Introduction

This study proceeds from the analysis of the thought of Walter Bagehot, as expressed 1873 in his book "Lombard Street. A Description of the Money Market".

We consider this work from the point of view of the theoretical approach to the basic characteristics of money which it indirectly implies, rather than from an economic history perspective. This kind of examination is not common with reference to this author. Usually, the way in which Bagehot's contribution has been seen is limited to the description of a monetary policy manoeuvre called "lender of last resort", well known to all central banks in the world, and to academicians in all branches of economics, as a fundamental part of financial crisis management.

The reason why an examination of Bagehot's thought was started with the precise aim to investigate his contribution as a theorist is to be found in the gap between the practice of central banking and the theory of money. A view inspired by this author might fill the gap, since Bagehot's ability to actually and also nowadays reflect and present the principles of successful central banking can be concretely shown and acknowledged.

Outside the traditional interpretation of the "lenderoflastresort" function, Bagehot's lesson is that no fixed quantity of money supply can be nor should it be guaranteed in practice. From the famous Peel Act on, every such law – when promulgated - has been suspended in times of money market stress, in order to avoid panic, and the case of the Federal Reserve in the 1920's, our starting issue, is the actual proof of Bagehot's effectuality.

Orthodox theory has not changed much in substance since Bagehot's time, rather, it has just become consolidated. And, as Bagehot already observed at his time, the practice of successful central banking radically differs from mainstream theory. Since it is this practice which essentially decides the financial markets' fortune, it seems extremely important to observe and interpret it correctly. The difficulty to escape the limitations of theory led Bagehot to avoid the hindrances of theory entirely, and to write a book directly about the praxis of the Bank of England. The direct observation of "practice" seems to have given him that special freedom of judgement, which is now for us such a precious inheritance.

Consequently, his clarity of views offers an essential instrument to interpret today's central banking, and to grasp the principles implicit in the most successful policy tradition.

Most important, "Lombard Street" seems to hide also a precise analytical view on money, which can be organised in a peculiar theory approach.

The need for innovation in monetary theory, with an academic world centred on the perfectly solved concept of a fixed money supply, and a practice of central banking largely avoiding it (for obvious reasons), is very much felt. The creation and consolidation of an alternative theory approach able to meet the reality of central banks can both strengthen successful central banking, by anchoring and securing the principles expressed in its "hidden" traditions, and empower less successful central banks, which cannot count on long experience and tradition.

Like at Bagehot's time, and actually in place of Bagehot himself, we break the taboo around "Lombard Street", and try to extract from this work the alternative theory approach Bagehot indirectly worked for, reconciling real central banking and deductive methodology. Thus, we will not only directly observe the praxis, but also indirectly investigate it further through the eyes of the author who proved to be a master in its interpretation.

By trying to obtain a new theoretical approach to money, able to suit the praxis of successful central banking, we take Bagehot as the guide and the source. We think his "practical book", instead of being a pure empirical investigation, has been keeping the potential for a new theory for so long, and can now be decoded.

1. A fundamental question separates this work from others, dealing with the content of "Lombard Street". While under the traditional

view Bagehot discovers crisis management, we believe Bagehot's talent is instead to "see" the unique function money holds in the system, to represent it as the most pure macroeconomic element for the connection of markets, and to translate his knowledge into money market management.

His understanding of the function of money, the core question in monetary theory and policy, has no precedent in the history of economic thought. A new tradition of theory can begin, being based on the concept of open money supply.

2.

Bagehot is the unimpaired analyst of financial crises. His advice has been standardised and followed by every single central bank in the world, via a praxis currently called "lender of last resort". Notwithstanding the efficiency of the LOLR manoeuvre, widely established in all well-developed countries, financial crises and panics continue to occur in Third World countries, letting entire credit and economic systems fall into calamity status.

By analysing Bagehot's work, we perceive we have to widen our look beyond LOLR, to understand what his work has to offer.

Is Bagehot's work about understanding fundamental principles contained in, or better: hidden behind the central banking practice of his time, and also respected by the best central banking in our times? Does Lombard Street hint at a theory, which has not yet been considered and elaborated? Does the observance of this implicit theory represent the true gap between monetary and premonetary economies, successful and unsuccessful central banking?

Under Bagehot's criteria, orthodox economic theory reveals to be a "pre-monetary" view. By holding and spreading its principles we might indirectly hinder new developing countries from becoming full monetary systems.

Our thesis, developed in this paper, is the following:

- Bagehot has more to offer to the economic community than a counter-manoeuvre against mounting panic;
- the most successful central banking works in practice according to the principles he describes (and implies) in his work;

- no monetary theory approach yet succeeded in grasping and systemising these principles; they remain unknown to the less experienced economies in our capitalist system; they also remain unknown to the central banks themselves, even though actually using them in their everyday business, since central banks formally adhere to mainstream thinking;
- the principles we are looking for are hidden in central banking experience and practice;
- Bagehot's work is the key to analyse successful central banking, to be translated into a new approach to money theory, able to found financial stability in monetary economies, and therefore also the optimal understanding of the rules of modern capitalism.

3. We are searching for the theoretical principles, which can be actually considered responsible for successful central banking.

The distance between Bagehot's work and orthodox money theory, professed by both the academic community and – lacking alternatives - the central banks, can be efficiently evidenced by focussing on the "money market" concept.

In Bagehot's words¹:

- "That (foreign) cash is not, so to speak, 'money market money': it is not attainable. (..) But the English money is 'borrowable' money."
- "In this constant and chronic borrowing, Lombard Street is the great go-between. It is a sort of standing broker between the quiet saving districts of the country and the active employing districts."
- "This organisation is so useful because it is so easily adjusted. (..) But in ordinary countries this is a slow process (..)".

Bagehot describes money inside the money market, as the link between savings and investment. It is attainable cash, and relies on fast and adjustable mechanisms. No laissez-faire or "hidden hand" rules.

Central banks are the crucial subject. Not only is the central bank a bank, and acts as the main participant in the money market. More-

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¹ Lombard Street, "Introductory", p.5 and ff.

over, it is definitely described as the centre of all markets²: "All banks depend on the Bank of England, and all merchants depend on some banker". This is the priority given to monetary policy, its importance and the deriving role.

The money market, and therefore the action of the central bank, is the hardly understood ring necessary to complete the powerful and delicate chain of credit. It is the part of the economic transmissionmechanisms which must be made extremely agile (i.e. discretionary) in order to serve the health of the banking system, at the very heart of modern capitalism.

Money is represented here as the macroeconomic link between markets, to be carefully protected.

Mainstream monetary theory can be divided into two major schools of thought. Both start by defining money as a good, and assigning to the money market a residuary role against the markets for goods.

Quantity Theory and Monetarism, which together make the Currency School, seek to eliminate the central bank's discretionary power and to exercise control over money supply by fixing it to a definite amount/percentage of income. Far from being seen as the money market instrument per excellence, as in Bagehot's work, the issue of notes is considered a dangerous bureaucracy leverage in the hands of idle political classes, mainly used against the healthy economic interests of the country. The economic interests of the country are represented by the markets for goods. The same approach aims to control the credit multiplier, in order to automatically limit the effects of money supply over the credit flowing into the markets, with the goal of controlling inflationary onsets.

Money is represented as a dangerous tool, to be bound and controlled.

The Banking School, the second direction in the infinitely penduling discussion about monetary theory, looks to the interests of commercial banking, it defends the "right" of commercial banks to borrow and lend without curbs. This school assumes the stability of

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² LS, p.35.

real values, hypothesising that the real system of values floats around a given equilibrium. Panics become irrelevant under this perspective. The occurrence of financial crises is considered innocuous, and even therapeutic, as they are considered able to free the forces enabling the return of nominal prices to their real basis. This argument has been denounced as an error with the name of "real-bills' fallacy", but it still characterises this approach³.

The Banking School represents the interests of credit, and superficially tries to free money from the currency cage.

Both schools argue in favour of automatic rules of policy, a view ultimately due to their common root of belonging to the General Equilibrium context, thus representing the economy through the "goods" and money as a veil.

By placing the priority on money itself, Bagehot overcomes this vision. His focus on panic works as a demonstration element, exemplification and parabola highlighting the urgency for the right working of money (markets). He doesn't mean (only) to cure panics, much further he originates and envisions the money market management concept itself, based on the right framing of the money function, in an economy which can in fact be called monetary.

Money can, according to Bagehot, express macro-systemic relevance, as the Currency School aims in vain. He can evidence the micro/market relevance of credit, as the best traditions of the Banking School have tried, otherwise losing every link with concrete economic reality.

By far more fertile is the theory link to Keynes, as we explain in Ch. 4. The elements of innovation in Bagehot's work concur to strengthen the critique of Say's Law, on the path already evidenced by Keynes.

Otherwise, since Bagehot completely avoids any theoretical reference, so actually escaping the General Equilibrium frame, his work allows to attribute a fully (pro-)positive meaning to money, thus enabling to radically redefine the money function in theory and pol-

³ Since the disrupting effects of a crisis are not recognised, one school denies the incidence of any effect (currency), and the other appreciates them as positive (banking).

icy. In our understanding, Bagehot is able to trace a positive monetary approach to the optimal resource employment in a monetary economy. This approach is founded on an open money supply and on its effect on credit stability and growth. It is able to reach the convergence of investment and savings, which Keynes searches for, without losing the money path, and without recurring to a Statebudget and public finance solution.

The function of money and the management of the money market are huge contributions to the understanding of capitalism by the author who can be said to be the first to describe a monetary economy. Bagehot's work offers a modern monetary approach to understand present capitalism, a unique path towards economic stability, and the only stable mechanism able to make finance capital work as a leverage for economic development.

4.

There has been an underlying belief in the thought of Prof. Riese as I learned to know it, i.e., opposite to the well-known principle of neo-classics: "we need a micro-economic theory founding macro-economics", he believes we need a macro-economic theory founding the micro-principles instead.

Bagehot's work is precisely about giving new foundations to macroeconomics.

What we finally learn, is that money is pure trust, it is the main connection element (connection=trust) between immaterial and material, i.e. between the individual and the collective elements ruling economics. Trust is recognised as the immaterial element bonding economic materiality (market mechanisms). (Bagehot's) Money management consists of the management of trust, every single element of money management is about implementing trust principles. Moreover, the role of a central bank, the main money market agent, escapes from individual (the Bank's) gain maximisation, for the benefit of the whole system.

Bagehot's merit is to understand the need for trust as the connecting energy of markets, and to implicitly criticise individual gain maximisation as the optimal and only goal and measure for economic activity.

The unknown side of macroeconomics lies probably in this unexplored horizon outside individual advantage and connecting individual decisions to an advantage for the whole. It's not clear how it works in detail, and which behaviour it engenders (microeconomics). However, starting from Bagehot's contribution, we are interested in a further development of this issue towards a deeper knowledge of macroeconomic as well as microeconomic theory.

Introduction to the chapters

Ch. 1

The first chapter immediately faces the "ceiling question", the main obstacle to a radical dismissal of mainstream monetary theory. We argue against any ceiling imposition over money supply, a concept conciliating with no concrete and no successful central banking practice. The case of the US Federal Reserve policy around the 1929 crash is discussed as a major example and evidence. The barter nature of every currency-school-derived theory approach can be further revealed by discussing the practice of successful central banking. The inability of central banks to explain their concrete practice through the theoretical principles of mainstream economics, the gap between their practice and their statements is being analysed, with the conclusion that it clearly signals the need for a new reference in its theoretical approach.

Ch. 2

An introduction to Bagehot's "Lombard Street", supporting the formulation of a theory of money redefining the concept of a monetary economy, thus restating priorities in the structure of a new approach to the theory of money. The mainstream approach to money is unable to express the specificity of modern finance; it represents more a barter status of the economy than a modern monetary one (Quantity Theory of Money, Currency School), or it cannot distinguish money from credit (Banking School).

Three main arguments are issued:

- the autonomy of the money market, revealing the difference of this market from the market for goods and from the one for credit; on the basis of this element we can conceive a different goal for monetary policy and found a theory of money adequate to monetary economies;
- the existence of a clear solution of continuity between modern financial capitalism (monetary system) and other historically and theoretically defined economic systems; on this element we can arrive at a new definition of a "monetary economy" (which will be advanced in Ch. 3 and refined in Ch. 4);

 a new interpretation of Bagehot's prescriptions towards larger central bank reserves for growing financial systems, helps avoiding the historical errors by the author and better shaping the original efficacy of "Lombard Street" in terms of internal coherence.

Ch. 3

The aim of the chapter is to introduce a new definition of the money function. With the fundamental guide of the revised definition of what a monetary economy actually is, we can look farther into the structure and needs of credit. Beyond mainstream models of credit equilibrium and autonomy, we hypothesise and explore the subordination of the credit market under the money market, justifying the need for money. Given the absence of an autonomous equilibrium inside the credit market, the latter requires stabilisation, which is provided through the action of the money market as described by Bagehot.

The second key under which the need for money is being explored in this chapter is the "convertibility" concept. Convertibility of commercial banks' deposits in legal tender makes up the basis for the most fundamental contract in a monetary economy, implemented through the paper⁴ money emission by the central bank. The redefinition of the money function makes a second important contribution our paper can offer. By re-evaluating the panic in the perspective of an indication of the needs felt by a modern credit system, we discover the potential of Bagehot's concept of "extraordinary" money demand. This shows up during panics, but also every time the trust level sinks inside the credit environment, and always in a misgoverned money market, where maximum and irremediable instability is performed. The concept of extraordinary demand for money makes explicit and reveals the instability intrinsic in money demand.

The money function is described by the (rare) ability of an asset to satisfy the extraordinary demand. It can be expressed through the function of "means of payment" for the system, revealing the uniqueness of money, i.e. its difference in liquidity and acceptance in front of every other asset. Consequently, in a cycle, the definition

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^{4 &}quot;fiat" money.

of liquidity unequivocally proves to depend on the procedure adopted for the issue of money.

Open-ended money supply reflects and represents at the same time

- the nature of money, inside a monetary economy,
- the central bank function,
- the condition of existence of the money market, and
- the macroeconomic condition of stability for the (whole) system.

When money fails to be governed by the right management, providing and assuring both existence and stability, its uniqueness and liquidity become also nil.

Ch. 4

This chapter connects the different contributions deriving from our analysis of Bagehot's work into a more precise path towards the "open money supply" approach.

An attempt is made to anchor Bagehot's principles to a general and macroeconomic vision of money, under the guidance of the path traced by the features of a monetary economy, as we redefine it. The new theoretical approach starts with the same critique of Say's Law which introduces Keynes' "General Theory". Bagehot's ability to deepen and concentrate on the positive function of money - since money is neither considered a veil nor an obstacle to growth - and on the needs of a monetary system, makes it possible to progress on a fully monetary path. The macroeconomic environment thus unveiled, expresses the power and the duties of monetary policy, and leads further towards the reconsideration of macroeconomic foundations.

Ch. 5

Going back to the traditional interpretation of Bagehot's, we can definitely review the "lender of last resort" concept, with the help of mainstream definitions and of papers specifically selected from the recent literature on financial crises. By investigating arguments and concepts which mainly influence the results of the reviewed papers, we try to discover why the current interpretation of panics is so limited and "light", although reality hits with so hard examples (Mex-

ico, Asia, Argentina). We verify that none of the analysed studies can realistically introduce the element of "contagion".

In the second part of the chapter we use our analysis in order to formulate an economic model expressing Bagehot's working rules, i.e. a realistic monetary system. This model includes only the money and the credit markets, i.e. strictly the financial sphere. A frame is conceived, which conjectures a realistic (and dramatic) transmission mechanism of contagion according to Bagehot and to our analysis of credit relationships. According to our new money function definition, an unsatisfied money demand lets liquidity preference explode and credit markets collapse. The model exemplifies the way the system is unmistakably destroyed by fixing the money supply. The equation for money supply expressed in Bagehot's terms, represents the existence and stability condition of the system, at whichever level of money demand expressed by the system.

This model further helps identifying Bagehot's contribution towards a money theory for monetary economies, consequently supplying a universally understandable guide and well-identifiable criteria for successful central banking management.