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What Money Does
An Inquiry Into the Backbone of Capitalist Political Economy

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Abstract

The theory and critique of capitalism is back at the center of scholarly debate. With it comes a growing awareness of the analytical and political importance of money and money creation. Moving from the more systemic reflections of Karl Marx to more recent work on money theory by Geoffrey Ingham and in financial economics, the paper focuses on three of money's "deeds." As a social structure and process, it makes moneymaking through capital permeate all our societies. As a public-private partnership between the state, rentiers, banks, and taxpayers that has existed since the foundation of the Bank of England in 1694, it binds these actors together in shifting relations of dependence. In today's financial capitalism, what counts as money and how far moneyness stretches into the realms of financial innovation has been the core object of struggle in the public-private partnership of money. In conclusion, the paper discusses how contemporary money redistributes intra-socially and internationally.

Keywords: capitalism, Bank of England, derivatives, inequality, banks, US dollar, Marx, Ingham

Zusammenfassung

Kapitalismus und Kapitalismuskritik sind zurück im Herzen der sozialwissenschaftlichen Debatte. Dadurch rückt die analytische und politische Bedeutung des Geldes und der Geldschöpfung in den Fokus. Durch die Verbindung der Marx'schen Analyse des Geldes mit institutionalistischen Arbeiten Geoffrey Inghams und der jüngeren Finanzwissenschaft öffnet das Diskussionspapier den Blick auf drei zentrale „Taten" des Geldes: Als weltgesellschaftliche Struktur und Prozess ermöglicht das Geld das beständige „Geldmachen", indem Geld zu Kapital wird. Als *public-private partnership*, die seit der Gründung der Bank of England im Jahre 1694 zwischen dem Staat, Rentiers, Banken und den Steuerzahlern besteht, verbindet diese Partnerschaft diese Akteure durch historisch variable Abhängigkeitsverhältnisse. Im heutigen Finanzkapitalismus ist die Auseinandersetzung darüber, was als Geld anerkannt wird und wie weit sich „Geldhaftigkeit" auf immer neue innovative Finanzprodukte erstreckt, innerhalb dieser Partnerschaft des Geldes zentral geworden. Drittens zeigt das Papier auf, wie das zeitgenössische Geld innergesellschaftlich und zwischenstaatlich umverteilt und zu wachsender Ungleichheit beitragen kann.

Schlagwörter: Kapitalismus, Bank of England, Derivate, Ungleichheit, Banken, US-Dollar, Marx, Ingham

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What Money Does: An Inquiry Into the Backbone of Capitalist Political Economy

In times of crisis, people start looking for answers. In today's world, people have begun blaming immigrants and refugees, incompetent politicians, or greedy managers for their tumultuous lives. The recent rise of populists from both left and right, running on partly anti-capitalist agendas, indicates that capitalism itself has lost some of its lasting appeal. This has not translated into broader movements scrutinizing capitalism's foundations, but we are witnessing the early stages of a stronger focus on fundamental questions of social organization.

In some quarters, among these renascent efforts to grasp the bigger pictures of our contemporary world, money as the capitalist means and structure of *Vergesellschaftung* par excellence has begun to move to the center of attention (Ingham, Coutts, and Konzelmann 2016). Although still a highly complex issue to dissect, it is becoming more widely known that money institutionalizes and makes private property widely tradable, and – while also propelling broader economic growth and democratic participation in the past – has always been susceptible to entrenching a social organization that profits the rich more than the poor. In short, it is the "backbone" (Beckert 2016) of capitalist society and political economy.

Money is thus no longer taken for granted. And it has become politicized for everyone to see. German savers are angry at ECB president Mario Draghi because of low interest rates; the Greeks are scornful of German finance minister Wolfgang Schäuble; and China is trying to turn the renminbi into the next contender against the US dollar as world money. What is more, the Brazilians dislodged their elected president in part because of an economic downturn that came with a massive withdrawal of foreign funds from the Brazilian economy when the US Fed promised to raise its interest rates soon.

Given that various governments have been saving banks since 2007, the question of who calls the shots – the state, or money and capital markets with their key actors such as banks – has been posed with renewed rigor (Braun 2016b; Knafo 2013; Konings 2011). This discussion paper intervenes into this debate laterally by taking a conceptual and historical look at what money is and how it acts on and structures capitalist society and political economy. Since money is both a (global) social relation and a highly desired commodity – coming in varying forms, from cash to credit and more complex financial instruments – an inquiry into what money does has to find a way to make sense of both

I thank Benjamin Braun, Sam Knafo, Ingo Stützle, and Timo Walter for poignant critiques of previous versions of this discussion paper. I am also grateful to Tod Van Gunten and Marina Hübner, with whom I discussed money theory while I was a visiting scholar at the fabulous Max Planck Institute for the Study of Societies, and to Alban Werner for very productive exchanges at the RWTH Aachen.

the more structural and the agential features of money. It might seem counterintuitive to consider a government bond, for example, as endowed with agency, but I hope to make clear throughout this discussion paper that different forms of money indeed "do" something by helping to generate profits and to accumulate and redistribute wealth in concert with banks, funds, and high-net-worth individuals who deploy these instruments for their ends.

Moving from the general impact to the more specific forms of money I will argue, first, that money has always assumed a structural role in market exchange, but even more so once the intensity and competitiveness of economic interrelations picked up speed with the development of capitalism. With the rise of capitalism came a particular configuration of money creation in which state-finance relations became public-private partnerships. Three main actor groups – governments, rentiers and their banks, and the people – have since been arguing and fighting over money and its spoils. This struggle originates in the fact that capitalist money is a public-private partnership with redistributive powers. In the realm of business, inventing and investing new money forms has since provided the avant-garde of financial innovation with fantastic opportunities for profit. Pushing the boundaries of moneyness has been an essential pillar of these profit strategies. The concluding focus on money's distributive power between classes and wealth percentiles will highlight the very specific and tangible nature of what money does to inequality in contemporary capitalist society.

1 Money in the literature

For the first time since the 1920s and 1930s, money itself is being seriously debated in a variety of disciplines of the social sciences beyond economics. It has become clear that neither is it a "neutral" phenomenon, as the Monetarists around Milton Friedman had proclaimed (Ingham, Coutts, and Konzelmann 2016, 1247), nor does it really work in the way it has been assumed to work. The fact that central banks are expanding the supply of base money by hundreds of billions of dollars, and that inflation has, until recently, been nowhere to be seen has made many wonder whether conventional wisdom on things monetary still holds or has ever held (Braun 2016a).

Whether and how money matters in understanding how our societies are structured politically and economically has been a matter of fierce debate for centuries. Already called the "blood of the body politic" in fifteenth-century France (Desan 2014, 422–3), money was at the center of reflections on politics before the compartmentalization of the social sciences in the twentieth century fortified a division of labor between sociology, economics, and political science that relegated the study of money to economics. The legacy of Parson's theory of separate social systems operating according to their own logics has since loomed large (Streeck 2015, 6).

The investigation of what capitalist money does to capitalist societies can build on a long lineage of Marxist social inquiry. Since Marx's dictum that "the power which each individual exercises over the activity of others or over social wealth exists in him as the owner […] of money. The individual carries his social power, as well as his bond with society, in his pocket" (1867, 156f.), money and power have been investigated in Marxist discussions under the banner of "finance capital" (Hilferding 1920) and "monopoly finance capital" (Baran and Sweezy 1966; Foster and Magdoff 2009) or in the historical sociology of Giovanni Arrighi (2010). Value-theoretical discussions have been less concerned with power and politics, but have continued the conceptual discussions on money and value (Elbe 2012; Heinrich 1999; Milios, Sotiropoulos, and Lapatsioras 2013; Stützle 2015).

But not only Marxists stress the relevance of money to understanding the world of today. Economists of the twentieth century like Keynes and Schumpeter investigated capitalism as a money-based system, and money has since been an important component of the (margins of the) discipline of economics despite its turn to mathematical modeling (Bell 2001; Friedman and Schwarz 1971; Minsky [1986] 2008; Wray 2012; Werner 2014). Longstanding debates between "metallists" and nominalists, for example, have negotiated whether the value and price of money is intrinsic or based on some kind of convention.

Sociology has also had its share of productive research on money, tending to stress the cultural and symbolic over the material (Dodd 2014; Simmel 1900; Zelizer 1997; for an exception, see Ingham below). In his analysis of capitalism as a system based on "fictional expectations," Jens Beckert, for example, has recently restated that "money and credit are its backbone" (2016, 97).

International Relations, traditionally interested in inter-state behavior with the in-built aim of overcoming war and contributing to a less war-prone world society (Carr 1939), has paid very little attention to the role of money in the pursuit of global politics.[1] With its longstanding focus on interstate war, global governance as the study of international institutions, and more recently, the role of norms, political economy in general and money or capital in particular have had no place in the discipline of IR (Koddenbrock 2017). Polanyian kinds of analyses linking economic turmoil and the rise of fascism, which highlight that the state of social inequality – and monetary relations such as the gold standard – play a role in the chauvinism and aggressiveness of foreign policy (1944) have not been taken very seriously in the post-1945 study of world politics. The discipline's roots in the *Trente Glorieuses* of high growth and little conflict on the Euro-

1 Marxist IR, broadly speaking, has tended to mention money and capital in its historical materialist accounts without placing emphasis on it as a relevant explanatory relation for their interest in the rise of the state system or the uneven and combined development of world order (Altvater and Mahnkopf 1999; Anievas 2015; Anievas and Nisancoglu 2015; Burnham 1988; Cox 1987; Gill 1993; Teschke 2003; Rosenberg 1994; 2012).

pean and North American continents – the heartlands of the discipline[2] – provide parts of the explanation for this obvious neglect.

International Political Economy, the academic discipline that sprung from that particular negligence (Strange 1970), has been the natural home of analyses of the global political economy and the global monetary system (Cohen 2016). IPE has produced numerous innovative works on "the international organization of credit" (Germain 1997), the "power of money" (Cohen 2016; Kirshner 2003), and the important role of the state – and the American state in particular – as part of their core disciplinary research interest in understanding the logics and hierarchies of the global political economy (Braun 2016b; Desai 2013; Fichtner 2016; Germain 1997; Helleiner 2003; 2014; Knafo 2013; Konings 2011; Norfield 2016; Norloff 2014; Panitch and Gindin 2013; Seabrooke 2001; Schwartz 2016).[3]

Recently, political economists such as Martijn Konings, Samuel Knafo, and Benjamin Braun have begun to look at the intricacies of money itself in a more detailed fashion. Samuel Knafo, for example, has shown that the gold standard was in fact a technology of power, shaped and deployed actively by the British state for its ends (2013, 176). Contrary to Marxist scholarship, which tends to underline the power of financial actors, Knafo argues that in the Britain of the seventeenth to the early twentieth centuries, "the success of dominant financiers came from their flexibility in adjusting to new structures of governance" (Knafo 2013, 177). Similarly, Martijn Koning's study of the rise of American finance concludes that we should "not examine present-day financial change through a focus on the alleged tendency of gyrating markets to overwhelm public capacities, but rather as ongoing, contradiction-ridden processes of institutional construction" (2011, 154). Benjamin Braun, then, investigates the infrastructural power of the ECB and provides insights on the ways the ECB as a state body attempts to "exert market-based state agency" (Braun 2016b, 2). Braun shows that the ECB was affected by the infrastructural power of banks because in order for monetary policy to work, they had to revive the securities and repo markets instead of regulating them – something the banks were very keen to support (Braun 2016b, 17).

Linking to these existing political economy debates on the infrastructural power of finance and the relevance of global monetary relations in general, this paper asks: How does money affect the distribution of power and resources in advanced capitalist societies? Instead of asking, as others have insightfully done, what is the power of the financial sector (Braun 2016b), to what extent is there continuing US dominance over the global

2 For a critique of the Eurocentrism of this legacy, see Anievas and Nisancoglu (2015) and Tansel (2015).

3 In Comparative Political Economy, the focus on institutions as part of the debates about "varieties of capitalism" has produced a wealth of insights on national differences in regulating and organizing national political economies (Baccaro and Pontussen 2016; Hall and Soskice 2001) without contributing to a theory of capitalism as such (Streeck 2009, quoted in Sablowski 2013, 97), or, by extension, a theory of money including its global and transnational dimensions.

political economy, or what is the institutional infrastructure involved in these power struggles, this paper focusses on money itself in its most basic sense and how it partakes in the shaping of our societies.

2 What money does

The problem with studying money is that delimiting what is money and what is not is notoriously difficult. While some authors take great care to show that money and credit are very different and that money and capital are distinct, others will collapse these distinctions and focus on the similarities and equivalences between them. Crucially, the distinctions made in particular theoretical traditions have implications for their assessment of what money does to capitalist societies and the global political economy.

For the purposes of this paper, I will propose a three-pronged definition of money as first, the coeval structural and systemic core of capitalism, next to private property and the separation between capital and labor; second, a public-private partnership of circulating credit-debt relations; and third, as all kinds of financial instruments which express and make tradable the capitalization of future earnings and make it possible to generate profits from this capitalization.

Many approaches define money based on its three or four key functions, such as *numéraire*/money of account, store of value, means of exchange, and money as money – i.e., as a highly desirable commodity in itself (Altvater and Mahnkopf 1994; Amato and Fantacci 2012). While all of these matter, these functions do not exhaust the specific facets of what capitalist money does today. Our times of financialized, global capitalism have brought a proliferation of financial instruments whose "moneyness" – i.e., the degree to which they are accepted by both public and private institutions, how liquid they are, and to what extent they trade at par or play an integral role in capital accumulation – is fiercely debated. These instruments have allowed for particular wealth accumulation strategies both among individuals and households and between nation states in recent decades.

The analysis of what money is and does which I present in this paper is based on an engagement with three broad debates about the general and specific nature of contemporary capitalist money: first, Marx's and Marxist discussions of money. Marx provides the most compelling analysis of the systematicity of money and capital as self-valuating value but is trapped in a commodity view of money that accords too much importance to gold as the prime money commodity for our post-Bretton Woods times. Second, (neo-)chartalist money theory, as discussed here through the influential work of Geoffrey Ingham, provides an institutional and actor-oriented nuance which is in tacit conversation with more recent work in financial economics on the hierarchies of money and shadow money. Third, studies in the tradition of the "power theory of capital," developed by Jonathan Nitzan and Shimshon Bichler, whose work attempts to bring power back in and tries to find out who is able to profit from the workings of contemporary money and capital, and with which distributive effects.

This is obviously a partial inquiry into money as the "backbone" (Beckert 2016) of capitalist political economy, but given the breadth and history of this debate, all starting points will be necessarily hampered by their selection choices. However, this does not mean political science should not try to make inroads into this daunting complexity.

Money as dynamic social structure

Marx begins his chef d'oeuvre *Capital* with the world of commodities and money. The capitalist mode of production is, for him, about the production of commodities and their exchange for and through money. Money is first and foremost the general equivalent emerging from commodity exchange and propelling this exchange to new heights (1877). But money is also the prerequisite of capital – capital being money invested or spent to create more money. Capital, in this view, is a form of money (de Brunhoff 1976). With money-based capitalism comes the necessity to outcompete your competitors and the departure from more static forms of social organization.

Based on and further entrenching the legal institution of private property and the separation between capitalists (as those who own money) and workers (those who need to earn money to live), money as means of exchange, store of value, unit of account, and desired commodity in itself allows for the systematic expansion of capitalist life. As the universal equivalent of all commodities, it is the prime means of linking the production of surplus value through labor and its trade and accumulation in circulation. Without capitalist money, owners such as feudal lords would have had to continue to coerce people into working for them through direct force – slavery – or by paying them a subsistence wage. Thanks to money – invested with hope for profit as capital – capitalism has come about as a system which forces everybody who does not own enough assets or means of subsistence to sell his or her labor and time in order to live.

Money becomes a social structure because, as capital, it allows for a process of autonomization of value and thus a de-linking from what Marx considers to be the source of all value: labor. In the interpretation provided by Ingo Elbe and Michael Heinrich, there are several consecutive steps of autonomization that entrench money further and render it more impactful (Elbe 2012): first, value turns from the means to the end of exchange. With the store of value function that money can provide, value no longer aims for exchange but for its own increase. As "treasure" or "world money," however, it is not really autonomous yet. Only as capital, as continuously invested money to make more money (sometimes travelling via the world of commodities, other times not), does it assume the stability and ubiquity that turns money into a dynamic structure. It is structural because it permeates all societies and nation-states. It is dynamic because it is continuously in flux. There is nothing static about money as a quintessential global relation.

Marx convincingly underscores the crucial importance of money for contemporary capitalism but has provided comparatively little empirical detail (1867; 1877; 1894) on the institutional specifics – in contrast to his analysis of the work day or original accumulation, for example. His scattered notes on banks, credit, and world money have often been interpreted and given a coherent allure (de Brunhoff 1976; Milios, Sotiropoulos, and Lapatsioras 2013, 65ff.), but it is obvious from these attempts that Marxists are on their own when they want to deal with contemporary money. Marx's case for the systemic and structural role of money and for money as the basis of capital remains, but it requires complementary contemporary scholarship. Moving beyond the fundamental argument on money as a dynamic structure and global relation, the next section will focus on more recent attempts to make sense of what money is and does in (neo-) chartalist debates and financial economics.

Money as public-private partnership

Since the influential work of Knapp (1905) and its selective adoption by John Maynard Keynes (1930), chartalist theories of money have highlighted the role of the state in determining what money is and what is allowed to function as money. As Randall Wray, one of the prime proponents of Modern Money Theory, put it early on: "Money is, and always has been, a 'creature of the state' (quoting Lerner 1946)" (Wray 2000, 12).[4] Neo-chartalists refute the metallist and Marxist conviction that money emerged from exchange. For them, money existed for much longer as a money of account in which credits and debts were recorded. Because of this reading of history, money is primarily a credit-debt relation, while also being the quintessential means of exchange, as Marx had highlighted.

Curiously, there is very little interaction between chartalists and Marxists, although their premises are by no means incompatible. Money can both be a general equivalent and basis of capital and a credit-debt relation shaped by the state. As the Marxist money analyst Lucas Zeise puts it, "whether money was first a general equivalent or a credit-debt relation cannot be decided" (2010, 63, own translation; Milios, Sotiropoulos, and Lapatsioras 2013, 223–28). Obviously, the Keynes–Ingham tradition is an openly reformist and non-revolutionary tradition which might go a long way in explaining their mutual neglect.

The most recent and influential state theory of money was provided by Geoffrey Ingham (2004). The benefit of Geoffrey Ingham's theory of money is that it thinks back from our times of central banks and private bank-created fiat money and adds nuance

4 http://www.cfeps.org/pubs/wp/wp10.html.

to the general thrust of the Marxist argument on the fundamental relevance of money for explaining capitalism and inequality today. Ingham's analysis allows us to grasp money as a systemic global relation which is fought over by specific actor-groups. Ingham's money theory analyzes money as a fluctuating three-way partnership – which is sometimes more akin to a struggle – between the state, rentiers (and "their" banks), and taxpayers (2004, 131). The character of money is constantly negotiated among these three actor-groups. What counts as money at all, the amount of money in circulation, the interest rates at which it can be borrowed, the inflation rates at which it is devalued, and the amount of taxation that redistributes money between these three actor-groups are tenuous and the result of conflict.

For Ingham, the "transformation of privately contracted debts into money" (Ingham 2004, 135) has been at the heart of recent monetary history. In this view, money is a state-sanctioned means of final settlement. Money is money once it has been accepted by the state either as a means of market interaction or, crucially, as a means to pay taxes. In his work and that of many others in this tradition, the narrative revolves around the ways merchants and banks have continuously found ways of issuing new credit-debt instruments, such as notes on goldsmith vaults – and their survival depended on the ways the state allowed and even rendered official their use.

The core value of Ingham's conflict theory of money is that it highlights to what extent money is a "deal" between these actor groups, building on the creation of mutual dependence. The state depends on financiers and taxpayers, so it develops bureaucracies to maximize tax returns and govern efficiently. Financiers, in turn, depend on the probability that their credits will be repaid, and taxpayers depend on both the state and the rich for their well-being. In the past, rulers could be erratic and throw creditors into turmoil.[5] This happens occasionally even in our time, as seen in the surprising acquiescence to Lehmann Brothers' demise.

Following Keynes, for Ingham, money is a credit-debt relation linking the present and the future (2004, 72). Money existed in archaic civilizations and in all kinds of places across all of human history (Graeber 2011; Ingham 2004). What is unique to capitalist money since the "financial revolution" (Dickson 1967; Wennerlind 2011) at the end of the seventeenth century in Britain is its tradability and ease of expansion resulting from the close public-private partnership that the government and the landed and moneyed classes entered into for mutual gain on the back of taxpayers. Thanks to this partnership, money slowly gained the level of tradability and ubiquity needed for capitalist expansion (Carruthers 1996, 9ff.; Ingham 2004, 126–31; McNally 2014).

5 See Arrighi (1990, 103) on Edward II's default on Florentine debt in 1339, which was worth the annual Florentine production of cloth at the time.

The struggle over money, however, is not simply about who gets how much money and at what price or discounted at which inflation rate, but also about what counts as money at all. As David Graeber perceptively argued in *Debt – the First 5000 years*, "[M]oney has no essence. It's not 'really' anything; Therefore, its nature has always been and presumably always will be a matter of political contention" (2011, 372; see also Bjerg 2014, 88). This is evident in the key institutional innovation of central banking in the later seventeenth century, and it has been evident in recent decades in the struggle about what counts as money and what doesn't.

The history of the public-private partnership of money

The problem of money in early capitalism was its scarcity. In order for the production of commodities and the accumulation of wealth – in money – to take place, money cannot be scarce at any time. Until our age of bank money and an exploding plethora of money instruments serving to provide liquidity and leverage for money-makers' profits, scarcity of money was a frequent phenomenon. Scarcity was particularly acute until various forms of paper money and credit based on the public-private partnership inherent in central banks were installed. Often, conquest and war were animated by the desire to steal gold and precious metals serving to increase the money supply. The late seventeenth century in England brought a decisive breakthrough in the development of flexible and expansionary money needed to take capitalism to new heights through colonialism and industrialization.

One of the important launching pads for this expansionary partnership was the founding of the Bank of England in 1694. Its founding followed times of civil war and the Glorious Revolution and resulted from the aristocracy's need to invest their riches with a profit, from the desire of influential London merchants to expand the money supply by bringing into circulation new forms of money-like banknotes, and from the need of the King to raise funds for warfare against Louis XIV of France. The objective of merchants and the aristocracy "was to create a liquid and reliable monetary asset in environments where such assets were rare or unavailable" (Roberds and Velde 2014, 1). The king needed cash to fight the French.

England had been at war with Louis XIV for quite some time and ran into problems generating enough tax revenue. The idea hatched by a group of London merchants was to set up a private bank – not much more than an "investment trust" initially – and to loan 1.2 million pounds to the crown at 8 percent interest (McNally 2014, 12–13). This setup of the Bank of England allowed for a mutually beneficial deal: the king promised to tax enough in the future to pay interest every year, which was in the interest of the creditors. The promise to tax was further backed up by installing well-connected "receiver generals" in the royal tax office (Knafo 2013, 96). The government, in turn, received a handsome sum for war financing on the spot and only had to pay back a fraction because the loan came as a "permanent loan," an innovation of the day (Davies 2003, 259).[6]

It is obvious from this process of granting a monopoly based on mutually beneficial public-private partnership that the Bank of England was not initially devised for the people but for the crown and for investors' monopoly rents.[7] It was also a prerequisite for the colonial subjugation of many parts of the world by the British starting in the eighteenth century (McNally 2014), and it came with a substantial degree of internal violence because sanctions on forging money were draconian (Wennerlind 2011, 123–60).

Most relevant for today's time of exploding state debt, the public-private partnership of the Bank of England also installed for the first time a bond of "national" debt. No longer was the debt "personal" and only tied to the King and his erratic decisions (Cain and Hopkins 2001, 70–71, as quoted in Knafo 2013, 33; Davies 2003, 265; McNally 2014, 14). This "national" debt was designed to be permanent. Marx quipped about this "national" debt: "The only part of the so-called national wealth that actually enters into the collective possession of a modern nation is – their national debt" (1977, 919). Today, there are only four countries in the world without a national debt: "Brunei, Lichtenstein, Palau and Niue" (Di Muzio and Robbins 2016, 59). As Richard Dienst put it: "The collective that has become indebted to itself has become unbounded" (2011, 31).[8]

As will be discussed in the next section, the more widely used newly-developed money forms and instruments such as securities and derivatives have become the cornerstones of today's money. With the help of these instruments asset managers from banks to insurance companies and money market funds engage in asset liability management to maximize their profits. The quest for monetary innovation is thus always also a quest for profit, partaking in the transformation of money into capital.

The public-private partnership of money today

Under capitalism, continuous innovation in money forms originates in the drive to accumulate, to make more money through money and through these innovative instruments. Yet, expanding the supply of money and credit was already an integral part of capitalist industrialization. Railways and steel plants would not have been financed without the credit-debt instruments of capitalist money. Contemporary financialized capi-

6 A permanent loan means that the principal never has to be repaid but that creditors make a profit from the sum of annual interest paid on the loan.

7 See Gorton (2016, 21–23) for an interesting treatment of the role of state charters for banking in the UK and the US.

8 The government also tried to raise more war financing through the selling of government securities, which were mainly bought by large joint-stock companies like the colonial East India Company, which effectively became an important owner of the "national debt."

talism means that more and more of the demand for money as credit-debt comes from the financial sector and from moneymakers themselves. Financialization has meant that the expansion of finance as the constant and competitive valuation of assets and income streams has reached more realms of social life (Bryan, Martin, and Rafferty 2009; Krippner 2005; Heires and Nölke 2014; Milios, Sotiropoulos, and Lapatsioras 2013).

What counts as money is as relevant today as it was when the Bank of England was created, because new money forms always bolster the profits of their inventors and traders. In the early days of new forms of money, business deals are possible for the avant-garde which are not yet available to others. With the financialization of our political economies came profit strategies that made use of the fungibility and pervasiveness of money and capital in ever more creative ways. The multi-faceted financial instruments devised in the past and the new kinds of investors – from giant asset managers to special purpose vehicles (Thiemann 2014) – all serve to make profits through asset and liability management – a mixture of risk management and strategic planning – in dealing with the vagaries of capitalist money. The balance sheet is where profits are registered these days. So in order to reach satisfying profit rates, managing both sides of your balance sheet is crucial.

What counts as money and what does not matters for these practices of profit generation because the transferability of all kinds of financial instruments into state money (reserves), bank or credit money (deposits), or other forms of money (liquid securities and derivatives) is an important strategic component of profit-making. If a varied portfolio of different financial instruments, a.k.a. money forms, were not essential to profit generation in times of asset and liability management, moneymakers could simply rely on old-fashioned cash or bank-created deposits *tout court*. But they don't, because new money forms allow them to hedge risks, to speculate on the future, and to repackage and sell existing assets; they make expected earnings monetizable and capitalizable, and thus allow for further trade and exchange profits which cash would not offer.

Moneyness is thus a strategic factor in profit-making and capital accumulation. If we accord moneyness to all those instruments that make the repackaging of credit and other financial assets and liabilities and its capitalization possible, we arrive at an understanding of money that underscores the Marxian analysis of the structural importance of the money relation for capital accumulation that is up to speed with current financial innovations.

The quest for acceptability and thus for moneyness is at the heart of the discussion on "shadow" money and the hierarchy of money. The debate revolves around the possibility and usefulness of making distinctions between various forms of money and credit and on the processes of getting forms of money accepted (Bell 2001; Braun 2016a, 12–14; Mehrling 2012; Pozsar 2014; Sgambati 2016). As Hyman Minsky quipped: "Everybody can create money. The problem is to get it accepted" (Minsky 1986; Sgambati 2016). Paper money was an IOU (I owe you) first, and was accepted and monopolized by states and central banks step by step. We are witnessing the same process today. All kinds of new financial instruments flourish – designed to make money with money – and their acceptability and profitability is a matter of fierce competition.

Like Ingham, who argues that money is a credit-debt relation, and contrary to others who attempt to draw a neat distinction between credit and money (Beckert 2016; de Brunhoff 2015; Stützle 2015), leading financial economist Perry Mehrling argues that in a modern central bank system, "what counts as money and what counts as credit depends on your point of view, which is to say that it depends on where in the hierarchy you are standing" (2012, 3). Reserves are money everywhere, bank deposits are money for their customers, private IOUs only function as money among private individuals. In Mehrling's view, lower-rank forms of money – such as bank deposits – are accepted for settlement at one level of the monetary hierarchy (say, individuals) but merely represent credit at the level above, where banks must settle in reserves (2012, 1).

The public-private partnership of money allows for various strategies among the three broad actor groups involved today. Governments rely on banks and other money actors to create credit and stimulate growth. Governments also profit from low interest rates when their government bonds are among the attractive ones. Commercial banks – the quintessential moneymakers since the end of Bretton Woods – and other money dealers engage in asset and liability management which is part of "a type of finance commonly known as debt finance. The latter consists in a regime of fluid property relations whereby debts are routinely monetised and, consequently, can be readily traded as commodities and accumulated as capital" (Sgambati 2016, 6). Households – the people – play their role in the triangle of money creation as the main receivers of mortgage credit – for better or worse. Without bank money creation through mortgage credit, there would be a lot less growth in the money supply and there would be less money to leverage, securitize, and derive (Michell 2016, 7; Turner 2013, 11).

While the public-private partnership installed since the founding of the Bank of England remains, banks as operators of the payments system have accumulated privileges of money creation that have fared well under the radar of academic and political scrutiny.

Since the advent of fiat money with the end of gold and dollar backing in 1971, commercial banks have moved ever more toward the center of current powers of making money. More than 90 percent of circulating money is bank (broad) money which is created endogenously by commercial banks (Solte 2007). In terms of quantitative importance, banks clearly have to be in focus (see also Hardie et al. 2013; Seabrooke 2001; Schwartz 2016). Thanks to reigning accounting rules and bank regulations, commercial banks are able to write deposits into customers' accounts and onto their balance sheets more or less as they wish. Banks indeed create (bank) money by fiat and "out of nothing" (Binswanger 2015; Schwartz 2016; Werner 2014), but this "nothing" consists of a very specific institutional architecture. Putting this particular autonomy into the limelight is no longer an obscure statement, but is increasingly entering the mainstream of economic reporting (Wolf 2013).

The Bank of England, and even the Bundesbank have most recently acknowledged this fact (Braun 2016c; Bundesbank 2017; McLeay, Radia, and Thomas 2014), but it was quick to reassure readers that there are a number of important limits to the autonomy of banks' money creation, the most important of these being "monetary policy" – i.e., the interest rates the BoE charges and the effects it has on economic performance more broadly (McLeay, Radia, and Thomas 2014, 4). Since all available data point to a massive increase in the amount of bank money in the last decades, this notion of limits is in doubt. While Central Bank reserves still matter for transactions for which reserves are needed, the ability to create bank money, trade in bank money and to extend moneyness into the realm of securities and derivatives has allowed banks and other financial actors to be the avant-garde of new money forms and to generate profits from this liberty.

Money theorists agree that money is more than cash. Yet, how far into the realm of securities or derivatives moneyness reaches remains a matter of fierce debate (Bryan and Rafferty 2007; Gabor and Vestergard 2016; Judge 2017; Michell 2016; Milios, Sotiropoulos, and Lapatsioras 2013; Murau 2017; Ricks 2011; Zeise 2010). From the vantage point of money as a public-private partnership, this matter cannot be settled easily. If we accept that bank money is money close to the top of the hierarchy of money, we have to adjudicate how far down the hierarchy moneyness extends in order to better understand what money does to capital accumulation today.

There are attempts to define money as that which allows for the "final" settlement of contracts (Michell 2016), as liquidity (Amato and Fantacci 2012; Ricks 2011; Sgambati 2016), or as those financial instruments that "trade at par on demand" (Gabor and Vestergard, 2016; Pozsar 2014, 9). The most far-reaching case for derivatives as money comes from Dick Bryan and Michael Rafferty, who argue that derivatives are

> "behind the scenes" money, ensuring that different forms of asset (and money) are commensurated not by state decree (e.g. fixed exchange rates) but by competitive force. In this sense, the effect of derivatives is to merge the categories of capital and money: to bring liquidity to the market for financial assets, making all assets more like money, and to bring capital-like attributes to money – at the extreme, presenting money as itself capital. (2007, 153)

This means that just like in "securitization (indeed, more so because of the leverage implied), derivatives give a liquidity to capital as a social relation of value in movement" (Bryan, Martin, and Rafferty 2009, 467). How so?

With the help of securities and derivatives, moneymakers tackle liquidity and interest rate risk. They manage their balance sheets by dealing and holding assets and liabilities in a way that makes them accrue profit while keeping a sufficient part of them liquid enough. Given that cash and central bank reserves are in short supply, more complicated contracts of credit-debt capitalizing future earnings or hedging profit risks assume the role of greasing the machine of capital accumulation as money.

Securities are equities and bonds. They are claims of future income towards the corporation which the holder now partly owns through equities or towards the debtor who has promised to pay annual interest and principal at a later stage, as in the case of government bonds, for example. Securitization refers to the re-packaging of assets such as mortgages or student loans sold on as securities. Since they are based on existing assets, they are generally called "asset-backed securities" (Braun 2016b). Derivatives are contracts generating fee income for the seller and a potential income stream when the contractual event like the rising of interest rates or a decrease of exchange rate or other value related events materializes. The underlying assets from which the derivative was supposed to be "derived" neither have to be owned nor do they have to exist. These contracts or bets can be traded on their own. However, since they allow for hedging risk and making profits,

> derivatives allow different financial obligations to be traded and this helps to open up what sorts of obligations derivatives mobilise, and how financial derivatives are used to shift these obligations within and across commodity and financial asset boundaries.
> (Bryan and Rafferty 2006, 65)

Without going into all the difficult details of these financial products, their strategic importance for profit-making warrants calling them forms of money. While not cash, they partake in the logic of capital accumulation – the hoarding of value through money without being final means of settlement. From this vantage point, money is a liquid and relatively safe means of storing and exchanging value but, more broadly, it is also that which allows us to make profits in the financial realm. All financial instruments that play an integral role in moneymakers' profit strategies as part of asset and liability management should thus be considered to assume this role.

The process has remained the same for centuries: moneymakers and dealers seek new ways to make more money by devising new financial instruments which they can sell at a profit or use to manage their balance sheets in ways conducive to annual profits. For the necessary credibility and trustworthiness, an endorsement by the state is helpful but not essential. Because of its arsenal of executive powers – including the ability to impose and forcibly collect taxes – it can act as a material guarantor of a money instrument's future value. The public-private partnership of money entails a constant back and forth between rentiers and investors eager to profit and the state's willingness to promote them or slow them down. This, in turn, has implications for inequality between classes and wealth percentiles, which will be in focus in this final section.

3 Money and the redistribution of wealth

Banks and other financial actors don't only work for their managers' interests and their bonuses, but also for their clients. It is here that the distribution between classes and layers of society through capitalist money forms comes in. Those moneymakers who don't have banking licenses, like investment or hedge and mutual funds, cannot create money through credit in the way banks do; however, they constitute an important demand for new bank money and securities – with varying degrees of liquidity, but all functioning as money according to the understanding deployed here, as (also) a means to make profits from capitalizing future earnings. These securities, then, are primarily held by the 1 percent or the top 10 percent of household percentiles, and it is here that the privileges of money creation become directly relevant for the growth of inequality in recent decades.

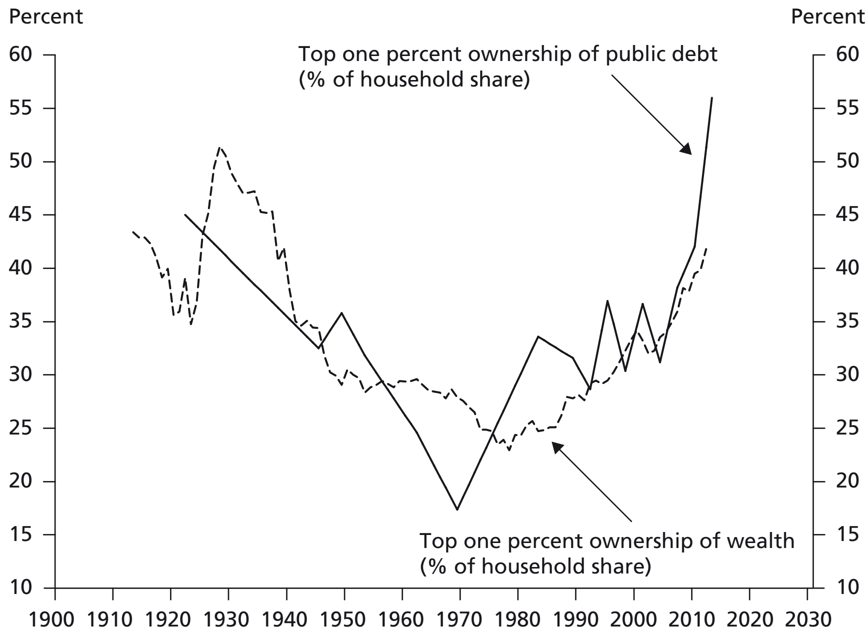
Much of the demand for the financial instruments and monetary innovations discussed above comes from institutions like banks or funds which are managing the stored wealth of high-net-worth individuals and successful corporations. The majority of the population is content with their good old bank notes or – if they have a bank account – their digital money in their bank accounts. Money thus not only is an important infrastructure of capitalist societies and a public partnership, but also re-distributes wealth between different layers of society.

Unfortunately, only very little data is available so far on who holds which forms of money, who profits from them, and to what degree. This final section thus provides a rough sketch of the sparse research on this subject.

Intra-social wealth redistribution through money

Thomas Piketty's milestone book *Capital in the 21st Century* brought research on global and national inequality back into the limelight. In International Political Economy, Jonathan Nitzan and Shimshon Bichler have consistently pursued their study of "capitalism from above" and have created empirical data on the growing role of big corporations and wealthy household in recent decades (2009; 2012). Emanating from Nitzan and Bichler's research program, recent work started after the 2007 crisis has provided useful evidence of the redistributive consequences of the growth of broad money and the resulting innovations in financial instruments (di Muzio and Robbins 2016; Hager 2015; 2016). Linking their work to the Occupy slogan of the 99 percent and the 1 percent, they are looking for evidence and theorization of the contemporary "bondholding-class" (Marx 1967).

Figure 1 The top percentile's share of the US public debt and net wealth



Wealth is total assets net of liabilities. Missing data on public debt are interpolated linearly by connecting adjacent observations. (Net wealth from Saez and Zucman, "Wealth Inequality"; public debt from Lampman, Top Wealth-Holders, Federal Reserve Survey of Consumer Finances, 1962–68, 1970–2010, IRS Personal Wealth Statistics for the top percentile's share of the public debt in 1969. www.irs.gov/pub/irs-soi/69inpwar.pdf.)
Source: Figure taken from Hager (2016, 41).

In his work on who holds the public debt in the United States, Hager shows that institutional investors have changed, and that the share of the top percentile has grown substantially, especially since the 2007 crisis: institutionally,

> over the past three decades widely owned pension funds have seen their share of the public debt fall drastically, while mutual funds, which are heavily concentrated in the hands of the top 1 percent of US households, have seen their share increase. The findings therefore point towards the emergence of a new aristocracy of finance, composed of giant money managers and wealthy households. (Hager 2015, 507)

The graph from his recent book *Public Debt, Inequality and Power*, reproduced as Figure 1 in this paper, illustrates the growing hold the 1 percent have developed over public debt.

Furthermore, the holding of particular kinds of financial assets is quite sharply distributed among household percentiles. Mostly the rich profit from the innovations in money forms, as indicated in the graph devised by Tim Di Muzio and Richard Robbins (2016), based on the work by economist Edward Wolff (2012; 2013), adapted in Table 1 in this paper.

It is obvious from this table that for 90 percent of the US population, the promises of financial markets and their money forms matter little. A large part of the elaborate edi-

Table 1 Total income-generating assets and debts by percentile of wealth, 2010

Asset type	Top 1 percent	Next 9 percent	Bottom 90 percent
Stocks and mutual funds	48.8	42.5	8.6
Financial securities	64.4	29.5	6.1
Trusts	38.0	43.0	19.0
Business equity	61.4	30.5	8.1
Non-home real estate	35.5	43.6	20.9
Total assets for group	50.4	37.5	12.0
Total debt for group	5.9	21.6	72.5

Adapted from Di Muzio and Robbins (2016, 114), based on Wolff (2012).

fice of contemporary financial markets and concomitant money forms exists to allow for existing wealth to be stored and to be increased. Without these monetary conduits, the rich would have to find other – possibly more productive – investments or consume more of their wealth.

In order to gauge the redistributive impact of the uneven distribution of money forms across households, it also matters which interest surplus these various instruments generate for income percentiles. With reference to the scarce work on the uneven distribution of interest returns – mostly by German Gesellians like Helmut Creutz and Margit Kennedy[9] – Robbins and Di Muzio show that, in sum, the bottom 80 percent transfer wealth somewhere else because of their share of interest-generating assets, and only the top 10 percent have a clear positive balance of interest payments (2016, 115).

Money is also a credit-debt relation, and the dependencies created in the process redistribute wealth. The fact that the 1 percent are now holding more of the public debt and control a higher share of interest-bearing financial assets indicates how money currently acts as a force of growing inequality. Some of that inequality has historically been removed through progressive taxation. And it is this counterweight that scholars like Piketty propose for today (2014).

The international redistribution of wealth through money

Not only do the current monetary order and the privileges of money creation re-distribute wealth between different wealth percentiles and classes, but they also do so between nations. Despite the attempts of American IPE to identify American hegemony in decline (Keohane 1984), the dominance of the USA over the global political economy

9 Next to "positive" money and "*Vollgeld*" proponents, there exists a small constituency of scholars and activists working with the thoughts of the German economist Silvio Gesell on "free land" and "free money." Gesell's main argument was that the interest system must be reformed and replaced by a negative interest rate system in order to make capitalism human again by increasing the amounts of money used for consumption and making money hoarding unprofitable (Gesell 1916). See Altvater (2000) and Zeise (2010) for a Marxist critique of this position.

has continued unabated until today (Fichtner 2016; Helleiner 2014; Panitch and Gindin 2013; Schwartz 2016). Capitalist money as global money redistributes internationally because of the role of the US dollar as world money and reserve currency.

As the only global monetary sovereign and largely unimpeded issuer of reserve currency, other states, particularly from the Global South, are forced to run into debt with either Western banks, Western governments, or international organizations like the IMF or the World Bank. While debt is not nefarious per se – since it can kick-start productive investments – debt can become an unbearable burden when interest payments increase at a pace higher than planned.

A debt trap can build up fast. In 1982, after Paul Volcker raised interest rates and made the dollar appreciate, it took only a few months for Mexico to announce bankruptcy (Schubert 1985, 139). Greece became unable to refinance its debt at acceptable rates very suddenly in 2010. A debt crisis came into being where few had expected it. The wealth of these societies is then drained by the forced debt repayments imposed by the IMF and the European Union.

Contrary to Keynes' idea of an Economic Clearing Union, which would have brought with it the global currency "bancor" – a money of account only (Amato and Fantacci 2012, 37) that would not have shifted in value unless collectively decided – the dollar's value is managed by the US government and the US government alone (Winecoff 2014, 90). The global consequences are not a primary concern for US monetary policymakers – although, occasionally, the interconnectedness of the global monetary order becomes threatening and leads to US intervention and/or support abroad (Helleiner 2014).

Although attempts at quantifying the "exorbitant privilege" enjoyed by the US have been inconclusive, the re-distributional power of global money in its current form is obvious (Eichengreen 2011). Countries in the Global South have learned that hoarding dollar reserves is an effective buffer against the self-centered money decisions made by the US government and central bankers (May 2013). These reserves, however, have to be earned and stored, which necessarily leads to massive amounts of reserves lying idle instead of being invested for productive purposes in those economies that would need them (Rodrik 2006).

The redistribution of wealth between the US and other countries worldwide, then, stems from the fact that these reserves are stored by investing in US government debt, which yields lower profits than the investments made by Americans abroad. Because of the fact that trade and oil are denominated in US dollars, and because of the safe-haven status of US government debt, countries are forced to invest in US dollar-denominated bonds. The US does not face this compulsion. Its companies can invest freely where they see fit.

The dominance of the US is, however, systemically needed. It is too easy to criticize the US for its quest to maintain hegemony. Given the weak state of aggregate demand, worldwide economic blocks like the EU and countries like China structurally depend on the willingness of US consumers to run into household debt and to consume the products produced overseas (Schwartz 2016). So when Perry Mehrling argues that "the Fed is essentially hybrid, both government bank and banker's bank, and also both US central bank and global central bank. The great challenge of the present time is the politics of managing the hybrid reality of the global dollar system" (Mehrling 2016a), he conjures up not only the central role of the US for global monetary relations, but also the inevitable fact that all nations and societies worldwide have to face the challenge of money as a global relation together.

4 Conclusion

Money impacts our societies and nation-states in multiple ways. At its most encompassing, it structures all capitalist societies because it allows for and nurtures the quest for ever-increasing profit and accumulation. Capitalist money has also been a very specific public-private partnership since the seventeenth century. This partnership has been profitable to both the state and the moneyed classes, and to a certain degree to the majority of taxpayers, but the balance of power in this three-way struggle has always been susceptible to imbalances. In recent decades, the increasing privileges of the banks and the ability of the capitalist class to fend off taxation have contributed to levels of inequality not seen since the interwar years. At the same time, the dependence on the US dollar creates substantial economic and political costs for the rest of the world and continues to redistribute wealth from the rest of the world to the US.

The broad understanding of money advanced in this discussion paper serves to highlight both the systemic and structural role of money in capitalist social relations and underlines the fact that thanks to money and with money, particular accumulation and profit strategies can be devised. Today's derivatives and securities assume the role that paper money played in the past. The avant-garde of capitalist profit-making is allowed to accumulate and profit through these novel forms of money. Gold and cash were never enough to satisfy the liquidity, predictability, and exchangeability needs of fluid private property relations. Our money-based capitalist political economy will always generate new money forms, greasing the machine of capital accumulation. Which importance these forms of money are allowed to gain and how complex they become depends on the willingness of the state to accommodate them, as money and moneyness continue to be public-private partnerships, driven largely by private profit desires.

Capitalist money has entrenched a social distribution of power that is heavily skewed towards those who are able to create, mobilize, and control large swathes and chunks of money. Money creation through credit and debt is largely in the hands of private actors such as banks and their depositors and investors. Interest rates have been uncapped and perpetuate this inequality automatically.

In order to start shifting the balance of power inherent in the longstanding public-private partnership of money, nation-states and individuals would have to engage in collective and encompassing defaults and debt strikes, deal with the economic turmoil resulting from this, and start afresh with more public control over the money supply and less permissive approaches to interest (Di Muzio and Robbins 2016).

However, at its most fundamental level, capitalist money has entailed a relation of indebtedness to the moneyed classes since its inception, so the impact of these reforms would be rather slim. After all, the capitalist class' influence is rooted in the system of private property: without tackling that system, no version of monetary reform will make wealth inequality history.

Money has fared well under the radar of progressive politics and social science for a long time. The evidence on who profits from the way money currently works is plentiful. To counteract the strategies employed by moneymakers in the last 350 years, this evidence should be applied to policy-making and nurture the scant mobilizations around monetary affairs that we have witnessed so far. The discussions about the promises and pitfalls of a coercive currency like the euro are a useful start. Who profits how much from capitalist money is a matter of social and political struggle, and there is no reason to believe that the ease with which the upper classes have made money work for them in the last decades should continue unabated.

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