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THE SOCIOLOGY OF MONEY AND ECONOMICS: TOWARDS AN INTERDISCIPLINARY SYNTHESIS OF RESEARCH ON MONETARY PHENOMENA

ABSTRACT

This article argues that the long-standing divide between economics and the sociology of money is real but bridgeable, and that the bridge has a specific location: heterodox economics read through a sociological theory of money as a social relation. I reconstruct the divide along three planes of tension. The epistemological plane concerns what money is: a functional instrument reducible to its uses, or a social relation of credit, trust and power. The methodological plane concerns how money is known: through formal modelling of measurable variables, or through interpretation of meanings and practices. The plane of analytical level concerns where money is studied: in macroeconomic aggregates, or in households, organisations and circuits. Three empirical cases – household earmarking, credit markets and the 2008 crisis with its aftermath of quantitative easing – are used not as illustrations but as tests, each assigned to one plane. On this basis I propose a sociological economics of money: a research programme with defined theoretical boundaries (money as institutionally designed, relationally earmarked and politically produced), explicit methodological requirements (sequential and nested mixed-method designs that link meanings to aggregates) and concrete research implications, spelled out in two illustrative research designs on earmarked public transfers and on central bank digital currency. The assessment of heterodox traditions is deliberately even-handed: Post-Keynesian and Modern Monetary Theory supply the most compatible account of endogenous money, yet they inherit a state-centred functionalism that a sociology of money must correct. The conclusion specifies empirical sites – CBDCs, cryptocurrencies and informal monetary systems – where the proposed synthesis can be falsified.

KEYWORDS: *sociology of money, monetary economics, earmarking, heterodox economics, mixed methods, central bank digital currency*

INTRODUCTION

Money constitutes one of the most fundamental yet theoretically contested phenomena in the social sciences. For more than a century economists and sociologists have debated its nature, functions and social consequences, and the debate has more often produced mutual misunderstanding than synthesis. The more money became a universal social medium, penetrating ever deeper into the fabric of modern societies, the more clearly the divergences in its conceptualisation between disciplines came into view (Simmel, 2004; Zelizer, 1994). Friedland and Robertson diagnosed the asymmetry a generation ago: the social sciences gravitate to the marketplace partly because of *the success of one*

discipline, and of one doctrine within that discipline, neoclassical economics, in asserting the primacy of the market as the most important economic institution, in constituting it as object of enquiry, and in monopolizing its analysis (Friedland & Robertson, 1990, p. 3). Sociology has since returned to economic behaviour with the conviction that *economic conventions are much like family or religious conventions* (Dobbin, 2004, p. 1). Money is the terrain on which these two programmes collide most directly.

The contemporary renaissance of interest in the sociology of money, particularly intense since the late twentieth century, relates not only to transformations of monetary systems themselves – financialisation, the proliferation of digital payment platforms, the emergence of cryptocurrencies and the design of central bank digital currencies – but also to a crisis of economic paradigms. The 2008 financial crisis and its protracted social and political consequences exposed critical limitations of models predicated on actor rationality and market equilibrium, and opened intellectual space for more sociologically oriented approaches (Dodd, 2014; Knorr Cetina & Preda, 2005). The scale of the policy response was itself a sociological fact: by 2013 the Bank of England alone had spent around £325 billion on quantitative easing, while the European Central Bank had lent at least €1.1 trillion directly to banks (Dodd, 2014, p. 2). Such numbers are not easily reconciled with the image of money as a neutral veil.

This intellectual shift has been accompanied by profound transformations in money itself. The decline of cash, the ascendancy of algorithmic trading, the appearance of cryptocurrencies and the increasing abstraction of financial instruments have rendered money simultaneously more pervasive and more enigmatic. These developments have exposed the inadequacies of approaches that treat money as a stable, given category, while vindicating sociological emphases on its malleability, social construction and institutional embeddedness (Maurer, 2006; Bandelj, Wherry, & Zelizer, 2017).

The central research question of this article concerns the relationship between the sociology of money and economics: what are the fundamental epistemological, methodological and theoretical differences between these disciplines in conceptualising money, and what possibilities exist for productive interdisciplinary synthesis? My hypothesis is that while genuine tensions exist – rooted in divergent assumptions about rationality, social construction and the nature

of monetary value – a space of complementarity can be identified, most clearly within the heterodox traditions of economics, provided that these traditions are themselves read critically rather than adopted as an alternative orthodoxy.

The article pursues three objectives. First, to reconstruct and critically analyse the differences between economic and sociological conceptions of money, organising them along three planes of tension. Second, to use three empirical cases as tests of those planes rather than as decoration. Third, to specify a framework I call the *sociological economics of money*: its boundaries, its methodological requirements and two research designs that would put it to work. The conclusion turns from restatement to agenda, naming the sites – central bank digital currencies, cryptocurrencies and informal monetary systems – where the framework can be confronted with evidence.

RESEARCH METHODS

This study employs theoretical analysis and critical literature review as its primary methods. The analysis encompasses classical foundational texts in both disciplines – Smith, Mill, Keynes, Simmel, Weber and Mauss – as well as contemporary scholarship in monetary economics, economic sociology and heterodox economics. The selection of sources prioritised works that have shaped disciplinary approaches to money, alongside recent contributions that address financialisation, digital money and the post-2008 transformation of central banking.

I treat epistemological assumptions not as neutral background conditions but as active components shaping what counts as *money* within each discipline. Particular attention is devoted to implicit assumptions regarding rationality, social construction, institutional embeddedness and the relationship between the monetary and the *real* economic spheres. Methodological divergences are analysed through the characteristic research strategies of economics (formal modelling, econometric analysis) and sociology (ethnographic observation, interpretive analysis of meanings, relational analysis of circuits).

Two procedural decisions deserve explicit statement. First, the three planes of tension are used as an analytical grid: each empirical case discussed below is assigned to one plane and is read for what it reveals about that plane

specifically. Second, the assessment of economic traditions applies the same standard to orthodoxy and heterodoxy alike. The question asked of each is not whether it is sociologically congenial but whether its account of money survives confrontation with the evidence on monetary differentiation, credit and crisis.

THE ECONOMIC CONCEPTION OF MONEY: FUNCTIONALISM, EQUILIBRIUM AND ITS INTERNAL CRITICS

In the canon of economic theory money is defined primarily through its functions – a definitional strategy that reveals much about the discipline's orientation toward practical utility and instrumental reason. The classical triad of medium of exchange, measure of value and store of value has constituted the conceptual core of money since Smith and Mill (Mill, 1848). This functionalist perspective, though seemingly self-evident, carries epistemological implications that shape the entire edifice of monetary economics.

Money appears here as an instrument that reduces transaction costs in exchange economies – a technological solution to the limitations of barter. The famous problem of the double coincidence of wants is overcome through a universally accepted medium facilitating indirect exchange. On this view the nature of money is secondary to its utility; efficiency in performing assigned functions matters more than the social conditions of acceptance (Keynes, 1930). Money is valued for what it does, not for what it is or represents. The specific material forms it takes – cowrie shells, precious metals, paper, digital entries – are treated as matters of historical contingency rather than theoretical importance.

Contemporary monetary economics, despite significant internal differentiation ranging from Friedman's monetarism through the new neoclassical synthesis, largely maintains this functionalist orientation (Friedman, 1968). Whether money is treated as an exogenous variable controlled by monetary authorities or as endogenously created by the banking system, it is conceptualised as an element amenable to mathematical formalisation. Dynamic Stochastic General Equilibrium models represent the culmination of this approach. Dominant in central banking, they treat money as a variable within equation systems describing the interactions of rational, forward-looking agents (Galí, 2008).

Two further assumptions complete the picture: the long-run neutrality of money, according to which changes in the money supply affect nominal prices but not real variables such as output or employment (Lucas, 1972), and the rationality of actors, modelled as utility maximisers with rational expectations (Becker, 1976). The *as if* methodology – modelling people as if they were rational optimisers while knowing that they are not – provides the epistemological justification (Friedman, 1953).

A fair assessment must register what this apparatus achieves. DSGE models are not naive; the generation after the New Keynesian synthesis incorporates sticky prices, financial frictions and heterogeneous agents, and the discipline has steadily relaxed its behavioural assumptions. Morduch, writing as an economist, observes that *most economists no longer rigidly adhere to the assumption that individuals are fully rational, calculating beings* and that behavioural economics has taught them to acknowledge *cognitive biases, difficulties following through on plans, unresolved internal conflicts, and rules of thumb that get used in place of precise optimization* (Morduch, 2017, p. 33). The neutrality thesis, moreover, is a long-run proposition, explicitly contested within economics by Keynesians of every stripe; Ingham's complaint that orthodoxy insists on rigorously controlling something it declares to be without efficacy (Ingham, 2004, Introduction) is one that many monetary economists would accept. The critique that follows therefore targets not the competence of economists but a specific epistemological commitment: that money can be fully described by its functions and modelled independently of the social relations that constitute it.

There is a further twist that complicates any simple opposition of a *descriptive* economics to a *constructivist* sociology. Economic models do not merely represent monetary processes; they help to produce them. In MacKenzie's formulation, *in Barnesian performativity, an effect of the use in practice of an aspect of economics is to make economic processes more like their depiction by economics* (MacKenzie, 2007, p. 56). Blyth makes a parallel claim for macroeconomic ideas, which serve agents as *weapons* to delegitimize existing institutions and as *blueprints* for building new ones (Blyth, 2002, pp. 35, 40). If this is right, then the sociological critique of economic reductionism is also a critique of a practice with institutional consequences – a point to which the discussion of the 2008 crisis will return.

THE SOCIOLOGICAL CONCEPTION: MONEY AS FORM, RELATION AND DESIGN

The sociological conception of money, inaugurated by Simmel's *Philosophie des Geldes* (1900), proposes a radically different framework. Simmel analysed money not as a neutral instrument but as a social form that transforms the structure of interpersonal relations and the character of modern culture. Money simultaneously embodies and drives the rationalisation process characteristic of modernity – the progressive subordination of qualitative differences to quantitative equivalence (Simmel, 2004). Yet Simmel also grasped something that commodity theories of money miss: *money is only a claim upon society* (Simmel, 2004, p. 177). Weber located the same calculating ethos at the foundation of capitalist enterprise, which he described as rationalised through strict accounting calculation, planned and soberly oriented toward the pursuit of economic success (Weber, 2011, pp. 100–101; my translation). For both, money is the medium through which calculation becomes a way of life.

Contemporary sociology has deepened these insights while challenging some of their conclusions. Zelizer demonstrated through historical and ethnographic research that money is far from the homogenising force Simmel described. Her claim is stated without hedging: *There is no single, uniform, generalized money, but multiple monies: people earmark different currencies for many or perhaps all types of social interactions* (Zelizer, 1994, p. 18). Earmarking is not an individual quirk of budgeting but a social process: *money is attached to a variety of social relations rather than to individuals* (Zelizer, 1994, p. 25), and *the earmarking of informal monies is a phenomenon as powerful as the official creation of legal tender* (Zelizer, 1994, p. 21). In her later work the concept is generalised as relational work: *When we earmark money for our child's college fund, for example, we are affirming our parental relationship to that child* (Zelizer, 2011, p. 90). Zelizer's position is deliberately placed between two rival doctrines – the *hostile worlds* view, which treats money and intimacy as mutually contaminating, and the *nothing-but* view, which reduces every intimate transfer to market exchange – in favour of a *connected lives* account in which people actively negotiate the meaning of payments (Zelizer, 2005, pp. 20–22).

Ingham develops a complementary approach from the opposite direction. Where Zelizer begins with practices, Ingham begins with the ontology of money as such: *Money is a social relation of credit and debt denominated in a money of account* (Ingham, 2004, p. 12). Money is a claim on resources backed by institutional arrangements spanning private banks, central banks and ultimately state power. This challenges both metallism and simple chartalism: money's value depends not on intrinsic properties but on the strength of institutional arrangements – on trust, political authority and the credibility of issuers. Ingham also notes, with some irritation, that heterodox economics points implicitly to money as a social relation but has not fully developed the idea, while sociology has largely ignored it (Ingham, 2004, ch. 3). Dodd pushes the ontological claim one step further: *money is a process, not a thing: it consists of social relations, and shared understandings are crucial to these* (Dodd, 2014, p. 272) – a process that is *inextricably social, inherently dynamic, complex, and contradictory* (Dodd, 2014, p. 88). Desan's constitutional approach closes the circle from the legal side. Whereas Zelizer assumed an apparently colourless object in order to show how people colour it in use, *the constitutional approach asserts that money is colored from the start* (Desan, 2017, p. 110): societies design money's internal structure, and that design shapes markets and even the way money is conceptualised.

Taken together, these contributions converge on a point that economics typically leaves implicit: the entanglement of money in power relations. Control over the creation and distribution of money is a fundamental social power, shaping hierarchies and life chances (Carruthers & Babb, 1996). Trust, in turn, is the condition of monetary systems: fiduciary money rests not on material value but on collective confidence in acceptability (Cohen, 1998). This trust is not a simple psychological variable but a social construct sustained by institutional infrastructure, routine practice and cultural narrative. Monetary crises are collapses of this multilayered trust, revealing a fragility that economic theory tends to take for granted.

THREE PLANES OF TENSION

The preceding reconstruction can be condensed into three planes on which the disciplines diverge. They are analytically distinct, though empirically intertwined, and I will use them as the grid for the empirical cases that follow.

The first is the epistemological plane: what is money? Economics assumes theoretical transparency – once the functions are understood, the essence is grasped – and functional reducibility. Sociology emphasises social construction, institutional design and the irreducibility of meaning. The test case is fungibility: if money is a homogeneous instrument, equal sums should be interchangeable; if it is a social relation, they will not be.

The second is the methodological plane: how is money known? Economics proceeds as if the social world were epistemically transparent, knowable through models that map statistical regularities (Friedman, 1953). Sociology, especially in its phenomenological and constructivist traditions, emphasises the constitutive role of meanings and interpretations, which makes social reality partly opaque to observers equipped only with quantitative categories (Berger & Luckmann, 1966; Geertz, 1973). The test case is credit: the moment at which trust is converted into a number.

The third is the plane of analytical level: where is money studied? Monetary economics focuses on macroeconomic relationships between money supply, inflation, interest rates and output (Woodford, 2003); the sociology of money operates at the meso – and micro-level of households, organisations and circuits. The test case is crisis: an event in which micro-level meanings and macro-level outcomes are visibly coupled.

EMPIRICAL TESTS OF THE THREE PLANES

EARMARKING AND THE EPISTEMOLOGICAL PLANE

Household-level research provides the sharpest test of money's claimed homogeneity. Zelizer's archival work on the United States between the 1870s and 1930s documents families distinguishing between streams of income – wages, pin money, gifts, relief – and treating them as morally non-substitutable despite their formal equivalence. The case of poor relief is instructive because

here the earmarking was imposed from above rather than negotiated from below. Charity organisations and public agencies long resisted unrestricted cash support; when cash relief was finally adopted in the early twentieth century, *cash relief was still treated as a very different kind of money from a wage. The poor, after all, were not ordinary consumers* (Zelizer, 1994, p. 123). Unlike the domestication of family money, the earmarking of relief was bureaucratically prescribed, and welfare workers undertook the reform of family budgets with the zeal formerly spent on family morality (Zelizer, 1994, p. 124). The lesson generalises: *Earmarking, in short, lies at the heart of economic processes* (Zelizer, 1994, p. 208).

What makes this a test rather than an anecdote is that economics has produced its own account of the same phenomenon. Mental accounting theory, developed by Thaler, Kahneman and Tversky, undermined fungibility from within economics by demonstrating a pervasive range of monetary distinctions (Thaler, 1985; Bandelj et al., 2017, p. 5). The two explanations differ precisely on the epistemological plane: mental accounting locates the distinctions in individual cognition, relational earmarking in social ties and moral obligations (Bandelj et al., 2017, pp. 5–7). The evidence from the US Financial Diaries project – which *set out to track every dollar that 235 households earned, spent, borrowed, saved, and shared over the course of a year* (Morduch, 2017, p. 28) – is decisive on one point: earmarking of particular income sources, not merely of accounts, is common, especially where resources are scarce, and it *can serve as 'data' on social norms and relationships within households* (Morduch, 2017, p. 35). The welfare-state literature points the same way at a higher level of aggregation. Esping-Andersen's concept of de-commodification – *when a service is rendered as a matter of right, and when a person can maintain a livelihood without reliance on the market* (Esping-Andersen, 1990, pp. 21–22) – implies that transfers framed as earned entitlements and transfers framed as means-tested assistance carry different social meanings even when the sums are identical, and that these meanings are built into the architecture of welfare regimes rather than added by recipients. The epistemological conclusion is that fungibility is socially regulated rather than economically given. Money is differentiated at the point of issue (Desan), at the point of distribution (Esping-Andersen) and at the point of use (Zelizer). No functionalist definition captures all three.

CREDIT MARKETS AND THE METHODOLOGICAL PLANE

If earmarking tests what money is, credit tests how money is known, because credit is the institutional site at which an interpretive judgement – can this person be trusted to repay? – is converted into a quantitative one. Carruthers describes the operation with precision: *credit earmarking is preceded by a classificatory and evaluative process that relies on financial information and formal credit scores*; lenders have also relied on social heuristics such as gender, race, ethnicity and marital status, and *to be deemed creditworthy was a form of social honor* (Carruthers, 2017, p. 77). The credit score is thus a hybrid object: it looks like a measurement but functions as a classification, and its history is one of social categories being first encoded into, and then partially displaced by, statistical scoring. Guseva and Rona-Tas add the observation that digital payment leaves permanent traces: *If money talks, plastic money tattles* (Guseva & Rona-Tas, 2017, p. 203), opening possibilities for surveillance and social control at both macro and household levels.

The same conversion operates at the level of states. Soederberg shows how, after the collapse of Bretton Woods, *signalling creditworthiness and demonstrating the investment potential and benefits of a country have become the overriding preoccupations of governments* (Soederberg, 2006, p. 12), with social spending cut in the name of remaining creditworthy in the global economy. Streeck's distinction between the Staatsvolk – the general citizenry – and the Marktvolk – the people of the market, bound to the state as creditors rather than as citizens – captures the political form of this dependence: the debt state must take care to gain and preserve the confidence of its creditors, whose assessment of risk is expressed in interest rates (Streeck, 2017, p. 80). Harvey's Marxian reading supplies the structural background: government debt is *the ultimate in fictitious capital as far as Marx was concerned*, and yet *fictitious capital is as necessary to accumulation as fixed capital itself* (Harvey, 2006, pp. 268–269).

The methodological conclusion is twofold. Quantification is not the opposite of interpretation but its institutionalised form: a score is a frozen interpretation that has acquired the authority of a number. Consequently, a purely quantitative study of credit allocation can measure outcomes but cannot explain the classificatory work that produces them, while a purely interpretive study can describe that work but cannot establish its aggregate distributive

consequences. Neither method is dispensable; the question is how to sequence them, which I address below.

THE 2008 CRISIS AND THE PLANE OF ANALYTICAL LEVEL

The crisis of 2008 and the decade of unconventional monetary policy that followed test the third plane because they expose the coupling of micro-level meanings and macro-level outcomes. Krippner's account of the political origins of financialisation – *the tendency for profit making in the economy to occur increasingly through financial channels rather than through productive activities* (Krippner, 2011, p. 4) – shows that the macro-structure was produced by a sequence of political choices in which policymakers sought to depoliticise monetary policy by *following the market*, thereby placing control over credit expansion *in the hands of a particularly lax master* (Krippner, 2011, pp. 25, 109). What looks in the aggregate data like an impersonal structural shift was, at the level of the Federal Reserve's deliberations, a series of attempts to avoid responsibility for distributive conflict (Krippner, 2011, p. 140).

The policy response reversed the direction of causation. Quantitative easing – begun in March 2009 with the Federal Reserve's purchase of \$1,750 billion of government bonds and mortgage-related securities and the Bank of England's purchase of £200 billion (Dodd, 2014, p. 130) – stabilised financial systems but also inflated asset prices, benefiting holders of financial capital disproportionately. Dodd observes that, after several episodes of QE, deflation rather than inflation remained the prevailing concern and that the *temporary* purchases increasingly looked permanent (Dodd, 2014, p. 131). The macro-level intervention thus reshaped the micro-level distribution of wealth, and did so through a reconfiguration of what state money is: in Harvey's terms as read by Dodd, the replacement of privately created fictitious capital with state-backed money, collectivising private risks through the monetary system (Dodd, 2014, pp. 70, 88).

Helleiner's contribution is to show that the Zelizerian argument need not stop at the household door. His analysis of nationalist values in the construction of territorial currencies in the nineteenth century demonstrates that Zelizer's critique of utilitarian models of money *is relevant not just at the micro level she analyzed but also at this more macro (national) level* (Helleiner, 2017, p. 149).

The conclusion for the third plane is that the micro/macro divide is not a division of labour between disciplines but a property of monetary phenomena themselves, which are produced at one level and experienced at another. A theory that cannot travel between levels will misdescribe both.

HETERODOX ALTERNATIVES: AN EVEN-HANDED ASSESSMENT

Although often portrayed as incompatible, the sociology of money and economics do not exhaust their explanatory potential when kept apart. Heterodox streams of economics provide the most promising space for dialogue. But each must be assessed by the same standard applied to orthodoxy above.

Institutional economics, particularly in its new-institutional form, recognises the role of institutions in shaping transactions and reducing uncertainty (North, 1990; Ostrom, 1990). Its compatibility with sociology is real but limited: institutions are typically modelled as constraints on pre-given preferences rather than as constitutive of actors, which leaves the epistemological plane untouched. Hodgson's original manifesto for institutional economics (Hodgson, 1988) and his later reconstruction of capitalism as a legal-institutional order (Hodgson, 2015) move closer to the sociological position, as does Pistor's argument that law itself *codes* assets into capital (Pistor, 2019).

Behavioural economics has systematically dismantled the rationality assumption (Kahneman & Tversky, 1979; Thaler, 1985). Here the dialogue is already under way, and Morduch's chapter in *Money Talks* is a model of what it can look like: reading behavioural savings experiments through Zelizer *directs attention to particular parts of their study designs*, revealing that interventions attributed to commitment features also work by evoking social meanings and earmarks (Morduch, 2017, p. 34). The limitation is symmetrical: behavioural economics remains methodologically individualist, so that the relational and moral dimensions of earmarking are visible to it only as *anomalies* (Bandelj et al., 2017, p. 9).

Post-Keynesian monetary theory and Modern Monetary Theory (MMT) propose the account of money most compatible with the sociological one. The recognition that money is created endogenously by the banking system in

the process of extending credit, rather than exogenously controlled by central banks, opens space for analysing the social and political determinants of monetary policy (Lavoie, 2014; Wray, 2015). MMT adds a chartalist emphasis: the state creates demand for its own currency by imposing tax liabilities, treasury spending adds to bank reserves and taxation drains them, so that fiscal policy determines the quantity of money while monetary policy merely sets overnight interest rates (Dodd, 2014, pp. 106–107). From a sociological perspective this makes distribution and power central to monetary theory, and positions fiscal and monetary capacities as socially and politically constructed outcomes rather than technical constraints.

Three reservations are nonetheless necessary, and the first version of this article did not state them clearly enough. First, MMT inherits a functionalism of its own. It explains the acceptance of state money by the tax liability – *taxes drive money* – which is an answer to the question of why money circulates, not to the question of what money means to those who use it. In Dodd's reading, the neo-chartalist account is precisely the view that Bitcoin, complementary currencies and other non-state monies put under strain, because the era in which money was defined by the state is ending (Dodd, 2017, p. 234). Ingham's critique of modern neo-chartalism makes the complementary point that a state theory of money needs a sociology of the state's credibility, which the theory itself does not supply (Ingham, 2004, ch. 2). Second, MMT's policy claims are contested within heterodoxy. Lavoie's synthesis of Post-Keynesian economics treats the consolidation of treasury and central bank as an accounting simplification rather than an institutional description, and Palley has argued that MMT understates inflationary and exchange-rate constraints that bind sovereign currency issuers outside the reserve-currency core (Lavoie, 2014; Palley, 2015). Third, the empirical record is ambiguous. The experience of 2009–2021 confirmed the Post-Keynesian expectation that large-scale reserve creation need not be inflationary; the experience of 2021–2023 confirmed the orthodox expectation that the inflation constraint is real once supply shocks and fiscal expansion coincide. A sociological economics of money should treat this as evidence that monetary constraints are themselves institutionally variable, rather than as a verdict for either side.

The even-handed conclusion is that heterodox economics supplies the most compatible theory of money's creation, while the sociology of money supplies what heterodoxy lacks: an account of money's meaning, of the classificatory work behind credit, and of the credibility on which state money rests. Neither can be absorbed into the other. The relationship is one of complementarity under mutual critique.

BRIDGING THE METHODOLOGICAL DIVIDE: FROM MICRO MEANINGS TO MACRO OUTCOMES

The tension between the disciplines manifests most sharply on the methodological plane, and the first version of this article left the question of aggregation open. It should not be left there. Three concrete strategies can be specified, each already partially realised in the literature reviewed above.

The first is sequential mixed-method design in the sense of Creswell and Plano Clark (2018), applied so that the qualitative and quantitative phases are tied to different planes of tension rather than merely to different stages of the project. An exploratory qualitative phase – ethnographic or diary-based, following the Financial Diaries model (Morduch, 2017, p. 28) – identifies the categories by which households actually differentiate money. A quantitative phase then tests whether those categories predict spending, saving and borrowing in representative survey or administrative data. The qualitative phase answers the epistemological question (what are the monies?), the quantitative phase the question of aggregate consequences. Small's review of mixed-method practice in sociology shows that such sequencing is methodologically mature and no longer requires special justification (Small, 2011).

The second is the choice of a meso-level unit of analysis that is simultaneously observable in meaning and in number. Zelizer's *circuits of commerce* – bounded sets of social relations, shared economic activities, common accounting systems, shared understandings and distinctive media – are defined so that each component can be documented ethnographically and several can be measured (Zelizer, 2011, p. 304). Remittance corridors, local currency schemes, rotating savings associations and platform-based payment networks are circuits in this sense. Because they are bounded, they can be aggregated; because they

are relational, they retain meaning. The digital traces left by payment platforms, which *tattle* on their users (Guseva & Rona-Tas, 2017, p. 203), make circuits observable at scale in ways unavailable to Zelizer's archival sources.

The third is the explicit modelling of aggregation. If earmarking rules can be elicited qualitatively, they can be encoded as behavioural rules in agent-based simulations, whose aggregate dynamics can then be compared with observed consumption responses to transfers. This does not replace econometrics; it supplies the micro-foundations that DSGE models assume rather than observe, and it provides a formal language in which an economist and a sociologist can disagree productively about the same object. Helleiner's demonstration that non-pecuniary values shaped the construction of territorial currencies (Helleiner, 2017, pp. 147–149) is the historical analogue: it shows that meanings do aggregate, through political institutions, into monetary structures.

None of these strategies dissolves the epistemological difference. Economics and sociology operate in different theoretical languages, and simple translation is not possible (Kuhn, 1996). What the strategies offer is a protocol for confrontation: a way of making a claim about meaning answerable to data on outcomes, and a claim about outcomes answerable to evidence on meaning.

SOCIOLOGICAL ECONOMICS OF MONEY: BOUNDARIES, REQUIREMENTS, IMPLICATIONS

I propose the term *sociological economics of money* for an interdisciplinary programme that consciously combines the tools of both disciplines. The term is not a synonym for economic sociology, nor for heterodox economics; it names the intersection of the two, delimited as follows.

Theoretical boundaries. The programme rests on three commitments, each drawn from the planes of tension. Money is institutionally designed before it is used (Desan, 2017; Ingham, 2004): its unit of account, issuers and hierarchy of acceptability are political products, which places central banks and treasuries inside the object of study rather than outside it. Money is relationally earmarked in use (Zelizer, 1994, 2011): its fungibility is a variable, not an axiom. Money is endogenously created through credit (Lavoie, 2014; Wray, 2015) and therefore distributes power as it distributes purchasing power (Carruthers,

2017; Krippner, 2011). What lies outside the boundary is equally important: the programme does not claim that preferences are infinitely malleable, that aggregates are unreal, or that formal modelling is illegitimate. It claims that the parameters of formal models – fungibility, trust, acceptability – are empirical quantities with social determinants.

Methodological requirements. Three follow. Research designs must specify, for each hypothesis, the plane of tension to which it belongs and the method appropriate to that plane. Designs must include at least one meso-level unit (household, circuit, organisation) at which meaning and measurement can be jointly observed. And designs must state the aggregation mechanism – institutional, statistical or simulated – by which micro findings are expected to produce macro effects.

Research implications. Two illustrative designs show what the programme looks like in practice.

RESEARCH DESIGN 1: EARMARKED PUBLIC TRANSFERS AND THE FUNGIBILITY OF HOUSEHOLD MONEY

Universal child benefits, which several European states have introduced or expanded over the past decade, are natural experiments in institutional earmarking: the transfer is legally unconditional but symbolically labelled. The epistemological hypothesis is that labelled transfers are treated as non-fungible by recipients – spent disproportionately on child-related goods and insulated from general household consumption – to a degree that exceeds what income effects predict, and that the degree of insulation varies with the moral framing of the transfer (entitlement versus assistance) in the sense of Esping-Andersen (1990). The design is sequential. Phase one is a financial-diary study of 150–200 households across income strata over twelve months, recording every inflow and outflow with its source and its stated purpose, supplemented by interviews on the meaning of the transfer. Phase two codes the earmarking rules elicited in phase one and tests them in household budget survey microdata, using the introduction or expansion of the benefit as the treatment and a difference-in-differences estimator on expenditure categories. Phase three encodes the same rules in an agent-based model of household consumption and compares its aggregate predictions with the observed marginal

propensity to consume out of the transfer. The macroeconomic payoff is direct: if fungibility is low and framing-dependent, then the transmission of fiscal transfers to aggregate demand depends on institutional design, which both Post-Keynesian multiplier analysis and DSGE consumption functions currently treat as a constant.

RESEARCH DESIGN 2: CENTRAL BANK DIGITAL CURRENCY AS INSTITUTIONALISED EARMARKING

Central bank digital currencies (CBDCs) are the first state monies whose internal design – programmability, holding limits, tiered anonymity, interest-bearing or not – is being decided in public, which makes them an ideal object for the constitutional approach (Desan, 2017) and for a Zelizerian analysis of acceptance. The design literature of central banks frames the choices in functional terms (Bank for International Settlements, 2020; Auer & Böhme, 2020); the economics literature frames them in terms of competition between public and private money (Brunnermeier, James, & Landau, 2019). The sociological hypothesis is that acceptance of a CBDC will depend less on its functional efficiency than on its social meaning: on whether it is perceived as state money carrying surveillance (*money that tattles*), as a safe public asset, or as a vehicle for earmarked transfers. The design is nested. A representative survey experiment varies the described design features of a hypothetical CBDC (anonymity tier, programmability, interest) and measures stated willingness to hold and use it, with attention to differences by trust in the central bank and by prior use of cash, cards and cryptocurrencies. Embedded within the survey sample, qualitative interviews and focus groups explore the meanings attached to *digital cash* issued by the state, following Dodd's treatment of Bitcoin as *a techno-utopia that rests, quite literally, on a technology of mistrust* (Dodd, 2014, p. 362), with the CBDC as its institutional mirror image. The aggregation mechanism is explicit: stated acceptance rates by design variant feed into estimates of deposit substitution and therefore of the policy transmission channel, which is where central bank models currently insert an assumed parameter. The programme would allow that parameter to be measured.

CONCLUSIONS: A RESEARCH AGENDA

The argument of this article can be stated in one sentence: the tensions between economics and the sociology of money are real on three planes – epistemological, methodological and analytical level – but on each plane the evidence favours treating the parameters that economics assumes as variables that sociology can measure. Rather than restate the three planes, I close by specifying where the synthesis proposed here can be tested, and what would count as its failure.

Central bank digital currencies are the first site. The research design above is one entry point; the broader agenda concerns whether CBDC design will reproduce the hierarchy of monies that Ingham describes or flatten it, and whether programmability will become a tool of institutionalised earmarking by the state – a digital successor to the bureaucratically prescribed earmarking of relief that Zelizer documented (Zelizer, 1994, p. 124). The synthesis fails here if acceptance turns out to be predicted entirely by functional attributes such as cost and convenience.

Cryptocurrencies are the second site. The case is paradoxical: Bitcoin was designed so that money would have *anything but a social life* (Dodd, 2014, p. 362), yet its users mark the public ledger with economic and non-economic messages, producing what Maurer calls a *digital version of physical earmarking* (Bandelj et al., 2017, p. 20), and the Cambrian explosion of payment systems has re-animated money of account as the primary monetary function (Maurer, 2017, p. 217). The agenda is to establish whether crypto-communities constitute circuits of commerce in Zelizer's sense, with shared accounting systems and bounded trust, and whether their price dynamics – Dodd predicted deflation rather than inflation as the characteristic pathology (Dodd, 2014, p. 368) – can be modelled with meaning-sensitive micro-foundations. The synthesis fails here if the social organisation of crypto-circuits has no measurable effect on adoption, holding or volatility.

Informal and alternative monetary systems are the third site. Gregory's *era of savage money*, in which state money tokens were converted into commodities whose relative prices are set by the market (Gregory, 1997, pp. 2–3, 296), has coexisted with a proliferation of local currencies, remittance circuits and

peer-to-peer lending that Dodd reads as evidence of money's utopian side (Dodd, 2017, p. 235) and that he would protect under a *genuine monetary pluralism* (Dodd, 2014, p. 383). The agenda is comparative: to measure the scale, durability and distributive effects of such circuits alongside, rather than instead of, the interpretation of what they mean to participants. The synthesis fails here if informal monies prove to be, after all, mere substitutes for an inadequate supply of official money, as a functionalist account would predict.

Each site requires a sociologist willing to count and an economist willing to interpret. Economics provides tools for modelling aggregate effects and the mechanics of equilibrium; sociology provides tools for understanding the meanings, norms and power relations that shape monetary decisions and sustain monetary institutions (Fligstein & Dauter, 2007; Ingham, 2020). The recent literature on the politics of money – Eich's reconstruction of money as a political institution (Eich, 2022), Pistor's account of the legal coding of capital (Pistor, 2019), Swartz's analysis of payment as communication (Swartz, 2020) – suggests that the convergence is already under way. The sociological economics of money is an attempt to give it a method. In this sense interdisciplinary self-awareness is not an academic aspiration but a practical condition for understanding, and for governing, the monetary transformations of contemporary societies.

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