DEPARTMENT OF ECONOMICS

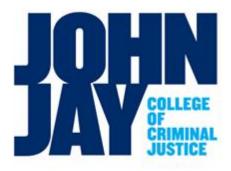
Working Paper

Overdetermination and Monetary Essentialisms: A Class Analytic Approach to the

Value of Money

Joseph T. Rebello

Working Paper 2015-01



Overdetermination and Monetary Essentialisms: A Class Analytic Approach to the Value of Money *

Joseph T. Rebello[†]

Draft: Fall 2014

Abstract

One reason the question of money's nature has persisted throughout history is its multiplicity; it takes multiple forms and has numerous functions. Essentialist monetary theories, both orthodox and heterodox, can be thought of as distinct attempts to reduce this multiplicity to a privileged function and/or form. For example, the orthodox Marxian theory of money has typically privileged a commodity form of money and the measure of value function. Informed and inspired by the overdeterminist Marxian tradition developed by Resnick and Wolff, this paper critiques these monetary essentialisms and offers a class analytic alternative. I argue that this alternative monetary framework helps resolve some theoretical problems concerning the value of money.

^{*}Work in progress.

[†]jrebello@jjay.cuny.edu

I. Introduction

Marx's analysis of money in Capital begins with the development of the "money-form" of value and then moves through three functions - measure of value, means of circulation, and money as money. Without suggesting commensurability between the functions/forms developed by Marx and those used in alternative paradigms, I do want to start with the superficial similarity shared by competing theories of money. Money is a complexity with, what appear to be, distinct functions and forms. We can think of competing theories of money as different ways of making sense of this complexity. Essentialist theories reduce the multiple of forms and functions to a singular monetary essence. In this line of thought, a Marxian theory of money would insist on one essential money function/form that would determine, and account for the existence of, the others. Informed and inspired by the overdeterminist tradition developed by Resnick and Wolff, this paper eschews any search for a monetary essence, defining a monetary theory as Marxian according to the entry point of class.

My argument has been influenced in two different ways by the work of Resnick, Wolff, and their students and collaborators. First, in a broad sense, my approach to the theoretical problems concerning non-commodity money has been inspired by reconceptualizations such as the critique of the transformation problem found in Wolff et al. (1982) and Wolff et al. (1984). For me, their critique and solution made clear the important interplay of the philosophical, methodological, and theoretic. Their solution to a problem in theory (the determination of prices) involved a critical overdeterminist detour into the philosophical and methodological (presuppositions the concepts of value and price). This is a move I appropriate here, attempting to deal with problems in Marxian monetary theory (i.e. the value of non-commodity money) by interrogating presuppositions concerning real money and the real economy.

Second, my argument here has been influenced by earlier overdeterminist treatments of money. Roche (1981; 1985; 1988) and Kristjanson-Gural (2008) have both dealt with money within this framework but the emphasis was on its commodity form. While some of my argument pertains to commodity money, it is primarily motivated by the dilemmas and lacuna made most apparent by non-commodity money. Biewener (1994) does link an overdeterminist notion of socially contingent value to the possibility of non-commodity money and the overdetermination of value by monetary and financial processes. This dual deconstruction of the non-commodity/commodity and productive/monetary binaries opens a crucial theoretical space for my argument. Nonetheless, the theory of non-commodity money and its value remains somewhat in limbo within this tradition. This paper seeks to fill in some of those holes.

In the next section I use Marx's discussion of monetary functions in *Capital* to introduce essentialist theories privileging the symbolic or imaginary dimension of money. Marx's critique of these "wildest theories" can go in two different directions. In one direction, the essentialism of imaginary/symbolic money is replaced by a Marxian essentialism of real money. After detailing the logic of this Marxian theory of money, I develop an overdeterminist Marxian alternative. Finally, I outline how this overdeterminist approach would deal with theoretical issues including the relationship between productive and monetary processes and the value of (non-commodity forms of) money.

II. The Wildest Theories

Marx's writing on money in the first volume of *Capital* exhibits an insistence on the real, where temptations to think of money as (merely) imaginary or symbolic are warned against. Ultimately, despite any appearances suggesting otherwise (imaginary money acting as a measure of value or symbolic money acting as a means of circulation otherwise), Marx's keep remining us of real money. Before addressing determinist and overdeterminist readings

of the status of this real money, we'll outline Marx's critique of imaginary or symbolic monetary essentialisms.

Because money originates as a universal equivalent of/for value it makes sense for Marx to proceed onto its functions with the measure of value role. Marx considers two functions, often treated together - money as a measure of value and as a standard of price:

"As measure of value, and as standard of price, money performs two quite different functions. it is the measure of value as the social incarnation of human labour; it is the standard of price as a quantity of metal with a fixed weight. As a measure of value it serves to convert the values of all manifold commodities into price, into imaginary quantities of gold; as the standard of price it measures those quantities of gold...But gold can serve as a measure of value only because it is itself a product of labor, and therefore potentially variable in value." (ibid.,p.192)

A pair of oppositions exist here. First, we may oppose the measure of value, determined by the value of gold as a product of labor, with the standard of price, decided upon by the state which as relative autonomy in the naming of different quantities of gold. Marx compares this nominal act of the state to the naming of persons - "I know nothing of a man if I merely know his name is Jacob" (ibid., p.195). Similarly, there is nothing essential about the name given by the state to various quantities of gold. As a standard of price the state is free to name any weight of gold a pound, yet as a measure of value gold functions according to its actual weight and the associated quantity of labor socially necessary for its production.

The second opposition is internal to the measure of value function itself. First, the measure of value, in opposition to the state denominated standard of price, depends on actual gold produced by labor. Behind the arbitrary, nominal, symbolic standard of price lurks the real gold commodity. However, at this moment real gold does not operate in its actual physical form. This actual substance is the condition of existence for the money form,

but the money used as a measure of value is just the *idea* of this gold. The significance for us is that just when we expect to see "cold, hard" commodity money in its brute physical form, its appearance is temporarily deferred. However, Marx warns us to maintain our bearings, and resist going wild, in response to this deferral:

"In its function as measure of value, money therefore serves only in an imaginary or ideal capacity. This circumstance has given rise to the wildest theories. But, although the money that performs the functions of a measure of value is only imaginary, the price depends entirely on the actual substance that is money." (ibid., pp.189-190)

Marx's "wildest theories" could be said to have mistaken an appearance for an essence. Seeing that money need not exist in a present physical form at one moment - the moment of measuring value - they miss the functioning of the real "actual substance" that strictly determines the prices expressed by imaginary money. Actual money, in a real form, returns in the next section when Marx discusses money as a means of exchange. Money does not actually have to be present in order to inform the customer that the commodity has a particular price, but in order for the exchange value of the commodity to be realized - in turn realizing the use value of money¹ - money must be on the scene.

However, just as actual real money in its role of a measure of value has a tendency

¹The fact that the money commodity and commodities must realize each other, from opposites poles, illustrates (1) the fact that even in commodity form, money is not just another commodity and (2) that we can not think of either money or commodities as prior to the other:

[&]quot;On the one hand, both sides of this opposition are commodities, hence themselves unities of use-value and value. But this unit of differences is expressed at two opposite poles, and at each pole in an opposite way. This is the alternating relation between the two poles: the commodity is in reality a use-value; its existence as a value appears only ideally, in its price, through which it is related to the real embodiment of its value, the gold...Inversely, the material of gold ranks only as the materialization of value, as money. It is therefore in reality exchange-value. Its use-value appears only ideally in the series of expressions of relative value within which it confronts all the other commodities as the totality of real embodiments of its utility." (ibid., p.199)

to become imaginary, money as a means of circulation becomes symbolic. At odds with the notion that paper money is deceptive, it is actually metallic money that Marx finds misleading. The fool is not only the person who thinks paper money is real, but the person who thinks metallic money is real: "This purely symbolic character of the currency is still somewhat disguised in the case of metal tokens. In paper money it stands out plainly" (ibid., p.224). At least paper money is upfront about being a symbol. This is a strong claim. Money, as a means of circulation, does not only include the possibility of becoming a non-metallic symbol, but is actually symbolic even when made of gold.

As with the case of imaginary money acting as a measure of value, this recognition may generate its own "wildest theories" in which money-value-economy is ultimately symbolic. Put concisely, I understand a wild monetary theory as an essentialism of the imaginary or symbolic. Resnick and Wolff (1987) describe essentialism as the presumption that:

"[A]ny apparent complexity - a person, a relationship, a historical occurrence, and so forth- can be analyzed to reveal a simplicity lying at its core...essentialism is the presumption that among the influences apparently producing any outcome, some can be shown to be inessential to its occurrence while other will be show to be essential cases." (p.3)

These theories move from the appearance of money as symbolic/imaginary to the idea that money is, essentially, symbolic/imaginary. In doing so they bracket, ignore, or deny other elements of money and a monetary economy. Money is complex. It takes various forms and fulfills multiple functions. The monetary essentialisms that Marx sets out to critique are those that take this complexity, and reduce money to a singular imaginary or symbolic essence.

The essence of money, it form and function, and the essence of the economy inform each other. For example, consider the neoclassical representation of an economy, taking the form of an essentialization of use-values. The economy is, essentially, the teleological circulation of commodities towards a pareto optimal distribution. Neoclassical theory does not deny the existence of other processes in the economy, but they are treated as inessential with respect to the real economy of use-values. Money's essential function in this paradigm is that of a means of exchange. Money can do other things, and may take various forms, but these are inessential. In an economy that is ultimately about the exchange of use-values, true money is essentially a means to this end.²

Essentialist theories of imaginary or symbolic money have two effects on how we would think about the broader economy. First, they nudge us to think of money outside of other economic processes - existing in our heads or in the voluntaristic policies of the state. Second, they suggest that economic problems - instability, exploitation, etc. - may be solved by tinkering with how we either imagine or represent money. This is notion, today associated with some popular versions of modern monetary theory, that if only we could recognize that money was a social construction (just imaginary or symbolic) we could better manage it. While actually has a Marxian anti-alienation element to it, recognizing that the money and budget constraints we think control us as exogenous natural powers are potential objects of our conscious democratic control, it leaves something off the table - the contradictions of class.

III. The Essence of Marxian Monetary Theory

One obvious counter to the essentialization of the imaginary/symbolic dimension of money, is an alternative essentialization of the real (material, metallic substance) dimension. Marx's writing on money, including parts of *Capital* discussed here, could indeed be read as such an alternative. Doing so would produce a distinct, essentialist, theory of money with a

²Those familiar with Aristotle's economies could also think of the relationship between his two economies and natural/unnatural uses of money.

particular conceptualization of the real as the essence of money. This theorization of money would exist in an overdetermined relationship with a broader view of the economy in general. Historically, this has taken the form of productivism.

Productivism conceptualizes the real economy as that of production, and hence essentializes forces and/or relations of production. Other aspects of the economy are secondary. Like neoclassical economics, productionism is not naive. It is not that it is ignorant of other social and economic processes than production. It merely casts these activities are secondary or inessential. Economic activities related to distribution or consumption are subsumed to the development of production where value is generated. Like the neoclassical view, this dualist treatment of the economy is related to a particular approach to money. The associated monetary theory follows what I call a real gold commodity (RGCM) logic. It can be characterized by four features:

- 1. The measure of value function is the real (essential) function of money.
- 2. Commodity money (i.e. gold) is the real (essential) form of money.
- 3. Other forms/functions, understood as symbolic or imaginary, are historically, practically, and theoretically derivative of real forms/functions.
- 4. The real economy, grounded in production, is considered independent of monetary processes; this is especially true when theorizing the value of non-commodity money.

This logic is obviously present in commodity theories of money, but could also operate in theories of non-commodity money. For example, Carchedi's analysis of paper money and specification of a Marxian monetary theory exhibits all four features.³

"A change in the quantity of paper money, inasmuch as it is not (de-)hoarded...does affect money prices. However, this effect is not due to money as a means of cir-

³A similar argument is made in Moseley (2004)

culation but to money as a measure of value, given that the value - purchasing power - of money changes. The difference between the monetary and the Marxist view is not that the latter denies that an increase in the money supply can have an (inflationary) effect on money prices. The difference is that in the Marxist view this effect is due to money as a measure of value, rather than as a means of circulation." (Carchedi, 1991, p.166)

The centrality of the measure of value function (1 from above) is clear. The independence of the real economy (4) is suggested by the inflationary effect of increasing the money supply. The privileged role of real monetary functions and forms (2 and 3) is less apparent, but can be teased out by looking at the value of different forms of money according to Marx's analysis in Volume 1.

Starting with simple gold commodity money, the value of one unit of money is simply its socially necessary abstract labor time $(v_m = L_g)$. Once we introduce symbolic but convertible non-commodity money, its value is determined by the quantitative relationship between itself (M^S) and the value of gold it represents (L_gG) :

$$v_m = L_g \frac{G}{M^S} \tag{1}$$

Before continuing onto inconvertible money, lets consider how the RGCM logic would evaluate a change in the supply of money in this case. What happens if the supply of money increases? One might ask whether this increase in money has the effect of increasing output, but this would be a wrong turn according to RGCM. Instead of thinking about money's role as a means of circulation, perhaps enabling greater realization of output, we should think about money as a measure of value. As the supply of symbolic money increases against a constant value of real gold money, the value of money falls and output stays the same. The symbolic money circulates; the relationship between the value of commodities produced in

the "real" economy and real gold calls the shots.

The move to incontrovertible non-commodity money creates a more serious difficulty in linking the value of money to the SNALT of gold. There are two paths taken in the Marxian tradition. Marx suggests that inconvertible paper money operates in a similar fashion as convertible. However, instead of representing a quantity of gold actually available for conversion, the gold that circulating paper stands in for is the quantity of gold that would circulate in a commodity money system (G^*) .

Because G^* is endogenously determined by the aggregate socially necessary labor time of circulating commodities this can also be rewritten (as in Moseley (2004)). Given an output of use-values with socially necessary abstract labor times and the value of money, we can derive commodity money prices. Then given a velocity of money we can derive the necessary quantity of money. This endogenously determined quantity of circulating gold money is then:

$$G^* = \frac{\sum L_i}{L_a V} \tag{2}$$

where $\sum L_i$ is the sum of the value of all non-money commodities and V is the velocity of money. This gives us two ways of thinking about the value of money; both equations are equivalent given the assumptions real gold money commodity interpretation of Marx:

$$v_m = L_g \frac{G^*}{M^S} \tag{3}$$

or, substituting (2) into (3):

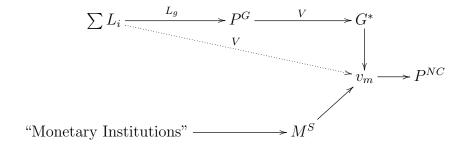
$$v_m = \frac{\sum L_i}{M^S V} \tag{4}$$

The latter is essentially the solution of Hilferding (Hilferding, 1981). While these equations are already theory-laden, being products of value theory, they open to various inter-

pretations based on the presumed causality.

Let us consider how various processes would determine the price of a commodity in inconvertible non-commodity money terms. Assuming, for simplicity, that the price simply represented the value of the commodity, we would need to look at both its value (L_i) based on SNALT and the value of money (v_m) based on the quantity of money (M^S) , its velocity (V), the value of gold (L_g) , and either the amount of gold that would have circulated $(G^*$ - the Gold solution) or the total sum of value produced $(\sum L_i$ - the Hilferding solution).⁴ Without assigning some strict causal guidelines a change in any one of these factors would have indeterminate effects. The real gold commodity money (RGCM) logic involves a monetary neutrality in which the real processes of production are prior to monetary processes that would determine the quantity and velocity of money. Schematically, with the dotted line representing the Hilferding solution:

Figure 1: The Priority of Gold Prices in Determining Non-Commodity Money Prices



Given the values of commodities and the value of gold we can derive a set of gold prices (P^G) . These gold prices are the real prices of the system, an analogue to the relative prices of neoclassical economics or the classical dichotomy. This is not to say they are identical. The real economy of objective productivist economics is different from the real economy of

⁴For now we are working with the equal exchange assumption of Volume 1. A prices of production scenario would not have any bearing on the point I'm trying to make about the epiphenomenal status of the monetary.

subjective exchangism. Nonetheless, there are some important structural similarities. The supply of non-commodity money can influence prices, but not these gold prices which are determined by real factors of production that themselves are independent of the social and economic processes that determine the money supply.

The insistence that the quantity of money influences its value only through the measure of value function, and not for example through its role as a means of circulation, means that there is no causality from the monetary to the real. Allowing the quantity of money to influence the aggregate production and realization of value would introduce a degree of circularity and indeterminancy, undermining the project of anchoring a Marxian theory of money on a clearly defined essence. By insisting on the essential character of the measure of value function, the privileged roles of gold money and real economy persist implicitly.

IV. Overdeterminist Marxian Monetary Theory

Applying overdeterminism to the concept of money involves breaking with attempts to isolate the true form of money from amongst its multiple manifestations: "Althusser's concept of contradiction emphasizes the necessary complexity of all contradictions, as against notions of contradictions that are simply dualistic opposites" (Resnick and Wolff, 1987, p.88). An overdeterminist monetary theory applies this notion of complexity to both economy/money and money's own diversity. In the first case there is no independent real and monetary economy we can theorize the relationship between. Secondly, as there is no essential real economy, there is no essential monetary form/function that plays a privileged role in articulating the two sectors.

Marx repeatedly insists on the priority of real money, but the necessity of this insistence betrays its tenuousness.⁶ At times real money appears dependent on the symbolic/imaginary.

⁵This implies the real-ideal necessary amount of gold that would circulate can not be determined prior to the quantity of non-commodity produced in the economy.

⁶For a more thorough critique of "real money" in Volume 1 see Rebello (2013)

At others, the latter appear to be even more real/fundamental. While a critique of the essentialism of the RGCM logic might suggest completely abandoning the language of real-imaginary-symbolic, or championing the symbolic/imaginary over the real, either move would be a mistake. The latter would merely reverse the real versus symbolic/imaginary dualism.

Completely abandoning the realist language is attractive, but presumes we can meaningfully speak about the monetary processes without categories similar to real, imaginary, and
symbolic. We err in accepting descriptions of the gold standard as actually more real than
today's institutions. However, we also err in ignoring the role this image of a real money
plays in constituting monetary practices. At the other extreme, virtual currencies enabling
exchange in massively multiplayer online games are not actually fake. They are as real - although not always as valuable or widely circulating - as any other currency, accepted in some
domains and not in others. Nonetheless, we would be foolish to neglect that they are constituted in our social world as fake or play money. In other words, the (mis)representation of
various forms of money as really real, imaginary, or symbolic is part of the overdetermination
of money.

In short, the language of the real-imaginary-symbolic (RIS) is misleading and unsustainable, but also necessary for an understanding of money. A deconstructive orientation to these terms recognizes both their impossibility and necessity.⁸ It is in this sense that Lacan is helpful. While a more sustained and thorough Lacanian analysis of money may be fruitful, my appropriation here is strictly instrumental. The Lacanian understanding of the RIS captures what is distinctive and important about these three registers, while undermining the common essentialism of such language.

The difference between the Lacanian RIS and essentialist versions are two complications

⁷A classic in the literature on the economics of massively multiplayer games and virtual worlds is Castronova (2006). Dibbell (2007) is written for a popular audience, but is an insightful account based on first-hand experience in the "gold-farming" industry.

⁸Foley (1983) almost hints at this when he refers to credit as a Derridean supplement to money, but he uses the term in a more standard, as opposed to deconstructive, sense.

or qualifications. The first complication is the distinction between the real before and after the letter. The real which we experience as pre-symbolic (before the letter), is constituted by the symbolic itself (it is after the letter). The second complication is the borromean ring type nature of the RIS. All three registers mutually constitute one another and the relationship between any two is dependent on the third. Whereas competing traditions in monetary thought differ in how they organize the hierarchy of money's real, symbolic, and imaginary dimensions, a Lacanian approach undermines the possibility of any ranking. This distinguishes it from dematerialization narratives where money becomes imaginary or symbolic over time.

V. Class Analysis and the Value of Money

The equations expressing the value of money are not the primary problem with the essentialist Marxian theory of money. These are largely definitional, following from the concept of value itself. Fine et al. (2004) argue that viewing the value of money as definitional is a weakness produced by the "New Interpretation" of the transformation problem. From their perspective the elements of value theory should be proven or derived in some fashion. The New Interpretation fails for being too definitional. While we should avoid presenting definitions as more than they are, it is impossible to avoid definitional concepts themselves. There is no way we can empirically prove, or theoretical derive, the concepts of value theory ex nihilio.

The question is how to add theoretical content to the equations. The real commodity money logic turns the definitions into a theory by introducting a specific Marxian casuality. Due to the essentialist character of this causality, an overdeterminist Marxian theory of money must take a different approach; instead of insisting on an essence it insists on an entry point. In short, an overdeterminist Marxian theory focuses on the complex relationship

⁹See Fink (1995, p.27)

between class and other process behind the variables that definitionally determine the value of money.

This point can be expanded upon by turning to a passage that is often used to support the RGCM logic because it could be read to suggest that money as a value is prior to circulation:

We have already seen that the sphere of circulation has a gap in it, through which gold...enters as a commodity with a given value. Hence, when money begins to functions as a measure of value, when it is used to determined prices, its value is presupposed. If that value falls, the fall first shows itself in a change in the prices of those commodities which are directly exchanged with the precious metals at their source. The greater part of all other commodities...will continue for a long time to be estimated in terms of the former value...which has now become antiquated and illusory. Nevertheless, one commodity infects another through their common value-relation, so that their prices, expressed in gold or silver, gradually settle down into the proportions determined by their comparative values. This process of equalization is accompanied by a continued increase in the quantity of the precious metals. (1976, p.214)

This process can be broken down into three distinct parts. First, money enters the economy with a value that may be different from the previous period. Second, changes in the value of money influence the price of commodities exchanged at the source of money. Finally, the prices of other commodities change over time while the supply of money accommodates these changes.

Each step in the process could be interpreted in terms of a long run RGCM logic. However, the deconstructive tension in this passage is evident in the way in which money's multiple functions are all necessary in seeing this process through to the end. The change in the value of money is exogenous to circulation in this example, but without processes of monetary exchange the new value has no effect; an "antiquated and illusory" value of money remains determinant for at least some time. In short, money's multiple functions all play a process in the overdetermination of both monetary prices and money's effective value and quantity.

This overdetermination is particularly apparent in the case of non-commodity money, where money's production and introduction through the "gap" of circulation involves complex interrelationships between class, subsumed, and non-class economic processes located in productive firms, financial institutions, the state and the household. The complexity and spatial-temporal distance between these various processes is such that no relationship may be seen at all. In a recent paper on Marx's theory of money, Paulani (2014, p.793) argues that the historical possibility of non-commodity money, in which "money has finally released itself from the chains that bound it to real commodities," is part of an "autonomisation of capital" that can be seen in the process financialization. 11

While it is technically true that the Federal Reserve can generate a dollar at will, everything that is socially meaningful about a dollar in the first place is constituted by multiple processes that include fundamental class processes where "real commmodities" are produced. If the RGCM logic is too stubborn in anchoring circulation/finance to an production, narratives concerning autonomisation or the eclipse of the labor theory of value in the era of finance are too quick to abandon production. Indeed, Marx warns us in the well-known section on commodity fetishism that the apparent independence of value (inherent in the commodity or, these days, conjured in finance) from capitalist production is itself just a product of the capitalist organization of social-economic life. The news of a financialized

¹⁰By saying this complexity is apparent in the case of non-commodity money, I am purposely resisting the notion that commodity money economies are any less complex even if some of the myths associated with a supposedly natural and apolitical piece of metal are easier to maintain.

¹¹For a critique of the autonomisation of capital literature see Bhattacharya and Seda-Irizarry (2014). There is some ambiguity to exactly what is meant by autonomisation, but my appraisal is that at least at times it goes too far in suggesting an independence of value from productive relations.

neoliberal world in which value appears independent of production is old news.

The power of class as an entry point is that it encourages us to link the creation of money (and the determination of its value and effects) to production in a non-reductionist way. Although stylized and simplified, the basic class analytic framework I'll lay out will roughly have a US-style monetary system in mind, focusing on four different sites: (1) the fundamental class process, (2) private banking/financial process, (3) a central bank, and (4) the state.

Allowing for subsumed and non-class revenue, the fundamental class process has the following flow of revenue and distributions

$$SV_f + SCR_f + NCR_f = \sum SC_f + \sum X_f + \sum Y_f$$

where SV is surplus value, SCR is subsumed class revenue, NCR is non-class revenue, and the terms on the right represent distributions required for the conditions of existence of these revenue flows, respectively. Our private bank will not be the site of a fundamental class process. This is not a necessary assumption. In the absence of surplus value realization, its revenues and distributions are

$$SCR_{pb} + NCR_{pb} = \sum X_{pb} + \sum Y_{pb}$$

In the case of the fundamental class process, the specific payments are contingent upon the industry in question. There is not much we can say in general about these payments. It is, however, worth specifying the payments involved for the private banking industry. Subsumed class revenue (SCR) would be determined by interest payments received from fundamental class processes. Non-class revenue (NCR) would include interest on loans made to consumers, the state, or other subsumed class processes (including banks). It could also include capital gains made by selling financial assets, interest on reserves held at the central bank, dividend payments from a central bank, and various fees on customers.

In order to access and manage the funds required to gain SCR banks may have to pay depositors, firms, and the central bank $(\sum X_{pb})$. The same would apply for receiving NCR $(\sum Y_{pb})$. Our private banks can create money by extending credit. In other words, we are not treating money/credit as exogenous, but the extension of credit may incur costs. In a fractional reserve system, the capacity/costs of expanding credit will be influenced by the behavior of the central bank.

$$SCR_{cb} + NCR_{cb} + NCR_{cb}^{M} = \sum X_{cb} + \sum Y_{cb} + \sum Y_{cb}^{M}$$

By including subsumed class payments we are assuming the central bank may lend money to a state that is involved in a fundamental class process. Otherwise this term will be zero. Non-class revenue would include interest on loans, as well as any capital gains. The final term on the revenue side represents the central banks ability to create money. It is difficult to distinguish between which central bank distributions (X, Y) are associated with each revenue stream. The cost associated with the privileges of being the central bank (in general), include supporting the state and private banking system. It is useful to distinguish between (1) dividend payments to private banks and/or distributions to the state and (2) the "distributions" associated with the ability to create money. These distributions (Y_{cb}^M) are coincident with the generation of money (NCR_{cb}^M) . This is revenue that is created in its distribution. For example, when the central bank purchases assets from private banks, it produces money. However, this money is immediately credited to the account of the private bank. Alternatively, the central bank may create money by crediting the account of the state. Again, the generation of money and it's initial distribution (in the system of accounts) occur simultaneously.

Finally, we will consider the state. The revenues and expenditures will be

$$SCR_s + NCR_s + D = \sum E_s + \sum T_s + i_s$$

where the first two terms include tax revenue and third (D) the issue of debt required to make up the difference between spending and revenue.¹² State spending includes expenditures on goods, services, and investment (E), transfer payments (T), and interest payments (i) on debt.

The relationship between money's value, the value of output, the supply of money, and its velocity will be determined by the complex relationship between all of these sites. Changes in money's value or quantity will have effects on the various flows of value. In turn, attempts to manage these flows, in any of these sites, will have potential monetary effects.

The capitalist begins production by borrowing a sum of money, M = c + v, consistent with the desired level of constant and variable capital. Where does this money come from? For simplicity, we can imagine that central bank accommodates demand for reserves (in the form of a loan to the private bank) that the private bank uses to credit the account of the capitalist. From this account, the capitalist pays for both wages and constant capital. After production, the capitalist realizes surplus by selling output for a sum of money (M') greater than M.¹³

We begin with an endogenous monetary circuit story because it is a good first approximation of the concrete institutional arrangements of modern banking. That being said, I am not adopting this story as a theory of money in itself. From an overdeterminist perspective, money is obviously endogenous, because everything is endogenous. The qualifier

¹²We could read "required" in a limited institutionally-mandated sense. It is possible for the state to spend with borrowing, assuming the central bank accommodates by creating money. We will assume the state always borrows, but that this debt may then be monetized in the future.

¹³This beginning is in the spirit of Graziani (1997; 2003) or "endogenous money" (Lavoie, 2003). The basic idea is to amend the standard Marxian circuit of money capital by treating the original sum of money as credit advanced from the banking system. The circuit ends when this loan is repaid. We begin with an endogenous monetary circuit story because it is a good first approximation of the concrete institutional arrangements of modern banking. That being said, I am not adopting this story as a theory of money in itself. From an overdeterminist perspective, money is obviously endogenous, because everything is endogenous. The qualifier endogenous is redundant, unless we assume some exogenous economic variables. This is precisely what the monetary circuit story does by essentializing a starting point - the capitalist's decision to borrow/invest. As with Marx's circuits, any particular circuit (monetary, productive, commodity) contains insights, but is also one-sided when not view as part of a greater totality.

endogenous is redundant, unless we assume some exogenous economic variables. This is precisely what the monetary circuit story does by essentializing a starting point - the capitalist's decision to borrow/invest. As with Marx's circuits, any particular circuit (monetary, productive, commodity) contains insights, but is also one-sided when not view as part of a greater totality.

Repayment to the bank comes from M'. But, where does this M' come from? Although it is determined by the level of surplus value, the money to realize it must come from somewhere? Part of it can come from workers who use their wages to purchase final goods. Part of it can come from suppliers of constant capital. Yet, in this simple case this would not be sufficient to realize a surplus. It must come from elsewhere. On the aggregate, the expansion in value requires additional money (Kotz, 1991). If there is no prexisting stock of money or credit, extra demand (purchasing power) must be generated in some fashion. Banks could extend more credit to firms/consumers to realize the extra value.

The state could purchase finished output as well. This could be financed in various ways. If a stock of non-circulating money exists in the economy, the state could sell bonds and use the proceeds to purchase commodities. The state could also borrow from the central bank, which has the power to create money. Alternatively, state spending could take the form of transfer payments. Again, money could be drawn out of non-circulating hoards or created by the central bank, but in this case the purchasing power is distributed to households that can then purchase commodities.

Expectations of final demand, as well as the actual success in realizing surplus value, will influence capitalist decision to invest, and therefore borrow. This decision will overdetermine the level of output. The financial relationships between firms, banks, central banks, the state, and households overdetermine these expectations/realizations, as well as the quantity

¹⁴The alternative to more money or credit is velocity, but this too would be the product of processes within the monetary-financial system.

of money and the associated costs in terms of subsumed and non-class payments in receiving it. In this overdetermined economy, output, value, and money/credit are all linked through the complex relationships between class, subsumed, and non-class processes. Let us imagine an example of a fall in the value of money. We will consider how it would be interpreted in quantity theory, standard Marxian, and overdeterminist Marxian terms.

If the value of money is falling, the combined growth rates of the money supply and the velocity of money, are greater than the rate of increase in the total value of commodities. From a quantity theory perspective, this is more money chasing the same amount of goods. Money acting as a means of exchange pulls prices up through some bidding process. The standard Marxian story is similar in the sense that the level of output (now in explicitly value-theoretic terms) is treated as independent of the supply of non-commodity money. This level of output presupposes an ideal quantity of real (commodity) money that would be required given the value of precious metals. Because this ideal money supply is constant, an increase in the actual non-commodity supply of money decreases the amount of value each symbolic token represents.

From an overdeterminist Marxian perspective, the primary question concerns the concrete circumstances instances in which money supply (or money supply and velocity growth) was expanded faster than the value of output. This would depend on the relationship between all of the previously discussed economic processes. One example would be class struggle over the value of wages and profits. As workers try to win higher wages, and capitalists maintain profits by increasing prices, demand for money increases which (in this example) will be accommodated by the financial system. In this case, the increase in the supply of money is overdetermined by the fundamental class process, but not in such a way that it would lead to more output.

This is not a novel explanation of inflation, nor uniquely overdeterminist. ¹⁵ The overde-

¹⁵For example, see Kotz(1982; 1987) and Saad-Filho(2000).

terminist point I am making is that a Marxian theory of money is not one that privileges the measure of value function. The complicated relationships between class processes, banks, and the state involve all functions of money, overdetermining its value.

It is important to note that the value of money will also overdetermine these processes. It is not simply an outcome of other processes, without its own overdetermining effects. Changes in the value of money change the value of predetermined (fixed) subsumed and non-class payments throughout the economy, and influence the arrangement of future payments. Since the monetary value of some distributions are set in advance, the value of these distributions will be overdetermined by the value of money. This also means that struggles over the monetary value of future payments may be influenced by expectations of the value of money. The neoclassical treatment of this phenomenon assumes that changes in expected inflation influence nominal contracts such that expected real values remain unchanged. We can not rule out this neutrality outcome as a contingent possibility, but it is not in any way the general case. The point is not that nominal contracts fluctuate to keep real flows equal, but rather that expectations of the value of money motivate and influence people in the struggle over these flows.

This example assumes that an increased demand for money, driven by a struggle over value in capitalist class processes, was accommodated by the financial system. However, it would be a mistake to treat finance as simply passive. On one hand, conditions in finance can influence the attractiveness of credit. Banks actively make pitches to potential borrowers. Central banks also engage in policies to make money/credit generation easier at times. On the other hand, the financial system may eventually fail to accommodate a demand for credit.

One aspect of many business cycles is that increased interest rates prior to recessions increase the value of future distributions of surplus associated with money creation. Unless the state steps in to demand output, the value of commodities that would have been purchased by credit-dependent firms (buying constant capital) and consumers (buying durable

consumption goods) is not realized. The combination of a fall in surplus realization and potential increases in subsumed interest payments leadS to bankruptcies for some and cutbacks in production for others.

There are a number of extensions to this basic theoretical framework that would be fruitful. First, distinctions between stocks and flows become important. It is easier for those working in the class analytic tradition to think in terms of flows. We are used to thinking about the overdetermined and contradictory relationship between flows to and from a particular economic site. However, stocks matter as well. This is particularly true for financial institutions, or other financialized sites. A related concern is maturity. At any given time a financial institution has a series of possible flows (as revenue or as costs) distributed across time.

Stocks of fictitious capital play an important role in the story about non-commodity money as deficit spending and exchanges of money for assets in the banking system involve either the creation or (re)distribution of fictitious capital. In other words, the gap through which money enters the sphere of circulation is not "those commodities which are directly exchanged with the precious metals at their source" but a financial system dealing with fictitious capital. This complicates the process of "infection" where a change in the value of money leads to price changes throughout the economy.

The bubbles in the stock market and then the housing market illustrate the significance of a careful theorization of this gap. Whereas both the neoclassical and RGCM stories suggest monetary neutrality, an overdetermined approach emphasizes the ways in which the effects of money are (1) non-neutral and (2) conditioned by concrete articulation of different sites and processes. While the non-neutrality of money is not unique to our approach, the class dimensions of these processes are often neglected. For example, in orthodox Keynesian theory the non-neutrality of money rests on price stickiness. A Marxian analysis is unique in emphasizing both the way class struggles shape the management of money and how monetary

processes influence class struggles.

The mutual overdetermination between money and class is important for both methodological and political reasons. An important development in post-2008 popular economic discourse is an increased concern over the unequal effects of monetary policy. Who gets bailed out? Who gets evicted? Who gets free money? Who gets thousands of dollars of debt in the process of trying to get the human, social, or cultural capital necessary for a 21st century job? The class analytic approach to money, made possible by the rethinking of Wolff and Resnick, can contribute to this critical movement by emphasizing issues of class - in the Marxian sense - that are neglected in discussions of wealth/income inequality. In terms of recognizing the effects of class on money, it can motivate more radical political projects by illustrating how seemingly unjust monetary policies are not just a bad ideas conjured by evil men, but are in part overdetermined by the class structure of the broader economy. It might not seem fair for monetary policy to favor banks over the working poor, but it makes basic capitalist economic common sense. This is not to advocate for a class essentialism, but the notion that we could ignore class without consequences is just as problematic as class-above-all-else politics. Movements against debt, for more progressive monetary policy, or in production of alternative currencies are not to be dismissed. Rather, the idea is to link them to class-conscious movements dedicated to producing an economy in which such just monetary policies (i.e. debt cancelations) would not only be nice, but also make basic democratic economic sense.

References

Rajesh Bhattacharya and Ian Seda-Irizarry. Financifinancial: A critique of the 'autonomization of capital' thesis. 2014.

Guglielmo Carchedi. Frontiers of Political Economy. Verso, New York and London, 1991.

- Edward Castronova. Synthetic Worlds: The Business and Culture of Online Games. University Of Chicago Press, 2006.
- Julian Dibbell. Play Money: Or, How I Quit My Day Job and Made Millions Trading Virtual Loot. Basic Books, 2007.
- Ben Fine, Costas Lapavitsas, and Alfredo Saad-Filho. Transforming the transformation problem: Why the "new interpretation" is a wrong turning. *Review of Radical Political Economics*, 36(1):3–19, Winter 2004.
- Bruce Fink. The Lacanian Subject. Princeton University Press, Princeton, New Jersey, 1995.
- Duncan K. Foley. On Marx's theory of money. Social Concept, 1(1):5–19, 1983.
- Augusto Graziani. The Marxist theory of money. *International Journal of Political Economy*, 27(2):26–50, 1997.
- Augusto Graziani. The Monetary Theory of Production. Cambridge University Press, New York, 2003.
- Rudolf Hilferding. Finance capital: a study of the latest phase of capitalist development.

 Routledge and Kegan Paul, London and Boston, 1981.
- David M. Kotz. Monopoly, inflation, and economic crisis. Review of Radical Political Economics, 14(4):1–17, 1982.
- David M. Kotz. Radical theories of inflation. In Union for Radical Political Economics, editor, *The Imperiled Economy*. URPE, 1987.
- David M. Kotz. Accumulation, money, and credit in the circuit of capital. *Rethinking Marxism*, 4(2):119–133, 1991.

Marc Lavoie. A primer on endogenous credit-money. In Louise-Philippe Rochon and Sergio Rossi, editors, *Modern theories of money: the nature and role of money in capitalist economies*. Edward Elgar, 2003.

Karl Marx. Capital, volume 1. Penguin Books, New York, 1976.

Fred Moseley. The "monetary expression of labor" in the case of non-commodity money. Unpublished. 2004.

Leda Maria Paulani. Money in contemporary capitalism and the autonomisation of capitalist forms in marx's theory. *Cambridge Jo*, 38(4):779–795, July 2014.

Joseph T. Rebello. Crises of real, imaginary, and symbolic money. 2013.

Stephen A. Resnick and Richard D. Wolff. *Knowledge and Class: A Marxian Critique of Political Economy*. University of Chicago Press, Chicago and London, 1987.

Alfredo Saad-Filho. Inflation theory: A critical literature review and a new research agenda. In Paul Zarembka, editor, *Value, Capitalist Dynamics and Money*, pages 335–362. JAI, 2000.

Richard D. Wolff, Antontio Callari, and Bruce Roberts. Marx's (not ricardo's) transformation problem: A radical reconceptualization. *History of Political Economy*, 14(4):564–582, 1982.

Richard D. Wolff, Antontio Callari, and Bruce Roberts. A Marxian alternative to the traditional 'transformation problem'. *Review of Radical Political Economics*, 16(1/2):115–135, 1984.