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## Historicising the money of account – A rejoinder

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### Abstract

“In Defence of the Nominalist Ontology of Money” by Geoffrey Ingham (published by the Journal of Post Keynesian Economics in 2021) contends that “Historicising the Money of Account: A Critique of the Nominalist Ontology of Money” (published by the same journal in 2020) is based on misunderstanding, misrepresentation, and imprecisions. The core proposition in “Historicising the Money of Account” is that the money of account, which is generally understood to be a universal attribute of money, is in fact an institution of late medieval and early modern times that has no significant equivalent in today’s world (or in the ancient world, for that matter). This reply is intended to provide further clarification on the historical and ontological specificity of the late medieval institution of the money of account.

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In *Historicizing the Money of Account: A Critique of the Nominalist Ontology* (Sgambati 2020), I argue that the money of account is not a universal attribute of money but a historically specific institution of late medieval Europe. In this connection, I criticise Geoffrey Ingham’s account of the development of money from the ancient world down to modern times (see Sgambati 2020: 12-14). For Ingham, the development of monetary practices and institutions is always kicked off with the establishment of a money of account (by an authority), which over time may lead to the consolidation of monetary means of payment and exchange. Ingham identifies two main developmental sequences over the past five thousand years: one that goes from the establishment of monies of account in the ancient Near East to the development of coinage-based monetary systems in classical antiquity; the other that goes from the re-establishment of a money of account by Charlemagne at the end of the eighth century in Western Europe to the development of credit-money systems in modern and contemporary times. Ingham thus sees the establishment of the Carolingian lira-soldi-denarii (or pound-shillings-pence) metric in the early Middle Ages as the beginning of a new era of monetary developments that will culminate with the establishment of capitalist credit-money several centuries later.

My critique of Ingham’s general history of money verges on three interrelated claims I make in relation to late medieval monetary developments. I have already stated the first claim: the money of account is not a universal attribute of money but an institution of late medieval and early modern times that has no significant equivalent in today’s world – or in the ancient world, for that matter (more on this later). The second claim is more specific and, to my knowledge, was first raised by Marc Bloch – one of the leading medievalists and economic historians of the twentieth century. According to Bloch (1981 [1954]), it would be a mistake to refer to the Carolingian lira-soldi-denarii metric as a genuine ‘money of account’, or ‘imaginary money’. As he explained, between the ninth and twelfth centuries, the only coin minted in Western Christendom was the silver denier, struck in different indigenous types (including the English

pound). Over this four-century period, the Carolingian metric functioned as a duodecimal language based on Roman numerals for expressing multiples of actual silver denier coins. This was to standardise and facilitate the reckoning of wealth and money across the Frankish kingdom. Thanks to the Carolingian metric, a patrimony of 1,224 deniers – or else MCCXXIV deniers in Roman numerals – could be expressed in simpler terms as the sum of V *lirae* and II *soldi*. The Carolingian metric was therefore *linked* to a specific denier-denominated coin type and described the value of actual, circulating monies. For Bloch, the delinking (or ‘*decrochement de la monnaie de compte*’) only started in the thirteenth century. In France, for instance, the *decrochement* occurred as a result of the extreme debasement of denier coins during the reign of Philippe Le Bel (Bloch 1953: 150-1).

The third point of my critique builds on Luigi Einaudi’s theory of imaginary money (Einaudi 1936) and connects once again to the work of Bloch and other economic historians. In line with Bloch, Einaudi argued that the Carolingian metric was not a genuine money of account insofar as it did not entail monetary governance in a strict sense. The *lira-soldi-denarii* equivalence was used to *describe* the value of a silver denier, but it could not be used to *alter* how much a denier was worth by royal decree or ordonnance. To declare that a denier was worth 1/12 of a *soldo* would not confer value to the denier but simply state a truism; to declare instead that a denier was worth 1/300 of a *lira* would be nonsensical – an arithmetical mistake. Indeed, we find no record of nominal mutations of silver denier coins – no crying up or down of deniers in relation to the Carolingian metric – in the early and high Middle Ages. The consensus among historians is that deniers were only subject to one form of monetary alteration performed via the mint: ‘intrinsic’ or ‘real’ mutation. In short, the economic value of silver deniers could be altered by reinforcing or debasing their weight and fineness (and debasements prevailed). In this respect, it is also worth noting that denier coins circulated either by weight or count, depending on the context, and circulation by weight was likely to occur in those regions where monetary prerogatives were highly fragmented and usurped by local lords, as in France (Bloch 1981)<sup>1</sup>.

Monetary practices dramatically changed with the commercial revival and the minting of new-denomination gold and silver coins in the late Middle Ages. Starting from the thirteenth century, both European monetary authorities and private bankers came to rely on a variety of monies of account, many of which were now based on the Arabic decimal system. These monies were ‘imaginary’ insofar as they were *delinked* from actual coins. More to the point, unlike the Carolingian metric of the early Middle Ages, these imaginary monies were used as technical expedients to govern and change the value of the precious-metal currencies. As Einaudi (1936: 28-34) pointed out, the primary goal of monetary authorities was indeed to neutralise their price variability due to Gresham’s Law dynamics in a context of anarchic

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<sup>1</sup> Desan’s history of money in early modern England is in line with what is being argued here. Prior to the “Halfpenny proclamation” of 1299 (Desan 2014: 109-150), which is a first historical record of monetary governance by means of tariff, monetary mutations in England were exclusively carried out via the mint. As Desan explains, English monetary authorities engaged in *renovatio monetarum* – reinforcing or weakening the penny’s material compound – in an effort to produce the ‘just penny’. None of these operations involved a nominal change in the tariff, or *valor impositus*, of the penny. Desan acknowledges that nominal mutations only became an imperative in the late Middle Ages, as new coin courses began to circulate in England and Europe in promiscuous ways, thus creating monetary instability. As she writes: “[c]rying up’ or ‘crying down’ the count of a denomination raised or lowered its face value without reminting. That strategy allowed authorities to resolve discrepancies between classes of coin, silver denominations against gold ones, for example, or small change against larger denominations” (Desan 2014: 122).

bimetallism, by resorting to a *combination* of real mutations (via the mint) and nominal mutations (via the tariff). To Einaudi's point, I have added, following Boyer-Xambeu, Deleplace, and Gillard (1994), that imaginary monies were also used by merchant-bankers to exploit and profit from the so-called 'problem of exchange' in a context of intense and growing international competition among money issuers (Sgambati 2020: 17-20). In effect, whereas they might have aimed to promote greater monetary and fiscal sovereignty (with mixed results), late medieval and early modern attempts to govern the production and value of precious-metal coins by means of monetary mutations had the unintended consequence of generating new opportunities for speculation in international financial markets. Starting from the mid-sixteenth century, this proved to be a factor in the progressive destitution of mint and tariff (the two hands of late medieval monetary governance) as effective instruments for governing monetary relations across Europe.

*In Defence of the Nominalist Ontology of Money* (Ingham 2021) contests my attempt to historicise the money of account and defends the notion that the institution of the money of account can be traced back to ancient times and it still survives in the monetary practices and institutions of our time. I disagree. With this rejoinder, I take the opportunity to further refine my argument as to why the money of account is *not* a universal attribute of money – why, in practice, no line of continuity can be drawn between the nature of the twenty-first century dollar and the nature of, say, the sixteenth-century *scudo di marco*. For the sake of my argument, I will first explain why the dollar is also ontologically different from any late medieval or early modern coin.

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The word 'dollar' comes from German *taler* (later *thaler*), abbreviation of *Joachimstaler*, a type of silver coin first minted in Bohemia in the early sixteenth century. Thalers were subject to both nominal and real mutations. This was true for many other precious-metal coins minted in the late Middle Ages (and until the nineteenth century in some cases). A thaler could be worth X soldi one day, and Y soldi the next, due to a mutation or sudden change in international markets for precious metals. As a result, the thaler was not an ideal store of value. More importantly, the thaler was unable to indicate its own value. While the early medieval silver denier was always worth 'one denier' (or 'one twelfth of a soldo'), a thaler coin was never worth 'one thaler'. Instead, the value of the thaler always had to be expressed in relation to an imaginary money of account. This does not apply to the twenty-first century dollar. The latter is an *index sui*: it always has the same value, which is expressed in the dollar unit of account. Regardless of whether it is a one-dollar banknote issued by the Federal Reserve or a one-dollar net-asset-value (NAV) share issued by a money market fund, a contemporary one-dollar debt instrument always promises to deliver value that is never worth less, or more, than one dollar. A one-dollar federal note that is no longer accepted at face value or a NAV share issued by a money market fund that 'breaks the bucket' simply ceases to be money and becomes indistinguishable from any other debt instrument that trades at a discount. In short, to function as a dollar and be equivalent to 'cash', a debt instrument that promises to pay one dollar cannot,

by definition, trade at a discount (e.g., it cannot be worth three quarters of a dollar)<sup>2</sup>. Hence, there can be no separation between the dollar as a unit of value (the dollar standard) and the dollar as a promise of value (the dollar claim). Unsurprisingly, today we do not hear of a ‘just dollar’, or a ‘bad dollar chasing out a good dollar’. A promise to pay one dollar that is no longer ‘good’ simply ceases to be current in exchange. As its liquidity evaporates, so does its currency. The sudden demonetisation of asset-backed commercial paper, or ABCP, in 2007 is a case in point (see Sgambati 2019: 298). In the years prior to the 2007-08 crisis, ABCP had become as good as cash from the perspective of institutional investors and money-managers. ABCP was issued by bank-sponsored conduits and was backed by a variety of collateral securities, including especially collateralised debt obligations, or CDOs. As the market for CDOs collapsed in mid-2007, ABCP started to trade at a heavy discount and was quickly demonetised, thus triggering the money market run of 2007-08. Things worked differently for a thaler coin. For if a thaler were to be suddenly undervalued in the official tariff, it would still function as money. Neither debasement, nor crying down were tantamount to demonetisation. A thaler that was originally worth 1/12 of a soldo and was subsequently declared to be worth 1/15 of a soldo after a change in the tariff, would still function as money; a one-dollar instrument that yesterday traded at par but is today only worth 3/4 of a dollar would immediately cease to function as money and possibly stir a panic.

In this connection, the most prominent difference between the dollar and the thaler is to be found in the logic underpinning their governance. While the governance of the twenty-first century dollar is premised on safeguarding the circulation of dollar liabilities at their market value (by making sure that collateral securities are marked to market, that repo markets are liquid, that cash equivalents issued in the money market trade at par or quasi par), the governance of the sixteenth-century thaler revolved around ensuring that thalers did *not* trade at their ‘market value’ (also referred to as ‘commodity value’, ‘bullion rate’, ‘commercial course’) but instead circulated according to their ‘fiduciary value’ (or ‘legal course’). In this respect, the ‘commodity vs credit’ dichotomy that is often applied to distinguish between respectively pre-modern and modern currencies is misleading: far from being ‘commodity’ monies, precious-metal coins of medieval times were current in exchange insofar as they enjoyed a fiduciary value in excess of their market value (and this was also true for the coins of classical antiquity). By contrast, contemporary ‘credit’ monies are fully commodified debt instruments whose currency is inherently reliant on the existence of liquid markets for debts (both public and private). While the fiduciary value of the thaler had to be always higher than its market value (otherwise thalers would be melted down or anyway disappear from circulation), the fiduciary value of the contemporary dollar must be always indistinguishable from its market value (otherwise there would be a panic). In other words, the currency of the contemporary dollar is a consequence of its liquidity. This is not to say that the dollar is a ‘creature of the market’. Rather, it is to stress that while both U.S. Treasury and the Federal Reserve are crucial institutions in ‘the making of’ the dollar, they only matter insofar as they can underpin and sustain a steady supply of, and liquid markets for, dollar-denominated debt

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<sup>2</sup> This is practically true since the establishment of the Federal Reserve in 1913. Before that, short-term dollar-denominated debt instruments were issued by a variety of banking agents and were not standardised. Some were interest-bearing notes, others were irredeemable notes or bills that were not redeemable on demand. While some of these notes were accepted at par, others enjoyed lower degrees of liquidity and it would not be uncommon for them to circulate at a discount.

securities. In short, the efficacy of their (fiscal and monetary) governance depends on their capacity to successfully enable, rather than escape, market valuation.

This leads me to the next point: the contemporary dollar could not be more different from any of the monies of account that proliferated in the late Middle Ages. For while the contemporary dollar is an *object* of monetary governance, the late medieval monies of accounts were *instruments* of monetary governance. Take for instance the already-mentioned scudo di marco (or *ecu de marc*). This was an imaginary money created by sixteenth-century merchant-bankers operating at the fair of Lyon. Its purpose was to govern both international payments and currency speculation – in particular, to arbitrage at a profit on price differentials between circulating precious-metal coins. Today no imaginary money is required to enable payments and speculation (e.g., carry trade), or to govern the practices by which more money is made from money. It is true that until 1971 currencies were formally anchored to a *tertium*, but this was no imaginary scudo. Under the Bretton Woods agreements, international holders of dollars could demand gold as a means of final settlement. But in the sixteenth century, merchant-bankers could not demand any specific thing for the same purpose. The imaginary scudo was not a security for exchange or a store of value. In fact, no scudo was ever hoarded, accumulated, loaned out (at interest), offered as a means of final settlement, pledged as a security, or sold in the money market: the scudo was unpossessable, unalienable, unchanging. As such, the scudo priced but could not be priced. Unlike the dollar, the scudo did not convey any economic value in and of itself: it was always worth *nothing*.

Unsurprisingly, Marc Bloch, Luigi Einaudi, Peter Spufford and other eminent historians never referred to late medieval monies of account simply as ‘monies’, but always made sure to add the adjective ‘imaginary’. For unlike actual monies, these monies could never exist in any of the following states: saved, spent, loaned, invested. By our standards, they were not really ‘money’. By contrast, the dollar can only exist in one of these states. A dollar is always owned by one economic agent and owed by another. It is possessable, spendable, loanable, investable. For this reason, the dollar can never be a *tertium*, or a pure *means*, like a scudo di marco, but it is always the very *end* of measurement, payment, exchange, finance and accumulation. Even when the dollar is used as a means of speculation, the object of such speculation is always the dollar – so long as dollars are invested with a view to making *more* dollars. In this respect, one could argue that the *raison d’être* – indeed the *value* – of both the dollar and the monetary and financial institutions governing its existence transcends the *functional* need to pay for things, meet one’s bills and/or settle one’s debt, and has instead a *speculative* foundation to it: it is to enable and sustain a self-referential game of money-making, whereby more dollars can be made out of dollars. Elsewhere (Sgambati 2019), I have suggested that ‘creating money’ and ‘making money’ (qua profits) come together, as part of the same process, and that the contemporary dollar is by far the best vessel of money-making worldwide because of the unique access that it offers to a universe of profit-yielding investment opportunities and safe assets in dollar-denominated financial markets. No other currency can match the demand for yield and safety that the dollar currently satisfies, and it comes as no surprise that the international community of money *wants* dollars more than any other currency<sup>3</sup>.

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<sup>3</sup> In Sgambati (2020: 10-12), I discuss this point with reference to Keynes’ liquidity preference hypothesis and the store of value function of modern money.

In the late Middle Ages, nobody wanted imaginary scudi or lire. These imaginary monies enabled speculation; however, they were not objects of speculation, as they could not offer any security or yield. Their intrinsic undesirability is precisely what sets them apart not only from modern and contemporary monies, but also from ancient units of account and weight. This is another point I touched upon, in passing, in the conclusion of *Historicising the Money of Account*, and which has been contested by Ingham (2021: 7-10). It is worth stressing this point again for purposes of my argument. When referring to ancient units of account or weight, scholars often use the term ‘money of account’. However, we know that the main economic unit of account in the Ur-III economy of the third millennium BC was not even a ‘unit’, let alone a ‘money’ of account. Instead, it was a price ratio between two quantities of physical commodities: 1 *gur* of barley was equal in value to 1 *shekel* of silver. According to Ingham, this price ratio was abstract: “[t]he ‘materiality’ of silver and grain was transformed into a symbolic standard by abstraction” (Ingham 2021, 13). More specifically, Ingham contends that the “conceptually *abstract ratio* between the commodities – not the commodities themselves” is consistent with the notion of *tertium* I used to refer to the late medieval money of account (Ingham 2021: 13). Alas, I cannot find the symbolic element in the *gur-shekel* price ratio, nor do I understand how this ratio could constitute a *tertium*. Is Ingham suggesting that the Mesopotamian authorities created an actual *symbol*, or a specific *word*, for this price ratio? The extant record shows otherwise, but I invite Ingham to present evidence for the existence of a symbol or word for the *gur-shekel* equivalence. Either way, even if a specific sign for the *gur-shekel* equivalence were to be found, this would be neither an imaginary language for governing and/or exploiting the fiduciary value of circulating coins (like the late medieval monies of account), nor the abstract sign of nothing but itself (an *index sui*, like the contemporary dollar). Instead, it would be the symbolic representation of a price ratio between two physical commodities. For this reason, I will continue to maintain that the ancient Mesopotamians had no abstract concept of money – and no money of account, insofar as the latter was a late medieval instrument *to account for, govern, and speculate on the value of (fiduciary) monies, not (physical) commodities*.

In this respect, one should ask the following: what is the methodological advantage of drawing an analogy, indeed a line of continuity, between an ancient world that knew no abstract concept of money and had to periodically enact mass debt cancellations to prevent societal collapse, and a contemporary world where money serves as a central signifier in social life and where debts ought to be routinely discounted, traded, monetised, and therefore grow to unimaginable heights to prevent societal collapse? More generally, how can we speak of ‘money’ and ‘monetary institutions’ in contexts where human subjectivities are *not* known to be shaped by anything that signifies ‘money’ – where no set of human relations and practices is constituted around the alienation of, and desire for, a thing that alone embodies abstract economic value? Can we say that the ancient Mesopotamians had money simply because their palatial authorities set up a price floor for key commodities? Wouldn’t this be equivalent to accepting the orthodox notion that money is bound to emerge whenever we can ascertain prices? Can we not imagine a society in which money cannot be owned and accumulated, or else a society that knows trade, credit and taxes, but which has no need or desire for money? In *The Imaginary Institution of Society*, Cornelius Castoriadis critiques the functionalist approach to the study of socio-historical institutions, arguing that functionalism “takes human needs as fixed and explains social organisation as the ensemble of functions intended to satisfy these needs”, while “the

very question that matters, that concerning differences between societies, is eliminated or covered over by platitudes” (Castoriadis 1987, 170). I could not agree more.

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