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The significance of money. Beyond Ingham's sociology of money

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Stefano Sgambati

Understanding money requires that we first grasp what makes money so significant - so *valuable* - to us. The article thus examines the sociology outlined by Geoffrey Ingham and criticises its ontology of money as a *measure of value* underpinned by state authority. By contrast, it argues that money ought to be primarily intended as *value in itself*. Accordingly, money's most specific attribute is none of its canonical functions but rather purchasing power: the power *not* to pay, or else the power to *buy time*. The latter is not the mere product of state (fiscal) agency, but is entangled from the start with the production of liquidity and the construction of speculative markets for debt. Thus the paper emphasises the importance of concrete bank *discounting* vis-à-vis abstract accounting in concrete processes of monetisation, and shows how modern money, far from cancelling debts, is historically constructed within liquid financial relations so as to 'buy time' and systematically procrastinate the final 'rendering of accounts' for debtors. As a result, money cannot exist without the simultaneous existence of a debt that it will never discharge.

Introduction: the problematic nature of money

Of the many reflections on the money phenomenon produced in the last two decades, Geoffrey Ingham's work (1996; 2000; 2004; 2006; 2007; 2008; 2013) undoubtedly stands as one of the most valuable contributions. In particular, in *The nature of money* (2004), Ingham has produced a remarkable attempt to reconcile within a comprehensive sociology the many, and often contradictory, strands in the "underworld" of post-Keynesian monetary analysis (Ingham 2004, p. 11). Ingham's

great merit is to have shown how orthodox monetary analysis is grounded in an a-historical and a-social understanding that is only concerned with establishing "the *logical* preconditions for money's existence" (Ingham 1996, p. 515), but which "does not possess an adequate *ontological* theory of money" (Ingham 1996, p. 509) capable of grasping the social-historical specificity of money, namely "how it functions and how it is maintained as a *social institution*" (Ingham 2004, p. 10). At the core of the mainstream doctrine is a functionalistic understanding of money - i.e. money is what money does - that is nearly exclusively focused on the medium of exchange function, and which assumes all other monetary functions as either given by, or derived from, the former (Ingham 2000, p. 17). In particular, the basic ontological error of orthodox economics is "to identify *forms* of money and their *circulation* with the quality of 'moneyness'" (Ingham 2004, p. 9): "in this conception 'moneyness' is somewhat tautologically 'exchangeability' - that is, the most 'liquid' commodity" (Ingham 2004, p. 6). By contrast, Ingham maintains that "money consists in 'claims' and 'credits'" (Ingham 2004, p. 6) that can only exist in relation to an abstract measure, or "money of account" as Keynes originally termed it (Keynes 1930).

Ingham's critique of mainstream economics, however, is not primarily focused on its ontological limits per se but on its *methodological* fallacies. In fact, according to Ingham orthodox "real analysis" only comprises an analysis of "*object-object relations* (exchange ratios between commodities, or the 'production function'), and *individual agent-object relations* (individual acts of utility calculation, or the 'utility function')", but it does not encompass an analysis of "*agent-agent, or social, relations*" (Ingham 2004, pp. 16-17). Such a (lack of) methodological focus makes ontological specification superfluous because it renders by default the nature of money *positive*, that is, given or determined by the impenetrable and a-historical rationality of the market. Altogether this positivist understanding implicitly supports the ideology that money, as a pure symbol-number, is *neutral* and thus does not affect the socio-economic process (Ingham 2004, pp. 16-17). The mainstream take on money can be accordingly epitomised as follows: *money is what money does, and what it does doesn't really matter*. Read: *laissez faire!*

Ingham's methodological project, on the contrary, moves from the basic assumption that money "can only be sensibly seen as being *constituted by social relations*" (Ingham 1996, p. 510), hence conceptualised as a social power that *does*

matter. Ingham's sociology thus revolves around four major interrelated themes, or "fundamentals of a theory of money" (Ingham 2004, pp. 69-85), that are constructed in radical opposition to the main tenets of mainstream economics: first, money is not *essentially* a medium of exchange but an abstract measure of value, or money of account; second, money does not consist *substantially* in a commodity, but in an abstract claim (a credit, a promise, an institutional power); third, money is not a by-product of a barter-like market exchange but, following the German Historical School, it is an institution underpinned by state authority; finally, money is not neutral in the economic process but is on the contrary an *autonomous* economic force.

Critically, I am going to argue in this article that Ingham fails to provide a theoretically consistent alternative to mainstream economics and, eventually, to grasp the actual significance - or "specificity" (Ingham 2007) - of money. On the contrary, his sociology reproduces an understanding that is in many respects as methodologically deficient and contorted as its orthodox counterparts, and equally blameable for a residual "economic determinism" (Konings 2010). Indeed, in spite of its professed *methodological relationalism*, Ingham similarly relies on a mixture of logical and "meta-theoretical" argumentations to justify the nature, origins and development of money *from without* (not from within) social relations. In particular, he systematically resorts to the *ad hoc* agency of the state (which is in fact steered by a subtle market logic) in order to justify the fact that money bears value.

My critique will first and foremost be a methodological and conceptual critique. My main point is simple: in order to understand money we must approach it neither as a measure (or medium) of value, nor as a claim to value, but as a *value in itself*. As such, money cannot be unilaterally established by an authority, but ought to be constantly negotiated within social relations. I will thus proceed as follows: in the first section I question the validity of Ingham's nominalist ontology and argue that money is 'by nature' neither a measure nor a claim but, if anything, a *unity in context* of the two. Such a conceptualisation, however, still tells us very little about how money comes about in the world and why. Thus, in the second section I argue that a proper ontological reflection on the money phenomenon should subordinate the question of the 'dual' *nature* of money, as a measure/unit and a claim, to the question of its *significance* as a 'whole', or 'unity'. To that purpose, money should be granted in

principle the phenomenological status of *value*: a gestalt, metaphor and form of social relations. Accordingly, the most specific attribute of money 'as we know it' is none of its canonical functions (with the partial exception of the store of value function): instead, it is *purchasing power*. Critically, the latter cannot be understood without reference to historical processes of monetisation and market-making in the modern political economy. In the third section I therefore proceed to highlight the flaws in Ingham's account of the historical origins and development of money. Other than discussing the emergence of monetary functions, this account does not encompass a theory for understanding actual processes of monetisation and the construction of speculative markets for debts. Instead, it constantly relies on the extra-economic agency of the state to justify institutional transformations and developments in monetary practice. Undoubtedly, Ingham does emphasise the centrality of the state in the creation of money also to invalidate the market-driven thesis of its origins. However, especially when it comes to explaining how money gets its value, Ingham ultimately frames the state authority (and, subsequently, the monetary authorities) as the most economic of all agents. In particular, as I show in the fourth section, by postulating the primacy of the fiscal agency of the state in the making of money, Ingham is caught in a fundamental paradox: the state can only give 'substance' (qua purchasing power) to money by promoting a market for it, de facto behaving as an economic agent that is committed to commercialising its own promise of payment in line with market imperatives. In the final section I further investigate the relationship between states and markets in the creation of money, and uncover in Ingham's discourse a subterranean theme of money as liquidity. This theme is somehow camouflaged as a question of credibility in 'stable money', and framed in a way that the value of money no longer seems to be the concrete product of a 'battle of man with man', but appears as the abstract outcome of a battle of ideas, as performed by 'epistemic communities'. Finally, in the conclusions I summarise my argument on the significance of money and offer some guidelines for future studies in money and finance.

The money of account: a measure with no value

Ingham's primary concern is to provide an adequate *ontology* of money (Ingham 1996), and thus answer to the most basic question - what is money? - without

incurring the classic functionalist error. Hence from his perspective money *cannot* simply be what money does, and this in turn seems to imply an impossibility to provide a straightforward and *unitary* definition of the phenomenon. Money is indeed conceptualised as a *dual* entity: an *infrastructural power* that provides the basis "for the progressive rationalization of social life" and "expands human society's capacity to get things done" as well as a *despotic power* that "can be appropriated by particular interests" (Ingham 2004, p. 4).

This phenomenal duplicity finds its semantic poles respectively in the concepts of *measure* and *claim*. The first is the proxy of a universal instrumentality (i.e. a structural property) whose *ratio* cannot be appropriated by the subject but only be governed by society as a social system. The second is the proxy of a particular finality (i.e. an agential feature) that can and must be pursued and appropriated by the subject. Significantly, money encompasses these two seemingly contradictory features: it is "uniquely specified as a *measure of abstract value* (money of account) [...] and a *means of storing and transporting* this abstract value (for means of final payment or settlement of debt)" (Ingham 2004, p. 70).

To be sure, most contemporary scholars explicitly refer to money as a dual and deceptive phenomenon that is capable of articulating *in a sense* the contradictions between subjective agencies and objective structures (see Hodgson 2001, p. 296). Dodd (2005a, p. 563; 2005b, pp. 406-7), for instance, sustains that all monies share two basic qualities: they are at once general and abstract units of account, or monetary *denominations*, and particular and concrete (though not necessarily tangible) *media* of exchange. In a similar vein, Zelizer (2000; 2011) argues that all monies serve both general and local circuits and entail at once uniformity and diversity. In general, it is safe to assume that after Aristotle virtually every scholar would agree that money is an actual paradox, or a peculiar *non-sense*, as the Greek philosopher put it¹. According to Konings (2011a), such a dualistic understanding of money is due to the fact that our theorisations merely register, though always in peculiar ways, "the fact that in our everyday practices we are capable of grasping money as both universal and particular *at the very same time*".

Critically, despite recognising a fundamental duplicity in the money phenomenon,

¹ Aristotle, *Politics*, 1257b: 8-17. See also Amato 2010b.

Ingham does not really try to make sense of the *unity* that the general measure and the particular claim contextually articulate *in the name of money*. Instead, he opts to uphold the former over the latter as the primary concept for a theory of money. Hence he assigns ontological specificity to the measure of value alone. As he puts it, "[m]oneyness is *assigned* by the money of account, not by the form of money", for "the money of account is logically anterior to any form of money that bears the abstract value" (Ingham 2004, p. 70). Accordingly, "the very *idea* of money, which is to say, of abstract accounting for value, is *logically anterior and historically prior to market exchange*" (Ingham 2004, p. 25).

Ingham's choice to uphold the measure over the claim is quite controversial. This conceptual position, referred to as *monetary nominalism*, is traced back to the earlier ideas of Keynes who, in the first pages of his *Treatise On Money* (1930), distinguished between a nominal money-of-account and a real money (which he termed "money-proper"). As he famously argued, "the money-of-account is the description or title and the money is the thing which answers to the description" (Keynes 1930, pp. 3-4), so that money "in the full sense of the term can only exist in relation to Money of Account" (Keynes 1930, p. 3). This said, it is worth pointing out that despite making a number of statements on the importance of the money of account (especially in the very first pages of his *Treatise*), Keynes never explicitly argued for the ontological specificity, or primacy, of the "description" (indeed, how can a description be logically anterior and historically prior to the value-thing that answers to it?). On the contrary, he was clear enough to define money *properly speaking* as the thing that answers to the description, namely as that the "delivery of which will discharge the contract or the debt" (Keynes 1930, p. 5). Accordingly, the great bulk of the *Treatise's* Book I (on the nature of money) was devoted to analysing and classifying the concrete *forms* that money could take as a means of payment and exchange, yet no effort was put into questioning its alleged *essence* as the description-idea of "abstract accounting for value" (Ingham 2004, p. 25).

Notably, the same subtle *ontological realism* (but perhaps I should say *formalism*), placing the means of payment rather than the money of account at the core of monetary analysis, can also be inferred from Knapp's original thesis, which Keynes openly subscribed in his *Treatise*, and according to which "all money, whether of metal or of paper, is only a special case of the means of payment in general" (Knapp

1924, p. 2). More specifically, for Knapp money is a creature of the state insofar as the latter is able to impose a tax debt on its subjects and then choose what will redeem them at "State pay offices" (Knapp 1924, p. 95).

Drawing on Knapp, Keynes has thus argued that the age of chartalist money, that is, the age of money properly speaking, is reached when the state is in the condition to claim the right not only to enforce the description, but also *to establish that which answers to it* (Keynes 1930, p. 5). This, writes Keynes, goes as far back as four thousand years ago - in practice, to the dawn of civilizations. Therefore it would make little sense to debate about what comes first between the money of account and the means of payment, the measure and the claim, because we can only understand the latter in relation to the former, *and vice versa* - precisely as a unity in context. That is, measure and claim are necessarily instituted *by the same token*.

Ingham, by contrast, separates the institutional genesis of the measure from that of the claim: the former is prior to the market; the latter, we shall see, is contingent upon it. And so, paradoxically, in his attempt to confute the ontological primacy of the medium of exchange, he similarly gets stuck on a pseudo-ontological ground whereby he can merely re-establish a "*logical foundation of money*" (Ingham 2004, p. 89, emphasis added). His theorem is straightforward: if we don't name the money-thing first, we cannot own it and hence alienate it. In other words, *unless we speak the same monetary language* and hence agree upon a nominal unit of account, we will not be able to express prices, arrange contracts with each other and eventually settle debts - whence the rationale for *ontological nominalism*. This leaves out a most fundamental question: what is it that we are actually *naming* and *claiming* when we *speak* money in our daily transactions?² Furthermore, why do we need a monetary language to begin with?

The (neglected) phenomenon of purchasing power

Scholars, including heterodox ones, often forget that by means of money we do not just name the material world of the political economy (its means and forces of

² A similar question - and namely "money talks, but what is it saying?" - is posed by Wennerlind (2001) in his article on the semiotics of money, where he analyses money as a "discourse of power" (Wennerlind 2001, p. 558).

production) so that we can finally exchange its products, but *we make claims* on it about what it is worth (producing and exchanging) and what it is not. By doing so we do not simply co-measure values, but we bring them into being. Stated differently, money does not simply *denote* a metrological system for the accounting of debts and the scaling of prices but, more importantly, it also *connotes* a process of signification/valorisation in which values are constantly and contextually becoming and mutating *in the name of money* - that is, in virtue of the myth of an endless accumulation of money that is entirely uprooted from, and which yet embraces and gives sense to, the material world of production.

Pace ontological nominalism, in this process of signification the nominal measure can only come into existence *along with* real value, and in particular along with the value of debts, as Keynes (1930, p. 4) has pointed out. Logically, *monetary commensuration is always finalised to claiming worth in payment and exchange*³. In this respect, the question of what comes first between the measure and the claim (or the medium) is a classic 'chicken or egg dilemma' that tells us very little about the institutional genesis of money and its political *and* economic significance. A proper ontology should therefore move beyond the basic question of '*what* money is', which is so often translated into an abstract *semantics* of monetary functions/uses (see for instance Polanyi 1980), and aim to respond to a more fundamental question: "*how* money is" (Bjerg 2014), and *why*. In other words, ontology should overcome *logical analysis* and embrace *phenomenological understanding*, so as to move in the direction of a *semiotics* of money: a study of why and how money is historically constituted as an icon (Konings 2011a) that seems to act autonomously and which is experienced to bear value in itself.

To this purpose, and in order to avoid the *positivist fallacy* of orthodox monetary analysis (i.e. the reduction of the institution of money to an a-historical rationality, law, or logic of exchange), I contend that the question of the Janus-faced *nature* of money ought to be recast in terms of its emblematic *significance* as a 'whole'. Money must be accordingly conceptualised as a *value* (a metaphor, a gestalt) that institutes a certain way of experiencing and finalising the *quid pro quo* of exchange (see Shell

³ Analogously, Saiag (2014, p. 574) has recently argued that "if money is a system of evaluation and settlement of debts, then monetary practices consist of *both* accounting and settlement. The question, therefore, is no longer whether payment, exchange and accounting can be observed separately from each other, but what kind of debts are evaluated and settled in each monetary practice".

1982; Amato 2010a; 2010b; Konings 2011a). For if money, as a measure *and* a claim, does logically imply exchange, the reverse is not true. Indeed, as anthropologists have long concluded, exchange can and *does* exist without money. Hence ontology should be instrumental to setting out the terms for the following phenomenological enquiry: what is the need or, better, the *absence* (Amato 2010b; Legendre 2005, p. 111), that money, 'as an institution', is meant to historically materialise in its twofold and deceptive articulation of measure and claim, universal and particular, structure and agency, means and end? More specifically, in what sense does money, as a value and a metaphor, connote the social text when it is 'uttered'? And, reciprocally, in what consists the dimension of *silence* that this new 'word' (or perhaps I should say 'figure of speech') opens with regards to social relations of exchange (Amato 2010a, p. 74)?

To answer this question or, better, to bring the question of 'money *as* value' into being, we must start from the common sense of what makes money so *worth* being pursued in the daily praxis: *purchasing power*. At first sight, purchasing power simply satisfies the *need* to pay and exchange, in line with the orthodox view. However, on a closer examination, purchasing power also materialises an *absence* (Amato 2010b), namely the power *not* to pay and exchange. The latter directly relates to the store of value function, "money's least *specific* attribute" according to Ingham (1996, p. 525). The reason is simple: to own the power to pay and exchange implies the possibility to *store* this power and hence, following Commons (1924), *to withhold it from others*. In this regard, it has been argued that money should be termed more properly "purchasing potential", as it "can remain indefinitely in the state of potentiality" (Amato and Fantacci 2012, p. 37; see also Werner 2005, p. 187).

Keynes captured the significance of purchasing power as the institution of the possibility not to pay in his famous "liquidity preference hypothesis" (Keynes 1936), where he elucidated the relationship between the demand of money and the rate of interest (I will discuss the theme of liquidity in the final section). Building on his insights, Minsky has subsequently shown how the capitalist monetary economy is inherently unstable because of a fragile financial structure that entails the systematic formation of spirals of debt deferrals. As these 'credit cycles' unfold, economic agents are likely to get caught in speculative practices of debt financing, to the point that they will seek money to merely pay interest on outstanding liabilities (see Minsky

1977; 1986; Ingham 2008, pp. 40-3; Nesvetailova 2007; 2010).

When the economy reaches this 'Ponzi stage', money is sought-after mostly in order to procrastinate the final fulfilment of debt commitments. As it were, towards the end of its 'life-cycle' money reveals itself as the power to *buy time* in financial markets, to the point of putting overall exchanges to a stall when the financial bubble finally busts. As a result:

[money] makes it possible for saving to be entirely unconnected with concrete goods and to take place rather through the constant and indefinite accumulation of abstract purchasing power, in the precise sense of *power independent of the fact of being concretely exerted* – so independent as to jeopardize the very possibility of it being exerted. (Amato and Fantacci 2012, p. 42)

The notion of purchasing power thus brings into focus the normative and institutional character of money as a concrete object of finance, hence as something that is more than a measure of, and a claim to, value. Indeed, as purchasing power, money appears as "a socially constructed abstract value which is measured by its own scale of value" (Ingham 2007, p. 268); "the value of things in *pure abstraction*" (Simmel, cited in Ingham 2004, p. 71); "one of those normative ideas that obey the norm that they themselves represent" (Simmel, cited in Ingham 2004, p. 74). In short, as purchasing power, money appears as the 'fundamental value' of the (political) economy.

It must be said in this respect that, unlike the idea of 'abstract accounting for value', purchasing power cannot be found everywhere in history (with the wisdom of hindsight), but is an institution specific to the modern world. Indeed, as Ingham (2000, p. 21, emphasis in the original) suggests, money "*makes possible the reproduction and continuity of economic life*" only when its institution finally assumes this seemingly transcendental, self-referential and autonomous *form of value*, and this has only taken place in conjunction with the rise of credit-money and the advent of capitalism. In this respect, Ingham also laments that one of the major deficiencies of orthodox monetary analysis is that it fails to "specify why money, as opposed to any other functionally alternative asset, performs as an intergenerational store of value", or else "as a temporal transporter of abstract value" (Ingham 2000, p. 21). Put simply, orthodox theory is unable to explain why and how money gets

historically constructed so as to bear purchasing power. However, as I will argue in the next section, Ingham also is unable to explain how money historically gets its value as *from within* social relations. Instead, his account of the historical origins and development of money (Ingham 2004, pp. 89-133) ought to systematically rely on the *ad hoc* agency of the state in order to justify the institutional transformations of money and the monetisation of debt relations.

A history of money without a theory of monetisation

Ingham's account of the history of money can be described, using his own words, as a "developmental sequence of the social structure of monetary practice" (Ingham 2000, p. 27). The sequence starts with the institution, lost in the mists of time, of the original idea of money "as a measure of value for representing and accounting for the (utilitarian and symbolic) worth of social positions and roles" (Ingham 2000, p. 27). It is assumed in this respect that primordial monies of account were devised by (proto-state) sacred authorities "to calculate differential debts to society" (Ingham 2004, p. 91) and to establish *wergeld* as a "worth payment" (Ingham 2004, p. 92). Following the (conjectural) emergence of primordial monies of account in pre-historic (and pre-economic) settings, we witness the actual emergence of "standards of value based upon quantitative relations between commodities expressed in a money of account" (Ingham 2000, p. 27; 2004, p. 91). This development took place for the first time in third-millennium BC Mesopotamia, when the temple and palatial authorities of the ancient Near East began to develop metrological systems for administering the prices of commodities (see Hudson 2004). The establishment of price systems (in what are by now *economic* settings) is then followed by the institution of "standardized means of payment/stores of value" in the second millennium BC (Ingham 2000, p. 27) and, finally, by the constitution of a totalising money system rooted in a general means of payment and exchange: coinage. This stage historically started around 600 BC in ancient Greece, and culminated with the consolidation of the Roman "coinage-military complex" (Ingham 2000, p. 27; 2004, pp. 89-106).

Unfortunately, Ingham does not provide any clear mechanism of causation for his developmental sequence. In particular, he does not explain the primordial transition from moral to economic debts, namely why and how "the calculation of social

obligations was transformed into a means of measuring the equivalences between commodities" (Ingham 2004, p. 91). Rather, each development appears as unfolding from the agency of a pre-existing extra-economic authority. This is fundamentally in line with Ingham's understanding that "money - as a social institution - is produced by non-market agencies and does not obey the economic 'laws' of the production and exchange of commodities" (Ingham 2000, p. 22). The rationale for this argument is, once again, logical: since "the process of exchange cannot produce the measure" (Ingham 2006, p. 261; 2004, p. 23), then the latter "must be introduced by an 'authority'" (Ingham 2004, p. 49). Accordingly, money "always has an authoritative foundation" (Ingham 2006, p. 271).

Interestingly, following the disintegration of the Roman empire (and its coinage system), the 'developmental sequence' got started again from scratch with the re-institution of myriad standards of account corresponding to equally numerous sovereign spaces in Europe. These monetary standards were thus incorporated under the rule of Charlemagne into a transnational metrological system, also known as the regime of *moneta imaginera*. Crucially, with the consolidation of *moneta imaginera*, the money of account was dissociated, or de-linked, from the means of payment⁴ once again (Ingham 2000, p. 28; 2004, pp. 107-112). As Ingham explains, the phenomenon of *décrochement* "firmly re-established the abstract monetary calculation that had been practised in ancient Babylon" (Ingham 2004, p. 110). This time, however, the reconstitution of the quintessential idea of money as 'abstract accounting for value' did not involve a mere repetition of things but set the ground for an actual evolution towards "the pure capitalist credit-money system" (Ingham 2004, p. 78). As the story goes, during the Middle Ages new ways of thinking about money as a dematerialised, imaginary construction began to evolve in concomitance with the customary use of old 'money-stuffs', remnants of the previous monetary order. The de-linking of measure of value and means of payment made monetary relations extremely complex. The instruments of monetary governance thus started to change dramatically, opening up possibilities for experimenting new forms of credit arrangements and establishing altogether new 'things that answered to the description'. As a result, new credit-based means of payment began to circulate in private financial networks along with the traditional form of coinage (Ingham 2004, p. 113). In time, the regime of *moneta imaginera* led to the gradual development of

⁴ The notion of *décrochement* (de-linking or discontinuity) is borrowed from Bloch (1981).

modern monetary institutions, and in particular to the emergence of banks of deposits and public banks, the diffusion of the bill of exchange and, finally, the *depersonalisation* of debt relations and the emergence of the promissory note as a means of payment. Finally, in seventeenth-century England these institutional changes culminated in the emergence of a central bank, the institution of the public debt (national debt) and the *hybridization* of private bank credit and public sovereign currency: it was the birth of the modern capitalist credit-money, or else of money as an *abstract claim* (Ingham 2004, pp. 114-123).

Unfortunately, this is not the place to properly engage with the content of Ingham's history of money. After all, if one excludes his stance on the development of capitalist credit-money in late seventeenth-century England (which has been criticised by recent scholarship⁵), Ingham does not really engage with any historically-specific context, but only provides a synthetic overview of alternative accounts of monetary history. I will thus concentrate my critique on a crucial methodological issue: Ingham's focus on state agency in the creation of money. Instead of grounding his historical analysis on actual processes of monetisation of debt relations, Ingham presents a highly schematic account of the development of money as the story of "successive, but overlapping, modes of monetary production"⁶ (Ingham 2004, p. 78). Here money and the authority are thought to exist in a rather *symbiotic* relationship, as dissimilar though *mutually beneficial* institutions. More specifically, we find that the existence of money is logically justified by the existence of the authority, *and vice versa*, so that both appear as producing and reproducing themselves in symbiosis *from principle to end*, and without any reason for their organic development other than the reproduction of their logical conditions of existence. And so, in a circular argument, while money requires the state in order to exist and be accepted as such, at the same time the state requires money to establish

⁵ Ingham's account of the origins of capitalist credit-money has been criticised in particular by Kim (2011) and Knafo (2013). The first argues that, unlike what Ingham suggests, "the depersonalisation of bills of exchange was not a necessary condition for the origins of modern credit-money" (Kim 2011, p. 940). Instead, modern money was the product of a financial securitisation of debts that was first performed by goldsmith bankers, and which was connected to the historically-specific emergence in England of the legal institution of the trust. Similarly, Knafo sustains that "the state was not the decisive factor behind the broad circulation of banknotes" (Knafo 2013, p. 52) and emphasises by contrast the importance of goldsmith banking and, more generally, of financial agents, in the making of the English financial revolution.

⁶ These modes of money production are essentially four: 1) money accounting according to a standard of value, without transferable tokens (earliest known case: Mesopotamia, third millennium BC); 2) precious metal coinage systems (Asia Minor, circa 700 BC to early twentieth century AD); 3) dual system of precious metal coinage and credit-money (fifteenth to early twenties century); 4) the pure capitalist credit-money system (mid-twentieth century onwards) (Ingham 2004, p. 78).

and exert its power. Among other things, this circular logic excludes the possibility for money to be disruptive of, rather than beneficial to, state power.

Undoubtedly, Ingham emphasises the importance of the state in the construction of monetary relations also to invalidate the mainstream dogma of the market-driven origins of money. However, from a methodological point of view, his understanding of money 'as an institution' spectacularly mirrors the orthodox account. Indeed, whereas in the latter money is imagined to emerge from the market as a way to optimise the management of symmetrical relations grounded in barter-like exchange, in Ingham's discourse money is assumed to be established by the authority in order to promote the governance of asymmetrical relations grounded in debt. Either way, the rationale for the institution of money is not really situated within actual agent-agent relations (respectively exchange relations and debt relations), but unfolds from the undisputed agency of a single metaphysical entity (respectively the market and the state). This agency is strategically employed to *logically justify*, rather than *explain*, how historically money gets its value and, in Ingham's specific case, how debts are monetised. But what is more, it will be shown in the next section that, despite being qualified as an extra-economic factor, the authoritative agency that Ingham posits as a violent foundation for money's value is in fact subtly permeated by a market logic.

The riddle of the value of money

The value of money, says Ingham, represents "the quintessential economic question" (Ingham 2004, p. 80), and yet "there is no consistent distinctively heterodox answer to the question of how money gets its value" (Ingham 2004, p. 56). The orthodox tradition, in its utilitarian spirit, has long eluded this question by positing a *value-price identity* at the foundation of monetary theory, thus assuming in a tautological fashion that money is that peculiar use-value whose utility consists in its exchange-value. Against this view, Ingham holds that the value of money cannot be derived from its exchange-value and therefore cannot be identified with its commodity price. Instead, in line with what has been argued previously, it corresponds to abstract purchasing power (Ingham 2004, p. 57), since the latter is what gives "substantive value" to money (see Ingham 2000, p. 29; 2004, p. 71).

Notably, Ingham's notion of substantive value is a legacy of Weber, and it is worth noting that in its original acceptance this notion explicitly referred to the market value of an asset serving as medium of exchange (Weber 1978, pp. 75-6)⁷. This for an obvious reason: as the power to purchase and exchange, the value of money cannot but be logically contingent upon the existence of a market economy. However, as Ingham rightly emphasises on more than one occasion, money's purchasing power is symptomatic of a market economy that does not conform to orthodox criteria, for here demand and supply are not bound to harmoniously meet after all to produce stable prices. On the contrary, purchasing power "at any point in time is the result of the economic 'battle of man with man' in which money is a weapon" (Weber, cited in Ingham 2004, p. 71), and namely "the enacted outcome of social and political conflicts between the main interests in the economy" (Ingham 2004, p. 81) whereby debtors and creditors "struggle to monetise their positions of power by raising their price" (Ingham 2004, p. 81).

In this situation of "real-world radical uncertainty" where no one wants to be a passive *price-taker* but on the contrary struggles to shape prices to her own advantage, economic and financial stability is never given but ought to be actively constructed. In this respect, the value of money lies precisely in its capacity to institute a form of "self-fulfilling long-term trust" among otherwise "potentially personally untrustworthy strangers" (Ingham 2004, p. 74). Thus, Ingham argues, money is able to do so because it is substantially a *promise of payment*, "and the production of promise involves trust" (Ingham 2004, p. 74). This is why, as a norm, "all money has a fiduciary character" (Ingham 2004, p. 85), including precious-metal money. Whence the following question arises: how is it possible that we get to experience and value something as a *means* of payment which is only a *promise* of payment?

As I have already suggested in the previous section, Ingham solves this riddle (in fact, he avoids solving it) by postulating the *ad hoc* agency of the state as a violent foundation for money. Thus he argues that "[e]stablishing the promise requires

⁷ In particular, by bringing forth the notion of substantive value Weber (1978) aimed to criticise Knapp's idea that the validity of money could be entirely conferred by the authority of the state. On the contrary, according to Weber the type of validity bestowed by the state, which he termed *formal*, implied nothing as to the actual value of money. Indeed, for him the value of money was equivalent to "the rate at which it will be accepted in exchange for commodities" (Weber 1978, p. 178).

'authority' which ultimately rests on coercion" (Ingham 2004, p. 76). This coercive capacity is manifested primarily as *the state's sovereign power to impose a debt on others* by producing a "promise of last resort" (Ingham 2000, p. 29). The state promise is central to the construction of money's value because, besides giving credibility and political legitimacy to all other promises, it acts as a public tax upon the private economy (and thus upon the market). That is to say, in virtue of its fiscal prerogative not only is the state in the condition to establish within its sovereign domain the money of account and then proclaim the legal tender status of the means of payment and exchange but, more significantly, it can also determine the purchasing power of money "by influencing what must be done in an economy to earn the income to pay the tax" (Ingham 2004, p. 84).

This introduces a fundamental contradiction in Ingham's discourse: by making the promise of last resort, the state functions as the par excellence *market-maker* in the economy and, in particular, as the market-maker for what 'by nature' (but in fact only 'in theory') should not be a commodity: money. Such an understanding is a legacy of the neo-chartalist tradition (see Wray 1998; 2000; 2012; Tcherneva 2006). According to the latter the value of money is conferred by state *acceptation* of the money-promise for tax settlement. This means that in theory "taxes drive money" (Wray 1998; 2000) though, in practice, deficit spending does. Either way, the state is thought to govern the ebbs and flows of money, hence the social construction of its scarcity essential to the management of its purchasing power, respectively via taxation (which destroys money) and deficit spending (which creates it). Conformingly, both the institutional *principle* and *end* of money appear as converging in the fiscal agency of the state, the latter serving as the keeper of the *original debt* (rolled over and over again, *ad infinitum*, until the end of times) for which its subjects have fallen at the dawn of capitalism.

Critically, despite moving from radically different ideas, the neo-chartalist approach nonetheless mirrors orthodox monetary economics for what concerns a crucial methodological issue: it analyses the state as if it were the biggest creditor (via taxation) *and* debtor (via deficit spending) in the economy - therefore "the single largest economic agency" (Ingham 2004, p. 84). Thus the state resembles at a macro level the utility-maximising agent of orthodox methodological individualism, bestowed with a unitary (though in this case collective) and partially autonomous

rationality⁸, and embedded in a world of market-driven social relations. The economic determinism of neo-chartalism clearly emerges from its logical thesis about the fiscal origins of money (see Wray 1998). The latter assumes the existence of a *saturation point* in the government's capacity to deficit spend (hence of a limit to its power to impose a tax) that is ultimately determined by market-driven considerations of supply and demand: "before that point [is] reached, the government would find queues of individuals showing up to offer goods and services to obtain dollars; beyond that point, the government would find no queue" (Wray 1998, p. 158). As a result, according to the very logic of tax-driven money, the state is only *formally* free to "deficit spend" but in fact it ought to take into consideration the *substantial constraint* posed by the market⁹. Ineluctably, the moment the state starts 'making the market', the market also starts 'making the state'.

As a result, Ingham's argument that money is a promise underpinned by the state's taxing power and political legitimacy does not validate per se the idea that money's fiduciary value is "partly *removed from the free market process*" (Ingham 2004, p. 179), provided that fiscal policy is also a means by which the state aims to commercialise its own promise of redemption according to a calculus of supply and demand. This, on the contrary, seems to unequivocally suggest that the state be itself subject to a regime of market imperatives. As Dodd has correctly pointed out in this respect,

[i]n so far as it is conceivable that state acceptance is important for the identity of money only as a result of the size of the state as a transactor, [...] this might just as readily apply to a non-political institution such as a large firm. If the significance of the declaration by an institution that it will accept only a particular monetary form as payment is proportional to the scale of monetary obligations to that institution, this is an economic rather than political consideration. While it is true that the state's fiscal operations provide the reasons for its dominance within the payments network, this nevertheless means that the relationship between money and the state needs no longer be defined exclusively as a political or even legal question. The state's importance with regard to the identity of

⁸ As a matter of fact, the state acts autonomously and discretionary only when it comes to fiscal policy, but then it must "accommodate" the market when it comes to monetary policy (see Wray 1998; 2012; Tcherneva 2006).

⁹ It is worth noting that, in criticising Knapp's state theory, Weber also pointed out that the formal power of the states to control monetary aggregates was grandly limited by the presence of substantial constraints posed by *other* interests. Among them, financial interests, "with particular reference to future foreign loans", were deemed to be "the decisive ones" (Weber 1978, pp. 178-9).

money would cease to be a question of trust or administrative competence and become instead an issue of economic obligation. (Dodd 1994, p. 29)

Despite endorsing its main theses, Ingham is equally critical of the methodological nationalism of neo-chartalism¹⁰. For him neo-chartalists "have missed the significance of the *political* nature of both *origins* and *functions* of the linkage between state spending, taxes and bonds in the capitalist system" (Ingham 2004, p. 143). In fact this linkage cannot be abstracted in the form of a mere accounting relationship between the money-supplying 'public sector' and the money-demanding 'private sector', but ought to be analysed historically as a "complex triangular power struggle" (Ingham 2000, p. 33), namely as "a matter of an implicit settlement between the state, capitalist 'rentiers' and the tax-paying capitalist producers and workers" (Ingham 2004, p. 143). After all, money is not just some creature of the taxing authority, but is more specifically the product of a *structure of social relations of credit-debt* (Ingham 1996, p. 516). But there again, credit has been known to exist from immemorial time whereas money, as the uniform value of an impersonal promise of payment bearing abstract purchasing power, is from a historical point of view a pretty recent development. What is therefore the specificity of the structure of credit-debt relations out of which money is constituted? How are these debts involved in the construction of modern relationships of authority, sovereignty and autonomy?

As I will show in the next section, Ingham misses the specificity of modern debt relations and the broader significance of money. Indeed, despite recognising the methodological limits of neo-chartalism, he ends up relying on the metaphysical agency of the 'monetary authorities' in order to justify the 'stable value' of modern money. This said, we can still infer from his account of the development and production of capitalist credit-money (Ingham 2004, pp. 107-151) a number of clues about what is truly specific about capitalist money and what makes it possible for a promise of payment to serve as a means of payment. Notably, these clues all point to a concept that is never explicitly referred to in Ingham's 'fundamentals for a theory of money': *liquidity*.

¹⁰ For other critical engagements with neo-chartalism see Mehrling 2000; Gnos and Rochon 2002; Rochon and Vernengo 2003; Lavoie 2013; Febrero 2009; Palley 2015a, 2015b; Frankel 1977; Graeber 2011.

The subterranean theme of money as liquidity

The most interesting aspect of Ingham's sociology remains its professed methodological relationalism, as exemplified by the following rule of thumb: "money has to be issued" and, more specifically, "money is always issued as a debt, or liability", hence it "cannot be created without the simultaneous creation of debt". Eventually, "[a]ll money is constituted by credit-debit relations", so that it is "the *existence of a debt that gives the money value*" (Ingham 2004, pp. 72-75, emphasis in the original).

Notably, the debt out of which money is constituted enjoys a very peculiar trait: it is not just some contractual binding agreement by a specific debtor to pay a specific creditor, but it is a *depersonalised debt*: a liability that, regardless of the sorts of the original creditor-debtor counterparts, can be readily transferred and be broadly circulated as a 'net worth' (see also Heinsohn and Steiger 2000; 2006). Conformingly, Ingham explains that "capitalist credit-money", 'money as we know it' in Keynes' jargon (Keynes 1936), comes at the end of a long historical process of *depersonalisation of debt relations* (Ingham 2004, p. 119) whereby money was finally constituted as an "*autonomous force of production*" (Ingham 2000, p. 28). As a result, under capitalism *even if all money is debt not all debt is money*, because to properly serve as money debt must be "*assignable* - or transferable, or negotiable" (Ingham 2004, p. 72).

Needless to say, this contradicts everything previously stated about money's extra-economic foundations as well as the ontological primacy of the money of account. Indeed, on these new premises 'moneyness' depends entirely on the degree to which money is readily *accepted* by society (see also Bell 2001, p. 160): it is a euphemism to say that money is the most sought-after value in circulation or, to quote Simmel (1990, p. 124), that it is "inter-changeability personified". In short, money *is* liquidity¹¹. This is fundamentally in line with the orthodox dogma, according to

¹¹ Liquidity, as Nesvetailova (2010: 6) has pointed out, "is a very fluid, complex, multidimensional notion". However, for the sake of simplicity, it can be safely argued that liquidity denotes the institutionalisation of the possibility to readily negotiate and trade debts *by means of debt*. For this reason, liquidity ought not to be intended as an a-historical, universal attribute of money, but as a historically-specific phenomenon that is entangled from the start with the monetisation of debts and the rise of financial markets for debt securities.

which "'moneyness' is somewhat tautologically 'exchangeability' - that is, the most 'liquid' commodity" (Ingham 2004, p. 6). Seemingly unaware of the enormous contradictions raised by his view of credit-money, Ingham maintains that the *differentia specifica* of capitalism "lies in the elastic creation of money by means of readily transferrable debt" (Ingham 2004, p. 108; p. 63).

The capitalist monetary system's distinctiveness is that it contains a *social mechanism* by which privately contracted debtor-creditor relations [...] are routinely monetized. Private debt in its various forms (cheques, credit cards, promissory notes and so on) are [*sic*] converted into the most sought-after 'promise to pay' at the top of the hierarchy of promises. [...] This transformation of privately contracted debts into money is achieved by complex linkages between the banking and financial system and the state and, in turn, between the state and its own creditors (bond-owners) and debtors (taxpayers). These relations are mediated by a central bank when it accommodates the banking system's private promises to pay by accepting - that is, buying - them with sovereign money. (Ingham 2004, pp. 134-5)

Suddenly, we come across the idea that rather than money being "peculiarly a creation of the state" (Keynes, cited in Ingham 2007, p. 269), "the state and the market *share* in the production of capitalist credit-money" (Ingham 2004, p. 144). As a matter of fact, the two are inherently entangled (via the central bank *nexus*) with a financial infrastructure of monetised debts, i.e. a 'hierarchy of promises' with varying degrees of liquidity, and built on a 'social mechanism' that essentially corresponds to *debt discounting* (though Ingham barely mentions the word 'discounting' throughout his work)¹².

This peculiar mode of monetary production can be roughly described as follows: in the effort to redeem themselves (in fact, to reproduce themselves by having access to credit and discharge their obligations), the least creditworthy agents in society (which include not only workers but also entrepreneurs) promise worth at a discount to the most creditworthy ones (bankers and financiers). The latter, in turn, get access at a better discount (thanks to the mediation of the central bank) to the general means

¹² The concept of discounting has been recently revamped by Nitzan and Bichler (2000; 2009) to explain modern processes of capitalisation. However, it is worth mentioning that as early as the mid-nineteenth century, Scottish political economist Henry Macleod placed the notion of debt discounting at the foundation of his *Theory and Practice of Banking* (1883). I genuinely recommend reading the work of this scholar, who was not only a forefather of contemporary credit theories of money but also a precursor of institutional and transactional economics.

of tax redemption (qua final settlements) - the "decisive money" of the system, using Knapp's words (Knapp 1924, p. 95). Notably, the means of tax redemption that is meant to fulfil the promise of payment is just *another* promise, though one 'high-powered' by the most authoritative of all creditworthy agents: the state. The latter sits by definition on top of the hierarchy and is able to draw a check on itself at no discount because, tautologically, it "is viable and can effectively tax" (Ingham 2004, p. 141). The state promise of last resort "consequently [provides] the basis for the creation of money (supply) in the banking system" (Ingham 2004, p. 141).

Altogether, the idea of a hierarchy of acceptability with sovereign high-powered money on top would seem to suggest that money is liquid because it is accepted by the state for tax redemption, in line with neo-chartalism. However, we learn from Ingham that this is not really the case. Indeed, the illusion of liquidation that the hierarchical articulation of promises *ad infinitum* puts in place is not imposed *from above* by the authority, but is "organized according to differential rates of interest" (see below) that are set *from within* debt relations (endogenously) via discounting, precisely as in a *market* for the *commodity* money.

The various forms of private debt are thereby monetized - that is to say, exchanged for sovereign promises to pay that are fully transferable/acceptable anywhere within the sovereign space defined by the money of account. These arrangements organize debt into a hierarchy according to criteria of risk of default - that is to say, a stratification order of debt/credit topped by the most sought-after credit - usually, but not always, a sovereign state's promise to pay. *This stratification ranking occurs at every level and is organized according to differential rates of interest.* The rate at which the central bank lends to the banking system as a whole is the 'base' rate. The dependent rates offered by the banking and financial system are calculated in accordance with an assessment of credit risk and profitability. (Ingham 2004, p. 135, emphasis added)

As a result of this bank-driven mechanism of debt discounting, even the least credible promise of payment can be potentially monetised and cashed (redeemed, liquidated) on the spot. This calls for a first consideration: from Ingham's own account of modern money we infer that it is not abstract accounting per se but concrete *discounting* what actually provides the generative calculation at the basis of the 'hybridization' of credit and currency (Ingham 2004, pp. 121-133) and, pace ontological nominalism, what best epitomises the technical principle of the

monetisation of debt relations. But this is not all. What's more interesting about discounting is that, when it is performed extensively and systematically, as in the capitalist regime, it ends up alighting a self-generating, relatively autonomous process (Ingham 2004, p. 108; 2008, p. 71) based on "delaying payments and settlements and consistently making these deferrals overlap one another" (Bloch, as cited in Ingham 2004, p. 140). This is a monetisation of debt relations that instead of allowing for the final redemption of taxpayers is bound to give rise to "a regime that would collapse if everyone paid his debts" (Bloch, as cited in Ingham 2004, p. 108).

As I have already suggested, the significance of money in such an infrastructure of liquid debt relations is precisely that it bears the potential *not* to pay, that is, to be withdrawn from exchange *sensu strictu* and be instead channelled into the speculative buying and selling of debts, to the point of putting overall exchanges to a stall, as in financial crises, and with the consequence of turning pro tem suspensions of debt settlements into a *structural impossibility to pay* the debt (see Hudson 2012). Crucially, this possibility to literally 'buy time' in financial matters, as engendered by debt discounting, and the resulting impossibility to liquidate the systemic debt overhang by the same means, calls for a second, important consideration: in order to procrastinate consistently the *redeeming of time* (the final rendering of accounts for debtors and creditors altogether), everyone must be able to engage in the systematic buying and selling of debts via discount markets (secondary markets for debts), because it is here that the time congealed in mutual rights (credits) and obligations (debts) is literally liquefied *before maturity* and made readily disposable for activities in primary markets in the form of purchasing power.

Accordingly, the institution of money is intrinsically related with the market, yet not in the sense attributed to it by orthodoxy. Rather, it is integral to the historical development of an *infrastructure of speculative markets for debts and debts alone*, a pool of liquidity out of which a promise of payment ought to systematically emerge as *the* money bearing the largest number of investment opportunities in a given context. In that respect, it is worth noting that money does not merely function as a medium of exchange and a store of value, as the orthodox has it, but has been termed the "bearer of options" (Anderson 1917, pp. 425-6) precisely to specify its peculiarity as an "intergenerational store of value" that, unlike any other store of value (such as land, for instance), is in the condition to be interchanged *at any point in time* with

potentially any other value¹³, including *other money*, in virtue of its liquidity (see also Amato and Fantacci 2012).

Put in this new light, the commodity trait of money appears undeniable. In line with the post-Keynesian tradition, money is the primary asset of the political economy, insofar as its most liquid financial object. And indeed Ingham is the first to admit that especially at the global level "the value of money is affected by its status as a commodity and, consequently, it can largely be explained in terms of supply and demand" (Ingham 2004, p. 83): eventually, "[o]nce constructed as an institutional fact, money is, of course, traded as a commodity" (Ingham 2004, p. 80)¹⁴. After all, as Schumpeter put it, "the money market", not the state, "is the 'headquarters' of capitalism" (Ingham 2004, p. 202).

This brings us back to the notion of 'hierarchy of money'. As I have already suggested, the hierarchy does not define a structure of liabilities internal to the jurisdiction of the state, therefore subject to its fiscal power, as the idea of a reversed credit pyramid built on the basis of high-powered state money would suggest. Instead, it is a network of liquid debt relations cutting across sovereign domains, whereby access to money by all economic agents, comprising states, "is determined by an assessment of creditworthiness [...] that includes a calculation of the degree of risk of default" (Ingham 2004, p. 137). The discounting of risk is therefore primarily a concern of creditors, *and especially of state's creditors*:

[creditors] have to be satisfied, first, that state debt and the subsequent supply of money will not produce inflation and thereby erode the value of the fixed-interest *investment in state bonds*. Second, creditors have to be convinced that state revenue (taxation, customs duties, etc.) will be adequate for the service of interest payments. Consequently, governments attempt to establish their creditworthiness by conventions of 'sound finance' in order to *secure the sale of their debt*. (Ingham 2008, p. 77, emphasis added)

¹³ As Anderson (1917: 425, emphasis added) explains in this respect, "[t]his bearer of options function is often identified with the store of value function. The two are properly distinguished. [...] The important thing about the distinction is that for one purpose a high degree of saleability in the thing chosen is necessary, while in the other, such is not the case. The most common case of the 'bearer of options' function arises when men hold money, liquid securities of low yield and stable value, short loans, call loans, or bank-deposits, *waiting for special opportunities in the market*".

¹⁴ Also, "[a]fter 'moneyness' has been established by the issuer's money of account and embodied in a particular form (metal, paper, electronic impulse, etc.), only then does it take on the status of a commodity that may be bought and sold, for example, in foreign exchange markets. In other words, *once money has been produced, then economic analysis is applicable*; but it is essential to understand that it cannot explain the existence of money" (Ingham 2004, p. 198, emphasis added).

Crucially, in order to secure the creditworthiness "that enables them to raise finance for spending by selling government bonds to the money market" (Ingham 2008, p. 78), *states do not need to actually honour their debts* but, more specifically, they must *show their willingness* to pay them 'by conventions of sound finance', in spite of the fact that their sound financial practice might not be corresponded by *any actual effectiveness in liquidating, or reducing, their debts*.

The whole point is indeed not to actually liquidate the debt, or to target inflation per se, but rather to "convince holders of [...] government debt that the value of their investment will not be eroded by inflation" (Ingham 2008, p. 78). In particular, "[i]t is the role of the central bank to establish *credibility* in an invariant monetary standard in relation to the *creditworthiness* of [state] fiscal policy and practice" (Ingham 2004, p. 145). The central bank, in other words, is primarily responsible for governing and stabilising the *price* at which money will be bought, so as to "influence estimations of its *future value*" (Ingham 2004, p. 83). Borrowing the expression from Mirowski (1991), Ingham calls this overall work of persuasion "the working fiction of an invariant monetary standard of abstract value" (Ingham 2004, p. 144).

Significantly, this theatrical performance, or "impression management" (Ingham 2004, pp. 144-50) is not set by the state as such, but is arranged by a broad and opaque ensemble of "monetary authorities", encompassing central banks *in primis* but also rating agencies and other *non-state* financial institutions (Ingham 2008, p. 79). In the effort to ensure credibility in "stable money" (Ingham 2004, p. 145), and hence sustain the illusion of liquidability of debts, the monetary authorities are committed to establishing "a transparent procedural correctness that is assessed according to the agreed organizational arrangements and the current macro-economic thinking" (Ingham 2004, p. 148). Mainstream economic theory thus plays an essential *performative* role in framing and legitimising sound monetary policy (Ingham 2004, pp. 84, 198). In particular, Ingham continues, the monetary authorities "are engaged in the creation of an 'epistemic community' of understanding based on theoretical economic knowledge and routine practice" (Ingham 2004, p. 146). The basic aim of this community of technocratic knowledge is to depoliticize pro-rentier *politics* of "inflation targeting" in a way as to display them as a natural goal of an "independent" monetary *policy* (Ingham 2004, p. 146).

My critique is once again methodological: by framing in a final analysis the subterranean problem of *liquidity* as a question of socially-constructed *credibility*, Ingham makes *the social struggle in which money is a weapon* appear more and more incompatible with the Weberian (but also Marxian) *battle of man with man*. Indeed, the grounding argument that the value of money is ultimately a matter of socially constructed impersonal trust (in fact, a *faith* in redeemability) that owes its credibility to the *persuasive performance* of economic theory (as sponsored by the monetary authorities), altogether invite us to think of the value of money as the product of a *battle of ideas*. With this, to be sure, I do not intend to begin a critique of the performativity approach in social sciences. I will yet contend, in the wake of Konings (2010, p. 63), that arguments based on the performance metaphor tend to be overly-deterministic as "actors appear to be largely unreflective, primarily motivated by discursive structures or impulses and performing meanings in whose emergence they had little 'agency'".

And indeed, despite all the constructivist fuss, the performance of the monetary authorities appears to be ultimately over-determined by a market rationality in an even more invasive and ultra-capillary fashion than it previously seemed to be. For unlike the state authority, the monetary authorities are no longer directly involved in the creation of money - i.e. they do not necessarily *issue* and/or *accept* the money - but are only concerned with its governance. Their job is to basically *persuade the market* to trust and accept state promises at a sound (appealing) price in order for the states to finance themselves and survive in a global economy whose needs and desires *can largely be explained in terms of supply and demand*. That is to say, monetary authorities do not even attempt to write and edit the dictionary *in their own pecuniary terms* but, more submissively, are involved in deploying its universal market terminology.

Conclusions: the significance of money

In this article I have engaged in a critical yet constructive manner with what I consider to be a very valuable and inspirational contribution in the field of monetary theory. My interest in the subject arose precisely through the eye-opening reading of Ingham's *The nature of money*. Now, by emphasising the methodological fallacies

and contradictions in his theory, I aim to instil a novel sense of what money is about. This new sense, or *significance* (I emphasise this word in opposition to the word 'nature' adopted by Ingham), can be summarised as follows: while Ingham holds that "[m]oney cannot be said to exist without the simultaneous existence of a debt that it can discharge" (Ingham 2004, p. 12), I argue on the contrary that *money cannot exist without the simultaneous existence of a debt that it will never discharge*. In particular, I contend that Ingham has failed to grasp the specificity of modern money as the institution of a peculiar *form of finance* (not just of 'exchange') based on the production of liquidity and the systematic deferral of payments, thus leaving a number of interrelated questions unexplored. Among them, the most important revolve around: (a) the type of inter- and intra-class conflict that such a finance entails and, in turn, (b) the forms of wealth (re)distribution and speculation that are specific to the capitalist mode of monetary production. In the following conclusions I will therefore suggest some guidelines for future studies in money and finance.

The first theme concerns monetary calculation. The idea that money is ontologically a metric and accounting technology has been gaining a transversal consent in social sciences. As it were, scholars seem to have learned to stop worrying about *value* and love the *measure*. Calculation, of course, remains a central topic of monetary theory (see for instance Amato, Fantacci, Doria 2010; Fourcade 2011; Christophers 2011). Yet, as I have argued, 'calculability in money terms' does not simply involve 'countability' *sensu strictu*, that is, a synchronic calculation based on the book-keeping of debts and the scaling of prices that are already *given* in relation to a money of account. Rather, it primarily involves *discounting*, a diachronic calculation of the present price of an asset in relation to its future value, as against a background of potential (market) opportunities.

Focusing on discounting shifts the attention from those who allegedly 'count' to those who actually 'make' money. For discounting does not measure value properly speaking: instead, it brings it into being in the form of purchasing power. In particular, discounting generates money *as* liquidity by enabling "the expansion of *both* sides of the banking system's balance sheet" (Ingham 2004, p. 140). This 'expansion' of banks' balance sheets does not merely involve a depersonalisation and transferability of debts, but is more specifically a process by which debts are *commodified, capitalised and securitised* (see Minsky 1986; Kim 2011; Amato and

Fantacci 2012; Allon 2015). Admittedly, the idea that banks, rather than states, create the great bulk of the money supply and enhance the liquidity of financial relations is not new: virtually all post-Keynesian scholars (including neo-chartalists) agree on this point. However, what is often disregarded, if not neglected, by the heterodox literature is that not only is the banking system's production of liquidity connected to the emergence of speculative markets for debts, but it is also involved with the construction of a peculiar regime of finance where *nobody is a genuine creditor because in principle every proprietor (and first and foremost the banker) is indebted to everybody else via a capillary infrastructure of liquidity.*

In particular, modern banking promotes a *leveraging* of real assets, that is, an overproduction of claims on titles of property (see Werner 2005; Schularick and Taylor 2012, Hudson 2012; Admati and Hellwig 2013). If carried out systematically (as it normally happens under capitalism) bank leverage inexorably leads to the consolidation of a structural *positive debt-to-equity* ratio in the overall system, that is, an accumulation of *net worth* in the form of liquid securities that literally flood the markets and further melt the solidity of contractual bonds, making altogether the system crisis-prone. Accordingly, in the capitalist regime the *circulation* of money must necessarily assume the contours of *spirals* of debt deferrals. By the latter I do not simply mean system-wide "boom and bust" credit cycles, but also and especially localised financial bubbles and processes of asset-price inflation. Like vortexes triggered by holes in a pool, these spirals are likely to cause the (more or less sudden) draining of liquidity, leaving the impression that in the same way as money would pop *out of thin air* it could readily return to it.

This brings us to a second crucial topic: the question of modern money as liquidity, and how this relates to modern speculation. As *liquidity*, modern money involves a growth *out of measure* of debt instruments which enormously extends the margins of manoeuvre, and profit, for speculative activities in financial markets, one being certainly the making of financial bubbles. Notably, as Knafo (2009) has pointed out, a financial bubble is the consequence of a *coordinated market-making activity*. Thus it requires that speculators *play with* financial markets in a concerted fashion so as to ingenerate market confidence and sustain the illusion of liquidability of specifically inflated assets in what seems to be a virtuous circle "as everyone appears to win in the process, at least until the crisis hits" (Knafo 2009, p. 32).

Now, as Ingham and neo-chartalists maintain, the institution of money similarly involves a market-making activity, that is, an active promotion of the *demand* of money. After all, "everyone can create money: the problem is to get it accepted" (Minsky 1986, p. 255). The construction of liquidity, however, is not a concern of the state authority per se, but is connected to the promotion of secondary markets by financial agents and, in turn, to the emergence of new forms of financial speculation involving among other things a commercialisation of state sovereignty (see Palan 1998; 2002). Accordingly, it could be rightly argued that, rather than simply entailing sovereignty (Ingham 2006, p. 261), money more specifically enables a *negotiation of sovereignty* by financial means, and by financial agents.

In particular, as liquidity, money enables the power to readily negotiate a very special title of property: debts. The latter, as John Commons has rightly pointed out, are first and foremost *rights* to legal control, and "[l]egal control is future physical control" (Commons 1931, p. 657). Thus, as the power to gain future physical control over things and people, modern money *encapsulates* time at a very material (indeed *historically-material*) level of sociality where speculation is sovereign. Indeed, not only is speculation integral to the construction of modern forms of authority and sovereignty, but it is especially intrinsic to *the very production of everything* under capitalism (see Minsky 1986; Knafo 2009; 2012; Konings 2011b). As Macleod clearly saw ahead of the times, "speculation is the mother of production" (Macleod 1883, p. 132).

Conformingly, as "a social technology for connecting present and future" (Ingham 2004, p. 72), money ought to be intended as the mother of speculation. Indeed, when proprietors perform their monetary transactions, they implicitly look *towards the future* (Commons 1924, p. 4) and delude themselves into believing that they can master 'uncertainty'. It goes without saying that what they see is never what is necessarily going to happen, but merely what they want to achieve. For some, especially for those who are committed to servicing their debt and producing 'by the sweat of their brow', the final goal is emancipation or, *in exchange*, the *pro tem* possibility not to pay whilst consuming (time). For others, especially for those who have time to invest in the game of finance, it is more of a mundane fantasy of perpetual money-making. Either way, what everybody fails to see, or perhaps choose to ignore, is the material cost that many must incur or anyway charge for 'living the

dream' of owning (in fact, *owing*) without necessarily having to pay for it: debt without end.

Admittedly, by conceptualising money in these terms I am here calling for a tremendous re-consideration of what is today significant about it. For it is not true, as Ingham (2004, p. 12) asserts, that "something can only be issued *as money* if it is capable of cancelling *any* debt incurred by the issuer". Rather, something can only be issued as money if it is capable of *buying time* for both the issuer and the acceptor, by granting them the possibility to access historically-specific and contextually-contingent markets for debts. As a result, money cannot exist without the simultaneous existence of a *debt that it will never redeem* because of an underlying *conflict of interests* among proprietors that nonetheless converge on the necessity to keep the overall spiral of debt relations ongoing.

The theme of the financial conflict of interests calls for a third fundamental question: who or what are the *authors/agents* that are primarily involved in the historical making of money and how does this relate to the construction (qua commodification) of modern forms of sovereignty. As Ingham has already suggested at one point, "the rules [...] by which money is produced in the capitalist system depend, ultimately, on the willingness with which a state's debt will be accepted by an independent class of rentiers" (Ingham 2004, p. 144). In other words, the problem to get money accepted is not solved by resorting to the *ad hoc* violence of an undisputed taxing authority, but truly is a legitimate business, based on a negotiation of sovereignty. More specifically, it concerns an 'independent class of rentiers', namely *transnational financiers* that operate *through* states and markets. As a matter of fact, these actual agents do have a real *interest* (as calculated by means of discounting) in issuing money and then accepting it back, and the rationale for this interest can be found in *just about everything interesting happening in between* the opening and closing of accounts¹⁵.

Once again, what happens in this in-between 'bubble in time' is not production per se, but finance and speculation. Indeed, inasmuch as production constitutes an

¹⁵ I am here paraphrasing Graeber (2011, p. 122). His original statement was: "[d]ebt is what happens in between: when the two parties cannot yet walk away from each other, because they are not yet equal. But it is carried out in the shadow of eventual equality. Because achieving that equality, however, destroys the very reason for having a relationship, just about everything interesting happens in between".

'imperative' for those (workers and entrepreneurs) who are compelled to *service* their ongoing debts, it is no more than a 'going concern'¹⁶ - indeed a pecuniary interest - for those (financiers and speculators) who are able to *leverage* their position and empower their agency while the accounts are kept open and inflated. Precisely these players who have a concrete interest in 'making money', in the double meaning of producing and accumulating money in and of itself (*as value*), are also those who more than everybody else are actively 'making history' to their own advantage, and in their own image.

Accordingly, future studies in money and finance should refrain from reifying the pseudo-agency of the state and/or the market, because states and markets only provide an infrastructure for financial relations and as such carry no rationality in and of themselves¹⁷. Instead, more attention should be paid to the actual conflicts and negotiations occurring among proprietors - and especially among those who *make* money - and how these relations contribute to the shaping of modern forms of sovereignty and property¹⁸. In that respect, one should be very careful not to automatically subsume modern property relations under the rubric of creditor-debtor relations and, in turn, draw a logical identity between financiers and creditors. For in a system where a positive debt-to-equity ratio constitute the norm, so that debt in its various forms will represent "the most gigantic species of property" (Macleod 1883, p. 157), there can be no *net* creditor because as a matter of fact *everyone is indebted* as long as the 'illusion of liquidity' is kept in place. Hence, *the real struggle is among debtors themselves*, and especially among the most indebted of all debtors: first-world bankers and financiers. As we have once again come to realise in recent years, the intra-class conflict among these *too-big-to-pay* agents is literally carried at the *expense* of the rest of the world of petty debtors and non-proprietors (people at the extreme margins of capitalism who are unable to access any credit whatsoever), and in plain disregard of the sorts of future generations - the true creditors of the current

¹⁶ A going concern is a business that functions without the threat of liquidation - in this case, without the threat of illiquidity - for the foreseeable future. On the significance of this concept in reference to modern finance and capitalism, see Commons 1924; Palan 2013.

¹⁷ Ingham, by contrast, tends to reify the relationship between states and markets as one of opposing forces in a "balance of power" with each other, and it is not clear whether he considers the two as being held together in an abstract accounting relationship (as in one between public sector and private sector) or sees them as being governed by two distinct logics (one being political, the other being economic).

¹⁸ See for instance Kim's work (2014) on the connection between finance, modern identity and the historical emergence of the legal trust as a form of double ownership.

order of things.

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