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**Currency hierarchy, monetary sovereignty and  
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# Currency hierarchy, monetary sovereignty and macroeconomic policy autonomy: a framework based on the French Monetary Institutionalism and the Regulation School

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## Abstract

The macroeconomic dilemmas faced by both the peripheral economies of Latin America and Asia and the peripheral countries of the euro area have brought to light the importance of analysing the relationship among currency hierarchy, monetary sovereignty and macroeconomic policy autonomy. Yet, most of the literature has focused on the nexus between two of these aspects: on the one side, the currency hierarchy and the macroeconomic policy autonomy; on the other side, the monetary sovereignty and this autonomy. This paper aims to devise an analytical framework on such relationship in the post-Bretton Woods International Monetary and Financial System (IMFS) on the basis of two intertwined approaches developed by French scholars: the French Monetary Institutionalism and the Regulation School. These approaches will allow us to: (i) develop the concept of monetary sovereignty regime that is historically determined and featured by institutional regularities, and (ii) draw up an analytical framework on the relationship among currency hierarchy, monetary sovereignty regime and macroeconomic policy autonomy in the current IMFS that could be used to undertake comparative case studies in the future.

**Key words:** Monetary sovereignty; Currency hierarchy; French Monetary Institutionalism, Regulation school.

**JEL Classification:** E42, E61, F3, F4.

## 1 Introduction

Asian and Latin-American peripheral countries<sup>3</sup> have engaged in the current international monetary and financial system (IMFS) by opening their capital accounts since the 1990s, becoming ‘emerging economies’. In this setting, the nature of these countries’ external vulnerability has changed. Although current account and, specially, terms-of-trade shocks have remained relevant, particularly in commodity dependent economies, the monetary and financial dimensions of the centre-periphery relationship have increasingly gained weight due to the features of these system - the fiduciary dollar as the key currency, floating exchange rates and financial globalization.

The monetary asymmetry is a consequence of the so-called currency hierarchy, which refers to the hierarchical structure of an IMFS anchored in a key-currency stressed by Keynes (1930, 1944)<sup>4</sup>. The key currency (currently, the US dollar) has a privileged position and is placed at the top of the hierarchy as it performs at the international level the functions of money (means of payment, unit of account and reserve

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(3) The concept of peripheral countries was proposed by Prebisch (1949), the founding father of the structuralist approach according to which it is impossible to analyse the dynamics of developing countries independently of their position within the world economy. ‘Peripheral capitalism’ has a quite different dynamic from that of nations which developed earlier and became the ‘centre’ of the world economy. This is the idea underlying the concept of an inherently hierarchical ‘center-periphery’ international economic system featured by productive and technological asymmetries between centre and peripheral countries.

(4) Keynes developed this idea in the Treatise on Money (Keynes, 1930) and in his preparatory works for the Bretton Woods Conference (Keynes, 1944).

of value). The currencies issued by the other centre countries or regions (such as the yen and the euro) are in intermediate positions as they are also international currencies, demanded as means of denomination of contracts and as a store of value, yet on a smaller degree than the dollar. At the opposite end are the currencies issued by peripheral economies, which are incapable of fulfilling those functions at an international scale, even marginally (Paula et al., 2017).

This monetary asymmetry is intertwined with the financial asymmetries, which refers to the magnitude and patterns of international capital flows to peripheral economies. Capital flows towards peripheral emerging economies depend mainly on exogenous sources, which render them permanently vulnerable to their reversal by virtue of changes in the monetary conditions of centre countries, as well as by the increase in risk aversion of global investors. Despite the residual nature of capital flows directed to those economies, their potentially destabilizing effects on their financial markets and exchange rates are significant, since the volume allocated by global investors is not marginal in relation to the size of these markets. As Ocampo (2001) stresses, centre economies are global financial cycle makers, while peripheral emerging economies are global financial cycle takers

The overlapping monetary and financial asymmetries result in a macroeconomic asymmetry (Ocampo, 2001), namely, a lower macroeconomic policy autonomy (i.e., policy space) of peripheral emerging economies in comparison to centre economies. In face of the higher vulnerability to the inherent volatility of the capital flows and the exchange rate, in general the macroeconomic policy in peripheral emerging economies needs to be subordinated to the financing of the balance of payments or to curb such volatility<sup>5</sup>.

At the same time, the sovereign debt crisis of the peripheral countries of the European Monetary Union (EMU) revealed that the substitution of their national currency for the euro has also ensue a loss of autonomy to adopt countercyclical policies in response to those crises. Scholars not only from economics (e.g., Wray, 2005; Arestis; Sawyer, 2011; Aglietta, 2012; Dullien; Schwarzer, 2011), but also from other fields of knowledge (such as sociology, law, and international political economy; e.g. Dodd, 2010, Zimmermann, 2013 and Cohen, 2012) have argued that such loss of autonomy was caused by the abandonment of the so-called monetary sovereignty<sup>6</sup>. Conversely, such substitution has allowed these countries to climb the hierarchy that resulted in lower interest rates (both in the sovereign debt and the credit markets), relaxing the constrains on growth and increasing their degree of macroeconomic policy autonomy. This means that from the adoption of the euro to the global financial crisis of 2008 they enjoyed a higher policy space.

Then, as Prates (2017) and Lo Vuolo and Marques Pereira (2018) stress, the dilemmas faced by these two groups of peripheral nations in the current IMFS has brought to light the importance of analysing the relationship among the currency hierarchy, the monetary sovereignty and the macroeconomic policy autonomy. Yet, up to now, the literature both in economics and in international political economy has focused on the nexus between only two of these aspects: on the one side, the currency hierarchy and the macroeconomic policy autonomy; on the other side, the monetary sovereignty and this autonomy.

This paper endorses the hypotheses of those scholars and aims to devise an analytical framework on such relationship on the basis of two intertwined approaches developed by heterodox French scholars:

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(5) For a detailed analysis of the monetary, financial and macroeconomic asymmetries, see Andrade and Prates (2013) and Paula et al. (2017).

(6) It is worth mentioning that in many texts the concept of MS is taken for granted, i.e., it is not defined.

the French Monetary Institutionalism and the Regulation School<sup>7</sup>. These approaches will allow us to: (i) develop the concept of monetary sovereignty regime that is historically determined and featured by institutional regularities (second section); (ii) draw up an analytical framework on the relationship among currency hierarchy, monetary sovereignty regime and macroeconomic policy autonomy in the current IMFS that could be used to undertake comparative case studies in the future (third section). In the last section, besides summarizing the main arguments of the paper, we present the next step of our research, namely, the use of such framework as an analytical tool of future comparative works based on country case studies that would allow us to identify ‘ideal types’ of economies with different capacities to maintain a certain degree of monetary sovereignty.

## **2 Monetary sovereignty regime as one pillar of the regulation modes: a conceptualization based on the French Monetary Institutionalism and the Regulation School**

The FMI is an interdisciplinary and institutional approach on money<sup>8</sup> according to which, money is a social invention present in almost all societies. Such approach refuses all value theories and supports that the market economy presupposes money, not the other way around.<sup>9</sup> (Théret, 2008). As Alary et al. (2016) summarizes: “Money is an institution, a social relation of a superior order whose complexity cannot be seized integrally within a mono-disciplinary framework” (p. 8; authors’ translation).

A key concept of the FMI is the tripod “debt, sovereignty and confidence” from which the concept of sovereign money arises. In the case of the democratic societies in the contemporary capitalism such tripod express itself in a complex monetary institutional framework that is anchored on what Théret (2008) calls ‘the three functional forms of money’ (account, monetization and payment). These forms reveal their presence under three different states: account is mental; issuing rules are institutional; instruments of payment are material. This means that money is simultaneously embodied, institutionalized and objectified.

The starting point of such framework is the definition by the state (the sovereign) of a sole unit of account. Such unit of account is the precondition for the constitution of an accounting and payment system where the cornerstone institution is the currency issued by the central bank. Such system is a dynamic network of debts that are refinanced and extinguished through different means of payments (besides the central bank money, the private credit moneys issued by commercial banks), enabling the reproduction of the economy and the society and constituting a payment community. Such reproduction, in turn, requires the confidence on money that assumes three forms – ethical, hierarchical and methodical<sup>10</sup> – associated to the different states of money (respectively, embodied, institutionalized and objectified).

In the case of the ethical confidence, money is accepted because it is distributed in accordance with ethical values and norms founding the community in which money is valuable, which implies that working rules of the monetary regime are legitimate. As Marques Pereira (2012) proposes based on Théret’s approach, such type of confidence requires a social agreement on the unit of account defined by the state

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(7) Some scholars have contributed to both approaches, among which M Aglietta, B. Théret and J. Marques Pereira.

(8) In this paper, the English words “money” and “currency” will be used as synonymous.

(9) The endeavour to build such approach encompass many scholars from different fields of the social sciences (economics, sociology, anthropology, political science, linguistics) who launch a common research agenda in a multidisciplinary seminar on “currency sovereignty and legitimacy” that took place over 1993-1995. For a historical trajectory of the emergence and consolidation of the FMI, see Alary et al. (2016). Some remarkable works of the FMI are: Aglietta and Órlean (1998; 2002); Théret (2008); Aglietta et al. (2016).

(10) According to Théret (2008), these forms would correspond to the english words ‘confidence, credibility and trust’. Théret (2017) uses these words to refer to the french terms ‘*confiance methodique, confiance hierarchique and confiance éthique*’ and translate “*confiance*” as “social faith”. We prefer to keep with the french original terms.

(the political government) as the monetary sign of the value of the various types of income. The hierarchical confidence is based on the superior position of the central bank in the payment system as the issuer of the state money that settles bank's debts in the interbank market and the lender of last resort, ensuring the smooth functioning of this system. Finally, the methodical confidence is due to mimetic behaviour by which an individual routinely accepts money because others do the same, with everyone believing that it will be accepted tomorrow and the day after tomorrow at today's value (Théret, 2008; 2017; Aglietta et al., 2016)<sup>11</sup>.

Although the methodical confidence expresses the intertwining of daily credit and debit relationships, the normal working of the payment system it is not sufficient for a currency to be sovereign, i.e., recognized as an authority, accepted for all the agents. In the majority of countries in the contemporary capitalism, the sovereign currency is set on a democratic and constitutional order (expression of ethical principles and values of the society) that legitimize the state as public power, hence ensuring the ethical confidence and the central bank as a public institution that guarantees the hierarchical confidence in the currency (Aglietta et al., 2016).

Based on these key ideas of the FMI summarized above, Blanc (2001) supports that according to such approach on money “the sovereign order of the currency cannot be reduced necessarily to a sovereignty engraved in the state constitution. Juridical sovereignty is only one of its aspects” (p. 2)<sup>12</sup>. Consequently, monetary sovereignty, defined as a specific field of the sovereignty of a political authority (i.e., sovereignty in the monetary sphere), should be distinguished in two levels: the primary one and the superior or absolute one. The primary level would be necessary and sufficient to characterize the monetary sovereignty, encompassing four elements: (i) the existence of a *territorial political authority* that asserts itself as sovereign in monetary matters in a specific space; (ii) the definition by such authority of an *unit of account*; (iii) the possibility of this authority to withdrawal a sovereign income (*seigniorage*) involving defining a set of means of payments used for paying the sovereign authority; (iv) the establishment and spread of a *monetary symbology* as a mark of the sovereignty<sup>13</sup>. Yet, there are other additional elements that could make the monetary sovereignty absolute or superior in the sense of the sovereign having total control of the monetary order. They refer to the will and capacity to: (i) control the monetary practices (account and payment)<sup>14</sup> (ii) conduct the monetary policy; (iii) control the conversion mechanisms between the domestic and foreign currencies; (iv) conduct the exchange rate policy.

According to Blanc (2011), the primary level provides the pre-conditions for the exercise of the monetary sovereignty in the absolute level; i.e., it implies a ‘capacity of the state to’ conduct the monetary and exchange rate policies and control the practices in the monetary and exchange rate markets. This capacity corresponds to a principle of sovereignty. However, in its actual exercise, it may not be entirely verified either because the sovereign authority is perceived as illegitimate by private agents and/or because of a set of constraints that restricts it. A long-lasting institutionalization (i.e., the institutional regularity) of a certain organization of the monetary sovereignty results in a monetary sovereignty regime.

The conceptualization proposed by Blanc (2011) enables to analyse the monetary sovereignty in a historical perspective, revealing that the differences regarding the capacity of the state to exercise such sovereignty (i.e., to reach the superior or absolute level that encompasses the autonomy of the monetary and

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(11) The methodical confidence corresponds to the Keynesian conventional behavior.

(12) This is a key difference between the FMI and the neo-chartalist approach (Wray, 2005), which claims that money is purely a state creation.

(13) The first level has some elements in common with the definition of the neo-chartalist approach (Wray, 2015).

(14) For instance, instruments of indexation, acceptance of certain means of payment.

exchange rates policies) take different forms according to the time, place, kinds of political power and perceived constraints.

Therefore, it provides important clues to understand the relationship between monetary sovereignty and macroeconomic policy autonomy<sup>15</sup> in the current setting. However, in order to depict our analytical framework, which also includes the currency hierarchy, additional steps should be taken. Although Blanc (2011) stresses the spatial and temporal variations in the capacity of the state to exercise the monetary sovereignty, he does not specify the factors that shape such capacity in a determined historical period, resulting in a variety of what can be called monetary sovereignty regime. The idea of an institutional regularity of these factors brings us back to the regulation school approach and its key concepts of institutional forms that make up the regulation mode and accumulation regime. Such concepts will allow us to identify the constraints faced by the states (the political authority in capitalism) in the exercise of the monetary sovereignty.

Three of these institutional forms shape the monetary sovereignty regime inasmuch they influence the capacity of the state to manage the macroeconomic policy autonomously<sup>16</sup> and to regulate the monetary and the currency markets. The first one is the international regime, specially to the IMFS - featured by both an exchange rate arrangement and a capital mobility level. The specific combination of these two elements results in a degree of autonomy of such policy as well as in a higher or lower capacity of regulating the currency market (see next section). The second one is the monetary-financial regime characterized by a certain degree of domestic regulation of these markets, and two key relationships: one between the central bank (or another financial supervision authority) and the financial market and one between the treasury (the political government) and the central bank, the latter considered to be the cornerstone of the connection between the monetary and the political sovereignty. Then, one could say that a third institutional form – the state/society nexus – is underlying the monetary sovereignty regime.

During the Fordist regulation mode, the Bretton Woods system was featured by fixed (but adjustable) exchange rates and low capital mobility. At the same time, the monetary-financial regime was characterized by a broad domestic regulation of the monetary and currency markets and the central bank could buy Treasury securities in the primary market in most countries. Other key element of such regime was the role of the central bank as lender of last resort and regulator of the financial system. All these features resulted in monetary sovereignty regime<sup>17</sup> that guaranteed a high degree of macroeconomic policy autonomy. Moreover, they were pre-conditions for what Boyer (1993), following Hicks (1955) calls ‘the labour-standard’ that required the monetary and credit expansions and/or currency devaluations to enable ex ante wage increases indexed on productivity. Then, this regulation mode encompassed a monetary sovereignty regime coherent with the Fordist accumulation regime where the wage-labour nexus was the superior one in the hierarchy of institutional forms<sup>18</sup>.

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(15) In our framework, we focus on two macroeconomic policies: the exchange rate and the monetary policies.

(16) This means that the management of these policies aims at attaining domestic objectives, without being subordinate to the balance of payment equilibrium.

(17) We refer to an ‘ideal type’ featured by the predominant characteristics of the monetary sovereign regime in each regulation mode. In practice, there are differences in the monetary sovereignty regime in force in each country.

(18) Based on Boyer (1993), one can support that in the Fordism a monetary sovereignty regime was institutionalized in which the ethical confidence in the currency was anchored on a particular democratic constitutional order that was the welfare state. The hierarchical confidence in the currency was based on the labour-standard in which the value of money (in terms of goods and services) was dependent on the unit of wage; and the methodical confidence stemmed from the stability of a capital accumulation regime driven by the expansion of final consumption enabled by the increase in employment and wages.

The current monetary sovereignty regime, focus of this paper, is one pillar of the post-Fordist development mode anchored in a financed-led (or financed-dominated) accumulation regime (Boyer, 2000). While the primary level of the monetary sovereignty (as defined by Blanc) did not change in relation to the Fordist regime, there has been important changes at the superior level that results in the control of the whole monetary order. Besides the change in the institutional forms shaping this regime, the hierarchy among them has shifted: the monetary-financial regime has assumed the central role.

Such regime is featured by a deregulated monetary and currency market due to the widespread external and internal financial liberalization. The central bank has kept its role of lender of last resort and regulator of the financial system, which is key to prevent (alongside the monetary policy) the emergence of financial bubbles that could result in financial crisis, jeopardizing the very accumulation regime. Yet, the treasury-central bank relationship went through a crucial change. In most countries the central bank is prohibited to buy treasury bonds in the primary market<sup>19</sup> and also to use other instruments to monetary financing public deficits. It is only allowed to buy/sell treasury securities in the secondary market, which are used in monetary policy operations. At the same time, the treasuries need to finance the fiscal deficits in the public debt markets.

Such institutional arrangement corresponds to a new state/society relation in which states are under scrutiny of financial markets that attach great importance to restraint public borrowing within strict limits<sup>20</sup>. In this setting, to maintain credibility and sustain the private financing of public debts, states need to comply with rules (e.g., maximum levels of fiscal balance/GNP and public debt/GNP) imposed by these markets exactly to limit their role<sup>21</sup>. These rules stem from the dominant ideology (neoliberalism) and theory (the new macroeconomic consensus) that are orchestrated by the agents, resulting in an institutionalised commitment with those rules.

Herein it is important to make some remarks on an important statement by Aglietta et al. (2016) regarding the treasury-central bank relationship that is strictly connected to the state/society nexus. Based on the FMI, these authors support that this relationship is organic inasmuch “the state guarantees the capital of the central bank, who guarantees the predominance of the public debt as counterpart of the collective wealth. This leads the central bank to legitimately keep the public debt out of the market in stressful situations in which financial markets obsessed with liquidity are no longer able to produce differentiated valuations of different types of debt. The public debt of a sovereign and no-defaulting state is safe from default because the state has the ultimate ability to monetize its debt, *sine qua non* condition for sovereignty” (p. 89, authors’ translation).

In capitalist societies where the state is the sovereign, such relationship has an imminent historical character, assuming different institutional features in each regulation mode. During Fordism, the monetary financing of the public debt was part of the regular operation of the monetary sovereignty regime. Currently, despite such type of financing being legally or conventionally prohibited, most states still have the ultimate ability to monetize their debt. The relationship of this ability and the neoliberal institutionalised commitment in force is paradoxical. On the one hand, it has become a “taboo” (Farhi, 2014) and could not be exercised in practice. On the other hand, it has a subliminal influence in the credibility of the public debt in the eyes of private creditors as such debt is safe from default in last resort. The importance of this influence is brought to light in the debt crisis of the peripheral economies of the euro area (see next section).

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(19) Canada is one exception. For more details, see Lavoie (2013).

(20) For details on this relation, see Boyer (2000).

(21) Streeck (2014) also calls attention for such change that has resulted in a ‘debt state’, which replaced the ‘tax State’.

Regarding the international dimension, the post-Bretton Woods IMFS - characterized by the fiduciary dollar as the key currency, floating exchange rates and financial globalization - is extremely unstable, with capital flows, exchange rates, interest rates and assets prices subject to large short-run fluctuations and a high degree of contagion (Chesnais, 1996; Harvey, 1999; Boyer, 2000).

The interplay of the above mentioned three institutional forms in the post-Fordist setting has resulted in new monetary sovereignty regime featured by a lower capacity of the state to exercise such sovereignty in comparison to the Fordist regulation mode. Then, we are supporting herein that both the regulation of the monetary and currency markets and the macroeconomic policy autonomy are smaller than in the previous regime. This is a key difference between the monetary sovereignty regimes in the two regulation modes. Yet, such capacity over the current regulation mode will vary between central and peripheral economies due to their different insertion in a hierarchical world economy (Aglietta 1998). One key pillar of such economy is the post-Bretton woods' IMFS. However, the regulation school does not consider, at least explicitly, a feature of this system that has been a research topic of a growing number of post-Keynesians recently, the currency hierarchy, the third element of our analytical framework.

The inclusion of the concept of currency hierarchy in our analysis of the monetary sovereignty is fully coherent with the theoretical perspective followed hitherto. Although the international dimension of money has not been a main topic of the FMI, Michel Aglietta, one of the founding fathers of this approach, has important contributions for the understanding on the dynamics of the IMFS anchored in a key-currency and its implications for the exercise of the monetary sovereignty. Despite not using the concept of currency hierarchy he highlights the hierarchical feature of the current IMF and its consequences for the countries that do not issue international currencies in some works<sup>22</sup>.

In Aglietta (1986), the key idea of the FMI, the ambivalence of money, leads the author to introduce “the key-currency as one hierarchical monetary principle apt to reconcile the contradictory tendencies of money in international relations in the absence of supranational monetary institutions” (authors' translation). Taking this principle as starting point, he draws theoretically the shortcomings of an IMF based on a key-currency and shows how they are present in the post-Bretton Woods system. He also calls attention for the higher vulnerability of developing countries (that corresponds to what we call peripheral economies) to the endogenous creation of international liquidity as they do not issue international currencies and cannot borrow abroad in their own currency, and for the lower monetary policy autonomy they face in this system independently of the exchange rate regime. Therefore, he points to what many years later the Keynesian-structuralist approach would call ‘impossible duality’<sup>23</sup> and ‘monetary, financial and macroeconomic asymmetries’, and the mainstream economics ‘dilemma’ (Rey, 2015) and ‘original sin’ (Eichengreen et al., 2003)

More recently, Aglietta et al. (2016) return to the analysis of the IMFS on the basis of the tripod ‘debt-sovereignty-confidence’, coming to the same conclusions. They argue that in face of the inexistence of a universal sovereignty, the IMFS is necessarily organized around a dominant currency, resulting in a hierarchical system with a sole form of ultimate liquidity. In the current system, the US Treasury bonds perform the role of such collective good, providing liquidity and security for global investors especially in moments of high uncertainty; in other words, these bonds have become the stability axis of the total debts structure within the international payment system. This supremacy of the US dollar “perpetuates an unbalanced international monetary system that generates asymmetries” (p. 374) with regard to the balance

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(22) Aglietta (1979) and Aglietta and Deusy-Fournier (1994) also focus on the thematic of currency internationalisation.

(23) Such term was originally proposed by Flassbeck (2002).



of payment adjustment and to the macroeconomic policy autonomy (the so-called exorbitant privilege). In this setting, the peripheral economies “do not have the room for manoeuvre”, i.e., macroeconomic policy autonomy, as “their monetary and exchange rate policies should respond to the decision of the Federal Reserve” and “their fiscal policies should be sustainable in the eyes of the financial markets” (p. 377).

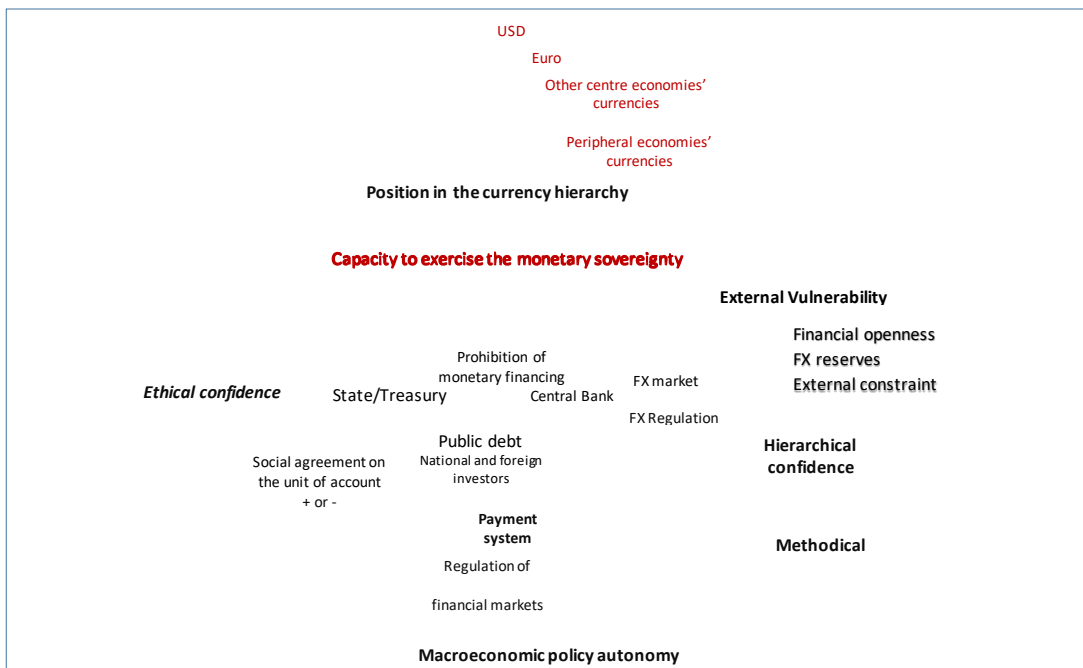
### 3 Currency hierarchy, monetary sovereignty regime and macroeconomic policy autonomy in the post-Fordism: an analytical framework

We have now the main elements to present our approach on the relationship among currency hierarchy, monetary sovereignty and macroeconomic policy autonomy in the post-Fordist regulation mode. As in the FMI perspective the monetary sovereignty is anchored in the three forms of confidence, it is necessary as well to include them in the framework.

As depicted in Figure 1, in the current monetary sovereignty regime, the US - issuer of the key currency - has the maximum capacity to exercise the monetary sovereignty and, hence, the uttermost macroeconomic policy autonomy. For the other countries that have a high degree of financial openness (pre-condition for being part of the financial globalization), the capacity of exercising the monetary sovereignty is smaller than in the previous regulation mode due to the specific features of the monetary-financial regime and the IMFS detailed in the previous section. Yet, the lower the position of their currency in the currency hierarchy, the lower is such capacity.

Figure 1

Currency hierarchy, monetary sovereignty regime and macroeconomic policy autonomy of in the current IMFS



Source: Author's elaboration based on Aglietta and Orléan (1998), Blanc (2011), Théret (2008), and Marques Pereira (2012).

In central countries that have their national currency<sup>24</sup>, positioned at an intermediate level of the currency hierarchy, this capacity is greater, i.e., they have a greater ability to reach the superior level of monetary sovereignty than the peripheral ones. As those countries are issuers of international currencies, they do not face currency mismatches and are less vulnerable to the inherent volatility of global capital flows. Consequently, their macroeconomic policy is not subordinated to the financing of the balance of payment or to the need to reduce the exchange rate volatility<sup>25</sup>. This means that these countries have greater macroeconomic policy autonomy as they could use their policy tools to achieve domestic aims (e.g., economic growth, high level of employment and/or price stability), which enhance the three levels of confidence in the domestic currency.

In the case of peripheral economies, issuers of non-international currencies, placed at lowest level in the currency hierarchy, the position in such hierarchy influences their capacity of exercising the monetary sovereignty mainly through the currency market. As Théret (2017) points out, at the scale of a national community of account and payments, money is a claim on the community which cannot be compensated (and sold) but solely lent and gifted, being associated to a territorial sovereignty. Outside the community, there is no more sovereignty, and a money can be exchanged (sold) against another money (i.e., the foreign currencies). These exchanges take place at the currency market where the exchange rates are determined<sup>26</sup> and where, in the current IMFS, national currencies have become object of speculation (i.e., financial assets), being “evaluated in function of the degree of confidence they inspire in financial operators that is based on the presumed ability of the monetary authorities to honour the public and private external debt” (Théret, 2008, p. 281).

Such authorities are the central banks that are responsible for the exchange rate and monetary policies, issuer of the ultimate liquidity and regulator of the currency market and the payment system. In the current setting of financial globalization, the central banks of peripheral economies should be able to provide liquidity in foreign currencies not only to honour the external debt (denominated in foreign currencies), but also other types of external liability, such as the non-resident portfolio investments in the domestic treasury bonds and private securities.

Moreover, as in those economies the network of debts encompasses foreign currencies (mainly, the key-currency) both the hierarchical and methodical confidences depend on the capacity of the central bank to maintain a smooth operation of the currency market, curbing the exchange rate volatility and, consequently, the uncertainty about the trajectory of the key-currency price. The lower this capacity, the greater will be the necessity to adopt pro-cyclical monetary and fiscal policies (i.e., increase the interest rate and the fiscal surplus) to prevent a huge depreciation of the national currency in moments of capital outflows (i.e., flight to the key-currency) associated to a rise in the risk aversion in the international financial markets and/or a change in the US monetary policy. The ethical confidence could also be impaired in such moments if this depreciation puts in question the social agreement on the unit of account defined by the state<sup>27</sup>.

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(24) The case of the euro area countries will be analysed later in this section.

(25) Ramos (2017) shows that the exchange rate volatility is lower in centre economies in comparison to the peripheral ones that adopt flexible exchange rate regimes (currently, the majority of them).

(26) In the case of peripheral economies, the exchange rate is measured in an indirect way, i.e., it is the price of the foreign currency, usually, the key currency (US dollar) with exception of the eastern and central Europe countries that adopted the euro as reference.

(27) The experience of Latin-America countries in the 1980s revealed that the speculative attack does not need to take place to undermine such social agreement; the uncertainty regarding the future value of the key-currency could be sufficient to undermine the ethical confidence. The case of Brazil analysed in the next section is an example of a developing country that had already gone through this situation and sought to increase its capacity to exercise the monetary sovereignty through the reduction of its external vulnerability.

Therefore, we need to identify the factors shaping the capacity of the central bank to guarantee the confidence in the currency market that varies between peripheral economies. As proposed in Figure 1, these factors are: the foreign exchange (FX) reserves that refer to the liquidity in foreign currency of the Central Bank; the financial openness degree; and the presence and dimension of the external constraint (i.e., current account deficit). The interplay of these factors will condition the balance of payment balance (positive or negative flow of foreign currency) and the gross external liability (the potential demand for foreign currency). In the current IMF a country without such constraint but with a high financial openness degree could accumulate these liabilities and become vulnerable to a huge capital outflow that could result in a currency crisis. Moreover, the residents also have the possibility of shifting the composition of their portfolio in favour of investments abroad in international currencies. In this context, the precautionary strategy of accumulating FX reserves (that depends on the exchange rate policy) is of paramount importance to reduce the country external vulnerability<sup>28</sup>.

Then, the aforementioned factors could reinforce or mitigate the negative impact of the position at the currency hierarchy on the macroeconomic policy autonomy and the three levels of confidence on money. A country with a lower financial openness degree (due to the adoption of capital account regulations) is less vulnerable to the portfolio decisions of non-resident and resident investors, which increases such autonomy<sup>29</sup>. The veto power of these investors over the macroeconomic policy (e.g., if the government does not meet the targets regarding the fiscal indicators) would be also reduced. In this setting, the central bank has as well a greater capacity to guarantee the regular operation of the currency and monetary markets, i.e., the payment system in the foreign and domestic currencies, enhancing the hierarchical confidence. At the same time, the methodical confidence is also boosted as the routine of payments becomes less susceptible to disruptive movements fostered by a capital flight. Moreover, the very increase in the macroeconomic policy autonomy reinforces these confidences. The ethical confidence could also be strengthened if, for instance, such autonomy is employed to enable or consolidate a new development model that reflects the consensus of the society on the distribution of the different types of income whose monetary symbol is the unit of account<sup>30</sup>.

While the financial openness degree is a policy variable, the external constraint stems from a set of external and internal factors. Besides the exchange rate policy, it depends on the international scenario (mainly the capital flows cycle, the external demand and the commodity prices) and the accumulation regime whose interplay will shape the current account performance<sup>31</sup>. The better this performance, the lower the dependence on capital flows to finance the balance of payments, enhancing the macroeconomic policy autonomy. Conversely, a high financial openness degree and a great external constraint narrow down such autonomy and could impair the three levels of confidence.

The currency hierarchy could as well influence the macroeconomic policy autonomy through two other factors that differ among peripheral economies. The first one is the institutional features of the currency and financial markets, among which their degree of regulation and deepness. The second factor is the

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(28) On the precautionary demand for reserves, see Andrade and Prates (2013)

(29) Many studies show the positive effect of capital account regulation on the macroeconomic policy autonomy of peripheral economies. For instance, see: Epstein, Grabel and Jomo (2005); Baumann and Gallagher (2012); Fritz and Prates (2014)

(30) One example is the resolution of the monetary and currency crisis of Argentina in 2001/2002 that resulted in the exclusion of the country of the international financial market. See Marques Pereira (2007).

(31) For an analyse of the interplay of these factors in the case of Mexico, Brazil and Argentina, see Marques Pereira (2001, 2012, 2017)

relationship between the treasury and the central bank that is affected by the non-international character of peripheral economies' currencies through at least three channels

Firstly, as already mentioned, this character results in the necessity of building up a huge stock of FX reserves whose sterilization mechanism could have a greater or lower impact in the public debt. Secondly, it also explains why part of some peripheral economies' public debt is an external debt, denominated in the key-currency and, hence, that could not be ultimately monetized. This has two consequences. The exchange rate variations (that is higher in these economies) impact the public sector balance sheet due to the resulting currency mismatch. The same impact takes place if part of the domestic public debt is denominated in foreign currency. Thirdly, if non-resident investors hold a relevant share of the domestic public debt, although such debt could be monetarized in last resort, the country still needs to have FX reserves to guarantee the convertibility of the domestic currency in the key-currency. All these channels reinforce the importance of these reserves in preserving the hierarchical and methodical confidences.

Besides peripheral economies, the case of the European Monetary Union's (EMU) countries also has specificities. The euro is a regional currency that has become the second most important of the current IMFS, just below the US dollar<sup>32</sup> (see Figure 1). This means that the countries of the EMU climbed the currency hierarchy when they abandoned their national currencies and adopted the euro. According to our framework, that would result in a greater macroeconomic policy autonomy. Hence, the benefits in terms of such autonomy would be greater for the peripheral countries of the EMU, whose currencies were positioned at lower levels of such hierarchy than the ones of the central countries. Germany would not be especially favoured since the Deutsch Mark was the runner up to the dollar before the adoption of the euro, although the German currency did not perform an international role as the euro<sup>33</sup>.

Conversely, many scholars support that the euro is not a sovereign currency (Aglietta et al., 2016; Wray, 2015). The lack of monetary sovereignty would constrain the macroeconomic policy autonomy and would be one key explanation for the debt crisis in the periphery of the EMU as the states do not have the economic policy tools either to avoid the contagion effect of the global financial crisis or to curb its adverse impacts on the economic activity.

We supported herein a different perspective, namely, that the euro is a sovereign currency, but without a sovereign state. In our perspective, the monetary sovereignty was taken over by non-democratic institutions, the European Central Bank (ECB) and the Economic and Financial Affairs Council (Ecofin), which have become the sovereign, i.e., the true political authority over money. Moreover, in the EMU original institutional architecture two key pillars of the monetary sovereignty regime in the post-Fordism were not present: the organic relationship between the political authority and the central bank was broken as the ECB could not buy/sell the national treasury bonds neither in primary nor in the secondary markets; and the constitutional treaty of the central bank did not permit it to perform the role of lender of last resort. To be able to respond to the debt crisis of the EMU periphery and avoid a banking crisis that could put in question the confidence on the euro, the European monetary authority will perform finally such role by its own initiative and will be charged to monitor the biggest banks by the project of Banking Union.

These specificities have resulted in new monetary sovereignty regime in which the primary level of this sovereignty was transferred from the member states to those institutions that in the exercise of the monetary sovereignty ensures the power of the financial system instead of the macroeconomic policy

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(32) For the current profile of the currency hierarchy, see De Conti and Prates (2018).

(33) However, Germany has benefited with the adoption of the common currency, as mentioned below.

autonomy of these states<sup>34</sup>. Such pillars were important macroeconomic policy tools that could be used for achieving such autonomy. Yet, other key pillar of the post-Fordist monetary sovereignty regime was not abandoned, i.e., the deregulated monetary, financial and currency markets, which is a precondition for ensuring that power. This means that in the EMU monetary sovereignty regime, the autonomy of the sovereign (ECB/Ecofin) *vis à vis* the society (i.e., the interests of the different social classes) is higher, hence enhancing its capacity of complying with the financial interests. Consequently, during periods of high liquidity preference, the member states are under a greater scrutiny of financial markets than the states that have monetary sovereignty<sup>35</sup> as the euro crisis brought to light. The ideological conservatism reinforces even more this scrutiny<sup>36</sup>. However, the debt crisis of the euro area periphery revealed that such scrutiny is not the same for all EMU countries and that the macroeconomic policy autonomy varies among them, being far lower for the peripheral countries, as detailed below.

From the adoption of the euro to the 2008 global financial crisis these differences were hidden by the positive effects that the climb in the currency hierarchy had on the EMU periphery. The first one was the convergence of long-term interest rates of the peripheral countries towards the German levels even before the launch of the euro due to markets' expectations. As Aglietta (2012, p. 9) points out, "...they fell very rapidly after May 1998 when the European Council ratified the list of countries eligible for admission. In Spain, the spread between the 10-year interest rate on public debt and the German rate fell from 5 per cent to zero in the space of a few months. Not only states but all economic actors benefited from the lowered cost of credit; the ability to borrow cheaply produced massive capital inflows in countries where high interest rates had long made credit scarce"<sup>37</sup>. Yet, with the contagion of the global financial crisis on the euro area, the negative effects of the EMU monetary sovereignty regime on the macroeconomic policy autonomy were brought to light. In this setting, such autonomy depends on the same macroeconomic factors identified in the case of peripheral economies (the external and fiscal constraints)<sup>38</sup>.

After the adoption of the euro and the consequence disappearance of the exchange rate risk from the cognitive map of decision-makers and investors, a boom of capital flows (mainly, loans of German, French and other centre countries banks) went to Spain and the other economies that had the highest interest rates (mainly Portugal, Greece and Ireland) before joining the euro area and presented better growth and profitability perspectives, fuelling consumption and property speculation. "Credit-based consumption drew in rising imports of manufactured goods, which brought widening current-account deficits and a price inflation that undermined competitiveness. Growth became dependent upon ever-greater injections of foreign capital, further exacerbating the current-account deficit" (Aglietta, 2012, p. 21). As the convergence criteria was based on nominal variables<sup>39</sup>, the inflation differential resulted in appreciation of the implicit

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(34) In the same sense, Dutraive and Théret (2013) deduce from the work of J.R. Commons that the dynamics of capitalism tends to make the credit currency a sovereign authority that competes with the political sovereignty of the State insofar as it represents a financial power capable of subjecting the executive, legislative and judiciary.

(35) One manifestation of this greater scrutiny is the performance of the spreads in the public debt markets. Based on empirical evidences, Grauwe and Yumei (2012) show that despite the similar debt-to-GDP ratios, investors reacted by raising the spreads of the EMU peripheral treasuries' bonds during 2010-2011 while no such worries developed in what they call stand-alone countries (that issue their own currency).

(36) As Aglietta (2012, p. 19) stresses: "The EU is further hampered by a deep-rooted ideological conservatism with regard to fiscal measures to support demand and central bank mandates for growth. If this approach is problematic in periods of calm, it becomes disastrous in times of turbulence".

(37) It worth mentioning that the position in this hierarchy results in lower spreads between the interest rates in centre and peripheral countries and lower exchange rate volatility, which constrained growth in these countries.

(38) The degree of financial openness was the same for all them as they are part of the EMU.

(39) According to Arestis and Sawyer (2012), such criteria is one of the design faults of the EMU.

real exchange rates and in lower real interest rates rate in the periphery, which boosted the domestic demand and imports.

Conversely, the trajectory of creditor countries was different. “Germany entered the Eurozone in 2000 with an unfavourable exchange rate and a current account deficit (...) High wage costs had eroded industrial competitiveness and the economy was sliding towards stagnation (...) The Schroeder government responded in 2003 with a drastic labour-market reform; wage growth was brought to a halt and industrial production restructured, with many processes outsourced to Central and Eastern Europe. The gains in competitiveness due to low unit-wage costs were sustained throughout the rest of the decade” (Aglietta, 2012, p. 21)<sup>40</sup>.

Therefore, “the economic heterogeneity of the Eurozone countries was reinforced by the financial logic that ensued from the creation of the euro” (Aglietta, 2012, p. 22). Countries with current account deficits become dependent on foreign financing and global investors portfolio decisions. At the same time, these deficits and capital inflows resulted in public and private debt growth<sup>41</sup>. The public debt/GNP, which has become a key indicator for private investors in the regulation mode current accumulation regime (see section 2), increased even more after the global financial crisis due to the recession, the countercyclical policies and the bail-out of financial institutions that was undertaken by the EMU states with fiscal resources as the ECB was not allowed to act as lender of last resort

Hence, the very adoption of the euro has resulted in the surge or widening of the external and fiscal constraints in the EMU peripheral countries. As there is no longer national exchange and interest rates, the differences regarding those macroeconomic factors are reflected in the public debt markets, more specifically, in the country risk (CDS spreads) and the spread between the interest rates of the country public debt and of the debt of Germany, the hegemon in the EMU. This means that in moments of pessimism or crises, the inability of the EMU states to monetize their debt even in last resort jeopardized the credibility of the peripheral countries’ public debt. Consequently, in the euro area there is only one currency, but differences in the macroeconomic policy autonomy expressed in the lower risk premiums and yields of the central countries’ public debt in such moments, being the German one the lowest.

Regarding the confidence on the euro, all the claims of each member of the monetary community on it remains fragmented between nations because there was no guaranteed conversion between public and private debts in the EMU original institutional architecture. In practice, the non-conventional monetary policy ensured the conversion of these debts, whose solvency was questioned by the financial market, in liabilities of the ECB. Therefore, the hierarchical confidence was preserved at the height of the crisis, i.e., the confidence that a monetary community - all users of the euro - can have in the reliability and integrity of the payment system, ensuring as well the methodical confidence. Yet, to have access to the exceptional conversion procedures, the peripheral countries had to accept the conditionality imposed by the Troika, namely, the adoption of the so-called structural reforms in exchange for any bailout.

The analysis of the ethical confidence in the euro is more complex. While Aglietta (2012) argues that the euro is an incomplete currency due to the inexistence of a relation to a political sovereignty, our hypothesis is that a new form of political sovereignty was established associated to social values that can be described as neoliberal, devoid of all foundation on a deliberative representation of the national populations

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(40) On the current account imbalances in the euro area, see also Priewe (2012).

(41) Each peripheral countries of the MEU had specificities. For instance, in the Greek case the ‘accounting make-up’ of the state liabilities made by the Papandreou government that was revealed in the end of 2009. In the Ireland case, the huge increase in the private debt that was eventually assumed by the Treasury.

and reduced to a government of experts constituted by the European Commission. Then, in this new form of political sovereignty, the social values that an EMU government can defend must be compatible with those underlying the European rules.

#### **4 Final remarks**

In this paper, based on the FMI and the RS, we have firstly proposed the concept of monetary sovereignty regime that is historically determined, being one element of each regulation mode. Secondly, we have devised a framework on the relationship among currency hierarchy, monetary sovereignty regime and macroeconomic policy autonomy in the post-Bretton Woods IMFS that encompasses the three forms of confidence on money proposed by the FMI.

According to such framework, the capacity of exercising the monetary sovereignty (i.e., reaching the superior level of monetary sovereignty that encompass the macroeconomic policy autonomy) is smaller in the current monetary sovereignty regime than in the Fordist one. The only exception is the US, the issuer of the key currency positioned at the top of the currency hierarchy, which enjoy the highest macroeconomic policy autonomy. For the other economies, the position in the currency hierarchy shapes this capacity.

In the case of peripheral economies, whose currencies are not accepted at the international level, being positioned at the lower end of the currency hierarchy, the network of debts encompasses foreign currencies (mainly, the key-currency). In this setting, the lower the capacity of the central bank to guarantee the confidence on the currency, the lower will be the macroeconomic policy autonomy, mainly in moments of capital outflows, what could harm the confidence on the currency. Yet, this capacity varies between peripheral countries, depending on the external and fiscal constraints. Hence, a peripheral economy of Latin America or Asia that issues its sovereign currency could increase its capacity of exercising of monetary sovereignty, hence its macroeconomic policy autonomy, through the reduction of these constraints that depend not only on domestic factors, but also on the international economy dynamics, such as the US monetary policy.

We also used our framework to analyse the case of the peripheral countries of the EMU. These countries climbed the currency hierarchy when they adopted the euro, which had a positive impact on their capacity of exercising the monetary sovereignty. The main indicator of such impact was the decrease in the interest rate of the public and private debts. Yet, with the contagion of the global financial crisis on the euro area, the negative effects of adopting the euro were brought to light, revealing that due to the huge scrutiny of financial markets on these countries in pessimist contexts such autonomy depends on the same macroeconomic factors identified in the case of peripheral economies, i.e., the capacity to settle fiscal and external imbalances.

In this perspective, although Greece and Germany have the same currency (the euro), the confidence of private agents in the nominal value of German Treasuries bonds is much greater than on the Greek ones that are not seen as a “safe heaven” in the eyes of these agents, hence not being demanded as a store of value. Although the announcement of Mario Draghi in July 2012 that the ECB will do “whatever it takes” to save the euro and the subsequent measures adopted avoided the collapse of the euro area, there are no guarantee that other countries will not face similar difficulties (currently, Italy is the most vulnerable economy) as the institutional framework of the ECB has not changed and the new president of BCE (Cristine Lagarde) that will take office in October 2019 will not necessarily adopt Draghi’s policies.

The framework proposed above is an analytical tool that can guide future comparative works based on country case studies that would allow us to identify the 'ideal types' of economies with different capacities to maintain a certain degree of monetary sovereignty.

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