

Dissertation am Fachbereich Wirtschaftswissenschaft der Freien Universität Berlin

Credit Guarantee Schemes for Small Businesses: between Euphoria and Scepticism

Concepts and Experiences with Institutional Structures in Europe and Latin America
– with Case Illustrations from Germany and Brazil

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Für meine Familie

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The thesis was submitted before commencement of employment at BaFin. Nevertheless, it is important to emphasise that this research represents the opinion of the author, and not the opinion of BaFin.

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LIST OF ABBREVIATIONS

\$	Dollar of the United States of America
%	Per cent
¥	Japanese Yen
€	Euro
§	Paragraph
A	Austria
AECM	European Association of Mutual Guarantee Societies (<i>Association européenne du cautionnement mutuel</i>)
AGC	Credit Guarantee Association of Serra Gaúcha (<i>Associação de Garantia e Crédito da Serra Gaúcha</i>)
AIG	American International Group Inc.
ATR	Augmented Triangular Relationship
AWS	Austrian Enterprise Service (<i>Austria Wirtschaftsservice</i>)
BAFIN	Federal Financial Supervisory Authority (<i>Bundesanstalt für Finanzdienstleistungsaufsicht</i>)
BAV	Bavaria (<i>Bayern</i>)
BB	Banco do Brasil
BCGS	Brazilian Credit Guarantee Society
BDI	Federal Association of Germany Industry (<i>Bundesverband der deutschen Industrie</i>)
BER	Berlin
BIS	UK Department of Business, Innovation and Skills
BMWI	Federal Ministry of Economics and Technology (<i>Bundesministerium für Wirtschaft und Technologie</i>)
bn.	Billion
BNDES	National Bank for Economic and Social Development (<i>Banco Nacional de Desenvolvimento Econômico e Social</i>)
BOB	Guarantee without bank (<i>Bürgschaft ohne Bank</i>)
BRA	Brandenburg
BRASESCO	Banco Brasileiro de Descontos
BTR	Basic Triangular Relationship
BW	Baden-Württemberg
CASFOG	Chamber of Argentine SGRs (<i>Cámara Argentina de Sociedades y Fondos de Garantía</i>)
CB	Claims against Borrowers
CDO	Collateralized Debt Obligation
CDS	Credit Default Swap
CEF	Caixa Econômica Federal
CEO	Chief Executive Officer
CERSA	Spanish Reguaranteeing Agency (<i>Compañía Española de Reafianzamiento</i>)

CESGAR	Spanish Association of Spanish SGRs (<i>Confederación Española de Sociedades de Garantía Recíproca</i>)
CG	Counter Guarantees
CGF	Central Guarantee Fund (<i>Fondo Centrale di Garanzia</i>)
CH	Switzerland
CIP	Competitive and Innovation Programme
CL	Claims of Lenders
CM	Capital market
CMZRB	Czech-Moravian Guarantee and Development Bank (<i>Českomoravská záruční a rozvojová banka</i>)
comp_CP	Compensation due to counter guarantees
comp_g	Compensation due to called guarantees
comp_IN&DER	Compensation due to insurance and derivative products
contr_budget	Contribution to budget
CORFO	Chilean Economic Development Agency (<i>Corporación de Fomento de la Producción</i>)
CREDIFIEMG	Credit cooperative connected to the FIEMG (<i>Cooperativa de Crédito dos Empresários Industriais Vinculados à FIEMG</i>)
CZ	Czech Republic
D	Germany
DB	Development Bank
DCP	Directed Credit Paradigm
DEM	German Mark (<i>Deutsche Mark</i>)
DIHK	Central Association of German Chambers of Commerce and Trade (<i>Deutscher Industrie- und Handelskammertag</i>)
divid	Dividend
DSGV	German Savings Banks Association (<i>Deutscher Sparkassen- und Giroverband</i>)
DTA	Deutsche Ausgleichsbank
DZ Bank	DZ Bank AG German Central Bank of Cooperative Banks (<i>DZ BANK AG Deutsche Zentral-Genossenschaftsbank</i>)
E	Spain
EADS	European Aeronautic Defence and Space Company
EDEKAKGG	EDEKA Credit Guarantee Society (<i>EDEKA Kreditgarantiegemeinschaft</i>)
EFG	Enterprise Finance Guarantee
EIB	European Investment Bank
EIF	European Investment Fund
ELG	Equity (not paid in), liabilities of shareholders or any guarantee
ERP	European Recovery Program
EST	Estonia
EU	European Union
F	France
FA(Li)	Financial assets (liquid)
FA(LT)	Financial assets (long term)

FAMPE	Guarantee Fund for Micro and Small Businesses (<i>Fundo de Aval para Micro e Pequenas Empresas</i>)
FAT	Labour Support Fund (<i>Fundo de Amparo ao Trabalhador</i>)
FDI	Foreign Direct Investment
FEBRABAN	Brazilian Federation of Banks (<i>Federação Brasileira de Bancos</i>)
fees_g	Fees for guarantees
fees_oth	Fees for other services
fees_cg	Fees for counter guarantees, insurance policies or derivatives
FEGA	Special Fund for Technical Assistance and Guarantees for Rural Finance (<i>Fondo Especial de Asistencia Técnica y Garantía para Créditos Agropecuarios</i>)
FGE	Export Guarantee Fund (<i>Fundo de Garantia à Exportação</i>)
FGI	Guarantee Fund for Investments (<i>Fundo Garantidor para Investimentos</i>)
FGO	Operations Guarantee Fund (<i>Fundo de Garantia de Operações</i>)
FGPC	Guarantee Fund to Promote Competitiveness (<i>Fundo de Garantia para a Promoção da Competitividade</i>)
FIEMG	Federation of Industry in the Federal State Minas Gerais (<i>Federação das Indústrias do Estado de Minas Gerais</i>)
FINEP	Financier for Studies and Projects (<i>Financiadora de Estudos e Projetos</i>)
FMP	Financial Market Paradigm
FNG	National Guarantee Fund (<i>Fondo Nacional de Garantías</i>)
FOGABA	Guarantee Fund of the Province of Buenos Aires (<i>Fondo de Garantías de la Provincia de Buenos Aires</i>)
FOGAPE	Credit Guarantee Fund for Small Businesses (<i>Fondo de Garantía para Pequeños Empresarios</i>)
FRG	Federal Republic of Germany
FSDB	Federal State Development Bank (<i>Landesförderbank</i>)
FUNPROGER	Guarantee Fund to Create Jobs and Income (<i>Fundo de Aval para a Geração de Emprego e Renda</i>)
g(RA)	Gains from real assets
G20	Group of Twenty Finance Ministers and Central Bank Governors
GB	Guarantee Bank (<i>Bürgschaftsbank</i>)
GDP	Gross domestic product
GDV	German Insurance Association (<i>Gesamtverband der Deutschen Versicherungswirtschaft</i>)
GI	Guaranteeing Institution
gra	Grant
GDR	German Democratic Republic (<i>Deutsche Demokratische Republik</i>)

GSE	Government-sponsored enterprises
HB	Bremen
HE	Hesse (<i>Hessen</i>)
HH	Hamburg
Hoga	Hotel and Gastronomy (<i>Hotel und Gastronomie</i>)
I	Italy
i(FA)	Interests and dividends from financial assets
i_OL	Interest payments for other loans
IADB	Inter-American Development Bank
IC	Insurance Company
IGR	Reciprocal Guaranteeing Institution (<i>Institucion de Garantía Recíproca</i>)
IN&DER	Insurance and derivative products
incr_OL	Increase of other loans
inv_FA(LT)	Investments in long-term financial assets
inv_RA	Investments in long-term real assets
IPEA	Institute of Applied Economic Research (<i>Instituto de Pesquisa Econômica Aplicada</i>)
JCGC	Japanese Credit Guarantee Corporation
k.	Thousand
KFW	Loan Agency for Reconstruction (<i>Kreditanstalt für Wiederaufbau</i>)
KGG	Credit Guarantee Societies (<i>Kreditgarantiegemeinschaften</i>)
KGG of German Crafts	Credit Guarantee Society of German Crafts (<i>Kreditgarantiegemeinschaft des deutschen Handwerks</i>)
KIBO	Korea Technology Credit Guarantee
KODIT	Korea Credit
KREDEX	Estonian Credit and Export Guarantee Fund
KRW	South Korean Won
Lei Geral	General Law of Micro and Small Businesses (<i>Lei Geral das Micro e Pequenas Empresas</i>)
LFA	Bavarian Federal State Loan Agency for Development (<i>Bayrische Landesanstalt für Aufbaufinanzierung</i>)
LSAX	Lower Saxony (<i>Niedersachsen</i>)
m.	Million
MBG	Venture Capital Company for SMEs (<i>Mittelständische Beteiligungsgesellschaft</i>)
MP	Mecklenburg-West Pomerania (<i>Mecklenburg-Vorpommern</i>)
MSMEs	Micro, Small and Medium sized enterprises
NGO	Non-Governmental Organisation
NRW	North Rhine-Westfalia (<i>Nordrhein Westfalen</i>)
DM approach	Ownership and decision-making approach

OECD	Organisation for Economic Co-operation and Development
OG	Outstanding Guarantees
OL	Other loans
opaym	Payments for administrative expenses
OSCIP	Organização da Sociedade Civil de Interesse Público
P	Portugal
payinEquity	Increase of paid in equity
payments_budget	Payments from public budget
PE	Paid in equity
pELG	Payments due to ELG
R\$	Brazilian Real
RA	Real assets
REGAR	Ibero-American Association of Credit Guarantee Schemes (<i>Red Iberoamericana de Garantías</i>)
repaym_CB	Repayments due to claims against borrowers
RGS	Rio Grande do Sul
RP	Rhineland-Palatinate (<i>Rheinland-Plalz</i>)
SAX	Saxony (<i>Sachsen</i>)
SAXA	Saxony-Anhalt (<i>Sachsen-Anhalt</i>)
SBA	Small Business Administration
SBCE	Brazilian Export-Credit Insurance (<i>Seguradora Brasileira Crédito à Exportação</i>)
SBIC	Small Business Investment Companies
SEBRAE	Brazilian Service of Support for Micro and Small Enterprises (<i>Serviço Brasileiro de Apoio às Micro e Pequenas Empresas</i>)
sell_FA(LT)	Selling of long term financial assets
sell_RA	Selling of long term real assets
SFLG	Small Firms Loan Guarantee
SGFA	Society for the Management of Funds for the Agricultural and Food Sector (<i>Società gestione fondi per l'agroalimentare</i>)
SGM	Mutual Guaranteeing Institution (<i>Sociedade de Garantia Mútua</i>)
SGR	Reciprocal Credit Guarantee Society (<i>Sociedad de Garantía Recíproca</i>)
SGRVC	SGR of the region Valencia (<i>Sociedad de Garantía Recíproca de la Comunidad Valenciana</i>)
SHOL	Schleswig-Holstein
SL	Saarland
SMEs	Small and Medium sized enterprises
SOCAMA	Mutual Guarantee Society for the Handicraft Sector (<i>Société de caution mutuelle artisanale</i>)
SOFFIN	Federal Agency for Financial Market Stabilisation (<i>Bundesanstalt für Finanzmarktstabilisierung</i>)
THU	Thuringia (<i>Thüringen</i>)
TRS	Total Return Swap

TUB	Consolidated law of banking (Italy) <i>(Testo Unico Bancario)</i>
U.S.	United States of America
UK	United Kingdom
UNIDO	United Nations Industrial Development Organization
US\$	Dollar of the United States of America
USA	United States of America
VDB	Association of German Guarantee Banks <i>(Verband Deutscher Bürgschaftsbanken)</i>
VÖB	Association of German Public Banks <i>(Verband öffentlicher Banken)</i>
ZDH	National Confederation of Skilled Crafts <i>(Zentralverband des Deutschen Handwerks)</i>

1 Introduction

Small businesses often face problems in obtaining credit. One reason for this is the lack of collateral. In addition, banks can find it difficult to evaluate the creditworthiness of small enterprises. As an answer to these problems, many countries worldwide have established credit guarantee schemes, which can provide guarantees when collateral is insufficient and which can help to reduce information asymmetries. In recent years, governments have also used guarantees as a response to the financial crisis and with the aim to rescue financial institutions, enterprises and even entire states. Despite the widespread use of credit guarantees, the related literature remains small. In particular, there is little systematic research on the institutional design of credit guarantee schemes.

This dissertation analyses the design and mechanisms of credit guarantee schemes for small businesses with a focus on Europe and Latin America. The central question is whether these institutions can become financially self-sustainable and work without public financial support in the long term. Theoretically, the thesis aims to deepen the conceptual understanding on the institutional design of credit guarantee schemes and the interplay of the actors involved. In addition, it provides new complementary approaches to categorise the different types of credit guarantee schemes worldwide. Empirically, the core of the thesis is an assessment of the long-established German Guarantee Banks, as well as of the Brazilian Credit Guarantee Societies, which are still under construction. The German schemes are analysed from their beginning in the 1950s until today. This enables to assess whether the high expectations towards them have been fulfilled. The in-depth findings for Germany and Brazil are then cross-checked in a broader analysis covering guarantee schemes in 17 countries across Asia, Europe, and North and South America.

For years, Brazilian policy makers have been building Credit Guarantee Societies. The basic idea is that these societies provide credit guarantees that reduce the lender's risk. The guarantees are supposed to indirectly improve the financing conditions of borrowers. The guaranteeing institutions should focus on formalised small businesses, and operate in their region. These first-tier societies should be embedded in a national system, and be supported by second-tier institutions (sometimes the terms first floor and second floor are used as well). Borrowers should not only be clients or beneficiaries but also members of the Brazilian Credit Guarantee Societies (BCGSs), instilling solidarity. The Brazilian financial system is well known for high interest rates and difficult access for businesses to financial services. Surveys indicate that missing collateral is one of the largest barriers for small businesses to obtain

loans. Since guaranteeing institutions can compensate for missing collateral there is some euphoria among policy makers that BCGS could solve the problem of missing collateral.

The euphoria was sustained because almost all countries of the world have some form of credit guarantee schemes for small business. The largest scheme can be found in Japan. Japanese Credit Guarantee Corporations (JCGCs) report that outstanding guarantees valued € 300 bn. in 2009, and that every year, 35% to 45% of Japanese small businesses had used the guarantee scheme in the period 2000-09. Hence, the scheme achieves impressive outreach. In the United States of America (USA), the Small Business Administration (SBA) uses credit guarantees to improve finance for small businesses. The SBA success stories, such as Nike Shoes, Microsoft, Intel Computers and Apple, are appealing for policy makers worldwide.

The probably most prominent success story of German Guarantee Banks (*Bürgschaftsbanken*, GBs) is the “hidden champion” in tunnelling machines *Herrenknecht*. It received support from GBs when it was still a small business. Now the company has grown, employing more than 3,000 people. The company’s machines are used worldwide: examples include road building through the Swiss Alps, constructing a tunnel for the subway in São Paulo, and extracting oil under the Atlantic Ocean. GBs themselves continue to focus on small business and consider themselves as self-help Institutions (*Selbsthilfeeinrichtungen der Deutschen Wirtschaft*). During the financial crises, the leading German business newspaper *Handelsblatt* published an article about GBs with the title “Guarantee Banks. The true pillar of the German mid-sized companies” (Drost 2010).

Italian Confidi and Spanish Reciprocal Credit Guarantee Societies (SGRs) are said to have a strong self-help character. Whereas in Germany, the borrowers are indirectly represented via chambers and associations, the Italian and Spanish borrowers are direct members of the guaranteeing institutions. These schemes raise the hope that credit guarantee schemes can be self-help agencies of borrowers without the intervention of the government. A study of the Organisation for Economic Co-operation and Development (OECD) encourages the replication of Italian schemes in developing countries. Indeed, several neighbours of Brazil have already introduced schemes where borrowers are shareholders¹.

On the other hand, there is scepticism. Schemes often suffer high default rates and in the past, there are experiences with credit guarantee schemes in developing countries that burned their equity. But also in Europe and North America there are experiences that support scepticism. For example, a scheme in the UK had default rates of roughly 35%. More-

¹ Note that the term shareholder does not only apply to stock companies but to all companies where the equity is shared among several owners; hence, shareholders can be owners of cooperatives, too.

over, the last financial crisis has shown that guarantees, or similar risk-sharing mechanisms, can be extremely dangerous. The unsustainable use of derivatives such as credit default swaps (CDS) is even said to be one of the central causes of the financial crisis. Indeed, things can go badly wrong. The insurance company American International Group (AIG) and the US mortgage financiers Fannie Mae and Freddy May required billion dollar bailouts from the US government. AIG had sold protection via credit derivatives, and the mortgage financiers sold loans with a guaranteed repayment.

1.1 The research question and case selection

Brazilian policy makers have been trying to build Brazilian Credit Guarantee Societies (BCGSs) for some years. The driving force in this institution building process is the Brazilian Service of Support for Micro and Small Enterprises (*Serviço Brasileiro de Apoio às Micro e Pequenas Empresas*, SEBRAE). However, the schemes were not automatic successes. In 2003, the first pilot project was built, but not until 2011 were further societies inaugurated. The questions arise: why did these schemes failed to flourish? Were the problems in the institution building process specific to Brazil, or general problems of credit guarantee schemes?

For a long time, the Directed Credit Paradigm (DCP) was predominant in development finance. The basic idea is that government should direct subsidised finance to a target group in order to fill a gap and induce investment. Since in many cases this strategy had failed and had destructive effects on the financial system, the Financial Market Paradigm (FMP) became the leading paradigm (Vogel and Adams 1997a, Santos 2003, 176-182). One central idea is that the banks should provide financial services with cost covering fees and interest rates. Despite some initial public support, the banks are required to achieve financial self-sustainability in the long term. In other words, banks should go the commercial approach and cover their costs on their own. Note, this does not mean maximising profits or the return on capital, but rather to be able to provide financial services without subsidies (Kramer and Nitsch 2010, 997).

The central question of this research is whether credit guarantees schemes for small businesses can go the commercial approach and achieve financial self-sustainability in line with the FMP, or whether governmental support is needed in line with the DCP. Indeed, there are some voices who say that credit guarantee schemes can go the commercial approach. This idea is backed by microeconomic models (see section 2.1.2, Langer and Schiereck (2002) and Busetta and Zazzaro (2011)).

To discuss this question, the German Guarantee Banks (GBs) and the institution building process of Brazilian Credit Guarantee Societies are discussed in depth. The historical assessment of the German schemes does not only improve the understanding of current GBs. Moreover, the initial expectations can be compared with the results. It also provides a link between Germany and Brazil because in the 1950s, the German policy makers had aims that are similar to those of the Brazilian SEBRAE.

The institution building process in Brazil is the central motivation for this research. Germany is an interesting example since there are several competing guarantee schemes and other institutions that support the finance of small businesses. In addition, Germany was chosen in order to conduct an in depth and long-term field study.

To crosscheck these findings, schemes in other countries were analysed in mini case studies. Experiences in Italy and Spain are scrutinised since they are the reference models for Brazilian policy makers. The schemes in Argentina were built following Spanish schemes and also serve as examples for Brazilian policy makers. Schemes in Japan and South Korea are investigated since they are of impressive quantitative outreach, and the Japanese scheme is said to be influenced by the German experience. In the USA, the scheme for small businesses is considered since the SBA is somewhat similar to the SEBRAE. In addition to credit guarantee schemes for small businesses, the cases of Fannie Mae, Freddy Mac, and AIG are discussed in order to show how things can go badly wrong, i.e. that guarantees can indeed be dangerous financial instruments.

This study does not provide a representative “large n study” with advanced quantitative statistical or econometrical methods. There is no representative data at hand. The approach of this study is rather to analyse two countries in depth. An additional worldwide analysis with the focus on Europe and Latin America provides an overview and enables to crosscheck the findings of the case illustrations. In addition, European and Latin American schemes are categorised into basic models when sufficient information is at hand.

In this research, credit guarantee schemes and systems are used as synonyms. Credit guarantee schemes are used as umbrella terms for credit guarantee programmes, credit guarantee funds and credit guarantee societies. In the literature, these terms are not used consistently and vary from author to author. In addition, the terms are improper to differentiate credit guarantee schemes, they do not serve to build categories, and hence often lead to confusion. This is why one section is dedicated to explain two complementary approaches to differentiate and group credit guarantee schemes.

1.2 Structure of the thesis, methods and literature

The research is structured into five parts. This introduction is followed by the theoretical discussion in part two. The empirical analysis is divided into two parts. Whereas part three provides an overview (survey including some mini case studies), part four provides the in depth case studies. Finally, part five draws the conclusions.

The theoretical part begins with section 2.1 in which theoretical considerations are discussed. It also provides a theoretical framework of the stocks and flows of guaranteeing institutions.

Section 2.2 discusses the Basic Triangular Relationship (BTR) which consists of the borrower, the lender and the guarantor. The BTR holds for all guarantee schemes. The concept of the BTR can be found in literature, especially in the German, Spanish and Portuguese languages. Section 2.3 introduces the Augmented Triangular Relationship (ATR) which is an extension of the BTR. The ATR includes the most important actors for credit guarantee schemes. It also provides the structure for the thesis and to discuss the interdependent sub-relationships in this theoretical section and in the empirical part.

In section 2.4, four central issues that may lead to euphoria are discussed. A hypothesis is introduced that states that four goals cannot be achieved simultaneously, i.e. there is no magic formula for an optimal credit guarantee scheme.

Section 2.5 provides a theoretical discussion of terms and models of credit guarantee schemes. Theoretical literature provides most of the distinguishing characteristics, which are restructured into two new complementary frameworks: the ownership and decision-making approach (ODM approach) and the relationship-based approach. The former is based on two dimensions and clearly discriminates schemes by using relatively easily observable variables. Hence, it can be used for an analysis of many schemes. The relationship-based approach is based on the framework of the ATR since it discriminates between different combinations of relationships within the ATR. Since relationships are more difficult to observe, qualitative methods are required in order to use the approach in empirical analysis. The ODM approach groups the credit guarantee schemes into six basic models and the relationship-based approach into four basic schemes.

The theoretical discussion is based on contributions by Stiglitz and Weiss (1981), Schmidt (1981), Schumpeter (1934/1993), Nitsch (2001) and Bresser-Pereira (2010). In addition to these fundamental contributions, literature also provides several studies that precisely discuss credit guarantee schemes for small businesses. Schmidt and Zeitinger (1984) provide

important principles which are picked up and further discussed by Geis (1993). More theoretical ideas are provided by von Stockhausen (1988) and Vogel and Adams (1997b). Furthermore, Honohan (2010) discusses schemes and structures the reasons of existence for credit guarantee schemes.

Parts three and four provide the empirical findings. Part three gives an overview on schemes worldwide with the focus on Europe and Latin-America; part four includes the two case studies of schemes in Germany and Brasil.

The empirical part begins with section 3.1, which serves as an empirical overview of schemes worldwide. The catastrophic experiences with AIG, and the US mortgage financiers Fannie Mae and Freddy May are briefly discussed as well as the experiences of credit guarantee schemes in Japan, South Korean and the USA. This section is predominantly based on literature. Worldwide overviews are provided by Herrero Calvo and Pombo González (2001), and a World Bank study conducted by Beck, Klapper and Mendoza (2010). The analysis of AIG and the mortgage financiers is based on the final report of the National Commission on the Causes of the Financial and Economic Crisis in the United States (2011). The schemes in the USA and Asia are based on corporate information of the schemes. In addition, a study conducted by Italian academics and practitioners and edited by de Vinventiis (2008) is used.

Section 3.2 provides an overview of schemes in Europe and Latin America. It discusses the schemes' outreach in comparison to schemes worldwide. In addition, the section contains mini case studies of schemes in Argentina, Italy and Spain. This section is also predominantly based of literature and combined with short-term field research. An overview of schemes in Europe is provided in several publications of European Association of Mutual Guarantee Societies (*Association européenne du cautionnement mutuel*, AECM), and several case studies that were conducted by Italian academics and practitioners (Vincentiis 2008). The Inter-American Development Bank provides a broad study with descriptive case studies in Latin America (Llisterri, et al. 2006). In addition, the Ibero-American Association of Credit Guarantee Schemes (*Red Iberoamérica de Garantías*, REGAR) provides descriptive information, too. In addition to literature, several short-term visits were conducted to attend conferences, to participate in meetings, and to realise guided interviews. It was only possible to interview representatives of the guaranteeing institutions and not other important actors of the ATR. This "brief field research" was done in Argentina, Italy, Portugal and Spain. As an attempt to sample a large number of schemes, phone interviews, communication via Email and a survey were conducted, too. With these methods, the analysis was enriched to include schemes in Austria, Argentina, Brazil, Chile, Czech Republic, Estonia, Germany, Italy, Portugal, the UK, Switzerland, and on the level of the European Union.

Section 4.1 discusses the German Guarantee Banks. This section, together with the analysis of Brazilian schemes, is the core of the empirical research. The section begins with an introduction of other somewhat competing credit guarantee schemes in Germany that determine the market niche of GBs. Also included is the historical assessment in which conflicts and the institution building process are discussed. The ATR of German GBs and its interdependent sub-relationships are analysed before an interim conclusion is drawn. German GBs and their association provide lots of descriptive information, which includes financial statements that are published online. In addition, the association conducted a survey and a cost benefit analysis in cooperation with the academics Elkan and Schmidt (2006). Analysis of the predecessors is provided by the empirical research of Fischer (1959) who analyses the institution building process in the 1950s, and by Brinkmann (1969) who analysis the institution building process in several European countries. In a publication of the Institute for Bank-Historical Research (*Institut für bankhistorische Forschung*), Giebitz (1987) analyses the predecessors, too. Moreover, researchers of the Institute for Mid-Sized companies (*Institut für Mittelstandsforschung Bonn*) provide descriptive information and discussion on both the GBs' predecessors, (Kaufmann and Kokalj 1989), and the Guarantee Banks (Kokalj, Paffenholz and Moog 2003). In addition to an analysis of literature, guided interviews were held with representatives of participating actors in the ATR. The basis of the empirical research are field studies carried out in Germany between the years 2007 (for the author's diploma thesis (Kramer 2008)) and 2010. Hence, this period includes both the financial crises and "the bonanza" before. The GBs' financial statements are analysed. This analysis is based on the discussion of stocks and flows in section 2.1.3.2. Hence, a multi-method research with qualitative and quantitative elements was conducted.

Section 4.2 discusses the Brazilian Credit Guarantee Societies (BCGSs) which provide the other core of the empirical analysis. In Brazil, the focus of empirical analysis lies on the institution building process of the national system of regional and mutual guaranteeing institutions. This includes an analysis of the pilot project (*Associação de Garantia de Crédito, AGC*). In Brazil, there are several publications of the SEBRAE that explain the vision and initiative to build the BCGSs. For example, the vision is discussed by dos Santos (2006) in his contribution to the OECD conference. Policy makers, also of other credit guarantee schemes, provide descriptive information and discussions in REGAR studies (Cardoso, et al. 2008, Vial 2008). In addition, there is an unpublished master thesis of Zica (2007) which is the base for the published article of Martins and Zica (2008). In addition to analysing the literature, field research was conducted in the years 2008 and 2009. This includes several interviews and visits to the pilot project AGC, the department for finance of the SEBRAE on national level and the department of the SEBRAE in a region that planned to build a society. These visits lasted sev-

eral days. Similar to the field study in Germany, other credit guarantee schemes and experiences with predecessors are included in the empirical analysis. Only some quantitative data is available and included in the research. Hence, the focus lies on qualitative research.

Section 4.3 provides a discussion on differences and equivalences of the case illustrations in Germany and Brazil. It does not provide a full list of all detailed differences but focuses on general questions and conflicts.

Part five summarises the analysis and draws the conclusions. In section 5.1 the empirical results of the two complementary approaches to categorise credit guarantee schemes that were introduced in section 2.5 are reflected. In addition, the two approaches are brought together in a consistent framework to group credit guarantee schemes into types, i.e. the basic models (ODM approach) and basic schemes (relationship-based approach) are combined in one table. Section 5.2 presents the lessons learned. This section discussed the hypothesis that there is no magic formula for an optimal credit guarantee scheme as well as the research question: whether credit guarantee schemes for small businesses can go the commercial approach in line with the FMP, or can only be used as instruments to fill a financing gap in line with the DCP.

A lists of interviews and discussions, lists of conferences, visits, Emails and survey partners are added in the appendix (1 to 5). If possible, the statements were crosschecked and cited by documents in written form.

2 Arrangements of credit guarantee schemes from a theoretical perspective

Before credit guarantee schemes are analysed, this theoretical section discusses concepts of credit guarantee schemes, why credit guarantee schemes emerge, and which problems can arise. In section 2.1, the problem of credit rationing, especially for small businesses, and basic issues of guaranteeing will be discussed. In the following section, 2.2, the Basic Triangular Relationship (BTR) among the borrower, lender and guarantor will be introduced. In addition, the interdependent sub-relationships will be discussed. In section 2.3, the BTR will be extended by further actors to an Augmented Triangular Relationship (ATR). In section 2.4 a central hypothesis will be introduced. In section 2.5, credit guarantee schemes will be differentiated and basic models and basic schemes elaborated by two complementary approaches.

2.1 Credit rationing and guaranteeing, especially for small businesses

In this research, finance is analysed using an institutional approach that will be outlined in section 2.1.1. This introduction is followed by section 2.1.2 which contains basic ideas on credit guarantee schemes that can be found in the literature. The structure of stocks and flows of a guaranteeing institution (GI) will be discussed in section 2.1.3.

2.1.1 Problems in finance and the commercial approach to provide financial services

Because there is general uncertainty and an asymmetric distribution of information among capital seekers and investors, it cannot be assumed that the market or any institutionalised financial intermediary will enable a perfect clearing of demand and supply of capital (R. H. Schmidt 1981, Stiglitz and Weiss 1981). In a study on basic forms of financing, Schmidt (1981) defines financing instruments via the following:

“Each financing instrument constitutes a specific combination of rights and possible actions of the capital investors, the object of which is to overcome undesired consequences of the originally asymmetrical distribution of information among investors and capital-seekers (firms)” (R. H. Schmidt 1981, 220).

Schmidt (1981) emphasises the partnership between investors and capital-seekers. Both partners have a common interest in achieving high returns from their investments. However, the partners have particular interests as well. A struggle over the distribution of returns can occur under circumstances not specified in the contract. That all possible outcomes can be considered is a strong assumption; a more realistic assumption is that an investment plan is not exact but rather an outline. Consequently, vagueness about the future cannot be ruled out. Moreover, the problem of information asymmetries between the usually better informed capital-seeker and the investor leads to an uncertainty whether the capital-seeker provides all information to the investor, before and after an agreement has been concluded. The information asymmetries facilitate (hidden) actions of the capital-seeker that are not in the interest of the investor (the problem of moral hazard). However, the investor who is aware of this problem, should be suspicious of the received information and consequently protect himself. One option is to refuse all finance or to demand a risk-premium (R. H. Schmidt 1981, 190-191).

The interest rate mechanism or exceeding collateral, however, does not automatically solve the financing problems as the “Law of Supply and Demand” might suggest. In their famous work, Stiglitz and Weiss (1981) conclude that the law is not a law but rather a result of the assumption that prices have neither sorting nor incentive effects. In their model, the authors demonstrate that due to information asymmetries, an increase in the interest rate can induce sorting and incentive effects (moral hazard and adverse selection) which reduce the bank’s profit. Furthermore, the authors show that an increase of collateral requirements can reduce the bank’s return, too. Therefore, the interest rate mechanism with a single interest rate and requirement of collateral do not provide for an efficient financial intermediation. Potential borrowers would not receive a loan even if they would indicate a willingness to pay more or put up more collateral. Hence, credit rationing in markets with free setting of the interest rate and collateral requirements is no phantasm (Stiglitz and Weiss 1981, 409). The authors show another microeconomic model without excess demand of loans. The main assumption of this model is that the function of the mean return to the bank, depending on the interest rate, has two peaks. All applicants that are rejected at the lower interest rate and who apply for the higher interest rate will receive finance (Stiglitz and Weiss 1981, 398-399). In other words, banks have to charge higher interest rates for borrowers which they would ration if only one interest-rate would be charged.

Schmidt (1981) also does not rely on the “Law of Supply and Demand” or the interest rate mechanism. Instead, the capital-seekers’ interest should be to reduce the suspiciousness of the investors. This could be done through a commitment that makes moral hazard impossible or unattractive for the capital-seeker. However, these commitments are not easy to find,

can be expensive and the investor has to be able to recognise them. Schmidt (1981) concludes with two recommendations: First, investors should be informed by a bunch of actions such that the total disadvantages that result from the asymmetric distribution of information reach a minimum. Second, institutions that often exist should constitute feasible bunches of actions. By this, the author means that market participants have developed reliable methods to overcome disadvantages due to asymmetric information, scepticism or mistrust (R. H. Schmidt 1981, 194).

In his famous book “The Economic Institutions of Capitalism”, Williamson (1987) sees the main, but not sole, purpose of economic institutions as economising transaction costs. The author states that transaction cost economics poses the problem of economic organisation as a problem of contracting, whereby contracts are not only explicit but also implicit. The main assumption behind this approach is bounded rationality, or in other words, the behaviour is extendedly rational, but limited. Moreover, there are opportunism and asset specificity (Williamson 1987, 30-32). The organisational imperative under such circumstances is:

“Organize transactions so as to economize on bounded rationality while simultaneously safeguarding them against the hazards of opportunism” (Williamson 1987, 30-32).

It should be clear that when financial instruments, such as credit guarantee schemes, are analysed, not only interest rates and fees but all costs of all actors, both participating and potential, should be considered. Moreover, the legal contract design of such schemes is important but does not explain all features. It is rather the organisational form and governance that is important.

Note that up to here, general problems in finance have been addressed, the following is dedicated more specifically to the discussion in development finance. Vogel and Adams (1997a) discuss two paradigms in development finance: the Directed Credit Paradigm (DCP) and the Financial Market Paradigm (FMP).

Within the DCP, the reasons for public intervention are market imperfections that result in inefficient or unfair loan allocations. To improve allocations, public policy planners direct subsidised funds towards target groups. These borrowers are usually seen as beneficiaries and not as clients. This can be either done directly by a first-tier bank or by a second-tier bank which channels funds via commercial banks². Funding comes from public resources and the subsidy is usually in the form of an interest rate below the market rate but may be in the form of credit forgiveness as well. Vogel and Adams (1997a) are critical of this paradigm and provide six concerns: First, since the loans are subsidised and of limited volume, there may

² The term “commercial bank” is used as a synonym for first-tier banks which includes saving banks and cooperative banks as well.

be excess demand. Consequently, lenders add conditions to the loans that raise the transaction costs. Second, because borrowers of larger loans receive more total subsidies, the support is distributed regressively. Poorer borrowers may have more difficulty receiving the loans due to their already constrained access to finance and added conditions. Rent seeking of attractive clients by the bank can increase regressive allocation further. Third, deposits are not encouraged since DCP projects focus on credit only and subsidised loans may tax the depositors. Fourth, financial institutions may be weakened since the interest rates are not cost covering and they may depend on public funding. Fifth, DCP projects had a weak and ambiguous effect on production and investment decisions. Finally sixth, the evaluation of the impact of DCP projects and their effect on production and investment often remains vague (Vogel and Adams 1997a, 362-372).

On the other hand, Vogel and Adams (1997a) present the Financial Market Paradigm (FMP) and explain that within the FMP, loans are not seen as one-time treatments. The authors emphasise that the transaction costs of both the lenders and borrowers are central problems in financial markets and result in constrained financial services. The “well-being” of financial infrastructure is important, i.e. there should be a set of sustained relationships among financial intermediaries, creditworthy clients and depositors. With regard to subsidies, or public intervention, Vogel and Adams (1997a) argue that direct transfers are better instruments to deal with income distribution problems and financial markets should not be distorted with directed credits. Financial institutions should be independent from subsidies (in other words financially self-sustainable), compete with each other and be disciplined by market forces. Consequently, market interest rates should be charged to the borrowers as clients of the financial institutions and not as “beneficiaries” of subsidies (Vogel and Adams 1997a, 373-377). Vogel and Adams (1997a) are convinced that the FMP is the better paradigm (Vogel and Adams 1997a, 378)³. Higher interest rates for previously rationed borrowers go in line with the second model presented by Stiglitz and Weiss (1981).

Nitsch (2001) is also critical with the DCP and concludes that a “commercial approach” is more promising to push the “frontier” of the formal finance sector in the direction of the poor by providing what they really need in financial services:

“These (the needed financial services) were small, readily available operating funds and emergency loans and secure and worthwhile investment options for temporary financial surpluses. Since poverty was a mass phenomenon, these financial products had to be offered with a loan technology, meaning a form of organization, that gave them a mass reach with as much saturation as possible” (Nitsch 2001).

³ For a further discussion and comparison of the paradigms see Santos (2003).

This approach to reach as many people as possible requires that the financial institutions should be largely financially self-sustainable, which is in line with the FMP. Following the commercial approach should not be confused with a belief in perfect markets or the orthodox thought that public support is not needed, or that public intervention only distorts the market. Moreover, this commercial approach does not mean that the financial institutions should maximise the rate of return. Instead, their aim should be to cover their costs and achieve financial sustainability:

“In Development Finance, it has become a general lesson learned that it makes sense to provide initial financial and/or technical support for the building of financial institutions, but not to give grants or money-losing loans to so-called ‘beneficiaries’. Financial institutions are to receive public aid to provide financial service to their clients, but they should soon be able to cover their total costs and hence be basically financially self-sustainable” (Kramer and Nitsch 2010, 997).

2.1.2 Basic ideas and approaches to analyse credit guarantee schemes

This section is based on theoretical contributions on credit guarantee schemes provided above all by Schmidt and Zeitinger (1984), Schmidt (1986), Krahn and Schmidt (1994) and Honohan (2010).

With respect to the question what kind of institution are credit guarantee schemes, Honohan (2010) calls guarantees and derivatives “close cousins” (Honohan 2010, 2), and Vogel and Adams (1997b) emphasise similarities to forms of insurance (Vogel and Adams 1997b, 2). Krahn and Schmidt (1994) also state that a credit guarantee scheme is a kind of insurance company (Krahn and Schmidt 1994, 70-72). In addition, the authors state that a credit guarantee fund is much like a credit guarantee system with the sole exception that a certain sum of money is “pledged” and put into a blocked account. Zeitinger and Schmidt (1984) analyse the similarity between a credit guarantee fund and a bank and conclude that a credit guarantee fund is an incomplete bank. Schmidt and Zeitinger (1984) state:

“A credit guarantee fund is a bank, although an incomplete one; and a bank is a credit guarantee fund, because the bank usually bears the risk of default of the loans it had provided. One should explain in more detail: The equity and the reserves, including possible bailout commitments by third parties [such as deposit guarantees or obligations to inject additional capital], are the ‘credit guarantee fund’ that serves as collateral for the loans which are refinanced by outside capital (deposits and raised funds)” (Schmidt and Zeitinger 1984, 2).

In other words, the authors point out the similarities between a credit guarantee fund and a bank since a bank also performs insurance functions by charging premiums and by diversification of risks. Zeiting and Schmidt (1984) provide two cases where a credit guarantee fund might be in a better position than a bank to provide finance: i) in partially incomplete financial markets where banks ration the targeted group due to their own business policy that might have been influenced by regulations such as interest rate ceilings of and ii) largely incomplete financial markets where banks ration the targeted groups although they could generate a profitable business in providing finance (Schmidt and Zeiting 1984, 3). Nevertheless, the authors conclude that in the first case it would be more efficient to alter regulations such as interest rate ceilings (Schmidt and Zeiting 1984, 6). Also the second argument does not mean that a guarantee scheme is the best solution to solve the problem. Schmidt (1986) concludes, in another study, that influencing and supporting the banks directly would be better and more effective than establishing a credit guarantee system.

In their study on the benefits and costs of loan guarantee programs, Vogel and Adams (1997b) state that these schemes are popular in both high- and low-income countries (Vogel and Adams 1997b, 2). Market distortions that ration disadvantaged groups are often cited to be the reason of existence. Guarantee schemes attempt to overcome this imperfection by shifting risk from the bank to the guarantor. Those schemes are often part of a package of subsidised activities following the previously discussed Directed Credit Paradigm (DCP). In the case of public credit guarantee schemes, the idea is to change the lenders' behaviour by a subsidised risk-sharing, i.e. the government does not charge the full risk-premium that would be cost covering. Consequently, the lender is subsidised directly and the borrower indirectly. The authors are critical of this instrument of public policy since costs and benefits are usually vague and hard to measure. However, they state that they "clearly do less damage than providing lenders with cheap funds".

Honohan (2010) provides three main reasons why credit guarantee schemes may emerge without direct public support: "differential information, as where the borrower's creditworthiness is better known by a well capitalized guarantor than by the lender"; "spreading and diversifying risk" and "regulatory arbitrage" (Honohan 2010, 2).

Following this argument, four general approaches to analyse schemes will be discussed in the following:

1. the information and incentive approach;
2. the intervention approach;
3. the pooling approach;
4. the arbitration approach.

The first approach, *the information and incentive approach*, asks whether the financial instrument bundles a specific combination of rights and possible actions which enables financing in the sense of Schmidt (1981). Thereby it should be discussed whether the guarantor is in a better position to screen applicants than the lender. Moreover, the scheme is not only analysed as to whether it increases available information but also whether the set of incentives is adequate.

There are authors that do believe in financially self-sustainable credit guarantee schemes. Langer and Schiereck (2002) provide a microeconomic formalised analysis of the set of incentives within credit guarantee schemes (following the example of German Guarantee Banks). The authors show a model in which Guarantee Banks can provide a financial intermediation due to specialisation. The banks then delegate the screening efforts to a central screening institution, the Guarantee Bank, which can achieve economies of scale. The credit guarantee scheme in turn can enable sustainable financing which would not have been possible without the institution, and the institution can cover its costs (Langer and Schiereck 2002, 156). The three central conditions are that i) within the market niche of such institutions there are sufficient borrowers with viable investment projects, ii) the screening bank can identify these viable borrowers with its screening technology and iii) the screening bank is pro-profit oriented.

In another microeconomic study, Busetta and Zazzaro (2011) present another formalised microeconomic model. In this model however, “Mutual Loan-Guarantee Societies” are wealth-pooling mechanisms to overcome adverse selection. Within their model, schemes may be characterised by assortative matching: with only safe borrowers when the guaranteeing institution is funded only by their associates, and with only risky borrowers when the public sector contributes to the scheme (Busetta and Zazzaro 2011, 10).

In both microeconomic studies the authors create models where credit guarantee schemes are able to “follow the commercial approach” under certain circumstances and hence, do not need public support. Indeed, the authors are critical of public intervention.

In their World Bank study, Levitsky and Prasad (1987) emphasise that banks can usually provide adequate finance to well known clients and the authors point to market imperfections and a financing gap that should be filled. Indeed, they conclude that credit guarantee schemes should not completely absolve banks from taking a normal level of risk and at the same time schemes should not enable the financing of projects of doubtful viability. The authors moreover conclude that schemes could be able to achieve financial autonomy and fulfil their aims in assisting small and medium enterprises if schemes are managed efficiently, if fees are charged “realistically”, operated by a “business approach” and only prudently assume risks (Levitsky and Prasad 1987, 14).

On the other hand, there are critical voices beyond Schmidt and Zeitinger (1984). Vogel and Adams (1997b) emphasise that pro-profit lenders have built relationships to enterprises and reducing the asymmetries of information without the need for subsidised external interventions (Vogel and Adams 1997b, 5), i.e. without the need for guarantees schemes.

The second approach, *the intervention approach*, analyses the intervention of government or non-governmental organisations, their costs and benefits, and compares it to alternatives.

Honohan (2010) states that the welfare economics perspective suggests three possible sources from which a net welfare improvement due to credit guarantee schemes could come: schemes could remove information-based market failure, and they could induce positive externalities. In addition, there are distributional arguments. The market failure could be reduced either by informative advantages of the guarantor relative to the bank or by subsidising the credit which reduces adverse selection. This type of credit subsidy might be important in times of heightened risk or risk aversion during a credit crunch. Exploiting externalities can be fruitful and the author provides two examples: the bank acquires sufficient skills over time, which enables the bank to lend without the scheme in the future; or positive externalities may emerge when the scheme enables lending in an infant industry. Since people of lower wealth have usually less bankable collateral to offer, they could benefit from a guarantee scheme. However, the author emphasises that it is in general unclear whether credit allocation is the best instrument to correct for unequal distribution of wealth (Honohan 2010, 2-4).

Vogel and Adams (1997b) state that virtually all schemes in low-income countries receive subsidies, however, they are critical whether these subsidies indeed increase welfare: if

small businesses might not receive credit because of fixed costs on loan processing, more loans to small businesses might reduce welfare due to these costs. Hence adjusting lending procedures to reduce the costs would be a more promising approach to increase welfare. In the case of credit guarantee schemes, however, the authors emphasise that an additional institution implies higher transaction costs (Vogel and Adams 1997b, 4). The authors furthermore emphasise that benefits of such schemes depend not only on the additionality of lending but also on loan recovery.

The authors also address the problem of counterfactuals, i.e. that it is never known what the lender would have done without cooperation with the scheme which is important to measure the costs and benefits. A bank might cooperate with the scheme for loans it would have provided anyway and then expand its lending to other borrowers (intra-portfolio substitution); or alternatively, a lender that cooperates with the subsidised guarantees might draw borrowers from other lenders (inter-lender substitution) (Vogel and Adams 1997b, 12).

The third approach, *the pooling approach*, examines whether the guarantor is in a better position to pool the credit risk than a lender. Saunders and Allen (2002) discuss new approaches to credit risk measurement. These new models are based on portfolio theory, and use traditional models to measure the risk exposures of a single loan (Saunders and Allen 2002, 9-22, 135-150). The following citation illustrates the thought of advocates of the portfolio approach:

“So far, we have considered default-risk and credit risk exposure on a single-borrower basis. This is not unreasonable; much of the banking theory literature views the personal at banks and similar financial institutions (FIs) as credit specialists who, through monitoring and the development of long-term relationships with customers, gain a comparative advantage in lending to a specific borrower or group of borrowers.

This advantage, developed by making (and holding to maturity) loans to a select subset of long-term borrowers, may nevertheless be inefficient from a risk-return perspective. Suppose, instead, loans were publicly traded at low transaction costs and with high liquidity in public security markets. By separating the credit-granting decision from the credit portfolio management decision, a bank may be able to generate a better risk-return trade-off... ” (Saunders and Allen 2002, 151) .

Schmidt (1986) also states that the credit guarantee scheme can reduce risk of all participating banks by diversification. On the other hand, the author points to the problem of moral hazard which also occurs within insurance contracts. Since banks often have more diversified portfolios, the author does not believe that credit guarantee funds in development finance are in a better position to pool risks than banks. In addition, there might be an adverse selection where the banks attracts both the good and bad risk but the credit guarantee scheme ends up bearing a higher average risk.

The fourth approach, *the arbitration approach*, detects possible arbitration gains and their impact. Arbitration gains can emerge, for example, if an unregulated firm provides guarantees that are accepted by the lenders' regulation as risk-mitigation tools. Another example is that of a scheme used to charge fees instead of interest rates that might be regulated by a ceiling (Honohan 2010, 2). If credit rationing is the result of legal restrictions that impede the use of collateral, such as mortgages, Vogel and Adams (1997b) emphasise that the high transaction costs of credit guarantees could be avoided by dealing directly with the legal shortcoming (Vogel and Adams 1997b, 4).

2.1.3 Stocks and flows of guaranteeing institutions

As stated by Zeitinger and Schmidt (1984), Krahen and Schmidt (1994), Vogel and Adams (1997b), and Honohan (2010) there are some similarities between credit guarantee schemes and banks, insurance companies and credit derivatives. This section provides an overview of stocks and flows of guaranteeing institutions. A digression to insurance companies and credit derivatives is provided in section 2.1.3.1 and in section 2.1.3.2, the GIs' stocks and flows will be analysed.

In the following, the cash flow of a single credit guarantee will be described and grouped in four periods:

- 1) The guarantor receives inflow due to fees and the total cash flow might be positive if flows from fees are higher than the negative flow resulting from the guarantor's operational payments.
- 2) During the credit period, the guarantor continues to receive inflows from fees. If fees are charged as a percentage of the outstanding guarantee, this flow declines parallel to the amortisation of the loan principal. On the other hand, negative flows (outflows) continue due to operational payments. However, these payments can be lower than at the beginning when the borrower was screened. If the net cash flow was positive in the first two periods, it can be invested in the capital markets which result in an additional positive flow due to interest payments. If no credit event occurs this structure of cash flow continues until the loan is repaid and the guarantee expires.

- 3) It is uncertain, whether and when the third period occurs. In this period, the guarantor has a cash outflow due to financial compensation if there is a credit event. The credit event can differ and be, for example, insolvency with legal action or a delay of the borrower's payment. There can be either a single payment to compensate the losses of the lender or, there can be a compensation scheme where the guarantor pays for the amortisations and interest rates as the borrower and lender have agreed. In addition, the operational payments may increase, too.
- 4) On condition that a credit event indeed occurred, the guarantor may receive a positive flow because the guarantor continues to have a claim against the borrower – be it directly or indirectly via the lender. Cash may come from the liquidation of collateral or payments from the borrower after the debt was renegotiated. In the extreme case, the borrower may be able to fulfil all the obligations. On the other hand, administrative costs constitute an outflow.

All in all, the net cash flow depends on the fees, interest rates from investments in the capital markets, payments due to operational costs and obviously whether a call on the guarantee occurs. If the call occurs, the existing collateral and capacity to repay the loan (partially) continues to be important.

2.1.3.1 Digression: insurance companies and credit derivatives

Except for life insurance – which has similar flows to savings products – the cash flow of insurance products is usually reversed compared with the flow of most other investments: there is usually a net cash inflow in the beginning from premium income, followed by a continuous cash stream through most of the life of the policy. Cash payment obligations are concentrated in the latter part of the policy life (Copeland, Koller and Murrin 2000, 455-476). Hence, the flow is similar to the cash flow of a credit guarantee.

A typical balance sheet structure is the following: on the left side, the insurance company has its assets which are usually investments in financial assets, real assets and cash. On the other side of the balance sheet are reserves, provisions and equity. Usually there is no significant debt in the form of loans. The main financial contracts, the insurance contracts, are not directly represented within the balance sheet total. It is the reserve that is shown in the balance sheet. In other words, the balance sheet total is an indication of the value of the reserve fund to fulfil obligations in the future and not the value of outstanding contingent liabilities.

Honohan (2010) calls derivatives and guarantees “cousins” (Honohan 2010, 2). In his dissertation on valuation of portfolio credit derivatives, Moosbrucker (2007) defines credit derivatives such as Credit Default Swaps (CDS) which:

“are designed for the transfer of pure credit risk of an underlying asset. The parties involved in the contract are called protection buyer and protection seller. The protection buyer pays a premium (typically on a quarterly basis) to the protection seller until a credit event of the reference obligation occurs. When a credit event occurs, the protection seller refunds the loss of the reference entity” (Moosbrucker 2007, 9).

The author also states that the “protection seller” and “protection buyer” have to specify the notional amount of the contract, the payment days, maturity, definition of the credit event and finally the settlement method. It has to be noted that a “reference” obligation or asset is indeed only a reference since the protection buyer does not necessarily have to own the underlying asset that is to be protected. Derivatives where no party holds the reference asset are sometimes called “naked derivatives” (The Financial Crisis Inquiry Commission 2011, 50).

In a Total Return Swap (TRS), the Total Return Payer (for example a bank that holds a loan or bond) does not have to sell the assets but can synthetically replicate the cash flow in favour of the Total Return Receiver. In return for this uncertain cash flow, the Total Return Receiver has to provide a previously agreed cash flow to the bank, independently of whether a default occurs. The base of derivatives can also be a portfolio, and credit derivatives can be used within securitization. Basket Default Swaps are similar to Credit Default Swaps, however, they are based on a portfolio. Moreover, the underlying assets of a Collateralized Debt Obligation (CDO) do not have to be a loan or bond but can be a Credit Default Swap, too. In this case, the CDO is said to be “synthetic” (Moosbrucker 2007, 9-13).

Without going into details, derivatives can transfer the risks of an asset or portfolio of assets from one party to another. Moreover, the protection buyer does not necessarily have to be the “owner” of the assets and the resulting cash flow. Consequently, credit derivatives, guarantees and insurance products are all measures to transfer risk. The Financial Crisis Inquiry Commission (2011) also points to the similarity between CDS and insurance products but provides two distinctions. First, only persons with an insurance interest will obtain an insurance policy whereas a CDS purchaser can use the product to speculate on the default of a loan which the CDS purchaser does not own (so called “naked CDSs”). The second aspect is that insurance regulators require reserves to cover losses unlike protection sellers that sell CDS (The Financial Crisis Inquiry Commission 2011, 50). Consequently, the differences of risk-sharing mechanisms lie in the arrangement of the risk-sharing contracts and the regulation, which might forbid “naked” products or order the accumulation of reserves.

Within their theoretical study on credit risk modelling, Bluhm, Overbeck and Wagner (2003) provide an overview of modern derivative instruments of credit risk sharing. Although the authors provide a very formalised and algebraic description they do not clearly differentiate between credit default swaps, insurance products and guarantees: On the contrary, the authors narratively explain that the major reason why banks prefer(ed) credit derivatives against the “well-established” insurance market are lower transaction costs, quicker payment and more liquidity (Bluhm, Overbeck and Wagner 2003, 211-212).

2.1.3.2 Items of financial statements that inform about stocks and flows

Schiereck (2002) models the provision of loans with guarantees of the German GBs from the banks’ and from the borrowers’ perspectives. In the model, GBs cannot provide guarantees of unlimited value since the guarantees have to be funded or counter-guaranteed. This model is indeed a valuable contribution to understand the stocks and flows and financial restrictions of guaranteeing institutions that do not receive counter-guarantees (counter-guarantees are only formally modelled with respect to the lenders’ regulatory capital requirements). Since counter-guarantees are important for many schemes (for example, the German government counter-guarantees up to 80% of the GBs’ risk), they are included in this research as the central extension of the model in order to apply to all credit guarantee schemes.

Balance sheets and income statements of schemes in Italy, Germany, France, Spain, South Korea and Japan were analysed in the empirical study “The guarantee systems and the SMEs access to credit”(Vincentiis 2008). The study was conducted by researchers of the University of Turin and the President of Eurofidi, one of the largest Italian credit guarantee schemes. Using this study and financial statements of analysed schemes in Germany, Spain and Portugal, the following elements were found to be typical:

The general structure of the institutions shows similarities with elements of balance sheets of banks and insurance companies: the core business, the guarantees, are contingent liabilities that can be found only outside the balance sheet total. Since the business of providing guarantees usually results in a positive cash flow (due to fees) before the guarantee is called, the guaranteeing institution has to “guard” this cash inflow like an insurance company. Indeed, on the left side of the balance sheet there are investments in real and financial assets. After a guarantee has been called, in period four, the guaranteeing institution has claims against either the lender or borrower. Consequently, within the institutions’ balance sheets there are claims against clients for example due to subrogation, i.e. assignments of claims.

On the other side of the balance sheet, this “guarding” results in an accumulation of provisions and equity.

As an alternative to providing finance to the GI, third parties, such as borrower associations or local authorities, can pay into a blocked (risk or guarantee) fund, or leave cautionary deposits with the lender. If these blocked funds are the only source of collateral, the “guarantee institution” is not a guaranteeing institution itself but rather an institution that manages blocked funds and is not necessarily subject to financial regulation.

Contrary to the typical balance sheet of insurance companies, the GIs’ balance sheets often contain debt towards financial institutions and others which is sometimes subordinated or even mezzanine capital. This can be either the guarantor’s debt due to calls on guarantees that were not paid yet, or this debt might come from third parties that provide liquidity.

On the income statements, there are typically net profits from guarantee fees, net interest rate profits and fees from other services. Since the institutions invest in the capital market, there are dividend gains and income (or losses) due to financial operations including depreciations. Obviously, providing guarantees and managing the investments result in administrative expenses, including personnel costs. In addition, there can always be extraordinary income or losses and the institutions might have to pay taxes.

With respect to the calls on guarantees, there are losses on credits and making of provisions. If a guarantee is not called or compensation is lower than expected, the institution can reverse the provisions which consequently results in income. Since the institutions may receive claims (against the borrower directly or indirectly via lenders) after a guarantee has been called, these claims can result in further losses or income due to valuation adjustments and payments. In addition, net amortisations and depreciations influence profits. If profit is not distributed among shareholders, the institution can accumulate equity including reserves.

Table 1 provides an overview of the stock of contingent and non-contingent claims and obligations. It differs from a balance sheet, in which the contingent obligations and claims are stated outside the balance sheet total.

Table 1 Stocks of Guaranteeing Institutions

Claims	Abbreviation	Obligations	Abbreviation
<i>Contingent</i>			
Counter guarantees	CG	Outstanding guarantees	OG
Equity (not paid in), liabilities of shareholders or any guarantee	ELG		
Insurance and derivative products	IN&DER		
<i>Non-contingent</i>			
Financial assets (long term)	FA(LT)	Claims of lenders	CL
Financial assets (liquid)	FA(Li)	Other loans	OL
Real assets	RA	Paid in equity	PE
Claims against borrowers	CB		

Own elaboration

The main stock of the guaranteeing institution is the portfolio of outstanding guarantees (OG). These guarantees are contingent liabilities and can be limited to a maximum amount, for example to the amount of loan principal plus planned interest rate payments. On the other hand, the outstanding guarantees might be “re-guaranteed” with counter guarantees (CG). These “contingent claims” are not the only ones. Like at cooperative banks, there might be equity which was not paid in, or shareholders can be liable limitedly or unlimitedly for the institution’s obligations (ELG). Moreover, the guaranteeing institution can always hold protection via insurance contracts or derivatives (IN&DER)⁴.

The “fund” of the guaranteeing institution usually consists of long-term or liquid financial assets (FA) and real assets (RA). These assets can be financed from the positive cash flow which results from the operation of providing guarantees and the paid in equity (PE). The guaranteeing institution might have obligations such as claims of lenders (CL) due to called guarantees or “other loans” (OL). These other loans should not be confused with the loans which are guaranteed; these other loans are provided by third parties or are cautionary deposits to the institution and provide liquidity to the guaranteeing institution. They can refinance claims against borrowers (CB), or regress that emerge when guarantees have been called or refinance real assets (RA) and financial assets (FA).

The guaranteeing institution’s non-contingent obligations (CL) and claims against borrowers (CB) can be found in the balance sheets and are determined by the outstanding guarantees

⁴ For example, real estate can be covered by insurance and an institution that operates in a special sector such as agriculture can buy protection against catastrophes or changes in commodity prices.

(OG) and counter-guarantees (CG), both contingent obligations and claims respectively: CL [OG-CG] and CB [OG-CG]. For example, a call on guarantee increases the institution's obligations (against lenders) but increases the claims (against the borrower), too.

For a GI to remain solvent, the assets should be higher than the claims⁵. This condition is described in the following equation.

Formula 1 Condition for the Solvency of a Guaranteeing Institution

$$FA + RA + CB[OG - CG] + ELG + IN\&DER > CL[OG - CG] + OL$$

The equation is derived from the research discipline of insurance business management – for an introduction see Karten (2000). Methods from this discipline were applied in a simulation study, tailored to Guarantee Banks, in the author's diploma thesis (Kramer 2008, 24-30,109-119). No simulations study is conducted in this research. Nevertheless, this section is the base for the quantitative analysis of financial statements.

Table 1 and Formula 1 also hold for the case of unfunded guarantee schemes (of the government or credit derivatives where no reserves are stipulated by law). In these cases, the values of non-contingent liabilities are negligible. Incoming cash is directly channelled to the shareholders or to the public budget. This brings us to the analysis of flows:

Negative flows or outflows arise from the payout of compensation due to called guarantees (comp_g) and administrative expenses (opaym) that include personnel or renting real estate. In addition, the institution might have to pay fees for counter guarantees, insurance policies or derivatives (fees_cg). The guaranteeing institutions can receive loans from third parties which imply interest payments (i_OL). Moreover, the institution might have to pay taxes to the authorities (tax) and dividends to its shareholders (divid). In the case of a public guarantee scheme, there can be contributions to the public budget (contr_budget).

A positive cash flow arises from compensation if the guarantees were "re-guaranteed" by counter guarantees (comp_cg) of third parties, or protection was bought via derivatives or from insurance companies (comp_(IN&DER)). After guarantees have been called, the guaranteeing institution has claims against the borrower, perhaps through the lender, (regresses)

⁵ It has to be stated that the book values can only be a starting point of analysis and usually, further internal information is needed.

which can result in repayments, interest rates and liquidation of collateral (repaym_CB). Moreover, the institution can charge fees for guarantees (fees_g) or other services such as consultation (fees_oth) and receives interest and dividend payments (i(FA)) from invested financial assets and gains from real assets (g(RA)) such as rented real estate.

Further cash inflow that does not come from the core business of providing credit guarantees results if the guaranteeing institution takes out loans (incr_OL) or receives grants (gra). Obviously, the institution would always receive positive cash flow if there is a bailout (pELG) or an increase of the paid in equity (payinEquity). These loans and positive cash flows have to be invested. The guaranteeing institution has the choice to maintain liquidity or invest in long-term financial (inv_FA(LT)) or real assets (inv_RA) which create outflows. Clearly, selling these long-term financial assets (sell_FA(LT)) and real assets (sell_RA) results in a positive cash flow and increases liquidity. In the case of public unfunded guarantee schemes the main inflow of cash comes from the public budget (payments_budget).

The following table provides an overview of the cash flow of guaranteeing institutions in a period t , which is equal to the variation of liquid financial assets:

Table 2 Flows of a Guaranteeing Institution in Period t

Cash Flow in period t	Abbreviation
<i>Positive</i>	
Compensation due to counter guarantees (net)	comp_cg _t
Compensation due to insurance and derivatives	comp_(IN&DER)
Repayments due to claims against borrowers (regresses)	repaym_CB _t
Fees for guarantees	fees_g _t
Fees for other services	fees_oth _t
Interests and dividends from financial assets	i (FA) _t
Gains from real assets	g (RA) _t
Increase of other loans	incr_OL _t
Grants of third persons	gra _t
Selling long-term financial assets	sell_FA(LT)
Selling real assets	sell_RA
Payments due to ELG ("Bailout")	pELG _t
Increase of paid in equity	payinEquity _t
Payments from public budget	payments_budget _t
<i>Negative</i>	
Compensation due to called guarantees	comp_g _t
Fees for counter guarantees, insurance policies or derivatives	fees_cg _t
Payments for administrative expenses	opaym _t
Interest payments for other loans	i_OL _t
Investments in long-term financial assets	Inv_FA(LT) _t
Investments in real assets	Inv_RA _t
Taxes	tax _t
Payments of dividends	divid _t
Contribution to public budget	contr_budget _t
SUM: variation of liquid financial assets	ΔFA(Li)_t

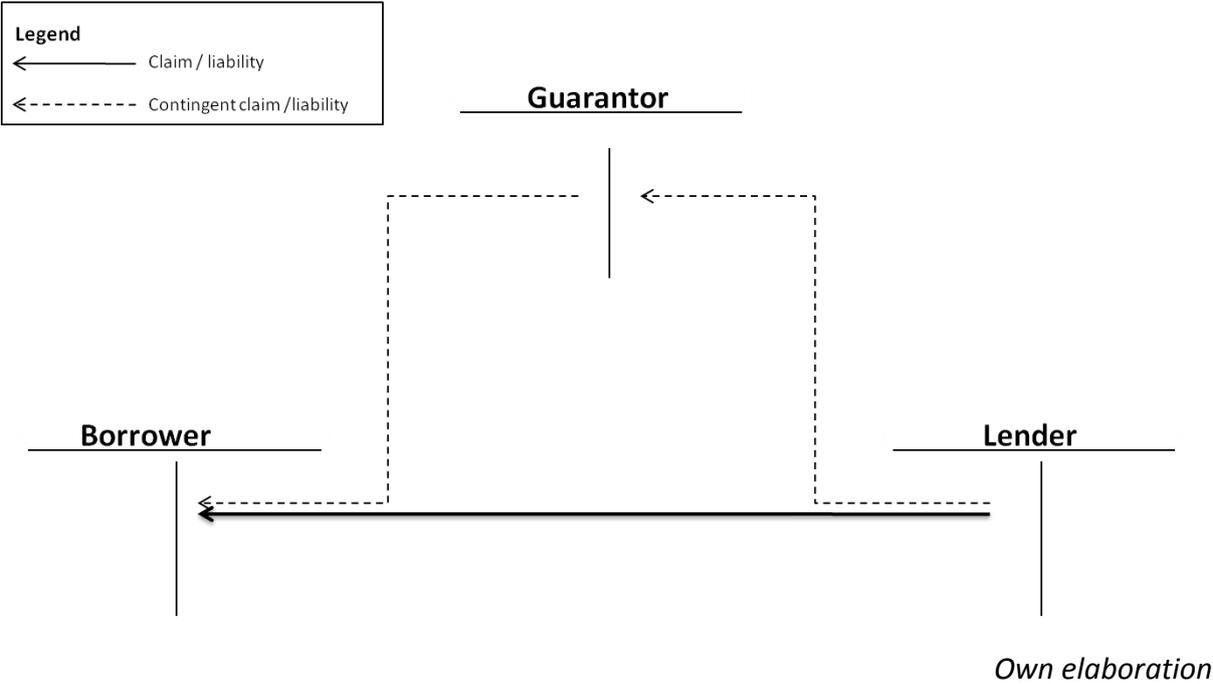
Own elaboration

2.2 The Basic Triangular Relationship

As discussed in section 2.1.1, Schmidt (1981) emphasises the asymmetrical distribution of information among investors and capital-seekers, and that financing instruments constitute a specific combination of rights and actions. A credit guarantee is a financial instrument which divides risk between the lender and the guarantor. Information is distributed asymmetrically between both actors.

When a credit guarantee is provided, the provision of liquidity to the borrower remains with the lender but the *credit*, i.e. the trust, is shared between the lender and guarantor via the guarantee. Hence, the relationship between the lender and the borrower is extended to a Basic Triangular Relationship (BTR)⁶. The following discusses the BTR and the three interdependent “sub-relationships” lender-borrower, borrower-guarantor and lender-guarantor. Contrary to the triangular relationship in the contribution of Kramer and Nitsch (2010) that is tailored to the German Guarantee Banks, the BTR includes the “lender” instead of the “bank” to be more generally valid. However, since the bank is usually the most important source of formal finance for small businesses, other lenders will only be discussed incidentally.

Figure 1 The Basic Triangular Relationship Expressed in “T” Accounts⁷



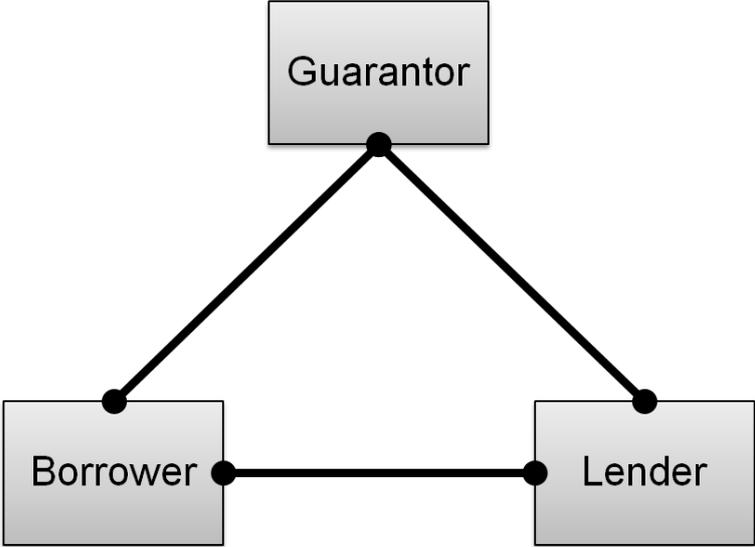
⁶ This term is rarely used in English literature. A similar term is used in German literature. For example, the triangular relationship, in German “Dreiecksverhältnis”, is used by Flessa (1989) in his juridical assessment of German guarantee schemes (Flessa 1989, 29). The term is also used by Geis (1993) in his study on credit guarantee funds in development finance for the German Federal Ministry for Economic Cooperation and Development (Geis 1993, 2,3).

⁷ “T” Accounts are a common form to illustrate claims and liabilities among actors, and go in line with the approach to illustrate balance sheets. On the left hand side of the “T”, there are its claims and on the right hand side, there are its liabilities. The arrows illustrate the set of claims and liabilities among the actors (see Nitsch (1999)).

A representation of the BTR is drawn in Figure 1. In accordance with the concept of horizontal accounting, the “T” represents the structure of a balance sheet: the actor’s assets or claims can be found on the left hand of the “T” whereas their liabilities are found on the right side. The loan contract constitutes a liability for the borrower and a claim for the lender. The guarantee is a contingent liability of the guarantor and a contingent claim of the lender. In addition, the guarantor receives a direct or indirect claim against the borrower after a guarantee has been called. To emphasise the contingency, these lines are broken.

Alternatively to the “T” accounts, a simpler illustration of the BTR can be used as shown in the following figure.

Figure 2 The Basic Triangular Relationship



Own elaboration, see Kramer and Nitsch (2010)

The BTR is generally applicable to accessory guarantees since the relationships can vary between very close and very distant ones. For example, an extremely close relationship between borrower and guarantor is given when the borrower is a limited company and its owner guarantees the company’s loan. In this case, the guarantee would be considered a personal guarantee. At the other extreme, the borrower might not know the guarantor or even about its involvement in the financing. In this case, the guarantee is solely a risk sharing

contract between the lender and the guarantor. Although the borrower might not be informed, the BTR does still exist because the guarantor's contingent liability depends on the borrower's repayment of the loan. In addition, the guarantee might indirectly affect the borrower's access to finance or financing conditions.

In the following sections, the three interdependent sub-relationships in the BTR will be discussed in more detail. Section 2.2.1 discusses the relationship between the borrower and the lender, section 2.2.2 considers between the relationship between the borrower and the guarantor, and section 2.2.3 is dedicated to the relationship between the guarantor and the lender.

2.2.1 Mutual relations between borrower and lender

The relationship between lender and borrower is the starting point of the analysis since the lender can provide finance (liquidity and credit) without the guarantor and credit guarantee schemes are often built in order to fill a financing gap.

External financing, such as a bank loan or finance via a bond, is usually characterised by a fixed claim on payment (repayments and interest rates) by investors and hence investors only participate asymmetrically in the profit of the financed enterprise.

Schmidt (1981) provides four basic forms of financing as combinations of rights and possible actions: equity-finance in a partnership, equity-finance in publicly traded joint-stock company, short-term external finance and long-term external finance. Equity finance implies that the risk and profit are more symmetrically distributed among investors and capital seekers. Information asymmetries can be reduced by personal contact in the case of a partnership, or the need for information is reduced in the case of a publicly traded company (R. H. Schmidt 1981, 195-213).

In the case of long-term borrowing, the cash flow of the investment project is coming in before the loan has to be repaid and the lender typically requires liens (or other collateral). The lender might only provide long-term finance if the expected gain from liquidation is sufficient to compensate for the borrower's default. Hence, the lender might only evaluate the expected value of liens and the lender's need for information on the borrower is reduced⁸. Moreover, if liens are provided, the lender receives a right of action and can influence the borrower to impede moral hazard since the borrower cannot dispose of the financed asset.

⁸ As discussed in section 2.1.1, there might be sorting effects as described by Stiglitz and Weiss (1981).

Moreover, the lien can reduce the possibility that the borrower takes more external finance because an additional lender would have to provide finance without liens. If liens are provided, the problem of moral hazard is reduced. Moreover, the lender might be able to reduce its costs when it is easier to estimate the value of the lien than to monitor both the financed investment and the borrower's behaviour (R. H. Schmidt 1981, 210-213).

Williamson (1988) applies the transaction cost approach to corporate finance and emphasises the importance of asset specificity. The author argues that the lender's value of a pre-emptive claim declines the higher the asset specificity is (Williamson 1988, 580). In other words, the liquidation or any other use of collateral is less promising for the lender when assets are only of high value for the borrower. Consequently, a high asset specificity can increase the lender's demand for guarantees from third parties.

Short-term borrowing, as a fourth alternative, increases the dependency of the borrower, can reduce information asymmetries through repeated interactions and hence, can reduce the risk of moral hazard (R. H. Schmidt 1981, 195-210).

The idea of short-term borrowing without liens is to provide finance with a lower maturity than the maturity of the investment. In other words, the borrower has to repay the loan before the cash flow of its investment is coming in. This implies that the borrower needs a continuous prolongation or a substitution of debt. The lender is in a position to refuse the prolongation which might imply the end of the investment project or even the liquidation of the enterprise. This threat enables the lender to reduce the moral risk of the borrower or stop financing if information was false. Consequently, this method can force the borrower to inform the lender truthfully, and the lender can collect information through a long-term relationship via repeated interactions. In the case of a substitution with finance of other lenders, the changing lenders cannot gather as much information as one lender that prolongs the loan. But the existence of alternative competing lenders increases the borrower's position and moreover reduces the borrower's risk that prolongation is denied. However, the rejection of the prolongation or impossibility of substitution can occur also because of reasons that cannot be controlled by the borrower. Consequently, sceptical borrowers will seek longer maturities (R. H. Schmidt 1981, 207-210).

None of the four methods reduces the technical risk or wrong expectations of both actors. Beyond the basic forms of finance, Schmidt (1981) reports that both methods of providing external finance can be mixed. Short-term finance is often secured by liens, and within long-term finance both parties might agree that the borrower has to pay interest and repayment of the principal starts during the period (R. H. Schmidt 1981, 216-219). Consequently, this agreement increases the lender's right to frequently monitor and undertake actions if the

borrower is not repaying as agreed. All in all, a long-term relationship with repeated interaction between a lender and borrower – which may include short and long-term finance – can reduce the information asymmetries.

Elsas and Krahn (2004) provide a theoretical analysis of relationship banking and state that the German “Hausbank”⁹ can be seen as an example of banks that practise relationship banking. These banks are regarded as the primary financier with more intensive and timely information on a firm than a comparable arm’s length bank. This informational advantage exists due to the accumulation of information through repeated interaction with the borrower over time (Elsas and Krahn 2004, 208). Following Boot (2000), the authors provide three potential benefits of relationship lending: information, renegotiation and intertemporal interaction. Whereas the informational advantages have already been discussed, the other benefits need some explanation. Relationship lending is an implicit contract between both parties which implies that its terms can be renegotiated flexibly. Since the long-term relationship introduces a long-term perspective, there can be an intertemporal transfer of earnings. In other words, the bank that practises relationship banking can provide a financial service which standing alone would not be profitable (Elsas and Krahn 2004, 208-209).

With respect to renegotiation, Elsas and Krahn (2004) emphasise that credit availability matters, especially when the borrower faces financial distress. With regard to the latter, the bank has an insurance function: with better information and a long-term perspective, the bank can assess the borrower and provide finance if the borrower’s financial problems are seen to be a temporary crisis. However, the authors admit that this insurance function does not automatically imply efficient lender behaviour. But, better informed lenders are more likely to make efficient decisions more often (Elsas and Krahn 2004, 209-211).

The relationship between borrowers and banks depends on several factors such as the size of the firm since larger enterprises have better access to capital markets and consequently are in a better bargaining position; competition among banks; bank regulation; whether the regulators allow universal banks that can provide most financial services; and whether financial stability allows banks to have such a long-term perspective.

Moreover, relationship banking includes not only the owner of a company who applies for a loan but might include the whole family. In their study on loan programmes within development finance, Krahn and Nitsch (2002) emphasise the role of the family. Starting a business or a household, building or purchasing real estate, and many other investments are usually financed by an advance from family members. For the borrower, this finance implies

⁹ The term „Haus“ means „house“ in German. It signals that in typical „hausbank“relationships all members of a family are clients of the “housebank”.

outflow of cash in the future like a loan, however, unlike for a loan, the outflow is usually not precisely fixed. Indeed, for the family, the micro- or small business is not only the family-business but also fulfils functions such as saving and insurance for the extended family. Consequently, the financing structure and relationship between the bank and the client should be seen as the “tip of the iceberg” within a complex framework including different generations, godfathers and inter-family relations (Krahn and Nitsch 2002, 71-75).

Borrowers can come in many forms. In his theory of economic development, Schumpeter (1912/1951) differentiates between the “innovative entrepreneur” (*Unternehmer*) and the “manager” (*Wirt schlechweg*) (Schumpeter 1912/1951, 83, Schumpeter 1934/1993, 122). However, since “manager” is not an adequate translation, and a better translation was not found, in the following the terms “wirt”, its plural “wirte” and “unternehmer” (both singular and plural) will be used.

The “wirt” runs the business in a circular flow and receives finance by the sales of what was produced before. Schumpeter concludes that the finance of “wirte” is not seen as of importance for economic development (Schumpeter 1912/1951, 95-115). It is more the “unternehmer” who conducts the “carrying out of new combinations of means of production” which is seen as the central contribution to economic development. This can be (Schumpeter 1912/1951, 66):

- I. the introduction of a new good,
- II. the introduction of a new method of production,
- III. the opening of new markets,
- IV. the conquest of a new source of supply of raw materials,
- V. the carrying out of the new organisation of any industry.

Thus the set of “unternehmer” is not reduced to independent businessmen or self-employed, who are usually called “unternehmer” in colloquial German¹⁰ but includes directors and managers within companies that are responsible for these innovations (this is why the translation in English is confusing). On the other hand, not all individuals and self-employed are considered “unternehmer”. They are not “unternehmer” when they merely operate in an established business without carrying out new combinations. Schumpeter emphasises that “unternehmer” lose their character as soon as their new combinations are car-

¹⁰ For example, the German version of Wikipedia defines the “Unternehmer” as a self-employed person or owner of a company who manages the company (Wikipedia 2011).

ried out and the person “settles down” to run his or her business (Schumpeter 1912/1951, 74-94).

For Schumpeter (1912/1951), not only the “*unternehmer*” is important, but also the banker. To conduct new combinations, the “*unternehmer*” needs purchasing power which must be borrowed if the “*unternehmer*” does not possess it (Schumpeter 1912/1951, 102). Consequently, the productive finance of the “*unternehmer*” is important (Schumpeter 1912/1951, 95-115)¹¹. Thereby the banker is seen by Schumpeter not as a trader of the commodity “purchasing power” but rather as a producer of this commodity. It is the bank that can create this purchasing power “out of nothing” (Schumpeter 1912/1951, 73-74). Consequently, both the “*unternehmer*” and the banker are the central drivers of economic development. The “*unternehmer*” carries out the new combinations and the banker may enable all persons to do so. Hence, innovations and new combinations do not depend solely on “investors” who already have purchasing power and might not be interested in the new combinations, i.e. competition.

While “*unternehmer*” and bankers who finance “*unternehmer*” are crucial for economic development, the importance of “*wirte*” and their financing demands should not be underestimated. Not only can and do “*unternehmer*” convert to “*wirte*” after they have carried out their new combinations, but the opposite is possible as well. The stable finance of “*wirte*” might enable the emergence of “*unternehmer*” when the person sees a good business opportunity, or is forced by competition, to “carry out new combinations of means of production”.

This research uses the differentiation provided by Schumpeter (1934/1993) between “*unternehmer*” and “*wirte*”. The possibility that one person might convert from “*wirt*” to “*unternehmer*”, or vice versa, is an advantage of the terminology. This is more useful for this research than the common differentiation into start-ups and established businesses. The differentiation between “*unternehmer*” and “*wirte*” is somewhat similar to the frequently used differentiation into innovative and non-innovative businesses. However, in literature, the definition of innovation varies and using that term might result in confusion. Moreover, the concept of Schumpeter’s “*wirt*” and “*unternehmer*” provides the link to the financing needs.

¹¹ „And this purchasing power does not flow towards him automatically, as to the producer in the circular flow, by the sale of what he produced in preceding periods. If he does not happen to possess it – and if he did then it would simply be the consequence of former development – he must borrow it“ (Schumpeter 1912/1951, 102)

It has to be noted that when the borrower is a “wirt”, he or she can often be a lucrative bank client. This holds especially, when a universal bank realises profits via cross selling. In addition, the “wirt” and the bank (or loan officer) may have established a long-term relationship, i.e. relationship banking. On the other hand, the “unternehmer” faces more financial constraints since the borrower cannot show the lender in advance that the innovation is indeed profitable.

2.2.2 Mutual relations between borrower and guarantor

There is always a fundamental relationship, “Grundverhältnis”, in the words of Flessa (1989) between the guarantor and borrower (Flessa 1989, 29). Both actors are either directly or indirectly connected via the guarantee contract, and the guarantor does not take the risk without any intentions of his or her own. These intentions might be the business motive to receive the financial compensation for taking the risk – similar to an insurance company. Alternatively, the intention is not receiving fees but other motives that depend on the overall relationship between the borrower and guarantor.

The most usual guarantors in small business finance are family members. Within a family structure, there can be a long-term interest in helping family members to receive finance. The borrower’s family members may be wealthier than the borrower is and be able to provide collateral. Moreover, they might know the borrower better than the lender, and via a guarantee they can provide an commitment that the borrower will repay. Moreover, the guarantee reduces the moral-hazard problem since the guarantee reduced the attractiveness to reshuffle the portfolio of assets. Other typical guarantors are business partners who provide guarantees in order to tie their partners to them. In this case, the borrower has to pay a price for the guarantee, often not in monetary terms, but not necessarily a less costly one (Kramer and Nitsch 2010, 999). The guarantor might prefer to provide the guarantee instead of an informal loan because the loan includes the provision of liquidity which the guarantor might not have. Moreover, the guarantor might prefer guaranteeing the loan because there is the possibility of not paying even if the guarantee is called.

The following will focus on institutional guarantee schemes. However, it has to be emphasised that the social integration of the borrowers within their family is important. In the case of bankruptcy, personal guarantees can affect the whole family and can result in poverty, social disgrace, exclusion and psychological pressure. Especially when a credit guarantee substitutes for a personal guarantee, the guaranteeing institution can reduce dependency of borrowers on their family and therewith reduce the risk held by the family which often also

serves as a social protection network. On the other hand, if the guaranteeing institution provides the guarantee but continues to require personal family guarantees, irresponsibly provided credit guarantees may lead to high ineptness.

In addition to risk-sharing, screening and monitoring, a long-term arrangement between an institutional guarantor and the borrower can be established. Similar to relationship-banking, the guarantor can accumulate information on the borrower over time via repeated interaction which could include other products such as advice or lobbyism. However, as already stated, Levitsky and Prasad (1987) and Vogel and Adams (1997b) emphasise that the guarantor can only provide finance in cooperation with a lender and hence guarantee schemes cannot provide the full range of financial services. This is an indication that the lender is usually in a better position to establish a long-term relationship with repeated interaction to the clients than a guarantor.

As shown in section 2.1, the guarantee contract has a life cycle and the intensity of the relation varies within the four periods. Although there might be a close cooperation between all actors in the Basic Triangular Relationship in the periods I, III and IV, in period II, which is the longest period when long-term finance is guaranteed, the screening can be completely delegated to the lender who also manages the business account and receives loan repayments or provides the liquidity of overdraft and hence is closer to the provided cash flows. Moreover, if the guarantor only guarantees a long-term loan and does not provide additional services, there is only little interaction. Also in providing short-term finance repeatedly, there are only a few points in time when a new loan has to be guaranteed or when the guarantee is called. On the other hand, a “Hausbank” can monitor the daily business beyond external financing. Consequently, the relationship between the guarantor and borrower is hardly as intensive as the relationship between a borrower (and his family) and a universal bank which practises relationship banking.

Contrary to “relationship-guaranteeing”, the relationship can also be arm’s length. Cooperation with an institutional guarantor, which implies higher transaction costs, may be used only in cases where finance of the lender alone is not sufficient or inadequate. In other words, the borrower receives financial services from the lender, and the guarantor is included only in some cases in the relationship between the borrower and the lender.

When the borrower is a “wirt”, the financing is often lucrative which also holds for guaranteeing finance of “wirte”. However, higher transaction costs of a guarantee scheme might reduce the attractiveness for “wirte” to participate in the scheme, and furthermore, “wirte” might obtain adequate finance from lenders without the guarantee. When the borrower is an “unternehmer” who has more financial constraints, the borrower might be willing to co-

operate, despite the high transaction costs because otherwise the “*unternehmer*” might not receive any formal finance at all. However, financing an “*unternehmer*” is more risky and the guarantee activity might be expensive due to high defaults.

2.2.3 Mutual relations between guarantor and lender

This section focuses on the relationship between lenders and guarantors, and the general question why lenders cooperate with a guaranteeing third party.

Credit guarantee schemes are usually built to improve directly the finance of borrowers, however, they do that indirectly, since credit guarantees are to reduce the lender’s risk. Thus, the guarantee can make the loan more attractive for the lender, which may be an incentive to provide the loan at all, provide longer maturities or to charge lower interest rates. Consequently, the question arises whether it is the borrower or the lender who benefits (more) from a guarantee. Indeed, Vogel and Adams (1997b) emphasise the problem of substitution: it may be the lenders who mainly benefit from the guarantees although the “*target group*” are the borrowers (Vogel and Adams 1997b, 11,12).

In fact, the explicit purpose of a credit guarantee scheme can be to support the lender. This does not only hold for schemes where it is the refinancing of the lenders which is guaranteed. A credit guarantee scheme can be used like a “*Bad Bank*” in order to “*free*” the bank from its risks. This is obvious in the case when the guarantor guarantees a loan (or portfolio of loans) which was already provided earlier. Another way to reduce the lender’s outstanding risk is the prolongation or substitution of an “*old*” unguaranteed loan with a “*new*” guaranteed one. In addition, the guarantee may increase the lender’s liquidity, especially if the guaranteeing institution provides payment on first demand, before the collateral has been liquidated or all claims have been satisfied under another repayment-plan. Moreover, the guarantor can conduct the decision-making process and liquidation of collateral, and hence, reduce the lender’s costs.

Honohan (2010) provides four reasons why credit guarantee schemes emerge and why banks cooperate with an institutionalised guarantor: If the guarantor is *better informed*, the lender’s informational risk and risk of moral hazard can be reduced since the guarantee is a commitment of the better informed guarantor. If there are *arbitration gains*, the guarantee becomes attractive for the lender too – at least in the short term. Sharing risk with an institution that is in a *better position to diversify that risk* is attractive for example for regional banks or lenders that specialise in financing companies in one or few sectors. *Public inter-*

vention in the form of subsidised risk-sharing is often welcomed by banks. However, public support is usually provided under restrictions and can increase transaction costs.

When there is no public intervention (be it regulatory arbitration or public support), only two of the four reasons stated by Honohan (2010) remain: risk-pooling advantages and informational advantages. What are the implications for the relationship between the guarantor and the lender in these cases?

Both actors could reduce their transaction costs and concentrate on their advantages. In the extreme case, there could be complete division of labour: if the advantage of the guarantor is risk-pooling, the guarantor does not screen the borrower at all and tries to control against high losses via risk sharing or stop loss mechanisms. If on the other hand, the guarantor has informational advantages, the opposite might be true. The guarantor screens the borrower and provides the credit in the sense of trust, leaving only the liquidity provision to the lender.

The division of labour, however, induces transaction costs due to the existence of informational asymmetries between the lender and guarantor. For example, in an introduction to credit risk modelling, future credit risk managers learn:

“Assume a major building company is asking its house bank for a loan in the size of € 100 m. Somewhere in the bank’s credit department a senior analyst has the difficult job to decide if the loan will be given to the customer or if the credit request will be rejected. Let us further assume that the analyst knows that the bank’s chief credit officer has known the chief executive officer of the building company for many years, and to make things even worse, the credit analyst knows from recent default studies that the building industry is under pressure and that the bank-internal rating of this particular building company is just on the way down to a low subinvestment grade (low credit quality).

What should the analyst do? Well, the most natural answer would be that the analyst should reject the deal based on the information she or he has about the company and the current market situation. An alternative would be to grant the loan to the customer but to insure the loss potentially arising from the engagement by means of some credit risk management instruments (e.g.; a so-called credit derivative)” (Bluhm, Overbeck and Wagner 2003, 15).

If the lender knows, in this example, that the borrower is probably losing its investment grade but does not provide this information to the guarantor, the lender does not provide all information he or she has. Hence, the guarantor’s problem of not receiving all available information is not only coming from the borrower’s behaviour but also from the lender’s. On the other hand, the guarantor might not behave as agreed and does not pay in the case of

default or delays payments as long as possible. Consequently, in this relationship a general mutual information and moral hazard problem can be noted – like in a loan contract.

Within this relationship both parties must agree to the risk-sharing, fees, process of providing guarantees and handling of claims. Among the set of possible contract designs three tradeoffs can be found in analysing the study of Levitsky and Prasad (1987):

- An automatic provision of guarantees would reduce transaction costs, but can result in moral hazard since the bank can transfer all loans they perceive as risky to the guarantee scheme. Alternatively, the lender can transfer loans although collateral is sufficient, which however, is not the purpose of the scheme. On the other hand, independent investigation “makes the system more bureaucratic, introduces delays, and raises costs” (Levitsky and Prasad 1987, 4). Hence, transaction costs may increase, and attractiveness of the guarantees decrease.
- Leaving a significant fraction of the risk with the lender may control for the moral hazard problem, i.e. a reduction of the lender’s screening efforts. However, high transaction cost to obtain the guarantee might not justify low risk mitigation that reduces the guarantee’s attractiveness (Levitsky and Prasad 1987, 4-6).
- Schemes must deal quickly with claims since excessive red tape and delays in payment act as major deterrents to lenders participating in the scheme. However, the authors are aware of the moral hazard problem and suggest that the guarantor should have the right to reopen the case if there are indications of an inconsistent behaviour of the lender (Levitsky and Prasad 1987, 7,8).

With respect to the tradeoff between high transaction costs due to screening and high defaults, portfolio management provides a simple solution. A stop-loss mechanism, or cap, at portfolio-level can be implemented in analogy with portfolio credit derivatives, described in section 2.1.4.1. It can be agreed that only a limited number of loans or a share of total volume will be compensated. Consequently, the losses, as well as administrative and transaction costs can be reduced. However, at what level does this mechanism become attractive enough for the lenders that they provide better finance than they would without this mechanism?

Levitsky (1997) suggests that the guarantor should always share the risk since this induces the lender to screen the borrower and as a consequence there might be a “learning process” for the lender (J. Levitsky 1997, 7). Krahn and Schmidt (1994), however, conclude that if banks lack experience and know-how, direct support of the relevant banks would be easier and more effective than the use of guarantee schemes (Krahn and Schmidt 1994, 72).

Another problem for the relationship between lender and institutional guarantor exists when the lender is a bank that practises relationship banking. The bank might have to share information with the guarantor, the borrower's bargaining position might increase and the relationship between bank and borrower becomes less exclusive. The lender might even fear competition in the sense that the borrower and "his" or "her" guarantor can "take" another lender for the next finance. This matters since the prospect of a lucrative business relationship in the future is essential in relationship-banking. The willingness to cooperate depends on the lender's expectations of the future business relationship with the borrower, be it a "wirt", an "unternehmer" or a declining business, and it depends on whether the lender fears a competition with the guarantor. Consequently, it can be rational for the bank to avoid cooperation with a guaranteeing institution that accumulates borrower information, even though a guarantee would make the loan itself more attractive.

This problem of competition is of less importance when the lender provides loans via an arm's length relationship or provides finance via bonds on the capital market.

All in all, it becomes clear that trust between guarantor and lender is essential in credit guarantee schemes. However, how can trust emerge? Analogous to the previously discussed relationship-banking, the information asymmetries, problems of moral hazard and high transaction costs can be reduced when a long-term relationship with repeated interaction is established between the guarantor and the lender (Kramer and Nitsch 2010, 1000). Over time, the lender may trust that the guarantor will indeed fulfil his or her promises when the guarantees are called and moreover the lender does not lose clients due to the credit guarantee scheme. On the other hand, the guarantor may trust that the information provided by the lender is correct. This long-term relationship can be fruitful especially on the loan officer level: when a guarantor is well informed, the willingness of the guarantor to share the risk is not only a risk-sharing but also a signal of creditworthiness. A loan officer might be in a better bargaining position within the bank's decision-making process if a guarantor signalled his or her commitment. This holds not only when the guarantor and loan officer are in favour of financing the borrower, but in addition, when both want to refuse finance.

To summarise, possible advantages of the guarantor over the lender like risk-pooling and accumulation of information, can be offset by mutual information and moral hazard problems within the Basic Triangular Relationship. Whereas a long-term relationship between lender and guarantor can result in a stable business relation built on trust.

2.3 Extension of the Basic Triangular Relationship

In this section, the Basic Triangular Relationship will be extended by private and public actors that initiate or directly influence the credit guarantee scheme. Dominance, ownership and influence within this Augmented Triangular Relationship (ATR) can vary significantly, and not all elements of the extension are always required to be present (Kramer and Nitsch 2010, 1004,1005).

2.3.1 Private initiatives

As discussed in section 2.1.2, there are microeconomic models that present financially self-sustainable credit guarantee schemes. Hence, these studies may encourage private actors to build credit guarantee schemes. Since information asymmetries are one cause of credit rationing, such as discussed by Stiglitz and Weiss (1981), one can argue that a private initiative of borrowers may be able to reduce information asymmetries. This section analyses private initiatives of borrowers and lenders. Thereby credit guarantee schemes and similar arrangements will be discussed. For example, the limits of guarantee schemes as self-help institutions will be addressed. Actors may not be willing to provide unlimited liabilities, to share internal information or not be willing to cooperate with competitors.

Similar to the already discussed concept of providing personal credit guarantees by businessmen in order to enable a profitable (long-term) business relationship, a larger company can institutionalise its guaranteeing activity in a guaranteeing institution. The scheme may support the finance of clients, suppliers or traders and be an alternative to the creation of a bank.

Well known self-help institutions are credit unions or cooperative banks. These institutions can be regarded as guarantee schemes since members are liable for the institution. Kluge (1991), in his historical assessment of German credit cooperatives, provides various forms for members' liabilities. These can be grouped by whether the liabilities of members are limited or unlimited (Kluge 1991, 167-176). Schulze-Delitzsch and Friedrich Wilhelm Raiffeisen, the most famous initiators of cooperativism in Germany, were advocates of unlimited liabilities. Based on a belief in solidarity among the members, Schulze-Delitzsch (1897) explains the advantages of the unlimited liability with a more reliable "credit basis" to capture deposits (Schulze-Delitzsch 1897, 31,32). In other words, the members provide a joint liability and form a guarantee scheme. The members' guarantee commitments represent the collateral

for the refinance of the cooperative. Hence, the similarity between banks and credit guarantee systems, as stated by Schmidt and Zeitinger (1984) and discussed in section 2.1.2, becomes illustrative. Cooperative banks are not the focus of this research. Nevertheless, these arrangements constitute an alternative for borrowers instead of creating a credit guarantee cooperative that cooperates with lenders.

An unlimited liability of members may be a good basis to capture finance but it is a risk for the members that may keep out wealthier members. Only borrowers who have no other opportunities may be willing to cooperate, and the unlimited liability is an incentive for members to leave the cooperative when they do not need a loan. In addition, it is an incentive to establish only small institutions where the members know each other. Kluge (1991) addresses this problem in his historical analysis on German cooperative banks and reports that since 1889, the limited liability has slowly replaced the unlimited liability and cooperative banks were able to offset the reduced “credit basis” by an accumulation of equity and mergers among cooperatives (Kluge 1991, 167-176).

Group lending is a well-known method in microfinance (Armendáriz and Morduch 2010). This arrangement is similar to a credit guarantee scheme since the members of the group are jointly liable for the loan. However, it is rather a method used by the microfinance institution to provide a loan. Several persons are jointly liable for the loan, i.e. similar to loans where personal guarantees are required from third persons. Nevertheless, explicit guarantees are scarce in group lending. Usually members of the group are sanctioned when there is no complete repayment. For example, they might not be eligible for further loans. An even softer realisation of group lending is providing individual loans but obliging the members to meet frequently and discuss issues such as financing (Kramer and Nitsch 2009).

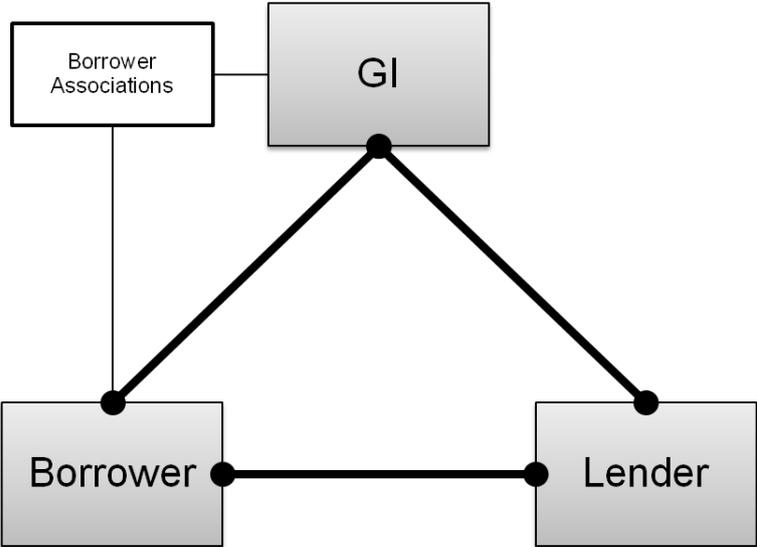
Cooperative banks and group lending with explicit and even unlimited guarantees are institutional arrangements to increase the borrower’s willingness to pay back the loan. However, one should be very careful of increasing social pressure among poor people that may have few financing opportunities. As discussed before, a lender is hardly able to understand the whole structure of mutual liabilities of individuals since the external finance is only the “tip of the iceberg” (Krahn and Nitsch 2002, 71-75). This difficulty can only increase if a loan is provided to a group.

Alternatively to the discussed arrangements, the borrowers themselves may initiate a self-help credit guarantee scheme in order to improve access to finance. Contrary to group lending, this arrangement is not a method of a bank but rather a self-help arrangement of borrowers who, in a second step, negotiate with banks or other lenders. In his study on credit guarantee schemes, von Stockhausen (1988) describes self-help groups as intermediaries

between the banking sector and individual small entrepreneurs. Entrepreneurs are able to finance a risk fund which can be offered as a guarantee for the lender when, according to the author, two basic assumptions hold: small entrepreneurs can save, and this saving is not sufficient to satisfy their total financing requirements. However, the author is critical whether such an association is accepted by the lender and whether the association, with its own management, is financially self-sustainable. Hence, financial support of governmental institutions, non-governmental organisations and the lenders themselves may be needed (Stockhausen 1988, 40-51).

Rather than few borrowers who try to establish a self-help group, there may be borrower associations that can initiate such a scheme. Enterprises can be organised in regional or sectorial associations and their umbrella organisations. In addition, especially in Europe and Latin America where many states were organised in the form of corporative order (*ständisch-korporativ*), there are chambers in which members of particular sectors are obliged by law to participate. This implies compulsory payments and these institutions still fulfil some public functions and, such as in Germany, are public agencies (J. H. Kaiser 1978). Since these institutions are frequently involved in credit guarantee associations, the Basic Triangular Relationship will be extended by the “Borrower Associations” which include both private associations and chambers.

Figure 3 First Extension of the Basic Triangular Relationship



Own elaboration, see Kramer and Nitsch (2010)

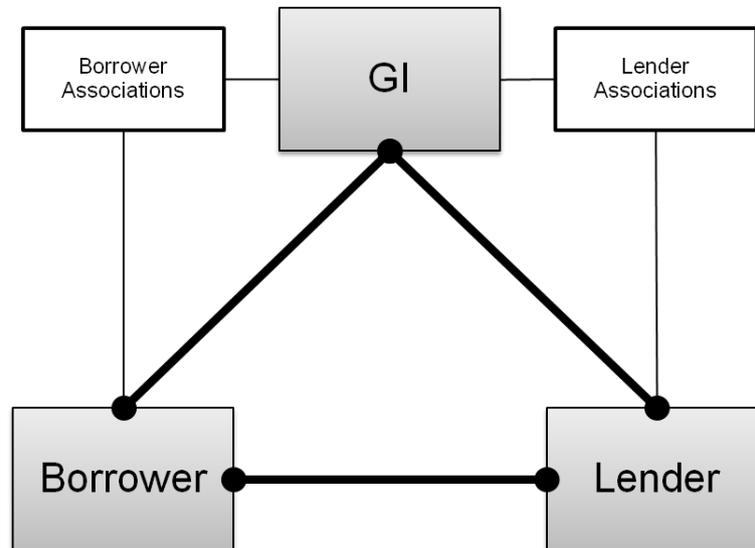
These chambers and associations may support the credit guarantee scheme since they have information that the lenders do not, and the associations can provide organisational or financial support.

The Borrower Associations can establish a credit guarantee scheme with limited liability of the members. For example, they can create a fund that serves as collateral for the lender. However, the problem of competition among the enterprises remains. Indeed, why should small businesses guarantee the finance of competitors and potential competitors? Consequently, there can be members of the association who influence negatively the activity of the guarantee scheme and limit the field of operations. This conflict is reduced when there are regional monopolistic or oligopolistic structures of competing borrowers and, on the other hand, a guaranteeing institution that is organised on a supra-regional level. For example, this may hold for small businesses in the crafts-sector that only operate in their municipality or neighbourhood.

Another problem is the distribution of internal information about the borrower which affects the attractiveness of a guarantee scheme. Contrary to a small group of borrowers who know and trust each other, an association usually constitutes an administrative body with a larger number of members. Additional actors such as Borrower Associations can thus increase scepticism about the scheme among the borrowers. If no confidential firewalls exist, the borrower may refuse to provide information (Kramer and Nitsch 2010, 1002). General scepticism of borrowers to share information with the associations may be aggravated when, for example in transitioning economies, the associations and chambers were or still are too close to the old political system.

Beyond private initiatives of borrowers, there can also be initiatives of lenders. There are several methods for financial institutions to share risk with third parties. For example, banks can jointly provide loans to a borrower or insure part of the risk with insurance companies. In addition, there are securitization and credit derivatives. Instead of including insurance companies and other actors from the capital market that can be guarantors as well, the triangular relationship will thus be extended by the lenders' associations:

Figure 4 Second Extension of the Basic Triangular Relationship



Own elaboration, see Kramer and Nitsch (2010)

Lenders usually form some weak lender associations that represent their interests or provide internal services such as training or research. Moreover, the lenders may also form a network with mutual responsibilities and strong associations. Indeed, the lender associations in this research also include second-tier institutions with operational business and full banking status, such as the “central banks” within the network of cooperative banks. With respect to cooperative banks, Arbak, Ayadi, De Groen, Lliwellyn and Schmidt (2010) state that a key factor to distinguish well integrated networks from weaker associations is the extent of mutual support: an integrated support scheme makes the network resources available ensuring the liquidity and solvency of member institutions. This does not hold only for cooperative banks. Savings bank can also form such strong networks, with joint liabilities to ensure deposits and other obligations. Within such networks, there are usually second-tier institutions that can have a high level of authority to monitor the banks. Sometimes they have even the right to restructure the bank’s debt, or the governance structure, or to push mergers among the network institutions (Arbak, et al. 2010, 22,30). Although such cooperation is also possible among other non-cooperative private banks, the motive of competition among oligopolistic rivals usually results in a weaker association. Only where some “fraternity” among banks exists, such as banks with statutory limitations on their respective district territories,

can a strong network among brothers and sisters emerge (Kramer and Nitsch 2010, 1002,1003). The Lender Associations in the Augmented Triangular Relationship include both the weaker associations and the strong second-tier institution.

The lender associations are not included because of their general importance within the networks or their representation and lobbying function, but they are included here since they can provide credit guarantees to their members directly or indirectly. A central institution can diversify risk within the network and can act as a specialised screening institution. Instead of providing credit guarantees and taking the risk, they can also offer a platform to share risk within the group or participate in other guaranteeing institutions. However, a second-tier institution can also provide loans on its own or in consortium with a member bank¹².

All in all, the private initiatives may have the advantage that actors know each other and hence may be better informed than an individual lender. On the other hand, private initiatives face problems that derive from the motive of competition. Private actors may refuse to share risk or information. Hence, the question arises whether private initiatives can establish viable credit guarantee schemes. In an Inter-American Development Bank (IADB) Study, Llisterri (2007) concludes that it is still an open question whether the government is needed only for initial support or whether continuous financial support is needed (J. J. Llisterri 2007, 10).

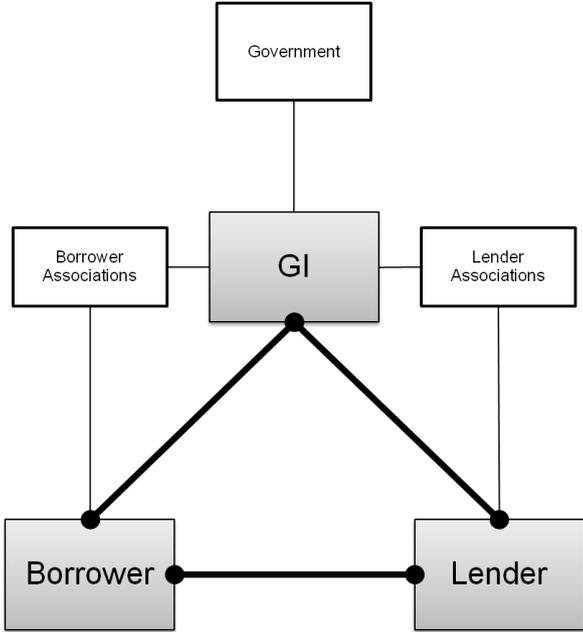
2.3.2 Public initiatives

In section 2.1.3, the interventional approach to analyse credit guarantee schemes was introduced. Credit guarantee schemes can be implemented in order to overcome market failures, and to increase development and welfare. This section discusses how credit guarantees can be used as a tool of public policies. It should be clear that guarantees are only one instrument of fiscal policy to improve finance next to instruments such as grants, regulation, taxation, participation in commercial banks and directed credit.

The Basic Triangular Relationship is thus further extended by the government resulting in the Augmented Triangular Relationship (ATR).

¹² For a further discussion and overview of methods to transfer credit risk, see Kern (2008).

Figure 5 The Augmented Triangular Relationship



Own elaboration, see Kramer and Nitsch (2010)

Within Development Finance, Vogel and Adams (1997b) state that guarantee schemes are usually used as measures in line with the Directed Credit Paradigm (Vogel and Adams 1997b, 1,2). However, when considering credit guarantees they do not see as negative incentives on lenders and on mobilisation of savings such as with directed credits (soft loans).

Geis (1993) emphasises that a soft and indirect public intervention can be conducted via credit guarantees, and relatively little financial means may result in a significant impact on development. The author provides three promising arguments for public policy makers in development finance to create credit guarantee funds. First, the government and international donors can reduce credit rationing without establishing a credit programme, by only providing subsidies or (counter-)guarantees to the fund. Second, it is possible to support self-help energies of the target group. The third argument is that learning processes among banks can be induced. In this sense, credit guarantee funds are seen by the author as market-based and self-help stimulating with low expenses for the public budget (Geis 1993, 8,9). On the other hand, Geis (1993) is aware of the problems such as moral hazard, substitution, reluctance of banks and difficulties in achieving financial self-sustainability. He warns against a thoughtless use of this financial instrument on a large scale and against political-administrative interventions in the scheme's operations. Faced with the problem of the substitution of finance that would have been provided without the scheme, the author strongly

recommends anchoring the “principle of subsidiarity” within the design of the scheme in order to achieve additionality (Geis 1993, 10-12). This principle will be explained in section 2.3.3.2.

With respect to information asymmetries and the consequent market failures, the government has usually no additional information. The tax office accumulates information on the borrowers. However, borrowers tend to understate their income and belongings in order to avoid high taxation (Kramer and Nitsch 2010, 1004). Nevertheless, government has more information on other public support, such as grants, or regulations which may be important for particular borrowers. Moreover, public agencies might have more “power” to exact claims.

Honohan (2010) emphasises, in line with the concept of public choice, that several features are seductive for politicians and administrators:

“The family resemblance that they bear to market-based institutions may confer in the eyes of the public an apparent legitimacy to these schemes that (given the failures of the past) is no longer shared by directed credit and loan subsidy schemes as devices to overcome the evident market failures that exist in small business finance.” (Honohan 2010, 4)

A relatively small initial cash outlay can leverage large outreach by number and by volume for which the political system can take credit. Each of these reasons can seem to politically outperform direct government lending programmes; however, the author critically states that credit guarantee schemes can be used by politicians to conceal, dissimulate or procrastinate when they are accounted “in a technically deficient, non-transparent or meretricious way” (Honohan 2010, 4). The author concludes that schemes lead to a natural suspicion among policy analysts and there must be transparency and robust accounting for both costs and benefits if performance is to be appraised adequately.

Indeed, when guarantee schemes are to be assessed, there is generally the problem of (intra-portfolio and inter-lender) substitution, and hence, the benefits or positive impacts are not clear. Moreover, the problem of calculating all (transaction) costs and the general question whether external debt is the best instrument to achieve the goal have to be addressed when impact on welfare is to be assessed. Consequently, strong assumptions must be set to conduct impact assessments of costs and benefits. These assessments can contribute to a better understanding of credit guarantee schemes, especially when the methods and assumptions are clearly provided. However, a broader analysis is needed.

A negative effect may be that publicly supported credit guarantees might induce “queues” (*Warteschlangen*). This term is used by Nitsch (2002) to describe a negative effect of subsidised loan programmes where borrowers wait in order to receive subsidised loans which,

however, are not sufficient to supply the finance of all borrowers (Nitsch 2002, 47). This effect may occur especially when credit guarantees are scarce but attractive for both the lender and the guarantor. The lender might provide loans only when the risk is borne by the guaranteeing institution. In addition, if finance were significantly cheaper with the credit guarantee, borrowers would demand the subsidised finance and if they do not receive it they could “put off” or postpone their investments. This problem, however, can be simply controlled by reducing the guarantees attractiveness for example, by charging high fees.

Nitsch (2002) analyses the experiences of development banks and emphasises the double-character of these institutions as financial intermediaries and public agencies. Since financial intermediary and public agency have different functions and follow a different and contradicting logic, development banks can show a negative combination (Nitsch 2002, 49-53). Although credit guarantee schemes are not full banks and hence cannot fulfil all functions of banks, they share similarities with the double-character of development banks. Similar to insurance companies, credit guarantee schemes pool and analyse risks, and provide liquidity in the credit event. These functions can be overlaid with the functions of a public administration agency which is usually “equipped” with a fixed budget that is to be spent in a fixed period. This internal conflict becomes illustrative when the similarity of guaranteeing institutions and insurance companies is considered: a private insurance company does not only distribute “risk on many shoulders”, it also rations individuals that seem to be too risky. On the other hand, the public administration may only be willing to promote riskier borrowers such as “*unternehmer*” in order to induce development by filling a financing gap.

Consequently, when a public scheme exists to fill a financing gap for a small (riskier) target group, the development promotion imperative may impede/hamper the guaranteeing institution to diversify risk by achieving high numbers over a broad range like an insurance company. Or the other way round, if the scheme is supposed to be financially self-sustainability, the methods of the insurance companies may impede the aim of filling a gap.

This double-character becomes particularly clear when the cash flow is analysed: since guarantees are contingent liabilities, fiscal planning of public guarantees differs from normal budget planning where cash flows can be planned, fixed in the budget, and monitored. The cash flow¹³ resulting from a credit guarantee is different because it is usually positive in the beginning but may become negative later. Decision makers face uncertainty in both whether a default will occur and, if it does, the amount that has to be paid. Consequently, the policy makers have to decide how to deal with this uncertainty. If a government does not ignore

¹³ Cash flow resulting indirectly from an increase of tax income due to the investment or reduction of contributions to unemployed labour is not considered in this cash flow analysis (see section 2.14.2).

futures budget risks, but is willing to take precautions, it has generally two methods to set aside reserves for guaranteed loans. The first is to include an estimated and fixed amount for calls on guarantees in the future budget plans. In this case, the guarantees are unfunded. The second method involves funding. Government can channel (once or periodically) financial means from the budget to a special fund. Consequently, each call on a guarantee does not necessarily affect the future public budget. The future budget is only affected, on top of the already planned contributions, if the liabilities exceed the assets of the fund. Hence, the fund is a technical tool to convert, up to a certain degree, the uncertain cash flow into periodical or unique payments. However, since the fund's assets can always lose their value and calls on guarantees can always exceed the value of the pledged assets, the general uncertainty cannot be totally abolished. A public guarantee fund can rather be interpreted as "making of provisions".

2.3.3 Guarantees and additionality: a subsidiary use for a light intervention?

As discussed in the previous sections, guaranteeing institutions do not have general advantages over commercial banks that can provide finance alone. A bank can generally provide a full range of financial services and practise relationship banking. In addition, it can be a regional or specialised bank. Banks (be they public or private) are institutions that can follow the commercial approach, providing financial services to "wirte" and "unternehmer", providing access to finance for small businesses with high outreach. The question arises whether and when credit guarantee schemes should be established. In the following, the concept of subsidiarity will be discussed since it is often used in the literature and by practitioners.

The word "subsidiarity" (*Subsidiarität*) is connected to catholic social teaching and relies on the development of individual abilities, self-determination and personal responsibility. Public agencies should only intervene when the possibilities of the individual or the smaller group are not sufficient. In addition, there is duty of the state to engage for the sake of the individual persons. This principle is a central element of the ordopolitical (*ordnungspolitisch*) understanding of the concept of social market economy (Gabler Wirtschaftslexikon 2011). Von Nell-Breuning¹⁴ is critical of the common interpretation that the community or the state should only intervene when there is no other solution to a state of emergency. In his opin-

¹⁴ Nell-Breuning provided groundwork for the social encyclical "Quadragesimo Anno" in 1931 by Pope Pius XI and furthermore, provided consultancy to the German federal ministries of economics, urban development and families (City of Trier 2011).

ion, it is a duty of the community to help its members and emphasises parallels to the principle of proportionality. He states that the principle of subsidiarity means that when the private economy is sufficient to enable existence (*Daseinsgestaltung*), the state is not allowed to crowd out this private economy, and if it is sufficient to regulate the private economy to enable competition, the state has no right to nationalise companies (Nell-Breuning 1990, 349-370).

When applied to the provision of public guarantees, this principle, in the sense of Nell-Breuning, implies that public guarantees should not “crowd out” the business of private commercial banks or the initiative of private borrowers, if they are able to achieve financial solutions. However, in his interpretation, subsidiarity does not state that the public guarantees should only be used as an “action of last resort”, i.e. if no other (private) solution is possible. In a positive interpretation of this principle, the state might assume the duty to enable access to credit (finance) and can choose this financial instrument among others.

Independently whether policy makers rely on the principle of subsidiarity or focus on additionality, the problem remains that it is uncertain what would happen if no guarantee would be provided, i.e. the problem of counterfactuals always exists (Balkenhol 2006, 14-16). Both concepts can be used by public agencies to refuse applications, to drag the decision-making process on and increase transaction costs in order to “crowding out” borrowers that could receive finance without the guarantee scheme.

Since this principle of subsidiarity is said to be a central element of the economic constitutional order “Ordnungspolitik”, which is the theoretical base for many “ordo liberal” politicians in Germany, it is fruitful to analyse what the often-quoted Walter Eucken stated about public subsidies. Eucken (1964) is generally critical of public subsidies, public monopolies, price fixing or prohibiting imports. However, avoiding these instruments is not sufficient for a sound economic policy. The state should work towards perfect competition with a price mechanism. However, this does not emerge on its own. Consequently, in contrast to both laissez-fair policies and direct intervention in the market, he suggests a policy to achieve an economic constitutional order (*Ordnungspolitik*) (Eucken 1964, 160). Eucken sees in the State a central actor to achieve this order, and to achieve these aims, he provides two basic principles: public policy should be tailored to dissolve or limit the functions of economic groups of power; and public policy should be tailored to structure an economic order and not to plan processes within this the economic order (Eucken 1964, 187-190). In addition, Eucken is extremely critical of limitations of liability, and states that limitation of the liability not only reduces control over behaviour but also increases the “waste” of capital. Reducing

liabilities moreover increases the concentration of power of anonymous owners and managers (Eucken 1964, 172-174).

What can be derived from this economic thought for the use of public guarantees? Eucken is generally critical of public intervention and explicitly critical of subsidies and reducing the liabilities of the actors. Since the public guarantee can be a direct intervention in the processes within the economy because the government decides who receives better finance, or finance at all, ordo-liberal policy makers should be critical of the use of public guarantees. However, public intervention could be justified if the two basic principles are maintained, i.e. reducing the power of groups and to structure an economic order. Public intervention via credit guarantees could be in line with these basic principles when “*unternehmer*” are supported who are new competitors that reduce the power of established groups of power (such as “*wirte*”). This may also hold for the financial intermediaries, i.e. new lenders can be supported by the credit guarantee scheme in order to increase competition and break a oligopolistic power of existing banks. Consequently, the credit guarantees can reduce power of groups and help the government to structure the economic order with more competition.

Since Eucken is critical of the reduction of liability, ordo-liberal policy makers would be sceptical of 100% guarantees and hence would prefer that at least some risk remains with both the lender and the borrower, i.e. partial guarantees. In addition, fees should be high in order to reduce the subsidy element of the guarantee. This behaviour would be in line with the principle of subsidiarity since high fees and only partial guarantees reduce the guarantees’ attractiveness for borrowers and lenders that could enable adequate finance without the public guarantee. This strategy points to a conflict with the aim to achieve a financially self-sustainable guaranteeing institution as discussed in the previous section.

The question whether or when government should conduct public policy and intervene into the market is widely discussed in the literature on development finance. The famous Brazilian economist Bresser-Pereira is critical of the Washington Consensus that had replaced Latin American developmentalist strategies (Bresser-Pereira 2010, 99-100). Although he admits a crisis of development strategies in Latin America, he emphasises that all countries require a national development strategy to induce industrial revolutions and to continue their economic development (Bresser-Pereira 2010, 93-94); Bresser-Pereira refers explicitly to the British, Japanese and German use of such national development strategies (Bresser-Pereira 2010, 80). The author discusses not only the conventional orthodoxy and old-, or national developmentalism but also introduces the “*new developmentalism*” which is a national development strategy for medium-income countries (Bresser-Pereira 2010, 90-94).

According to the new developmentalism, the state can and must invest in certain strategic industries. The role of the state in firms' investments should be subsidiary but it is important (Bresser-Pereira 2010, 95). Hence, the principle of subsidiarity is anchored similar to Eucken's economic constitutional order "Ordnungspolitik". Bresser-Pereira (2010) emphasises export industries and industries characterised by advanced technology or knowledge (Bresser-Pereira 2010, 107). Industrial policy, however, should not be confused with protectionism and the government should only support business enterprises that are "efficient enough" to export (Bresser-Pereira 2010, 96,97). Hence, a strategy where the government supports subsidiarily "unternehmer" would be in line with the new developmentalism proposed by Bresser-Pereira.

Even representatives of the World Bank, an institution that stands – or stood – for the Washington Consensus, are nowadays less critical of industrial policy. Within the World Bank Policy Research Working Paper, Lin and Monga (2010) note that past experiences of active economic policies of developing countries' governments have often failed to achieve their objectives. However, they emphasise that in successful economies the state has played an important role in facilitating structural changes and they analyse how public intervention should be done. One strategy is trying to develop new industries that are too advanced, far beyond their latent comparative advantage, or too old, which lost comparative advantage. On the other hand, the government can support industries that are consistent with the country's latent- and developing comparative advantages – such as in South Korea. The authors conclude that only the second approach is likely to succeed (Lin and Monga 2010, 13,16, 21, 23-24). The second approach implies that the investments have to be financially self-sustainable in the long run. The general conclusion for the instrument of public guarantees could be that the borrower and lender should remain with a significant fraction of the risk and hence it should be less likely to guarantee finance that is unsustainable.

Bresser-Pereira (2010) emphasises in his "new developmentalism" a national development strategy with a moderate role of the state in investing and in industrial policy (Bresser-Pereira 2010, 78-109,107). This industrial policy is called "light intervention" in the following. "Light" refers to the strategy to induce only investments that promise to be financially sustainable in the long run. Using public credit guarantee schemes, policy makers can set this principle of "light intervention" as the general purpose of the scheme, even if the outreach by number and volume can be modest. Within the screening process, the guarantor can ration applications that are not promising to be financially sustainable in the long run. Instead of only providing guarantees to loans, equity or mezzanine-finance can be guaranteed as well. High fees and transaction costs within the screening process in combination with a significant inclusion of risk taking by the lender and borrower reduce the attractiveness of the

credit guarantees and hence can be an “anchor” of additionality (or subsidiarity) within the credit guarantee scheme.

Before closing this section two statements have to be made. First, public credit guarantees are usually only one among several tools to conduct intervention. For example, grants can be used alternately or in combination with guarantees. In addition, governments can use public banks that take the commercial approach to enable a broad access to financial services, and use the credit guarantee scheme to fill a financing gap.

Second, a national development strategy might be important. However, in a globalised world, and the world has always been globalised to a certain degree, the national development strategy and use of public guarantee schemes must be conducted under international agreement. This is important to prevent a “race of subsidies”, extreme market distortions, and political conflicts. Especially, when markets are open, a supra-national institution should be envisaged providing a sophisticated transparent and powerful framework that regulates the use of all kinds of public support to enterprises.

2.3.4 Cooperation between public and private actors and the question of ownership

The following analyses the cooperation between public actors that may contribute with financial support, and private actors that may have informational advantages. Who finally receives which kind of support depends on who takes the initiative and who “sits in the driver’s seat” – i.e. who assumes leadership or ownership. Owners can push the scheme’s activity towards their special “target-group”. However, when there are several owners with several, diverging or contradicting agendas, the executive management may become occupied above all with balancing these interests. This impedes the kind of ownership which is essential for a dynamic business (Kramer and Nitsch 2010, 1005). The question which will be discussed in this section is: can there be a positive combination of public and private initiative?

In section 2.3.3.1 the motives and centres of conflict will be outlined. In section 2.3.3.2 the financial support for guaranteeing institutions will be discussed.

2.3.4.1 Motives to cooperate and the resulting conflicts

Private self-help groups can cooperate with public agencies that are willing to work with the guaranteeing institution in order to support borrowers. With the government's participation, subsidised credit guarantees may be provided with more attractive conditions, such as lower fees.

Moreover, the government's participation can induce those lenders to cooperate who would otherwise refuse cooperation because they doubt the willingness or ability of the guaranteeing institution to pay when guarantees are called (Stockhausen 1988, 47,48). Although cooperation with public agencies will usually not significantly increase information, public agencies may be in a better position to liquidate collateral or proceed against borrowers that are unwilling to fulfil their obligations. This can be done by involving, wielding or threatening to involve, the tax office or embassies in foreign trade finance.

Due to a possible informational advantage of self-help groups, the government may be willing to support a private credit guarantee scheme, instead of providing guarantees in its own. Since public agencies are the "agents" of politicians, the public agencies may be instructed to support private initiatives, maintain the principle of subsidiarity or even, in an orthodox interpretation, reduce public intervention as much as possible. As already quoted, Honohan (2010) emphasises that the resemblance of credit guarantee schemes to market-based institutions may confer an apparent legitimacy in the eyes of the public (Honohan 2010, 2). This holds especially when there are private shareholders inducing "business spirit" to the scheme.

If the government provides finance, the borrower associations or any representative of self-help groups have the responsibility to push the interests of their members. A common interest may be a reduction of fees or transaction costs, or to introduce the "business spirit" of the associations' members. In addition, public support may also benefit the borrower associations themselves since with this support the associations can provide services to their members. Consequently, private actors may be able to contribute with better information and business spirit; and on the other hand, the public agencies can bring financial support and stricter proceedings in the case of defaults.

However, there are several obstacles to achieve such a positive combination. There is the problem of distributing internal information to third parties that may be competitors. Generally, the more actors included, the more actors can receive this information which may

increase scepticism among borrowers and lenders. To mitigate this problem, the guaranteeing institution has to provide firewalls for confidentiality. But even with effective firewalls, the general scepticism may remain.

Moreover, the borrower associations or self-help groups may have interests opposing those of the government. For example, the aim of public agencies may be to increase competition which is usually not the aim of established businesses.

A strategy for competing institutions that have to share risk and information in order to receive public support might be to keep the institution small and cooperate only if no finance would be possible without the intervention. The guaranteeing institution may be seen as a “special purpose vehicle” by the lenders to receive public support for less profitable finance. Consequently, the guaranteeing institution may not be able to become financially self-sustainability because the (competing) stakeholders prefer to conduct their profitable business on their own without the scheme. This strategy may be rational for the lenders and in line with the aim of the public agency, but it would be against the goals of the self-help private initiative of the borrowers.

This information-sharing problem and the generally different interests of stakeholders may result in two different outcomes of missing ownership:

- 1) The actors may search for compromises or the lowest common denominator. Stakeholders may use their veto or refuse cooperation when a guarantee (or a too large share of all guarantees) is provided against one of the actor’s interests. This political- or business strategy of stakeholders can reduce the scheme’s offer of guarantees to a small niche of the market. As a result, the credit guarantee scheme may be of negligible or modest outreach.
- 2) This missing ownership may on the other hand result in a “joint-irresponsibility”: there might be moral hazard since the private actors may believe in a public bail out (beyond explicit commitments like counter-guarantees) since the guaranteeing institution is already supported by the government and behaves following the aim of the governmental policy. On the other hand, the government may be blinded by the current benefits of enabling loans, and it may believe that risk sharing is sufficient to control for moral hazard and may over-estimate the ability of private actors to assess the risk of loans. The result may be a credit guarantee scheme that is exposed to large volumes in a risky market, pushing finance (and hence debt) beyond a sustainable level – until the bubble bursts.

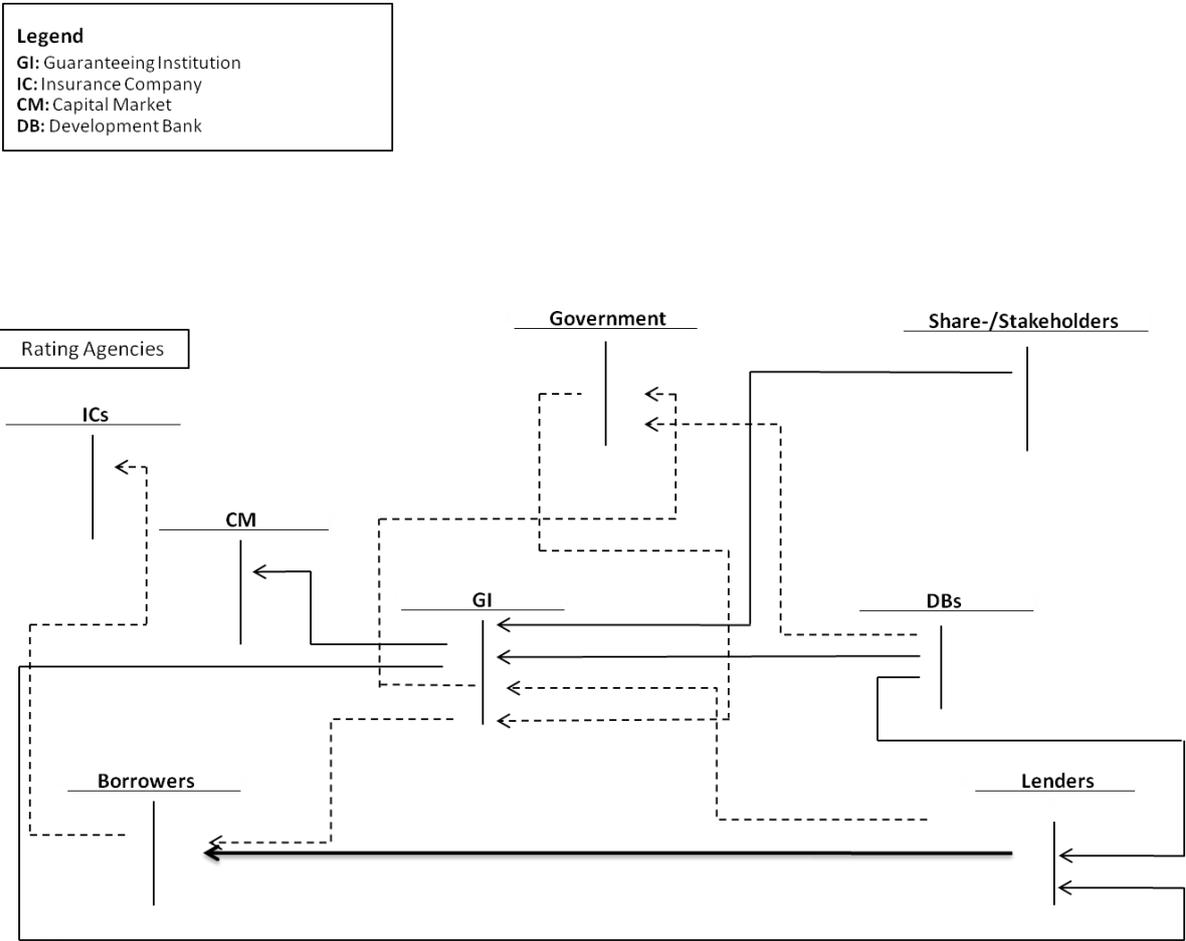
All in all, the cooperation of several actors, with fundamentally diverging interest may result in either a compromise with low outreach or there might be the problem of “joint-

irresponsibility". These problems can be reduced if one party sits in the driver's seat and assumes ownership and responsibility for the scheme, and the others cooperate.

2.3.4.2 Financial support to guaranteeing institutions from third parties

The ATR and additional actors can be presented in the form of "T-accounts". Figure 6 provides an overview of typical actors within credit guarantee schemes and their claims and obligations.

Figure 6 The Guaranteeing Institution and Important Actors Expressed in "T" accounts



Own elaboration

The fundamental relation is the finance (loans and equity) provided by a lender to the borrower which is marked by a fat arrow at the graph's bottom. In the centre of the graph there

is the guaranteeing institution (GI). In accordance with Table 1, where the claims and obligations are provided, the GI has outstanding guarantees (OG) on the right side that are contingent liabilities and on the left side are claims against borrowers (CB) which are contingent on the outstanding guarantees¹⁵. For purpose of simplification, any already existing claims against borrower due to fees and called guarantees are not included in this graph. The guaranteeing institution invests long-term real (RA) and financial assets (FA) in the capital market (CM). The graph emphasises the financial assets and suppresses both real assets and the possibility of the guaranteeing institution to invest or deposit financial assets at the bank.

Insurance companies (IC) can “sell protection” to all actors in the graph. For example, the company can insure the actors against risk such as fire or other damages. Moreover, life insurances or credit insurances can reduce the borrower’s risk, which reduces indirectly the lender’s risk. Consequently, insurance companies can reduce both the guarantor’s and the lender’s risk. Hence, insurance companies can reduce the demand for credit guarantees. In addition, the insurance company can insure the loan or loan portfolio of the lender and thus be a direct competitor of the guaranteeing institution. Moreover, insurance companies and other actors engaged in the capital market can sell protection for the lender and guarantor via derivatives. On the other hand, the insurances companies can be business partners of the guaranteeing institutions since the guaranteeing institution can insure its guarantees. Consequently, the insurance companies (and other protection selling actors) can be either competitors or business partners of guaranteeing institutions.

Shareholders, such as the borrowers themselves, borrowers- and bank associations, lenders, private companies or the government (directly or indirectly via public agencies) provide the equity. In addition, these shareholders and other stakeholders may provide further support such as grants or loans. Consequently, they have a claim on the guaranteeing institution.

The government can be a shareholder and a stakeholder without being shareholder. In the graph the government is represented as “Government” and by the development bank (DB). In order to reduce complexity, important public agencies such as the central bank, the agencies which are responsible for financial regulation, the tax offices, the jurisprudence and institutions within the political process are not explicitly represented within the graph. Since rating agencies may play an important role in the regulation of the lender and the guarantor, these institutions are high-lighted in the graph.

The government usually provides an explicit guarantee for the obligations of the public development bank which is included in the graph. The development bank itself can refinance the lenders and it can also support the guaranteeing institution with equity, loans or grants.

¹⁵ Like in Figure 1, broken lines represent contingent claims and liabilities.

On the other hand, it can compete with the guaranteeing institution when it shares risk with the lender.

The government has generally four methods of directly supporting the guaranteeing institution, usually via a ministry, special agency or the development bank. The first method, as already stated, is to provide equity. The second method is to share the risk with the guaranteeing institution, for example by providing counter guarantees which are represented within the graph by a broken line. This risk sharing improves the solvency of the guaranteeing institution. In addition, if the government pays quickly or in advance, the liquidity of the institution is also improved.

The third method is support via loans, for example, provided by development banks. These loans do not directly improve the solvency of the guaranteeing institution. They rather improve liquidity. However, the development bank can charge fees below the market rate and hence the guaranteeing institution can achieve positive net flows of interest when liquidity is invested in financial assets, without high operational expenses. Over time, these gains can help the institution accumulate equity or reserves, and hence indirectly improve solvency. In contrast to the first two channels, this does not directly affect the governmental budget but has two drawbacks. Invested funds can always lose value which would reduce the solvency of the institution and its ability to repay the loan. Consequently, the risk taking of government is high in order to enable the guaranteeing institution to achieve interest spread gains. Moreover, if the guaranteeing institution invests the money in relatively safe public bonds, a cycle can be produced: the development bank refinances the loan on the capital market, provides it to the guaranteeing institution which refinances public debt or even the development banks by purchasing these bonds. Consequently, there are high transaction costs and many outstanding liabilities involved with this channel.

As a fourth method, the government can, instead of taking risk, provide grants or tax concessions. Grants should be considered in a broad sense, including grants such as releases of rents or providing technical support such as consultancy which the institution otherwise would have to pay at market prices. These grants directly improve the liquidity of the guaranteeing institution and in the long run they can help the institution to accumulate reserves or equity.

In addition to the four methods of direct support, there are indirect ones. The reputation of the guaranteeing institution may be increased by the participation of the government. There can be regulatory or arbitration gains for lenders when they cooperate with the guaranteeing institution. Tax reductions or grants can also be provided to other actors when they cooperate with the guaranteeing institutions. For example, a lender may receive a grant to

compensate for its operational expenses, the government may pay fees that the borrower or lender would otherwise have to pay, or shareholders and other stakeholders may not be obliged to pay taxes on dividends or interest rates for the equity and loans provided to the institution. Moreover, soft loans to borrowers via lenders, provided by the development banks, can be made on the condition that the guaranteeing institution screens the borrower.

2.4 Hypothesis: No magic formula for an optimal credit guarantee scheme

In the last sections, the benefits and drawbacks of any cooperation within the Augmented Triangular Relationship have been discussed. As a conclusion of the discussion a central hypothesis is provided in this section. The hypothesis will be taken up in the empirical analysis. The hypothesis states that it is not possible for any credit guarantee scheme to achieve simultaneously:

- 1) relatively low transaction costs,
- 2) a notable outreach by number and volume,
- 3) and a high degree of additionality,
- 4) financial self-sustainability.

Low transaction costs and a notable outreach go together since low transaction costs increase the attractiveness of the scheme for lenders and borrowers, and a high demand for guarantees can indeed result in a notable outreach. Both items may also go in line with financial self-sustainability when the guaranteeing institution guarantees finance that seems not to be too risky and the lenders would provide finance anyhow. But this is in opposition to a high degree of additionality. On the other hand, if the institution guarantees loans with a high degree of additionality, with a lean decision-making process and consequently low transaction cost and a high outreach, no financial self-sustainability can be expected due to the moral hazard problems.

A high degree of additionality and a financial self-sustainability may be possible. However, this combination implies intensive screening and close monitoring efforts of the guarantor within the decision-making process since leaving only a fraction of the risk with the lender may not be sufficient to control for moral hazard or an irresponsible provision of loans. This participation in the decision-making process, however, increases transaction costs which reduces the scheme's attractiveness and its outreach.

If one assumes that there exists a credit guarantee scheme that fulfils all four items, the question arises why would lenders not step into the profitable business that is financially self-sustainable and does not depend on public support? This could be explained by either regulation or arbitration gains, or it could be a temporary situation due to an extremely undeveloped banking sector.

The hypothesis suggests that owners of the scheme may have to choose and drop one or two items. For example, policy makers who want to induce development may be aware of positive externalities of the finance and may be willing to drop both the requirement of financial self-sustainability and the aim of a notable outreach since they can use other institutions such as commercial banks to reach more borrowers. Another possibility may be a reduction of the degree of requirements of the four items, such as “moderately high” transaction costs, a “modest” outreach, “some” additionality and “almost” financial self-sustainability.

2.5 Basic models of credit guarantee schemes and their differentiation

The question that will be discussed in this section is how schemes can be differentiated in order to identify workable (and unworkable) basic models. Although a lot of valuable research has been done on credit guarantee schemes, there is no established consistent categorisation in the literature. There are three frequently used categories: credit guarantee programme, credit guarantee fund and credit guarantee society. Indeed, many titles of credit guarantee schemes include the words programme, fund or society. However, is the approach consistent, or does it lead to confusion?

This chapter discusses these questions and, moreover, explains two approaches that will be used in the empirical research. First, chapter 2.5.1 provides an overview and critical assessment of differentiations or categorisations used in the literature. Subsequently, a new ownership and decision-making based approach to differentiation will be presented in chapter 2.5.2. In section 2.5.3, a new complementary relationship-based approach will be explained.

2.5.1 Basic models and differentiation in the literature

Before analysing common categories in the literature, the main characteristics of credit guarantee schemes will be discussed. Pombo González, Sánchez and Sobrino (2007) provide 43 characteristics of credit guarantee schemes in their questionnaire (Pombo González,

Sánchez and Sobrino 2007, 123-132). Based on this study, the contribution of Levitsky and Prasad (1987) and the discussion of the relationships in the ATR, the following distils five groups of characteristics that describe credit guarantee schemes:

- 1) Schemes can vary with respect to the general objectives of the scheme. A single scheme may have many (even contradictory) aims. Indeed, it is important whether the scheme is a (public) temporary measure to stabilise the economy or a tool to address its structural problems. The target group can vary with respect to company size, region and sector. The scheme might be directed towards exporting enterprises, innovative enterprises (“*unternehmer*”), enterprises in financial distress, Micro, Small and Medium sized enterprises (MSMEs) or a support for “*wirte*”. On the other hand, instead of being directed towards a target group (and hence be exclusive) the scheme can be non-exclusive and open to all enterprises. The schemes vary whether they should support the borrowers, their associations, the lenders or should make profit for its shareholders. Consequently, it is important to discriminate whether the scheme is supposed to be financial self-sustainable, have a high degree of additionality, a high outreach and whether transactions costs for participants are to be reduced.
- 2) Schemes can vary with respect to ownership and the participation of actors within the Augmented Triangular Relationship. Shareholders can be public, private or there can be a mix of public and private shareholders (public-private cooperation). There can be actors that are not shareholders of the guaranteeing institution but dominate the credit guarantee scheme and can be considered the scheme’s owners. Consequently, there are variables that indicate the influence/power of the actors (such as shares, formal voting power or the scheme’s financial dependence).
- 3) Schemes can vary with respect to the decision-making process. There are variables that describe the screening process: who is screened by whom, when and how. For example, the borrower can be screened by the GI before the lending decision or only after the default occurs. Moreover, the available source and quality of information can vary significantly.
- 4) Schemes can vary with respect to the juridical guarantee contract. Schemes have very different obligations and rights to conduct action for each party. Indeed, not all actors have to be formal parties of the contracts. For example, there are variables that describe the fees (or commissions), the percentage of risk-sharing, the debt recovery, the monitoring, the event of default and the procedures in the case of default.

- 5) Finally, schemes can vary with respect to the fulfilment of their aims. For example, there are variables that describe the outreach by number and volume, the financial (self)-sustainability or even profitability of the GI, the additionality, and the impact on the financing conditions for borrowers.

Characteristics of the groups 1 to 3 describe the general setting of the scheme: What is the purpose (1) that is wanted to be achieved by whom (2) and how (3). Characteristics of group 4 also describe how to achieve the aims, however, they focus on the formal guarantee contract. Characteristics of group 5 describe the result and hence depend on the other variables.

Within a broad study of the United Nations Industrial Development Organization (UNIDO), Green (2003) provides a theoretical and empirical overview of credit guarantee schemes worldwide. She reports that a systematic classification of the more than 2,250 schemes worldwide is difficult because of linguistic problems and hybrid forms of guarantee schemes. As an example, she explains that a guarantee fund in English speaking countries would refer to any guarantee agency with a fixed fund, however, the Brazilian credit guarantee fund "*Fundo de Aval SEBRAE*" would be a guarantee programme according to Herrero Calvo and Pombo González (2001), since it is managed by a state operated development agency (Green 2003, v,17-18). Another study describes this same Brazilian scheme as a privately funded and managed partial guarantee fund (Beck, Klapper and Mendoza 2010, 13,23).

In the following, some approaches to group credit guarantee schemes found in literature will be described.

In her UNIDO study, Green (2003) concludes that the terminology used by the guaranteeing institution should not be the main point of the distinction and proposes five major types (Green 2003, 17-22): mutual guarantee associations, formed by potential borrowers with limited access to bank loans; publicly operated national schemes, run either by an administrative unit of the government or by a legally separated credit guarantee organisation; corporate schemes, where banks, chambers and the entrepreneurs themselves are shareholders of a guaranteeing institution; schemes that arise from international co-operation, where a local organisation cooperates with international organisations; and schemes operated by a Non-Governmental Organisation (NGO). These major types can further be subdivided according to operational mechanisms. The author differentiates between the selective approach where the decision-making process is based on a case-by-case analysis, the portfolio approach where lenders are accredited and entitled to attach guarantees to loans within an eligible category without prior consultation of the guarantor (Green 2003, 33), and the intermediary approach where a GI provides a guarantee for an intermediary that receives a loan and lends the money to a target group.

As already mentioned, schemes are frequently differentiated between credit guarantee programmes, funds and societies. This approach was formalised by Herrero Calvo and Pombo González (2001) in their often cited, almost 1,000 page broad empirical and theoretical study. Likewise, the authors admit that there are many hybrid forms. Nevertheless, they provide basic general models (Herrero Calvo and Pombo González 2001, 60-62):

- 1) Credit Guarantee Programmes are usually managed by public agencies. Financial resources can be limited and renewable, coming from government and public agencies. The decisions are delegated to the lender and normally there is no contact between the public agency and the borrower.
- 2) Credit Guarantee Funds with (public and/or private) financial resources that are limited by amount and time. The fund can provide case-by-case guarantees or portfolio guarantees.
- 3) Credit Guarantee Societies/Corporations provide individual (case-by-case) guarantees having a direct contact with the borrower. Societies are furthermore subdivided into
 - Mutual Societies with the borrowers as shareholders;
 - Corporate Societies with a variety of shareholders. The public sector is usually dominating, however, borrowers participate indirectly via their associations.

This approach does not strictly rely on two dimensions (such as the approach of Green (2003)) but rather groups the schemes into three basic models. Actors and the decision-making process are used as features of the basic models.

In a later empirical study, conducted by Pablo Pombo González, the authors no longer differentiate whether a scheme is a fund or not (Pombo González, Sánchez and Sobrino 2007). In their study “Conceptual contributions and characteristics for classifying guarantee systems/schemes” the authors differentiate between a “majority public/public guarantee programme group” and a “majority private group (guarantee society)” with the two sub groups “mutual scheme (majority business participation)” and “purely commercial societies (majority financial sector participation)” but do not explain why funds disappear as a category in their new approach (Pombo González, Sánchez and Sobrino 2007, 109,110)¹⁶.

¹⁶ Indeed, they state that it is “a common error” to use the “Guarantee Fund” concept as a generic term for the classification/identification of guarantee systems/schemes and the classification of companies as “Guarantee Funds” only because they are called funds (Pombo González, Sánchez and Sobrino 2007, 21).

Within the empirical study on credit guarantee systems in Latin America, conducted by the Inter-American Development Bank (IADB), Llisterri, Manueco, López and Tabuenca (2006) point to two basic models: the credit guarantee funds (*fondo de aval*) and societies (*sociedades de garantía*) (Llisterri, et al. 2006, 4). They cite Herrero Calvo and Pombo González (2001) and use similar definitions. However, unlike Pombo González, Sánchez and Sobrino (2007) who skip the funds, they skip the programmes.

All in all, the approach to differentiate between credit guarantee programmes, societies and funds may be used frequently in literature, however, categories are defined differently and in comparing the results of different studies with the different categorisations using similar terms may result in confusion. As stated by Schmidt and Zeitinger (1984) and discussed in previous sections, a credit guarantee scheme is somewhat similar to an insurance company and a bank. The financial structure of institutionalised guaranteeing institutions in the form of an associations or societies is the same as the structure of a fund since the institution's net assets serve as a "reserve fund". Moreover, the society or association might be supported by public agencies through a public credit guarantee programme. In this case, the credit guarantee scheme could be interpreted as a programme, a fund or an association. Consequently, the approach to differentiate credit guarantee schemes into funds, programmes or societies has fundamental problems and is inconsistent. The terms "fund" "society" and "programme" should rather be used to describe features of credit guarantee schemes and not be used as categories of differentiation.

The statements of Krahn and Schmidt (1994), Schmidt and Zeitinger (1984) are indeed clarifying. However, for empirical research, a less abstract approach is needed. Von Stockhausen (1988) provides a promising approach which is tailored to credit guarantee schemes for small farmers (in developing countries). As the first step von Stockhausen differentiates by individual guarantees, public guarantees and collective guarantees (Stockhausen 1988, 10-14). The author states that:

- 1) Individual guarantees are regarded as personal securities, and he does not focus on these guarantees.
- 2) Public guarantees can be funded or unfunded where a specific credit guarantee fund is simply a promise by the government to cover the guarantee. Moreover, there can be public trustee credits which are public funded loans (directed credits) whereby the credit institutions are not liable but only channel the loans.

- 3) Collective guarantees are guarantees in which many creditworthy individuals are liable as a collective. These guarantees can be in the legal form of a credit guarantee association.

With respect to public credit guarantee funds, the author differentiates between the prevalence of guarantor-lender or guarantor-borrower relationships (Stockhausen 1988, 18-25): within a guarantor-borrower scheme the guaranteeing institution itself investigates the borrower's creditworthiness in each case in terms of target-group as well as financial criteria whereas the guarantor-lender scheme is an arrangement between the guarantor and lender with the borrower not directly included in the decision-making process. The guarantor-lender scheme is directed to support the lending institutions to fulfil their banking duties to a specific target group.

With respect to collective guarantees, von Stockhausen does not differentiate between borrower-guarantor and lender-guarantor schemes, since he refers to collectivities formed by borrowers only. In a second step, the author introduces "two-stage" credit guarantee schemes of several (mutual) credit guarantee associations and a joint counter guarantee fund. Associations can be financed by the members' payments, whereas the credit guarantee fund can be financed by public agencies (Stockhausen 1988, 13,14,38-40).

The concept of guarantor-borrower and guarantor-lender schemes will be further developed in the relationship-base approach which will be described in the section 2.5.3. However, an approach that is based on the ownership and the decision-making process will be presented first.

2.5.2 The ownership and decision-making approach to differentiation

This section presents an ownership and decision-making approach (the ODM approach) to differentiation which uses quantitative variables only. The purpose of this approach is to create a tool for empirical research that enables a relatively fast differentiation without requiring a deep analysis of the credit guarantee scheme. In empirical research, this approach might be used in surveys of a large number of schemes or alternatively, as the first step of a deeper analysis. This approach contains a basic and a detailed version.

The basic differentiation has two dimensions. The first dimension A is the ownership, and it differentiates into public schemes (A1), schemes with cooperation of public and private actors (A2) and private schemes (A3). A1 includes schemes where private actors consult the public actors and schemes with private actors as "mandataries". A2 includes not only a pos-

sible public participation in the GI’s equity but also any financial or technical governmental support. Although there is always indirect public influence such as special regulation, a scheme is considered to be totally private (A3) if all actors are private and there is no direct support from public agencies. Institutions, like some chambers, where membership and fees are obligatory by law are considered as public agencies due to obligatory membership and public duties of the agencies (see section 2.3.1).

The second dimension B relies, similar to the approach of Green (2003) and von Stockhausen (1988), on the decision-making process for each guarantee. It differentiates whether the GI has to approve every guarantee ex ante and screens each borrower (B1, the case-by-case approach) or on the contrary, the lender is not required to obtain approval of the GI for every guarantee (B2, the portfolio-approach). Hence, in B2 the GI does not screen the individual borrower and only the lender decides whether each loan is guaranteed and provided – or not. As a result, there are six basic models of credit guarantee schemes that are presented in the following table.

Table 3 The Basic ODM Approach to Differentiation and Resulting Basic Models

		Decision-making process for an individual guarantee	
		B1) Case-by-case approach	B2) Portfolio approach
Ownership	A1) Public Guarantee Schemes	Basic Model 1	Basic Model 2
	A2) Public- Private Cooperation	Basic Model 3	Basic Model 4
	A3) Private Guarantee Schemes	Basic Model 5	Basic Model 6

Own elaboration

In the following, the basic models will be further differentiated. Using the notation of section 2.5.1, the dimension A is based on variables of group 2, the dimension B is based on variables of group 3. Although variables of group 4 are important, the ODM approach does not

focus on these variables, because it is not feasible to detect the necessary details for an empirical analysis of many schemes.

The six basic models of credit guarantee schemes that are presented in table 3 are highlighted in the following table that illustrates the detailed ODM approach to differentiation.

Table 4 The detailed ODM Approach to Differentiation

		Decision-making process for an individual guarantee			
		B1) Case-by-case approach. The lender is required to obtain an approval of the GI. The GI screens the individual borrower.		B2) Portfolio approach. The lender is not required to obtain individual approvals by the GI.	
		B1.1) The GI uses its own information beyond an application form.	B1.2) The GI relies on the bank's information.		
Ownership	A1) Public Guarantee Schemes	Basic Model 1		Basic Model 2	
	A1.1) Unfunded Guarantee: Individual call on a guarantee does affect the budget.				
	A1.2) Funded Guarantee: Individual call on a guarantee does not affect the budget.				
	A1.2.1) State is explicitly liable for all guarantees.				
	A1.2.2) State is not explicitly liable for all guarantees.				
	A2) Public-Private Cooperation	Basic Model 3		Basic Model 4	
	A2.1) Government takes explicit risk.				
	A2.1.1) - Unfunded: Individual call on a guarantee affects the public budget.				
	A2.1.1.1) State is explicitly liable for all guarantees.				
	A2.1.1.2) State is not explicitly liable for all guarantees.				
	A2.1.2) - Funded: Individual call on a guarantee does not affect the public budget.				
	A2.1.2.1) State is explicitly liable for all guarantees.				
	A2.1.2.2) State is not explicitly liable for all guarantees.				
	A2.2) Government does not take explicit risk.				
	A3) Private Guarantee Schemes	Basic Model 5		Basic Model 6	

Own elaboration

Because public budget planning significantly influences the behaviour of public actors, the impact of credit guarantee schemes on the public budgets is considered throughout the first dimension (ownership). As explained in section 2.3.2, the government has two methods to take precautions. The first is to only plan expenditures in future budgets which would imply that guarantees are unfunded since guarantees are only a promise to pay and no money was pledged. The second method involves funding, where the government pledges money (into a fund or special agency) before calls on guarantees occur.

Consequently, public schemes (A1) are differentiated further whether the guarantee is unfunded and each call on a guarantee necessarily affects the current public budget of the period when the guarantee is called (A1.1), or the guarantee is funded and a call on a guarantee does normally not affect the current public budget (A1.2). The approach does not differentiate whether the government creates a credit guarantee fund, a public bank (that can provide guarantees), a public credit guarantee corporation or an insurance company that provides credit guarantees. The approach also does not differentiate whether the credit guarantee scheme is a two-level scheme or not. In addition, this approach does not account for the leverage-ratio (e.g. the relation between the volume of outstanding guarantees and funded means). This introduces a drawback: a funded scheme might have such a high leverage ratio that it could be considered an “almost not funded” guarantee scheme.

Since the pledged amount might be exceeded by the liabilities, the approach further differentiates whether the government is explicitly liable for all provided funded guarantees (A1.2.1) or not (A1.2.2)¹⁷.

The focus of the further differentiation of A2 is on the way the government supports the credit guarantee scheme. Various possible support channels were discussed in section 2.3.4.2. The approach differentiates between schemes where the government takes some explicit risk (A2.1) or not (A2.2). Governments can take explicit risk in many forms. For example, there could be public counter-guarantees or similar risk-sharing mechanisms. Moreover, beyond a risk-sharing mechanism with the GI, the government can take risk by providing soft loans to the GI. In addition, equity is another form of taking risk. Parallel to the differentiation in A1, A2.1 is further differentiated as to whether each call on a guarantee affects the public budget (A2.1.1) or not (A.2.1.2). Likewise, there is a differentiation whether

¹⁷ This differentiation seems to be redundant since governments should always be liable for public guarantees (hence A1.2.2 should not exist). However, governments can establish and finance a limited company of civil law whose shares are owned completely by public agencies. This corporation can provide the guarantees that cannot be considered private guarantees. Since it is a limited company, the government is not explicitly but maybe implicitly liable for all provided guarantees. This differentiation is included because an explicit guarantee might increase the intensity of monitoring through public auditors, parliamentarians and the media (see section 2.3.3).

a government is liable for all guarantees resulting from the risk-sharing mechanism (A2.1.1.1 and A2.1.2.1) or not (A2.1.1.2 and A2.1.2.2).

Without explicitly taking risk (A2.2), the government can support the private guaranteeing institution with either technical support or financial support such as grants, tax relief, or payment towards fees that borrowers would have to pay. What is important is that the government does not take explicit risk.

Private schemes (A3) are not further differentiated in this approach since there is only little empirical evidence on them. Important private guarantees for which there is plenty of evidence are credit derivatives and some insurance products. However, they are not in the focus of this research.

The second dimension (B) investigates the decision-making process of the GI and will also be further differentiated. This dimension is important since information asymmetries do exist. They are not only one of the central causes of credit-rationing, they can provoke moral hazard problems within the Basic Triangular Relationship. To differentiate whether the guarantee scheme can reduce the information asymmetries between borrowers and lenders, the category B1 is further differentiated. In B1.1, the GI screens the individual borrower directly and uses its own information sources. In B1.2, the GI relies mainly on the lender's information. This includes schemes where the guarantor receives an application form from the lender with aggregated information on the borrower. This implies that there is no direct contact between the borrower and the guarantor, so that the latter cannot reduce the information asymmetries (B1.2).

It would be interesting to differentiate between the coverage of the guarantee contract. Indeed, one incentive to reduce the moral hazard problem is a contract design, wherein the lender continues to retain a significant fraction of the default risk. Obviously, if the guarantor guarantees 100%, the lender bears only the risk that the guarantor is not able or willing to pay. However, when the GI provides only a partial guarantee, the risk exposure of the lender is not clear. Although the lender demands the guarantee, the borrower might be able to provide collateral. If the financial results from liquidation are not equally shared (% of guarantee) between guarantor and lender, the lender can cover the risk (that is not covered by the credit guarantee scheme's guarantee) with other collateral. Therefore, the percentage of the guarantee contract does not provide complete information of the distribution of risk between guarantor and lender. In addition, it is not only the coverage of the losses that matters but also the questions when the guarantor has to pay, and who takes the risk to pay the operational costs. Since this is difficult to discover in research, the ODM approach does not include the risk-sharing dimension.

Sometimes, a GI provides different guarantee products or receives different public support for its different guarantees. In these cases, the scheme has to be split into different (sub) guarantee schemes or to step back and apply the more vague basic ODM approach.

2.5.3 The relationship-based approach to differentiation

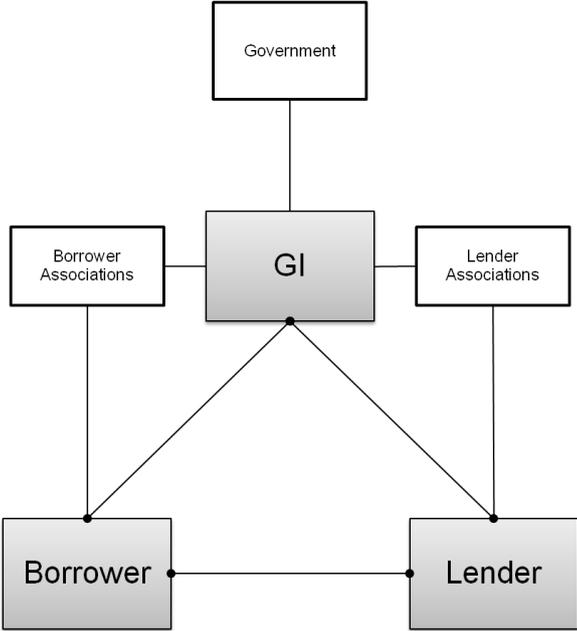
This chapter explains the basic idea of a complementary differentiation, the relationship-based approach to differentiation, which needs a deeper qualitative analysis of the scheme. As already discussed in section 2.2, a long-term relationship requires repeated interactions – such as in relationship banking¹⁸. This relationship-based approach is based on the ideas of von Stockhausen (1988) who differentiates with respect to collective guarantees¹⁹: there are borrower-guarantor schemes, where the borrower is screened by the GI, and lender-guarantor schemes where the GI does not screen the borrower. Unlike the approach of von Stockhausen, this approach is valid for all credit guarantee schemes differentiating whether there is a long-term relationship between the actors or not.

In this approach there are four basic schemes. There are i) arm's length schemes where the guarantor has long-term relationships with neither the lender nor the borrower (Figure 7), ii) borrower-guarantor schemes, where the guarantor has a long-term relationship with the borrower (Figure 8) , iii) lender-guarantor schemes where the guarantor has a long-term relationship with the lender (Figure 9), and finally iv) government-guarantor schemes where the guarantor has a long-term relationship with the government (Figure 10).

¹⁸ A lender (or a guarantor) which provides (or guarantees) a long-term loan only once without repeated interactions would not establish a long-term relationship in this sense, even though both parties are somewhat connected for a long time.

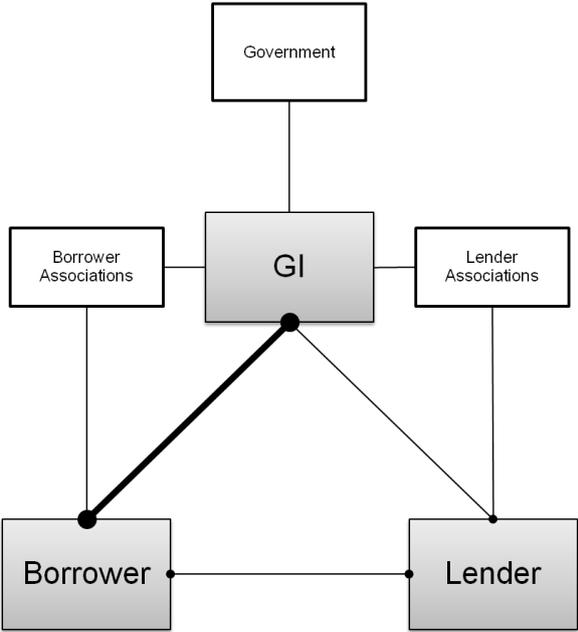
¹⁹ The author differentiates by individual guarantees, public guarantees and collective guarantees (Stockhausen 1988, 10-14)(see section 2.5.1).

Figure 7 Scheme 1: The Arm's Length Scheme



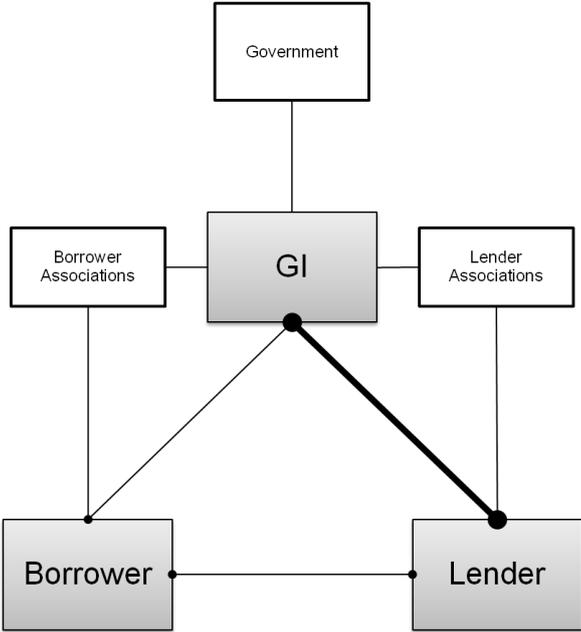
Own elaboration

Figure 8 Scheme 2: The Borrower-Guarantor Scheme



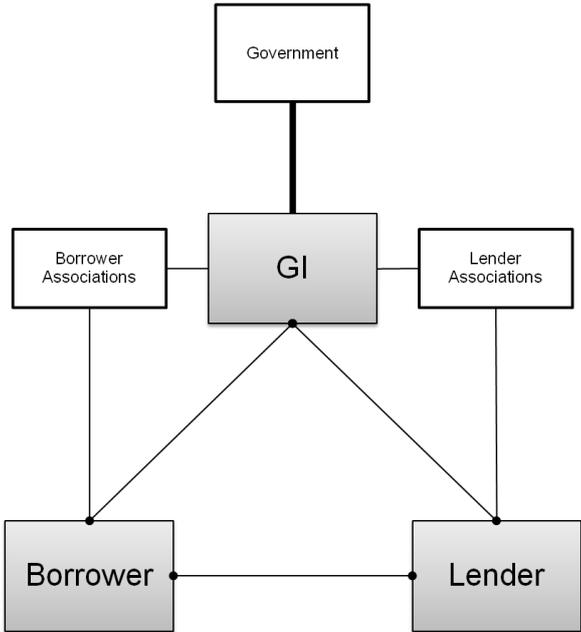
Own elaboration

Figure 9 Scheme 3: The Lender-Guarantor Scheme



Own elaboration

Figure 10 Scheme 4: The Government-Guarantor Scheme



Own elaboration

These four basic schemes are based on the framework of the ART. Different to the six basic models in the ODM approach, this approach allows combinations. For example, the government may intend to build a lender-guarantor scheme to conduct public policy, and hence it is a government-guarantor scheme at the same time.

Obviously, credit guarantee schemes can vary over time. For example, within the institution building process “from scratch” a scheme can be built derived from a vision or experiences in other countries. By time, however, the credit guarantee scheme might find its niche within the financial system being another basic scheme or basic model.

Moreover, both approaches to differentiate the credit guarantee schemes can be merged resulting in a “4x6” matrix with two dimensions and 24 different types of credit guarantee schemes. The merger of the two approaches will be discussed in the conclusions only. Primary, the ODM- and the relationship-based approach will be used separately within the empirical sections.

3 Empirical evidence I: surveys

This empirical research focuses on the two case illustrations of German Guarantee Banks, section 4.1, and Brazilian Credit Guarantee Societies, section 4.2. However, before analysing the schemes in Germany and Brazil, this part sets the international stage of credit guarantee schemes. Section 3.1 provides an overview of schemes worldwide. This includes mini case studies of guarantee schemes for small business finance in Japan, South Korea and the USA, and other guarantee schemes that are not specialised in guaranteeing small business finance. In section 3.2, there is an overview of schemes in Europe and Latin America.

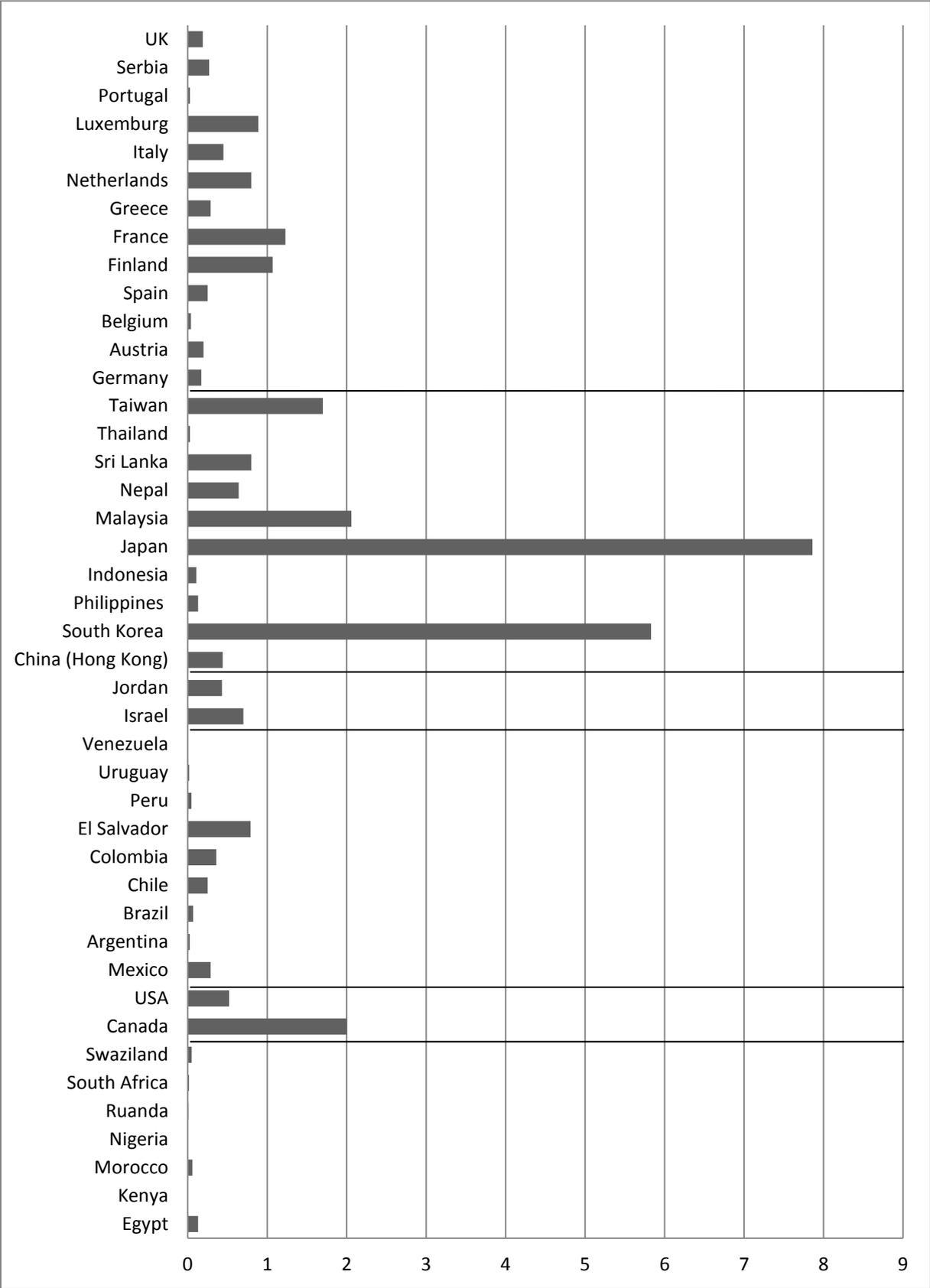
The ODM approach is used throughout the analysis. The relationship-based approach is used for the schemes in Brazil and Germany, and partially in the mini case studies. The question whether there is a magic formula to build credit guarantee schemes will also be discussed throughout the analysis. An exchange rate table is attached in the appendix.

3.1 Worldwide overview and digression to North America and Asia

A worldwide overview of credit guarantee schemes is provided in an almost 1,000 page long study conducted by Herrero Calvo and Pombo González (2001) who describe schemes in almost 70 countries. This was followed by a further study by Pombo González, Sánchez and Sobrino (2007). In addition, there is a study conducted by Beck, Klapper and Mendoza (2010) who analyse 76 schemes. In this publication, the authors provide little descriptive information and focus on quantitative aggregated results of their survey.

Providing an overview of schemes worldwide is beyond the scope of this section. However, reviewing the literature suggests two conclusions. First, credit guarantee schemes are used in many countries in all continents, be they developing or developed. Second, credit guarantee schemes for small business finance have the highest outreach in Asia. These findings are shown in Figure 11 in which the ratios of outstanding guarantees to GDP are compared in Europe, Asia, the Middle East, Latin America, North America and Africa.

Figure 11 Outstanding Guarantee Value to National GDP Worldwide before 2001 (in %)



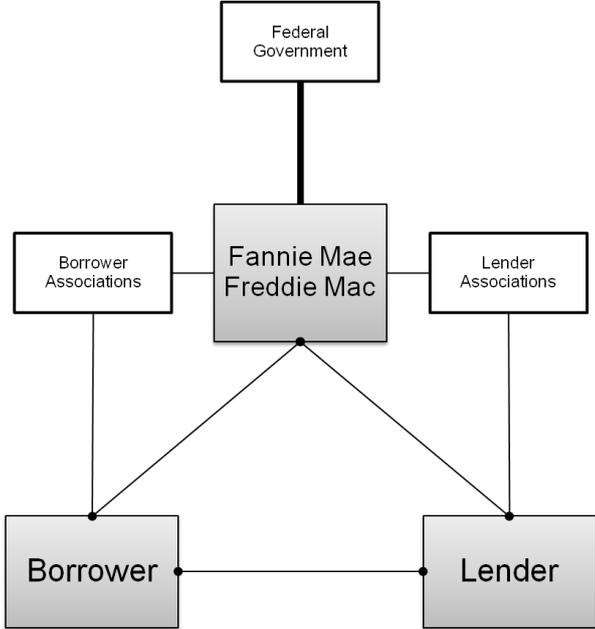
Own elaboration, source: Herrero Calvo and Pombo González (2001, 82,99,163,222,289,385,539,585)

Figure 11 illustrates that guarantee schemes are relatively important in East Asia. With the exceptions of Japan and South Korea, however, the quantitative macroeconomic relevance of these analysed schemes is modest. This general picture is confirmed in the more recent study of Beck, Klapper and Mendoza (2010). The authors state that the ratio of total outstanding guarantees to GDP is 0.6 worldwide and 4.7 in Asia (Beck, Klapper and Mendoza 2010, 13). However, these figures are only a rough indicator for the use of credit guarantees since there can be other schemes in the respective country that are not included in the data.

3.1.1 Examples where things went badly wrong

This section discusses the risk-sharing schemes of the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the American International Group Inc. (AIG). These schemes are not specialised in small business finance. Nevertheless, this discussion serves to highlight the potential outreach of risk-sharing schemes and how schemes can go badly wrong, even in “highly developed” financial markets. These institutions were the among the most prominent cases of bankruptcies in the financial crisis.

Figure 12 ATR of Fannie Mae and Freddie Mac



Own Elaboration

Fannie Mae and Freddie Mac had private shareholders and were called “government-sponsored enterprises” (GSE) since they were supported financially by the government and used to conduct economic policy (The Financial Crisis Inquiry Commission 2011, 38). Although borrower associations and lender associations did not (to my knowledge) participate directly in the guarantee scheme, these associations are not removed from the ATR because public policy is always subject to lobbying.

The original business model was to purchase mortgages and hold them. Since the 1970s, these GSEs started to pool and sell these loans together with a guarantee of timely payment of interest and principal which effectively turned them into guarantee schemes. The institutions received cheap refinance from the government and cheap finance from the capital markets due to an implicit government guarantee to bail them out if necessary. Indeed, this implicit guarantee was substantiated with a public bailout via tax relief in the 1980s. Moreover, regulators allowed a leverage ratio higher than for other financial institutions (The Financial Crisis Inquiry Commission 2011, 39,40).

The outreach of the schemes was impressive. In 2007, both institutions together owned and guaranteed US Dollar (US\$) 5,300 bn. of mortgages. In December 2007, Fannie Mae reported that its capital of US\$ 44 bn. stood against potential losses of US\$ 879 bn. of assets and US\$ 2.2 trillion of guarantees on mortgage-backed securities. Moreover, Fannie Mae reported that it would be insolvent if losses exceeded the rate of 1.45%. Similarly, Freddy Mac reported that it would be insolvent if its losses would exceed 1.7% of the potential losses (The Financial Crisis Inquiry Commission 2011, 309-312). Consequently, the high leverage ratio resulted in a risk of insolvency for even moderate default rates. Finally, both institutions were taken over by the US government. Government provided finance of US\$ 151 bn. by 2010. The total direct cost of bailout cannot be quantified yet.

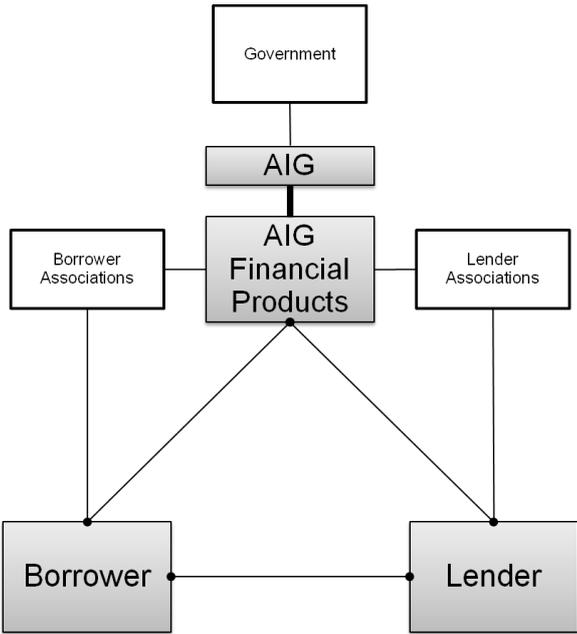
The Financial Crisis Inquiry Commission (2011) concluded that the business models as private, publicly traded and profit-making entities that received financial support and an implicit guarantee by the government and that were mandated to fulfil a public mission (to support American homebuyers) was fundamentally flawed. In addition to the bailout in 2007, a study, in the year 2005, estimated that more than half of the public benefits accrued to private shareholders and not to homebuyers (The Financial Crisis Inquiry Commission 2011, 38-42,323).

With respect to the hypothesis in 2.4, the case clearly shows that there was a high outreach, relatively low transaction costs but no financial self-sustainability. The “recipe of success” to support American home buyers on a large scale was to buy, sell and guarantee loan portfolios with an implicit public counter-guarantee and further public support. However, insuffi-

cient reserves (such as equity or provision) were taken. This set-up had led to a “joint-irresponsibility” that inflated a bubble in the housing market that affected for the world’s financial system.

The next case is the risk taking (or protection selling) of the insurance company American International Group Inc. (AIG) in the credit default swap market.

Figure 13 ATR of AIG Financial Products



Own elaboration

AIG and its subsidiary AIG Financial Products were private enterprises where AIG explicitly guaranteed its unit. Similar to Fannie Mae and Freddy Mac, (to my knowledge) borrowers associations and lender associations did not directly participate in the scheme. However, both actors are again not removed from the ATR because public policy (for example the regulation of financial products) is always subject to lobbyism.

Since the 1980s, AIG was the largest US American insurance company and had an AAA rating. As an insurance company, it was subject to prudent regulation. However, the regulation for the company’s subsidiary AIG Financial Products was weaker. The subsidiary was based in the USA but conducted most operations in London where it became a major over-the-counter derivative dealer. CDSs were attractive for purchasers such as banks, because they reduced the amount of regulatory capital from 8% to 1.6%. On the other hand, the CDS seller was not required to accumulate provisions or equity. Instead, the CDS sellers could agree to

provide collateral if the value of underlying assets decreased, i.e. not when the risk-taking was agreed but later when a default was seen to be more likely. Indeed, AIG was able to accumulate half a trillion US\$ position on the over-the-counter market without being required to post one single dollar of initial collateral or making any provision for losses. The company charged fees of only 0.12% (The Financial Crisis Inquiry Commission 2011, 139-142).

In August 2008, AIG had to provide US\$ 3.3 bn. to its subsidiary, and protection buyers were demanding US\$ 24 bn. to increase the collateral due to a diminished value of the securities. However, AIG only had liquidity of up to US\$ 4 bn. in revolving credit facilities and up to US\$ 13 bn. in cash. Since at first it seemed to be a problem of liquidity, there was hope that a private solution was possible (with Allianz and Flowers as investors). However, after the collapse of Lehman Brothers, the negotiations with private actors failed and it was unclear whether AIG was “just” illiquid or insolvent. Indeed, AIG made a loss of US\$ 99.3 bn. in the year 2008. Since no private solution was found and AIG was judged to be too big to fail, the US government rescued the company with US\$ 180 bn. (The Financial Crisis Inquiry Commission 2011, 344-353).

The Financial Crisis Inquiry Commission (2011) states that AIG’s bankruptcy would have affected other companies because of the US\$ 2.7 trillion over-the-counter derivatives portfolio with an US\$ one trillion exposure to 12 large counterparties (The Financial Crisis Inquiry Commission 2011, 348). The commission concludes that because of sweeping deregulation, the company was able to sell enormous amounts of CDSs without providing initial collateral or setting aside capital reserves. This opportunity resulted in a failure of corporate governance and its risk management practises by engaging in regulatory arbitrage:

“If they (the CDSs) had been regulated as insurance contracts, AIG would have been required to maintain adequate capital reserves, would not have been able to enter into contracts requiring the posting of collateral, and would not have been able to provide default protection to speculators; thus AIG would have been prevented from acting in such a risky manner” (The Financial Crisis Inquiry Commission 2011, 353)

All in all, both cases can indeed be interpreted as schemes of “joint-irresponsibility” where regulators did not fulfil their obligation and let the private and public actors behave in a too risky manner by allowing high leverage ratios. With respect to the hypothesis in section 2.4, the schemes show a high outreach but no financial self-sustainability. The mortgage financiers are examples of public intervention via public private partnerships since both institutions had private shareholders but were used for public policy. Hence, there is evidence for a government-guarantor scheme. AIG is an example of regulatory arbitrage since AIG was not re-

quired to accumulate reserves but its guarantees reduced the capital requirements of lenders. Both schemes seem to be Lender-guarantor schemes within the relationship-based approach. More research would be required to precisely discuss the information available to the guarantors and to conduct the ODM approach.

3.1.2 Important schemes in the USA, Japan and South Korea

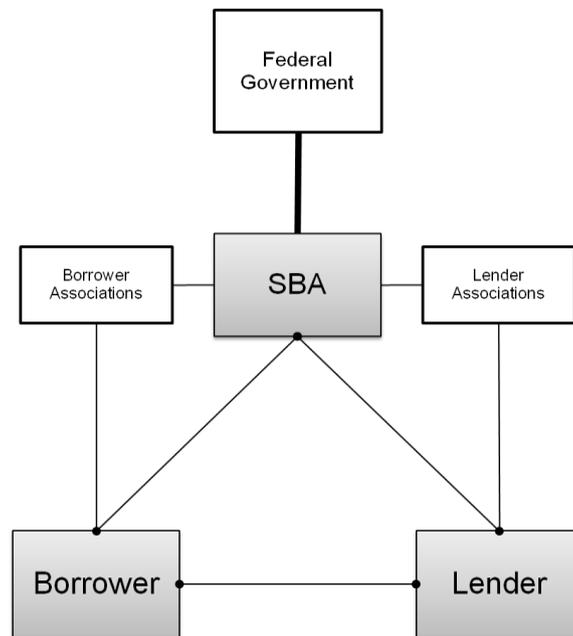
This section provides a brief illustration, or mini case studies, of important schemes in the USA, Japan and South Korea. The guaranteeing institution in the USA, the Small Business Administration (SBA) in cooperation with the Small Business Development Centres, roughly equals the agency in Brazil that is the driving force to create a national system of local credit guarantee societies: the Brazilian Service of Support for Micro and Small Enterprises (SEBRAE)²⁰. Schemes in Japan and South Korea will be analysed because of their notable outreach and because the predecessors of German Guarantee Banks were reference models when the predecessors of Japanese Credit Guarantee Corporations (JCGCs) were built. Over time, the banking systems and the guarantee schemes evolved differently. Hence, the analysis is promising to improve the understanding of credit guarantee schemes in their current form and their dynamics.

The first example is the guaranteeing activity of the US American central government to support small business finance. Hence, the public scheme is a government-guarantor scheme. A national credit guarantee system for small businesses was established with the creation of the SBA in 1953²¹. In 1954, the SBA started to provide technical and financial assistance (US Small Business Administration 2010a).

²⁰ In Portuguese: Serviço Brasileiro de Apoio às Micro e Pequenas Empresas

²¹ The predecessor of this public agency was the Reconstruction Finance Corporation (founded in 1932) that had the aim to enable finance of large and small businesses that were hurt by the great depression (US Small Business Administration 2010a). In addition, one should note that the SBA is not the only guaranteeing institution in the USA. There are initiatives on state level, and federal ministries provide guarantees for finance of larger investments. For example, the company Choren applied for credit guarantees in the USA and Germany to finance biofuel plants (Wüst 2008).

Figure 14 ATR of the US Small Business Administration



Own elaboration

The credit guarantee scheme is a national scheme backed by the federal government. Local governments usually do not participate in the risk of the scheme but local business community centres cooperate with the SBA by providing technical assistance and preparing applications for the guarantees. Lender associations are not excluded from the ATR because these actors usually influence public policy. Borrower associations indeed play a role in the scheme although they are not a formal party in the risk-sharing.

The SBA sees itself as an agency of the federal government with the following mission statement:

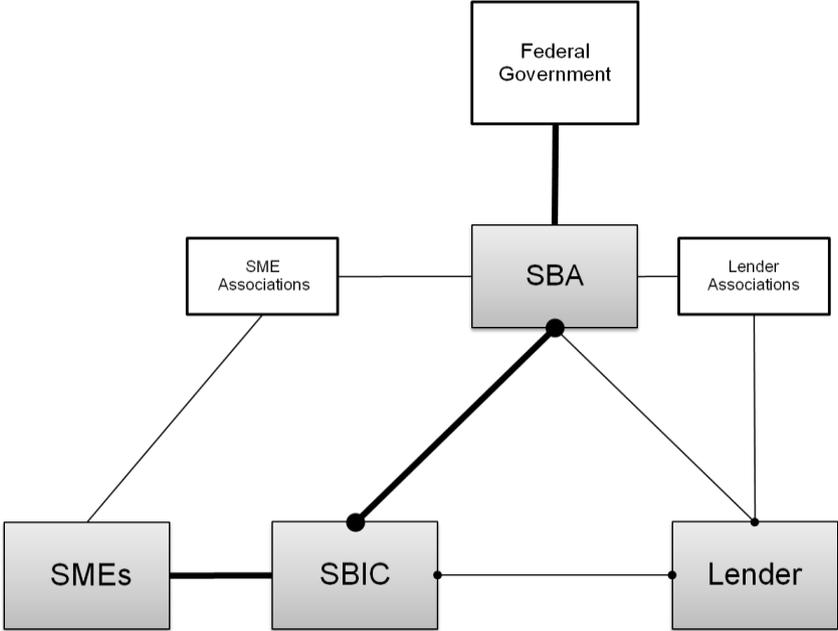
“The mission of the U.S. Small Business Administration is to maintain and strengthen the nation’s economy by enabling the establishment and vitality of small businesses and by assisting in the economic recovery of communities after disasters.” (US Small Business Administration 2010b, 8)

To fulfil its mission, the SBA uses several methods like directed loans, credit guarantees and grants, and has special programmes for minorities, veterans and borrowers in regions that

faced disaster. The credit guarantee programme “7(a) Loan Program”²² provides partial guarantees for loans of up to US\$ 2 m. The SBA calls this programme its “flagship programme” (Ginsburg 2010, 11).

In addition, the SBA has guaranteed the refinance of Small Business Investment Companies (SBIC) since 1958. SBICs are similar to venture capital, or private equity funds. SBICs are licensed and regulated by the SBA and provide finance to small businesses only (US Small Business Administration 2010c). Figure 15 describes the SBIC guarantee scheme, whereby a SBIC provides finance to Small and Medium sized enterprises (SMEs) with itself acting as the borrower within the Basic Triangular Relationship.

Figure 15 ATR of the US SBIC Programme



Own elaboration

The total portfolio of outstanding guarantees was US\$ 62 bn. in FY 2009 and US\$ 64 bn. in FY 2010 (US Small Business Administration 2010b, 65). The following table shows the approvals in the period 2006-10.

²² “The name comes from section 7(a) of the Small Business Act, which authorizes SBA to provide business loans to American small businesses. The SBA itself does not make loans, but rather guarantees a portion of loans made and administered by commercial lending institutions.” (US Small Business Administration 2011).

Table 5 Approvals of the SBA's guarantees in the Period 2006 – 2010

Financial assistance approved in FY In US\$ m.	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
7(a) Regular by volume	\$14,528	\$14,292	\$12,671	\$9,191	\$12,407
7(a) Regular by number	97,291	99,606	69,434	41,289	47,000
average volume	\$0.149	\$0.143	\$0.182	\$0.223	\$0.264
SBIC by volume (gross financing invested in small businesses)	\$477	\$759	\$1,030	\$788	\$2,047
SBIC by number (of small businesses financed)	2,121	2,057	1,905	1,481	1,331
average volume	\$0.225	\$0.369	\$0.541	\$0.532	\$1.538

Own elaboration; source: US Small Business Administration (2010b, 7), US Small Business Administration (2009, 7)

Table 5 shows that the average guarantee volume of 7(a) guarantees is well below the ceiling of US\$ 2 m. It also shows that on average the SBICs' participation is of higher volume than that of the "7(a)" guarantees.

In December 2009, there were € 930 bn. outstanding commercial and industrial loans in the USA (Board of Governors of the Federal Reserve System 2011, 4). Hence, SBA's outstanding guarantees represent roughly 7% of commercial and industrial banking loans in a financial system where the capital market plays a large role. Hence, unlike Fannie May and Freddie Mac, the SBA's quantitative importance is modest within the US financial system. The SBA encourages start-ups to apply for the guarantees, and the lenders have to declare that the loans would not have been provided without the SBA's guarantees. Hence, it can be stated that the principle of subsidiarity is anchored into the scheme, and that the scheme is tailored towards "unternehmer" to fill a financing gap. Whether the SBA indeed fulfils this aim lies beyond the scope of this brief section. Nevertheless, the SBA's showpieces are famous and appealing "unternehmer": Ginsburg (2010) states that Apple Computers, Federal Express, American Online and Intel Corporation are among the SBIC's success stories. Furthermore, Nike Shoes Company and Microsoft Corporation are said to have been supported by the SBA (Herrero Calvo and Pombo González 2001, 195).

The question of financial self-sustainability can only be briefly discussed in this digression since insufficient information is at hand. Nevertheless, it is known that the SBA receives

grants and finance from the budget to fulfil its mission. The default rates²³ of the 7(a) programme varied between 1.5% and 2.5% in the period 2001-07 and continuously increased to almost 6% in 2010 (US Small Business Administration 2010b, 23). Hence, these numbers indicate that the SBA are not schemes of “joint-irresponsibility” since defaults are high but not extraordinarily high for the finance of “*unternehmer*”, and the overall outstanding guarantee volume is limited.

With respect to the ODM approach, the SBA can be interpreted as a GI with pledged money since it receives grants and loans from the budget. Hence, each call on guarantee does not affect the budget and the SBA should be in row A1.2 of table 2.1. Probably A1.2.1 is true (Government is explicitly liable for all guarantees) since the SBA is a public agency. However, no documents were found that prove this assumption. With respect to the decision-making process, the SBA uses the case-by-case approach but relies primarily on the bank’s information on the individual borrower and on the application form (column B.1.2). The SBA cooperates with several public and private agencies that consult small businesses in general – beyond finance. There are for example, the Small Business Development Centers, the “Counselors to America’s Small Business” association with more than 12,000 volunteers, U.S. Export Assistance Centers and Women’s Business Centers. Indeed, the interview at the SBA’s Illinois District Office in Chicago brought to light that this cooperation between the SBA and the consultants is frequently used within the SBA’s decision-making process (Interview 50). However, cooperation and consultancy is not a requirement for a guarantee. With respect to the risk-sharing, the SBA usually provides partial guarantees. All in all, the “7(a)” program of the SBA is of basic model one.

With respect to the SBIC, the SBA guarantees a portfolio of the SBIC’s small business finance. According to Green (2003), this would be the intermediary approach (see section 2.5.1). Within the ODM approach, the SBIC programme is of basic model one, if the SBIC is considered the borrower within the scheme. Alternatively, it can be considered as a public-private partnership where the private SBICs provide finance case-by-case and the SBA guarantees the SBICs’ refinance. Hence, it is of basic model three.

A deeper analysis is required to conduct the relationship-based differentiation. Nevertheless, the focus on finance that would not be possible without the guarantee, start-up finance and temporary assistance to regions in emergencies suggest that usually there is no long-term relationship between the SBA and the borrower. Whether the SBA and the lenders establish such a relationship could not be clarified. Hence, it is not clear whether the scheme is

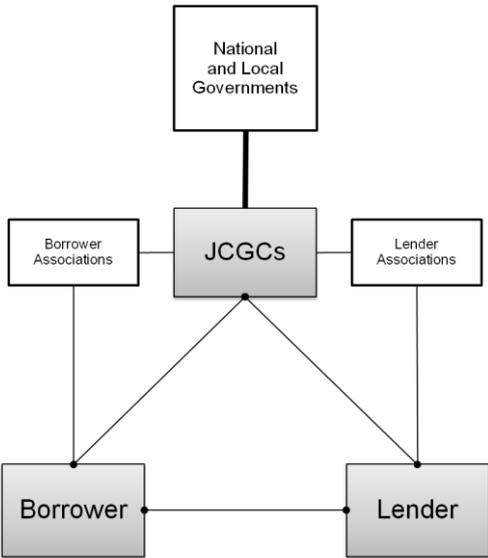
²³ The SBA guarantees the loan in a way that the bank receives the right to sell the loan in the credit event, i.e. the guarantee is similar to a put option for the bank to sell the loan. In the case of a call on guarantee, the SBA purchases the loan.

a guarantor-lender or arm’s length basic scheme. For the SBIC programme, the SBA establishes a long-term relationship with the SBICs (which are regulated by the SBA). These SBICs provide venture capital which suggests that there are long-term relationships between the SBIC and the borrowers. However, further research is needed to verify this impression.

The following discusses the Japanese system of credit guarantee schemes. In 1936, representatives of the Industrial Bank of Japan visited credit guarantee schemes in Germany and decided to establish similar schemes in Japan. Indeed, the scheme is said to be inspired by the German experience (Herrero Calvo and Pombo González 2001, 449, Damilano 2008, 219). Damilano (2008) reports that the first institution was built in Tokyo in cooperation with the metropolitan government, several financial institutions and many borrowers associations. After World War II, 49 public guaranteeing institutions were built at a local level on the initiative of a national public agency for small business. In the 1990s, when the Japanese economy and banks faced structural changes, including a credit crunch, the schemes received additional public funding and started to widen their range of operations, including guarantees for bonds or collateralized loan obligations. In 2002, a special programme was introduced for SMEs in difficulty (Damilano 2008, 215-218).

Today, the scheme consists of 52 non-profit public credit guarantee corporations of public law that operate on the municipal level providing guarantees for small business finance. Figure 16 shows the ATR of Japanese Credit Guarantee Corporations (JCGCs).

Figure 16 ATR of Japanese Credit Guarantee Corporations



Own elaboration

The regional JCGCs usually operate only in their municipality. The local municipalities created a loss subsidy system that indicates an explicit liability of the municipalities for the JCGCs. Moreover, Damilano (2008) states that the public nature of the JCGCs has always assured unconditional support of the State. In addition to the support of their respective municipalities, there is a national system of second-tier institutions. For example, the national Japanese Finance Corporation shares the risk with the JCGCs via credit insurance that take over 70% and 90% of the JCGCs' risk (Damilano 2008, 219,226). Hence, the scheme of JCGCs is a government-guarantor scheme (basic scheme 4).

Although the schemes were founded in cooperation with Japanese chambers and other private associations, the private initiative is of less importance. The only indication of private initiative are financial contributions of "Financial Institutions" and "Industry Organizations" to the JCGCs' "Basic Assets Fund" which are significantly less than the contributions of local governments (National Federation of Credit Guarantee Corporations 2010, 12). Damilano (2008) concludes that the indirect mutual nature is negligible because the borrower associations are not involved in the management and their financial contribution is limited (Damilano 2008, 219).

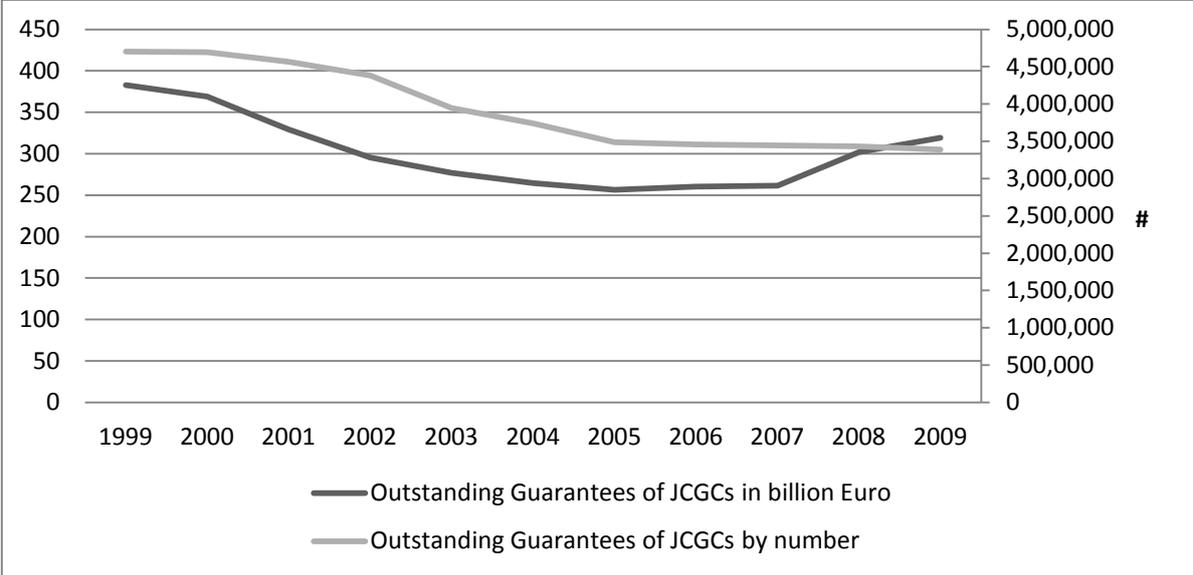
Herrero Calvo and Pombo González clarify that the JCGCs use the case-by case approach within the decision-making process and receive a portfolio-counter guarantee (Herrero Calvo and Pombo González 2001, 457). The JCGCs analyse each request – including an interview and visit to the borrower. Before, 2001, all guarantees were 100%.

The general aim of the JCGCs is to improve prosperity of enterprises and to promote strong regional economic development. In the annual reports of the national federation, start-up finance is not mentioned and there is no indication that JCGCs should only support enterprises that would not receive a loan without the guarantee (National Federation of Credit Guarantee Corporations 2010). This indicates that the scheme is not only tailored to "unternehmer" but to "wirte", too.

With respect to the fulfilment of the aim, the outreach and financial self-sustainability will be analysed. The system is the largest credit guarantee scheme for small business finance by outreach in the world. Herrero Calvo and Pombo González calculate that these guarantees represent 7.86% of Japanese GDP (Herrero Calvo and Pombo González 2001, 447). In its 2010 annual report, the National Federation of Credit Guarantee Corporations (2010) calculates that the "Guarantee use rate" (i.e. the ratio between the number of companies using guarantees and the number of all SMEs) varied between 35.3% and 45.3% in the period 2000-09 (National Federation of Credit Guarantee Corporations 2010, 16). Indeed, the out-

standing numbers and volumes (calculated in Euro with the exchange rate of 0.0089) are impressive:

Figure 17 Outstanding Guarantees of Japanese Credit Guarantee Corporations



Own elaboration; source: National Federation of Credit Guarantee Corporations (2010, 16)

In comparison to the European schemes, it has to be noted that the ceiling of credit guarantees is Japanese Yen (¥) 400 m. (€ 3.6 m. in 2010) and ¥ 450 m. (€ 4 m. in 2010) when bonds are to be guaranteed. This ceiling is much higher than the ceilings for the members of the European Association of Mutual Guarantee Societies (AECM), however, the average value of guarantees is not fundamentally higher (see section 3.2.1.2). The average value of outstanding guarantees varied between € 67.000 and € 94.000 in the period 1999-2009 (National Federation of Credit Guarantee Corporations 2010, 14).

For the years 2000 until 2009, the relation of payments to the outstanding guarantees varied between 2.34% and 3.80% by volume and between 2.28% and 3.17% by number of guarantees. Since the credit guarantee fees (in 2009) vary between 0.5% and 2.2%, no financial self-sustainability can be expected. Moreover, Damilano (2008) reports that defaults reached 10% in the 1990s when the Japanese economy entered a long period of depression. To solve the problem, a special guarantee fund was created and funded by public agencies (Damilano 2008, 216,217,239).

Hence, the Japanese schemes are public-private partnerships. However, private participation is small, and their status as institutions of public law indicates that it is the government that

sits in the driver's seat. Within the ODM approach, the first dimension is A2.1.2. With respect to the local governments' explicit guarantee for the JCGS, there was no proof found. However, there are indications that municipalities are explicitly liable for all guarantees provided since there are loss compensation mechanisms and the JCGSs are public agencies (A2.1.2.1). The literature suggests, such as discussed by Herrero Calvo and Pombo Gonzáles (2001), that the second dimension is usually B1.1. With respect to risk-sharing, the JGCs provided guarantees of 100% before 2001 and later introduced a sharing of the risk with the lenders (National Federation of Credit Guarantee Corporations 2010, 5). Consequently, the Japanese Credit Guarantee Corporations are a scheme of basic model three.

Conducting the relationship-based approach requires a deeper analysis. However, analysis of the literature reveals the following impression:

The Japanese main banking system is seen as a "nexus of relationships" with three elements: first, the main banks practice relationship-banking with their clients. Second, there are relationships between the main bank and other creditors and third, there is usually a relationship between these parties and the government. This nexus of relationships is established with large and small enterprises (Nam 2004, 2-7, Aoki, Patrik and Shead 1994, 2-4). Although Japanese banks practice relationship-banking, the relationship is not exclusive. Indeed, there were no universal banks in Japan between World War II and 1993 (Cameron 1995, 17). The US Americans successfully introduced a separate banking system in Japan which remained until the 1980s. During this period, banking business was separated from the security and insurance businesses. There were special deposit banks and other institutions for the trust business. Especially important for small business finance was a separation between long-term and short-term finance (Hall 1993, 86-171). Consequently, in the first decades after the JCGCs' foundation, there was a long-term relationship between banks and borrowers but it was not exclusive and banks did not have the whole range of information available like universal banks.

Larger JCGCs have exclusive relationships with many banks, however, they concentrate their activities on only a few banks (Damilano 2008, 246). This indicates that there is a strong relationship between public agencies, the JCGCs and lenders, i.e. that the scheme is a lender-guarantor, guarantor-government scheme (schemes 3 and 4 in the relationship-based approach).

The relationship between borrowers and guarantors is less clear. Nevertheless, there are some indications of a long-term relationship: the JCGCs use the case-by-case approach. Moreover, the impressive outreach with a guarantee use rate varying between 35.3% and 45.3% in the period 2000-09 indicates that borrowers might have repeated interactions with

the JCGSs. However, more research would have to be done to understand the relationship between the guaranteeing institutions and the borrowers.

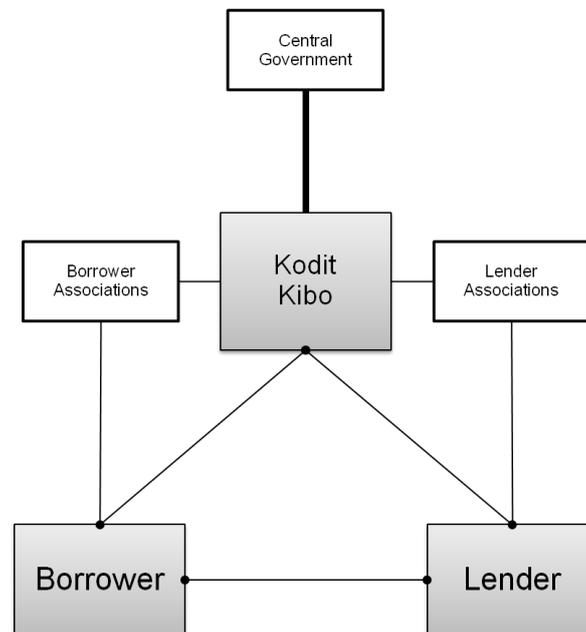
With respect to the hypothesis in section 2.4, the degree of additionality and transaction costs remains an open question in this brief analysis. However, the scheme shows a high outreach but without financial self-sustainability.

There are four approaches to explain the high outreach of JCGCs which can be derived from the historical analysis: First, the municipalities and the central government were willing to use the JCGCs as a business promoting scheme from the beginning. Second, there was a form of relationship banking but it was less exclusive and the banks did not have the full range of information on the borrower like universal banks. Third, for a long time there was an interest rate cap for short- and long-term finance (Kerstien 1994, 154). Consequently, it can be assumed that JCGCs, that charged fees, were a tool to avoid credit rationing due to low interest rates. Fourth, once established, the JCGCs continued to be used as a public business support scheme after the financial market had been liberalised which enabled universal banking and higher interest rates.

The third example in this section is the South Korean system. As one can see in Figure 11, the South Korean credit guarantee schemes are important in terms of outreach. Rovera (2008b) reports that there are 18 guaranteeing institutions. 16 municipal schemes are of rather modest outreach and will not be discussed. More important are the Korea Credit (KODIT) (previously called the Korea Credit Guarantee Fund) and the Korea Technology Credit Guarantee Fund (KIBO) (previously called Kotec) (Rovera 2008b, 187,188). The following relies largely on the study conducted by Rovera (2008b).

Both guaranteeing institutions are public agencies of the central government, controlled directly by the ministries and indirectly by parliament (Rovera 2008b, 188,189). Hence, they are both government-guarantor schemes (basic scheme 4). Banks are obliged by law to contribute to the fund. Borrower associations sometimes voluntarily provide contributions to the scheme. However, this source of finance is negligible (Rovera 2008b, 196,197). Borrower- and lender associations are not excluded from the ATR because there is always lobbyism.

Figure 18 ATR of South Korean KODIT and KIBO



Own elaboration

The objective of KODIT is to “contribute to the SMEs’ growth potential and the advancement of the financial industry” (KODIT 2010, 9). On the other hand, KIBO’s mission is “to contribute to the national economy by providing credit guarantees to facilitate financing for new technology-based enterprises while promoting the growth of technologically strong Small and Medium Enterprises (SMEs) and venture businesses.” (KIBO 2006). This apparently indicates that the first is tailored to support “wirte” whereas the second is more targeted to “unternehmer”. Both public agencies operate nationwide as first-tier guaranteeing institutions. They charge fees from borrowers and receive yearly financial contributions from the government. In addition, they receive compulsory contributions from banks. Next to the structural policy goals, the guaranteeing institutions were used as a tool of public stability policy during both the Asian and the current worldwide crises.

Borrowers are screened case-by-case and have to pay subsidised fees that vary between 0.7% and 2% of the guarantee volume. KODIT has 85 branches and 2,177 employees and KIBO has 50 branches with 975 employees (Rovera 2008b, 189,202-206, KODIT 2010, 31). KIBO focuses on new technology-based enterprises and also KODIT provided almost 26% of its guarantee volume to start-up finance and 22% to “Certified Innovative Enterprises” in 2009 (KODIT 2010, 15). Consequently, KODIT also supports “unternehmer” although it seems to be tailored to support “wirte”. Hence, it can be assumed for both schemes that many of

the borrowers are “*unternehmer*”, but “*wirte*” are not excluded, especially in the case of KODIT. In both cases, repeated interaction can be expected since finance is usually only for one year and has to be renegotiated.

Guarantees can be provided up to US\$ 3 m. (€ 2.25 m.) (G-20 Financial Inclusion Experts Group 2010, 67). Within KODIT’s Annual Report 2009, it is stated that provided guarantees increased from 30.7 South Korean Won (KRW) trillion (€ 24 bn.) in 2005 to 45.6 KRW trillion (€ 25.7 bn.) in 2009. In the year 2009 (2008), 218,744 (193,978) enterprises received guaranteed finance (KODIT 2010, 5,14). Consequently, the average guarantee in the year 2009 had a value of € 117,000. These flows are impressive, however, since guarantees are usually provided for one year, which is the common maturity of loans in Korea, these flows are roughly equal to the stock of outstanding guarantee volume.

KIBO (2009) reports that outstanding guarantees varied in the period 2004-08 between a peak of 13.5 KRW trillion (€ 9.5 bn.) in the year 2004 and a trough of 11.2 KRW trillion (€ 9.34 bn.) in the year 2006 (Kibo 2009, 21). Rovera (2008b) reports that KIBO had guaranteed finance of 67,642 companies in 2005. Moreover, the author reports that the Korean credit guarantee schemes provide risk sharing to 10% all Korean small firms (Rovera 2008b, 189). Consequently, the Korean schemes have an impressive outreach.

With respect to defaults, KODIT (2010) reports a peak of 14.5% in 1998 which was during the IMF bailout programme. This default rate fell to a level between 3.9% and 5.9% in the period 2005-09 (KODIT 2010, 5). KIBO (2009) reports default rates between 6% and 13% and collections from subrogation between 4% and 12% in the period 2003-08 (Kibo 2009, 49). Fees of up to 2% may be sufficient to cover much of the net default but with 3,000 employees in both institutions, financial self-sustainability is questionable. Indeed, significant annual contributions provided by the government next to compulsory contributions from banks are a sign of significant public financial support.

Within the ODM approach, both schemes are publicly funded guarantee schemes (since the financial contribution of banks is compulsory, and the voluntarily contributions of borrower associations are of negligible quantity). Since both KODIT and KIBO are public agencies, it can be assumed that there is an explicit guarantee and hence within dimension A, the schemes can be categorised as A1.2.1. In addition, KIBO provides additional guarantees on the behalf of the government and just manages the contingent liabilities of the government. In this case, the appropriate category would be A1.1 if the public guarantees are not funded. Usually, the GIs use the case-by-case approach within the decision-making process with their own information and share the risk with the lender. Consequently, the schemes are B1.1 in the second dimension. This makes them schemes of basic model one.

Conducting the relationship-based approach lies beyond the scope of this section. Nevertheless, it can be stated that there is a strong relationship between the GIs and the government (basic scheme 4). Both GIs are public agencies used by government to realise a policy of “soft intervention”. The schemes are not self-help institutions but a tool of public intervention. With respect to the hypothesis of section 2.4, a high outreach can be recorded. Relatively high default rates, high share of start-up finance and innovative enterprises indicate a high degree of additionality. On the other hand, no financial self-sustainability can be recorded and the double-screening and risk sharing does not imply low transaction costs.

All these schemes in the USA, Japan and South Korea are public schemes or a cooperation of public and private actors where the government sits in the driver’s seat. They all have a clear political mission. In South Korea and the USA, it is filling a financing gap and in Japan, the schemes are used to improve finance of a broad number of borrowers. Financial self-sustainability is not a binding condition for the guarantee operations, but there is no evidence of a “joint-irresponsibility” like at the public-private partnerships of Fannie Mae and Freddie Mac.

3.2 Evidence from Europe and Latin America: an overview

The following section provides an overview of schemes in Europe and Latin America. The ODM approach is used to differentiate the schemes. In addition, an historical assessment of schemes in Europe and mini case studies in Argentina, Italy, and Spain enrich the analysis.

3.2.1 Credit guarantee schemes in Europe

Public credit guarantee schemes for enterprise finance have become well known since they were used to combat a (possible) credit crunch during the worldwide financial and economic crisis which peaked with the collapse of the Investment Bank Lehman Brothers in September 2008. Media frequently reported the credit guarantee schemes, in particular when large enterprises like Ford in the UK and Saab in Sweden applied for credit guarantees (European Commission 2011a). In Germany, two famous cases that were widely discussed among politicians and the media were whether government should guarantee the finance of a consortium that tried to take over the European subsidiary of General Motors (*Opel/Vauxhall*), and the application by the German retailer Arcandor (*Karstadt Quelle*). Moreover, governments

provided guarantees for the refinance of financial institutions and sovereign debt – which is not the focus of this research.

Even before the financial crises, guarantee schemes in favour of the European Aeronautic Defence and Space Company EADS (with its most famous brand Airbus) were widely reported in the media (Afhüppe 2001). Moreover, there are, for example, longstanding guarantee schemes for shipbuilding in several member states such as the Netherlands, Germany and France. The European Commissioner for Competition (2011a) provides online a database of 591 State aid cases of (single ad-hoc) guarantees and guarantee schemes, including guarantees for financial institutions.

Credit guarantee schemes have a long tradition in Europe. In 1919, Schumpeter, as secretary in the Ministry of Finance of the “Republic German-Austria” (*Deutschösterreich*), stated that a public guarantee can induce banks to provide a loan to the industry. When an industry and the employees would “perish”, guarantees should not be denied. However, Schumpeter also stated that the use of guarantees was exceptional (Neue Freie Presse 1919/1992, 60). Moreover, there were some forms of guarantee associations already in medieval times. Körner (1993) reports that with respect to collateral, guarantees and “collective liabilities” (*Kollektivhaftungen*) were used to enable loans (Körner 1993, 70-72). Unfortunately, the author does not provide sufficient information to specify whether these collective liabilities were more like group lending or institutionalised credit guarantee schemes, for example organised by guilds or brotherhoods.

The schemes in the medieval times will not be discussed in this research. The recent history will be outlined in the following section, starting with schemes in the beginning of the 20th century.

The research focuses on schemes for small and medium sized enterprises. The European Commission defines these enterprises as enterprises which employ fewer than 250 persons and whose annual turnover does not exceed € 50 m. or annual balance sheet total does not exceed € 43 m (European Commission 2005, 14).

3.2.1.1 A brief history of schemes after World War I

This section is based, unless otherwise cited, on the empirical research of Brinkmann (1969) who analysed European schemes for small business finance in Switzerland, Germany, Austria, Italy, France and the Benelux countries. The history of German schemes will be analysed

in more detail in section 3.2.2. Focus of this section is whether private guarantee schemes emerged without public support.

In the 1920s, so called “chain-guarantees” (*Kettenbürgschaften*) emerged in Switzerland. Private persons guaranteed borrowers who themselves provided guarantees in favour for other persons. In 1929, these guarantees resulted in “guarantee catastrophes” where governmental intervention was needed (Fischer 1959, 69-70). These informal guarantee schemes are another example, in addition to the recent experiences described in section 3.1.1.2, of an uncoordinated and unregulated use of risk-sharing mechanisms that can result in financial instability. As a consequence, several private credit guarantee cooperatives emerged in the 1920s and 1930s. Swiss schemes emerged not by the initiative of the borrowers, but rather of the private guarantors that had experienced high calls on their guarantees before. The institution building was enabled by the government that channelled public means to the cooperatives in order to improve financing conditions of small businesses (Brinkmann 1969, 33-36). In 1942, the Swiss government passed a law that made the provision of private guarantees more difficult and used the schemes to channel public aid to enterprises that fell into trouble because of the war. Banks provided finance of roughly 50% of the cooperatives’ equity while borrowers associations provided a further 20%. With the support of borrowers associations, banks and government, the institutions’ outstanding guarantees increased from one m. Swiss Francs in 1936 to 28 m. in 1960. In 1965, 672 guarantees with a volume of 14.1 m. Swiss Francs were approved.

Although the increase of outreach was notable, the level of the outreach remained moderate. Moreover, the schemes continued to depend on public support.

Swiss schemes were not the only schemes that emerged before World War II. In the years 1936 and 1937, the Dutch central government provided counter-guarantees of 40% to 35 regional guaranteeing institutions (*Borgstellingsfondsen*) formed by regional governments and chambers of industry and commerce. In Belgium, similar institutions were founded. However, outreach was modest in both countries. In France, a law enabled the foundation of credit guarantee cooperatives in 1917. However, only in 1936 after the unlimited liability of members was abolished did the first credit guarantee scheme start operations. By 1939, 35 schemes were founded, but outreach of the French cooperatives was modest (Brinkmann 1969, 38-39). Brinkmann (1969) concludes that European schemes emerged as a response to the great depression of the 20th century (Brinkmann 1969, 33-40).

Another important wave of institution building took place after World War II. In Austria, the first credit guarantee schemes for small businesses were founded in 1955: one national scheme (*Bürges-Organisation*), two regional schemes and two sectorial schemes. Whereas

the national scheme was a public agency, borrowers participated directly in the regional and sectorial guarantee cooperatives. By 1966, only the national credit guarantee scheme achieved a relative importance. In the Netherlands, the already established scheme for enterprises in financial distress (*Borgstellingsfondsen*) continued to operate. In addition, a national scheme was established to support start-up finance in 1955 (*Algemeen Waarborgfonds voor de Middenstand*). This scheme was jointly initiated by borrower associations and the government. Around this time, nine sectorial guaranteeing institutions were also established. Borrowers did not participate directly in the Dutch schemes, but, the borrower associations did participate in the sectorial GIs and in the “Borgstellingsfondsen”. Whereas the national scheme is a public scheme, the other schemes received public counter-guarantees of up to two third of the guarantee. In Belgium, regional credit guarantee cooperatives were founded in the 1950s. However, in 1959, a public credit guarantee scheme was established which by 1964 had crowded out 17 of 21 regional cooperatives. These four successful guarantee schemes were not completely private schemes since they received public counter guarantees.

In France, credit guarantee cooperatives were established in the 1930s. They were able to triple the outstanding guarantees to 2,495 m. Francs in the period 1960 to 1966. These guaranteeing institutions were private cooperatives. However, not only the borrowers participated in the cooperatives’ equity. The borrower associations, banks and their associations were able to participate in the cooperatives as “non participating” members which meant that they were not able to receive guarantees for their finance. This form of cooperatives with borrowers as members next to another type of shareholders that do not directly benefit from the GIs’ operations is still common in Spain, Portugal and Latin America. Although government did not participate in the equity of cooperatives, many institutions received public support. The public agencies Caisse Nationale de Marchés de l’Etat (predecessor of the current guaranteeing institution OSÉO Garantie) and Crédit Nationale, provided guarantees of up to 50% under the condition that a guarantee cooperative provided a guarantee to the financing bank. Consequently, the public agencies did support the cooperatives indirectly.

In Italy, the first credit guarantee cooperative was founded in 1958 and soon other institutions emerged. especially in northern Italy. By 1966, 48 cooperatives had started their operations within the crafts sector and the wave of founding credit guarantee continued. The Italian GIs did not receive public second-tier counter-guarantees. However, the public agencies provided grants to the GIs that equalled the equity which was provided by the borrowers (Brinkmann 1969, 126).

What are the lessons learned from the developments of this period? First, an unlimited liability is an incentive to not participate. For example, in France the schemes only started when the unlimited liability was abolished. Many schemes did not have the juridical form of a cooperative but instead were limited companies. In order to increase the willingness of borrowers to participate in the cooperatives members of credit guarantee cooperations in Switzerland, Austria and Belgium were only liable with their shares (*Anteilhaftung*). No unlimited liability of borrowers was demanded to participate in the schemes (Brinkmann 1969, 90-94).

Second, Brinkmann (1969) furthermore concludes that borrowers who needed guarantees due to missing collateral, were not able to provide sufficient capital to GI on their own. On the other hand, those borrowers who had capital did not need the GI (Brinkmann 1969, 83). Consequently, third parties were needed to build credit guarantee schemes. Self-help and private initiative was vivid because private actors provided financial support and borrower associations provided reports within the decision-making process of the GIs, organizational support and advertisement. However, no completely private schemes emerged since most credit guarantee schemes received significant financial support or were completely public agencies, i.e. government-guarantor schemes. Brinkmann detects four levels of public support for private schemes (Brinkmann 1969, 118-128):

- 1) Public agencies provided risk-sharing, for example in the form of counter-guarantees. This was the case in Belgium, Dutch cooperatives, French cooperatives and the German schemes.
- 2) Public agencies provided grants to the schemes in order to accumulate assets. This was the case in Belgium, Italy and the Dutch cooperatives.
- 3) Public agencies were able to subsidise administrative expenses which was the case in Switzerland and the Netherlands.
- 4) Private guaranteeing institutions were supported by tax relief, which was the case in all schemes with the exception of schemes in Italy and Belgium.

In this period, public support was provided to the new institutions as an initial support with the idea that schemes would be able to be financial self-sustainable in the future (Brinkmann 1969, 133). However, the author doubts that this aim would be possible if the public support is provided in order to use the guaranteeing institutions to carry out public policies. This argument goes in line with the hypothesis in section 2.4, when the aim of public policy is to achieve a high degree of additionality or to anchor the principle of subsidiarity.

In 1978, after the time of the Franco regime, Spanish *Sociedades de Garantía Recíprocas* (SGRs) were founded. These schemes will be discussed in section 3.1.2.4 as a model for the institution building process in Portugal and Latin America. After the fall of the Berlin Wall, schemes emerged in eastern European countries, Greece and Portugal. Whereas the scheme in Portugal was built after the “Spanish” model with public and private shareholders, the schemes in eastern Europe were predominantly public guarantee schemes (Herrero Calvo and Pombo González 2001, 568). Many of them were supported by the European Union and the US development agency USAID.

3.2.1.2 Outreach of European credit guarantee schemes in the period 2007-2009

The section continues with an overview of the outreach of European schemes in the period 2007-09. Quantitative data is only analysed for members of the European Association of Guarantee Societies (AECM). Consequently, the numbers do not provide an overview of the total use of credit guarantees schemes in the countries.

The following tables describe the outreach of AECM members and Swiss schemes. Table 6 describes the outreach by volume, Table 7 the outreach as relation to national GDP and Table 8 the outreach by number for the years 2007 to 2009.

Table 6 Outreach in Europe by Volume in the Period 2007 – 2009

Country	Outstanding guarantees in € m.			Approved guarantees in € m.		
	in 2007	in 2008	in 2009	in 2007	in 2008	in 2009
Austria	425.54	426.18	481.03	121.09	77.77	111.82
Belgium	320.04	357.55	492.70	124.18	140.63	263.08
Czech Rp.	451.00	530.49	701.40	120.00	174.14	301.90
Estonia	41.34	42.21	68.30	22.24	23.33	51.40
France	9,575.55	9,421.88	13,354.83	3,882.75	4,012.98	6,733.00
Germany	5,301.00	5,401.00	5,586.08	1,156.00	1,077.00	1,261.30
Greece	83.37	134.78	3,498.00	87.94	82.67	4,085.00
Hungary	1,481.95	1,580.03	1,706.93	1,306.38	1,321.03	1,499.52
Italy	29,332.12	30,318.16	31,707.23	12,573.95	11,903.00	11,913.86
Latvia	18.51	42.35	42.35	16.37	29.53	29.53
Lithuania	163.24	190.64	220.25	87.16	77.84	89.17
Poland	-	-	442.31	-	-	226.47
Portugal	464.99	898.03	2,749.00	312.09	665.32	2,273.00
Slovak Rp	128.14	140.12	0.00	39.52	75.90	0.00
Romania	385.63	466.32	709.80	356.27	319.97	659.42
Spain	5,638.31	5,938.78	6,524.33	2,441.14	2,238.30	2,515.94
Slovenia	14.18	30.66	100.53	6.89	15.97	74.28
Sweden	4.24	4.63	-	3.16	2.24	-
Switzerland			108			
Turkey	1,593.71	1,494.58	1,980.00	1,315.30	1,363.35	1,682.00
Total	55,422.83	57,418.39	70,365.05	23,972.42	23,600.96	33,770.68

Own elaboration; source: AECM (2009b, 2010)

Table 7 Relation of Outstanding Guarantees to GDP in Europe in the Period 2007-09

Country	Outstanding Guarantees / GDP		
	in 2007	in 2008	in 2009
Austria	0.16%	0.15%	0.18%
Belgium	-	-	-
Czech Rp.	0.37%	0.41%	0.49%
Estonia	0.29%	0.28%	0.49%
France	0.52%	0.50%	0.71%
Germany	0.22%	0.22%	0.24%
Greece	0.04%	0.06%	1.51%
Hungary	1.64%	1.56%	1.72%
Italy	1.95%	1.99%	2.13%
Latvia	0.10%	0.21%	0.22%
Lithuania	0.62%	0.65%	0.80%
Poland	0.00%	0.00%	0.12%
Portugal	0.28%	0.53%	1.65%
Romania	0.37%	0.35%	0.55%
Slovak Rp	0.26%	0.24%	0.00%
Slovenia	0.04%	0.09%	0.29%
Spain	0.55%	0.56%	0.62%
Sweden	0.00%	0.00%	0.00%
Turkey	0.36%	0.33%	0.50%
Total	0.62%	0.62%	0.78%

Own calculations, source: AECM (2009b, 2010) and Eurostat (2011)

Table 8 Outreach in Europe by Number in the Period 2007 – 2009

Country	Stock of supported SMEs			Approved guarantees by number		
	in 2007	in 2008	in 2009	in 2007	in 2008	in 2009
Austria	4,857	4,863	5,070	960	654	1,035
Belgium	5,038	5,156	4,438	1,448	1,089	2,108
Czech Rp.	3,055	2,101	4,000	810	1,340	1,366
Estonia	571	698	732	314	341	456
France	437,007	432,319	470,499	112,800	124,323	138,449
Germany	39,400	40,000	41,000	7,230	6,800	7,745
Greece	2,827	3,548	59,440	1,037	959	54,752
Hungary	30,959	34,198	37,813	27,189	30,627	33,438
Italy	855,190	1,350,844	-	240,652	215,323	343,970
Latvia	152	287	287	130	192	192
Lithuania	1,322	2,573	2,799	1,013	784	721
Poland	-	-	9,000	-	-	6,178
Portugal	3,000	5,350	37,458	2,530	4,130	44,047
Slovak Rp.	875	1,080	0	409	895	0
Romania	3,636	6,701	29,022	5,380	4,939	29,017
Spain	90,633	94,522	100,987	44,872	45,123	45,682
Slovenia	763	1,090	1,584	81	163	561
Sweden	15	15	-	84	72	-
Switzerland					2,000	
Turkey	267,255	254,306	261,735	164,375	160,854	154,605
Total	1,746,555	2,239,651	1,876,042	611,314	598,608	864,322

Own elaboration; source: AECM (2009b, 2010)

The tables show that for all AECM members the total outstanding guarantees increased from € 55 bn. to € 70 bn., total approvals varied between € 24 bn. and € 34 bn., the number of outstanding guarantees was around 2 m. and that approvals increased from 611- to 864 thousand in the period of 2007 and 2009. In 2009, the ratio of outstanding guarantees to the GDP of the 19 countries (€ 9 trillion) is 0.8% (Eurostat 2011).

These volumes and numbers underline that the European credit guarantee schemes are of modest importance for the financial system. Compared with Japanese CGCs the AECM member GIs are tiny. In 2009, the stock of outstanding guarantees of Japanese JCGCs is above 3 m. by number and more than € 300 bn. by volume which represents roughly 8.6% of the Japanese GDP with € 3.5 trillion (Eurostat 2011).

Comparison of the AECM numbers to European cooperative banks and savings bank shows that the outreach of AECM members is modest: the European Association of Cooperative Banks (2010) reports outstanding loans of € 3.1 trillion, 50 m. members and 176 m. clients in the year 2009. The European Savings Banks Group (2010) reports that their outstanding loans to non-banks equalled € 3.3 trillion in the same year. Table 10 provides the ratios of

outstanding guarantee volume of AECM members to the outstanding corporate loans in the year 2009.

Table 9 Outreach of Some European Schemes Compared with Finance Provided by Banks in the period 2007-09

	AECM guarantees / corporate loans		
	2007	2008	2009
Austria	0.15%	0.14%	0.16%
Belgium	0.23%	0.23%	0.33%
France	1.33%	1.21%	1.74%
Germany	0.33%	0.41%	0.42%
Greece	0.09%	0.12%	3.16%
Hungary	5.73%	6.02%	6.62%
Italy	3.56%	3.49%	3.73%
Lithuania	1.76%	1.69%	2.20%
Slovak Rp.	1.08%	0.83%	-
Spain	0.60%	0.58%	0.65%
Slovenia	0.07%	0.13%	0.42%
Turkey	1.43%	1.31%	2.17%
Average	1.36%	1.35%	1.80%

Own elaboration; source: AECM (2009b, 2010) and European Banking Federation (2010)²⁴

In line with the previous tables, Table 9 underlines the modest quantitative importance of AECM schemes within the respective financial systems, although the schemes increased their activity within this period. Other loans (such as mortgage or consumption loans) are generally important for small businesses as well. Including these loans into the calculation would reduce the ratio of guarantees to loans even further.

Only in Italy and Hungary does the relation of outstanding guarantees to corporate loans rise to 3.5% and 6.5%. In the other countries, this ratio is lower and often well below 1%. The Italian system consists of 72 guaranteeing institutions that are members of AECM, often called Confidi and are said to have a strong cooperative character. France has the second largest stock of guarantees by number and volume. The ratio of outstanding guarantees to corporate loans, however, is well below 2%.

In Turkey there are 910 regional cooperatives that provide credit guarantees with more than 1 m. members within the sector of craftsmen (TESKOMB 2011). However, Table 8 shows that less than a fourth of the members were actively supported with a guarantee in the period

²⁴ Note: sources are provided by the European Banking Federation which represents only private banks. However, the numbers in the publications indeed refer to loans provided by all Monetary Financial Institutions. Numbers were taken from the respective country-sheets of the published Excel document.

2007-2009. In addition to the cooperatives there is a national credit guarantee fund, however, without notable outreach. In 2009, outstanding guarantees were well below € 200 m. and 2,000 by number.

The Spanish system of Sociedades de Garantía Recíproca (SGR) and the German system of Guarantee Banks (GB) have 22 and 18 GIs respectively. The volume of outstanding guarantees in Germany are slightly less than that of Spanish SGRs, although the German economy, measured in GDP of the year 2009, is twice as large as the Spanish economy. In both economies, the ratio between outstanding guarantees and corporate loans is below 1% (AECM 2009b, AECM 2010).

The smallest scheme by outreach is the Swedish guarantee scheme that had only 15 outstanding guarantees in the years 2007 and 2008.

All countries have in common that schemes were used as a tool to prevent a credit crunch triggered by the financial crisis. In the year 2009, almost all numbers increased. The most significant increase can be recorded in Greece and Portugal. For example, in Portugal the outstanding guarantees increased from € 900 m. in 2008 to € 2.7 bn. in the following year. In Greece, the ratio of outstanding guarantee to corporate loans increased from 0.12% to 3.16% in the same period. On the other hand, this indicator only increased from 0.41% to 0.42% in Germany. Italian Confidi increased their approvals by number; however, approvals and stocks by volume remained stable.

All in all, the AECM members are generally of modest quantitative importance. However, these numbers do not represent the total use of credit guarantees since analysis is only based on AECM members and not on all guarantee or risk-sharing schemes.

3.2.1.3 Result of the ownership and decision-making based approach applied in Europe

Since the analysis focuses on credit guarantee schemes for small businesses, in the following some European schemes for small business finance will be briefly analysed. This section neither provides a full list nor a representative sample of all credit guarantee schemes in Europe. A broad number of institutions and associations, especially the AECM members, were contacted. All schemes where sufficient information is at hand are included in this overview. Hence, the section provides an overview of schemes in Europe and shows the variety of European credit guarantee schemes. The Italian and Spanish schemes will then be discussed in more detail in the following sections since both are models for Latin American schemes. The results are presented in Table 10.

Table 10 Result of the ODM Approach in Europe

		Decision-making process for an individual guarantee			
		B1) Case-by-case approach. The lender is required to obtain an approval of the GI. The GI screens the individual borrower.		B2) Portfolio approach. The lender is not required to obtain individual approvals by the GI	
		B1.1) The GI uses its own information beyond an application form.		B1.2) The GI relies on the bank's information.	
Ownership	A1) Public Guarantee Schemes	Basic Model 1		Basic Model 2	
	A1.1) Unfunded Guarantee: Individual call on a guarantee does affect the budget.				
	A1.2) Funded Guarantee: Individual call on a guarantee does not affect the budget.	Oséo (F)	OSÉO (F)		
	A1.2.1) State is explicitly liable for all guarantees.	AWS(A)	KREDEX (EST), AWS(A), SFLG1(UK)	KREDEX (EST), SFLG2(UK), EFG(UK), EIF(EU)	
	A1.2.2) State is not explicitly liable for all guarantees.	CMZRB(CZ)			
	A2) Public-Private Cooperation	Basic Model 3		Basic Model 4	
	A2.1) Government takes explicit risk.	Socama			
	A2.1.1) - Unfunded: Individual call on a guarantee affects the public budget.				
	A2.1.1.1) State is explicitly liable for all guarantees.				
	A2.1.1.2) State is not explicitly liable for all guarantees.	Guarantee Cooperatives (CH), Guarantee Banks (D)			
	A2.1.2) - Funded: Individual call on a guarantee does not affect the public budget.	Confidi (I), SGR (E)			
	A2.1.2.1) State is explicitly liable for all guarantees.				
	A2.1.2.2) State is not explicitly liable for all guarantees.	SGM1(P)	PME_Investe (P)		
	A2.2) Government does not take explicit risk.				
	A3) Private Guarantee Schemes	Basic Model 5		Basic Model 6	

Own elaboration

Public guarantee schemes of basic model one, within the basic ODM approach, were found in France (F), Austria (A), Estonia (EST), the Czech Republic (CZ) and in the United Kingdom (UK). The UK scheme was recently transformed to a scheme of basic model two. The scheme of the European Union (EU) and partially the Estonian scheme are of basic model two. Public and private guarantee schemes of basic model three were found in Germany, Spain, Italy (these will be analysed in the following sections) as well as in Portugal and Switzerland. No schemes of basic model four or the private basic models five or six were found outside Germany²⁵. Hence, all observed schemes were either public or supported by public agencies. No financially self-sustainable self-help scheme was found. Corresponding with this result, the AECM's president Figueiredo (2011) admitted at a World Bank conference on private sector development that it is very difficult for a "full private guarantee scheme to be self sustainable"(Figueiredo 2011, 11.58).

In France, there are three AECM members. One scheme (SIAGI) is of no notable outreach and is not considered in Table 10. The Mutual Guarantee Societies for the Handicraft Sector (Socamas) are a cooperatively organised schemes and support a notable 250,000 SMEs of the handicraft sector and hence provide half of all guarantees of French AECM members. Socamas receive financial support from public agencies such as the European Investment Fund (Rovera 2008a, 146,147). Consequently, Socamas seem to be of basic model 3.

The third French scheme is the publicly dominated agency OSÉO Garantie. Its predecessor "Caisse Nationale de Marchés de l'Etat" was already mentioned in the historical analysis in section 3.1.2.1. The scheme had outstanding guarantees of roughly € 6 bn. in the years 2007 and 2008, and € 10 bn. in the year 2009 (AECM 2009b, AECM 2010, AECM 2010). Consequently, OSÉO Garantie is by far the most important French scheme by volume. OSÉO itself is a mixed economy entity whereby the government holds 58.3% of the shares and the remaining is held by financial institutions (OSÉO garantie 2009, 2). However, the scheme is classified as a public credit guarantee scheme since OSÉO itself does not provide the guarantees but rather manages several regional public credit guarantee funds (OSÉO garantie 2009, 5, AECM 2007b). Consequently, the public guarantees are funded and within dimension A, the scheme can be categorised as of type A1.1. Whether the French government or the regions are explicitly liable for the scheme's liabilities could not be clarified. With respect to dimension two, i.e. the decision-making process, literature is even less precise. OSÉO (2009) reports that 95% of guarantee decisions are taken at branch level and usually only guarantees with a value above € 900,000 have to be referred to the headquarters (OSÉO garantie

²⁵ An extensive analysis was only conducted in Germany, which will be discussed in section 4.1. Since the analysis of other European countries was less extensive, there may exist smaller private schemes.

2009, 9). Rovera (2008a) reports that OSÉO uses a scoring system. Nevertheless, the final decision is normally taken in the branches (Rovera 2008a, 146). This indicates that the scoring system does not result in a fully automated decision-making process. Both publications indicate a case-by-case decision-making process of type B1, although there may be guarantees provided on a portfolio basis as well. Consequently, the scheme is of basic model one. This impression was confirmed through a discussion with representatives of OSÉO at a REGAR-conference in Mexico City (Conference 7). The scheme usually provides partial guarantees (AECM 2007b).

In Estonia there is only one AECM member. The Estonian Credit and Export Guarantee Fund (KREDEX) is a 100% state owned agency supported by the central government and the European Investment Fund. It provides credit guarantees for SMEs as well as export guarantees and support for housing finance. KREDEX usually provides partial guarantees, the guarantees are funded and the government is explicitly liable for all outstanding guarantees (AECM 2007a, KREDEX 2010, 5,14,40). Consequently, with respect to dimension A, the scheme can be identified as A1.2.1. The decision-making process varies. KREDEX states that they primarily uses the information received from the lender (Email 3). Hence, KREDEX is B1.2 type. However, sometimes own information is used too (B1.1). For very small investments (loan value below € 32,000) the granting decision is completely delegated to the lenders (B2). Consequently, the scheme is usually of basic model one but for small investments, of basic model two.

The Czech-Moravian Guarantee and Development Bank (*Českomoravská záruční a rozvojová banka*; CMZRB) is also the only AECM member in the country and it is the central development bank of the Czech Republic. The agency provides grants, loans and guarantees to support small-businesses and improve housing finance. In favour of small business finance, the CMZRB provides more guarantees than loans. It largely guarantees bank loans as well as bids for public tenders (CMZRB 2010, 17-20). In the survey, the CMZRB reports that the scheme is completely public (A1). With respect to small-business finance, the bank uses the case-by-case approach with own information (B1.1). In the annual report 2009, the CMZRB (2010) informs that the government subsidises the fees and deposits cash in order to cover future payments (CMZRB 2010, 53,54). In other words, the guarantees are funded. Since the government is not explicitly liable for all outstanding guarantees (Survey 4), the scheme is of type A1.2.2/B1.1, i.e. basic model one.

The Austrian Enterprise Service (*Austria Wirtschaftsservice*; AWS) is also a complete public agency of basic model one. The agency provides loans, grants, consulting services and in addition credit guarantees with a value varying between “a few thousand euro” and € 8 m.

(Interview 47). In the year 2010 (2009) guarantees represented 26% (30%) of the volume of provided grants, guarantees and loans together (AWS 2011, 20). The public guaranteeing institution receives support from the European Investment Fund and counter-guarantees from the government which is explicitly liable for all the institution's obligations. Since the institution charges fees and has reserves, the public guarantees are funded and the scheme is of type A.1.2.1. With respect to the decision-making process, the representative of the AWS stated that the institution does not delegate the decision-making to the lender and consequently uses the case-by-case approach (B1) (Interview 47). Usually, the AWS does not rely only on the lender's information and consequently the scheme is of type B1.1. However, the representative admits that the level of screening varies. For guarantees of smaller value, the AWS largely relies on the lender's information (B1.2). With respect to the risk sharing, the guarantees are usually partial (Interview 47).

Within the UK, the analysed schemes are completely public, i.e. of basic model one and two. Interesting for this research is the reorganisation of the UK schemes. After the "Graham Review" (2004) that was conducted on behalf of the government to assess the Small Firms Loan Guarantee (SFLG), the SFLG was modified in 2005 (SFLG1 to SFLG2 in Table 10). In 2009, the SFLG was replaced by the Enterprise Finance Guarantee (EFG) scheme.

Graham (2004) reports that the completely public SFLG had provided nearly 6,000 loans worth over £ 400 m. in the fiscal year 2003/04 (Graham 2004, 9). The UK Department of Business, Innovation and Skills (BIS) confirmed via Email that the SFLG used the case-by-case decision-making process which was based on the lender's information (B1.2)(Email 5). Moreover, BIS states in the Email that the government is explicitly liable for the provided guarantees and provisions were made in order to meet the obligations (A1.2.1). Usually, partial guarantees of 75% were provided (Graham 2004, 31).

Graham (2004) criticised high default rates that varied between 30% and 35% (resulting in 20% net default rates) which impeded financial self-sustainability of the old scheme. The author is not generally critical of public financial support but does not believe that the high default rates can be explained with the risk profile of the lenders (Graham 2004, 9,34). Although the author does not mention it, one explanation for this could be the problem of substitution, discussed in section 2.1.2. The author emphasises high transaction costs and concludes:

"The Review believes that the case-by-case authorisation of each SFLG loan is no longer necessary. It is, in effect, a comprehensive front-end audit of the programme, putting a significant burden on both lenders and the government. (...) It is not clear that such a comprehensive audit process is either proportionate or necessary" (Graham 2004, 43).

In other words, with respect to the hypothesis of section 2.4, the SFLG1 did not meet financial self-sustainability – and outreach was modest too. Moreover, low transaction costs were questioned in the review (Graham 2004, 23).

In order to improve the impact of the public financial support, the author does not recommend measures to reduce the default rates but recommends to focus on start-up and early stage finance in order to increase additionality. In addition, the SFLG should delegate the decision-making process to the lender using the portfolio approach. Indeed, both central recommendations were implemented in the rearrangement of the SFLG in 2005. The UK minister for state competitiveness emphasises:

“The most significant change to the delivery of SFLG under the Graham reforms has been the full delegation of the loan approval process to the lenders, provided the borrower satisfies the lender’s normal commercial eligibility criteria but for the absence of security” (SFLG 2007, 1).

Consequently, the SFLG (SLFG2 in Table 10) changed with respect to the second dimension to a scheme of type B2 and converted to basic model two. With respect to the other dimension, no reforms were conducted that would change these categories. In addition, a five year rule was introduced. Borrowers with more than five years of trading business history were no longer the target group of the scheme (SFLG 2007, 5). However, within the annual report of the fiscal year 2008-09, the SFLG (2009) reports that the five year rule was lifted in 2008. Despite this relaxation, the share of enterprises fitting the rule remained at 75% of approvals by number. With respect to outreach, approvals (by number and volume) dropped to roughly half the level before the “Graham reforms”.

With respect to the default rates, the SFLG (2009) reports that they were a “continuous source of concern” because 21% of all guarantees provided since 2005 had already been called by 2009 (SFLG 2009, 2). The annual report shows that defaults are even more dramatic for the provided guarantees in the period 2006-09: roughly²⁶ 26% out of the provided 8,750 in that period were already called by 2009 and only about 1% had ended. Consequently, 73% were still outstanding in 2009 and so may still be called (SFLG 2009, 18). Whether the increase of the default rate can be traced to the change in the decision-making process or to the financial crisis lies beyond the scope of this brief analysis. Nevertheless, in 2009 the SFLG programme was stopped and replaced by the Enterprise Finance Guarantee (EFG) (SFLG 2009, 2).

With respect to the ODM approach, the EFG is also of basic model two. The main difference is that a cap (or stop loss mechanism) was introduced at portfolio level. With this cap, the

²⁶ Numbers are taken from the graph and hence are not very exact.

EFG covers only up to 13% of the lender's portfolio (Email 5). On the other hand, borrower eligibility was eased with respect to turnover and the ceiling of the guarantee volume was increased from £ 250,000 to £ 1 m. In addition, existing borrowing on overdraft was allowed to be replaced with a new guaranteed loan under the condition that additional lending was granted (SFLG 2009, 4). The BIS (2011) reports on its webpage that between January 2009 and June 2011, hence 2 and a half years, 13,270 guaranteed loans had been provided with a value of £ 1,323 m. (with an average volume of roughly £ 100,000). Although this is an increase, the outreach remains modest within the UK economy.

Some guarantee schemes mentioned above are supported by the European Investment Fund (EIF) which is part of the European Investment Bank (EIB) Group²⁷. The EIF is predominantly owned by the EIB (61%) and the European Commission (30%). The remaining 9% of the shares are owned by European financial institutions. Among these financial institutions are public banks of the member states and some private banks like Barclays. However, the private banks' total contribution to the EIF's equity is below 5% and hence the EIF is considered to be a public institution in this classification (European Investment Bank 2011, European Investment Fund 2010b).

In the year 2009, the EIF had outstanding guarantees totalling € 13.6 bn. to institutions predominantly in EU member states and Turkey. Most of the outstanding guarantees, € 10.7 bn., were provided on behalf of the European Commission via the current Competitive and Innovation Programme (CIP) and the similar preceding programmes MAP and SMEG. In these cases, the EIF manages the programmes and the European Commission is the guarantor. Within this CIP programme, lenders such as the Spanish Microbank La Caixa or French Crédit Coopératif are directly supported, i.e. the Commission directly provides portfolio guarantees to the lenders. Alternatively, several guaranteeing institutions such as the AECM members AWS (Austria) and Socama (France) receive counter guarantees at portfolio level. The remaining € 2.9 bn. were provided by the EIF as the guarantor (European Investment Fund 2010a, 36-42). In the latter case, the EIF is engaged in securitization of SME loans as guarantor or protection seller (credit enhancement operations). Consequently, the EIF guarantee scheme for small business finance is of basic model two.

²⁷ The EIB is owned by the European Union's member states. It provides loans, venture capital, guarantees and technical assistance, usually for large capital investment projects. For example, the EIB provides guarantees through the scheme "Loan Guarantee Instrument for Trans-European Transport". The institution also provides loans that are guaranteed by member states. For example, the new airport in the region of Berlin-Brandenburg is co-financed with € 1bn (of € 2.4bn) from the EIB. This EIB finance is guaranteed by the German Federal government and the federal states Berlin and Brandenburg (European Investment Bank 2009, Senatsverwaltung für Finanzen Berlin 2008, Tagesspiegel 2008).

The G-20 Financial Inclusion Experts Group (2010) describes the kind of guarantee used within the CIP:

“EIF provides capped guarantees partially covering portfolios of financing to SMEs. These are known as EU Guarantees. The EC Guarantee typically covers 50 percent of the total loan portfolio to align interests with the intermediary, and is capped ex ante at the expected losses of the loan portfolio (e.g., 5 percent), which creates a leverage effect (typically 8–10 times the budget)” (G-20 Financial Inclusion Experts Group 2010, 118-119).

The risk of the outstanding guarantees is limited on the portfolio level similar to the UK EFG scheme. The cap reduces the risk exposure of the European Commission, but at the same time a large outreach by volume can be achieved. Through a phone interview with a representative of the EIF, more details were clarified in order to classify the EIF’s guaranteeing activity within the ODM approach (Interview 53): in all cases (whether credit derivatives or credit guarantees are used, and whether the EIF is the guarantor or manager), the guarantees are funded. In the case where the EIF itself is the guarantor, the institution makes provisions and in the case of guarantees of the European Commission, no “abstract budget” is allowed and finance has to be pledged. Fitch Ratings (2010b) reports that the EIFs’ shareholders are “legally bound to respond to a capital call”. Consequently, the scheme is of type A1.2.1. Moreover, the EIF’s representative confirmed that with respect to SME finance, the EIF always provides portfolio guarantees (B2) and only provides partial guarantees.

Now that public schemes of basic model one and two have been described, in the following examples will be presented which are of basic model three, i.e. where there is a public-private cooperation.

The shareholders of the Swiss guarantee cooperatives are the borrowers. The institutions receive counter-guarantees that directly affect the public budget (Emails 2 and 4). Since the schemes use the case-by-case approach with own information, the scheme is of basic model three. According to the Swiss parliament (Bundesversammlung 2009), the Swiss guarantee cooperatives are a “niche product” (*Nischenprodukt*) because in 2008, only 2,000 (of 300,000) Swiss enterprises had received guarantees. Moreover, the total outstanding guarantee volume was only 163 m. Swiss Franc (€ 108 m.).

The Portuguese scheme is of special interest since it had increased its outstanding guarantees from roughly € 0.5 bn. in 2007 to almost € 3 bn. in 2009 (see Table 6). The Portuguese scheme was built on the initiative of the Portuguese government in 1994 (Figueiredo, Branca and Gonçalves 2008, 471). A two-tier system was established with a first-tier institution for the agricultural sector and three regional first-tier Mutual Guaranteeing Institutions (*Sociedades de Garantia Mútua*, SGMs) with borrowers as shareholders. A predominantly public

second-tier institution, which is backed by the Portuguese government and the European Union, supports the first-tier institutions with “back-office” services and counter-guarantees. Consequently, the scheme is one of public and private cooperation (Figueiredo, Branca and Gonçalves 2008, 473-474). The SGMs generally screen the borrowers case-by-case with their own information (category B1.1)²⁸ and usually provide partial guarantees. The Portuguese government and the European Union take risk by providing funded counter guarantees. Government is explicitly liable for all counter-guarantees but not for all guarantees provided by the SGMs (A2.1.2.2), (interview 2). Consequently, the scheme is of basic model three.

Since July 2008, the scheme increased its activity significantly when the Portuguese government started to use it as a central tool to prevent a credit crunch because of the financial crisis. Now, the system receives more public support through a higher degree of public counter guarantees and lower fees (AECM 2009a, 16). In addition to an increase of public support for the existing scheme (SGM1), several public programmes for special target groups, called “PME Investe”²⁹, were introduced (SGM_Investe). Within this new scheme, the idea is to provide “one stop” assistance. In other words, the borrower should only be screened by one institution. Consequently, the SGM_Investe scheme uses another decision-making process and SGMs rely on the banks’ information only (B1.2). For example, for one of these special programmes, “PME Líder”, the decision-making is based on a rating calculated by the banks and only the leading borrowers are eligible. This list of more than 6,000 businesses is provided online (IAPMEI 2011). Since the SGMs have the right to veto every guarantee the decision-making processes is of type B1.2. This makes them of basic model three. However, the guarantees are very similar to portfolio guarantees (type B2) of basic model four. This result of categorisation was discussed and confirmed in the field research (Interviews 48 and 49).

All in all, the differentiation of European schemes whether they are public or a cooperation of public and private actors does not clearly explain the outreach of the schemes. For example, there are schemes of public and private cooperation with a relatively high outreach such as in Italy and others, such as in Germany, with a low outreach (Table 9). Nevertheless, this brief assessment of several schemes shows that significant reorganisations of credit guarantee schemes – that result in a change into another basic model – can have an impact on outcomes.

The Portuguese scheme is such an example. The scheme’s outreach increased significantly with an increase of public financial support and lower transaction costs within the decision-

²⁸ In addition, the SGMs also provide guarantees for student loans using the portfolio approach (B2).

²⁹ PME stands for SME in Portuguese.

making process (B1.1 to B1.2). Instead of focussing on the most constrained borrowers, the government was willing to protect also the “leading” enterprises against a possible credit crunch. Since the “old system” (SGM1) with a double-screening process remained, borrowers can still be intensively screened by the SGMs.

The UK’s SFLGs are an example where the guarantor abandoned the case-by-case approach in 2005. As a result of this and the focus on younger businesses, default rates increased. A simple measure to reduce payments is to limit the total payments to the lender at portfolio level, i.e. include a cap (or stop loss mechanism) within the guarantee agreement between the guarantor and the lender. In 2009, the year after the collapse of the AIG’s UK unit, such a cap was introduced to the UK SFLG that replaced its cap less predecessor SFLG³⁰.

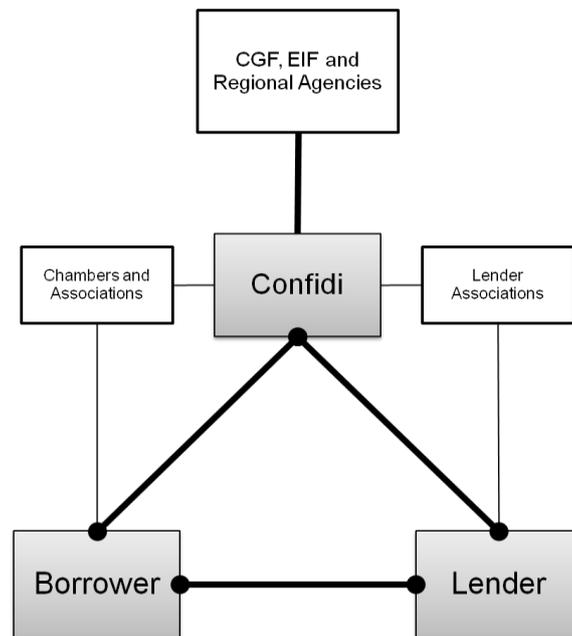
3.2.1.4 The Italian schemes under scrutiny

The Italian schemes were the model for the first Brazilian credit guarantee association and are a reference in the institution building process of further GIs. In this section, the Italian schemes will therefore in a somewhat more elaborated manner be outlined. It will be discussed why the Italian schemes have a relatively high outreach and whether the guaranteeing institutions, often called Confidi, are financially self-sustainable³¹.

³⁰ However, contrary to the experiences with AIG, Fannie Mae and Freddie Mac, the total outstanding risk exposure of the UK scheme is lower and hence less dangerous for the financial system.

³¹ The following analysis is based on: an interview conducted at Eurofidi in Turin (Interview 56); a report of the Eurofidi’s parent company Eurogroup (Eurogroup 2010); and a study conducted by researchers at the University of Turin, Isaia (2008), in cooperation with practitioners, namely Pezetto (2008), who is the president of the guaranteeing institution Eurofidi.

Figure 19 ATR of Italian Confidi



Own elaboration

The Italian guaranteeing institutions are often cooperatives. Hence, borrowers have a direct relationship to the Confidis since usually they are members. In addition, there is an indirect connection since borrower associations play an important role within the schemes. Indeed, new members of the Confidi are usually informed about the existence of the Confidi via their associations (Isaia 2008, 54). In line with the findings of Isaia (2008), Herrero Calvo and Pombo González (2001) highlight the private initiative. However, according to the Spanish authors, Italian chambers are considered to be completely public agencies. Hence, their participation points to a cooperation of public and private actors (Herrero Calvo and Pombo González 2001, 713-732,714,717).

Isaia (2008) states that private initiative enabled a dynamic development, and the strength of the schemes is the strong spirit of solidarity (Isaia 2008, 39,40). The author further notes that public support varies and that there are no national criteria for the allocation of funds. On the national level, there are five associations that represent the local and regional Confidi: Federat Fidi for the artisan sector, FederConfidi for the industrial sector, FederAsconFidi and FederFidi for the commercial sector and Fincredit-Confapi for small industrial firms (Isaia 2008, 48). Not all Confidi are limited to a sector or region. For example, Eurofidi has its origin and operational focus in the region of Piedmont but operates in almost half of Italy (Isaia 2008, Eurogroup 2010). In addition, there are public initiatives of the national government

and the European Union, also for the agricultural sector, that will be explained subsequently in the introductory outline.

In the 1990s, there were 1,000 schemes officially registered and it was estimated, in a study conducted in the year 2002, that around 600 were operational (Ventura and Zecchini 2007, 13). A more recent study confirms that the exact number is unknown but it is estimated that there are about 500 guarantee schemes in Italy (Isaia 2008, 39,46). This vagueness points to a low degree of institutional formalisation and regulation. Indeed, as an alternative to credit guarantees of the GI as a financial institution, Confidi can organise personal guarantees provided by small businesses or external promoters. However, the use of these joint guarantees is decreasing which can be explained that banks might have to recoup their losses from the more solid firms who are the banks' better clients (Isaia 2008, 50).

Weaknesses of the national scheme seen by Isaia (2008) are the existence of many schemes with little capitalisation, fragile organisational structures and sometimes unqualified staff. Only since 2006 have legislators started to legally organise the guarantee system. The consolidated law of banking (*Testo Unico Bancario*, TUB) requires registration of the schemes. However, this does not imply supervision. Schemes can voluntarily submit to regulation (article 107 of TUB). In this case, schemes are supervised by the Bank of Italy and the guarantees are accepted as a risk-mitigation tool within the Basel frameworks. Hence, they lower the minimum supervisory capital of the financing bank (Isaia 2008, 40-49). In 2011, there are roughly 50 supervised Italian guaranteeing institutions (Interview 56).

Isaia (2008) reports an ongoing process of consolidation within the system. Pezzetto (2008), president of Eurofidi, provides outreach by volume for the largest Confidi in the year 2006:

Table 11 Outstanding Guarantees of the Five Largest Italian Confidi

Name of the GI	Outstanding Guarantees in 2006³²
Eurofidi Scpa	€ 3.6 bn.
Toscana Com-Fidi	€ 1.5 bn.
Fiditoscana Spa	€ 1.3 bn.
Unionfidi	€ 1.0 bn.
Neafidi	€ 0.5 bn.
Sum of top 5	€ 7.9 bn.

Source: Pezzetto (2008, 85)

³² Numbers were taken from a graph and are not very precise.

The sum of outstanding guarantees of the five largest Confidi equalled almost € 8 bn. in 2006. Unfortunately, no data of outstanding guarantees of all Confidi is available for 2006. However, in 2005, the sum of outstanding guarantees equalled € 18.3 bn. (Isaia 2008, 47). Hence, the outstanding guarantees of the five largest Confidi equalled roughly almost half of the volume of guarantees of all Confidi.

The following will highlight the relationships within the Augmented Triangular Relationship of Italian Confidi. In 1936, a specialized banking system was introduced to Italy which resulted in a separation of banks for short-term and long-term finance. Only some specialised banks, such as the famous Mediocredito Centrale, were allowed to provide finance with maturities above 18 months. Consequently, relationship-banking based on the full range of financial services was not possible for decades (Klein 1998, 265-283). In addition, the Italian regulators were allowed to set interest rate caps (Forsyth 1997, 105). Klein (1998) concludes that the banking system impeded a trustworthy relationship between the borrower and the “Hausbank”.

Only in the 1990s was the Italian banking system fundamentally reformed: universal banks were introduced and most public banks that had dominated the banking system were privatised. Initially, local public banks were transformed to stock companies that were owned by public foundations. Over time, the foundations had to reduce their shareholding. As a consequence, large banking groups emerged, such as Unicredit and Intensa San Paolo where public foundations still have a minority of shares (Carletti, Hakenes and Schnabel 2005, 36-39). As well as these banks, there are 483 local cooperative banks. However, their market share in the banking system is small and their share of provided loans equals only 5% (Polster 2004). Moreover, small regional cooperative banks do not have strong second-tier institutions (Carletti, Hakenes and Schnabel 2005). Although universal banks were introduced, the relationship between borrowers and lenders is usually not characterised by an exclusive long-term relationship. Indeed, the OECD study “The SME Financing gap” reports that it is common that Italian SMEs chose different financing products from multiple lenders (OECD 2006, 45). This is also confirmed by Ongena and Smith (2000) and in the field research (Interview 56). All in all, the Italian banking system is seen as historically one of the least accessible systems in Europe (Ayadi, Schmidt and Valverde 2009, 168). In addition to difficult access, Italian banks set the highest pricing in western Europe and there are indications that SMEs have not benefited from the structural changes in the Italian banking system. Within the European flash barometer of 2005, Italian SME managers voiced most their discontent. Only 66% of Italian correspondents stated that their current finance was sufficient whereas the EU15 average was at 77% (Ayadi, Schmidt and Valverde 2009, 171,172).

With respect to the relationship between Confidis and banks, banks are not shareholders of the Confidi. The only exception to this is Eurofidi (Interview 56). On average the risk-sharing involves a guarantee of 50%. Confidi usually have to deposit their funds into blocked accounts in the lending bank. Hence, third party grants are important for Confidi. It has to be highlighted that for the unsupervised Confidi in the case of default, only the Confidis' blocked accounts are explicitly liable for the approved guarantees (Isaia 2008, 49-53). Thus, these Confidi are just "managers" of the credit guarantee funds and do not take the risk like a financial intermediary. This explains why Confidi were unregulated for a long time. This contract design underlines that it is not only the distribution of shares that matters within the governance, but also who provides the funding to the credit guarantee fund and hence has the right to impose conditions and participate in the decision-making process.

The Confidis establish bilateral agreements with the lenders. Whereas the smaller Confidi only establish these contracts with few banks, the larger Confidi try to cooperate with as many partner banks as possible. Within the decision-making process, the Confidi decide on their own information and hence were classified as B1.1 schemes within the detailed ODM approach. The committee always includes representatives of the borrower associations and sometimes representatives of local public agencies or representatives of banks. Isaia (2008) highlights that the Confidi assessments are independent from the banks. This is explained by the entrepreneurial nature of the committee which usually bases decisions on qualitative aspects. Larger Confidi have their own administrative body whereas smaller Confidi do not. In the latter cases, the Confidi rely on the financial assessment of the bank in combination with their own qualitative information from the committee members (Isaia 2008, 53-58). Moreover, the supervised Confidi with status as financial intermediaries are encouraged to create innovative financial products within the financial system. Indeed, some Confidi such as Eurofidi participated in securitizations (Pezetto 2008, 86-90).

Borrowers have a direct relationship to the Confidi as members and an indirect one via their associations and chambers. Confidi or the borrowers associations often also provide consultancy services. For example, Eurogroup has a subsidiary, Eurocons, which provides consultancy next to its guaranteeing institution Eurofidi (Eurogroup 2010). During the interview at Eurofidi, the relationship between borrowers and the Confidi was described as a long-term relationship with few meetings (Interview 56). The OECD (2006) reports that the Italian schemes appear to be very successful with respect to costs since defaults are low within the Italian banking system and lower than default rates of many European schemes. On the other hand, the OECD (2006) is critical that the funds are not targeted to the most financially constrained and recommends redirecting the funds (OECD 2006, 61-62). Hence, this is an indicator that the Confidi are usually organised by and for "wirte" that are known to the bor-

rower associations. This impression was confirmed in the interview. However, some Confidi also provide guarantees to support start-up finance (Interview 56).

Like Brinkmann (1969), Herrero Calvo and Pombo González (2001) report that public support was used from the beginning. The first schemes for handicrafts were created on public initiative in 1956. Confidi are classified as basic model three within the ODM approach since they use the case-by-case approach, have private and public shareholders, and receive public support.

Isaia (2008) states that the Italian guarantee schemes receive generous public support and that the mutual initiative would not have lasted long without this support. She differentiates the public intervention into direct support to the GIs and second-tier support. Direct support to GI is usually in the form of grants and loans, and is estimated to equal 50-60% of the schemes' guarantee funds. This support enables representatives of public agencies (including chambers) to participate in committees although public agencies are not necessarily shareholders. With respect to the second-tier support, there are (i) guaranteeing institutions formed by the first-tier schemes within a region, (ii) the national Central Guarantee Fund (*Fondo Centrale di Garanzia*, CGF) and (iii) the European Investment Fund (Isaia 2008, 63-67):

- 1) Second-tier GIs formed by the first-tier schemes receive public financial support. These institutions emerged in the artisan and agricultural sectors. For example, the public Society for the Management of Funds for the Agricultural and Food Sector (*Società gestione fondi per l'agroalimentare*, SGFA) provides counter-guarantees via Confidi and direct guarantees as a first-tier institution. The SGFA's outstanding guarantees varied between € 9 bn. and €10 bn. in the period 2007-09. Hence, it represents roughly a third of all outstanding guarantees (AECM 2009b, AECM 2010).
- 2) In 1996, the public CGF was set up at the national level. It is managed by Mediocredito Centrale. Although the scheme can guarantee directly loans to SMEs, it mainly provides counter-guarantees to local Confidi. It shares up to 90% of the local schemes' risk and charges fees between 0.25 and 1%. Public agencies provide financial means to the fund, however, they do not provide an explicit guarantee. The Central Guarantee Fund (2010) reports that it had provided 25,000 guarantees valuing € 2.7 bn. in the year 2009. This is about 7% of the number and a 25% of the volume of the provided guarantees of all Italian AECM members in 2009 (see Table 6 and Table 8). Ventura and Zecchini (2007) report that the fund is directed towards constrained borrowers such as start-ups, innovative firms or firms in disadvantaged regions (Ventura and Zecchini 2007, 109).

- 3) In 1998, the counter-guarantee scheme of the European Investment Fund was established. In contrast to the national scheme, it does not provide guarantees as a first-tier institution. It shares the risk with first-tier institutions and some regional second-tier institutions (Herrero Calvo and Pombo González 2001, 730-731). The EIF had outstanding guarantees for Italian SME finance of € 4.7 bn. by the end of 2009 (2010a36).

Overall, local credit guarantee schemes receive significant public aid via grants to local credit guarantee funds and have access to several counter-guarantee schemes. Public agencies support the Confidi with grants and take risk in form of loans and counter-guarantees. The guarantees provided by the Confidi are not explicitly guaranteed by the government. In particular, not even the national public counter-guarantees are explicitly guaranteed by the government. However, there might be an implicit public guarantee for the Confidi. For example, in the case of Eurofidi, Fitch Ratings (2010a) and Standard&Poor's (2010) report that the region of Piemonte³³ would provide support if needed which enables ratings of "BBB+/F2" and "BBB/Negative/A-2" respectively. As a measure against a possible credit crunch during the financial crisis, the Central Guarantee Fund was used to support SME-finance via Confidi. Moreover, local public agencies augmented their funding of local credit guarantee funds (AECM 2009a). It should be highlighted that no financial self-sustainability is recorded within the Italian experience. This was confirmed during the field research (Interview 56).

With respect to the relationship-based approach, the Italian universal banks can practice relationship-banking. However, this relationship is not exclusive since borrowers have business contacts with several banks. The Confidi can establish a kind of "relationship-guaranteeing" in cooperation with their consultancy activity and borrowers associations. Hence, this points to a borrower-guarantor scheme. However, the guarantee relationship is not as continuous as relationship-banking. Confidi themselves are likely to assist the finance of "wirate". On the other hand, public agencies such as the Central Guarantee Fund try to encourage the Confidi, with modest quantitative success, to support the most constrained enterprises such as start-ups or innovative enterprises. These enterprises can often be considered as "unternehmer" in the sense of Schumpeter. Indeed, significant and ongoing public support points to a government-guarantor scheme.

With respect to the hypothesis of section 2.4, a high outreach (for a European institution) can be recorded, however there is no financial self-sustainability. The following discusses why the outreach of Italian AECM members is larger than in other European countries. Five indications were found that help to explain the quantitative success.

³³ Fitch Ratings rate this region with the note AA-/stable Outlook.

The first explanation is that Italian Confidi provide guarantees within the agricultural sector which is not common for all AECM members. Hence their niche increases significantly compared to the ones of other members of AECM that are not allowed to support borrowers in this sector such as the German GBs.

The second possible explanation lies in the Italian specialized banking system that prevailed until the 1980s and hindered relationship banking. The guaranteeing cooperatives were able to establish long-term relationships with the support of public and private borrowers associations. This was adequate for the finance of “wirte” which has enabled the guarantee scheme to achieve modest default rates. Moreover, the Italian regulators were allowed to fix interest rates. Since Confidi do not charge interest but fees, they could have been used as a tool to circumvent these ceilings. However, more historical research is required to validate this hypothesis.

The third explanation is that public financial support was provided from the beginning. First-tier institutions received grants from local public agencies and since the 1990s, counter-guarantees were provided by second-tier institutions. Isaia (2008) criticises the absence of a national legal framework for the Italian credit guarantee schemes before 2006, although she admits that private agreements favoured the growth of the Confidi. This absence of regulation on a national level might have enabled local public and private institutions to create credit guarantee schemes that exactly serve their particular interests. Consequently, the owners were more willing to support their guaranteeing institutions enabling them to grow.

The fourth possible explanation is an extension of the third explanation and clarify why Confidi are attractive for public support. In the 1990s the Italian banking system changed not only to a universal banking system but also local savings banks were privatised and via mergers, large nationwide operating banking groups emerged (Ayadi, Schmidt and Valverde 2009, 157-162, Carletti, Hakenes and Schnabel 2005). Consequently, the municipalities lost “their public bank”. Confidi enable local stakeholders to provide funding without taking risk and without formal ownership. On the other hand, they allow these stakeholders to participate in operational committees. Consequently, Confidi are attractive for local policy makers to conduct public policy. Although the historical data is scarce, there are indications that quantitative outreach of the Italian Confidi increased significantly from the 1990s on. In 1998, the outstanding guarantee volume equalled € 6 bn. (Herrero Calvo and Pombo González 2001, 732). The comparison with the current outstanding volume of roughly € 30 bn. indicates that there has been a notable increase in the last decade.

The fifth explanation is that in Italy there are no other institutionalised public credit guarantee schemes for small business finance, not even trustee credits provided by public devel-

opment banks or guarantee schemes of the regions or national government. There are only two exceptions. The Central Guarantee Fund and SGFA can directly provide guarantees as first-tier institutions. In addition, SACE is a governmental guarantee scheme to promote foreign trade (Interview 56). Consequently, the Italian Confidi seem to have little competition in the national “guarantee market”.

3.1.2.5 The Spanish schemes under scrutiny

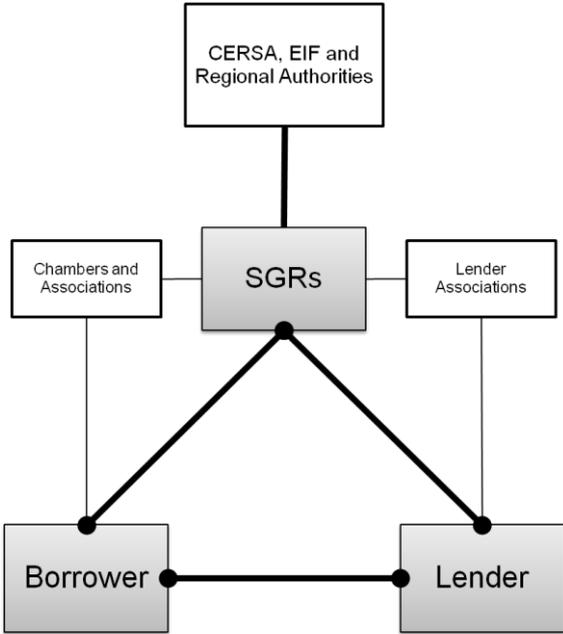
Within the IADB-study, Llisterri, Manueco, López and Tabuenca (2006) report that the Spanish schemes served as the reference model for the schemes in Argentina (Llisterri, et al. 2006, 51). Moreover, Spanish SGRs “notoriously influenced” schemes in Portugal (1995), Venezuela (1999), Brazil (1999), Uruguay (2000), El Salvador (2001) and other Latin American countries (Pombo González, Sánchez and Sobrino 2006, 8). Therefore, the Spanish schemes, like the Italian Confidi will be analysed in more detail.

Gómez Jiménez (1994) reports that the Spanish Societies of Reciprocal Guarantees (*Sociedades de Garantía Recíproca SGR*) emerged during the transformation process after the Franco regime ended. In 1977, as a response to recession and high unemployment, the Economic and Social Pact (*Pacto Económico y Social*), also known as the “Pactos de la Moncloa”, was signed. One provision of this pact impelled the government to establish regulation to create mutual credit guarantee schemes. In addition to regulation, initial public support was intended. The objective of the measure was that all entrepreneurs with lucrative projects should not depend on their own personal wealth or the possibility to provide collateral for financing (Gómez Jiménez 1994, 95-99).

Figure 20 describes the ATR of Spanish SGRs. The following actors are usually involved in the current system of Spanish SGRs. Regional Authorities, the Spanish Reguaranteeing Agency (*Compañía Española de Reafianzamiento - CERSA*) and the European Investment Fund (EIF) are second-tier institutions. SMEs that want to “participate” in the scheme have to be members of the SGRs. These members are called “Participating Members” (*Socios Partícipes*). In addition, “Protecting Members” (*Socios Protectores*) are agencies that support the SGRs but guarantees cannot be provided to them. These shareholders are usually public agencies, borrower associations and banks. Consequently, Spanish SGRs are a public-private cooperation. Since the SGRs analyse their members with their own information, the Spanish SGRs are of basic model three within the ODM approach (Herrero Calvo 2008, Herrero Calvo and Pombo González 2001, 641,635-661).

In a study of European schemes by Italian researchers, Pia (2008) states that the framework of the SGRs adopted many characteristics of other European schemes such as the significant support by public agencies, like in Germany, and the concept of mutuality like in Italy. After the system of Spanish SGRs faced a crisis between 1983 and 1986, the system was re-structured: the number of SGRs was reduced, SGRs were allowed to increase their activities in the field of consulting, there was transfer of shares from a central public agency to the Regional Authorities (*Comunidades Autónomas*) and SGRs were now supervised by the central bank. In 1994, a special regulation for the credit guarantee societies was enacted (Pia 2008, 153-156).

Figure 20 ATR of Spanish SGRs



Own elaboration

The Spanish association of Spanish SGRs (*Confederación Española de Sociedades de Garantía Recíproca*, CESGAR) reports that it has 22 members. Three of them operate nationwide within their sector (transportation, gambling and one SGR for enterprises engaged in audiovisual operations) (CESGAR 2010, 13). The remaining ones are multisectoral but usually limited to their region. SGRs are usually tied to the public policy of their region. However, some SGRs, such as the Basque Elkargi, operate in other regions and hence increase competition among SGRs (Pia 2008, 182).

Spanish SGRs guarantee loans (*avales financieros*) but also provide bank guarantees (*avales técnicos*). Indeed bank guarantees equalled 20% of outstanding guarantees by volume and

almost 60% by number in 2009 (CESGAR 2010, 28). SGRs do not provide partial guarantees since their credit guarantees cover 100% of the finance. In addition, SGRs provide other services such as consulting (Pia 2008, 161-163,169,179,180).

With respect to outreach, the CESGAR reports that outstanding guarantees have almost doubled in the period 2004-09 and the number of members increased as well. Table 12 shows the outstanding guarantees by volume and the number of members (it has to be noted that the number of Participating Members does not equal the number of SMEs that actively participated in the credit guarantee scheme in the respective year).

Table 12 Number of Members and Outstanding Guarantees by Volume of Spanish SGRs in the period 2004-10

Year	Outstanding guarantees of Spanish SGRs in € bn.	Members of SGRs in numbers	
		“Protecting Members”	“Participating Members”
2004	3.307	731	74,783
2005	3.945	739	79,931
2006	4.826	746	85,746
2007	5.638	758	90,633
2008	5.934	762	94,522
2009	6.524	768	100,987
2010	6.534	783	106,266

Own elaboration; source: CESGAR (2010, 25) and CESGAR (2011, 25)

The outstanding value of guarantees increased significantly in the period 2004-10, as can be observed in the table. In the period before, there was also an increase since outstanding guarantees valued roughly³⁴ € 600 m. in 1994 (Pia 2008, 156). Indeed, the growth rate is significant and outreach by volume is higher than in Germany, Europe’s largest economy. Nevertheless, only 2.16% of Spanish registered firms have used the SGRs (Pia 2008, 183). In other words, the numbers indicate that the Spanish SGRs play a limited quantitative role in the Spanish financial system.

With respect to the relation between borrowers and the lenders, Klein (1998) analyses the Spanish banking system and states that universal banks emerged in parallel with specialised banks in the 1970s and 80s. Traditionally, cooperatives do not play an important role in the Spanish banking system. The market is divided between: private banking groups that oper-

³⁴ The numbers are taken from a graph.

ate nationwide and abroad, and savings banks that are not tied to their region and compete among themselves (Klein 1998, 290-298). In the period 1991-2007, the cooperative banks' market share of loans remained below 5%. The private banking groups' share had reduced continuously from more than 60% to below 50%. On the other hand, the market share of savings bank increased from 30% to almost 50% (Ayadi, Schmidt and Valverde 2009, 94-95). In 1977, when the government created credit guarantee schemes, savings banks were deregulated which enabled them to operate as commercial universal banks in competition with each other and private banks. The savings banks have chosen the relationship-based banking approach and provide a wide range of products. Spanish saving banks are specialised in providing financial services to households, family-based firms and small and medium-sized businesses (Ayadi, Schmidt and Valverde 2009, 88-91). Consequently, although not all banks practice relationship-banking, this approach is common in Spain.

With respect to the relation between borrowers and the guaranteeing SGRs, it was already said that borrowers have to be members. These shares enable borrowers to participate and vote in the assembly. Indeed, regulation requires that these participating members have at least 50% of votes. However, this empowerment is scattered since no member can hold a number of votes above 5% of total votes. Moreover, it is not the equity of the shareholders that matters within the financial design of the credit guarantee schemes. Only staff and representatives of the "protecting members" participate in the decision-making process (Pia 2008, 157-174). Consequently the mutualism within the scheme is indirect via associations and limited voting power in the assembly. Herrero (2008), CEO of the SGR Iberaval, emphasises that borrowers are clients (*clientes*) and the central values of Iberaval are a focus on clients and to establish a long-term relationship with them (Herrero Calvo 2008, 461).

Indeed, this goal goes in line with the mutual elements such as the direct membership of the borrowers in the SGR. However, borrowers are not described as members but rather as clients. Although the SGRs might try to establish long-term relationships, there is no empirical evidence that Spanish SGRs can be interpreted as borrower-guarantor schemes within the relationship-based approach to differentiation (see Figure 8). On the contrary, Fuente Cabrero (2007), a former director of the SGR in Madrid, ranks the importance of the SGRs' relationships to the banks above the relationship to borrowers. Based on a survey of the three largest SGRs that represent almost 60% of the SGRs' outreach and two more mid-sized SGRs, Fuente Cabrero (2007) states that 43.4 % of the SGRs' clients were forwarded by the banks and only 20% were already members (Fuente Cabrero 2007, 112). Hence, although the SGRs have existed for almost three decades, only one fifth of guarantees are provided to already participating members, where there can be repeated interaction.

Another indication that SGRs are lender-guarantor schemes rather than borrower-guarantor schemes is that surveyed executives of the SGRs responded that the most important factor for success are cooperation with financial institutions in order to capture operations and cooperation with the regional authorities in order to receive public support (Fuente Cabrero 2007, 102). Hence, this points to a government-guarantor scheme.

Indeed, banks are also shareholders (*Socios Protectores*) of SGRs. However, the share of banks in the SGRs' equity is below 18% (Herrero Calvo 2008, 453). Spanish SGRs provide guarantees for loans of cooperative banks, savings banks and private banking groups. In addition, they provide bank guarantees, usually for borrowers providing services to the public administration. In the year 2009, the largest share of guarantees was provided to savings banks followed by private banks and the public administration (€ 2.72 bn., € 1.26 bn. and € 1.25 bn. respectively in the year 2009). Pia (2008) furthermore states that the SGRs usually build relationships with only a certain number of "partner" banks (Pia 2008, 169-170, 182). This was confirmed by representatives of Spanish SGRs at a conference (conference 4).

In the following, the public support and relationship between SGRs and public agencies will be analysed. First, public agencies are shareholders of SGRs and consequently participate in the assembly and as "protecting members". They have the right to nominate board members. However, Herrero (2008) emphasises that most shares of SGRs are owned by private actors: In 2007, the borrowers held 60% of the shares as "participating members". The remaining 40% were shares of "protecting members" and were split up as follows: the public sector (22%), savings banks (10%), private financial institutions (3%) and others (4%). Consequently, the participation of public agencies (including savings banks) equalled roughly 32% of the SGRs' equity. However, is equity the indicator that represents the relations within the public and private cooperation? SGRs receive ongoing financial support from public agencies (Pia 2008, 175-179, European Commission 2006a, 58):

- a system of counter-guarantees on a national level (which is also supported by the European Investment Fund) and on regional level;
- financial resources which are not to be reimbursed;
- the cover of fees for certain guarantees;
- several tax benefits;
- cooperation of public agencies with SGRs with respect to subsidised loans (which is an opportunity for the SGRs to get new clients).

Since 1994, Spanish SGRs have access to counter-guarantees of the Spanish Reguaranteeing Agency CERSA that has predominantly public equity. CERSA itself receives counter-guarantees from the European Investment Fund. In 2009, the outstanding counter-guarantees of CERSA equalled € 2 bn. which represented roughly 31% of the outstanding guarantees of Spanish SGRs (CERSA 2010, 14). Contracts and conditions are negotiated frequently, and the SGRs receive automatic counter-guarantees. These counter-guarantees usually vary between 30%-70% and can be extended to 75% if micro-loans are guaranteed or the investment is considered innovative. Usually, counter-guarantees are free of charge but SGRs can be penalised with fees if a risk-measuring factor is not maintained (Pia 2008, 176-179).

The largest SGRs receive an additional counter-guarantee from the Autonomous Communities (Comunidades autónomas), i.e. regions. For example, the region of Valencia provides complementary risk-sharing to the SGR “Sociedad de Garantía Recíproca de la Comunidad Valenciana” (SGRCV) which has the largest outreach of Spanish SGRs. It provides automatic and uncharged/free counter-guarantees of 40%. These and the CERSA guarantees can cover over 75% of the SGRCV’s outstanding guarantee risk. Similar measures are taken by the Basque region to support the SGR Elkargi, which is the second-largest SGRs by outreach (Fuente Cabrero 2007, 61-67). As a result, the three largest SGRs (Iberaval, Elkargi and SGR-Valencia) equalled 58% by value of all outstanding guarantees (Pia 2008, 160-161). The author explains this heterogeneity by the variation in quality and type of support that the SGRs receive from their regional administrations.

In addition to the counter-guarantee, the regions provide all kinds of the above listed measures of public support to the SGRs in their region. A quantitative analysis of this support is beyond the scope of this research. Nevertheless, the previously presented literature clearly indicates that the cooperation with the regions is a central factor of the success of an SGR. The importance of the regions within the Spanish system of credit guarantee schemes was confirmed by interviews in Portugal, where the Spanish system was replicated and hence analysed before (interview 2).

Consequently, the Spanish SGRs of basic model three within the ODM approach receive a risk-sharing mechanism and grants that do not have to be repaid. Since, CERSA itself builds reserves, a call on a counter-guarantees does not directly affect the public budget and Spanish SGRs are classified as A2.1.2.

With respect to financial self-sustainability, de la Fuente Cabrero (2007) analyses the financial statements of all Spanish SGRs in the period 1998-2005 and provides information about (a) fees for guarantees and services, (b) the operational expenses where provisions and calls

on guarantees are not included, (c) the outstanding guarantees, (d) the calls on guarantee and (e) the loans at risk.

Table 13 Brief Analysis of Financial Statements of Spanish SGRs

Year	Inflow (fees) (a)	operational expenses (b)	(a) - (b)	outstanding guarantees (c)	calls on guarantees (d)	loans at risk (e)	(d) / (c)	(d+e) / (c)
1998	€ 19.64 m.	€ 19.53 m.	€ 0.12 m.	€ 1.4 bn.	€ 34.92 m.	€ 37.59 m.	2.43%	5.06%
1999	€ 23.27 m.	€ 21.14 m.	€ 2.13 m.	€ 1.7 bn.	€ 31.40 m.	€ 47.27 m.	1.81%	4.53%
2000	€ 23.71 m.	€ 22.63 m.	€ 1.08 m.	€ 2.0 bn.	€ 21.65 m.	€ 74.01 m.	1.09%	4.81%
2001	€ 24.48 m.	€ 22.92 m.	€ 1.57 m.	€ 2.2 bn.	€ 20.95 m.	€ 85.36 m.	0.95%	4.81%
2002	€ 27.21 m.	€ 25.13 m.	€ 2.07 m.	€ 2.5 bn.	€ 24.92 m.	€ 111.89 m.	1.01%	5.54%
2003	€ 29.83 m.	€ 26.27 m.	€ 3.56 m.	€ 2.8 bn.	€ 22.58 m.	€ 119.25 m.	0.80%	5.01%
2004	€ 33.18 m.	€ 27.88 m.	€ 5.30 m.	€ 3.3 bn.	€ 20.89 m.	€ 158.88 m.	0.63%	5.44%
2005	€ 39.61 m.	€ 31.78 m.	€ 7.83 m.	€ 3.9 bn.	€ 20.98 m.	€ 213.06 m.	0.53%	5.93%

Own elaboration; source: Fuente Cabrero (2007, 91,211,216,217)

In the period 1998-2005, for every year the calls on guarantees (d) exceed by far the difference of fees and operational expenses (a) – (b). Moreover, the sum of calls on guarantees and loans at risk equal on average 5.1% of the outstanding guarantees. Although no recovery rates are at hand, these numbers underline that Spanish SGRs are not financially self-sustainable. The SGRs' operations are only possible since third parties (usually public agencies) share the risk with the guaranteeing institutions. This risk-sharing support and additional grants enable the SGRs to finance the calls on guarantees. In addition, this financial support enables SGRs to invest in financial assets and increase their balance sheet, equity and provisions.

Calls on guarantees and loans at risk that equal on average 5.1% of the outstanding guarantees, indicate that it are not the best clients of banks that receive a loan guaranteed by an SGR. In other words, numbers suggest that it is more the financially constrained borrowers that participate in the credit guarantee scheme. Tabuenca and Crespo Espert (2005), researchers of the Universidad de Alcalá, analyse the borrowers within the credit guarantee scheme in their empirical research for Spanish ministry of economics, tourism and trade. The authors analyse the period 1996-2003 and show that roughly 37% of the enterprises were started in the 1990s and hence were relatively young (Tabuenca and Crespo Espert 2005, 47/48). Moreover, the authors show that some³⁵ of the borrowers are engaged in research

³⁵ For the years 2000-04, 77% of the borrowers report that they do not research or develop at all (Tabuenca and Crespo Espert 2005, 66).

and development. The numbers suggest that SGRs indeed support innovate young enterprises, however, this support is not the core business of the SGRs.

It is more the support of long-term finance that can be interpreted as the “value added” to the Spanish economy. De la Fuente Cabrero concludes that the core activity of the SGRs is to guarantee loans with long-term maturities (Fuente Cabrero 2007, 167). Indeed, 64% of all guarantees provided by Spanish SGRs had a maturity of more than eight years and consistently 41% were provided to support investments³⁶ (Herrero Calvo 2008, 452).

To conclude, the Spanish SGRs do not achieve financial self-sustainability but are rather institutions with the aim to channel public financial support from public agencies. There are indications that they do improve finance, especially for long-term investment finance. Although the borrowers have to be shareholders of the SGRs, they usually do not use the institution frequently, i.e. no repeated interaction establishing a long-term relationship. Hence, Spanish SGRs are not borrower-guarantor schemes within the relationship-based approach to differentiation. On the contrary, there is evidence that they are rather lender-guarantor schemes with ongoing public support, i.e. a lender-guarantor and government-guarantor scheme. Lenders cooperate especially when a long-term finance is provided. SGR guarantees seem to be promising for the public administration and also a good deal for the banks since they receive guarantees of 100% without being charged the full risk premium. The system also underlines the hypothesis of section 2.4, since no financial self-sustainability can be recorded and outreach is modest.

3.2.2 Credit guarantee schemes in Latin America

Similar to the previous section, the following provides an overview of schemes in the continent. All members of the network Red Iberoamericana de Garantías (REGAR) were contacted and asked to participate in the survey. Only in a few countries is sufficient information at hand to conduct the ODM approach. A mini case study of schemes in Argentina is backed by field research and the survey. Hence, the sample is not representative but underlines the variety of credit guarantee schemes in Latin America.

³⁶ Again, long-term loans should be not confused with a long-term relationship with repeated interactions.

3.2.2.1 State of the art and outreach of Latin American schemes

Contrary to the analysis of European schemes, no historical analysis of Latin American schemes will be conducted. However, Green (2003) states in her UNIDO-study, there were several negative experiences with credit guarantee funds that decapitalised due to high losses (Green 2003, 58). That a credit guarantee scheme can be a dangerous financial instrument, in the sense of high defaults and financial costs, was already underlined with the empirical analysis of schemes, particularly in the UK and the USA. Especially when a country had experienced high defaults in the past, scepticism against the use of credit guarantee schemes is understandable and influences the policymakers.

This section is based on an empirical study including a survey conducted by Pombo González, Sánchez and Sobrino in the years 2007 and 2008 (Pombo González, Sánchez and Sobrino 2009, Pombo González, Sánchez and Sobrino 2008). The authors are from Spain, and Pombo González is a founding member of the Red Iberoamérica de Garantías (REGAR). Their sample of 22 credit guarantee schemes largely represents the members, or associates, of the REGAR-network, and hence should not be interpreted as a complete or representative sample that would describe the use of credit guarantees in Latin America. In this and the following section, the sample is used to provide an introduction, or the state of the art in 2008, and showing possible arrangements of credit guarantee schemes. The authors emphasise that outreach of Latin American credit guarantee schemes is small and most credit guarantee schemes are public schemes. However, there is a strong movement to build mutual credit guarantee systems similar to the Italian and Spanish schemes.

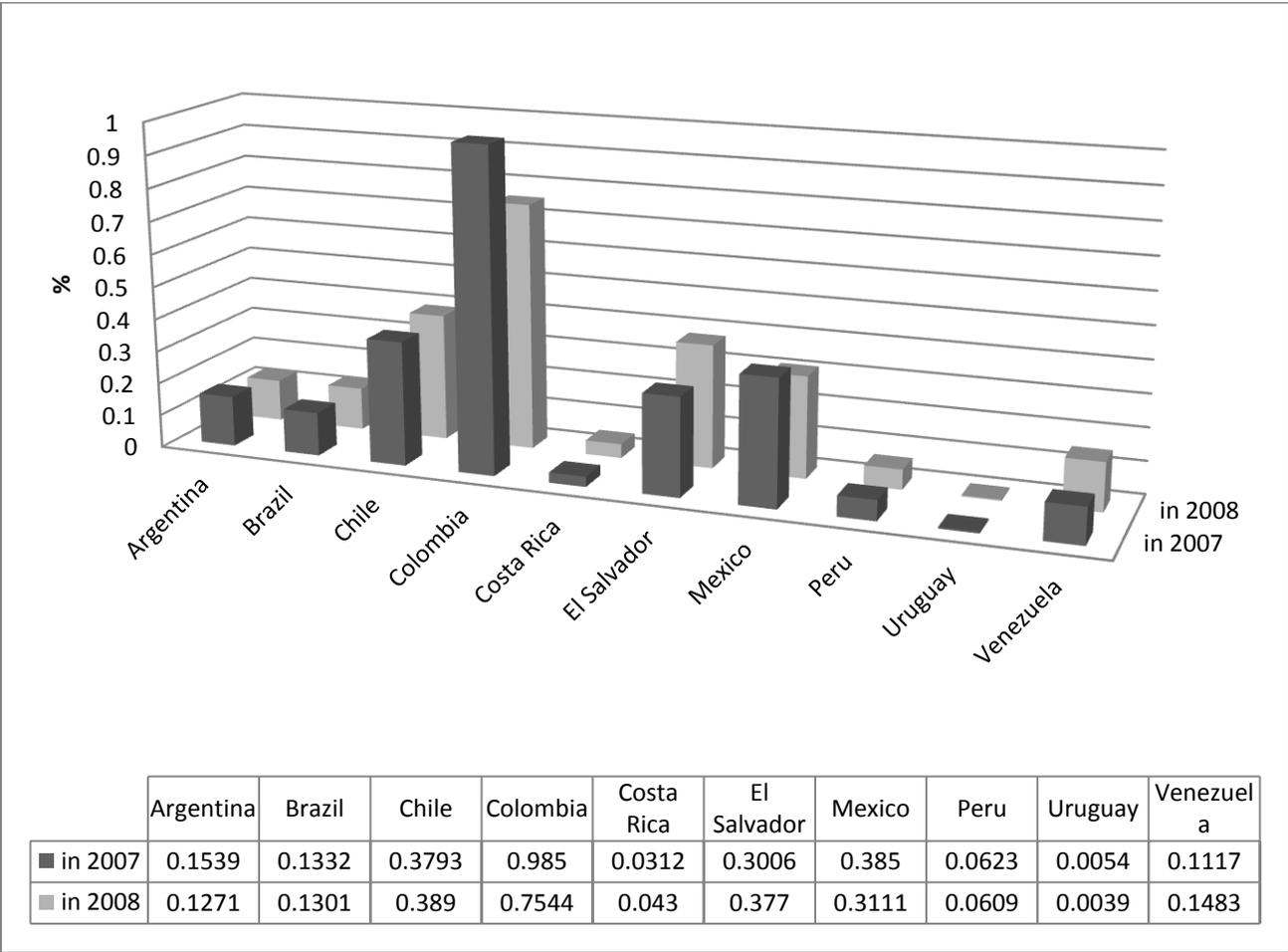
Within the sample, there is no completely private scheme, i.e. all private credit guarantee schemes receive public support. 59 % of the schemes are public and hence 41% a cooperation of public and private actors. All guaranteeing institutions of the sample cooperate with banks and savings banks. However, other lenders can receive guarantees, too. The maturity of the guarantees is below three years in 73% of the cases. On average, the upper ceiling of the guarantees is US\$1 m. and the lower ceiling is on average US\$ 50,000 (Pombo González, Sánchez and Sobrino 2008, 45,59,60).

The survey found out that 50% of the guarantees were individual guarantees and the other half guaranteed a portfolio of loans. Consequently, with respect to the decision-making process the portfolio approach is more dominant than in the European AECM schemes. This also goes in line with the share of GIs that operate on national level which is 86%. Often it is national development banks that provide the guarantees as well as other financial support.

Indeed, 41% report that the institution only provides guarantees and on the other hand, exactly other 41% of the surveyed institutions report that the guaranteeing activity is of little importance for the institution, i.e. the guarantees are provided by a (less important) special department of an institution that uses several instruments (Pombo González, Sánchez and Sobrino 2008, 41,43,52).

Figure 21 clearly shows that, similar to European AECM members, the outstanding credit guarantees in relation to GDP is negligible. The largest relation can be recorded for Colombia, which does not even reach 1 %.

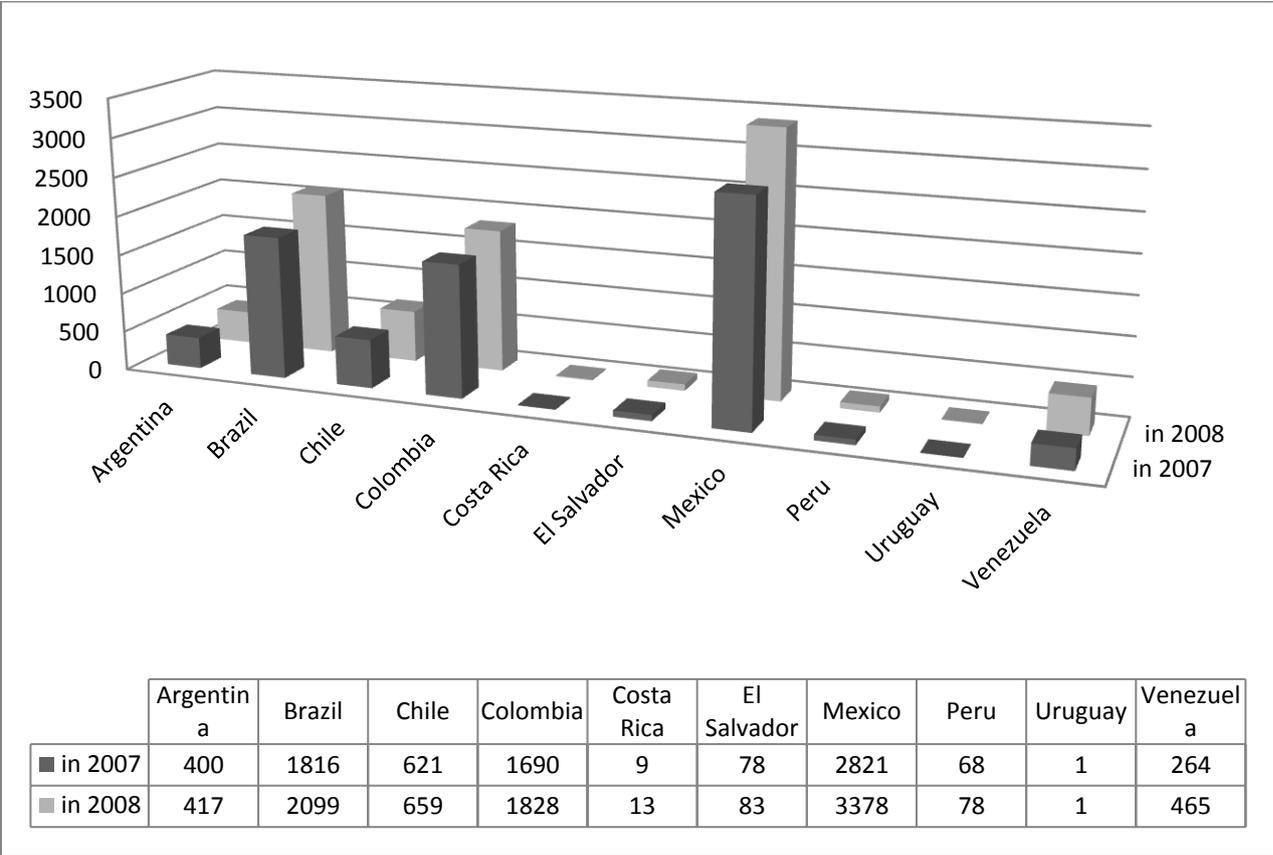
Figure 21 Ratio of Outstanding Guarantees to GDP in Latin America in %, period 2007-08



Own elaboration; source: Pombo González, Sánchez and Sobrino (2008, 67) Pombo González, Sánchez and Sobrino (2009, 24)

Figure 22 provides an overview of the outreach by volume. The largest outreach by volume is recorded in Mexico. However, this volume equals roughly the stock of guarantees in Portugal. Altogether, the sum of all Latin American outstanding guarantees roughly equalled the outreach of Spanish SGRs.

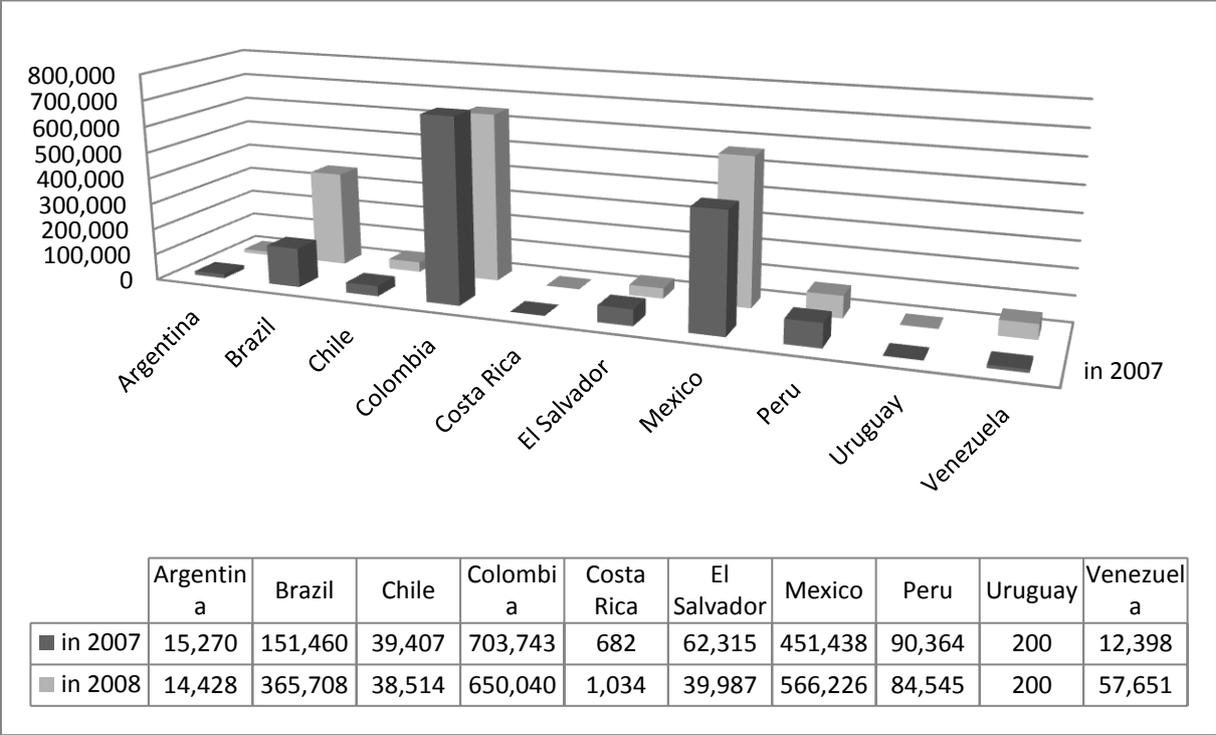
Figure 22 Outstanding Guarantees in Latin America in US\$, period 2007-08



Own elaboration; source: Pombo Gonzáles, Sánchez and Sobrino (2008, 67) Pombo Gonzáles, Sánchez and Sobrino (2009, 24)

The following figure provides an overview of schemes with respect to the outreach by number. In the years 2007 and 2008, the stock of borrowers by number summed to roughly 1.6 m. and 1.8 m. respectively which is less than the numbers of AECM members (1.7 m. and 2.2 m.).

Figure 23 Number of Outstanding Guaranteed SMEs in Latin America in the period 2007-08



Own elaboration; source: Pombo Gonzáles, Sánchez and Sobrino (2008, 66) Pombo Gonzáles, Sánchez and Sobrino (2009, 24)(survey 9)

All in all, the numbers indicate that the guarantee value is on average lower than that of the European AECM members and total outstanding volumes are indeed small. The ratio of outstanding guarantees by volume to GDP varies between the countries but generally is on a low level similar to the AECM members.

3.2.2.2 Result of the ownership and decision-making approach

Like the section 3.1.2.3, where European credit guarantee schemes were analysed, this section does not provide a neither complete nor a representative sample of credit guarantee schemes, as already mentioned. Basically, only REGAR-members are analysed. The Argentine and Colombian schemes are included because both countries contain schemes that provide combinations within the ODM approach that have not been discovered in the previous section. Moreover, the Colombian scheme provides most guarantees in relation to GDP. The Chilean system is frequently cited as a reference model, see G20³⁷ (G-20 Financial Inclusion Experts Group 2010, 69). The results are based on literature, participation of Chilean schemes in the survey and confirmations/discussions with representatives at REGAR-conferences (conferences 3, 5 and 7). Table 14 provides the results of the ODM approach to differentiation.

³⁷ G20 is the abbreviation for the Group of Twenty Finance Ministers and Central Bank Governors.

Table 14 Results of the ODM Approach in Latin America

		Decision-making process for an individual guarantee		
		B1) Case-by-case approach. The lender is required to obtain an approval of the GI. The GI screens the individual borrower.	B2) Portfolio approach. The lender is not required to obtain individual approvals by the GI.	
		B1.1) The GI uses its own information beyond an application form.	B1.2) The GI relies on the bank's information.	
Ownership	A1) Public Guarantee Schemes	Basic Model 1 FNG_95-05(Col)		Basic Model 2
	A1.1) Unfunded Guarantee: Individual call on a guarantee does affect the budget.			
	A1.2) Funded Guarantee: Individual call on a guarantee does not affect the budget.			FNG_95-05(Col)
	A1.2.1) State is explicitly liable for all guarantees.			
	A1.2.2) State is not explicitly liable for all guarantees.			FOGAPE (CL)
	A2) Public-Private Cooperation	Basic Model 3		Basic Model 4
	A2.1) Government takes explicit risk.			
	A2.1.1) - Unfunded: Each call on a guarantee affects the public budget.			
	A2.1.1.1) State is explicitly liable for all guarantees.			
	A2.1.1.2) State is not explicitly liable for all guarantees.			
	A2.1.2) - Funded: Individual call on a guarantee does not affect the public budget.		FNG_06-07 (Col)	
	A2.1.2.1) State is explicitly liable for all guarantees.			
	A2.1.2.2) State is not explicitly liable for all guarantees.	Garantizar(ARG), FOGABA(ARG), IGR(CL)	IGR(CL)	
	A2.2) Government does not take explicit risk.	SGR(ARG)		
A3) Private Guarantee Schemes	Basic Model 5		Basic Model 6	

Own elaboration

In their IADB study Llisterri, Manueco, López and Tabuenca (2006) report that on the Colombian national level the National Guarantee Fund (*Fondo Nacional de Garantías*, FNG) and a specialised fund for the sector of agriculture are operating. In this section, only the FNG is analysed. Its stock of outstaying guarantees is roughly twice as large as the stock of the special scheme for the sector of agriculture. The FNG provides guarantees for finance for small businesses, and in addition guarantees mortgages, student loans and refinance of financial institutions. For example, 50% of the loans provided by Bancóldex for Microfinance institutions (basically cooperatives) are covered by guarantees of the FNG. Usually, the FNG guarantees short-term finance and provides partial guarantees, usually covering 50% of the loan (Llisterri, et al. 2006, 127-166)

Three issues are of interest from the Colombian experience:

- 1) The attempt to create regional public-private guaranteeing institutions that should receive counter-guarantees of the FNG (basic model three such as Spanish SGRs) failed because private actors did not provide sufficient equity. In addition, the lenders did not accept the guarantees of these regional associations. However, regional agencies were built that manage and promote the guarantees provided by the FNG. However, they do not take the risk (Llisterri, et al. 2006, 130-132).
- 2) Nevertheless, at least for the period 2006-07, the FNG is a cooperation of public and private actors (FNG_06-07 in Table 14). The FNG itself is predominantly publicly funded (99.9%). However, the public agency receives counter-guarantees not only from the multilateral development banks but also from private insurers (Colseguros-Allianz and SwissRe) (Durán, García and Pedraza 2008, 356). The FNG (2007) reports that in the years 2006 and 2007 the FNG had received private counter-guarantees covering 30% and 25% respectively of the outstanding guarantees. Private insurance was capped to a maximum value of US\$ 100 m. and US\$ 250 m (FNG 2007, 8). Consequently, the scheme is a cooperation of public and private actors where the government provides funded guarantees and receives private counter-guarantees (A.2.1.2). For the period before 2006, no such private risk taking is recorded and hence the scheme is classified as a completely public guarantee scheme.
- 3) Before 1995, the FNG only provided guarantees case-by-case (B1). In the period 1995-2005, the institution provided portfolio guarantees and guarantees that were approved case-by-case. Consequently, the scheme (FNG_95-05(Col)) was of basic model one and two. Not sufficient information is at hand to differentiate whether FNG conducted the

B1.1 or B1.2 decision-making process. Since 2000, the share of case-by-case guarantees fell well below 20%. From 2006 on, the scheme converted back to a scheme with a case-by-case decision-making process. According to the IADB study, the representatives of the FNG argue that the ex-ante approval conducted by the FNO (B1.2) would remove operational errors that impede lenders receiving payments from the FNG (Llisterri, et al. 2006, 141). In other words, there were problems between the guarantor and lenders when the B2 decision-making-process with no ex-ante approval of the FNG was applied.

In the period 1995-1999, when the guarantees were provided largely on a case-by-case approach, the default rates (net) varied between roughly 6% and 13%. In the period 2000-04, this ratio decreased to a level below 2.5%. With fees of 1.75% on average, no financial self-sustainability can be expected, however, default rates were moderate and the IADB concludes in their study in 2006 that the scheme was financial sustainable in that period (Llisterri, et al. 2006, 23,145).

With respect to new provided guarantees since 2007, the volume stagnated until 2009. The value of guaranteed loans decreased from US\$ 2.4 bn. in 2007 to US\$ 2.3 bn. in 2008 followed by an increase to US\$ 2.4 bn. in 2009 (FNG 2010, 18). Default rates increased in the period, starting at 2% in 2007 to 5% in 2009. The share of delayed loan payments within the period had increased from 3.15% in 2007 to over 6% in 2009 (FNG 2009, 7,8).

All in all, the FNG is basically a second-tier institution. The FNG itself is a predominantly public agency that, at least for a period of time, bought protection (counter-guarantees) from private insurance companies and converted between the basic models one, two and three. This brief analysis indicates a lender-guarantor scheme. It guarantees the loans of the lenders to businesses, and also the refinance of lenders, such as Microfinance Institutions that receive refinance from Bancóldex. In addition, the Colombian experience shows the difficulties of building private regional guaranteeing institutions and operational problems within the portfolio decision-making process.

In Chile there are six Reciprocal Guaranteeing Institutions (*Instituciones de Garantía Recíprocas*, IGRs) and the Credit Guarantee Fund for Small Businesses (*Fondo de Garantía para Pequeños Empresarios*, FOGAPE). The six IGRs are a result of public and private cooperation and started their operations in 2009. FOGAPE is a completely public credit guarantee scheme founded in 1980 and managed by the public bank BancoEstado. In relation to the numbers presented for the years 2007 and 2008 in Figure 21, Figure 22 and Figure 23, the outreach of the Chilean scheme increased significantly during the worldwide financial crisis. Approved guarantees increased from 15,000 in 2008 to 31,000 in 2009 to 51,000 in 2010. Numbers by value almost multiplied by five (in Chilean Pesos) (Bozzo Toselli 2010, 38).

FOGAPE operates as a first-tier guaranteeing institution, and in addition, the institution provides counter-guarantees to the six IGRs. The institution is not only managed by a public bank but it is also completely funded by government, except for the fees of up to 2% which it charges. However, there is no explicit guarantee of the government for all obligations of FOGAPE. Hence, the scheme is of type A1.2.2. Since FOGAPE uses the portfolio approach (B2), it is a scheme of basic type two (Survey 9). Sometimes it approves the guarantees in the form of auctions and always provides partial guarantees (Survey 9). Of the provided guarantees in the years 2000 and 2001, 2.42% and 2.15% (by volume) had been called by 2005 (Llisterri, et al. 2006, 112). Although defaults are relatively modest, no financial self-sustainability can be expected since FOGAPE charges fees of only up to 2%.

The six IGRs³⁸ started operations in 2009 guaranteeing loans and providing bank guarantees. The institutions receive counter-guarantees from FOGAPE and have private shareholders that can be borrowers. At the REGAR-conference 2010, a representative of the Chilean Economic Development Agency (*Corporación de Fomento de la Producción*, CORFO) reported that CORFO had provided US\$ 130 m. for the reserve funds of the IGRs. By 2010, the IGRs had supported 1,100 borrowers with a guarantee volume of almost US\$ 100 m. (CORFO 2010, 9). Consequently, the value of provided guarantees is below the value of the reserve funds. This low leverage ratio can partially be explained by the young age of the IGRs. Since the risk-sharing mechanisms are funded, the IGRs are of type A2.1.2. Two IGRs have participated in the survey, and stated that the government is not explicitly liable for all the IGRs' obligations (A2.1.2.2). With respect to the decision-making process, the institutions use the case-by-case approach and can base their decisions on either own information (B1.2) or information of the lenders (B1.2). Also contrary to FOGAPE, the IGRs do not provide partial guarantees and they guarantee 100% of the loans (Survey 6 and 8). Consequently, the Chilean IGRs are of basic model three.

All in all, the Chilean FOGAPE is a scheme of basic type two within the ODM approach. Since borrowers are not included within the decision-making process, FOGAPE is likely to be a lender-guarantor scheme within the relationship-based approach. The six IGRs are a result of public and private cooperation, and are of basic type three. For a categorisation of the schemes within the relationship-based approach, more research would have to be done.

³⁸ In January 2012, there exist 10 IGRs (Email 10).

3.2.2.3 A closer look at Brazil's neighbour Argentina

The case of Argentina is not only interesting since it is Brazil's neighbour. In addition, the schemes were built following the Spanish experience. Although a small scale field study in Argentina was conducted, this section is primarily based on written documents (Email1, survey partner 3). The expert interviews and visits were used to collect documents and to clarify the sometimes contradictory literature (interviews 17-21, visit 5 and 6).

Like in Spain, there are several Societies of Reciprocal Guarantees (*Sociedades de Garantía Recíproca, SGR*) that have "protecting" and "participating" members, are supported by the government and provide guarantees of 100%. However, it has to be noted that it is not only banks who provide the guaranteed finance within the scheme. In cooperation with the Stock Exchange of Buenos Aires (*Bolsa de Comercio de Buenos Aires*), the borrowers can obtain finance from the capital market via bonds that are guaranteed by the Argentine guaranteeing institutions (Llisterri, et al. 2006, 49-74).

Among these SGRs, Garantizar is the largest institution operating nationwide. Garantizar (2011) boasts that it had provided 940 m. Argentine Pesos in 2010 which equals 37% of all provided guarantees in Argentina. Whereas for most of Argentine SGRs all members are private, the "protecting" members of Garantizar are predominantly public agencies. Within the IADB study, Garantizar is categorised as a public guarantee scheme and imprecisely called the SGR of the Banco de la Nación Argentina and of the Banco Ciudad (Buenos Aires). Both banks are public agencies and moreover the Banco de la Nación Argentina is the leading bank in Argentina (Llisterri, et al. 2006, 64). This categorisation is imprecise since there are other shareholders, too. Nevertheless, the study indicates that the public agencies dominate Garantizar and it is a government-guarantor and lender-guarantor scheme.

In addition to the SGRs, there is one predominantly public institution, the Guarantee Fund of the Province Buenos Aires (*Fondo de Garantías de la Provincia de Buenos Aires, FOGABA*). Within the IADB study (2006), the authors state that FOGABA mainly operates with the public bank Banco de la Provincia de Buenos Aires (Banco Provincia)³⁹. Unlike the SGRs, it provides partial guarantees. A representative of FOGABA stated at the REGAR-conference 2009 in Lisbon that in 2008-09, FOGABA had approved 8% (5%) of all guarantees in Argentina by volume. The outstanding guarantees equalled 12% of all outstanding guarantees in Argentina by the end of 2009 (FOGABA 2009). FOGABA is the second largest guaranteeing institution in Argentina.

³⁹ Indeed, on the homepage of Banco Provincia one can see the link to Fogaba, and moreover on the section for enterprise finance it provides general information on the cooperation with Fogaba (Banco Provincia 2011).

The SGRs, except Garantizar, have private shareholders only. They can be open to all sectors and operate in the whole country. Indeed, there are SGRs that do so. On the other hand, the scheme can be part of a business network. Los Grobo SGR, for example, is integrated into the business network of Los Grobo Agropecuaria, one of the largest grain producers in Latin America. McAfee and de Royere (2010) report that the network had direct 900 employees, 5,000 producers and 4,100 suppliers. With respect to the SGR the authors write⁴⁰:

“Los Grobo offered financial instruments to its SME network, including its reciprocal guarantee company (SGR for its initials in Spanish). The SGR helped extend credit to SMEs at the same interest rate as large corporation, with guarantees enabled by a risk fund. Helping entrepreneurs secure affordable loans to grow was important in Argentina, where such loans were hard to come by. The money was typically used as working capital or put towards the purchase of assets. The SGR was started in 2004 and grew quickly. In 2008, Los Grobo saw 420 SMEs participating, with guarantees totalling \$87 million. Over four years, the SGR had provided guarantees for \$220 million in all, with no defaults.” (McAfee and Royere 2010, 22).

Although the borrowers are members of the SGR, the scheme is close to an institutionalised scheme of personal guarantees within the business network of the Los Grobo Group. Since two other SGRs (not Garantizar) stated that they had almost no defaults⁴¹ there are indications that defaults among privately organised SGRs are lower than at FOGABA and Garantizar.

Within the ODM approach, all schemes in Argentina have in common that they usually analyse the borrowers case-by-case with their own information. Other decision-making processes are sometimes used as well. For example, FOGABA reports a case-by-case approach⁴² that relies mainly on the lenders' information on the borrowers (B1.2) for guarantees of lower value (Pata 2008). The central difference among Argentine guarantee schemes lies in the governmental support (dimension A). Garantizar and FOGABA receive equity and loans from the government and hence government takes risk and moreover, the public support is funded (A2.1.2). No explicit government guarantee was recorded within the survey. In addition, the central government started to provide counter-guarantees in the year 2010. Although they are available for all SGRs, only FOGABA and Garantizar have benefited so far (Ministerio de Industria SEPYME 2010). Whether these counter-guarantees are funded could not be clarified. On the other hand, the private SGRs only receive public support in the form of tax reductions. Investors that finance the Reserve Funds of SGRs (and hence this also holds for Garantizar) do not have to pay taxes on the investment gains. With respect to risk

⁴⁰ The symbol “\$” is used for Argentine pesos.

⁴¹ This was stated within the survey and within the (unpublished) financial statements of another SGR.

⁴² The scheme is called „Garantía de Cartera“ which means portfolio guarantee, and within the IADB study this scheme is indeed described as a portfolio scheme. However, as stated by Pata (2008) this seems to be not the case, since he emphasises that the scheme does not correspond to the definition of portfolio guarantees.

sharing, only FOGABA provides partial guarantees whereas Garantizar and the other SGRs cover 100%. Hence, all Argentine credit guarantee schemes are of basic model three. This differentiation was confirmed by the chamber of Argentine SGRs (*Cámara Argentina de Sociedades y Fondos de Garantía, CASFOG*) and by a private SGR (Email 1, Survey 3).

With respect to the relationship-based approach, more research has to be done. However, the scheme among Los Grobo Agrepecuaria and the guaranteeing of bonds indicate a borrower-guarantor scheme. On the other hand, the close relations between FOGABA and Garantizar and a few banks points to a lender-guarantor scheme. The latter schemes are also government-guarantor schemes.

As stated in Figure 22 and Figure 23 in the previous section, the Argentine system supported a stock of about 15,000 SMEs in the years 2007 and 2008. In both years, the outstanding guarantee volume was around US\$ 400 m. which equalled 0.15% of GDP. Within the IADB study, the authors report that the outstanding guarantees equalled 0.46% of all outstanding loans in Argentina in 2005. Consequently, the schemes are of little quantitative importance for the financial system. In the following table, the outreach of the SGRs (hence without FOGABA) is expressed in Argentine Pesos in order to provide an overview that is not affected by the exchange rate volatility of the period.

Table 15 Statistics on Argentine SGRs, 1996-2010 (in Argentine Pesos)

Year	Number of SGRs	Reserve Funds in million Pesos	Called Guarantees in million Pesos	Net payments in million Pesos	Outstanding guarantees by volume in m. Pesos (average)	Outstanding guarantees / Reserve Fund	Default rate	Default rate (net)
1996	1	36	0	0	0	0.00		
1997	2	44	0	0	0	0.00		
1998	4	71	0	0	10	0.14	0.00%	0.00%
1999	5	96	0	0	26	0.27	0.00%	0.00%
2000	5	111	0	0	50	0.45	0.00%	0.00%
2001	9	98	0	0	70	0.71	0.00%	0.00%
2002	9	74	16	16	63	0.85	25.40%	25.40%
2003	11	125	10	8	77	0.62	12.99%	10.39%
2004	17	190	2	-2	158	0.83	1.27%	-1.27%
2005	21	322	15	6	380	1.18	3.95%	1.68%
2006	24	596	15	7	770	1.29	1.95%	0.96%
2007	24	667	70	43	1,130	1.69	6.19%	3.81%
2008	24	708	98	37	1,197	1.69	8.19%	3.09%
2009	25	756	134	34	1,180	1.56	11.36%	2.88%
2010	24	838	35	-5	1,399	1.67	2.50%	-0.36%

Own elaboration; source: Ministerio de Industria SEPYME (2011)

Table 15 shows that only in 1998, two years after the first reserve fund was established, do the SGRs start providing guarantees. However, the outstanding guarantee total was of a moderate value. The numbers also show that there has been a significant increase in the value of outstanding guarantees and number of GIs since 2004.

The leverage ratio, as the relation of outstanding guarantees to reserve fund, was below 1 until 2004, i.e. the reserve funds were higher than the outstanding guarantees. Only since 2005 has the value of outstanding guarantees become larger than the paid-in reserve fund, but it still does not climb over 1.7. This low ratio is either an indication for an extreme risk aversion or that SGRs want to provide guarantees but are not able to reach more clients. The table also shows that there were two peaks of dangerously high default rates: both in the periods shortly after the peak of crises (the Argentine crisis 2000/2001 and the worldwide financial crisis at the end of the same decade). In addition, Table 15 shows that the SGRs are able to recover some of the losses due to called guarantees since the net payments are well below the called guarantees. Indeed, in two years (2004 and 2010) after high volumes of calls had occurred in the years before, the net payments from calls on guarantees resulted in a positive cash flow for the SGRs.

What are the lessons learned from Argentina? Like in Spain, the institutions that receive more public support have a dominant position within the Argentine system. Moreover, both institutions have a bank as a strategic partner and a long-term relationship between the bank and the guarantor.

With respect to the private SGRs, outreach is minor. There are three possibilities that may explain this phenomenon:

- 1) There may be mistrust among the lenders who do not trust the guarantees of private SGRs that only receive little public support.
- 2) Private SGRs may be crowded out by the strongly supported Garantizar and FO-GABA.
- 3) The public support can have a negative incentive on the guaranteeing activity, i.e. the outreach.

The third possibility needs some more explanation: the network Los Grobo Agropecuaria has the particular interest to improve finance within their business network. Other investors, however, can see a SGR not as a credit guarantee scheme but rather as a tax relief scheme. If investors do not believe in the profitability of the guaranteeing business, they can alternatively make profits via the investments of the reserve fund (“i(FA)” in section 2.1.4.4). When

a SGR only provides few guarantees to the best rated or even collateralised borrowers, operational expenses and payments due to called guarantees can be very low. Consequently, the value of the reserve fund (FA) does not decrease due to its guaranteeing business, leaving the fund free to generate profits in the capital markets.

4 Empirical Evidence II: case studies

Several schemes have been analysed in the previous part. In this part, the German Guarantee Banks (GBs) will be discussed in section 4.1. This analysis is the core of the empirical study next to the case illustration of somewhat similar schemes in Brazil that are discussed in section 4.2. A brief discussion of differences and equivalences of both experiences can be found in section 4.3.

4.1 Case 1: German Guarantee Banks

GBs provide credit guarantees for loans and (mezzanine) capital, of usually up to € 1 m. Within the ODM approach they are a public-private cooperation using the case-by-case approach and hence are of basic model three. Usually, they operate on a federal state level and are open to most sectors with exceptions such as agricultural production.

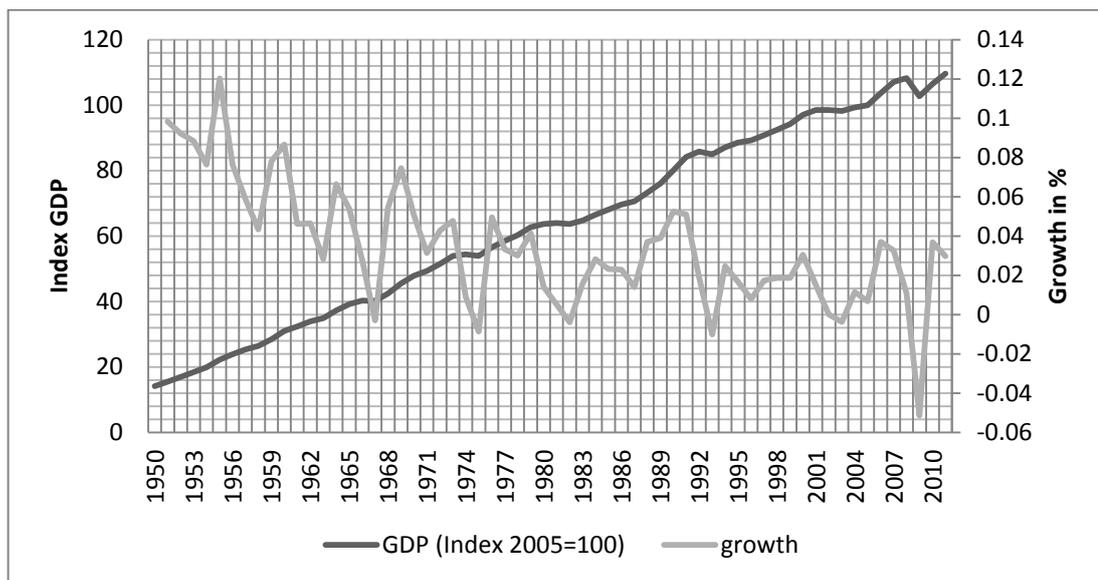
Next to the success story of Herrenknecht, the “hidden champion” in tunnelling machines, the Associations of German Guarantee Banks (*Verband Deutscher Bürgschaftsbanken*, VDB) reports several other success stories where GBs have guaranteed finance (VDB 2006, 15-49): the start-up of an innovative aluminium factory that supplies the aircraft and space industry; the finance for the re-foundation of the traditional publisher Baedeker; the first steak-house chain in Germany (Block-House); the finance of a producer of solar cells, Q-Cells; the take-over of a developer and producer of pharmaceutical products in East Germany shortly after reunification which is now known as Riemser AG; and the finance for the company that produces “Velotaxis”. These bicycles have a small auxiliary engine, similar to modern rickshaws in India. They are produced in Berlin and are well known in the city. In addition, they are exported worldwide and can be found in New York, Tokyo and Rio de Janeiro (Velotaxi GmbH 2011).

Before the guaranteeing institutions themselves are analysed, several competing risk-sharing schemes and financial institutions will be described in section 4.1.1. This is important to understand the market for GBs, their outreach and financial sustainability. These descriptions are followed by a historical analysis of the GBs’ predecessors in section 4.1.2. This improves the understanding of the current GBs, reveals some conflicts and provides a link to the institution building process of similar schemes in Brazil. Section 4.1.3 provides an overview of the state of the art of GBs. This includes a description of the GBs’ activities and their decision-making processes, and a brief analysis of their financial statements. In section 4.1.4, the rela-

tions within the Augmented Triangular Relationship will be analysed. Finally, section 4.1.5 provides interim results.

Since in this case illustration also the historical development of GBs and predecessors is analysed, development of German GDP and growth is an important background information. Figure 24 shows the development of the German GDP (price adjusted, index 2005=100) and growth (first differences) in %.

Figure 24 German GDP and Growth in the Period 1951 – 2011



Own elaboration; source: (Deutsche Bundesbank 2012a)

4.1.1 Overview of guarantee schemes in Germany

The GB in Berlin comments on new programmes of the KFW Bankengruppe,⁴³ which include a risk-sharing mechanism with the banks:

“The often used argument of the missing ‘promoting gap’ does not explain that the central government provides loan programmes with exemption of liability via the KFW Bankengruppe despite the existence of similar successful programmes on federal state level. We can understand that in a federal system, like the Federal Republic of Germany, it can always be tempting for the central government not to take the second place behind the federal state level. However, it irritates us as a Guarantee Bank that the government so ‘easily’ disregards the principle of subsidiarity despite empty cash boxes. KFW products are an extremely worthy support for mid-sized companies with respect to the refinance under good conditions. However, with re-

⁴³ KFW in the name of the KFW Bankengruppe stands for the former name of the development bank: Kreditanstalt für Wiederaufbau (Loan Agency for Reconstruction).

spect to the collateralisation of loans due to missing collateral of the borrower, it is the experience and the knowledge of the regional markets that matters. As the successful cooperation with the Investitionsbank Berlin⁴⁴ shows, we as a specialist can provide both every time. In addition, we use our own capital and hence relieve the government.” (BBB Bürgschaftsbank zu Berlin-Brandenburg 2008, 16)⁴⁵

This statement clearly indicates a competition between GBs and some programmes of the KfW Bankengruppe. In the following, several risk-sharing mechanisms will be introduced.

4.1.1.1 Guarantee schemes for public banks

Public banks and guarantee schemes in favour for public banks will be described because:

- 1) Public banks can be a (indirect) competitor of GBs. This is because a bank can provide the loan without the credit guarantee which would make the GBs superfluous. On the other hand, the bargaining position of a borrower can increase with a credit guarantee and a positive vote of the GB in hand. This may enable the borrower to choose among competing lenders, which makes the GB an indirect competitor of any lender (see section 2.2.3).
- 2) Public development banks provide guarantees and similar risk-sharing mechanisms. This makes the institutions direct competitors of GBs.
- 3) Government can choose to channel financial support to borrowers via public development banks instead via GBs. Indeed, public agencies can provide credit guarantees instead of GBs, or do so in close cooperation. On the contrary, the GBs can conduct several duties of the development banks, too.

The largest network of public banks is the Savings Bank Finance Group (*Sparkassenfinanz-Gruppe*). The network is a guarantee scheme since member banks are mutually and explicitly liable. The joint liability is called “Liability Combine” (*Haftungsverbund*)⁴⁶. This “Verbund” consists of a) regional savings banks (universal banks) that are usually owned by the municipalities, b) the federal state banks (*Landesbanken*) that are owned by the savings banks (via their associations) and the federal states and c) further specialised institutions such as the mortgage savings banks (*Bausparkassen*) and the central asset manager Dekabank (Ayadi, Schmidt and Valverde 2009, 113-138).

⁴⁴ The Investitionsbank Berlin is the public development bank of the Federal State Berlin.

⁴⁵ Own translation.

⁴⁶ This is indeed an explicit guarantee and all members officially declare that they are jointly liable. The “Verbund” can also be translated as “federated system” (Ayadi, Schmidt and Valverde 2009, 129).

The “Verbund” is the leader within the German banking system. In the period 2007-09, 35% loans were provided by the group, and 38% of German savings were captured by the group (Ayadi, Schmidt and Valverde 2009, 125).

In this guarantee scheme, the banks are the “borrowers” and all lenders to the banks, which includes the savers, are called clients. The “Verbund” guarantees the fulfilment of obligations. In addition, the government explicitly guaranteed the obligations of the savings banks and federal state banks. In 2005, these public guarantees were abolished or “watered down almost completely” (Ayadi, Schmidt and Valverde 2009, 119-120). As a response to the cancellation of the public guarantees, many federal states have split the existing banks into new federal state banks and Federal State Development Banks (*Landesförderbanken*) (FSDBs). The FSDBs are not supposed to compete with private commercial banks and hence continue to be explicitly guaranteed by the federal states⁴⁷.

These development banks and the national KFW Bankengruppe are important for small business finance. Whereas savings banks can be indirect competitors, these institutions can be direct competitors of the GBs. The Association of German Public Banks (*Verband öffentlicher Banken, VÖB*) (2011) provides an overview of these 19 institutions which include the FSDBs and two national development banks, the KFW Bankengruppe and the Landwirtschaftliche Rentenbank which is specialised in supporting the agricultural sector. The KFW Bankengruppe is Germany’s largest development bank. It operates worldwide and supports small and medium sized enterprises (SMEs) all over Germany. One can calculate that altogether 12,000 people are employed at the development banks. The sum of the balance sheet totals almost € 860 bn. However, it has to be noted that the FSDBs also refinance themselves at the KFW Bankengruppe. Hence, the sum is not consolidated.

4.1.1.2 Public guarantee schemes in particular for company finance

This section analyses only public guarantee schemes that are explicit, although there are several implicit guarantee schemes in Germany, too⁴⁸. Within the European Union, all public

⁴⁷ For example, in Germany’s largest federal state, North Rhine-Westphalia (NRW), the NRW.Bank became the federal state development bank. The WestLB continued to be the federal state bank without an explicit guarantee for the obligations that were taken after 2005. But, like all other private and public troubled banks in Germany, the WestLB was bailed out during the recent financial and economic crises (Moody’s Investors Service 2010, Schrooten 2009, DSGV 2010).

⁴⁸ In addition to explicit guarantees, there are implicit guarantees for pensions, health-care systems and companies that are too big or too connected to fail. For example, the Deutsche Bahn AG (a rail and logistics company) is a stock company with 100% of the shares held by the government. The external debt summed to € 16.5 bn. in the year 2009. In the same year, to my knowledge, there were explicit guarantees supporting the

guarantees (or any other public support like grants or loans) have to be in line with both the regulation of the World Trade Organization and the sophisticated European State aid regulation. This European regulation will be discussed in the detailed analysis of the GBs in section 4.1.3.

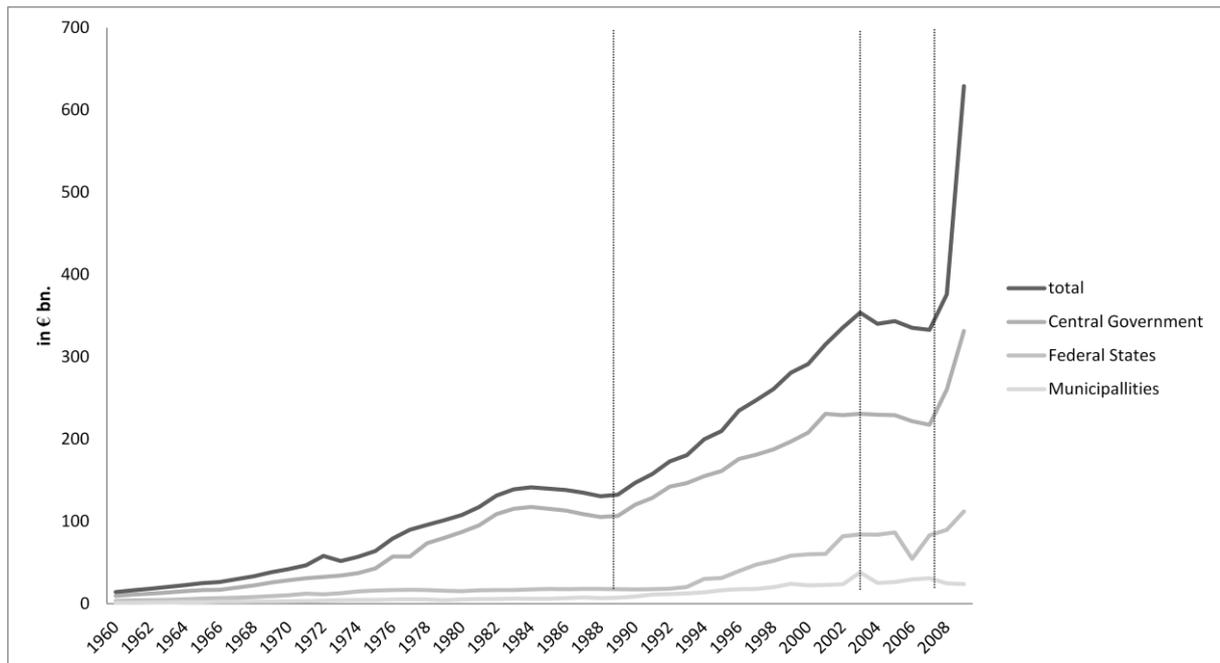
The Constitution (*Grundgesetz*) of the Federal Republic of Germany (FRG) divides power between the parliament and the executive and thus states in article 115 (1) that a parliamentary law is needed to authorise the executive to take debt or provide guarantees (Deutscher Bundestag 2009, 105). For example, there is a special law that guarantees the obligations of the KfW (*KfW-Gesetz*) (see the previous section). Another example is the engagement of the German government within the bailout of euro zone members⁴⁹.

Figure 25 provides an overview of outstanding guarantees in Germany since 1960. Data is provided by the Federal Statistical Office (*Statistisches Bundesamt*). The numbers do not represent all explicit public guarantees but only guarantees in the “Core Budget” (*Kernhaushalt*) such as guarantees approved under §3(1) of the federal budget law. For example, the guarantees to the public development banks are not included. Hence, the data is incomplete when the contingent liabilities to the public budget are analysed. Moreover, the data is not adjusted for inflation. Nevertheless, the data serves as an illustration of the use of credit guarantees as public policy in Germany.

company of “only” up to € 154m (Bundesministerium der Finanzen 2010b). The remaining debt can be considered to be implicitly guaranteed only. Indeed, Standard & Poor’s justifies its AA rating with a “very high likelihood” that the German government would support the company with timely, sufficient and extraordinary spending (Standard & Poor’s 2011).

⁴⁹ On 3rd of May 2010, the German Federal Parliament (*Deutscher Bundestag*) sanctioned a law that authorised a guarantee of € 22.4bn in favour for the KfW Bankengruppe which should provide finance to the Hellenic Republic (Greece) in cooperation with other European institutions (Deutscher Bundestag 2010). Only twenty days later, the Federal parliament sanctioned another guarantee authorisation of € 125bn that should be used for the European Financial Stability Facility. This time, the lender was not specified but the guaranteed finance should only be provided in cooperation with the International Monetary Fund, the European Commission and the European Central Bank, the so called “troika” (Bundesministerium der Justiz 2010). Soon after this short term facility was authorised, the Euro member started to negotiate a funded guarantee scheme (the European Stability Mechanism, ESM) that should start operations in 2013. The Federal Republic of Germany should guarantee up to € 125bn and provide € 22bn in cash to fund the scheme (Bundesministerium der Finanzen 2011). By November 2011, the executive was enabled to take the risk but politicians were still negotiating the arrangement of the ESM. This discussion included leverage ratios and whether the ESM should receive a banking licence and be able to provide liquidity, i.e. not only guarantees.

Figure 25 Time Series of Outstanding Guarantees in Germany in the Period 1960 – 2008



Own elaboration, source: Federal Statistical Office (2009)

Figure 25 shows that guarantees have been used since the 1960s. After the fall of the Berlin Wall, there was a significant increase of outstanding guarantees in the period 1989-2003. Guarantees were used by the new federal states in close cooperation with the central government in order to transform their economies. After a decrease in the period 2003-07, guarantees were used again after 2007 as counter-measures against the worldwide financial and economic crises. After 2008, the federal states and the central government increased their support of business finance through economic stimulus programmes. Under the name “Business Fund Germany” (*Wirtschaftsfonds Deutschland*), conditions and ceilings of existing guarantee schemes were relaxed and the Guarantee Banks received more public support. In 2009, the central government guaranteed a further € 154 bn.⁵⁰ via the Federal Agency for Financial Market Stabilisation (*Bundesanstalt für Finanzmarktstabilisierung, SOFFIN*) that was built to rescue German banks. The SOFFIN’s total commitment had increased to € 360 bn. in April 2011 (SOFFIN 2011).

The graph also shows that the outstanding guarantees of the central government have a higher value than the guarantees of the federal states. Within the official statistics, the outstanding guarantee value provided by municipalities is even lower. The total value of out-

⁵⁰ These guarantees are included in the value of total guarantees but not in the guarantee value of the central government.

standing guarantees is of macroeconomic relevance. For example, in the period before 1989 these values equalled 50% of the total outstanding debt of the FRG. This ratio decreased to an average of 25% in the period 1989-2008 before increasing again to almost 40% in 2009.

The budget of the Federal Republic of Germany provides an insight into the use and regulation of this fiscal policy. For the years 2010-11, it is estimated in the budget to receive cash of € 0.8 bn. in 2010 and € 1 bn. in 2011 due to fees and other “income”. On the other hand, it is planned to provide cash, due to calls on guarantees, of € 2 bn. in 2010 and € 1.8 bn. in 2011. Hence, the planned cash flow would result into a negative cash flow⁵¹ for the budget (Bundesrepublik Deutschland 2010, section 3208). Consequently, no financial self-sustainability is required by the budget plan, and the guarantees are usually not funded (beyond payments of fees during the fiscal year).

In the Federal Budget, section 3, paragraph 1, § 3(1) the “guarantee authorisation” (*Gewährleistungsermächtigung*), authorises to issue outstanding guarantees of up to roughly € 446 bn. in the year 2011 (Bundesrepublik Deutschland 2010, §3(1)).

Table 16 shows the ceilings for the years 2004, 2009-11 and the indeed outstanding guarantees for the year 2004. The paragraph breaks this limit into eight numbers, i.e. § 3 (1) 1 to §3 (1) 8, represented in Table 16.

⁵¹ Indirect flows such as an increase of tax revenues or decrease of social transfers are not included in this calculation.

Table 16 Guarantee Ceilings Authorised by §3 of the German Federal Budget Plan in the period 2004-09

Purpose	Authorisation				Outstanding
	2004 in € bn.	2009 in € bn.	2010 in € bn.	2011 in € bn.	2009 in € bn.
§3(1) 1 Exports	117	117	120	135	108
§3(1) 2 FDIs ⁵² , EIB and EIF	40	40	40	50	30
§3(1) 3 Financial Cooperation	2	3	5	6	1
§3(1) 4 Food stockpiling	7	7	7	1	7
§3(1) 5 Domestic economy	105	140	240	185	129
§3(1) 6 International financial institutions	47	47	58	62	51
§3(1) 7 Trust agency	1	1	1	1	1
§3(1) 8 Interest rates compensation	-	4	6	6	4
sum	319	359	477	446	331

Own elaboration; source: Bundesrepublik Deutschland (2010), Bundesrepublik Deutschland (2008), Bundesrepublik Deutschland (2004), Bundesministerium der Finanzen (2010b)

Table 16 provides an overview of the ceilings to provide guarantees (authorisation) according to §3 of the respective federal budget laws and the chapters 3208 of the budget plans (*Bundeshaushaltspäne*)⁵³. Number 5 is marked in bold since it includes the legal foundation for the counter-guarantees of the Federal Government for the GBs and other schemes to support German enterprises. Furthermore, the table shows that in the year 2009, ceilings of numbers 4, 7 and 8 were fully used. The ceiling of number 6 is lower than the actual outstanding guarantees. This indicates a supplementary budget or a special law that was sanctioned after the general budget.

Numbers 1 and 2 mainly apply to foreign trade and are the legal authorisation for the Foreign Trade and Investment Promotion Scheme, better known as “Hermes Guarantees”. Number 2 authorises guarantees to support Foreign Direct Investments (FDIs) of German companies and guarantees for the participation of the KfW Bankengruppe at the EIF. It also

⁵² FDI is the abbreviation for Foreign Direct Investments.

⁵³ In German: „Kapitel 3208: Bürgschaften, Garantien und sonstige Gewährleistungen. Einzelplan 32 Bundes-schuld.“

authorises guarantees for the EIB when finance is provided to borrowers outside the European Union. Both numbers sum to € 185 bn., i.e. 41% of the ceiling.

With respect to the Export guarantees (number 1), the Federal Ministry of Economics and Technology (*Bundesministerium für Wirtschaft und Technologie*, BMWI) (2011a) states that outstanding guarantees and claims against borrowers had increased from € 0.3 bn. in 1950 to values that varied between € 96 bn. and € 108 bn. in the period 1996 to 2010. The ministry furthermore states that during the last 12 years, the guarantee scheme had achieved a positive annual cash flow that was channelled to the Federal Budget. For example, in 2010, € 0.7 bn. was transferred into the budget. The ministry calculates that the accumulated losses of € 13.5 bn. in the period 1980-1998 were € 2.1 bn. lower than the profits in the period 1999-2010. However, this calculation does not include (calculatory) interest rate payments, and hence one should be careful in assigning financial self-sustainability in the long run (BMWI 2011a, 81,89). With respect to credit guarantees for FDIs (number 2), the BMWI (2011b) reports that the portfolio of outstanding guarantees had increased from € 14.3 bn. in 2001 to € 27.7 bn. in 2010. With respect to financial self-sustainability, the ministry reports that the guarantee scheme accumulated a positive cash flow and made net contributions to the federal budget (BMWI 2011b, 55-57).

Although the private companies Euler Hermes (Allianz) and PricewaterhouseCoopers manage the guarantee scheme on behalf of the government, the scheme is public (A1) of basic model one in the ODM approach since the private companies do not take the risk.

Number 3 enables guarantees for the finance through German financial cooperation with emerging and developing countries, largely provided by the KFW Bankengruppe but also via the World Bank Group⁵⁴. In the year 2011, this ceiling equalled roughly 1.3% of the total guarantee ceiling. The federal budget law requires that the partner government in the developing or emerging country has to guarantee the finance, too. Hence, if the KFW Development Bank provides a loan to a credit guarantee fund, the government has to guarantee this loan too, i.e. the main risk would remain in the partner country. In order to support credit guarantee funds, the development bank provides grants and technical support to the guaranteeing institution (interview 57). In addition, the KFW Development Bank can provide loans on its own risk where this requirement does not hold. The requirement does not hold for loans provided by the Deutsche Investitions- und Entwicklungsgesellschaft which is a daughter company of the KFW Bankengruppe.

⁵⁴ The World Bank Group denominates the International Bank for Reconstruction and Development (IBRD), International Financial Corporation (IFC), and the International Development Association (IDA).

Number 6 is also relevant for financial cooperation since it authorises the guarantees for the participation of the German government in international development agencies such as the World Bank Group, the European Bank for Reconstruction and Development, and the Inter-American Development Bank. This ceiling equals 14% of the total ceiling.

Number 4 authorises the public administration to provide guarantees for food stockpiling and market interventions. This ceiling was reduced to 0.1% of the total. Number 7 applies to successor agencies of the Trustee Agency (*Treuhandanstalt*)⁵⁵ and number 8 applies to ship-building finance. Authorisations of numbers 7 and 8 equal roughly 0.2% and 1.3% of the total ceiling respectively.

Number 5, which enables the central government to provide counter-guarantees to the GBs, contains the largest single ceiling, and represents 41% of the total. It authorises the government to provide guarantees of up to € 185 bn. for finance within Germany. The authorisation is for several guarantee schemes including those to support social projects, the agricultural sector and to improve infrastructure such as transportation or energy. A well-known infrastructure project is the airport Berlin Brandenburg International (European Investment Bank 2009, Senatsverwaltung für Finanzen Berlin 2008, Tagesspiegel 2008). In the following, only guarantees to support private businesses will be analysed.

On the subject of commercial enterprises (*gewerbliche Wirtschaft*), the law explicitly states that it only authorises the government to provide guarantees under the condition that there is no possibility to provide the finance without the public guarantee. This requirement clearly anchors the principle of subsidiarity in the legal authorisation of the public guarantees. Since the focus of the research is the system of GBs, other sometimes competing schemes will only be briefly discussed in order to characterise the “guarantee market”, i.e. the opportunities of lenders to share the risk with third parties.

In Germany, there are various systems of risk-sharing mechanisms that are used by government to improve finance for domestic private borrowers:

- 1) Credit guarantees of the central government (usually) in cooperation with the federal states (*Bürgschaften des Bundes und der Länder*);
- 2) Credit guarantees of the federal states (*Landesbürgschaften*);
- 3) Credit guarantees provided by the Guarantee Banks (*Bürgschaftsbanken*) that receive counter-guarantees from the federal states and the central government;

⁵⁵ In 1990, the agency was built to privatise or close the state companies of the German Democratic Republic.

- 4) Credit guarantees of the municipalities (*Kommunalbürgschaften*);
- 5) Special schemes for microcredit ;
- 6) Credit guarantees and “exemption of liability” (*Haftungsfreistellung*) provided by second-tier development banks.

Usually the same departments in the ministries of economics and finance manage the counter-guarantees and guarantees (1) to (3). The credit guarantees of the federal states (2) and sometimes in cooperation with the central government (1) usually analyse the borrowers with their own information case-by-case. The private mandataries such as PricewaterhouseCoopers and the public Federal State Development Banks often manage the guarantee scheme on behalf of the government. However, representatives of the government make the final decision (Kramer 2008, 79; interviews 25,27,29). Consequently, the schemes are public schemes of basic model one within the ODM approach. Despite cash flow during the financial year, guarantees are usually not funded. The credit guarantees of the central government and federal states (1) are usually irrelevant for small businesses. The federal states (2), however, can also provide guarantees of lower volume if the GB is not willing – or not able due to regulation – to guarantee the finance. For example, GBs are not allowed to support companies in financial distress (see section 4.1.3.3). A discussion of the schemes (2), (3) and (6) with case illustrations of schemes in the federal states Bavaria and North Rhine-Westphalia is provided by Kokalj, Paffenholz and Moog (2003).

Credit guarantees of the municipalities (4) seem to be relevant for municipalities. Unfortunately, insufficient information is at hand to analyse the activities of the municipalities. Furthermore, there are several schemes for micro-enterprises (5). Municipalities or ministries of can provide means into a special credit guarantee fund. One such scheme is the *Mikrofinanzfonds Deutschland* (renamed as *Mikrokreditfonds* in 2010) which is a public-private credit guarantee scheme managed by the GLS Bank. A specialised local institute, called Micro Finance Institute (*Mikrofinanzinstitut*) consults, screens and monitors the potential borrower. Moreover, it participates indirectly in the risk of default since the remuneration depends on default rates and it has to provide collateral of 20% of the loan portfolio. In the period 2005-09, 500 loans were supported. Outreach increased to 1.600 loans in the year 2010, which however remained modest (Mikrokreditfonds 2011, GLS Bank 2009).

For small businesses, development banks (6) usually provide grants or directed loans as second-tier institutions, and the on-lending banks bear the risk of the borrower’s default. In order to be more attractive for on-lending banks, the public development banks not only provide grants to the commercial banks (to compensate for administrative expenses) but

also loans where an "exemption of liability" is attached. In other words, the on-lending bank (not the borrower) is not obliged to pay back all of the refinance it has received from the development bank. Sometimes the "exemption" is of 100% and the development bank bears all the risk. The part of the loan for which the bank is not liable is sometimes also called the trustee loan⁵⁶.

As discussed in the introduction, these risk-sharing mechanisms are direct competing schemes to GBs. In an interview, a representative of KfW Bankengruppe, the largest German development bank, confirmed that the "exemption of liability" schemes are completely public (A1) and the decision-making process is of type B1.2 (Interview 51). Consequently, these schemes are of basic model one in the ODM approach.

The development banks usually only publish information on the provided soft loans without sharing information about how many liabilities of commercial banks were exempted. After the reunification, in the years 1992-2001, the development bank "Deutsche Ausgleichsbank" provided almost 40,000 loans with a value of € 3.6 bn. (accumulated) with "exemptions of liability" for start-up finance. In addition, other programmes not exclusively for start-ups had such exemptions, too. The bank entered into financial distress and became part of the KfW Bankengruppe. In the year 2008, the Association of German Public Banks (*Verband öffentlicher Banken, VÖB*) reports that in the period 1998-2007 the member institutions had provided grants between € 2.8 bn. and € 4.9 bn. and loans between € 13.3 bn. and € 28.1 bn. each year to support businesses (on top of finance for housing and the agricultural sector) (VÖB 2008, 3). In the following years (2008-09), the public agencies had provided grants of € 3.9 bn. and € 4.6 bn. respectively, and loans of € 20.5 bn. and € 22.8 bn. respectively. On top they provided loans to commercial banks during the financial crises (without any direct participation of the development bank in the decision-making process of each loan to a company, called *Globaldarlehen*) of € 1.8 bn. and € 2.4 bn. respectively. For this period, the association also provides information of the members' guaranteeing activity including the "exemption of liability". Approvals of these commitments to support businesses summed to € 1.8 bn. and € 6.2 bn. in the years 2008 and 2009 respectively (VÖB 2010, 5-8).

The numbers show that public development banks provide loans and grants, and achieve a high outreach. In addition, the public banks share the risk with the commercial banks. Data for these risk-sharing mechanism is scarce but it can be noted that at least in the turbulent

⁵⁶ In Germany, there is no legal exact foundation. A partially "exempted" loan fictitiously splits into two loans. The first remains with the on-lending bank and the second is transferred to the second-tier institution. This second loan is similar to a directly provided loan of the development bank to the borrower (Kokalj, Paffenholz and Moog 2003, 98).

year 2009, the additional outreach by volume was a not negligible € 6.2 bn. This flow is larger than the value of outstanding guarantees, i.e. stocks, of GBs.

As discussed in the theoretical chapters, not only the percentage of the exemption (or guarantee), but also the rights on provided collateral are important. The part of the loan that was “exempted” from the liability was usually only subordinately collateralised in the past (Kokalj, Paffenholz and Moog 2003, 98,99). Consequently, in the case of default, the liquidation of collateral first satisfied the claims of the on-lending bank and only then the claims of the development bank. Hence, the development bank’s share of risk was higher than the share of exemption. In the extreme case, the on-lending bank’s risk could have been lower than the estimated value of existing collateral. This distribution of the risk can lead to moral hazard. Within interviews conducted during 2007 (in the region of Berlin and Brandenburg) many practitioners explained that the programmes with “exemptions of liability” were cancelled due to high defaults (Kramer 2008, 54). Consistently, in Bavaria, the FSDB Bavarian Federal State Loan Agency for Development (LFA) calculated with default rates between 6% and 8%. However, interviewees expected default rates to be higher (Kokalj, Paffenholz and Moog 2003, 140). The cancellation of these risk-sharing mechanisms was only temporary. Soon, new loan programmes with “exemptions of liability” were provided again. Now, however, the cash of liquidated collateral is divided relative to the share of exemption between the on-lending bank and the development bank (Interview 29).

Default rates, however, are not only determined by the risk sharing and moral hazard problems between the lender and the guarantor (or second-tier development bank). The general purpose or target group affects the default rates, too. Several interview partners stated that default rates vary significantly. Finance for established enterprises does not usually incur high default rates, unlike finance for start-ups where rates above 33% are normal. These rates can rise to 70% for start-up finance for borrowers that were unemployed before. It was not possible to confirm these numbers in the literature. However, they are consistent with appraisals of several interviewees⁵⁷.

All in all, there are several public risk-sharing mechanisms that can be used by lenders. This implies that the government can also choose among public or publicly supported institutions that can share the risk with lenders, and indirectly support the borrowers.

⁵⁷ No quotation of interviews due to guarantee anonymity.

4.1.1.3 Importance of securitization for business finance and development bank initiatives

Lenders can use securitization to receive liquidity and reduce their outstanding risk. The latter can also be achieved via credit derivatives. Hence, these tools can be an alternative to any credit guarantee scheme. Indeed, the European Investment Fund (EIF) provides both credit guarantees and credit derivatives. Kraemer-Eis, Schaber and Tappi (2010) state in their EIF working paper that securitization “can play a positive role in extending the sources of finance to the real economy”. However, “there were undoubtedly parts of the structured finance market which at least partially caused and clearly exacerbated the financial crisis” (Kraemer-Eis, Schaber and Tappi 2010, 3). This section focuses to the question whether securitization and credit derivatives are important for small business finance in Germany.

In section 3.1.1 three schemes with impressive outreach were analysed. AIG alone had a US\$ 2.7 trillion over-the-counter derivatives portfolio which also included credit derivatives. The volumes with respect to securitization of loans that were provided in Germany are lower: KFW Bankengruppe and Moody’s calculate that the volume of securitizations has increased from € 14 bn. in 2001 to € 76 bn. in 2008. In the years 2009 and 2010, the volumes decreased to € 34 bn. and € 13 bn. In the period, the number of transactions varied between 14 and 54 per year. The German securitization market is of less quantitative importance than, for example, in Great Britain. In addition, the volume of securitization in Spain has been higher than in Germany since 2004 (KFW Bankengruppe 2011a, Kraemer-Eis, Schaber and Tappi 2010, 16). With respect to the finance of small businesses, the EIF calculates that the share of SME securitization to all securitization in Europe had increased from 6% in 2001 to 16% in 2009. Consequently, in European and German securitization, high volumes can be noted but with respect to SME finance, the importance has remained limited.

The EIF is engaged in guaranteeing securitization of German SME loan portfolios. All guarantees provided in Germany summed to roughly € 1 bn. in 2009 (European Investment Fund 2010a, 36); consequently, the value of securitization is less. For example, the “CoSMO Finance 2007-1” is a synthetic securitization where the German bank Commerzbank continues to hold its loans within its balance sheet but credit risks are outplaced. The bank securises a portfolio of loans to German mid-sized companies (Commerzbank AG 2007). The Commerzbank (2007) reports that this portfolio had a value of roughly € 2 bn. with loans of up to € 2 m. provided to 1,830 clients. Moreover, the bank reports that the securitization was successful and the bank’s clients should benefit with a better pricing due to the outplacement of the risk. In comparison: this single transaction is higher by volume than the provided guarantees of all German GBs in the same year but lower by number of borrowers.

The KfW Bankengruppe informs that it supported 69 transactions with a notional amount transferred to capital markets of € 125 bn. on its platforms “Promise” and “Provide” in the period 2000-2010. The development bank’s aim is to indirectly support small and medium sized businesses and home owners. The KfW Bankengruppe does not only provide a platform for private traders with standardised products but also acts as an intermediary itself. The credit risk of the selected portfolio is transferred via guarantee to the development bank, which simultaneously transfers the risk to investors (KfW Bankengruppe 2010). In other words, the institution is a “guarantee intermediate” between the protection seller and buyer since it provides a public guarantee and receives a private counter-guarantee. Because the KfW Bankengruppe⁵⁸ guarantees portfolios and there is a cooperation of public and private guarantors, this is a guarantee scheme of basic model four in the ODM approach.

Default rates of all US securitization was estimated to be 6.2% in the period 2007-10. Sub-prime portfolios had default rates of almost 20%. On the other hand, the default rate of all European securitizations at 0.65% is significantly lower. The KfW reports that the accumulated losses of German SME CLOs are only 0.16% (Bräuning and Hille 2010). Bräuning and Hille (2010), members of the board of KfW Bankengruppe and DZ Bank⁵⁹ respectively, emphasise standardisation and regulations as success factors. In the EIF working paper (2010), the authors provide five key success factors of securitizations (Kraemer-Eis, Schaber and Tappi 2010, 22):

- 1) Granular and diversified portfolios;
- 2) Transparent and standardised structures (without multiple securitization);
- 3) Proper and transparent incentive structures which are able to avoid moral hazard;
- 4) Loans should be originated in line with relationship banking and;
- 5) Investors or guarantors should perform their own analysis and due diligence, and should not rely only on external ratings.

Consequently, in Germany, securitization and risk-sharing exist also with respect to SME finance. However, volumes are significantly lower than in the examples of “joint responsibility”. The low default rates in Europe show that securitization and portfolio guarantees can be managed in a more sustainable way. This, however, requires a control for the moral haz-

⁵⁸ As discussed in the previous sections, the German government is explicitly liable for all the KfW’s obligations.

⁵⁹ The DZ bank is a central institution within the German group of cooperative banks. The banking group’s internal securitization system “VR Circle” will be described in the following section.

ard problems such as risk sharing, transparency and that institutions who take the risk (as guarantors or investors) should know their risk. This control for the moral hazard problems can be partially achieved with a long-term relationship and repeated interaction between the risk-sharing parties. The section will be closed with a positive example of risk-sharing on portfolio level. Insurance companies and re-insurance companies share their risks on a portfolio level, and often the business relationship is based on a long-term relationship.

4.1.1.4 Private guarantee schemes

In the empirical analysis in Germany, few completely private credit guarantee schemes (A3) were found – except personal guarantees and derivatives that are not the focus of this research. In the following, the risk taking of insurance companies, the risk taking of members of cooperative banks, risk sharing schemes within the network of cooperative banks and a private Credit Guarantee Societies (*Kreditgarantiegemeinschaften*, KGG) will be briefly outlined.

The above mentioned Foreign Trade and Investment Promotion Scheme is a public scheme but export guarantees are managed by Euler-Hermes which is a credit insurer that is owned by the insurance company Allianz. Beyond the management of the public support scheme, the insurer itself “sells protection” against payment delays and defaults for the domestic and exporting business. Hence, they provide financial services that are valuable for small and medium-sized companies. However, in contrast to credit guarantee schemes, the credit insurer usually insures the claims of the enterprises and not the ones of the banks. The insurance products reduce the enterprises’ risks and hence can indirectly reduce the risk of the bank that provides loans to the enterprises. Indeed, banks – and Guarantee Banks – urge their borrowers to buy protection from insurance companies. Any reduction of risk can reduce the lenders’ collateral requirements and hence be an indirect competitor to GBs.

In addition, German insurance companies sell insurance to banks for consumer finance (*Konsumkreditversicherung*). This is indeed relevant for small businesses, since there can be an overlap between consumer- and company finance.

The outreach of the risk taking by insurers is indeed impressive. The German Insurance Association (*Gesamtverband der Deutschen Versicherungswirtschaft*, GDV) reports that risk cover of trade credit insurance was over € 312 bn. in the third quarter of 2010 (GDV 2010). These insurance products will not be analysed further. Nevertheless, it should be recorded that

risk-taking of insurance companies influences the finance of small businesses and can directly or indirectly reduce the lenders' risk.

The banking group of regional cooperative banks, that are often called Volksbanken or Raiffeisenbanken, has a joint liability mechanism that urges all members of the group to provide mutual financial help if needed. This guarantee scheme is similar to the joint liability of the Savings Bank Finance Group and is organised in the form of the "Verbund", too. All deposits are guaranteed 100% by the "Verbund" similar to the deposits at savings banks. The main difference is that cooperative banks do not have public shareholders, and a public bailout is less likely, and – to my knowledge – has never occurred in the FRG.

Similar to the set-up of the savings banks, the "Verbund" of cooperative banks can be interpreted as the guarantor, and the individual cooperative bank as a borrower in an Basic Triangular Relationship, since this guarantee scheme guarantees the bank's liabilities. Lenders are the clients, often in the form of members, with net claims against the bank (depositors and other clients)⁶⁰. In the case of a bankruptcy or financial distress of a cooperative bank, there are two parallel guarantees.

First, as was discussed in the theoretical section, the owners (members of the cooperative) may provide a joint liability. Indeed, in the past, members were unlimitedly liable to the cooperatives' claims. Nowadays, the members are either only liable with the paid in equity or guarantee in the sense that they are normally obliged to make limited financial contributions in the case of insolvency (*Nachschusspflicht*). However, since the 1930s the member guarantees have never been called in the Federal Republic of Germany (Arbak, et al. 2010, 32).

Second, similar to the savings banks, the financial institutions in the "Verbund" of German cooperative banks are jointly liable. Indeed, several cooperative banks have entered into financial distress and received support. For example, the Berliner Volksbank received a € 1.7 bn. rescue package in the period 2001-06 (faz.net 2008). Members of the bank in Berlin were not obliged to fulfil their guaranteed promise but the national "Verbund" provided the rescue.

Arbak, Ayadi, Groen, Lliwellyn and Schmidt (2010, 33) emphasise that there is the problem that members may have limited incentives to "get involved in the affairs" of the bank, or to monitor its management, i.e. also to provide equity. These limited incentives are explained with: the fact that each member has only one vote in the general assembly; they cannot sell their shares freely on the market; and the existence of the explicit guarantee on top the paid in equity (*Nachschusspflicht*). The authors underline that, contrary to the experience in Ger-

⁶⁰ German cooperative banks can provide financial services to non-members, too.

many, this lack had led to the failure of many cooperative banks in developing countries (Arbak, et al. 2010, 33)⁶¹. In addition, Schulze-Delitzsch (1897) and Kluge (1991) report drawbacks of the German credit cooperatives at the early stage (Kluge 1991, 46-48,169, Schulze-Delitzsch 1897, 12,32).

Kern (2008) provides an overview of instruments for the transfer of credit risk that can be used by cooperative banks. The author identifies the credit guarantee scheme called “Standard-meta” and classifies it as a traditional risk-sharing product (Kern 2008, 57). The DZ Bank AG German Central Bank of Cooperative Banks (*DZ BANK AG Deutsche Zentral-Genossenschaftsbank*, DZ Bank) provides credit guarantees. The guarantees are called Standard-meta since their decision-making process is standardised and used within the “meta-business”, i.e. when the central bank cooperates with the member banks in financing enterprises. The decision to provide a guarantee or not is based on the borrower’s rating which was done by the lender (the cooperative bank). Thereby the member bank uses a rating tool that is commonly used in the banking group and hence known to the DZ Bank AG (Kramer 2008, 94), (Interview 52). In the ODM approach, the decision-making process is of type B1.2, and since DZ Bank AG guarantees 50% of the risk, the guarantees are partial. Since no public actors are involved, the scheme is of basic model five.

In interviews, representatives reported low transaction costs and that member banks were satisfied with the product that helped to improve finance for better rated borrowers (Kramer 2008, 94). The DZ Bank AG (2005) reports that within the initial pilot phase, 350 applications were applied and € 40 m. were guaranteed in 2004 (DZ Bank AG 2005, 21). The financial statements for 2008 report that through the joint loan business (*Gemeinschaftskreditgeschäft*), i.e. where the DZ bank cooperates with the cooperative banks, applications of cooperative banks summed up to € 4.3bn. In the same year, 424 guarantees and roughly 1,000 loans were provided. The jointly provided loans summed to roughly € 4bn.

⁶¹ As an answer for the question how current German cooperative banks deal within this problem, Arbak, Ayadi, Groen, Lliwellyn and Schmidt (2010) provide the following arguments that may be interesting for credit guarantee cooperatives, too: 1) There is competition to which the cooperative banks are exposed nowadays. Lenient management might press staff and customers to leave the organisation. 2) There are regular and comprehensive audits by regional Audit Associations. The auditors do not only audit financial statements but also the management. Indeed, good auditors have good chances to become managers of cooperative banks in the future. 3) The “Verbund” is not only a protection scheme but some kind of governance system. First, the contributions to the protection scheme depend on the audit and hence affect the profitability of the cooperative banks. Second, managers fear being dismissed if they incur too much risk and if the auditors become aware of this fact. 4) Moreover, cooperatives banks are regulated as banks (Arbak, et al. 2010, 33-35). Consequently, the explicit guarantee is not only a system to share or pass forward the risk which may induce moral hazard problems. But it implies the right to monitor the members – exactly in order to control for moral hazard problems and the general problem of a lack of ownership in cooperatives.

which implies that the volume of provided guarantees was roughly € 300 m. and the average value of a guarantee was below € 700,000 (DZ Bank AG 2009, 37).

These numbers show that the jointly provided loans were of more importance for the cooperative banks. Since refinance via deposits is usually not a problem for German cooperative banks, this preference can either reflect a general scepticism against guarantees, the fees, and generally better conditions of the jointly provided loans. Another approach to explain this preference is the decision-making process. Within the guarantee scheme, the DZ bank relies on the cooperative bank's information (B1.1). On the other hand, when loans are provided jointly, the cooperative banks can also rely on the decision made by the DZ bank that is more specialised on financing of larger volumes. Indeed, the average volume of the jointly provided loans is with € 4 m. much higher than the average volume of the guaranteed finance.

In addition to the credit guarantees and loans that are provided by the central bank, the "Verbund" uses the synthetic securitization scheme "VR Circel" for a risk transfer among cooperative banks⁶². The DZ Bank administrates the scheme but does not take any risk. In the period 2005-09, 6 transactions were realised with 13 to 33 banks participating. Altogether, a volume of € 434 m. was securitised. Through the securitization scheme, 455 borrowers that received financing of € 1.3 bn. were indirectly involved (Hille and Hillmer 2009). It has to be noted that € 1.3 bn. in 5 years is a relatively modest number for the banking group. Unfortunately, the authors, both representatives of the DZ bank, do not share information on defaults. Nevertheless, it is a risk-sharing mechanism and potentially in competition with other credit guarantee schemes such as the ones of the Guarantee Banks.

Another private credit guarantee scheme (A1) is a risk-sharing mechanism of Germany's largest food retailer EDEKA, which is structured as a cooperative. The group of retailers has its own bank. The EDEKA Bank is a universal bank that provides financial services to the retailers and their employees⁶³. With respect to the finance of the retailers, the bank cooperates with public agencies that provide grants and soft loans. In addition, the bank has established the EDEKA Credit Guarantee Society (*EDEKA Kreditgarantiegemeinschaft*, EDEKAKGG). This is a limited company owned by the EDEKA Bank and other central institutions within the EDEKA network. It is specialised in providing partial credit guarantees for start-up finance

⁶² The scheme is an internal scheme of the banking group and does not rely on external ratings or investors. The relationship between the bank and the borrower is not directly affected since the banks uses synthetic securitizations and the loans remain on the balance sheets. The member banks sell these synthetic loans (or a part of a loan) to a special purpose vehicle that has the aim to create a diversified portfolio. In return, the member bank buys an equal value of the portfolio (Hille and Hillmer 2009).

⁶³ The bank has the juridical form of a stock company and it is a member of the German cooperative banking group. Hence it participates in the joint-liability scheme.

which includes new supermarkets and the transfer of existing supermarkets to new owners (EDEKABank 2011). With respect to outreach, the EDEKA Bank had claims against non-banks of almost € 1 bn. (EDEKABank 2010, 3). All in all, the EDEKAKGG is a small institution working in close cooperation with the EDEKA Bank. Within the survey, a representative of the EDEKAKGG confirmed that the scheme is completely private, and any borrower is screened with their own information (survey 11). Consequently, the scheme will be considered of basic type five (A3, B1.1). However, because of the very close cooperation with the EDEKA Bank, the guarantee scheme could also be interpreted as a special purpose vehicle within the EDEKA group or a special risk fund for the EDEKA Bank.

Unlike the unlimited joint liabilities of the cooperative and savings banks, the remaining private banks do not unlimitedly guarantee for each other. Nevertheless, there is a private guarantee scheme. The voluntary “Deposit Protection Fund of the Association of German Banks” exists in order to safeguard the deposits of clients. The guarantee scheme is not a guarantee scheme that obliges members of the association to bail out the other members. Another difference to the guarantee schemes of the savings and cooperative banks is that it does not guarantee 100% of the deposits (Bundesverband Deutscher Banken 2011). This voluntary guarantee scheme had to be supported by the central government via the SOFFIN (see the previous sections) when the German subsidiary of Lehman brothers entered insolvency and obligations against the fund increased from € 5.5 bn. to € 7.5 bn. (European Commission 2009).

Hence, there can be noted less cooperation among private non-cooperative competing banks than among members in the “Verbund” of savings banks and the “Verbund” of cooperative banks.

4.1.1.5 Interim results

The following table summarises credit guarantee schemes in Germany. However, not all schemes that were discussed in the previous section are included in the differentiation, either because there is insufficient information or the schemes are not focus of the research.

This section described several potentially competing institutions of Guarantee Banks such as the Federal State Development Banks (*Landesförderbanken*) and second tier institutions within the “Verbund” of cooperative banks. Indeed, every lender has the following options to share the risk, beyond taking collateral and personal guarantees:

- 1) The lender can jointly provide finance with other lenders.
- 2) Insurance companies provide several “indirect guarantees” available to the lender such as credit insurance, life insurance or publicly supported export guarantees. With respect to consumer finance there is a direct risk sharing between lenders and insurance companies.
- 3) Targeted to support domestic borrowers, there are several public guarantee schemes financed by municipalities, development banks, federal states and the central government.
- 4) There are several risk sharing mechanisms provided by the Federal State Development Banks and the KfW Bankengruppe. This support includes liquidity provided by directed credits in combination with partial or total “exemption of liability”.
- 5) The cooperative banks can receive credit guarantees from their “central bank”, the DZ Bank. In addition, cooperative banks can use synthetic securitization within their “Verbund”.
- 6) There is also the possibility to outplace risk via securitization on portfolio level. This can be completely private or supported by the public agencies KfW Bankengruppe and the European Investment Fund.
- 7) In addition, the lenders can also buy protection via credit derivatives.

With respect to the “no magic formula” hypothesis, only credit insurance seems to satisfy all four requirements (see section 2.4). Indeed, they are private schemes and have a notable outreach. However, it is hard to judge whether the additionality is high or in other words, what would happen if insurance companies would not provide this financial service. The public credit insurance scheme to promote exports comes very close to achieving all four goals of the hypothesis. However, in the calculation of financial self-sustainability, the (calculatory) interest rate payments of losses in the past were not included. In addition, a significant increase of payments is not unlikely due to the current financial and economic crisis. Since the export guarantees are managed by a credit insurance company (Euler Hermes), it is likely that if the business were to be profitable, the private insurance company would conduct the business on its own.

A German bank, like any bank anywhere, can take the risk on its own, possibly with personal guarantees and collateral. This section has shown various opportunities to share the risk with third parties. In other words, banks can shop for guarantees.

4.1.2 An analysis of the predecessors of the German Guarantee Banks

This chapter outlines basic designs of predecessors of the German Guarantee Banks. The aim is to improve the understanding of the design of the current scheme in Germany, to reveal several documented conflicts, and to enrich the comparison of German GB with Brazilian associations. Since aims of current Brazilian policy makers roughly equalled the aims of German policy makers in the 1950s, this chapter focuses on the process of institution building in West Germany in the 1950s. In addition, the analysis of this period is interesting since several interviewees reported that the GBs' predecessors have been important in the 1950s, i.e. have contributed to the German "economic miracle" (*Wirtschaftswunder*).

Because no credit guarantee schemes were built in the German Democratic Republic, the analysis focuses on West Germany and the reunified Germany.

The chapter is structured in chronological order. First, section 3.2.5.1 provides a brief outline of schemes before the foundation of the Federal Republic of Germany. Section 3.2.5.2 provides a brief analysis of institutions within the Augmented Triangular Relationship that were engaged in the process of institution building. Section 3.2.5.3 provides a more comprehensive analysis of the process of institution building of Credit Guarantee Societies (*Kreditgarantiegemeinschaften*, KGG). Section 3.2.5.4 follows the development of KGGs between 1960 and 1979, and in section 3.2.5.5 there is an outline of their development in the 1980s, beginning the transformation process of KGGs to Guarantee Banks. In chapter 3.2.5.6 the institution building process of schemes after the German Reunification will be outlined, and finally section 3.2.5.7 draws conclusions of the historical analysis.

This analysis is primarily based on the empirical research of Fischer (1959), Brinkmann (1969), Giebitz (1987), Kaufmann and Kokalj (1989), and Kokalj, Paffenholz and Moog (2003). Moreover, further literature on credit cooperatives provided by Kluge (1991) and Schultze-Delitzsch (1897) was used, too.

4.1.2.1 Credit guarantee schemes before 1945

At the end of the 17th century, savings banks were founded in Europe. These institutions were either public, such as in Prussia, or private such as in England. Union banks, also called cooperative banks, were founded later. As already discussed, these cooperatives were joint-liability schemes and consequently similar to guarantee schemes. Soon after these first cooperatives were founded in England, the self-help movement spread over to continental Europe in the mid 19th century. By 1870, 740 People's Banks (*Volksbanken*) across Germany had 314,000 members – usually small family-led enterprises in the handicraft sector. In agriculture, 17,000 cooperative banks were founded before World War I. These credit cooperatives were often named after the movement's initiator Friedrich Wilhelm Raiffeisen and were the most important provider of loans to the agricultural sector. Many cooperative institutions relied on private self-help where members provided guarantees⁶⁴. Public support (and influence) was not welcomed in many cases (Pohl 1993, 229-231, Schulze-Delitzsch 1897, 12)

Within the context of the private self-help movement, credit guarantee schemes were established. For example, in the 1850s, guarantee- and liability societies (*Bürgschafts- oder Haftungsgenossenschaften*) emerged in the German region of Westphalia. These private associations guaranteed loans of local public savings banks. However, according to Kluge (1991), these associations were short lived due to competition with credit unions and their philanthropic character (Kluge 1991, 388-390). Between 1905 and 1920 several specialised credit guarantee cooperatives emerged, however, also disappeared soon after their founding (Brinkmann 1969, 36-37).

A central lesson learned from this period, marked by the movement of private self-help, is that no credit guarantee cooperatives survived economically. Only credit cooperatives successfully developed.

Only after World War I did more successful schemes emerge in Saxony. In 1923, on the initiative of a German association for middle-sized enterprises (*Reichsdeutscher Mittelstandverband*), Liability-Cooperatives (*Haftungsgenossenschaften*) were built to enable finance. Lenders were the predecessors of local savings banks. These Liability-Cooperatives allowed

⁶⁴ In the 19th and 20th century, it was common that members of cooperative banks were completely liable for the banks' obligations. The members liability was in a special form of a personal guarantee (Nachschusspflicht). Hence, there was a joint liability or guarantee mechanism of the members. However, after 1889, legislation on cooperative banks enabled membership with a limited personal guarantee (Kluge 1991, 167-176, Schulze-Delitzsch 1897, 23,31).

local businesses to participate in the decision-making process of the public banks. Most institutions had the legal form of cooperatives, however, some were stock corporations or limited partnerships (Giebitz 1987, 34-37, Kluge 1991, 389, Fischer 1959, 82).

There are indications that local institutions followed the Commercial Approach since (i) new members had to provide equity of 10% of the loan to be guaranteed, (ii) some schemes provided dividends of around 5%, (iii) especially in smaller cities, the schemes provided guarantees to known businessmen and (iv) schemes usually had low default rates and were able to accumulate equity (Giebitz 1987, 34-37). By 1933, 10 years after institution building, the Saxon scheme consisted of approximately 80 institutions. Outstanding guarantees summed to 62m Reichsmark (€ 248 m. in 2008 prizes). During the Great Depression, the system continued to be stable and these institutions enabled additional finance of working capital. The scheme stopped its operations during World War II, and was not rebuilt when Saxony became part of the German Democratic Republic (*Deutsche Demokratische Republik*) (Fischer 1959, 81-85, Kluge 1991, 389-390).

Although in the Saxon scheme the cooperatives had private members, in many cases the local mayor was the director of the cooperative, and especially among smaller cooperatives, the administration was usually done by the local public bank (Fischer 1959, 83). In addition, there was a guarantee of 50% provided by the Saxon Association of Giro Banks (*Giroverband Sächsischer Gemeinden*) in case the cooperative was not able to comply with the obligations to the Giro Banks (Kluge 1991, 35). Consequently, the Saxon Liability-Cooperatives can be considered to be a cooperation of public and private actors. They were of basic model three within the ODM approach since literature indicates case-by-case decision-making process.

These schemes are of special interest for this analysis, because there was a conflict between the guaranteeing institutions and the credit cooperatives. The private business association's vision was both to improve finance with these guaranteeing institutions via "symbiotic" cooperation with the public banks, and they should even abolish the existing credit cooperatives (Kluge 1991, 389-390). On the other hand, Hegg (1932) reports that opponents of these new guaranteeing institutions argued that cooperative banks are the better institutions because they are able to provide financial products such as savings and loans together and independently (Hegg 1932, 13).

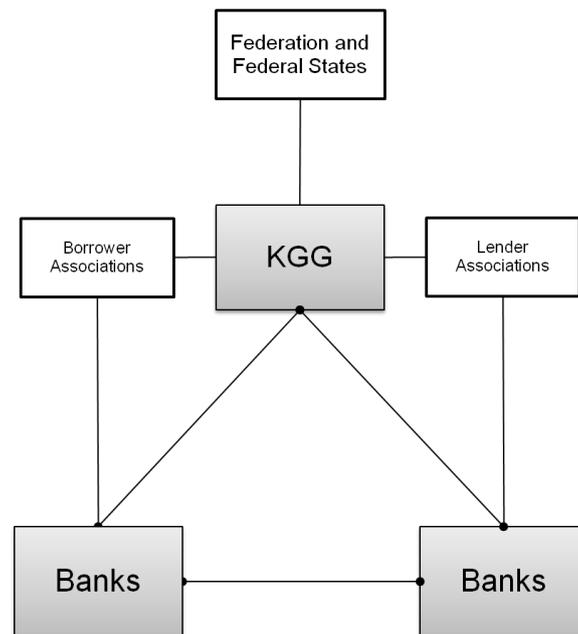
This conflict underlines the indirect competition between banks and guaranteeing institutions. In this case, the borrowers had the option to choose between joining a cooperative bank or to join a liability cooperative that cooperated with public savings banks.

In 1933 and 1934, several Guarantee Associations (*Garantieverbände*) were implemented through Hitler's "Battle for Employment" (*Arbeitsschlacht*). It was planned that these associations should be temporary aid only. Usually these guaranteeing institutions had public and private equity, and were built in the legal form of limited liability companies (*GmbH*). Bank associations, chambers of commerce and handicrafts were introduced into the new schemes (Fischer 1959: 86). Usually chambers provided information on the borrowers and in some schemes, Hitler's National Socialist German Workers' Party (*Nationalsozialistische Deutsche Arbeiterpartei*) participated directly in the decision-making process. All in all, these institutions had moderate outreach. For example, in Württemberg 226 guarantees were provided before 1939 and in the large region of Berlin Kurmark, only 4,510 guarantees were provided before 1937. The institutions stopped operation toward the end of the 1930s (Giebitz 1987, 37-44, Fischer 1959, 86-99). Since little literature is at hand and this research focuses on schemes in democratic and market-oriented economies, these schemes will not be analysed further.

4.1.2.2 Background information on important institutions after World War II

Before the process of institution building of Credit Guarantee Societies (*Kreditgarantiegesellschaften* KGGs) will be analysed in detail, this section briefly outlines important issues regarding the actors within the Augmented Triangular Relationship, which is shown in figure 26.

Figure 26 ATR of German KGGs



Own elaboration

After the end of World War II in 1945, the occupying powers started to denazify Germany and cast a critical eye on the associations and chambers that had played an active role within the Third Reich (Chesi 1966, 133-134). However, chambers were not an invention of the Nazi regime. The German system of associations had its origins (at least) from the time of the Corporate Society (*Ständische Gesellschaft*). Feudalistic compulsory corporations remained after the transformation from the Corporate Society to the Civil Society (*Bürgerliche Gesellschaft*) in the 19th century. In this new order, citizens were allowed to choose their profession; however, entrepreneurs were obliged to participate in the chambers. These chambers were public-law institutions, integrated into the system of public authorities. Chambers had private self-governing elements, too. In addition, private associations without compulsory membership coexisted, and a dual system of private associations and public chambers was born (Lösche 2007, 22-26). By the time of the Weimar Republic (1918-1933), a diversified

system of public, private, specific, regional and national associations existed. Within the Third Reich, Nazis shut down the diverse system of competing chambers and associations. Until 1945, only united associations (*Einheitsverbände*) existed without private competitors, and with compulsory membership (Lösche 2007, 31-33).

In 1948, one year before the foundation of the Federal Republic of Germany (FRG), a directive ordered the freedom of trade (*Gewerbefreiheit*) in the US sector. Moreover, chambers of public-law were directly forbidden. However, chambers successfully organised demonstrations and protests, and local parliaments sanctioned laws that were inconsistent with the directive (Chesi 1966, 135-173). In 1952, the National Confederation of Skilled Crafts (*Zentralverband des Deutschen Handwerks, ZDH*) was established. In 1953, a law was sanctioned that established the regional chambers of crafts as public-law institutions. These chambers were responsible for public functions such as professional education and licensing. Also at this time, membership became compulsory (Chesi 1966, 178-210).

As a consequence, a system of public chambers and private associations similar to the system from the Weimar Republic was (re)built. Although chambers were inheritors of a long history, they were “young institutions” and had to re-establish their core activities.

With respect to the lenders, a two-tier financial system was rebuilt after 1945. It included the central bank (or rather central banks in the first years) and the three pillars of commercial banks as universal banks (public, private corporate and private cooperative) as well as several special banks. In the western states, most banks either continued to be universal banks or transformed towards this type (Wolf 1980, 111-112). However, in the very beginning, universal banks were generally questioned, and there were voices to forbid these institutions. The dual banking system, which had been introduced in the USA only two decades before, was the alternative (Glass-Steagall Act in 1931). Indeed, the dual banking system was introduced in Japan after World War II (see section 3.1.2).

A brief look at the state of art of the commercial banks will provide valuable information to understand the institution building process of the credit guarantee schemes:

- The three major private banks (Deutsche Bank, Dresdner Bank and Commerzbank) were split and decentralised into nine to eleven separated institutes. In 1956, these institutions merged and were rebranded under the three old names. Consequently, the private banks occupied themselves with their internal structure to re-achieve their old size (Büschgen 1997).
- Savings banks were able to start “well-ordered” operations only after the monetary reform in 1948. In 1953, the juridical reform of special legislation on saving banks

(*Sparkassenrechtsreformen*) was established. As a result, savings banks were local public commercial banks with their own status and corporate governance with management and board. The public owners were liable for all obligations due to an explicit guarantee (*Gewährträgerhaftung*). A system of 887 local public commercial banks soon emerged. Moreover, a system of second-tier institutions on regional and federal state level (with public equity) was established and saving banks were transformed into universal banks (which was not the case for all institutions before). Savings banks provided financial services to small business of different sectors and captured 63.5% of all savings in Germany in 1960 (Mura 1997). Hence, these banks were the market leader.

- In 1950, there were around 12,000 small cooperative banks that were exclusive for specific members⁶⁵. Cooperative banks were often not able to increase share capital. Structural changes were needed. Due to the competition with private corporate banks and savings banks, cooperative banks had to decide whether they would remain within their (decreasing) niches and uphold their cooperative ideals, or transform into local universal commercial banks that were open for all. All in all the institutes chose the latter option and in the 1950s, cooperative banks began their lasting transformation process from exclusive banks to open universal banks (Kluge 1997).

Hence, all financial institutions were undergoing deep structural transformations and their place within the political economy was not fixed. Indeed, the general model of universal banks was questioned and there were signs of a fundamental clash between the banking groups. Indeed, both types of regional banks (cooperatives and savings banks) chose a growth strategy in respect to outreach and augmentation of financial services. Indeed, Linder (1968) reports that there was hard competition and the cooperation among the lenders' associations was not always fruitful (Linder 1968, 115-116).

In addition, development banks and banks specialised in financing enterprises were built on a federal state- and national level. In 1948, US President Harry S. Truman sanctioned laws to implement the European Recovery Program (ERP) within the famous Marshall Plan (which was soon established in western Europe)⁶⁶. In 1949, the USA agreed with the Federal Republic of Germany to use these deposits to create special assets, and to use this finance as revolving loans. To administer this funding, the Kreditanstalt für Wiederaufbau (KfW) was

⁶⁵ In 2008, there were 1,156 cooperative banks in unified Germany, most of them called "Volksbanken" or "Raiffeisenbanken".

⁶⁶ American tax payers financed American exports to Europe of around US\$ 13bn until 1951. For their part, European importers paid their obligations in local currency into an account of their respective central bank. By 1951, in West Germany and West Berlin these deposits amounted to US\$ 1.6bn (which is roughly equivalent to € 3bn in 2005) (Bundesministerium der Finanzen 2010a).

founded in January 1949. During the first years, this finance was used predominantly for the reconstruction of housing, the energy sector, and the primary sector, i.e. industries such as coal mining and steel production (KFW Bankengruppe 2011b).

With respect to small business finance, Fischer (1959) reports that savings banks and cooperative banks soon began to provide short term finance to small businesses (Fischer 1959, 30-34). However, all commercial banks had serious liquidity constraints, especially for long-term finance. Indeed, private corporate banks did not provide any long-term finance to enterprises at all. Cooperative banks also left long-term finance to the savings banks. However, saving banks had their limits. Indeed, the handicrafts sector claimed difficulties in receiving finance, and missing collateral was seen as a central problem (Reinermann 1955, 41,44).

Public agencies were important in supporting businesses. Between 1949 and 1963, Ludwig Erhard served as minister of economics. Public support for a credit guarantee scheme was the responsibility of his ministry (and the respective ministries of the federal states). Erhard (1962) stated in 1956 that there was a structural problem of missing collateral for middle-sized companies, and the government would not reduce its efforts to address the problem (Erhard 1962, 325). The following points outline his economic thought with respect to public guarantees:

- In 1948, Erhard stated that he is in favour of competition and free price setting. However, the society must limit the market via social-economic or fiscal policy if society “sees” misdirections, dangers and distress. On the other hand, these limits and regulations should be limited and not repress the original drive of humans (Erhard 1962, 38-53).
- In 1953, he stated that government should not be the entrepreneur (except to some sectors such as education or infrastructure), and should essentially not provide finance for enterprises (Erhard 1962, 218).

These statements show that he was in favour of some public intervention in the market. However, public activity should be limited and investments should be in line with the market. This general thought is in line with the economic constitutional order “Ordnungspolitik” from Eucken. Indeed, Erhard was a representative of this school (Kindelberger 1984, 416). Moreover, Erhard is probably the most famous advocate of the Social Market Economy (*Soziale Marktwirtschaft*).

In 1960, when discussing financial cooperation⁶⁷ and export guarantees, Erhard emphasised that long-term finance with subsidised interest rates is needed and that government is willing to provide support. On the other hand, he restricts public intervention (Erhard 1962, 519):

“Nevertheless I hold to my old view that, also in the future, business should be left to the private initiative. Government should only provide support to private initiative and not take over its duties. Only where private initiative is not sufficient, should one think about public means as a supplement. In accordance with the regulation, these means should be used in a way that does not compete with the means of the private sector, but rather create wherever possible, new impulses and possibilities for unlocking the initiative of entrepreneurs.”⁶⁸

These statements clearly show that Erhard was in favour of the subsidiarity principle (with respect to public intervention). In other words, public guarantees should only be provided if banks are not able to provide finance without this State Aid. Although the second statement was made with respect to export guarantees, the general economic thought is likely to have an impact on public initiative within any credit guarantee scheme.

To summarise, at that time chambers were young and relatively weak institutions. Financial institutions were undergoing fundamental structural reforms. For a relatively long time, private cooperative banks were decentralised, cooperative banks started to open themselves to new members (or clients), and savings banks grew and became universal banks with substantial public support. Hence, there was both a “struggle of survival” and competition among the different types of banks. The German banks were soon able to provide short-term finance, and, with the help of publicly funded directed credit, long term finance, too. However, there are indications that missing collateral was a problem for small businesses that needed long-term finance, and the central government was willing to address the problem.

⁶⁷ The Federal Ministry for Economic Cooperation was actually found in 1961; in 1960, economic cooperation was a responsibility of the ministry of economics.

⁶⁸ In German: “Dennoch halte ich an meiner alten Auffassung fest, daß der kommerzielle Sektor auch in Zukunft vor allem der privaten Initiative überlassen bleiben soll, die der Staat nur fördern und unterstützen, deren Aufgaben er aber nicht selbst übernehmen sollte. Nur dort, wo die private Initiative nicht ausreicht, ist als Ergänzung auch an den Einsatz öffentlicher Mittel zu denken. Nach den vorgesehenen Vergabegrundsätzen sollen diese Mittel im allgemeinen so eingesetzt werden, daß sie nicht mit denen der privaten Wirtschaft konkurrieren, sondern, wo immer möglich, neue Impulse und Möglichkeiten für die Entfaltung eigenverantwortlicher Unternehmerinitiative wecken.“

4.1.2.3 Institution building of the first societies for craftsmen and trade in the 1950s

Before there was a nation-wide coordinated initiative to create local Credit Guarantee Societies (*Kreditgarantiegemeinschaften*, KGGs), four major attempts to build local schemes without the federal government can be identified: the public scheme in Schleswig-Holstein still exists today; the association in Berlin merged with the other KGG in 1991; the privately initiated guaranteeing institution in Bavaria never started operations; and in Württemberg, the guaranteeing institution's activity was transferred to a KGG soon in 1956 (Giebitz 1987, 46-46, Fischer 1959, 99-106).

On the federal level, there were public credit guarantee schemes, generally for larger investments to reconstruct the German economy in the 1950s. In 1951, the Federal Parliament (*Bundestag*) approved a law that empowered the government to provide guarantees up to a volume of DEM 500m. Guarantees should only be provided if financing of the project would not be possible without the guarantee and if there was a common public interest (Bundesrepublik Deutschland 1951). In other words, the principle of subsidiarity should be respected. By 1960, the total outstanding volume of credit guarantees amounted to DEM 14.2bn (Statistisches Bundesamt 2009, 22).

In 1952, a working committee was established by the National Confederation of Skilled Crafts (*Zentralverband des Deutschen Handwerks*, ZDH). The aim was the creation of a national system of local Credit Guarantee Societies. After the unsuccessful attempt to create a private scheme in Bavaria, the representatives of ZDH were sure that public financial support was needed, at least initially. Consequently, there was the willingness to cooperate with public agencies. Indeed, the working committee consisted not only of representatives of the initiating ZDH but also of representatives from the Federal Ministry of Economics and experts from bank associations. Hence, all actors of the Augmented Triangular Relationship participated in the decision-making committee from the beginning – borrowers only indirectly via their associations (Fischer 1959, 106-107). This working committee agreed to build guaranteeing institutions with equity from banks and chambers. No direct participation of borrowers in the institutions was intended. Public agencies should provide substantial financial support with a ratio of 2:1 between public and private funding. In the long run, however, the public financial support was supposed to be unnecessary, as the KGGs achieved financial self-sustainability (Fischer 1959, 130,131,187-189).

Consistent with the results of the working committee, private institutions provided equity. Moreover, the associations donated work force and space for the KGG offices while participation in the guarantee committee – the central decision-making entity – was not remuner-

ated. Additional funding was provided via grants and loans to credit guarantee funds (Fischer 1959).

Government provided equity indirectly via public banks and moreover, via chambers⁶⁹. In Schleswig-Holstein, the Federal State provided equity directly (Fischer 1959, 144-145). The most important financial support to all KGGs was the supply of public counter-guarantees. Indeed, the federal government was willing to channel public guarantees of up to DEM 50 m. via KGGs (Reinermann 1955, 68). Government provided counter-guarantees of up to 80% (of which the Federation covered 60% and the Federal State 40%). This financial support also implied that government participated in the decision-making process and KGGs had to respect specific regulations. Furthermore, KGGs for craftsmen and trade also received loans of DEM 3.4m and DEM 1.8m respectively from the European Recovery Programme via KFW. Because the interest rates for these ERP loans were around 2.5%, interest rate gains could be achieved and these returns were the main income of the young KGGs. In addition, this funding included a risk-sharing mechanism: when a guarantee was called, the KGGs were allowed to reduce their liability to KFW by half of the amount which the KGGs had to pay to the banks (Giebitz 1987, 80). Hence, this mechanism in combination with a public counter-guarantee of 80% reduced the KGG's own liability to just 10% of the outstanding guarantee.

The KGGs received public financial support. On the other hand, the government increased its influence and representatives of counter-guarantors participated alongside the shareholders in the central-decision making body, the Guarantee Committee (*Bürgerschaftsausschuss*) (Fischer 1959, 144-145). Owners (including the government) limited the activity of KGGs significantly (Giebitz 1987, 53-59):

- In the first years, only long-term finance was allowed to be guaranteed. Later, KGGs were allowed to provide guarantees for short-term finance up to a defined percentage of their guarantee portfolio.
- The borrower's business should exist for at least 2 years.
- No ERP loans should be guaranteed.
- Guarantees could only be provided if the borrower provided a personal guarantee.

The first KGG for craftsmen of this national framework was established in the Federal State of Lower Saxony (*Niedersachsen*)⁷⁰ in May 1953. However, it did not start operating until October 1954. Giebitz (1987) explains this delay was due to the complex cooperation be-

⁶⁹ Whether a chamber is public or private was discussed at the beginning of this chapter.

⁷⁰ Although Saxony occurs in the word, the Federal State of Lower Saxony is not part of the Federal State Saxony, where first schemes emerged.

tween the Federation and the federal state (Giebitz 1987, 53). Thereafter, KGGs emerged in all Federal States of West Germany. The KGGs analysed the borrower and the project to be financed before providing the guarantee to the bank. Guarantees had a maximum value of DEM 35,000 and maturity was allowed to vary between 6 month and 10 years. The borrower had to provide an initial fee of DEM 25 to DEM 50 and if the guarantee was provided, the borrower had to pay a commission of around 0.75% of the guaranteed loan. Moreover, the interest rates for the bank had to be freely negotiated between the bank and the borrower (Reinermann 1955, 65-67). Hence, the KGGs were of basic model three in the ODM Approach (A2, B1.1).

Although the ZDH initiated the formation of KGGs for craftsmen, the Federal Ministry of Economics had other sectors in mind as well. However, within the trade sector, initially only retail trade was interested in building their own KGGs whereas the wholesale trade seemed to resist (Fischer 1959, 109-114). Fischer reports two arguments of the associations in this discussion: first, there was no need for a guarantee scheme, and second, the scheme would primarily benefit the retailers that already received support of the wholesale traders. On the other hand, the Federal Ministry of Finance was not willing to provide public guarantees directly to the sector but was willing to provide public counter-guarantees to the KGGs. Fischer (1959) describes the resulting pressure as an “accusation of an unwillingness to self-help and at the same time rejection of public subsidies” (Fischer 1959, 111).

By the end of 1953, a working committee of retail- and wholesale trade was established following the model of the committee for craftsmen. Despite tough negotiations, KGGs for crafts and for trade emerged in all Federal States of West Germany⁷¹.

Table 18 and Table 19 provide an overview of KGGs of handicrafts and trade in the 1950s in West Germany.

⁷¹ For this purpose, West Berlin counts as a Federal State of West Germany, although this is not precisely correct in juridical/legal terms.

Table 18 KGGs for Handicrafts in the 1950s

Federal State	Inauguration date	Operating since	Share capital (inauguration)	Shareholders in % of total shares and by numbers of institutions in 1958				
				KGG of German Crafts ⁷²	Chambers of craftsmen	Associations and guilds	Banks and associations	insurance companies
Baden-Württemberg	02.1955	02.1956	DEM 10 k.	19%	26%/8	7%/7	48%/6	0%/0
Bavaria	07.1955	09.1956	DEM 100 k.	10%	20%/8	10%/1	50%/8	10%/2
Berlin	08.1951	1951	DEM 60 k.	-	-	-	-	-
Bremen	06.1955	07.1956	DEM 50 k.	10%	50%/1	0%/0	40%/6	0%/0
Hamburg	04.1954	08.1954	DEM 75 k.	20%	15%/1	25%/16	40%/10	0%/0
Hesse	07.1954	11.1954	DEM 100 k.	17.5%	28.5%/4	14%/12	40%/4	0%/0
Lower Saxony	05.1953	10.1954	DEM 100 k.	20%	35%/7	0%/0	30%/0	15%/1
North Rhine-Westphalia	04.1954	10.1955	DEM 128 k.	8%	27%/8	10%/15	47%/5	8%/1
Rhineland-Palatinate	01.1955	11.1955	DEM 60 k.	18%	37%/4	0%/0	45%/7	0%/0
Saarland	1959	09.1959	DEM 70 k.	-	-	-	-	-
Schleswig-Holstein, (Fund B)	05-1954	07.1954	DEM 275 k.	-	-	-	-	-
Sum:			DEM 1,118 k.	15%	28%/41	9%/50	43%/51	5%/4

Own elaboration; source: Giebitz (1987, 52) and Fischer (1959, 136)

⁷² The Credit Guarantee Society of German Crafts (Kreditgarantiegemeinschaft des deutschen Handwerks GmbH) was built to accelerate the process of building KGGs in all Federal States. The society provided technical assistance and equity to the KGGs, and served as a platform of communication. This institution was largely financed by the government and its governing board consisted of representatives of the Federal Ministries of Economics and Finance, representatives of the bank associations (savings bank and cooperative banks), representatives of insurance companies and of representatives of associations of handicrafts and the KGGs (Fischer 1959, 118, Giebitz 1987, 51).

Table 19 KGGs for Trade in the 1950s

Federal State	Inauguration	Operating since	Share capital in 1958	Shareholders				
				in % of total shares and by numbers of institutions in 1958				
				Associations of wholesale trade	Associations of retail trade	Banks and associations	Insurance companies	Others
Baden-Württemberg	05.1956	05.1957	DEM 150 k.	10% /3	24%/14	32%/6	23%/1	11%
Bavaria	01.1956	03.1957	DEM 54 .k	19%/2	25%/4	56%/10	0%/0	0%
Berlin	06.1957	10.1957	DEM 20 k.	25%/1	30%/2	22%/4	0%/0	22%
Bremen	06.1956	-	DEM 45 k.	-	-	-	-	-
Hamburg	06.1954	08.1954	DEM 100 k.	10%/13	15%/17	50%/13	0%/0	25%
Hesse	09.1954	-	DEM 60 k.	-	-	-	-	-
Lower Saxony	05.1955	07.1956	DEM 41 k.	26%/10	24%/10	50%/14	0%/0	0%
North Rhine-Westphalia	07.1955	10.1955	DEM 200 k.	0%/0	45%/18	35%/5	20%/1	0%/0
Rhineland-Palatinate	08.1955	01.1956	DEM 73 k.	13%/3	27%/7	60%/12	0%/0	0%
Saarland	1959	06. 1959	-	-	-	-	-	-
Schleswig-Holstein, (Fund C)	1955	04.1955	-	-	-	-	-	-
Sum:			DEM 743 k.	9%/39	30%/72	42%/64	11.7/2	7%

Own elaboration; source: Giebitz (1987, 55) and Fischer (1959, 137)

Both tables report that KGGs started in all Federal States. Moreover, it can be noted:

- KGGs differed in the distribution of shares and the date of inauguration.
- Equity was distributed equally between financial institutions and chambers or associations. Among all KGGs, banks provided more than 40% of the institutions' equity. Associations' and chambers' share of equity equalled 52% at the KGGs for craftsmen and 39% at the KGGs for trade. Insurance companies provided some equity, too.
- The tables show a time gap between inauguration and starting of operations.

- The lack of initiative among wholesale traders is underlined by their modest participation in equity (9%). Moreover, KGGs for trade were generally established later than the KGG for craftsmen. In the Federal State of North Rhine-Westfalia (NRW), wholesale does not participate in the KGG's equity at all.
- The share capital varies between DEM 10,000 and DEM 275,000 which is relatively modest. Nevertheless, this is not the most important financial indicator since KGGs themselves had to take only 10% of the guarantees' risk.

With respect to the outreach, only 18.7% and 16.8% of the potential guarantee volume of the KGGs was exploited by KGGs for trade and crafts respectively until 1957 (Fischer 1959, 119). Among the 800,000 small businesses in the sector of crafts, only 5,000 received support via the KGGs. Fischer (1959) argues that between 1953 and 1957, there was a general credit constraint due to missing liquidity among banks. Because there was a shift towards providing larger loans, even small businesses that were able to provide collateral were affected. In addition, KGGs were not allowed to guarantee ERP loans. Moreover, interest rates for long-term finance were around 12% p.a., which reduced demand for loans. The author reports a certain resistance among the loan officers of commercial banks. Sometimes, KGGs were simply not known to bankers, chambers and craftsmen. Finally, because KGGs had no experience they might have screened the borrower extremely intensively. Consequently, these additional high transaction costs hindered the relationship between bank and KGG, and between KGG and borrower (Fischer 1959, 119-123).

4.1.2.4 The development of KGGs in the 1950s and 1960s, and new KGGs for industry

This section focuses on the building of KGGs in the industrial sector and the development of the schemes in the 1960s.

New KGGs were founded that were limited by sector and region, and other sectors started cooperation with existing KGGs. In the cases of cooperation among sectors, chambers and associations were able to create sector-specific credit guarantee funds and sector-specific guarantee committees. The KGGs themselves managed the funds and did the preliminary work for the guarantee committee. This model of cooperation enabled the formal existence of specialised KGGs (with own status, board and/or guarantee committee) that cooperated on the operational level with other KGGs (Giebitz 1987, 49-54,59-69).

Between 1955 and 1958, the building of KGGs was discussed within the industrial sector. In 1955, the Federal Association of Germany Industry (*Bundesverband der deutschen Industrie*

– BDI) surveyed members and the response was mainly negative: first, the limited benefit would not justify the large effort and second, in contrast to crafts and trade, competition among enterprises would not enable cooperation within the association (Giebitz 1987, 61). This reflects the problem of cooperation among competitors, and the different status of competition between companies in the sectors of crafts and industry. Moreover, in the first half of the 1950s, industry financed its investments with equity since long-term finance via banks was not common and loans were used only for short-term finance. Consequently, the problem of missing collateral for long-term finance was not a central problem (Giebitz 1987, 62). Only in Schleswig-Holstein, the State Guarantee Scheme Schleswig-Holstein (*Landesgarantiekasse Schleswig-Holstein*) provided guarantees to the industrial sector. Finally, the BDI officially declared that there was no demand for KGGs and an association would do more harm than good.

Fischer (1959) argues that industry already had access to public guarantees provided directly from all federal states and moreover, the industrial sector – like the sector of wholesale trade – was generally sceptical of collective self-help since industry was less homogenous than the sector of craftsmen (Fischer 1959, 115-117). However, the Federal Ministry of Economics continued to urge the industry sector to create KGGs.

Between 1955 and 1960, liquidity constraints reduced and banks were more able to finance long-term investments. Missing collateral emerged to be a more important issue for banks and consequently, credit guarantee schemes for long-term finance became more promising, so that the BDI withdrew its general opposition and supported the initiative. The first attempt to build a KGG for industry started in the Federal State of Lower Saxony. Because of sticky negotiations, the first KGG was inaugurated in October 1960 and started operations in November 1962 (Giebitz 1987, 64-65). In the following years, existing KGGs introduced special credit guarantee funds for industry or special KGGs were founded in other Federal States.

Table 20 Creation of Several New KGGs in Germany

Federal State	Main sectors (not complete)	Inauguration	Start of operations
All Federal States	Trade (EDEKA)		1956
All Federal States	horticulture	1958	1959/1960
Schleswig-Holstein	Hotels and catering	1958	1958
North Rhine-Westphalia	Hotels and catering	1958	1959
Hesse	Hotels and catering	1958	1959
Hamburg	Hotels and catering	-	1961
Schleswig-Holstein	Fund I for sector of industry	1961	January 1961
Lower Saxony	Industry, transportation, hotels and catering	October 1960	November 1962
Hamburg	Industry, trade and transportation	April 1963	November 1963
Baden-Württemberg	Industry, transportation and catering	November 1963	March 1965
Hesse	Industry, (transportation and others	1964 (1972)	1965
Bremen	trade, hotel and catering	1965	
Bremen	Industry, transportation and others	1965	1966
Saarland	Industry	1972	1972

Own elaboration; source: Giebitz (1987, 59-66)

As already stated, the KGGs were not the only guaranteeing institutions that channelled public (counter-) guarantees to small businesses. For example, in the Federal States of Bavaria and Rhineland-Palatinate, public development banks provided credit guarantees to support small enterprises. In Bavaria, the State Development Bank (*Bayerische Landesanstalt für Aufbaufinanzierung GmbH: LFA*⁷³) was built in 1950 and provided loans, grants and guarantees. In Rhineland-Palatinate, there was the public Financing Stock Company Rhineland-Palatinate (*Finanzierungs-Aktiengesellschaft Rheinland-Pfalz*). It was founded in 1948 and from 1955, it cooperated with the KGGs within the federal state⁷⁴. In this cooperation, the public agency managed all guarantees, including the screening-process. This KGG was a guaranteeing institutions with its own decision-making body, but administration was done by the public agency. Both development banks in Bavaria and Rhineland-Palatinate provided additional loans and managed or provided credit guarantees (Giebitz 1987, 69-71).

⁷³ This institution still operates with the same name until today. However, there exists a Guarantee Bank, too.

⁷⁴ Today, management of guarantees is still partially conducted by the Investitions- und Strukturbank Rheinland-Pfalz (ISB) GmbH.

Table 21 provides an overview of the outreach of the KGGs for crafts and KGGs for trade between 1961 and 1968. No data for KGGs of other sectors was found.

Table 21 Development of KGGs in the 1960s

year	KGGs for crafts			KGGs for trade		
	Approvals by #	Approval by volume	Approvals by #	Approvals by #	Approvals by volume	Approvals by volume
			retail	wholesale	retail	wholesale
1961	1,695	DEM 27.0 m.	-	-	DEM 13.0 m.	DEM 4.3 m.
1962	1,728	DEM 36.0 m.	617	89	DEM 14.6 m.	DEM 4.7 m.
1963	1,948	DEM 45.2 m.	677	124	DEM 17.0 m.	DEM 6.4 m.
1964	2,143	DEM 55.8 m.	846	104	DEM 23.2 m.	DEM 5.3 m.
1965	2,309	DEM 64.7 m.	954	146	DEM 30.6 m.	DEM 8.7 m.
1966	1,762	DEM 55.2 m.	686	81	DEM 24.8 m.	DEM 6.6 m.
1967	1,434	DEM 47.5 m.	668	64	DEM 27.4 m.	DEM 5.0 m.
1968	1,792	DEM 63.4 m.	654	92	DEM 26.9 m.	DEM 8.6 m.

Own elaboration; source: Giebitz (1987, 145-146)

All in all, the outreach of KGGs by volume can be considered to be modest in the 1960s. Unfortunately, whether the KGGs filled their niche of supporting sound loan requests that would not have received finance because of missing collateral cannot be answered. Nevertheless, it can be said that the development of the late 1950s continued with modest increase of outreach. In addition, there are signs that the KGGs were used in a subsidiary way not only because of low outreach. The share of guarantees for start-up finance (no precise definition of start-up is provided) was between 22.5% and 60% in the years 1961 until 1968 (Giebitz 1987, 81-86).

4.1.2.5 The development from the 1970s to the 1990s and mergers to Guarantee Banks

Through the 1970s and 1980s, general structural changes in the economy (away from the primary sector and steel treatment) occurred. For example, in 1985, there was a peak in insolvencies and at the same time a peak in the formation of start-ups (Giebitz 1987, 103-114).

There were periodical negotiations between public agencies and representatives of KGGs. For example, the possibility of using guarantees for conversion of debt was reduced. More-

over, only 25% (40% for the trade sector) of KGGs' guarantees should be used for working capital. The official reason was that State aid for already assigned or started projects is not consistent with the economic constitutional order (*Ordnungspolitik*), i.e. the principle of subsidiarity. The discussion and the new regulation induced scepticism within banks; indeed, the use of KGGs dropped significantly in the years 1973 and 1974 (see table 6)(Giebitz 1987, 94-95). In 1979, new negotiations on the allocation of public counter-guarantees resulted in a continuation of the risk-sharing mechanism of the public agencies and the KGGs, but KGGs were now allowed to guarantee finance of investments that were started within the last three years (Giebitz 1987, 114-117). However, representatives of public agencies were able to veto every single request.

KGGs augmented the range of their financial products. For example, in 1971, KGGs started to guarantee equity finance (provided by the KfW) on the initiative of the central government. However, success was marginal and in fact, after a few years several KGGs stopped their efforts. Giebitz (1987) explains the lack of interest by banks as due to limited fees (10% p.a.) and restrictions on the public programme such as the impossibility of pay-out in some conflict situations (Giebitz 1987, 92-93). Moreover, public agencies permitted the KGGs to counter-guarantee up to 70% of the commercial banks' bank guarantees (except export guarantees). Another increase of the KGGs' activities was the allocation of guarantees for leasing that started in 1982. Moreover, in 1982, a new focus was the promotion of innovative projects. For example, there was an ERP programme that was created by the KfW and the Federal minister of science and technology (*Bundesminister für Forschung und Technologie*). The target group were start-ups that planned to introduce new technology on the market, and hence were risky (Giebitz 1987, 118).

Consequently, KGGs increased their innovative activity, but usually only in cooperation with public programmes. This close cooperation underlines the dependence of KGGs on public support and that government used the KGGs to conduct structural policies. Moreover, the KGGs can be seen as laboratories of the German commercial banks for equity finance, leasing finance and finance for innovative enterprises because banks participated in the scheme and the central decision making body. For example, the decision-making process of KGGs was not based on the existence of collateral but on the investments' probability of success. This method was taken over by the lenders in the 1970s (Giebitz 1987, 127).

Beyond changes in products and public support, there were some changes in the institutional design of the guaranteeing institutions. In 1971, the first Guarantee Bank (*Bürgschaftsbank*, GB) emerged in the Federal State of Baden-Württemberg due to a merger of existing KGGs. The new GB was then the largest guaranteeing institution in the national

system of local guaranteeing institutions for small businesses (Giebitz 1987, 94). This merger spilled over to other federal states. However, the process was slow. The next GB emerged only years later when all KGGs within the Federal State of Lower Saxony merged to a single GB in 1977 (Giebitz 1987, 116).

Table 22 provides an overview of the development of KGGs between 1969 and 1976 with information on approvals by number and by volume, share of guarantees for start-up finance and defaults.

Table 22 Development of KGGs in the Period 1969 – 1976

	Sector	1969	1970	1971	1972	1973	1974	1975	1976
Number of approvals									
	Crafts	1,763	1,515	1,444	1,448	965	1,033	1,454	1,487
	Trade	790	606	657	689	514	488	830	800
	Industry	279	256	247	308	224	247	394	399
	Hoga ⁷⁵	281	-	-	220	154	138	237	283
	All sectors	3,113	2,377	2,348	2,665	1,857	1,906	2,915	2,969
Volume of approvals in DEM m.									
	Crafts	74	76	81	90	65	69	110	123
	Trade	44	38	51	57	45	40	80	81
	Industry	40	49	48	62	40	53	88	83
	Hoga	20	-	-	21	20	19	30	37
	All sectors	178	163	180	231	170	180	309	324
Defaults in DEM m.									
	Crafts	0.683	1.217	0.501	0.675	0.631	1.570	3.234	1.930
	Trade	0.545	0.433	0.490	0.588	0.365	0.870	0.818	0.640
	Industry	0.171	0.016	0.305	0.760	0.259	1.616	1.119	1.136
	Hoga	-	-	-	-	0.692	0.395	-	0.734
	All sectors	1.399	1.666	1.296	2.023	1.947	4.451	5.171	4.440

Own elaboration; source: Giebitz (1987, 154-163)

In the years 1969-72, KGGs were able to expand their activity in part due to the general economic growth in Germany. In 1973, although German banks increased the supply of long-term finance, KGGs were not able to provide more guarantees. This contradiction can be explained partly by the troubled negotiations between the KGGs and the public agencies. In

⁷⁵ Hoga is the abbreviation for Hotel and Gastronomy (*Hotel und Gastronomie*).

1974, in addition to new regulations, low rates of approvals can be explained by the recession and lower investments in Germany. Some KGGs did not provide any guarantees in that year. Only in 1975 and 1976 – within a period of economic growth and economic stimulus such as grants for investments – KGGs re-achieved old levels. Throughout the period 1969-76, KGGs for crafts provided most guarantees by volume and by number (Giebitz 1987, 95-103).

The highest guarantees by value – on average – continued to be provided to the industrial sector. Guarantees for start-up finance in the sector of crafts and trade was almost one third of the guarantee volume. For industry, however, start-up finance usually represented less than 10% of approvals by volume.

The total of defaults increased from DEM 1.4m in 1969 to DEM 4.4m in 1976. Giebitz (1987) shows that at the same time the rejections increased (Giebitz 1987, 101-102).

Table 23 provides an overview of the development of KGGs between 1977 and 1987 with information on approvals by number and by volume, risk exposure, share of guarantees for start-up finance and defaults. Numbers and volumes are only provided as the sum for all KGGs and for the larger KGGs for crafts, trade and industry.

Table 23 Development of KGGs in the Period 1977 – 1978

Sector	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Number of approvals											
Crafts	1,545	1,826	2,016	2,010	1,794	1,419	1,684	1,678	1,501		
Trade	975	1,189	1,476	1,536	1,271	970	1,265	1,560	1,168		
Industry	376	433	596	662	394	345	402	539	531		
All sectors	-	-	4,779	5,036	4,133	3,284	4,082	4,646	3,897	4,000	3,947
Volume of approvals in DEM m.											
Crafts	127	160	197	191	171	136	156	171	158		
Trade	89	109	145	145	129	104	134	148	121		
Industry	72	91	113	129	87	81	103	104	113		
All sectors	319	405	543	566	463	388	474	513	466	504	519
Risk exposure in DEM bn.⁷⁶											
All KGGs	-	-	1.51	1.72	1.82	1.82	1.85	1.90	1.93	1.95	1.98
Average size of guarantee in DEM m.											
all sectors	0.101	0.107	0.114	0.112	0.112	0.118	0.116	0.111	0.120	0.126	0.131
Share of start ups (vol.)											
all sectors	-	-	57%	63%	62%	61%	70%	65%	67%	63%	61%
Defaults in DEM m.											
crafts	3.80	3.30	2.50	2.20	4.60	7.00	8.00	11.80	10.70		
trade	1.30	1.50	1.60	1.80	2.50	4.50	7.90	12.70	12.40		
industry	2.00	4.30	2.30	2.20	2.10	2.40	5.50	5.90	6.80		
all sectors	7.42	9.53	7.42	7.30	11.20	15.30	26.30	36.50	33.80	40.7	47.9

Own elaboration; source: Giebitz (1987, 166-179) and Kaufmann and Kokalj (1989, 40-47)

In line with economic growth, KGGs were able to increase their activity in the years between 1977 and 1980, and in the years 1983 and 1984. Between 1981 and 1982, there was a decrease of real growth and KGGs' activity declined. The value of outstanding guarantees increased by 30% from DEM 1.5bn in 1979 to DEM 2bn in 1987. However, this volume remains relatively small within the German financial sector. Throughout the whole period, start-up finance continued to be important for the KGGs.

⁷⁶ Calculated as new guarantees - depreciations - amortisations - payments on defaults; source: Kaufmann and Kokalj (1989, 41).

In this period, defaults became an issue for KGGs. Table 23 shows that payments on defaulted loans increased from DEM 7.42 in 1977 to DEM 47.9m in 1987, which was 2.4% of outstanding risk exposure in 1987. Unfortunately, reserves were limited and Giebitz (1987) reports that from 1982 on the solvency of KGGs was questioned by bankers (Giebitz 1987, 122). Higher defaults cannot be entirely explained by the recession in the beginning of the 1980s. Higher defaults among KGGs were also a sign of a higher risk strategy of the KGGs. Giebitz (1987) reports that banks usually provided only collateral lending in the 1950s, and KGGs screened the perspective profit and earning power of the borrowers. In the 1960s, banks started to do the same, and because of higher competition among banks in the 1970s, banks reduced their collateral requirements and more borrowers received loans without the need of KGGs. Consequently, KGGs had to guarantee finance for riskier borrowers which affected the KGGs' portfolio. This risk strategy is underlined by the fact that the share of start-up finance increased up to 70% in the year 1983 and the average equity-to-assets ratio of all enterprises that applied for a guarantee (or rather where banks required a guarantee) was just 8% in 1981 and 6% in 1983. This points to an increase of the KGGs' niches and that banks included the KGGs only in the finance of riskier clients.

As a consequence of the financial distress of the KGGs, structural changes to the national system of KGGs were discussed:

Giebitz (1987) concludes that KGGs are a modern and successful instrument to foster business development. He argues that KGGs enabled much finance that would otherwise not have been financed because of "risk sharing on many shoulders" (a typical German figurative expression that means in this case to pool risk). He argues that the guaranteed volume did not represent the total economic benefit of KGGs since many start-ups and innovative enterprises were supported, and KGGs advised borrowers. He states that, in comparison to other public support, public counter-guarantees helped public budgets because calls on public counter-guarantees were only a fraction of the enabled or induced investments. The author recommends increasing the support to the KGGs enabling them to continue their successful mission (Giebitz 1987, 138-140).

On the other hand, Kaufmann and Kokalj (1989) were more critical about the effectiveness of the German system of regional and sector specific KGGs. They stated that the small size of KGGs impedes financial efficiency. Moreover, they concluded that the initial aim of KGGs to be independent of public financial support was unrealistic and there might be windfall gains for banks. Indeed, KGGs depended on additional public financial support, and there was the danger that KGGs might lose their share of the market. Consequently, there was a need for a redesign of the system of KGGs and the authors proposed the following reforms: an increase

the banks' share of the risk with the aim of reducing windfall gains; an increase of equity; and finally mergers or at least cooperation among KGGs. The last reform is explained with the belief that larger multi-sectorial institutions might be able to reduce costs, improve risk pooling, and maintain their specialisation advantage due to close cooperation with their shareholders (Kaufmann and Kokalj 1989, 136-140).

Indeed, the national system of regional and sector specific KGGs changed. In most western federal states, sector specific KGGs started to merge into a single Guarantee Bank (Kokalj, Paffenholz and Moog 2003, 103). Moreover, only GBs that operated across sectors were built in the new Federal States after the German Reunification. However, the process of transformation did not occur uniformly. For example, in the Federal State of Rhineland-Palatinate a specific KGG for crafts coexisted with a guarantee programme of the Federal State Development Bank until November 2011 (Investitions- und Strukturbank Rheinland-Pfalz 2011). In Bavaria, sector specific KGGs for crafts, trade, gardening, hotel and catering merged only in 2008, while the industrial sector continues to receive guarantees from the development bank of the Federal State Bavaria (LFA Förderbank Bayern 2009, 35, VDB 2009, 15).

4.1.2.6 GBs in the new federal states after the fall of the Berlin Wall

After the fall of the Berlin Wall, the general economic order and design of many institutions were quickly transformed in the eastern "new" federal states in the territory of the former German Democratic Republic (*Deutsche Demokratische Republik*, GDR). The actors within the Augmented Triangular Relationship were transferred or set up following the institutional design that was known in the West.

Financial institutions in the east had to be transformed because the old banking system was not compatible with the two-tier banking system. Savings- and cooperative banks did exist in the GDR but were different to the institutions in the west. They usually captured savings and channelled liquidity to the State Bank (*Staatsbank*). The State Bank was almost the only bank that provided finance to usually public enterprises (Bodin 1994, 230-231). Savings banks provided few loans to individuals (consumer loans were politically suspected) and private enterprises which were scarce. Savings- and cooperative banks provided loans of only 16% of their bank deposits. These loans represented only 6% of all loans in the GDR (Kleedehn 1994, 277-281). Through the transformation process, western private banks took over the State Bank, and western savings- and cooperative banks provided support to their sister institutions. One motive of the support was the general fraternity among institutions, and the

competition of the three types of banks within the three pillar system. Indeed, there can be noted a “race” of commercial banks to build up their market share in the new federal states. In addition to these three types of commercial banks, the German central bank (*Deutsche Bundesbank*), and the national development banks such as KfW and Deutsche Ausgleichsbank (DTA)⁷⁷ expanded their activities to the new Federal States. In the new States, new state owned commercial banks (*Landesbanken*) and state owned development banks (*Landesförderbanken*) either emerged or western institutions augmented their activity in the eastern Federal States (Bodin 1994, Kleedehn 1994).

As already stated, the start-up finance of was supported by the government. The ERP fund (*ERP-Sondervermögen*) was modified to increase resources which resulted in a increase of the volume from DM 6 bn. in 1989 to DM 23.5 bn. in 1997. Start-up finance was important. For example, in the year 1997, 42% of the DM 13 bn. ERP loans were directed to start-up finance. As well as the ERP means, the DTA managed other programmes such as a programme to enhance technology and another to increase capital of enterprises. In total DM 9.2 bn. were directed to 70,000 start-ups in 1997 alone. The outreach is notable and supported borrowers equalled 12% of all start-ups. The DTA did not only provide subsidised liquidity but also used the “exemptions of liabilities” to share 50% of the risk with the banks. As already stated, the DTA provided almost 40,000 loans with an value of € 3.6 bn. (accumulated) with “exemptions of liability” for start-up finance in the years 1992-2001. In addition to the DTA risk-sharing mechanism, credit guarantee schemes were introduced in the East. Guarantee Banks were responsible for loans of up to DM 1.5 m., the loans with a volume between DM 1.5 m. and DM 20 m. were managed by the DTA and guarantees of higher volumes were provided by the central government and the respective federal state (Gläser 2002, 10-28).

Bilateral partnerships between federal states and several regional agencies (such as the savings banks) in the west and the east were initiated. This was also done within the institution building process of Guarantee Banks. For example, the Guarantee Bank in Brandenburg was created as a subsidiary the GB in North-Rhine Westphalia. The GB in NRW and their shareholders provided technical and financial assistance in Brandenburg. Every GB had its cooperating institution in the West and staff consisted of local employees that were trained in the West. Moreover, initially, each GB had one Chief Executive Officer (CEO) from the West and one from the East (Hoffmann 1993, interviews in 2007).

Guarantee Banks in the old Federal States served as a general model in the institution building process in the East. It is notable that banks were competing among each other but pro-

⁷⁷ This bank was built in 1950 in order to support the “exiled” population that came to the West.

vided most of the equity to the new Guarantee Banks. This can be explained by the fact that the central government was willing to bear most of the risk. Since start-up finance was important in that period, it can be assumed that banks expected the GBs' niche to be large. In addition, western GBs provided technical and financial support. Although the share of SME association in the equity was negligible, their representatives participated in the decision-making body, the Guarantee Committee.

The institution building process was extremely fast and within two months after German Reunification in October 1990, Guarantee Banks were established in each of the five new Federal States. The process was initiated by the western German Ministry of Economics in May 1990. The umbrella organizations of the KGGs and Guarantee Banks organised the institution building process, and collected initial capital of DEM 3bn. for each of the new Guarantee Banks. Moreover, the central government provided the same amount in form of the ERP-loans (Hoffmann 1993).

The KFW Bankengruppe (1993) reports that initially, the federal states did not provide counter-guarantees. Only the Federation provided counter-guarantees of 80%. In addition, the KFW Bankengruppe provided subsidised loans to the new institutions in order to finance the initial equipment and create a "base of liability" (*Haftungsbasis*). The maturity of these ERP-loans was 25 years with a grace period of 15 years and low interest rates of 1%. In the case of a call of guarantee, the GBs were allowed to reduce this ERP obligation by 10% of the compensation provided to the banks. Consequently, the GBs' share of the guarantees' risk was only 10% of the guarantee contract in the beginning (KFW Bankengruppe 1993, 75).

Outreach was larger than expected: in 1991 new GBs provided 1,900 guarantees by number and roughly DEM 423m by volume. Within the first boom following reunification, annual approvals increased by 74 % in number and 14 % by volume in 1993. Indeed, the volume of provided guarantees by the new GBs in the eastern Federal States (including Berlin) exceeded the volume of the western Federal States (Hoffmann 1993). After the first recession in 1993, however, outreach decreased by volume and number, and soon the approvals by number and volume were lower in the East than in the West.

Table 24 Approvals by Number of German Guarantee Banks in the Period 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	#	#	#	#	#	#	#	#	#	#
New Federal States and Berlin	3,555	3,302	3,078	2,869	2,333	2,151	2,065	2,178	2,104	2,000
Old Federal States	3,260	3,326	3,841	4,441	4,517	4,691	5,002	4,883	4,257	3,909
Total sum	6,815	6,628	6,919	7,310	6,850	6,842	7,067	7,061	6,361	5,909

Own elaboration; source: Kokalj, Paffenholz and Moog (2003, 106)

Table 25 Approvals by Volume of German Guarantee Banks in the Period 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	DEM m.	DEM m.	DEM m.	DEM m.	DEM m.	DEM m.	DEM m.	DEM m.	DEM m.	DEM m.
New Federal States and Berlin	542	766	616	480	373	355	354	392	351	324
Old Federal States	391	541	529	565	586	637	724	740	695	685
Total sum	933	1,307	1,145	1,045	959	991	1,078	1,132	1,046	1,008

Own elaboration; source: Kokalj, Paffenholz and Moog (2003, 107)

Both the DTA and the Guarantee Banks financed a significant share of start-ups within the transformation process. Default rates of the DTA are not at hand, but the bank entered financial distress and was integrated in the KfW Bankengruppe in 2003. GBs also had high default rates but no institution had to be closed. Indeed, governments bore most of the risk.

Elkan and Schmidt (2006) analyse the defaults of the guarantees that were provided by all GBs in the year 1995. Until 2004, the net payments due to calls on guarantees, provided in 1995, stood at 15.6% of all provided guarantees in 1995. 11.9% of the provided guarantees were still outstanding and hence were still able to default. In the “new” federal states these numbers were significantly higher. Highest defaults were recorded in the federal state of Mecklenburg West-Pomerania with 26%, followed by Saxony (22.4%), Thuringia (21.5%) and Saxony-Anhalt (18.9%). Only the rates in the federal states of Brandenburg (14.5%) and Berlin (11%) were lower than the national average (Elkan and Schmidt 2006, 87).

All in all, the institution building process of GBs in the East was fast and the new GBs achieved an outreach that was even higher than in the western states. The market niche was relatively large, competing commercial banks did not face liquidity constraints and in order to establish a long-term relationships with the new clients in the East, loans were provided.

The credit guarantees and DTA's exemption of liabilities were used to reduce the risk. The costs due to higher defaults were high but not surprisingly high for such a fast transformation process from a planned economy to a market economy.

4.1.2.7 Conclusions from the historical development

Guaranteeing institutions have evolved and significantly changed over the century from the Saxon cooperative model before World War II, through schemes during the Nazi regime and KGGs to modern Guarantee Banks.

When guarantee schemes were built after the World War II, policy makers preferred institutions where borrowers were not shareholders. A reason why the Saxon model was not replicated might have been the conflict between cooperative banks and the liability cooperatives that received public support and cooperated only with public banks. The general conflict that became visible in the 1920s can be seen as an incentive for all commercial banks to participate in the publicly supported KGGs to avoid losing advantages to their competitors.

The KGGs had many owners from the beginning. Shares were roughly equally distributed between financial institutions on one hand, and chambers and associations on the other. Most of the shareholders did not only sit on the board, they participated in the decision-making process at the operational level, too. Hence, they were able to closely control the KGGs. Consequently, there was a chance to reduce information asymmetries. On the other hand, the general problem of distribution of information was present from the beginning. The central government was willing to address the problem of missing collateral with public intervention and provide most of the financial support for the guaranteeing institutions. The aim was "to fill a gap". The vision of government was to use public guarantees only if finance was not possible without the guarantee, i.e. to respect the principle of subsidiarity. Indeed, from the beginning KGGs were thus quite restricted with the consequence that the guarantees lost their attractiveness. On the other hand, KGGs were supposed to achieve financial self-sustainability in the long term, i.e. the government was willing to provide initial support but did not intend to establish a government-guarantor scheme with continuous public financial support. Hence, the KGGs had to fulfil a double mission: channelling public intervention respecting the subsidiarity principle, and to be financially self-sustainable.

KGGs were locally and personally closely tied to the chambers, and the initial effort by the ZDH suggests that chambers were the central driving force. However, chambers and associations themselves had to be rebuilt and were not strong enough to assume leadership. In ad-

dition, the conflicts between sectors (wholesale- and retail trade) are well documented. Cooperation was limited, and the resulting KGGs were limited in space (to their federal state) and sector. Consequently, KGGs remained small.

Financial institutions participated from the beginning and also provided roughly half of the KGGs equity. These institutions, however, were also undergoing a transformation process and fighting for survival. Private banks (cooperative and corporate) fought against the privileges and public aid given to a growing sector of public savings banks. Moreover, all three types strove to become universal banks in order to create long term bank-borrower relationships. Consequently, the cooperation among banks to share (or even outsourcing) the competence to screen borrowers had its limits. Within the Augmented Triangular Relationship, there were strong relationships between guarantors and chamber, between government and guarantors, and some banks and guarantors. Fischer reports that KGGs did not meet their expectations. Moreover, the goal of financial self-sustainability was not attained (Fischer 1959, 210,123,124).

Fischer (1959) concludes that the building of the KGGs was complicated and that the “living space” (the niche) of such institutions was more limited than expected. Among bankers there was the fear to lose clients to competing banks and moreover there was the feeling that KGGs were useless because they could only assume the same risk as the commercial banks themselves. However, the author detects advantages of the KGGs, too. Because of the participation of chambers, there was an advantage of information. Moreover, KGGs transform non-bankable collateral to bankable collateral and in addition, KGGs can be seen as a kind of “pre-school” for riskier borrowers. Fischer concludes that KGGs indeed helped filling some part of the so-called financing gap. Furthermore, the author reports that the existence of KGGs reduced a conflict that “polluted” the political and social life because small businesses, which always complained about their financing conditions, were no longer able to complain about the financing gap since KGGs could be involved. Moreover, the screening by KGGs and imposed conditions might be useful for small business, and the guarantee committees provided useful information for several institutions and enabled discussions on access to finance. All in all, Fischer concludes that the positive impacts do justify the existence of KGGs and there was hope that young institutions might grow in the future. Finally, he recommended that KGGs should merge to larger institutions that were open to several sectors (Fischer 1959, 210-231).

In the following decades, the general conception of the credit guarantee scheme was similar to that of the 1950s. The sector of industry started to participate, the small KGGs started to cooperate among each other and finally GBs for several sectors emerged. Dependency on

public agencies continued, and it came to light that temporary public support was not sufficient so that government-guarantor scheme emerged, i.e. with continuous financial support from government. It was the government which determined general conditions for the application of guarantees and participated actively in the decision-making process (Giebitz 1987, 136-137). Indeed, limitations for KGGs varied over time, the focus only on long-term finance for investments (in combination with only little working capital) impeded a long-term borrower-guarantor relationship, and dependency on banks continued.

The GBs' predecessors have not been of extreme importance in the 1950s, i.e. it is a myth that they have significantly contributed to the German "economic miracle" (*Wirtschaftswunder*).

In the 1970s, defaults continuously increased and in the 1980s as a consequence of their riskier portfolios, defaults became problematic for the small KGGs. Although KGGs received public counter-guarantees of around 60%, shareholders (especially banks) had to inject equity. Young KGGs especially had problems because they were not able to accumulate much equity, and there were (at least) three cases of serious financial distress (Giebitz 1987, 132-135). Evidence is clear that KGGs were not financially self-sustainable and consequently, there was a structural dependency on public financial support.

There are no clear indications about active ownership of KGGs. Although chambers and associations – especially the ZDH for the sector of crafts – actively initiated the KGGs, the guaranteeing institutions always depended on public agencies. In addition, the associations of the industrial sector and wholesale sector did initially block the building of KGGs. The public agencies not only provided financial support but also tied down the guaranteeing institutions with general conditions on the approval of guarantees (that had to be renegotiated perpetually) and moreover controlled the decision making-process of each guarantee. Lending banks (that are already important in the Basic Triangular Relationships of any credit guarantee scheme) became very important because they provided equity and participated in the decision making process. All in all, the literature indicates that the problem of ownership was relevant for most KGGs. In analogy, KGGs were Public-Private Partnerships (PPPs) from the beginning. Empirical evidence suggests that KGGs and GB have always been a government-guarantor scheme (basic scheme four) with private participation.

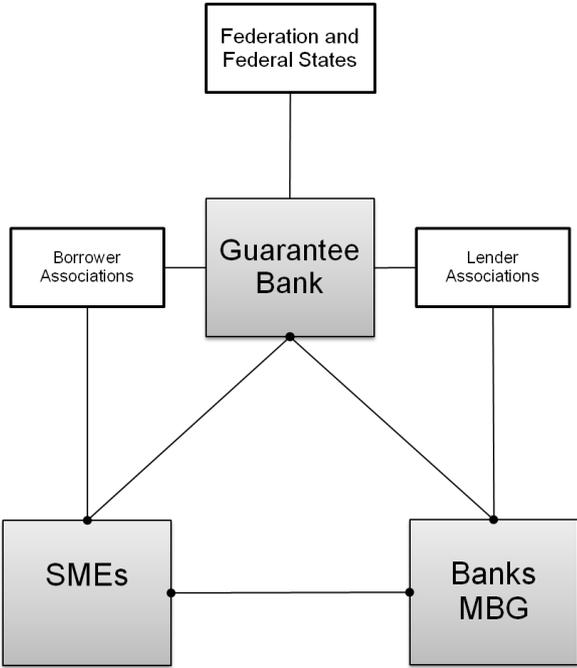
Since outreach was modest, KGGs could not be considered important within the German banking sector or in the German economy in quantitative terms, and certainly they were not a backbone. However, within their niche, they enabled riskier finance and there are indications that KGGs were used as a laboratory for all their owners to innovative. After the fall of the Berlin Wall, the institution building process was fast in the East and outreach was briefly

relatively high. The structural niche of the GBs was somewhat larger than in the West and government was willing to use them to conduct industrial policy.

4.1.3 State of the art of Guarantee Banks

The following focuses on the current system of GBs, i.e. in the period 2007-2011. Since reunification, the general structure of the scheme of GBs did not change. The last mergers of sector specific KGGs to GBs happened in the Federal State of Bavaria in 2007 and Rhineland-Palatinate in 2011 (Investitions- und Strukturbank Rheinland-Pfalz 2011). All GBs receive significant support from the Federation and the respective federal state. Borrower associations (chambers with compulsory membership and associations with voluntary membership) and lender associations (in the broad sense) continue to be shareholders and participate in the decision-making process. The following figure describes the Augmented Triangular Relationship of GBs.

Figure 27 ATR of German Guarantee Banks

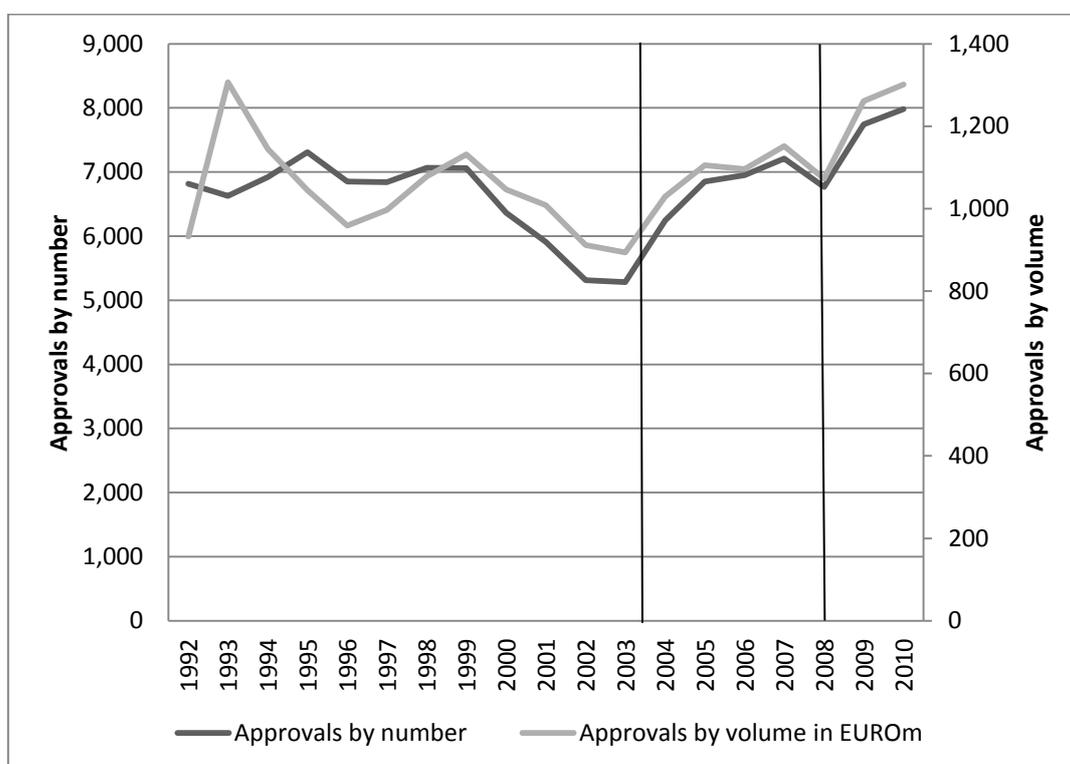


Own elaboration

4.1.3.1 The outreach of Guarantee Banks

GBs provide guarantees up to € 1 m. for loans to SMEs⁷⁸. During the financial crises, the upper ceiling of guarantees was raised to € 2 m. in between March 2009 and March 2011. Since the GBs can guarantee up to 80% of the loan, the maximal guaranteed loan can be € 1.25 m. if the GBs guarantee 80% of the loan. The maximum loan volume can increase with a decrease of the GB's share in the risk. For example, with a 50% guarantee, a loan € 2 m. can be guaranteed. Moreover, the guaranteed loan can be used together with other sources of finance. Hence, GBs can be involved in financing projects well above € 1 m.

Figure 28 Approvals of guarantees by all German GBs by Number and Volume in the Period 1992 – 2010



Own elaboration; source: VDB (2011, 84,85) and Kokalj, Paffenholz and Moog (2003, 106,107)

Figure 28 shows that the approvals by number varied between 5,000 and 8,000 per year in the period 1992-2010. The volume of approved guarantees varied between € 0.9 m. and € 1.3 m. In this period, the average value of provided guarantees varied between € 137,000 and € 197,000. The GBs behaved pro-cyclically before 2008. In the period 1992-1999, the GBs provided relatively high numbers and volumes of guarantees during the “reunification-

⁷⁸ Definition, see section 3.2: employees < 250 persons and annual turnover < € 50 m. or annual balance sheet total < € 43 m (European Commission 2005, 14).

boom” and the period of the “dot.com” bubble. This boom was followed by a decrease of approvals during the German banking crisis between 1999 and 2003. This period was followed by a “little bonanza” in the period 2003 until 2007, before the international financial and economic crisis affected Germany directly. During the crisis, the approvals by number and volume decreased in the year 2008 but increased in the following years. The increase was due to the government using the Guarantee Banks to combat a possible credit crunch. This temporary contra-cyclical measure will be analysed in more detail in section 3.2.3.5.

Since the guarantees are partial, the volume of guaranteed loans and venture capital (often mezzanine capital) is higher. In the years 2007, 2008 and 2009, the guaranteed finance summed to € 1.6 bn., € 1.6 bn. and € 1.8 bn. respectively (VDB 2010, 82, VDB 2009, 56). Consequently, the GBs guarantee on average 68% of the guaranteed external finance.

The collateralised loan or equity in question is usually only one brick of financing. For example, the total investments supported by GBs were estimated at € 3.4 bn. according to the Association of German Guarantee Banks in the year 2008 (VDB 2009, 10, Kramer and Nitsch 2010, 1010). Hence, this is roughly twice as much as the volume of the guaranteed finance.

Before analysing the stocks of guarantees, it has to be noted that generally, two thirds of the guarantees of the GBs support the finance of long-term investment and one third support working capital. In the crisis year 2009, this structural split was completely reversed and two thirds of the guaranteed finance was for working capital (Elkan and Schmidt 2006, 74,75, VDB 2010, 12, and interview 28). This is a first sign that GBs are used like their predecessors by the government to support long-term investment respecting the principle of subsidiarity.

With respect to the stocks of guarantees, the outstanding total portfolio of all German GBs varied between to 44,000 and 47,500 by number in the period 2008-10, and between € 5.2 bn. and € 5.9 bn. by value in the period 2006-10.

Table 26 Outstanding Guarantees of German GBs in the Period 2006 – 2010

Outstanding guarantee portfolio of all German GBs		
	by number	by value
2006	43,000	€ 5.20 bn.
2007	43,700	€ 5.30 bn.
2008	44,192	€ 5.40 bn.
2009	45,614	€ 5.59 bn.
2010	47,671	€ 5.87 bn.

Own elaboration; source: (VDB 2011, 91, VDB 2010, 81, VDB 2009, 55, VDB 2007, 10,13, VDB 2008, 14,15)

These numbers indicate that the GBs are of modest outreach within the German banking sector. In comparison to commercial banks, the network of German savings banks alone had a balance sheet total of € 1,071 bn. and an outstanding credit volume of roughly € 631 bn. to non-banks in 2008 (DSGV 2009, 2)⁷⁹. Also with respect to loans to companies and the self-employed, the savings banks alone had an outstanding loan volume of almost € 300 bn. at the end of 2008. Consequently, the savings banks are by far larger financial institutions and the Guarantee Banks do not play such an important role, unlike the credit guarantee schemes in Japan and South Korea. Also in comparison to other European AECM members like the Italian Confidi or Spanish SGRs, the outreach of German GBs is modest. One explanation is that the German GBs are competing with several other national guarantee (or risk sharing) schemes which is, to my knowledge, not the case in Italy and Spain.

In 2009, volumes increased because the GBs were used as a temporary scheme to prevent a credit crunch. The numbers also indicate that the GBs' niche had only widened slightly. The stock of the GBs' guarantees becomes small in comparison to the outstanding guarantees of the central government (see Figure 25 and Table 16). In the year 2009, the outstanding guarantees to support exports summed € 108 bn. and guarantees to support the domestic economy summed € 129 bn. In addition, approvals (hence flows and not the stocks) of "exemptions of liability" and guarantees of the development banks summed to € 1.8 bn. and € 6.2 bn. in the years 2008 and 2009 respectively (see section 4.1.1.2). In other words, the approvals of "exemptions of liability" in one year were higher than the stocks of the GBs' portfolio in the year 2009.

⁷⁹ DSGV: German Savings Banks Association (*Deutscher Sparkassen- und Giroverband*).

The following table describes the regional distribution of the outreach.

Table 27 GBs' Stock of Guarantees by Federal States in the Year 2009

Federal States				Outstanding guarantees by volume in 2009		Outstanding guarantees by number in 2009	
Name	Abr.	GDP in € bn.	Population in m.	in € m.	share in %	#	share in %
Baden-Württemberg	BW	341	10.7	1,437	26%	12,815	28%
Bavaria	BAV	424	12.5	408	7%	2,341	5%
Berlin*	BER	92	3.4	221	4%	2,033	4%
Brandenburg*	BRA	54	2.5	266	5%	2,028	4%
Bremen	HB	27	0.6	50	1%	443	1%
Hamburg	HH	85	1.7	288	5%	3,176	7%
Hesse	HE	215	6.1	236	4%	1,617	4%
Mecklenburg-West Pomerania*	MP	35	1.7	161	3%	1,324	3%
Lower Saxony*	LSAX	206	7.9	247	4%	2,130	5%
North Rhine-Westphalia	NRW	523	17.8	483	9%	3,827	8%
Rhineland-Palatinate	RP	102	4.0	314	6%	2,251	5%
Saarland	SL	28	1.0	31	1%	204	0%
Saxony*	SAX	93	4.2	420	8%	2,962	6%
Saxony-Anhalt*	SAXA	50	2.4	355	6%	2,353	5%
Schleswig-Holstein	SHOL	73	2.8	365	7%	3,954	9%
Thuringia*	THU	48	2.2	306	5%	2,156	5%
total		2,397	81.8	5,586	100%	45,614	100%

Own elaboration; source: VDB (VDB 2010, 81) and Statistische Ämter des Bundes und der Länder (2011a, 2011b)

The table shows the regional distribution of outstanding guarantees in the year 2008. Data from the year 2008 is available and the distribution is very similar, see (VDB 2009, 55).

In the table, the new Federal States and Berlin are marked with an “*”. Their share of outstanding guarantees represents 28% of all guarantees by number and 31 % by volume. This share roughly equals the share of the Guarantee Bank in Baden-Württemberg – a relatively small but highly developed federal state. Indeed, with 26% of all outstanding guarantees by volume and 28% of all guarantees, this Guarantee Bank is by far the largest in Germany. The GB in Baden-Württemberg has a higher outreach even than the GB in the largest Federal State North-Rhine Westphalia (that is also highly developed). It has to be noted that the GB

in Baden-Württemberg was the first Guarantee Bank that emerged from the sector-specific KGGs. Although the Guarantee Bank in Baden-Württemberg is the largest in Germany, its outstanding guarantees, however, appear small in comparison to the FSDB of the same state which has a balance sheet total of € 61 bn. (see section 3.2.1.2). This relation generally holds for all federal states since the FSDBs are not only restricted to the finance of SMEs.

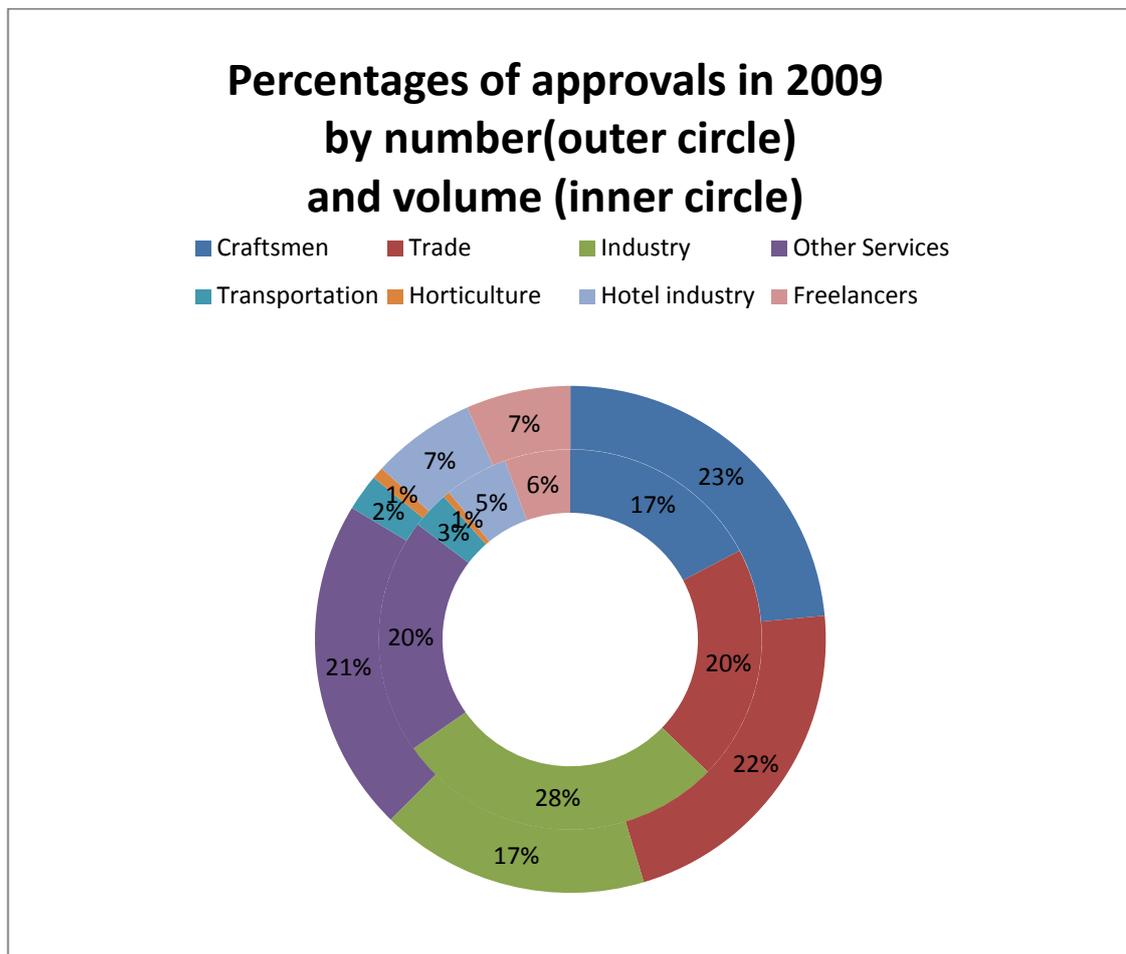
The table also shows that there are extremely small institutions such as the GBs in the Federal States of Bremen, Saarland and Mecklenburg-West Pomerania. Indeed, in some federal states, the guaranteeing institutions do not have their own administrative body. In these cases, the FSDBs conduct the screening and prepare the guarantee approvals for the central decision making body, the guarantee committee of the GB.

The following graph describes the sectorial distribution of approved guarantees in the year 2009. Note that GBs are usually open for all sectors unlike their predecessors (KGGs). But they are generally not allowed to support the sectors of agriculture⁸⁰ or coal which are excluded because of their special public promotion systems and special State aid regulation.

There are some exceptions and restrictions. There is one GB for social projects (*Bürgschaftsbank für Sozialwirtschaft*) that is sectorially restricted but operates nationwide and there was still one KGG for crafts in Rhineland-Palatinate until 2011. However, this KGG was not a completely independent institution since its guarantees were managed by the FSDB that also manages guarantees for other sectors. The Bavarian GB does not provide credit guarantees for the industrial sector, which instead is supported by the FSDB (see section 4.1.2.5).

⁸⁰ However, farmers can receive guaranteed finance when the finance is for activities beyond the production of agricultural products, for example processing and trade of their products.

Figure 29 Approvals of GBs by sector in 2009

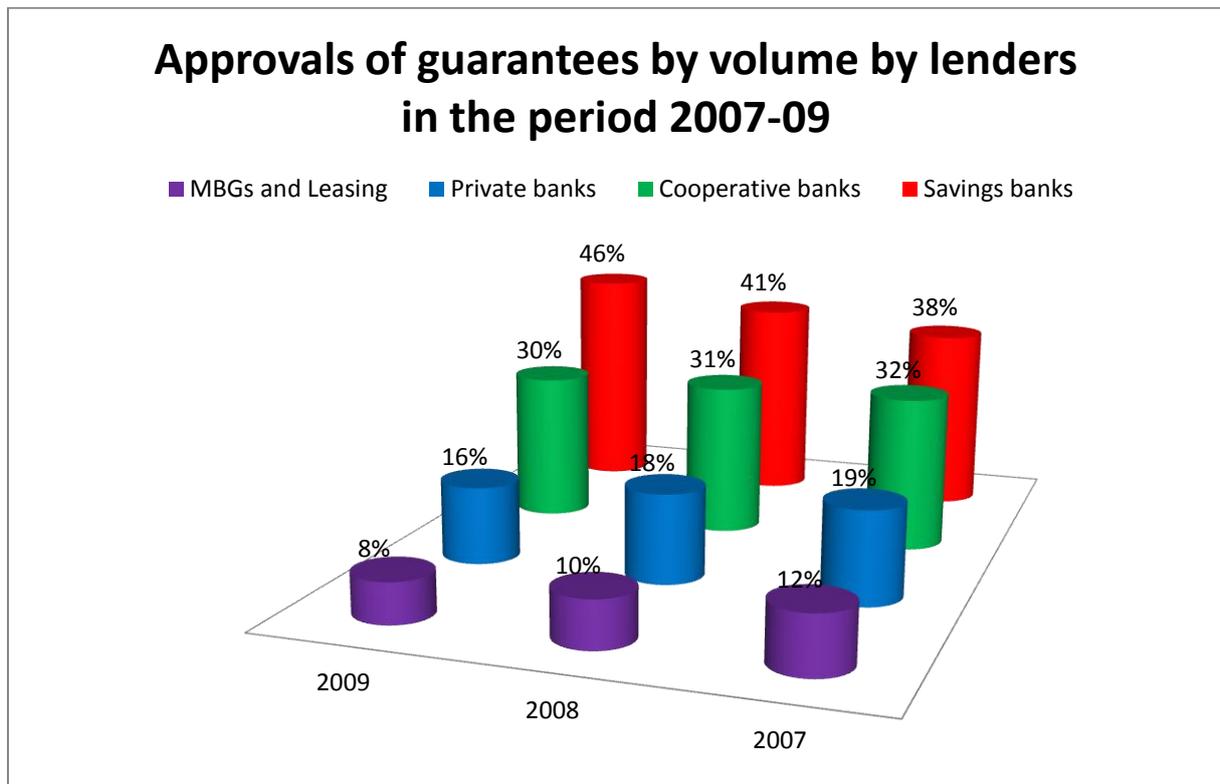


Own elaboration; source: VDB (2010, 80)

The percentages of approvals are stable for the period 2007-09 with the exception of the industrial sector, that had a drop during the crisis year 2008. The graph moreover shows that the sectors of craftsmen, of trade, of industry and the sector of services are roughly equally important and together they represent almost all guarantees. Consequently, the portfolio is diverse but on the other hand, this means that the small GBs with few employees are not specialised. The graph also shows that guarantees for industry are on average of higher value. The opposite is true for the craftsmen, their guarantees are on average the smallest.

The following graph provides an overview of the active participation of lenders within the scheme of Guarantee Banks. Generally, GBs cooperate with all commercial banks and also issue guarantees for silent partnerships via Venture Capital Companies for SMEs (*Mittelständische Beteiligungsgesellschaften*, MBG) which are usually sister institutions with a legal status of their own, and usually refinanced by the KfW (Kramer and Nitsch 2010, 1007).

Figure 30 Approvals of GBs by Lenders in the Period 2007 – 2009



Own elaboration; source: VDB (2011, 92, 2009, 56, 2010, 82)

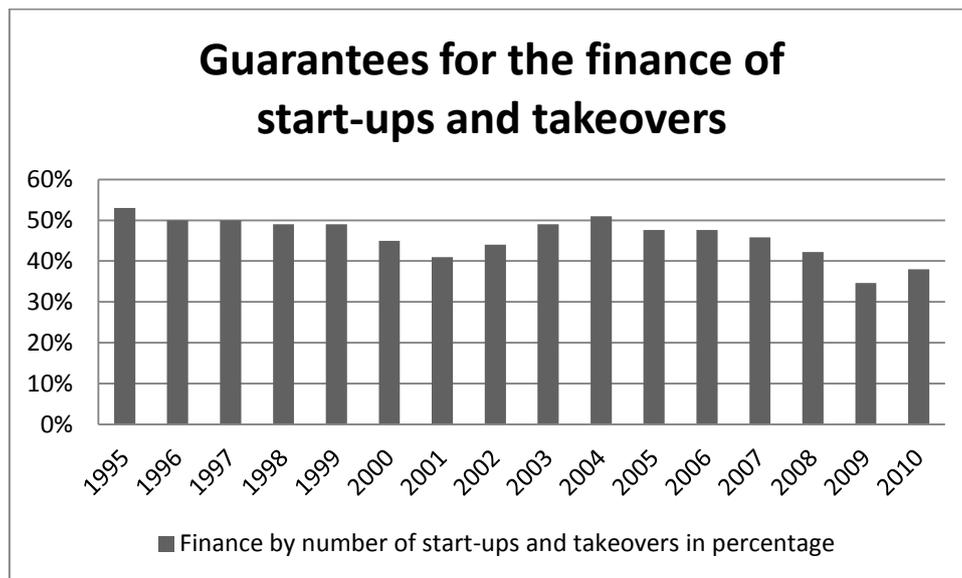
Figure 30 clearly shows that savings banks are the most important lenders that cooperate with the Guarantee Banks. In the period, their share of approved guarantees increased from 38% to 46%. The savings banks are followed by the cooperative banks and private non-cooperative banks. The MBGs together with leasing companies have the smallest share of all lenders. The graph also shows that this private equity or mezzanine capital scheme is of less quantitative importance for GBs than the risk sharing with the banks.

The graph only illustrates a period of three years but it gives a good picture of the structure. The order presented in the graph is constant for the period 1995-2007 but the share of private banks was on a higher level in the period 1995-2001, i.e. before the German banking crises. The share of MBGs was always below 10% within the period 1995-2007 (Schmidt and Selbherr 2009, 59). With respect to the eastern Federal States, it has to be noted that the distribution is different and through all years the share of private non-cooperative banks is higher than that of the cooperative banks. In the year 2007, the private banks also received more guarantees from the eastern GBs than the savings banks.

The following figure highlights the importance of guarantees for the finance of start-ups and takeovers. With 46% of all guarantees by number (on average in the period), start-ups, en-

terprises whose formal foundation was up to three years ago, were at the forefront of the customers. Indeed, interviews have confirmed the impression that GBs are of special value for these young enterprises, which have great difficulties to come up with traditional collateral (Kramer and Nitsch 2010, 1010).

Figure 31 The Role of Start-up Finance for German GBs in the period 1995-2010



Own elaboration; source: VDB (2010, 78,79, 2011, 88,89) and Schmidt and Selbherr (2009, 57)

With respect to the share of the provided guarantees by volume, the quantitative importance is lower. For the years 2008 and 2009, the share (by volume) is 33% and 19%. Consequently, on average, the finance of start-ups and takeovers is usually of lower value. The graph shows that GBs provide more guarantees for new companies during periods of economic growth. On the other hand, their share fell in the periods 2000-02 and 2008-10 that are both marked by financial and economic instability.

Hence, one can conclude that the GBs' outreach is modest, even though this potential niche is hard to estimate. Nevertheless, start-ups finance and long-term finance are especially important for GBs. They cooperate with banks of all three pillars and the GBs behaved procyclically, except for the year 2009. Hence, this points to the impression that GBs are usually used as institutions for implementing structural policies supporting "unternehmer", but they can also be used as vehicles for temporary crisis measures. These are indicators for a subsidiary use of the credit guarantees.

4.1.3.2 Shareholders and risk-sharing

GBs are public-private partnerships. SMEs are represented within the scheme via their respective chambers and associations. In the Federal States of what was West Germany, as discussed in the historical analysis, chambers and associations are the main shareholders of GBs, along with the banks (public, cooperative and private). As already shown in the historical analysis, in the western GBs the shares are equally distributed between financial institutions and associations (including chambers). In the eastern states, however, banks contribute most of the equity (Kramer and Nitsch 2010, 1007,1008, Schiereck 2002, 184). This can be explained by the financial constraints of eastern chambers. Unlike the situation of the banks in the 1950s, the banks had financial means in the reunification period.

The following table provides the distribution of the shares of the Guarantee Bank in the eastern Federal State Thuringia.

Table 28 Shareholders of the GB in Thuringia

Name of shareholders	Description	Shares in %
Helaba	Federal State Bank	31.50%
DZ Bank	Central bank of the cooperative banks	22.10%
Deutsche Bank	Private bank	8.70%
HVBank	Private bank	8.70%
Commerzbank	Private bank	12.20%
SEB	Private bank	1.90%
Bankhaus Max Flessa	Private bank	1.00%
Thüringer Aufbaubank	Federal State Development Bank	7.90%
Signal Iduna	Insurance company	4.00%
IHK Erfurt	Regional chamber for industry and commerce	0.40%
IHK Ostthüringen	Regional chamber for industry and commerce	0.40%
IHK Suhl	Regional chamber for industry and commerce	0.40%
HWK Erfurt	Regional chamber for craftsmen	0.40%
HWK Ostthüringen	Regional chamber for craftsmen	0.40%
HWK Südthüringen	Regional chamber for craftsmen	0.40%
Other associations		0.50%

Own elaboration; source: Bürgschaftsbank Baden-Württemberg (2010, 62)

The table clearly shows that banks provide most of the equity. The share of chambers and associations, totalling 2.9%, is negligible. The public banks Helaba and Thüringer Aufbaubank hold 40% of the shares, the “Verbund” of cooperative banks holds 22% via its central institution, and the private non-cooperative banks hold together 33%. For the other Guarantee Banks in the eastern Federal States no data is at hand but it was stated in interviews that the

distribution of equity between banks and associations is similar. Hence, the financial institutions dominate the shares of Guarantee Banks in the East.

This wide distribution of shares can result in a general missing ownership problem. The lenders are not only shareholders but also clients of the Guarantee Banks, so there is a conflict of interest. For example, as a client, a bank may be interested in receiving credit guarantees with low fees and low transaction costs, best of all for riskier loans. As a shareholder, the bank should be interested in the profitability of the Guarantee Bank, especially if the gains would be distributed to the shareholders – which is not the case. This general conflict will be discussed in the analysis of the relationship between lender and guarantor in section 4.2.3.4.

Due to the fear of a credit crunch, the Guarantee Banks received more public support between March 2009 and March 2011 (see section 4.1.3.6). The following provides an overview of the risk-distribution in the GB scheme before this period. The distribution of the risk will be studied in three steps. First, the distribution between bank and GB will be explained. Second, the distribution of risk between the GB and their counter-guarantors will be described. Third, the resulting distribution of risk for all actors will be considered.

As already discussed, the GB provide guarantees of up to 80% and on average, the cover is 68%. In addition to the reduction of the percentage that is covered by the guarantee, the share of the Guarantee Banks' risk can be reduced further if there are other non-guaranteed loans. For example, if the Guarantee Bank covers a loan of € 1 m. with an 80% guarantee and the lender provides an additional loan of € 1 m. that is not guaranteed, the Guarantee Bank supports a finance of € 2 m. with a guarantee of 40% (Elkan and Schmidt 2006, 40-43, Kokalj, Paffenholz and Moog 2003, 99-102).

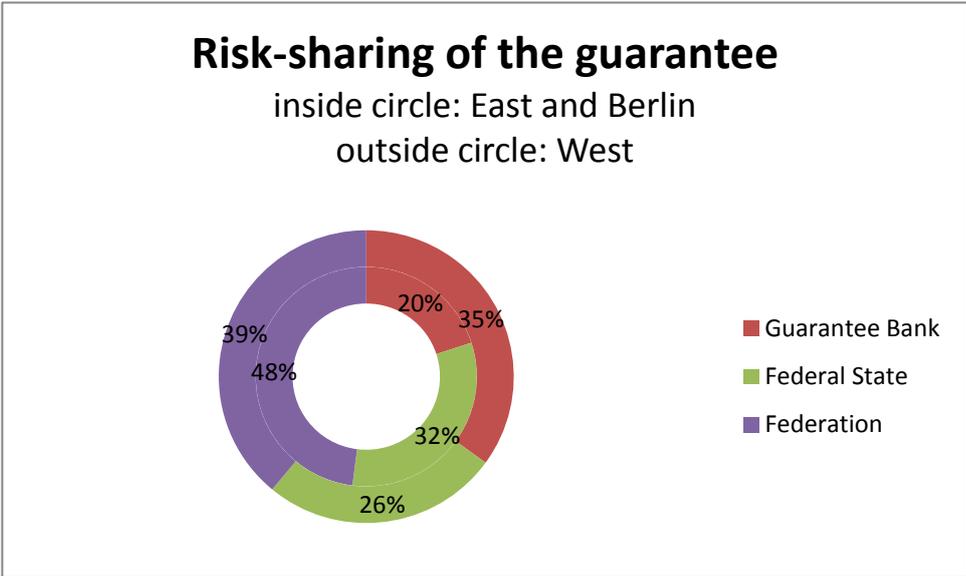
This flexibility has an impact not only on the risk distribution but also on the costs of the guarantee (for the borrower and the lender). GBs charge fees relative to the guaranteed loan. If the percentage of the guarantee is reduced but fees continue to be charged as a percentage of the loan, the cost for the risk taking increases. Consequently, the percentage of the loan covered by the guarantee can be used within the negotiations (Kramer 2008, 104,105).

With respect to the existing collateral, the results of liquidations are shared in proportion with the negotiated percentage of the guarantee. Even for small businesses the financing structure of the enterprise can be complicated (including the intra-family claims and liabilities) and the guaranteed loan is often only one brick of finance. Since the guaranteed loan

can vary in seniority in relation to other external debt of the borrower, the claims on existing collateral and the risk distribution vary with every loan and borrower.

A GB provides the guarantee and at the same time, it receives a public counter-guarantee of 65% in the West and 80% in the East, including Berlin. In all Federal States, 60% of each counter-guarantee is provided by the Federation and 40% by the Federal State (Kramer and Nitsch 2010, 1008). The resulting risk sharing is presented in the following graph.

Figure 32 Risk-Sharing of a Guarantee between the GBs and the Counter-Guarantors

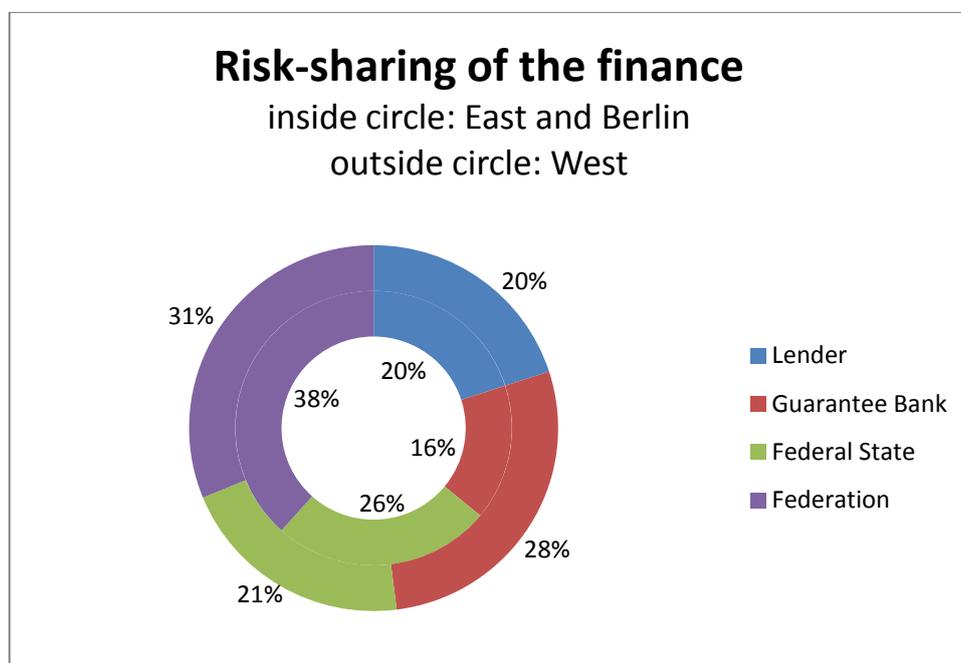


Own elaboration; source: Elkan and Schmidt (2006, 40-43)

Consequently, the GBs’ share of the risk of a called guarantee is 35% in the West and 20% in the East. The federation always assumes the largest part of the risk, which is almost 50% in the eastern federal states. Consequently, the eastern Federal States receive more public support per guarantee from the central government. However, this does not mean that the East receives counter-guarantees that are of higher absolute volume. When one has a look at the absolute outstanding guarantees (Table 27 in the previous section), the total outstanding counter-guarantees of the Federation sum up to roughly € 1.5 bn. in the West and € 0.8 bn. in the East for the year 2009.

In the following graph, the resulting risk-distribution among the lender, the GB, the federal state and the central government is presented for a maximum 80% guarantee.

Figure 33 Risk-Sharing between Lender, GB and Counter-Guarantors



Own elaboration; source: Elkan and Schmidt (2006, 40-43)

If a guarantee of 80% is provided, a GB in the West (East) itself only participates with 28% (16%) of the risk. This share decreases further as the percentage of the guarantee provided to the lender decreases. This percentage is on average 68%, and hence the GB's usual part of the risk is only 23.8% in the West and 13.6% in the East.

The distribution of risk points to the impression that GBs are not a self-help credit guarantee scheme but rather institutions that channel public guarantees to SMEs, i.e. government-guarantor schemes. GBs participate in the risk, which reminds one of deductibles in the insurance industry.

4.1.3.3 Regulation as a bank and as a public credit guarantee scheme

In addition to the regulation as financial institutions, due to the public financial support via counter-guarantees, the guaranteeing activity is subject of German budgetary regulations and the State aid regulations of the European Union. This section focuses on the budgetary and State-aid regulation.

GBs are limited liability companies (*GmbH*), and formal credit institutions in the sense of §1 of the Banking Act (*Kreditwesengesetz*).⁸¹ Hence, GBs are audited by independent auditors and regulated by the Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, BAFIN) (Kramer and Nitsch 2010, 1008). The status of a bank and the associated regulation have a direct effect on the GBs and in addition, the credit guarantees are accepted as a risk-mitigation instrument (within the Basel I and II frameworks) and reduce the risk weighting coefficients, i.e. reduce the requirements of regulatory capital of the commercial banks (BAFIN 2006, § 164 (3))⁸².

With respect to the regulation of the central government and the federal states, there are three “crash barriers”: First, there should be “a general economic interest” in supporting the borrower. Second, the principle of subsidiarity is anchored in §3(1) 5 of the federal Budget Plan that enables the government to provide guarantees (see section 3.2.1.2). Third, the government urges the GBs to apply “the duty of care of a prudent businessman” (*Sorgfalt eines ordentlichen Kaufmanns*) in order to impede financial irresponsibility (Bundesamt für zentrale Dienste und offene Vermögensfragen 2009, 4). These principles are relatively vague but explain the following restrictions that can be found in the general counter-guarantee agreement between the government and GBs (Bundesamt für zentrale Dienste und offene Vermögensfragen 2009):

- 1) The representatives of the government monitor the GBs’ activities case-by-case and can veto any counter-guaranteed guarantee. Moreover, the audit divisions of the Federation and the federal state have the right to audit. Consequently, representative of the government monitors the activity and can always veto the guarantee if it does not comply with one of the crash barriers.
- 2) The government urges the GBs to take as much collateral as possible and provide only partial guarantees of up to 80% of the loan. Moreover, maximum ceilings on the total outstanding counter-guarantee volume are agreed with every GB and the respective federal state. These restrictions anchor the principle of subsidiarity and are in line with the third crash barrier since the credit guarantees do not substitute existing collateral that could have been provided, risk remains with the borrower and partially with the lender (like a “deductible” for the lenders as it is used by insurance companies), and the whole guaranteeing activity remains of limited volume.

⁸¹ Guarantee Banks are restricted to their core business and, for example, cannot capture deposits.

⁸² For a technical explanation of this reduction within the Basel framework see De Vincentiis and Isaia (2008) and BaFin (2006).

- 3) The government forbids the GBs to guarantee loans for borrowers in financial distress which is a restriction with respect to crash barrier three.
- 4) Regulation also limits⁸³ the GBs in cases where loans were already provided and to guarantee loans that replace other unguaranteed loans (debt conversion). Moreover, guarantees for working capital should only represent 35% of the outstanding guarantees. For the trade sector this ceiling is 50%. These measures anchor the principle of subsidiarity since GBs should not crowd out finance that lenders can provide without the guarantee scheme.

The EU State aid regulation is binding for the GBs⁸⁴. Indeed, because of modifications within the State aid regulation since 2005, the whole public support scheme was questioned (Kramer 2008, 81).

The Commission concentrates on market distortions because of public intervention, and generally classifies public credit guarantees as intransparent. Whereas credit guarantees of high value have to be submitted directly to the Commissioner of competition, credit guarantees for SMEs can be allowed in two steps. Hence, unlike representatives of German government, the EU does not monitor every guarantee of the GBs case-by-case. To regulate all European credit guarantee schemes, it sets exact rules under which guarantees can be provided. In the first step, the State aid element (or cash grant equivalent) of a credit guarantee has to be calculated. The Commission provides special regulations for the method, and before a method can be applied, it has to be approved by the Commission itself. In the second step, there are several regulations, such as the “de minimis aid” and “General block exemption Regulation”, under which State aid (be it grants, guarantees or subsidised loans) can be provided. However, there are exceptions. For example, there is a possibility to calculate the State aid element of the guarantee as 13% of the guarantee volume if the guarantee volume is below € 1.5 m. and should be provided, in the second step, according to the “de minimis aid” regulation (Bund/Länder AG Bürgschaften/ staatliche Beihilfen 2011, 8).

The VDB (20XX) reports that it has an approved method to calculate the cash grant equivalent. It is based on many items such as: the VDB rating⁸⁵ of the borrower (one-year default-

⁸³ There is an exception for investments undertaken in the last three years.

⁸⁴ “The objective of State aid control is, as laid down in the founding Treaties of the European Communities, to ensure that government interventions do not distort competition and trade inside the EU. In this respect, State aid is defined as an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities. Therefore, subsidies granted to individuals or general measures open to all enterprises are not covered by Article 107 of the Treaty on the Functioning of the European Union (TFEU) and do not constitute State aid” (European Commission 2011b).

probability); the percentage of the counter-guarantee (that varies in the federal states); the maturity of the finance; the current reference rate of interest; the expected recovery rate; fees; administrative costs; and capital costs (European Commission 2009). One should note that the State aid element increases with the expected risk and share of counter-guarantees, and on the other hand, it decreases with higher fees.

In the second step, the GB can test whether the guarantee is in line with the “de minimis aid”. Most important requirement is that the total State aid, which a borrower had received over any period of three fiscal years, should not exceed € 200,000. This ceiling is further reduced to € 100,000 to any undertaking within the road transport sector (European Commission 2006b). Note that other State aid provided to the borrower such as loans with subsidised interest rates or grants are included in the calculation of the total State aid. If the total State aid is higher than the ceiling, the finance has to be renegotiated to include less State aid – with less grants, less subsidised loans, and/or less guarantees. Alternatively, the GB has to find another regulation that enables the State aid, such as the General Block Exemption Regulation⁸⁶.

To sum up, the regulation of the GBs as financial institutions and schemes of public intervention involves high transaction costs. GBs are not allowed to provide guarantees for companies larger than SMEs and not for companies in financial distress. Moreover, GBs are restricted in the agricultural and fishery sector as well as exports and finance of transportation. There are limits with respect to finance of working capital and conversion of debt. In addition, GBs are restricted in the value of State aid, which stops the GBs from providing guarantees of higher value, higher expected default rates and low fees. In addition, the ceiling on the total state aid increases the competition with other support systems to SMEs since this support is limited. Hence, decision makers of the government, their agencies, lenders and borrowers may have to decide what kind of support they want to provide – or take. GBs are monitored closely by their public counter-guarantors that have to accept every guarantee. These representatives of the German government have to monitor that there is a general economic interest in supporting the borrowers, the principle of subsidiarity is maintained and that GBs behave as prudent businessmen. In addition, the European Union regulates

⁸⁵ The rating method was created by the German association of Guarantee Banks with the Creditreform Rating AG.

⁸⁶ The German association provides an example and states that either the de minimis ceiling may be reached due to other public support or that a high default rate may result in a State aid that would be too high. In a case of a finance of € 2 m., the counter-guarantors would bear the risk of € 1.28 m. or 64%. If the default rate (of the whole period of 10 years) is 20%, the State aid equivalent would be € 256,000 and hence could not be considered as a de minimis aid. However, it could be in line with the General block exemption (VDB 20XX, Annex II page 7).

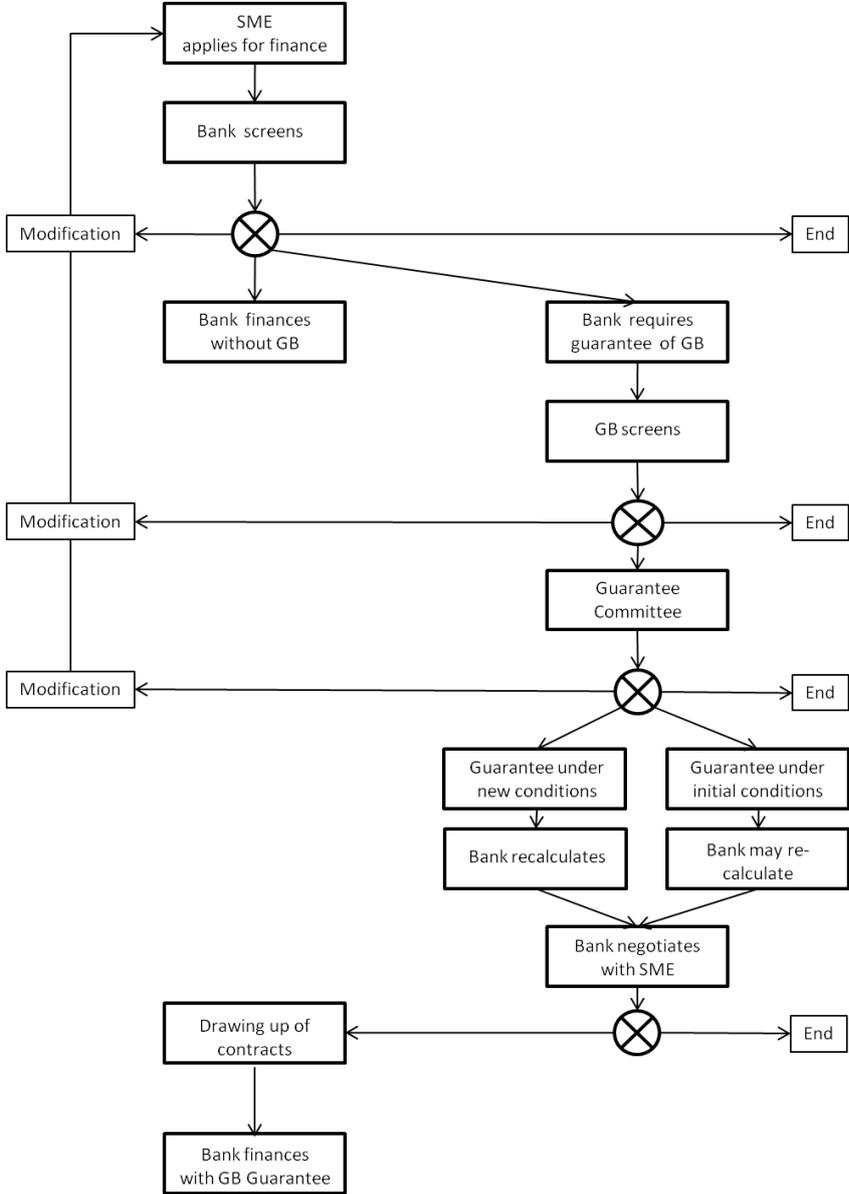
and restricts the GBs in which cases guarantees can be provided. Whereas the German government analyses every request case-by-case and hence can include qualitative information, including case-by-case discussions, in its decision, the EU regulation for is based on quantitative information, in the case of Guarantee Banks.

The banking regulation, acceptance of the guarantees as a risk-mitigation, tool, and State aid regulation points to the prime importance of the relationships between guarantor and lender, and government and guarantor in the ATR – making GBs examples for government-guarantor schemes.

4.1.3.4 The decision-making process of Guarantee Banks

In the following, the decision-making process of the GB in the Federal State of Brandenburg will be presented since this Guarantee Bank was visited intensively in the field research (Kramer 2008, 66-70). Several interviewees explained that this decision-making process is largely representative for German GBs. These statements were crosschecked with a detailed analysis of the GB in NRW and the (then) KGGs in Bavaria conducted by Kokalj, Paffenholz and Moog (2003). The most important difference to other GBs is that the first screening of the borrowers and the administration of the guarantees can be conducted by a Federal State Development Bank whereby the central decision-making body, the GB's guarantee committee, remains in the charge of final decisions.

Figure 34 Standard Decision-Making Process when GBs are Involved in SME-Finance



Own elaboration; Kramer (2008, 67)

As a first step, the SME normally applies for finance at a commercial bank which can provide the loan. This bank can provide finance with refinance through a KfW credit line or without. Moreover, it can refuse financing altogether. If the commercial bank requires a guarantee of the GB, with the consent of the SME, the GB assesses the SME with respect to its criteria of

eligibility. The GB (in some cases the FSDB as manager) starts the screening process of the potential borrower. This process does not rely only on the commercial bank's documents but also requires a set of its own (B1.1 in the ODM approach). Furthermore, there is usually an interview with the borrower, and a staff member of the GB visits the SME. In addition, the respective chamber or association is asked to send a reference. Instead of merely accepting or denying the proposal, the bank's loan officers and the GB staff often discuss the loan request with the prospective borrower. Indeed, that discussion can modify the proposed financing structure and even the content of the investment project (Kramer and Nitsch 2010, 1011).

When the GB's staff is in favour of providing the guarantee, the GB presents the project to its central decision-making body, the Guarantee Committee which consists of (i) representatives of chambers and associations, (ii) representatives of commercial banks (public, private and cooperative) and (iii) representatives of the ministries of finance and economics of the respective federal state who also represent the Federation. In spite of usually not being shareholders of GBs⁸⁷, the representatives of the ministries have the right to impose conditions and even to veto the guarantee, because, as already pointed out, the Federal States and the Federation provide counter-guarantees (Kramer and Nitsch 2010, 1011). Consequently, the SMEs normally do not participate directly in the decision-making process. Nevertheless, exceptions do exist. A representative of an association can be at the same time a business owner and hence can be a competitor of the prospective borrower. There can be a Guarantee Committee that assesses all guarantees, such as in Brandenburg. In other Federal States, like in Berlin and NRW, there are several committees for different sectors – which can be explained by the merger of sectorial KGGs.

In advance, the GB circulates aggregate information on the borrower (the financial situation and investment project) to the committee members. The Guarantee Committee does not only approve or reject approvals, but it can impose conditions. These conditions can be fundamental modifications and the committee can urge that the application be resubmitted to the committee. Alternatively, the committee can approve the guarantee under new conditions such as a reduced risk sharing or requiring an additional personal guarantee of a family member.

Kokalj, Paffenholz and Moog (2003) report that in North Rhine-Westphalia the process lasts on average three to four weeks but can last six weeks. In complicated cases, this process can also last three to four months. This time varies from two to six weeks in the other federal states. Complicated cases can last up to nine months (Kokalj, Paffenholz and Moog 2003,

⁸⁷ The only exception is the GB in Schleswig-Holstein.

115). These numbers agree with the interviews, however, interviewees emphasised that there are many cases with a shorter time especially for smaller volumes. For example, the Guarantee Committee in Brandenburg meets usually 16-17 times a year (Kramer 2008, 72). Elkan and Schmidt (2006) calculate that on average, the approval rate of the GBs was 70% in the period 1995-2004. The lowest values can be found in Saxony (59%) and Bavaria (61%), and the highest values in Bremen (86%) and Baden-Württemberg (79%).

With the guarantee in place, the bank and the borrower have to negotiate financing. If the committee had imposed new conditions, the bank has to recalculate the financing which may affect the financing conditions for the borrower. Indeed, although the GB had approved a guarantee there is still the possibility that the bank refuses its financing. However, this is unlikely. Usually the contracts are drawn up and the bank finances the SME with the guarantee of the GB.

Once the loan is given, the commercial bank monitors the borrower. However, the GB also keeps an eye on the SME by receiving the current financial statements. In the case of delay or default, the commercial bank has to inform the GB. The commercial bank and the GB can jointly negotiate a debt restructuring with the borrower. If that is not possible, the GB usually provides a first payment to the bank. On the other hand, the GB receives claims on existing collateral in the proportion of the provided guarantee. The commercial bank liquidates the existing collateral so that the exact value of loss becomes apparent. The commercial bank and the GB adjust their losses via a second payment. Usually, there is neither juridical action nor any other insolvency procedure, since the expected value of collateral does not normally justify formal insolvency procedures. Furthermore, enforcement against private persons with low economic means is usually not feasible. However, it is common practice to negotiate a realistic long-term loan repayment agreement with the defaulted borrower with a reduced amount (Kramer and Nitsch 2010, 1011).

The description of the decision-making process show that for the ministries, GBs thus assume valuable screening, pre-selection and monitoring functions as well as part of the risk so that not only big and medium-sized enterprises with their direct access to government agencies can enjoy public guarantees (Kramer and Nitsch 2010, 1011).

The Guarantee Committee is not only the central decision making organ but also acts as a platform of the small business supporting community. Indeed, many interviewees stated that the committee is somewhat like an "Information Pool" (Kramer 2008, 107). The committee meets regularly and members can discuss current issues such as regulation (banking regulation, national regulation to provide financial support and State aid regulation of the

European Union), alternative financial support and indeed anything that matters to SME finance.

In general, this decision-making process enables further learning effects on all sides. Chambers and associations have knowledge about markets that banks and borrowers might not have. Within the Guarantee Committee, the joint discussion of the SMEs' financial statements, the investment projects and the banks' financing enhances the knowledge of the ministries of economics and finance. Consequently, this direct information on the needs of SMEs can improve local public policy. By augmenting the available information and reducing information asymmetries on all sides, the institutional set-up of GBs promotes and enables the provision of sound loans to SMEs. On the other hand, however, this decision-making process implies high transaction costs. Also the distribution of sensitive information can put off potential participating persons and institutions, because the involvement of a third party in the triangle always means that internal information might spread to competing enterprises, banks or the tax authorities. That is why strict codes of professional conduct with regard to confidentiality and trust as well as institutional and IT firewalls are essential for a well functioning guarantee mechanism (Kramer and Nitsch 2010, 1013)⁸⁸. This problem holds for both the borrowers and the lenders. Competing lenders can monitor the financing conditions and general financing behaviour of the involved banks.

The negative impact of an distribution of sensitive information and the positive impact of additional information – or whether the GBs can reduce information asymmetries – will be analysed in the following sections when the relationships of the GBs to the borrowers and to the lenders will be discussed. Nevertheless, it can already be recorded that the GBs use their own information and that there are high transaction costs. GBs provide a vote and an opinion that can influence the lender. Hence, GBs have some similar functions like rating agencies but, on the other hand, differ fundamentally since they take risk via the credit guarantee.

Politicians of municipalities who might be interested in supporting particular borrowers do not have a direct influence in the GB scheme. An indirect channel would be via savings banks who are usually owned by the municipalities and indeed are important within the scheme. However, the influence of one savings bank is usually small. Only the politicians of the respective federal state can generally influence the decision-making process. For example, this can be done via the representatives of the ministries who manage the counter-guarantees and via representatives of public banks that are shareholders. However, this influence is also only indirect, and although politicians on federal state level are interested in small business

⁸⁸ Indeed, confidentiality in banking is binding for the members of the committee.

finance they might not be interested in the finance of individual borrowers. This may be different in the cases where the GB participates in the finance of larger investment projects. However, in these cases, the share of the finance that is guaranteed by the GB decreases significantly since the GB can usually only guarantee up to € 1 m. All in all, the influence of politicians on single decisions seems to be of less importance for this credit guarantee scheme.

The analysis of the decision-making process also shows that GBs are quite limited in their autonomy: only if public authorities and commercial banks cooperate can the GB become active and provide guarantees. Moreover, cooperation can be rather complicated due to high transaction costs for all parties in terms of time, discussion and documentation (Kramer and Nitsch 2010, 1012).

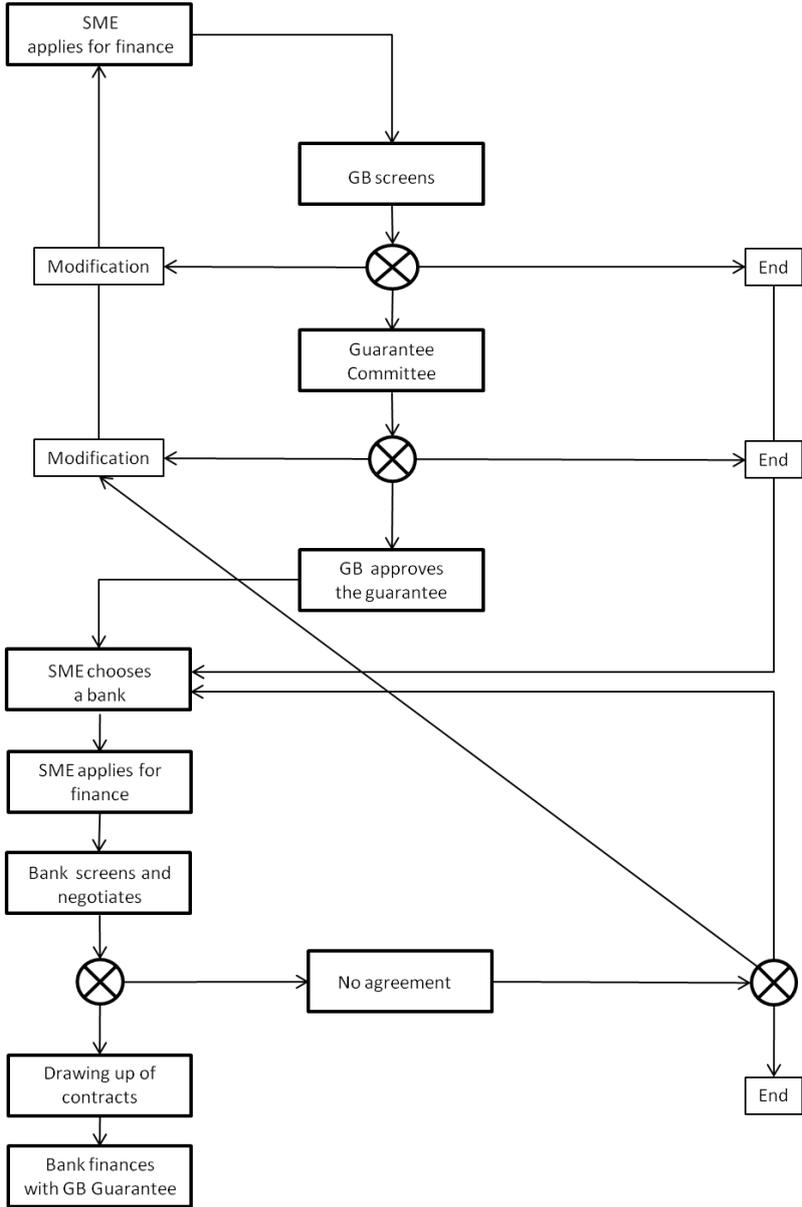
In order to address this problem of dependency, there are several initiatives to improve the attractiveness of GBs. In order to reduce transaction costs, the GBs can avoid calling a meeting of the Guarantee Committee. In this case, the abstract information on the borrower and the investment project is circulated to the members who can send their vote as soon as possible instead of waiting until the next regular meeting. This is usually only done for smaller guarantee values. Within the temporary counter-measures against a possible credit crunch, some federal states delegated the decision-making process completely for guarantees of up to € 150,000 (VDB 2009, 10).

The GBs can cooperate with the state owned development banks which provide grants and subsidised loans. Since finance is usually a combination of different bricks, the agencies can offer joint products such as a soft loan of a development bank in combination with a guarantee of the GB. This can reduce transaction costs and may improve the GBs attractiveness. For example, this cooperation is done in Baden-Württemberg and Berlin (Kramer 2008, 123-125, Elkan and Schmidt 2006, 65,76).

Another possibility is that the GB provides guarantees without the counter-guarantees and bears the risk on its own. This is generally possible since GBs are banks and have equity and reserves to cover losses. Kokalj, Paffenholz and Moog (2003) report that the institutions in Bavaria were allowed to do this for guarantees up to € 100,000 since 2001. The GBs bear the risk, and the approval does not have to be submitted to the guarantee committee and the counter-guarantors, which reduces transaction costs (Kokalj, Paffenholz and Moog 2003, 120). Nevertheless, there was no sign for a significant use of this procedure in the interviews. The analysis of the financial statements in the following section supports this impression that GBs usually only provide counter-guaranteed guarantees.

A further possible improvement is the programme "Guarantee without bank" (*Bürgschaft ohne Bank*, BOB). This name is a misname since BOB still requires a bank. It is rather another decision-making process that can be used for smaller amounts of guarantees. Within the BOB programme, the GB screens the borrower first and the commercial bank screens the borrower in a second step. The detailed process is shown in the following figure.

Figure 35 Decision-Making Process for the "BOB" Scheme



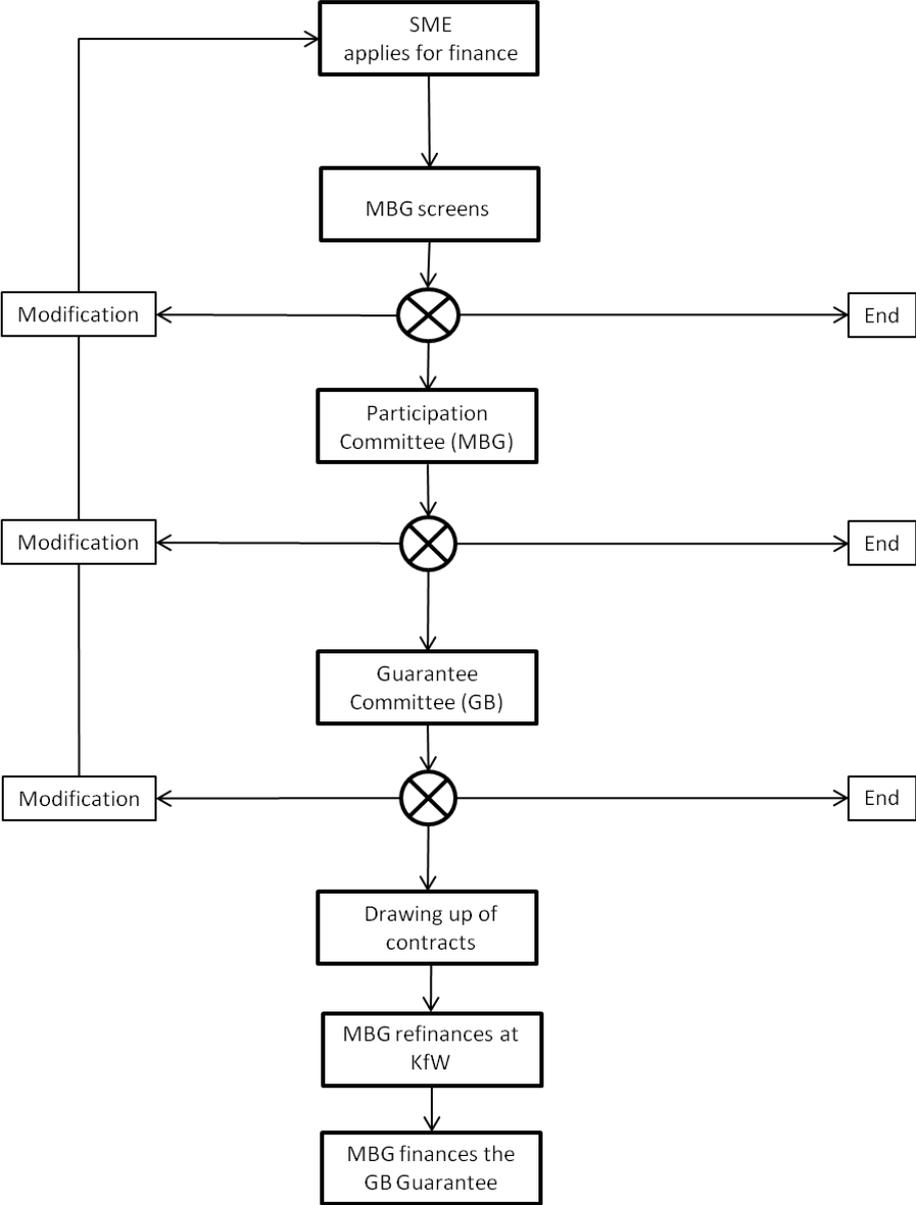
Own elaboration; Kramer (2008, 68)

It has to be noted that the borrower can first go to the bank, which “sends” the borrower to the GB. Nevertheless, the GB conducts the first evaluation and hence, the commercial bank does not have to conduct the pre-selection.

In order to support SMEs with equity finance or mezzanine finance, there were created special entities, the Venture Capital Companies for SMEs (*Mittelständische Beteiligungsgesellschaften*, MBGs). The MBGs are usually “sister” institutions (and sometimes the GB also participates in the MBG) that receive finance from the KfW Bankengruppe and a credit guarantee of the GB. The close cooperation between GBs and MBGs is underlined by the fact that employees often work for both institutions and both institutions often share the same building. The decision-making process, however, differs since the banks are not directly included as lenders. Indeed, the guarantee scheme converts to a scheme that also provides finance. However, the MBGs can hardly behave against the interest of the banks, for example as competitors, because the banks are shareholders of the GBs, and MBGs and banks participate in the Guarantee Committee of the GBs. With so much information at hand, banks can control the scheme and prevent a scheme competing against their products. However, they can use the MBGs to provide additional source of finance for their clients.

With respect to the decision-making process, the MBG’s participation has to pass two guarantee committees: the Participation Committee of the MBG itself and the Guarantee Committee of the GB that guarantees the MBG’s participation. The following graph illustrates the decision-making process.

Figure 36 Decision-Making Process when MBGs are Involved to Provide Finance



Own elaboration; Kramer (2008, 70)

All in all, the GBs depend significantly on the lenders and the government. They are closely monitored and can only behave in the general interest of lenders and the government. This holds for all forms of the decision-making process. Hence, GBs do not increase competition in the financial system and do not increase empowerment of the borrowers. They are rather a tool of the lenders and government to conduct their respective policy.

4.1.3.5 The question of financial self-sustainability and public financial support

This section analyses the financial statements of German GBs with respect to the institutions' cost structures and channels of public financial support. Thereby the section focuses on the question whether financial self-sustainability is achieved and therefore follows the cash flows that result from the guaranteeing activity. The important question which (financial) assets did the GBs invest in will not be addressed. Since the closely connected venture companies MBGs are of less quantitative importance and receive guarantees from the GBs for their provided finance, their financial statements will not be explicitly analysed in this section. The data was taken from the respective financial statements of the Guarantee Banks that are published online.⁸⁹

The following eight tables provide an overview of the financial structure of German GBs. Table 29 to Table 32 show the most important stocks and flows of 16 GBs in the year 2007. Table 29 and Table 31 show the stocks and flows of GBs in the western federal states and Table 30 and Table 32 shows these items of GBs in the eastern federal states, including Berlin, and of the Guarantee Bank for social projects. In these tables, the same abbreviations for stocks and flows are used as in the theoretical assessment. The year 2007 was chosen because it is in a period of bonanza (see Figure 24). Not achieving financial self-sustainability cannot be explained with the financial crisis. The calculation was also conducted for the crisis years 2008 and 2009. However, since the basic findings are similar in all years, only the data of one financial year is provided. Most of the information is taken directly from the audited financial statements that are published online by most GBs. Only some numbers had to be calculated. In addition to the one-year analysis of all GB, financial self-sustainability is ana-

⁸⁹ (VDB 2011, VDB 2010, VDB 2009, VDB 2008b); (BBB Bürgschaftsbank zu Berlin-Brandenburg 2011, BBB Bürgschaftsbank zu Berlin-Brandenburg 2003, BBB Bürgschaftsbank zu Berlin-Brandenburg 2004, BBB Bürgschaftsbank zu Berlin-Brandenburg 2005, BBB Bürgschaftsbank zu Berlin-Brandenburg 2006, BBB Bürgschaftsbank zu Berlin-Brandenburg 2008, BBB Bürgschaftsbank zu Berlin-Brandenburg 2009, BBB Bürgschaftsbank zu Berlin-Brandenburg 2007, BBB Bürgschaftsbank zu Berlin-Brandenburg 2010); (Bürgschaftsbank Baden-Württemberg 2010, Bürgschaftsbank Baden-Württemberg 2009, Bürgschaftsbank Baden-Württemberg 2001, Bürgschaftsbank Baden-Württemberg 2002, Bürgschaftsbank Baden-Württemberg 2003, Bürgschaftsbank Baden-Württemberg 2004, Bürgschaftsbank Baden-Württemberg 2005, Bürgschaftsbank Baden-Württemberg 2006, Bürgschaftsbank Baden-Württemberg 2007, Bürgschaftsbank Baden-Württemberg 2008); (Bürgschaftsbank Nordrhein-Westfalen 2001, Bürgschaftsbank Nordrhein-Westfalen 2002, Bürgschaftsbank Nordrhein-Westfalen 2003, Bürgschaftsbank Nordrhein-Westfalen 2004, Bürgschaftsbank Nordrhein-Westfalen 2005, Bürgschaftsbank Nordrhein-Westfalen 2006, Bürgschaftsbank Nordrhein-Westfalen 2007, Bürgschaftsbank Nordrhein-Westfalen 2008, Bürgschaftsbank Nordrhein-Westfalen 2009, Bürgschaftsbank Nordrhein-Westfalen 2010); (Bürgschaftsbank Brandenburg 2009, Bürgschaftsbank Hessen 2009, Bürgschaftsbank Bremen 2009, Bürgschaftsbank Saarland 2009, Bürgschaftsbank Sachsen 2009, Bürgschaftsbank Schleswig-Holstein 2009, Bürgschaftsgemeinschaft Hamburg 2009, Bürgschaftsbank Bayern 2009, Niedersächsische Bürgschaftsbank 2009, Bürgschaftsbank Thüringen 2009); (Bürgschaftsbank für Sozialwirtschaft 2009, Bürgschaftsbank Mecklenburg-Vorpommern 2009, Kredit-Garantiegemeinschaft des rheinland-pfälzischen Handwerks 2009).

lysed for the GBs in Baden-Württemberg, Berlin and North Rhine-Westphalia in Table 33 for the period 2006-10 and in Table 34 for the period 2000-05. The GBs are chosen because sufficient information is at hand, the GB in Baden-Württemberg is the largest one and operates in a rich region, the GB in Berlin is smaller and operates in a poorer region and the GB in North Rhine-Westphalia is based in the largest federal state in Germany. In Table 35 and Table 36 two performance indicators are provided for the GBs in the western federal states and in the eastern federal states, including Berlin, and of the Guarantee Bank for social projects. The analysed period includes years of bonanza and crisis.

In order to improve understanding of the tables, the four channels of public support will be summarised (Kramer and Nitsch 2010, 1013,1014):

- 1) Counter-guarantees are provided by the Federation and by the federal states without charging fees. They reduce the GBs' risk exposure.
- 2) GBs are provided with public equity, since public commercial and development banks of the Federal States (*Landesbanken* and *Landesförderbanken*), and local saving banks are typical shareholders of these public-private partnership enterprises. Moreover, in Schleswig-Holstein the federal state itself is a shareholder as well. In addition, some federal states provide grants in order to support the GBs' capital.
- 3) GBs hold the status of "common public interest" (*Gemeinnützigkeit*), which helps the institutions receive tax relief. GBs pay neither corporate income tax (*Körperschaftsteuer*) nor local business tax (*Gewerbesteuer*). This subsidy requires capital and profits be used for additional guarantees. Hence, realised profits cannot be distributed among shareholders (Langer and Schiereck 2002, 145, Stenfanović 2009, 280).
- 4) GBs received public KfW loans with low interest rates until 2008. In addition, the respective federal state can provide funding which may include a risk-sharing mechanism as well.

Table 29 Stocks of German GBs in the Year 2007, West in € m.

		BW	BAV	HB	HH	HE	LSAX	NRW	KGG RP	SL	SHOL
Outstanding guarantees	OG	1,322	208	46	269	223	240	431	41	22	343
Outstanding risk of GB	OG-CG	455	-	16	93	75	83	149	16	8	115
Balance sheet total		290	53	11	81	63	61	113	11	9	112
Financial Assets	FA	278	53	11	78	62	59	107	11	9	105
Liabilities to banks	OL	148	24	5	30	32	27	46	5	2	36
"Other liabilities"	OL, CL	3	0	0	4	4	4	4	1	0	5
Balance sheet total – obligations		139	29	6	47	27	30	64	5	6	7

Own elaboration; source: Financial Statements of GBs

Table 30 Stocks of German GBs in the Year 2007, East in € m.

		BER	BRA	MP	SAX	THU	GBSP
Outstanding guarantees	OG	217	251	191	421	310	52
Outstanding risk of GB	OG-CG	44	50	39	84	62	-
Balance sheet total		48	55	49	130	69	8
Financial Assets	FA	47	48	48	104	68	8
Liabilities to banks	OL	23	26	20	45	30	0
"Other liabilities"	OL, CL	1	0	2	26	1	0
Balance sheet total – obligations		24	30	27	59	38	8

Own elaboration; source: Financial Statements of GBs

Table 29 and Table 30 describe the most important stocks of the GBs in the year 2007. Most of the items are published in the financial statements however, in some cases the outstanding risk of the GB (OG-CG) had to be calculated⁹⁰.

The tables underline the importance of counter guarantees since the outstanding risk of GBs themselves (OG-CG) is well below the outstanding value of guarantees (OG). In accordance

⁹⁰ The amount of outstanding guarantees was either provided in the text, by the national association or calculated from the balance sheet as contingent liabilities + provisions taken for calls on guarantees.

with the results of the previous sections, where the risk distribution was analysed, most of the risk is not taken by the GBs themselves but by the government.

Since the GBs have financial assets on their balance sheets, the tables also show that the GBs can be interpreted as “credit risk funds” since their net assets serve as reserves for the guarantee commitments – although only for a fraction. For six GBs, the outstanding risk is below the balance sheet total. This could be a sign that the leverage ratio is lower than one. The balance sheet total, however, does not equal the “risk fund” since the GBs have liabilities to banks. Indeed, the institutions refinance their financial assets (FA) via loans. The most important source of refinance is an ERP facility provided by the KfW-Bankengruppe, which was already described in the historical assessment. However, these ERP loans no longer include a risk-sharing mechanism. In addition, no new loans are provided any more (Email 6). On the other hand, the federal state governments can provide loans with risk-sharing mechanisms. For example, such a loan is stated in the item “other liabilities” of the GB in Hamburg. When the solvency of GBs is to be analysed, the “risk fund” is not the balance sheet total but rather the balance-sheet total minus obligations. This value is calculated in the lowest lines⁹¹. In the year 2007, the ratio of this risk fund to the outstanding risk of the GBs is 50% on average. In other words, the GBs could “survive” calls on guarantees totalling 50% of the outstanding value. This holds, however, only under the three conditions that the government indeed fulfils its counter-guarantee promises, the financial assets (FA) are liquid, and liquidation of FAs results at least in the book value.

The tables show that most of the assets are financial assets. Not included in the tables are real assets and claims against clients of lower book value. The investment strategy of the GBs will not be analysed in more detail since the focus of this section is the guaranteeing activity. However, it is obvious that the investment and the public support via loans bear risk. Indeed, some interview partners reported losses due to investments in stocks during the dot-com bubble. In addition, the current financial turbulences remind us that there is general uncertainty also in financial markets, i.e. even relatively safe investments are not “risk-free”.

⁹¹ In the balance sheet, this value is divided into provisions, equity and special items such as a risk fund for general banking risk (*Fonds für allgemeine Bankrisiken*).

The following tables describe the flows of the GBs.

Table 31 Flows from the Guaranteeing Activity of GBs in the Year 2007⁹², West in € m.

		BW	BAV	HB	HH	HE	LSAX	NRW	KGG RP	SL	SHOL
Net interest & dividends from FA	i(FA) - i(OL)	5.8	0.7	0.2	2.0	1.7	1.7	-0.1	0.3	0.3	1.7
Commissions and fees	fees_g	18.2	2.3	1.0	5.2	4.4	4.2	7.3	0.6	0.4	4.2
Other operative income⁹³	fees_oth + gra	4.2	0.3	0.0	1.2	0.4	0.2	0.4	0.0	0.0	1.5
Administrative expenses	opaym	-10.0	-1.6	-0.4	-3.7	-2.0	-1.7	-4.5	-0.5	-0.2	-5.2
Payments for calls on guarantees	comp_g				-8.3	-		-14.7		-	
Net payments	comp_g - re-paymCB	-24.6	-4.8	-1.9		-8.3	-5.4		-2.4	-	-11.7
Compensation counter-guarantors cash flow	comp_cg	*16.1	3.1	1.2	5.4	5.5	3.6	*9.6	*1.5	-	7.4
Cash flow without counter-guarantees		-6.4	-3.1	-1.1	-3.7	-3.7	-1.0	-11.6	-1.9	-	-9.4
Profit / Loss		5.5	0.6	0.2	0.6	0.7	1.1	0.9	0.1	0.0	0.2

Own elaboration; source: Financial Statements of GBs

⁹² * These compensations from counter-guarantors are calculated as payments multiplied with the ratio of the outstanding counter-guarantees to outstanding guarantees of the respective GB.

⁹³ The "operational income" may include grants and provisions as well (Bavaria and Thuringia).

Table 32 Flows from the Guaranteeing Activity of GBs in the Year 2007⁹⁴, East in € m.

		BER	BRA	MP	SAX	THU	GBSP
Net interest & dividends from FA	i(FA) - i(OL)	0.6	1.5	1.7	2.7	1.2	0.3
Commissions and fees	fees_g	3.8	4.6	2.7	6.6	3.7	0.8
Other operative income ⁹⁵	fees_oth + gra	0.5	0.7	0.7	2.4	0.2	0.0
Administrative expenses	opaym	-2.6	-2.6	-2.8	-5.2	-3.3	-0.7
Payments for calls on guarantees	comp_g			-			-
Net payments	comp_g - repaymCB	-3.5	-4.5	-	-14.3	-11.1	-
Compensation counter-guarantors	comp_cg	*2.8	*3.6	-	*11.4	*8.9	-
Cash flow		1.7	3.3	-	3.6	-0.4	-
Cash flow without counter-guarantees		-1.1	-0.3	-	-7.9	-9.3	-
Profit / Loss		0.4	0.1	0.7	1.9	0.7	-0.6

Own elaboration; source: Financial Statements of GBs

Table 31 and Table 32 describe the flows of the 16 GBs in the year 2007. Net interest and dividends from FA are the result of the investments in FAs minus the interest that had to be paid for the refinance. Hence, the changes in the value of the assets, investments or amortisations are not included in this item.

Borrowers have to pay an initial flat fee of 0.8% to 1.5% and an annual commission of 1.0% to 1.5% on the volume of the loan. The interest rates have to be negotiated between bank and borrower (Kramer and Nitsch 2010, 1007).

Other “operative income” can either be “indeed operational income” like fees for services conducted for the government – such as in Hamburg. This income also can include fees for the services provided to the GBs’ sister institutions for equity, the MBGs. In Bavaria, the GB declares grants to increase the equity of the GB as operational income. Also sometimes included are the reductions of provisions, which, unlike the previously mentioned items, is not a cash flow.

⁹⁴ * These compensations from counter-guarantors are calculated as payments multiplied with the ratio of the outstanding counter-guarantees to outstanding guarantees of the respective GB.

⁹⁵ The “operational income” may include grants and provisions as well (Bavaria and Thuringia).

Most administrative expenses are personnel costs. In addition, administrative expenses can include fees for the administration that is conducted by another institution such as in the case of the FSDB in Rhineland-Palatinate.

Payments for calls and guarantees are only indirectly stated in the profit and loss statements via making and reversing provisions. However, most GBs publish the information in their financial statements. Contrary to other schemes such as in the USA and Portugal where the guaranteeing institution pays immediately if the borrower is not paying (“guarantee on first demand”), the GBs may pay a part in advance, however, usually the full payment is kept until the collateral has been liquidated. Consequently, the payments usually include the liquidation of collateral. However, there may always be additional flows from borrowers where the debt was renegotiated after a default in the past (regresses or repayments). These flows are included in the net payments of the GBs that share this information.

The compensations from counter guarantors are the payments from the federal states and the central government. In most cases these payments are stated in the financial statements. In some cases (highlighted with “*”), the flows were calculated from the information on the risk-sharing between the GB and the government.

One can calculate from data in Table 31 and Table 32 that the inflow from fees and commissions would have to be much higher to achieve a positive cash flow from the guaranteeing activity in the year 2007. Indeed, the inflow from fees and commissions would have to increase c.p. by 7% to 306% for the respective GB. The unweighted average of the necessary increase is 120%, i.e. the inflow would have to more than double. However, whether the GBs could achieve this inflow by higher fees and commissions is questionable because there will be sorting effects; lenders might prefer charging higher interest rates instead of paying the fees to the GBs; and lenders might prefer to ration the borrowers.

The tables show that in the year 2007, all GBs except the GB for social projects declared profits. However, this does not mean that the institutions are financially self-sustainable. The analysis of the cash flows shows that fees and commissions are charged for the risk taking. This inflow indeed is higher than the outflow for the administration. However, this net flow is by far lower than the outflow due to calls on guarantees. This also implies that the GBs would not be able to benefit from interest and dividends of their financial assets if there was no ongoing external support – be it public or by the shareholders.

For this reason, net interest rate profits are not included in Table 33 and Table 34 that focus only on the guaranteeing activity of GBs without financial support of the counter-guarantees.

Table 33 Important Stocks and Flows of three GBs in the Period 2006 – 2010 in € m.

	2010	2009	2008	2007	2006
Baden-Württemberg					
Outstanding Guarantees	1,516.5	1,437.4	1,364.0	1,322.0	1,287.9
Commissions and fees	22.0	19.9	19.3	18.2	17.5
Administrative expenses	11.0	10.4	10.0	10.0	9.1
Payments for calls on g.	33.8	33.7	33.6	32.2	36.2
Repayment				6.6	7.3
Operational cash flow ⁹⁶	-22.8	-24.2	-24.2	-17.4	-20.5
Default rate	2.23 %	2.35 %	2.46 %	1.94 %	2.24 %
Berlin					
Outstanding Guarantees	228.0	221.0	213.6	217.2	206.5
Commissions and fees	4.0	3.9	3.7	3.8	3.6
Administrative expenses	2.8	2.6	3.0	2.6	2.4
Payments for calls on g.	6.2	7.9	6.4	4.6	8.4
Repayment	1.1	1.1	1.5	1.2	-
Operational cash flow	-3.9	-5.5	-4.2	-2.2	-7.2
Default rate	2.73 %	3.56 %	2.98 %	2.13 %	4.07 %
North-Rhine Westphalia					
Outstanding Guarantees	-	482.5	450.8	432.2	417.1
Commissions and fees	-	8.2	7.6	7.3	6.6
Administrative expenses	-	5.0	4.6	4.5	5.5
Payments for calls on g.	-	10.0	10.3	14.7	13.0
Repayment	-	0.6	0.8	-	-
Operational cash flow	-	-6.2	-6.6	-11.9	-11.9
Default rate	-	2.07 %	2.28 %	3.40 %	3.12 %

Own elaboration; source: Financial Statements of GBs

⁹⁶ Commissions and fees – administrative expenses – payments for calls on guarantees + repayment.

Table 34 Important Stocks and Flows of three GBs in the Period 2000 – 2005 in € m.

	2005	2004	2003	2002	2001	2000
Baden-Württemberg						
Outstanding Guarantees	1,270.4	1,220.5	1,136.5	1,097.2	1,032.5	971.5
Commissions and fees	16.6	15.2	13.5	12.5	11.9	10.8
Administrative expenses	8.6	8.0	7.2	7.1	6.8	5.7
Payments for calls on g.	37.7	42.5	39.8	26.4	25.0	24.6
Repayment						
Operational cash flow ⁹⁷	-29.6	-35.2	-33.5	-20.9	-19.9	-19.5
Default rate	2.96 %	3.48 %	3.50 %	2.41 %	2.42 %	2.53 %
Berlin						
Outstanding Guarantees	203.0	193.3	210.0	-	-	-
Commissions and fees	3.6	3.0	3.4	-	-	-
Administrative expenses	2.3	2.3	2.1	-	-	-
Payments for calls on g.	10.2	11.5	10.9	-	-	-
Repayment						
Operational cash flow	-9.0	-10.8	-9.6	-	-	-
Default rate	5.04 %	5.95 %	5.18 %	-	-	-
North-Rhine Westphalia						
Outstanding Guarantees	419.9	450.5	501.1	544.9	576.8	567.4
Commissions and fees	5.9	6.2	6.7	7.3	7.7	7.1
Administrative expenses	4.2	4.0	4.0	3.6	3.3	3.2
Payments for calls on g.	15.7	24.2	15.6	20.5	13.2	13.3
Repayment						
Operational cash flow	-14.0	-21.9	-12.9	-16.8	-8.8	-9.3
Default rate	3.75 %	5.37 %	3.10 %	3.76 %	2.29 %	2.34 %

Own elaboration; source: Financial Statements of GBs

For all GBs in all years, the difference of the inflows from fees and commissions is lower than the outflow due to administrative expenses, payments for calls on guarantees and repayments (see operational cash flow). Consequently, no interest profits could be achieved without financial support from government or shareholders.

All in all, the cash flow is negative without governmental support. This holds for all GBs over all time periods analysed. Hence, the dependency on financial support is a common feature of all German GBs, independent of the economic strength of the federal state, from richer ones like BW to poorer ones like Berlin.

⁹⁷ Commissions and fees – administrative expenses – payments for calls on guarantees + repayment.

The following tables illustrate two indicators for the GBs in the year 2007. Table 35 and Table 36 show some indicators that result from the previous tables. The “operating expense ratio” of Guarantee Banks is the ratio of the administrative expenses to the outstanding guaranteed loans and equity. The administrative cost per guarantee is the ratio of the administrative expenses to the number of outstanding guarantees. These indicators are used to measure and similarly calculated to measure efficiency of Microfinance Institutions (Rosenberg 2009, 11,12).

Note that the administrative expenses are only the GBs’ expenses and not the expenses of the whole guarantee scheme. Not included are the expenses of the counter-guarantors and the members of the guarantee committee who do not charge the GBs. Also not included are the expenses of the lenders. Hence, these numbers do not reflect total costs but only the costs of the guaranteeing institutions.

Table 35 Indicators Describing Administrative Costs of German GBs in the Year 2007, West

	BW	HB	HH	HE	LSAX	NRW	KGG RP	SHOL
Operating expense ratio⁹⁸	0.47 %	-	0.97 %	-	0.48 %	0.80 %	0.52 %	1.05 %
Administrative costs per guarantee⁹⁹	€ 860	€ 1,190	€ 1,226	€ 1,144	€ 800	€ 1,091	€ 826	€ 1.511

Own elaboration; source: Financial Statements of GBs

Table 36 Indicators Describing Administrative Costs of German GBs in the Year 2007, East

	BER	BRA	SAX	Thu	GBSP
Operating expense ratio	0.85 %	0.79 %	-	0.82 %	1.03 %
Administrative costs per guarantee	€ 1,318	€ 1,345	€ 1.728	€ 1.467	€ 3,415

Own elaboration; source: Financial Statements of GBs

The average costs per guarantee vary between € 800, in Lower Saxony, and € 1,700, in Saxony. The GB for social projects has much higher costs which average € 3,400 per guarantee. These high costs can be explained by a low volume of outstanding guarantees.

⁹⁸ Operating expense ratio: administrative expenses / outstanding guaranteed loans and capital

⁹⁹ Administrative costs per guarantee: operating expenses / number of outstanding guarantees

The costs per guarantee of the GBs is roughly the same as the cost incurred by a bank when an SME is financed (interviews 22 and 24). The administrative expenses are usually below 1% of the outstanding guaranteed finance. With respect to the differences of costs per guarantees, the low costs in BW may be explained by the relatively large outstanding guarantee volume which enables the GB to achieve economies of scale. On the other hand, the small KGG RP may have relatively low costs since it does not have its own administrative body and only pays for the administrative services of the FSDB.

All in all, the tables underline that GBs receive several forms of financial support, and clearly show that the GBs' cash flow is only positive because the institutions receive generous inflows from the government. With this positive cash flow, the GBs are able to conduct the guaranteeing activity and accumulate reserves over time.

4.1.3.6 GBs within the context of the financial and economic crises

In October 2008, when many commercial banks fell into financial distress, the German GBs jointly declared that they did not feel any stress and that they were not directly affected by the financial crisis. Furthermore, they declared that they were able and willing to confront and fight against a possible credit crunch for SMEs. Therefore, they lobbied for a continuance of public support and for an easing of regulatory requirements (VDB 2008a). In December 2008, the European Commissioner of Competition adopted its "Temporary Community Framework for State Aid measures to support access to finance in the current financial and economic crisis", which eased regulations on State Aid and provided a framework for national public initiatives until 2010 (AECM 2009a). This enabled member states to increase their guarantee activity to fight symptoms of the financial crisis like a credit crunch of company finance¹⁰⁰.

In Germany, this temporary framework enabled the government, on the initiative of the ministry of Economics, to start augmenting public support for existing guarantee schemes in January 2009 (VDB 2009, 9,10). The overall programme was approved astonishingly fast by the European Commission by the end of February 2009. However, in the case of GBs, many details of State Aid regulation were not approved until September 2009 (Kramer and Nitsch 2010, 1015).

¹⁰⁰ Due to the present global financial and economic crisis, many policy makers have started public programmes to combat a possible credit crunch. Across Europe, a few new credit guarantee schemes have been implemented and existing schemes strengthened (AECM 2009a).

Within the “Business Fund Germany” (*Wirtschaftsfonds Deutschland*), the Guarantee Banks, guarantee schemes of the federal states, and the scheme of joint guarantees of the federal states and the central government were all used to make an additional credit guarantee package available amounting to € 75 bn. In addition, the KfW Bankengruppe was authorised to provide loans with “liability exemptions” of € 40 bn. wherein € 25 bn. were supposed to support larger enterprises (BMW 2010, 1).

On the initiative of the central government, the credit guarantee scheme of Guarantee Banks was temporarily modified for the period March 2009 to December 2010 (interviews 25 and 27). This period was extended until March 2011 for guarantees that were applied for before December 2010.

The GBs received more support and authority within the decision-making process. Most important was the increase of public support by the expansion of public counter-guarantees from 80% to 90% in the East and from 65% up to a maximum of 80% in the West. In addition, GBs were now able to provide guarantees up to € 2 m. instead of € 1 m., and they were allowed to cover up to 90% (instead of 80%) of the loan. Consequently, the government can assume up to 81% of the outstanding risk, whereas the bank only assumes 10% and the GB 9% (AECM 2009a, 10, Kramer and Nitsch 2010, 1015, VDB 2009, 9,10). Hence, the public financial support to GBs was increased. On the other hand, the association of Guarantee Banks reports that the loans of the KfW Bankengruppe for Guarantee Banks were abolished (Email 6).

In addition, the GBs were allowed to provide guarantees on their own authority of up to € 150,000 without the permission of the counter-guarantors. The restriction on working capital was eased and the GBs were allowed to have a share of 50% of the outstanding guarantee portfolio for working capital instead of 36%. The temporary State aid framework of the European Union furthermore allowed the GBs to guarantee loans for borrowers in financial distress under the condition that they were not in this financial distress before July 2008. Hence, policy makers intended to only support borrowers that came into financial distress during the financial crisis (AECM 2009a, 10, VDB 2009, 10).

However, GBs and the government have also been forced to raise their expectations of future losses from outstanding guarantees due to the financial and economic crisis. The precarious aim was to prevent a credit crunch due to the financial crisis, but not to rescue all enterprises in difficulty (Kramer and Nitsch 2010, 1015). Indeed, not all federal states followed completely the initiative of the central government. For example, in Berlin, the GB continued to be restricted to guarantees of up to € 1m. and all guarantees had to be approved by the representatives of the federal state ministries (BBB Bürgschaftsbank zu Berlin-

Brandenburg 2011, 14). Possible explanations for that are the bad experience Berlin had with credit guarantees in the housing sector which resulted in a collapse of the Federal State Bank some years before which significantly worsened the fiscal problems of the federal state. In addition, guarantees of higher volumes could be provided by the Federal State Development Bank, which is directly controlled by the government.

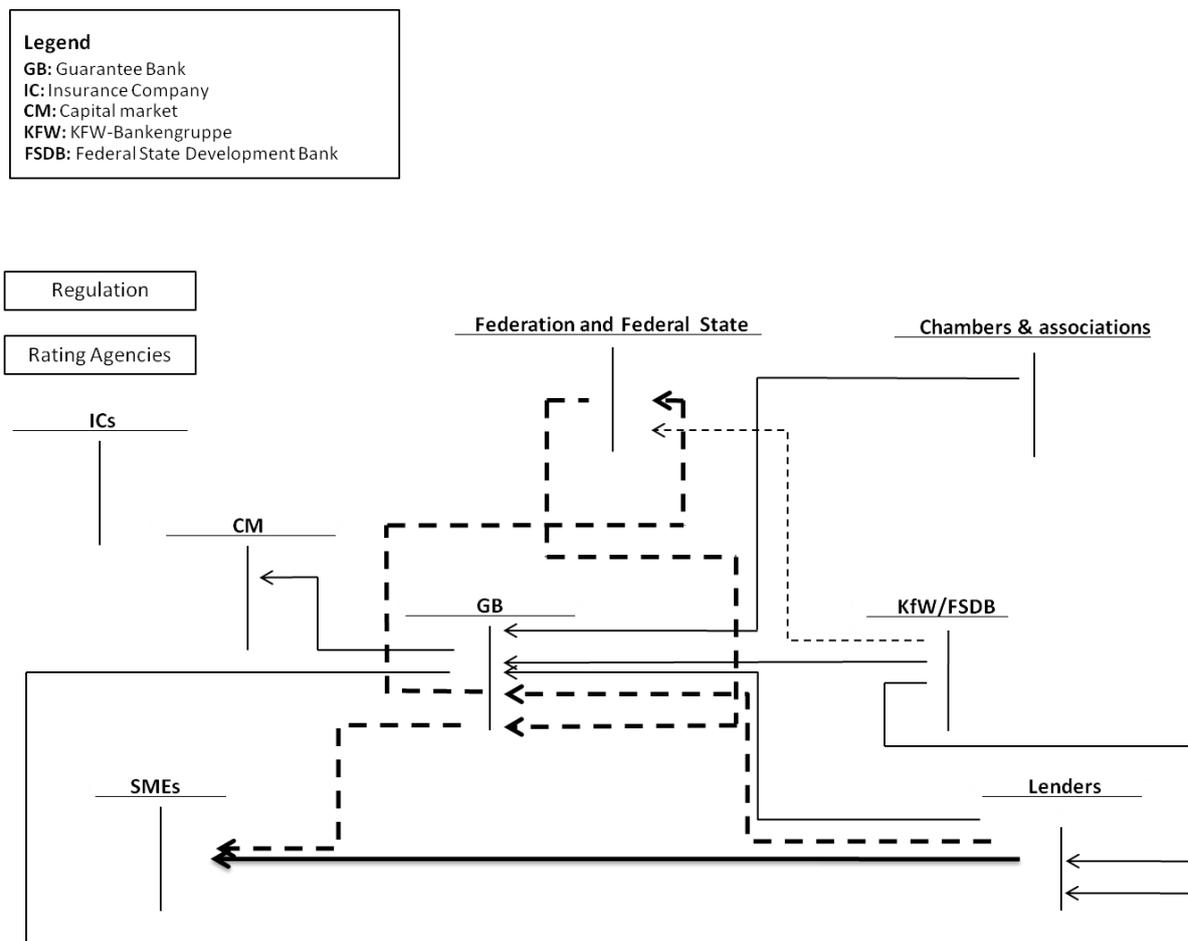
In all federal states, there has been a modest increase in provided guarantees in the period. As shown in Figure 28, in the period 1999-2008, annual approvals varied between 5,284 and 7,212 by number and between € 894 m. and € 1,132 m. by volume. In the years 2009 and 2010, the numbers increased to 7,745 and 8,000 by number and to € 1,261 m. and € 1,300 m. by volume. However, a structural boost of activity through the crisis cannot be seen (Kramer and Nitsch 2010, 1015). It is rather the structural niche that had increased moderately in the period.

Since March 2011, the temporary changes have been discontinued. The only exception is that no new loans can be taken from KfW Bankengruppe to refinance the GBs' financial assets (Email 6).

4.1.3.7 Interim result. T-Account model of the scheme of German Guarantee Banks

The following graph provides an overview of the scheme of a GB with the main stakeholders and their claims including the contingent ones. The conceptualisation is based on Figure 6 in the theoretical section.

Figure 37 The Guarantee Bank System Expressed in “T” Accounts



Own elaboration

The reason for the GBs' existence is the finance of SMEs. To emphasise this importance, the guaranteed loan is marked in bold. Due to the credit guarantee, the lenders have contingent claims against the GBs (broken line). The GBs themselves receive counter-guarantees from the federal state and the federation, which are contingent claims for the GBs. Indeed, the government bears the largest share of the risk. In the case of default, the GB and counter-guarantors have a claim against the SME.

GBs have the status as formal banks (though limited in activity) and consequently the business of providing guarantees is subject to banking regulation. As banks, GBs could provide guarantees without this “re-insurance”, however this is usually not the case. In addition, the counter-guarantees are subject of the German budgetary regulation and the government can veto any counter-guarantee. Public support is also subject to State aid regulation of the European Commission which has a veto, too – however instead of analysing each guarantee itself the commission sets conditions under which the public support can be provided.

In addition to the counter-guarantees, GBs can receive loans from the FSDBs and KfW which in some cases include a risk-sharing mechanism. GBs invest this finance and the reserves from the guaranteeing activity in the capital market, or deposit it at banks, i.e. the lenders. The KfW and the FSDB can also be competitors of GBs. The development banks also provide directed loans, sometimes with “exemptions of liability” (*Haftungsfreistellungen*), i.e. refinance the lenders and sometimes share the risk. Some FSDBs also manage credit guarantees of the federal states (*Landesbürgschaften*). Moreover, although GBs usually have their own staff, some smaller GBs purchase services to preliminarily screen and manage the applications from an FSDB. In all cases, the central decision making body is the Guarantee Committee that consists of the GBs’ managing directors, the counter-guarantors and most of the shareholders.

Equity is provided by the lenders (directly or via their associations and central institutions), the SME chambers and associations, insurance companies, and government agencies. Indeed, in one state, the federal state is direct shareholder. In other states, the government is indirectly a shareholder of the GBs via the savings banks (*Sparkassen*), the Federal State Banks (*Landesbanken*) or Federal State Development Banks (*Landesförderbanken*).

Insurance companies and rating agencies participate in the scheme, however, they are of less importance. Insurance companies provide minor shares of equity and usually do not participate in the operational business. However, GBs require a special form of life insurance that provides a financial compensation if the SME owner dies. Hence, the insurance companies indirectly reduce the lender’s and the guarantor’s risk. Rating agencies have created a rating tool in cooperation with the GBs in order to rate the SMEs.

All in all, since the GBs share of the guaranteed risk is minor, the GBs themselves can be interpreted as specialised agencies that channel public credit guarantees to the lenders. Hence, the scheme is more a system to conduct public policy than a self-help arrangement of the borrowers. In contrast to private consultancies, who manage federal state guarantees for domestic finance or exports, the GBs bear a fraction of the risk and can also be interpreted as a funded credit guarantee scheme. This participation in the guarantee risk is simi-

lar to deductibles that are a common method to reduce the problem of moral hazard in the insurance business.

4.1.4 Analysis of the scheme's Augmented Triangular Relationship

This section analyses the interdependent bilateral relationships in the Augmented Triangular Relationship. The discussion provides relevant background information that influences the behaviour of the actors. First, in section 4.1.4.1, the relationship between borrowers and lenders will be analysed, and discussed whether there is a financing gap for German SMEs. Second, the private initiative of borrowers, their associations and the relationships between borrowers and GBs will be analysed in section 4.1.4.2. In the section 4.1.4.3, the banks' initiative, interest and the relationships between lenders and GBs will be analysed before the public policy and relationships between GBs and government will be discussed in section 4.1.4.4.

4.1.4.1 The relationships between borrowers and lenders, and the question whether there is a "financing gap"?

This section first analyses the sources of finance, then provides important information about German banks and the relationship between the banks and borrowers and finally discusses the question of the "financing gap". This analysis is important to understand the structural niche of Guarantee Banks, i.e. to have a sense when banks and borrowers may draw in a third party that shares the risk and information.

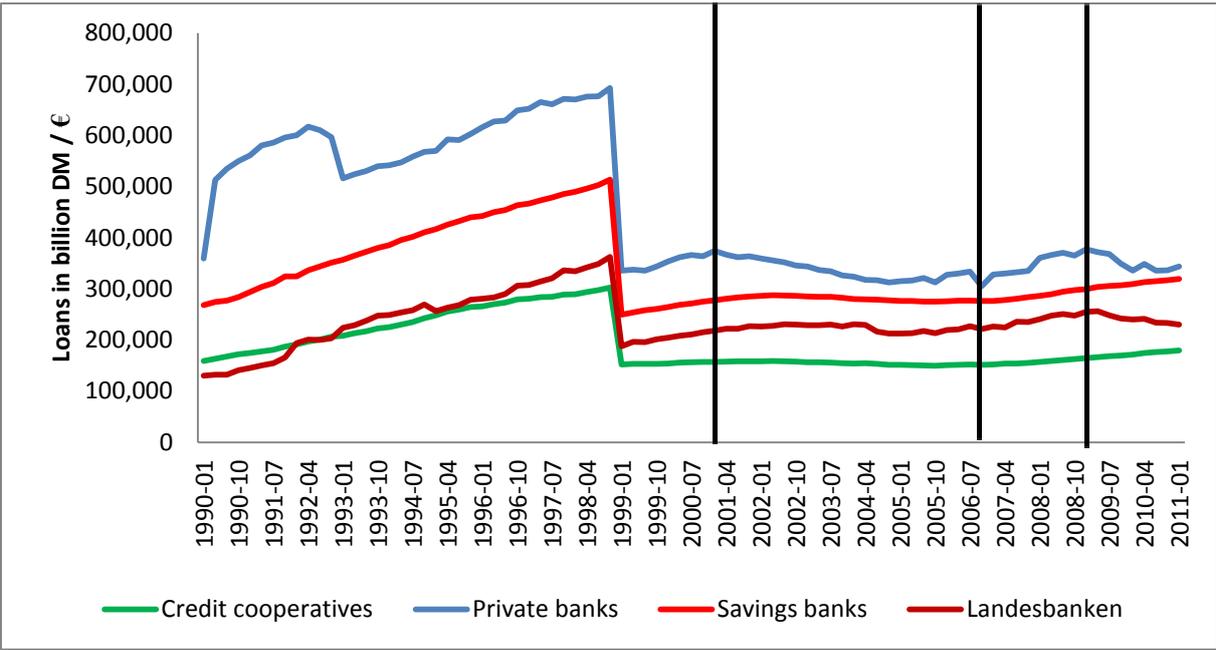
A survey conducted in the beginning of 2011 by the KFW Bankengruppe (2011c) in cooperation with several business associations discovered that German businesses believe that internal finance, family finance and bank loans (short-term and long-term) are the most important sources of finance (KFW Bankengruppe 2011c, 79-87).

In the survey, 77% of the businesses declare that internal finance (profits, amortisations and reserves) is important. Almost 50% declare that short- and mid-term finance from banks is important and for almost 40% the investments of owners and loans from family members are of importance – not only for smaller businesses. Roughly one third reports that long-term finance from banks is important for them and one fourth reports that finance from their suppliers and leasing is important. Other sources like the often called "new" or "alternative" sources such as factoring, mezzanine capital or bonds for SMEs are only important

for few surveyed companies (KfW Bankengruppe 2011c, 82). These numbers indicate that bank loans are the most important source of external finance. Although this survey is only a picture of the moment, the general findings point to the general and permanent structure of finance for small- and mid-sized businesses in Germany. This is supported by the literature (Kramer 2008, 45-56).

In the German banking sector there are the “three pillars” of public, cooperative and private banks. These three pillars are the commercial banks which exist alongside several specialised banks and the public development banks such as the KfW Bankengruppe and the Federal State Development Banks that were discussed in the previous sections. The following graph provides an overview of the outstanding loans of banks to cbusinesses and the self-employed (*Kredite an Unternehmen und Selbständige*) in the period 1990-2011.

Figure 38 Outstanding Bank Loans to Businesses and Self-Employed in the Period 1990 – 2011



Own elaboration; source: Bundesbank (2011)

First of all, the structural break which characterises Figure 38 is a result of the monetary reform when the Euro was introduced in 1999 with an exchange at roughly € 1 = DEM 2, and not a drop in outstanding loans. Moreover, there are four periods that are separated by a line. In the period 1990-2001, there was the “reunification boom” where, except for the year 1993, the loans increased significantly. This boom was followed by a decrease of outstanding loans, especially by the private (non cooperative) banks and Federal State Banks (*Landesbanken*) in the period 2001-2007. During the years 2007-2009, the increase of loans was in

line with a general growth of GDP. Finally, there is the period when Germany was affected directly by the international financial and economic crises since 2008.

The table also shows the market shares of the different types of banks. If savings banks and federal state banks are considered as one group, it has by far the largest market share. Indeed, the public savings banks and the private cooperative banks are organised in their “Verbund”, a special form of network with joint liability that was already discussed in section 4.1.1.1. Since the 1970s, the Savings Bank Finance Group had provided most loans to non-banks, followed by the private corporate banks. The smallest “pillar” is the network of cooperative banks (Ayadi, Schmidt and Valverde 2009, 125). Both the savings bank and most cooperative banks are universal banks that are locally restricted and retail oriented. In addition, they form central institutions that are, however, different in both systems. They also have in common that they usually provide all kinds of financial services (*Allfinanzdienstleistung*). In addition, they follow the commercial approach and have to be profitable, but they do not necessarily maximise the value of shareholders but are rather stakeholder banks. Indeed, the regional banks are quite successful with the commercial approach.

With respect to the finance of small businesses, especially savings banks and cooperative banks usually conduct relationship banking and try to be the “Hausbank” of the borrower (and if possible of the whole family). A long-term loan, as discussed in the theoretical section, can be used as an anchor that itself is not very profitable but stabilises the relationship and hence enables profitable cross selling (Ayadi, Schmidt and Valverde 2009, 133, Elsas and Krahen 2004, 197, 207-211, Kramer 2008, 84).

The relationship banking or “Hausbankprinzip” was common in Germany for all banks. In the last decades, however, the large private banks re-orientated themselves to become “more capital market focussed” (Ayadi, Schmidt and Valverde 2009, 117). To discuss whether this tendency was stopped due to the financial crises lies beyond the scope of this research. Nevertheless, this tendency can be explained by strong competition in the German banking market and low profitability. Indeed, in the 10 years after reunification, not only have the outstanding loans been reduced as shown in Figure 38, but the banks faced structural problems and there was a banking crisis in Germany. It became clear that many investments especially in the new federal states did not provide the expected return. Indeed, many banks had to be bailed out and/or were sold to competitors¹⁰¹.

¹⁰¹ The Dresdner Bank was sold to the insurer Allianz in the year 2001; the Bayerische Hypo- und Vereinsbank AG was sold to Unicredit in 2005, and in Berlin both the state bank Berliner Bankgesellschaft and the cooperative bank Berliner Volksbank had to be bailed out by government and the cooperative network respectively.

With respect to the finance of businesses, especially the private (non-cooperative) banks reduced their financing activity in this period. In 2007, one executive of the Guarantee Bank in Berlin stated in an interview with the local newspaper that for a certain period basically only savings banks and cooperative banks had provided finance to small businesses. In 2007, however, the private banks started to “invade” the market of business finance (S. Kaiser 2007). This impression is supported by the interviews held in the region of Berlin and Brandenburg: several interviewed persons reported that private banks had cancelled “Hausbank” relationships in the recent past.

All in all, there is much competition among German banks. In addition to the competition among the different types of universal banks, universal banks are increasingly confronted with competing specialised banks such as direct banks, i.e. internet banks without a network of branches like ING DiBa in Germany) or banks that specialise in mortgage finance or car purchasing such as the Volkswagen Bank. Moreover, although the quantitative importance of “alternative” sources like leasing and factoring is below that of bank loans, these sources of finance compete with bank loans and hence increase the bargaining position of borrowers.

This competition makes it harder for “Hausbank” to realise cross-selling or intertemporal smoothing. Moreover, this competition leads to low margins for German banks. For example, in the period 1970-2000, the net interest margins were below 3.5% for cooperative banks and savings banks and below 1% for private banks that usually have to refinance at the capital markets and capture fewer savings. Ayadi, Schmidt and Valverde (2009, 129) state that the German banking market is probably the most competitive among the larger countries in Europe. On a regional level, there are one or a few savings banks, a few cooperative banks and a few branches of big private banks. The authors explain this high degree of competition by the restriction of cooperative banks and savings banks to their region (Ayadi, Schmidt and Valverde 2009, 129-131).

The following discusses whether there is a financing gap for small businesses. Before the international financial and economic crises, the KfW Bankengruppe (2005) reports that in 2004, calculated from a survey, out of almost 2 m. SMEs (roughly 55% of all SMEs) that were willing to invest, roughly 60% started negotiations with banks. Of these 1.2 m. SMEs, 0.5 m. received finance after the first negotiation, the remaining 0.7 m. needed a second negotiation round. In total, 0.4 m. did not receive finance from the bank at all (KfW Bankengruppe 2005, 17-42,23). The KfW Bankengruppe (2005) concludes from an econometric analysis that small and young enterprises have special problems receiving finance (KfW Bankengruppe 2005, 28-31).

Reize (2006) analyses the reasons for the failed negotiations, and found that the most often stated reason by borrowers why they did not accept the first offer of the banks was too high interest rates (50% in the years 2004 and 2005). The author suspects that the borrowers with better creditworthiness use their good bargaining position to achieve better financing conditions. Indeed, in 2004 (2005), 40% (20%) of the surveyed enterprises who refused a financing offer reported that they received a better financing offer. On the other hand, the most often stated reason by borrowers why they did not receive finance was missing collateral: 74% in 2004 and 85% in 2005 (Reize 2006, 53-56). Note that these statements are provided by borrowers that might not know the real reason why they did not receive a loan.

In November 2008, when the international financial and crises finally started to directly affect Germany, a survey conducted by the central association of German chambers of commerce and trade (*Deutscher Industrie und Handelskammertag, DIHK*) showed that 21% of the surveyed enterprises feared a worsening of their access to financing, 28% reported a worsening of financing conditions but only 6% reported a rejection of a credit demand. The findings are based on a survey of 1,200 businesses in the sectors of industry, construction, trade and services (DIHK 2008). This survey is indeed interesting because it shows that most of the established businesses did not face any problems with respect to their access to finance. It was the financing conditions such as interest rates, and the general uncertainty that worried the companies.

During the financial and economic crises, the fear of a credit crunch was present. Indeed, the government took counter-measures to fight a possible crunch. In 2011, the KfW Bankengruppe (2011c) reports that the temporary financing problems, especially for larger and exporting companies, had been reduced. The development bank placed special emphasis on the structural financing problems, i.e. the finance of small and mid-sized as well as young businesses: 39% of small businesses with a turnover of less than € 1 m. reported that they had financing problems which is 3.2 times higher than for companies with a turnover above € 50 m. Rejections are also high for young enterprises. 55 % of young companies reported that they did not receive finance at all (KfW Bankengruppe 2011c, 3-5).

The KfW Bankengruppe (2006) points to the (structural) problem of obtaining external finance for innovation. 17% of companies (with more than five employees in the industrial sector and knowledge-based services) report that restrictions in obtaining finance is an important obstacle to conduct innovations. Most enterprises (59%) finance their innovations only with internal finance. Only 5% of the surveyed companies report that they finance innovations only with external finance. Venture capital is generally not an option for most businesses since only 1% of the innovation was financed with this source in 2004. Only in 2000, a

“boom year” of venture capital in Germany, did this source represent 5% of the innovation-finance in Germany (KFW Bankengruppe 2006, 95,130). Consequently, this survey suggests that “unternehmer” indeed have more problems in financing their innovations. However, most “unternehmer” that are not based in start-ups but in established enterprises are able to finance their innovations via internal finance of those larger firms.

Good bank clients usually do not have problems in receiving a loan at all. Also if these borrows cannot offer collateral, finance is not automatically denied from banks. This was reported by several representatives of banks (Kramer 2008, 47). In line with this impression, the CEOs of the Guarantee Bank in Berlin states:¹⁰²

“The restraint of banks is often complained during discussions about an optimal supply of credit for small and medium sized enterprises. (...) However, considering the current business strategy of the banks, one cannot see a bottleneck in banks. We have observed another trend since the second half-year of 2005: Despite Basel II we observe in our market-area a competition for good small and medium clients. Often our guarantee approval exists before a borrower can choose among different offers of competing banks. This competition is often won by the best price. We noted in this situation that the question of collateral was pushed into the background, i.e. blank loans were provided without collateral. The client will feel the consequences when the business policies change with an increase of collateral requirements” (BBB Bürgschaftsbank zu Berlin-Brandenburg 2008, 16,17).

Consequently, the competition among the lenders results in financing with low collateral requirements if the borrower seems to be promising for the lender. Under these conditions, the GBs face competition with the option of the lenders to provide the loan with little or no collateral.

The surveys and interviews indicate that in Germany “wirte” who have a settled business do not have structural financing problems. In addition, long-term finance is usually not a problem. Indeed, the “wirte” are attractive for the banks and there is much competition among German banks which increases the bargaining position of businesses – also in a long-term relationship. A potential structural “financing gap” is the external finance of “unternehmer”. Surveys show that start-ups and innovative businesses face more constraints in receiving finance from the banks. However, not all “unternehmer” face financing problems. Established companies usually finance innovations and investments with internal finance. But “unternehmer” that own start-ups or relatively young businesses may face more financing problems. In addition, smaller businesses, and businesses in the east find it harder to obtain finance.

¹⁰² Own translation.

4.1.4.2 Private initiatives and the relationships between borrowers and GBs

As discussed in the previous section, there is strong competition among banks and, moreover, there are different sources of finance for small businesses. With respect to outreach, the most successful private initiative of borrowers have been cooperative banks that were joint-liability groups and hence somewhat similar to credit guarantee schemes. However, over time, these institutions evolved into open universal banks. The government is willing to “fill the financing gap” and instructed several agencies with this duty. Indeed, there are not only discussions about structural financing gaps or temporary credit crunches, but also about “promotion gaps” (*Förderlücken*) within the “promotion jungle” (*Förderdschungel*) (Conference 1). Consequently, the financing situation of German small businesses is relatively good and any private initiatives of borrowers, beyond the established cooperative banks, that want to improve finance and go the commercial approach face tough competition.

There are two levels of relationships between the borrowers and the GBs. First, the indirect one via the chambers and associations, and second, the direct one when the GB receives the application and screens the borrower. This section discusses how GBs deal with problems and the additional information in the screening process.

The Guarantee Banks title themselves as self-help institutions of mid-sized businesses (*Selbsthilfeeinrichtungen des Mittelstandes*), see the advertising brochure of the association (VDB 2012). However, as discussed in the previous sections, the GBs are substantially supported and controlled by government. There is no doubt that the institutions do not achieve financial self-sustainability and rather conduct economic policy on behalf of the government. Consequently, the term self-help institution might create confusion. The scheme has certain elements of private initiative, and the representatives of GBs justify the term because they contribute with “know-how” and own financial means (Email 7). Indeed, the analysis of the decision-making process has shown that the GBs actively screen the borrowers and discuss their finance. With respect to the participation in the risk, the analysis has shown that this share is modest. However, it creates an incentive to intensively screen and to sort out, too risky borrowers.

GBs have several shareholders. Members of the Savings Bank Financing Group and the Federal State Development Banks are public. On the other hand, there are some private shareholders such as the private and cooperative banks, private associations, and private insurance companies. Public agencies with private elements are the chambers. Membership is obligatory for German companies, and the agencies are of public law. On the other hand, the members have the voting power within the chamber. Due to their public status, the German

chambers have the double mission of representing their members and also conducting public policy. For a broader discussion see Vrobruba (1992). This double mission, and the problem of cooperation among competing businesses was discussed in the theoretical sections. In this section, some evidence will be discussed analysing how GBs deal with this general conflict.

Conflicts were already discussed in the historical assessment. During the institution building process of KGGs, the wholesale-trade and industry sector resisted in building KGGs and had to be convinced by the government to participate.

The financing of “*unternehmer*” is a policy target of the German government on the national and the federal state levels. On the other hand, the established existing enterprises that can be considered “*wirte*” may fear new rivals and hence have reasons to influence the chambers in reducing their efforts to support (particular) “*unternehmer*” avoiding the “creative destruction” which is so important in the theory of Schumpeter (1934/1993). A joint interest of associations and government, especially on federal state level, is the support the finance of established companies that are innovative and intend to export their products out of the federal state or even beyond the national borders.

In addition, associations and chambers may always support businesses that do not have competitors within the federal state or region of the chamber and association. Indeed, the German chambers are organised in regions that are often smaller than the federal states.

Moreover, a chamber may have a conflict of interests in improving finance when a business is sold. In this case, the interviewed chambers reported that they may face even two conflicts of interest: one with respect to price (Kramer 2008, 73,74). For the seller who is already a member for a long time, the proceeds from the sales are part of his pension. Hence a high price would be the aim. But for the young buyer and future member, a high price may be an obstacle to achieve a financial sound business. The second conflict can occur when the chamber does not believe in the economic success of the succession. If the chamber reports its doubts, it would behave against the interest of the seller but in favour of the GB and purchaser.

All in all, there may be conflicts of interest within the chambers and associations. However, there are also many investment projects where these associations, government and GBs have a common interest. In addition, the GBs deal with this problem in a way that they include the information from associations in their decision-making process to augment the information-base for the discussion. In other words, the reports are not taken as a final verdict but as additional information, an opinion or warning among several opinions and

sources of information. Ultimately, the associations are only one voice among many. Since chambers and associations know that every application is discussed and screened by the lender and the GB, there is an incentive to provide valuable independent information. The local association can establish an active long-term relationship with the GB through repeated interactions, i.e. beyond a participation of the chamber in the GB's equity. If the chamber or association would provide doubted reports, it will lose credibility, and the GB may stop cooperation or simply ignore future reports and statements. Moreover, a long-term relationship also enables the chamber to provide trusted information to the GB beyond the formal report or discussion within the Guarantee Committee (Kramer 2008, 106). There is a regional concentration of activity in larger federal states such as North Rhine-Westphalia or Brandenburg. An explication for this may be the close relationship to particular locally based banks or associations.

The second level of relationship between borrowers and Guarantee Bank is the direct link. As discussed in the theoretical section, the borrower generally seeks cheap finance, which also includes low transaction costs. The analysis of the decision-making process, however, shows that the transaction costs are indeed high because the borrower is screened at least twice. The credit guarantee is not free of charge and the total financing costs (without the transaction costs) only decrease with the credit guarantee when the reduction of the interest rate is higher than the fees for the guarantee. Better-rated enterprises usually do not face a credit rationing in Germany and in addition, relatively low interest rates are charged (see the previous section). As discussed above, the GB of Berlin also reports that due to competition among banks, some borrowers also receive finance without providing collateral. In addition, the KfW Bankengruppe provides directed loans with "exemptions of liabilities" for better-rated borrowers. Consequently, these privileged borrowers can choose not only among lenders but also among the lenders' way of sharing the risk with third persons. The complicated decision-making process and distribution of information to several institutions reduces the attractiveness of credit guarantees.

Within the relationship between the borrowers and guarantors, there are two additional problems that were also discussed in the theoretical section. The borrowers can generally shift the risk to the lender or guarantor. However, the GBs do not reduce the borrower's risk and also require private personell guarantees for the loan. For example, the owner of a limited company can be made personally liable for the loan. In addition, GBs require guarantees from family members in order to control for reshuffling of assets (Kramer 2008, 15,71, Kokalj, Paffenholz and Moog 2003, 97).

Another explanation why borrowers may be sceptical about cooperating with a guarantee scheme is that credit guarantees are often connected with rescue guarantees or bailouts for companies in financial distress. GBs, who are not allowed to support borrowers in financial distress, are relatively unknown among enterprises, and media usually only reports credit guarantees when larger companies are in financial distress and seek for rescue guarantees of the government – even before the recent financial and economic crisis. Prominent examples are the companies Phillip Holzmann, Krupp, Mobilcom, LTU (Handelsblatt 2010). Consequently, borrowers may fear that business partners may believe that the borrowers face financial distress because they “need” a public guarantee. This problem may also explain why GBs emphasise their difference from public credit guarantee schemes and title themselves as “self-help” institutions.

In other words, the borrowers usually only “accept” the credit guarantee of the Guarantee Bank if there is no other opportunity, the interest rate would be significantly higher without the credit guarantee, or if they fear they will not receive sound finance at all.

The borrower and GB usually only have close contact during the initial decision-making process. When the guarantee and finance have been provided, the lender monitors the borrower, and the GB only receives financial statements. Only in the case of default or threat of default the GB is involved again. Of course, the GB may be involved in future financing. However, the GBs usually provide only one time assistance and the relationship is typically an arm’s length relationship. One representative of a GB brought it to the point and stated that in the best case, the GB only meets the borrower once: the borrower and GB usually only get to know each other within the decision-making process. If the borrower does not default, the borrower may receive finance in the future without the GB’s assistance (interview 44). Several representatives stated that GBs do not deal with the best clients and, the GBs do not provide guarantees for loans that are too risky. These statements describe the borrowers and their relationships to the GBs.

The question arises what kind of informational advantages a Guarantee Bank may have in comparison to the banks. The GB itself screens the borrowers like a bank, however, it does not usually establish a long-term relationship. In addition, the GB is based in the capital of the federal state which, in larger federal states, can result in long geographical distances to the borrowers. On the other hand, the GB can be specialised in the finance of “unternehmer” and have a methodological advantage over local banks. A second screening institution may always increase available information or improve analysis of the available information. For example, the GB may have some experience with similar projects in other regions. Additional information may arise from the members in the Guarantee Committee, especially the

chambers and associations. The borrower may be known to other lenders. However, when there is a long-term relationship between the bank and the borrower, the additional information will be little and in addition, the lender could receive information from the chamber or association directly. The government may introduce information about other public supporting schemes which may be of importance for the borrowers' investment projects.

Concerning information asymmetries causing credit rationing, GBs have a hard time to really augment the available information basis. In Germany, most commercial banks are universal banks and often provide relationship banking. Hence, the commercial banks might know the SME, the owner, the manager and even the local employee families for a long time, and they have also monitored their saving and investment behaviour. However, such a relationship can lull attention so that GBs providing a second due diligence and screening might throw a new light on a long-standing, unchecked „Hausbank“ conviviality. Consequently, a trustful long-term guarantor-bank relationship can be quite attractive for commercial banks when it comes to monitoring declining enterprises with a long „Hausbank“ history. In some regions, commercial banks have so few SME investment loan requests so that loan officers lack practice and are grateful for help (Kramer and Nitsch 2010, 1013, Kramer 2008, 89,90,99)

The increase of total available information can be more fruitful in the case of finance for “unternehmer”, be they start-ups or existing businesses that expand into new markets. In these cases, the relationship banking may have its limits, and among the numerous representatives in the Guarantee Committee there can be experts in the market. The GB and members of the committee may have more information and experience in the evaluation of projects than representatives of a local bank or branch. This holds for example in markets that depend on public (direct or indirect) support and regulations such as investments for renewable energies. House building and house renovation are important for the solar industry and for many craftsmen. In these cases, the representatives of the government and chambers may be better informed than the banks. This points to an informational advantage with respect to the market for the investment project.

In general, GBs enable further learning effects on all sides. Chambers and associations have knowledge about markets that banks and borrowers might not have. Within the Guarantee Committee, the joint discussion of the SMEs' financial statements, the investment projects and the banks' financing enhances the information of the ministries of economics and finance. Consequently, this direct information on the needs of SMEs can improve local public policies. By augmenting the available information and reducing information asymmetries on all sides, the institutional set-up of GBs promotes and enables the provision of sound loans to SMEs (Kramer and Nitsch 2010, 1013).

4.1.4.3 Banks' initiatives and the relationships between GBs and lenders

In the previous sections, the relationships between borrowers and lenders, and borrowers and GBs were discussed. In addition, the various possibilities of German banks to “shop for guarantees” have been highlighted, suggesting a panorama where GBs have to compete with other agencies in a guarantee-, or risk-sharing market. A representative of a GB brought it to the point when he stated that not only the borrowers are the GB's clients but also the banks. This is consistent with the theoretical discussion on who benefits from the guarantees. In this section, the relationships between the intensively competing banks and the GBs will be analysed more deeply.

Both the guarantees of the GB and subsidised loans with an “exception of liability” of development banks are risk sharing mechanisms for lenders. A central difference is that the refinance is “attached” to the risk sharing of the development banks whereas the bank can freely decide how to deliver liquidity when the bank cooperates with the GB, i.e. it may cooperate with development banks, too. Soft loans are often attractive for borrowers due to lower interest rates. In addition, banks can receive grants from the development bank when they cooperate, and there are “exceptions of liabilities”. On the other hand, many savings banks and cooperative banks are not short of refinance due to their captations of savings. Hence, the refinance is not necessarily a benefit for the banks and one representative even stated that the bank cooperates with the development bank due to the risk-sharing mechanism and grant but “bites the bullet” (“die Kröte schlucken”) of obligatory refinance (Interview 46).

The bank's loan officers do not participate in the Guarantee Committee. However, there is always a representative of the bank or banking network that does participate and monitor the GB and the behaviour of the counter-guarantors. Consequently, a loan officer or director (of a local bank or local branch) can always receive information on the credit guarantee scheme. However, the contract design is relatively complicated and it is understandable that loan officers who are familiar with the refinance of the development banks might prefer the directed loans with exemptions of liabilities, if they are tailored to the particular SME. Loan officers of many cooperative banks can use the credit guarantee scheme provided by their second tier DZ bank. It is based on the same ratings, and approvals are decided quickly.

In the historical assessment, evidence for the disputes between the cooperative banks and savings banks, and between the private banks and the public savings banks was discussed. Indeed, the public guarantees (*Gewährträgerhaftung*) for the savings banks and Landesbanken were forbidden by the European Commission due to a claim by the private banks.

Hence, competing financial institutes may be willing to cooperate. However, this cooperation will have its limits. For example, Ackermann, in the period of the analysis the CEO of the Deutsche Bank, which is the largest German private bank, proposed an equity fund to improve the solvency of German businesses in January of 2010. The fund should receive contributions from other lenders (Köhler and Stock 2010). However, to my knowledge, no other bank provided finance to this joint initiative which dried up rapidly.

Table 31 and Table 32 reveal that for most GBs and most years the inflows to the banks due to called guarantees are higher than the fees that are charged by the GBs. Consequently, if lenders would reduce the interest rates, which can be negotiated freely, by the total value of the fees, the banks would receive more cash from GB than they would lose due to a reduction of interest rates. Hence, the cash flow analysis indicates that lenders on average benefit when they cooperate with the GBs. This result holds especially when the paid in equity is considered as “sunk costs” of the past. On the other hand, this calculation does not include transaction costs that arise from cooperation with the GBs. Nevertheless, one can note that German lenders, in contrast to lenders who cooperate with other schemes such as Italian Confidi, are able to negotiate the interest rate with the borrower and hence can include operational costs in their calculations. All in all, the analysis of cash flows suggest that lenders benefit from the scheme of GBs. The lenders pay in equity and may receive indirect dividends when they cooperate with the GBs.

Another argument to cooperate with GBs is the reduction of regulatory capital. GBs have the status of a regulated financial institution and receive counter-guarantees from the German government. Within the Basel I framework, the risk reducing coefficient was 0% which implies that for a 80% guarantee the cooperating bank was able to reduce the regulatory capital to 20%. However, the authors furthermore report that only one third of the surveyed representatives of the lenders stated that this reduction has an “expanding” incentive. (Elkan and Schmidt 2006, 107). Within the Basel II framework, only the public counter-guarantees reduce the risk weight completely. The part that is “only” covered by the GB has a risk weight coefficient of 20%. For example, an unrated loan for a SME of € 100 would require € 6 regulatory capital¹⁰³. For a loan that is guaranteed by 80% in the West (where there are counter-guarantees of 65%), this regulatory capital would be only € 1.648¹⁰⁴ (Vincentiis 2008, 114-116).

¹⁰³ The €100 is multiplied by 0.75 before multiplied with the 0.08 minimal requirement because the SME loan benefits from this discount since it is considered to be part of the retail portfolio. $€100 * 0,75 * 0,08 = €6$.

¹⁰⁴ The share of the loan (20%) that is not covered by the credit guarantee is calculated as there was no credit guarantee ($€100 * 0.2 * 0.75 * 0.08 = €1.2$). The share that is counter-guaranteed ($0.8 * 0.65$) is weighted with 0% ($€ 100 * 0.8 * 0.65 * 0 * 0.08 = €0$). The part of the loan that is bearded by the Guarantee Bank ($0.8 * 0.35$)

On the other hand, the banks are generally reluctant to let other institutions, such as the GB and public authorities, let alone competitors, monitor one of their core businesses, which provokes reservations among their loan officers. In the field study, a high degree of discretion and arbitrariness was discovered since there are banks and individual loan officers who almost never cooperate with GBs, while others do it quite often (Kramer and Nitsch 2010, 1012). In section 4.1.3.4 the analysis decision-making process has shown that basic information on the SMEs is shared among several institutions – including the representatives of competing banks.

Both the above mentioned calculation, i.e. that the fees are only justified with a portfolio where relatively high losses are to be expected, and the reluctance of sharing information with third persons points towards the impression that the banks do not cooperate with the GBs when their best clients seek for finance. This goes in line with the statement of a representative of a GB that the GBs do not receive the best clients. This impression supports the intended principle of subsidiarity of the government. Moreover, Elkan and Schmidt (2006) report that the default rate, of the guarantees provided in 1995, to established enterprises equalled the default rate of guarantees provided to start-ups (Elkan and Schmidt 2006, 91). Moreover, within the field studies no interviewee reported that a competing bank had tried to “woo away” a client. Consequently, there are several indications that the best clients of banks are not financed in cooperation with the GBs.

Long-term guarantor-bank relationships seem to exist, especially on the level of loan officers, to reduce transaction costs and information asymmetries by creating confidence. This alliance can be especially attractive for commercial banks when they want to finance start-ups or investments that change the firms significantly. Consequently, the GB and the commercial bank can shop for new clients together. After a successful start-up, the bank normally takes the enterprise into a long-term bank-borrower relationship making the GB redundant for that client (Kramer and Nitsch 2010, 1012).

This long-term relationship with repeated interaction can be fruitful to reduce transaction costs and create trust. As discussed in the theoretical section, high transaction costs arise due to mutual moral hazard problems. For example, the lender might fear that the guarantor will not provide the compensation in the case of default. Indeed, the guarantees are not unconditional and the GBs or counter-guarantor can always try to delay, reduce or even avoid payments. On the other hand, the guarantor can always fear that the lender provides risks

is weighted with 20% ($€100 * 0.8 * 0.35 * 0.2 * 0.08 = €0.448$). Consequently, the lender needs $€ 1.2 + € 0.448 = € 1.648$ regulatory capital.

that are riskier than declared. Consequently, both the lender and the guarantor have an incentive to monitor each other. This happens on the level of loan-officers who frequently cooperate with the GBs and via representatives of the lenders in the GBs' boards and Guarantee Committees (Kramer 2008, 89-92,101-107).

In contrast to many other risk mitigation tools, cooperation with GBs can increase available information and provide a second analysis by another competent institution with its own source of information. Indeed, Elkan and Schmidt (2006) report that 43% of interviewed representatives of lenders agreed strongly or more or less strongly that they received new information from the GB (Elkan and Schmidt 2006, 106). This finding is supported by the field study conducted in the region of Berlin and Brandenburg: Roughly one third (7 of 21) of interviewed representatives also stated that they had received new information or that the GB had analysed the borrower in more detail. 6 representatives also reported some learning effects due to cooperation with the GBs. The others (13 of 21; one representative did not respond) stated that it is the second evaluation that brings more "security" to the evaluation – even if the source of information is the same (Kramer 2008, 86-88).

This indicates that a second evaluation even with the same source of information can increase the confidence of the loan officer that his or her assessment and decision is right. The second judgment (like an external rating) together with the guarantee commitment can increase the power and bargaining position of the loan officer within the decision-making process of the bank. Indeed, one representative explained that the cooperation with the GBs may increase his or her internal power when he or she is not in favour of the finance and can rely on the negative vote by the GB. On the other hand, the opposite may be true when the GB judges differently. Consequently, this is another incentive for the bank's loan officer to build a trusting long-term relationship with the staff of the GB.

A long-term relationship with repeated interaction between the banks' loan officers and staff of the GBs reduced transaction costs. Indeed, within the field study some representatives of the lenders reported that they cooperated with several GBs and that the cooperation with the GB they cooperate most often is usually the easiest. Together, cases can be jointly discussed. When the staff is in favour of the approval, both actors can jointly discuss and modification the finance in order to improve finance and/or increase the chance to push it through the Guarantee Committee. As long as both sides cooperate and behave consistently, the long-term relationship can increase trust and improve communication, even introducing a "pre-assessment" before a formal application. Indeed, Elkan and Schmidt (2006) report that 30% of the applications were refused in the period 1995-2004 (Elkan and Schmidt 2006, 78). One can imagine that a loan officer who applies for the first time for a

guarantee and is denied may not try again. But if there is a frequent interaction, the weight of a single refusal may not be so significant.

The surveyed lenders report that only 5% of the start ups where the GB refuses the guarantee receive finance anyway. This share increases to 18% with respect to already established businesses (Elkan and Schmidt 2006, 105). In other words, the refusal of the GBs is not directly a refusal of the finance; however, in most cases the GBs are indeed the last institution that enables or hinders the finance of a project or a firm.

Hence, this analysis indicates that the lenders do not cooperate with the GBs to finance their best clients. On the other hand, the GBs screen with their own information and ration borrowers that are not promising. Hence, a niche was found in finance of promising but riskier borrowers. Often the banks establish a long-term relationship with the GBs also at loan officer level, and the scheme can be considered as a lender-guarantor scheme. However, since the scheme is not financially self-sustainable and financial support is provided by the government, this “bilateral” relationship depends on the relationship of the government to the GB which will be discussed in the following section.

4.1.4.4 Public initiatives and the relationships between government and GBs

The previous sections have shown that the GBs are not private self-help institutions with “light” support of government but are rather institutions that enable the various levels and agencies of government to channel public credit guarantees to SMEs. Thereby the GBs manage the guarantees, screen, pre-select and provide a statement whether the guarantee should be provided or not. In addition, they also provide an explicit commitment and participate in the risk. Hence, the scheme is largely a government-guarantor scheme. In the following, the initiative and division of labour of the federal states and central government will be discussed. The European Commission and the municipalities will not be discussed since the State aid regulation was already covered in section 4.1.3.3, and municipalities have little influence of the on the guarantee scheme.

In contrast to the Federal State Development Banks and KfW Bankengruppe, the government does not (and never did) provide an explicit guarantee (*Patronatserklärung or Gewährträgerhaftung*) for all liabilities of the GBs (Drost 2010). The four channels of public support are counter-guarantees for each guarantee that was provided by the GBs, subsidised loans (sometimes with a risk-sharing mechanism), equity via public banks and tax relief. The federal states represent the federation in the Guarantee Committee. Indeed, in Germany, busi-

ness support is in general a competence of the federal states. Nevertheless, it is the central government that bears most of the risk and that is the official contact to the European Commission. On both the federal state and central government level, the ministries of finance and economics are responsible. On federal state level, the ministries of finance are in charge overall while the ministries of economics monitor. At the level of the central government the roles are reversed.

There is a double principal-agent relationship – at least with respect to the monitoring of risk. The federal state is agent of the federation and at the same time, it is the principal of the agent GB. With respect to the risk of the guarantees, the GB is the best-informed institution. The federal states do participate in the decision-making process, receive abstract information on the borrower and participate in the Guarantee Committee. The central government usually does not conduct an analysis of each guarantee but receives aggregated information from the GBs (Kramer 2008, 75,76,103).

Due to the limited participation of the federal state in the risk, which is 32% in the East and 26% in the West (see Figure 32) there seems to be an incentive for a lax risk-policy of counter guarantees. Indeed, it is an incentive for the federal state to actively use the GBs as a regional business promoting scheme where the central government pays most of the costs. On the other hand, there are several measures in order to prevent excessive defaults or a “joint irresponsibility”. In the following, these measures will be discussed.

It was already mentioned that GBs have the status of a bank and are subject of banking regulation. In addition, the EU State aid regulation makes it more difficult to guarantee riskier finance. Moreover, the central government and the federal states closely monitor the GBs’ activities. As discussed in the theoretical section, the cash flow of guarantees differs from the normal budget flow. In order to deal with the different flow, the federal states and central government set two ceilings. One restricts the maximum outstanding volume of counter-guarantees. This is a direct restriction and can easily be monitored. However, the ceiling can always be increased. The other ceiling is rather indirect. The governments, on both levels, plan the future payments due to called guarantees in the budget plans which have to be sanctioned by the respective parliaments. In the case that defaults of public guarantees, including the counter-guarantees to the GBs, are higher than expected, the finance is not in line with the budget planning and may be discussed in parliament. For example, in Berlin there were many discussions in the parliament and the media about the mortgage guarantees and the so called “Tempodrom Affair” (*Tempodromaffäre*) where the federal state had provided a credit guarantee (*Landesbürgschaft, i.e. not the GBs*). Also, the public audit divisions may always screen the activity of the ministries and the staff that are responsible. This

threat is a significant incentive for the public administrators to be careful with the provision of guarantees they allow personally. This issue was indeed reported within the interviews (Kramer 2008, 77-80) (interviews 25 and 27).

The representatives have two central tools to induce the GB to avoid high risk or acting against the aims of public policy:

- First, the legal framework and regulation of counter-guarantees are renegotiated every two years. Consequently, the GB has to worry that government stops or reduces its counter-guaranteeing activity. This threat is sustained due to the existence of other agencies that could replace the GBs¹⁰⁵. Whether a GB could provide guarantees without public support is questionable and a suspension of public support could be the end of the institution.
- Second, the representatives of the ministries are empowered with a veto of any guarantee application. Thereby they can veto high risk finance or projects that are not in line with public policies. Alternatively, when they are not sure how to judge the risk, they can easily slow down the decision-making process and require changes in the finance or investment project and urge a resubmission to the Guarantee Committee¹⁰⁶. This also holds for the contribution in cases of defaults. This slow down can “dry out” the guaranteeing activity since the credit guarantees would become unattractive for both the lenders and the SMEs.

Consequently, the better informed GB has a significant incentive to keep the counter-guarantors informed and behave in line with the policy aim of the government. The representatives of the ministries are usually skilled specialists and able to discuss in depth with the representatives of the GBs and other institutions. The departments of the ministries are usually responsible for several credit guarantees schemes and often concentrate on larger and sometimes more complex finance.

As discussed in section 4.1.1, GBs are only one of several schemes to support finance of German SMEs and that GBs depend on the public agencies and indeed are closely tied. Government can choose not only among different tools of State aid (like grants, soft loans or credit guarantees as well as tax relieves or price and purchasing guarantees) but also which institution is charged with the implementation. This manifold variation results in the so called “promoting jungle” (*Förderdschungel*) and creates several small institutions that may impede

¹⁰⁵ For example, the government could alternatively engage its FSDBs or private business consultants to manage an alternative credit guarantee scheme for the SMEs. Alternatively, the development banks could increase their offer of loans with exceptions of liability and screen the borrowers with their own information.

¹⁰⁶ The decision-making process can last up to nine months (Kokalj, Paffenholz and Moog 2003, 115).

economies of scale, but on the other hand, it reduces the power of any one institution since almost any institution could be replaced by another one. This follows the economic thought of the economic constitutional order “Ordnungspolitik” which is present in Germany (see section 2.3.3.2). A central recommendation is to dissolve or limit the functions of economic groups of power (Eucken 1964, 187-190).

As a result, with respect to SME finance, the public savings banks follow the commercial approach as regional universal banks. In competition with private banks, including cooperative banks, they provide a wide range of financial services to the “wirte”. In addition, they cooperate with other public agencies and publicly supported private agencies in order to realize the “promotion business” (*Fördergeschäft*) for the “unternehmer”. In this “business”, the lenders can also conduct finance which is not in line with the commercial approach, i.e. would not be cost covering without public financial support. They can receive soft loans from the KfW Bankengruppe or the FSDBs. The FSDB can also support both the “wirte” and “unternehmer” and provide grants, soft loans or also provide finance directly. For example, the FSDB of Berlin has a subsidiary that provides venture capital up to € 1.5 m. for young enterprises and can increase its participation up to € 3 m. The FSDB in North Rhine Westphalia provides micro loans directly.

The credit guarantees via GBs are usually provided to support the finance of “unternehmer” in the form of start-ups and investment finance as discussed in the previous sections. With this tool, the governments conduct a “light intervention”, as discussed in section 2.3.3.4. The principal of subsidiarity is intended and anchored in the credit guarantee scheme. This implies that the supported SMEs are relatively risky and face difficulty in obtaining finance without public support. On the other hand, only SMEs that can show that they are both promising for the economic development and also with respect to their financial sustainability are supported.

4.1.5 Interim results

The experience of the Guarantee Banks shows that they are no examples of a “magic formula” to establish a scheme with relatively low transaction costs, a notable outreach by number and volume, a high degree of additionality, and a financial self-sustainability. This holds for both the Guarantee Banks and their predecessors since there was no financial self-sustainability and no large outreach.

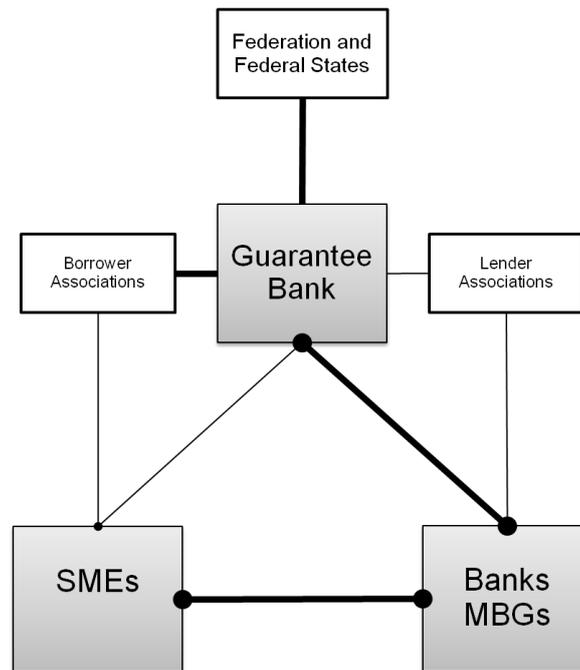
GBs are of basic model three in the ODM approach. With respect to the first dimension, GBs have private shareholders and receive unfunded counter-guarantees but government is not explicitly liable for all guarantees which makes them of type A2.2.2.2. With respect to the decision-making process, the GBs are of type B1.1 although in some cases the GBs may rely on the banks' information. GBs provide partial guarantees of up to 80% of the loan or participation.

Due to specialisation in finance of "unternehmer" and through cooperation with chambers and associations, they can reduce information asymmetries between banks and SMEs (Kramer and Nitsch 2010, 1015,1016). However, in many cases GBs do not have access to information that banks would not achieve. The value added for the lenders is often more the double screening in cases where the judgement is not clear for loan officers. However, there are high transaction costs.

With respect to the relationship-based result of differentiation, the analysis shows that the scheme is both a lender-guarantor and government-guarantor scheme.

Within the basic triangle, the typical GB-borrower relationship tends to be one-time assistance for overcoming the threshold to finance innovative investment or to face emergencies, whereas the GB-lender relationship tends to be more permanent, especially at the loan officer level. Together, both institutions can jointly hunt new customers such as promising start-ups, which in many cases would not have obtained external finance otherwise (Kramer and Nitsch 2010, 1016).

Figure 39 Long-Term Relationships within the ATR of German Guarantee Banks



Own elaboration

The borrower associations are shareholders of the GBs and there are long-term relationships between the GBs and associations that send a representative to the Guarantee Committee.

The crucial problem of "ownership" should be kept in mind. Being servant to so many masters within the Augmented Triangular Relationship (Figure 39) makes it difficult for the GBs to reach out into profitable fields, because those are occupied by one or the other of their shareholders (Kramer and Nitsch 2010, 1017). Typical consequences of missing ownership are either a "joint irresponsibility" or little outreach (section 2.3.4.1). In the case of GBs it is rather the second outcome.

Most shareholders as well as the other external stakeholders have their particular reasons to keep the scheme small: for borrowers and SME associations it can be rational to prefer loans from banks without the GBs and their high transaction costs; also for commercial banks it can be rational to cooperate only in a few "doubtful cases" because of high transaction costs and information sharing with competing banks. Finally, representatives of government often tend to be restrictive since the government agencies, i.e. ministries of economy and finance, have to pay the bill and because public budgets are directly affected, even if only in an uncertain future. Moreover, to avoid fiscal excesses and distortion of competition, regulation is imposed by the federal states, the Federation and the European Union which retards the scheme's growth as well (Kramer and Nitsch 2010, 1018).

The government seems to be the most important stakeholder, but it cannot be noted that the counter-guarantors “sit in the driver’s seat”. Instead, it seems that the government agencies rely on the principle of subsidiarity (which significantly reduces the GBs’ business niche) and in addition do not want promoting agencies to become too important and irreplaceable. Indeed, GBs have several competing public and private agencies that conduct similar risk-sharing schemes. Consequently, while the staff and executives of the Guarantee Banks may sit in the driver’s seat, they are servant to many masters.

GBs are an example demonstration for credit guarantee institutions that do not follow the commercial approach with a significant outreach and financial self-sustainability. The stakeholders use the GBs to “fill a gap” and conduct a light public intervention.

Analysing the GBs' business niche, it has to be noted that GBs are “sandwiched” between several guarantee- or risk-sharing schemes on the one side, and smooth bank-borrower “Hausbank” relations, also with support from KFW funds, for micro and small enterprises on the other. Within this limited space, performance depends largely on personalities who find fruitful grounds in the segment of "subprime loans" (in the literal sense) that are too risky for the banks, such as start-ups and innovative investments (that cannot offer collateral), but at the same time promising enough to be counter-guaranteed by government agencies (Kramer and Nitsch 2010, 1016).

4.2 Case 2: Brazilian Credit Guarantee Societies

In December 2006, the President of the Federative Republic of Brazil Luiz Inácio Lula da Silva signed the General Law of Micro and Small Businesses (*Lei Geral das Micro e Pequenas Empresas*, Lei Geral) which is a framework to reform the relationship between government and small businesses. Government should increase its public purchasing with small businesses, reduce bureaucracy and enable better access to technology, markets, financial services and the juridical system. In addition, the process of registration and business formalisation should be eased. With the “Empreendedor Individual” a framework was established where informal businesses could become formal businesses relatively easily, issue receipts, pay modest taxes, and, on the other hand, benefit from social welfare like pensions. The law also encouraged the institution building process of credit cooperatives (SEBRAE 2006). In the year 2007, an complementary law, the “Lei Complementar n^o 127”, encouraged the government to build a national credit guarantee system in order to improve access for micro and small businesses to credit and other financial services (Ministério da Fazenda 2007).

In his contribution to a three year commemorative publication, the president of the Institute of Applied Economic Research (*Instituto de Pesquisa Econômica Aplicada, Ipea*), Pochmann (2010) noted that small businesses are important but the Brazilian government was historically, since the 16th century, more concerned with large businesses such as the sugar cane agribusinesses. Only since the 1970s have the government started to address the needs of small businesses. With respect to fiscal policy and access to finance, the Lei Geral and governmental actions are more than “programmatically intentions”. Pochmann concludes that strengthening small businesses in Brazil is a fundamental piece of public policy (Pochmann 2010). It is within this extensive public policy framework that a national system of credit guarantee schemes was to be built.

In 2002, the Brazilian government defined microenterprises (*microempresas*) as businesses with an annual turnover below R\$ 360,000 (roughly € 170,000 –see appendix 7) and small businesses (*empresas de pequeno porte*) as businesses with a higher turnover than microenterprises but an annual turnover below R\$ 2.4 m. In 2011, these thresholds were increased to R\$ 360,000 and R\$ 3.6 m. (Receita Federal 2011, Art. 3)¹⁰⁷.

4.2.1 First experiences with schemes and the vision for a national system of local societies

Before discussing the credit guarantee schemes, the agencies directly involved will be briefly presented.

The National Bank for Economic and Social Development (*Banco Nacional de Desenvolvimento Econômico e Social, BNDES*) operates as a second-tier bank (sometimes called second floor bank) with respect to the finance of small businesses. Only for larger enterprises does it provide finance as a first-tier bank. It refinances itself via special public funds and the treasury but can also capture finance from the financial markets or loans from foreign development banks. With credit approvals of Brazilian Reals (R\$) 170 bn., and a balance sheet total of R\$ 380 bn. in 2009, it is not only important within the Brazilian financial system but its finance is on a level of the World Bank and the German KfW Bankengruppe (BNDES 2010b, 4, BNDES 2010a, 8).

The Banco do Brasil is a first-tier universal bank in the legal form of a stock company. It is predominantly owned by the central government, operates nationwide and is an important bank for small businesses. It conducts several public policy programmes and competes with

¹⁰⁷ Note: the annual turnover is only one threshold that defines a SME (by the European Commission). In Europe, this legal threshold is with € 43,000 far higher than in Brazil.

private banks and the other national public bank Caixa Econômica Federal which is more specialised in mortgage finance (Araujo and Macedo Cintra 2011, 7-9). The Banco do Brasil had a balance sheet total of R\$ 740 bn. in 2010 and R\$ 660 bn. the year before (Banco do Brasil 2011, 2-3). Banco do Brasil and the private and nationally operating bank Banco Brasileiro de Descontos (Bradesco) are the two banks that provide most of long term finance for small businesses, using public funds (Email 8).

The Labour Support Fund (*Fundo de Amparo ao Trabalhador*, FAT) is a parafiscal fund financed by compulsory payments¹⁰⁸. It had a balance sheet total of R\$ 217 bn. in 2009 and R\$ 221 bn. the year before (Ministério do Trabalho e Emprego 2010, 86,87). The fund is important for both the BNDES and the Banco do Brasil since this money is deposited with them. In addition, the FAT refinances special loan programmes (Santos 2003, 84-88).

The Brazilian Service of Support for Micro and Small Enterprises (*Serviço Brasileiro de Apoio às Micro e Pequenas Empresas*, SEBRAE) is also a parafiscal public institution, since it receives compulsory payments from companies and has its own independent budget which is not controlled by the parliament. Contrary to BNDES and Banco do Brasil, it is mainly a technical assistance agency and acts as an advocate for small businesses. It has a wide network of branches throughout the country. It is engaged in building microfinance institutions and credit cooperatives. In addition, it also established a nationwide credit guarantee fund, which will be discussed in the following, and it is the central agency involved in the institution building process of a national network of local Credit Guarantee Societies (visit 2).

A representative of the SEBRAE states that the institution has a role in introducing innovative ideas to the market, even with sometimes unsuccessful returns. Moreover, it is part of the business to experiment with those ideas. In line with this statement, the representative also states that it is not the role to be a huge player as a guaranteeing institution but to induce the market (Email 8).

4.2.1.1 Scepticism of “first generation” guarantee schemes

Seven years before the Lei Geral, the president Fernando Henrique Cardoso already signed a law that enabled the building of credit guarantee societies (Presidência da República 1999). In the late 1990s, three guarantee schemes and one insurance scheme were built in Brazil (A. G. Araujo 2004, 84, Barros 2004):

¹⁰⁸ See article 239 of the Brazilian constitution.

- In 1995, the Guarantee Fund for Micro and Small Businesses (*Fundo de Aval para Micro e Pequenas Empresas, FAMPE*) was established, financed and managed by SEBRAE.
- In 1997 the Guarantee Fund to Promote Competitiveness (*Fundo de Garantia para a Promoção da Competividade, FGPC*) was established. It was managed by BNDES on behalf of the central government.
- In 1999, the Guarantee Fund to Create Jobs and Income (*Fundo de Aval para a Geração de Emprego e Renda, FUNPROGER*) was created. Management was assigned to Banco do Brasil and finance was provided by the Labour Support Fund FAT.
- In 1999, the insurance company Caixa Seguros started to provide credit insurance to its mother company Caixa Econômica Federal (CEF)

All of them were public and funded schemes (A1.2), did not rely on their own information within the decision-making process (B1.2 and B2) and provided partial guarantees covering between 50% and 80% of the finance. Hence, they were of basic model one and two within the ODM approach and government-guarantor schemes in the relationship-based approach.

In 2004, an expert group of academics and practitioners, organised by SEBRAE, analysed the access to finance for small businesses in Brazil. The following is based on the resulting publication of Araujo (2004).

The FAMPE was open to all lenders and many kinds of finance for small businesses. The other schemes were restricted to directed loan programmes. The FGPC only guaranteed directed loans of the BNDES, some of them directed to exports and exporting companies. The FUNPROGER was only directed to guarantee finance of the programme Proger – Urbano¹⁰⁹, which was tailored to finance private borrowers, small businesses (including start-ups and informal businesses), microfinance institutions and cooperatives. It has to be emphasised that the FUNPROGER is managed by the Banco do Brasil which is also the predominant lender in the scheme. This clearly indicates a lender-guarantor scheme. The government and the FAT set general regulation and delegate operations to the bank. With the exception of FAMPE, these credit guarantee schemes can be interpreted as risk-sharing tools attached to directed credit programmes that obviously include liquidity as well. FGPC and FUNPROGER were somewhat similar to the KFW's "exemptions of liabilities" since like in Germany, the credit risk usually remains with the on-lending first tier bank if there is no special risk-sharing scheme.

¹⁰⁹ For a critical assessment of this programme see dos Santos (2003).

The Caixa Econômica Federal (CEF) is the second largest public commercial bank and was specialised in housing finance (Araujo and Macedo Cintra 2011, 8)(see Table 40). In 1999, it started to finance working capital and investments of businesses as well. A CEF representative, Barros (2004), states with respect to small business finance, that the institution insured the loans at its own insurance company, the Caixa Seguros¹¹⁰. Hence, the risk remained within the financial institution. In 2003, the insurance or guarantee scheme had realized 103,500 operations with a value of R\$ 1.7 bn. (including short term finance). The outreach is indeed impressive, however, the scheme cannot be considered a risk-sharing scheme since it is more like an internal provision, i.e. an an internal credit insurance (*seguro de crédito interno*). In 2008 and 2009, other representatives of the CEF stated during interviews and discussions that the credit insurance was no longer used¹¹¹.

There are three possible explanations for the temporary existence of this scheme. First, there may have been arbitration gains in the regulation of banks and insurance companies. Second, somewhat similar, the public bank was not allowed by its owners to charge high interest rates and instead charged insurance fees for borrowers who were not able to offer collateral. The third possible explanation is that the CEF started to provide loans to SMEs and hence had little experience and data. Possibly, it used the database of the insurance company within the decision-making process in the beginning. Since the scheme was closed and there is only little information at hand, the following focuses on FAMPE, FUNPROGER and FGPC.

Table 37 provides an overview of the three credit guarantee schemes and their outreach by 2006.

¹¹⁰ Since 2001, the French CNP Assurances is the main shareholder, too (Caixa Seguros 2008, 26).

¹¹¹ No quotation of interviews due to guarantee anonymity.

Table 37 Overview of Brazilian Schemes of the “First Generation”

	FAMPE	FGPC	FUNPROGER
Administrator	<i>SEBRAE</i>	<i>BNDES</i>	<i>Banco do Brasil</i>
Borrowers	turnover < R\$ 1.2 m.; or < R\$ 6.125 m. if exporting	turnover < R\$ 10.5 m.	turnover < R\$ 5 m., and MFIs
Lenders	Banco do Brasil, CEF, Banco de Masona, Banco do Nordeste	21 banks in 2005	Banco do Brasil (92.5%), Banco do Nordeste, CEF
Guarantees up to	R\$ 80,000 (< R\$ 300,000 for exports)	R\$ 8 m.	R\$ 160,000
Risk sharing	50% to 80%, cap on portfolio	up to 80%,	up to 80%, cap on portfolio
Fees	-	-	3.6% p.a. on average
Outstanding guar- antees in 2004	US\$ 19 m.	US\$ 456 m.	US\$ 625 m.
Number of pro- vided guarantees in 2004	257	1,143	72,657

Own elaboration; source: Llisterri et al. (2006, 75-97)

Table 37 shows that the FGPC was directed towards larger enterprises and the FAMPE had the lowest outreach. Only FUNPROGER, with more than 70,000 guarantees provided in 2004, had a relatively impressive outreach by number and volume. In the IADB Study, the modest outreach of FAMPE is explained by its similarity to the competing FUNPROGER scheme.

In the period 1998-2002, the FGPC seemed to be a success story since provided guarantees increased to a peak of roughly 4,000 and more than R\$ 900 m., which equalled almost 40% of all provided loans to SMEs by the BNDES. Nevertheless, representatives of the BNDES report that new operations had decreased since 2003 (Cardoso, et al. 2008). In 2006, almost no new guarantees were provided. The authors provide four reasons why the scheme was not used anymore (Cardoso, et al. 2008, 282-284): First, the default rate was 34% in 2006. High default rates implied that 60% of the lenders exceeded a threshold of 12% and were excluded from new operations with the FGPC. Second, the compensation due to calls on guarantees had to be sanctioned by the ministry of finance (although the scheme was funded) and these sanctioned payments were well below the fund’s obligations to the lenders. In other words, the guarantor did not fulfil what it had promised. Some calls on payments for the year 2005 were only paid in 2007. Third, lenders were required to conduct legal action against defaulted borrowers, and fourth, any financial agreement between the

lender and borrower had to be sanctioned by the guarantor. The BNDES, however, as the fund's manager was not able to provide the service in a timely manner.

To sum up, a relatively high outreach was achieved in the beginning. But in the long run, the scheme was not financially self-sustainable and the guarantor did not fulfil its obligations. The financial statements showed profits. However, the guaranteeing institution paid its obligations late and invested the funded money into treasury bonds, which enabled profits (Email 9). This business strategy may suggest financial self-sustainability for a period. However, this strategy may imply that the scheme's clients, the lenders, stop cooperating with the scheme. Indeed, this happened, and the scheme was closed soon. One cause of wrong expectations with regard to or the assumed risk may have been the decision-making process. The guarantor was markedly less informed than the lender.

The FUNPROGER had a cap of 7% for every lender, except for finance to start-ups. In 2004, the defaults of the Banco do Brasil, the scheme's manager and main lender, were significant 3% and of the Banco do Nordeste 7%. With fees of 3.6%, financial self-sustainability might have been possible. Indeed, for the year 2004, the income from fees was higher than payments due to guarantees and administrative expenses. This, however, did not hold for 2003. Only when the income from investments in financial assets – which equals roughly half of the income from fees – is included in calculations, there was a positive flow in both years (Llisterri, et al. 2006, 86).

Santos (2003) analysed several Brazilian credit programmes, including Proger-Urbano. His central criticism is in line with the criticism against the Directed Credit Paradigm in general (see section 2.1.2). The author criticised the inadequate decision-making process and that highly subsidised loans were provided to good bank clients that would have received a loan anyway. On the other hand, most of the 9.4 m. formal and informal small businesses with up to 5 employees did not benefit from this programme (Santos 2003, 124-126,171-175). Since the FUNPROGER was only established in 1999, the author was not able to analyse the impact of the risk-sharing mechanism in depth. However, although outreach has increased with the implementation of FUNPROGER, the scheme continued to benefit only a limited group. Dota Sanches and Pereira (2008), both executives of FUNPROGER, state that the scheme had increased access to finance. However, they admit that the goal to solve the problem of missing collateral was not met, and they point to the successful experiences of alternative credit guarantee schemes in Spain and Italy (Sanches and Macedo 2008, 318,319).

Indeed, even though these programmes exist, the access to credit (and finance at all) is still limited. In January 2004, a SEBRAE survey was conducted in the industrialised Federal State of São Paulo which is the Brazilian industrial and financial centre. In the period 1994-2007,

38% to 60% of all loans provided in Brazil were provided in this federal state. The SEBRAE survey indicated that missing collateral was the main obstacle for small businesses to receive a bank loan: 40% of the SMEs who were denied a bank loan reported that missing guarantees were the reason. 61% of the SMEs reported that they had never taken a bank loan and only 6% reported that they had received finance from a bank to start-up their business (Bedê 2004, 47,48,50). Consequently, although there were credit guarantee schemes, the survey indicated that access to credit was still scarce and a central obstacle seemed to be missing collateral.

All in all, the FAMPE was of negligible outreach. The FGPC did not fulfil what it had promised, and after disputes between banks and the guarantor there was little demand for new operations. The FGPC was finally closed for new operations. The CEF scheme was a temporary internal risk-sharing mechanism. FUNPROGER had relatively high outreach. Since the Banco do Brasil was both the manager of the scheme and by far the main lender, this scheme was similar to an internal risk-sharing mechanism or provisions of the lender. There was scepticism among Brazilian policy makers. Hence, the question arose how to improve Brazilian credit guarantee schemes.

4.2.1.2 Euphoria and the vision for “second generation” guarantee schemes

In the published report of the expert group, Guerra de Araujo (2004), a representative of the SEBRAE, applies the approach of Herrero Calvo and Pombo González (2001) to differentiate credit guarantee schemes and hence differentiate between credit guarantee funds, programmes and societies. The FAMPE, FGPC and FUNPROGER Brazilian were categorised by the author as programmes (A. G. Araujo 2004, 83,84).

As an alternative to existing schemes in Brazil, the author presented the alternative idea of credit guarantee societies (*sociedades garantidoras*) where borrowers are direct or indirect shareholders and financial resources are public and private. In Brazil, these schemes are often called “second generation” guarantee schemes. An important difference, beyond the governance structure and the question of funding, is said to be the decision-making process since the societies operate on the first-tier level (A. G. Araujo 2004, 83). Consequently, within the ODM approach, Guerra clearly points to schemes of basic model three because the societies use the decision-making process with own information (B1.1) and are a result of public and private cooperation (A2) since the author notes that the private societies receive public financial support. Moreover, the degree of activity of the societies is said to be high whereas it is low for funds and medium for programmes. Hence, the report raised ex-

pectations with respect to a high outreach. Moreover, euphoria was sustained by the SEBRAE survey, which indicated that missing collateral was the main obstacle in receiving bank loans.

Araujo (2004) admits that the “great challenge” is to achieve additionality, to improve finance for borrowers and at the same time try to achieve financial self-sustainability. With respect to public support, the author states that the working group was aware that the institutions need public support to induce the private sector to establish the schemes (A. G. Araujo 2004, 86,101).

Before “reinventing the wheel”, Brazilian policy makers organised several technical missions to Spain and Italy. For example, there was such a visit to schemes in Italy and Spain in 2005 (SEBRAE 2005). Moreover, policy makers participated in several REGAR-conferences, and organised one in Brazil in the year 2008 (for example, conferences 2, 3, 5, 7). Some euphoria with experiences in Spain and Italy was sustained by several OECD contributions. In 2006, the OECD-conference “Financing the SME gap” was held in Brazil’s capital Brasília and in the conference document one can read:

“Guarantee schemes are among the most effective instruments governments can use to ease SMEs’ access to credit financing” (OECD 2006, 271).

In a former OECD study, Rossi (2000) argued in his contribution to the OECD study “Financing newly emerging private enterprises in transition economies”:

“The recent entrance of former socialist countries and developing countries into the global market and the simultaneous insufficiency of savings to direct towards investments has sparked interest in the instruments with which to finance balanced economic development. In this context the operative experience of the Italian *confidi* and the very characteristics which might be seen as weaknesses compared to the more structured systems of France and Germany could in fact become factors for success. In economies with a predominance of small enterprises, high credit risk and an inadequate supply of financing instruments, the experience of Italian *confidi* could be applied to extremely effective micro-financing interventions – and they would be relatively easy to export” (Rossi 2000, 87).

In a separate contribution for the above mentioned OECD conference, dos Santos (2006) provides a proposal for a national system of credit guarantees in Brazil. To illustrate the potential market, the author used an open pair of scissor. On the left, the handle is closed representing the Brazilian national financial system where established companies can negotiate with banks and receive finance. On the other end, the pair of scissors is widely open to represent the wide difference between the supply of financial products and the demand of roughly 4.5 m. formal SMEs and about 10 m. informal enterprises. This side refers to the

market of microfinance (Santos 2006, 3-5). Between the closed and the widely open side of the pair of scissors, the pair of scissors is less widely open and represents the market for guarantees:

”Thus, the primary function of a National System of Guarantees would be to facilitate access to credit on the part of businesses which are situated in the middle area of the ‘scissors’: formal businesses of micro or small scale which are not able to respond to the requirements of the banks in respect of traditional guarantees, and for whom the supply of limited micro-credit is not adequate. To summarize, the main factors limiting the supply of credit for this segment are the insufficiency and unreliability of information about the firm, the high costs of operation, the lack of appropriate guarantees, and, finally, the perception of heightened risk” (Santos 2006, 5).

Dos Santos emphasises that the current Brazilian schemes do not reduce the asymmetries of information between lender and borrower, which are the cause of credit rationing. On the other hand, he states that credit guarantee societies can make “a drastic reduction” of this asymmetry possible (Santos 2006, 8). Therefore he proposes a national system of regional Brazilian Credit Guarantee Societies (BCGSs) with private management and co-responsibility for the credit guarantee. Cost covering is seen as essential, but government and/or medium and large enterprises can support with funding. The mutual and cooperative-like nature should reduce the problem of moral hazard, and for the government on municipal and state level the institutions could be “powerful instruments for local and regional development” (Santos 2006, 11). For the supporting larger companies, the benefit should be the support of their suppliers, customers and partners in the production chain. The proposed decision-making process is roughly similar to the decision-process of Spanish SGRs. However, the author leaves open who should participate in the central decision-making body. By collecting and analysing information, the institution should facilitate financial intermediation where banks encounter serious difficulties (Santos 2006, 8-13).

There should be a National System of Guarantees in the form of a counterpart fund, which is supervised by the Central Bank. This second-tier (or second-floor) agency should supervise the local BCGSs and provide financial support that “will guarantee liquidity and additional guarantees to the credit operations realized by the local SGCs” (Santos 2006, 12).

The guaranteeing institutions should reduce the information asymmetries and increase the bargaining power of associated borrowers against banks. Similar to Spanish and Argentine SGRs, there should be small businesses as members (or shareholders) and supporting partners¹¹². The first group should consist of formal enterprises, whereas the latter may be pub-

¹¹² Not that the term shareholder does not only apply for stock companies but all capital companies.

lic and private agencies including associations and private enterprises. Financial institutions should only be supporting members but “affiliated” to the society (Santos 2006, 8-13).

4.2.2 The institution-building process of local BCGSs in the shadow of centralised schemes

Before providing an overview of the institution building process of Brazilian Credit Guarantee Societies (BCGSs), other (old and new) credit guarantee schemes will be described in this section: the already introduced internal insurance scheme of the CEF and the FGPC managed by the BNDES disappeared while the FAMPE and FUNPROGER continue to exist. In addition there is a scheme to promote exports, the Export Guarantee Fund (*Fundo de Garantia à Exportação*, FGE), and a special scheme to promote highly innovative SMEs, managed by the Financier for Studies and Projects (*Financiadora de Estudos e Projetos*, FINEP). Moreover, there emerged two credit guarantee funds, the Operations Guarantee Fund (*Fundo de Garantia de Operações*, FGO) and the Guarantee Fund for Investments (*Fundo Garantidor para Investimentos* – FGI) – both as measures to combat a possible credit crunch during the financial and economic crises after the collapse of Lehman Brothers. The following table provides the results of the ODM approach in Brazil.

Table 38 Classification of Guarantee Systems in Brazil According to the ODM Approach

		Decision-making process for an individual guarantee		
		B1) Case-by-case approach. The lender is required to obtain an approval of the GI. The GI screens the individual borrower.	B2) Portfolio approach. The lender is not required to obtain individual approvals by the GI.	
		B1.1) The GI uses its own information beyond an application form.	B1.2) The GI relies on the bank's information.	
Ownership	A1) Public Guarantee Schemes	Basic Model 1 FINEP FUND ¹¹³		Basic Model 2
	A1.1) Unfunded Guarantee: Individual call on a guarantee does affect the budget.			
	A1.2) Funded Guarantee: Individual call on a guarantee does not affect the budget.		FUNPROGER/FGO	
	A1.2.1) State is explicitly liable for all guarantees.		FGPC	
	A1.2.2) State is not explicitly liable for all guarantees.			FAMPE
	A2) Public-Private Cooperation	Basic Model 3		Basic Model 4
	A2.1) Government takes explicit risk			
	A2.1.1) - Unfunded: Individual call on a guarantee affects the public budget.			
	A2.1.1.1) State is explicitly liable for all guarantees.			
	A2.1.1.2) State is not explicitly liable for all guarantees.			
	A2.1.2) - Funded: Individual call on a guarantee does not affect the public budget.			
	A2.1.2.1) State is explicitly liable for all guarantees.			
	A2.1.2.2) State is not explicitly liable for all guarantees.	AGC/BCGSs	FGI	
	A2.2) Government does not take explicit risk.			
	A3) Private Guarantee Schemes	Basic Model 5		Basic Model 6

Own elaboration

¹¹³ Probably A1.2.1 and B1.1. However, not sufficient information is at hand.

Zica and Martin (2010)¹¹⁴ report in an unpublished contribution to a conference that the FAMPE significantly increased its activity during the period of financial crises. Hence the scheme was used for a countercyclical policy. Whereas the number (value) of provided guarantees varied between 137 and 647 (R\$ 2.3 m. and R\$ 12 m.) in the period 2000-07, the number (value) of provided guarantees increased to 66,500 (R\$ 1.6 bn.) in 2008 and remained on a high level with 43,800 by number and R\$ 1.2 bn. by value in 2009. The authors explain this because there was a high-risk adversity among banks during the financial crisis, and because the resources of the competing FUNPROGER were reduced (Martins and Zica 2010, 7,8).

As a response to the financial and economic crises, government used public banks such as the Banco do Brasil and CEF to increase the supply of loans. The banks themselves were supported via new government funded credit guarantee schemes. In the law 12.087 of November 2009, the central government declared its willingness to provide funding of R\$ 4 bn. to directly guarantee finance of SMEs and indirectly via credit guarantee societies, on top of special funding for exports and the agricultural sector (Presidência da República 2009). Indeed, two new credit guarantee schemes were established soon (as already stated). The Operations Guarantee Fund (*Fundo de Garantia de Operações*, FGO) is managed by the Banco do Brasil and started its operations in the end of 2009. The Guarantee Fund for Investments (*Fundo Garantidor de Investimentos* – FGI) is managed by the BNDES and started operations in 2010 (Martins and Zica 2010, 10,11). Both schemes were initiated by the central government but from the beginning the guaranteeing institutions had several shareholders since participating lenders are obliged to participate in the fund's equity. Although they were built as a counter-measure against a credit crunch, the funds had no special closing date.

The main shareholder of the FGO is the central government with 97% of the shares. In addition, the public banks Nossa Caixa and CEF and the predominantly public bank Banco do Brasil¹¹⁵ are minor shareholders. The fund guarantees up to 80% for investment loans up to R\$ 500,000 and working capital of R\$ 150,000. In addition to the risk sharing via partial guarantees, there is a cap of 7% to each lender's outstanding portfolio (Guimarães de Oliveira 2008, 4). Similar to the FUNPROGER, the Banco do Brasil is the manager of the guarantee fund and at the same time the most important lender within the scheme. In its annual report for the year 2010, the Banco do Brasil (2011) reports that it had extensively used the scheme for working capital and by the end of 2010 353,600 loans were guaranteed with a value of R\$ 7

¹¹⁴ Henrique Cordeiro Martins is professor at the faculty of Business Administration at FEAD and the University Center of Belo Horizonte. Roberto Marinho Figueiroa Zica holds a master (mestre) in business administration and was a senior specialist at SEBRAE for the institution building of credit guarantee societies.

¹¹⁵ As already stated, the Banco do Brasil is a stock company with the government as the main shareholder.

bn. These guaranteed loans represent approximately 14% of the bank's SME portfolio. An average guaranteed loan has the value of roughly R\$ 20,000 (Banco do Brasil 2011, 161-162). The scheme is clearly a lender-guarantor scheme like the FUNPROGER. But the FGO provided in less than one year guarantees of roughly 60% by value and 123% by number in comparison to the guarantees provided by FUNPROGER in eight years.

The FGI has several shareholders similar to the FGO: the central government, public banks and in addition, unlike to the FGO, private banks. Nevertheless, most of the equity comes from public agencies since the central government holds 86% of the FGI's shares and the public development bank BNDES 12.5%. The guarantees can only be used for loan programmes of the BNDES and are limited to up to R\$ 10 m. per borrower. The guarantees can guarantee between 20% and 80% of the loan and in addition, like the FGO, there is a cap of 7% for each lender's outstanding guarantee portfolio. Like the FGO, the FGI can guarantee working capital and long-term investment finance, however, it is tailored to investment finance. Only 0.5% of the guarantee finance, by volume, had a period below one year and 78% of the guaranteed finance had a maturity between four and six years¹¹⁶. In the first year during the months November and December, the fund had guaranteed 2,700 loans of roughly R\$ 500 m. By July 2011, the fund had provided guarantees of R\$ 890 m. Consequently, the average value of the guaranteed loan is R\$ 184,000 and hence higher than the loans guaranteed by the FGO. The FGI's main cooperation lender is the private bank Bradesco with 65% of operations (Fundo Garantidor para Investimentos 2011).

In addition, there are special public credit guarantee schemes for exports and high-tech start-ups. For example, the BNDES manages the Export Guarantee Fund (*Fundo de Garantia à Exportação*, FGE) which was built in 1997 (BNDES 2011). The Fund cooperates with the Brazilian Export-Credit Insurance (*Seguradora Brasileira Crédito à Exportação*, SBCE), a joint venture of BNDES, Banco do Brasil and the private credit insurer Coface (*Seguradora Brasileira de Crédito à Exportação* 2011). The Financier for Studies and Projects (*Financiadora de Estudos e Projetos*, FINEP) is a special agency of the Ministry of Science and Technology. The FINEP conducts a loan programme targeted towards innovate SMEs with financing needs between R\$ 100,000 and R\$ 900,000. In the cases with insufficient collateral from the borrower, FINEP requires only personal guarantees of 20% of the loan principal. A "Reserve Fund", for which the borrower has to pay fees, guarantees another 30%. The remaining 50% have to be provided by regional strategic partners (Ministério da Ciência e Tecnologia 2009). Unfortunately, insufficient information is at hand to apply the ODM approach to differentiation. Nevertheless, an interview suggests that it is a scheme of basic model one (interview 42).

¹¹⁶ Long-term finance is especially scarce in Brazil which will be discussed briefly in section 4.1.3.1.

Private credit insurers also operate in Brazil. The insurers' turnover (premiums) for credit insurance in Brazil is R\$ 113 m. Unfortunately, precise data on the outstanding exposure is not at hand. Nevertheless, the market leader Coface (roughly 50% of the premiums in Brazil) reports that it has an exposure to Brazil of € 12.6 bn. in 2010. It also declares that roughly 50% of its clients in Brazil are Brazilian companies. Hence, these numbers indicate that Brazilian companies had insured claims of roughly € 12.6 bn. in 2010 (Lucchesi 2011).

All in all, as shown in the previous table, the FGPC was a scheme of basic model one, although the character of the guarantees was close to portfolio guarantees. The FGI, also managed by the BNDES is of basic model three since private institutions do participate although they are only minor shareholders. The shareholder structure and management by the national development bank clearly indicate that it is the government that sits in the driver's seat. The FAMPE is a scheme of basic model two since it provides guarantees on portfolio level. SEBRAE, a public agency, is in the driver's seat since it manages the fund and finances the scheme. The schemes FUNPROGER and FGO are also of model one (private participation via some shareholders of the Banco do Brasil can be neglected). The decision-making process is delegated to the Banco do Brasil which is the main lender. These schemes have in common that they are lender-guarantor and government-guarantor schemes, and the guaranteeing institutions have no direct contact to the borrower.

In the following, the institution-building process of the BCGs will be discussed¹¹⁷.

In 2003, the first Brazilian credit guarantee society, the Credit Guarantee Association of Serra Gaúcha (*Associação de Garantia e Crédito da Serra Gaúcha*, AGC) was also built in the south-

¹¹⁷ In addition to this institution building process there is another experience with a regional credit guarantee scheme. However little information is at hand: Since 2004, the GARANTIARS had guaranteed finance in the federal state of Rio Grande do Sul for small businesses and Community Credit Institutions (Instituições Comunitárias de Crédito, ICCs). Based in the federal state's capital Porto Alegre, this public agency operates in the whole federal state Rio Grande do Sul and cooperates with the public agencies CaixaRS and BRDE as well as the private cooperative banks. In 2009, it advertised that it had guaranteed since its foundation more than R\$ 2 m. to roughly 1,500 to micro businesses (hence the average value of finance was R\$ 1,400). In addition, it had guaranteed finance of more than R\$ 1 m. to ICCs that had in turn provided R\$ 4 m. to micro businesses (GARANTIARS 2009). In a 2009 interview, the chief executive officer stated that GARANTIARS is a funded guarantee scheme and the agency analysed every guarantee case-by-case more intensively than the bank – be it a single loan or the funding of ICCs (Interview 32). However two questions arise: what additional information does the GARANTIARS have when it guarantees a microloan somewhere in the federal state or guarantees refinance of an ICC? Can a double-screening process be cost efficient for loan volumes of R\$ 1,400? Unfortunately, little information is at hand and since GARANTIARS has ceased operations, the scheme will not be analysed further.

ern federal state Rio Grande do Sul. This scheme was created in the Serra Gaúcha, a region of several municipalities where Italian immigrants settled at the end of the 19th century¹¹⁸. Indeed, the AGC's reference models were Italian Confidi and it was built with technical assistance from Italy. The AGC is based in the industrialised city Caxias do Sul which has roughly 400,000 inhabitants and a GDP per capita that is twice the Brazilian average (Instituto Brasileiro de Geografia e Estatística 2006).

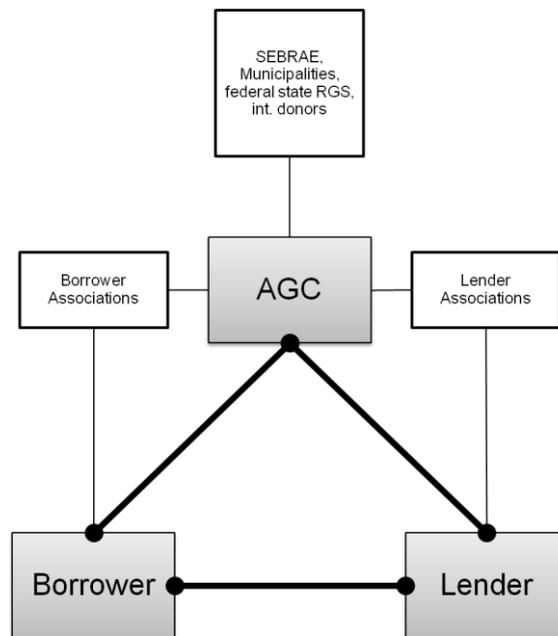
In a contribution to the academic journal *Revista de Administração Pública*, Martins and Zica (2008) analyse the Brazilian guarantee system with a special focus on the AGC. The findings are based on a master-dissertation (mestre) with field study and qualitative interviews. The AGC has public and private shareholders and operates multi-sectorially. The AGC operates as a first-tier institution and hence has direct contact to its members. The AGC is a nonprofit NGO and its statutes authorise the agency to operate in the region Serra Gaúcha only. The AGC has the objective to promote economic and social development, and to fight poverty via improving access to finance for micro, small and medium enterprises. Beyond providing guarantees for working capital and investments, the agency can support the enterprises by providing information and technical assistance. These services should be invoiced and hence help the institution cover its costs (Martins and Zica 2008, 193-197).

A local risk fund (*Fundo de Risco Local*) is the financial base of the provision of guarantees. It received contributions from the Inter-American Development Bank, agencies from Italy, the SEBRAE (of the national and of federal state level), the federal state of Rio Grande do Sul (RGS), municipalities in the region, and associated enterprises. In September 2006, 66% of the promised finance was indeed provided and summed up to R\$ 2.1 m. In addition to this local risk fund, there was a proposal of SEBRAE (on national level) and the Inter-American Development Bank to establish a counter-guarantee fund. It should be used in the case that the local risk fund is not able to comply with its guarantee commitments (Zica 2007, 131-133). Nevertheless, the counter-guarantee scheme was never implemented (Email 8).

The following figure shows the ATR of the AGC. The lender associations do not participate directly in the AGC, however, they are not excluded from the ATR since lobbyism may always influence the scheme.

¹¹⁸ Although Portuguese is the official and commonly used language, Italian is also widely spoken in this area. Moreover, in the association's partnership agreement it is stated that the president has to be able to speak Italian.

Figure 40 ATR of the Brazilian AGC¹¹⁹



Own elaboration

In the ODM approach, the scheme is of basic model three since the AGC is a cooperation of public and private actors and the decision-making process is of type B1.1. The government explicitly takes the risk via the funded counter-guarantees (A2.1.2.2) but is not explicitly liable for all guarantees. The AGC provides partial guarantees.

With respect to the outreach, Vial (2008), the then chief executive of the AGC, reports that in the period May 2004 to May 2007, 296 members were associated to the society. Of the 262 guarantee requests, only 182 were actually provided with an accumulated value of R\$ 4 m. (Vial 2008, 270,271). Hence, outreach was modest and well below expectations since the value of all guarantees provided in the three years was lower than the cash that was paid into the guarantee fund. Despite the modest outreach, there was still enthusiasm and the AGC served as a pilot project for the building of a national system of regional credit guarantee societies.

In 2008, two years after the OECD contribution of dos Santos (who had become member of the board on the federal level of SEBRAE), the National SEBRAE started a Public Call for SGC start-ups (*Chamada Pública*) to support local organisations to build Brazilian Credit Guarantee Societies (BCGSs)(SEBRAE 2008). The BCGSs should not only be mutual but also operate

¹¹⁹ This graph provides for an overview of the actors and serves as an introduction. Hence, bolded lines do not represent long-term relationships.

multisectorial. The legal form should be under a private legal framework and management, and the BCGS should be created as a special form of a Non Governmental Organisation that allows these associations also to be funded by public resources, the “Organização da Sociedade Civil de Interesse Público” (OSCIP) (Email 8). A central requirement to achieve an OSCIP-status is that the organisation be of a non-profit character. This impedes the distribution of dividends and implies tax relief. The BCGSs should not have a banking status. The institution should, among other requirements, “pursue” financial self-sustainability and act as a private agency (SEBRAE 2008, 1-6).

The local agencies that are interested in building such schemes have to establish a business plan and apply for the support of the National SEBRAE. Local SEBRAE branches advertised the institution-building and provided technical support from the beginning. In detail, SEBRAE offers to cover 50% of the total operational costs of the project for the first 30 month. SEBRAE finances up to 100% for technical assistance and it offers to support the local risk fund. These financial contributions, however, are not in the form of grants or a risk-sharing mechanism. The funding is charged and liquidity is provided for five years only. This finance can be prolonged only once for a further period of five years. This prolongation is not automatic and depends on the performance of the institution. Consequently, the support is similar to a loan. The values and fees are not fixed in the Chamada Pública and have to be negotiated with SEBRAE (SEBRAE 2008, 3-8).

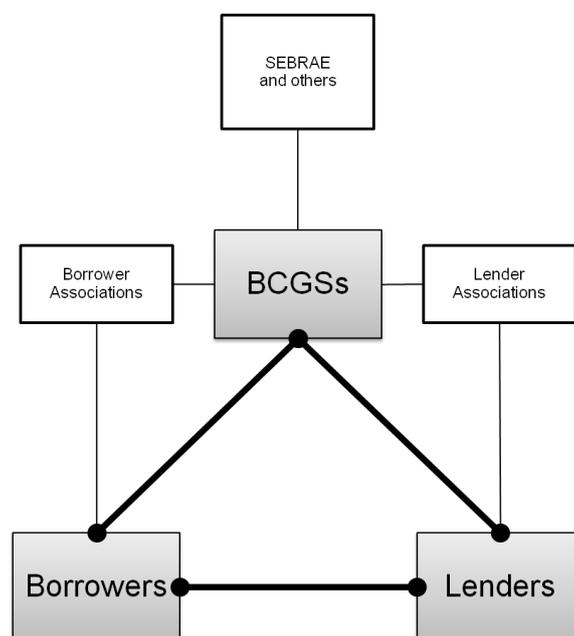
As a result of the tender, there were 19 local initiatives to build such institutions – in a country with roughly 5,500 municipalities. However, by November 2011, only four were inaugurated, three in the southern federal state Paraná (SEBRAE 2011) and one in the north of the federal state of Rio de Janeiro (Email 8). In the meantime, the pilot-project AGC has increased its outreach. In June 2011, the institution reported that it had 485 members, and the accumulated provided guarantees summed to 492 by number and R\$ 12 m. by volume (in almost seven years). Hence, the outreach remains modest. This holds especially when it is compared with the nationally operating guarantee schemes FAMPE and FGO. Nevertheless, there are still other societies in the institution building process and the national system of BCGCs is still to be built.

4.2.3 Analysis of the Augmented Triangular Relationship

This section focuses on the institutional analysis of the Credit Guarantee Association of Serra Gaúcha (*Associação de Garantia e Crédito da Serra Gaúcha*, AGC) and the institution building process of the national system of local Brazilian Credit Guarantee Societies (BCGSs). The cen-

tral question in this section is why only one agency is actively operating and few were inaugurated by 2011 – seven years after the conference of the working group in 2004.

Figure 41 ATR of the Brazilian Credit Guarantee Societies



Own elaboration

Vial (2008), the then executive of the AGC, provides three possible explanations for a modest outreach of the pilot project in his contribution to a REGAR-study. The author criticizes the initial amount that the members had to contribute to the AGC's equity because independent of company size, new members had to contribute R\$ 2,400 to become member of the society. In 2006, this amount was reduced to R\$ 1,000 for small and to R\$ 500 for micro enterprises. Second, the author states that the missing regulation of credit guarantee societies as a financial institution is an obstacle (Vial 2008, 267,275). The third explanation is rather indirect and needs more discussion:

“Because it is a new system in the country, in order to maintain and increase the operations, the AGC as a guaranteeing institution cannot depend exclusively on the companies that do not have collateral. Therefore, maybe atypically, there is a great number of companies within the AGC scheme, that already have an equity structure that is sufficient to provide personal guarantees in its operations with the banks” (Vial 2008, 268)

Hence, the benefit for borrowers lies in better conditions and not the access to finance. The corresponding risk-averse business strategy is underlined by AGC's low default rates. There

was only one payment of R\$ 14,000 by 2008. This value represents 1.8% of all provided guarantees in the period 2004-07 (AGC 2011).

The implementation of this business strategy to guarantee finance of borrowers that would obtain finance anyway, was confirmed by interviewees and visits in the field research. Hence, to conduct such a strategy, the AGC has to ration borrowers, which has the effect of low outreach. Whether the credit guarantee society is an adequate institution to support the best clients will be analysed in the following sections.

4.2.3.1 The relationship between borrowers and lenders

In order to explain the relationship between borrowers and lenders, some structural characteristics of the Brazilian banking system will be addressed. As already stated at the beginning of section 4.2, there are some Brazilian public development banks. The largest is the BNDES that refinances commercial banks as a second-tier bank with respect to small business finance and provides loans of larger value directly as a first-tier institution. In March 2011, the total assets of BNDES summed to R\$ 538 bn. Directed loans play an important role in the Brazilian financial system, which can be seen in the following table.

Table 39 All loans in Brazil, registered at the Central Bank, in the Period 2007 – 2009

	2007	2008	2009
Total outstanding loans in R\$ bn.	936	1,227	1,414
- of that directed loans in R\$ bn.	275	356	460
Ratio total outstanding loans /GDP in %	35.2%	40.8%	45%

Own elaboration; source: Banco Central do Brasil (2009b, 13)

The increase in these values during the worldwide crisis has been substantial. Also compared with the recent Brazilian history, this ratio of outstanding loans to GDP is high. For example, the ratio of credit to GDP varied between 20% and 35% in the period 1990 to 2004.

In an Ipea-study, de Araujo and Macedo Cintra (2011) calculate that in the period 1995 to 2008, 75% of the total assets of Brazilian banks were concentrated among the ten largest banks (Araujo and Macedo Cintra 2011, 20). The four largest banks operate nationwide. There is the public bank Caixa Econômica Federal (CEF), the predominantly public bank Banco do Brasil (BB), and there are the private banks Itaú and Bradesco. The largest private foreign banks are the subsidiaries of Santander and HSBC. In addition, there are some re-

gional commercial and state development banks including the local cooperative banks. However, their share of the national financial system is modest. De Araujo and Macedo Cintra calculate that aggregated assets of all cooperative banks represented 0.2% of total assets of Brazilian banks in 1994. This share increased to a peak of 1.9% in 2006 and was 1.3% in 2008. With respect to the share of provided loans, the cooperative banks' share is slightly higher: 2.6% in 2008 (Araujo and Macedo Cintra 2011, 17,18). In March 2011, the ranking of Brazilian banks with respect to total assets was as follows:

Table 40 The Largest Brazilian Banks in 2011

Bank	Assets in R\$ bn.	Outstanding loans in R\$ bn.
Banco do Brasil	832	342
Itaú	751	246
Bradesco	599	207
Caixa Econômica Federal	432	190
Santander	391	148
HSBC	138	43
Sum, top 6	3,142	1,177
Sum, all banks (103 institutions)	3,887	1,433

Own elaboration; source: Banco Central do Brasil (2011)

Table 40 underlines the dominance of the six largest banks within the Brazilian banking system. The big four banks operate nationwide, but Araujo and Macedo Cintra (2011) show in their Ipea study that the banks focus on the richer regions like the South or South-East, whereas in poorer regions like the North or Northeast, banks are less present. Indeed, in 40% of all Brazilian municipalities, i.e. 2,187, there are neither branches nor attending points of any banks (Araujo and Macedo Cintra 2011, 37,38,44).

Consequently, there is a concentration within the banking sector and the bank associations are, in contrast to for example German associations of savings banks and cooperative banks, rather loose organisations. They are, however, strong lobbyists. For example, there is no joint liability of associated banks and the deposit guarantee scheme is managed by the central bank. Only for the cooperative banks are there second-tier institutions that are important for the banks in the network. Within the Augmented Triangular Relationship, the bank associations do not play an important role.

Other characteristics of the Brazilian banking system are high interest rates and preference for short-term loans. The following table provides an overview of the banking spread for pre-

fixed finance in the period 2001-09. These rates are structurally high and cannot be explained by high inflation since the annual inflation (IPCA) has been 13% in 2002, 9% in 2003, 8% in 2004 and below 6% in the period 2005-09 (Banco Central do Brasil 2009a).

Table 41 Brazilian Average Interest Rates and Spreads in the Period 2002 –2009

	2002	2003	2004	2005	2006	2007	2008	2009
	in %							
Interest rates (charged)	70	57	53	53	47	40	53	40
Interest rated (capture)	28	16	18	17	13	12	13	11
Spread Total	42	42	36	36	35	28	40	30
Administrative Costs	8	11	8	8	7	6	5	5
Defaults	12	14	10	12	12	10	12	10
Compulsório and Cross subsidies	2	3	2	2	1	1	1	0
Indirect taxes, Deposit guarantee etc.	4	4	3	3	3	2	3	2
Gross Margin	18	12	13	13	13	11	21	14
Direct taxes	6	4	5	4	4	4	8	6
Net Margin	12	7	9	9	8	7	12	8

Own elaboration; source: Banco Central do Brasil (2009b, 20)

The table shows that finance is extremely expensive. The average interest rate is never below 40%. Second, the total spread and net margins are not only positive throughout the period but comfortable with percentage-points between 7% and 12%. However, defaults at 10% to 14% are indeed high and contribute to the general risk-aversion of banks. This high risk aversion (among banks and banking supervision) can partially be explained by the Brazilian banking crises and the reconstruction of Brazilian banks. For example, of the 31 public banks that existed in 1996, 10 were liquidated, 13 were privatised, five were reconstructed and only three did not participate the Program for Reduction of State level participation in banking activities (Araujo and Macedo Cintra 2011, 15,16). Their risk-aversion and preference for liquidity was not helped by the Brazilian crisis in 1999, the Argentine default in 2001 which reduced liquidity in Brazil, and finally, the recent international financial crises. The SEBRAE in São Paulo surveyed SMEs in 2004. The survey found that 61% of the SMEs did not receive any bank loan for their business. More important sources of finance were the credit of suppliers, pre-dated checks, credit cards and other sources. The SMEs stated that the

most important obstacles to receive finance were missing collateral, a negative entry in a credit bureau (CADIN/SERASA) and missing documents (Bedê 2004, 48-50). Recent surveys within the institution-building process of the Brazilian Credit Guarantee Societies, such as in the Federal State Paraná, revealed that missing collateral is still a problem (Incorporativa 2011). Indeed, within the field study, the interviewees (bankers and representatives of associations) reported that banks urge collateral of 100% to 200% of the loan principal, that long-term finance is scarce, and interest rates are extremely high.

The field study also revealed that banks intend to establish a long-term relationship with the borrowers, especially the more promising clients who can be attractive for cross-selling products. However, financing is usually short-term, with few exceptions like directed subsidised loans from the BNDES. As discussed in the theoretical section, short-term finance with repeated interaction can be an adequate way financing. However, the refinance of the outstanding debt is not guaranteed by the banks and the borrower may always fear that the bank will not prolong the finance although the borrower behaves consistently as agreed. As a consequence, borrowers have multiple relationships to several banks and hence these long-term relationships are less exclusive than the typical “Hausbank” relationship such as in Germany.

All in all, the financing for most Brazilian borrowers, not only the “*unternehmer*”, is expensive with respect to high interest rates and also includes high transaction costs. With the exception of subsidised directed loans, finance is usually short term and the borrower has to permanently reshuffle debt from different sources, not only from banks. This can partially be explained with the oligopolistic structure of the banking sector and strong bargaining positions of the banks against borrowers.

Consequently, having examined the relationship between Brazilian banks and smaller businesses, the general vision of SEBRAE, as described by dos Santos (2006), seems to be promising and reasonable. BCGSs as borrower-guarantor schemes may increase the borrower’s bargaining position and reduce transaction costs that arise from permanent negotiations to prolong or substitute finance. The institution can participate in the negotiations and consult the borrowers before. In addition, the guarantee commitment of an institution that may be better informed than the bank can improve the borrower’s financing conditions. However, are there no other alternatives? And how much public support is needed?

4.2.3.2 Private initiatives and the relationship between borrowers and guarantors

Including the borrowers as members of the guaranteeing institution should reduce the problem of moral hazard and increase responsibility as discussed by dos Santos (2006). In addition, this should help keep the guaranteeing institution better informed than the lenders about the borrowers. However, as it was often discussed in the theoretical and empirical sections, borrowers are often also competitors that are sceptical about sharing information and risk. This was seen in the experience of the pilot project AGC. The field study revealed that only some borrower associations and few individuals were actively engaged in the AGC. This impression is underlined with the statements of interviewees that the members did not even participate in the general assembly of the AGC (visit 4). In other words, the solidarity among the borrowers should not be overestimated. As stated illustratively with the pairs of scissors by dos Santos (2006), the target group of BCGSs are formal businesses and not the poorest members of the Brazilian society¹²⁰. Indeed, the AGC members, in one of the richest regions of Brazil, seem to be “wirte” with their established business and several employees seeking better financing conditions. They are not unbanked but rather lucrative bank clients. The AGC’s low default rates underline this impression.

In the field study, a general clear interest was noted of borrower associations in participating in BCGSs. This can easily be explained by the financing conditions of Brazilian borrowers discussed in the previous section, and that any help to improve the financing conditions is welcomed. For example, a survey conducted in the south of the federal state of Paraná revealed that 78% of the 437 surveyed SMEs were interested in participating in a credit guarantee society (Incorporativa 2011). However, despite the interest, there was always one central point of discussion among the borrower associations (interview 41, visit 3): whether the financial self-sustainability of the new institution would be achievable or not. In other words, whether further continuous financial support on top of the initial support of SEBRAE was needed.

Within the Public Call for SGC start-ups (Chamada pública), as discussed above, the SEBRAE offered to provide financial and technical support within the initial building process. In addition, the agency was willing to provide funding that had to be paid back within a maximum of ten years. This support equals a loan that provides liquidity. This liquidity was to enable the institution to deposit finance at the lenders in order to fund the BCGSs’ guarantees. In addition, the support should enable the credit guarantee societies to achieve interest rate

¹²⁰ An opposite experience is the famous microfinance programme Crediamigo in the less developed Brazilian Northeast. The Banco do Nordeste uses the method of group finance, especially for new clients (ABDE 2003, 63-80).

profits. Consequently, as discussed in section 2.3.4.2, this support increases the scheme's liquidity but not directly its solvency. Although the funding involves risk taking by SEBRAE, it is not a risk-sharing mechanism from the BCGSs' point of view. Hence, it ties the GIs' members to the financial self-sustainability of the BCGSs.

The scepticism among local borrower associations is indeed sustained since there has not been an empirical example of a credit guarantee society that would be financially self-sustainable and in addition, in the proposal of dos Santos (2006) public support was emphasised. The fact that the national SEBRAE was not willing to share the risk is one reason why in many federal states this project was not even supported by the federal state SEBRAEs despite general interest in building credit guarantee schemes (Interview 5). Moreover, irritations can also arise from the fact that the national SEBRAE continues to provide guarantees via its guarantee scheme FAMPE that could have been but were not used as a second-tier counter-guarantee fund relatively easily. The project to build a national system of regional credit guarantee societies has been taken up in only 9 out of 26 Brazilian federal states.

The interviews revealed the strategy of the associations was to continue with the project but to wait with the funding (interview 41, visit 3). The associations were willing to create a BCGS but were sceptical about the financial self-sustainability of the BCGSs. However, instead of completely giving up on the project, there was still hope that third parties – such as the municipalities – would support the institutions. As already emphasised by dos Santos (2006), municipalities or large companies could contribute to the scheme in order to support regional or cooperation businesses. In addition, when the federal government provided R\$ 4 bn. to fund the counter-measures FGI and FGO, it was explicitly stated in the law that the funds could support the BCGSs. This latter form of public support, however, had not occurred by July 2011.

Although there has been shown interest among borrowers and their associations, it has to be noted that there are alternatives to establishing credit guarantee societies. Borrower associations can provide advisory services as well as support credit cooperatives. For example, the compulsory Federation of Industry in the Federal State Minas Gerais (*Federação das Indústrias do Estado de Minas Gerais*, FIEMG) created its own credit cooperative SICOOP CREDIFIEMG¹²¹ within the SICOOP network in February 2005 (CREDIFIEMG 2011).

¹²¹ Credit cooperative connected to the FIEMG (*Cooperativa de Crédito dos Empresários Industriais Vinculados à FIEMG*). Unfortunately, not much information is at hand.

4.2.3.3 Banks and the relationship between lenders and AGC/BCGSs

The management of credit guarantee funds by the Banco do Brasil (FUNPROGER and FGO) and by the national development bank BNDES (FGPC and FGI) was already discussed in sections 4.2.1 and 4.2.2. Brazil's most powerful lenders association, the Brazilian Federation of Banks (*Federação Brasileira de Bancos*; FEBRABAN) is critical of the schemes managed by the Banco do Brasil. Indeed, when the FGI was officially inaugurated, there were critical voices since other cooperating banks fear that the competing Banco do Brasil would obtain internal information (Oliveira 2009). Moreover, it has to be noted that there is no direct cooperation between the BNDES and either the AGC or the other planned and already inaugurated BCGSs, even though the central government had explicitly stated that the FGI could support these societies. Nevertheless, a BNDES's representative showed willingness also at a REGAR-Conference (Porteiro Cardoso 2011, 11).

Any loan officer of the Banco do Brasil has the opportunity to use the guarantee schemes FUNPROGER and FGO. Since both schemes are managed "in house", it is not a surprise that representatives of the bank reported low transaction costs (interviews 15 and 36). Moreover, the bank's loan officers can cooperate with the FAMPE and FGI that are not managed by the Banco do Brasil but open to this important lender. Consequently, the important lender Banco do Brasil has several opportunities to mitigate its risk in business finance. In other words, the lender can shop for guarantees and the AGC and future BCGS are not the only institutionalised guarantors and hence face competition.

A representative of a lender that cooperates with the AGC stated in the interview that there are two reasons why the bank cooperates with the AGC, although there are higher transaction costs. First, the bank's client can be offered lower fees and second, the bank receives liquidity via the credit guarantee fund (visit 4). The second statement seems to be surprising; however, the value of the credit guarantee funds were higher than the value of outstanding guarantees in 2007 (Vial 2008, 276). Since liquidity is scarce in the Brazilian banking system, the capture of any form of liquidity can be attractive. As Vial (2008) stated, many guaranteed borrowers do not have problems with missing collateral. Indeed the field study revealed that the AGC's members are usually good bank clients. In other words, the "collateral benefits" of the guarantee scheme for the lenders seem to be at least as important as the original benefit, namely risk-sharing. To benefit from these "collateral benefits" it is rational for the bank to cooperate with the scheme, capture deposits and receive some credit guarantees for the finance of relatively risk-free borrowers (that are good clients of the bank) who in turn benefit from lower interest rates.

Within the field studies, interviews with banks that do not cooperate with the AGC showed vague interest in cooperating with the AGC and BCGCs (interview 37, visit 4, conference 2). However, no formal agreements for cooperation were found by October 2011.

All in all, the cooperation between banks and credit guarantee societies is limited and banks seem to benefit rather from “collateral benefits” such as liquidity. There are several competing credit guarantee funds that involve less transaction costs. For the target group of “wirte” that are already good clients, the AGC was simply not attractive enough to convince banks to cooperate on a large scale. There is neither an impressive advantage in reducing the information asymmetries nor a cheap risk-sharing from the bank’s point of view, since fees are charged by the AGC and the AGC requires a reduction of interest rates. Indeed, why should a lender cooperate with a guaranteeing institution for the finance of lucrative clients that do not have problems providing collateral when the guarantee society’s objective is to increase the empowerment of the borrowers? An answer to this question could be public financial support which will be analysed in the following section.

4.2.3.4 Public initiatives beyond SEBRAE and their relationships with the BCGSs

A central blueprint or vision of the BCGSs are the Italian Confidi. When the Italian Confidi were built, the government had provided grants valuing 100% of the equity provided by private actors (Brinkmann 1969, 126). As stated before, the national SEBRAE was willing to take risk but not share the risk with the local BCGSs. Consequently, the institutions would have to operate covering their costs or receive financial support from other public agencies.

Like in Italy, municipalities could provide such financial support, and Brazilian municipalities were asked to support the BCGSs. Indeed, they have an interest in supporting their local businesses and many of the municipalities already conduct support to small businesses and have means to provide financial assistance. Compared to municipalities in Germany, where it is more the responsibility of the federal states to support companies, the Brazilian municipalities, like in Italy, play a more important role in fiscal policy, and the constitution gives more rights to them. However, there are two central problems that reduce the euphoria of potentially participating municipalities.

The first problem refers to municipalities that are too small to support a BCGS of their own so that they should cooperate with one BCGS. This is indeed relevant since the field study revealed that SEBRAE intended to start the first BCGSs in small cities. This is not explicitly stated but in the Public Call for SGC start-ups (Chamada Pública) SEBRAE always uses the

plural of municipalities as the appropriate source of support for one BCGS. In addition, the pilot project AGC and the project to build a BCGS in the south of Minas Gerais, that was visited by the author, intended to operate in several municipalities (visits 3 and 4). Technically this is not a problem since each municipality can provide finance to its own credit risk fund that is only liable for credit guarantees for borrowers within that municipality. Applications and use of the fund can be monitored. However, local SMEs compete with SMEs in the neighbouring municipalities. This competition is visible in the wholesale sector since clients can decide where they go shopping. As already discussed, cooperation among competitors has its limits.

The second problem is connected with the general question of the BCGSs' economic benefits. Officially published by Vial (2008), many members of the AGC are good bank clients. In a country where many people do not have access to any financial services, it is understandable that governments (on any level) have the priority to support the excluded population via institutions that provide financial services to the more constrained businesses. In an interview with a mayor of a mid-sized city (population of roughly 200,000) exactly this concern was revealed. The mayor was not interested in supporting the BCGS project. He was more interested in microfinance institutions or programmes with a high outreach and more or less financial-self sustainability (interview 34). Obviously, the single interview is not representative, however, it underlines that in Brazil there are other priorities of (local) public policy. On the other hand, the project to build BCGSs is not tailored to support "unternehmer" but rather "wirte", and it is hardly feasible to direct it towards the needier businesses.

All in all, the project seems not to be very promising for public policy. Unlike to schemes in the USA and Germany, the BCGCs' target group are not the promising "unternehmer". And in Brazil, there are no interest rate ceilings that could be circumvented by a guarantee scheme nor a separated banking system, which are explanations for the historical development of schemes in Japan and Italy. As alternative forms of support for "wirte", there can always be provided directed and subsidised loans (like BNDES-loans), technical assistance, tax reductions or grants. In addition, there is a movement to build local Brazilian credit co-operatives that can provide more comprehensive financial services to small businesses, i.e. beyond guarantees, at better financing conditions. In fact, SEBRAE also supports these institutions (Santos 2010). Indeed, the Inter-American Development Bank that had provided initial support to the AGC no longer supports this guarantee scheme initiative (Favilla 2009).

4.2.4 Interim results: missing ownership, alternatives and three scenarios

No clear ownership can be noted within the ATR of the AGC and generally in the institution-building process of the BCGSs. Most of the initiatives are driven by the public agency SEBRAE. Without going into details, the institution building of credit guarantee societies is only one of many initiatives of the SEBRAE which also supports credit cooperatives, microfinance institutions and it had pushed the Lei Geral. The empirical evidence shows that credit guarantee societies are only a small piece within the extensive reform package of the Lei Geral.

Nevertheless, on both the national level and in some branches of the state level SEBRAEs, there are not only advocates of a national guarantee system with local guarantee societies, but the agency actively also provides technical support. In addition, the SEBRAE takes some of the risk and provides financial support. However, there are federal state SEBRAEs that do not participate in the institution-building process, and the national SEBRAE does not assume decisive leadership of the local societies nor a risk-sharing mechanism. In addition, it continues with a competing guarantee fund, the FAMPE, that could have been and still could be used as a second-tier institution.

Apart from the public agency SEBRAE, there is little involvement of the municipalities and the federal states. Indeed, interviewees reported that municipalities did promise to provide funding for the AGC but many did not fulfil their promises (visit 4). In the field study, the refusing position of municipalities and agencies of the federal states was also reported. As discussed in section 4.1.3.4, this can be explained by a general scepticism of the benefits and the existence of alternatives.

With respect to the initiative of the small businesses and their associations, there can partially be seen individual initiatives and ownerships. However, the SMEs and their associations are often competitors. A strong willingness to cooperate and share the risk between each other beyond lobbying and consulting functions was not detected. Many members of the AGC do not even show up at the general assembly. Since there is scepticism that the societies can be financially self-sustainable there is the fear that money will be lost. A common strategy is to wait until a third party provides the financial support.

Of the six large nationwide banks in Brazil only the Banco do Brasil cooperates with SEBRAE's BCGS initiative. Other banks had shown general interest (interviews 7 and 37, visits 3 and 4, conference 2), but at the end of the day they did not participate as of October 2011. Moreover, not even all branches of the Banco do Brasil in the area of the AGC participate. It is rather a cooperation of the AGC with single executives/loan officers of the branches. Even then, a central purpose of the cooperation seems to be the capture of deposits, while the

officially stated objective falls behind. In addition, the Banco do Brasil has several options to mitigate risk. Some credit cooperatives cooperate with the AGC, however, the outreach has remained modest.

The analysis of institution-building process reveals a problem of missing ownership. If there were strong leadership by one of the actors, other “sub problems” could be solved. This also holds for the discussion whether the societies should be formal and supervised banks (such as in Germany), receive a special regulation (such as in Spain) or be NGOs that manage local credit guarantee funds (such as in Italy for a long time). This question was indeed fiercely discussed (interviews 7 and 9, visit 4), but not yet settled.

The problem of missing ownership is reinforced by several alternatives. The central government, including their para-fiscal agencies, established credit guarantees schemes that operate nationwide (FAMPE and FUNPROGER). As a response to the worldwide financial crises, it was easier to establish centralised schemes (FGI and FGO) with a clearer ownership and mission. On the other hand, with respect to private initiatives, there is a movement to build credit cooperatives. Their outreach on the national level is still far behind the six largest banks but in some regions, especially in the south, they are an alternative not only for small businesses. It is questionable whether the BCGSs will ever be able to compete with these other institutions to participate in the finance of established formal businesses that are often “wirte”.

Applying the relationship-based approach, the only long-term relationship with repeated interactions are between the AGC and the loan officers of some branches and between the AGC and some borrowers.

Turing to the hypothesis in section 2.4, there was initially hope for achieving all four goals in the long run after some initial public support, as can be seen in the report of the working group in 2004. Two years later, after several discussions and technical visits to Europe, dos Santos (2006) emphasised the role of governments to support the local societies and does not emphasise the additionality. Consequently, high outreach and lower transaction costs for the borrower remain the central objectives of the scheme. The institutions should cover their costs with limited public financial support. Again, two years later, within the Public Call for SGC start-ups (Chamada pública), SEBRAE offered public support. However, it was limited in time and there was no risk-sharing mechanism. By July 2011, there is now empirical evidence that the support offered by SEBRAE now is sufficient to establish viable guarantee schemes that do not need financial support in the long run.

The following section presents three scenarios or strategies to build a national system of viable Brazilian Credit Guarantee Societies. This section is not a prediction or estimation of the future but an approach to analyse possible strategies.

In the first scenario, government, including SEBRAE and the municipalities, continue to provide only small amounts of financial support but reduce barriers such as requiring the juridical form to be a non profit organisation, OSCIP, or that the society has to be open to all sectors. In the long term, larger companies or single borrowers can take ownership and implement their own particular strategy. The Argentine private SGRs Los Grobo or the German EDEKA scheme could serve as blueprints. This however, is not consistent with the initial aim of augmenting the empowerment of small businesses but is rather a tool to link small businesses to a large enterprise and hence increasing its power in the market. Indeed, there is always the alternative to establish cooperative banks that can provide more financial services and achieve financial self-sustainability.

The second scenario is somewhat a continuation of the current strategy. There is still hope, since in many other countries the institution-building process also lasted for years. If some public agencies have problems to spend the entire planned budget by the end of the budget-period, a contribution to a guarantee fund could be made. For these cases, the credit guarantee societies would be a solution for the problem since the GI can always absorb money, the municipality can assume ownership and conduct local public policy. In addition, the money can be used also in the following budget periods. However, this strategy has been implemented over the last few years and was not successful yet. The probability that a municipality is going to provide such public financial support could be increased if SEBRAE would actively “speak” to wealthy and larger municipalities or federal states instead of concentrating on several municipalities who are to a certain degree competitors.

The third scenario or strategy is that SEBRAE takes the initiative to use credit guarantees as a tool to support promising “*unternehmer*”, be they start-ups or innovative established enterprises. The objective is no longer to achieve a large outreach, since there are other institutions that can fulfil this objective, but rather a soft intervention to increase the competitiveness of Brazilian enterprises. Supporting “*unternehmer*” usually implies higher default rates and in general, no financial self-sustainability can be expected. The empirical research provides several blueprints for such a strategy.

4.3 Differences and equivalences between the German and Brazilian cases

Obviously, beyond different financing conditions in Brazil and Germany, the main difference is that today, the German Guarantee Banks are established institutions that found their niche within the German banking and governmental business support system. On the other hand, the national system of Brazilian Credit Guarantee Societies is still being built, and has not found its place or niche in the Brazilian economy.

With respect to the relationship-base approach, German BGs are bank-guarantor and guarantor-government schemes. BCGSs were intended to be borrower-guarantor schemes. However, the pilot project AGC found the long-term relationship between guarantor and lender as important as the relationship to borrowers, and the government-guarantor relationship provided to be the main incentive to hold the institutional set-up together.

In Germany, the government is willing to provide ongoing financial support and shares the risk with the Guarantee Banks via counter-guarantees. This enables the GBs to operate in their small niche, usually guaranteeing finance to “*unternehmer*”, where it is very likely that private institutions would ration the borrowers. The principle of subsidiarity is anchored within the scheme of GBs. In Brazil, the government, i.e. SEBRAE, also provides support. However, it does not share the risk with the local institutions who are supposed to be financially self-sustainable in the long term. These local institutions were supposed to be self-help schemes that improve borrowers’ finance by increasing their bargaining position, but they did not really get off the ground.

In the case of the Guarantee Banks’ predecessors, the KGGs, the German governments were willing to provide counter-guarantees and other risk-sharing mechanisms from the beginning. Moreover, they somewhat forced industry associations to create KGGs and they refused to foster alternative credit guarantee schemes where the government would provide credit guarantees directly to small industrial companies. In Brazil, such an active engagement is not seen.

As a consequence of public engagement, the German GBs and their direct predecessors can be interpreted as a tool for soft public intervention with private self-help elements. In Brazil it is rather the opposite since BCGSs were supposed to be self-help institutions with modest public financial support.

On the other hand, despite these fundamental differences, there are some equivalences. Both institutions use the case-by-case decision-making process with own information (B1.1), they are both a result of public-private cooperation (A2) and in both countries the govern-

ment takes the risk by providing loans to the GIs, but only in Germany does the government provide a risk-sharing mechanism that reduces the outstanding risk of the GIs in an orderly and substantial way. Both schemes provide partial guarantees.

Both guaranteeing agencies have the particular problem that they are doubly “sandwiched”. First, they are sandwiched between other risk mitigation schemes in the one hand side. Secondly, there are local lenders on the other side that have good information on their clients/members, i.e. it is hard for the GIs to reduce the information asymmetries. Hence, lenders can normally provide finance without the guarantees of the GBs or BCGSs.

In Brazil and Germany in the 1950s, policy makers were unsatisfied with existing schemes, or previously existing schemes in the case of Germany, and looked abroad for inspiration: Switzerland in the case of Germany, and Italy and Spain in the case of Brazil. The evidence that both institution-building processes were complicated and lasted years underlines the problem of missing ownership. Only after years did the stakeholders of German GBs find their “smallest common agreement”. In Brazil, the question is still open whether the BCGSs, beyond the pilot project AGC, will start operations at all. Like in Brazil, in Germany there was initially hope that the KGGs would only need public support in the beginning. Both the AGC and the young German KGGs were risk-averse in order not to enter into financial distress. As a consequence, their outreach was negligible and financial self-sustainability never occurred.

5 Conclusions

5.1 Credit guarantee schemes, theory and central findings

Guarantee schemes were greatly used and discussed in the last years of crisis. Nevertheless, rescue schemes for large enterprises, banks or sovereign debt are not the motivation of this research. It is more the institution-building process of Brazilian Credit Guarantee Societies (BCGSs) that were to improve the financing conditions of small businesses in Brazil.

In the theoretical section, the economics of guarantees were further specified. A credit guarantee is a contingent liability for the guarantor and a contingent claim for the lender who finances the borrower. The Basic Triangular Relationship between borrower, lender and guarantor exists in all financial structures where a guarantee is involved. Thereby, the borrower can be a sovereign, a financial institution, a company or an individual. The guarantor can be the government, a bank, an insurance company, a family member or any other institution. The lender can be an investor that finances via anonymous financial markets, a saver who finances the bank or a bank that finances a business or a household with a mortgage. Since the focus of this research is the finance of small businesses, the borrower is the small business and the lender is usually a bank. Nevertheless, mid-sized companies can also seek finance from bond markets or venture capital companies. The guarantor is the guaranteeing institution of the analysed credit guarantee scheme.

This research uses the differentiation provided by Schumpeter (1934/1993) between the “*unternehmer*” and “*wirt*” in order to differentiate the small businesses and their financial needs. The “*wirt*” runs the business in a circular flow and receives finance by the sales of what was produced before. On the other hand, the “*unternehmer*” carries out “new combinations of means of production”. This can be the introduction of a new good, the introduction of a new method of production, the opening of new markets, the conquest of a new source of supply of raw materials and the carrying out of the new organisation of any industry (Schumpeter 1912/1951, 66). The most interesting difference is that the “*unternehmer*” usually needs external finance, whereas the “*wirt*” can often do without, which makes them different types of clients for banks and guarantors.

The cash flow of a guarantee is similar to the flow of an insurance product and is opposite to the flow when a loan is provided. From the guarantor’s point of view, in the beginning there are outflows due to operational costs and inflows due to fees and commissions. These inflows usually continue until the loan is paid off, or until a credit event occurs when the guar-

antor has to provide compensation to the lender. The guarantee does not automatically release the borrower from the obligation, and in time, due to liquidation of collateral or a debt renegotiation, the guarantor and lender may receive further cash inflows. The point in time and value of the outflow is uncertain and the guarantor needs to manage the risk. The guarantor can build reserves like provisions and equity similar to an insurance company, or, in the case of a sovereign guarantor, can plan payments in future budgets.

Banks or other lenders usually bear the risk, and can accumulate reserves for future losses. Since their liabilities (against savers, institutionalised investors on the capital markets, other financial institutions or the central bank) should be of lower value than their assets (like loans), the difference can be interpreted as collateral or a guarantee fund for the banks' liabilities. In the words of Schmidt and Zeitinger (1984), a bank is a guarantee fund and a guarantee fund is a bank – only incomplete. Indeed, Geis (1993) emphasises that the guarantee can split the finance into the provision of liquidity, provided by the lender, and the provision of credit, in the sense of trust, that is provided by the guarantor (Geis 1993, 2,3). This implies that the guaranteeing institution, per se, cannot enable more finance than a bank. On the contrary, the guarantor depends on a lender who trusts the guarantor and is willing and able to provide liquidity.

Although a credit guarantee fund is not more than an incomplete bank, there are credit guarantee schemes in almost every country in a world full of complete banks. Honohan (2010) provides four reasons why credit guarantee schemes emerge: there may be direct public support; the guaranteeing institution may be better at diversifying risk; regulatory arbitrage may exist; and there may exist a differential in information, i.e. the guarantor is in a better position to screen the borrower. Hence, guaranteeing institutions can have advantages over banks in that they are in a better position to diversify the risk, for example when lenders have little outreach and are specialised to a region or sector. Another advantage can be that they are in a better position to screen the borrowers, for example, if the lenders are not present in some regions or sectors. Indeed, the long-term existence of private re-insurance companies shows that specialised insurance companies use re-insurers to diversify the risk, and that young insurance companies use the experience of the established re-insurers. The experience of credit derivatives shows that there is a demand for risk-sharing among financial institutions. However, a long-term analysis is needed to find out whether these instruments can improve the systematic risk diversification and whether guarantee schemes can exist without public support or regulatory arbitrages. In business finance there can be arbitration gains, for example when the guarantee reduces the regulatory capital of the lender but regulation does not require the same level of regulatory capital to be held by the guarantor. Another arbitration gain can exist when there are interest rate ceilings. The

guarantor usually charges fees and commissions and hence, the sum of interest rates, fees and commissions can be above the interest rate ceiling. This enables a circumvention of the ceiling, and can avoid credit rationing due to low interest rates – which is relevant for small businesses in countries where ceilings exist.

In order to improve the understanding of credit guarantee schemes, the Basic Triangular Relationship was extended to include the government, the borrower associations (including chambers), and the lender associations (including the second-tier institutions in a network) creating the Augmented Triangular Relationship (ATR). Information asymmetries exist in all sub-relationships in the ATR. There are several principal-agency relationships, and similar to the relationship between the borrower and the lender, the lender has to trust the willingness and ability of the guarantor to fulfil its guarantee commitment. In addition, the guarantor has to trust the information and behaviour of the lender. Similar to the findings of Stiglitz and Weiss (1981), with respect to the relation between lenders and borrowers, the fees and commissions do not automatically clear the market of risk sharing. Hence, the question arises whether possible benefits of a credit guarantee scheme, such as improvement of the risk diversification, can overcompensate high transaction costs of a scheme with several actors.

Guaranteeing institutions can be observed worldwide. The actors in the ATR can conduct mutual monitoring and introduce complex incentives with regard to risk-sharing. In addition, the actors can establish long-term relationships with repeated interactions. This is a method to reduce existing information asymmetries and transaction costs in the long term, and is well known when applied to the relationship between borrowers and lenders. This relationship-banking is analysed in-depth in the literature, such as by Elsas and Krahen (2004), and in this research, the findings were used and transferred to the other sub-relationships within the ATR. The actors can mutually accumulate information and the actors may increase their perspective with respect to time and behave consistently with what has been agreed in order to benefit from contracts in the future. On the other hand, long-term relationships can be competing among each other. For example, if banks try to establish exclusive relationships with their clients, they might consider a credit guarantee scheme as a competitor, if the guaranteeing institution tries to establish a long-term relationship with the borrower and/or to empower the borrower and to help him finding the cheapest lender.

A way to tackle the problem of competition among lenders is guaranteeing finance for less lucrative borrowers. In addition, borrowers compete and may refuse to cooperate. Beyond the reluctance to support competitors via guarantee schemes, borrowers can fear that internal information spreads during the decision-making process. Governments can participate

in the scheme and use it for interventions. Since the particular interest of the actors in the ATR diverge, the result can be the problem of “missing ownership”, i.e. no stakeholder assumes leadership and responsibility for the guarantee scheme.

The theoretical section presented some microeconomic models that show that credit guarantee schemes can improve finance without public support, see Langer and Schiereck (2002) and Busetta and Zazzaro (2011). Nevertheless, in this research, the hypothesis was established that it is not possible to achieve simultaneously: relatively low transaction costs; a notable outreach by number and volume; a high degree of additionality; and financial self-sustainability. In other words, the hypothesis states that there is no magic formula for an optimal credit guarantee scheme.

This hypothesis was supported by empirical research which failed to find any scheme that achieved all four goals. Trade finance and credit insurance may achieve all four goals, however, they were not the focus of this research. That no scheme meeting all goals was found can be explained by multiple information asymmetries and opposing interests of the actors in the ATR. Moral hazard problems can be controlled, but guarantee schemes are usually connected with high transaction costs. In addition, there is a dependency of the guaranteeing institutions on the lenders, and there are alternatives for self-help initiatives, such as cooperative banks instead of a cooperative guaranteeing institution. Credit guarantee schemes do not seem to be the best alternative for the self-help of borrowers. It is usually the government that provides a significant part of the finance. Indeed, schemes are usually primarily public schemes or public-private partnerships.

Whether one is euphoric or sceptical about credit guarantee schemes depends on one's economic paradigm. A central finding of the empirical research is that credit guarantee schemes are not directly in line with the financial market paradigm (FMP), since they have problems achieving financial self-sustainability. In fact, they are often used to “fill a gap” in line with the directed credit paradigm (DCP). Vogel and Adams (1997a) analyse both paradigms and conclude that they are incompatible (Vogel and Adams 1997a, 377). They are critical of the DCP and directed loans but are less critical of credit guarantee schemes since they do not destruct financial intermediation as much as soft loans (Vogel and Adams 1997b, 13). The empirical in-depth analysis of the German case has shown that there is a “third way”, a possible combination of both paradigms. There are universal banks (public savings banks, private cooperative banks, and private corporate banks) that go the commercial approach and are, usually, financially self-sustainable. Hence, they are in line with the FMP. In addition, the government conducts public policies, and tries to fill financing gaps via credit guarantees, which is in line with the DCP. The government, not in line with the DCP, does not

focus on reducing the financing costs. Although hard to judge whether it was always respected, the principle of subsidiarity is anchored in many governmental actions, i.e. the government tries not to crowd out business opportunities for banks that could be done without public support. For example, government supports long-term finance via development banks; risk-sharing mechanisms to support the finance of riskier borrowers; and temporary anti-crisis measures. In addition, the public agencies like KfW Bankengruppe and agencies with private character like GBs, whose business is based on public financial support, are used to improve the German banking system by introducing forms of finance such as equity or mezzanine capital, and used to fill a financing gap felt by small businesses that cannot offer collateral but have promising investment projects.

5.2 Approaches to differentiate credit guarantee schemes

The most common categories in the literature are credit guarantee programmes, credit guarantee funds and credit guarantee societies. However, the definition of a programme, a fund and a society is not clear and varies from paper to paper. Moreover, these three terms are rather characters of credit guarantee schemes and do not serve to differentiate schemes. For example, German Guarantee Banks (GBs) can be considered to be credit guarantee societies since they are formally limited companies and banks with their own equity. This equity can be interpreted as the credit guarantee fund for the GBs' guarantee commitment. Since most of the risk is taken by the government via counter-guarantees, the whole scheme can also be interpreted as a public guarantee programme. Hence, for the empirical analysis, two complementary approaches to differentiate credit guarantee schemes were used. The ownership and decision-making approach (ODM approach) relies on relatively easily observable information and has two dimensions. Roughly 40 schemes in 18 countries were differentiated by this method. The second approach is the relationship-based approach and discriminates using the set of long-term relationships in the ATR. A long-term relationship is difficult to observe and hence the approach needs an in-depth analysis. This approach was used in the two case illustrations and partially in other countries.

The ODM approach has two dimensions, considering the ownership (including stakeholders that participate in the finance of the scheme beyond fees, i.e. not shareholders) and the decision-making process (see

Table 3 and Table 4). There are six basic models. Basic models 1 and 2 are public guarantee schemes, basic models 3 and 4 are results of public and private cooperation, and basic mod-

els 5 and 6 are private guarantee schemes. Basic models 1, 3 and 5 use the case-by-case approach in the decision-making process. Thereby, the guarantor can either rely on own information or on the information from the lender. Basic models 2, 4 and 6 are characterised by a portfolio approach.

Empirical evidence for Basic model 1 was found in various countries. For example, in Germany there are the public guarantees of the central government (for domestic finance, foreign trade, and foreign direct investment), public guarantees of the federal states, as well as “exemptions of liabilities” of the development banks such as KfW Bankengruppe. In addition, the schemes in South Korea, the USA, and the earlier experiences in the UK (the SFLG1 before the Graham-reforms) are of this basic model. In Brazil, the FGPC that was managed by the national development bank, is an example of this basic model, too.

The analysis of these schemes has shown that credit guarantee schemes are generally used to conduct public policy. Often, the goal is to support “*unternehmer*” in line with the DCP. Financial self-sustainability is not required. However, losses are relevant and usually measures are taken to limit these losses (for example, by moderate defaults or a lower outreach). Nevertheless, there are experiences with high default rates, like in Germany, Brazil and the UK, when the schemes directed to support “*unternehmer*” used the case-by-case approach, but relied only on the lender’s information about the borrower. There are generally three ways to prevent high defaults: the guarantors can conduct the screening with their own information on the borrower. However, this double screening increases transaction costs which are especially high for small business finance. Alternatively, the schemes can be directed away from the “*unternehmer*” and instead targeted towards “*wirte*”. However, this may not be in line with the aim of public policy, especially when there is a banking sector that provides finance to “*wirte*”, and the government wants to follow the principle of subsidiarity. For example, the German development bank has different schemes (of “exemptions of liability”) targeted to support finance of “*unternehmer*” on the one hand side and “*wirte*” on the other¹²². The third option is to introduce a cap, or stop-loss mechanism on portfolio level with each participating lender. This may reduce additionality since with the introduction of a cap, the guarantor may only take a small fraction of the risk on portfolio level and hence may have little influence on the lender’s behaviour. Two examples where such a cap was introduced are the schemes in the UK (SFLG2/EFG) and the schemes managed by the Brazilian development bank BNDES (FGPC/FGI).

In some cases, such as in Germany, the guarantees are unfunded and hence rely only on the credibility of the guaranteeing public authorities. Indeed, guarantees are of macroeconomic

¹²² Note that KfW does not use the terms „*unternehmer*“ and „*wirte*“.

relevance in Germany. Explicit outstanding guarantees, next to guarantees for public banks, equal roughly half of the public debt. These schemes are not directly subject to banking regulation, but can affect the regulation of the lenders (in the way that they reduce the regulatory capital). To prevent an irresponsible use of public guarantees, a sophisticated public administration and public regulation (national fiscal regulation and international State aid regulation) is needed. Moreover, public audit divisions, politicians (especially the opposition) and the media have the right and duty to monitor the guaranteeing activity of the current government. On the other hand, this can imply a spread of the enterprises' internal information and imply high transaction costs. For example, open discussions in the media about whether a guarantee should be provided, clearly reduces the attractiveness of a guarantee scheme. The government can delegate the decision-making process of each guarantee to a special agency. This delegation can be more cost efficient for a large number of smaller guarantees. Hence, the delegation may be adequate to support small businesses. Moreover, the guaranteeing institution can have the function of a firewall that prevents the spread of the enterprises' internal information. In addition, the guaranteeing institution may receive annual financial means from the budget and be able to build reserves for future obligations. Hence, guarantees are at least partially funded.

The Basic model 2 is characterised by public guarantees for loan portfolios. Evidence was found in several Latin American countries, the UK, and the scheme of the European Investment Fund. In Brazil, a typical scheme for this basic model is the FAMPE that is managed by the public agency SEBRAE.

The objective is, like the first basic model, to conduct public policy. However, another methodology is used. The public guarantor uses the portfolio approach and does not analyse every request case-by-case. Hence, the government negotiates directly with the lender in order to influence its lending policy. Consequently, the transaction costs within the decision-making process are reduced significantly, and for the government these schemes seem to be an appealing method to improve small business finance. From the lender's point of view, the guarantee on portfolio level reduces its expected loss of the whole business field – such as small business finance. This delegation of the decision-making process may be an incentive for the lender to only cooperate with doubtful loans. Hence, high losses can occur. However, a cap or stop loss mechanism can reduce the guarantor's exposure and losses. Indeed, this simple method is frequently used for schemes of this basic model.

The Basic model 3 groups schemes where there is public and private cooperation to provide guarantees and the Guaranteeing Institution (GI) uses the case-by-case approach. Consequently, different from the first basic models, the guarantee scheme is subject to both regu-

lations for private financial entities and public intervention. Usually the private or public-private guaranteeing institution receives public financial support. Typically, there is a private initiative of borrowers or their associations, and the guaranteeing agency might have informational advantage over the lenders. Indeed, many schemes conduct the case-by-case approach with their own information on the borrower. Evidence for this basic model was found in various countries. Both case illustrations, the German Guarantee Banks and Brazilian Credit Guarantee Societies are examples of this group. Also the schemes in Japan, Italy, Spain and Argentina fall into this category.

Since the borrowers, the borrowers' private associations or compulsory chambers, public agencies and sometimes the banks (hence all actors of the ATR) can support the scheme, its mission is not clear per se. In the scheme of the German GBs, even competing banks participate in the central decision-making body and monitor not only the GBs' activity but also the activity of their direct competitors. In addition, representatives of the government participate as well and have a veto power that increases their bargaining position. For schemes of this type, the questions arise whether the scheme is dominated by the private or the public actors, or whether there is a missing ownership where no stakeholder assumes leadership?

Indeed, many schemes, such as the German Guarantee Banks have a modest outreach and fill a modest gap, i.e. the stakeholders have found the lowest common nominator. In Brazil, this common nominator was not found yet (despite one pilot project with little outreach and the building of few institutions that do not operate yet). Nevertheless, this leadership can be assumed by an owner. This can be either the government, as was shown in the mini case study of Japanese Credit Guarantee Corporations that have the largest outreach of all the analysed schemes for small business finance. On the other hand, this can be a private company such as the family-led business network of Los Grobo in Argentina.

Basic model 4 is also a result of public-private partnership, but the decision-making process differs from the previous model. There was found little evidence for schemes of this model. One example is the activity of the German development bank KfW Bankengruppe that is engaged in building a market of securitization in Germany. It does not only provide technical assistance for such as a platform with standardised regulation for private risk-sharing on portfolio level. In addition, the development bank is something like a "guarantee intermediary".

Basic model 5 is often the initial vision for private initiatives when small business or farmer "wirte" experience credit rationing and feel that they could do something against it as an independent private initiative, without necessarily involving public support. However, empirical analysis failed to find credit guarantee schemes that would fulfil the vision of an inde-

pendent private guarantee scheme. The only two exceptions were found in Germany. One is the credit guarantee scheme connected to the cooperative EDEKA network. This scheme is indeed private and does not receive financial support from the government. However, it has no economic independency since it is within EDEKA network and operates closely with the EDEKA's own bank, the EDEKA Bank. The second example is the guaranteeing activity of the DZBank, which is the largest second-tier bank within the "Verbund" of the German cooperative banks. Hence, these examples of self-help underline the general finding that a complete bank is the more adequate alternative for private initiatives. Nevertheless, additional guarantee schemes can be used for special finance needs.

Basic model 6 groups schemes without public support that use the portfolio approach. In a way, credit derivatives can be seen as such. However, these instruments are not the focus of this research. Nevertheless, the brief analysis and recent financial turbulences show the problems when these instruments are used too unconcerned and with too little reserves involved. Nevertheless, risk-sharing mechanisms on portfolio level are not per se "the devil's instruments" as one can sometimes hear in debates. Indeed, the banks' "sister institutions", the insurance companies, provide positive examples: re-insurers operate on portfolio level and share the risk with insurance companies. Indeed, diversification and risk-pooling is no invention of the 21st century but a method that has been used for a long time in banking. Often, there are long-term relationships between insurers and re-insurers which brings us to the second approach to differentiate credit guarantee schemes.

The relationship-based approach differentiates between combinations of long-term relationships (with repeated interaction) and short-term relationships in the Augmented Triangular Relationship (ATR). There are 4 basic schemes: The arm's length basic scheme, the borrower-guarantor scheme, lender-guarantor scheme and finally the government-guarantor scheme. This approach allows combinations of these basic schemes.

The arm's length basic scheme is the first basic scheme in the relationship-based approach. In this basic scheme the guarantor does not establish long-term relationships with either the lender or the borrower. This enables the guarantor to continuously re-organise his portfolio of guarantees and possibly improve the risk structure of his pool. On the other hand, the guarantor does not use the method to reduce information asymmetries and transaction costs by establishing a long-term relationship. Since credit derivatives are not the focus of the research, the empirical analysis fails to provide examples and to analyse any schemes. Nevertheless, the assessment of AIG's activity should be seen as a warning.

The second basic scheme is the borrower-guarantor scheme. This scheme is the basic vision in the institution-building process of Brazilian societies. The borrowers should work together

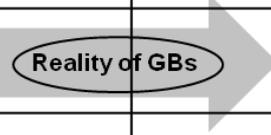
and the self-help guaranteeing institution should increase their bargaining power against lenders. This is especially appealing in countries where borrowers establish multiple relationships with several banks – who not always prolong their finance. Usually the target group of these schemes, and often also their initiators, are “wirte”. Indeed, the experience from Italy shows that it is possible to build borrower-guarantor schemes. However, this relation is hardly more intensive than the relationship between borrowers and lenders that can provide the full range of financial service to the small business. In separated banking systems, such as in Italy and Japan in the past, this advantage of banks over guaranteeing institutions might be reduced, however, this hypothesis needs more empirical analysis. The Italian schemes also show that the self-help initiative to build borrower-guarantor schemes is not sufficient to establish financially self-sustainable guaranteeing institutions. The Italian schemes depend on ongoing public financial support. Moreover, the Italian scheme also shows that banks are important in the ATR. Also the analysis of the Brazilian experience shows that self-help alone is not sufficient to establish financially self-sustainable guaranteeing institutions. Like in Italy, banks are important and government support is needed for viable guaranteeing institutions. The Argentine scheme among Los Grobo is an example of a borrower-guarantor scheme, however, it is not a scheme of self-help but rather a tool of the business network of Los Grobo to support (and tie) business partners. In addition, the government supports this scheme, too.

The third basic scheme is the lender-guarantor scheme. Indeed, the analysis of the borrower-guarantor schemes has shown that lenders can be more important. Since the guarantee reduces the risk of the lender, it is the lender who has to trust the willingness and ability of the guarantor to fulfil his commitment. Hence, building long-term relationships, for example on loan-officer level, is a method to reduce information asymmetries and transaction costs in the long term which banks often use in their relationship to the borrowers (relationship banking). Empirical evidence for schemes of this basic model was found in Germany. There is the above mentioned EDEKA KGG that closely operates with the EDEKABank; and the guaranteeing activity of DZBank that only operates with banks of the “Verbund” of German cooperative banks. Also GBs can be grouped into this basic scheme. Banks do not only hold equity of GBs but also at a loan-officer level there are long-term relationships. Especially in the case of promising but riskier “unternehmer” finance, the banks are willing to cooperate. Interviewees reported that the transactions costs reduce over time and trust can be built. However, this relationship alone is not always sufficient to build a credit guarantee scheme. Indeed, German GBs receive substantial financial support from governments which makes them an example of the forth scheme, too.

The fourth basic scheme is the government-guarantor scheme. The guaranteeing institution is a public agency or receives continuously public financial support, independently whether it establishes long-term relationships with the borrowers and/or the lenders. In other words, the guarantor does not (only) receive an initial support in the beginning but depends on ongoing financial support because the guaranteeing activity is not financially self-sustainable. Although the empirical analysis does not pretend to cover all guarantee systems or to provide a representative sample, it clearly shows that this basic scheme is predominant. As in Germany (GBs), the UK, the USA and South Korea (KIBO), governments try to anchor the principle of subsidiarity to direct the GIs to support primarily “*unternehmer*”. Schemes are used to fill a (small) financing gap, whereas the large part of the borrowers receives finance at banks without guarantee schemes. On the other hand, governments can use GIs to support “*wirte*” as in Japan, Italy, Germany (some “*exemptions of liabilities of the KfW Bankengruppe*”) and South Korea (KODIT). In these cases, schemes have larger outreach and it is not the task of the GI to fill a financing gap but rather to improve the financing conditions of borrowers, for example with respect to interest rates and/or maturities. Governments can also use the guaranteeing institutions both to conduct temporary contra-cyclical policies and to conduct structural policy. This was clearly shown in the recent times of crisis. In most countries, the GIs were used to face structural problems of the economies. For example, in Germany there are several established schemes to improve access to finance of small businesses, of innovative businesses, of young or even of declining businesses. During the crises, these schemes were used to prevent a credit crunch. In addition, governments can use the schemes to improve the financial system, and hence only indirectly improve small business finance. For example, the SBA supported the Small Business Investment Companies to improve equity finance already in the 1950s. And German GIs have sometimes been used by banks to test new methods, such as providing loans without collateral in the 1950s and equity finance in the 1970s.

In the following, the two approaches to differentiate credit guarantee schemes will be framed together in a matrix. On the top row of table 42, there are the four basic schemes of the relationship-based approach. In the left column, there are listed the six basic models of the ODM-approach. Hence, this matrix results in 24 types.

Table 42, Basic Schemes and Basic Models in a Matrix Resulting in 24 Types

			Relationship-based Approach				
			Arm's Length Scheme	Borrower-Guarantor Scheme	Lender-Guarantor Scheme	Government-Guarantor Scheme	
ODM Approach	Public	Case-by-case (Basic Model 1)					
		Portfolio (Basic model2)					
	Public-private Cooperation	Case-by-case (Basic Model 3)		Starting Point			
		Portfolio (Basic Model 4)					
	Private	Case-by-case (Basic Model 5)		Initial Vision			
		Portfolio (Basic Model 6)					

The initial vision of the schemes in both case studies, i.e. German Guarantee Banks and Brazilian Credit Guarantee Societies, was an initiative of borrowers and their associations. The vision was to build a credit guarantee scheme with borrowers as active owners (a borrower-guarantor scheme and basic model 5). Temporary or start-up public support (Starting Point) was welcome in order to build the guaranteeing institution. In the long term, however, the schemes were supposed to be financially self-sustainable. However, the German GBs have continuously relied on public support and remained a basic model 3. Over time, the GBs have found their niche as guarantors with long-term relations with both bank (“lenders”) and ministries (“governments”); furthermore, they have become predominantly guarantors for the finance of “unternehmer”. Instead of being the private borrower-guarantor type, the reality is rather a combination of a lender-guarantor scheme and a government-guarantor scheme fostering “unternehmer” enterprises rather than “wirte” as borrowers.

Although other schemes of basic model 3 were not analysed in depth, there are strong indications from empirical research in Europe, Latin America and Asia that the German GB experience is not unique. Guaranteeing institutions have long-term relationships with lenders and government agencies, which are of crucial importance. Somewhat closer to the initial vision than the GBs are the German credit guarantee schemes around the EDEKA bank and the DZBank. Both cases are of type basic model four; however they are lender-guarantor

schemes. Indeed, borrowers had built a full bank in the case of EDEKA, and respectively a national system of local cooperative banks. These banks use the credit guarantee scheme for special types of finance only. Hence, empirical analysis suggests that the borrower-guarantor scheme is not a viable basic scheme of its own, i.e. the combination with basic model 5 remains a vision.

During the period of the empirical investigation in the last few years, the Brazilian Credit Guarantee Societies (BCGSs) have not yet found their niche within the Brazilian financial system. Right now, it can only be stated that the initial vision, a financially self-sustainable borrower-guarantor scheme, has not been achieved – and that it is very improbable that it ever will.

5.3 Lessons learned: Tradeoffs and pitfalls in the institutional setup

The analysis revealed that the problems in building Brazilian Credit Guarantee Societies are not country specific. Indeed, also the institution-building process of the German credit guarantee schemes has been lengthy – despite the experience after the reunification. Literature documents the resistance of the industrial sector and the wholesale trade to participate in guarantee societies. Although Guarantee Banks finally have found their niche, they never achieved the initial vision of financial self-sustainability. In addition, the analysis of schemes in other countries shows that it is difficult to build credit guarantee schemes as pure self-help institutions. Only very few German schemes were found that do not rely on ongoing public financial support. They are exceptions. Most existing credit guarantee schemes for small businesses found their niche either within groups/“Verbünde” or among instruments to conduct public policies. This niche was not yet found for Brazilian Credit Guarantee Societies and their multi-tier system as envisaged in the beginning.

On the other hand, many schemes with less outreach were analysed. Again, the problems in the institution-building process do not seem to be specific Brazilian problems. Also in other European countries, such as France and Switzerland, the process lasted decades. Different from the Brazilian Credit Guarantee Societies (BCGSs), the schemes in Europe have meanwhile found their market niche and their ongoing governmental financial support.

The recent financial and economic crisis has shown that risk-sharing mechanisms can buffer enterprises against a credit crunch contributing greatly to a stabilisation of economies. However, risk-sharing instruments can also be rather dangerous, since a better position in pooling risks does not “diversify away” uncertainty. AIG and Fannie Mae and Freddie Mac are not

credit guarantee schemes that focus on small business finance, and hence were not analysed in depth here. Nevertheless, both schemes are well-documented cases that show how things can go bad. An impressive outreach was achieved by both guarantee schemes, but the relation between the taken risk and the accumulated reserves, sometimes called leverage ratio, was too high. Literature indicates that the financial distress of Fannie Mae and Freddie Mac was a result of a bad combination of public-private partnership. In the case of AIG, regulators allowed the private company to take risks without caring for sufficient reserves. At the same time, the AIG's guarantees reduced the lenders' regulatory capital, and hence reduced overall reserves. In other words, there was a joint-irresponsibility between borrowers, lenders, guarantors, insurers and regulators.

The empirical analysis did not discover a single credit guarantee scheme that achieves simultaneously high outreach, a reduction of transaction costs, financial self-sustainability, and a high degree of additionality (hypothesis in section 2.4). The theoretical explanation for this result lies in diverging interests of the actors in the ATR and in the existence of information asymmetries. Information asymmetries can be reduced by monitoring. However, this increases transaction costs which seem to be so high for small business finance that financial self-sustainability cannot be expected. A long-term relationship can reduce both the information asymmetries and transaction costs in the long term. However, a dilemma arises since several actors in the ATR simply do not want to share all their internal information. This holds especially for the borrowers and lenders who have competitors and generally fear that their information may spread to these competitors. Hence, the guaranteeing institution has to provide firewalls, too. In addition, the lender may generally be willing to share the risk but not the profitable clients with any third partner. Consequently, lenders are reluctant to share information on the borrowers or even empower their clients. Portfolio guarantees are less sensitive in that regard; they can reduce transaction costs and lenders may not fear that the guaranteeing institution receives too much information. However, also these guarantees have their drawbacks. The guarantor has to reduce his exposure for example via caps or stop-loss mechanisms in order to avoid moral hazard incentives, which reduces the effect on additionality.

If one notes that banks usually take risk, can accumulate reserves and provide several financial services, i.e. they are also credit guarantee funds in the words of Schmidt and Zeitinger (1984), one can conclude that normally it is the bank that is in a better position to provide financial services to small businesses. In other words, they are the better institution to provide financial services in line with the FMP, and to reduce negative results of information asymmetries in the sense of Williamson (1987) and Schmidt (1981). Indeed, no credit guarantee scheme as a pure self-help arrangement or commercial enterprise could be found.

Only in close cooperation with banks, or as a special credit guarantee fund of a banking group, purely private self-help seems to be possible. Indeed, many attempts to build financially self-sustainable credit guarantee schemes (as borrower-guarantor schemes) have failed. They either disappeared soon, or the government used the GIs to conduct public policies. Hence, nearly everywhere the government plays the fundamental role in the ATR.

Credit guarantee schemes are not the adequate agencies for pure self-help since there are better institutions, such as universal banks, that can be used for this purpose. However, the schemes can be used to conduct public policy. Due to the GIs' dependency on the lenders who provide for liquidity, the government can build arrangements that conduct "light" intervention. Governments can assume part or total of the risk and charge, directly or via the guaranteeing institution, fees for the risk taking. If the scheme is used for borrowers in line with the principle of subsidiarity, and if it supports borrowers who face financial constraints, such as small businesses that are innovative and cannot offer collateral, higher fees go in line with the findings of Stiglitz and Weiss (1981). The authors do not only point to the often cited problems of higher interest rates (moral hazard and adverse selection) when lenders charge only a single interest rate. In their second model, the constrained borrowers pay more than others do and credit rationing is reduced.

The government can use the available information of private actors, such as borrower associations and banks, and build a public-private partnership. In addition, this enables the government to conduct a less visible intervention, which may be appealing in times where public intervention is frowned upon. However, with many (sometimes competing) owners in the scheme, missing ownership problems can occur.

Governments can build the scheme to overcome structural problems in the economy, anchor the principle of subsidiarity and focus on constrained borrowers such as innovative "unternehmer" (start-ups and innovative established companies). Indeed, there are appealing success stories. In times of crises, the schemes can also be used to prevent a credit crunch. Instead of or in parallel to trying to directly support the borrowers, as is suggested in the directed credit paradigm, the government-guarantor scheme can be used to improve the financial system. Forms of finance that are not usual in the national financial system can be introduced and tested with guaranteeing institutions that are government-guarantor and lender-guarantor schemes. In this combination, financial self-sustainability is not the binding restriction for the guaranteeing activity, and lenders can learn by doing. As an outlook for development finance, one should discuss whether guarantee schemes could be used, among other instruments, to build sound universal banks in developing countries where there is no

reliable banking regulation and supervision, and where development agencies do not trust the local banks and are not willing to inject equity, refinance, or provide grants.

Coming back to the title of the thesis: since banks are the better agencies to provide access to finance to a broad number of small businesses, scepticism with credit guarantee schemes is indeed adequate. However, one can be optimistic, if not euphoric, when governments heed the problems of credit guarantee schemes and use them to positively influence the banks to support both the more promising but often riskier “*unternehmer*” and the “*wirte*” during times of financial crises.

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Appendix

Appendix 1 List of Interviews and Discussions

Number	Date	Country	Type of Institution	Department / Position	Type of Interview	Length of Interview
1	27.09.07	Spain	GI Association	CEO	Interview	1.5 hours
2	28.04.08	Portugal	Guaranteeing Institution	CEO	Interview	
3	16.06.08	Germany	Guaranteeing Institution	CEO	Interview	3/4 hour
4	07.10.08	Brazil	Bank	Director of the branch, responsible for corporate finance	Interview	1/4 hour
5	08.10.08	Brazil	Development Agency	Director, Department SME Finance	Interview	1 hour
6	09.10.08	Brazil	SME Association	Director, Foreign Trade	Interview	3/4 hour
7	09.10.08	Brazil	Bank	Superintendent Corporate Finance, Manager	Interview	1 hour
8	10.10.08	Brazil	Development Bank	Director, Mercosul	Interview	3/4 hour
9	21.10.08	Brazil	Government	Vice Director. Department of Economic Policy	Interview	1 hour
10	22.10.08	Brazil	SME Association	Executive Manager (Research, Assessment and Development Unit)	Interview	0.5 hour
11	23.10.08	Brazil	Government	Analyst, Programa Nacional de Microcrédito Produtivo Orientado	Interview	1 hour
12	28.10.08	Brazil	SME Association	Director, department of economics and finance	Interview	1 hour
13	18.11.08	Brazil	Development Bank	Planning Manager	Interview	3/4 hour
14	20.11.08	Brazil	Bank	President of the bank and member of the board of the local trade association	Interview	1.5 hours
15	20.11.08	Brazil	Bank	Director of the branch, responsible for corporate finance	Interview	1 hour
16	21.11.08	Brazil	SME Association	CEO of the association and entrepreneur	Interview	1 hour
17	28.11.08	Argentina	Guaranteeing Institution	President	Interview	1 hour

Number	Date	Country	Type of Institution	Department / Position	Type of Interview	Length of Interview
18	28.11.08	Argentina	Stock Exchange	Director, SME Department	Interview	1 hour
19	28.11.08	Argentina	Government	Director, Department SME Finance	Interview	2 hours
20	02.12.08	Argentina	Guaranteeing Institution	Manager / Director	Interview	1 hour
21	03.12.08	Argentina	Consultancy	Consultant	Interview	0.5 hour
22	11.03.09	Germany	Bank	Director Corporate Banking	Interview	3/4 hour
23	24.03.09	Germany	Development Agency	CEO	Interview	1.5 hours
24	27.04.09	Germany	Bank	Director, Loan Department Corporate Finance	Interview	
25	14.05.09	Germany	Government	Head of division	Interview	2 hours
26	15.05.09	Germany	Bank	Director Corporate Banking in Leipzig/Erfurt	Interview	1 hour
27	18.05.09	Germany	Government	Head of division	Interview	1 hour
28	20.05.09	Germany	GI Association	CEO and Director	Interview	2 hours
29	02.06.09	Germany	Development Bank	Authorised representative, department of corporate structure and referent strategic participation	Interview	1 hour
30	02.06.09	Germany	Guaranteeing Institution	CEO	Interview	1 hour
31	24.06.09	Germany	SME Association	Director monetary policy, banking and finance, statistics policy	Interview	1 hour
32	07.07.09	Brazil	Guaranteeing Institution	CEO	Interview	2 hours
33	10.07.09	Brazil	Development Bank	Planning Manager	Interview	1/2 hour
34	13.07.09	Brazil	Government	Mayor	Interview	1/2 hour
35	13.07.09	Brazil	Development Agency	Consultant	Interview	3/4 hour
36	13.07.09	Brazil	Bank	Loan Officer	Interview	3/4 hour
37	14.07.09	Brazil	Bank	Director of the local branch, Director Corporate Finance	Interview	1 hour
38	15.07.09	Brazil	Guaranteeing Institution	CEO	Interview	2 hours
39	15.07.09	Brazil	SME Association	CEO of the association and entrepreneur	Interview	3/4 hour

Number	Date	Country	Type of Institution	Department / Position	Type of Interview	Length of Interview
40	16.07.09	Brazil	SME Association	CEO	Interview	1 hour
41	20.07.09	Brazil	SME Association	Members of the board and project manager	Discussion	2 hours
42	22.07.09	Brazil	Development Agency	Director and Adviser	Interview	1 hour
43	23.07.09	Brazil	Development Bank / Guaranteeing Institution	Director and manager of the department of guaranteeing instruments for the access to credit	Interview	1 hour
44	21.10.09	Germany	Guaranteeing Institution	CEO	Interview	1 hour
45	21.10.09	Germany	GI Association	President and CEO	Interview	1.5 hours
46	03.03.10	Germany	Bank	Director, Loan Department Corporate Finance	Interview	1 hour
47	30.06.10	Austria	Guaranteeing Institution	Director, Corporate Communications	Interview - Phone Call	1/4 hour
48	02.07.10	Portugal	Development Agency	Chairman of the Board	Interview	1 hour
49	06.07.10	Portugal	Guaranteeing Institution	Member of the Board	Interview	1.5 hours
50	24.09.10	USA	Development Agency	Loan Officer	Discussion	1/3 hour
51	13.10.10	Germany	Development Bank	Director, product development	Interview - Phone Call	1/3 hour
52	14.10.10	Germany	Bank	Member of the Board	Interview	1 hour
53	28.10.10	Luxembourg	Development Bank	Head of EIF's Research & Market Analysis	Interview - Phone Call	1 hour
54	02.02.11	Germany	Consultancy	Project Manager	Discussion - Phone Call	1 hour
55	11.02.11	Germany	Association	Department head	Discussion - Phone Call	0.5 hour
56	18.02.11	Italy	Guaranteeing Institution	Risk Management	Interview	1 hour

Number	Date	Country	Type of Institution	Department / Position	Type of Interview	Length of Interview
57	06.10.11	Germany	Development Bank	Sector Economist, Competence Center for Private and Financial Sector Development	Discussion	0.5 hour
58	10.10.11	Germany	Bank	Director, Loan Department Corporate Finance	Discussion	3/4 hour
59	12.10.11	Germany	Development Bank	First Vice President Strategic Projects, Investment Manager Special Programs, Senior Investment Manager Special Programs, Centre of Expertise for Private-Sector Promotion	Discussion	0.5 day

Appendix 2 List of Conferences

Number	Country	City	Beginning	End	Conference
1	Germany	Berlin	18.09.08	18.09.08	EU Finance Day for SMEs
2	Brazil	Salvador da Bahia	15.10.08	15.10.08	II Fórum Brasileiro Sistemas de Garantias de Crédito
3	Brazil	Salvador da Bahia	16.10.08	17.10.08	XIII Fórum Ibero-Americano de Sistemas de Garantias de Crédito – Garantia e Financiamento para as Micro e Pequenas Empresas
4	France	Nice	25.06.09	25.06.09	AECM Seminar
5	Portugal	Lisbon	10.09.09	12.09.09	XIV Fórum Ibero-Americano de Sistemas de Garantia e Financiamento
6	Germany	Berlin	22.03.10	22.03.10	European Finance Forum, Meeting "Mittelstandsfinanzierungen der deutschen Bürgschaftsbanken"
7	Mexico	Mexico City	29.09.10	01.10.10	XV Foro Iberoamericano de Sistemas de Garantía y Financiamento a la Micro y PYME

Appendix 3 List of Visits

Number	Beginning	End	Country	Type of Institution	Description
1	28.09.07	28.09.07	Spain	Guaranteeing Institution	Meetings with CEO and Loan Officer
2	22.10.08	24.10.08	Brazil	Development Agency / Guaranteeing Institution	Interviews and discussions with consultants, managers and directors of SEBRAE. Inspection of Internal documents, presentation of German Guarantee Banks with discussion afterwards.
3	27.10.08	31.10.08	Brazil	Development Agency	Interviews and discussions with consultants and managers of SEBRAE in Minas Gerais (capital and local branch). Inspection of Internal documents. Accompanied the consultants to a region where a BCGS was planned to be built. Participation in meetings with a bank and a meeting of representatives of local SME associations.
4	19.11.08	21.11.08	Brazil	Guaranteeing Institution	Interviews with the CEO and Loan Officers. Participation of a Guarantee Committee and a meeting with representatives of from the headquarters of a nationwide operating bank
5	26.11.08	27.11.08	Argentina	GI Association	Discussion with the CEO and organisation of meetings, visit of SGRs
6	27.11.08	27.11.08	Argentina	Guaranteeing Institution	Interviews and Discussions with the CEO, Loan Officers and a shareholder of Los Grobo
7	27.07.09	28.07.09	Germany	GI Association	Representatives of the VDB, the GB of Hamburg and representatives from Vietnam
8	28.09.10	28.09.10	Mexico		Meeting of the Delegation from Brazil with representatives of the Mexican Ministry of Economy, SME Department

Appendix 4 List of received Emails

Number	Date	Country	Type of Institution	Department / Position
1	27.06.10	Argentina	GI Association	CEO
2	28.06.10	Switzerland	Guaranteeing Institution	Director
3	02.07.10	Estonia	Guaranteeing Institution	Media and Communications Specialist
4	13.07.10	Switzerland	Guaranteeing Institution	CEO
5	21.07.10	United Kingdom	Development Agency	Enterprise Directorate
6	01.07.11	Germany	GI Association	Director
7	04.07.11	Germany	Guaranteeing Institution	CEO
8	21.12.11	Brazil	Development Agency / Guaranteeing Institution	Department head
9	09.01.12	Brazil	Development Bank	Manager of the department of guaranteeing instruments for the access to credit
10	20.01.12	Chile	Development Bank / Guaranteeing Institution	Manager

Appendix 5 List of Survey Partners

Number	Date	Country	Type of Institution	Department / Position
1	24.08.10	Brazil	Guaranteeing Institution	CEO
2	02.09.10	Brazil	Development Bank / Guaranteeing Institution	Manager, department of guaran- teeing instruments for the access to credit
3	09.09.10	Argentina	Guaranteeing Institution	CEO
4	17.09.10	Czech Re- public	Guaranteeing Institution	Manager
5	20.09.10	Brazil	Development Agency / Guaranteeing Institution	Analyst
6	22.09.10	Chile	GI Association	Assistant
7	22.09.10	Italy	Guaranteeing Institution	Risk Management
8	09.10.10	Chile	Guaranteeing Institution	CEO
9	13.10.10	Chile	Development Bank / Guaranteeing Institution	Manager
10	26.11.10	Germany	Development Bank	Director
11	05.01.11	Germany	Guaranteeing Institution	Credit management

Appendix 6 Questionnaire of Survey

- 1) The use of information within a publication** (please mark with x and feel free to add additional requirements)

The outcome of the survey (the differentiation) and all the information may be published with the name of the guaranteeing institution.	
The outcome of the survey (the differentiation) and the information may be published with the name of the guaranteeing institution. However, the answers of the questions ... have to be used anonymously.	
All the information has to be used anonymously. The outcome of the survey (the differentiation) may only be published without reporting the name and region of the guaranteeing institution. Within the analysis of the survey, the name of the guaranteeing institution will only appear in the list of interviewed institutions.	

- 2) The credit guarantee scheme:**

- a. Name of the guaranteeing institution:
- b. Country/region:
- c. Existence (since – until):
- d. Do you represent one guaranteeing institution or a network of x institutions?

...one guaranteeing institution	
... a network of x institutions	

- 3) Outreach of the scheme:**

	2006	2007	2008	2009	2010
Approved guarantees by number in the year					
Approved guarantees by volume in the year					
Guaranteed loans by volume in the year					
Outstanding guarantees by number					
Outstanding guarantees by volume					
Outstanding loans by volume					
Share of start-up finance, indicator 1:					
Share of start-up finance, indicator 2: ...					

If there is a document available that contains the above information and is written in English, German, Spanish or Portuguese, I can fill in the data myself.

4) Are there special limitations on the participating borrowers or lenders? (please mark the limitations with an x (x= correct/yes)– or provide some information on the limitations)

	Limitations on borrowers	Limitations on lenders
Indicators that measure the size of the enterprise limit the range of borrowers.		
The volume of finance limits the range of borrowers.		
There are geographical limits on the range of borrowers.		
Some sectors are excluded.		
The scheme is specialised and only some sectors are included.		
Informal business may be included?		
Participation in a kind of formal network is required (banking group, cooperatives, association beyond the guarantee scheme...).		
Business relation to a single company is required.		
Male or female borrowers are excluded?		
No guarantees can be provided for start-ups or young companies.		
Only start-ups or young companies can receive guarantees.		
Other limitations: ...		
Other limitations: ...		
Other limitations: ...		

5) Responsibilities within the credit guarantee scheme (please mark the responsibilities of each actor with an x)

		RESPONSIBILITIES					
		Shareholder of the Guaranteeing Institution	Administration of Guarantees	Credit Risk Assessment	Recovery	Monitoring	Financial or technical support
SOME STAKEHOLDERS WITHIN THE SCHEME	Guaranteeing Institution						
	Financial institutions (lenders)						
	Borrowers						
	Mandatory private company						
	Governmental agency, including public banks						
	International or foreign public agency						
	Associations and chambers of borrowers						
	Associations or central institutions of the lenders						
	Banking supervision						
	Auditors						
	Other: ...						
	Other: ...						
Other: ...							
Other: ...							

6) Do you consider your credit guarantee scheme as an agency to support and promote business or as a commercial enterprise with the aim of making profit?

... an agency to support and promote business?	
... commercial enterprise with the aim of making profit?	
Observation:	

7) The guaranteeing institution (GI) has to approve every guarantee and the GI screens each borrower.

a. Does the GI rely mainly on the lenders' information on the individual borrower (including an application form with aggregate information on the borrower)?

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

b. Does the GI screen the individual borrower directly and use its own information sources (beyond an application form with aggregated information on the borrower)?

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

8) The lender is not required to obtain approval of the GI for every guarantee. Does the GI provide a kind of portfolio guarantees and does not screen any individual borrower directly? (Only the lender decides whether each guaranteed loan is provided or not.)

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

9) The GI does not cover 100% of the risk and hence the lender always participates in the risk.

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

10) Is the credit guarantee scheme a completely private one which does not receive any form of public support (including international cooperation)?

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

11) Is the credit guarantee scheme a completely public scheme? (This includes credit guarantee schemes where private institutions, such as chambers or associations, participate in the decision-making process without the right to vote or veto. Also included are schemes where government mandates private companies to manage the credit guarantee scheme without participating in the risk.)

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

Notice: Questions 10 and 11 can both be responded "INCORRECT/NO". In this case I conclude that there is a form of cooperation between private and public institutions.

12) The government (or any national or international public agency, or member countries of multi-lateral agencies) participates in the risk of the credit guarantee scheme.

a. **The government participates in the risk of the credit guarantee scheme. Does each call on a guarantee affect the current public budget?** (For example, this could be public (counter-)guarantees provided by government agencies directly.)

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

b. **The government participates in the risk of the credit guarantee scheme. A call on a guarantee does not affect the current public budget?** (This could be, for example, a credit guarantee fund or loans to the scheme. In other words: The public budget might only be affected if the fund is not sufficient to cover all obligations or the guaranteeing institution is not able to pay off the loan.)

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

c. **Does the government (or any national or international public agency, or member countries of multilateral agencies) provide further support to the scheme (in addition to the risk-sharing mechanism)?** (This could be, for example, technical support or financial support such as grants, tax relief, payment or contribution to fees that borrowers would have to pay etc. In addition this could be financial contributions of institutions where membership and fees are obligatory by law, for example some chambers.)

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

13) Does the government (or any national or international public agency, or member countries of multilateral agencies) provide support but does not participate in the risk of the credit guarantee scheme? (This could be, for example, technical support or financial support such as grants, tax relief, payment or contribution to fees that borrowers would have to pay etc. In addition this could be financial contributions of institutions where membership and fees are obligatory by law, for example some chambers.)

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

14) Is the government explicitly liable for all the guarantees provided by the credit guarantee scheme?

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

15) The guarantee of the GI affects the lender with respect to banking regulation. For example it reduces the capital requirements of the lender?

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

16) Does the credit guarantee scheme achieve financial self-sustainability? In other words: would the scheme’s activity be possible without any public support?

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

17) The public support is only temporary, and in the long run financial self-sustainability has to be achieved.

	Valid for the whole range of the credit guarantee scheme					
CORRECT/YES						
INCORRECT/NO						

18) Do you have numbers/indicators that quantify loan defaults covered by the scheme?

	2006	2007	2008	2009	2010
Defaults by number					
Defaults by volume					
any other indicator/number:					
any other indicator/number:					
any other indicator/number:					
any other indicator/number:					

19) Who are the shareholders of the Guaranteeing Institution and the second-tier institution that backs the Guaranteeing Institution(s) (if there is a second-tier institution within a two-stage scheme)?

20) Is there a decision-making committee that approves each guarantee? Who participates and who has a right to vote and/or veto?

21) Is there a “cap” or “stop-loss” mechanism?

22) What kind of public support does the guaranteeing institution receive?

Appendix 7 Annual Exchange Rates with the Euro

Year	Brazilian real	Swiss franc	Czech koruna	UK pound sterling	Japanese yen	Korean won (Republic)	Turkish lira	US dollar
2011	2.33	1.23	24.59	0.87	110.96	1541.23	2.34	1.39
2010	2.33	1.38	25.28	0.86	116.24	1531.82	2.00	1.33
2009	2.77	1.51	26.43	0.89	130.34	1772.90	2.16	1.39
2008	2.67	1.59	24.95	0.80	152.45	1606.09	1.91	1.47
2007	2.66	1.64	27.77	0.68	161.25	1272.99	1.79	1.37
2006	2.73	1.57	28.34	0.68	146.02	1198.58	1.80	1.25
2005	3.04	1.55	29.78	0.68	136.85	1273.61	1.68	1.24
2004	3.64	1.54	31.89	0.68	134.44	1422.62	1777052.34	1.24
2003	3.47	1.52	31.85	0.69	130.97	1346.90	1694851.11	1.13
2002	2.79	1.47	30.80	0.63	118.06	1175.50	1439680.39	0.95
2001	2.11	1.51	34.07	0.62	108.68	1154.83	1102424.85	0.90
2000		1.56	35.60	0.61	99.47	1043.50	574816.12	0.92
1999		1.60	36.88	0.66	121.32	1267.26	447237.56	1.07

Own elaboration; source (European Central Bank 2012)

Fixed rates

DEM	1.96
Estonian kroon	15.65

Own elaboration; source (European Central Bank 2012, Deutsche Bundesbank 2012b)

Weitere Anhänge laut Prüfungsordnung

Zusammenfassung der Arbeit auf Deutsch

In der jüngeren Vergangenheit hat es viele Diskussionen über Kreditgarantie- und Risikoteilungsmechanismen gegeben. Derivate, wie Credit Default Swaps, werden sogar als eine Ursache für die weltweite Finanz- und Staatenkrise angesehen. Regierungen haben Garantien vergeben, um Finanzinstitute und Unternehmen der Realwirtschaft zu retten. Auch die Finanzierung von Staaten wurde so unterstützt. Dabei sind Kreditgarantiesysteme keine Erfindung des 21. Jahrhunderts. So entstanden viele Systeme in Europa zu Beginn des 20. Jahrhunderts. In fast allen Ländern gab es bereits vor der Krise Kreditgarantiesysteme, um kleinen und mittleren Unternehmen den Zugang zu Krediten zu vereinfachen. Es gibt Systeme mit großer Reichweite wie in Japan, während andere eher Spezialinstitute sind, die sich z.B. auf die Finanzierung junger und innovativer Unternehmen konzentrieren.

In der Dissertation werden Kreditgarantie-, und Bürgschaftssysteme für kleine und mittlere Unternehmen (KMU) analysiert. Der Fokus liegt auf der Analyse von Systemen in Europa und Lateinamerika. Zentraler Untersuchungsgegenstand sind die Bürgschaftsbanken in Deutschland und der Aufbauprozess von Kreditgarantiegemeinschaften in Brasilien. Die beiden Fälle eignen sich für die Analyse, da die brasilianischen Institutionen sich im Aufbau befinden und in Deutschland nicht nur die aktuellen Bürgschaftsbanken analysiert werden, sondern auch der Aufbauprozess der Vorgängerinstitutionen (Kreditgarantiegemeinschaften) in den 1950er und 1960er Jahren einbezogen wird. Es werden somit Visionen und bestehende Institutionen analysiert. Eine zentrale Hoffnung ist, dass die Gemeinschaften als Selbsthilfeorganisationen langfristig ohne laufende staatliche Förderung auskommen, oder diese zumindest nicht erheblich sein muss. Darüber hinaus werden in der Arbeit zwei komplementäre Ansätze entwickelt, die Kreditgarantiesysteme zu differenzieren und zu gruppieren. Da die meiste Literatur über die deutschen Bürgschaftsbanken und brasilianischen Kreditgarantiegemeinschaften auf Deutsch, Portugiesisch oder Spanisch sind, ist die Arbeit ein seltener Beitrag für die englischsprachige Literatur. Obwohl die Forschung auf Kreditgarantiesysteme für KMU fokussiert und in der Diskussion in der Entwicklungsfinanzierung einzuordnen ist, können Ergebnisse auch die Diskussion um andere Kreditgarantie- und Risikoteilungsmechanismen bereichern.

Einleitung, Motivation, Forschungsfrage und Fallauswahl

Der Aufbauprozess der brasilianischen Kreditgarantiegemeinschaften zieht sich bereits seit mehreren Jahren hin. Die grundsätzliche Idee ist, dass diese Institutionen Kreditgarantien vergeben und somit das Risiko des Kreditgebers reduzieren. Somit soll die Finanzierung von Unternehmen indirekt verbessert werden. Die Institutionen sollen sich auf formelle, d.h. registrierte kleine, und mittlere Unternehmen spezialisieren und regional verankert sein. Die Institutionen vor Ort sollen in ein nationales System eingebettet und durch Dachorganisationen unterstützt werden. Um die Solidarität zu fördern, sollen die Kreditnehmer Anteilseigner der Gemeinschaften werden. In die Institutionen wird viel Hoffnung gesetzt, da das brasilianische Finanzsystem durch einen schwierigen Zugang zu produktiven Krediten gekennzeichnet ist und Umfragen ergaben, dass fehlende Sicherheiten ein zentrales Problem bei der Kreditvergabe darstellen.

Diese Erwartung, teilweise Euphorie, wird dadurch untermauert, dass es in fast allen Ländern der Welt Kreditgarantiesysteme gibt. Die größten Institutionen sind die japanischen Gesellschaften. Der Verband berichtet, dass 35% bis 45% der kleineren japanischen Betriebe diese Institutionen nutzen. In den Vereinigten Staaten von Amerika fördert die Small Business Administration (SBA) kleine Unternehmen mit Garantien. Die Erfolgsgeschichten der SBA sind mit Nike Shoes, Microsoft, Intel Computers und Apple beeindruckend. Die wohl bekannteste Erfolgsgeschichte der deutschen Bürgschaftsbanken ist der „hidden champion“ Herrenknecht, Marktführer bei Tunnel-Bohrmaschinen. Das Unternehmen wurde von den Bürgschaftsbanken unterstützt, als es noch ein kleines Unternehmen war und es beschäftigt inzwischen 3000 Angestellte.

Die deutschen Bürgschaftsbanken bezeichnen sich selber als Selbsthilfeeinrichtungen der deutschen Wirtschaft. Während der Krise wurden diese Institutionen von der Politik eingesetzt, um eine Kreditklemme zu verhindern. Die renommierte Zeitung „Handelsblatt“ publizierte sogar einen Artikel mit der euphorischer Überschrift „Bürgschaftsbanken. Die wahre Stütze des Mittelstandes“. Italienische Confidi und spanischen Sociedades de Garantía Recíproca (SGRs) sollen ebenfalls einen Selbsthilfecharakter haben. Wie bei den brasilianischen Institutionen, aber im Gegensatz zu den Institutionen in Deutschland, sind dort die Kreditnehmer Anteilseigner bzw. direkte Mitglieder der Gemeinschaften. In Deutschland sind die Kreditnehmer nur indirekt über Verbände und Kammern vertreten. Diese Selbsthilfeelemente wecken die Hoffnung, dass diese ohne staatliche Intervention und Finanzierung auskommen und auch in Schwellen- und Entwicklungsländern repliziert werden könnten. So wird in einer OECD Studie empfohlen, die Italienischen Confidi im Ausland nachzubilden. Tatsächlich wurden in Brasiliens Nachbarländern bereits ähnliche Institutionen aufgebaut.

Andererseits gibt es auch Skepsis, denn oftmals gibt es hohe Ausfallquoten. So gab es in der Vergangenheit negative Erfahrungen in Schwellen- und Entwicklungsländern mit Kreditgarantiesystemen, da sie rasch dekapitalisierten. Aber auch in Europa und Nordamerika gab es Erfahrungen, die Anlass zu Skepsis sind. So hatte z.B. ein Kreditgarantiesystem im Vereinigten Königreich Ausfallquoten von 35%. Die bekanntesten Negativbeispiele für große Institutionen, die wegen Risikotransfermechanismen in die Schieflage gerieten, sind die US-amerikanische Versicherung American International Group (AIG), welche im Markt für Credit Default Swaps engagiert war, und die Immobilien-Finanzierer Fannie Mae und Freddy May, welche Kredite mit garantierten Zins- und Tilgungszahlungen verkauft hatten. Auch wenn diese Institutionen nicht speziell Kredite für KMU abgesichert haben, sind sie dennoch Beispiele dafür, dass es gefährlich sein kann, einer finanzierenden Bank das Ausfallrisiko abzunehmen.

Da der Aufbauprozess in Brasilien sich seit Jahren hinzieht, ergeben sich die ersten Forschungsfragen. Warum sind die Verhandlungen so zäh, und ist das ein spezielles Problem in Brasilien?

Die zentrale Fragestellung ist jedoch, ob sich Kreditgarantiesysteme für KMU im Sinne des Financial Market Paradigms (FMP) selbständig finanzieren können, oder ob sich die Institutionen im Sinne des Directed Credit Paradigms (DCP) eignen, mit öffentlichen Mitteln die Finanzierung einer Zielgruppe zu fördern, um Finanzierungslücken zu schließen und Investitionen anzukurbeln.

Der Forschungsansatz ist, die beiden Garantiessysteme in Deutschland und Brasilien detailliert auch unter Berücksichtigung von konkurrierenden ähnlichen Garantiesystemen und der historischen Dimension zu analysieren. Darüber hinaus werden ein kurzer weltweiter Überblick präsentiert, Statistiken in Europa und Lateinamerika kurz ausgewertet und anhand weiterer Kurz-Fallstudien die Ergebnisse abzugleichen. In Europa und Lateinamerika werden überdies zahlreiche Institutionen Grundmodellen zugeordnet.

Um diese zentralen Fragen diskutieren zu können, werden die deutsche Bürgschaftsbanken (GBs) und der Aufbauprozess der brasilianischen Kreditgarantiegemeinschaften (BCGSs) tiefgreifend analysiert. Die historische Komponente der Untersuchung in Deutschland hilft nicht nur, die Bürgschaftsbanken zu verstehen. Es können die Resultate mit den ursprünglichen Zielsetzungen verglichen werden. Es ergibt sich zudem eine Verbindung mit dem brasilianischen Fallbeispiel, da zentrale Hoffnungen in den 1950ern ähnlich mit denen in Brasilien heute sind.

Der Aufbauprozess in Brasilien ist die zentrale Motivation für die Forschungsarbeit. Die Erfahrungen aus Deutschland wurden gewählt, da es in Deutschland zahlreiche Kreditgarantie-

systeme und andere Institutionen gibt, die die Finanzierung von kleinen Unternehmen unterstützen. Außerdem publizieren die meisten Bürgschaftsbanken ihre Geschäftsberichte. Somit konnten diese systematisch ausgewertet werden. Darüber war eine langfristige und detaillierte Feldforschung vor Ort möglich.

Um die Ergebnisse mit den Erfahrungen in anderen Ländern abzugleichen, wurden kleinere Fallstudien in Italien und Spanien durchgeführt, da meist diese die Referenzmodelle für die brasilianischen Institutionen sind. Außerdem wurde eine solche kleinere Fallstudie in Argentinien durchgeführt, da dort Institutionen nach spanischem Vorbild entstanden sind. Kreditgarantiesysteme in Japan und Südkorea wurden analysiert, da diese eine beeindruckende Größe erreicht haben. Außerdem waren deutsche Institutionen Referenzmodelle beim Aufbau der Institutionen in Japan. Die Garantievergabe der SBA in den USA wird analysiert, da die SBA der Institution in Brasilien ähnelt, die federführend im Aufbauprozess ist, nämlich SEBRAE. Darüber hinaus werden die US-amerikanische Versicherung American International Group (AIG) und die Immobilien-Finanzierer Fannie Mae und Freddy May kurz analysiert.

In dieser Arbeit wird der Begriff Kreditgarantiesystem als Oberbegriff für Kreditgarantieprogramm, Kreditgarantiefonds und Kreditgarantiegemeinschaft verwendet. Diese Begriffe werden in der Literatur benutzt, jedoch werden sie von Autor zu Autor unterschiedlich definiert. Tatsächlich sind die Begriffe ungeeignet, die Kreditgarantiesysteme zu differenzieren bzw. zu gruppieren. Deswegen werden zwei komplementäre Ansätze erarbeitet, die eine Unterscheidung und Gruppierung ermöglichen.

Die Forschungsarbeit ist in fünf Teile gegliedert. Der Einleitung folgt in Teil 2 die theoretische Diskussion, welche Grundlage der empirischen Analyse in den Teilen 3 (Überblick) und 4 (Case Studies) ist. Teil 5 ist eine Zusammenfassung und zieht das Fazit der Forschungsarbeit.

Theoretische Überlegungen zu Kreditgarantiesystemen

Im theoretischen Teil wird die Risikoübernahme durch Kreditgarantien und Ausfallbürgschaften analysiert. Im Folgenden werden die Begriffe Bürgschaft und Garantie wie Synonyme behandelt, obwohl juristische Unterschiede bestehen. So ist die „Bürgschaft“ im deutschen Bürgerlichen Gesetzbuch verankert, während die „Garantie“ weniger normiert ist.

Bei einer Bürgschaft entsteht immer ein Dreiecksverhältnis zwischen Kreditnehmer, Kreditgeber und Bürgen. Kreditnehmer können sowohl Unternehmen, Haushalten und Finanzinstitute als auch Staaten sein. Kreditgeber können Investoren, Sparer und auch Banken sein. Da der Fokus der Arbeit auf der Finanzierung von kleinen Unternehmen liegt, sind Kreditgeber

jedoch in der Regel die Banken (einschließlich Sparkassen), während Finanzierungen über Kapitalbeteiligungsgesellschaften oder Bondmärkte eher die Ausnahmen sind.

Um die Kreditnehmer und ihren Finanzbedarf zu differenzieren, wird das Konzept von Schumpeter (1934/1993) herangezogen. Auf der einen Seite bewirtschaftet der „Wirt schlechtweg“ (im Folgenden „Wirt“) bestehende Kombinationen im Wirtschaftskreislauf. Auf der anderen Seite führt der „Unternehmer“ neue Kombinationen ein und initiiert eine „schöpferische Zerstörung“. Diese neuen Kombinationen können neue Produkte sein, neue Produktionsmethoden, die Erschließung neuer Absatzmärkte, die Erschließung neuer Wege der Beschaffung von Rohstoffen und Vorprodukte sowie neue Organisationsformen. „Unternehmer“ werden als oftmals vermögenslos modelliert; sie bedürfen in der Regel des „Bankiers“ oder eines anderen Finanziers, um ihre Unternehmung in Gang zu bringen.

Der Cash Flow einer Bürgschaft ähnelt dem eines Versicherungsvertrages. Aus Sicht des Bürgen entstehen zu Beginn Abflüsse wegen operativer Kosten und Zuflüsse durch Entgelte. Diese Zuflüsse bestehen während der weiteren Laufzeit der Bürgschaft; sie werden laufende Provisionen genannt. Die Zuflüsse stoppen erst, wenn der Kredit abbezahlt ist, oder aber der Kreditnehmer seinen Verpflichtungen nicht nachkommen kann und somit die Bürgschaft fällig wird. Die Bürgschaft entbindet den Kreditnehmer nicht von seinen Verpflichtungen, denn sie sichert vielmehr das Risiko der Bank ab. Bei Ausfall können die Sicherheiten des Kreditgebers, wie z.B. Immobilien aber auch das gesamte Privatvermögen des Schuldners, herangezogen werden. Die Schulden können ebenfalls neu verhandelt werden. Folglich kann vereinbart werden, dass der Bürge der Bank den Kapitaleinsatz des Kreditnehmers ersetzt und auf der anderen Seite Forderungen gegenüber dem Kreditnehmer erhält. Alternativ kann die Bank entschädigt werden, nachdem die Sicherheiten liquidiert wurden oder eine Umschuldung vereinbart wurde. Der Bürge hat in jedem Fall eine Forderung gegenüber dem Kreditnehmer, sei es direkt oder indirekt über die Bank. Bürgschaften oder Garantien, wie Mietgarantien sowie Kreditversicherungen, die das Risiko des kreditnehmenden Unternehmens reduzieren, sind nicht der Fokus der Arbeit.

Um bei Ausfall der Bürgschaft nachzukommen, kann der Bürge wie ein Versicherungsunternehmen Reserven, z.B. in der Gestalt von Rückstellungen und Rücklagen, bilden (bzw. ist als institutionalisierter Bürge durch die Regulierung dazu verpflichtet). Alternativ können Ausfallzahlungen in künftigen Perioden eingeplant werden. So kann z.B. der Staat ohne Kapitaldeckung Ausfallzahlungen in den künftigen Haushaltsperioden einplanen.

Auch Banken übernehmen Risiken und akkumulieren Reserven. Das Eigenkapital der Bank, bzw. die Differenz aus den Verbindlichkeiten und Forderungen, kann als Sicherheit für die

Anleger, also Kreditgeber, interpretiert werden. Somit folgern Schmidt und Zeitinger (1984) in Bezug auf Banken:

„Das Eigenkapital und die Reserven, einschließlich eventueller Haftungszusagen, sind der Kreditgarantiefonds, aus dem die Bankkredite besichert sind, die durch Einlagen und aufgenommene Mittel, also durch Fremdkapital, finanziert werden“ (Schmidt and Zeitinger 1984, 2).

Die Autoren stellen fest, dass ein Kreditgarantiefonds eine unvollständige Bank ist und eine Bank ein Kreditgarantiefonds. Geis (1993) betont, dass bei Kreditgarantiesystemen der Kredit in zwei Komponenten geteilt wird. Die Geldleihe bzw. Liquidität wird von der Bank bereitgestellt und die Kreditleihe bzw. die anteilige oder komplette Übernahme des Bonitätsrisikos von dem Garantiegeber.

Honohan (2010) nennt vier Gründe, warum Kreditgarantiesysteme existieren: Staatliche Unterstützung, der Bürge kann die Risiken besser diversifizieren, es bestehen regulatorische Arbitrage-Möglichkeiten (wie Eigenkapitalreduzierung durch Risikoteilung oder das Umgehen von Zinsschranken durch Erhebung von Entgelten anstelle von Zinsen), und es besteht ein Informationsvorsprung seitens des Bürgen gegenüber der Bank.

Um Kreditgarantiesysteme besser zu verstehen bzw. analysieren zu können, wird das Dreiecksverhältnis um die Akteure Staat, Verbände der Kreditnehmer und Verbände (einschließlich der Kammern) und die Verbände der Kreditgeber (einschließlich der Zentralinstitute in einem Verbund von Banken) erweitert. Es entsteht das Erweiterte Dreiecksverhältnis. Zwischen allen Akteuren bestehen Informationsasymmetrien, und es können „principal-agent“-Verbindungen entstehen. Der Kreditgeber muss prüfen aber auch dem Kreditnehmer vertrauen, dass Informationen richtig angegeben werden und dass der Kreditnehmer den Kapitaldienst erfüllen kann und will. Der Kreditgeber muss aber auch den Bürgen analysieren und darauf vertrauen, dass der Bürge bei einem Ausfall der Bürgschaftsverpflichtung nachkommen kann und will. Analog zu den Überlegungen von Stiglitz und Weiss (1981) ist nicht davon auszugehen, dass Entgelte und Provisionen (anstelle des Zinses bei Krediten) den Markt automatisch räumen.

Der Aufbau von Hausbankbeziehungen zwischen Kreditnehmern und ihrer Bank ist vor allem in Deutschland weit verbreitet und eine Methode, Informationsasymmetrien und Transaktionskosten auch bei der Kreditvergabe zu reduzieren. Durch wiederholtes Interagieren entsteht Wissen und bei konsistentem Verhalten auch Vertrauen zwischen der Bank und ihren Kunden. Universalbanken haben die Möglichkeit, verschiedenste Finanzprodukte anzubieten und können durch ein Bündel von Interaktionen viel über den (potentiellen) Kreditnehmer

erfahren. Ein langfristiger Kredit kann den Kunden an die Bank binden. Somit wird die Bank der exklusive oder zumindest wichtigste Finanzpartner. Dadurch kann auch ein nicht lukrativer Kredit für die Bank attraktiv werden, wenn sie sich davon verspricht, eine langfristige lukrative Hausbankbeziehung aufbauen zu können. Das Prinzip der Hausbankbeziehung wird in der Literatur ausführlich diskutiert, siehe Elsas und Krahen (2004). In dieser Forschungsarbeit wird es auf die Beziehung innerhalb des Dreiecksverhältnisses übertragen. Langfristige Verhältnisse können Informationsasymmetrien und Transaktionskosten reduzieren. Jedoch können solche intensiven Beziehungen auch gegeneinander konkurrieren. Dies wird offensichtlich, wenn Banken versuchen, exklusive Hausbankbeziehungen aufzubauen und auf der anderen Seite die Kreditgarantiegemeinschaft eine Institution ist, die versucht den Kreditnehmer zu unterstützen und helfen soll die günstigste Finanzierung bei irgendeiner Bank zu finden.

Wie in dem Beispiel verdeutlicht, können innerhalb des Erweiterten Dreieckverhältnisses Konflikte durch Konkurrenz entstehen. So können die Kreditnehmer, möglicherweise Mitglieder einer Kreditgarantiegemeinschaft, untereinander konkurrieren und nicht bereit sein, Informationen an die Institution weiterzugeben, geschweige denn, gemeinsam füreinander solidarisch zu haften. Auch Kreditgeber stehen untereinander in Konkurrenz und können befürchten, lukrative Kunden zu verlieren, wenn die garantiegebende Institution den Kunden gut kennt und sich eine andere Bank suchen kann. Dieses Konkurrenzmotiv kann dazu führen, dass die Banken nicht bereit sind, Informationen zu teilen oder nur kooperieren, wenn Kredite an weniger lukrativen Kunden verbürgt werden sollen. Das Verhalten ist konsistent mit dem Verlangen nach zusätzlichen Sicherheiten oder Bürgschaften, wenn das Ausfallrisiko von den Banken als hoch angesehen wird. Das erhöhte Ausfallrisiko kann jedoch vom Staat gedeckt werden. Dieser kann entweder Kreditgarantiesystem finanziell unterstützen oder Bürgschaften und Rückbürgschaften über staatliche Institutionen selber vergeben. Dabei kann er versuchen, im Sinne des DCPs eine bestimmte Zielgruppe zu erreichen und subsidiär einen Finanzierungslücke zu schließen bzw. Kreditkosten der Zielgruppe zu verbilligen. Das Schließen von Finanzierungslücken und eine subsidiäre Bürgschaftsvergabe können bedeuten, dass sich der Staat restriktiv verhält und nur bereit ist, wenige Bürgschaften für vielversprechende Investitionen zu übernehmen oder das Kreditgarantiesystem nur in Krisenzeiten zu nutzen. Alternativ kann der Staat versuchen, Institutionen im Sinne des FMPs zu schaffen, die sich selbst finanzieren. Dies kann jedoch zu einem Konflikt mit den Banken führen, die eine subsidiäre Bürgschaftsvergabe bevorzugen. Die Einzelinteressen der Akteure im Erweiterten Dreiecksverhältnis können dazu führen, dass sich kein Akteur als der hauptverantwortliche Anteilseigner der bürgschaftsgebenden Institution sieht. Somit kann das Problem der „Missing Ownership“ entstehen.

Es wird die Hypothese aufgestellt (und geprüft), dass es nicht möglich ist, mit Kreditgarantiesystemen gleichzeitig folgende Ziele zu erreichen: relativ geringe Transaktionskosten, eine große Reichweite (Anzahl der Kreditnehmer und Bürgschaftsvolumen), ein hoher Grad an Additionalität (bzw. Einhaltung des Subsidiaritätsprinzips) und eine sich finanziell selbsttragende bürgschaftsgebende Institution.

Typologie von Kreditgarantiesystemen

Die üblichen Kategorien von Kreditgarantiesystemen sind Kreditgarantieprogramme, -fonds und -gemeinschaften. Jedoch sind die Definitionen nicht klar und variieren von Autor zu Autor. Darüber hinaus beschreiben die Begriffe eher Charakteristika von Kreditgarantiesystemen. So sind z.B. die deutschen Bürgschaftsbanken (und deren Vorgängerinstitutionen die Kreditgarantiegemeinschaften) Einrichtungen verschiedener Träger und Gesellschaften mit eigenem Eigenkapital. Somit sind sie Kreditgarantiegemeinschaften. Das Eigenkapital kann als Kreditgarantiefonds bzw. als Sicherheit für die eingegangenen Eventualverbindlichkeiten bezeichnet werden. Da der Staat als Rückbürge den größten Teil des Risikos übernimmt, kann das Kreditgarantiesystem jedoch auch als öffentliches Kreditgarantieprogramm interpretiert werden. Somit werden nicht die drei üblichen Begriffe genutzt, sondern zwei komplementären Ansätze zur Differenzierung erarbeitet. Der ODM approach (*ownership and decision-making based approach*) wurde bei ca. 40 Systemen in 18 Ländern angewendet und der relationship-based approach vor allem bei den beiden zentralen Fallbeispielen in Deutschland und Brasilien. Zudem ist er bei der Analyse der kleineren Fallbeispiele nützlich.

Der ODM approach berücksichtigt zwei Dimensionen. Zum einen wird nach Teilhabern unterschieden und zum anderen nach dem Kreditvergabeprozess. Teilhaber werden nicht nur Anteilseigner der bürgschaftsgebenden Institution, sondern auch Institutionen, die an der Finanzierung des Kreditgarantiesystems "teilnehmen", die über die Gebühren und Entgelte hinausgeht. Es ergeben sich sechs Grundmodelle. Die Grundmodelle 1 und 2 sind öffentliche Kreditgarantiesysteme, die Grundmodelle 3 und 4 sind Ergebnisse aus öffentlich-privater Kooperation und die Grundmodelle 5 und 6 sind private Kreditgarantiesysteme. Die Grundmodelle 1, 3 und 5 nutzen den case-by-case approach bei der Garantievergabe, d. h. sie entscheiden bei jedem Kredit, ob er garantiert wird oder nicht. Dabei kann der Bürge sich auf die Information der Bank verlassen oder ex ante mit eigener Information die Kapitaldienstfähigkeit des Kreditnehmers analysieren. Die Grundmodelle 2, 4 und 6 vergeben Portfolio Garantien, d.h. eine Garantie sichert ein ganzes Kreditportfolio ab.

In der empirischen Untersuchung wurden Kreditgarantiesysteme des Grundmodells 1 in zahlreichen Ländern gefunden. So gibt es z.B. in Deutschland Bürgschaftsprogramme des Bundes und der Länder für die Förderung im Inland und für die Außenwirtschaft. Haftungsfreistellungen bei der Vergabe von Förderkrediten über Förderbanken zählen auch zu diesem Grundmodell (d. h. die durchleitende Geschäftsbank wird vom einem des Ausfallrisikos freigestellt). Auch die Systeme in Südkorea, den USA und UK (SFLG2 vor den Graham-Reformen) sind diesem Grundmodell zuzuordnen. Auch der brasilianische FGPC (welcher keine neuen Finanzierungen absichert und von der nationalen Förderbank verwaltet wird) ist ebenfalls ein System dieses Grundmodells.

Diese Systeme haben gemeinsam, dass sie genutzt werden, um öffentliche Förderpolitik zu betreiben. Oftmals sollen Schumpetersche „Unternehmer“ im Sinne des DCPs gezielt gefördert werden. Finanzielle Selbständigkeit ist nicht erforderlich, was jedoch nicht bedeutet, dass Ausfallzahlungen irrelevant sind. Ausfallzahlungen können zum einen begrenzt werden, indem das System klein gehalten wird oder indem die Ausfallquoten gesenkt werden. Hohe Ausfallquoten wurden in mehreren Ländern beobachtet (Deutschland, UK und Brasilien), insbesondere wenn das Ziel ist, „Unternehmer“ zu fördern und der Vergabeprozess gewählt wurde, beim dem die garantiegebende Institution lediglich Informationen von der Bank erhält. Um bei diesen Kreditgarantiesystemen die Ausfälle zu begrenzen, gibt es grundsätzlich drei Möglichkeiten: Die garantiegebende Institution kann sich selbst über den Kreditnehmer informieren. Durch die Doppelprüfung entstehen jedoch hohe Transaktionskosten, welche insbesondere bei der Finanzierung kleiner Unternehmen ins Gewicht fallen. Alternativ kann die Zielgruppe geändert werden und es können anstelle von „Unternehmern“ „Wirte“ gefördert werden. Dies kann jedoch widersprüchlich zu der politischen Zielsetzung sein, insbesondere wenn „Wirte“ ihren Finanzierungsbedarf bei Geschäftsbanken decken können und die Förderinstitutionen das Subsidiaritätsprinzip einhalten sollten. So gibt es in Deutschland zahlreiche Förderprogramme für unterschiedliche Zielgruppen, die eine Haftungsfreistellung beinhalten. Die dritte Option ist, eine Begrenzung („cap“) der Ausfallleistungen nicht nur auf den einzelnen Kredit, sondern auf das Portfolio der garantierten Kredite der jeweiligen Bank einzuführen. Im Vereinigten Königreich (SFLG2/EFG) und in Brasilien (FGCP/FGI) wurden Beispiele gefunden, bei denen ein solcher „cap“ eingeführt wurde.

Im Grundmodell 2 werden öffentliche Garantien für Kreditportefeuilles vergeben. Solche Systeme wurden in Lateinamerika und UK gefunden. Auch der Europäische Investitionsfonds vergibt solche Bürgschaften. In Brasilien gibt es den FAMPE des Wirtschaftsförderinstituts SEBRAE.

Auch bei diesen Systemen gilt die Wirtschaftsförderung als oberstes Ziel. Jedoch ist die Methode unterschiedlich zum ersten Grundmodell. Mit dem Portfolio-Ansatz verhandelt die öffentliche bürgschaftsgebende Institution mit den Banken, ohne in die Einzelfallentscheidung ex ante einzugreifen. Somit können Transaktionskosten reduziert werden, was insbesondere relevant für die Finanzierung kleinerer Unternehmen ist. Um Probleme des moralischen Risikos (moral hazard) zu berücksichtigen, wird in der Regel ein „cap“ auf das Portfolio vereinbart.

Das Grundmodell 3 ist charakterisiert durch eine Zusammenarbeit öffentlicher und privater Akteure und einem case-by-case approach bei der Vergabe von Bürgschaften bzw. Garantien. Somit unterliegt die Bürgschaftsvergabe bei diesen Systemen, im Gegensatz zu den ersten beiden Grundmodellen, oftmals sowohl der Bankenaufsicht als auch der Regulierung für öffentliche Bürgschaften (vor allem Haushalts- und Wettbewerbsregulierung).

In der Regel erhält eine solche garantiegebende Institution mit ausschließlich privaten oder privaten und öffentlichen Anteilseignern finanzielle Unterstützung vom Staat. Oftmals wurden die Institution auf Initiative der Kreditnehmer bzw. deren Verbände (einschließlich Kammern) gegründet und die Institutionen können durch ihren gemeinschaftlichen Charakter Informationsvorsprünge gegenüber den Banken haben. Tatsächlich wird bei vielen Institutionen der case-by-case approach auf Grundlage eigener Informationen angewendet. Beispiele für dieses Grundmodell wurden in vielen Ländern gefunden. Die beiden zentrale Fallbeispiele, die deutschen Bürgschaftsbanken und brasilianischen Kreditgarantiegemeinschaften, sind diesem Grundmodell zuzuordnen. Aber auch untersuchte Systeme in Japan, Italien, Spanien und Argentinien sind Systeme dieses Grundmodelles.

Da die Institutionen dieses Grundtyps viele Teilhaber haben können (sämtliche Akteure des Erweiterten Dreiecksverhältnisses wie die Kreditnehmer, deren Verbände, die Kreditgeber, deren Verbände und der Staat), ist die Zielsetzung des Kreditgarantiesystems nicht per se klar. So sind z.B. im zentralen Entscheidungsgremium der deutschen Bürgschaftsbanken (dem Bürgschaftsausschuss) Vertreter von den Verbänden der Realwirtschaft als auch von konkurrierenden Banken vertreten. Somit beobachten die Vertreter der Banken nicht nur die Aktivitäten der Bürgschaftsbank sondern auch die verbürgten Finanzierungen der konkurrierenden Banken. Auch der Staat ist vertreten, und seine Repräsentanten haben sogar ein Vetorecht, um ihre Interessen durchzusetzen. Grundsätzlich stellt sich bei Kreditgarantiesystemen dieses Grundtyps die Frage, ob es von den privaten oder den öffentlichen Institutionen dominiert wird. Oder es ergibt sich eine Konstellation, bei welcher kein Akteur die Führung übernimmt bzw. das Problem der „Missing-Ownership“ entsteht.

Die Untersuchung hat gezeigt, dass viele Kreditgarantiesysteme dieses Grundtyps, wie auch die deutschen Bürgschaftsbanken, weniger Bürgschaften (Volumen und Anzahl) vergeben und eher eine moderate Finanzierungslücke füllen, d.h. die Stakeholder haben einen „kleinsten gemeinsamen Nenner“ gefunden. In Brasilien wurde dieser gemeinsame Nenner bisher noch nicht entdeckt. Es gibt nur ein kleines Pilotprojekt und Austragungen zum Aufbau weiterer Institutionen, die jedoch noch keine Bürgschaften vergeben. Allerdings kann die Führungsrolle von einem der Akteure übernommen werden. So werden die japanischen Credit Guarantee Corporations vom Staat unterstützt und sind bei einem hohen Anteil der Finanzierung kleiner Unternehmen involviert. Auch private Akteure können die Führungsposition übernehmen. Dies ist zum Beispiel bei dem Familienunternehmen Los Grobo in Argentinien der Fall.

Auch Grundmodell 4 ist das Resultat einer Kooperation von privaten und öffentlichen Akteuren. Jedoch wurde der Portfolioansatz bei der Bürgschaftsvergabe gewählt. In der empirischen Forschung wurden wenige Systeme gefunden. Ein Beispiel ist ein Teil der Verbriefungsaktivität der KfW Bankengruppe in Deutschland. Die Förderbank bietet nicht nur eine Verbriefungsplattform mit Standards, sondern ist auch eine Art „Garantieintermediär“, da sie Kreditportefeuilles garantiert und die übernommenen Risiken wieder ausplatziert.

Das Grundmodell 5 ist oftmals die Vision beim Aufbauprozess von Kreditgarantiegemeinschaften. Ohne laufende staatliche Förderung sind die solidarischen Gemeinschaften unabhängig und wirtschaftlich lebensfähig. Einzelne Bürgschaften von Privaten (wie von Geschäftspartnern oder Familienmitgliedern) würden in diese Gruppe passen, jedoch liegt der Fokus der Forschungsarbeit auf institutionalisierten Garantiesystemen. In der Untersuchung wurde kein solches System gefunden, welches die Verhandlungsmacht der Kreditnehmer gegenüber den Banken erhöht. Die einzigen Ausnahmen von Systemen, die dieser Gruppe zugeordnet werden können, sind die EDEKA Kreditgarantiegemeinschaft und das Bürgschaftssystem der DZ Bank in Deutschland. Die EDEKA Kreditgarantiegemeinschaft kooperiert eng mit der EDEKA Bank und kann als spezielle Zweckgemeinschaft innerhalb des EDEKA Genossenschaftssystems oder auch als Sonderhaftungsfonds bezeichnet werden. Die DZ Bank ist die größte „Zentralbank“ der Genossenschaftsbanken und das Bürgschaftssystem ist ein Risikoteilungsmechanismus zwischen der DZ Bank und den genossenschaftlichen Mitgliedsbanken. Beide Beispiele sind private Kreditgarantiesysteme. Jedoch sind es keine Gemeinschaften von Kreditnehmern, die sich zusammenschließen, um gemeinsam den Banken gegenüber eine bessere Verhandlungspositionen zu erlangen. Beide Fälle sind hingegen Beispiele der Selbsthilfe in Form von Genossenschaftsbanken, welche bei speziellen Finanzierungen das Instrument Bürgschaft einsetzen.

Im Grundmodell 6 ist der Staat ebenfalls nicht an der Finanzierung beteiligt, jedoch wird der Portfolioansatz bei der Besicherung von Kreditrisiken verwendet. Dies ist oft bei Kreditderivaten der Fall. Auch wenn diese Systeme nicht der Fokus der Forschungsarbeit sind, haben die Erfahrungen der letzten Jahre gezeigt, dass diese Systeme gefährlich sind wenn zu sorglos mit Risiken umgegangen wird und zu wenig Reserven gebildet werden. Dabei müssen Risikoteilungsinstrumente auf Portfolioebene kein „Teufelszeug“ sein. So teilen sich beispielsweise Versicherungen untereinander und über institutionalisierte Rückversicherungen seit langem komplexe Risiko- bzw. Schadensportefeuilles. Oftmals sind langfristige Beziehungen zwischen Erst- und Rückversicherern bzw. Rückversicherungen innerhalb von Versicherungsgruppen zu beobachten. Dies bringt uns zum zweiten Ansatz, Kreditgarantiesysteme zu differenzieren und zu gruppieren.

Der relationship-based approach zielt auf verschiedene Kombinationen von langfristigen Beziehungen (mit wiederholenden Interaktionen zwischen den Akteuren) und kurzfristigen Beziehungen innerhalb des Erweiterten Dreieckverhältnisses ab. In diesem Ansatz ist eine Kombination der Schemata möglich.

Das „arm's length“-Schema ist das erste in dem Ansatz und repräsentiert Kreditgarantiesysteme, in denen die bürgschaftsgebende Institution weder mit den Kreditnehmern noch mit den Kreditgebern langfristige Geschäftsbeziehungen mit wiederholten Interaktionen eingeht. Dies ermöglicht eine kontinuierliche Umstrukturierung des Risikoportfolios. Allerdings nutzt der Bürge nicht langfristigen Geschäftsbeziehungen, um Informationsasymmetrien und Transaktionskosten zu reduzieren. Da Kreditderivate nicht der Fokus der Forschungsarbeit sind, werden keine Kreditgarantiesysteme, welche klar diesem Grundmodell zuzuordnen sind, in der Arbeit analysiert. Jedoch bietet die kurze Analyse des Kreditderivat-Engagements des Versicherers AIG genügend Hinweise zur Skepsis.

Das zweite Schema ist das Kreditnehmer-Bürge-Schema. Es ist die Vision beim Aufbauprozess der Kreditgarantiegemeinschaften in Brasilien. Kreditnehmer sollen kooperieren und die Selbsthilfeeinrichtungen die Verhandlungsposition der Kreditnehmer stärken. Dies scheint vielversprechend zu sein, insbesondere wenn Kreditnehmer Geschäftsbeziehungen zu mehreren Kreditgebern haben, welche nicht immer bestehende Kredite prolongieren. In diesem Fall sind oftmals die Kreditnehmer „Wirte“. In Italien bestehen mit den Confidi solche Kreditgarantiesysteme. Jedoch haben die Italienischen Banken oftmals intensivere Geschäftsbeziehungen und Interaktionen mit den Kreditnehmern als die Confidi. Die Erfahrung aus Italien zeigt aber auch, dass es schwierig ist, ein finanziell sich selbst tragendes Kreditnehmer-Bürge-Schema aufzubauen. Die italienischen Institutionen werden laufend vom Staat finanziell unterstützt. Außerdem sind auch in Italien die Banken von entscheidender Bedeutung

im Erweiterten Dreiecksverhältnis. Die Analyse in Brasilien untermauert, wie schwierig bzw. sogar unmöglich es ist, finanziell selbst tragende Institutionen ohne laufende finanzielle Unterstützung seitens des Staates aufzubauen. Die Erfahrung mit dem System um das argentinische Familienunternehmen Los Grobo ist ein Beispiel für ein solches Schema. Das System ist dadurch, dass kleinere Unternehmen an einen Konzern gebunden werden, weniger durch Selbsthilfe der Kreditnehmer charakterisiert. Zudem erhalten die Investoren Steuervergünstigungen.

Das dritte Schema ist das Kreditgeber-Bürge-Schema. In der empirischen Untersuchung wurde oft festgestellt, dass das Verhältnis zwischen Bürge und Kreditgeber bedeutend ist. Da die Bürgschaft das Risiko des Kreditgebers reduziert, muss der Kreditgeber die Werthaltigkeit der Bürgschaft, bzw. die Fähigkeit und den Willen des Bürgen bei Ausfall zu zahlen, analysieren. Vertrauen bildet die Grundlage dieser Geschäftsbeziehung und eine langfristige Geschäftsbeziehung mit wiederholten Interaktionen kann ein solches erstellen. Dies kann die Informationsasymmetrien und Transaktionskosten reduzieren; auch auf der operationellen Ebene der Banken und bürgschaftsgebenden Institutionen. In Deutschland wurden Kreditgarantiesysteme dieses Schemas gefunden. So kooperiert die EDEKA KGG eng mit der EDEKA Bank und die DZ Bank mit den Genossenschaftsbanken innerhalb des Verbundes. Banken sind nicht nur Anteilseigner von Bürgschaftsbanken. Auch auf der operationellen Ebene wurden langfristige Geschäftsbeziehungen festgestellt. Insbesondere bei der Finanzierung von „Unternehmern“ sind die Banken bereit, zu kooperieren. Interviewpartner berichteten, dass die Transaktionskosten mit der Zeit abnehmen und Vertrauen aufgebaut werden kann. Jedoch ist diese langfristige Geschäftsbeziehung nicht ausreichend, um sich finanziell selbst tragende Institutionen zu schaffen. Die Bürgschaftsbanken erhalten erhebliche finanzielle Unterstützungen vom Staat – vor allem durch Rückbürgschaften. Daher sind sie nicht nur ein Kreditgeber-Bürge-Schema sondern vor allem auch ein Staat-Bürge-Schema.

Das vierte Schema ist das Staat-Bürge-Schema. Die bürgschaftsgebende Institution ist eine staatliche Institution oder sie erhält laufende finanzielle Unterstützung vom Staat. Auch wenn die empirische Untersuchung nicht repräsentativ ist, weist sie darauf hin, dass dieses Schema das dominierende Schema ist. Der Staat kann wie bei den Bürgschaftsbanken in Deutschland, dem UK, den USA und Südkorea (KIBO) das Subsidiaritätsprinzip verankern und vor allem „Unternehmer“ unterstützen. Die Systeme werden dann relativ klein gehalten und füllen eine Finanzierungslücke, während die Kreditnehmer üblicherweise die Finanzierung bei Banken erhalten, ohne dass das Bürgschaftssystem eingeschaltet wird. Andererseits gibt es Systeme, welche vor allem „Wirte“ unterstützen. Beispiele für diese Systeme wurden in Japan, Südkorea (KODIT), Italien und Deutschland (Haftungsfreistellungen) gefunden.

Die beiden Ansätze können auch zusammengefügt werden und ergeben eine 6x4 Matrix mit 24 verschiedenen Typen von Kreditgarantiesystemen (siehe Tabelle 42). Die Anfängliche Vision bei beiden Fallstudien ist eine Kombination aus Grundmodell 5 und einem Kreditnehmer-Bürge-Schema. Zu Beginn sollte jedoch der Staat temporäre „Anschubhilfe“ leisten. So wurde als Startpunkt eine Kombination aus Grundmodell 3 und einem Kreditnehmer-Bürge-Schema mit geringer staatlicher Intervention geplant; langfristig sollten die Kreditgarantiesysteme sich finanziell selbst tragen. Dieses Ziel wurde jedoch nie erreicht und die Feldforschung ergibt, dass die Bedeutung sowohl des Staates als auch der teilnehmenden Banken elementar ist. Die „Realität“ der Deutschen Bürgschaftsbanken ist vielmehr eine Kombination aus Grundmodell 3, einem Kreditgeber-Bürge-Schema und einem Staat-Bürge-Schema. Die Deutschen Bürgschaftsbanken haben ihre Nische gefunden und garantieren vor allem Finanzierungen von Schumpeterschen-Unternehmern mit Hilfe des Staates.

Auch wenn die anderen Kreditgarantiesysteme nicht so detailliert analysiert wurden wie die Deutschen Bürgschaftsbanken zeigt die Feldforschung, dass die Erfahrung aus Deutschland keine Seltenheit ist. Kreditgarantiesysteme bauen generell eine langfristige Beziehungen zu den Kreditgebern und dem Staat auf – und sind von der Kooperation mit den Banken und der finanziellen Unterstützung des Staates abhängig. Die Kreditgarantiesysteme um EDEKA und DZ-Bank erhalten keine staatliche Unterstützung und entsprechen demnach scheinbar der anfänglichen Vision. Jedoch sind sie eher eine Instrument der Banken (EDEKA-Bank und DZ Bank). Die Erfahrung aus diesen privaten Initiativen ist vielmehr, dass die Kreditnehmer sich zusammenschließen und Genossenschaftsbanken gründen.

In Brasilien habe die Kreditgarantiegemeinschaften noch nicht ihre Nische im Finanzsystem gefunden. Bisher kann nur festgestellt werden, dass die anfängliche Vision noch nicht erreicht wurde – und dass es sehr unwahrscheinlich ist, dass die erreicht wird.

Schlussfolgerungen

Die theoretischen und empirischen Untersuchungen haben gezeigt, dass es sich beim langwierigen Aufbau der brasilianischen Kreditgarantiegemeinschaften nicht um ein speziell brasilianisches Problem handelt. Der Aufbauprozess in Deutschland war ebenfalls langwierig und schleppend. So ist in der Literatur der Widerstand des Großhandels und der Industrie gegen den Aufbau von Kreditgarantiegemeinschaften dokumentiert. Auch die Verhandlungen mit den öffentlichen Institutionen werden in der Literatur als zäh bezeichnet. Lediglich nach der Wiedervereinigung wurden in den neuen Ländern Institutionen zügig nach ihren Vorbildern in den alten Ländern geschaffen. Das langfristige Ziel aus den 1950er Jahren, sich

selbst tragende Selbsthilfeeinrichtungen zu ermöglichen, wurde nicht erreicht. Die Analyse in weiteren Ländern hat gezeigt, dass es grundsätzlich schwer ist, Kreditgarantiesysteme als Selbsthilfeeinrichtungen der Kreditnehmer zu konzipieren. Kreditgarantiesysteme, die ausschließlich auf Selbsthilfe basieren sind die Ausnahme bzw. Sonderfälle. Bestehende Kreditgarantiesysteme mit Elementen der Selbsthilfe haben ihre Nische im jeweiligen Finanzsystem und in der Wirtschaftsförderung gefunden. Dies ist bei den brasilianischen Kreditgarantiegemeinschaften bisher nicht festzustellen.

In der empirischen Untersuchung wurde kein Kreditgarantiesystem für kleine und mittlere Unternehmen gefunden, welches Kredite absichert und alle vier Ziele der Hypothese erreicht (geringe Transaktionskosten, eine große Reichweite, ein hoher Grad an Additionalität und eine sich finanziell selbsttragende bürgschaftsgebende Institution). Es ist anzunehmen, dass allenfalls Risikoteilungsmechanismen in internationalen Handelsfinanzierungen und Kreditversicherungen die vier Ziele erreichen. Jedoch sind diese Risikoteilungsmechanismen nicht Gegenstand der Untersuchung. Multiple Informationsasymmetrien innerhalb des Erweiterten Dreiecksverhältnisses sind ein Erklärungsansatz, warum kein solches Kreditgarantiesystem gefunden wurde. Informationsasymmetrien und Transaktionskosten können durch langfristige Geschäftsbeziehungen reduziert werden. Jedoch bleibt das Problem, dass Konkurrenz unter beteiligten Akteuren die Kooperation beeinträchtigt, Informationen nicht geteilt werden und man nicht für den Konkurrenten haften will.

Dass Risikoteilungsmechanismen mit Banken gefährliche Finanzinstrumente sein können, hat die Finanzkrise mit den Bail outs von AIG Fannie Mae und Freddie Mac gezeigt. Nicht nur Banken, sondern auch die „protection seller“ bzw. Bürgen müssen für Eventualverbindlichkeiten Vorsorge treffen. Auch Kreditgarantiesysteme für Unternehmensfinanzierungen können nicht die Unsicherheit mindern, sondern nur auf mehrere Schultern verteilen.

Banken können ihre Kosten ohne kontinuierliche finanzielle Unterstützungen im Sinne des Financial Market Paradigms (FMP) selbst erwirtschaften. Die meisten Kreditgarantiesysteme benötigen jedoch die kontinuierliche finanzielle Unterstützung des Staates. Daher sind sie eher als Instrumente der Wirtschaftsförderung geeignet, denn sie können Kreditrationierung reduzieren. Somit sind sie eher ein Instrument im Sinne des Directed Credit Paradigms. Das Fallbeispiel in Deutschland hat gezeigt, dass beide Paradigmen parallel angewendet werden können. Geschäftsbanken wirtschaften gemäß dem FMP. Sie ermöglichen einer großen Anzahl einen Zugang zu Krediten und weiteren Finanzdienstleistungen. Die Bürgschaftsbanken sowie weitere deutsche Förderinstitutionen füllen darüber hinaus eine moderate Finanzierungslücke gemäß des DCPs. Jedoch steht die Zinsverbilligung nicht im Vordergrund sondern das Subsidiaritätsprinzip.

Durch Entgelte zusätzlich zu den Zinsen, kann nicht nur Subsidiarität verankert werden, da die Entgelte und hohe Transaktionskosten für viele Kreditnehmer unattraktiv sind. Gemäß Stiglitz und Weiss (1981) kann durch ein höheres Entgelt (d.h. bei Kreditgarantiesystemen Zins zuzüglich der Entgelte) den Kreditnehmern eine Finanzierung angeboten werden, welche bei einem geringen Zins rationiert worden wären.

Um Informationen privater Akteure aufzunehmen, kann der Staat mit diesen kooperieren. Dies ermöglicht auch eine weniger offensichtliche Intervention des Staates, falls diese politisch nicht gewollt oder „verpönt“ ist. Andererseits kann mit Aufnahme zusätzlicher Akteure das Problem verschärft werden, dass konkurrierende Akteure wie Kreditnehmer und Kreditgeber weniger bereit sind, Informationen zu teilen. Auch die Zielsetzung des Kreditgarantiesystems kann mit Aufnahme weiterer Akteure unklarer werden.

Der Staat kann die Garantiesysteme nutzen, um Strukturpolitik und Konjunktur- bzw. Krisenpolitik zu betreiben. So wurden viele Kreditgarantiesysteme vor der Krise als Instrumente der Strukturpolitik verwendet und während der Krise als temporäre Mechanismen gestärkt oder modifiziert, um eine Kreditklemme zu verhindern. Darüber hinaus kann der Staat diese Institutionen nutzen, um das Finanzsystem zu entwickeln. So begannen die USA bereits in den 1950er Jahren, mit der SBA die Small Business Investment Companies (Beteiligungsgesellschaften) aufzubauen. Auch die deutschen Bürgschaftsbanken wurden eingesetzt, um Beteiligungen als Finanzierungsform in Deutschland zu testen und um Kredite nicht auf der Bewertung von Sicherheiten sondern auf Grundlage der Kapitaldienstfähigkeit zu vergeben.

Da Banken die besseren Institutionen sind, um vielen Kreditnehmern den Zugang zu Krediten zu ermöglichen, ist eine grundsätzlich skeptische Einstellung gegenüber Kreditgarantiesystemen begründet. Allerdings kann auch Optimismus – wenn nicht sogar Euphorie – erklärt werden, wenn sie mit Erfolg dazu genutzt werden, um einzelne riskante aber vielversprechende Unternehmer zu fördern und in Krisenzeiten auch Wirte zu unterstützen.

Tabellarischer Lebenslauf (Kurzform)

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