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## Hegemonic Currencies during the Crisis: The Dollar versus the Euro in a Cartalist Perspective

by

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**ABSTRACT** 

This paper suggests that the dollar is not threatened as the hegemonic international currency, and

that most analysts are incapable of understanding the resilience of the dollar, not only because

they ignore the theories of monetary hegemonic stability or what, more recently, has been termed

the geography of money; but also as a result of an incomplete understanding of what a monetary

hegemon does. The hegemon is not required to maintain credible macroeconomic policies (i.e.,

fiscally contractionary policies to maintain the value of the currency), but rather to provide an

asset free of the risk of default. It is argued that the current crisis in Europe illustrates why the

euro is not a real contender for hegemony in the near future.

**Keywords:** Dollar; Euro; International Currency

**JEL Classifications:** F31, F33, F55

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### INTRODUCTION

Conventional wisdom has suggested that the US dollar is on the verge of loosing its hegemonic position in international monetary markets at least since the 1960s with the seminal work of Robert Triffin. In fact, many authors believe that the collapse of the Bretton Woods system was the proof of the weakness of the dollar. The creation of the euro in 1999, and to a lesser extent the spectacular rise of China, consolidated the view that the dollar's days as the key international reserve currency were numbered.

In this view, the structural American current account deficits, and the counterpart in Germany, Japan, and China's surpluses, the so-called global imbalances, would eventually lead to a run on the dollar. Unsustainable current account deficits would lead agents worldwide to dump the dollar for assets denominated in other currencies, presumably the euro. In this hard landing scenario a financial crisis in the United States would be the detonator of the crash. As it turns out, the global crisis, now known as the Great Recession for its similarities with the Great Depression (Eichengreen and O'Rourke 2010), has led a to a moderate depreciation of the dollar, and a severe crisis in the peripheral countries of the Eurozone, the so-called PIIGS (Portugal, Ireland, Italy, Greece, and Spain), and to increasing doubts about the sustainability of the euro as a common currency.

This paper suggests that most analysts are incapable of understanding the resilience of the dollar, not only because they ignore the theories of monetary hegemonic stability (e.g., Kindleberger 1973; Keohane 1980; Eichengreen 1989) or what, more recently, has been termed the geography of money (Cohen 1998),<sup>2</sup> but also as a result of an incomplete understanding of what a monetary hegemon does. The remainder of this paper is divided in two sections. The first discusses the role of the hegemonic monetary currency in the world economy, providing an alternative to the conventional wisdom, while the second discusses the problems associated with the hard landing scenario for the dollar, and why it is very unlikely that the dollar would be replaced as the key currency by the euro, or any other contender, for a very long period.

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<sup>&</sup>lt;sup>2</sup> An important difference between Cohen's approach and the hegemonic stability theory is that the he allows for more than one currency as a dominant reserve asset at a given historical period.

#### WHAT DO HEGEMONS DO?

Conventional wisdom sustains that money is the result of its functions, in particular, in the marginalist tradition it is assumed that the medium of exchange function is paramount, since it allows to avoid the double coincidence of wants needed for direct exchange (Ingham 2004). Thus, money is an asset that reduces transaction costs and allows for a smoother working of the market economy. There are objective qualities (e.g., divisibility, difficulty to forge, etc.) that are required for an asset to be used as money, but ultimately, in this view, money depends on the subjective acceptance by market participants.

Once a currency becomes accepted, network externalities and inertia provide the momentum to make it the dominant currency (Kiyotaki and Wright 1989). The sanction of the state in this view is not essential, but it maybe the catalyst that leads to widespread adoption. Once a particular asset becomes the dominant means of exchange, inertia leads markets to adopt it as a reserve currency and as a unit of account.

Further, since confidence is essential, conventional wisdom argues that the prince should not directly control the money supply, since political power may lead to overissuing and depreciation. In the absence of an independent monetary authority, metallic currencies—or currency boards, monetary unions, and outright dollarization in modern arrangements—would provide a simple solution for tying the hands of the state. It is important to note that the conventional wisdom—referred to as the Metallist approach by Goodhart (1998)—infers that a separation of monetary and fiscal policies are the trademark of good policymaking.

The conventional story for the existence of money in a domestic setting is more or less extended in the same fashion for international markets. An international vehicle currency fundamentally reduces transaction costs in international trade (Krugman 1980). The advantages of being the vehicle currency are cumulative, and inertia leads to an increasing role in the composition of foreign exchange holdings. Symmetrically, if there is a loss of confidence in the currency, international holders may substitute it for an alternative asset and a crash follows. Conventional wisdom suggests that these crises tend to occur either because the state runs excessively large fiscal deficits (Krugman 1979) or as a result of a self-fulfilling prophesy (Flood and Garber 1984; Obstfeld 1986). In other words, not only governments must be well-behaved,

but also, given the fickleness of international markets, they must convince markets that they are well-behaved.

In this view, the hegemon is no different than any other country, and it must maintain a credible macroeconomic stance to avoid a run on its currency. High inflation and a depreciating exchange rate (or pressures for depreciation in case of fixed exchange rate) would spell disaster for the reserve currency. Eichengreen (1992) suggests, for example, that the lack of credibility of the interwar gold standard in the United Kingdom, as a result of the rise of left-of-center parties more concerned with unemployment and the expansion of the electoral franchise, was at the heart of the instability of the system and the ultimate demise of the pound.<sup>3</sup>

In contrast with Metallist views of money, the Cartalist or Chartalist approach (Goodhart 1998) emphasizes that the role of economic and political power are the key to a currency standing. In this view, in terms of its functions, money is essential the unit of account that allows calculations to take place, and from that characteristic the other functions are acquired. However, the Cartalist approach is not functionalist (Ingham 2004), and the role of money as a unit of account is a reflection of the political power to establish a particular asset as the currency in the economic system. In other words, money is the expression of the power to enforce the unit of account in which economic calculations are made.

In the ancient world the political power of the prince was always behind a currency. Modern money, meaning the currency system that emerged with capitalism, was not dominated by the state until relatively recently, that is, in the nineteenth century (Helleiner 2003; Rochon and Vernengo 2003), but it is essentially state money now. This means that for the alternative view it is the power of the state, rather than the confidence of the markets, that is essential for the moneyness of a particular asset.<sup>4</sup> In other words, money results from specific historically determined social relations.<sup>5</sup>

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<sup>&</sup>lt;sup>3</sup> Eichengreen and Flandreau (2009) show that the pound lost its reserve position in the 1920s, to partially recover it in the 1930s, and finally be displaced by the dollar in the postwar period. In their view, the dollar and the pound can be said to have shared the international reserve position during the interwar period, which shows that there might be more than one key reserve currency at a given point in time.

<sup>&</sup>lt;sup>4</sup> This view of money is compatible with the views of the classical authors and Marx. For a discussion of the classical and Marxist views of money, see Green (1992).

<sup>&</sup>lt;sup>5</sup> Marx (1859–61: 239) argued that: "the special difficulty in grasping money in its fully developed character as money ... is that a social relation, a definite relation between individuals, here appears as a metal, a stone, as a purely physical, external thing which can be found, as such, in nature, and which is indistinguishable in form from its natural existence." In fact, the difficulty of grasping the nature of money was greater in a period in which international money was directly or indirectly tied to gold. After the closing of the gold window in 1971, the social

In this context, the monetary functions are intrinsically connected with the fiscal matters of the state. Money derives its properties from the state's guarantee, and the monetary authority ensures the creditworthiness of the state by keeping its fiscal solvency.<sup>6</sup> In its own domestic currency the national state is essentially always creditworthy, and default is impossible, since the central bank can always buy government bonds and monetize the debt.

Monetization may, under very specific conditions, lead to inflation, but this seldom has any connection with conventional monetarist stories about excess money supply. If monetization raises the specter of a depreciation of the domestic currency, economic agents may change their portfolios to increase the holdings of foreign denominated assets, precipitating the depreciations and leading to higher domestic prices. Only in the case that the economy was at full employment, a rare phenomenon unless there are explicit government policies to maintain it, would it be possible for monetization to overstimulate demand and lead to inflation.

By providing a guarantee for state debt, the central bank delivers a secure financial asset that facilitates the functioning of financial markets. Also, the state can use fiscal policy to maintain full employment at home, provided the level of activity does not lead to an unsustainable balance of payments position. In that sense, it should not be surprising that the creation of national currencies in the nineteenth century preceded the expansion of the state, from a night watchman that provided only security and the rule of law, to a welfare state that participated actively in the economy and guaranteed an extensive set of social and economic benefits to its citizens. Historically, the power over a national currency provided the foundations for the rise of a fiscally activist state.

If money of account derives its existence from the political power that establishes it, the same is the case for the international unit of account. During the mercantile phase of capitalism, bankers had the power to enforce the repayment of debt in a particular token. For that reason the key reserve currencies were over time associated with the main trading empires and their merchant bankers, i.e., the Venetian ducat, the Dutch guilder, and the British pound. The state,

nature of money should have been more evident. For a discussion of money as a social relation, see also Ingham (2004).

<sup>&</sup>lt;sup>6</sup> In fact, Helleiner (2003) shows that beyond the control of monetary policy for domestic reasons, the access to fiscal resources was one of the motives behind the creation of territorial or national currencies in the nineteenth century.

<sup>&</sup>lt;sup>7</sup> For alternative inflation theories, see Vernengo (2006b).

<sup>&</sup>lt;sup>8</sup> Note that the principles of functional finance do not extend to debt in a foreign currency. For a discussion of functional finance, see Berglund and Vernengo (2006).

dominated in general by mercantile interests, reinforced the dominance of their currency by promoting the mercantilist colonial empires.

As shown by Kirshner (1995) the central or hegemonic states manipulated international money markets, controlling exchange rates or disrupting the functioning of financial markets, to subdue weaker countries in the periphery. It is the power to coerce other countries that is central for monetary hegemony. Further, as much as in the domestic market, the hegemonic country can provide credit on an international basis to promote global demand expansion. For example, during the height of the United Kingdom hegemonic dominance, peripheral countries would obtain credit in British banks, use it to demand manufacturing goods from Britain, and pay for them and the interest on the loans with commodity exports. Since countries were indebted in pounds, and the pound had the guarantee of the Bank of England, the sterling was the main reserve currency *par excellence*.

However, even the hegemon suffered from one particular constraint during the gold standard period and in the previous international monetary systems. Even though the pound was the key reserve currency, it was fixed to gold. In other words, debt was ultimately redeemable in an asset that was not directly controlled by the monetary authority. Default was a possibility, even if a remote one, since through manipulation of the rate of interest and through coercion and cooperation with other central banks, the stability of the system could be maintained. Power, not credibility, was at the center of the international monetary system. The hegemon was not just a source of global stability, acting as a lender of last resort, but also the crucial source of global demand.

These features of the international monetary system have only been intensified since the dollar lost its connection to gold with the collapse of the Bretton Woods arrangement. In fact, since the closing of the gold window the dollar became the first world fiat money. For the first time the international currency is akin to the domestic currency for the hegemon, since its central bank can always buy assets denominated in the domestic currency and finance government debt. There is no balance of payments constraint for the hegemonic country and the principles of functional finance apply on a global basis. In this sense, it is possible for the hegemonic state, in

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<sup>&</sup>lt;sup>9</sup> Serrano (2003) refers to the post-Bretton Woods system as the flexible dollar standard, while Vernengo (2006a) argues that the system maybe described as a *latu sensu* dollarization, i.e., not the specific use of the dollar by a country (dollarization *strictu sensu*), but by the whole world economy, i.e., a system in which the dollar is *de facto* a global fiat money.

this case, the United States, to be a global debtor (as national states are in their domestic economies) and to provide a default risk free asset to facilitate global accumulation.

Not only the central bank of the hegemonic country can act as a lender of last resort to its own banks, but also it can do it for the state, and the national government has the ability to stimulate global, not just domestic, effective demand. Further, the risk that the hegemon would be unable to expand demand globally because it's forced to maintain a fixed ratio of currency to an external asset is inexistent. It is true that foreign countries and agents may show unwillingness to hold dollar denominated assets, but, as in the domestic case, the Fed can always monetize debt.

Again, as in the closed economy case, this only would be inflationary and lead to a run on the dollar if there is currency substitution on a massive scale, which would require a credible alternative to the dollar. And that leads us to the current crisis and the euro, which was hailed by some as a possible alternative to dollar hegemony. It is important, however, to emphasize that even if economic agents substitute the euro for the dollar, the United States still would not have its ability to import curtailed, since most American imports are invoiced in dollars, including commodities. Essentially, that means that the United States would still not have a balance of payments constraint.

### FOR WHOM THE BELL TOLLS?

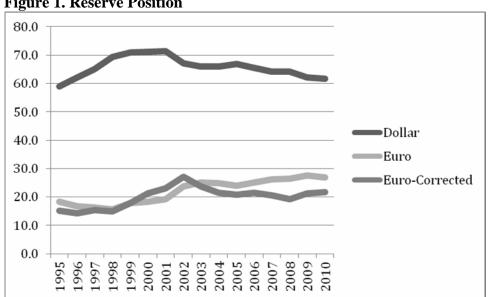
The Triffin dilemma suggested that a dollar glut would lead to the demise of Bretton Woods, and eventually the loss of the hegemonic position of the dollar in international monetary markets. The collapse of the Bretton Woods system allowed for the devaluation of the dollar and, even according to conventional wisdom, that should have been enough for eliminating the dilemma. In this view, imbalances persist because some countries are resistant to revaluation of their currencies, in particular China (Bergsten 2010). The long-term devaluation of the dollar,

<sup>&</sup>lt;sup>10</sup> In this sense, the global imbalances, in particular the large American current account deficits that reflect the so-called "exorbitant privilege," are instrumental for the functioning of the world economy. However, it is important to note that the fact that countries in the periphery have benefited from the flexible dollar standard does not imply that it is adequate to suggest that the system is akin to Bretton Woods (Dooley, Folkerts-Landau, and Garber 2003). In fact, during the actual Bretton Woods period global imbalances were limited by the dollar-gold connection. A similar view of global imbalances to the one presented here can be found in Kregel (2010).

<sup>&</sup>lt;sup>11</sup> Note that imbalances were solved during Bretton Woods, and to a great extent still are, by changes in the level of activity rather than changes in the exchange rate (Kregel 2010).

considering the trend after the end of Bretton Woods, and more importantly, after the appearance of the euro has been interpreted as a sign of the end of dollar hegemony (Chinn and Frankel 2008).

A cursory look at the data does not provide an obvious scenario in which the euro would overtake the dollar as the main international currency. Figure 1 shows that since the 1990s the reserve position of the dollar did not change much, remaining around 60 percent of central bank's holdings. In the late 1990s holdings peaked up at 70 percent, a number that is closer to the 1970s level, but has since returned to the mid-1990s level. Foreign exchange reserve holdings of dollars have grown sharply over the last decade, exceeding \$7 trillion in 2008, mostly concentrated in the accounts of peripheral economies. More importantly, the euro has increased it relative participation in the holdings of central banks around the world, from 20 to 30 percent approximately.12



**Figure 1. Reserve Position** 

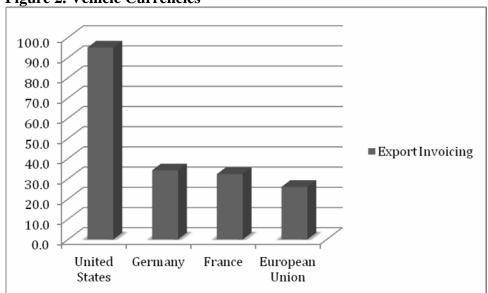
Source: IMF and authors' calculations

However, it is important to note that the International Monetary Fund's Currency Composition of Official Foreign Exchange (COFER) data is measured in current dollars. In other words, the changes in reserve holdings reflect changes in the value of the currencies vis-à-vis the dollar. If one fixes the exchange rate then, as shown in figure 1, the euro (corrected for exchange rate

<sup>&</sup>lt;sup>12</sup> Before 1999 the euro reserves are represented by the sum of German marks, French francs, and Dutch guilders.

variations) share remains at around 20 percent. Other potential substitutes to the dollar as key reserve currency, like the yen or the renminbi, are too insignificant to be taken seriously at this point.

Another crucial measure of dollar dominance is the percentage use of the dollar in international trade transactions, that is, to what extent the dollar is used as vehicle currency for world trade. Figure 2 shows relatively recent data on the fraction of exports invoiced in its own currency by the United States, the European Union, and two key countries within the EU. The United States, in contrast to the EU and its members, invoices most of its exports in its own currency. Around 95 percent of American exports are invoiced in dollars, while the euro is used in around 30 percent for European countries. A similar situation is found when one looks at the data for import invoicing (Goldberg and Tille 2008). Also, the dollar remains the leading transaction currency in the foreign exchange markets, with slightly less than 85 percent share in the volume of international trade and financial markets combined, which corresponds more than twice the share of the euro, which stands at around 39 percent (BIS 2010).



**Figure 2. Vehicle Currencies** 

**Source:** Goldberg and Tille (2008)

It is interesting to note that American banks do not dominate the geographical distribution of currency turnover in international financial markets. Banks located in the United Kingdom accounted for 37 percent of global foreign exchange market turnover, followed by those in the

United States (18 percent), Japan (6 percent), Singapore (5 percent), Switzerland (5 percent), Hong Kong (5 percent), and Australia (4 percent) (BIS 2010). Germany, the main financial center for euro area countries accounts for only 2 percent of daily currency transactions (BIS 2010). This suggests that there is great inertia in the position of world financial centers, and that London remains central long after the demise of the British financial order (Langley 2002).

In this sense, it seems reasonable to assume that the dollar will remain as a key currency even if the euro gains momentum, as several authors have suggested (e.g., Chinn and Frankel 2008; McNamara 2008; Eichengreen and Flandreau 2009; Goldberg 2010). Yet, in our view, to correctly understand the euro's threat to the dollar international position, it is crucial to evaluate the effects of the first major financial crisis suffered by the euro in the aftermath of the 2007–08 financial crisis.

European banks were heavily exposed to mortgage based securities and other assets that caused the American financial crash. Financial distress created early on, in September 2008, an increasing spread between the benchmark German government bonds and those of peripheral countries within Europe, even though all are denominated in euros. As correctly noted by McNamara (2008) there is no equivalent in the EU to the US Treasury bills, a situation that results from the lack of coherent fiscal framework in the Eurozone. Further, the European Central Bank (ECB), while willing to act as a lender of last resort to European central banks, has been unwilling to do the same for member states. The ECB applies a macroeconomic straightjacket based on an incoherent monetarist view of strictly maintaining price stability, regardless of circumstance, at whatever social costs.

In the United States the crisis led to an effort by the Fed to maintain the interest rate on long-term government debt at low levels with the controversial quantitative easing policy. By buying great quantities of treasuries, the Fed not only keeps stable bond prices and low interest rates, but it also provides assurances that Treasury bonds remain a secure asset. That allows the US Treasury to maintain high fiscal deficits on a sustainable basis.

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<sup>&</sup>lt;sup>13</sup> Several authors have criticized the problems in European macroeconomic conduct, in particular, the decentralization of fiscal management (e.g., Arestis and Sawyer 2006; Sardoni and Wray 2006).

<sup>&</sup>lt;sup>14</sup> The Maastricht accord involves the technical prohibition of the financing of public deficits by the ECB (Article 21.1 of the ECB statute).

That is the exact opposite of what the ECB has done for the countries in the periphery of Europe. <sup>15</sup> Countries in a currency union lose control of monetary policy and cannot depreciate the exchange rate. But a common currency setting also brings to an end the possibility for a single nation to run fiscal deficits since the sources of funding are either removed or subjected to supranational control. <sup>16</sup> If the ECB decided to buy Greek and Irish bonds (and Spanish and Portuguese, too), and maintain their interest rates on par with the German ones, it could. But, alas, the ECB decided to show that euro-denominated bonds are all equal, but some more equal than others. If the ECB says that some euro-denominated bonds are worthless, who would deny it?

As in the Greek case,<sup>17</sup> the Irish are accepting a European Union, International Monetary Fund, and ECB bailout, which will imply severe fiscal adjustment—and increasing unemployment—and which will ultimately, but unquestionably, fail. They should simply leave the euro, even though the political reality is that they are very likely going to stick to it (as Argentina did with a fixed peg) for several years.

For our purposes it is important to note that the EU has been unwilling to expand effective demand at the regional level, let alone act as a global source of demand, which is one of the key roles of a hegemon. The inability to implement global expansionary policies and the enforcement of regional adjustment with fiscal consolidation and wage reductions within the Eurozone to compensate for German trade surpluses is more important to understand whether the euro can rival the dollar than the fact that the latter has experienced a mild depreciation over time.

In fact, there is no rule that says that the international unit of account cannot have a variable price in terms of other currencies, and the domestic currency does change in value (inflation) and for the most part that does not preclude its functions as fiat money.<sup>18</sup> The essential feature of the key currency is that there is no possibility of default in that currency, and that is

<sup>16</sup> European economic policy lacks necessary effective fiscal policy coordination conducive to the structural needs of the different European economies that constitute the EMU. The Stability and Growth Pact (SGP) has become a rigid fiscal rule that generates counterproductive procyclical policies (see Panico 2010).

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<sup>&</sup>lt;sup>15</sup> In May 2010 the EU created the European Financial Stabilization Fund to bailout financially distressed countries in the region, but still requiring severe fiscal adjustment in exchange for funding.

<sup>&</sup>lt;sup>17</sup> It is interesting to note that the ratio of debt/GDP for Greece moved from 100.3 in 1999 to 95.6 as of 2007, owing to a significant rise in GDP. Greek authorities did not, in fact, let their finances decay, as many in the mainstream argue was straw that broke the camel's back in the unfolding European debt crisis (Panico 2010).

<sup>&</sup>lt;sup>18</sup> For a discussion of conventional (Monetarist/Metallist) and alternative views of inflation, see Vernengo (2006b).

why in the worst period of the crisis, after Lehman's collapse, the dollar actually appreciated, since agents tend to fly to secure assets (figure 3).

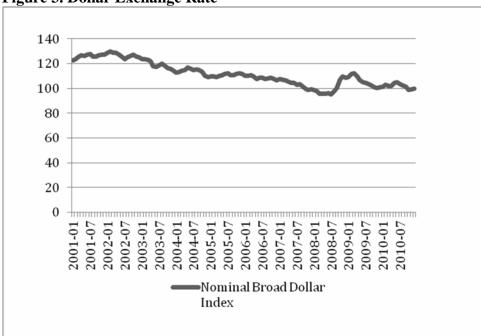


Figure 3. Dollar Exchange Rate

Source: Fed

The reason the dollar remains and will remain the key currency is not that its value is stable, as Metallists would argue is necessary for fiat money, but because the United States does not incur debt in other currencies and the institutions that manage macroeconomic policy guarantee that a default in dollars cannot take place. This creates the capacity for the United States to incur international debt without any reasonable limit.<sup>19</sup>

Note that an important part of that privilege is associated to the fact that key commodities, like oil, are priced in dollars in international markets. Not only that implies that there cannot be an insufficient source of dollars to import key commodities, but also a depreciation of the dollar does not have the impact of increasing the price of imports (Parboni 1981).

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<sup>&</sup>lt;sup>19</sup> If the United States ever decided to repay its foreign liabilities through persistent current account surpluses, this would require a strong dollar depreciation, which would, by implication, depreciate the real value of US debt through the related increase in its price level. This, in turn, would reflect a slow-down in the growth of exports from the rest of the world to the United States (Schulmeister 2000). Given the predominance of export-led growth for many economies in the periphery, semi-periphery, and even in the core, dominant economic agents in the world economy are not necessarily keen on seeing dollar hegemony progressively vanish.

Note that this is true even if fiscal and monetary policy in the United States have been insufficient for creating full employment at home. In fact, even though massive unemployment in the style of the Great Depression would be unacceptable, the US authorities have been willing for the last three decades to allow for higher levels of unemployment, and stagnating wages, which has been implicated in private debt-led consumption expansion, and speculative boom and bust cycles (Barba and Pivetti 2009). But that is more a domestic question than the international position of the dollar that reflects the social conflicts in the United States.

#### FINAL REMARKS

The dollar is the *lingua franca* of the international monetary system, and will remain so for a very long period. Neither the euro, nor any other contender, has the necessary requirements to be the key international currency, when that role is properly understood according to a Cartalist position. In the conventional Metallist view, the hegemon is no different than any other country, and it must maintain a credible macroeconomic stance to avoid a run on its currency. The fears of a near demise of the dollar are, in this view, associated to the domestic mismanagement and lack of austere, credible policies in the United States.

Barry Eichengreen (2011), who uses a conventional Metallist interpretation of hegemonic currencies, suggests more sensibly that the dollar will remain one of the several international reserve currencies. In his view, the historical record shows that more than one currency is often used as international currency. While it is true that several currencies are often used as reserve and vehicle currencies in international markets, it is far from clear that more than one currency has served as the risk-free asset since the rise of global capitalism. And that feature of the dollar is currently unrivalled. A Cartalist approach suggests that the resilience of dollar might be greater than expected, because for the first time the hegemonic currency is fully the creature of the dominant international state and disconnected from gold.

In the alternative, Cartalist view, the hegemon must be able to borrow in its own currency and provide a secure asset free of default risk to the system. The ability to provide the risk-free asset is not a privilege, despite De Gaulle's finance minister dictum, since privileges must be granted. The dollar is the key currency because the United States can impose that key commodities are traded in its own currency, and agents must trade in dollars to settle transactions

with American corporations. The role of the dollar in international markets, and the advantages that come with it, are the spoils of hegemonic power.

The provision of this asset allows the hegemonic country to become the source of global demand and insulate itself from fluctuations and contradictions of perilous cumulative disequilibria that may arise in the world economy. In other words, the secure asset enables the hegemonic country to set the global social, political, and economic conditions, within which the transmission of misery (contagion) between countries, and between global and national levels, is essentially regulated.

The current crisis shows that the euro is not a credible challenge to the dollar. The EU has forced a significant fiscal contraction on the deficit countries, imposing packages that are equivalent to the IMF-sponsored structural adjustment programs in developing countries. The renegotiation of inter-European debts, which is common for subnational entities within countries, providing European funds rather than contractionary adjustment is off the table, at least for now, making the euro completely unqualified as an international currency, since default in eurodenominated bonds seems possible.

In fact, the continued Chinese expansion, and its positive effects in a good part of the periphery, in particular for commodity exporting countries, makes the renminbi a more adequate international currency in some respects. However, in the case of China, the inconvertibility of the currency and the lack of developed financial markets make the renminbi a very unlikely challenger to the dollar. The dollar remains, as famously put by John Conally, the American currency, but the world's problem.

#### REFERENCES

- Arestis, P., and M. Sawyer. 2006. "Macroeconomic Policy and the European Constitution." in P. Arestis and M. Sawyer (eds.), *Alternative Perspectives in Economic Policies in the European Union*. New York: Palgrave-Macmillan.
- Bank for International Settlements (BIS). 2010. *Triennial Central Bank Survey*. Basle: Bank for International Settlements.
- Barba, A., and M. Pivetti. 2009. "Rising household debt: Its causes and macroeconomic implications." *Cambridge Journal of Economics* 33(1): 113–137.
- Berglund, P., and M. Vernengo. 2006. "Introduction." in P. Berglund and M. Vernengo (eds.), *The Means to Prosperity*. New York: Routledge.
- Bergsten, F. 2010. "China's Currency and the US Economy." VoxEU.org, November 1.
- Chinn, M., and J. Frankel. 2008. "Will the Euro Rival the Dollar? A Debate." *International Finance* 11(1): 49–73.
- Cohen, B. 1998. *The Geography of Money*. Ithaca, NY: Cornell University Press.
- Dooley, M., D. Folkerts-Landau, and P. Garber. 2003. "An Essay on the Revived Bretton Woods System." Working Paper 9971. Cambridge, MA: National Bureau of Economic Research (NBER).
- Eichengreen, B. 1989. "Hegemonic Stability Theories of the International Monetary System." Working Paper 2193. Cambridge, MA: National Bureau of Economic Research (NBER).
- Eichengreen, B. 1992. *Golden Fetters: The Gold Standard and the Great Depression*, 1919–1939. New York: Oxford University Press.
- Eichengreen, B. 2011. Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System. New York: Oxford University Press.
- Eichengreen, B., and K.H. O'Rourke. 2010. "A Tale of Two Depressions." Voxeu.org. Available at: http://www.voxeu.org/index.php?q=node/3421.
- Eichengreen, B., and M. Flandreau. 2009. "The Rise and Fall of the Dollar, or When Did the Dollar Replace Sterling as the Leading Reserve Currency?" *European Review of Economic History* 13: 377–411.
- Flood, R., and P. Garber. 1984. "Collapsing Exchange-rate Regimes: Some Linear Examples." *Journal of International Economics* 17(1–2): 1–13.

- Goldberg, L. 2010. "Is the International Role of the Dollar Changing?" Federal Reserve Bank of New York, *Current Issues in Economics and Finance* 16(1): 1–7.
- Goldberg, L., and C. Tille. 2008. "Vehicle Currency Use in International Trade." *Journal of International Economics* 76(2): 177–192.
- Goodhart, C. 1998. "The Two Concepts of Money." *European Journal of Political Economy* 14: 407–432.
- Green, R. 1992. Classical Theories of Money, Output and Inflation. London: Macmillan.
- Helleiner, E. 2003. The Making of National Money. Ithaca, NY: Cornell University Press.
- Ingham, G. 2004. The Nature of Money. Cambridge, UK: Polity Press.
- Keohane, R. 1980. "The Theory of Hegemonic Stability and Changes in International Economic Regimes, 1967–1977." in O. Holsti et al. (eds.), *Change in the International System*. Boulder, CO: Westview Press.
- Kindleberger, C.P. 1973. The World in Depression. Berkeley: University of California Press.
- Kirshner, J. 1995. Currency and Coercion. Princeton, NJ: Princeton University Press.
- Kiyotaki, N., and R. Wright. 1989. "On Money as a Medium of Exchange." *Journal of Political Economy* 97(4): 927–954.
- Kregel, J. 2010. "An Alternative Perspective on Global Imbalances and International Reserve Currencies." Banco Central República Argentina, processed.
- Krugman, P. 1979. "A Model of Balance-of-Payments Crises." *Journal of Money, Credit and Banking* 11(3): 311–325.
- Krugman, P. 1980. "Vehicle Currencies and the Structure of International Exchange." *Journal of Money, Credit and Banking* 12(3): 513–526.
- Langley, P. 2002. World Financial Orders. London: Routledge.
- Marx, K. 1859–61[1973]. Grundrisse. London: Penguin.
- McNamara, K. 2008. "A Rivalry in the Making? The Euro and International Monetary Power." *Review of International Political Economy* 15(3): 439–459.
- Obstfeld, M. 1986. "Rational and Self-Fulfilling Balance of Payments Crises." *American Economic Review* 76(1): 72–81.

- Panico, C. 2010. "The Causes of the Debt Crisis in Europe and the Role of Regional Integration." Working Paper 234. Amherst, MA: Political Economy Research Institute (PERI).
- Parboni, R. 1981. The Dollar and Its Rivals. London: Verso.
- Rochon, L-P., and M. Vernengo. 2003. "State Money and the Real World." *Journal of Post Keynesian Economics* 26(1): 57–67.
- Sardoni, C., and L.R. Wray. 2006. "Monetary Policy Strategies of the European Central Bank and the Reserve Bank of the United States." *Journal of Post Keynesian Economics* 28(3): 451–472.
- Serrano, F. 2003. "From Static Gold to Floating Dollar." *Contributions to Political Economy* 22: 87–102.
- Schulmeister, S. 2000. "Globalization without global money: The double role of the dollar as national and world currency." *Journal of Post Keynesian Economics* 22(3): 365–395.
- Vernengo, M. 2006a. "From Capital Controls to Dollarization." in M. Vernengo (ed.), *Monetary Integration and Dollarization: No Panacea*. Cheltenham, UK: Edward Elgar.
- Vernengo, M. 2006b. "Money and Inflation." in P. Arestis and M. Sawyer (eds.), *A Handbook of Alternative Monetary Economics*. Cheltenham, UK: Edward Elgar.