Endogeneity of Money and the State in Marx’s theory of Non-commodity Money

Hyun Woong Park
UMASS Amherst
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Moseley and Saros’s MELT in case of inconvertible paper money

In developing Marx’s non-commodity theory of money which is largely an uncultivated area in Marxian economics, one of the crucial issues at stake is to establish the monetary expression of labour time (MELT) in case of inconvertible paper money consistently with Marx’s theory in general and not rejecting his labour theory of value in particular. Recently Moseley (2004, 2010) and Saros (2007) tackled this issue independently to each other and arrived at the same conclusion that MELT in case of inconvertible paper money ($MELT_n$) can be determined as follows (using the same notations Moseley used):

$$p_nMELT_n = \frac{M_pV}{L}$$

where $L$ is total socially necessary labour time (SNLT), $M_p$ the quantity of paper money forced into circulation, and $V$ velocity of money. That is, MELT in case of inconvertible paper money is determined as a ratio of total quantity of money adjusted to the velocity to the total SNLT independently from the value of gold. Using MELT of (1), the quantitative dimension of Marx’s labour theory of value as a price theory can be demonstrated as follows:

$$P_i = MELT_n \cdot L_i = \frac{M_pV}{L} \cdot L_i$$

Compare this with MELT in case of commodity money ($MELT_c$) and the associated formula

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1 MELT as defined within the tradition of New Interpretation (NI) where the concept was first introduced is problematic with circular reasoning.
2 Another recent attempt to tackle this issue are Kristjansen-Gural 2008.
3 The detail process of derivation of this formula can be referred at Moseley 2010.
4 In fact, Marx himself discusses the case of inconvertible fiat money in 1859 Contribution and in chapter 3 of Capital Vol.1 where MELT is constructed in reference to gold; i.e. the implicit amount of commodity money that would have circulated if they had been in place of fiat money. Moseley and Saros’s solution is arrived by simply adopting Marx’s solution and representing it in a mathematical formula. By doing so they found out that the variable representing the value of gold cancels out.
of price determination:

\[ (3) \quad MELT_c = \frac{1}{L_g} \]

\[ (4) \quad P_i = MELT_c \cdot L_g = \frac{1}{L_g} \cdot L_i \]

In chapter 1 of *Capital* Vol.1 MELT in case of commodity money can be conceived as the reciprocal relation between labour time expanded in the production of the amount of the commodity money, e.g. gold, that corresponds to the unit price, as in (3). Equation (4) shows the price determination in case of commodity money, which reflects Marx’s basic idea that price is determined as the ratio of labour time in the commodity and the money commodity.

Comparing equations (1) and (2) on the one hand and equations (3) and (4) on the other, we verify that MELT, which is a fundamental factor that determines the price from the given social abstract labour, can be constructed for the case of non-commodity as well as the commodity money case. This implies that non-commodity money which has no intrinsic value itself is able to measure the value (as SNLT) and express it in price-form exactly as the commodity money does.

However, differences are also identified. The first difference is the specific meaning of ‘money functioning as the measure of value’. The commodity money can measure the value of the other commodity since it has its own intrinsic value. But the non-commodity money can do this even without having intrinsic value by being able to reflect or represent social abstract labour as ‘the moon reflects the sunlight without emitting light itself.’ In other words, commodity money *has/contains* value while non-commodity money *represents/reflects* value, and because of this both can measure the value of any other commodities and express it in price-form.

The second difference is the causal relation between the price and money in circulation. One of the powerful theoretical implications of Marx’s commodity theory of money is that it poses a criticism of the classical quantity theory of money, which suggests that the quantity of total money in circulation determines the overall price level. On the contrary, in Marx’s theory, price is determined independently of the quantity of money but rather determines the latter. This can be verified in equation (4) where there is no money in the right hand side. However, in equation (1) and (2) for the non-commodity money case, the quantity of money appears in the MELT and thus determines the price. That is, in the commodity money case,
money is entirely endogenous being determined in response to the commodity production and circulation represented in the aggregate price, whereas in the non-commodity money case money becomes exogenous in the sense that the factors of its determination such as the state in case of fiat money and the banking policies in case of credit money lie outside of the inner logic of commodity production and circulation. From this a question rises if Marx’s theory of non-commodity money shares the same conclusion of exogenous money with the quantity theory of money which Marx strictly rejected.

One important way to distinguish the two lies in developing Marxian theory of endogenous determination of the supply of non-commodity money, which is appears as $M_p$ in Moseley & Saros’s MELT formula in equation (1). However, they didn’t move further to specify this issue. Actually Moseley provided some basic introductory ideas how to deal with it. But he conceives the state or the monetary authority as an exogenous factor independent of the capital relations of production and circulation. In this case, money remains as exogenous since the state is the most important agent in affecting through the monetary policy the quantity of money in the non-commodity money regime. If then, Marx’s theory of non-commodity money cannot be satisfactorily distinguished from the quantity theory of money at least for the quantitative analysis. Moreover, positing the state and money as exogenous seems to be vulnerable to the criticism waged against the mainstream economic theories which view the state as a neutral agent existing beside and above the capitalist dynamics and money as a veil. And most importantly it loses one of the powerful insights within the Marxist tradition on the capitalist character of the state and money.

The primary aim of this paper is to provide a theoretical ground for analyzing the endogenous aspect of the determination of the quantity of non-commodity money. And since the state issues fiat money and controls the credit system through its monetary policy and central banking system, the endogenous aspect of the state is discussed as well. For this purpose I start with reexamining Marx’s money theory in the next section, where I show that Marx’s money theory is a general theory that can coherently explain both commodity money regime and non-commodity money regime, and that the state is an important factor in Marx’s general money theory. And in the third section, based on what we have from the reexamination of Marx’s general money theory, I demonstrate the endogeneity of non-commodity money and the state. And in the last section, a comparison is made with two important contributions on these issues within the Post Keynesian tradition, horizontalist
endogenous money theory and chartalist theory of money, and two theoretical attempts in Marxian tradition to redefine endogeneity of money, Mollo (1999) and Milios (2006).

Reexamination of Marx’s money theory

1. The way Marx theorizes money is very unique and exceptional in the history of economic theories. Let alone the ‘non-theory of money’ of neoclassical school where money is introduced merely for the sake of convenience of exchange and thus as a veil, Marx also made a decisive departure from the classical political economists whose commodity theory of money he succeeded. With a sophisticated version of labour theory of value where use-value and value are strictly distinguished, Marx could overcome money fetishism pervaded in his predecessors. Marx penetrates into the origin and logical development of money by way of deriving it as a form of appearance of value, and thus as a general equivalent which has an intrinsic value within the generalized exchange relation. This explains why in Marx the theory of money is organically based upon the theory of value.

However, Marx himself was well aware of the existence of non-commodity money. Then when he develops money theory in direct relation to value theory and derives money as a commodity we could justifiably assume that there must be some presuppositions underlying in Marx’s exposition. I found two such presuppositions important:

**Presupposition 1.** Money in its essence has to have a ‘foundation of acceptability.’

**Presupposition 2.** There can be a foundation spontaneously emerged as an internal logic to the commodity system being thus stable; and another one extrapolated from without as an external logic to it thus being unstable.

Marx’s procedure of tracing the origin of money can be conceived as premised upon the first Presupposition that there should be a ‘foundation of acceptability’ of money. On the other hand, Marx’s task of tracing the origin of money into the value relation could be an answer to an ensuing question, what then specifically would be that foundation of acceptability of money, which is related to the second Presupposition.

Of course these are not immediately obvious in Marx and the two Presuppositions are not explicitly stated either. However, as it will be shown as we proceed, I think they are helpful hypothetical tools in grasping Marx’s money theory as a general theory applicable to the
totality of capitalism whose process of development has seen various forms of money from gold to inconvertible credit money.

2. By ‘foundation of acceptability’ I mean the following: In order for a thing, whether itself possessing intrinsic value or not, to be generally accepted as money in the society its acceptability needs to be guaranteed by some sort of stable ground whatever that might be. In other words, a thing becomes money when it is anchored in an unshakable foundation which dubs it as a general equivalent so that owners of it have confidence that it will be undoubtedly accepted in the market.5

The notion of ‘acceptability’ is not much different from what Marx means by ‘value’. Remind that Marx defines value as ‘exchangeability’. When a thing is said to be exchangeable with other things, it implies that it is acceptable in transaction; in large it is from this observation that Marx derived the value concept. Particularly, emphasizing money’s special character of being able to be directly exchangeable with any commodity Marx refers ‘direct exchangeability of money’. Furthermore, he uses an expression ‘power of money’ in describing money’s direct exchangeability or universal acceptability in Grundrisse (131) and Contribution (127-137). Thus, in this paper ‘acceptability of money’, ‘direct exchangeability of money’, and ‘power of money’, can all be used as referring to ‘value of money’, with of course different degrees of generality and implication though.

Then why do I introduce this new term to the literature which is already full of intrusive terminology instead of just using the concept ‘value’? It is solely because of the contemporary capitalist phenomena where inconvertible valueless paper money is still accepted as money whether for means of circulation or for means of payment settling debts. Then the question is, what is the basis or ground or foundation of the acceptance of valueless


In the notion of ‘acceptability of money,’ ‘money’ refers to all forms of money corresponding to various functions of money discussed by Marx.

Aglietta 1979 and de Brunhoff 1978 use the notion of ‘social validation,’ widely adopted by French value-form theorists, to explain the mechanism by which any form of money is accepted as a general equivalent. In case of commodity money or convertible paper money system, social validation of money occurs automatically since money has either direct or indirect connection to bullion; whereas in case of inconvertible paper money system money is socially validated by the state. (From de Brunhoff 1978: 47)
non-commodity money? The notion of ‘foundation of acceptability of money’ and the detail
discussion of it as will be conducted in the next section aim to answer this question.6

Now we can think of two types of such foundation in general; one that is internal to the
logic of commodity production and circulation, and the other that is external to the latter.
Since in the former case money’s acceptability is grounded in the value dimension from
which the money-form emerged, it would be stable and therefore the value of money could
also be stably maintained. On the contrary, when the foundation of money’s acceptability lies
in something that is external to the value dimension from which the money-form emerged,
money’s acceptability would be unstable and thus its value could be subject to drastic
fluctuations and to, in some cases, collapse.

3. First of all, Marx’s labour theory of value presented in the first chapter of Capital Vol.1
can be understood as an outcome of a theoretical search for the objective and structural law
that operates invisibly at the back of autonomous producers and regulates the complex
totality of commodity exchange.7 And the theory suggests that human’s labouring activity
conceptually captured in the notion of ‘value’ is the very anchoring ground for such law.
What should be emphasized here is that the core aspect of this human’s labouring activity is
the labour expanded autonomously by independent individual producers, not the labour
expanded according to the preconceived, centralized social plan.8 So to speak, according to
Marx’s value theory, the apparently harmonious social order of the capitalist-commodity
economy constituted of private producers is rooted in the social relation itself of individual
labour of those private producers. One of the important points implied here is that at least at
this highly abstract level of analysis of the generalized commodity economy, such
harmonious social order does not require any external devices for a conscious control, such as
the state or law, detached from the economic field. Rather, it emerges spontaneously as an
unintended outcome of the value relations among private producers; it is governed by an

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6 So ‘acceptability’ is wider and more general notion than the concept of ‘value’.
7 It could be also said that Marx was trying to find his own answer to the classical question
culminated in Adam Smith, i.e. how can we explain the harmonious social order of the capitalist-
commodity economy organized as an individual, autonomous production without a priori central
planning. In this sense, Marx’s law of value can be viewed as a parallel of Smith’s invisible hand.
8 This aspect of labour, along with the physiologically homogenous aspect, consist the fundamental
character of Marx’s notion of abstract labour. Park (2010) systematically shows this in a paper
critically examining Rubin’s value form theory.
internal logic of the capitalist-commodity economy itself.

Returning to our initial question about the foundation of money’s acceptability, since money is essentially a material expression of value relation, which in turn is the basis of the objective law that regulates the workings of the capitalist-commodity economy, it can be conceived that the foundation of money’s acceptability lies in the value space. Furthermore, as the operation of the law of value is a spontaneous result of the autonomous production relation among individual producers in the absence of non-economic conscious control, the ground by which a thing is generally accepted as money consists in the same, i.e. the autonomous production relation among individual producers captured as the value relation. It seems to me that this is what Marx tries to convey when he traces the origin of money by analyzing it in direct connection to the value relation and eventually derives money as a commodity; namely, the foundation of acceptability of money in the value space. In this line of understanding, money is a produced commodity.

4. Now if this is what Marx’s money theory is all about, it could be justifiably dismissed as merely metallic (as Schumpeter did) and thus outdated (as mainstream economists and some of heterodox economists have been doing). However, in Marx’s theoretical system a necessity arises that the spontaneous and stable foundation of money’s acceptability is replaced by the extrapolated and unstable one. In parallel to the emphasis on money’s origin in the value space and thus its derivation as a produced commodity, in Marx’s money theory, as I see it, another important attention is given to the non-commodity money system where money’s general acceptability is not founded in the value relation; that is, the monetary system where the foundation of money’s acceptability is not inherent to the commodity exchange but is extrapolated from without as an external dimension. In this case, money itself does not have to be a produced commodity in order to be acceptable. So in such society money can possibly take the forms other than commodity money such as, most prominently, paper money.

The most dominant moment for the replacement of one foundation of money’s acceptability by the other is the quantitative/qualitative insufficiency of the former to satisfy the monetary needs coming from the expansion of capitalist relations of production. That is, the labour-value space as a ground of money’s acceptability and its value becomes a fetter for the capital’s growing greed for the profit and social requirement arises for a substitute. In response, the consciously contrived foundation of money’s acceptability replaces the original
one spontaneously grown and provides a monetary environment much more adequate for the expanded reproduction of capital. However, this replacement sacrifices the stability of the foundation of money’s acceptability and its value, which at a contingent moment develops into a crisis as analyzed by Marx as the so-called currency crisis. This is the inherent contradiction of the commodity-form which is the conceptual origin of the capital-form.

5. The most dominant example of the foundation of money’s acceptability external to the logic of commodity production and circulation in *Capital* and in history is (the authority or the credibility of) the state. This is the very place in Marx’s money theory where (the role of) the state can be derived as providing the foundation of money’s acceptability and its value in the non-commodity money system. Of course, as Marx demonstrates, the commodity money regime also requires the state to perform certain roles in arranging and maintaining the money system; the most typical examples are stipulating of denomination of the unit of price and controlling the metallic reserve of the banks. Therefore that the denomination is viable only within the geographical boundary is pointed out many times in chapters on money in various manuscripts of *Critique of PE*. However, the state monetary policy in determining the unit standard of price does not determine the essential nature of money-form but only plays a technical role of maintaining the smooth operation of the monetary system. However, the state role acquires a fundamentally different meaning in the non-commodity money system compared to that in the commodity money system; in the former the state authority replaces the value space as the foundation of money’s acceptability. This idea is worked out implicitly in chapter 3 of Capital Vol.1.

6. In that chapter Marx systematically analyzes various functions of money and its forms that correspond to each of those functions. In particular, he does this in relation to the development of the commodity exchange to the capitalist mode of production and the expansion and deepening of the latter. (Lapavitsas 1991, 2000) First of all, at the early stage of the generalized commodity economy the primary functions of money, measure of value

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9 Establishment of a unit of price implies “both forced intervention by the state and also specific monetary institutions.” (Brunhoff 2005: 210) “Coining, like the establishment of the standard, is the business of the State.” (Brunhoff 2005: 211) See also Brunhoff (1978: 48).

10 “State intervention does not create the money form – which arises in commodity circulation – but it contributes to its existence as such.” (Brunhoff 1978: 37)
and means of exchange, were conducted by the commodity money. At this conjunction, the power of money as a generally acceptable thing was founded in the totality of labour relations among private producers, and the role of state and its law was confined to the technical management of monetary system such as determining the denomination of the standard of price as mentioned above.

The gradual replacement of the foundation of money’s acceptability from the spontaneous order imminent in the value relation to something external to it starts with the advance of convertible symbolic money, a specific form of money which Marx considers next to the commodity-form of money. Symbolic paper money was issued against bullion put in banks (or goldsmith's) and was convertible to bullion in demand. When the commodity producer accepts such paper money whose real value is zero from the buyer of her commodity, she has a trust that it would be redeemed in demand at the bank where it was issued. Here we can observe that the acceptability of money is founded in something external to the value space, i.e. the trust on the banks or the state to the extent that private banks are incorporated into the national banking system. On the other hand, however, the convertibility of symbolic paper money makes money not completely detached from the value relation. That is, the foundation of acceptability of convertible paper money lies partly in the spontaneous order of value space and partly in the institutional device, i.e. credibility of the bank and the state. The full-fledged substitution of the foundation of money’s acceptability takes place with the introduction of inconvertible paper money.

The necessity of inconvertible paper money arises as a response to the development and deepening of the capitalist mode of production. At the highly developed stage of capital accumulation, the magnitude of metallic money, the constraining effect of which is either directly felt in case of commodity money system or indirectly in case of convertible paper money system, cannot meet the monetary need of the increasing rate of the growth of capital accumulation. Notice that in capitalist economy the commodity exchange acquires a fundamentally different character not only in quantity but also in quality compared to that in the simple commodity exchange. The demand for money not only drastically soars in magnitude as the social production is taken over by the capitalists from the petty producers

11 As for the credit money, the most typical form of inconvertible paper money, Marx writes “so far as the expedience developing with the credit system has this effect they increase capitalist wealth directly.” (Marx 1978: ch17; See this chapter more on this.)
and as a consequence the scale of production increases. But also money goes through a qualitative change from the mere mediator (and means) of the process of C-M-C’ to the subject (and the end itself) of the process of M-C-M’.

At first, the inconvertibility of money is adopted only temporarily at the juncture of the magnitude of gold in the vault of central bank being not able to meet the sudden rise of the demand for the conversion. So to speak, it is a temporary measure stipulated by the state to bring the soaring demand for money beyond the gold basis down to the limit set by the latter. In this sense, the temporary inconvertibility does not depart far from the value relation. However, as the imbalance between the vault gold and the social demand for money intensifies and solidifies as a structural feature of the economy along with the expansion of the capitalist accumulation, inconvertibility becomes permanent, and consequently the foundation of money’s acceptability is entirely disconnected from the value space. Yet, strangely, such paper money was still observed to be accepted as money throughout the economy even after the cease of conversion. However, according to one of the Presuppositions we found implicit in Marx’s money theory, a thing cannot operate as money without foundation of its acceptability as money. Then this observed phenomenon tells us that something other than the value space was functioning as an alternative foundation of acceptability of such inconvertible paper money. I think this notion of alternative foundation of money’s acceptability in case of non-commodity money constitutes a very important theoretical moment in Marx’s discussion of various social phenomena related to monetary crisis throughout *Capital*. We now turn to a more detail discussion of it.

7. To begin with, we can think of two categories of valueless non-commodity money in large: fiat money and credit money. First, fiat money is symbolic money issued by the state. Recall that the acceptability of convertible symbolic money was grounded partly on the bullion into which it could be converted in demand and partly on the trust on the bank or the state that it will convert in demand. Now in case of inconvertible fiat money, its acceptability is entirely grounded in the legal authority of the state which decrees and guarantees the value of such valueless paper money and enforces its circulation.

Second, credit money. One of the most dominant forms of credit money is banknote. Notice that banknote is a liability of issuing bank, or the bank’s promise to pay. As Lapavitsas systematically shows, the issue of banknotes tends to be monopolized by the state’s monetary
head i.e. the central bank due to the contradiction inherent in banknote between “the required generality of the banknote and the narrow ambit of the private banknote.” (Lapavitsas 1991: 312-3). That is, the locality of banknotes issued by private banks is overcome and its universal power of generally acceptable means of payment is guaranteed by the state backing with its own credibility. The essential nature of money as means of payment requires that the banknote be issued by the central bank. And this is the case in most contemporary capitalist economies. Therefore we may say that the acceptability or value of credit money is founded on the credibility of the state as Engel writes in his edition of Capital Volume 3 that “inconvertible banknotes can become general means of circulation only where they are in actual fact supported by the state’s credit.” (Marx 1981: 657)12 And it is in this regard that Foley points out, “the holders of cash are lending to the central bank (or, more broadly, the state).” (Foley 2005: 44) As was the case with inconvertible fiat money, the banknote credit money is entirely disconnected from the commodity-value; and the state credibility completely replaced the value dimension as the foundation of money’s acceptability and its value. Now the question arises whether the state is the perfect substitute.

A careful reading of chapter 3 designates that Marx makes a conceptual contrast between the state authority or ‘the state’s compulsion’ which he describes as bolstering the nationwide circulation of fiat money on one hand, and, on the other hand, the social division of labour and production relation of the commodity economy as a spontaneous and unconscious development ‘beyond the [artificial] control of the human agents’ which provides a basis for the value space. The point in this contrast is that the state creditworthiness and its compulsion are subject to drastic fluctuation and abrupt disruption and in worst case to collapse; and consequently the same is true for the paper money founded upon it.13 The artificiality and instability of the state authority as a substitute for the value space as a foundation of money’s acceptability becomes manifest in two moments: in the world market and in times of crisis.

8. Firstly, note that Marx distinguishes the world market from the domestic market. The

12 Innes (1981: 25) also mentions that “The move to inconvertibility of dollar shows that “without formal support the dollar was incapable of functioning effectively as means of payment.”
13 This unstable aspect of the state-backed money is also acknowledged by the Chartalist theory. According to it, the main mechanism the state provide value to fiat money is by imposing the tax liabilities to its citizenry and proclaiming that it will accept only a certain thing whatever that may be as money which settles tax liabilities. Wray (1998: 32) one of most active writers in this tradition admits that if the tax system breaks down “the value of money would quickly fall toward zero.”
major distinction of the two as demonstrated in chapter 3 is that non-commodity money works within the domestic market whereas money is always in metallic form in the world market. It is written, “when money leaves the domestic sphere of circulation it loses the local functions it has acquired there, as the standard of prices, coin, and small change, and as a symbol of value, and falls back into its original form as precious metal in the shape of bullion” (240) For critics, this is a striking evidence that Marx’s theory of money is merely a historical product superficially reflecting the empirical fact of his time that gold is the only means of payment in the international arena and thus that it can be easily dismissed as outdated when the period has come where non-commodity money widely circulates in the world trade. However if we probe into the reason Marx had in mind for making such an argument we arrive at an entirely different conclusion.

From Marx’s demonstration of government’s roles of maintaining the regime of non-commodity money, i.e. guaranteeing the value, or acceptability, of valueless paper money and enforcing its circulation, we are naturally led to the opposite side of his demonstration, i.e. that without such roles of the government the value of non-commodity money cannot be sustained. In turn, from this we can easily conjecture that the reason why for Marx it should be commodity money not non-commodity money in the world market is because there is no legal authority that could play the roles the government usually plays within the domestic territory in providing the foundation of money’s acceptability. In this sense, if there is any historical limit in Marx it would be not an observation that there is no non-commodity money in the world market but an observation that there is no ‘world government’.

However, this limiting aspect of Marx’s money theory can be overcome by applying another aspect of his theory itself. Namely, the proposition we derived from chapter 3 that money should assume metallic form in the world market due to the absence of the world government can be flipped into a statement that non-commodity money can be accepted as money even in the international arena \textit{if} there exist the world government. Now the idea would become clearer if we apply Marx’s logic of demonstrating the origin and development of money into the more extended context of international market.

Let us conceive the world market as an analogy where the domestic economy is extended to the international market where individual countries represent individual commodity producers of the domestic market.\textsuperscript{14} First, by deriving the commodity money system from
the simple commodity exchange relation, Marx describes the early stage of the generalized commodity exchange without complex institutional settings, such as the administrative or legal system of the state, as an economy where money must be a commodity with intrinsic value. However, Marx also shows how non-commodity could be accepted as money through the intervention of the state. The same story can be applied to the case of global economy. At the early stage of the international trade without the existence of any kind of enforcement device agreed upon by all member states which was the case of Marx’s day, the only ground for money’s acceptability was the metallic base (or the value space established in the context of international transaction.\textsuperscript{15}) This explains why Marx made a statement that in the world trade non-commodity money cannot function as means of payment, and that world money always has to assume a metallic form. And there is no reason why Marx’s reasoning in his admission of the power of non-commodity money as money with the state support cannot be applied to the international context. So to speak, if there exist worldwide legal system or quasi-world government, such as England in the gold standard era and USA in the post-Bretton Woods period, whose hegemonic political power enforces a certain set of rules into the world economy, it could replace the commodity base as the foundation of money’s acceptability and introduces non-commodity money into the international market, specifically their own currencies.

This is the juncture where Marx’s money theory should be pursued in relation to the concrete history of international monetary system with an emphasis on Marx’s notion of ‘world money’ as the last and culminating function of money.\textsuperscript{16} For example, understood in this way, imperial policies of British empire in the late 19\textsuperscript{th} and early 20\textsuperscript{th} century and neoliberalism of the US since 1980s can be conceived as politico-economic intervention of the state power to sustain the value of its currency as an internationally acceptable world money; and the currency war among major countries especially after the rise of alternative

\textsuperscript{15} Value space established in the domestic market and that in the world market are different since in the latter there is no SNLT calculation standard generally applicable to all different countries which have different conditions of production from each other. This is the place where the study on the theory of international value is called upon.

\textsuperscript{16} The most recent seminal paper on this issue is Vasudevan (2009).
powers such as Japan, the Euro community, and China as a struggle to win the status of the world central bank which monopolizes the issue of world money, which is more than evident in quite recently.\(^{17}\)

9. Secondly, the artificiality and instability of the state credibility as the foundation of money’s acceptability also comes to the fore in times of crisis. In chapter 3 of volume 1 and in various places in volume 3 there are many descriptions of the crisis of credit/debt relation where money in palpable metallic form is required instead of valueless paper money in settling the debts. It is noted in volume 3 that “In the crisis we get the demand that all bills of exchange, securities and commodities should be simultaneously convertible into bank money all at once, and this bank money again into gold.” (Marx 1981: 708)\(^{18}\) This is what happens when the creditworthiness of the state, which is the foundation of the acceptability of credit money as we saw above, is seriously questioned. The value of national currencies collapse and the demand shifts to the real commodities such as gold as a genuine hoard for storing value. Historical experience shows that the price of gold rapidly rose at the critical junctures of major crises; most typically in early 80s’ crisis and the current one as is described in graph 1. In particular, the tail of the graph in the circled area shows that the gold price skyrocketed with the start of the current financial crisis in 2007 and another rise of larger scale was propelled in the early 2010 when the debt crisis of the southern Euro countries aggravated the situation.

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\(^{17}\) See Innes (1981) for a wonderful discussion on the implication of the gold as the ‘real’ money within the history of international monetary system.

\(^{18}\) “…rapid turnaround from creditism to metalism” (Marx; reqouted from Chae 1999: 301)
10. To sum up, starting from the two Presuppositions which we think implicit in Marx’s exposition, it was shown that Marx’s money theory is a general theory that can consistently explain the existence of non-commodity money as well as commodity money. And as a crucial moment in relation to the non-commodity money system, we have derived the state from Marx’s money theory as a legal institution which provides a foundation of money’s acceptability aiming to maintain the value of money.

**The endogeneity of money and the state**

Recall from our initial discussion in the first section that one of the most fundamental differences between the commodity money system and non-commodity money system lies in the way the quantity of money in circulation is determined. In the commodity money system the quantity of money in circulation is determined by the aggregate price, which in turn is determined by commodity-capitalist processes of production and circulation; in this sense money is purely endogenous. Yet in the non-commodity money system money is supplied from without by an agent, which exists independently of the economic sites of production and circulation, i.e. the state; so in this sense money is exogenous.

The exogeneity of non-commodity money, as we have seen in the previous section, most importantly lies in the fact that the foundation of money’s acceptability lies in the state sovereignty substituting the value space as the original foundation, which however has
become a fetter to the capital accumulation. However, another important thesis of our reexamination of Marx’s money theory was that the state authority as an alternative foundation of money’s acceptability is subject to disruption and collapse and thus is unstable. This implies that the state management of the money system is constrained by certain conditions, the failure to satisfy which results in the monetary crisis. In history such constraint appeared in the state monetary policy in controlling the total quantity of money at an appropriate level. And as reported by Marx, there were many historical examples where the failure of such control caused a (hyper) inflation. Since the non-commodity system was mainly advanced as a response to the requirement for more money for the ever expanding capital accumulation, which the commodity money system couldn’t meet, the capitalist economy inevitably is chronic to inflation, which is another expression of collapsing value of money. This is why the main task of the central bank in capitalist economies is ‘inflation targeting.’

These observations inform us that even though the labour-value dimension as an anchor of the value of money is severed from the monetary system its effect seems to linger on behind the scene. So to speak, the non-commodity money system cannot fully enjoy the advantage acquired from transcending the material barrier of the original labour-value dimension since as a cost of sacrificing the latter it has to suffer from the chronic collapse of the value of money and thus the instability of the system as a whole. In this sense the money supply is exogenously determined by the state only apparently. The more pressing truth is that the ability of the state to provide the foundation of money’s acceptability and to expand the quantity of money is limited by the requirement the quantity of money should be managed within a sustainable level in order for the value of money to be stably maintained.

Remind that this requirement is specific to the non-commodity regime where money has no intrinsic value. In the commodity money regime the requirement for maintaining the value of money does not arise since money already has value itself. And of course in the modern history meeting such requirement is given as one of the main tasks of the sovereign state with the non-commodity money system. This observation points to the case that the state is not so much exogenous as it first appeared to be. Even though the state is an agent separately existing from the inner relations of capitalist production and circulation and its monetary policy is decided and performed by a group of people within the state, the state policy activities are fundamentally conditioned by the above mentioned requirements. For the same
reason, we may conceive the endogeneity of the quantity of non-commodity money in circulation as an ultimately important reality of the non-commodity money system.

In sum, according to Marxian theory of endogenous money and the state, which was derived from reexamining Marx’s money theory, we have the following propositions: i) the state is a decisive element at the moment in shift from the commodity money to the non-commodity money system; ii) it maintains the non-commodity money system by providing the foundation of money’s acceptability and thus thereby sustaining the value of money, iii) for this purpose, the state attempts with its monetary policy and central banking system to control the money supply at a sustainable level, iv) the quantity of money is mainly determined the state, whose monetary policy is not subject to random forces unexplainable by the logic of capital accumulation but is guided by the latter, and in this regard the apparent detachment of money from the metallic base as the original foundation of money’s acceptability is fundamentally constrained and limited by the inherent requirement for maintaining the quantity of money at a level that corresponds to the dynamics of capital accumulation.

Concluding Remarks

The above analysis of Marxian general theory of money and the state is conducted at a high level of abstraction. Having this as a theoretical foundation we have to further develop the analysis to a much more concrete level incorporating discussions of specific mechanism of the quantitative determination of, such as, national currencies, bank deposits, etc. and detail policy roles of the state and its management of the credit system within this mechanism. For this purpose, Post Keynesian tradition’s contribution to these issues is quite rich and can be of a great help. For example, Post Keynesian economists’ discussions on money endogeneity, horizontalist money supply, and the working of central banking system and credit system; Chartalists’ emphasis on the social, institutional aspect of money, and, most importantly, on the state as what creates money, etc. However, before searching for the overlapping areas between Post Keynesian and Marxian monetary theory, the differences between the two should be clearly recognized.

First of all, in horizontalist endogenous money theory, money is nothing but a promise to pay, i.e. credit. What the commercial banks or the central bank does is to accommodate the

19 Lapavitsas & Saad-Filho (2000) is one such attempt in Marxian tradition.
needs of trade arising from the credit-debt relations within the private sectors. The central bank only sets the short-term interest rate and provides whatever amount of reserves to the commercial banks so that they could fully accommodate the demand for money from the capitalists. Represented in a diagram of the interest rate on the vertical line and the money supply on the horizontal line, the money demand curve is downward sloping whereas the money supply curve is horizontal; thus horizontalist as opposed to verticalist for the neoclassical monetarist theory. Succinctly, money is demand-determined and credit-led. The problem is that in this theory there can be no such thing as an excess supply of money. Since money is defined as a credit from the outset, there is no nominal anchor with which excess or shortage of money can be assessed. As a result it cannot explain monetary crises which occur due to the mismatch between the supply and demand of money. This is in stark comparison with Marx’s theory the failure to maintain the adequate level of money supply is one of the most important reasons for monetary crisis.

Second, Chartalist theory of money is a theory presented as opposed to the so-called Metallist money theory. The main mechanism the state provide value to fiat money is by imposing the tax liabilities to its citizenry and proclaiming that it will accept only a certain thing, whatever that may be, as money which settles tax liabilities. In this sense money is state-created or state-backed; thus this theory is also called ‘the state theory of money’ which is the book title of Knapp the progenitor of the modern Chartalism. Here the value of money is sustained by the state sovereignty, and this is what is similar with Marx’s theory of non-commodity money. Notice that the unstable aspect of the state-backed money is also acknowledged by the Chartalist theory. Wray (1998: 32) one of most active writers in this tradition admits that if the tax system breaks down “the value of money would quickly fall toward zero.” However, one fundamental difference between Marx’s notion of state in relation to the theory of money and that of Chartalist theory is the following: In the former, the state is introduced at the stage of transition from commodity money system to non-commodity money system, i.e. the state authority as the substitute for the original foundation of money’s acceptability; in the latter on the contrary the state constitutes the origin and foundation of money from the outset. Why this is problematic is that Chartalists’ theory of state and money is ahistorical theory attempting to explain any forms of society where there is money. Therefore the state is conceptualized as a neutral agent existing autonomous from the economic sector to which it merely imposes tax liabilities from without. (Bell 2001: 155)
Contrarily, in Marx’s theory as presented in this paper the state comes into the picture as a decisive moment which provides a set of conditions for satisfying the monetary requirements arising from the capitalist dynamics. That is, the state is crucial part of the capitalist system.

Actually, not only Chartalist theory, but Post Keynesian monetary economics as a whole fatally suffer from the lack of class analysis and discussions on the capitalist mode of production and circulation. This should be kept in mind in further developing Marxian theory of endogenous determination of money and the role of the central bank (the state) in close connection to Post Keynesian.

Meanwhile there were theoretical attempts to redefine the notion of money endogeneity within the Marxian tradition. First, adopting the French tradition of value-form theory rooted in the Rubin School, Mollo (1999) tries to theorized money an endogenous entity itself from its very origin. One of her central arguments is: “If money emerges and develops because of the commodity logic underlying capitalism, this implies that money is (broadly) endogenous, or rather, that it is internally (endo) generated (genous).” (Mollo 1999: 10) Milios (2006) demonstrates a similar idea. He emphasizes that money is an entity that represents the capital circuit of production and circulation, and in this sense money creation is ‘an endogenous phenomenon and an exclusive result of the dynamics of capitalist expanded reproduction on the total social level.’ (Milios 2006: 13) The problem with these two Marxian approaches is that their elaborations on the essential nature of money within the capitalist economy are all too obvious. For sure, the fundamental idea of Marx’s money theory is that money is endogenous to the dynamics of capital accumulation. However, they pay attention to the puzzling fact that within the non-commodity regime the way the quantity of money is determined is different from that within the commodity money system. Thus they don’t tackle a pressing question how the quantity of money is determined within the capitalist production and circulation. That is, Mollo and Milios’s analysis deal only with the qualitative aspect of money endogeneity leaving unattended the quantitative determination of endogenous money, which urgently calls for extensive research on it for the development of Marxian theory of non-commodity money.
References

Moseley, Fred. 2010, “The Determination of MELT in Case of Non-Commodity Money.”
Park, Hyun Woong 2010, “Rubin and the Value-Form Theory”
Ramos, Alejandro M. 1995, “The Monetary Expression of Labour: Marx’s Two Fold Measure of Value,”
Saad-Filho, Alfredo. 2002, _The Value of Marx._