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Note from the editor

The results of accounting

Economic sociologists are increasingly paying attention to questions of valuation (Beckert/Aspers 2011; Stark 2009; Lamont 2012), and everyone who is interested in valuation should be interested in accounting, possibly its most prominent form. Having been credited with an instrumental role in the development of capitalism by Weber and Sombart, accounting has mostly been lurking in the shadows of sociological inquiry, referenced but rarely studied for its own properties, apart from a few exceptions (e.g. Zald 1986; Schneiberg/Berk 2010; Hatherly/Leung/MacKenzie 2008).

Although the argument that double-entry bookkeeping helped create the notion of capital, monetary valuation and enterprise, has since been refined and disputed (Caruthers/Espeland 1991; Chiapello 2007), classical sociology firmly placed accounting at the core of sociological theory. The new and newer economic sociologies have shown its importance, albeit indirectly. In organizational and institutional approaches, accounting has primarily been implicated as a vehicle of corporate transformation towards a more financialized economy (Krippner 2011), for example through the rise of Shareholder Value and corresponding managerial strategies (Fligstein 2001; Davis 2009). In the sociology of markets, accounting has often been considered as an important calculative device, which participates in marketization and economization (Callon/Muniesa 2005) – creating, coordinating and transforming markets and trading (e.g. MacKenzie/Spears 2014) or the national “economy” (Mitchell 2014).

The ubiquitous yet still under-conceptualized use of accounting is complemented with the recent surge of interest in valuation – as activity and process rather than value as product – and the parallel emergence of Valuation Studies as an interdisciplinary enterprise (Helgesson/Muniesa 2013; Adkins/Lury 2011; Antal et al. 2015). Valuation has been successfully torn from its status as the attribution of financial value according to principles of economics, as well as from the classical opposition between reality and value judgments (Durkheim 1911). While there are many interpretations of valuation and evaluation, many sociologists agree that value in the economy is assembled in certain ways to become singular and fact-like, objects transform in the process of being valued, and incommensurable

or controversial valuations co-exist. Valuation has been recast as a moral act (e.g. Fourcade 2011), and the economy made possible by diverging regimes of worth (Stark 2009). The expanding notion of valuation has yet to tackle what is perhaps the most intricate and hidden valuation infrastructure – the forms of accounting. This is difficult because sociologists have limited exposure to this highly professionalized field. Recent general theories (e.g. of “capitalization,” Muniesa 2014) and positioning statements from the accounting field are beginning to address these missing areas of valuation studies, going back to the basics of understanding accounting (Kornberger et al. 2015).

By taking valuation seriously,¹ economic sociologists are now in a good position to engage with some of the more intimate workings of accounting.² As sociologists, we often gloss over the technical details of cases in search of the social, which is presumed to lie behind the substance of expertise – it is not the actual numbers that count. Spending time on the nuts and bolts becomes necessary, however, if we want to understand how the accounting infrastructure (Power 2015; Vargha 2015) brings the economy into being.

In fact, we have already been acquainted with some of the foundational ideas in the social studies of accounting on the pages of this journal, and I refer the readers to the Newsletter issue edited by Andrea Mennicken (2008) for a concise overview of productive overlaps between accounting scholarship and sociology. Similar introductions have been made elsewhere (Vollmer/Mennicken/Preda 2009; Power 2011; Miller/Power 2013) on the project of accounting as social, organizational and institutional practice (Hopwood/Miller 1994). Power and Miller (2013) have recently outlined the four main properties of accounting relevant for organization studies as territorializing, mediating, adjudicating, and subjectivizing.

Therefore, instead of an overview of the vast field that is the social studies of accounting, the current issue aims to present readers with new research by sociologists working on some of the large, now-classical problems of accounting. These include non-governmental regulation by accounting standards, accounting for non-financial and non-economic value, the uses of accounting information, visibility through accounting, and controlling action by meas-

urement. Several of the authors straddle multiple academic disciplines, speaking to the accounting field from the viewpoint of sociology, and this is palpable in the technical nature of reasoning.

With different theoretical viewpoints, the papers in this issue bring forth questions of economic “performance” – what entity is performing, what mechanisms bring performance on, what counts as performance and who is its audience. The papers look at the relationship of valuation and measurement (Millo et al, Thiemann and Friedrich), the way performance figures come to have an effect in markets (Vollmer), and how accounting aims to elicit that performance by conceptualizing behavior (Dix). Each paper approaches accounting with a different theoretical lens, from political economy and organizational sociology to historical analysis and communication.

The traditional format of accounting was fundamentally challenged by the financial crisis, as the paper *Drawing the Line: The Political Economy of Off-balance Sheet Financing* by Matthias Thiemann and Jan Friedrich makes clear. The balance sheet and income statement (profit and loss account) are highly formalized documents regulated by transnational governance mechanisms of accounting standards. These documents provide “visibility” into the organization in terms of financial value. The question is what that organization “is” as an economic and legal “entity”. Banks moved securitized mortgage debt off their balance sheets into Special Purpose Vehicles, so risk could be sold off to investors. Risk accumulating in the system was not therefore “visible” through banks’ financial statements, while banks retained that risk due to the contractual arrangement of the Special Purpose Vehicle, which is a type of lease. Thus, inclusion on the balance sheet turns out to be a legal question, and renders financial innovation a legal innovation. Thiemann and Friedrich show that the organization as an entity is constantly being reconstructed – the lines are being moved – in tandem with regulation, which tries to affix those lines around the organization, to have a view on value. There is a fundamental political struggle around the boundaries of the firm, which is fought out in the legal and auditing terrain, generating new economic formations. Instead of a metaphor of framing and overflowing (Callon), it is better to imagine battle lines.

Alternative valuations of performance proliferate as “other than economic” value has been expanding into the official definitions of markets, notably in the rise of environmental

and social accounting. In the paper *Accounting measurement tools and their impact on managerial decision making* by Yuval Millo, Emily Barman and Matthew Hall, a collaboration between sociologists and accounting scholars, we witness how non-economic morality is worked up into economic morality in different ways, as the organizations produce an increasingly influential valuation: the Social Return On Investment (SROI). The authors carry out an organizational analysis of the SROI measure: how it is composed differently based on the infrastructure, the informational and financial resources mobilized by the organizations using them. In contrast to the setting of financial accounting standards, the measure here is an intra-organizational affair, at best an early stage of valuations that might later become future standards for entire markets. Accordingly, the paper focuses on managers’ positions in the valuation process, as agents managing stakeholder interests by the way they assemble the SROI measure.

A significant shift in accounting theory has paved the way for alternative valuations: the move away from Shareholder Value towards stakeholder theories, defining the organization’s goals not only in satisfying its owners (shareholders) but also its multiple *stakeholders* – a reference to the larger and often diffuse groups affected by the organization, its employees, local communities, government, customers, and so on. Framing the problem of audience as that of stakeholders justifies having different views of what constitutes the “performance” of an organization. Performance is interpreted narrowly as financial performance in finance and accounting, and in management more broadly. Hence, Social Return On Investment is still a return on investment, a financial metric, albeit one of multiple strategies which more or less blend alternative orders of worth into the existing valuation landscape. Surprisingly, the paper argues that the SROI measure will cement particular inequalities, as different constituents (stakeholders) become prioritized and their “concerns” addressed in SROI methodologies. However, as the authors show, this is not simply a deliberate political decision or even a struggle, as the priorities depend on the organization’s ability to conceptualize and carry out the task of measurement: seeking, and in practice gathering, certain type of information and building it into the measure.

Shareholder Value itself rests on a theory of incentives, perhaps one of the most powerful economic theories. While environmental and social accounting chips away at the Shareholder Value conception of organizations, the latter is still the dominant paradigm in accounting and

finance. Nonetheless, the original shift to Shareholder Value in the US was greatly facilitated, if not engendered, by agency theorists, as sociologists have argued (Davis 1991, Dobbin/Jung 2010, Khurana/Fourcade 2008). The imagery of self-interested managers acting against the greater interest of owners has shaped the development of contemporary corporate governance, accounting and finance. In brief, these have revolved to a great extent around the problem of designing the right incentive structures that would ensure that managers follow shareholder interests.

In his paper *A Genealogy of the Incentive*, Guus Dix traces the origins of the “incentive” as key governing concept in modern economic thought, and the creation of the “incentivizable subject”, an agent who is configured to play the game of incentives and rewards. The paper finds the origins of the incentive in early mechanical engineering, following the concept’s path from scientific management and Gantt’s “Man Record Charts” to Mayo’s management science, the socialist calculation debate, and finally into 1970s information economics, culminating in agency theory. Dix identifies three governmentalities in this history, each conceptualizing “human performance” as a relationship between rewards and behavior, pursuing the problematic of the “incentivizable subject” and the techniques by which it can be governed. Surprisingly, after the early mechanistic view of the financially motivated worker, management scientists’ models of maladjustment proved to be overly complex in the face of the emerging mathematical descriptions of planning, and later of information asymmetry between principal and agent. The paper concludes by proposing that incentive is a future-oriented device that stands in contrast to (Foucauldian) discipline and forms part of the regime of fictional expectations (Beckert 2013, and see below), reflecting on incentive-based policy in traditionally non-market domains such as health and education.

Performances have audiences, and this is the angle from which the paper by Hendrik Vollmer, *Financial Numbers as Signs and Signals: Looking Back and Moving Forward*, tackles the problem of what any of these measured and packaged accounting values mean. What is the status of information about firms’ performance in economic life? Vollmer challenges the widely held notion that accounting provides transparency. This is a foundational idea both in mainstream accounting and in many critical studies – accounts allow us to “see” into the management and operation of organizations. Vollmer argues that the visibility

metaphor is incomplete at best if not entirely misplaced. Visibility pushes us to question the process of fabricating the visible accounting figures and assumes their governing capacity. If we distinguish between signs and signals, however, we can unpack not only the past of numbers, but also their present and future – the mechanisms by which they gain significance to form the basis of action. When and how does certain accounting information become signal of some sort for certain economic actors? The formation of signals, Vollmer argues, is tied to stakeholders’ “intuition,” an experience of the world which operates alongside, and engulfs, the perception of visible numerical signs.

These sociological insights on accounting enable us to keep revising our theories of organization and economy as social formations inextricably constituted by accounting techniques. Another fruitful task is to appreciate what valuation studies and accounting can learn from each other.

In the special section *New Frontiers of Economic Sociology: Capitalism and Sociological Theory*, the contribution by Jens Beckert delineates a novel theory of capitalism that hinges on actors’ preoccupation with the future. In his article *Fictional expectations and the crisis of contemporary capitalism*, which is based on his forthcoming book, Beckert argues that capitalism is founded on and driven by a “future-oriented temporal order.” Because that future is seen as open-ended and limitless but full of uncertainty, an important aspect of economic action is the fabrication of “imagined futures.” We can reconsider capitalist institutions and policies in light of their ability to create the ground for, and shape certain types of “fictional expectations.” The paper then examines how fictional expectations structure three key areas of the capitalist economy: financial markets, consumption and human capital. Beckert finally argues that economic paradigms, models and theories appear as instruments for creating fictional expectations. Consequently, crises of capitalism involve the dismantling of certain imagined futures and their resolution lies to a great extent in building up new imaginaries, which would again set the economy in motion.

The *interview with Alya Guseva*, current Chair of the Economic Sociology Section of the American Sociological Association, explores the connectedness of economic sociology in Europe and the U.S., and with other fields, and reflects on her intellectual trajectory pursuing questions of uncertainty, markets, credit and finance in the post-socialist terrain, now turning to the household as a relevant research object for economic sociology.

In the book review section, we have reviews by Benjamin Werner on Will Davies' book *The Limits of Neoliberalism*, by Arndt Sorge on Bart Noteboom's *How Markets Work and Fail, and What to Make of Them*, and by Felipe Gonzalez on Nigel Dodd's book *The Social Life of Money*. Further, Ana Gross and Felipe Gonzalez introduce their doctoral projects on data framing techniques and on credit and status anxiety.

I hope you enjoy reading this issue.

We welcome your comments and ideas, so please feel free to contact me at zv8@leicester.ac.uk.

With best regards,

Zsuzsanna Vargha

Endnotes

1But see the economization research program (Callon/Caliskan 2010).

2Not of accountants as professionals but of accounting as expertise. For this distinction see Eyal (2013).

References

- Adkins, L./C. Lury, 2011: Introduction: Special measures. In: *Sociological Review* 59(2), 5–23.
- Antal, A./M. Hutter/D. Stark (eds), 2015: *Moments of valuation: exploring sites of dissonance*. Oxford: Oxford University Press.
- Beckert, J., 2013: Imagined futures: Fictional expectations in the economy. In: *Theory and Society* 42(3), 219–240.
- Beckert, J./P. Aspers, 2011: *The Worth of Goods: Valuation and Pricing in the Economy*. Oxford: Oxford University Press.
- Callon, M./F. Muniesa, 2005: Economic markets as calculative collective devices. In: *Organization Studies* 26(8), 1229–1250.
- Carruthers, B.G./W.N. Espeland, 1991: Accounting for Rationality: Double-Entry Bookkeeping and the Rhetoric of Economic Rationality. In: *American Journal of Sociology* 97(1), 31.
- Chiapello, E., 2007: Accounting and the birth of the notion of capitalism. In: *Critical Perspectives on Accounting* 18(3), 263–296.
- Davis, G.F., 1991: Agents without Principles? The Spread of the Poison Pill through the Intercorporate Network. In: *Administrative Science Quarterly* 36(4), 583–613.
- Davis, G., 2009: *Managed by the markets: how finance reshaped America*. Oxford, New York: Oxford University Press.
- Durkheim, É., 1911: Jugements de valeur et jugements de réalité. In: *Revue de Métaphysique et de Morale*.
- Fligstein, N., 2001: *The architecture of markets: an economic sociology of twenty-first-century capitalist societies*. Princeton: Princeton University Press.
- Fourcade, M., 2011: Cents and Sensibility: Economic Valuation and the Nature of "Nature." In: *American Journal of Sociology* 116(6), 1721–77.
- Fourcade, M./R. Khurana, 2013: From social control to financial economics: The linked ecologies of economics and business in twentieth century America. In: *Theory and Society* 42(2), 121–159.
- Hatherly, D./D. Leung/D. MacKenzie, 2008: The finitist accountant. In: T. Pinch/R. Swedberg (eds), *Living in a Material World: Economic Sociology Meets Science and Technology Studies*. Cambridge, MA: MIT Press.
- Helgesson, C.-F./F. Muniesa, 2013: For What It's Worth: An Introduction to Valuation Studies. In: *Valuation Studies* 1(1), 1–10.
- Hopwood, A.G./P. Miller, 1994: *Accounting as Social and Institutional Practice*. Cambridge: Cambridge University Press.
- Kornberger, M. et al. (eds), 2015: *Making Things Valuable*. Oxford: Oxford University Press.
- Krippner, G., 2011: *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge, MA: Harvard University Press.
- Lamont, M., 2012: Toward a Comparative Sociology of Valuation and Evaluation. In: *Annual Review of Sociology* 38(1), 201–221.
- MacKenzie, D./T. Spears, 2014: "A device for being able to book P and L": The organizational embedding of the Gaussian copula. In: *Social Studies of Science* 44(3), 418–440.
- Mennicken, A., 2008: Accounting for Economic Sociology. In: *Economic Sociology_The European Electronic Newsletter* 10(1).
- Miller, P./M. Power, 2013: Accounting, Organizing, and Economizing: Connecting Accounting Research and Organization Theory. In: *The Academy of Management Annals* 7(1), 557–605.
- Mitchell, T., 2014: Economentality: How the Future Entered Government. In: *Critical Inquiry* 40(4), 479–507.
- Muniesa, F., 2014: *The Provoked Economy: Economic reality and the performative turn*. Abingdon, New York: Routledge.
- Power, M., 2011: Foucault and Sociology. In: *Annual Review of Sociology* 37(1), 35–56.
- Power, M., 2015: How accounting begins: Object formation and the accretion of infrastructure. In: *Accounting, Organizations and Society* 47, 43–55.
- Schneiberg, M./G. Berk, 2010: From categorical imperative to learning by categories: cost accounting and new categorical practices in American manufacturing, 1900–1930. Categories in Markets: Origins and Evolution. In: *Research in the Sociology of Organizations* 31, 255–292.
- Stark, D., 2009: *The Sense of Dissonance: Accounts of Worth in Economic Life*. Princeton, NJ: Princeton University Press.
- Vargha, Z., 2015: Infrastructures of control: The accidental pipelines of measuring bank sales incentives. In: *Management Ac-*

counting as Social and Organizational Practice (MASOP). London School of Economics, London, April 2015.

Vollmer, H./A. Mennicken/A. Preda, 2009: Tracking the numbers: Across accounting and finance, organizations and markets. In: *Accounting, Organizations and Society* 34(5), 619–637.

Zald, M.N., 1986: The sociology of enterprise, accounting and budget rules: Implications for organizational theory. In: *Accounting, Organizations and Society* 11(4-5), 327–340.

Drawing the line: The political economy of off-balance sheet financing

By Matthias Thiemann and Jan Friedrich

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Key words: Accounting and economic sociology, assets, boundaries, debt

Scholars in the social studies of finance and accounting (Callon 1998a, b, Callon/Muniesa 2005, Çalışkan/Callon 2010, Mennicken 2002, Vollmer et al. 2009) have pointed to the importance of boundary drawing to enable calculation, forming the precondition of economic activities. Insisting that all calculation begins with “distinctions between things or states of the world” (Callon/Muniesa 2005: 1231), scholars in this area have focused on the disentangling and framing of activities and entities (Callon 1998a) that create spaces of commensurability, thereby facilitating exchange. Calculative devices, such as accounting (Callon 1998a: 29) disentangle goods from their environment, which enables pricing. By clarifying *ex ante* in these situations what needs to be taken into account in the calculation, framing is understood to create a space “which brings together the different parties and allows them to harmonize their desires” and thus to come to a mutually agreed exchange (Callon 1998b: 250).

While these are very important theoretical advances in economic sociology, the focus on the facilitating character of metric systems of valuation for exchange has led to a neglect of the political economy which resides in the moments of boundary drawing itself. While Callon focused on framing as a necessary precondition of exchange (1998a), he largely ignored the distributive consequences of these boundaries and the contestations it provokes (but s. Callon 1998b: 260-264 on the measurement of negative externalities). As we will show for the case of firms, the act of boundary drawing is a contested, political act. Demarcating boundaries of firms and their activities is a heated battleground due to its distributive consequences, be it in terms of taxation, costs of credit or the value of shares (Callahan et al. 2013), all of which are related to the recording of assets and liabilities on balance sheets. The application of financial accounting rules produces financial

ratios (such as equity over liabilities) that function as a central regulative device in financialized capitalism (Froud et al. 2006) as it structures firms’ relationships to the state (taxation)¹, creditors (price of borrowing, Kalthoff 2007) and shareholders (price of shares). Financial accounting numbers thus have a direct impact on the viability of the firm, as the cost of credit impacts profitability and share prices partially determine the vulnerability for takeovers (Froud et al. 2006).

Due to these implications, corporate actors, whose activities are being measured by accounting rules engage in reactive behaviour (Espeland/Sauder 2007) and seek to game the numbers that represent their size and activity to influence these distributional conflicts to their advantage. This implies that firm boundaries are not only influenced by simple transaction costs (Coase 1937), but instead are drawn to maximize exposure to gains and minimize exposure to potential losses (Robé 2011). Firm behaviour in this respect exemplifies the contention of historical institutionalists that “the typical rule taker that capitalist institutions must reckon with as the normal case is a rule bender: She reads rules entrepreneurially, untiringly looking for ways of twisting them in her favour.” (Streeck 2011: 146, italics in the original, also Streeck/Thelen 2005; Mahoney/Thelen 2010).

This conflict, inherent in the application of accounting rules plays out in the social relationships between the accountants, lawyers and regulatory advisors hired by firms to optimize accounting decisions and auditors of these firms who verify the correct application of these rules. The dialogues of these agents are shaped by the general properties of rules, which are by definition over- or under-inclusive, indeterminate and therefore subject to interpretation (Black 1997: 10; Garfinkel 1991). Market actors and their legal consultants exploit this feature of accounting rules which do not predetermine the classification decisions of accountants on the ground (MacKenzie 2009; Power 2012), coming up with constructs that only partially fit the paradigm case envisioned in the rules (Black 1997). In this way, agents reflexively interact with these rules through “regulatory arbitrage” (Fleischer 2010: 229): perfectly legal planning techniques that exploit the gap be-

tween economic substance and legal form, stretching the letter of these rules in order to circumvent their spirit (ibid).

This essay focuses on these moments of reflexivity, as firms attempt to optimize acts of boundary drawing through the use of off-balance sheet financing techniques. These techniques evolve around the exclusion/inclusion of assets and liabilities on the balance sheet of corporations, allowing corporations to obtain economic ownership while avoiding legal ownership of assets and the concomitant negative effects. Understanding the emergence and functioning of these techniques requires us to delve into the intricacies of property and ownership which are constituted in social relationships (Hann 1998, 2007), as claims to property and ownership are constructed through acts of accounting.

Firms and corporations – economic substance and legal form

Constructivist accounting scholars have long emphasized the social construction of reality through acts of boundary drawing (Hines 1988; Morgan 1988; Mennicken 2002; Chiapello 2009). Constituting the boundaries of the corporation in the act of accounting, accountants create the corporation itself (Hines 1988). While this statement might appear astounding at first sight (after all, isn't the law supposed to clearly demarcate these boundaries?), recent legal scholarship lends support to this hypothesis (Robé 2011; cf. Manfrin 2007). These scholars differentiate the firm as an entity in which the organization and coordination of economic activity of different actors is coordinated from the legal form this entity takes as a corporation. While taking the form of a corporation is necessary for firms to be recognized as legal persons and thus to be able to "own assets, to enter into contracts and to incur liabilities" (Robé 2011: 1), this form is never just equal to the economic activities it organizes. These scholars insist on the difference of economic substance and legal form of enterprise, where economic substance always precedes the legal form and "is far from being completely synthesized by it" (Manfrin 2007: 292). Corporate agents and their advisors exploit this incongruity between economic substance and legal form, optimizing the delineation of corporations to reduce regulatory costs and taxes, for example through their tax planning departments (Fleischer 2010).

The measurement of economic activity through accounting rules thereby leads to a change in economic activity itself, which we may call a performative effect of accounting (Froud et al. 2006; also Mennicken 2002). This reflexive

feedback loop between business activity and accounting rules is driven by the conflict of interest between those preparing financial statements, accountants of firms and those using them, financial analysts (Borio/Tsatsaronis 2005: 12; Dye et al. 2014). This external mode of observation is the foundation for the creative compliance with accounting rules by firms, as accountants exploit the increase in the supply of information that credit and equity analysts have to process in recent decades. As Luhmann (1991) has pointed out, the increasing complexity in financial markets leads to attempts at simplification by external observers (p. 188 – 189; also Esposito 2011). Given the growing obscurity of financial reports, which is structurally promoted as annexes are ever-growing and difficult to evaluate in their information content (s. Hoffmann/Luedenbach 2007), there is an increasing tendency among financial analysts to reduce this complexity to easily graspable ratios.² Financial ratios, such as the debt to equity ratio are such means of simplification that analysts employ, as we will explain below.

The tyranny of financial ratios and systemic balance sheet manipulations

The potential ignorance of credit analysts regarding the possibilities to manipulate financial ratios in accounting due to information overload makes attempts by single firms to push assets and debt off-balance sheet systematically, as the comparison of firms, according to which share prices and costs of debt are determined, are partially built on these financial statements. These performative aspects have a systemic impact on accounting policies, as those companies which are not pushing the interpretive margins of accounting rules will be treated comparatively worse in financial markets. As financial accounting numbers force conglomerates into a relentless comparison in terms of their valuation, such acts of regulatory arbitrage give certain conglomerates a cost advantage by presenting a better image than the economic substance of activities would justify. As these acts of regulatory arbitrage are legal, they become systemic once the practice spreads. This threatens the function of accounting to represent reality, as becomes clear in the following remarks by the Senior accounting standard setter mentioned above:

"So they confound the image with the reality, and if you consolidate everything you need to consolidate, your balance sheet is worse, looks worse and you look like a bad manager, and this is the one who has done the things correctly. ...if having accounting that does not reflect the reality is an advantage,

that evidently forces not to represent reality.” (Interview Paris 01/2011, translation M.T., emphasis added)

This trend to not represent reality in accounting leads to attempts by management to push assets and liabilities off-balance. The same standard setter reflects,

“They try to overcome regulation, which is especially impregnating, because there is a tyranny of financial ratios. And you do whatever it takes to have good financial ratios. ... It is a pity to see that because the enterprises are pushed to make mistakes in order to respect their ratios. So they say, listen I cannot put that on my balance sheet, that will add debt and so it will deteriorate my financial ratios...”

In the following we will focus on these techniques to hide debt related to the delineation of conglomerates, the predominant form in which economic activity is organized today.

Conglomerates are produced through a performative speech act as accountants delineate the borders of a „fictional jurisdictional unit“, which does not exist in legal terms (s. Claussen/Scherrer 2011: 1021, translation M.T.). In legal terms, conglomerates are a network of corporations but in economic terms they are one business unit. Accounting rules, as opposed to corporate law have to determine if the relationship between corporations equals a conglomerate, i.e. if there is complete control exerted by the parent company over subsidiaries or if they are simply cooperating as business partners.

The performative accounting act of delineating a conglomerate and the shifting of risk to Special Purpose Entities

Auditors seek to provide financial market participants a “true and fair view” of the business activities and risk exposures of conglomerates (Walton 2008) by merging the different companies judged to be controlled by one parent company into one consolidated balance sheet. The drawing of the boundary of the conglomerate, that is determining which entities are to be taken into account in forming the conglomerate (what is known as “the perimeter problem” in accounting studies) is where the fight between auditors and the audited firm takes place. If the audited (parent) firm can manage, in the exercise of categorization, to exclude disadvantageous corporations and their assets and liabilities which worsen the equity ratio, that firm has

gained great leverage over the process by which financial analysts calculate financial ratios.

It is at this point that Special Purpose Entities (SPE), shell companies into which conglomerates are placing assets and liabilities, come into play. Exploiting the indeterminacy of accounting rules, firms seek to structure the relationship with the SPE as to be outside the boundary of the conglomerate. In this way, firms seek to keep assets and liabilities outside the purview of creditors, shareholders as well as regulators, while benefitting from their use.

The indeterminacy of the conglomerate’s boundaries and the use of special purpose entities to exploit it came into the spotlight during the recent financial crisis. Many banking conglomerates had optimized the conglomerate’s official demarcation, keeping subsidiaries that held assets worth hundreds of billions of dollars off the balance sheet (Gorton 2010; Milne 2009). But the use of special purpose entities for the purpose of balance sheet reduction is in no way limited to banks alone. A legitimate use is to finance construction projects and other large projects, separating the risks of those projects from the company at large. Asset-partitioning in this way allows for cheaper financing (Hansmann/Kraakman 2000). On the other hand, financial advisors utilize the off-balance-sheet effect for lease contracts. They do this to sell their clients a possibility to benefit from the economic ownership of assets while keeping them off their balance sheet.

Leasing

Leasing combines elements of an on-balance-sheet, debt financed purchase (the buyer becomes the owner of an item) and of an off-balance-sheet rent (the property in the item remains with the renter). The ownership in an item depends on the question which of these two features predominates in a specific case. Financial engineers draw and adjust the delineation between these categories reflexively in order to create the desired off-balance-sheet effect for the lessee, thus redefining these categories continuously. As Pottage (2004: 3) puts it, “the question [...] is not how to fit entities into the ‘right’ category, but to explore the emergence and deployment of the category itself”.

A lease contract requires two parties, a lessee and a lessor. The lessee rents an asset from the lessor and pays a fee for it (Peters/Schmid-Burgk 2007: 11). The accounting of lease agreements under International Financial Reporting Standards IFRS3 follows an “all-or-nothing” approach which

distinguishes between a finance lease and an operate lease. In case of a finance lease (“all”), the lessee shall recognize the lease, valued at fair or present value, and a corresponding liability. For example, a firm leases an assembly line over 8 years (the major part of its economic life) and is committed to purchase the machine by the end of the lease term. Therefore, the lessee carries the price risk incidental to the item (similar to a purchase on credit). An operate lease (“nothing”), on the other hand, provides an off-balance-sheet effect for the lessee (Fülbiel 2012: 101; International Accounting Standard [IAS] 17.20) because the lessor mainly bears the risk and has to recognize the item. For example, the lessee leases a car over one year, including a (not mandatory) purchase option and the depreciations and servicing costs are carried by the lessor⁴. At the end of the lease term the lessee can easily decide to reject the option and the lessor must organize the resale of a used car. In substance liabilities incurred through operate leases, only appear in the annex of the financial statement (IAS 17.35), thus, often escape the attention of financial analysts and do not affect their decision-making anymore. This also holds for credit analysts of banks, as was explained by a German accounting professor analysing the financing models of German small and medium-sized enterprises (SMEs):

“Many German firms have a high degree of external financing and if this is part of your business model, then leasing is a very good idea. Normally, this should not play any role regarding the decision to grant credit or not, as credit analysts are asked to also look into miscellaneous liabilities. But the problem is that many addressees only look at the income statements and the balances, they don’t look into the annex. They are fixated on the financial ratios.” (Interview Wuppertal 06/2011, translation M.T.)

Lease agreements and special purpose entities

The vast majority of all lease contracts are directly concluded between lessors and lessees but some particular forms, such as Sale-and-Leaseback transactions (hereinafter SLBs) or synthetic leases⁵, usually involve Special Purpose Entities, their use being also strongly linked to issues of taxation. In a SLB-transaction the lessee sells an owned item and, simultaneously, leases it back over a period of time. If the SLB is designed as an operate lease, the lessee can continue to use the item without restrictions, releasing capital which otherwise would have been bound by a fixed asset (the item that has now been sold and leased back), and keeps the accruing liability (the lease) off-balance-

sheet. A special feature of SLB transactions is that the asset is not directly leased back from a lessor but from a Special Purpose Entity, usually financed by a bank⁶ and jointly founded by the lessee as well as by the structuring lessor. The lessee possesses a renewable repurchase option to the SPE (Helaba [Landesbank Hessen-Thüringen] 2010; PwC 2008: 29; Streckenbach 2006: 49) that effectively ensures the property in the item for the lessee without exerting direct control⁷ over it. In so doing, the lessee relates the classification of the SLB (operate or finance lease?) to the question of consolidation of subsidiaries according to the accounting standard IFRS 10. In case of a German lessee, the SPE has mostly the legal form of a *GmbH & Co. KG* (Helaba 2010: 3; Fahrholz 1998: 146), which allows an asynchronous entanglement⁸ between both contract parties regarding shares and control of the SPE. Thereby, the lessee neither meets the prerequisites of consolidation of the SPE nor the criteria of a finance lease, thus, the Special Purpose Entity is consolidated by the lessor or by the bank and provides an off-balance-sheet for the lessee.

One can argue that synthetic leases are the “point of culmination” of the issue of boundary drawing and reflexivity. This financial instrument stretches the boundaries of property and non-property, of ownership and non-ownership, assets and non-assets, and the definition of conglomerate itself, to their limits by linking the respective manifestation to the addressees of the conglomerate’s financial statement.

The structuring of a synthetic lease is even more complex than a SLB transaction but follows a similar logic and blurs ownership of the SPE. A synthetic lease is structured to be an operate lease for purposes of financial reporting, whereas being treated as a finance lease for national tax law. By financing an asset through a synthetic lease, the lessee pursues the goal to keep the lease off-balance-sheet in its financial statement while using the possibility to depreciate the asset and to deduct the interest expenses⁹ of the SPE (Weidner 2000: 447) in order to reduce the lessee’s tax payments. Thus, the lessee is at the same time the owner of the SPE (for tax returns) and is not the owner of the SPE (in particular, for credit analysts and shareholders).

Synthetic leases are a “high stakes gamble in the game of form over substance” (Weidner 2000: 448) because they benefit from the sharp quantitative provisions of IFRS¹⁰ and German-GAAP. With those structures the lessee “cannot be sure whether it is approved by the state tax authorities (Interview 04/2014, Frankfurt) because, in the context

of a single transaction, dealt as one package, the question of recognition is answered differently.

The issue of recognition of both SLB transactions and, in particular, synthetic leases is subject of a bargaining process between the structuring lessor, the lessee and their auditors.

An auditor, describing the structuring process of complex off-balance-sheet leases constructions states:

“Well, insofar it is often a combined activity of several auditors. So, it usually starts like this, that the auditor of the customer [lessee] is asked first and then, when you are relatively sure [we] formulate [the contract] and then, you go again to the auditor, to show him [the lease contract] beforehand. And then, you have possibilities to point out what could be changed, where are needs for interpretations [...]and this is [the moment] where you can usually intervene in time.” (Interview Frankfurt, 11/2013, translations and amendments J.F.)

Or as another auditor puts it, “this is an iterative process that goes back and forth” (Interview Frankfurt 06/2014, translation J.F.).

Balance sheet manipulations by banks pre-crisis

In the case of banks, the use of Special Purpose Entities to place assets off-balance sheet is motivated by core capital requirements which are applied to consolidated balance sheets of banking conglomerates (Acharya et al. 2009). As these core capital charges limit the leverage of banking conglomerates (that is the amount of capital they can borrow to finance their operations) and hence their potential profitability, banks attempt to place assets off-balance sheet in legal form while maintaining economic exposure to the risks and rewards of that entity. In the case of the ABCP market, they set up SPEs into which they placed highly-rated assets (e.g. Collateralized Debt Obligations, CDOs), which were refinanced with short-term Asset-Backed Commercial Papers (ABCP), securities with a maturity of less than one year and usually less than 90 days, posing refinancing risks due to the maturity mismatch. Through these techniques, Bank Holding Corporations were able to expose themselves to more risk than they officially recorded in their balance sheet, gaining economic exposure to these assets but refusing to account for the risks they posed. The orphaning of credits and their risks into the balance sheets of Special Purpose Entities meant

that credit risk was building up in the system to a much larger degree than preventive measures taken to deal with the possibility of the actualization of these risks. Instead of distributing the risks into financial markets, this form of securitization concentrated risks off the balance sheet of banks, returning onto the balance sheets of banks once the assets in the SPE deteriorated.

The contractual structure between the investors, the special purpose entity and the sponsoring bank guaranteed that the bank would absorb the majority of rewards (revenues) emanating from the assets held in the SPE, but would also be exposed to the majority of risks. Banking conglomerates did not need to account for these risks via capital charges, regulatory requirements to have a certain extent of equity to deal with potential risks, if they could avoid consolidation of the SPE. At the same time, they earned fee income for the risk exposure through the services they provided to the SPE, thereby improving their financial ratios and their evaluation in financial markets. The relationship between SPEs and banking conglomerates was crafted to avoid the possibility of consolidation on the balance sheet of the bank, transforming the special purpose entity into an “orphan company” (see PwC 2005: 36).

To ensure that the SPE was not consolidated as a subsidiary required the structuring of the relationship between banks and SPEs counter to the accounting standards. Before 1998 in the US and Europe, the rules for conglomerates maintained that a company needs to consolidate a subsidiary company in which it holds the majority of shares and/or controls its business strategy. The interpretation of then actual accounting norms required that the control of the business had to be visible in the daily operation of the firm. Avoiding indicators of control in legal form, while maintaining control in economic substance led banks to shift control into the contractual realm. With the help of contracts all relevant actions by the SPE were pre-specified, putting the SPE on a contractual “auto-pilot.” These “auto-pilot mechanisms” specified that SPEs could not sell or buy assets on their own but that instead the investment advisor (the bank) made the investment decision (these are called service level agreements), for which the SPE would have to pay a fee. Furthermore, banks usually held no shares in the SPEs nor provided any other capital for them to maintain their non-controlling status which allowed the SPE to be off-balance sheet. This resulted in the SPEs having only minimal equity (own funds), which meant that these shell companies had no capacity to deal with a deterioration of the formerly highly-rated but now toxic assets on their own balance

sheets. When the SPE's assets started to deteriorate, investors refused to buy the ABCP from the SPE.

Instead, the sponsoring bank had guaranteed that in case there was a problem with the market refinancing, it would buy the newly issued the Asset-Backed Commercial Papers. This contractual arrangement called a liquidity facility, which was described even at the time by some as collusion between banks and investors (Gorton/Souleles 2006) made Asset-Backed Commercial Paper a technique of "securitization without credit-risk transfer" (Acharya et al. 2009).

The cycle of rules and rule-evasion in off-balance sheet financing

The practices of off-balance sheet financing described above contradict the goals of accounting standard-setters to generate a "true and fair view" of the firm. Standard setters in the International Accounting Standard Council, alarmed by auditors about this abuse of accounting rules, issued a new interpretation (SIC 12) already in 1998 which placed economic substance over legal form when making the decision whether to consolidate SPEs into the balance sheet of banks. Auditors were asked to focus on the firm that was bearing the majority of risks and rewards with relation to the SPE to determine consolidation. In this way, the standard-setters of the IASC¹¹ sought to keep the negotiating situation between auditors and audited open and rather undefined. They refused to unambiguously specify the calculative procedures to disentangle the conglomerate from its environment¹², instead granting the final say to the professional judgment of the auditor. Based on indicators (who holds the majority of risk and rewards with respect to an asset/ a special purpose entity) and principles (economic substance over legal form), the final decision-making resides with the auditor. As a consequence, banks restructured their contractual risk and reward exposure to the SPE by adding *third parties* that took just sufficient risk to refute the presumption that the bank was bearing the majority of risk and rewards (Thiemann 2012). This restructuring and the continued possibility for off-balance sheet SPEs points to the cycle of rules and rule-evasion in off-balance sheet financing.

This cycle is best described by an experienced auditor and accounting professor, when commenting on the increasing use of SPEs in the 1990s:

"It is not a new thing. It is just that the rules change over time. So the companies want to find a way to keep financing off-

balance sheet. So the banks find vehicles, the world becomes aware of that. The auditors tell the standard-setter that they are not happy about this and the standard-setter issues a rule about this saying you cannot do that or if you do that, this happens. So then they go away and start the game again, so alright, if we cannot do that anymore, let us find a new way of doing it, so it is an ongoing thing. ... because they test the rules to destruction, they destroy the rules and the rules have to be remade." (Interview Paris 03/2011, emphasis added)

This cycle can be seen if we now turn back to the case of leasing. The International Accounting Standards Board (IASB) published an exposure draft for leasing in 2009, followed by a revision (re-exposure draft) in 2013. In these drafts, the IASB emphasizes that lease agreements represent "rights and obligations that meet the definitions of assets and liabilities in the boards' conceptual framework" (IASB 2010: 5).

To achieve an on-balance sheet status, the draft proposes the so called Right-of-Use-Approach (RoU) which implies that the lessee shall recognize a right to use to the leased asset and a corresponding liability¹³, thus, virtually ending the off-balance-sheet status of leases. Despite intense lobbying of the industry the IASB released a new accounting standard (IFRS 16 Leases) in January 2016 that seeks to bring the vast majority of all lease contracts on-balance-sheet (Financial Times, 2016). Our interviews indicate however, that the lease industry has already developed an innovative antidote to ensure that the off-balance-sheet status of lease agreements continues. By contractual adjustments, the lease is redefined as a "service contract" and, thus, as a transaction that remains off-balance-sheet (Interview Frankfurt, 11/ 2013, Interview Frankfurt, 06/2014, Interview Duesseldorf, 02/2015). By these means the delineation between finance and operate leases is shifted to the boundary of on-balance-sheet lease agreements and off-balance-sheet service contracts, which will in turn be subject to an "iterative" (interview 06/2014) bargaining process.

This iterative process is acknowledged by a standard-setter who was involved in the creation of SIC 12, the principles-based standard interpretation issued in 1998 to limit the use of off-balance sheet special entities (see above). He acknowledges the impossibility to issue an ultimate rule limiting off-balance sheet activity, while defending principles-based standards as the second best option:

”When you issue a pronouncement, people will look at it, and they will revise their strategies, ... so to some extent you moved the point along the spectrum... you might discover that you have an awful lot of people spending an awful lot of time and awful lot of money to stay on one side of the line or the other and I think that is inevitable, ...and if you go to principles that is terrific but you still are going to have a judgement and a grey zone, so neither is the perfect solution.” (Interview London 02/2011, , emphasis added)

In this quote, the standard-setter acknowledges the power of those seeking to structure their deals such that they “stay on one side of the line”, a force which you cannot control, given that you “still are going to have a judgment and a grey zone” in which those structuring will place their deals. A corporate lawyer, thinking about the new standard IFRS 10 which came into force in 2013 and seeks to limit the use of off-balance sheet special purpose entities further is also sceptical about the possibility to limit such activity once and for all:

“Is this the be-all and end-all? The IFRS 10, it is new right now, where even that one is not the wisdoms last conclusion, so I am just afraid that the problematic of special purpose entities is very difficult to get a grasp on, independent of the rule element you use.” (Interview Cologne 11/2011, translation M.T.)

Why is an ultimate rule ending unruly off-balance sheet activity impossible? Because the structures of SPEs are determined in response to the rules which are seeking to capture them on the balance sheet. This dialectical relationship between SPEs and their rules means that one can only temporarily force SPEs on the balance sheet, until those structuring have found a new way to escape. Still, principles-based standards might be the best way for dealing with the problem, as is clarified by a senior auditor in a technical department of an auditing network in Germany:

“No, the problem is not solved, there you are totally right, but ... this is a process...we cannot write a handbook called treatment of SPEs where we then present the 1500 different models and then you look there for everything..., but because we don't want something like that ... we make a broad standard and that leaves space for discretion.” (Interview Duesseldorf 02/2011, translation M.T.)

As this quote clarifies, discretion placed with auditors seems to be the best option to deal with the indeterminacy

of the boundaries of the firm in a world in which this indeterminacy cannot be fixed by the rules themselves.

Conclusion

Based on the example of off-balance sheet financing, this essay has sought to demonstrate the political economy inherent in acts of boundary drawing. It has shown that corporations, exploiting the inherent indeterminacy of rules to predetermine decisions by auditors (MacKenzie 2009) employ off-balance sheet techniques to avoid the recording of assets and liabilities. These acts of regulatory arbitrage offer a temporary possibility for corporations to optimize their balance sheets and to avoid negative consequences in terms of taxation or costs of credit. Doing so, they exploit the incongruity between the economic substance of the firm as a system of economic activities and the legal form this activity takes. The malleability of the legal form of corporations coupled with the accountability mechanisms based on their boundaries invites a reflexive feedback loop that structures the boundary of the corporation to minimize its accountability. By focusing on the opposing interests involved in the act of boundary drawing and the outcomes it produces, we seek to complement the current perspective on metric systems of valuation as facilitators of exchange (Muniesa et al. 2007) with a perspective that emphasizes their political-economic implications (Black 2010; Gilad 2014).

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Endnotes

¹This is the case in several jurisdictions (e.g. Germany, France, Italy), where these numbers determine tax obligations to the state, but not in Anglo-Saxon countries.

2 Interview with former standard setter IASB, Paris 01/21/2011, and participant observation of seminar on risk analysis of financial institutions, Frankfurt 06/25/2015

3 The International Financial Reporting Standards (IFRS), elaborated and continuously revised by the International Accounting Standard Board (IASB), represent the most important accounting frame due to its global scope.

4 These additional costs are usually incorporated into the lessee's lease payment.

5 Since the revision of German-GAAP in 2009 (BilMoG), synthetic leases constitute a third lease type in Germany, beside operate and finance leases. This article is the first which focuses on synthetic leases in Germany.

6 One auditor remarked that a third party is not always required to achieve the desired off-balance-sheet effect and he emphasized that the third party can also be an insurance (Interview with auditor 3).

7 The exertion of direct control would certainly meet the criteria of IFRS 10.17.

8 Additionally, the lessee avoids the payment of real estate transfer taxes.

9 As explained above, the SPE is financed by a bank.

10 However, the final decisional power has the auditor of the lessee who has to balance legal form against economic substance, a process which is in particular tough in case of complex lease contracts that make use of SPEs.

11 The International Accounting Standard Council (IASC) was the predecessor of the IASB, into which it was transformed in 2001.

12 The first standard setter to do so was the International Accounting Standards Council in 1998. The French Accounting Standard Setter followed suit in 1999, the Dutch one in 2001, the American one in 2003.

13 With only a few exemptions such as for short-term leases with a lease term less than 12 months.

References

- Acharya, Viral V./Philipp Schnabl/Gustavo Suarez, 2009: *Securitization Without Risk Transfer*. http://richmondfed.org/conferences_and_events/research/2009/pdfsuarz_paper.pdf
- Adolph, Peter/Klaus-Dieter Findeisen/Günther Gabor, 2012: Bilanzierung von Leasing-Verträgen nach IFRS. In: Horst Fittler/Martin Mudersbach (eds), *Leasing-Handbuch für die betriebliche Praxis*. Frankfurt am Main: Fritz Knapp Verlag, 133-165.
- Peter Adolph/Ingo Weber, 2010: Leasingbilanzierung im Umbruch. Auswirkungen auf Reporting und Messgrößen der Financial Performance. In: *Going Public Magazin. Sonderausgabe Kapitalmarktrecht*, 76-77.
- Black, Julia, 1997: Rules and Regulators. In: *The Modern Law Review* 62(5) (Sept. 1999), 803-806.
- Black, Julia, 2010: *The Rise, Fall and Fate of Principles Based Regulation*. Law Society Economy Working Papers 17/2010. Available at: www.lse.ac.uk/collections/law/wps/wps.htm
- Borio, Claudio/Kostas Tsatsaronis, 2005: *Risk in financial reporting: status, challenges and suggested directions*. Paper prepared for the BIS Workshop on "Accounting, risk management and prudential regulation", November 11-12, 2005.
- Çalışkan, Koray/Michel Callon, 2010: Economization, part 2: a research programme for the study of markets. In: *Economy and Society* 39(1), 1-32.
- Callahan, Carolyn M./Rod E. Smith/Angela Wheeler Spencer, 2013: The valuation and reliability implications of FIN 46 for synthetic lease liabilities. In: *Journal of Accounting and Public Policy* 32(4), 271-291.
- Callon, Michel, 1998a: Introduction. The embeddedness of economic markets in economics. In: Michel Callon (ed.), *The Laws of the Markets*. Oxford: Blackwell Publishers, 1-57.
- Callon, Michel, 1998b: An essay on framing and overflowing: economic externalities revisited by sociology. In: Michel Callon (ed.), *The Laws of the Markets*. Oxford: Blackwell Publishers, 245-269.
- Callon, Michel/Fabien Muniesa, 2005: Economic Markets as Calculative Collective Devices. In: *Organization Studies* 26(8), 1229-1250.
- Chiapello, Eve, 2009: Die Konstruktion der Wirtschaft durch das Rechnungswesen, 2009. In: Rainer Diaz-Bone/Gertraude Krell (eds.), *Diskurs und Ökonomie. Diskursanalytische Perspektiven auf Märkte und Organisationen*. Wiesbaden: Verlag für Sozialwissenschaften, 125-149.
- Claussen, Carsten P./Gerhard Scherrer (eds), 2011: *Kölner Kommentar zum Rechnungslegungsrecht, §§ 238-342 HGB*. Köln: Carl Heymanns Verlag.
- Coase, Ronald, 1937: The Nature of the Firm. In: *Economica* 4(16): 386-405.
- Dye, Ronald A./Jonathan C. Glover/Shyam Sunder, 2014: *Financial Engineering and the Arms Race between Accounting Standard Setters and Preparers*. <http://ssrn.com/abstract=2508360> or <http://dx.doi.org/10.2139/ssrn.2508360>
- Espeland, Wendy/Michael Sauder, 2007: Rankings and Reactivity: How Public Measures Recreate Social Worlds. In: *American Journal of Sociology* 113(1), 1-40.
- Esposito, Elena, 2011: *The Future of Futures. The Time of Money in Financing and Society*. Cheltenham, UK: Edward Elgar.
- Fahrholz, Bernd, 1998: *Neue Formen der Unternehmensfinanzierung. Unternehmensübernahmen, Big-Ticket-Leasing, Asset Backed- und Projektfinanzierungen. Die steuer- und haftungsrechtliche Optimierung durch Einzweckgesellschaften (single*

- purpose companies), dargestellt anhand von Beispielsachverhalten. München: Verlag C.H. Beck.
- Financial Times**, 2016: Reporting rule adds \$3tn of leases to balance sheets globally. <http://www.ft.com/cms/s/0/00689412-b937-11e5-b151-8e15c9a029fb.html#axzz3x8nsX4v8>
- Fleischer, Victor**, 2010: Regulatory Arbitrage. In: *Colorado Law Legal Studies Research Paper Series Working Paper*, 10-11.
- Froud, Julie et al.**, 2006: *Financialization and Strategy: Narrative and Number's*. London: Routledge, Taylor and Francis.
- Fülbier, Rolf**, 2012: Reform der Leasingbilanzierung nach IFRS. In: Karlheinz Küting/Norbert Pfitzer/Claus-Peter Weber (eds), *Brennpunkte der Bilanzierungspraxis nach IFRS und HGB*. Stuttgart: Schäffer-Poeschel Verlag, 99-115.
- Garfinkel, Harold**, 1991 [1967]: *Studies in Ethnomethodology*. London: Polity Press.
- Gilad, Sharon**, 2014: Beyond Endogeneity: How Firms and Regulators Co-Construct the Meaning of Process-Oriented Regulation. In: *Law and Policy* 36(2), 134-164.
- Gorton, Gary/Nicholas S. Souleles**, 2006: Special Purpose Vehicles and Securitization. In: Mark Carey/René M. Stulz (eds.), *The Risks of Financial Institutions*. Chicago: University of Chicago Press for the NBER, 549-602.
- Gorton, Gary B.**, 2010: *Slapped by the Invisible Hand*. Oxford: Oxford University Press.
- Hann, Chris**, 1998: *Property relations: Renewing the anthropological tradition*. Cambridge: Cambridge University Press.
- Hann, Chris**, 2007: The state of the art. A new double movement? Anthropological perspectives on property in the age of neoliberalism. In: *Socio-Economic Review* 5, Advance Access publication February 20, 2007.
- Helaba (Landesbank Hessen-Thüringen)**, 2010: *Corporate Finance. Sale-and-Lease-Back-Immobilien. Wir zeigen Ihnen, wie Sie Ihre Immobilien in Bewegung bringen*. <https://www.helaba.de/de/DieHelaba/Downloads/NachThemen/CorporateFinance-DL/Sale-and-Lease-Back-Immobilien.pdf>
- Hines, Ruth D.**, 1988: Financial Accounting: In communicating reality, we construct reality. In: *Accounting, Organizations and Society* 13(3), 251-261.
- Hansmann, Henry/Reinier Kraakman**, 2000: The Essential Role of Organizational Law. In: *The Yale Law Journal* 110, 387-440.
- Hoffmann, Wolf-Dieter/Norbert Luedenbach**, 2007: Die bilanzielle Abbildung der Hypothekenkrise und die Zukunft des Bilanzrechts. In: *Der Betrieb* 41, October 12, 2007, 2213 - 2219 / Betriebswirtschaft Aufsätze.
- IASB (International Accounting Standards Board)**, 2010: *Exposure draft for leasing*.
- Kalthoff, Herbert**, 2007: Rechnende Organisation. In: Jens Beckert/Rainer Diaz-Bone/ Heiner Ganßmann (eds), *Märkte als soziale Strukturen*. Frankfurt am Main: Campus Verlag, 151-165.
- Luhmann, Niklas**, 1991: *Soziologie des Risikos*. Berlin, New York: Walter de Gruyter.
- Mahoney, James/Kathleen Thelen**, 2010: A Theory of Gradual Institutional Change. In: James Mahoney/Kathleen Thelen (eds), *Explaining Institutional Change. Ambiguity, Agency, and Power*. New York: Cambridge University Press, 1-37.
- Manfrin, Federico**, 2007: The firm as an entity and the law. In: Yuri Biondi/Arnaldo Canziani/Thierry Kierat (eds.), *The Firm as an entity - implications for economics, accounting and the law*. London: Routledge, 292-316.
- Mackenzie, Donald**, 2009: *Material Markets: How Economic Agents are Constructed*. Oxford: Oxford University Press.
- Mennicken, Andrea**, 2002: Bringing Calculations Back. Studies in the Sociology of Accounting. In: *Economic Sociology: European Electronic Newsletter* 3(3), 17-27.
- Milne, Alistair**, 2009: *The Fall of the House of Credit*. Cambridge: Cambridge University Press.
- Morgan, Gareth**, 1988: Accounting as Reality Construction: Towards a new Epistemology for Accounting Practice. In: *Accounting Organizations and Society* 13(5), 477-485.
- Muniesa, Fabian/Yuval Millo/Michel Callon**, 2007: An Introduction to Market Devices. In: *The Sociological Review* 55, 1-12.
- Power, Michael**, 2012: Accounting and finance. In: Karin Knorr-Cetina/Alex Preda (eds.), *The Oxford Handbook of the Sociology of Finance*. Oxford, UK: Oxford University Press, 293-314.
- Pottage, Alain**, 2004: Introduction: the fabrication of persons and things. In: Pottage, Alain/Martha Mundy (eds), *Law, anthropology, and the constitution of the social: Making persons and things*. Cambridge: Cambridge University Press, 1-39.
- Peters, Bernd/Klaus Schmid-Burgk**, 2007: *Das Leasinggeschäft*. Köln: Bank-Verlag Medien GmbH.
- PwC (PricewaterhouseCoopers)**, 2005: *Structuring securitization in Belgium*. Brussels: PwC Press.
- PwC (PricewaterhouseCoopers)**, 2008: Bilanzierung von Leasingtransaktionen nach IFRS. [http://www.ruhr-uni-bochum.de/audit/RUB%20Pr%E4sentation%20Leasing%20\(ohne%20Aufgaben\).pdf](http://www.ruhr-uni-bochum.de/audit/RUB%20Pr%E4sentation%20Leasing%20(ohne%20Aufgaben).pdf).
- Robé, Jean-Philippe**, 2011: The Legal Structure of the Firm. In: *Accounting, Economics, and Law* 1, Issue 1, Article 5.
- Streckenbach, Jana Isabelle**, 2006: *Bilanzierung von Zweckgesellschaften im Konzern. Abgrenzung der wirtschaftlichen Einheit nach US-GAAP und IFRS. Dissertation*. Bochum: Ruhr-Universität Bochum.
- Streeck, Wolfgang**, 2011: Taking Capitalism Seriously - Towards an Institutional Approach to Contemporary Political Economy. In: *Socio-Economic Review* 9(1), 137-167.
- Streeck, Wolfgang/Kathleen Thelen**, 2005: *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.

Thiemann, Matthias, 2012a: Out of the Shadows - Accounting for Special Purpose Entities in European Banking Systems. In: *Competition and Change* 16(1), 37-55.

Thiemann, Matthias, 2012b: *Out of the Shadows - Accounting for Special Purpose Entities in European Banking Systems*. Dissertation. New York: Columbia University.

Thiemann, Matthias, 2014: In the Shadow of Basel: How Competitive Politics Bred the Crisis. In: *Review of International Political Economy* 21(6), 1203-1239.

Vollmer, Hendrik/Andrea Mennicken/Alex Preda, 2009: Tracking the numbers: across accounting and finance, organizations and markets. In: *Accounting, organizations and society* 34(5), 619-637.

Walton, Peter, 2008: *La comptabilité anglo-saxonne*. Paris: La Découverte: Collection repères.

Weidner, Donald J., 2000: Synthetic Leases: Structured Finance, Financial Accounting and Tax Ownership. In: *The Journal of Corporation Law* 25, 446-487.

Accounting measurement tools and their impact on managerial decision making

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The rise of Shareholder Value has received attention from sociologists (e.g. Zorn 2004), but in the last few years, there has been growing concern in the public sphere about the presence and visibility of *stakeholders*. This shift calls for a more sociologically-informed look at dynamics related to stakeholders. According to stakeholder theory, a key task of managers is to manage the relations between the firm and its various stakeholders, such as customers, employees, suppliers, shareholders, government, and local communities, in ways that improve matters for all salient stakeholders (Crilly and Sloan, 2013; Donaldson and Preston, 1995; Freeman, 1984; Freeman et al, 2007; 2010; Jawahar and McLaughlin, 2001). In spite of the centrality of this process, little is known about how the voices of salient stakeholders are incorporated into a firm's accounting and reporting system. This gap in the literature is critical because the goal of managing the firm to create value for salient stakeholders cannot be realized without translating those ideas into reliable, systematic, and accountable measurements (Freeman et al., 2010). Value creation for stakeholders thus requires managers to develop an accounting and reporting system to collect and communicate information about a range of stakeholder interests (Pruzan, 1998).

The literature shows, however, that the development of an accounting and reporting system that incorporates salient stakeholders requires extensive effort. Its success is dependent upon managers possessing adequate expertise and resources (Ahrens and Chapman, 2004; Henri, 2006; Mouritsen and Larsen, 2005; Wouters and Wilderom, 2008). As such, in this study we examine how managers' attention to salient stakeholders becomes represented in and communicated by a firm's accounting and reporting system. Specifically, we pose two research questions: How do managers develop an accounting and reporting system to reflect their prioritization of stakeholders? What factors influence managers' ability to construct an accounting and

reporting system to incorporate the voices of salient stakeholders?

To address these research questions, we study the development of 'Social Return on Investment' (SROI), an accounting methodology that aims to measure and report on the benefits created for stakeholders by social purpose organizations, such as social enterprises. In each of the two settings we investigate – the United States and the United Kingdom – SROI was developed as an attempt to overcome existing organizational deficiencies by incorporating stakeholders' voices into the firm's accounting and reporting system and, crucially, by demonstrating the benefits created by the firm back to its stakeholders. The SROI methodology calculates a ratio of the organization's costs relative to the monetized benefits gained by different stakeholders from the organization's activities. Yet, we find that despite similarities in its basic calculative procedure, a comparison of the US and UK cases reveals important differences in how managers' prioritization of stakeholders was reflected in the formulation of the SROI methodology in each setting, including the range of stakeholder worldviews and expertise incorporated in the SROI calculation and the way those stakeholder interests were represented.

To explain these differences, we develop a theoretical framework to show how the prioritization of stakeholder voices in the development of an accounting and reporting system is shaped by both the epistemic beliefs held by managers, especially their understandings of the type of knowledge that is valid or acceptable, and by the material conditions of the organization, in particular, the amount and type of resources – technical and material – at the managers' disposal. The findings show that in order for managers to succeed in incorporating stakeholders' voices and improve value creation, they must develop and implement a relevant accounting and reporting system. Our study of SROI, and the theoretical framework we develop, indicates that understanding stakeholder value creation requires attention not only to how certain stakeholders are recognized as salient to the firm, but also to the changes to accounting and reporting systems that underpin the

process through which stakeholders' voices are incorporated into managerial practices.

Theoretical framework: accounting for salient stakeholders

Limited attention has been given to how managers incorporate the voices of stakeholders into organizational practices (Neville et al. 2011; Parent and Deephouse 2007). This discrepancy exists even though over-arching ideas about stakeholder engagement cannot be usefully adopted in managerial practice without the development of reliable, systematic ways of translating those ideas into accountable measurements (Freeman et al., 2010). The development of an accounting and reporting system to collect and communicate the social and ethical dimensions of organizational activities is a precondition for effective stakeholder engagement (Prusan, 1998), manifest in approaches such as social auditing, social accounting, sustainability reporting, and triple bottom-line accounting (Freeman et al., 2010; Greenwood, 2007).

We explore two dimensions where accounting is directly involved in the process of stakeholder management: "listening" to stakeholders and "talking" to stakeholders. First, an accounting and reporting system typically forms a central avenue of communication through which managers in the organization are informed about a variety of stakeholder interests and, ultimately, affects how managers form their views about what needs to be done in the organization (Burchell et al., 1980; Chapman, Cooper and Miller, 2009); Miller and Power, 2013).

Second, an accounting and reporting system is a central means for communicating information about organizational activities 'back' to stakeholders, and as such plays a critical role in how stakeholders perceive the organization and its activities, thus increasing the potential to create value for stakeholders (Cooper and Owen, 2007; Freeman et al., 2010; Zadek et al., 2013; Chapman, Cooper and Miller, 2009; Hines, 1988). Scholarship has demonstrated, however, that an accounting and reporting system necessarily reflects managerial decisions about what aspects of the firm and which stakeholders are to be "counted" and which are not (Gray et al., 1997). For example, accounting reports focusing only on the financial activities of the organization may exclude activities that are important to stakeholders, but have little recordable financial footprint (Gray, 2002; Gray et al., 1995), such as changes to air quality, for example, as a result of installing a new filtering

system in a chemical plant. As such, we examine the process by which managers develop an accounting and reporting system to include stakeholders' voices and we delineate the causal factors enabling and constraining managers in that effort. We highlight the importance of the content of managers' epistemic beliefs and differences in the material conditions in and around the organization in determining how the voices of some stakeholders but not others get incorporated into an accounting and reporting system and, ultimately, into firms' management of stakeholders for value creation.

Managers' epistemic beliefs

Stakeholder theory has emphasized the critical role of managers' decisions in how firms select stakeholders for their attention, alongside the objective characteristics of stakeholders' claims, including their power, urgency and legitimacy (Buysse and Verbeke, 2003; Crilly and Sloan, 2012, 2013; Mitchell et al., 1997). Key determinants of how managers prioritize some stakeholders over others include managers' cultural frameworks, such as their personal values (Egri and Herman, 2000), their intuition (Harvey and Schaefer, 2001; Henriques and Sadorsky, 1999), managers' perceptions of the firm's environment (Crilly and Sloan, 2012), the managers' role and location in the organization (Parent and Deephouse, 2007), and the effect of the broader organizational culture or the firm's dominant institutional logic on managers' decisions regarding stakeholders (Bundy, Shropshire, and Buchholtz, 2013; Mitchell, Agle, Chrisman, and Spence, 2011).

We augment this literature by suggesting that the inclusion of specific stakeholder voices in an organization's accounting and reporting system is shaped by the specific epistemic beliefs held by its managers. Epistemic beliefs are actors' assumptions and understandings regarding the source and nature of knowledge and can relate to views on the certainty of knowledge, how it is organized, and the extent of control an individual has over it (Schommer, 1990; Schommer-Aikins and Hutter, 2002). Epistemic beliefs have been shown to influence comprehension and educational processes (Schommer, 1990), as well as playing a role in leadership behaviors, workplace learning and moral reasoning (Bauer et al., 2004; Mintchik and Farmer, 2009; Tickle et al., 2005). Informed by these insights, we focus specifically on how the incorporation of stakeholder voices in an accounting and reporting system is shaped by managers' epistemic beliefs regarding the type and forms of information they consider valid and appropriate.

The materiality of accounting and reporting systems

Accounting has an inherent material dimension, as to perform accounting it is necessary to create and establish data collection systems, databases, and associated reporting processes (Balogun, Jacobs, Jarzabkowski, Mantere, and Vaara, 2014; Bechky, 2003; Boudreau and Robey, 2005). In particular, accounting research has shown that expanding the set of stakeholder voices reflected in a firm's accounting and reporting system requires the establishment of new practices to collect information not captured by bookkeeping oriented strictly at financial information (Zadek et al., 2013). We expect, thus, that as managers attempt to include the voices of salient stakeholders in their accounting and reporting system in order to improve the firm's capacity to create value, they will draw from their particular epistemic beliefs on what information is considered valid and/or credible. At the same time, as managers consider the desirable forms of information collection, aggregation and distribution, they will encounter (or realize they may need to develop) specific material arrangements, such as data systems and reporting formats, which require adequate technical expertise and financial support at the level of the firm and its members. We expect that this process will result in the selection of some salient stakeholders, but not others, for inclusion and representation in the firm's accounting and reporting system.

Findings

We find that, in the case of the US, the epistemic beliefs of the managers at REDF and the material conditions in which they operated led to a prioritization of funders and government agencies as salient stakeholders in SROI over other potential stakeholders, such as the beneficiaries of social enterprises. In contrast, in the UK, different epistemic beliefs and different material conditions meant SROI was changed to prioritize perceptions of value from multiple stakeholders, including government agencies, beneficiaries, staff, and community members, and thus paid attention to and communicated the value of social enterprises to a wider assortment of stakeholders.

To explain this variation, we trace two organizational processes framing managers' decisions to alter the existing accounting and reporting system in order to ensure different stakeholder prioritization (see Table 1 for an overview). First, we examine the events in which managers realized the existence of mismatches between the type and quality of information they had collected and reported on to

stakeholders and the type and quality of information (and presentation format) they believed would bring about a more responsive engagement with and communication of the firm's value to stakeholders. Second, following this realization, we examine events whereby managers attempted to develop a new accounting and reporting system for collecting, aggregating, calculating and reporting the necessary information. In this process, managers' decisions about the new accounting and reporting system, in the form of SROI, were shaped by their epistemic beliefs about what counted as valid and appropriate data to be included in the accounting and reporting system and by the material conditions of their setting, including the nature of managers' technical knowledge and the firm's resources.

See appendix, table 1

Discussion

Our study shows that the development of SROI in both the US and UK settings was influenced by managers' epistemic beliefs – their cognitive understandings of the type of knowledge that is valid or acceptable to use in organizational practices – and the organization's material conditions – the amount and type of resources, technical and material, at the managers' disposal. The findings point at two important consequences. First, the process we examine influenced which stakeholder voices were included in the accounting and reporting system (e.g., only direct beneficiaries vs. variety of stakeholders). Second, for those stakeholders included in the accounting and reporting system, it influenced the form and type of data used to represent stakeholder voices (e.g., a set of pre-specified and standardized indicators vs. the organic development of indicators based on stakeholder input). We formalize these findings in the development of two propositions emerging from our analysis:

Proposition 1: The prioritization of stakeholder voices in an accounting and reporting system (such as which stakeholder voices are included and the way those voices are represented and measured), is shaped by managers' epistemic beliefs (such as what counts as valid and appropriate data).

Proposition 2: The ability of managers to develop an accounting and reporting system, consistent with their epistemic beliefs, is shaped by the organization's material conditions (such as the nature of existing data collection and

reporting systems, access to financial resources, and access to necessary labour and expertise).

Our study contributes to existing understandings of the roles accounting and reporting systems play in the process of firms' value creation. The fact that managers sought to adapt the accounting and reporting system in order to better communicate with salient stakeholders resonates with the connection that stakeholder theory identifies between the collection, measurement and communication of information about important dimensions of organizational activity and effective stakeholder engagement (Freeman et al., 2010; Pruzan, 1998). In our case, the managers in both the US and UK settings viewed their engagement with salient stakeholders as deficient because of an unsuitable accounting and reporting system, which hindered their attempts to communicate effectively. It indicates that to understand better the organizational processes through which managers in both for-profit and non-profit firms create value for stakeholders (whether that be economic, social, or environmental value, for example), we should examine how an organization engages with stakeholders through its accounting and reporting system.

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References

- Abbott, A., 1992: From causes to events: notes on narrative positivism. In: *Sociological Methods and Research* 20, 428-455.
- Ahrens, T./C.S. Chapman, 2004: Accounting for flexibility and efficiency: a field study of management control systems in a restaurant chain. In: *Contemporary Accounting Research* 21, 271-301.
- Arvidson, M./F. Lyon, 2014: Social impact measurement and non-profit organizations: compliance, resistance, and promotion. In: *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 25, 869-886.
- Arvidson, M./F. Lyon/S. McKay/D. Moro, 2013: Valuing the social? The nature and controversies of measuring social return on investment (SROI). In: *Voluntary Sector Review* 4, 3-18.
- Balogun, J./C. Jacobs/P. Jarzabkowski/S. Mantere/E. Vaara, 2014: Placing strategy discourse in context: sociomateriality, sensemaking, and power. In: *Journal of Management Studies* 51, 175-201.
- Barman, E./H. MacIndoe, 2012: Institutional pressures and organizational capacity: The case of outcome measurement. In: *Sociological Forum* 27, 70-93.
- Bauer, J./D. Festner/H. Gruber/C. Harteis/H. Heid, 2004: The effects of epistemological beliefs on workplace learning. In: *Journal of Workplace Learning* 16, 284-292.
- Bechky, B.A. 2003: Object lessons: workplace artifacts as representations of occupational jurisdiction. In: *American Journal of Sociology*, 109, 720-752.
- Boudreau, M.C./D. Robey, 2005: Enacting integrated information technology: a human agency perspective. In: *Organization Science* 16, 3-18.

- Bundy, J./C. Shropshire/A.K. Buchholtz**, 2013: Strategic cognition and issue salience: toward an explanation of firm responsiveness to stakeholder concerns. In: *Academy of Management Review* 38, 352-376.
- Burchell, S./C. Clubb/A. Hopwood/J. Hughes/J. Nahapiet**, 1980: The roles of accounting in organizations and society. In: *Accounting, Organizations and Society* 5, 5-27.
- Burchell, S./C. Clubb/A. Hopwood**, 1985: Accounting in its social context: towards a history of value added in the United Kingdom. In: *Accounting, Organizations and Society* 10, 381-413.
- Buysse, K./A. Verbeke**, 2003: Proactive environmental strategies: a stakeholder management perspective. In: *Strategic Management Journal* 24, 453-470.
- Cabinet Office, Office of the Third Sector**, 2009: *A guide to social return in investment*. London, United Kingdom.
- Chapman, C.S./D.J. Cooper/P. Miller**, (eds), 2009: *Accounting, organizations, and institutions: essays in honour of Anthony Hopwood*. Oxford University Press.
- Clarkson, M.E.**, 1995: A stakeholder framework for analyzing and evaluating corporate social performance. In: *Academy of Management Review* 20, 92-117.
- Cooper, S.M./D.L. Owen**, 2007: Corporate social reporting and stakeholder accountability: the missing link. In: *Accounting, Organizations and Society* 32, 649-667.
- Crilly, D./P. Sloan**, 2013: Autonomy or Control? Organizational Architecture and Corporate Attention to Stakeholders. In: *Organization Science* 25, 339-355.
- Crilly, D./P. Sloan**, 2012: Enterprise logic: explaining corporate attention to stakeholders from the 'inside-out'. In: *Strategic Management Journal* 33, 1174-1193.
- Donaldson, T.**, 1999: Making stakeholder theory whole. In: *Academy of Management Review* 24, 237-241.
- Donaldson, T./L.E. Preston**, 1995: The stakeholder theory of the corporation: concepts, evidence, and implications. In: *Academy of Management Review* 20, 65-91.
- Dugdale, D./C. Jones**, 2002: The ABC bandwagon and the juggernaut of modernity. In: *Accounting, Organizations and Society* 27, 121-163.
- Egri, C.P./S. Herman**, 2000: Leadership in the North American environmental sector: values, leadership styles, and contexts of environmental leaders and their organizations. In: *Academy of Management Journal* 43, 571-604.
- Emerson J./M.T. Tuan/L. Dutton**, 1998: *The Roberts Enterprise Development Fund: Implementing a Social Venture Capital Approach to Philanthropy*. Stanford University Graduate School of Business. S-E- 45, October.
- Emerson, J./F. Twersky**, 1996: *New Social Entrepreneurs: The Success, Challenge and Lessons on Non-Profit Enterprise Creation*. San Francisco: Roberts Foundation.
- Emerson, J./J. Wachowicz/S. Chun**, 2000: Social return on investment: exploring aspects of value creation in the nonprofit sector. In: *The Box Set: Social Purpose Enterprises and Venture Philanthropy in the New Millennium* 2, 130-173.
- Freeman, R.E.**, 1984: *Strategic Management: A stakeholder approach*. Boston: Pitman.
- Freeman, R.E./J.S. Harrison, J. S./A.C. Wicks**, 2007: *Managing for Stakeholders: Survival, Reputation, and Success*. Yale University Press, London and New Haven.
- Freeman, R.E./J.S. Harrison/A.C. Wicks/B.L. Parmar/S. De Colle**, 2010: *Stakeholder theory: The state of the art*. Cambridge: Cambridge University Press.
- Fricker, M.**, 2007: *Epistemic injustice: power and the ethics of knowing*. Oxford; New York: Oxford University Press.
- Gibbon, J./C. Dey**, 2011: Developments in social impact measurement in the third Sector: scaling up or dumbing down? In: *Social and Environmental Accountability Journal* 31, 63-72.
- Glaser, B.G./A.L. Strauss**, 1967: *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine Publications.
- Gray, R.**, 2002: The social accounting project and Accounting Organizations and Society privileging engagement, imaginings, new accountings and pragmatism over critique? In: *Accounting, Organizations and Society* 27, 687-708.
- Gray, R./C. Dey/D. Owen/R. Evans/S. Zadek**, 1997: Struggling with the praxis of social accounting: stakeholders, accountability, audits and procedures. In: *Accounting, Auditing and Accountability Journal* 10, 325-364.
- Gray, R./R. Kouhy/S. Lavers**, 1995: Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. In: *Accounting, Auditing and Accountability Journal* 8, 47-77.
- Greenwood, M.**, 2007: Stakeholder engagement: beyond the myth of corporate responsibility. In: *Journal of Business Ethics* 74, 315-327.
- Greenwood, M./K. Kamoche**, 2012: Social accounting as stakeholder knowledge appropriation. In: *Journal of Management and Governance* 17, 723-743.
- Hall, M.**, 2014: Evaluation Logics in the Third Sector. In: *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 25, 307-336.
- Harvey, B./A. Schaefer**, 2001: Managing relationships with environmental stakeholders: a study of UK water and electricity utilities. In: *Journal of Business Ethics* 30, 243-260.
- Henri, J.**, 2006: Management control systems and strategy: a resource-based perspective. In: *Accounting, organizations and society* 31, 529-558.
- Henriques, I./P. Sadorsky**, 1999: The relationship between environmental commitment and managerial perceptions of stakeholder importance. In: *Academy of management Journal* 42, 87-99.

- Hines, R.D., 1988: Financial accounting: In communicating reality, we construct reality. In: *Accounting, Organizations and Society* 13, 251–261.
- Jawahar, I.M./G.L. McLaughlin, 2001: Toward a descriptive stakeholder theory: an organizational life cycle approach. In: *The Academy of Management Review* 26, 397–414.
- Laplume, A.O./K. Sonpar, K./R.A. Litz, 2008: Stakeholder theory: reviewing a theory That moves us. In: *Journal of Management* 34, 1152–1189.
- Marshall, J.H./D. Suárez, 2013: The flow of management practices: an analysis of NGO monitoring and evaluation dynamics. In: *Nonprofit and Voluntary Sector Quarterly*, July 4, 2013.
- Medawar, C., 1976: The social audit: A political view. In: *Accounting, Organizations and Society* 1, 389–394.
- Miller, P., 1991: Accounting innovation beyond the enterprise: Problematizing investment decisions and programming economic growth in the U.K. in the 1960s. In: *Accounting, Organizations and Society* 16, 733–762.
- Miller, P./M. Power, 2013: Accounting, organizing, and economizing: connecting accounting research and organization theory. In: *The Academy of Management Annals* 7, 557–605.
- Mintchik, N./A. Farmer, 2009: *Associations Between Epistemological Beliefs and Moral Reasoning: Evidence from Accounting*. Springer Science and Business Media B.V., 259–275.
- Mitchell, R.K./B.R. Agle/J.J. Chrisman/L.J. Spence, 2011: Toward a theory of stakeholder salience in family firms. In: *Business Ethics Quarterly* 21, 235–255.
- Mitchell, R.K./B.R. Agle/D.J. Wood, 1997: Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. In: *Academy of Management Review* 22, 853–886.
- Mook, L., 2013: *Accounting for Social Value*. Toronto: University of Toronto Press.
- Mouritsen, J./H.T. Larsen, 2005: The 2nd wave of knowledge management: the management control of knowledge resources through intellectual capital information. In: *Management Accounting Research* 16, 371–394.
- NEF, 2004: *Social Return on Investment: Valuing What Matters*. London.
- Neville, B.A./S.J. Bell/G.J. Whitwell, 2011: Stakeholder salience revisited: refining, redefining, and refueling an underdeveloped conceptual tool. In: *Journal of Business Ethics* 102, 357–378.
- O'Dwyer, B., 2005: The construction of a social account: a case study in an overseas aid agency. In: *Accounting, Organizations and Society* 30, 279–296.
- Parent, M.M./D.L. Deephouse, 2007: A case study of stakeholder identification and prioritization by managers. In: *Journal of Business Ethics* 75, 1–23.
- Pedersen, E.R., 2006: Making corporate social responsibility (CSR) operable: How companies translate stakeholder dialogue into practice. In: *Business and Society Review* 111, 137–163.
- Pruzan, P., 1998: From control to values-based management and accountability. In: *Journal of Business Ethics* 17, 1379–1394.
- REDF, 2000: *SROI Methodology: Analyzing the Value of Social Purpose Enterprise Within a Social Return on Investment Framework*. San Francisco: REDF.
- Scholten, P./J. Nicholls/S. Olsen/B. Galimidi, 2006: *SROI A Guide to Social Return on Investment*. Amsterdam: Lenthe.
- Schommer, M., 1990: Effects of beliefs about the nature of knowledge on comprehension. In: *Journal of Educational Psychology* 82, 498–504.
- Schommer-Aikins, M./R. Hutter, 2002: Epistemological beliefs and thinking about everyday controversial issues. In: *The Journal of Psychology* 136, 5–20.
- SROI Network, 2014: www.thesroinetwork.org/news?start=5 , accessed 20 February 2014.
- Sturges J.E./K.J. Hanrahan, 2004: Comparing telephone and face-to-face qualitative interviewing: A research note. In: *Qualitative Research* 4, 107–118.
- Tickle, E.L./J. Brownlee/D. Nailon, 2005: Personal epistemological beliefs and transformational leadership behaviours. In: *The Journal of Management Development* 24(7/8), 706–719.
- Tuan, M.T., 2004: Cultivating a culture of measurement. In: *Funding effectiveness: Lessons in Building Nonprofit Capacity*, 105–142.
- Tuan, M./J. Emerson, 1999: *The Roberts Enterprise Development Fund: A Case Study on Venture Philanthropy. Social Purpose Enterprises and Venture Philanthropy in the New Millennium, Volume II*. San Francisco: Roberts Enterprise Development Fund.
- Van de Ven, A.S. Poole, 1990: Methods for studying innovation development in the Minnesota innovation research program. In: *Organization Science* 1, 313–334.
- Williams, J.J./A.E. Seaman, 2001: Predicting change in management accounting systems: National culture and industry effects. In: *Accounting, Organizations and Society* 26, 443–460.
- Wouters, M./C. Wilderom, 2008: Developing performance-measurement systems as enabling formalization: a longitudinal field study of a logistics department. In: *Accounting, Organizations and Society* 33, 488–516.
- Zadek, S./R. Evans/P. Pruzan (eds), 2013: *Building Corporate Accountability: Emerging Practice in Social and Ethical Accounting and Auditing*. London: Routledge.
- Zorn, D.M., 2004: Here is a chief: the rise of the CFO in the American Firm. In: *American Sociological Review* 69(3), 345–364.

Appendix

Table 1

	REDF	UK
Managers	Managers at philanthropic organization in San Francisco Bay Area using principles of venture capital to fund social enterprises providing employment to homeless persons.	Managers in different parts of the UK working with social enterprises advocating new ways of helping disadvantaged persons.
Challenge of stakeholder management	Difficulties in communicating the value of social enterprises to stakeholders including funders and government departments. Difficulties in obtaining relevant information to analyze whether and how social enterprises were creating value for stakeholders.	
Managers' epistemic beliefs about what counts as valid and appropriate data	Data is valid when it is standardized, collected consistently over time and is comparable across organizations.	Data is valid when it reflects and directly incorporates the (potentially) different experiences of stakeholders.
Organizations' material conditions	Extensive financial resources. Hire interns and consultants with expertise in data collection and analysis. Managers also have expertise in data collection and analysis. Resources to develop new data collection systems.	Extremely limited financial resources. No interns or consultants. Managers have limited expertise in data collection and analysis. Lack of resources to develop new data collection systems.

A genealogy of the incentive

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The 'incentive' has become a key notion in current intellectual and political attempts to understand human action and act upon it. Managers, management consultants, politicians and bureaucrats frequently use 'incentives' in their accounts of the current and expected behavior of individual and institutional actors. More than a cognitive device, employees and organizations in the public and private sectors are also governed with the help of incentives – from monetary ones that are linked to performance to informational ones that are related to naming and shaming and voting with one's feet. Incentives should thus equally be understood as 'an instrument in the hands of powerful experts useful for managing and directing people's behavior to achieve certain social purposes' (Grant 2002: 130; Dix 2014b). I draw upon Michel Foucault's normative and theoretical perspectives on power/knowledge in the human sciences to challenge the current self-evidence of the incentive as explanatory term and technique of governing individuals and institutions. More in particular, I trace the emergence and subsequent development of incentivization as a new modality of power in an overarching genealogy of the incentive. That history of 20th century attempts to steer people's behavior in new directions takes me from American engineers turned industrial consultants via interwar management scientists to the mechanisms designed by postwar economists of information and incentives.

Foucault's normative stance can be derived from his use of the term 'genealogy' as interchangeable with what he called 'the history of the present' (1995: 31). Although he analyzed a variety of practices as diverse as ancient sexual chastity and eighteenth-century factory rules, the purpose was always to understand something disconcerting in contemporary societies. So even if Foucault sought to uncover the 'complex causal antecedents of a socio-intellectual reality', he did so only in 'an effort to question the necessity of dominant categories and procedures' (Gutting 1994: 12). Foucault's genealogical accounts of the recurrent shifts of purpose and the contingent combination of heterogeneous elements that pass as present-day

necessities thereby act on an impulse to transgress what now goes without saying (Goldstein 1994: 14). For what remains of the moral and historical 'necessity' of the categories with which we understand ourselves and the techniques developed to change our behavior if they are the product of historical contingencies and struggles for power?

Theoretically, Foucault genealogical works are concerned with the multifaceted relationships between power and knowledge (Foucault 1980). Sometimes, power is a brute and physical phenomenon, but more often, it is cloaked in discourses that try to rationalize its exercise and legitimize its existence. At the end of the 1970s, Foucault (2008, 2009) began to systematically investigate the history of the 'governmentalities' that provided such rationality and legitimacy. Drawing on his older political and epistemological themes, he focused on two interrelated aspects in succeeding rationalizations of government that were provided by historians, economists, theologians and philosophers from the Middle Ages to the twentieth century. First, he shifted his earlier focus on the formation of the human subject as an object of knowledge towards the constitution of objects and objectives of political action by different groups of (scientific) experts (Foucault 1972: 40–49; Dix 2014a). Second, he extended his analysis of discipline as a technology of power towards a broader set of techniques with which the behavior of individuals and groups could be steered in a different direction (Foucault 1995).

In this article, I will present three successive rationalizations of (industrial) government in which 20th century experts in the social and behavioral sciences demarcated the 'incentivizable subject' as an object of knowledge and designed 'techniques of incentivization' with which that subject could be governed. From the end of the 19th century onward, members of the American Society of Mechanical Engineers presented themselves as the first professional authority in matters of incentives. Second, management scientists with a background in the sociology, psychology and anthropology of work challenged that authority and added new characteristics to the worker that could be targeted with a new set of instruments. Third, mathematical economists appropriated the incentive as a key notion of their own in the 1970s and broadened the need for incentives to all situations where principals faced well-informed and self-interested agents. In the final section I

will outline how to proceed from a genealogy of the incentive to the cognitive and technical manageability of the future in particular instances of incentivization.

Engineering incentives

American mechanical engineers held a unique position in the late nineteenth century industrial landscape because they worked closely with the workers and foremen and, at the same time, had access to the higher echelons of management (Layton 1971; Nelson 1995). In 1886, Henry Towne called upon his fellow engineers to partly shift their attention from engineering problems to managerial ones. For the vast majority of the engineers that engaged in the ensuing debate, the management of workers became synonymous with the introduction of a variant of piece wages. This is where the characteristics of the worker came in. In his own proposal for profit-sharing, Towne urged managers to calculate the exact contribution of the factor 'labor' in the profits of the firm so the workers could be rewarded for their economic use of material and for their efficiency. His method of 'gain-sharing' could work because the worker was conceived of as a self-controlled individual who collaborated with colleagues and was able to postpone monetary satisfaction until the yearly bonus envelopes were distributed (Towne 1889). Frederick Halsey was not convinced. He thought workers were more shortsighted – i.e. only interested in immediate rewards – and inclined to slack off upon seeing the laziness of coworkers. Gain-sharing's reliance on collaborative effort and a long-term gaze should thus be countered by the individualization of incentives. Halsey's (1891) own 'premium plan' combined a fixed daily wage with a flexible premium rate received for reducing the time spent on performing a particular task.

A similar pessimism with regard the workers can be found in Frederick Taylor's infamous system of scientific management. In this system, the worker was viewed as a person who was not prone to work hard – soldiering was an engrained habit (Taylor 1998). Managers should therefore not rely upon the initiative of the workers but teach them how to do the job properly with the help of instruction cards and seek their adherence by way of an experimentally determined piece rate that differentiated between the accomplishment of the task and the failure to do so (Taylor 1895). Henry Gantt – one of Taylor's pupils and close collaborators – subsequently designed a system of organizational charts that visualized the productivity of workers and foremen. Supervisors would capture the performance of

individual employees on a daily basis by drawing shorter and longer lines on so-called 'Man Record Charts' to determine and legitimate the distribution of bonuses. At the same time, however, these lines made it possible to ascribe other features to the workers than that of their relative ability to produce. Especially with regard to the class of 'short-line workers', underperformance was accompanied by personality traits that were equally relevant for managing the shop floor. These workers felt inferior, were keen to distract others and were often found among those who started arguments in their departments (Gantt 1919; Clark 1942).

Although there were slight differences between their respective points of view, the nineteenth-century engineers delimited the incentivizable subject as a materialistic creature that was supposed to respond to monetary incentives in a mechanistic way. The materialism and mechanistic responsiveness of the industrial workers was closely related to the techniques of managers and foremen to govern them. The executive should first install an invariable wage incentive scheme that offered a monetary reward to workers who exerted themselves and increased their output. Second, the lower management representatives – superintendents and foremen – should assist the worker in attaining goals and achieving the material rewards he or she desired. Instruction cards and performance charts could be used to explain what needed to be done and the most efficient way to do it.

Adjustment as incentive

With the charting of human performance, the engineers reached the limit of their ability to delimit the incentivizable subject. Because the length of the line was the only access to the characteristics of the workers, a more fine-grained and 'deeper' understanding of their behavior and motivation became possible only after the emergence of other expert communities. From the 1920s onward, the authority of the engineers was challenged by social and behavioral scientists from a variety of disciplines. British and American economists criticized their one-sided focus on the material motives of workers (Commons 1921; Mitchell 1924; Pigou 1921). That criticism was not lost on a group of management scientists who, in the 1930s, moved industrial research in a new direction. With backgrounds in psychology, sociology and anthropology, these management scientists at the Harvard Business School construed a different account of employee behavior and developed a set of alternative techniques to manage the worker (Gillespie 1993; O' Conner 1999). First, the behavior of the worker

was now explained by deeper instincts and inclinations that were largely beyond the worker's control. Internal tensions would build up when outside circumstances prevented individuals from following their inclinations. The worker, who had no outlet for his or her frustrations, would suppress them until some trivial event on the shop floor triggered an excessive response (Mayo 1946). Second, the shop floor came to be considered a culture in its own right. The industrial anthropologist studied verbal communications, physical interactions, bonds of friendship and lingering antagonisms as if he were studying a foreign tribe. On the one hand, the working group was now viewed as something more than a set of individuals; it was a unity with a distinct set of norms and a set of strategies for maintaining those norms. On the other hand, the ethnographic researchers noted that the working group was far from homogeneous. There were different social positions in the group, and it was made up of different kinds of workers (Dickson 1935; Roethlisberger/Dickson 1934). Third, the workers were now considered to be communicative beings who were eager to have discussions with their superiors rather than merely receiving orders from them (Hall/Locke 1938).

At the end of the 1930s, the incentivizable subject was no longer a materialistic being that responded mechanically to monetary rewards. Instead, it had become a figure of considerable complexity that was either well-adjusted and productive or maladjusted and prone to cause problems within the organization. The worker was now endowed with an inner equilibrium, which could be disturbed by harsh treatment from the supervisory staff; however, it could also be strengthened by opportunities to relieve stress. Moreover, the worker was part of a group and acted according to relatively fixed patterns of behavior. The robustness of social interactions fostered a stable balance in the organization that could, however, be disturbed by sweeping organizational changes and disruptive elements within the group itself. Finally, the worker felt more in line with organizational purposes when its views were taken seriously by management and would become frustrated when instructions were badly communicated.

With the replacement of lack of will or effort for maladjustment as the key governmental problem, those who faced this novel incentivizable subject could no longer rely on their earlier wage incentive schemes (Rose 1999). The manager or foreman now had to be attentive to the mental and social processes on the work floor and also had to engage in friendly conversations with the workers. Thus,

the proposal for a new class of personnel counselors, ones who would speak with workers in an open yet authoritative way, set an example for the new role of the governor. The personnel counselor was the most approachable management representative; he or she could offer guidance and simultaneously gather vital information about conditions and moods on the shop floor. The open conversation was thus a way for management to get to know the workers, while at the same time making them feel at ease. With counseling techniques such as these one could address the various forms of friction that disrupted the atmosphere at work and foster the adjustment between internal life and external industrial conditions that was considered to be the major incentive for people to apply themselves.

Incentives and information

It took until the 1970s before a third and final governmentality centered on incentives came into being. This time, mathematically trained economists broadened an older theoretical debate on socialism versus capitalism as rival economic systems, to include a number of problems that were faced by all who governed. In their models, these economists gradually forged a link between information and incentives in formal models of central economic planning. In doing so, they abstracted from management as being a concrete problematic of manager-meets-reluctant-worker-or-foreman and excluded the substantial conception of motivation from the economic debate about allocation of resources in situations of information asymmetry.

The roots of the economics of incentives go back to a controversy over socialism and capitalism as distinct allocation mechanisms in the 1920s and 1930s (Lavoie 1985; Mirowski 2002). In the so-called *socialist calculation debate*, economists discussed the possibilities and limits of central planning in a society where information on supply and demand was dispersed over the entire economy (Cottrell/Cockshott 1993; Hayek 1975; Mises 1951). Although the participating economists disagreed about many issues, they shared an economic view – as opposed to a technical or engineering view – on matters of allocation and efficiency. The consensus about motivation as an issue that belonged to psychology – not to economics – enabled them to side-step the discussion of their fellow interwar economists about the characteristics of the worker. Moreover, they agreed that information was the most important issue to address because socialist economic planning required centralized knowledge of all relevant economic parameters that would otherwise be used by consumers

and producers in a more decentralized manner. The second step towards a more abstract approach was taken in postwar *mechanism design theory* (Lee 2006). In this specific branch of economics – an offspring of the earlier debate about central planning – the design of mechanisms for the allocation of resources in different mathematically defined economic environments was put center stage. By formalizing the interaction between a central coordinator on the one hand and consumers and producers on the other hand, mechanism design theorists could model the optimal allocation of resources in a rigorous mathematical way (Hurwicz 1972, 1973). The introduction of ‘*incentive compatibility*’ marked the third and final step in the establishment of a new problematic of government. As mechanism design theorists realized that people were not necessarily angels – truthful and concerned about others individuals – they could equally deceive the planner if that served their own interest (Hurwicz 1987). Any mechanism with which one could truly overcome the information asymmetry between coordinator and participants should fit in with the latter’s self-interested strategies. That is, all viable economic mechanisms had to be compatible with the – totally unspecified – incentives of the individuals in order to ensure that they opted for truthfulness. Game theory subsequently offered mechanism design theorists the opportunity to characterize the self-interested individual in a mathematical way. In game theoretic terms, the individual was a strategic agent who optimized his own gains by constantly changing his tactics based on the strategies of other agents (Hammond 1979; Laffont/Maskin 1983).

The end result of this process was the statement of a formal but relatively stable governmental problem and its solution: the relationship between a central coordinator and a set of participants was permeated by asymmetrically dispersed information that could only be overcome with the help of incentive schemes. In the economic theory of principal and agent this information-incentive nexus was subsequently plugged into a variety of concrete situations (Ledyard 1987; Stiglitz 1987; Laffont/Martimort 2002). The central planner became the neutral ‘principal’ as someone who can only achieve his or her goals if a set of agents – formerly known as socialist producers and consumers – either honestly provides the necessary information or adequately performs certain actions. According to economists, the world is inhabited by principals and agents; thereby, the idea took hold that incentivization was not a local matter – as the engineers still thought – but that it could be located in a wide range of relationships between gov-

ernors and governed, in both the public and the private sectors.

For all its mathematical sophistication – or precisely because of it – mechanism design theory had a very narrow conception of the incentivizable subject in comparison with the elaborate conception of the interwar management scientists. And that proved to be its main strength. The more abstract delimitation of the incentivizable subject as a self-interested and strategic agent made it possible to think of the problem of government in a far broader sense than engineers and the social and behavioral scientists had done before. The incentivizable subject was no longer the circumscribed figure of the materialist worker or the maladjusted industrial employee, but now appeared anytime information asymmetry could be said to occur. In this rationalization of government, the self-interested agent thus became the adversary of all governors – ministries, managers, corporate shareholders, socialist central planners, insurance firms, electorates and municipalities – who lacked direct access to the characteristics, the effort or the performance of the individuals and institutions they tried to influence. The fact that the incentivizable subject was no longer found in a particular location, such as the industrial shop floor, called for a new awareness from public- and private-sector principals. A rational governor should keep watch for possible instances of information asymmetry that could be exploited by self-interested agents. When such situations were found, a rational governor should design procedures that revealed the knowledge agents try to hide. In other words, the informational or behavioral strategies of agents should be addressed with targeted incentive schemes. When the scheme was adequate, the goals of the agents can be made compatible with those of the principal.

The incentive as future-oriented cognitive and technical device

Each rationalization of government was a combination of elements that were contingent on certain presuppositions about human action, on the orientation to particular academic and nonacademic networks and their prevalent debates, and on the prevalent research methods, the conceptions of proof and the dominant interpretations of the research results. Moreover, there was little necessity in the succession from one rationalization to the next: past achievements and earlier techniques were not disproven or disputed. Rather, they were neglected or simply excluded from the debate. Contingency permeated the genealogy of

the governmentalities that were centered on incentives and it is hard to describe this history as an increased understanding of incentives through the slow accumulation of results or an elimination of theories that had proved to be erroneous.

The objective of a genealogical inquiry is to transgress that which now goes without saying. Understanding the historical contingency that permeated the nineteenth- and twentieth-century views on and uses of incentives as twin elements in a more or less comprehensive program for wielding power over people is one way of doing so as it unsettles the taken-for-grantedness in our current thoughts about and uses of incentives. However, the problematization of something that is presently not perceived as problematic might be a necessary but certainly not a sufficient step to address present day instances of incentivization.

The first move in that direction is to see that, despite the many contingent historical shifts, the *incentive* also became a novel and quite coherent device that contrasts sharply with *discipline* as a rival modality of power. If we zoom out of the particular origins of new ways to wield power and its erratic course of development, we see how 'the multiplicity of often minor processes' in the end 'converge and gradually produce the blueprint of a general method' (Foucault 1995: 138). As a general method, contrary to discipline, the incentive does not target and transform the inner characteristics of individuals but surrounds them with desirable courses of action; it does not restrict movements and correct deviations from the norm but seduces the individual by addressing the willingness to act in accordance with the objectives of those who govern. With its aim to surround and seduce – not discipline and punish – incentivization comes close to Foucault's depiction of neoliberalism as an 'environmental technology' that addresses the relationship between the individual and the field of possibilities for action open to it (Foucault 2008: 259).

Second, these concrete instances of incentivization as a method of wielding power should be studied in light of the broader narratives about the future that structure of the forthcoming and disclose certain behavioral possibilities while limiting others. On the one hand, such *fictional expectations* (Beckert 2013a, 2013b) are bound up with the cognitive manageability of the future in the sense that individuals try to come to grips with the present state of the world and the one that might emerge from it. On the other hand, they are intimately related to the technical manageability of the future in the sense a wide variety of

instruments has been designed to drive off uncertainty and work towards a different world. The current importance of incentives fits in with this double status as a cognitive tool used to turn an open and uncertain future into something that is more or less stable and predictable as well as a technical tool to alter the future courses of action of individuals and institutions.

The importance of the incentive as a cognitive tool did not come out of thin air; it is part of an overarching economization of the social that is critically informed by the theories and models of economic experts. Over the past four decades, the incentive became a key term to make sense of individual and organizational behavior in the public and private sectors and to anticipate behavioral responses to institutional change. Economic science was a vital resource for such anticipations as the incentive had become a widely used yet ill-defined concept to explain why humans act as they do and what to expect from them. One of the pioneers of the economics of incentives holds that 'incentives are the essence of economics' (Lazear 1987: 744). The presupposition that 'people respond to incentives' or that 'people usually respond to incentives, exploiting opportunities to make themselves better off' subsequently became one of the core principles of microeconomics (Mankiw 2014: 7-9; Krugman/Wells 2012: 9). Some economists even recast the complete subject matter of economics in terms of incentives:

Today, for many economists, economics is to a large extent a matter of incentives: incentives to work hard, to produce quality products, to study, to invest, to save, etc. How to design institutions that provide good incentives for economic agents has become a central question of economics. (Lafont/Martimort 2002: 1)

The economics of incentives has provided these scientists with a 'flexible framework for modeling innumerable variations in institutional arrangements, and comparing their potential for inducing desirable behavior' (Gailmard 2014: 90). Next to its flexibility, the framework has also permitted economists 'to generate rather precise expectations about the effects of different institutional arrangements' because these arrangements 'have systematic and predictable consequences' (Strom 2000: 275). What goes for the core principles of economic science goes for its burgeoning popularizations. In *The armchair economist* we find that 'most of economics can be summarized in four words: "People respond to incentives". The rest is commentary' (Landsburg 1995: 3). Whereas the idea that 'people respond

to incentives' unites the heterogeneous collection of everyday and not-so-everyday situations in the bestselling *Freakonomics* and *Superfreakonomics* (Levitt/Dubner 2010: xii).

Starting out from the academic arena, the economic approach to incentives was taken up by a wider audience. Management consultants now explain and justify the positive role of private equity in a wider narrative about incentives. When investment funds buy a large part of the shares of a major firm, they allegedly exert leverage and give managers a much-needed incentive to realign their interest with those of the shareholders (Engelen et al. 2011: 74-75). In light of the recent financial crisis, attempts to get rid of the 'perverse incentives' in finance led to a method of remuneration where part of the bonus earned is not immediately paid out but kept on an account to replace the short-term focus with a concern for the longer run. Consultants from the Hay Group (2009) warn advocates of such 'bonus banking' that they should keep one cardinal rule of reward in mind: 'the more remote the payment becomes, the weaker the incentive'. In the public sector, economic experts argued for fundamental reform as the public sector was being out of touch with the 'market-driven incentives' of private businesses and lacking the 'clear incentives to satisfy their customers' (Crouch 2011: 76 and 78).

With such great expectations about people's responsiveness to incentives, the question of foreseeing the reaction of actors to institutional change could become a core concern of economists and those more directly concerned with public and private sector reform. As these examples show, the articulation of present and future states of affairs in terms of incentives is more than a cognitive matter; it already points in the direction of certain types of political or managerial interventions. The incentive should hence be understood as a technique to manage the future. After the decline of ideas of countercyclical intervention, and societal steering more broadly defined, incentivization became a guiding principle of individualized, market-informed forms of social control (Streeck 2015: 76). It is a key ingredient of neoliberalism as a policy discourse and practice. This is evident, for instance, in the 'pervasive neoliberal insistence on "incentives" in fiscal and welfare policies to kick-start economic growth' via 'higher pay and lower taxes at the top, along with cuts in wages and benefits at the bottom of the income ladder' (Streeck 2014: 67). The past three decades also saw the entrance of incentives in particular areas of the public sector. After his brief visit to the British National Health Service (NHS), economist-consultant Alain

Enthoven stated that 'the structure of the NHS contains perverse incentives' and advocated managed competition as a technique to break the power of organized elites. By measuring costs and outputs, establishing performance targets and fostering competition between different regional suppliers one could simultaneously increase the efficiency of health care professionals and stimulate medical innovation (Enthoven 1985: 1-4). Recently, the use of incentives has moved from UK professionals to the (future) recipients of health care as is the case with mothers who are offered two hundred pounds worth of vouchers when they breastfeed their newborns for six months (www.noshvouchers.org).

Education has also been a key area of incentive-infused reform. Dutch economic experts were concerned that teachers and schools did not perform optimally because they could make strategic use of the lack of knowledge about their performance. Providing parents with data about the relative performance of schools in their region was one way to address such instances of 'information asymmetry'. The public availability of information about school performance and the subsequent fear of losing pupils would be an incentive for principals to increase their school's performance. If this did not work out, then governments would introduce performance pay to incentivize teachers, as happened in different forms in the United States, Australia, The United Kingdom and The Netherlands. With a bonus directly related to the student test scores, teachers were given an interest in the performance of their pupils (Dix 2014c). When schools and teachers did not comply, governance would finally target the pupils themselves. In Dallas, Chicago and Washington a range of 'pay for grades' programs were established to incentivize children to apply themselves at school (Grant 2012: 111-112).

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References

- Beckert, Jens**, 2013a: Imagined futures: fictional expectations in the economy. In: *Theory and Society* 42, 219-240.
- Beckert, Jens**, 2013b: Capitalism as a System of Expectations: Toward a Sociological Microfoundation of Political Economy. In: *Politics & Society* 41(3), 323-350.
- Clark, Wallace**, 1942: *The Gantt chart: A working tool of management*. London: Sir Isaac Pitman & Sons.
- Commons, John R.**, 1921: *Industrial Government*. New York, NY: The Macmillan Company.
- Cottrell, Allin/Paul W. Cockshott**, 1993: Calculation, complexity and planning: The socialist calculation debate once again. In: *Review of Political Economy* 5, 73-112.
- Crouch, Colin**, 2011: *The strange non-death of neoliberalism*. Cambridge, MA: Polity Press.
- Dickson, William**, 1935: Incentives and wage plans. In: *Personnel Journal* 13, 324-330.
- Dix, Guus**, 2014a: Ricardo's discursive demarcations. A Foucauldian analysis of the formation of the economy as an object of knowledge. In: *Erasmus Journal of Philosophy and Economics* 7(2), 1-29.
- Dix, Guus**, 2014b: *Governing by carrot and stick. A genealogy of the incentive. Dissertation*. Amsterdam: Amsterdam University.
- Dix, Guus**, 2014c: Expressing concerns about the incentive as a public policy device. In: Susi Geiger et al. (eds), *Concerned markets: Economic ordering for multiple values*. Cheltenham: Edward Elgar, 19-45.
- Engelen, Ewald, et al.**, 2011: *After the great complacency: Financial crisis and the politics of reform*. Oxford: Oxford University Press.
- Enthoven, Alain**, 1985: Reflections on the management of the national health service: An American looks at incentives to efficiency in health services management in the UK. In: *Nuffield Provincial Hospital Trust Occasional Papers* 5. Retrieved from <http://www.nuffieldtrust.org.uk/publications/reflections-management-national-health-service-american-looks-incentives-efficiency>.
- Foucault, Michel**, 1972: *The Archaeology of Knowledge*. New York, NY: Pantheon Books.
- Foucault, Michel**, 1980: *Power/knowledge: Selected interviews and other writings, 1972-1977*. New York, NY: Pantheon Books.
- Foucault, Michel**, 1995: *Discipline and punish: The birth of the prison*. New York, NY: Vintage Books.
- Foucault, Michel**, 2008: *The birth of biopolitics: Lectures at the Collège de France, 1978-1979*. Hampshire: Palgrave Macmillan.
- Foucault, Michel**, 2009: *Security, territory, population: Lectures at the Collège de France, 1977 - 1978*. Hampshire: Palgrave Macmillan.
- Gantt, Henry. L.**, 1919: *Work, wages, and profits*. New York, NY: The Engineering Magazine.
- Gailmard, Sean**, 2014: Accountability and principal-agent theory. In: Mark Bovens/Robert E. Goodin/Thomas Schillemans (eds), *Oxford handbook of public accountability*. Oxford: Oxford University Press, 90-105.
- Gillespie, Richard**, 1993: *Manufacturing knowledge: A history of the Hawthorne experiments*. Cambridge: Cambridge University Press.
- Goldstein, Jan**, 1994: Introduction. In: Jan Goldstein (ed.), *Foucault and the writing of history*. Oxford: Blackwell Publishers, 1-16.
- Grant, Ruth W.**, 2002: The ethics of incentives: Historical origins and contemporary understandings. In: *Economics and Philosophy* 18, 111-139.
- Grant, Ruth W.**, 2012: *Strings attached: Untangling the ethics of incentives*. Princeton, NJ: Princeton University Press.
- Gutting, Gary**, 1994: Michel Foucault: A user's manual. In: Gary Gutting (ed.), *The Cambridge companion to Foucault*. Cambridge: Cambridge University Press, 1-28.
- Hall, Patricia/Henry W. Locke**, 1938: *Incentives and contentment: A study made in a British factory*. London: Pitman.
- Halsey, Frederick A.**, 1891: The premium plan of paying for labor. In: *Transactions: American Society of Mechanical Engineers* 12, 755-64.
- Hammond, Peter J.**, 1979: Symposium on incentive compatibility: Introduction. In: *Review of Economic Studies* 46, 181-184.
- Hay Group, 2009: Is bonus banking the answer to banking bonuses? Retrieved from: http://www.haygroup.com/downloads/uk/misc/bonus_banking_uk.pdf
- Hayek, Friedrich A.**, 1975: The nature and history of the problem. In: Friedrich A. Hayek (ed.), *Collectivist economic planning: Critical studies on the possibility of socialism*. Clifton: Augustus M. Kelly Publishers, 1-41.
- Hurwicz, Leonid**, 1972: On informationally decentralized systems. In: Charles B. McGuire/Roy Radner (eds), *Decision and organization: A volume in honor of Jacob Marschak*. Amsterdam & London: North-Holland Publishing Company, 297-336.
- Hurwicz, Leonid**, 1973: The design of mechanisms for resource allocation. In: *The American Economic Review* 63(2), 1-30.
- Hurwicz, Leonid**, 1987: Oral History III: An Interview. In: George R. Feiwel (ed.), *Arrow and the ascent of modern economic theory*. London: Macmillan, 258-292.
- Koselleck, Reinhart**, 2004: *Futures past. On the semantics of historical time*. New York: Columbia University Press.
- Krugman, Paul/Robin Wells**, 2012: *Microeconomics*. New York: Worth Publishers.
- Laffont, Jean-Jacques/Eric Maskin**, 1983: The theory of incentives: An overview. In: Werner Hildenbrand (ed.), *Advances in economic theory*. Cambridge: Cambridge University Press, 31-94.
- Laffont, Jean-Jacques/David Martimort**, 2002: *A theory of incentives: The principal-agent model*. Princeton, NJ: Princeton University Press.

- Landsburg, Steven E.**, 1995: *The Armchair Economist. Economics and Everyday Life*. New York, NY: Free Press.
- Lavoie, Don**, 1985: *Rivalry and central planning: The socialist calculation debate reconsidered*. Cambridge: Cambridge University Press.
- Layton, Edwin T., Jr.**, 1928: *The revolt of the engineers. Social Responsibility and the American Engineering Profession*. Originally published: Cleveland: Press of Case Western Reserve University, 1971.
- Lazaer, Edward P.**, 1987: Incentive contracts. In: John Eatwell/Murray Milgate/Peter Newman (eds), *The new Palgrave: A dictionary of economics*. New York, NY: Stockton Press, 744-748.
- Ledyard, John O.**, 1987: Incentive compatibility. In: John Eatwell/Murray Milgate/Peter Newman (eds), *The new Palgrave: A dictionary of economics*. New York, NY: Stockton Press, 739-744.
- Lee, Kyu S.**, 2006: Mechanism design theory embodying an algorithm-centered vision of markets/organizations/institutions. In: *History of Political Economy* 38 (Annual Suppl.), 283-304.
- Levitt, Steven D./ Stephen J. Dubner**, 2010: *Superfreakonomics*. London: Penguin Books.
- Mankiw, N. Gregory**, 2014: *Principles of microeconomics*. Mason: South Western Cengage Learning.
- Mayo, Elton**, 1946: *The human problems of an industrial civilization*. Boston, MA: Division of Research, Graduate School of Business Administration, Harvard University.
- Mirowski, Philip**, 2002: *Machine dreams: economics becomes a cyborg science*. Cambridge: Cambridge University Press.
- Mises, Ludwig**, 1951: *Socialism: An economic and sociological analysis*. New Haven, CT: Yale University Press.
- Mitchell, Wesley C.**, 1924: The prospects of economics. In: Rexford G. Tugwell (ed.), *The trend of economics*. New York, NY: Albert A. Knopf, 3-36.
- Nelson, Daniel**, 1995: *Managers and workers: Origins of the new factory system in the United States 1880-1920*. Wisconsin, WI: The University of Wisconsin Press.
- O' Conner, Ellen**, 1999: The politics of management thought: A case study of the Harvard Business School and the Human Relations School. In: *The Academy of Management Review* 24, 117-131.
- Pigou, Arthur C.**, 1921: *The economics of welfare*. London: Macmillan and Co.
- Roethlisberger, Fritz J./William J. Dickson**, 1934: *Management and the worker: Technical vs. social organization in an industrial plant*. Harvard University: Division of Research, Business Research Studies, no. 9.
- Rose, Nikolas**, 1999: *Governing the soul: The shaping of the private self*. London/New York: Free Association Books.
- Stiglitz, Joseph E.**, 1987: Principal and agent. In: John Eatwell/Murray Milgate/Peter Newman (eds), *The new Palgrave: A dictionary of economics*. New York, NY: Stockton Press, 966-972.
- Streeck, Wolfgang**, 2014: *Buying time: The delayed crisis of democratic capitalism*. London: Verso.
- Streeck, Wolfgang**, 2015: Von der Gesellschaftssteuerung zur sozialen Kontrolle. In: *Blätter für Deutsche und Internationale Politik* 1, 63-80.
- Strøm, Kaare**, 2000: Delegation and accountability in parliamentary democracies. In: *European journal of political research* 37, 261-289.
- Taylor, Frederick W.**, 1895: A piece-rate system, being a step toward partial solution of the labor problem. In: *Transactions: American Society of Mechanical Engineers* 16, 856-83.
- Taylor, Frederick W.**, 1998: *The principles of scientific management*. New York, NY: Dover Publications.
- Towne, Henry R.**, 1886: The engineer as an economist. In: *Transactions: American Society of Mechanical Engineers* 7, 428-32.
- Towne, Henry R.**, 1889: Gain-sharing. In: *Transactions: American Society of Mechanical Engineers* 10, 600-14.

Financial numbers as signs and signals: looking back and moving forward

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The idea that economic reality is represented by financial numbers is ubiquitous in economic discourse of all shapes and forms, micro and macro, theoretical and practical, mainstream and alternative. Michel Foucault's take in his lectures on governmentality on the economy as a sphere of intervention created by the efforts of bureaucrats and political advisors, by now a locus classicus for economic sociologists (Foucault 1991: 92-6), provides one particular image of the economic as something inspected from without by the numbers. This image has been instructive with respect to the history of statistics and the history of the social sciences more generally (e.g., Hacking 1990: 115-88).

At the same time, the image does not connect seamlessly with how people make use of numbers across markets and organisations: When market actors respond to prices or financial reports, the use of numbers as representations of some reality is often less important than the effect these numbers have (or are anticipated to have) on other actors; within organisations people also quite often appear much more concerned with what others will make of a measure than with whether a measure is true or false to begin with. The language of valuations, indicators, rates and rankings certainly captures a sense of "circulating reference" (Latour 1999: 24-79) but there is an important difference between the idea that a financial number as a sign indicates a reality out there to be acted upon, and the understanding that the number is indicative primarily by the very act of being a signal that is acted upon and acted with. If you are looking at a number as a *sign* – in terms of the information that has been put in – you are looking backward to what it represents. If you are looking at that same number as a *signal* – in terms of the message it is sending – you are looking forward to a receiver and the information to which he or she will respond (Clark 1996: 159-60; Skyrms 2010: 8).¹

In addressing this difference between what financial numbers bring in as signs and what they bring on and about as

signals, much has been made of the idea that numbers can be performative (Callon 1998; MacKenzie and Millo 2003). Part of the appeal of the concept of performativity in talking about financial numbers is that it presents an apparent alternative: either numbers will be determined by certain aspects of reality or certain aspects of reality will be determined by numbers. The distinction between signs and signals however suggests a continuum of ways in which numbers are used rather than a sharp demarcation – and significant overlap between signs and signals: a number that is a sign by virtue of referring to some slice of reality may also be a signal that makes people do something, and a number that is a signal will tend to rely on being understood as a sign to begin with.

It is perhaps on financial markets where prices are many things at once that such overlap between signs and signals becomes particularly apparent. The difference between signs and signals on the other hand, is particularly salient in situations in which it is clear that some information is being deliberately sent as a message rather than being just "given off" (Goffman 1959: 14-6). In such situations, messages are perceived as utterances that are clearly separate from the information involved in an act of communication (Luhmann 1995: 150-4) and as something that can be interrogated separately, for example for its motives or the effects intended by senders: You may register the information that is born by a number (as a sign) but you may also wonder what the sender is trying to accomplish by offering it to you (as a signal); the number may be a truthful representation (sign) and at the same time a poisoned message (signal), or, vice versa, an honest signal that uses a sign that has been compromised. When people are trying to do many things with numbers, as in the run-up to publishing a quarterly earnings report, the difference between signs and signals may not always be readily apparent, especially when communication has been designed to resist any such to unpacking. Just then the difference is of particular strategic importance: When you know that people may draw all kinds of conclusions and be pushed to all kinds of action by a number, you can ill-afford to let information inadvertently be given off. Against this background of the need to manage financial numbers not only as signs but also as signals in many settings of economic

activity across markets and organisations, it is surprising that the difference between signs and signals has received so little systematic attention among economic sociologists. It presents a gradual qualification of financial numbers in different settings and uses that can allow analysts to explore tensions and interdependencies between their distinct aspects and potentials as signs and signals.

From costly signals to coordination devices

The signalling potential of financial numbers is often associated with allegedly less rational aspects of market behaviour like selling or buying frenzies (e.g., Kindleberger 1989: 5-6). In such cases, financial numbers turn from signs into signals (to sell or buy in a hurry) not only for human beings but also for computers and algorithms (see Roberts and Jones 2009: 862; Pardo-Guerra et al. 2010). These actors are just as well and often significantly faster at “getting” a signal from market data. The signal character of, say, a price is not necessarily a matter of anybody trying to consciously send information forward to market participants but of market participants responding to what they think market data are telling them. In this sense, a signal is indeed a special kind of sign to be picked up from among the many signs floating around. It is up to the receiver to “get” the message from all the information set up for her in one way or another (Luhmann 1995: 139),² and what “the” market or “the” world is trying to tell her is retrospectively turned into an element of “getting it”. Put in these terms, the signal character of certain financial numbers, whether their message is to sell, buy or hold, turns into something much less dramatic as when numbers are more or less seen to be ‘screaming’ at people. This signal character emerges from a process of separating information that is relevant from other information that might just as well be noise.

The most routine and everyday form of signalling well established as a topic in the broader socio-economic literature is job market signalling in the sense originally investigated by Michael Spence (1974). In this case, the message character of signals (levels of education, academic degrees, merits or marks) is very much apparent to the parties – potential employers and employees – involved in the signalling process. In Spence’s model, signals are effective to the extent in which they are able to rank for employers applicants in terms of their productivity after having landed a job. Imposing signalling cost on senders is the mechanism for achieving respective separation between the more and the less pro-

ductive applicants (Spence 1974: 14-28): if only productive applicants are able to afford a degree (merit, mark etc.), the degree can be a signal of productivity.

This idea of a cost condition establishing a message that is ‘telling’ to receivers of a signal has found wide applications across disciplines, from the investigation of status signals in a variety of markets in economic sociology (Podolny 2005) to biological investigations of evolutionary dynamics and signalling among, say, sticklebacks (Folstad et al. 1994; Milinski et al. 2010), to sociological explorations of recruiting problems in criminal networks (Gambetta 2009a). Take away the cost condition in any of these cases of signalling, and the difference between a sign that is ‘cheap talk’ and a signal that can be ratified as passing information on effectively about what people (or sticklebacks) are actually like will collapse (Gambetta 2009b: 178-83). Costly signalling through financial numbers takes many forms, the most notorious of which may be share buybacks (e.g., Vermaelen 1981; Bhattacharya and Dittmar 2008). Alongside workforce reductions, buybacks are the prevalent signals corporations use to demonstrate “shareholder value” (e.g., Lazonick & Sullivan 2000: 18f.). Both signals are manifestations of the “handicap principle” (Zahavi & Zahavi 1997): signalling firms reduce their capital, handicapping themselves and thus showing management’s commitment to economize on assets and hand money back to shareholders rather than spend it otherwise.

It is worth re-emphasising that the ability to make out signals in all these cases rests completely with receivers, whether these are future employers, sticklebacks, traders or algorithms. Sending off a sign that is as costly however is a necessary but ultimately not sufficient condition for it to become a signal. If employers in Spence’s original model are not convinced that academic degrees can tell them anything about productivity (see Spence 1974: 16-7), they will consider these degrees a form of “cheap talk”; if a female stickleback would not have inherited an attraction to a male’s red flank (perhaps her father was a greyish but otherwise attractive guy), a male’s redness would be for nothing (and might eventually phase out of the gene pool). There is therefore a certain scope here for potential bases of receivers’ subjective inclination, learned, inherited or perhaps purposely built into an algorithm, to pick up a signal – despite the apparent objectivity of the cost condition. This need for an effective signal to appeal in some form or another to receivers does not in any way decrease the generalizability of the associated signalling model. If anything, it makes the model more general as the appeal

of the signal receivers may be brought about by a wide variety of means – from observing employees at work to evolutionary dynamics among bacteria to having read the Financial Times in the morning (also see Podolny 2005: 22-39). Though economic research has applied the concept of costly signals widely (see also Hoppe et al. 2009; Orzack and Tauman 1996), this dependence of a signal's effectiveness on what is essentially receivers' "practical sense" (Bourdieu 1990: 69) have not been explored to any extent.

Game theory in particular has certainly been associated with a strong stream of research in which the use of signals has informed the analysis of economic action more broadly considered. Schelling's understanding of coordination games with its prominent concept of focal points (Schelling 1960: 52-118) was received with some early enthusiasm also among sociologists – before Erving Goffman threw down the gauntlet and those who might otherwise have been well disposed to explore coordination game dynamics stayed clear ever since (Goffman 1969: 83-145; Vollmer 2013: 372-4). Instead Schelling's ideas became influential in analytical philosophy (Lewis 1969; Skyrms 2004) and over the years gathered some momentum among the game theoretically minded across disciplines – even if this has to some extent been overshadowed by a preoccupation with the prisoners' dilemma scenario and its alleged implications for the feasibility of human cooperation (see Riker 1992). In the coordination game scenario, receivers and senders have common interest in finding efficient coordination (focal) points among the many possible combinations of moves. However, the concept of focal points is meant to apply to the much greater set of mixed motive game scenarios (see Schelling 1960: 99-113).

The limited overlap of interests that is characteristic of mixed motive games (like the prisoners' dilemma) is characteristic of most market situations as buyers and sellers with diverse interest need to coordinate demands and offers. Credit ratings (Boot et al. 2005) as well as even forms of "cheap talk" have been found to affect market coordination in favour of both senders and receivers of signals (see Almazan et al. 2008; Qu 2013). Whereas the role of prices in coordinating market participants is very much apparent, this has not systematically been explored as a particular role for numbers as signals – despite the fact that on closer inspection it has to appear anything but unproblematic, not at least because of its association with market volatility (see Gintis 2007). This of course recalls the more dramatic implications of signalling dynamics in triggering herding-like forms of collective behaviour through

what is effectively a "keynote" (Turner and Killian 1972: 47-8) to get going. At the same time, and perhaps more generally, such dynamics associate numbers with forms of coordination that can turn into stable conventions in the sense of Lewis (1969), for example in how people respond to prices or indexes.

That ongoing coordination would constantly reinforce the value of a signal (or set of signals) is the very point of the Schelling-Lewis perspective on signalling (also see Sugden 2004: 191-2). As with costly signals, the effectiveness of any number to work as a signal in this manner will need to imply a simultaneous sign character, in other words that receivers will see some reference of a number to a specific slice of reality, say, a commodity or asset. While one interesting implication of signalling game dynamics is the ability to explain the emergence of signs and larger vocabularies through the very process of signalling (Lewis 1969: 122-59), the limiting factor for the effective use of signals is again that a population of receivers adopts and retains the ability to pick up signals (also see Skyrms 2010: 48-62). As keen as economic research has been to adopt game theoretical models, this boundary condition for generating signals from sets of signs has also not been given much consideration in the case of convention-backed signals. But it may very well affect just about anything this research is about. Most critically perhaps, a proclivity among receivers to value certain signs more than others may upgrade certain signs into signals just as it downgrades others into noise, respectively affecting the ability of financial numbers to have an impact on economic activity – and potentially impairing the ability of financial numbers that are but mere signs to convince receivers of their relevance, if not validity.

Accounting and the problem of transparency

Such consequences of signalling on the consumption of financial numbers can hardly leave the production side unconcerned. If two kinds of information are involved in signalling – one put in by the sender, the other picked up by the receiver (Skyrms 2010: 8) – the production side in general and accounting practice in particular seem very much preoccupied with getting the first kind of information right. After all, putting the right kind of information into the right kind of place, for example into a financial statement, should be about getting the relationships between signs and economic substance right irrespective of which signs will become signals (which is either way up to receivers). The complications of reliably produc-

ing accounting numbers and financial statements as “circulating references” (Latour 1999: 24-79) of economic realities in this manner have been duly noted, both with respect to the degree of reality construction that appears unavoidably involved in such production (e.g., Hines 1991) and with respect to the lack of an alternative to the ideal of representation (McSweeney 1997). However, it is perhaps with respect to the understanding of accounting as generating a particular form of visibility, which has been highly productive in acknowledging both its reality creating and reality reflecting aspects (Hopwood 1990), that the production of financial numbers is most directly affected by uncertainty among consumers.

This uncertainty has often been expressed as a concern with the level of transparency. The metaphor of transparency is interesting because, like the idea of accounting visibility, it suggests that financial numbers should improve stakeholders’ sight of some economic substance. The call for transparency articulates a concern with being able to see the right kind of information about this substance. Rather than a wish of making everything visible, the call for transparency is a concern with seeing what is important, a concern about the ability to ‘see through’ to the real (e.g., Fung et al. 2007: 5-6). With respect to accounting, this is a second-order concern about the proper form, level, or quality of making things visible (see Jordan & Messner 2012: 546-7; Nielsen & Madsen 2009: 852-3). Accounting struggles with resolving this concern – since how could it get itself out of the way for stakeholders to ‘see through’? In order to provide visibility, accounting after all will need to put *some* numbers in the field of vision.

Nevertheless, the concern with transparency among stakeholders is hardly irrational. That numbers get in the way is part of the contemporary workplace experience. Not just accountants but all kinds of organisation members are mobilised to make visible their efforts and feed them into management information, enterprise resource or performance measurement systems (e.g., Quattrone & Hopper 2006; Cushen 2013). That people struggle to meet their targets and perhaps find ways of accomplishing them that were not quite intended can nowadays be treated as common knowledge with respect to the possibility of “exploitive fabrication” (Goffman 1974: 103-11) when in need to come up with certain numbers. Stakeholders who have seen the likes of Enron and Lehman Brothers fall will hardly imagine accountants to be above the fray.

Academics of course are no exception to any of this, and our experience of being measured, rated and ranked has dramatically increased interest in understanding the dynamics of quantification. The verdict of “reactivity” (Espeland and Sauder 2007) in particular expresses concerns with the ability of numbers to provide accurate and serviceable information in terms of a measurement problem. The verdict resonates with Foucauldian assumptions about the use of numbers among those made visible by these numbers. In terms of “the government of the self by the self” (Langley 2007: 72; Cushen 2013: 327-329), reactivity may be an effect desired by stakeholders wishing to impose the work of monitoring on those being monitored. Common knowledge about the playability of financial numbers and the possibility of exploitive fabrication, however, will block such a Foucauldian route towards trusting numbers to bring about discipline. This again points to receivers’ practical sense as a limiting factor to any signal’s validity – or, in this case, the lack thereof. Interestingly though it is often *not* the character of numbers as signals which suffers primarily from being not quite believable at face value. Instead their character as signs is called into question. In the same sense that shareholders may feel that share buybacks do not tell them anything interesting about a company’s assets or strategies but still signal commitment to shareholder value, the scepticism towards numbers that receivers assume to have been “played” may hollow out accounting signs with respect to anything else than the circulation of signs, models and conceptual assumptions in which they are involved according to the rules of the game (see Macintosh et al. 2000). This may give rise to a certain cynicism with respect to financial numbers that rarely anybody would believe in as signs (e.g., of some ‘underlying’ economic reality) while still trusting them as signals (e.g., in moving markets).

The accounting profession can ill-afford to have accounting devolve into a kind of hyperreality machine. Its reputation continues to depend on its ability to convince stakeholders that accounting provides and safeguards numbers that are both valid as signs and can be effective as signals. Any signalling function of financial numbers will have to rely on the reliability of the sign function, i.e. will need to be backed up by a belief that a number represents something meaningful to begin with. If accounting is seen to either stand in the way of economic substance or to just provide a superficial façade for something more substantial happening behind the scene, then the serviceability of accounting signs as potential signals cannot but erode.

One of the major problems in dealing with this situation appears to be the lack of an easy answer to the question, how to improve the signalling quality of accounting signs once stakeholders have lost trust in them. Accounting standard-setting with its emphasis on ideals of representation relies on a convention-based form of signalling that appeals to a common-sense understanding of objectivity (Hines 1991) and tries to mobilise at least some trust in numbers by staying within the area of public dispute indicated by authors like Porter (1995). If the belief in the power of numerical expertise, however, is not conventional at least to the extent that stakeholders will tend to play along with it (Lewis 1969: 152-9), an alternative mechanism will be required that would effectively separate those who send reliable signals from all the others. Investments into standard-setting are unlikely to solve this problem, since almost by definition standards provide recipes for pooling rather than for separating signallers. The assumption of such pooling of course tends to be that informative differences will be visible to receivers after standards of signalling have been applied indiscriminately but, again, this would rely on the improbability of exploitive fabrications. The twin-character of standards as rules for regulating as well as for fixing and gaming the use of numbers in statements and reports has long been seen in the literature on creative accounting (Shah 1996: Waskey 2014: 5). The technical literature about signalling dynamics in financial reporting is certainly sophisticated but where it tries to offer practical guidance for reporting, it has to acknowledge that pooling is to some extent endemic (see Guttman et al. 2006: 835-6).

Moving on with the numbers, forward to consumers

There are, to conclude, two kinds of information relevant to signalling processes: the information put into a number by a sender and the information retrieved from it by a receiver (Skyrms 2010: 8). The first one can be associated with the sign character of financial numbers, the second with their ability to become a signal. The preceding considerations suggest that signalling dynamics will tend to privilege the latter over the former. As a result, a lot of information may be lost in the circulation of financial numbers, most of which never become – or at some point cease to be – signals, possibly to the detriment of stakeholders that miss out on them.

For economic sociologists and accounting scholars this suggests that the engagement with financial numbers as a

generic topic of research needs to be extended toward a closer inspection of what goes on among receivers as consumers of numerical information. The Foucauldian literature has made big strides in investigating the involvement of financial numbers in political discourses and the technologies of governing (Rose and Miller 1992) but it has tended to treat the character of financial numbers as signs (of economic and social regularities, populations, selves etc.) as a given. Government is certainly one major type among consumers of financial numbers but the process of consumption itself is complex (see Graham 2008), cannot be taken for granted but so far has too rarely been unpacked.

Examining more closely how receivers affect the ability of numbers to provide information is one way in which sociologists could contribute widely to both the understanding of professional practice in accounting and finance and the understanding of signalling more generally (also see Connelly et al. 2011: 60-1). The circulation of specific bits of information by numbers is not automatic but neither is it accidental or entirely irregular. In other words the circulation of financial numbers, including the dynamics and tensions within investing and retrieving information from them, appears wide open for analytical engagement, and such engagement should not remain the prerogative of the more technically-minded among social scientists.

Signalling is not confined to human senders and receivers; animals do it, bacteria do it (Skyrms 2010: 20-32). In contemporary economic action, and increasingly in social life per se, a lot of signalling is done by non-human non-organic actors: information-processing machines and algorithms. If the effectiveness of a signal ultimately comes down to the ability of receivers to pick it up, this may suggest that these actors have been set up by human engineers to participate in signalling – perhaps in a way initially conforming to the needs of some human receiver. Even if that was the case, the brief considerations offered here suggest that the sheer amount of signalling that is brought about through the work of information-processing devices would still have a considerable and not entirely tame effect on the information that market actors (humans and non-humans) would respond to (Roberts and Jones 2009: 862-5). A sustained engagement with the consumption of financial numbers as signs and signals will need to interrogate the participation of algorithms, laptops, servers or apps as much as the involvement of flesh-and-blood stakeholders and their embodied “practical sense” (Bourdieu 1990: 69).

Non-human participation in processing signs and signals can be expected to increasingly affect the production of financial numbers by accounting and finance professionals, pressing the preparation of accounts, statements and reports to anticipate non-human readers. Maybe these users can be “made up” or regulated in a way simulating the ideal readers envisaged by accounting standard-setters (Young 2006). However, if effective signalling through financial numbers depends on stakeholders’ practical sense and if some of these stakeholders’ very access to these numbers is mediated by non-human actors who upgrade certain numbers into signals and others into noise, how could standard-setting alone keep pace with such dynamics? Stakeholders’ intuitions about the meaning, relevance and validity of financial numbers are informed by models, algorithms and all kinds of other mediations quite beyond the control of professional bodies. For the moment, accounting and finance professionals in the field are left to their own devices and allies in chasing such dynamics. In the spirit of active professionalization, economic sociologists should be keen to throw themselves in the mix.

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Endnotes

¹Clark (1996) and Skyrms (2010) diverge significantly in the way they employ the concepts of sign and signal. The differentiation here between signs and signals with respect to financial numbers adopts Clark’s intuition that as signals they require some sign character but otherwise follows Skyrms’ understanding of two kinds of information involved in signalling – while bracketing all other (and certainly much finer) aspects of a wide-ranging discussion.

²This is not to say that all the other information would make no difference whatsoever. Such a claim would not only contradict the very definition of information (Bateson 1972: 315) but would also collapse differences in how people respond to the world into one simple opposition between signals and noise (e.g., Silver 2012).

References

- Almazan, Andres/Sanjay Banerji/Adolfo DeMotta, 2008: Attracting Attention: Cheap Managerial Talk and Costly Market Monitoring. In: *Journal of Finance* 63: 1399-1436.
- Bateson, Gregory, 1972: *Steps to an Ecology of Mind*. San Francisco: Chandler
- Bhattacharya, Utpal/Amy Dittmar, 2008: *Costless versus Costly Signaling: Theory and Evidence from Share Purchases*. Working paper, Indiana University, Bloomington.
- Boot, Arnoud W. A./Todd T. Milbourn/Anjolein Schmeits, 2005: Credit Ratings as Coordination Mechanism. In: *Review of Financial Studies* 19, 81-118.
- Bourdieu, Pierre, 1990: *The Logic of Practice*. Stanford, Cal.: Stanford University Press.
- Callon, Michel, 1998: Introduction: The Embeddedness of Economic Markets in Economics. In: Michel Callon (ed.), *The Laws of the Markets*. Oxford: Blackwell, 1-57.
- Clark, Herbert H., 1996: *Using Language*. Cambridge: Cambridge University Press.
- Connelly, Brian L./S. Trevis Certo/R. Duane Ireland/Christopher R. Reutzell, 2011: Signaling Theory: A Review and Assessment. In: *Journal of Management* 37, 39-67.
- Cushen, Jean, 2013: Financialization in the Workplace: Hegemonic Narratives, Performative Interventions and the Angry Knowledge Worker. In: *Accounting, Organizations and Society* 38, 314-331.
- Espeland, Wendy N./Michael Sauder, 2007: Rankings and Reactivity: How Public Measures Recreate Social Worlds. In: *American Journal of Sociology* 113, 1-40.
- Folstadt, Ivar/Anne Mette Hoppe/Andrew Karter/Arne Skorping, 1994: Sexually Selected Color in Male Sticklebacks: A Signal of both Parasite Exposure and Parasite Resistance. In: *Oikos* 69, 511-515.
- Foucault, Michel, 1991: Governmentality. In: Graham Burchell/Colin Gordon/Peter Miller (eds), *The Foucault Effect: Studies in Governmentality*. Chicago: University of Chicago Press, 87-104.
- Gambetta, Diego, 2009a: *Codes of the Underworld. How Criminals Communicate*. Princeton/Oxford: Princeton University Press.
- Gambetta, Diego, 2009b: Signaling. In: Peter Hedström/Peter Bearman (eds), *The Oxford Handbook of Analytical Sociology*. Oxford: Oxford University Press, 168-194.
- Gintis, Herbert, 2007: The Dynamics of General Equilibrium. In: *The Economic Journal* 117, 1280-1309.
- Goffman, Erving, 1959: *The Presentation of Self in Everyday Life*. Garden City, N.Y.: Doubleday.
- Goffman, Erving, 1969: *Strategic Interaction*. Philadelphia, PA: University of Pennsylvania Press.
- Goffman, Erving, 1974: *Frame Analysis. An Essay on the Organization of Experience*. New York: Harper and Row.

- Graham, Cameron**, 2008: Fearful Asymmetry: The Consumption of Accounting Signs in the Algora Steel Pension Bailout. In: *Accounting, Organizations and Society* 33, 756-782.
- Guttman, Ilan/Ohad Kadan/Eugene Kandel**, 2006: A Rational Expectations Theory of Kinks in Financial Reporting. In: *Accounting Review* 81, 811-848.
- Hacking, Ian**, 1990: *The Taming of Chance*. Cambridge: Cambridge University Press.
- Hines, Ruth D.**, 1991: The FASB's Conceptual Framework, Financial Accounting and the Maintenance of the Social World. In: *Accounting, Organizations and Society* 16, 313-331.
- Hoppe, Heidrun C./Benny Moldovanu/Aner Sela**, 2009: The Theory of Assortative Matching Based on Costly Signals. In: *Review of Economic Studies* 76, 253-281.
- Hopwood, Anthony G.**, 1990: Accounting and Organisation Change. In: *Accounting, Auditing and Accountability Journal* 3 (1), 7-17.
- Kindleberger, Charles**, 1989: *Manias, Panics, and Crashes. A History of Financial Crisis*. Revised edition. New York: Basic Books.
- Langley, Paul**, 2007: Uncertain Subjects of Anglo-American Financialization. In: *Cultural Critique* 65, 67-91.
- Latour, Bruno**, 1999: *Pandora's Hope. Essays on the Reality of Science Studies*. Cambridge, Mass.: Harvard University Press.
- Lewis, David**, 1969: *Convention: A Philosophical Study*. Cambridge, Mass.: Harvard University Press.
- Luhmann, Niklas**, 1995: *Social Systems*. Translated by John Bednarz with Dirk Baecker. Stanford, Cal.: Stanford University Press.
- MacKenzie, Donald/Yuval Millo**, 2003: Constructing a Market, Performing Theory: The Historical Sociology of a Financial Derivatives Exchange. In: *American Journal of Sociology* 109, 107-145.
- Macintosh, Norman B./Teri Shearer/Daniel B.Thornton/Michael Welker**, 2000: Accounting as Simulacrum and Hyperreality: Perspectives on Income and Capital. In: *Accounting, Organizations and Society* 25, 13-50.
- McSweeney, Brendan**, 1997: The Unbearable Ambiguity of Accounting. In: *Accounting, Organizations and Society* 22, 691-712.
- Milinski, Manfred/Siân W. Griffiths/Thorsten B.H. Reusch/Thomas Boehm**, 2010: *Costly Major Histocompatibility Complex Signals Produced only by Reproductively Active Males, but not Females, Must be Validated by a 'Maleness Signal' in Three-Spined Sticklebacks*. Proceedings of the Royal Society B 277, 391-398.
- Orzach, Ram/Yair Tauman**, 1996: Signalling Reversal. In: *International Economic Review* 37, 453-464.
- Pardo-Guerra, Juan Pablo/Daniel Beunza/Yuval Millo/Donald MacKenzie**, 2010: Impersonal Efficiency and the Dangers of A Fully Automated Securities Exchange. In: *Foresight Driver Review, DR11*. London: Foresight, <http://eprints.lse.ac.uk/43589/> (last seen 1st December 2015).
- Podolny, Joel M.**, 2005: *Status Signals. A Sociological Study of Market Competition*. Princeton, N.J.: Princeton University Press.
- Porter, Theodore M.**, 1995: *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, N.J.: Princeton University Press.
- Qu, Hong**, 2013: How Do Market Prices and Cheap Talk Affect Coordination? In: *Journal of Accounting Research* 51: 1221-1260.
- Quattrone, Paolo/Trevor Hopper**, 2006: What Is IT? SAP, Accounting, and Visibility in a Multinational Organisation. In: *Information and Organization* 16: 212-250.
- Riker, William H.**, 1992: The Entry of Game Theory into Political Science. In: E. Roy Weintraub (ed.), *Towards a History of Game Theory*. Durham, N.C.: Duke University Press, 207-223.
- Roberts, John/Megan Jones**, 2009: Accounting for Self Interest in the Credit Crisis. In: *Accounting, Organizations and Society* 34, 856-867.
- Rose, Nikolas/Peter Miller**, 1992: Political Power Beyond the State: Problematics of Government. In: *British Journal of Sociology* 43: 173-205.
- Schelling, Thomas C.**, 1960: *The Strategy of Conflict*. Cambridge, Mass.: Harvard University Press.
- Shah, Atul K.**, 1996: Creative Compliance in Financial Reporting. In: *Accounting, Organizations and Society* 21, 23-39.
- Silver, Nate**, 2012: *The Signal and the Noise. Why So Many Predictions Fail – but Some Don't*. New York: Penguin.
- Skyrms, Brian**, 2004: *The Stag Hunt and the Evolution of Social Structure*. Cambridge: Cambridge University Press.
- Skyrms, Brian**, 2010: *Signals. Evolution, Learning, and Information*. Oxford: Oxford University Press.
- Spence, Michael A.**, 1974: *Market Signaling: Informational Transfer in Hiring and Related Screening Processes*. Cambridge, Mass.: Harvard University Press.
- Sugden, Robert**, 2004: *The Economics of Rights, Co-operation and Welfare*. 2nd edition. Basingstoke: Palgrave Macmillan.
- Turner, Ralph H./Lewis M. Killian**, 1972: *Collective Behavior*. 2nd edition. Englewood Cliffs, NJ: Prentice-Hall.
- Vermaelen, Theo**, 1981, Common Stock Repurchases and Market Signaling: An Empirical Study. In: *Journal of Financial Economics* 9, 139-183.
- Vollmer, Hendrik**, 2013: What Kind of Game Is Everyday Interaction? In: *Rationality and Society* 25, 370-404.
- Waskey, Andrew J.**, 2014: Accounting. In: Timothy R. Levine (ed.), *Encyclopedia of Deception, Volume 1*. Thousand Oaks: Sage, 4-7.
- Young, Joni J.**, 2006: Making up Users. In: *Accounting, Organizations and Society* 31, 579-600.
- Zahavi, Amotz/Avishag Zahavi**, 1997: *The Handicap Principle. A Missing Piece of Darwin's Puzzle*. Oxford: Oxford University Press.

New Frontiers in Economic Sociology: Capitalism and Sociological Theory

Fictional expectations and the crisis of contemporary capitalism

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Imagined Futures. Fictional Expectations and Capitalist Dynamics by Jens Beckert will be published by Harvard University Press in June 2016.

It is perhaps the Greek foreign minister Nikos Kotzias who, in an interview in the spring of 2015, best expressed what I will argue here: the worst of the crisis in Greece, Kotzias stated, is that it made people stop dreaming about the future. Stopping to believe in the future as a “place” of opportunities undermines all efforts needed to work Greece’s way out of the crisis. The hope for a better future – the hope for profit, income, or security – lies at the heart of capitalist dynamics.

Capitalist modernity is characterized by seeing the future as open, entailing unlimited opportunities but also unpredictable risks. This temporal orientation means that actors – whether they are companies, entrepreneurs, investors, employees, or consumers – must orient their activities towards the future. The temporal disposition toward the future requires of actors in the economy that they imagine future states of the world that are different from the present and are willing to pursue these imagined futures (Beckert 2013). Action takes place on the basis of projections of a new and different state of the world. This can be the imaginary of the invention of a new product or the imagined profits yet to be made with a financial investment. It can also be hope in gaining a good salary at the end of a long period of training. As an encompassing social phenomenon, the capitalist economy can develop only when people seek economic opportunities they imagine in anticipation. I refer to these projections of the future as “imagined futures.”

The future-oriented temporal order of capitalism is institutionally anchored. It is anchored in the increasing organization of economic exchange via competitive markets and the growing use of credit. Competition forces every actor to constantly anticipate being ousted by his competitors and thus pressures everyone into proactively inventing new products or altering existing ones, changing the organization of production, or improving skills in order to remain competitive. Such pro-activeness then requires all other actors in the market to act likewise. Credit, according to Schumpeter, is a right to own goods at a point in time when a “normal claim” (Schumpeter 1934: 214) to these goods does not (yet) exist. Success is only achieved if the value of the goods sold on the market is higher than the invested value, so that the credit plus interest can be repaid. Capitalism as a credit-based economy is therefore dependent on growth. Credit compels a calculative orientation towards a future that is different from the present and thus, along with competition, imposes the restlessness of the economic system.

1 The future in economics

This future orientation of capitalist modernity is also an integral part of economic thinking. The notion of “dated contingent commodities” in General Equilibrium Theory, the notion of rational expectations in the new classical macroeconomics, the concept of “the shadow of the future” in game theory, or the notion of “present discounted value” in capital budgeting theory all express the future orientation of economics – a temporal orientation largely absent in the other social science disciplines. This future orientation makes economics a discipline especially akin to the conditions of capitalist modernity.

However, the way in which the future is conceptualized in the cited economic approaches appears problematic. In all the approaches mentioned the relationship to the future is ultimately a deterministic one where possible states of the world are known, actors accurately anticipate future states and the probability of events and act accordingly.

Such a deterministic perspective of expectations and subsequently of decisions seems to be largely at odds with the practices of real world actors who lack information, don't know which game is being played, or misinterpret the information available to them. The deterministic understanding of expectations does away with what I would define as the central characteristic of the future orientation of capitalist modernity: the openness and unpredictability that the future presents.

However, there is also a long tradition within economic thinking which disputes such a deterministic understanding of the future, and it is this tradition which promises a much more realistic understanding of the role of expectations. Perhaps most prominent in this regard are the works of Frank Knight (1985) and John Maynard Keynes. During the post-war period, the British economist George Shackle further developed Keynes' insights by making the future's uncertainty central to the concept of expectations. Because, Shackle writes, the "content of time-to-come is not merely unknown but nonexistent, and the notion of foreknowledge of human affairs is vacuous" (Shackle 1983: 33), any theory that proceeds from the predictability of the future is misguided. Consequently, choice, according to Shackle, takes place "amongst imagined experiences" (Shackle 1964: 12). Thus in a universe of ultimately creative thought, expectations have an originating force and are not determined.

2 Fictional expectations

Connecting to the insights of Knight, Keynes, and Shackle, I suggest describing expectations under conditions of uncertainty as "fictional" and thus introduce the notion of "fictional expectations." By fictional expectations, I refer to the imaginaries of future states of the world and of causal relations that inform actors' decisions.¹

The notion of fictional expectations takes uncertainty seriously. Expectations cannot be predictions of the future: they are mere imaginaries of future states – imaginaries upon which actors base their behavior "as if" these expectations actually do describe future states and causal relations (Beckert 2013). Expectations thus create a reality of their own by making assertions that go beyond the reporting of empirical facts. The notion of fictional expectations expresses that expectations *pretend* a reality into which actors enmesh as *if* it were true. Using Niklas Luhmann's terms (1996), representations of the future involve a "doubling of reality." The imagination of future states of

the world proclaims new possible dimensions of reality and thereby adds new layers to it.

Fictional expectations are made possible by human beings' unique ability to evoke images of a counterfactual reality that may be situated in the future or the past, that are located anywhere, and presume any imaginable behavior by actors, objects, and forces of nature. The imaginative power of the human mind seems unlimited, and humans' "fiction-ability" (Iser 1993) is fundamental to the human condition. It is also fundamental to capitalist dynamics, i.e. the processes of growth and crisis characterizing capitalist modernity. The mechanisms of competition and credit demand that actors constantly operate in reference to an open and uncertain future, imagining future outcomes associated with their decisions. Surviving and making profits requires investment and innovation, the acceptance and lending of money, and it requires that consumers perceive new products as possessing utility or conveying social prestige. At the same time, the outcomes associated with concrete decisions are unpredictable. Capitalism can develop only when the willingness to act prevails, despite the incalculability of future outcomes. Fictional expectations are crucial: actors are motivated by the hopes and fears they imagine and organize their activities based on these depictions. It is fictional expectations through which actors coordinate and through which novelty comes into the world.

Keynes warned against the assumption that the willingness to take risks in the expectation of future profit or increased social status is a foregone conclusion. Capitalism is constantly at risk of the uncertain future paralyzing actors, leading to the underemployment of production factors, and thus resulting in economic crises. "Crisis" here means a collapse of expectations regarding future opportunities and a foreshortening of future perspectives. Keynes termed the resulting inactivity of actors "liquidity preference," which can be understood as the unwillingness of investors to engage in investments that would expose their wealth to unforeseeable risks.

At the level of social interaction, fictional expectations are crucial for producing the willingness to act, for coordinating action, for economic innovation, and for shaping distributive outcomes. Although they are anchored in actors' perceptions of the situation, fictional expectations are not simply individual. Expectations do not emerge in an institutional, cultural, or political void. The social basis of expectations is to be found within the economy's institutional structuring, in norms and cognitive frameworks, in social

networks, and within the power structures in which market actors find themselves. Capitalism's institutions – be they accounting rules or the state's protection of property rights – can be analyzed according to their contribution to the buildup of expectations that encourage risky engagements by widening temporal perspectives, encouraging and demanding creative responses, as well as fostering a willingness to take risks. Explaining capitalist dynamics therefore requires that we take structural factors into account, albeit with reference to their impact on action. Long-term credit, for instance, is more likely to be granted where property rights are effectively protected. The institutional rules of coordinated market economies and liberal market economies lead to different expectations regarding the outcomes of innovative activity.

Fictional expectations require – in addition to their institutional basis – consideration of their political dimension. The contingent nature of expectations makes them open to interest-based politics. If decisions have distributive consequences, and if decisions are based on expectations, then actors have an interest in the expectations of other actors. Influencing expectations has become a central task in the economic field. Competition takes place largely through the influencing of expectations of other actors. An example is the marketing activities of firms. Through the instrument of marketing, economically powerful firms shape the imaginaries of consumers. The “politics of expectations”, however, is not limited to firms. Central banks, through their reports and through their policies of “forward guidance” are engaging in the *politics of expectations* with huge influences on the expectations and decisions of actors in financial markets (Holmes 2009).

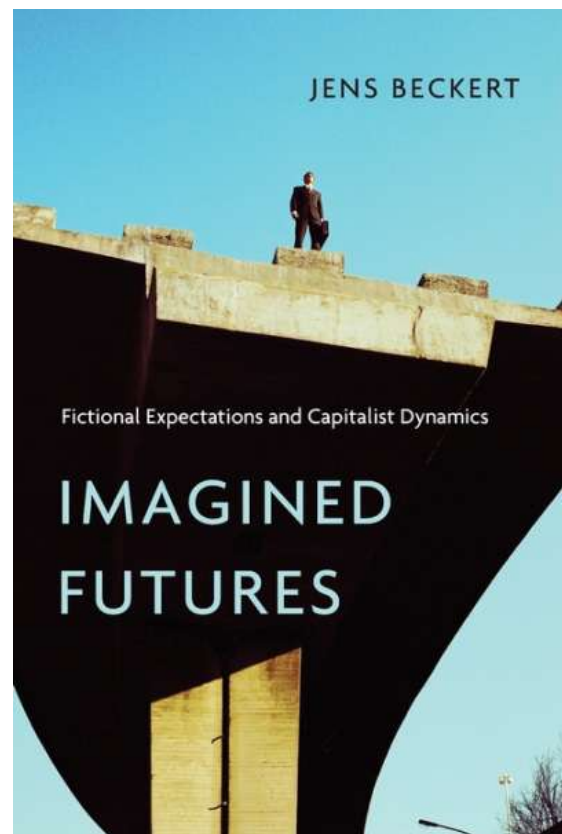
3 Building blocks of capitalism

I now make use of these theoretical considerations by discussing the role of fictional expectations in concrete fields that constitute the capitalist economy. Such building blocks of capitalism are in particular investments, innovation processes, the production process, the use of money and credit, as well as consumption. Here I limit myself to investments in financial markets, investments in human capital, and to consumption. In addition I discuss economic policy paradigms as an example of an *instrument* for the creation of fictional expectations.

Financial markets

In financial markets, investors make commitments by exposing their wealth to expectations of certain imagined futures. Through these commitments, firms are capitalized, a crucial condition for economic growth. To be willing to make such commitments, investors must be confident that their investments will be profitable.

Confidence in financial markets is established communicatively. An example of this are the communication strategies of central banks (Abolafia 2010, Holmes 2009, Smart 1999), which aim at creating confidence in the business community by “talking to the markets” through public statements. Such communicative interventions through which market expectations are shaped have highly visible effects: at the peak of the European sovereign debt crisis in July 2012, for example, Mario Draghi, the president of the European Central Bank, announced that the ECB would firmly defend the euro. Within its mandate, Draghi stated, “the ECB is ready to do whatever it takes to preserve the euro – believe me, it will be enough.” Immediately after the speech, interest rates for the sovereign debt of Greece and Portugal went down significantly. The speech did not change the objective economic situation of Greece or Portugal in the slightest, but it shifted investors' expectations, which in turn had an impact on the economic situation by reducing financing costs for the country.



This influencing of expectations in markets is not limited to the state and its agencies. Stories are told by all market participants in order to influence investors' expectations that markets will develop in a certain direction. The intentions of such stories can be seen starkly in certain particularly candid examples of stock market advice. In the now ridiculed book *Dow 36,000: The New Strategy for Profiting From the Coming Rise in the Stock Market*, published in 1999, the authors Glassmann and Hassett (1999) proclaimed that the Dow Jones Industrial Average (DJIA), then at 10,600 points, would rise to 36,000 points within the next six years. This projective imaginary was accompanied by a story of how the future development of the index would unfold. The future, however, turned out very differently: in 2005, the year the authors of the book expected the DJIA to reach 36,000 points, the highest value the stock index reached was 10,700 points – not even one third of the predicted level.

The discursive interventions may mostly aim at creating convictions of the future value of an investment but they can also destroy wealth and thus generate crises. In 1997, for example, a "Thai crisis" turned into the "Asian crisis" when investors took the economic downturn in Thailand as evidence of potential difficulties in other Asian countries, a fictional expectation formed despite the fact that economic fundamentals varied greatly across Asia (Hellwig 1998: 715). When investors withdrew funds from other countries, such as Korea, they created the very difficulties that had been predicted by the "story."

Fictional expectations provide justification for investment decisions whose success is uncertain. But statements on expected future developments are made also with the *intention* to influence the events they foresee. By influencing decisions, imaginaries of future states of the world can influence outcomes. This is what I mean when I connect economic power to fictional expectations. The expectations communicated create demand for that asset, eventually leading to the higher prices they asserted in their projections. In this sense, stories create the economy itself, and power in the economy means: my stories count!

Narratives of how and why the prices of indexes, stocks, commodities, or bonds develop are the main communicative tool in financial markets. Thousands of analysts of individual stocks or classes of financial assets write regular reports in which they assess the current situation and future outlook of companies or states, and draw conclusions about the future prospects of stocks and bonds. These

projections pretend to provide foreknowledge of future value development and, if positive, motivate the investments which allow firms to grow and nations to prosper.

When large numbers of financial investors believe in certain stories – think for instance of the BRICS story – they become what André Orléan has called "valuation conventions" (Orléan 2014), meaning collective beliefs about how to value a security or a class of securities. Such beliefs appear credible in the moment and create at least partial consensus in that the financial community agrees on certain valuation principles. Such conventions provide orientation in the face of uncertainty, thus helping to create confidence and suspend disbelief. If they are convinced, actors behave as if the stories really do anticipate market developments; and in this way, they may actually drive markets in the direction predicted.

Crisis ensues in the very moment in which investors lose confidence in their valuation convention and reassess the future value of assets. This happened in 2001 when the dotcom bubble burst, and again in 2007 when beliefs in the repayment of the mortgages underlying asset backed securities turned bleak. A similar story can be told about sovereign debt in the southern European countries. Until 2010, the valuation convention of financial market actors was that Greek bonds would not entail a significantly higher risk compared to German bonds. As long as this convention held up, the risks indeed remained similar. In 2010 this convention broke down. The crisis was triggered by a change in expectations, a claim that is fully in line with Hyman Minsky's thesis that financial crises unravel when financial investors lose confidence in a Ponzi scheme.

Human capital

A second example for the role of fictional expectations for capitalist dynamics refers to investment in human capital where fictional expectations play just as important a role as in other types of investment. Collective imaginaries on the role of education for the future wellbeing of society justify educational expenditure at the societal level. An example is the reaction in the United States after the shock of the Sputnik launch in the 1950s which was perceived as a threat of future technological and economic inferiority from a lack of investment in human capital. This expectation led to an expansion of technological investments in the United States. Another example is the European Commission's plan to make Europe the world's most competitive and dynamic knowledge-based economy by 2020. In

both cases, public investment in the educational system were justified by imaginaries of the future.

Fictional expectations are also crucial for understanding the educational decisions of individuals: the imagined future life that might be possible through an investment in specific skills motivates efforts and sacrifices in the present. Studies show that educational and career choices are at least partly shaped by idealizing imaginaries that trigger decisions for specific career paths and prompt the sacrifices necessary to complete training programs. Such career dreams serve as a guiding and motivating force.

Without a doubt, the most obvious examples of the role of career dreams are expectations for artistic and sporting careers. These careers demand exceptionally disciplined training, often from a very young age, but offer stable incomes to only a fraction of those who embark upon them. Despite this, cultural industries have a permanent oversupply of labor.

It would, however, be a mistake to see the relevance of fictional expectations as limited to peripheral labor market segments. Young researchers imagine becoming influential professors, making important discoveries in the future. Students of management project themselves into careers at the top of the managerial hierarchy. These projections are encouraged by business school training methods, which portray firms from the perspective of top management. Using the case method, students investigate strategic decision-making situations in companies by projecting themselves into the role of the company leaders – a role they will most likely never have a chance of filling in real life.

The career dreams of adolescents and young adults and their parents operate as a motivating force in the process of their skill formation. From the perspective of the firm, the motivational effects of imagined futures help to “extract” labor power from the worker. Though many aspirations end in disappointment, the capitalist economy is also propelled forward by imaginaries of the future recompense of investments in skill formation. Capitalist dynamics would slow if beliefs in opportunities for individual social mobility through strenuous effort, training, and hard work were to fade. However, this is exactly what we may be currently witnessing: the increasing income and wealth disparities, the realization among the younger generation that they will have lower living standards than their parents, and the increasing discontinuities in careers may undermine the fictional expectations that underlie motivations to strenu-

ous effort and thus also hinder capitalist growth in the future.

Consumption

Without the permanent expansion of consumption, the capitalist economy would come to a halt. Fictional expectations play a crucial role in the desire for consumer goods. Consumers considering *new* consumer goods have no clear idea of what satisfaction they will obtain from these products. Imaginaries associated with a good before it is purchased inspire consumers to project a desirable life situation that its acquisition will help them to achieve. In their imaginations, consumers act as if they already possess the product they are considering and thus “test” in their imaginations whether the product will bring the desired satisfaction.

Studies show that consumers value products that do not yet even exist, simply because of their expectations of future satisfaction (see Dahlén 2013). Companies, recognizing the future orientation of consumer desires, exploit it profitably in marketing campaigns, creating expectations by, for example, announcing the introduction of new technological devices. Marketing is mostly a technology of imagination, applied to create demand. Apple has probably been most successful in deploying marketing campaigns that create imaginaries regarding future consumption opportunities. The extraordinary power of the marketing industry to create expectations is evident from the people who queue through the night at Apple stores to be among the first to purchase a new technical device. The film industry also uses this technique to great effect, creating expectation-based desires by releasing film trailers, sometimes more than a year in advance of the actual film.

Products appear especially attractive to consumers when their exact details remain vague and the openness of the future can be filled by their imaginaries. These expectations are often disappointed once consumers own the product. The product is valued more in the imagination than in the actual experience of it.

The expansion of consumer demand depends increasingly on consumer desire beyond necessity. The production of consumer dreams thus becomes itself a productive force in the economy. At the same time, to create the socially enshrined symbolic meanings that make goods valuable, extensive communicative efforts must be made to establish, reinforce, or alter the meaning of products, as demon-

strated by the increasing growth of marketing costs as a percentage of overall production costs (Hirschle 2012: 138). This also implies that the expansion of capitalist growth is precarious. The fictional expectations associated with consumer goods stand on uncertain ground since they are largely anchored in the intersubjective recognition of symbolic qualities attached to them, not in the material qualities of the goods themselves. Declining growth rates in affluent consumer societies over the past forty years may also indicate that the new products being introduced to the market are not sufficiently effective to inspire consumers' imaginaries, and that established products, such as cars, are losing their imaginary attraction. Crisis is ensued when consumers stop mobilizing dreams associated with products.

Economic paradigms

Finally I want to briefly discuss the role of economic models and paradigms. Here I change the level of analysis because such cognitive models are not themselves fictional expectations but they are rather what I call *instruments* for the creation of fictional expectations. Such instruments play a crucial role in the construction of credible imaginaries of the future.

Economic paradigms provide interpretative frameworks that operate as sets of beliefs. Peter Hall (1993) was at the vanguard of historical institutionalists investigating the role of policy paradigms and the changes in such paradigms. Hall investigated British macroeconomic policies during the 1970s, studying the paradigm shift from Keynesianism to monetarism occurring at the time. The two paradigms had different views on the macroeconomic effects of specific policy tools, and motivated utterly different policy decisions.

The paradigm shift, Hall argued, was triggered by a crisis in the old paradigm: confidence was lost in the policies the old paradigm inspired. Keynesian policy instruments were interpreted as being less and less effective as a means to keep unemployment low and create growth by stimulating demand and keeping inflation under control. Demand stimulus programs came to be seen as causing stagflation. The paradigm had ceased to create imaginaries of a future people actually desired, and monetarism, with its fundamentally different assumptions about the effects of macroeconomic instruments, came to stimulate persuasive imaginaries. It gained credibility and ultimately replaced Keynesianism.

Economic theories not only create imaginaries at the level of macroeconomic policies; they also shape imaginaries of how to structure firms. The role agency theory has played in the transformation of companies and the emergence of shareholder capitalism since the 1970s is an excellent example of this (Dobbin and Jung 2010). Agency theory helped to create imaginaries of profitability that would be reached once the suggested changes to the governance of firms would be put in place.

Both of these examples show how a perceived crisis led to the deflation of an existing paradigm, and led to the emergence of a new imaginary of the means to be applied to achieve prosperity. Theories, by alleging causal relationships, create, if successful, credible reasons for advocating specific policies or corporate governance reforms. If put in place, these reforms alter the structure of the economy and its firms.

4 Conclusion

Capitalism is an economic formation based on a temporal orientation toward the future. This future is uncertain and open; it entails unlimited opportunities and unknown risks. Under conditions of uncertainty decisions are undetermined because outcomes cannot be foreknown. Actors must gain confidence in their decisions, and in the absence of full knowledge, "fictional expectations" become placeholders that let actors act "as if" they would know outcomes. Since expectations are contingent, meaning they can always also be different, the shaping of expectations of others becomes crucial in the exercise of power. Powerful are those actors who can shape the expectations of others in ways beneficial to themselves. Competition is in large parts competition for rallying confidence behind specific imaginaries of the future.

To commit to risky decisions, actors must be confident, and this confidence stands in many ways on shaky grounds. If it falters, crisis ensues. In this sense I speak of crises as following when an imagined future is at risk of being disappointed and actors lose confidence in the envisioned outcome. Financial crises are a typical example of this: the optimistic belief in the future value of assets vanishes among financial investors and the selling of assets produces the feared outcome. The short-term flexibility of financial investments seems to make the finance sector especially volatile and prone to such crises.

But the accumulation crisis expressing itself in decreasing growth rates in the advanced capitalist societies may also be interpreted more generally as a receding capacity of capitalism to inspire desirable imagined futures and the associated actions. Consumers may be less attracted to the economically most valuable goods and the attraction of iPhones or iPads is not compensating for this in terms of economic value creation. Increasing levels of social inequality and high levels of unemployment may demotivate workers from aspiring toward career goals and from making the necessary investments to achieve these. This is what the Greek foreign minister had in mind when he stated that the crisis stops Greeks from dreaming. If this holds true, one may observe a trend in which capitalism becomes more precarious by generating less investment, less motivation by workers, and by being more prone to sudden shifts in sentiments and thus to economic crises.

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Endnotes

*This article is based on my opening lecture at the conference "The regulation theory in times of crisis" in Paris in June 2015. It makes use of material presented in Beckert (2015) and Beckert (2016).

¹Moreover, with the term fictional expectations, I refer to symbolic qualities that actors ascribe to objects and that transcend the objects' empirically observable features. This is crucial for understanding the attraction of consumer goods but it is also relevant for understanding the operation of money.

References

- Abolafia, Mitchel Y.**, 2010. Narrative Construction as Sensemaking: How a Central Bank Thinks. In: *Organization Studies* 31, 349-367.
- Beckert, Jens**, 2013: Imagined Futures. Fictional Expectations in the Economy. In: *Theory and Society* 42, 219-240. doi: 10.1007/s11186-013-9191-2.
- Beckert, Jens**, 2015: Re-imagining Capitalist Dynamics: Fictional Expectations and the Openness of Economic Futures. In: Patrik Aspers/Nigel Dodd (eds), *Re-imagining Economic Sociology*, 57-78. Oxford: Oxford University Press.
- Beckert, Jens**, 2016: *Imagined Futures. Fictional Expectations and Capitalist Dynamics*. Cambridge: Harvard University Press.
- Dahlén, Michael**, 2013: *Nextopia: Freu dich auf die Zukunft - du wirst ihr nicht entkommen!* Translated by T. A. Wegberg. Frankfurt a.M.: Campus.
- Dobbin, Frank/ Jiwook Jung**, 2010: The Misapplication of Mr. Michael Jensen: How Agency Theory Brought Down the Economy and Why It Might Again. In: Michael Lounsbey/Paul M. Hirsch (eds), *Markets on Trial: The Economic Sociology of the U.S. Financial Crisis*, 29-64. Bingley, UK: Emerald Group Publishing Limited.
- Glassmann, James K./ Kevin A. Hassett**, 1999. *Dow 36,000: The New Strategy for Profiting from the Coming Rise in the Stock Market*. New York: Times Business.
- Hall, Peter A.**, 1993: Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain. In: *Comparative Politics* 25 (3):275-296.
- Hellwig, Martin**, 1998: Discussion on International Contagion: What Is It and What Can Be Done Against It? In: *Swiss Journal of Economics and Statistics* 134 (4.2):715-739.
- Hirschle, Jochen**, 2012: *Die Entstehung des transzendenten Kapitalismus*. Konstanz: UVK Verlagsgesellschaft.
- Holmes, Douglas R.**, 2009: Economy of Words. In: *Cultural Anthropology* 24(3):381-419.
- Iser, Wolfgang**, 1993: *The Fictive and the Imaginary: Charting Literary Anthropology*. Baltimore: Johns Hopkins University Press.
- Knight, Frank H.**, 1985: *Risk, Uncertainty, and Profit*. Chicago: University of Chicago Press. Original edition, 1921.
- Luhmann, Niklas**, 1996: *Die Realität der Massenmedien*. 2nd ed. Opladen: Westdeutscher Verlag.
- Orléan, André**, 2014: *The Empire of Value: A New Foundation for Economics*. Cambridge, MA: MIT Press.
- Schumpeter, Joseph A.**, 1934: *Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. Cambridge, MA: Harvard University Press.
- Shackle, George L.S.**, 1964. *General Thought-Schemes and the Economist*. Woolwich Economic Paper 2. Woolwich, UK: Woolwich Polytechnic Department of Economics and Management.
- Shackle, George L.S.** 1983: The Bounds of Unknowledge. In: Jack Wiseman (ed.), *Beyond Positive Economics: Proceedings of Section F (Economics) of the British Association for the Advancement of Science, York*, 1981, 28-37. London Macmillan.
- Smart, Graham**, 1999: Storytelling in a Central Bank: The Role of Narrative in the Creation and Use of Specialized Economic Knowledge. In: *Journal of Business and Technical Communication* 13, 249-273.

Interview

Alya Guseva interviewed by Zsuzsanna Vargha

Alya Guseva is an economic sociologist with interests in market emergence, particularly the development of new financial and consumer markets in Eastern and Central Europe, and postcommunist Asia. She is the author of *Into the Red: The Birth of the Credit Card Market in Postcommunist Russia* (Stanford 2008), and a co-author, with Akos Rona-Tas, of *Plastic Money: Constructing Markets for Credit Cards in Eight Postcommunist Countries* (Stanford 2014). Her work appeared in the *American Sociological Review*, *Socio-Economic Review*, *American Journal of Economics and Sociology*, *Journal of Comparative Economics* and *Journal of Family Issues*. She is involved in a collaborative project on domestic money management in Russian households (with Dilyara Ibragimova of Moscow's Higher School of Economics). With an interest in connecting economic sociology and the sociology of biomedicine and health, she is currently researching transnational reproductive markets.

Alya Guseva is Associate Professor of Sociology at Boston University. She is the Chair of the American Sociological Association's Economic Sociology section, member of the Society for the Advancement of Socio-Economics (SASE) Executive Council, serves on the Editorial Board of the *Socio-Economic Review*, and together with Akos Rona-Tas (UCSD) and Bruce Carruthers (Northwestern) she co-organizes SASE's permanent research network on Finance and Society. aguseva@bu.edu

1 As the Economic Sociology Section Chair, you have expressed a long-standing interest in building bridges between disciplines and across national borders. Where does this agenda come from, and what disciplines and other boundaries do you find most compelling to address?

Economic sociology itself was born out of a boundary dispute as it reached into the territory traditionally studied by economic theory with its distinct sociological toolkit (social networks, institutions and culture). So it is only natural that economic sociology continues reaching across the aisle and engage with other ASA sections and other related social science disciplines (I find anthropology and feminist economics to be most promising in this respect). It may be that bridge-making is becoming more and more important, as more symbolic fences are being erected. I

have recently come across some really interesting numbers: the size of the overall ASA membership stayed practically the same since 1970, but the number of sections in the ASA jumped from 8 to 52 (with several more groups circulating petitions to become sections-in-formation).

2 Going back to national or regional differences, can we say that economic sociology is practiced differently in the US and elsewhere? How do you see the key differences with European economic sociology in particular? Where do you see shared interests and overlapping agendas?

Is economic sociology practiced differently in the US and elsewhere? Yes and no. Yes, because there are clearly certain historical affinities such as the influence of STS, ANT, accounting studies, etc. that gave rise to distinctly European traditions in economic sociology, such as performativity, social studies of finance and value and valuation studies. On the other hand, given the mobility of scholars and the diffusion of ideas (the very bridge-building I am advocating), schools of thought that originated as distinctly European or distinctly American may not stay this way. And this is the reason for a 'no'.

There are many topics, though – all of them central to economic sociology – that are actively researched on both sides of the Atlantic, in parallel fashion or collaboratively, such as markets, finance and financialization, money and value. These are the empirical examples of shared interests and agendas.

3 What other differences do you see within Europe, for example with Eastern European and Russian academic communities?

In places that are heavily influenced by the American economic sociology tradition, like the Higher School of Economics in Moscow, I do not see many differences: I have a lot in common with scholars there; they have read the same authors and are contributing to the same arguments and debates. But I am sure there are other, more distinct traditions, which are more insulated primarily because of language barriers: those scholars may have read American or Western European authors in translation, but they do not publish in the English-language outlets, and for this reason are largely invisible to the English-speaking world.

4 To what can we attribute these differences – intellectual traditions, national academic structures, academic and political culture, the properties of the research object, the economy?

Probably all of those, albeit to a different degree. This could be a very interesting project: tracing intellectual trajectories and affinities between economic sociologies in different countries to these various factors.

5 What can US and European economic sociology learn from each other, and what is your vision for bridging them, as ASA Section Chair and in the long term?

Cross-fertilization between different traditions of economic sociology has been going on for quite some time but more can and should be done. However, the ASA platform may not be the best for these conversations. SASE, on the other hand, has been on the forefront of such transatlantic bridge-building. This year's SASE meeting is at Berkeley, and the program, organized by Marion Fourcade, promises to be fascinating. I have a soft spot for SASE. It is much smaller and more manageable than ASA, and the shared general interest in "socio-economics" coupled with diversity of countries of origin and academic traditions make for a very interesting mix.

6 In your own trajectory, how did you come into contact with what we may call economic sociology and who have been your greatest influences – within economic sociology and more broadly?

I did not have any particular interest in the economy or in markets when I applied to the PhD program at UC, San Diego. Most likely my interest developed gradually, out of my personal experience of witnessing the collapse of the socialist block and subsequent, sometimes disastrous, attempts at market reforms. At UCSD I took several classes taught by East Europeanists, including Akos Rona-Tas, who also had a strong interest in uncertainty and rationality. These encounters inspired me to write one of my qualifying papers on economic sociology, in particular on the dynamic relationship between economic sociology and economic theory in terms of their approaches and subject matters. The long line of names that influenced me at that stage is probably quite standard for any US-trained economic sociologist of my generation: Granovetter, Swedberg, Smelser, Powell and DiMaggio, Biggart, Zelizer, Dobbin, Weber and Polanyi, Akerlof, Elster and Geertz (paying tribute to my early interest in rationality and uncertainty).

7 Your work on the sociology of finance has highlighted market formation but increasingly also the importance of looking at households as actors in finance. How do you see the place of domestic finance and households in the economic sociology research program?

Economic sociologists have traditionally downplayed the household as a subject of inquiry, focusing instead on profit-making, the firm and the market. It is particularly ironic because the word "economics" is derived from *oikos*, Greek for "the household." In part, this curious omission may be rooted in the origins of new economic sociology as a response to the expansionist encroachment of rational choice economists, like Gary Becker, into traditional sociological areas of inquiry, including the household. Economic sociologists went on the offensive and challenged economics at its core. So with a notable exception of Viviana Zelizer, most economic sociologists have remained doggedly focused on the market and avoided the household.

I have become an ardent advocate for making the household a legitimate focus of economic sociology inquiry, alongside the market, the industry, the firm and the workplace. If we are serious about understanding the challenges that families and individuals face in their daily lives, we ought to examine those challenges in the context of households. Take inequality, for instance. In stratification and income/wealth inequality studies, households are typically approached as a unit of analysis rather than an object of inquiry, and "head of household" responses to surveys are taken as representative of households as a whole. Such an approach assumes equitable distribution of resources within the family, obfuscating the very real possibility of complex internal dynamics that could result in significant intrahousehold inequality.

Opening the "black box" of the household will challenge economic sociologists to test their approaches and apply their tools to a setting where economic behaviours are not only culturally and structurally embedded, but also tightly intertwined with emotional and relational concerns, are gendered and/or informal.

8 The financial crisis has been a major productive event for economic sociology as a field, revitalizing an already vigorous field. How did the crisis or crises change your own thinking about finance, markets, economics?

I have been fascinated by the process of emergence for quite a long time. I have dedicated many years to researching the question of how a working and predictable market order is created in consumer finance in Russia and elsewhere in the post-communist world. This has culminated in the publication of two books: *Into the Red* in 2008 and *Plastic Money*, co-authored with Akos Rona-Tas, in 2014. However, if earlier I was mainly interested in how the emerging markets prevail despite the numerous obstacles in their paths and what it takes on the part of various actors, including the state, to put markets into gear, following the financial crisis, I started to become concerned much more than before with the moral foundations (or outcomes) of markets. In the case of consumer finance this includes financial inclusion and predatory lending, but also the loss of privacy and increased transparency and traceability of plastic money, and their effects on surveillance and control. Akos and I explore these issues in a chapter we recently wrote for a new collection on money.

9 What do you see as the greatest challenges for economic sociologists today?

I see two main challenges, perhaps shared by sociology as a whole. First is a threat of balkanization, as I already explained earlier. My interest in initiating dialogues and collab-

orations across section (as well as disciplinary and national) boundaries is motivated by this concern. The forthcoming issue of *Accounts* [the ASA Economic Sociology section newsletter] is featuring several examples of such cross-boundary dialogue, including conversations with economic anthropologists, with economic sociologists teaching in non-sociology departments and with those on a non-academic track. Our section is also organizing several joint events at this year's ASA meeting in Seattle, including a joint reception with the Comparative Historical section, and the Organizations, Occupations and Work sections.

The second challenge is how to be relevant outside academic walls, particularly in policy debates. Compared, perhaps, to their European counterparts, American sociologists are rarely even invited to the table. Economic sociologists are particularly sensitive to this oversight because economic policy debates have been heavily dominated by economists. But I get optimistic each time I come across my colleagues making a splash in the blogosphere, authoring New York Times OpEds, or being invited as experts to high-level economic policy discussions (for instance, Fred Wherry recently took part in a roundtable on financial inclusion hosted by the National Economic Council and held at the White House).

For more details on Alya Guseva's work, please see the faculty page <http://www.bu.edu/sociology/faculty-staff/faculty/alya-guseva/>

Book Reviews

Book: Davies, William, 2014: *The Limits of Neoliberalism: Authority, Sovereignty and the Logic of Competition*. Sage.

Reviewer: Benjamin Werner, University of Bremen,
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Studies on “neoliberalism” abound, inquiring from various angles what is perceived as the dominant ideology of our time. William Davies’ *The Limits of Neoliberalism* adds to this literature yet another, and I think fruitful, perspective. Based on French “convention theory,” Davies’ analysis broadens our knowledge about how neoliberalism works (and fails) as a specific way of organizing social order.

In particular, *The Limits of Neoliberalism* develops two central arguments. Firstly, Davies demonstrates that neoliberalism is attractive. It is not hollow rhetoric used to dominate and exploit. Instead, neoliberalism has serious “critical capacities” which offer specific promises and appeals, thereby creating a genuine basis for legitimacy and authority. For Davies, this feature is crucial for understanding neoliberalism’s rise and persistence. Secondly, Davies describes also very convincingly the central limits of this attractiveness: neoliberalism is not able to justify and legitimize the political authority it needs. Since the pursuit to organize society along market principles means to replace politics with economics, neoliberalism has to obfuscate that this pursuit is itself a specific form of politics. Yet, the necessity to hide the fact that neoliberalism does not bring about the propagated minimalist state but a big state of its very own kind has the disadvantage that this political authority can hardly be legitimated. For Davies, this explains why neoliberalism has to resort to emergency management and coercion in times of crisis, i.e., when neoliberalism’s authority is in danger.

These arguments are developed in five consecutive, very well-written and nicely organized chapters. The starting point for Davies’ analysis is the understanding of neoliberalism as the “attempt to replace political judgement with economic evaluation” (page 3) or as “the pursuit of the disenchantment of politics by economics” (page 4). Admitting that neoliberalism is not a unified doctrine but a quite heterogeneous construct of ideas, Davies – I think convincingly – claims that his definition nevertheless captures the central idea as well as the “operational guideline” of ne-

oliberal thinking. In order to explore this central trait, Davies then turns in a second step to the work of French sociologist Luc Boltanski. This work, known as “convention theory” – a variation of pragmatism –, tries to understand how conventions (i.e., a mixture of normative values, ideas, conducts, and practices) help individuals solve problems collectively when faced with uncertainty. Davies applies this perspective in order to understand how neoliberalism’s ways of thinking, its normative underpinnings, its critical capacities, and its specific techniques offer “appealing” – better maybe: “efficient” – solutions for coping with uncertainty, thereby creating the authority necessary to execute neoliberalism’s central pursuit of state transformation.

Chapter 2 addresses “competition” as neoliberalism’s central principle on which social organization should be based. Davies describes how the early neoliberals like Hayek saw competition on markets as the perfect instrument for handling uncertainty by preserving it to a certain degree, and how this justified specific state activities like anti-trust policies. However, by drawing on Coase and Schumpeter, Davies shows how later neoliberals turned competition into “competitiveness,” meaning that the notion of competition was taken beyond the sphere of markets to provide an organizing principle for dealing with uncertainty that applies potentially to all spheres of human life. The turn to “competitiveness” also facilitated very different forms of evaluating and executing political authority, for example, education, research and development or infrastructure policies, which exceed the narrow competition policies advocated by Hayek.

In the subsequent chapters, Davies traces this shift to competitiveness in more detail. Chapter 3 explores how the influential ideas of the University of Chicago School of Law and Economics transformed the practices of the judicial branch and regulators by replacing the legal categories “just/unjust” with the categories “efficient/inefficient” in the meaning of neo-classical economics. Chapter 4 describes how the use of techniques and strategies from the “business strategy” literature brought about the shift to competitiveness for the executive branch of the state, a transformation epitomized by the “national competitiveness” agendas from the 1980s onwards. The central notion here was not, as Davies argues, that the executive should stay out of the economic realm. Instead, the idea

was to reimagine the state as a firm which is competing in a game called “global capitalism,” and thus to reinvent executive action in ways that are enhancing a nation’s chances to survive and to win in this game.

Both chapters also explore the pitfalls of the competitiveness agenda. Chapter 3 points out how the divergence between “efficient” and “fair” undermines the acceptance of policies designed according to neo-classical economics, since “efficient” can easily be used to nurture, protect, and legitimate the already well-off. (In the U.S., for example, the effect of applying the Chicago arguments was a reduction of competition and an increase in monopolies and oligopolies – the opposite of what Hayek fought for!) Chapter 4 highlights the thin capacity of “national competitiveness” concepts to justify the policies pursued in its name: since the only legitimate criteria to assess state action consists of the executive’s capacity to win the competition (as measured by economic figures), the will of the people becomes not only unimportant but potentially counterproductive to competitiveness. But when legitimacy can be created only by successful state actions (in the meaning of competitiveness), and not by appeals to justice (which could make such state action also desirable to the “losers” of competitiveness, e.g., in the “old industries”), a failure of competitiveness policies severely undermines neoliberal authority. And the only way out of a crisis that neoliberalism has to offer, according to Davies, is to prescribe the same medicine again – only in a higher dose.

Chapter 5 explores this stunted reaction pattern of neoliberalism to crises in more detail by describing how the recent financial crisis – which was perceived by many observers as the final blow to neoliberalism’s predominance – has boosted various efforts of “anti-critical thought” (p. 34), i.e., more or less successful efforts or strategies aiming at reinforcing and defending the pursuit of competitiveness. In particular, Davies points here to two such efforts: firstly, to behavioral economics, which is basically an attempt to better understand the actual reasons on which people base their decisions and aims to refine neoliberal practices with the help of this improved knowledge about “homo economicus.” Secondly, Davies points to the current market rescue measures which are taken to preserve the market at any cost – although the price for this is suspending the market, at least for a while. Both “rescue strategies” are, of course, very different, but both nevertheless remain firmly within the neoliberal paradigm. They both deny the idea that the current crisis might be caused by neoliberalism itself, and they also deny the necessity to refer to any

other form of justification outside of the competitiveness categories. At the same time, this narrowness constitutes, according to Davies, the Achilles heel of these strategies. Their capacity to organize social order remains limited since they are unable to generate sufficient acceptance for neoliberalism to survive (at least in the long run), thereby leaving present social order in a very fragile condition: “The economized social and political reality now only just about ‘holds together,’” but “it does not survive as a consensual reality” (p. 186f.).

The book concludes by discussing possible ideas for organizing social order beyond neoliberalism and how to achieve this. Yet, this is only a comparatively short afterword which remains rather vague by arguing basically that any alternative to neoliberalism has to offer “critical capacities” itself in order to be appealing and thus successful. That might be considered unsatisfying since this is not really anything new, but this book was never meant to be the blueprint for erecting a different, better world.

I enjoyed reading *The Limits of Neoliberalism* and I learned a lot. It is a highly interesting and stimulating book, which I can recommend to everybody who wants to better understand the inner logics of the neoliberal project. Any reader of the book should, however, be aware of its limits. It is a very fine book about a construct of ideas, about the power and the weaknesses of this construct. However, it is not a book about the actual circumstances of neoliberalism’s emergence nor its current dynamics or spatial differences – although Davies gives us important hints in this regard, which is already a lot.

Book: Nooteboom, Bart, 2014: *How Markets Work and Fail, and What to Make of Them*. Edward Elgar.

Reviewer: Arndt Sorge, Prof. emeritus, University of Groningen and Wissenschaftszentrum Berlin. arsorge@uni-potsdam.de

The author expressly writes “in the wake of recent financial and economic crises” (page 1) to spread a message about a “radical” revision of what economics is and what it should be. Overall, the book is a mixture of a more academic text and a tract – both of which are wide ranging and general – and shorter policy clips. One major focus of

discussion is on markets, the other on a grounding of economics in an ethic of virtue and "the good life," rather than in utilitarian principles. Bart Nooteboom is not a mainstream economist but does have a grounding in management science (operations research) and has been involved in small-business research, interorganizational relations, the study of trust in and between organizations, and other socioeconomic policy fields. I would call him a scholar in organization theory and policy studies. The present book was published in the series *New Horizons in Institutional and Evolutionary Economics*. The point of departure is a critique of a number of idols (analogous to the concept of Francis Bacon) in economics: calculative non-morality, rational choice/ autonomous agents, self-interest, risk/ mathematics/ positivism, efficient markets, and growth. The book then argues that these idols are not only those of economic science but are overly present in the design of socioeconomic institutions. After a theoretical and empirical critique of the fundamental concept of markets, the book becomes more philosophical and argues for an ethical grounding in virtue, justice, and "the good life" to create a non-utilitarian foundation.

The larger part of the book is, however, dedicated to a value chain and a process and flow analysis of different industries, which elaborates a perspective often missing in economics but, I would contend, is indeed present to some extent in the field of industrial organization or industrial economics. The field is also one which I have found to be more realistic and balanced because it implicitly or explicitly bears in mind or addresses many of the criticisms of both macro- and microeconomics highlighted by Nooteboom. The analysis offers a useful heuristic and points to many important factors impinging on the functioning of markets. This is a highly apposite antidote to the overgeneralizing tendencies in different strands of general economics. It alerts us to situationally or institutionally specific influences that are more important than general principles in markets. Also, chapter 5 on "hybrids and examples" offers useful applications specific to industries and businesses. It is helpful in enabling an analysis of specific problems, but the degree of detail and empirical references could have been greater. Finally, alternatives are offered to a stylized standard treatment of economic theory, involving such things as cooperatives, a basic income, trust, and a number of cognitive and social postures modifying this standard treatment.

The overall posture of the book is also political, as it argues against what is now often called "neoliberal" economics and economic policies. Throughout, there is a whiff of a

countervailing approach, which I would identify as that of the Left-Liberal-Green-Alternative (LELIGA) brigade. Readers who adhere to such a posture and despise neoliberalism will be delighted by everything in this book. Yet, I wonder. The argument against the overrated importance of markets makes too much of "perfect" or "pure" competition. Industrial economics has shown that these market forms are idealized extremes. There are many more differentiated and refined market forms; furthermore, there is a substantial body of literature on their economic results. "Efficient markets" in the literature are used in different senses, from the more modest market-clearing function to that of integrating all available information. Even the latter meaning is less controversial than the author makes out, because "information" can be taken to include hunches, guesswork, speculation, and "animal spirits" as Keynes called them. Efficient markets thus have to be imagined as potentially destabilizing, as leading to boom and bust through the creation and bursting of bubbles. Likewise, there is no point in a frontal attack on the fundamental notion of contract (p. 28); there is a body of literature on the non-contractual foundation of contracts which makes a potentially similar point without throwing out the notion of contract per se. Even when we buy something from a vending machine, lawyers see this as governed by contracts, for otherwise we could not complain to the operator of the machine when a coin disappears but no product comes out. The author is not sufficiently consistent: sometimes he attacks markets and contracts, notably in the earlier chapters, while in later chapters he often suggests alternatives in a more moderate form, as real-typical variants on a stylized ideal-typical concept. Thus, the book vacillates uncomfortably between a posture of radical attack and a more nuanced treatment of real types. Although the thematic scope of the book is very large, the references are few and quite selective, except for those to earlier work by the author, which comprise nearly half of the total number of references.

Since the financial crisis not only prompted the first sentence of the book but also hovers in the background all the time, it has to be pointed out that this is wrongly stylized, by the LELIGA brigade, as the consequence of markets left to their own devices and running wild. At the beginning of the bubble that burst, of the subprime mortgage market in the United States and derivatives such as collateralized debt obligations, there existed a historically sustained understanding between specific business interests and the left-liberal reformists since the end of the Second World War to support mortgage credit for the

common people by assuming the default risk and thereby lowering the rate of interest. There was explicit agreement between reformist politicians, regulators, and business interests to influence markets; there was not a problem of markets being left to themselves. This consensus grew over time to the point that it became politically uncontroversial and was further extended by the abolition of regulatory boundaries between riskier and less risky types of financial business. Markets were not at fault because they were left to themselves but because regulation facilitated unbridled exuberance. Literature quoted by Nootboom bears this out, but he does not follow this up. In the more political discussion, neoliberals blame the regulation and the LELIGA brigade blame markets. One is as silly as the other. It is always a specific coincidence or interaction of markets and their regulation and embeddedness – another term adored by LELIGA – which poses problems. The conclusion to be drawn is: never venture any corrective suggestion in this debate without immediately thinking of a market solution firmly attached to it. Inversely, never design markets without thinking of the actors and their resources that are needed to make markets work in the way desired.

To be sure, the author does venture a number of corrective suggestions, and they are worthy of attention. They are depicted and reported in a cursory manner and are not clearly related to the theoretical parts of the book. However, they would merit closer investigation. Yes, e.g., cooperative enterprises deserve attention. By and large, cooperative banks were less at fault in the run-up to the financial crisis. Still, they also compete in markets, rather than pose an alternative. Now, do cooperatives operate differently from other enterprises? A major financial scandal in Italy was produced by Parmalat, also a cooperative. The dominant dairy producer and marketer in the Netherlands is FrieslandCampina, which has grown from a national quasi-monopoly into a dominant European concern, processing 5 million tons of milk a year. It is also a cooperative, of dairy farmers, just like Parmalat. I am not saying that this is a bad thing for either the farmers involved or the consumers. But is this an alternative to markets?

The stylization of a philosophically inspired “good life” by the author is not convincing as an orientation wholly opposed to utilitarianism. Those who aspire to the good life can very well be imagined to have specific utility functions, which often lead them to the provision and consumption of services. What happens on this score is not alien to an economic analysis using utility schedules and market forms. The literature on organization behavior uses the

notion of “psychological contracts” very widely, not as a formalized construct but in the latent yet powerful sense of a fundamental agreement or disagreement on what ties an individual to work in an organization. Virtue and the good life, including intrinsic work motivation, cannot be classified as wholly altruistic or non-instrumental, as the author suggests; intrinsic motivation is loaded on work satisfaction, which is a highly utilitarian motive. Again, the opposites the author suggests up front are more like combinations in real life, and they blend into one another. I would argue that this point is revealed later in the book. A classic example of aspiration to the good life is, of course, that of a number of monastic orders in the Middle Ages. Monks and nuns were philosophically or spiritually inspired by a certain idea of the good life. Yet, some monastic orders pioneered very utilitarian and innovative forms of agriculture and the crafts, following an old Latin motto: *Ora et labora*. As Max Weber famously said, the monks were the first occidental rationalists, they increasingly produced for markets, also using wage labor, and they played an important role in agricultural and craft innovation, besides supplying the initial stock of record-keepers, copiers of scriptures, educators, and other “knowledge workers” in the early Middle Ages in Europe. The importance given to monastic orders by the rulers of the time rested greatly on their socioeconomic utility.

Nootboom extols the good life quoting Aristotle (p. 49), but look at what Aristotle did for a living; he was an educator and policy advisor to Alexander the Great. Was this life ethically superior to that of the manager of a present-day local bank branch? Conviction and preaching is not a problem but practice is a grave one. There are other references to scholars favored by the LELIGA brigade, such as Martha Nussbaum, Charles Taylor, and Amartya Sen. Yes indeed, I would hate to profit from body organs donated by people who feel compelled to sell them in order to survive. Of course markets and self-centered utilitarianism are repulsive at some stage. But is it a lack or a surfeit of participation in markets in such organ-donating countries as India that makes people desperate? Where else but in India is the idea of a good life more widely spread by Hinduism and other religions? I am sure Alexander the Great lent a helping hand to spread it, in that magnificent international civilization which stretched from Egypt to Afghanistan and was further extended by the Arabs. Historically, wherever markets and trade flourished, it was also the good life that was expounded, be it by Jews or Hindus or the early Christians or Islam. Should I buy fair trade prod-

ucts from Africa or India, or locally made products? Whatever one does, it points us to markets.

This, then, is my main contention with the book: Nootboom makes too much rhetorical use of conceptual opposites, and gives short shrift to what is the core of socioeconomics: the interweaving of the spiritual and the instrumental, the utilitarian and the philosophical aspects of human behavior. Markets are much more diverse and open to all sorts of motivation and posture. Moreover, there are variants of economic analysis which consider and explain how this happens. Granted, this is not what the Robert Lucases of this world have emphasized. Granted again, they failed abysmally to produce a consistent and sustainable general explanation of economic affairs, and one of the more devastating failures is the dogmatic neglect of economic bubbles such as the one that burst in the financial crisis. But is it the focus on markets as such that points to the major flaw? I argue it is the neglect of the diversity of markets and, above all, an almost fetishistic fascination with highly elaborate theory developed to a level of great complexity, on the basis of a parsimonious number of assumptions. Nowadays, new economic approaches proliferate, avowedly different from neoliberalism. The prime example is behavioral economics, which commits the same errors in different ways by building elaborate theory on the basis of experiments with college kids or by looking at which parts of the brain are more active when types of buying or investment decisions are made. Major areas in economics are thus averse to the real life in an economy by being obsessed with the brain and neglecting social institutions. They will probably continue to be so as long as there is a Nobel Prize for economics, which leads to an exacerbation of formalistic single-mindedness. I am sure I am not far from Nootboom in writing this, but he could have made such a message clearer by avoiding overly stylized opposites and by delving instead into the rich world of socioeconomic diversity.

What then is the remedy? Again, I am sure that in proposing the following, I am not far from Nootboom. A generally well-respected economist at the University of Groningen, where both Nootboom and I worked at different times, was Angus Maddison. His approach was to look at economic developments over time, comparatively, with a keen eye for institutions. Maddison was averse to any set of single-minded assumptions and elaborate general theory. Yet he produced the most credible and empirically rich analyses of the development of capitalist economies. There are clear links with socioeconomic analysis and with institu-

tional embeddedness. Forget about any new-fangled theory or decontextualized moral tracts written by sages in the past. We have more than enough of them already, and the last thing we need is for people to come up with new formalisms. If we are able to connect existing modest theories and say under which circumstances which combinations of theories work better and which fail, then this is a tall enough order already. Above all, we need more respect for socioeconomic history and for placing theories and practical concepts in a context of a time and place. Neither Nussbaum, Nietzsche, nor Aristotle will help us further in this respect. They distract too much attention from comparative socioeconomic history. We need more broadly educated people in socioeconomics who are not the disciples of any particular theory but have accumulated enough diverse insights to be "about right rather than completely wrong," as J. M. Keynes said.

Book: Dodd, Nigel, 2014: *The Social Life of Money*. Princeton University Press.

Reviewer: Felipe González, Facultad de Ciencias Políticas y Administración Pública, Universidad Central de Chile, felipe.gonzalez@ucentral.cl

If the financial crisis of 2007-8 was in any way fruitful for society, it was in raising questions, creating new ideas, initiating lively debates, and – ultimately – producing books about the nature of both money and debt (Ganßmann 2012; Graeber 2011; Esposito 2011; Carruthers/Ariovich 2010; Coggan 2012; Róna-Tas/Guseva 2014). Within the landscape of "monetary debates," however, *The Social Life of Money* represents an unusual and exciting way of approaching the subject: it is not a traditional critique of Wall Street and the banking system, or a general theory of money, but an attempt to reframe and reorganize the way we think and talk about money (page 4).

First let the reader be forewarned: the book is not an easy read. It demands attention and might be frustrating for those looking for definitions of *what money is* and *what its origins are*. In other words, after almost four hundred pages, the book does not culminate in a "final revelation." Not in vain, Dodd closes (and opens) his book by arguing that money is a "nonplace where form and idea endlessly coa-

lesce. Little wonder that it has proved so elusive for those who have sought to encapsulate it in theory" (page 394).

But herein lie the strength, innovativeness, and main contribution of the book in comparison with most traditional treatises on money. For Dodd, laying out what is meant by *The Social Life of Money* is not a matter of listing several aspects that should be taken into consideration when thinking and talking about money. It is rather the attempt to provide a multidimensional account of money as a "social process." Just as the location of a point on a map requires the triangulation of at least three reference points, Dodd traces in this way the social life of money by triangulating sociological theories with literary critique, anthropology, philosophy, and psychoanalysis. This approach leads the author to address a broad range of questions, such as: what is money's source of value; how does it relate to time and space; what are its connection with community, society, the state, and power; what are its associations with culture, identity, the self, and the unconscious? Although the book engages in specific debates found in the literature, this is not a textbook with a clearly defined audience. By being highly eclectic and avoiding fixing any type of definition, it engages in all debates and none of them at the same time. Fortunately, the book is well written, and Dodd is particularly pedagogic in guiding the reader through complex arguments and an impressive range of authors and theories. On the whole, as I expect to show, these elements are exactly what makes *The Social Life of Money* a path-breaking and appealing piece, as well as mandatory reading for those interested in coming to grips with one the most ubiquitous and opaque human institutions, money.

Because of its heterogeneous inspirations, one has to keep an eye on the main goal of the book: to provide a framework that enables the interaction between disperse and disconnected conceptions of money. To accomplish such a task, Dodd draws on Simmel's suggestive and sufficiently broad idea that money is "a claim upon society." Two implications are drawn from this, which, I think, represent the main theme of the book. Firstly, Dodd challenges strongly ingrained beliefs by arguing that money's value – which has to be maintained and protected – does not stem from any stable or material substance such as gold, banks, or states, but rather comes from its everyday uses. This means that in order to understand money – and its social life – we have to look at how its value is created through its multiple manifestations and modes of utilization. In other words, the basic formula of the book is that "money

is a process, not a thing" and, as such, it must be underpinned by trust across society as a whole.

This leads the reader to the second general and arguably overlooked implication of Simmel's idea (that money is a claim upon society), which is to spell out *what* exactly we mean by *society*. In answering this question, the book makes one of its most audacious claims that money is basically a socially necessary illusion, to which its historical associations to the state, the gold standard, and bank money – to mention some interchangeable words for society – are inessential. Following this assertion, Dodd advocates throughout eight chapters for a fluid and dynamic conception of what *society* is, which brings him closer to the idea of "sociation" (the process) rather than "society" (the thing) (page 268). Trying to do justice to a landmark in the sociology of money, I outline the different angles through which Dodd analyzes what is meant by "society" when we define money as a claim upon it.

Chapter 1 defines the terms used to navigate the multiple expressions of the social life of money, for which the book remains intentionally eclectic. Instead of determining once and for all the social status and definition of money, it seeks to do justice to the empirically variegated organizations of money: from Menger's myth of barter to the idea that money originated in the payment of tributes to authorities; from the attempts to conceptualize money as a language to the idea that it is inextricably linked to different forms of violence; and from the attempt to recognize the existence of different forms of premodern monies that become understandable as expressions of the moral economy of gifts to the widespread idea that modern money evolves in the direction of an increasing quantification, depersonalization, and homogenization of social relations.

The second chapter deals with Marx's diffused and uneven conception of money, offering a particular interpretation that puts money at the center of capitalist dynamics instead of production and, later on, consumption. Dodd shows that Marx and his followers were specially keen to uncover the "social life of money" that lies behind its appearance as a mere "thing" or commodity, pointing out the constant struggle to maintain the underlying value of money. The source of such struggles is money's own central contradiction, which is that, as a universal representative of commodities, money is a measure of value, while at the same time, as a particular commodity, it is a medium of exchange. Connecting the contradictory nature of money with its role as the "main conduit through which the

effect of credit crisis resonates through society as a whole" (page 88), Dodd sees the proliferation of monies, such as derivatives, CDOs, paper or commodities, as attempts to reconcile the "desire for a quality store of value with the requirement for a frictionless medium of exchange" (page 87). Following Marx, it is thus possible to show the inherently dynamic, contradictory, and unstable process through which money's value is produced.

In the third chapter, Dodd moves on to tackle the relationship between debt and money. As a form of debt, money is not a mere contract between two interested parties, but a sort of collectivized debt that Simmel epitomized under the idea that money is "a claim upon society," i.e., an obligation assumed by the community towards the money holder. Debt poses the question of whether the link between individuals and society has to be necessarily guarded by structures of authority responsible for the repayment of debts, or if it can be detached from societies, as seems to have happened during the financial meltdown. From this viewpoint, a striking feature of money comes to the fore: money depends on debt, and debt has the capacity to destroy money. Just as the sovereignty of money has to be reached in a context of constant struggle between creditors and debtors, the financial institutions that give modern money its "moneyness" tend to create the conditions of its devaluation and eventual collapse. This is the most violent expression of the "claim upon society" that the debt-money relationship embodies.

Chapter 4 deepens the morally contested nature of debt and money, but in a different way. Rather than tracing monetary theories of the origins of money, Dodd delves into the "quasi-sacred ideals" about human existence that underpin our relationship to money according to social theorists whose reflections can be traced back to Nietzsche. For those economic sociologists not acquainted with Benjamin and Brown, for example, this might be arid reading. In tune with the previous chapter, Dodd urges us to follow money and its underlying structure of guilt in order to understand capitalism as a debt-economy whose debt is relentlessly growing. Seen as such, the moral hypocrisy of capitalism and financial debts lies in the fact that capitalism continues as it will and must be paid for, although this debt is unredeemable (page 159).

The fifth chapter continues the strategy of thinking about money from outside the context of monetary debates and in unconventional ways, suggesting with Bataille, Baudrillard, and Derrida that money – not the thing but

the process – can also be understood as a form of "waste." Through the lens of Bataille, for example, money escapes the homogeneous representation of the world and is conceived from the point of view of "the excluded" or excretion, while from the perspective of Derrida's *counterfeit money* it becomes clear that money is a simulacrum that resists all attempts at stabilization. In this way, monetary practices that are usually conceived as deviant, such as sacrificial tribute payments that are not mere debts but also "nonproductive expenditures," tell us something about the social life of money: ultimately, a possible answer to one of Dodd's opening questions is that "what counts as money" or what makes a currency real is not its materiality, but the very fact that it can be wasted.

Chapter 6 challenges one of the most ingrained representations that we have about money, which is its relationship with territory in a "Westphalian" sense, i.e., as governed and constituted by the state. The author urges us to "re-conceptualize monetary space" and "map its different layers and dimensions, in its various constituent subspaces, and the myriad of interconnections among them" (page 221). Addressing the "gap between our mental mapping of money" and its real political governance, Dodd draws on Carl Schmitt, David Harvey, Deleuze and Guattari, Hardt and Negri to think of the multiple undetermined spaces through which money – again, the process – is constituted, ranging from the global informal economy to transnational monetary union and digital monies not issued by any state. In the end, the goal of the chapter is to elucidate Simmel's idea that money is a claim upon society by coming to grips with the meaning of society in an era of postnational monies.

Chapter 7 addresses the relationship between money and culture following the rich body of literature that ranges from the economic sociology of Zelizer to the impressive empirical accounts in the anthropology of money, starting with Polanyi, Bohannan, Hart, and Maurer. The core insight of these empirically diverse and well-informed approaches is that culture is "neither in opposition to money nor as exogenous to it" (p. 310). Despite the fact that this is now commonplace among scholars, the key fact for Dodd is that, by telling us the ways in which money is actively shaped and created by its uses, cultural approaches tell us not only what money is but also what it may become.

The eighth and final chapter pushes further into the aforementioned insight and brings the reflection to a different level, that of utopia. To understand this, one has to go back to the diagnosis that Dodd raises throughout the

book, which is that the era of money as “a thing” defined by the state is coming to an end, and that money is returning to a condition of pluralism. This idea has a political corollary, namely, that there is no single way of organizing money correctly; money can be arranged differently by communities, nations, and groups of nations alike. This is the political and “utopian” dimension that compels us not only to think of “what money is” but, equally important, to imagine “what money may become.” This is among the most interesting challenges posed by the book. Just as anthropologists look at premodern forms of exchange in order to shed light onto the fundamentals of modern money, “utopian” thought helps us think of money’s present state through the lens of what it may become, be it digital currency (Bitcoin), labor and time-based currencies, or any other way that current and past experiences and our sociological imagination enable us to imagine it.

By the end of this necessary detour, Dodd leaves us at a point where the eclectic and encyclopedic approach and utopian thinking conjoin, which could be considered one of the main contributions of the book and its most innovative aspects. In the end, the thematic organization of *The Social Life of Money* might appeal differently to the lay reader, the monetary specialist, and scholars broadly interested in both economic subjects and more encompassing issues of social theory. Unquestionably, Dodd’s exciting

book represents not only a landmark in the sociology of money but also offers a unique invitation to debate and re-think our ideas about money in an era when reality urges us to do so.

References

- Carruthers, Bruce G./Laura Ariovich**, 2010: *Money and credit: a sociological approach, economy and society*. Cambridge [u.a.]: Polity Press.
- Coggan, Philip**, 2012: *Paper Promises. Debt, Money and The New World Order*. New York: publicaffairs.
- Dodd, Nigel**, 2014: *The social life of money*. Princeton u.a.: Princeton Univ. Press.
- Esposito, Elena**, 2011: *The future of futures: the time of money in financing and society*. Cheltenham [u.a.]: Elgar. [Italienische Originalausgabe: *Il futuro dei futures. Il denaro nella finanza e nella società*. Pisa: Edizioni ETS, 2009.]
- Ganßmann, Heiner**, 2012: *Doing money. Elementary Monetary Theory from a Sociological Standpoint*. Routledge International Studies in Money and Bank. London [u.a.]: Routledge.
- Graeber, David**, 2011: *Debt, the first 5,000 years*. New York: Melville House.
- Róna-Tas, Ákos/Alya Guseva**, 2014: *Plastic money: constructing markets for credit cards in eight postcommunist countries*. Stanford, California: Stanford Univ. Press.

PhD Projects

Data types and functions: A study of framing devices and techniques

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This thesis contributes to the sociology and anthropology of data fields by examining some of the techniques and devices that are deployed to frame data as part of methodological, commercial, digital, journalistic and artistic practices. The thesis first traces the lineage of the concept of “frame” in cybernetic anthropology, artificial intelligence, social interactionism and science and technology studies, to delineate a conceptual framework that can account for the framing of data. The thesis advances that studying the framing of data is important because it enables to make visible both the ontological politics (Mol 1999) and the political economy of data. Empirically, the project identifies two data leaks, and repurposes the materials that emerged from these as case studies that render visible how different techniques and devices frame two distinctive data types: personal data and prices. The first case study examines the making and unmaking of search keywords as personal, and it is based on the materials and events that arose from the leak of a search engine database in 2006. It focuses on analysing how different devices and techniques work to configure certain pieces of data like search keywords to be about persons. Firstly, this case study looks at the technique of reidentification demonstrations – a statistical technique deployed for identifying persons and making them visible from anonymised databases – and at the sequential reordering of data, that is, the repurposing of data found organized in a serial order in a database. Secondly, this case study also looks at anonymisation and informed consent as ethical devices that aid in the economisation of data and its depersonalisation. The second case study is based on the materials and entities that became available as a consequence of the request of disclosure by government officials of the databases that have been used to estimate the Argentinean national inflation indicator since 2006. This case study examines a range of techniques and devices that frame prices in the measurement and commercialisation of consumer price indexes. Firstly, it looks at how procedures for the identification of products aid in the establishment of prices as pure, and

how legal regulations contain the formation of price in the measurement of offline inflation. Secondly, it investigates how digital methods like scraping – a technique for the automatic capturing of web-data – and imaging, that is, the crowd-sourced picturing of the products taken to measure inflation reconfigure the framing of retail price variation for the observation and interpretation of financial actors. The thesis concludes by suggesting that the function of traditional data types such as personal names and official economic indicators – understood as coordinators of social and economic action – might be changing due to the emergence of new data types, data frames and analytical techniques.

Micro-foundations of financialization: Status anxiety and consumer credit in Chile

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This project investigates why people in Chile acquired so much consumer debt in contexts of material prosperity, and asks what the role of inequality and commodification is in this process. The case raises an important challenge to the literature. Insofar as existing accounts assume that the financialization of consumption occurs in contexts marked by wage stagnation and a general deterioration of the middle classes, they engender two contradictory explanations: while political economists argue that people use credit in order to smooth their consumption in the face of market volatility, economists maintain that concentration of wealth at the top pushes middle income consumers to emulate the expenditures of the rich and consume beyond their means. These explanations do not necessarily fit the reality of developing countries.

Triangulating in-depth interviews with middle class families, multivariate statistical analysis and secondary literature, the project shows that consumers in Chile use credit

to finance "ordinary" forms of consumption that do not aim either at coping with market instability or emulating and signaling status to others. Rather, Chileans use department store credit cards in order to acquire a standard package of "inconspicuous" goods that they feel entitled to have. From this point of view, the systematic indebtedness of consumers originates in a major concern with "rank", "achievement" and "security" that – following De Botton (2004) – I call "status anxiety". Status anxiety does not stem from the desire to emulate rich consumers, but from the impossibility of complying with normative expectations about what a middle class family should be (and have) that outweigh wage improvements.

The project thus investigates the way in which "status anxiety" is systematically reproduced by means of two broad mechanisms that prompt people to acquire consumer debt. The first mechanism generating debt stems from an increase of real wages and high levels of inequality. It is explained by a general sociological principle known as relative deprivation, which points to the fact that general satisfaction with one's income, possessions or status, is assessed not in absolute terms such as total income, but in relation with reference groups. In this sense, I explore the

mechanisms that operate as catalyzers of relative deprivation, by making explicit social inequalities and distorting the perception of others' wealth. Despite upward mobility and economic improvement, Chileans share the perception of "falling behind," which materializes in an "imaginary middle class" against which people compare their status, possessions and economic independence.

Finally, I show that the commodification of education, health and pension funds does not directly prompt people to acquire consumer debt, but operate as "income draining" mechanisms that demand higher shares of middle class families' "discretionary income." In combination with "relative deprivation," these "income draining" mechanisms leave families with few options to perform their desired class identities, other than learning how to bring resources from the future into the present with the help of department store credit cards.

References

De Botton, Alain, 2004: *Status Anxiety*. New York: Vintage International.

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