DEBATE

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THE BANG AFTER THE BOOM: UNDERSTANDING FINANCIALIZATION

1. Prologue

Milton Friedman hung up the phone in disgruntlement. The most influential economist of the postwar era had just called three different banks, one in Chicago and then two in New York, in order to initiate a financial transaction. He wanted to sell short $300,000 in pound sterling.[1]

Short selling is a technique for speculating on falling prices. Initially, speculators can only speculate on rising prices: they buy something and hope that it gains value, so that they can sell it at a profit. If the price for this asset goes down instead, the speculator incurs a loss when he resells it. So in order to profit from falling prices, speculators need to sell first and buy later – which is indeed possible if what is sold now is in fact only to be delivered a few weeks later. If the speculator is right and prices fall in the interim, he can buy cheap just before delivery is due and thus profit from having already sold what, at the time, he had not yet owned.

This is exactly what Friedman had in mind. He wanted to sell pound sterling worth $300,000, but for delivery in the future, a few weeks or months ahead: he wanted to enter a so-called forward contract. At the time he made those phone calls, in late October 1967, $300,000 were worth slightly more than £107,000, as one British pound was worth about $2.80. It had been like this since 1949, because under the Bretton Woods system, governments had agreed to keep exchange rates fixed (in order to stimulate world trade).[2] Whenever a country's market exchange rate started moving away from what the governments had agreed upon, the country reacted by buying or selling currency in order to counteract the market movement.

1 The incident is mentioned in: Bob Tamarkin, *The Merc. The Emergence of a Global Financial Powerhouse*, New York 1993, p. 156.

2 On the postwar history of the British currency: Catherine R. Schenk, *The Decline of Sterling. Managing the Retreat of an International Currency, 1945–1992*, Cambridge 2010.

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Friedman's expectation was that the British pound could not be stabilized in this way for much longer, and that devaluation was imminent. He was right: on November 18, 1967, the pound was devaluated by 14.3%. From now on, one pound was worth just $2.40. In late October, Friedman had made the banks an offer to deliver £107,000 in exchange for $300,000 in late 1967 or early 1968. After the devaluation, he could purchase the £107,000 (which he did not yet own) for just $257,000. He would then be paid $300,000 for it, thus turning a profit of $43,000. The speculation was extremely attractive, as it was risk-free: the worst that could happen to Friedman was that no devaluation would take place, in which case he would incur neither a profit nor a loss. He could incur losses only if the pound suddenly appreciated, something that most clearly was not about to happen. Given the macroeconomic conditions, the only question was whether or not depreciation could be avoided.

To Friedman's dismay, but perhaps not unsurprisingly, all three banks rejected his proposal. They told Friedman that private speculation against currencies was generally discouraged. The forward market for currencies, which Friedman wished to tap for speculative reasons, was a closed inter-bank market for the purpose of organizing currency transactions; it was not intended to serve private speculative investment.

History never repeats itself: in September 1992, the British government was again unable to keep the exchange rate at the agreed level, this time within the European Exchange Rate Mechanism (the ERM, which was designed to pave the way for the introduction of the euro as a single currency).[3] This time, however, private speculators could easily bet against the pound, as suitable markets for this (derivatives markets, as will be explained in section 4 below) were in place and open to investors. George Soros and his Quantum Fund made a profit of about a billion pounds by massively short-selling the British currency, which itself enforced the weakening of the pound to such a degree that Soros' bet bordered on self-fulfilling prophecy. Britain left the ERM, never to return. Today the British pound is a free-floating currency, and anyone may bet on its getting cheaper or dearer in relation to the euro or dollar. And there is no need to call a bank; an online trading account is all it takes to speculate from the comfort of your own home. This would all be very, very much to Milton Friedman's liking.

2. Financialization ›after the Boom‹

The emergence, increasing accessibility, and growing importance of markets for currency derivatives is but one aspect of a broader process of marketization since the 1970s, in which financial markets multiplied, proliferated, and came to leave an ever larger imprint on economy and society. For a long time, these developments remained

3 Ibid., pp. 405-412.

somewhat under the radar, except for more acute turning points like the so-called Big Bang, i.e. the deregulation and restructuring of the financial markets in the City of London in October 1986, which triggered a surge in financial market activity.

This complex rise of financial markets to prominence has been discussed in economic sociology and political economy since the 1990s, increasingly under the label of ›financialization‹. It is often viewed as a transition from Fordism as one regime of production to a new, finance-oriented one: financial market capitalism. In recent years, financialization has become a topic in economic history, and of late also for history in general. In their widely received 150-page essay on how to conceptualize German and West European contemporary history of the 1970s and the following decades, i.e. the era ›after the boom‹, Anselm Doering-Manteuffel and Lutz Raphael suggest that the arrival of what they call ›global, digital financial market capitalism‹ had been the most important and powerful force behind the complex societal transformations of the last four decades.[4]

It is interesting, then, that while practically elevating financialization (a term they do not yet use themselves) to first in rank among all historical developments since 1970, Doering-Manteuffel and Raphael do not include it among the topics they recommend as new fields of study in contemporary history. They seem to regard financialization as the one historical process that can be taken as given, and which can be used as a backdrop against which to problematize all others. It could be argued, of course, that it is simply up to the experts – economic sociologists, political economists, economic historians – to provide a better understanding of this specific historical process. And indeed, Doering-Manteuffel and Raphael do refer to the debate in economic sociology, if only briefly.[5]

In the preface to the second edition of their essay, Doering-Manteuffel and Raphael clarify that they view ›digital financial market capitalism‹ as a compound of three factors: the rise of information technologies and digitalization, a change in the guiding macroeconomic principles from Keynesianism to monetarism, and a progressive reconceptualization of man by which the ›entrepreneurial self‹ tends to become the hegemonic form of subjectification.[6] This statement is as interesting as it is puzzling. It is interesting, for it explicitly accentuates digitalization as a key factor – a thought somewhat lacking in the bulk of the financialization literature. Doering-Manteuffel and Raphael suggest melding the concept of informational capitalism (along the lines

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4 Anselm Doering-Manteuffel/Lutz Raphael, *Nach dem Boom. Perspektiven auf die Zeitgeschichte seit 1970*, 2nd ed. Göttingen 2010, p. 8.

5 They reference two articles in the 2005 special issue of the *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, which sparked the German debate on *Finanzmarkt-Kapitalismus* (financial market capitalism): Paul Windolf, Was ist Finanzmarkt-Kapitalismus?, in: *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 45 (2005), special issue: Finanzmarkt-Kapitalismus. Analysen zum Wandel von Produktionsregimen, pp. 20-57; Christoph Deutschmann, Finanzmarkt-Kapitalismus und Wachstumskrise, ibid., pp. 58-84.

6 On the concept of the entrepreneurial self, see Ulrich Bröckling, *Das unternehmerische Selbst. Soziologie einer Subjektivierungsform*, Frankfurt a.M. 2007.

of Daniel Bell[7] and Manuel Castells[8]) with that of financial market capitalism. It is of course evident that information technology amplified processes of financialization, and that financial markets are per se informational markets. The question is: Did digitalization, the rise of information technologies, the emergence of a knowledge society add an important quality to financialization which it would otherwise lack? Would the economic and societal logic of financialized capitalism be different if you took the microprocessor out of the equation? Does genuine financial market capitalism require genuine informational capitalism to be in place? This merits (further) reflection, and is something which sociologists have addressed.[9]

Now, what is puzzling about the suggestion that ›digital financial market capitalism‹ came about through the interplay of digitalization, the switch to monetarism, and the growing compulsion to develop an entrepreneurial self? It is puzzling that none of these three factors actually accounts for the ›financial‹ in ›digital financial market capitalism‹.

What exactly did the change from Keynesian to monetarist economic policy entail? It meant that governments partially stepped back from stabilizing economic growth through a combination of ad-hoc monetary policy (adapting interest rates to govern the supply of money) and fiscal interventions (adapting the level of taxation and the amount of government spending to govern demand), and instead focused solely on (now rule-based, no longer ad-hoc) monetary policy.

The turn towards monetarism since the 1970s, led by the *Bundesbank* and not by the Fed,[10] was accompanied by a renewed economic liberalism in the 1980s. With a re-established faith in the efficiency of markets, public enterprises were privatized and private competition encouraged through deregulation. And there are indeed certain affinities between marketization and monetarism: Both rest on the assumption (albeit for different theoretical reasons!) that public authorities should refrain from economic activities other than setting up and following necessary rules. Keynesian policy has a use for public enterprises, monetarist policy has not. Milton Friedman, the academic father of monetarism, pushed with equal enthusiasm for free markets and the private sector. Nevertheless, it is misleading to explicitly single out and identify monetarism, and not marketization, as a central pillar of ›digital financial market capitalism‹. This wrongly suggests either that privatization and deregulation are genuine aspects of monetarism, or that economic marketization was a consequence of the shift to monetarist policies.

Do the two other pillars of ›digital financial market capitalism‹ account for the financial aspect? Digitalization does not. The emerging imperative to develop an entrepreneurial self might speak for a broader reorientation towards individualism, risk-taking,

7 Daniel Bell, *The Coming of Post-Industrial Society. A Venture in Social Forecasting*, New York 1973.
8 Manuel Castells, *The Information Age. Economy, Society, and Culture*, 3 vols, Oxford 1996–1998.
9 See below, at the end of section 3.
10 Peter Andrew Johnson, *The Government of Money. Monetarism in Germany and the United States*, Ithaca 1998.

competition, and self-responsibility – all aspects that are compatible with marketization. Nevertheless, even restated in these more general terms, nothing surfaces which points to what many hold to be a new, overarching orientation towards financial markets in a seemingly new stage of capitalist development. In order to get a better understanding and grasp of financialization, it seems advisable to take a closer look at the templates to which Doering-Manteuffel and Raphael refer, and to tap the broader, mainly socio-scientific discussion on financialization, which provides a foundation and starting point for genuine historical research on the subject. This is especially useful as it comprises a considerable amount of empirical analysis.

3. The Concept of Financialization in Economic Sociology, Political Economy, and Economic History

Sociologist Paul Windolf defines financial market capitalism as a regime of production, i.e. he is concerned with how (industrial) production in the so-called ›real economy‹ is governed. His suggestion is that industry is principally financed by giving out stocks, so that the ownership and control over firms depends on the possession of shares. According to Windolf, possession becomes ever more concentrated in investment funds, which spread their capital over a myriad of enterprises and are quick to buy and sell their shares. Their focus is not on the sustainability of a firm they co-own, but on short-term maximization of earnings per share. Thus the investment funds, in their power as owners, subject the operations of enterprises to the logic of financial markets, and narrowly focus them on generating shareholder value. This approach essentially falls in line with a whole string of research on finance-oriented changes in corporate governance since the 1990s.[11] While a growing number of larger corporations indeed reoriented their activities to maximize shareholder value, the pervasiveness of this development for business in general is not yet established.

A different strand of literature[12] does also focus on how profits are generated in modern capitalism. But instead of stressing that finance increasingly shapes the way in which the ›real economy‹ makes its profits, these studies focus on the observation that, more and more, profits are generated in finance rather than in the ›real economy‹.[13] This implies a growth of financial firms, but also that non-financial corporations may

11 Neil Fligstein, *The Transformation of Corporate Control*, Cambridge 1990; Neil Fligstein, *The Architecture of Markets. An Economic Sociology of Twenty-First Century Capitalist Societies*, Princeton 2001; Julie Froud, *Financialization and Strategy. Narrative and Numbers*, London 2006.

12 Greta R. Krippner, The Financialization of the American Economy, in: *Socio-Economic Review* 3 (2005), pp. 173-208; Greta R. Krippner, *Capitalizing on Crisis. The Political Origins of the Rise of Finance*, Cambridge 2011.

13 Krippner, Financialization (fn. 12), p. 181.

generate revenue not only from profits from selling their products, but increasingly also from interest payments, dividends, and capital gains that accrue from their own investments and instrumental participation in financial markets. This perspective also involves looking at the growth of financial markets with regard to the wave of new financial products and especially to how states, corporations, and households have increasingly indebted themselves – a key factor in those accounts of financialization that focus on macroeconomics rather than on corporations.[14]

Any of these processes, which are of course not mutually exclusive, may be referred to as ›financialization‹.[15] It seems appropriate, then, to attempt to incorporate all of these observations into a bigger picture. Gerald A. Epstein has presented a most encompassing definition of financialization, which for him means ›the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies‹.[16] There have been some efforts to furnish similarly encompassing theories regarding this increasing role. In a 2012 paper, Christoph Deutschmann presented a multilevel model of capitalist dynamics to give a comprehensive explanation for financialization as a (multifaceted) historical process.[17] Other comprehensive explanations have been furnished by Giovanni Arrighi and Beverly J. Silver in 1999 and by Gerald F. Davis in 2009.[18] These attempts have at least hermeneutic value for historians, and for some they might provide a suitable theoretical framework.

Arrighi and Silver draw on world system theory and conceptualize financialization as a phenomenon characteristic of the final stage of hegemony by a politico-economic power, be it today's U.S.-driven financialization, nineteenth-century British financialization, or early modern Dutch financialization. In each case, they argue, the hegemon loses its real economy to the periphery (due to lower wages) and turns to finance as the final and most lucrative economic field in which hegemony can be sustained. This model is so simple and neat that it should represent an outright challenge to historians to conduct detailed empirical studies to identify, in the first place, actual agents of such financialization, and to discover the specific motives, conditions, constraints – and forms – of their actions.

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14 Thomas I. Palley, Financialisation. What it is and why it matters, in: Eckhard Hein/Torsten Niechoj (eds), *Finance-led Capitalism? Macroeconomic Effects of Changes in the Financial Sector*, Marburg 2008, pp. 29-60; Till van Treeck, The Political Economy Debate on ›Financialization‹. A Macroeconomic Perspective, in: *Review of International Political Economy* 16 (2009), pp. 907-944.

15 For a more detailed overview of the literature, see Natascha van der Zwan, Making Sense of Financialization, in: *Socio-Economic Review* 12 (2014), pp. 99-129.

16 Gerald A. Epstein, Introduction, in: Gerald A. Epstein (ed.), *Financialization and the World Economy*, Cheltenham 2005, pp. 3-17, here p. 3.

17 Christoph Deutschmann, Limits to Financialization, in: *European Journal of Sociology* 52 (2012), pp. 347-390.

18 Giovanni Arrighi/Beverly J. Silver, Introduction, in: Giovanni Arrighi/Beverly J. Silver (eds), *Chaos and Governance in the Modern World System*, Minneapolis 1999, pp. 1-36; Gerald F. Davis, *Managed by the Markets. How Finance Reshaped America*, Oxford 2009.

Davis, in his comprehensive explanation of (recent North American) financialization, points in a similar direction as do Doering-Manteuffel and Raphael. He maintains that financialization was ultimately driven by the transition from a manufacturing to a service economy, and the concurrent rise of information and communication technologies.[19] Financialization, then, is the consequence of the (perhaps ultimately inevitable) *failure* of Fordism, and of the faltering of the postwar economic boom.

Deutschmann holds that, quite to the contrary, financialization is the consequence of the *success* of Fordism, and of the fruits of the postwar economic boom. The private wealth generated in the boom provided the means for higher investments, and called for more and better expertise in making these investments – which explains the rise of finance.[20] In other words, the success of entrepreneurship automatically led to increased rent-seeking, which in turn presented a challenge to entrepreneurialism. Financialization, according to Deutschmann, should therefore be understood as the transition to a state of capitalism in which rent-seeking becomes even more successful than entrepreneurship, and thus hegemonic over it.

Historians are in a position to take this debate further, as both Deutschmann and Davis essentially link different socio-economic processes plausibly, but without showing the particular workings of these links. Davis' position calls for an analysis of business models and strategic decisions of firms in the financial service sector, to see if and to what degree they were driven by technological opportunities, a stronger focus on information and knowledge, and a crisis of traditional financial business. Deutschmann's view invites further investigation into how entrepreneurs and employees changed their private investment and savings behavior.

4. Financialization as Marketization

The more integrative and general studies in particular tend to regard financialization as a fundamental process that changes the workings of our economies and societies in a most profound way. If financialization is understood *by definition* as the displacement of Fordist capitalism by (digital) financial market capitalism, then there is no disputing its importance. But is this really an adequate description of the historical development of the last forty years?

It may be advisable to complement the theoretical views described above with a more basic and specific historical reconstruction and description of the proliferation of financial markets, and only then to inquire as to the scope and impact of these developments with regard to the economy and society as a whole. This chapter will

19 Davis, *Managed by the Markets* (fn. 18), pp. 11-16, 236-237.
20 Deutschmann, Limits (fn. 17), p. 378.

therefore present a short overview of financialization interpreted as a marketization process, to provide the background for some concluding remarks on the place of financialization in contemporary history after 1970.

Financialization as a marketization process is first and foremost to be observed in the United States, but it can be found to differing degrees in other countries as well. The globalization of the financial industry means that its transformation is increasingly of an international and transnational nature. A first observation is that borrowers and lenders, at least larger borrowers like corporations and larger lenders like funds or insurance companies, increasingly circumvent the traditional services of banks in their borrowing and lending (a practice known as *disintermediation*).[21] Traditionally, banks take deposits from lenders and pay them interest, and take those deposits to give loans to borrowers, who in turn pay interest to the bank. Banks live on fees and the difference between the interest they pay and receive. Since the 1970s, larger and/or sufficiently experienced borrowers and lenders increasingly turned directly to capital markets to match their capital demand and supply there. Smaller borrowers like homeowners were increasingly able to tap the capital markets as well, although in this case new intermediaries between borrower and capital markets emerged.

The process of disintermediation is closely connected to a second phenomenon, *securitization*. Securitization refers to the act of turning a financial asset which is not or not easily transferable into a security, i.e. a tradable financial asset. A specific loan from a bank to a firm or government is usually not easily transferable, in contrast to debt securities like government bonds, or equity securities like shares in a company's stock. As early as the nineteenth century, the stock exchange had become the icon of capitalism by securitizing the basic capital demand of larger firms. It afforded risk-seeking investors an easy and exciting way to put their money to work. It functioned as a giant attractor of capital, channeled this capital to different firms, and allowed the public to assess the prospects of different firms on the basis of the pricing of their shares.

From the end of the 1960s, this attractiveness of securities markets was increasingly used to draw capital for other forms of debt as well, especially mortgages for homeowners.[22] Following a credit crunch in the consumer mortgage market in 1966, the U.S. congress allowed the creation of mortgage-backed securities (MBS). In principal, private loans to homeowners were bought and pooled, i.e. a single stream of revenue was created from the payments of these homeowners. Then securities backed by the mortgages were issued that entitled the owner to a share in this revenue. This proved very attractive to investors, as it freed them from having to assess the viability

21 Michel Boutillier/Jean-Charles Bricongne, Disintermediation or Financial Diversification? The Case of Developed Countries, in: *Revue d'économie politique* 122 (2011), pp. 547-583.

22 Louis Hyman, American Debt, Global Capital: The Policy Origins of Securitization, in: Niall Ferguson et al. (eds), *The Shock of the Global. The 1970s in Perspective*, Cambridge 2010, pp. 128-142.

of individual mortgages and from the paperwork of collecting revenue from homeowners themselves. Consequently, new domestic and international sources of capital have opened up since the 1970s to fuel the ever increasing U.S. mortgage markets.

Other forms of debt like car loans, student loans and credit card receivables have also been securitized, although MBS remain the most important product among all these asset-backed securities (ABS). In 2007, ABS with a total value of $2.2 trillion were newly issued in the United States, $1.9 trillion of which were MBS.[23] The most traditional form of debt security, medium- and long-term government bonds, pales in comparison: In 2007, the U.S. federal government issued $0.7 trillion worth of treasury bonds and notes (with a maturity of at least two years).[24] In the same year in all of Europe, newly issued ABS amounted to just a quarter of what was issued in the U.S. ($501 billion).[25] About half was issued in the UK. Germany accounted for only $25.5 billion (5.1%), one eighth of the value of newly issued German government bonds ($196 billion).[26] These figures illustrate the very uneven progress of securitization.

A third aspect of financialization as marketization is what could be called *derivatization,* i.e. the rise of derivative securities. A derivative is a security that derives its value from the development of an underlying asset or parameter (such as a commodity or share price, an interest rate, or a stock index).[27] It provides gains (or losses) from the price development of stocks or commodities without actually holding or transacting them. Derivative markets provide an opportunity to take a specific economic risk, either with the purpose of profiting from it (speculation), or of offsetting complementary risks to which one is already subjected in one's normal course of business (hedging).[28]

The two most important forms of derivatives prior to 1970 were options and futures. Options were popular at stock exchanges until 1929; they regained popularity from around 1970, especially when academic approaches greatly enhanced option pricing. The new discipline of financial economics itself became an engine for the derivative industry, as it provided ever more intricate methods to construct and price new forms of derivatives.[29] Futures had been traded at commodity exchanges since the nineteenth

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23 Securities Industry and Financial Markets Association (SIFMA), Statistics (<http://www.sifma.org/research/statistics.aspx>): US ABS Issuance and Outstanding; US Mortgage-Related Issuance and Outstanding.

24 OECD.StatExtracts, Finance, Central Government Debt (<http://stats.oecd.org/index.aspx?queryid=8089>), variable ›total bonds‹, type ›flows: gross issues‹, unit ›million USD‹.

25 European Securitisation Forum, ESF Securitisation Data Report, Q1:2008, p. 3 (<http://www.afme.eu/WorkArea//DownloadAsset.aspx?id=5286>). Data converted using an exchange rate of 0.7293 EUR/USD, according to <http://www.measuringworth.com/exchangeglobal/>.

26 OECD.StatExtracts, Finance, Central Government Debt (<http://stats.oecd.org/index.aspx?queryid=8089>), variable ›total bonds‹, type ›flows: gross issues‹, unit ›million USD‹.

27 On the economic theory of derivatives, see: John C. Hull, *Options, Futures, and other Derivatives*, 8th ed. Boston 2012.

28 On the conceptual history of hedging, see: Alexander Engel, Futures and Risk: The Rise and Demise of the Hedger-Speculator Dichotomy, in: *Socio-Economic Review* 11 (2013), pp. 553-576.

29 Donald A. MacKenzie, *An Engine, not a Camera. How Financial Models Shape Markets*, Cambridge 2008.

century.[30] A futures contract is a highly standardized, tradable obligation to transact a certain amount of a commodity for a certain price at a future date. These contracts are usually fulfilled by paying the difference between the contract and the market price rather than by delivering the actual commodity. In other words, commodity markets essentially became financial markets.

In the early 1970s, the two futures exchanges in Chicago took the principle of futures trading in commodities and applied it to finance.[31] Expecting the system of Bretton Woods to fall apart, the Chicago Mercantile Exchange (CME) opened its International Monetary Market (IMM) in 1972 to trade currency futures. One driving force behind the establishment of the IMM was, unsurprisingly, Milton Friedman. He was commissioned by the CME to write a paper on the necessity of having a futures market for currencies – something that had been lacking in his own speculative endeavor five years before. This paper proved extremely helpful in gaining the approval of the authorities and organizational help in the financial sector. Friedman again helped to get approval from the treasury when the CME introduced futures on treasury bills. Meanwhile, the other Chicago exchange, the Chicago Board of Trade, had taken up the trade in futures on mortgage securities. Futures on many other interest-bearing instruments, mostly government bonds, followed. The currency and interest rate futures were complemented by futures on stock exchange indices in the 1980s, and later on by futures on single stocks.

These exchange-traded derivatives were increasingly complemented by over-the-counter (OTC) derivatives, usually created by investment banks and sold to their clients. The OTC derivative markets allowed for a much more diverse range of financial instruments and also for more complex, less transparent, and riskier constructions (derivatives on derivatives, repackaging of different derivatives). In recent years, OTC derivatives have dwarfed exchange-traded derivatives; their markets are now gigantic.[32] Derivatives have become a ubiquitous instrument for the management of exposure to a multitude of market risks, not just within the financial sector, but also for corporations and private investors.

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30 Jeffrey C. Williams, The Origins of Futures Markets, in: *Agricultural History* 56 (1982), pp. 306-316; Jerry W. Markham, *The History of Commodity Futures Trading and Its Regulation*, New York 1987; Joseph Santos, A History of Futures Trading in the United States, in: EH.Net Encyclopedia, March 16, 2008, URL: <http://eh.net/encyclopedia/a-history-of-futures-trading-in-the-united-states/>.

31 For the following, see: Tamarkin, *The Merc* (fn. 1); MacKenzie, *Engine* (fn. 29).

32 In June 2007, the gross market value of OTC derivatives worldwide had been about $11 trillion: Bank for International Settlements, Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2007 (<http://www.bis.org/publ/rpfxf07t.htm>), pp. 2-3. This outstripped the size of the markets for government bonds, but not (yet) the size of the world's stock markets. The total market capitalization of companies listed at stock exchanges (not including investment firms and funds), i.e. the total value of all shares in companies worldwide, amounted to $64.5 trillion at the end of 2007: World Bank, Open Data, Indicator ›Market capitalization of listed companies (current US$)‹ (<http://data.worldbank.org/indicator/CM.MKT.LCAP.CD/countries>).

5. Conclusion

Disintermediation heightened the importance of markets for the allocation of capital, securitization broadened the scope of financial markets, and derivatization added an additional layer of financial markets for market risks. By reconfiguring the mode of capital and risk allocation, the basic mechanics of the capitalist economy were changed at the financial core. But how deeply did these changes actually affect the capitalist economy *outside* its core? Did they really affect the nature and logic of everyday economic actions?

Financialization partially changed the running of non-financial enterprises, principally with regard to risk management (in terms of both new opportunities and new regulatory imperatives for all businesses) and to some degree in the form of a (new) shareholder value orientation. Nevertheless, it remains an open question whether an orientation towards rent-seeking was really a *pervasive*, let alone defining feature of the ›post-boom‹ economy, or indeed society. It also remains an open question whether rent-seeking will inevitably become more important as an economic motive to the detriment of entrepreneurship. And how would such a triumph of rent-seeking over entrepreneurship fit with the suggested rise of the ›entrepreneurial self‹ as the new dominant form of subjectification?

Financialization changed the mechanisms of capital allocation for both government and household borrowing. At least in the U.S., consumers experienced an abundance of lending capital and ease in taking out loans for houses and cars – until, in 2007/08, they experienced a new, disastrous unravelling of the housing market. But again: Did all this, in turn, alter the motives, logic and behavior of consumers?

Rather than assuming that the advent of financialized capitalism was the driving force behind the complex societal transformations of the last four decades, it would be wise for historians to study empirically if, when and in what way the concepts and the behavior of entrepreneurs, consumers, governments, and experts really changed. This is not so much a matter of reconstructing the potentially fugitive registers of financial market transactions, as of unearthing potential changes in the aims and strategies of economic agents. Future research would do well to assess more exactly the changing meaning of markets, of credit, and of risk for the economy and the society as a whole. This would also help to place financialization in the wider context of more general processes of marketization and monetization.

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