

Marx's Transition to Money with no Intrinsic Value in *Capital*, Chapter 3

Martha Campbell

Abstract:

In Chapter 3 of *Capital*, Volume 1, Marx provides the basis for money with no intrinsic value. Money has an expression of value, the commodity price list read backwards, because of its placement in the universal equivalent form. Marx's explanation of money as means of circulation and as hoards establishes that this expression—the exchange ratio between money and commodity values—is maintained whether money has intrinsic value or not. With this, the expression of money's 'value' is sufficient for money to express the value of commodities and so to function as the measure of value, whether money's own value is real or imaginary. This interpretation is derived from S. de Brunhoff's *Marx on Money*.

Key Words: Marx, fiat money, value, social form, S. de Brunhoff

1. Introduction

Marx's theory of money commands attention because it claims to explain what money is and why money is necessary. The theory seems to be tainted, however, by Marx's assumption that money is the commodity, gold. Making the best of this, Foley says it is "disorienting" because it means that Marx's monetary theory "does not correspond to the historical and institutional realities of capitalism."¹ Numerous scholars have dealt with the problem this poses by arguing that the crucial elements of Marx's monetary theory do not depend on money being a commodity; the theory's most significant insights (variously conceived by different scholars) can be detached from Marx's peculiar assumption.²

In this paper, I argue instead that Marx himself shows that money does not need to be a commodity, even though he continues to assume that it is throughout *Capital*, Volume I.³ Further, he shows this early on in *Capital*, already in Chapter 3. As I will argue, Marx's explanation of money's functions in Chapter 3 establishes that money's value expression, the counterpart of an ordinary commodity's price, suffices for money to express the value of ordinary commodities. This provides the basis for a reconsideration of money as credit money – which Marx knows full well to be the money of capitalism – in *Capital*, Volume III (or it would have if that volume had been revised).

The inspiration for this argument comes from de Brunhoff's *Marx on Money*. For this reason, my examination of *Capital*, Chapter 3 is informed by her approach and refers extensively to her discussion of money in simple commodity circulation. It is not clear, however, that de Brunhoff herself recognizes the conclusion I have drawn from her work, namely, that Marx has shown that money need not have intrinsic value. I am building on her work rather than repeating or interpreting it.

I will show next (Section 2) the elements of de Brunhoff's argument that are most important for my thesis. In the subsequent section (Section 3), I consider the meaning of the double commensurability of commodities – as values and as prices – with which Marx begins Chapter 3. I then turn to Chapter 3 itself (Section 4), taking money's functions in the order that Marx presents them, but then doubling back to consider the

first and second functions in light of the third. It is this last step that I argue supports the thesis that money's value may be imaginary.

2. Key Elements of de Brunhoff's Approach to Money in *Capital*, Part I

To give a preliminary sense of what de Brunhoff's interpretation involves, I list the key elements of it that are relevant to my thesis. Their significance will emerge more fully when they are applied to the interpretation of Marx's *Capital*, Chapter 3.

De Brunhoff's most important contribution in the present context is her thesis that the three functions money performs in simple circulation are, for Marx, aspects of money. This means that they are distinctions we can isolate in thought but that necessarily coexist in money itself. The textual evidence she offers for this is that Marx uses the title, money, only for the third section of *Capital*, Chapter 3, when he comes to money's third set of functions. Of this set, hoarding is the most important for de Brunhoff's thesis because, as we will see, it unites the previous two (measure and means of circulation). As she says of it: "the paradox of this third function is that it introduces money "proper" at the end of an analysis entirely devoted to money."⁴ This thesis regarding the unity of money's functions informs de Brunhoff's reading of *Capital*, Chapter 3 as a whole. It leads her to see that, although Marx presents each of money's functions separately, what he is really showing is that they mutually support each other. Because each function supports the other two, they are all three, mutually requiring – necessary for each other – and therefore, one.⁵

Second, de Brunhoff focuses on the universal equivalent form as that which distinguishes money. This might seem obvious from Marx's account. However, both his assumption that money is a commodity and his insistence that commodities are doubly commensurable (as values and as prices) could suggest a different alternative: that Marx includes these features to connect money to labour. Because of her focus on form, de Brunhoff recognizes this as the wrong turn that would reduce Marx back into Ricardo. Although de Brunhoff does not elaborate on this, the difference between them is that Ricardo's theory is that value is labour whereas Marx's is that value is the social form of labour in capitalism.

Third, de Brunhoff emphasises that dematerialization is a characteristic feature of money's aspect as means of circulation, no matter what kind of money – gold,

banknotes – is at stake. The dematerialization of money is important in this context because it is a crucial step in Marx's transition to money with no intrinsic value (although de Brunhoff does not take it that far).

I disagree entirely, however, with de Brunhoff's thesis that Marx presents a general theory of money in *Capital*, Part 1. In her description of it, this is a theory that applies to "every monetary economy" or "the study of money *in its general aspect, independent of the capitalist form of production*."⁶ I hold instead that in *Capital*, Part I, Marx describes simple commodity circulation; this is unique to capitalism and an abstract aspect of it. It is the surface of the capitalist mode of production in the sense that it is how capitalism looks when we first consider it, all we would see if we did not investigate further.⁷

In the next section, I defend this alternative to de Brunhoff's general theory of money. If her view did not do damage to Marx's theory, it could just be set aside. As will emerge in the next section, it does do damage: it obscures the thorough integration of circulation and production that, for Marx, is distinctive of the capitalist mode of production. This integration, as I will argue, is the reason for Marx's insistence on the double commensurability of commodities at the beginning of *Capital*, Chapter 3. Finally, the argument of the next section will also support the way Marx was just distinguished from Ricardo, namely, that Marx holds that value is the social form of labour in capitalism whereas Ricardo posits that value is labour (that, as Marx puts it, "the *substance* of value.... is *labour*."⁸ De Brunhoff's comparisons between Marx and Ricardo suggest that she would accept this way of differentiating them, although she does not say this herself.

3. Value and Money as Universal Equivalent

The argument of *Capital*, Ch. 3, which is the focus of this paper, breaks into a development that is already in progress. Specifically, Marx begins the chapter with the claim that "commodities are in themselves commensurable" rather than rendered so by money.⁹ He insists, in other words, that there is a double equalization: the denomination of commodity prices in money units is the counterpart of an inner commensurability of commodity values in terms of labour time. The basis for this claim is supplied by Marx's

earlier explanation of value and of money as universal equivalent. It will be shown briefly what this entails.

In his first look at commodity values and money as universal equivalent, Marx attributes both to one aspect of the kind of social labour that produces commodities, namely, that it is simultaneously social – connected and unified – and carried out independently – made up of labour activities that are conducted in isolation from each other and for the sake of private gain.¹⁰ To be social and independent are “contradictory and mutually exclusive conditions,” but it is Marx’s case that these conditions in fact coexist in commodity production. Their coexistence is possible because of the value character of commodities and money as universal equivalent. This yields Marx’s first explanation of value and money: that they result from and make it possible for social labour to be simultaneously independent.

One clarification before proceeding: private and independent labour is just the simplest aspect of commodity producing labour. The entire development in Part I of *Capital* follows from it and spells out what it entails. To see this development, the extraordinarily simple character of private and independent social labour must be kept in mind. Inattention to its simple character leads to two kinds of misinterpretations: private and independent social labour must neither be over-concretized – filled out into the description of a complete mode of production (as is done, for example, by the simple commodity production interpretation) – nor taken as a complete explanation for commodity values. In the further development of *Capital*, Marx will argue that commodities are the products of capital.¹¹ Looking back from there to *Capital*, Part I, we can see that private and independent production is an abstract description of capitalist firms: they produce separately from each other and on private account because for the sake of their individual profit. To begin with, the pair, money as universal equivalent and value, is explained solely as that which gives the contradiction between social and independent labour “room to move.”

How it does this, Marx explains, is that production is both independent and social because it is indirectly social: because labour activities are connected *only* by the exchange of products. Labour activities are, in fact, integrated but the connection among them is shifted outward onto exchange relations among the objects produced and so also, *post festum*, delayed until after their production is complete.¹² For exchange of products to unify isolated labour activities into one social whole, it must be monetary exchange. The unification accomplished by exchange of all commodities

against money requires that money combine the four features that Marx identifies separately in the value-form section (Section 3) of *Capital*, Chapter 1. First, because the contradiction between independent and social is carried outward onto exchange relations among products, monetary exchange involves a polar opposition between commodities and money. Money is the social pole (possesses the quality of direct exchangeability) that ordinary, independently produced commodities aspire to become (by their aspirations, their ideal values, showing that they are intended as social products but have not proven themselves as such until their transformation into money succeeds). Second, monetary exchange must also be all-inclusive; as Marx brings out by the expanded form of value, for monetary exchange to integrate all labour activities, it must link each product of every other. Third, it must link products in a unified way if it is to make all labour activities into one social labour. As Marx brings out in the general value form, it does this by relating all ordinary commodities to one and the same money commodity (which adds universality to money's direct exchangeability). Finally, custom must settle on one particular commodity to be universally and directly exchangeable – that is, to be money.

Value is the counterpart of money as universal equivalent; it is, in fact, first derived from exchange value described as money price in all but name.¹³ This derivation discloses the quality that labour has because of the manner of its socialization. As this is labour seen through the lens of money price – abstract labour, as Marx calls it – it has, unsurprisingly, exactly the same character as money: it is directly social and homogeneous, every bit of it the same as every other. Since abstract labour is the consequence of the socialization of production mediated by monetary exchange, it is the first specification of labour – the first aspect of labour's social form – to emerge from the contradiction between independent and social labour.¹⁴ By the derivation of the social form of labour, abstract labour, from money, Marx presupposes that labour is shaped by its socialization through monetary exchange. What justifies this presupposition?

The basis for it is that mediation by monetary exchange is *necessary* when social production is private and independent. Production is then inseparable from exchange. The necessity of their connection is a distinctive feature of the capitalist mode of production.¹⁵ Compounding the difficulties of understanding it, exchange and money are simply present in other settings, but are not necessary to them.¹⁶

As the case of money as universal equivalent and abstract labour illustrates, the necessary interconnection of production and exchange results in a doubling of social determinations – exchange and production counterparts.¹⁷ Since this interconnection is distinctive of capitalism, at least the one distinctive feature to be disclosed so far, the signs of it run throughout *Capital*, Part I. One version of it is that the requirement of products to be exchanged is already inherent in the indirectly social way their production is organized. Marx calls this requirement the value character of commodities. That social production is oriented exclusively towards exchange makes products bearers of the connection among labour activities. As bearers of that connection, products are values.¹⁸ Second, mediation by exchange necessarily has a *post festum* aspect, which requires a further qualification: because the social character of products is established definitively only by their transformation into money, it could seem that exchange alone makes products social and production is not social at all. Marx preserves the integration of production with exchange, which is characteristic of this mode of production, and takes into account that exchange is *post festum* by the qualification that commodity values are ideal before exchange and real only once it takes place.¹⁹ Third, the doubling is captured again in Marx's references to appearance forms and "a content distinguishable from" them: connections in exchange are visible because direct; because they are the indirect and only connection among labour activities, they occupy a necessary place in the mode of production.²⁰ This necessary place makes them appearance forms: the visible realm of exchange shows the character production has (e.g., that its products are commodities) because it is inseparable from exchange. Marx brings all of this to bear in the opening paragraphs of *Capital*, Chapter 3: the outer commensurability of commodities in terms of money price is the necessary appearance form of their inner commensurability in terms of labour times.²¹ The commodity's double commensurability is the mark of production's integration with exchange. This is unique to and distinctive of capitalism. If we leave out the inner commensurability, we are in a non-capitalist world where exchange may be present but is unnecessary.

With this, I turn next to the rest of *Capital*, Chapter 3 and to de Brunhoff.

4. *Capital*, Chapter 3

4.1 Money as Measure

De Brunhoff emphasises two points in Marx's presentation of money as measure. The first is the one just discussed, that commodities are commensurable as values. As De Brunhoff puts this, money does not have the "mysterious power to make commodities commensurate with one another"; in Marx's conception of commodity exchange, "there are no 'circulating use values.'"²² In other words, the equivalence of commodities is manifested in prices, not imposed on commodities by their prices. As argued in the previous section, this is true because production is exclusively oriented towards exchange and integrated with it.

The second is that money expresses and, therefore, measures value because of its universal equivalent form. De Brunhoff appears to suggest that Marx presents money as a commodity precisely in order to highlight that its form is its only difference from other commodities. As she says since "money as a metal commodity is of the same nature as other commodities" its form, or its "socially validated monopoly of equivalence," is "what characterizes its social function as money."²³ Stated somewhat differently (drawing on the argument I have presented in Section 3), the assumption that money is the commodity, gold, continues the line of development that begins with the private and independent labour. Even if Marx could come up with some way of justifying this, it would violate the principle on which his argument is based to throw in something from the outside (e.g., a favorite candidate is the idea that money "is itself a mere symbol" established by "the universal consent of mankind").²⁴

Since it is money's position in the equivalent form that enables money to measure value, money cannot have a price (this would displace it from the equivalent form). Money's value does have an alternative expression, however: "to find the magnitude of the value of money expressed we have only to read the quotations of a price-list backwards" Marx says.²⁵ In other words, a value of money is implicit in commodity prices. Marx's gold money, of course, has an intrinsic value. He says that he takes gold to be the money commodity "for the sake of simplicity," but it isn't immediately obvious whether the simplification consists in settling on one particular commodity (e.g., gold as opposed to silver) or in settling on a commodity rather than a valueless object.²⁶

There is support for each of these interpretations. On the one hand, Marx's analogy to weight in *Capital*, Chapter 1 suggests that money must have intrinsic value if

it is to measure value (iron has weight like a sugar loaf, and can measure the sugar loaf's weight because of this).²⁷ On the other, Marx says later in his section on measure that "a thing can...have a price [an expression of value, mc] without having a value."²⁸ This could be read as the anticipation of money without intrinsic value. Any valueless object (paper or bank records) that occupies the universal equivalent form would still have an expression of value implicit in commodity prices just because it occupies that form. Moreover, even if that expression of value is imaginary, Marx's claim that it is "a socially given fact" attributes objective social reality to it.²⁹ This leaves an opening for money to lack intrinsic value. But it would not do to think of measure this way at the outset because this would enclose both money and commodities in the same circle of prices. It would then seem that money *does* make commodities commensurable. It has to be shown how the loss of money's intrinsic value does not threaten the commensurability of commodities as values. As we will see, that loss develops out of money's own functions.

A last point on de Brunhoff on measure: to appreciate the significance of her focus on the universal equivalent form, it is important to recognize the alternative she is rejecting. This is that Marx assumes money to be gold in order to maintain a connection between money and the labour time spent on gold's production. As de Brunhoff states: "It is tempting to think that Marx began [with] . . . an analysis of metallic money in order to combine the tradition of the money commodity with the theory of value as labour, as Ricardo had previously done."³⁰

Because Marx distinguishes money from commodities by its universal equivalent form, de Brunhoff maintains, his "examination of metallic circulation is not a return to Ricardo's premises." This point is crucial, as, at this stage of *Capital*, it is the crucial distinction between Marx and Ricardo (whose theory often serves as the model of labour value theory as such); hence it is worth expanding on the basis for it presented in the previous section. The idea that Marx assumes money to be gold in order to connect money to labour time directly bypasses the necessity for monetary exchange, that is, for money. As explained in the previous section, the labour time that constitutes the value of commodities is labour time as it is transformed by its presentation in money prices (abstract labour). This is as true for gold, even if gold is assumed to be money, as it is for any other commodity. The abstract labour that constitutes gold's value is accessible only in money's value expression, the price list read backwards. Thinking of the labour time that constitutes gold's value as that actually spent in gold's production, conflates

abstract and concrete labour. Marx's assumption that gold is money is not some little trick to obliterate the difference between the two. To state this point another way, the ultimate source of the difference between Marx and Ricardo on value is that Marx's theory begins from the private and independent character of commodity producing labour and derives from this the necessity for money. By contrast, Ricardo's value theory refers to labour as such, with no social character and presents money as a "ceremonial form." All of this is implicit in de Brunhoff's emphasis on money's form.³¹

4. 2 Money as Means of Circulation

In moving from money's first to its second function as means of circulation, de Brunhoff emphasizes the interdependence between the two. Their interdependence is evidence for her case that the separate "functions" of money—as they are usually conceived—are instead simultaneous aspects of money for Marx.

On the one hand, it is only with money's second function that the universal equivalent form is activated and acquires real existence; money as means of circulation has "the universal power of exchange."³² As measure, money implies "the necessity of exchanges," but does not carry them out.³³ Hence de Brunhoff says that money's second function is the "practical guarantee" of money's role as measure; it gives "the fixing of prices" accomplished by measure "its full significance," by making these prices the basis of real exchanges.³⁴ This echoes Marx's conclusion to the section on measure: "gold serves as an ideal measure of value only because it has already established itself as the money commodity in the process of exchange."³⁵ On this side, money derives its ideal function as measure from performing the role of equivalent in real exchange. On the other side, money as means of circulation presupposes its function as measure: it *only* realizes prices and does not 'fix' them. To repeat de Brunhoff's statement of this point, "There are no circulating use values," as the quantity theory supposes.³⁶ Commodities enter circulation with already established prices and money with an already fixed value, for now, an intrinsic value. Detached from measure, money as means of circulation "would have only a purely functional character"—its familiar role as a medium of exchange.³⁷

With prices given by money's function as measure, the new problem raised by its means of circulation function is to identify the law governing the quantity of money in circulation. In keeping with his usual method, Marx initially poses this problem in the simplest version possible. It will reveal both the elements of the problem and a line of

development to a more complex account.³⁸ In this case, the simplest version is a story about gold mining – a ‘model’ – based on the assumption that the circulating medium is full-weight gold coin. This model is used to identify a required quantity of the circulating medium. As the story goes, gold enters circulation with a given value, which is expressed in the exchange ratio between it and other commodities at its source (the mine head). With money's value given, the quantity of money required for circulation is easily shown to be determined by the needs of trade: the sum of commodity prices to be realized and the velocity of money. Because both its elements are variable, so is this required quantity of circulating medium. For the actual quantity of circulating medium to correspond to its required quantity, there must be some mechanism whereby the first adjusts continually to the second. One way of describing this adjustment mechanism is to call it a change in the velocity of money. A decrease in money's velocity, however, is exactly the same thing as an increase in hoarding (money has to be somewhere, even if this is only someone's pocket, when its velocity decreases because it isn't spent). Since the two versions have the same meaning, the adjustment mechanism may be stated in terms of either one. De Brunhoff poses it in terms of hoarding; it will simplify matters to follow her in this since it is the version Marx eventually settles on.³⁹ Following de Brunhoff's lead, then, the adjustment mechanism is hoarding: the quantity of money in circulation is its required quantity because of the existence of hoards. These absorb the difference between the quantity of money, here gold, in existence and the quantity that is required for circulation.

If we compare Marx's account to the quantity theory, we could say that the latter lacks any notion of a required quantity of the circulating medium because it overlooks money's function as measure. In Marx's account, the required quantity depends on prices fixed by the exchange ratio between gold and other commodities, by which gold expresses their values. By contrast, the quantity theory just assumes that all gold in existence circulates. Alternatively, we could say that the quantity theory overlooks money's third function, hoarding, by which the actual adjusts to the required quantity. This adjustment mechanism preserves the ratio between gold and other commodities that obtained when gold entered circulation. These two ways of comparing Marx and the quantity theory are counterparts of each other.

To put the matter in terms of money's three functions, in the gold mining story, gold's given value connects money's function as measure to its function as means of circulation. But the circulation of full-weight coin also connects money's second

function to its third, hoarding. In this model, the three are simultaneous aspects of money. The model's purpose in Marx's account would seem to be that it permits this simultaneous character to be presented in a simple way.

To take this argument one step further: it was just argued that hoarding preserves the ratio money has to other commodities on its entry into circulation, by adjusting the quantity of circulating medium to the required quantity (this is really just the basic principle that circulation doesn't change the value of anything, applied here to gold). With gold, this initial ratio is the expression of an intrinsic value. By the same argument, however, hoarding would preserve the initial ratio of anything that was money, whether that ratio expressed intrinsic value or not. This implies that all that money needs to fulfill its function as measure is an expression of value – rather than value itself – and, as argued earlier, it has this because it occupies the equivalent form. The last element of the gold-mining story is the path it supplies to money with no intrinsic value.

Full-weight gold coin cannot circulate because it wears away or dematerializes when it circulates. As a result, the eroded coins that circulate are symbols, not of value, but of full-weight coin. This creates the opening for the introduction of state issued paper money, since it is just as capable as eroded coin of symbolizing the quantity of gold in full-weight coin. *If* this kind of paper money cannot be hoarded because it is only a symbol of gold in money's function as means of circulation, then it is devalued whenever its quantity exceeds the needs of trade. Money's devaluation means that prices rise. This could suggest that Marx accepts the quantity theory, at least for this kind of money.⁴⁰ De Brunhoff rejects this suggestion unequivocally: "Instead of tending toward a quantity theory of paper money, he [Marx] seeks to get rid of the quantity theory for all kinds of money. Marx completely rejects the Quantity Theory of Money; to accept it on a limited point would undermine the logic of his monetary theory."⁴¹ Accepting the quantity theory even for one kind of money would reduce money solely to a medium of circulation, or, in other words, eliminate money's function as measure.⁴² Marx preserves this function and its link to money as means of circulation by his explanation of paper money as a symbol of gold. This yields his explanation for the reduced purchasing power of a unit of money consequent on the over-issue of paper (assuming it isn't hoarded): if the quantity of paper is increased to twice the amount of gold that could be in circulation "The effect is the same as if an alteration had taken place in the function of gold as the standard of prices."⁴³ In Marx's account, paper

money does not conform to entirely different laws, but to the same laws as those derived from gold, modified by the supposition that it isn't hoarded.

Having set aside any question that Marx restores the quantity theory, de Brunhoff argues that the real principle to emerge from the consideration of paper money is the *dematerialization* of the circulating medium. This, she says, is a general principle that applies to every kind of money "all money which circulates dematerializes itself."⁴⁴ This principle is illustrated by the two kinds of money considered so far: gold money is dematerialized by eroding when it circulates, paper, by the decrease in the standard of prices, when the quantity in circulation exceeds the quantity of gold that would have circulated. Credit money is not considered here, but when de Brunhoff does consider it, she maintains that it has its own kind of dematerialization, namely, its tendency to become fictitious. Credit money circulates in the circuit of capital, rather than simple circulation. In circulation in that sense, credit money becomes fictitious – dematerializes – when it evades "the conditions of the circulation of [real] capital" by enclosing itself within itself and separating itself off from the value of commodities in the circuits of industrial capital.⁴⁵ Each kind of circulating medium is dematerialized in its own way, but the point here is that all money that circulates is dematerialized in some way. Since money must be a means of circulation, it follows that all money is dematerialized. Marx's gold model suggests that money's hoarding function is just as necessary. If dematerialized money can't be hoarded, we are at an impasse: money can't exist because its necessary functions preclude each other. Marx's account of hoarding explains why money would be hoarded even if it is dematerialized – lacks intrinsic value: it is hoarded because it performs its other functions as measure and as means of circulation. As we will see, money's three functions support rather than preclude each other and because each is required to support the other two, it must have all three to be money.

4.3 Money

The common feature of money's third set of functions – hoarding, means of payment, and world money – is that money is the "sole form of value" (meaning that commodities are just use values opposite it).⁴⁶ For this reason, money "has to appear in person" to perform this set of functions. The 'person,' however, doesn't have to be gold. If a 'representative' is established as the sole form of value, it would be the person who has to show up to perform these functions. Marx's introductory paragraph to the section

entitled, "money," is extraordinarily convoluted, but we can assure ourselves that a 'representative' is adequate to the functions described. By the time Marx comes to the second of these, means of payment, he tells us that a monetary crisis is one of the occasions where commodities are just use values and that bank notes (the 'representative') do just fine as the sole form of value – as long as they are there. This places the focus on the preceding function, hoarding, as the place where money's liberation from intrinsic value occurs.

Even though Marx presents the reasons for hoarding in terms of gold money, the reasons themselves have nothing to do with gold's intrinsic value. They are instead the consequences of money's other two functions. These, in turn, derive from money's form.

The reasons to hoard are, first, that money is "the universal equivalent form of all other commodities and the directly social incarnation of all human labor."⁴⁷ The universal equivalent form makes money the measure of value and the unit in which all prices are denominated. Marx refers to this aspect of money by observing (in his immediately preceding statement) that changes in money's value don't prevent it from being the denominating unit: 200 ounces of gold still "contain more value than 100 ounces." Here it is the universal equivalent form, not gold's intrinsic value, that is at stake; further, the reference is to denomination in money units, not to the origin of that denominating function, the measure of value. Second, money is hoarded because "it is the universal representative of wealth because it is directly convertible into any other commodity." This is the universal equivalent form activated. The power to actually become anything else belongs to money as means of circulation.

Money's two previous functions are now presented as reasons for hoarding. In addition, two points should be noticed about how Marx has presented them. First, money (in any function) isn't 'the direct incarnation of human labour' or the 'universal representative of wealth' unless producing and exchange are integrated into a single unit, into one mode of production. Marx has lead up to this in the preceding paragraphs of the section on hoarding, by recounting the historical increasing "extension of commodity circulation" from "its very beginnings" to its all-inclusive state, where "circulation becomes the great social retort into which everything is thrown." The extension of commodity circulation increases "the power of money" awakening the "lust for gold" – for "the commodity as exchange value, or exchange value as a commodity."

With this inversion, the form generated by exchange, exchange value, itself becomes the aim of exchange.⁴⁸

Second, just before his reference to money's two functions (described earlier), Marx shifts attention from gold's intrinsic value to its value form. One aspect of this shift has already been noted: money's measure of value function is referred to only by its effect, denomination of prices in money units. In another attempt to shift our gaze, Marx says that to barbarians and peasants "value is inseparable from the value form." If we held this foolish notion ourselves, this should persuade us to think differently. In case we don't, Marx's strange next sentence alerts us to the point again: "the value of money varies, whether as a result of [1] a variation in its own value or [2] of a change in the value of commodities."⁴⁹ The first applies if money is gold with intrinsic value. The second cannot: the value of intrinsic value money – gold – does not vary with a change in the value of commodities (Marx does not say *other* commodities; money is not a commodity). The only sense in which the value of money can change in [2] is if 'value' means the expression that Marx spoke of in the section on measure – the "socially given fact in the shape of the prices of commodities."⁵⁰ In case we have still missed the point, Marx gives us one last shove: "*qualitatively* and *formally* considered, ...money is the universal representative of material wealth." Money is hoarded because of its universal equivalent form.

De Brunhoff points out that the "qualitative aspect' of money" is noticed in other theories and is "today is called the 'liquidity' of money."⁵¹ Liquidity preference (the demand for money as a store of value) combines the measure and medium of exchange aspects distinguished by Marx. The measure aspect is that because money is the denominating unit of prices, it has no price; unlike any other asset, it is impervious to a fall in price. Hoarders cannot experience a capital loss. The medium of exchange aspect is liquidity's other quality: that money can be converted quickly into anything else. To reiterate the point established thus far: money is hoarded because of its form; as universal equivalent it is measure and so the denominating unit of prices; as measure activated, money exerts its power as the medium of exchange.

The other side of this is that hoarding supports money's two other functions. Marx has already presented this argument in connection with money as means of circulation and returns to it in the concluding paragraph of the section on hoarding. The ebb and flow of money between circulation and hoards insures that the circulating medium is always available in sufficient quantity to handle the volume of commodity

values to be realized. Moreover, it is the same *thing* that moves between one function and the other (*money* flows between the two). It is apparent from this that being the circulating medium and being a hoard are two aspects of money. Not only that, they are complements of each other: hoarding enables money to be the circulating medium and the circulating medium is hoarded because it is the prerequisite for satisfying needs and producing.⁵²

The third aspect of this is that the complementary relationship between money's character as hoard and as circulating medium at the same time preserves the exchange ratio between money and all commodities. This ratio is the by-product of the fact that money alternately assumes its character as circulating medium and as hoard. From this it emerges that the ratio is itself an aspect of money. It is inseparably combined with the other two because it is created by them. The third aspect is the magnitude expressed in the price list read backwards; this is true whether money has intrinsic value or not. This is now all there needs be for it to function as measure.⁵³

It would stretch the truth to say that Marx makes money's third aspect explicit. As argued earlier, the preservation of money's exchange ratio to commodities is already there in his account of the circulating medium; it is most visible in Marx's gold model. Marx comes back to it in the last sentence of the section on hoarding: "The reserves created by hoarding serve as channels through which money may flow in and out of circulation so that the circulation itself never overflows its banks."⁵⁴ This is a reference to the quantity theory and an invitation to compare it, once again, with Marx's account.

Since the quantity theory identifies money with 'the circulation', if the quantity of money increases there is nothing money can do except overflow – devalue (money is everywhere – it is carted to stores in wheelbarrows; it is wallpaper in people's bathrooms). This has nothing to do with whether money has or lacks intrinsic value; according to the quantity theory, it applies to both gold and paper. It results instead from the quantity theory's denial of money's hoarding aspect.

Reconsidered from this perspective, it is apparent that Marx adopts this same denial in his earlier discussion of the circulation of state-issued paper money.⁵⁵ However, he will direct our attention to a different point than the one noticed by the quantity theory. His case that the standard of price declines if "paper money exceeds its proper limit" rests on the assumption that paper money does not flow between circulation and hoards.⁵⁶ If paper were hoarded, it would never 'exceed its proper limit' – overflow its banks – nor would the standard of prices decline. The idea that devaluation

is caused by over-issue – the state's action – comes from the quantity theory. Marx's theory implies that the cause lies instead with the reason for refusing to hoard it. Marx hints at this: it is the unique feature of state-issued paper that it acquires its "objective social validity" from the state.⁵⁷ It loses this if the state's authority is called into question and, having lost it, the state's money is in "danger of being universally discredited" – of ceasing to be money.⁵⁸ On such occasions, state-issued paper wouldn't be hoarded. But this is because its validity is questionable or, in other words, it isn't clear that it is money. It is not because the state printed more than the 'proper limit'. As long as the state's authority is certain, its paper should move between circulation and hoards and maintain the standard of prices as a result.

This contrast with the quantity theory shows that we find the same argument in the sections on the circulation and on hoarding. This should not be surprising since it is Marx's thesis that the two are complementary aspects of money. In both sections, the third aspect is present as their result. Marx gives us a way to see it, but leaves it for us to figure out.⁵⁹ Established as the result of the interaction between the circulation medium and hoarding, this third aspect, measure, has evolved from its initial character as a commodity with intrinsic value into a ratio that is a value form (the expanded relative form). This could be expression of an intrinsic value but it does not have to be. Money "could acquire the form of" a commodity through this expression, "without having a value."⁶⁰

This prepares the way for a (much) later explanation of credit money. In Part I of *Capital*, Marx is considering simple commodity circulation by itself. He sticks to state-issued paper because it is "the only kind of paper money which emerges directly from metallic currency or from simple commodity circulation itself."⁶¹ In his oblique way, Marx lets us know that credit money is capitalism's money: the money capital creates for itself.⁶² He tells us also that it "implies relations that are as yet totally unknown from the standpoint of simple commodity circulation."⁶³ In other words, it implies capital, its circulation, and its differentiation into its particular forms, industrial, commercial, and financial capital. Until Marx has accounted for these, credit money cannot be explained. On the other hand, gold money is adequate for these 'as yet unknown relations'—the presuppositions of credit money – to be developed. What Marx has established so far is, in de Brunhoff's words, the "unity of the functional aspects of money," and derived from that, money's detachment from intrinsic value.⁶⁴

5. Conclusion

It was just explained why Marx cannot begin *Capital* with credit money. This paper has sought to explain both why Marx begins with money as a commodity and how he establishes that money need not be one.

In answer to the first part, the overview in Section 3 maintained that the logical starting point of the argument of *Capital* is the private and independent character of labour (not labour itself), which Marx presents in his second section of *Capital*, Chapter 1. Everything that follows is derived from that: it is given as the reason why products take the form of commodities, and this, in turn, shows the necessity for a universal equivalent, for money. Money cannot be anything but a commodity if the argument is to adhere to this line of development.

The answer to the second part develops in stages over the course of *Capital*, Chapter 3. To begin with, Marx's gold model embodies all three aspects of money in the simplest possible way. Marx's shift in focus, however, makes one aspect or another more prominent. When his focus is on circulation, hoarding comes up in an auxiliary way because of its role in adjusting the quantity of the circulating medium. We could figure out that the interaction between hoarding and circulation causes money's value expression to conform to gold's intrinsic value. In this context, however, there is little incentive to consider the expression of money's value, because the intrinsic value of gold is just presupposed.

The transition to state-issued paper money begins the detachment of money from commodity money and so from intrinsic value. With the focus still on circulation, the point seems to be that circulation does not require money to have intrinsic value. With paper money, however, money's value becomes the center of attention, because it seems to depend on the quantity of paper in circulation, whereas it was just given in the case of gold.

Money's detachment from intrinsic value really occurs when the focus shifts to hoarding. This is because the reasons for hoarding have nothing to do with money's intrinsic value. Money is hoarded because of its two other aspects: that it is the denominating unit of prices and the circulation medium (these are the source of its liquidity). With this, we can see that the quantity of circulating medium adjusts in the same way, whether money is gold or paper. On the one hand, looking back to Marx's discussion of paper in circulation, we can see that the reason money's value seemed to

depend on its quantity was that circulation was considered by itself (as in the quantity theory). On the other hand, since the same adjustment mechanism applies to paper as to gold, that adjustment mechanism maintains money's value expression whether it expresses a real or an imaginary value. One overall outcome of this entire argument, therefore, is that money does not have to have intrinsic value.

One sees Marx's difficulties: money is a three-fold thing. To show that money is hoarded because of the formal quality it acquires from its two other aspects, he has to explain what these two other aspects are. To show the latter, however, he has to presuppose hoarding. Could he have explained all this more clearly? Possibly, but he was trying to get us to think it through ourselves. How else do we come to know things?

¹ Foley 2005, p.46.

² Up until now, this has been my own strategy; see e.g., Campbell 2002. Some other examples include Reuten, who states that "It is obvious that a Marxian theory of credit money can be constructed" and provides a list of authors to whom this applies (2005, p.114). Others not in Reuten's list include Arthur 2004:114, Ganssmann 2012: especially pp.57-8 and 1998. This is a sampling; a complete list would be too long.

³ Marx says: "Throughout this work I assume that gold is the money commodity" (1867:188). By "this work," I take him to mean Volume I. Since I will not refer to the other volumes of *Capital* in this paper, I refer to Volume I just as *Capital*.

⁴ De Brunhoff 1976, pp. 38-9. She anticipates the same point earlier: "One is immediately struck by the discussion of the third point [the title of the third section of Ch. 3] under the heading "Money" in a chapter entirely devoted to money and its various functions." (ibid, p.25).

⁵ Reuten has reached the same conclusion independently: "The heading of section 3 is 'Money.' It means that only in that section money becomes constituted." (2005, pp.86).

⁶ De Brunhoff, 1976, p.25, p.19; emphasis is hers. Perhaps most tellingly, she states that it is "money studied in abstraction from capitalism" (ibid, p. xiii). At other times, however, she describes *Capital*, Part I in the way I would: for Marx, it is "necessary to begin with 'simple,' i.e., abstract circulation in order to understand money in the capitalist form of production." (ibid, p.22). De Brunhoff appears to have arrived at her 'general' conception of *Capital*, Part I, for the following reasons: She sees that, for Marx, money in capitalism is credit money. She also sees that the theory in *Capital*, Part I is necessary for understanding credit money (in her view, so that features of capital are not confused with features of money). She must find a way to explain why the latter is true. Finally, she rejects the logical-historical interpretation of *Capital* to maintain that the argument of Part I is logical (Marx did not throw in gold money just because it is historically earlier). The idea that Part I is general serves all these purposes.

⁷ I have explained this more fully in Campbell 2013.

⁸ Marx 1867, p.131.

⁹ Marx 1867, p.188.

¹⁰ Marx says that the useful forms of labour...are "carried on independently and privately by individual producers," alternatively, "only the products of mutually independent acts of labour, performed in isolation, can confront each other as commodities." (1867, p.133 and p.132). He takes pains to distinguish private and independent production from the division of labour, which is nearly universal.

¹¹ See Campbell 2013.

¹² Because the social connection among labour activities is shifted outward to the monetary exchange of products, Murray (2005) speaks of money as a displaced social form. See also Ganssmann 2012, pp.57-8.

¹³ In his first description of exchange value in *Capital*, Marx proceeds from its initial appearance as "something accidental and purely relative," to the expanded form, that a commodity "has many exchange values instead of one," and, last, to the conclusion that these many are "of identical magnitude" and so "express something equal." These are, in miniature, the elements of the value form elaborated in Chapter 1, Section 3. See Marx 1867, pp.126-7.

¹⁴ Mattick (1991:32) argues that "Marx did not intend to prove that labour was the substance of value" but is instead concerned with "the organization and development of a particular social form." This is very helpful as it saves us from the search for something that isn't there or the embarrassment of finding it nonetheless.

¹⁵ In the *Grundrisse*, Marx returns repeatedly to the point that the complete integration of production with exchange is uniquely modern. To pick one example, he says that "this reciprocal dependence is expressed in the constant necessity for exchange, and in exchange value as the all-sided mediation." (1939, p.156, see also: p.204, p.214, p.227, pp.256-7).

¹⁶ This is the flaw in thinking of Part I of *Capital* as general. It eliminates the uniqueness of the necessity for exchange or, in other words, the integration of production with exchange.

¹⁷ This doubling, together with Marx's references to exchange, the visible part, as appearance, is the reason that the counterpart is sometimes called, essence (see Murray 2016, p.11 and Chapter 8).

¹⁸ For commodity owners, Marx says, commodities are "bearers of exchange-value" or quoting Aristotle (who says the opposite), they were "made for the sake of being exchanged" (Marx, 1867, p.179).

¹⁹ Marx warns that the transformation of ideal into real values is always precarious, but, since he is concerned with the development of the value form, also sets aside the difference between the two. As he says: "we have to look at the phenomenon in its pure shape [from which the value forms emerge, mc], and assume it has proceeded normally." (1867, p.203)

²⁰ Marx 1867, p.127. This is the first instance in *Capital* of Marx's use of the term 'appearance form.'

²¹ See Marx 1867, p.188. The labour time referred to here is the time of abstract labour, accessible only through its expression in money price, after exchange and so after production is over. As Reuten (2005:85,90) points out this is not accessible through some quantitative manipulation of concrete, empirically given, labour time.

²² De Brunhoff, 1976, p[.29, see also p.26.

²³ Ibid., p.24 and p.23.

²⁴ Marx 1867, p.185, the second quotation is from Marx's citation of Locke. De Brunhoff suggests this point: if we overlook the equivalent form, gold becomes a "simple symbol of the value of commodities" and the monetary privilege assigned to it appears "arbitrary and unfounded" (1976:23).

²⁵ Marx 1867, p.189.

²⁶ Marx 1867, p.188.

²⁷ See Marx 1867, p.148.

²⁸ Marx 1867, p.197.

²⁹ Marx 1867, p. 189.

³⁰ De Brunhoff, *ibid.*, p.24.

³¹ De Brunhoff does recognize this but she states it very abbreviated way (see 1976:23). The previous section is meant to provide a fuller explanation.

³² De Brunhoff, 1976, p.41.

³³ Marx, 1867, p. 198.

³⁴ De Brunhoff, 1976, p.30 and p.31. Ganssmann makes the same point in another way: "a money of account is useless without a complementary socially accepted mechanism for evaluating goods in some way...Market exchange is such a mechanism." (2012, p.81).

³⁵ Marx 1867:198. The "process of exchange" refers to *Capital*, Chapter 2. There Marx says: "The money commodity ...acquires a formal use value arising out of its specific social function"—meaning the practice of exchange (1867, p.184).

³⁶ *Ibid.*, p.26.

³⁷ *Ibid.*, p. 31.

³⁸ Another, fairly obvious example of this kind of development is the form of value argument (Section 3, *Capital*, Chapter 1); less obviously, all three volumes of *Capital* develop in this way. An important point in the case here is that the first version is not the end of the story. Marx does not end by arguing that money *must be* gold, just as he does not argue the simple form of value is all there is to money.

³⁹ "The difference between the total stock of gold and the amount which circulates is absorbed by hoarding" (De Brunhoff 1976, p.31). With two exceptions, in the section on money as means of circulation Marx poses the issue in terms of velocity and does not mention hoarding. This is the quantity theory's version. As will be argued below, Marx tries, in so far as possible, to consider circulation in isolation from money's two other functions (as the quantity theory does); his point is to show that money's functions can't be separated and, thereby, that money is the combination of all three. The two exceptions are (1) the gap through which money enters circulation from gold mines (1867, p.214) and (2) changes of the velocity of different coins, whereby if one increases "the other slows down or completely leaves the sphere of circulation." (1867, p.216). The latter is the closest Marx comes to referring to hoards in the section on means of circulation; once the gold model is transcended, the former is revised into money's entrance into circulation from hoards.

⁴⁰ To illustrate this interpretation of Marx, de Brunhoff (1976, p.34) refers to Bartoli.

⁴¹ de Brunhoff, *ibid.*,p.35.

⁴² *Ibid.*

⁴³ Marx, *ibid.*, p.225. The standard of prices is the quantity of gold that a money unit represents.

⁴⁴ De Brunhoff, 1976, p.97. Her earlier statement is more explicit, but seems to be either mistranslated or wrong: "the fundamental problem posed by the circulation of fiat money...is that of the *demonetization of all money in circulation by the very fact of its employment as an instrument of circulation.*"

(demonetisation should perhaps be dematerialization) (p. 37).

⁴⁵ Ibid, p.96, p.97. As de Brunhoff puts it: "The circuit of credit, in enclosing itself completely within itself, reveals itself on a market of obligations which evades the conditions of the circulation of capital." (ibid:96).

⁴⁶ Marx 1867, p.227. The term for 'form of value' is *Wertgestalt*, value shape, differentiating it from the universal equivalent form. Marx calls these "money as money" in the *Grundrisse*, where it is essentially the same as capital. In the *Contribution*, he adopts the term 'money' and prods himself to stick to simple circulation (see Marx 1859, p.123). As we will see, it is sometimes helpful to insert the 'as money' part of it to keep track of which aspect of money is at stake.

⁴⁷ All quotations in this paragraph are from Marx 1867, pp.230-1.

⁴⁸ This last is the circulation form M-C-M (Marx has already alluded to it [1867, pp.227-8]), which is so much more prominent in the *Contribution* and the *Grundrisse*. Here it is set aside to focus instead on hoarding's role in detaching money from intrinsic value.

⁴⁹ Marx 1867, p.230. I have inserted numbers in square brackets to make reference to the two parts easier.

⁵⁰ Marx 1867, p.189. That money is a value expression with no underlying value supports Foley's thesis that money is a kind of fictitious capital (Foley 2005, p.45). Lest it be feared that labour has disappeared, it is there in the private and independent character of labour that is the starting point of Marx's whole argument.

⁵¹ De Brunhoff 1976, p.40. Keynes's liquidity preference is a symptom of Marx's universal equivalent form. As de Brunhoff observes, it "leaves a psychological residue," perhaps because there is no explanation of the form itself to base it on.

⁵² Marx says: "with...developed commodity production, every producer is *compelled* to secure for himself the nexus rerum" (1867, p.228) (emphasis added).

⁵³ De Brunhoff calls the interdependence between hoarding circulating medium the "regulatory function" of hoarding and says that it "can be fulfilled not only by gold but by every kind of currency" (1976, p.40). She recognizes that besides regulating the quantity of money in circulation, which is obvious in Marx's account, hoarding sustains "the *value* of the general equivalent" (ibid, p.43, emphasis added). This means that hoarding, by its 'regulatory functions' establishes the "representative" as money in all three of its functions. As de Brunhoff states: "Hoarding...serves to ceaselessly preserve and reconstitute the money form as such, whatever the deformations, transformations, and disappearances [meaning as measure money is ideal and as means of circulation it dematerializes] it undergoes as a result of the other two functions. Produced by these [functions], it [hoarding] becomes in its turn a condition of their functioning." (ibid, p.39).

It is not clear, though, whether she recognizes that the mutually supporting character of money's functions implies that money does not have to have intrinsic value. For example, in speaking of money in simple circulation, she says that "money is produced like other commodities;" when she comes to credit money, she says that "the first function of money, that of measure of values cannot be fulfilled directly by credit money" (ibid, p.54). Measure is the function in which intrinsic value counts, at least in Marx's first

presentation of it. In any case, I do not know of anyone who has interpreted de Brunhoff to mean that money need not have intrinsic value.

⁵⁴ Marx 1867, p.232.

⁵⁵ This is the reason why Marx's discussion of paper as circulating medium is so puzzling. We are supposed to reconsider it in light of hoarding and look for the reason why paper would not be hoarded. Having failed to notice this, de Brunhoff tries her utmost to interpret Marx generously, she asserts that Marx does not subscribe to the quantity theory but must confess that his discussion of paper money is unclear (see 1976, p.34 and p.37). The same problem has bedeviled Lapavistas (see for example 2017, pp.32-35) and, to some extent, a former self (Campbell 2005).

⁵⁶ Ibid., p.225.

⁵⁷ Ibid., p.226. Standing in for custom, this supplies the fourth aspect of the universal equivalent form. Since the only kind of paper money Marx discusses in *Capital*, Chapter 3 is state-issued paper, this kind of money loses its status as money outside the state's reach. This may account for his explanation of world money as bullion in *Capital*, Chapter 3. If so, this would supply a simple solution to a problem that has plagued Marx scholarship.

⁵⁸ Ibid.:225. The notorious devaluations in the US occur with Continentals, before the federal government is established, and with Confederate money, when the South begins to lose the Civil War.

⁵⁹ As Murray (2009:173) observes, "Like the body of *Capital*, Volume I, these three works [Hegel's *Encyclopedia* and *Philosophy of Right*, and Spinoza's *Ethics*, mc] are dense, closely reasoned, 'scientific' texts that challenge readers, first to follow the argument and then to situate it and appreciate its significance." In other words, Marx does not tell us what to think but requires us to think along with him.

⁶⁰ Marx 1867, p.197.

⁶¹ Marx 1859, p.116. This is pointed out by Ganssmann (2012, p.126). A less explicit statement of the same point appears in Marx 1867, p.224.

⁶² Marx tells the story, from 19th century China, of a proposal to replace state-issued paper with bank notes. The government committee on money rejects this proposal because "it is entirely in the interests of the merchants [capital, in its earliest form, mc], and in no respect advantageous to the Crown." Marx 1867, p.224n.

⁶³ Marx 1867, p.224.

⁶⁴ De Brunhoff, 1976, p.42.

Works Cited

- Arthur, C. J. "Value and Money." In *Marx's Theory of Money: Modern Appraisals*. Edited by F. Moseley, pp.36-49, Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2005.
- Brunhoff, S. de. *Marx on Money*. Translated by M. J. Goldbloom, New York: Urizen Books, 1976.
- Campbell, M. "The Transformation of Money into Capital." In *In Marx's Laboratory: Critical Interpretations of the Grundrisse*. Edited by R. Bellofiore, G. Starosta and P. D. Thomas, pp.149-175. Leiden and Boston, 2013.

-
- ____. "Marx's Explanation of Money's Functions: Overturning the Quantity Theory." In *Marx's Theory of Money: Modern Appraisals*. Edited by F. Moseley, pp.36-49, Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2005.
- ____. "The Credit System." In *The Culmination of Capital: Essays on Volume III of Marx's Capital*. Edited by M. Campbell and G. Reuten. Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2002.
- Foley, D. "Marx's Theory of Money in Historical Perspective." In *Marx's Theory of Money: Modern Appraisals*. Edited by F. Moseley, pp.36-49, Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2005.
- Ganssmann, H. *Doing Money: Elementary monetary theory from a sociological standpoint*. Milton Park, Abington, Oxon and New York, Routledge, 2012.
- ____. "The Emergence of Credit Money." In *Marxian Economics, vol. I: Essays on Volume III of Capital – Method, Value and Money*. Edited by R. Bellofiore, pp.145-156. Basingstoke, Macmillan, 1998.
- Lapavitsas, C. "The Theory of Credit Money: A Structural Analysis." In *Marxist Monetary Theory: Collected Papers of Costas Lapavitsas*. Leiden and Boston, Brill, 2017.
- Marx, K. *Capital*, Volume 1. Translated by Ben Fowkes. New York, Vintage Books, 1977/1867.
- ____. *A Contribution to the Critique of Political Economy*. Translated by S. W. Ryazanskaya. New York, International Publishers, 1970/1859.
- ____. *Grundrisse*. Translated by M. Nicolaus. London, Penguin Books, 1993/1939.
- Mattick, P. Jr. "Some Aspects of the Value-Price Problem." *International Journal of Political Economy*, 21, 4: pp.9-66, 1991-2.
- Murray, P. *The Mismeasure of Wealth: Essays on Marx and Social Form*. Leiden and Boston, Brill, 2016.
- ____. "The Place of 'The Results of the Immediate Production Process' in *Capital*." In *Re-reading Marx: New Perspectives after the Critical Edition*. Edited by R. Bellofiore and R. Fineschi. Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2009.
- ____. "Money as Displaced Social Form: Why Value Cannot be Independent of Price." In *Marx's Theory of Money: Modern Appraisals*. Edited by F. Moseley, pp.36-49, Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2005.
- Reuten, G. "Money as Constituent of Value." In *Marx's Theory of Money: Modern Appraisals*. Edited by F. Moseley, pp.78-92, Houndsmills, Basingstoke, Hampshire and New York, Palgrave Macmillan, 2005.