Ricardo's Proposals in Light of the Euro Crisis

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Introduction

The interest in studying the debates surrounding Ricardo's *Proposals for an economical and secure currency with observations on the Bank of England, as they regard the public and the proprietors of bank stock* (1816) has been aptly summarised by Marcello De Cecco: "When we study pre-1914 monetary history, we find ourselves frequently reflecting on how similar were the issues of monetary policy then ... to those of our time" (1974: 58). This is echoed by Kindleberger, who says "financial history is... intended to illuminate modern problems and controversies" (Kindleberger 1984: 6).

The euro crisis brings to the fore several interrelated issues that echo the concerns of the era from which Ricardo's *Proposals* emerged. This paper contends that finding the causation of economic ills and attempting to remedy them was as complicated in the Bullionist controversy of the early 1800s as it is in the current euro crisis. Both periods have produced a dense literature around issues of currency, with broad participation in the debates, whose ideas have been circulated by means of official documents, pamphlets, and letters to the press, speeches and academic works.

This paper does not aim to locate the actual causes of economic problems of either period. Rather, it aims to draw out some analytical issues relevant to the two periods which deserve greater attention. By doing so, it hopes to amplify the links as well point out the differences in theoretical frameworks used to understand the euro crisis today with the frameworks utilised two hundred years ago. Both periods' debates are concerned not only with issues of currency, but multiple and overlapping fundamental relationships in the workings of the economy. Practical blueprints to monetary problems such as *Proposals for an Economical and Secure Currency* have not been as sophisticatedly developed today, and admittedly, they are far less tolerable in the current climate. However, it is this paper's contention that important aspects of the two periods can be revealed by referring to different underlying theoretical presuppositions, in order to clarify the nature and characteristics of the current monetary system.

The ways in which balance of payments adjustments and their monetary implications are theorised under commodity and credit theories of money remain insufficiently disentangled and this paper is an attempt to contribute to this discussion. The paper tries to explore the direction of conceptualising external adjustment as conceived of under commodity and credit theories of money (see for example Toporowski, (2013) and Bellofiore, Garibaldo and Mortagua (2015)). The ultimate objective is better understand the implication for the so called adjustment process in a system whose monetary base (commercial bank reserves) is endogenously created as credit not backed by any commodity or real bill. The consequence of such a view might be that the traditional conception of balance of payments imbalances cannot follow forward is the same way as envisioned under a commodity money view.

Several issues are relevant. Theoretical similarity between a system linked to gold and the European monetary union has been claimed in both orthodox and heterodox theory. The euro area monetary arrangement had been viewed as functioning as good as gold (De Soto). This is apparent in the literature discussing balance of payments adjustment within the euro using the theoretical crutch of the optimal currency area literature. As the build-up of balance of payments imbalances is identified as a cause of the crisis, there is a concern that the monetary implications of this assumes an external adjustment process as under a commodity money system (see Bellafiore et al, 2015).

This brings us to the second point: interpretations of Ricardo's monetary theory are mixed. There is the clinical viewpoint of Fetters (1965) as well as the more sophisticated versions explored by Bonar (1923). There is a string of associations for the short hand version of what is generally accepted as Ricardian monetary theory, which could be summarised as commodity theorist unable to reconcile inconsistencies between the quantity theory and commodity aspect of money. It becomes necessary to delve into abstract principles described by Ricardo, as a necessary foundation to understand the nature of his plan on devising a better monetary system.

The structure of this paper is as follows. This first section tries to highlight some of the features of Ricardo's *Proposals* which credits his monetary theory with more than what has been ascribed to him by those who summarise it as clinical and crude (such as Fetter, (1965) or Mason (1953) for example). The section covers the details of the plan and its objectors' arguments. The section comes to a close with issues about form and function of money that will be developed in the subsequent sections.

The second section focuses on two analytical relationships that can help us bridge to a discussion about the euro crisis. The first is the meaning of commodity and credit money and the second surrounds the discussion on internal and external circulation.

The third section opens with an exploration of why euro area monetary dynamics have been labelled as Ricardian. The section delves into the theoretical view that associates euro adjustments with a commodity money view and subsequently looks at how and why a credit theory of money can reveal aspects of the crisis otherwise concealed. This paper's objective is to explore a credit money perspective of current account dynamics.

I. Ricardo's Proposals

a. Ricardo's Plan for returning to Gold

England had suspended convertibility of its bank notes into specie in 1797 and during the early 1800s a series of deteriorating economic conditions were the subject of intense debate. *Proposals* was published in 1816 and it contained a detailed plan about the logistics of how the Bank of England could return to the gold standard all the while maintaining paper money as a means of payments. The Plan, according to Fetter (1965: 91), "showed him at his best as an economist". Ricardo's *Proposals* is a roadmap for the creation of the most perfect kind of currency – one that possesses two traits: is economical and secure.

One of the grave concerns about how and when to resume convertibility was the great quantity of gold that the Bank of England might need to purchase in order to satisfy all the notes that holders may want to exchange for gold. The first version of the Plan appeared in the Appendix of *High Price of Bullion* (1810) as a riposte to the view that Bank of England would need to accumulate a great stock of gold in lieu of resumption. *Proposals* (1816) suggests a means to "replace metallic coin with paper … using an ingot of standard weight and fineness instead of coin for the conversion of the paper money" (Takenaga, 2016,: 199).

An important innovation of the plan was that by prohibiting the convertibility of its note into coin, the Bank would have to pay in gold ingots. The need to economise on gold as the circulating medium is pronounced in *Proposals* when Ricardo describes the perfect currency as one in whose use "the utmost economy is practised" (Ricardo, 1816: 8). This would economise and reduce the amount of gold that needed to act and circulate as money (Takenaga, 2003: 99). According to Davis (2005: 194), the Bank's gold reserves would face reduced pressure and demand by those wanting to redeem their notes because of the sheer inconvenience of receiving ingots in return. This would have the effect of allowing the Bank to maintain a smaller hoard, i.e. smaller reserves. Given the already run-down state of reserves, this was an important consideration. "I think there would be no provision of gold necessary beyond that which the bank must have now, however small it may be" (Ricardo, 1819, in Davis 2010: 194).

The quantity theorists' story in the Bullion Report of 1810 comes out clearly: "An increase in the quantity of the local currency raises price in that country" and "By means of the increase of quantity, the value of a given portion of that circulating medium, in exchange for other commodities, is lowered" (Select Committee, 1810: 17). The aim of Ricardo's Plan was to alleviate the ills caused by an excessive note issue by the Bank of England. By what criterion can 'excess' be judged? In agreement with the Bullion report "this excess is to be ascribed to the want of a sufficient check and control in the issues of paper from the Bank of England; and originally, to the suspension of cash payments, which removed the natural and true control." (Select Committee, 1810: 73). The solution is to reduce the money supply. However Ricardo attached a highly specific meaning to 'excess'.

Depreciation was observable through the divergence between the market and mint price of gold. Thus the amount of monetary contraction recommended by Ricardo related to achieving a convergence between the two prices. Given the amount of Bank of England notes already in circulation, there would have to be a reduction, estimated of about 15% of the note supply in 1810, to reach par (Bonar, 1923: 283). "Ricardo addressed himself wholly to the question of the adjustment of the supply of money and the price level to the price of gold that would be enforced by the decision to resume cash payments" (Sayers, 1952: 39).

By proposing a paper circulation, where Bank of England notes would be convertible into bullion, rather than gold coins, Ricardo sought to improve the pre-1797 system by

replacing the expensive medium of gold with one that was cheaper (Ricardo, 1816: 32). The aim was thus to close the gap between the market and mint price of gold, which he viewed would only require a small reduction in note issue (Morgan, 1943: 44). The way the contraction would be instituted was by beginning resumption of notes for gold at the market price and coming down in small steps at specific periods until the mint price was reached. The fall in the price of goods would follow the descent of the market price to the mint price of gold; a process which was estimated to last up to a year (Bonar, 1923: 289).

Legitimate concerns about deflationary prospects of a monetary contraction were implicit in the public discussion about 'economising' on gold. However several commentators shake up Ricardo's post humus reputation of paying little regard to the deflationary problems of monetary contraction. Although not the focus of his concern, Ricardo acknowledged temporary problems that could emerge, and there are several evidences of this in the secondary literature. Both Laidler (2000) and Sayers (1952: 45) maintain that Ricardo acknowledged the potential difficulties arising from a monetary contraction. Although frequently charged with being a deflationist, the Ingot Plan was argued to reduce the degree of monetary contraction necessary to return to gold because the amount of gold the Bank of England would be required to hold under the scheme was minimised and the quantity of paper in circulation could be more easily altered to meet changing conditions. Sayers (1953: 55) recognises that Ricardo did take note of the effects on employment of a monetary contraction, and notes that Ricardo always insisted on a gradual contraction (Sayers, 1953: 39). So contrary to the crude view, Ricardo did acknowledge that the level of output could be changed because of a fluctuation in the quantity of money (Marcuzzo and Rosselli, 1994: 1257).

This is part of the essence of the Ingot plan, hence the adjective in the pamphlet's title, 'Proposals for an *Economical* and Secure Currency', which is to create the objective of requiring less circulating gold whilst maintaining its *Security*, i.e. a stable value. It is to this aspect of the Plan that we now turn. Ricardo's Plan not only supported the resumption of cash payments through a scheme that would economise on the amount of gold needed but it also allowed England to resume gold payments without raising the purchasing power of gold. This aspect of the plan relates to the value of money vis-a-vis other commodities, i.e. the relative price between the price of gold in relation to the price of other commodities. "All writers on the subject of money have agreed that uniformity in the value of the circulating medium is an object greatly to be desired" (Ricardo, 1810: 7).

The Plan aimed to stabilise the fluctuations in the value of money, which can be ensured by a proportional link between whatever circulates as money and the standard commodity of gold (Takenaga, 2003: 99). Accordingly, in order to keep constant the price of buying and selling gold implied that the relationship between money and gold ought to be fixed. It was a plan that was seen as assisting in the stabilisation of the "equivalence of currency to the standard metal" (Takenaga, 2016, p 83).

The benefits derived from replacing gold with paper were not confined to the reasons Adam Smith extolled the benefits of paper over gold – these were basically down to cost savings. Rather, the Ingot Plan goes further by claiming to enhance the stability of the price of gold. This is done because if gold was a circulating medium, then any increase in the quantity of gold supplies would affect both the value of the circulating medium and stocks of bullion. Using paper for circulation however, would purportedly, allow the price of gold to remain constant "regardless of the amount of paper" (Arnon, 2011: 146). The advantage of paper over gold was that the quantity of paper money did not rely on the production process and deposit discovery of gold reserves. With a changing need for trade and changing economic circumstance the quantity of money could be altered fairly simply, which would allow the value of money to remain more constant (Takenaga, 2003: 100).

This reveals Ricardo's higher order purpose, which was the search for an invariable measure of value (the second trait necessary for a currency to be characterised as perfect). "Currency may be considered perfect, of which the standard is invariable, which always conforms to that standard" (Ricardo, 1816: 8). Value theory in Ricardo has been described as containing insurmountable difficulties. This is partly down to the two parallel processes he uncovers about commodities' value: one arising from production and one found in exchange. The problem is that commodities do not necessarily exchange according to the labour values bestowed in them (Fine, 1982). When it comes to Ricardo's monetary theory, and the difficulty of finding a perfect measure of value, his work has been described as incompatible and inconsistent (Lapavitsas, 1994, Blaug 1997, among others).

The distinction offered by Marcuzzo and Rosseli (1994) about Ricardo's monetary theory is insightful, and will help guide the discussion in the following sections. Emphasis is placed on Ricardo's distinction between money and gold. Following the distinction made

above, Ricardo's monetary theory also has two parallel processes. On the one hand it money's value is built up according to value theory, in which gold has a commodity character, and so, like all other commodities, its value is determined in its production process, independent of the amount that exists in circulation. Its value is thus related to the embodied labour time as well other costs in the production process, and in this sense, it has an intrinsic value. The purpose of this gold as money is as a measure of value of other commodities. Simultaneously however, Ricardo builds up a theory about money's value that is based on money's value in exchange, through a quantity theory framework, which appears to differ significantly from the aforementioned one. Through the quantity theory lens, money's value is determined in circulation, meaning it has no intrinsic value bestowed upon in through the labour time (and other costs) of its production. Its value is dependent on the quantity and the volume of transactions, in the familiar causal way. How much output can a unit of money buy? As the quantity of money increases, the amount that can be fetched in its exchange with other goods, meaning the value of money, decreases. In this respect we are talking of money as purchasing power vis-a-vis other commodities. In the sphere of circulation, the value of money is also determined by the volume of transactions it must conduct: as transactions increase, so does the value of money. Using gold as the standard, the value of a paper medium would thus be determined by the amount of gold it can buy. "It is immaterial whether the circulating medium is made up of full bodied gold coins or of debased coins or paper money (whether convertible or inconvertible): the value of money is always determined by the quantity of gold bullion that one unit of currency can buy on the domestic and foreign markets, according to the prices of gold and the exchange rate" (Marcuzzo, Roselli 1994: 1253).

The point is to make gold the frame of reference from which fluctuating prices of other commodities can be measured. "The role of gold in Ricardo's theory is not as money, but as the standard of money, i.e. the means to measure the value of money" Marcuzzo and Rosselli, 1994: 1253). This is brought out by his initial preference for silver as a standard of value, for its price was less volatile than gold's (Sayer, 1953, Laidler 1999). If we use an analogy with units of metric measurement, the point put forward is that by keeping the ruler's units fixed, varying lengths of objects can be measured; if the length of a centimetre keeps changing, a change in measurement may reflect a change in the unit of measurement or a change in the thing being measured, but it would be impossible to

distinguish between them. According to Ricardo: "When two commodities vary in relative values, it is impossible with certainty to say, whether the one rises, ,or the other falls; so that if we adopted a currency without a standard ... [the] depreciation could not admit of proof, as it may always be affirmed that commodities had risen in value, and that money had not fallen" (Ricardo, 1816: 19).

Marcuzzo's distinction between the value of gold and the value of money helps identify important mistakes that have been made when commentators ascribe to Ricardo the view that the role of gold is to provide for money's value. The "value of gold, namely the relative value of gold in terms of commodities, has no role to play in Ricardo's monetary analysis. It is not the equalisation of the purchasing power of gold in terms of commodities that accounts for gold movements. Rather, the mechanism is to be found in the differences between the purchasing power of money over gold, that is to say in the difference between money prices of gold at home and abroad. It is not a change in the prices of commodities, but rather the discrepancy between prices of gold at home and abroad, due to a variation in the exchange rate, which signals arbitrage opportunities for gold importers and exporters." (Marcuzzo and Rosselli, 1994: 1254-5). This view is important also for the commodity view of money we will discuss in Section 2.

A change in the 'value of money could be seen through the difference between the mint and market price of gold: i.e. between the fixed price that has been set by law of what weight of metal that is analogous to a monetary unit, and the amounts of monetary units that can be given in the market by selling a quantity of metal. When these diverge, and the market price is greater than the mint price, opportunities for profitable arbitrage materialise, and people melt their coins into bullion to sell for the market price which is higher than its mint. If this process entails demanding the Bank to exchange a holder's notes for gold taken from the banks reserves, in order to profit from the margin, there will be both a contraction of the money supply as well as a strain on the reserves. This process of arbitrage, Takenaga (2003) explains, is the means through which under a convertible scheme, the price of bullion on the market does not tend to deviate far from its official price. However, the problem of inconvertibility is therefore that the mechanism to ensure the two prices do not diverge has been stopped, and the divergence indicates a measure of depreciation. It is in this respect that Ricardo talks of an excess note issue. No longer constricted, the note issuance is entirely based on the demands made by

merchants for loans and the needs of government. In this case, the value of money is measured by gold, which acts the standard of value.

Ricardo's intention was create an economincal and secure monetary system. By not simply substituting circulating notes with circulating gold coins, but reserving gold for use externally (Sayers, 1953: 38), Ricardo's Plan distinguished between domestic and external needs. The question of where the Bank of England would source the gold it needed to return to gold was, according to Sayers (1953), cast aside by Ricardo because his intention was not where to source more gold but to reserve gold, however much of it there was, for international transactions. This is the interesting part of the scheme's objective; the Ingots were not designed to enter into internal circulation and exchange hand to hand. The Bullion Report (1810) made the point clearly: 'That excess cannot be exported to other countries, and, not being convertible into specie, it is not necessarily returned upon those who issued it; it remains in the channel of circulation, and is gradually absorbed by increasing the prices of all commodities" (Select Committee, 1810: 17). Ricardo takes up this point and tries to explain why inconvertible notes do not get exported as gold does and what the domestic repercussions are. When bank notes are inconvertible, according to Ricardo, an ever greater quantity of notes is being supported by a constant amount of gold for the external account of the country. Section 2 expands on further on these points.

b. The arguments against a return to gold

The theoretical arguments relied upon to argue the case against a return to gold will be discussed in this section. They reappear in different incarnations throughout time and will be subsequently discussed in relation to twentieth century literature on endogenous money. The main, but not sole, opponents to the opinions reflected in the Bullion Report were given by the Anti-Bullionists. Their arguments differed both in the analysis they gave to the problem and the policy conclusion they reached. The generally advocated for a postponement of the return to convertibility, and according to Corry (1962), they distinguished between what caused external monetary problems in the exchanges and what caused internal problems in relation to rising domestic prices.

Anti-Bullionists defended gold convertibility being suspended on two grounds: they made use of the real bills doctrine that alleviated the blame from the Bank of England's note issuance, and because they located monetary problems arising from different causes than the Bullionists (Allen, 1999). This section primarily develops the real bills doctrine for it will be useful for the subsequent discussion and secondly it briefly covers the Anti Bullionists' alternative explanations for the monetary ills of the time.

The theoretical concepts used to defend the Bank of England were the real bills doctrine and the law of reflux. A common mix of these two ideas leads to the conclusion that if currency expands and contracts according to the needs of trade the result will not be inflationary. The anti-bullionists used the real bills doctrine to show that the increase in bank notes by the Bank of England could not be the source of monetary problems, because the responsiveness to a demand for credit that was granted for a trustworthy cause was seen as a guarantee that credit creation in itself cannot be the source of inflation. The description of the Bank of England as being passive stands out here. The Bank of England's actions were not and could not be the culprit of inflation for it merely passively responded to the (legitimate) demands for credit.

The essence of the real bills doctrine was that bank lending "should be confined to loans made on the security of short term bills of exchange issued by reputable merchants or manufacturers to finance production and distribution of real goods" (Laidler 1984: 7). According to this view, providing a supply of money doesn't create the need for it, it is responding to a need that is made of it. Bank notes could never be excessive if they were created out of genuine tradesmen's needs. As Corry explains, "such issues could never be the active factor in any price rise because if they were the equivalent of real security they would only be meeting a demand for credit which was already in existence: hence according to this view - bank credit met the needs of trade and did nothing to create those needs" (Corrie, 1962: 75). The elasticity of money supply is instrumental in the analysis - for it assumes that limiting itself to the discount of only good quality bills makes the money supply grow and contract elastically responding to the production and trade needs. When loans are thus accorded, expanding the credit supply of money cannot cause an excessive increase in the money supply. It follows from the real bills doctrine that "a rise in prices is not typically preceded but, on the contrary, is followed by an increase in the circulating media" (Blaug, 1962: 195).

Based on this elasticity, we can describe the efflux mechanism: this view attributes to credit money a certain characteristic – because repayment must be made there is an inbuilt mechanism to annihilate purchasing power when the loan is repaid. The Bank of England's liabilities would grow on the basis of the needs of trade and the advances made to government. As a bank's assets will be comprised of real bills, the amount of loans they make is based on 'goods–in-process' and so "the means of payments in an economy will necessarily expand in pace with the volume of goods produced" (Blaug, 1962: 195). This, on the basis of the Law of Reflux, inflation is never the result of a growth in the supply of credit awarded in this way.

It appears therefore that one significant policy conclusion based on this idea is that the authorities should not interfere with this mechanism. Excess credit creation is regulated by the banks' ability to discount sound real bills. Gold reserves would not be reduced, and convertibility of the Bank's liabilities that would be threatened by such a drain would be avoided, if discounting was done on the basis of real bills. According to Laidler's (1984) interpretation of the debate, and a view he disagrees with, advocates of the real bills doctrine maintained that price level stability could be guaranteed if bank lending was constrained by this doctrine. According to Mints (1945) the real bills doctrine put forward the idea bank lending in such a way could have a stabilising impact on the price level. Furthermore, Willis and Edwards, (1926: 494) repeat the core message of the real bills doctrine: "the proposition that even in the absence of convertibility, a banking system which confines itself to lending on the security of good quality short term commercial loans will automatically act so as to stabilise the price level."

Several important rebuttals have been made against these ideas. There were significant reasons to hold reservations that such a self-regulating principle would produce good results. Goodhart, who charts the gradual development of the clearinghouse system, supervised by the Bank of England, points to the concern at the time as to whether this could successfully restrain the rapid expansion of business by any one private banker (Goodhart, 1988: 29). There were significant concerns that the divide between a genuine and a speculative need for credit was often blurred. With industry expanding rapidly in the early 1800s there were ample opportunities for speculative ventures, and according to Niebyl (1946: 67) the Bank of England wanted to take part in potential profit making from these loans to business. Furthermore, according to Goodhart, the problem with this benign view of supplying loans to merchants was that it hadn't factored in the possibility

of banks trying to make their liabilities more attractive and thus avoid drains on their reserves at the Bank of England. "The automatic loss (gain) of reserves through the clearinghouse mechanism accruing to relatively fast (slow) growing banks tended to force all banks to grow at around the same mean rate, but it provided no guide to what would determine the rate of growth, and whether that could be expected to be stable or unstable" (Goodhart, 1988: 47). Blaug raises a similar concern, describing how real bill discounting potentially enhances credit boom and bust cycles. Increasing loans and raising money incomes, may justify additional borrowing, and so he argues, real bill discounting in and of itself does not guarantee a stability in the quantity of money or credit (Blaug 1962: 632).

To what did they attribute the cause of the acute economics problems of the time? In modern parlance we could say the anti-bullionists favoured a cost push view of inflation. It was problems such as bad harvests that brought about domestic price increases, and had nothing to do with an increase in paper note issue. Explanation for the growing internal price rise (inflation) was attributed to, among other things, importation of expensive corn (because of the measures of the Corn Laws), from abroad that was necessary after a string of bad harvests in England. Furthermore, the high price of bullion and depreciation of the pound was largely a cause, not of an over-issue of the Bank of England, but due to the large funds sent abroad by England to subsidise allies who were on the same side of the Napoleonic Wars (Corrie, 1962).

In this view we can find the complete reversal of causation that the simple quantity theory of money held, with quantity of money determining prices. As Schumpeter explains, "what acts upon prices is expenditure", however financed (1954, p709). According to the real bills doctrine, the connection between the quantity of circulating medium and price level was one in which the level of prices determines the quantity of money (Corrie, 1962).

II. Concepts in monetary theory relevant to the euro crisis

Certain key monetary issues raised above will be taken up in more depth in this section. Here, we expand upon some analytical issues raised in the preceding discussion that concern theories of money. The aim is to draw out the parallels in monetary concerns of the current time with the concerns of the past. There exists a diverse and often competing story about the nature of money and the importance of the functions attached to it. Two elements of this discussion are central to this paper: commodity and credit theories of money as well as the internal and external circulation of money. The following section tries to explore the consequences of these two binaries for our varying understanding of monetary relations.

a. Commodity and Credit theories of money

The preceding discussion in Section One about the merits or drawbacks of inconvertible paper money during the years of Suspension brought to the fore important issues about the role of money during the post war economic difficulties. The acceptability of Bank of England notes without them being proclaimed legal tender brought to the fore discussions about how these 'worthless' pieces of paper acquire or lose value.

The orthodox Classical viewpoint became known as the quantity theory view. In modern minds this is a simple dictum whereby an exogenous increase in the money supply will cause a proportionate rise in the price level. However, it is considered that there is a substantial misrepresentation about the Classical theorists' views and it is inaccurate to call the Quantity theory a single theory as it more resembles a paradigm (Harris, 1985). Early nineteenth century quantity theory was heterogeneous and nuanced; for example, according to Harris (1985) the unqualified crude version of the quantity theory just mentioned and that became popular in the twentieth century was not actually a feature of Classical theorists. Theorists may have subscribed to the quantity theory view, but only by attaching numerous other qualifiers and considerations so as to be in constant dispute with each other. This view is reiterated by Marcuzzo and Rosselli (1994) who adhere to the view that a quantity theory view, much more than other aspects of monetary theory, means rather different things to different people. Similarly, we have Corry (1962) whose

main thesis is that the popular view surrounding Classical monetary orthodoxy that assumes that money is a veil that is superimposed on 'real' relationships, is a gross simplification and unhelpful description of Classical monetary thought.

Nonetheless, where can we begin from to engage with the issues raised during the period of Ricardo's *Proposals*? A credit and commodity theory of money will first be sketched out. According to Schumpeter "There are only two theories of money which deserve the name, the commodity theory and the claim theory. From their very nature they are incompatible" Ellis (1937: 4). This section delves deeper into some relevant implications of each perspective as well as some of the various interpretations of what a commodity theory of money is.

The meaning of the phrase 'commodity theory of money' seems to have multiple interpretations. The conventional story is that money emerged to facilitate exchange as a cost saving measure to relieve the inconveniences of barter. This emphasis on money's function as a medium for exchange is a mainstay of mainstream thinking. This arises out of an attempt to situate the origins of money in market transactions, a view held by some Classical and neo-Classical writers. Through this conventional story about money, we can pick out aspects of the commodity view a little more clearly. The view that money arises to facilitate exchange crystalizes a view of money as an exchange *good* and as something that is (physically) traded to receive commodities in return. Commodity money is money that arises out of an exchange of goods or services (see Gnos, 2006: 92).

But is it a commodity like any other? There seems to be two broad approaches: "those which regard it as something more, and those which regard it as something less, than an economic commodity" (Ellis, 1937: 3). The discussion about whether money is a commodity like any other is complicated and intimately linked to the discussion about money's value, money's origin and its relation to other commodities' value. One possible way to understand the meaning of commodity money is in terms of the production of the commodity that functions as money, such as the production of the gold commodity. As we are talking about the value of a produced commodity, its value will arise from the overall theory that determines the value of all commodities, which in the case of Ricardo is related to its embodied labour time and costs of production. It is in this respect that money has an intrinsic value, i.e. a value imbued from its creation which is independent of its quantity in circulation. The assertion that Ricardo and his Bullionist contemporaries

merely picked the quantity theory baton from predecessors such as Hume is a misrepresentation: Hume precludes this view held by Ricardo, whereby money is also a commodity in its own right whose value is determined in production. Viewing money as a commodity like any other has been the source of much criticism to Ricardo's monetary thought (Lapavitsas, 1994).

However, this is not the only possible approach towards commodity theory of money. When the quantity theory of money is utilised the value of money does not arise from its production like any other commodity. Money's value arises as a non-commodity, meaning it is determined in exchange, by its quantity and by the amount of on-going transactions. The meaning of non-commodity here means that its value is not determined in the production process, therefore the determinants of its value arising from the cost of production are not recognised.

We may be accustomed to discussing the formalised quantity theory as introducing money as the numéraire, thus supplying Walras' nth market. It is through this framework that money is seen as unit of account and the broad debate about money neutrality takes centre stage. Does the insertion of money into this framework merely help us determine the nominal variables, for which the actual amounts produced have already been established? If this was the case, the entry of money into the analysis doesn't fundamentally change the nature of the transaction underlying it. What is relevant for us is how an analysis of a monetary economy is different from an analysis of a non-monetary economy. It is not immediately obvious how one can maintain a cost of productions view to money as commodity today given the tiny fraction of global money made of metal.

When we look at Ricardo's quantity theory, or quantity theory in general, and we ask how much output can a unit of money buy – what is the purchasing power - we are comparing two variables, which are going to exchange at definite exchange ratios, thus producing a relative price. "Exchange between money and commodities is nothing other than symmetrical exchange between commodities" which is not dissimilar to a barter economy (Takenaga, 2003, p 117). If we take Takenaga's interpretation of Ricardian monetary ideas, we can ask whether and in what way Ricardo had a commodity money view. It can be argued that even by taking a non-commodity view, as implied by this interpretation of the quantity theory's determination of money's value, we are still focusing on a real analysis rather than a monetary analysis.

i) Monetary concerns

Continuing with the real and monetary distinction may be a helpful way forward. One of the theoretical innovations which came to the fore with the monetary theory of production view was that money needs to be considered right from the outset of the analytical framework. And when we do so, the monetary cycle traces the creation of money to the creation of a debt, which becomes a corresponding asset on a lender's balance sheet. Through this lens we can see an aspect of commodity money concealed from the preceding discussion. Moore (1998) was instructive for making it clear that commodity money is an asset which has no corresponding liability (1988). By comparison, credit money does have a corresponding liability.

The circumstances through which money arises are a useful approach to disentangle the significance of commodity versus credit views on money. Mentioning some interventions by circuit theory could be helpful. The circuitist approach (which is represented in the work of Graziani or Parguez) focuses on a continual time analysis of the production process and begins the analysis by looking at how money is advanced as loans to firms. One of the concerns raised by monetary circuit theorists is that money is unlike commodities because it can never be scarce, because money is something created out of nothing by the banking sector (Rochon and Seccareccia, 2013). This approach reinforces the view that money "is no more than entries in bank accounts, recording borrowers' liabilities and lenders' assets" (Gnos, 2006: 92). According to this viewpoint, one of the important functions of money, when we understand money as fundamentally a debt and credit relationship is the function of money as a mere recording device of the measurement of credits and debts (Arestis and Sawyer, 2006: 1). Perhaps it is due to these insights that many subsequent commentators have engaged with Schumpeter's widely quoted remark on how best to view capitalist finance: "as a clearing system that cancels claims and debts and carries forwards the difference" (1954: 717).

The expansion of the literature on the demand for money (liquidity preference) and portfolio analysis about the portion of wealth to be stored as money as opposed to other assets, has taken up a lot space in the twentieth century, from Keynes, to Gurley and Shaw (1960) and modern post Keynesians. This includes emphasising money's other functions, such as store of value. The functions-of-money discussion becomes useful in drawing out how in different circumstances, the same 'money' can assume different characteristics.

One of the objectives of this paper is to draw out the diachronic nature of these debates. As discussed previously, the defence of the authorities' policies that the anti-Bullionists advanced were frequently related to the implications of the real bills doctrine. This is a very fitting link to contemporary monetary theory. Much current thinking about the supply of credit being endogenous has arisen from the intellectual heritage of the Antibullionist's argument. Side-lining for the moment the important distinctions between the two Post Keynesian endogenous money strands (accomodationist and structuralist), they both lead to the view that the money supply is endogenous to the activities of the real private sector. Rather than focusing on money's supply as exogenously determined by the authorities, the focus is on the demand for credit which is based on real expenditure plans of firms and their future expectations about profitability. It is out of this process that the stock of money is created. In this sense we can talk of money being created through a process of credit creation. One of the vantage points of this approach is that by placing the direction of causation from advancement of loans to the creation of deposits, it makes it more obvious to discuss the implications of money (in the form of deposits) when they have a counterpart as a liability on another's balance sheet. It follows from this that the exogenous money view that the monetary authorities have within their command the ability to control the money supply, is no longer applicable. "Endogenous money theorists emphasize particularly cost-push forces for inflation ... far from causing inflation (as in the monetarist model), money comes at the end of the causal process by which inflation occurs" [Dow, 2006: 40]

The passivity that was attached to the Bank of England's response through creation of credit is echoed in the recent literature in Post Keynesian monetary theory, and in particular in the accommodationist view (Dow, 2006:24). The accommodationist view is represented by writers such as Kaldor and Moore, among others, and holds that "inflation could not be caused by an excessively high growth rate of the money supply" and that there could "never be any excess money supply" (Lavoie, 2006: 17).

The central question of this section is what do these abstractions show us though for our understanding of "adjustment"? Having laid out a brief introduction to the different views on money, we can now ask whether the dynamics of adjustment are different when money is created as a private liability or whether it arises as a commodity money, whose holder doesn't have any corresponding counterpart.

The valuation of assets is determined through complex processes and the development of capitalist finance as it stands makes assets subject to big swings in valuation. The credit economy view constructs an understanding of the international monetary system as an interlocking web of credit and debt relations, which all priced in different currencies and which in any given moment are moving in different directions based on the moods of the time and volume and direction of capital. Rapid changes in valuations have far reaching consequences when adjustments on the balance sheets of individuals, firms, banks and states create unstable debt and deflationary dynamics (See Koo's (2011) on balance sheet recession).

Before moving on from this commodity and credit theory of money discussion it is important to mention authors who have argued that the function and form of money evolve with capitalism's development (Chick, (1989) and Niebyl (1946). In the early days of industrialisation the divide between internal and external circulation was more evident. At the time of Ricardo's *Proposals*, even a generalised price level was hard to discern, for markets were far more localised and less integrated. Niebyl underscores a change in the *function* of money that occurs during the course of the monetary controversy debates Ricardo was part of. "With the turn of the century, industry in England had reached a stage in its development that was functionally and basically different from that of twenty-five years earlier" (Niebyl, 1946: 88). What did this imply for the role of money? A transformation of this scale, Niebyl asserts, was underway in the way money's function was understood during Hume and Smith's time as compared to the era of the Bullionist debates.

Where Niebyl notes a change in the function of money during this period, Kindleberger (1984) points to the problems inherent in the nature of monetary systems of multiple objectives, such as simultaneously satisfying internal and external needs. Kindleberger takes this point further by applying the frequently mentioned Greesham Law which follows much of the history of monetary theory, the problem of bad money driving out good into hoard or export. This Law, says Kindleberger, "is relevant not only to good and bad coins of the same precious metal...", for which he must mean that the problem of dealing with moneys of different characteristics always presents problems. He continues that the Law is relevant to "more widely, gold and silver; to paper money and coin; to the gold exchange standard that permits switches in central-bank reserves from gold to national money and back again; or to a pure exchange standard with two reserve

currencies. The problem is insoluble: two or more monies are necessary because different monies are needed to perform different tasks, but two or more monies are unstable" (Kindleberger, 1984: 6).

b. Internal and external Circulation

The need for money internally and externally can differ substantially and the interaction between internal and external circulation is where monetary theory and balance of payment theory is insufficiently disentangled. For it is here that theories of balance of payments and their monetary counterparts become blurred.

In order to identify some of the issues at stake, the simplified version of the so called "classical" international adjustment mechanism will be sketched out. Corrie's 'straw man' view of Classical Theory is presented by De Cecco, who summarises the Classical theory's adjustment as one where "there is only space for an international equilibrium mechanism based on movements of absolute and relative prices. The equilibrating medium is gold, flowing from one country to another." (De Cecco: 1974: 6).

The ideas that were dominant at the time the Price-Specie-Flow mechanism was formulated by Hume maintained that pursuing a current account surplus strategy would be fruitful. Hume's response described how price adjustments would tend to automatically equilibrate the trade balance and hence render such a strategy self-defeating. A condensed view of "the Classical adjustment mechanism" is that under a convertible monetary system, the current account and the money supply are inextricably and directly linked and operate via the price level regulated by the quantity theory of money. The expansion and contraction of the money supply is intricately connected to the trade balance: a trade surplus means acquiring gold (increasing the domestic money supply), and a trade deficit means exporting gold (decreasing the domestic money supply). A chain runs from a current account imbalance affecting the money supply, which adjusts the price level – until the current account has been brought to equilibrium. In modern explanations this works via improvement or worsening of competitiveness, (i.e. relative price shifts). In order for this mechanism to hold, a proportional relationship

was assumed to hold between quantity of gold and prices. The quantity theory of money applied to a world level is the central regulating principle (see Walter, 1991: 54). Under a monetary system that is based on gold, the state of the current account automatically affects the money supply which is proportionate to the domestic price level. This link is present regardless of any less stringent assumptions made on the composition of money, so long as it is linked to reserves and money supply are proportionally maintained.

i) Ricardo's international adjustment mechanism

There are numerous concerns and criticisms raised about this version of classical adjustment mechanism and it is to some of these that we now turn. The first is based on the element of misrepresentation as described in the aforementioned formalistic, simple model.

A more detailed view of how Ricardo viewed the international adjustment mechanism has been provided by Takenaga (2003). To understand the adjustment mechanism under Ricardo's monetary theory consider the following example. Assume a system of gold convertibility and a situation of equilibrium where the value of money is the same in each country and thus the money supply is proportionally distributed across the globe. If the Bank of England issues notes, the global money supply will have increased in an instant. But because the increase in the quantity of money has occurred only in England, in accordance to the quantity theory of money, it is there that the value of money will fall. This changes the relative purchasing power of money in England vis-a-vis other countries. With an increase in the quantity of money in England, its purchasing power visa-vis what it could buy in other countries has fallen. Because of an increase in the quantity of money and consequent lowering of the value of money in England, there is an excess of money over what had been previously its allotted share in the distribution. Money, like any other commodity will go to the place it has more value, therefore, England will import commodities and export money to pay for them, continuing until the global proportion of distribution is re-established. This efflux of money is a way to discharge of excess money. This will continue until that extra issuance is distributed across all countries along the same proportions as before, so the money supply in each country will be a little higher than before. Assuming England's position in the world economy remains the same "As the Bank of England adds to the currency of the world England would retain its share of the increase" (for a in depth explanation see Takenaga, 2003)

ii) De Cecco's 'Myth'

Ricardo's Ingot plan was a scheme to reconcile the different nature of internal and external circulation. According to Takenaga, the problem for Ricardo was that the process of equalisation of the values of money across the world is disrupted through inconvertible money which cannot be exported to re-establish the correct international distribution of precious metals. As mentioned previously, the inability to export inconvertible money a key concern of the Bullion Report of 1810.

The excessive issue of inconvertible paper money impacts internal circulation by depreciating the circulating medium by an amount equivalent to this excess. Assuming the gold that these notes represent hasn't changed, an ever greater amount of notes is represented by a smaller share of gold. The problem as presented by Takenaga, is that inconvertible money break the link between the internal and external circulation and the problem is that money, in whatever form, cannot enter or exit circulation freely (2003: 117). Inconvertible notes are only acceptable as money inside the country, and their link to the 'intrinsic' value of money as gold has been severed, leading their value to be determined by quantity alone.

Takenaga summarises Ricardo's Ingot Plan as the means with which a country can halt the destabilisation of the value of money by removing the barrier of money between the domestic and international arena. Once a firm link is established with gold, then money as gold can move freely to re-establish an international distribution of gold in which money's value will be equal in all countries.

Moving on to other types of objections about the classical adjustment mechanism we can adopt a central line of argument developed in the thought of Marcello de Cecco's 'Money and Empire'. The critique launched by De Cecco pivots on the central but often disregarded observation that theorising about a system and studying how it actually works are two different things. According to De Cecco, this is made clear from the abundance of work on how the classical adjustment process was supposed to work, whilst maintaining a deep regret for the lack of studies that accurately address how it actually worked. It is from this that his frequently quoted observation stems: that there exists a widely held myth of *automatic* adjustment under a gold standard.

The concern is echoed by Hammond (1985); prosperity and economic efficiency were not the corollary counterparts to an international system that revolved around gold: "the myth is ... that the standard provided automatic monetary and financial adjustments which resulted in market-clearing changes in relative prices and internal and external balance". Furthermore there are strong doubts about their desirability if they did work.

Imagine having to wait for the price adjustments to work themselves through and restore external balance. The underlying implication of relying on such a system being automatic is the authorities do not have to intervene. Domestic deflation or recession will have to be tolerated as and when the external balance needs realigning. The authorities however, who face competing demands and objectives, will be frequently faced with the nonnegligible political cost that will be incurred when deciding to sacrifice internal concerns to salvage external adjustment.

De Cecco may well fall fowl of the crude generalisation often made of the complexities of Classical monetary thought and the classical adjustment system. However his critique is about the broader dynamics that are excluded from consideration. The world of Smith and Ricardo, De Cecco explains, is characterised by a static analysis between homogenous nations in the "civilised world" (quoting Ricardo), a world in which problems that result from countries in different relative positions of power and economic development are under-represented. This is, in his opinion, a fatal mistake, for it excludes the very drivers of the industrial economy this nascent school of political economy is trying to grapple with: "great inventions, the differences in levels of development that have permitted colonisation, the huge migrations of Europeans to the new continents, the massive exports of investment capital to the new countries" (De Cecco, 1975: 6).

Beyond the reality-check criterion however, there are problems about the analysis of the international monetary system when applying quantity theory to the global level. Endogenous money theory on a global level is somewhat dispersed, but there are scholars who are working in this direction. We have already mentioned the strand of thought in which money supply is based around the decision making processes of profit-making firms, and is not something which is determined by the amount of reserves or state of the trade balance. On a global level today, money flowing in and out is not just down to trade, and so the ultimate focus on the trade balance may not be necessarily merited for an analysis of today's monetary system. Financial flows and the causes of their movements,

such as interest rate differentials, open it up to both accounts on the balance of payments. And as we shall go on to see in Section Three, recent theoretical and empirical discussions have broadened this out even further to pay attention not to the *balance* of payments but to their overall gross amounts.

Although Ricardo's preoccupation about the lack of acceptability of inconvertible paper money out of the country of issue is clearly a concern which belongs to a period far from today, there are several unanswered questions about the nature of international money. This raises all the more complicated issue of what a contemporary view on international money is, and how its value or acceptability is determined. A promising direction lies in understanding the international credit structures and issues of international monetary hierarchies. There are views on international money, i.e. money in respect to external needs, which associate its characteristics and nature clearly as part of a credit structure. Toporowski in this respect is insightful: international money is essentially overlapping cross border payments (Toporowski, 2005), appearing as credits and debts on institutional balance sheets. Some relevant points in respect to the euro will be raised in the next Section.

III. Interpreting the euro crisis with a lens from the past?

What can the discussions out of which Ricardo's *Proposals* emerged illuminate about current controversies? We now turn our attention to the way in which the euro crisis analysis contains a similar theoretical entanglement as witnessed in the past. We keep in mind the same disclaimer made by De Cecco (1975) in his view of the gold standard: discussions on how the system is supposed to work and how it actually works are two different things. Just as the supposition that gold standard heyday worked because countries followed so called 'rules of the game' has been strongly contested, similarly when referring to the euro area, the existence of a much more rigid framework for rule adoption has not implied its even application. We will overview only certain elements of the theoretical justifications about the common currency area, with the *actual* nature of the currency union and explanations about its dysfunctions being beyond the scope of the paper.

a. Gold Standard adjustment and Optimal Currency Area Literature

Apologists of the gold standard are many; a vocal strand comes from Austrian School economist De Soto: "The euro [should be seen as] a proxy for the Gold Standard" (de Soto, 2012). There is a similarity between the gold standard adjustment process and the optimal currency area (OCA) literature, in that both stress the how wage and price flexibility are a means correct external balance. The standard reference of the later is Mundell (1961), with subsequent contributions by Fleming (1971). Key conditions are identified that would enhance the operation of a currency union. Relinquishing monetary and exchange rate policy reduces the policy instruments available to governments for dealing with changing economic circumstances. In order to mitigate the varied difficulties that countries may face, the Optimal Currency Area theory looks for certain features (described below) that would lessen these difficulties, and thus allow the benefits of membership to exceed the costs.

According to this viewpoint, wage and price flexibility can respond to changing external conditions given the preclusion of the exchange rate between members of the union to adapt to changing external circumstances. Such a requirement assumes prices are able to respond through absolute reductions in order to meet changing external balance. With regards to the structures of the economies, the degree to which they respond in similar ways to external shocks can minimise the relative price shifts among countries. Under this schema the currency area's viability is greater between homogenous and integrated countries which face similar external difficulties. Thus allegedly, a currency area is more optimal, the more symmetrical their responses are to external shocks. In the case of limited domestic nominal price and wage flexibility, the second best solution according to this view, is for adjustment to happen via factor mobility. According to this theoretical viewpoint if factors of production are mobile, labour migration can provide a suitable response to changes in relative wage changes. In theory, relative price shifts would be mitigated the higher the degree of factor mobility between countries (Boughton 1991).

Thus in this 'fictional world' as Bellofiore et al (2014 p 20) call it, "employment arises out of competitiveness" and competitive deflation via wage flexibility plays the role that competitive devaluation via exchange rate flexibility would have otherwise played. If a country has an external trade imbalance, and exchange rate adjustments have been precluded by default, adjustment will take place through the labour market. According to

Toporowski, "this theory therefore provides a teleological rationale for deflation, when deflation has been sufficient to increase the 'competitiveness' of a country's output and thereby increase demand for that output abroad." (2013: 3). The comparison between the euro and the gold standard has been made more frequently with successive new EU governance law changes that enforce a rigid deflationary framework.

Having found some similarities between the conceptions of adjustment as perceived under the classical adjustment story and the optimal currency area literature, we now turn to the parallelism in their monetary counterparts. The core point to be made is that the optimal currency area literature, by focusing on adjustment through shifts in relative prices is fundamentally concerned with a real analysis of adjustment processes. To the question of whether money matters, we might say that money variables are not integrated into the base floor of the analytical framework (Schumpeter, 1954). According to Toporowski the optimal currency area's monetary analysis is "regarded as a commodity money, or at best, as a monetary theory of credit in which credit is a claim on money that serves as medium of exchange, rather than a store value". According to this perspective, the process of adjustment depends on a monetary system of fiat or commodity money. This point is echoed by Bellofiore et al, who claim "the Euro is built upon a Ricardian theory of money perspective, where fiat money issued by a central bank pretends not to be (as it is) a liability, growing out from debt/credit relations, and must be held scarce by the issuer, setting price and quantity" (2014: 20). Smithin (2003) highlights money as inconvertible paper currency (backed by the state) is a different kind of monetary relationship to credit money, where money is mainly held as deposit with banks.

What is missed out from this is that money is primarily in the form of deposit liabilities held with private banks. This has implications about the reserve constraint of the system. If we take the example of extreme monetarists such as Frenkel and Johnson, their development of the Monetary Approach to the Balance of Payments upholds that the volume of reserves are determined by the balance of payments (Frenkel and Johnson, 1976). However, when credit forms of money are integrated into an analysis of external exchanges, we have to ask what the relationship between the trade balance and reserves are today.

There has been a large discussion about whether reserve creation is an endogenously created process. The monetary authorities clearly recognise this, explained clearly as early as 1969 by the vice president of the New York Federal Reserve: "In the real world, banks extend credit, creating deposits in the process, and look for the reserves later" (in Jakab et al 2015). According to the standard approach of conventional monetary policy, open market operations influence the level of reserves that banks hold in the system, and these fluctuations are a way to arrive at the interest rate changes that monetary policy aims for. However, the significance of these aforementioned theories is that the central bank stands ready to supply additional **reserves as required**" (Arestis and Sawyer, 2006: 35).

Ricardo's method, as for example in the *High Price of Bullion*, builds a theoretical construct starting from a pure metallic monetary system, moving to a metallic and convertible notes system in order to analyse the dynamics and problems of an inconvertible money system. Chick (1986) follows an evolutionary approach when analysing the changing nature of the savings and investment causality and corollary evolving banking system. She emphasizes how the latest stage banks is characterized by liability management techniques by the banks to attract depositors.

The argument put forward is that in order to appreciate the dynamics of today's credit based monetary system, the method ought to be the reverse. Hicks (1967), who highlighted how monetary theory ought to evolve with how the system evolves, shifts his position to emphasizing how understanding credit is key to understanding money in a monetary economy at whatever stage of development (see Smithin: 2003: 30). This means making credit transactions and predominantly private liabilities that they are based on a central and primary concern.

Bank deposits are the main component of the money supply and come into being as the vehicle for credit extension. Thus money's value is not "deriving its value from its convertibility into some kind of commodity or *fiat* money.... bank credit...derives its value from its convertibility into other forms of bank credit (in other currency units) or into financial assets." (Toporowski, 2013: 6) Ricardo's world centred on gold and on developing a system to best link paper money to gold. The volume of credit created or the paper money in circulation were constrained in some way (multiplier view or fractional reserve view).

There are a number of issues to be expanded upon; especially as regards to the representation of Ricardo's monetary work. Is it a short-hand straw-man version, as Corry (1962) warns? At the very least, the quick guide mention of Ricardo in this way, by taking us back to the early 1800s reminds us of the transformation to capitalist finance that has occurred in the meantime, and it is to this that we now turn.

b. Evolutions in contemporary Analysis of the Balance of Payments

The Classical adjustment model described above remains a significant reference point. The next section reviews today's contemporary literature on balance of payments and particularly on the conceptions of the current account (see Bonizzi, 2015 for a full review).

Balance of payments imbalances were originally theorised under standard neoclassical models as being positive and not needing any interference with. A current account deficit paid for by an inflow in the capital account is viewed as a legitimate form of borrowing from foreign savings to fund domestic investment. The "intertemporal approach to the current account" (Obstfeld and Rogoff, 1995) is based on the idea of maximising utility following the permanent income theory of consumption (Sachs, 1982, Ghosh and Ostry, 1995). This way of viewing the balance of payments allows the current account to be seen as a temporary buffer for a lack of domestic savings. A country will run a current account deficit and borrow from abroad in order to maintain a smooth and unchanged current consumption. The benign view of current account imbalances implied that they are not a cause for concern for they allow the use of cheaper foreign capital as well as aide consumption smoothing, and these things are positive.

This consensus was eventually challenged (by several decades of lower income countries' crises) and current account imbalances were acceptable under certain provisos. Reisen (1998, p. 25), for example, argues that "the intertemporal approach fails to predict the macroeconomic responses of most capital-flow recipient countries".

Current account dynamics and their centrality to understanding recent decades of crises became a central research area (Reisen, 1998; Milesi-Ferrett and Razin, 1998; Edwards, 2001, Calvo, 1998). The relationship between current accounts fuelling domestic credit

booms was investigated by Obstfeld (2012:25-28). The attributes previously justified as enhancing the positive effects of free capital flows, such as the consumption smoothing functions of the current account, were deemed to increase domestic volatility (Kose et al. (2003). This research area reached its zenith recently with the association by Blanchard and Milesi-Ferretti (2009) of global current account imbalances to the global crisis. All of this aforementioned research shares a common belief: "the current account is the key driver of changes in foreign debt and foreign liabilities more in general. The focus therefore should be on *net* external liabilities, just as the current account focuses on *net* capital flows. This view has however been challenged by both empirical evidence and theoretical arguments." (Bonizzi et al, 2015).

A large literature has emerged which states that the experience of financial globalisation cannot be captured in the examinations of current account dynamics (Johnson, 2009; Borio and Disyatat, 2011; Broner et al., 2011; Bruno and Shin, 2013). This literature highlights two related issues: the claim that international financial relations should focus on gross flows and not net flows as depicted by the balance of payments. Some empirical evidence will highlight this issue: there has been an unprecedented expansion of cross border holdings of assets (Lane and Milesi-Ferretti, 2001, 2003; 2007; 2008), whose corresponding gross flows are several orders larger than their corresponding net figures (Obstfeld, 2012b; Brunnermeier et al., 2012). Current accounts exclude asset transactions that fall outside the trade and income balance (Borio and Disyatat (2011). It is clear how the monetary implications of the classical adjustment system, where domestic money supply and the trade balance are connected via the domestic price level are concerned with a reality very different to the one just described. This was central point to the critique made by Triffin in 1944 when he observed the trade cycle in Latin America: "the business cycle is dominated by the international movements of capital" (in Maes, 2013: 1132), which in the good times flow to and in bad, away from, periphery countries, allowing financial centres to "shift part of the burden of adjustment upon the weaker countries in the world economy" (Triffin, 1947: 60)

The second issue is that as countries are holding increasing quantities of foreign assets, whose values are subject to changes in asset valuations, an alternative balance of payments adjustment process has been proposed (Lane and Milesi-Ferretti, 2007). The role of valuation effects on the international investment position has become an

increasingly important area of research (Gourinchas and Rey, 2005; Cavallo and Tille, 2006; Devereux and Sutherland, 2010). The nature of global financial integration merits a greater emphasis on gross flows and cross-border holdings, as well as the more traditional focus on current accounts and trade balances. Looking into vulnerabilities that arise out of imbalances and contemporary adjustment mechanisms must take into account these broader issues of integration.

Returning to the monetary implications of these changes is quite complicated. The international credit system is made up of a complex web of relationships. Borrowing abroad results in a credit relation between the borrower and lender: the lender will hold a claim on the borrower, who reciprocally holds a bank account credit with the lender. This issue helps clarify the distinction between the traditional view of balance of payments of using foreign savings to fund domestic investment. This view stresses that there is a conceptual confusion, it is not saving that is being utilised, but financing (source see Bonizzi). It becomes therefore impossible to trace, on the basis of the net position depicted in the current account, any specific activity funded by a specific gross flow.

c. Are trade imbalances a driver of the international monetary system?

An important weakness about the automatic adjustment process, in any of its reincarnations (gold standard or optimal currency area) is that it assumes the system will revert to a position of balance. This final section explores the insight, mostly attributed to Triffin (1958), who underlined the inconsistency between international monetary stability and domestic policy pursuits. International liquidity needs could only be via a growing payments imbalance so long as convertibility to gold was not questioned. A similar point is made by Minsky (1989) that trade imbalances provide a driver for the continual operation of the international monetary system. This is because capital importing and capital exporting countries are not two sides of the same coin and we have to underscore their unequal implications. The system they sustain is a system of imbalance and unequal relations that ultimately drive the international monetary system, and this is true of the present as much as the past.

There is a hole in the conventional story that surpluses and deficit are conceived of as neutral counterparts and that trade imbalances can be brought back to equilibrium, whether as in the Classical story, through imports and exports of gold, or through exchange rate adjustments in a flexible exchange rate system, or through internal devaluation or migration as in the Optimal Currency area literature.

Example can be taken from the scholarship on how the adjustment mechanism operated during the classical gold standard system of late 1800s to 1914. The so called 'rules of the game' of international adjustment did not equally apply to those in surplus and to those in deficit. This is a point made by Triffin, who points out "that if capital exporting countries succeeded, up to a point, in controlling the flow by discount rate movements, capital importing countries had huge difficulties when they tried to do the same: foreign capital flowed in during the booms and out during slumps, without regard for the discount rates of those countries central banks." (De Cecco, 1975: 18).

Triffin observed that the capital movements experienced were far greater than those to have been predicted given the changes in the terms of trade that classical theory described. Discussing the gold standard period 1870-1914, De Cecco observers that "England on her part, experienced growing payment surpluses for the whole period, which were mainly caused by **income flowing in** from her past investments abroad." (De Cecco, 1975: 18).

De Cecco points out the gold standard system was successful for the advanced countries and those linked to them who formed the core of the system. The capital flows between core and peripheral countries had an unequal effect: the "cyclical pattern of capital movements and terms of trade ... contributed to stability in the first group and to instability in the second. The adjustment process did not depend on any tendency toward equilibrium of the national balances of payments on current account." (De Cecco, 1975 18).

The work of Williams (1968) places the sterling at the centre of the gold standard system and describes its operation from England's perspective:

"England had deficits with Europe and the United States and surpluses with the Empire. Her banks in the Colonies and City allowed long term international investment to take place; this could continue only if money sent out of England as investment came back to England in payment for English goods exported. England, moreover, as leading country in international finance satisfied the demand for gold induced by rising incomes in the 'new' countries, and ... by aggregate changes in the Bank of England's discount rate." (in De Cecco, 1974: 20).

According to this view, the international monetary system functions by England acting as long term investor abroad; the colonies transforming the inward investment into demand for English exports and because of the other European countries also had gold reserved that could be drawn on.

It is important to draw out of this account the totality of international monetary settlement, meaning to include both the current and the capital account, and their impacts on "domestic monetary and credit developments" (De Cecco, 1975: 18). One of Minsky's insights about the international monetary system was on how the US trade deficit is crucial for supplying dollars to dollar denominated debtors to maintain their debt servicing (1989). Exploring this aspect of the global monetary system ties together the implications of balance of payments imbalances given the way countries have been integrated into the global financial system. The latter issue is crucial, as following Minsky again, there are innate tendencies related to over-indebtedness that inevitably end badly.

Conclusion

There is a parallelism to be drawn between the difficulties theorists faced in the debates from which Ricardo's Proposals emerged and those that are relevant to current monetary problems. This concerns the workings of a monetary economy and how to theoretically isolate its constituent parts so that when it falters we can be guided to appropriate remedies. This paper tried to highlight areas that appear to be insufficiently disentangled by separating the issues out, in particular the development of theories of money.

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