

South-South monetary regionalism: a case of productive incoherence?

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ABSTRACT

The variety of monetary and regional cooperation institutions often is characterised as uneven, fragmented, and partially contested. In contrast to this narrative, Grabel (2018) applies a Hirschmanian mindset to monetary and regional cooperation that highlights the experimental nature of recent innovations as a 'productive incoherence'. This paper presents a case study of such productive incoherence. We examine the institutional set up of the Local Currency Payments System (SML) between the Mercosur countries based on interviews with Central Bank staff and statistical analysis. We assess the factors that explain the emergence, limitations and institutional linkages of the SML. The results suggest that, despite its small scale, the mechanism expanded and provided to be remarkably robust in midst of a generally agonising Mercosur, representing the first cooperation between the Mercosur central banks after decades of absence of coordination of exchange rate policy and foreign exchange regulation. Our findings confirm and further refine Grabel's approach: assessing incremental changes in terms of highly specific and contingent policies is key to understanding the role institutions play for development. We conclude that even very small-scale initiatives such as the SML can contribute to developmental monetary and financial governance as a building block of reform and change.

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Introduction

Economic globalisation is under pressure. Especially large emerging market economies (EMEs) have been challenging their subordinate position in the international monetary system (IMS). The deleterious effects of the EME financial crises during the 1990s, the repercussions of the 2008 global financial crisis, and the COVID-19 pandemic showed that the global monetary order and financial architecture are exposing these countries to significant risks, without providing adequate institutions to tackle them. At the same time, the share of EMEs in the global economy has increased significantly, which is due especially, but not exclusively, to China's accelerated growth, but also includes increasing so-called south-south trade amongst EMEs.

In this context of sustained monetary and financial vulnerabilities and shifting global economic and financial powers, the need for further monetary and financial cooperation between EMEs has

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gained new relevance. As highlighted by the literature on currency hierarchy and subordinate financial integration, the dominant role of central currencies (in particular, the US dollar) and the high degree of dependence of EMEs on central currencies makes these economies particularly vulnerable to the volatility of international capital flows and exchange rate risks (Prates and Andrade, 2013; Kaltenbrunner and Paineira, 2015; Bonizzi, 2017; De Paula *et al.* 2017; Orsi, 2019). As discussed by this literature, this international monetary subordination impacts negatively the autonomy of macroeconomic policymaking and the availability of sustainable development finance, and constrains the everyday actions of economic actors in ECEs (see Alami *et al.* 2022 for a recent overview). A stronger South-South financial and monetary cooperation could potentially reduce this international monetary subordination by increasing the use of local currencies and limiting the dependence on foreign currency, which, in turn, may reduce the spillover effects from financial markets in the core to EMEs.

This paper presents a case study of the Payment System in Local Currency (Sistema de Pagos en Moneda Local, SML) as a mechanism of regional monetary cooperation between the key Mercosur countries Argentina, Brazil, Uruguay, and Paraguay. The SML was an initiative of these countries' central banks to allow Small and Medium-sized Enterprises (SMEs) to access the market in other Mercosur member countries by trading in local currency and avoiding the high costs of foreign exchange operations. The aim of the participating central banks was to foster regional trade integration in Mercosur, despite ongoing political tensions and economic disparities. This initiative can be understood as part of a broader wave of institution-building and innovation in regional monetary and financial South-South cooperation (Grabel, 2018). Especially in Latin America, it brought forward a vast variety of even competing regional cooperation mechanisms (see also Armijo 2012).

There is a small, but growing body of literature on South-South monetary and financial regionalism (Fritz and Mühlich 2015, 2018; Grabel 2018; Ocampo 2018; Eichengreen 2019). However, more often than not, the Latin American pursuit of regionalism has been perceived as a failure (e.g. Pastрана 2013; Klaveren 2018). Regarding the SML, the view is that its uptake so far has been somewhat limited and heavily skewed toward Brazilian exports (i.e. Pasin *s.d.*; Urbieta 2018).

This paper attempts to address the question of whether the SML represents an exception to this Latin American failed regionalism. We argue that despite its limited uptake and asymmetric nature, the SML represents a great example of what Grabel (2018) has coined 'productive incoherence'. Grabel analysed the increasing complexity of the landscape of South-South monetary and financial multilateral institutions, especially at the regional level. Drawing on key concepts from Albert O. Hirschman, she argued that the unfolding of institutional innovations that appear to be incoherent and are often contested may increase the scope for institutional experimentation and, thus, may give rise to alternative forms of economic and social development.

This conceptual framework allows us to present a new perspective on the SML. We explore how and why seemingly incoherent integration efforts may 'productively' enable South-South cooperation. We consider issues of intra-regional asymmetries, rivalry, and hierarchy. We argue that the SML is an example of 'productive incoherence'. The simple institutional setting of this rather diminutive mechanism, closely adjusted to the specific features of the financial aspects of international trade of its member countries, has made it prone to survive all political turmoil of the Mercosur; and, based on mutual confidence building among the central Mercosur central banks, it is a potential vehicle for multilateral forward and backward institutional linkages.

This paper is organised as follows: in section 2, we first introduce the theoretical framework of productive incoherence paying particular attention to its Hirschmanian elements, followed by a systematisation of the technical aspects, commonalities and differences between regional payments systems by presenting a typology of such mechanisms (section 3). In light of this typology, Section 4 presents a brief overview of the technical features and key characteristics of the SML. In section 5, we discuss the oftentimes contested and conflictive, yet strangely productive, creation of the SML. We use official documents and the scarce literature on the mechanism, and triangulate these with interviews with staff members of the central banks of Argentina, Brazil and Uruguay. Section 6 concludes.

'Productive incoherence': Hirschman and the changes in the global financial governance landscape

Grabel (2018) assesses the new and expanding landscape of regional financial and monetary cooperation between EMEs. While she finds this incomplete to replace the existing global financial governance, she analytically understands it as dynamically evolving elements of a complex, dense, and multipolar new financial governance landscape. As such, she argues that, contrary to the standard narrative, this emergent incoherence is productive rather than debilitating. Thus, appreciating the highly experimental nature, especially of recent innovations, she terms the development towards a multipolar global financial governance as one of 'productive incoherence'.

To come to this conclusion, she uses a Hirschmanian approach, that is guided by the principle of 'possibilism'. According to Hirschman, practicing 'possibilism' is a way to 'increase the number of ways in which the occurrence of change can be visualised' (Hirschman 2013, p. 23; see also Wilber and Francis 1986, p. 187). Grabel (2018, p. 191) advances a possibilist view to allow focusing on the potential productiveness of supposedly ineffective and incoherent ad-lib initiatives of regional financial and monetary cooperation: 'The new initiatives provide Hirschmanian opportunities — for learning by doing and learning from others, parallel experimentation, and providential problem solving'.

Grabel (2018) bases her analysis on three Hirschmanian concepts that are central to his reasoning on economic development: First, the widely known idea of forward and backward linkages, where existing production patterns and actor constellations determine a rather unbalanced growth path. Hirschman highlighted the importance of small-scale combinations of production processes or technological inventions for large-scale social change. She takes up this idea to argue that the creation of certain institutions, even unintendedly, may lead to the creation of other institutions. As Birdsall and Rojas-Suarez (2004) highlighted, relationship and trust building through incremental coordination approaches can feed into regional cooperation and practices that enhance economic and financial stability. In that sense, grounds for linkages to the creation of further institutions may be laid even in diminutive initiatives.

Second, she also embraces Hirschman's emphasis on the failure of uniform solutions. The argument is that only by understanding the multiplicity of development paths, instead of single-shaped and uniform policy blueprints, social change may be the result of the complexity, specificity, messiness and contingency of institutions and policies. 'The idea that beliefs, attitudes, and values can be refashioned and moulded by more or less accidentally undertaken practice is put forward here only for the purpose of justifying the existence of alternatives to certain "orderly" sequences' (Hirschman 2013, p. 24).

Thirdly, the centrality of the diminutive, the seemingly not relevant or superficial change, pulls through Hirschman's work as essential to understanding and appraising the potential of supposedly disorderly development paths. 'To look at unbalanced growth means [...] to look at the dynamics of the development process in the small.' (Hirschman 1961, pp. ix) A problem-solving process can have its roots in a very small approach that can initiate dynamics to resolve further stumbling blocks or transform them into forward or backward linkages in the above-mentioned sense. Grabel (2018) underlines the necessity to analyse even very small local initiatives as they might be the building block of the path-dependent reform and change, or the prism for such change on a larger scale (e.g. pp. 161-3; see also Birdsall and Rojas-Suarez 2004).

Later in the paper, (sections 4 and 5), we apply this Hirschmanian reading of current changes in the financial governance landscape to the analysis of the SML. But before this, we introduce the basic mechanisms of regional payments systems, and the variations of different mechanisms.

Regional payment systems: definitions, comparison and a typology

Regional payment systems are international mechanisms designed to facilitate payments between residents of the participating countries. The advantage of this kind of mechanism is not difficult to understand: if a resident of a country, say Bolivia, wishes to buy a good produced in another country, say Nicaragua, the Bolivian resident has to find a way to pay for this good with a currency that is accepted by the Nicaraguan resident. This may be the Nicaraguan córdoba, or a major international reserve currency like the US dollar. In either case, the Bolivian importer has to assume the cost of obtaining a currency different from their own currency in order to pay for the Nicaraguan good. While costs for the individual importer may be small (especially for large enterprises), they increase at the aggregate level, depending on the specific funding conditions for the respective country at a certain moment. Aiming at reducing transaction costs at the level of individual transactions, regional payment systems by definition allow firms in each of the participating countries to settle their transactions with firms in other member countries in their domestic currency.¹

According to Chang (2000), a reduction of foreign currency flows and associated transaction costs can be obtained mainly in two ways. First, the number of transactions is reduced to net final settlement at the end of the period, while transactions of equal value cancel out. Second, temporary liquidity is provided to the deficit countries' central banks by the surplus countries' counterparts, as they allow each other to cancel mutual obligations not immediately, but only at the end of a clearing period. In effect, an efficiently run regional payment system in this simple version may slightly improve the terms of trade for intra-regional trade transactions.

A closer look at past and present regional payment systems shows that a variety of arrangements exist to address the problem of transaction costs in regional trade with a range of different instruments. Since economic literature so far lacks a systematic definition and discussion of regional payment systems, in the following we propose a typology of such systems and give examples. Particular emphasis is placed on the workings of the SML and its nature with regard to our typology.

As indicated in Chang (2000)'s discussion, the primary function of reducing transaction costs in intra-regional trade transactions requires the establishment of a clearing mechanism among the central banks of the participating countries, where trade-related payments are registered. Therefore, at the core of a regional trade-related payment system is the agreement between the member countries' central banks to temporarily extend credit to each other by settling the accumulated net differences periodically.

The degree to which regional payments systems can contribute to reducing transaction costs of intra-regional trade transactions at the aggregate level thus depends on three main criteria and the institutionalised mechanisms established between the involved central banks:

- a *The difference between the gross and net values of trade transactions, and the length of the clearance period:* As a rule, the greater the difference between the number and volume of gross and net transactions, and the longer the clearance period for net surpluses and deficits, the more effective a regional payment system can be in terms of reducing transactions costs in intra-regional trade (Chang, 2000). Additionally, temporary liquidity may arise through the provision of credit by central banks throughout the agreed clearance period.
- b *The currency denomination of the operation and final clearance, and settlement of surpluses and deficits between the central banks:* When the operation and final clearance and settlement between the central banks are conducted not only in international currencies but also (at least partially) in national currencies of the member countries, transaction costs diminish, because central banks do not need to obtain the equivalent volume of foreign currencies for this purpose.
- c *Provision of credit beyond the clearance period:* Additional credit can be provided to deficit member countries through credit lines or swap arrangements on terms agreed between the

member countries' central banks. Depending on the interest rate charged for these mutual credit lines, this can be more advantageous than financing conditions in financial markets.

- d *The additional introduction of a regional unit of account can have two main functions:* First, it may reduce transactions costs in multilateral clearing at the macroeconomic level, as it reduces the number of intra-regional exchange rates to the bilateral exchange rates of each of the currencies towards the regional unit of account. Second, in a more sophisticated arrangement, the unit of account may emerge as an instrument for intra-regional exchange rate cooperation, as it may provide a point of reference for regional coordination of exchange rates.

Table 1 summarises the variety of different objectives and tools associated with regional payment systems, which often go above and beyond the basic goal of reducing transaction costs. Moreover, it also presents examples of different payment systems and their varying configurations.

When discussing the post-World War global monetary order, Keynes proposed a global payment system, which, on the basis of a global currency, should create a balance between net export and net import nations. The Keynes plan did not win, but rather the Bretton Woods order without these balancing mechanisms. But at the European level, the European Payments Union (EPU), which was in place from 1950 to 1958, to be replaced by the European Monetary Agreement, took in some of the elements of this global mechanism. Until today, it is regarded as a role model for fostering regional trade (De Macedo and Eichengreen 2001).

Since then, the regional payments system proliferated especially in Latin America, leaving aside the Asian Clearing Union and some emerging mechanisms in Africa. It is important to note that all of these South-South mechanisms are significantly smaller than their European predecessor. In Latin America, two institutions have been relevant references in terms of institutional learning for the building up of the SML (see also Pérez Caldentey *et al.* 2013). One is the Latin American Agreement on Reciprocal Payments and Credits (CPCR-LAIA by ALADI), founded in 1982 in its current form, and embraces a large number of member countries of the sub-continent. The CPCR-LAIA had its heydays during the 1980s debt crisis, where, as an obligatory mechanism, it allowed the maintenance of intra-regional trade despite repeated and severe US dollar shortages in the region. It went almost out of use since the 1990s, mainly because regional free trade agreements such as the Mercosur did not longer foresee the channelling of intra-regional trade through the mechanism, but also due to the fact that it still contains a clause that the central bank guarantees the final payment. Its use thus engenders significant risk for the central banks involved, as the risk for uncovered debt settled through CPCR is shifted to the central banks of the member countries. Consequently, in the 2000s, the bulk of the operations were Venezuelan imports and Brazilian exports of engineering

Table 1. Comparison of selected regional payment systems.

Initiatives* Objectives	Instruments	Keynes Plan	EPU	CPCR-LAIA	SUCRE	SML
1. Reduction of transaction costs	a) Interlinking of payment systems for direct cross-border transfers	X	X	X	X	X
	b) International trade settling in local currency at the firm level	X	X	X	-	X
2. Saving of foreign reserves	a) Temporary liquidity (clearance period)	X	X	X	X	-
	b) Final settlement in national currencies	X	partially	-	optional	-
	c) Credit lines beyond clearance	X	X	-	intended	-
3. Coordinated adjustment between deficit and surplus countries		X	X	-	intended	-
4. Unit of account		X	X	-	X	-

Source: Fritz *et al.* 2014.

* EPU: European Payments Union; CPCR-LAIA/ALADI: Agreement on Reciprocal Payments and Credits of the Latin American Integration Association; SML: System of Payment in Local Currency; SUCRE: *Sistema Unitario de Compensación Regional*.

services associated with large infrastructure projects, thus involving only a small number of transactions, with the Brazilian central bank covering the payment risk.

The other regional payment system is the SUCRE (Sistema Unitario de Compensación Regional de Pagos; Unified System for Regional Compensation). It was created in 2009 by the member countries of the Bolivarian Alliance for the Peoples of Our America (ALBA); its current members are the Bolivarian Republic of Venezuela, Bolivia, Cuba, Ecuador, Honduras and Nicaragua. The SUCRE initiative has aimed not only at reducing transaction costs in intra-regional trade through the use of domestic currencies but also has been linked to the saving of foreign exchange by allowing delayed settlement of trade transactions. The mechanism has offered the option of settling final net payments of net trade surpluses and deficits in a domestic or international currency (for the case of Ecuador as a dollarized economy, it would be only the US dollar). The establishment of a regional credit fund and adjustment mechanisms to balance intra-regional trade channelled through the system were envisaged, but did not become operational until today. Most prominently, the SUCRE proposed the creation of a regional unit of account, the sucre, to take over the role played currently by the US dollar not only as invoicing regional transactions but also as a means of payment and store of value, in the medium or longer-term. However, the system remained in its very initial steps, having conducted over the years a small number of bilateral operations involving food trade between Cuba, Ecuador and Venezuela. This is due, in part, to the adjustment mechanisms for bilateral exchange rates, which are not designed in a way to reflect market rates, and also to the multiple exchange rate regime in Venezuela, which seems to have created obstacles for the other members (for a more detailed analysis see Fritz *et al* 2014). Seemingly, the mechanism is out of use, last operations officially being reported for the year 2017 (SUCRE *s.d.*).²

The local currency payment system (SML)

Emergence

The Local Currency Payment System, in Portuguese Sistema de Pagamentos em Moeda Local or in Spanish Sistema de Pagos en Moneda Local was an initiative of the central banks of the Mercosur, especially the Brazilian and the Argentinean ones. Its legislation and execution, however, are based on bilateral agreements and legislation between the Mercosur member countries.

The SML between Argentina and Brazil started its operations in October 2008. However, the negotiations of this system had been proposed by the central banks of Argentina and Brazil in 2006. The agreements with the smaller core Mercosur countries took longer: Uruguay and Brazil were negotiating the mechanism since 2009, but they took until October 2014 to start operations. Uruguay and Argentina signed an agreement in 2012 and started effectively in June 2015 (INTAL, 2015). Lastly, Paraguay established an agreement with all three other countries, but operations only started with Brazil in August 2018.

As a high-level Uruguayan central bank member explained, the adherence of Uruguay and Paraguay did take longer, due to the technical standards set by Argentina and Brazil, which confronted the central banks of the smaller countries with compatibility problems they needed to tackle (interview with high-level Uruguayan central bank member, November 2019; see list of interviews in the annex).

Design

The SML's primary purpose is to support bilateral trade by reducing transaction costs, particularly for Small and Medium-sized Enterprises (SMEs), to be achieved by allowing exporters and importers to use their respective currencies in international operations. The SML aims at reducing the dependence of international operations on the US dollar as the dominant currency generally used for invoice, vehicle, and trade settlement purposes.

For this reason, the SML has been designed as a simple payment system that allows the use of the national currency for bilateral trade denomination and settlement between an importer, an exporter, and commercial banks. Consequently, there is no need to exchange, for example, the Brazilian Real for US dollar and then Argentinian Peso (or vice versa).³ Payments are made in local currencies through local banks previously authorised to transfer the operations from private agents to the central banks and vice versa. Although the trading parties and their respective banks only settle payments in local currency, the net settlement of all operations is cleared, usually in US dollars, directly between the two regional central banks involved in this operation.⁴ The use of a central currency for the net settlement of operations is explained by the fact that neither central banks are willing to hold the other's currency in their foreign exchange reserves. Therefore, the reliance on the US dollar is reduced, but the use of this currency cannot be completely discarded. The maximum period for this clearing is three days, but it usually takes just 24 h.

Its use is expected to be favourable, especially to private agents. First, the interbank exchange rate is used for the bilateral exchange in the SML, which, outside the SML, usually is only used for voluminous transactions, i. e. larger firms engaged in international trade. Second, administrative procedures are designed simpler than those for the foreign exchange market in US dollars, reducing transaction costs and the exposure to exchange rate volatility. Currency exchange transaction costs like fees are due only once between the two local currencies. This contrasts with operations in US dollars which charge fees twice. Thus, it should lower both financial and transaction costs for importers and exporters. Finally, as one of the objectives of the SML, it facilitates access for SMEs to regional trade (BCB, 2018). For these smaller firms, the option to pay and receive payments in local currency should represent a significant cost reduction.

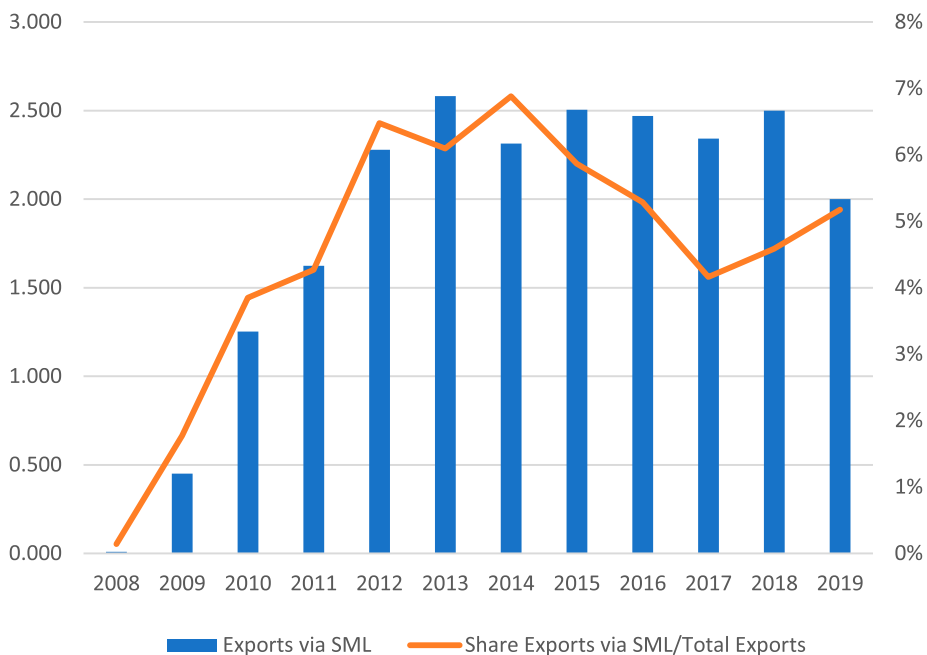


Figure 1. Source: Own elaboration based on data from Central Bank of Brazil (<https://www.bcb.gov.br/estabilidadefinanceira/sml>); on Time Series Management System of Central Bank of Brazil for exchange rates of US\$ to BRL; and on bilateral trade volumes from MDIC (<http://www.mdic.gov.br/>) (BCB, n.d.).

Scope

The mechanism started with a limited number of operations and trade volume. Yet, the bilateral trade between Argentina and Brazil increased slowly, but steadily over the first years. The trade volume operated via SML since 2012 is over 2 billion Brazilian Reais (BRL) (see [Figure 1](#)). The total number of operations channelled through the SML, grew up from roughly 1,200 operations in 2008 to around 9,000–11,000 operations per year since 2012 (see [table 2](#)). Measured in terms of intra-regional trade share, it has aggregated since 2012 between five and seven percent of Brazil's exports to neighbouring Argentina. This is a small share of Brazilian overall exports, bearing in mind that Argentina accounts for roughly seven to eight percent of total trade; for Argentina, Brazil is a bigger commercial partner, with relative shares of 20–25 percent of imports, and 15–20 percent of exports during this time.

Bilateral trade between Brazil and Uruguay, and between Brazil and Paraguay also shows an increasing share of operations channelled via SML, yet at an even lower relative level, compared to trade between Argentina and Brazil (see [Figure 2](#), and [table 3](#) in the Appendix).

Due to its targeting towards SMEs, both the Argentinean and the Brazilian central banks estimate the potential use at a maximum of 10% of bilateral trade, which is the SME share of trade between Argentina and Brazil (interview with high-level BCRA member, March 2018, and interview with high-level BCB member, August 2018e). From this perspective, a level of use of around six to seven percent, after launching and at least until 2016, in terms of Brazilian exports, as shown in [Figure 1](#), is not so far from this target. In fact, according to [Fazio \(2013\)](#), 72% of the operations had a volume smaller than 500,000 US\$. Regarding sectoral distribution, there is a concentration on the car and car parts sector, textiles and leather, household appliances, and food products.⁵ A second explanation is that this mechanism is attractive mostly for trade operations that are not credit-funded, which applies to less than 30% of intraregional trade. Credit-financed trade gives firms more time to pay their obligations. Yet, due to the significant interest rate differential between the US dollar and local currencies, credit denominated in US\$ is significantly more advantageous for firms than in domestic currency. Once the operation is financed in US\$, debtor firms would face an exchange rate risk using the SML, where the operation is settled in domestic currency.

One peculiar aspect of the SML is its highly asymmetric use. When we look at the operations channelled through the SML between Argentina and Brazil, surprisingly more than 98% of all operations are Brazilian exports over the complete period of existence (see [table 2](#) in the annex).

According to our interviews (with high-level BCRA member in 2018, and 2019; and with high-level BCB members, August 2017a, b, c and August 2018a, d), the main reason for this asymmetry is the structural differences of the financial market in both countries, especially the use of the dollar at the domestic level. Whereas in Brazil the domestic use of the dollar has been largely avoided, dollarisation is widespread in Argentina which reduces the incentive of Argentinean exporters to denominate their exports in the Argentinean peso. In the case of the bilateral trade channel between Brazil and Uruguay, opened in 2014, the use of the SML mechanism is much more balanced: almost 40% of the operations are realised by Uruguayan exporters (see [tables 3.a](#) and [3.b](#) in Annex).

In sum, the above section has shown the key features of the SML as a simple payment mechanism. Despite its recent stagnation, overall small size, and central tensions, conflicts, and contradictions in this implementation and operation, we argue the SML is a good example of what [Gabel \(2018\)](#) denominated 'productive incoherence'. It's a short description of this concept and its Hirschmanian roots which we turn to next.

The SML as an example of productive incoherence

We apply a Hirschmanian perspective on the multiple linkages for institution building through trust building, on the particular and regionally adjusted design of this regional payments system, and on the centrality of the diminutive, in terms of the simplicity and small scope of the SML. We argue that

the SML could be realised not despite, but exactly because of its simple and limited ambitions. The SML represents the first step of monetary cooperation ever taken within the Mercosur. At the same time, the SML has been gradually established and expanded within the context of a heavily troubled Mercosur, in its general terms of regional economic integration and harmonisation of trade rules. Following the analytical structure of this paper, we develop our argument along three dimensions of the SML: its emergence, design, and scope.

Emergence

To understand the significance of the SML, one needs to consider the context within which it was implemented. After some initial declarations and successes, Mercosur integration was lastingly interrupted by Brazil's unilateral maxi-devaluation of its currency at the beginning of 1999. Brazil, which was suffering from an acute foreign exchange liquidity shortage, let its currency float freely, without even informing Argentinean or any other neighbouring central bank (interview with high-level BCRA member, March 2018). This was not only fatal to all efforts of deepening regional integration within the Mercosur, which since then never came back to the same level of intra-regional trade and pace of further integration steps but also showed the total lack of commitment for collaboration in the key field of monetary coordination, despite its decisive effects on bilateral trade at least until the end of the 1990s.

In this troubled economic and political context, the SML represented the first step of mutual trust and confidence building, both on the political and technical level of central bank cooperation. As discussed above, one of the main objectives of the SML is to support and promote regional trade integration between countries in the Mercosur. However, the SML is not just a technical project. Although SML was an initiative of analysts and technicians from the Argentinean and Brazilian central banks, its implementation had great support from the former presidents of Brazil and Argentina, Luiz Inácio Lula da Silva and Nestor Kirchner, respectively. Lula called this agreement 'a good start' despite its small size (Folha de Sao Paulo, 2009). Thus, one may understand that behind the rationales for the SML creation was a greater political objective of promoting cooperation between Mercosur members.

Implementing the SML in this small-scale and gradual way contributed significantly to incrementally increasing mutual knowledge and learning at the central bank level on the respective institutions, regulations and processes, up to details such as the timing of payments system processing. A process described by the BCRA representative as the first experience of central bank cooperation without competition. 'It was the first and highly peculiar experience of collaboration among central banks, working on a small project with no high flying aims and without competition, but creating a real process of integration' (Interview with high-level BCRA member, March 2018; all quotes from interviews translated from Spanish or Portuguese by the authors). Another interviewee from BCRA noted, 'We experienced increasing mutual knowledge on institutions and processes at the other side, up to time schedules of payment system processing, and with this, we created sound mutual confidence' (Interview with technical BCRA member, November 2019). These reflections of the involved actors confirm the idea of Hirschmanian opportunities for learning by doing for mutual confidence building, but also by specialised literature on regional financial cooperation mechanisms (Birdsall and Rojas Suarez, 2004) that such small-scale regional cooperation arrangements provide an important learning ground for regional policy co-ordination beyond intra-regional trade.

Our interviews also showed that the sequenced integration of member countries allowed for parallel experimentation and problem-solving instead of uniform institution-building. For instance, the first SML agreement between Argentina and Brazil states that the trade operation must be denominated in the currency of the exporting country. In Uruguay and Paraguay, these arrangements are more flexible, as the invoice currency can be either the currency of the importer or the exporter. Additionally, whilst the SML with Argentina only allows users to send and receive trade-related

transactions and pensions, the more recent agreements involving Uruguay and Paraguay allow users also to send and receive unilateral transfers, i.e. remittances. In line with Hirschman's and Grabel's work, these incremental adaptations to the requirements of the member countries were crucial to secure the buy-in and capability of all member countries, and thus, to increase the eventual productivity of the mechanism.

Design

Against this background of generally increasing conflicts and diminishing cooperation within the Mercosur, and the until then non-existing cooperation between the major Mercosur central banks in their key areas such as monetary and exchange rate policies or financial sector regulation and supervision, it certainly helped that cooperation started with such a 'diminutive' design, in the Hirschmanian sense introduced above. It was precisely the simplicity of this payment system that allowed the implementation of the SML across the three types of participants involved in the transaction.

First, from the perspective of the central banks, interviews with representatives from the Argentinean, Brazilian and Uruguayan central banks involved in the setting up of the SML confirm the idea that the simplicity of the mechanism was a necessary condition for institution building and expansion, i.e. to allow the SML to fit the national payment systems in the Mercosur countries. As discussed in section 3, a key guiding principle on both sides was that it had to be a simple system in the sense that it should create no costs and no risks for the central banks involved. This was crucial to secure the buy-in from all national central banks involved, in particular the Brazilian one which was loath to take on any credit risk for its trading partners.

'For example, there is that CPR-LAIA, which is everything we don't want, because this is an operation in which you transfer the risks from the private operator to the monetary authority. [...] the risks were transferred to the BC. [...] And the SML doesn't. The SML is a system where everyone takes their own risk. We only pay if we receive it. The SML is like a TED [bank transfer] here in Brazil, that is, you get paid if the other party pays. [...] So, what is our risk? I don't say any, but tending to zero.' (Interview with high-level BCB member, August 2018b)

It was a strong guiding principle for the two major central banks that no guarantees, or contingent liabilities for the central banks, should be involved in the SML as was the case in the older regional payment system of ALADI, the CPR-LAIA (see [Table 1](#)). For successful institution-building, the BCRA representative reported, it was key to distance the mechanism from competing and highly politicised ideas of financial regionalism within the Western hemisphere (see [Armijo, 2012](#)). The principle of 'no costs, no risks' was given high priority by all participating central banks, as a high-level BCRA representative who had participated in the design of the mechanism expressed. Therefore, SML remained a simple clearing mechanism with short-term clearing periods, without providing central bank guarantees for bilateral payments and/or credit for the intra-regional debtor country through longer clearance periods, and without establishing a unit of account as a potential starting point for a regional currency.

Second, the simplicity of such a payment system is also crucial to allow commercial banks to operate with the SML in the context of their national payment systems. Its compatibility with the private banking systems as well as the automatization of the operation are key to allow banks to offer this service, particularly when considering the costs related to the necessary personnel to operate with the SML payments (Interview with Brazilian Commercial Bank, July 2019).

Finally, and most importantly, the SML must be simple enough to attract SMEs, given that they are generally too small to deal with high-risk, complex transactions (Interview with Brazilian Export Company, July 2019). Therefore, the simplicity of the SML was not only an important 'productive' feature for central banks but also the other stakeholders such as the participating firms (SMEs) and commercial banks.

Scope

In the same vein, it is important to note that operators of the SML – particularly on the Brazilian side – were adamant to stress that the SML, did not aim at currency internationalisation, i.e. establishing local currencies as medium of exchange, unit of account, and store of value in the region (Interview with high-level BCB member, August 2017a and 2018b, c). Given the Brazilian Real's dominant role in SML operations any notion that these could be aimed at making the Brazilian currency the leading currency of the region, could have been met with political and economic resistance on behalf of the regional partners. The purposively limited and seemingly unambitious scope of the SML was important to limit such resistance and enable its small – yet successful – implementation.

This also holds true for the explicit focus on Small and Medium-Sized Companies as the main user group of the SML. As set out in section 3, the SML replaces foreign exchange services provided by the banking system with local currency operations for the user community, whereas settlement takes place between the respective central banks. Interview partners indicated that transaction fees could be up to 50% less in SML in comparison to normal Forex operations. At the same time, though, banks remain the key intermediaries for SML operations. Thus, the willingness of the banks to provide SML services is a key condition for the functioning of the SML. Arguably, only the explicit focus on SMEs made this possible: SMEs' traditionally have limited access to foreign exchange services and engage very little in cross-border operations. Thus, the loss of foreign exchange revenue for the banks would be rather insignificant, increasing the likelihood of their participation in the system.⁶

Regarding the Hirschmanian concept of linkages, the SML, despite its small nature, has the potential to lay the ground for important forward and backward linkages to sustain regional monetary integration efforts. The careful, simple, and sequential nature of the SML was crucial to ensure buy-in from national central banks, enable mutual learning and confidence building, and create the possibility for adaptive learning, especially for smaller member countries as well as incrementally adapting the mechanism to the region's needs.

This is the case for example for the potential inclusion of further countries outside of the Mercosur, i.e. its associated members. One example of the preparation of such linkage is the inclusion of an additional clause in the Bilateral Free Trade Agreement (FTA) between Brazil and Chile that authorises direct negotiation between the respective central banks, which may ease Chile's future membership in the SML.

Furthermore, we assume that trust building could provide fruitful grounds to grow further linkages that are again part of a seemingly incoherent and at the same time productive regional cooperation dynamic: There were negotiations after the global financial crisis in 2009 and again in 2014, to establish a bilateral swap arrangement between Argentina and Brazil, strictly conditioned towards bilateral trade finance in periods of foreign exchange shortage, and thus deepening trade financing cooperation of the SML between the two central banks. However, with negotiations almost concluded, Brazil withdrew. Instead, both Argentina and Brazil agreed on a bilateral swap arrangement with China each, which, in the case of Argentina, was renewed in 2014 (INTAL 2014; La Nación 2014), and again in 2020 (Mühlich *et al.* 2021). Even if in this case, there was no institutional link, in other circumstances, such an agreement could be made based on the SML.

Conclusion

Applying a Hirschmanian perspective on institution building in development, the Sistema de Pagos en Moeda Local (SML) can be seen as an exception within the landscape of competing and often failed Latin American regionalism. Within the context of an agonising Mercosur, this regional payment mechanism for regional trade did not only survive, but it is experiencing incremental changes and expansions until today. Starting with the two major member countries, it gradually included all other Mercosur members over the course of the past ten years. This incremental

enlargement allowed for parallel experimentation, mutual learning, and the building of trust between central banks in a troubled regional economic trade project. As such, SML may provide grounds for important forward and backward linkages.

On the surface, the SML is a very small and simple payment mechanism, also when compared to other regional payment schemes which emerged during the twentieth century. It does not provide any credit facilities to relieve foreign exchange reserve shortages or a regional currency temporarily. Its sole purpose is to allow importers and exporters within the Mercosur to settle their contracts with their domestic currencies, without requiring further transactions in US dollars. Yet, based on our Hirschmanian perspective and Ilene Grabel's recent work on 'productive incoherence,' we show that the diminutive and simple nature of the SML is not a sign of its failure. On the contrary, the SML's diminutive nature and its simplicity were crucial to remove resistance in the context of contested economic regionalism in Latin America. At the same time, its limited scope has ensured buy-in from key stakeholders: first, for the involved central banks it has been key not to incur any economic or political risks; and second, its focus on SMEs allowed it to overcome strong private sector interests, in particular those of the financial sector. Following Grabel (2018), our analysis thus shows that the SML is a typical case of a seemingly 'unproductive' and 'incoherent' institutional development, which can play an important role in regional governance. While it appears to be a small mechanism of limited stretch and usability, it is an important ingredient for supporting SMEs in engaging in regional trade, and for establishing and expanding Mercosur's monetary cooperation in the future.

This case study also demonstrates that it is worthwhile to study the 'development of the small'. Given the constraints on large-scale structural transformation in southern countries, the Hirschmanian approach to look for what he called 'hidden rationalities' in small, specific areas, and to detect their potential linkages proves to be useful.

Although a greater integration of Mercosur countries and beyond was not a primary objective of the SML, it is clear the importance of the SML in creating potential forward and backward linkages to enable increased regional monetary cooperation and integration. The ground for at least selective expansion of the SML beyond the Mercosur core countries is laid; and, even if a first initiative failed, the mutual confidence building between the central banks may provide room for further monetary and financial cooperation, such as the agreement of mutual central bank swaps to provide liquidity for trade in local currencies in times of foreign exchange shortage, or the creation of digital currencies to be traded amongst the regional central banks. The current political alignment of the Argentinean and the Brazilian government provides the chance to use the SML as a platform for deepening cooperation in these fields.

This case study also supports a broader research programme for the careful assessment of the appropriateness of regional and multilateral institutions in an increasingly multipolar world. When existing global institutions and the global financial architecture are limited in providing global stability, a more precise understanding of its multifaceted components is required. The case study also demonstrates the fundamental need for a profound analysis of the shape of local and regional markets, institutional settings, and actors' interests to understand these highly diverse mechanisms.

Notes

1. The transaction is realised as follows: when there is agreement between the central bank or the exporter in country A and the central bank or the importer in country B to channel a trade transaction through a payment system, the importer in country B will pay in currency B to central bank B while the exporter in country A will be paid in currency A by central bank A. These payments are frequently made through commercial banks, at the time of the goods' boarding, and the buyer and producer pay and are paid, respectively, in their own currencies, using their own domestic banking systems.
2. For a more extended comparative introduction to these regional mechanisms, see Fritz et al. 2014.

3. Given the lack of market liquidity (demand and supply) among peripheral currencies, the US dollar is generally used for the purpose of currency triangulation, i.e. to use the US dollar as a vehicle to trade two currencies that cannot be directly exchanged for one another.
4. In theory this could create an exchange rate risk for the central banks. However, given the diminutive nature of the SML, this is currently not a concern for the monetary authorities.
5. This sectoral distribution, however, indicates that not all firms using the mechanism can be accounted as SMEs; see also Urbietta 2018, p. 33).
6. Though we also find in other research, that the lack of interest of banks to offer SML services remains a key limiting factor on its expansion. Moreover, empirical evidence shows that rather than SMEs, key users of the system are transnationals which operate their intra-industry trade via the SML.

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Bibliography

- Alami, I., et al., 2022. International financial subordination: a critical research agenda. *Review of International Political Economy*, 1–27, Online first. doi:10.1080/09692290.2022.2098359.
- Armijo, L.E. 2012. *Equality and Multilateral Financial Cooperation in the Americas*. (Working Paper Series No. 29). Desigualdades.net - Research Network on Interdependent Inequalities in Latin America. http://www.desigualdades.net/Resources/Working_Paper/29_WP_Armijo_online.pdf.
- Banco Central do Brasil (BCB). 2018. *Sistema de Pagamentos em Moeda Local – Introdução*. <http://www.bcb.gov.br/rex/sml/1-introducao.asp>.
- BCB. n.d. *Sistema de pagamentos em moeda local – estatísticas*. <http://www.bcb.gov.br/rex/sml/5-smlestat.asp>.
- Birdsall, N., and Rojas-Suarez, L., 2004. *Financing development: the power of regionalism*. Washington, DC: Center for Global Development.
- Bonizzi, B., 2017. An alternative post-keynesian framework for understanding capital flows to emerging markets. *Journal of Economic Issues*, 15 (1), 137–62.
- Chang, R., 2000. *Regional monetary arrangements for developing countries*. (Working Paper). <https://www.g24.org/wp-content/uploads/2014/03/210.pdf>.
- De Macedo, J.B., and Eichengreen, B. 2001. *The European Payments Union: History and implications for the evolution of the international financial architecture*. OECD Development Centre. <http://jbmacedo.com/oecd/triffin.html>.
- De Paula, L.F., Fritz, B., and Prates, D.M., 2017. Keynes at the periphery: currency hierarchy and challenges for economic policy in emerging economies. *Journal of Post Keynesian Economics*, 40 (2), 183–202.

- Eichengreen, B., 2019. Two views of the international monetary system. *Intereconomics*, 54 (4), 233–6. <https://www.intereconomics.eu/contents/year/2019/number/4/article/two-views-of-the-international-monetary-system.html>.
- Fazio, A. 2013. *Sistemas de Pago: Una Perspectiva Regional* [PowerPoint slides]. Banco Central de la República Argentina. <https://docplayer.es/71373064-Sistema-de-pagos-en-moneda-local-argentina-brasil.html>.
- Folha de Sao Paulo. 2009. *Usar moneda local entre BRICs*. <https://www1.folha.uol.com.br/fsp/dinheiro/fi1806200929.htm>.
- Fritz, B., Biancarelli, A., and Mühlich, L., 2014. Sistemas regionales de pago. Una perspectiva comparativa sobre Europa y el mundo en vías de desarrollo. *El Trimestre Económico*, 81 (324), 875–908. <https://www.eltrimestreeconomico.com.mx/index.php/te/article/view/133/369#info>.
- Fritz, B., and Mühlich, L., 2015. Varieties of regional monetary cooperation: a tool for reducing volatility in developing economies? *Contemporary Politics*, 21 (2), 127–44.
- Gabel, I., 2018. *When things don't fall apart. global governance and developmental finance in an Age of productive incoherence*. Cambridge, MA: MIT Press.
- Hirschman, A.O., 1961 (1958). *The strategy of economic development (paperback edition)*. New Haven: Yale University Press.
- Hirschman, A.O., 2013. *The essential hirschman* (ed. by Adelman, J.). Berlin: DeGruyter.
- Institute for the Integration of Latin America and the Caribbean (INTAL), 2014. Sistema de Pagos en Moneda Local Brasil-Uruguay y swap Argentina-China. Carta Mensual INTAL, 226, noviembre.
- INTAL. 2015. Sistema de Pagos en Moneda Local entre Argentina y Uruguay. Carta Mensual INTAL No. 226, junio. http://www19.iadb.org/intal/Cartamensual/Cartas/PDF/226/es/CartaMensual226_Bloques%20de%20Integraci%C3%B3n_Mercosur_Art1.pdf.
- Kaltenbrunner, A., and Paineira, J.P., 2015. Developing countries' changing nature of financial integration and new forms of external vulnerability: the Brazilian experience. *Cambridge Journal of Economics*, 39, 1281–306.
- Kanenguiser, M. 2014, March 15. Promueven un swap con Brasil para el comercio. *La Nación*. <https://www.lanacion.com.ar/economia/promueven-un-swap-con-brasil-para-el-comercio-nid1672387/>.
- Mühlich, L., and Fritz, B., 2018. Safety for whom? The scattered global financial safety net and the role of regional financial arrangements. *Open Economies Review*, 29 (9), 981–1001.
- Mühlich, L., Fritz, B., and Kring, W., 2021. *Towards the marginalization of multilateral crisis finance? The global financial safety Net and COVID-19*. GEGI policy brief 015. Boston, MA: Global Development Policy Center. https://www.bu.edu/gdp/files/2021/04/GEGI_GFSN_PB_Apr_2021.pdf.
- Ocampo, J.A. 2018. *Resetting the International Monetary (Non)System*. Wider Studies in Development Economics. <https://global.oup.com/academic/product/resetting-the-international-monetary-nonsystem-9780198718116?cc=us&lang=en&#>.
- Orsi, B. 2019. *Currency internationalization and currency hierarchy in emerging economies: the role of the Brazilian real* [Unpublished doctoral dissertation]. University of Leeds.
- Pasin, M.C. s.d. *Cooperación financiera entre Bancos Centrales: potenciando el comercio intrarregional y reduciendo la incertidumbre y riesgo cambiario: Sistema de Pagos en Monedas Locales (SML)*. https://www.cepal.org/sites/default/files/news/files/05-cristina_pasin.pdf.
- Pastrana, E.D., 2013. Why regionalism has failed in Latin America: lack of stateness as an important factor for failure of sovereignty transfer in integration projects. *Contexto Internacional*, 35 (2), 443–469.
- Pérez Caldentey, E., Titelman, D., and Cipoletta Tomassian, G., 2013. *Sistema de pagos transnacionales vigentes en América Latina: ALADI, SML y SUCRE* (Series No. 245). CEPAL, Naciones Unidas. https://www.cepal.org/sites/default/files/publication/files/36882/LCL3692_es.pdf.
- Prates, D.M., and Andrade, R., 2013. Exchange rate dynamics in a peripheral monetary economy. *Journal of Post Keynesian Economics*, 35 (3), 399–416.
- Sistema unitario de compensación regional de pagos (SUCRE). s.d. Retrieved from <http://www.sucrealba.org>. Accessed July 7, 2021.
- Urbieta, N.O., 2018. *Sistema de pagos en moneda local (SML): Alcances y desafíos en la Integración Regional*. *Boletín del Observatorio de Comercio Internacional*, 2 (3), 31–15 https://issuu.com/gabrieltextis1/docs/boci_2018.
- Van Klaveren, A. 2018. *El eterno retorno del regionalismo latinoamericano*. Nueva Sociedad, 275. <https://nuso.org/articulo/el-eterno-retorno-del-regionalismo-latinoamericano/>.
- Wilber, C.K., and Francis, S., 1986. The methodological basis of hirschman's development economics: pattern model vs general laws. *World Development*, 14 (2), 181–94.