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6.2

The silence of finance and its critics

Portfolio investors in the world-system

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In a classic text, Albert O. Hirschman (1970) observed that stakeholders in organizations typically face a conflict between *exit* and *voice*. We, who can easily exit an organization, have few incentives to invest in changing it; in contrast, when our exit is blocked, we are incentivized to exercise our voice, even when to do so is difficult or politically or socially dangerous. In finance, this social calculus between exit and voice is conceptualized as an opposition between liquidity and control (Coffee 1991). Historically, sociological research has focused on the causes and consequences of financiers' control of corporations (Stearns and Mizruchi 2005). This article instead focuses on a frontier of existing theory: professional money managers who almost exclusively invest in liquid securities, and therefore putatively have few incentives to exercise control.

Although portfolio investors may not seek control, their behavior can be socially consequential. As of early 2011, many housing and financial markets have not yet recovered from a financial crisis that began over three years earlier, caused in large part by portfolio investors seeking liquid investments, without a desire for either control or long-term ownership.

The article begins by demystifying global capital flows by outlining the parties involved. It proceeds by surveying finance studies to outline social forces shaping portfolio investors' behavior. Next, it examines the social consequences of financialization and financial innovation, particularly their role in generating financial crises. The conclusion outlines two social movements advocating reform of financial markets.

Demystifying global capital flows

Scholars of cross-border capital flows implicitly draw on Hirschman's (1970) distinction to define two types of investment. *Foreign direct investment* seeks to build corporate subsidiaries overseas or purchase control of foreign corporations. Such investors profit by building or buying into businesses and claiming a portion of their revenue streams. In contrast, *foreign portfolio investment* is the purchase of relatively liquid securities such as government debt, foreign corporations' debt or equity, or financial instruments derived from such instruments (i.e., derivatives). Such investors seek to profit by buying low and selling high; with an exit strategy planned before every purchase, they have few incentives for exercising voice.

How much of a corporation must a portfolio investor accumulate before she has lost liquidity and gained control of a corporation? In *Global Development Finance*, the World Bank (2008) sets the minimum threshold for control at 10 percent of equity ownership. Based on earlier research

(Pitluck 2011), I find that ownership below this 10 percent threshold is often an illiquid ownership stake. This suggests that social research using World Bank data on global capital flows overestimates the size of portfolio flows and correspondingly underestimates the size of foreign direct investment.

With this conventional definition in mind, we can make several generalizations regarding cross-border portfolio capital flows in the world-system. Firstly, money managers in core countries primarily invest in corporations in their own country—a phenomenon known in the finance literature as "home bias" (Karen 1999). Secondly, when core countries' money managers invest overseas, they primarily invest in one another, or in offshore financial centers that also primarily invest in core countries.

Thirdly, when high-income countries invest outside of Europe, the United States, and Japan, they invest in a narrow selection of countries. In the global South over the past decade, nearly every dollar flowed to only twenty so-called "investable emerging markets," identified as such by Standard & Poor's and other finance industry institutions. These countries are: Argentina, Brazil, Chile, China, Columbia, Egypt, Hungary, India, Indonesia, Lithuania, Malaysia, Mexico, Morocco, the Philippines, Poland, the Russian Federation, South Africa, Turkey, and Venezuela (World Bank 2008). Fourthly, throughout the global North, a growing share of wealth is held outside of the banking system and is managed by portfolio investors employed by investment funds (esp. Austria and Ireland), insurance companies (esp. Belgium and Sweden), and pension funds (esp. Australia, Canada, Iceland, the Netherlands, and Switzerland) (Gonnard et al 2008: 7 and Figure 1).

A valuable step in demystifying high finance in order to understand the social forces shaping global capital flows is to reformulate it as a prosaic work practice. Portfolio investors labor under multiple aliases: portfolio managers, fund managers, asset managers, investment advisers, money managers, and institutional investors. Portfolio investors may be employed by nonfinancial firms in corporate treasury operations. More typically, they are employed by finance firms such as investment banks, commercial banks, mutual funds, pension funds, insurance companies, and hedge funds. The type of finance firm determines the regulations constraining the portfolio investor and the organizational constraints on his or her trading choices. Portfolio investors working in finance firms may manage clients' money or engage in proprietary trading (i.e., trading on behalf of their own firm) (Davis and Steil 2001).

Portfolio investors trade legal contracts that represent ownership of real assets and the cash flows produced by these assets. These contracts (called financial instruments) may be standardized and easily traded on public exchanges, or they may be custom-designed bilateral contracts running to many hundreds of pages.

Social forces shaping portfolio investor behavior

Modal studies in finance emphasize that portfolio investors are profit-maximizing, boundedly-rational agents responding to exogenous information signals. In this framework, to understand why or where portfolio investors make their investment and disinvestment decisions, analysts focus on the destination country's investment climate (e.g., World Bank 2010). The behavioral finance literature retains this methodological individualism to model psychological constraints on investors' rationality. In contrast, sociological approaches emphasize how portfolio investors are agents in social cognitive networks acting in markets constituted by cultural fields and state power.

Social cognitive networks is a term that emphasizes the interpersonal and interorganizational nature of cognition in finance; the decision-making process takes place both inside and outside of professional investors' heads (Pitluck 2011). Some portfolio managers work alone, or in small groups. For example, some hedge funds are small organizations composed of a fund manager and a small collaborative staff of a half dozen people. More typically, when an investment manager works alone or with a small staff, their principal duty is to hire and monitor external portfolio

managers. Portfolio managers typically work in large, complex organizations. Within these organizations, traders typically gain information, deliberate, and decide in teams at a "desk," narrowly focused on a single financial instrument or a narrow trading strategy (Beunza and Stark 2005; Clark and Thrift 2005). In social interaction with brokers and competitors, portfolio investors interpret and co-create the market (Knorr Cetina and Bruegger 2002b; Pitluck 2011). Even intra-day arbitrage traders working in crowds on trading floors gain and process information in interpersonal networks (Baker 1984; Zaloom 2006).

Portfolio investors seek to gain a unique interpretation of investment opportunities from public information, but such information is always constructed in interaction with others. For example, "raw" information and numbers regarding corporations is provided and interpreted by corporations' investor relations offices and public filings (Useem 1996; Westphal and Bednar 2008), by market analysts inside and outside of the firm (Lounsbury and Rao 2004; Zuckerman 1999), by private-sector credit rating agencies (Sinclair 2005), and by the mass media (Warner and Molotch 1993). Financial information and how it is interpreted is constructed from prosaic work practices and technologies, such as the use of financial models and proprietary trading technologies (Beunza and Stark 2005; Knorr Cetina and Bruegger 2002a; MacKenzie 2006; MacKenzie and Millo 2003; Preda 2009). Cognition, data and price construction are social activities (Beunza et al 2006; Knorr Cetina and Preda 2005; Pixley 2004).

These investment decisions are made in the context of shifting government regulation. A fundamental insight of world-systems analysis is that all markets are political. All products are bundles of rights and obligations, the value of which is shaped by the legality and enforcement of these property rights (Wallerstein 2004). This theory provides four insights to aid the understanding of financial markets. Firstly, financial instruments are legal contracts outlining rights and obligations to an income stream. The value of such contracts is not only shaped by public interpretations and expectations of the underlying income stream, but also by current and future expectations of the contract's judicial interpretation and regulatory enforcement. As elaborated below, this is particularly germane in the area of financial innovation, where novel contracts are often designed to take advantage of ambiguous legal or regulatory infrastructure, such as tax shelters.

Secondly, even in the trading of standardized financial products, such as shares on stock exchanges, there is a great deal of legal and normative ambiguity regarding the distinction between licit aggressive opportunism that capitalizes on information asymmetries and illicit insider information, fraud, or market manipulation. As Mitchel Y. Abolafia (1996) documented in his ethnographic research, where this legal distinction is drawn shifts over time and is shaped by state regulatory practices in interaction with financial workers' industry culture.

Thirdly, all corporations are artifacts of state power, but this is particularly germane for financial firms. For example, since 1933, what financial instruments US financial firms are legally permitted to invest in and the degree of risk that they are permitted to purchase has been dictated by securities regulation; these regulations have shifted dramatically over the course of the twentieth century up until the present, thereby dramatically altering the size of financial firms, their scope of operations, and their employees' investment behavior (Burk 1992; de Goede 2005). Lastly, as elaborated below, financial markets are marked by periodic crises (Arrighi 2010; Harvey 1982; Reinhart and Rogoff 2009), which provide an opportunity for social movements to advocate for regulatory reform to constrain the power of financial firms (Abolafia 1996; Burk 1992).

Social consequences of professional investors' behavior

Over the past 40 years, alongside observed trends in wealthy countries of deindustrialization and the growing importance of the service sector, numerous scholars and activists have argued that the

financial sector has grown more significant in social life. This trend has been broadly termed *financialization*. Financialization is frequently perceived as a conflict between Wall Street and Main Street. For example, some researchers have argued that corporate behavior is increasingly designed to raise short-term stock market prices, and decreasingly oriented to benefit employees, geographic communities, or even the long-term survival of the firm. Others point to the expanding economic, political, and cultural power of financial sector elites. Yet other scholars have argued that diverse banks' influence on corporations—particularly in Japan and the European Union—is diminishing, but is being replaced by the opinions and power of portfolio managers, market analysts, and credit rating agencies.

Pulling together these empirical observations with the theoretical work of Giovanni Arrighi (2010), Greta Krippner (2005: 174) defines financialization as "a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production." She describes a post-War trend of US *nonfinancial* corporations increasingly resembling financial corporations, in that financial activities are a growing source of their profits and cash flow. In particular, manufacturing corporations are increasingly dependent for their survival on providing or trading financial products. In other words, the distinction between Main Street and Wall Street is eroding as both sectors pursue liquid investments and eschew illiquid commitments to workers and communities.

Earlier scholars have emphasized the long-term systemic relationship between financialization and financial crises. Drawing on Marx's theory of the tendency for the profit rate to fall and thereby produce crises of overaccumulation, David Harvey (1982:esp. Ch. 6 and 7, 2003: Ch. 3) argues that capitalists seek a "spatio-temporal fix" of investing surplus capital into long-term projects (e.g., infrastructure, education, research) and/or investing abroad. For Harvey, financialization is one path through which capital flows to overcome capitalism's chronic crises.

Drawing inspiration from the work of Fernand Braudel, Giovanni Arrighi (2010: 372) argues that in the history of the world-system, one finds intense periods of financialization (referred to as "financial expansions") marking the transition between a waning cycle of accumulation in one region and the rising cycle of accumulation in the next. He argues that in all such cycles to date, the rapid expansion of world trade and production has resulted in increased competitive pressures and diminishing returns. This encourages the capitalist class to "keep in liquid form a growing proportion of their incoming cash flow" (372) rather than invest it in production. (See Silver [2003] for the related idea of a financial fix, and Block [1977] on capital strikes.) This creates the supply conditions for overaccumulation of capital. Arrighi traces the demand conditions:

> to the tendency of territorial organizations to respond to the tighter budget constraints that ensue from the slowdown in the expansion of trade and production by competing intensely with one another for the capital that accumulates in financial markets. This tendency brings about massive, system-wide redistributions of income and wealth from all kinds of communities to the agencies that control mobile capital, thereby inflating and sustaining the profitability of financial deals largely divorced from trade and production. All the *belles époques* of finance capitalism—from Renaissance Florence to the Reagan and Clinton eras—have been characterized by redistributions of this kind.
>
> *(Arrighi 2010: 372)*

For Arrighi, like Harvey, financialization is a bandage that allows capitalists a profitable respite before the capitalist system slides into a periodic crisis of world-historical significance.

Financial innovation has been argued to either alleviate or cause financial crises. Financial innovation is the "act of creating and then popularizing new financial instruments as well as new

financial technologies, institutions and markets" (Tufano 2003: 310). The finance literature and much economic history depict financial innovation in functionalist terms. Financial innovation promotes economic growth and acts as a prophylactic against financial crises. It does so by solving three problems for firms: raising funds (e.g., junk bonds in the 1980s), redistributing risk (e.g., Mortgage Backed Securities with a "waterfall" structure, Langley [2008]; Coval et al [2009]), and circumventing or minimizing taxation or regulatory constraints (Miller 1986). Economy-wide, financial innovation is argued to create new markets, thereby leading to improved information and more efficient allocation of capital throughout the economy, and consequently producing financial stability and economic growth (e.g., Allen and Gale 1994: Ch. 2).

Political economists with a functionalist bent can expand this list, for financial instruments have been created to solve many additional problems—often with unintended harmful consequences. For example, new financial instruments have been designed to redistribute wealth or control within a corporation, such as the "poison pill securities" created in the 1980s (Allen and Gale 1994: 22–24). Lawyers have worked with financial engineers to create new instruments to circumvent new court decisions (Tufano 2003: 320). Islamic scholars have worked with financial engineers to create financial instruments that circumvent Islam's prohibition on interest (El-Gamal 2006). Moreover, in recent years financial engineers have worked with analysts in credit rating agencies to create mortgage backed securities and other collateralized debt obligations that circumvent risk models in order to create financial instruments rated as having exceptionally low risk (Coval et al 2009).

Elsewhere in finance studies, we find constructionist and political economic arguments that financial innovation contributes to parasitism and financial instability. Karen Ho (2009) documents the ways in which investment banks provide self-serving consultation services to corporations that identify "problems" and "needs" and then market risky new financial instruments and strategies as "solutions." Other scholars emphasize how financial firms seek to reduce competition by creating and marketing putatively differentiated financial instruments, or are pressured to create destructively risky "me too" financial instruments in order to compete in under-regulated market niches, such as Collateralized Debt Obligations (CDOs) and Credit Default Swaps (Ashton 2009; Best 2010; Erturk and Solari 2007; Engelen et al 2010; Gotham 2006; Langley 2008; Lounsbury and Hirsch 2010).

In the recent financial crisis, these financial derivatives created a large and rapidly growing demand for conventional and subprime mortgages. Financial firms increasingly originated loans simply in order to re-sell them to financial engineers, who repackaged and then re-sold them as CDOs. When the demand for derivatives began outstripping the supply of potential borrowers, since these mortgage markets were under-regulated, lenders found themselves in a vicious cycle of competitively declining lending standards, in which they created mortgages with increasingly risky terms to borrowers increasingly unlikely to be able to afford repayment. Such mortgage products were disproportionally peddled to racial minorities, residents in historically redlined neighborhoods, and to residents in communities with the most severe real estate price inflation (Hernandez 2009; Langley 2008).

Social movements advocating reform

What alternative institutional arrangements exist to minimize the destructive aspects of financial innovation, financialization, and portfolio investors' behavior? In the spirit of Erik Olin Wright's (2010) real utopias project, here I reflect on two such projects. The social investment social movements seek to reform corporate behavior by using portfolio investors as our progressive political representatives. Islamic finance social movements share some of these goals, and

additionally seek to reform financial markets based on religious and moral reasoning. Both social movements advocate for portfolio investors to behave less like absentee owners fetishizing liquidity, and more like owners exercising a voice for social justice. Both social movements, in other words, contest the morality of liquidity.

Social investment is a normative vision of finance seeking "the allocation of capital to advance the social and economic well-being of people" (Bruyn 1987:13). In many countries, as share-ownership had become more widespread through pension funds, mutual funds, and insurance schemes, social investment advocates have sought for the money managers of these funds to invest using not only financial criteria, but nonfinancial political criteria as well. For example, the pension funds of labor unions could promote positive industrial relations using their money manager's voice and threat of exit (Fung et al 2001). Public pension funds could direct their money managers to meet the needs of community residents, including potentially investing in local infrastructure and disadvantaged communities (Clark 2000).

Social investment faces numerous hurdles. Firstly, corporate governance rules are currently crafted to give shareholders (including money managers) limited control over corporations (Black 1991; Coffee 1991). Secondly, savers typically have limited mechanisms for democratic control over their money managers (Pitluck 2008). Ensuring that money managers attend to our financial interests rather than engage in self-interested excessive trading or charge excessive fees is already problematic. Through what mechanisms can we communicate (and enforce) our nonfinancial investment interests? Pension funds in the United States, United Kingdom, and Canada illustrate these challenges (Clark 2000; Fung et al 2001).

One potential solution is socially responsible investment (SRI) financial products that can be purchased by individuals or indirectly via their portfolio managers. Akin to "fair trade" claims in nonfinancial products, SRI accounts have their investments screened to meet minimum nonfinancial criteria. In the United States, these are typically left-leaning political criteria, and/or criteria inspired by Christianity, such as foregoing "sin stocks" such as liquor or tobacco corporations. In early 2010, over $2.51 trillion in US assets were held in such accounts. If we add to this number funds invested with institutional investors who do not practice social screening but who practice shareholder advocacy, and/or invest in community projects that are typically underserved by traditional financial institutions, we find that the size of SRI assets rises to $3.07 trillion. This amount is non-trivial; it represents nearly one out of every eight dollars in the $25.2 trillion under professional management (Social Investment Forum 2011).

Another extant institutional alternative is Islamic finance, also known as Islamic banking. Like SRI, individuals and portfolio investors can invest in Islamic accounts and financial instruments. "Islamic financial institutions are those that are based, in their objectives and operations, on Koranic principles" (Warde 2002: 5). These principles are contested and transformed over time by debate within and between diverse groups, including Islamic (*Shari'a*) scholars, secular lawyers, financial engineers, and regulators (El-Gamal 2006). As a consequence, as one scholar concludes, "No definition of Islamic finance is entirely satisfactory. To every general criterion…one can find some significant exception" (Warde 2002: 5).

Nevertheless, one can posit several core tenants of contemporary Islamic finance (Iqbal and Molyneux 2005: 4–17; Usmani 2002; Warde 2002: esp. 55–72). Islamic finance overlaps with SRI in attending to the behavior of corporations. In Islamic finance, corporations must engage in socially beneficial activities and may not engage in activities forbidden by the religion. The precise list of such activities varies, reflecting the religion's global diversity, flexibility and pragmatism (see Warde 2002: 15; 41–42; Ch. 16). For example, financial firms may only invest in real assets and inventories and may not make money from money (Usmani 2002: xiv–xvii). Nonfinancial corporations may not engage in some activities, such as selling liquor or gambling. Like SRI

advocates, Islamic finance seeks to set a pragmatic ceiling of acceptable involvement in unacceptable industries.

In contrast to SRI, Islamic finance additionally critiques and seeks reform of the role of finance in society. Firstly, *riba* is prohibited, a concept frequently interpreted as prohibiting interest-earning transactions (but see El-Gamal 2006: Chapter 3). Secondly, *gharar* is prohibited, a concept that Iqbal and Molyneux (2005:12–15) equate with asymmetrical information. All economic and financial contracts should be transparent, minimize risk, and not seek to profit from uncertainty. Thirdly, all kinds of gambling and games of chance are prohibited (*maysir*). While profiting from entrepreneurial risk or utilizing insurance against natural disasters is permitted, one may not profit from "uncertainties that are not part of everyday life," including speculation (Iqbal and Molyneux 2005: 15).

For scholars and activists, Islamic finance provides a sophisticated and significantly broader critique than SRI of diverse practices in the finance industry, including financial innovation, the morality of making money from money, and alternative conceptions of risk and uncertainty (e.g., Pitluck 2008). Moreover, many practitioners seek to create new "Islamic" financial instruments that shift economic rewards and risks to empower the disempowered. On the other hand, Mahmoud A. El-Gamal (2006) is correct that much scholastic and industry work in Islamic finance is often in practice focused not on seeking a more socially just financial system, but in regulatory and religious arbitrage—replicating the status quo using complex, structured financial products that Islamic jurists can approve and that can therefore be marketed as "Islamic." This is particularly problematic in light of the role that structured financial products played in causing the 2007 financial crisis (Coval et al 2009; Langley 2008).

Conclusion

As Severyn T. Bruyn (1987: 14) has observed, the word *investment* is defined not only as employing money to make a profit, but also to endow or furnish with power, authority or privilege. Until recently, world-systems analysts have focused on the social consequences of financiers' control but have neglected to examine the consequences of financiers' desire for liquidity. Scholars therefore have much to learn from activists in social investment and Islamic finance who have for decades contested the morality of liquidity. By re-politicizing finance (de Goede 2005) and conceiving of financial markets as cultural fields shaped by state power (Abolafia 1996), we position ourselves to better understand and change where portfolio capital flows, how financial and nonfinancial corporations behave, and how to intervene in periodically destructive social processes such as financialization and financial innovation.

References

Abolafia, M.Y. (1996) *Making markets: Opportunism and restraint on Wall Street*, Cambridge, MA: Harvard University Press.

Allen, F. and Gale, D. (1994) *Financial innovation and risk sharing*, Cambridge, MA: MIT Press.

Arrighi, G. (2010) *The long twentieth century: Money, power, and the origins of our times*, London: Verso.

Ashton, P. (2009) "An appetite for yield: The anatomy of the subprime mortgage crisis", *Environment and Planning A*, 41(6): 1420–41.

Baker, W.E. (1984) "The social structure of a national securities market", *American Journal of Sociology*, 89(4): 775–811.

Best, J. (2010) "The limits of financial risk management: Or what we didn't learn from the Asian crisis", *New Political Economy*, 15(1): 29–49.

Beunza, D., Hardie, I. and MacKenzie, D. (2006) "A price is a social thing: Towards a material sociology of arbitrage", *Organization Studies*, 27(5): 721–45.

Beunza, D. and Stark, D. (2005) "How to recognize opportunities: Heterarchical search in a trading room", in K. Knorr Cetina and A. Preda (eds) *Sociology of financial markets*, Oxford: Oxford University Press.
Black, B.S. (1991) "Shareholder passivity reexamined", *Michigan Law Review*, 89: 520–608.
Block, F. (1977) "The ruling class does not rule: Notes on the Marxist theory of the state", *Socialist Review*, 7(3): 6–28.
Bruyn, S.T. (1987) *The field of social investment*, Cambridge and New York: Cambridge University Press.
Burk, J. (1992) *Values in the marketplace: The American stock market under federal securities law*, New York: Aldine de Gruyter.
Clark, G.L. (2000) *Pension fund capitalism*, Oxford and New York: Oxford University Press.
Clark, G.L. and Thrift, N. (2005) "The return of bureaucracy: Managing dispersed knowledge in global finance", in K. Knorr Cetina and A. Preda (eds) *Sociology of financial markets*, Oxford: Oxford University Press.
Coffee, J.C., Jr. (1991) "Liquidity versus control: The institutional investor as corporate monitor", *Columbia Law Review*, 91(6): 1277–1368.
Coval, J., Jurek, J. and Stafford, E. (2009) "The economics of structured finance", *Journal of Economic Perspectives*, 23(1): 3–25.
Davis, E.P. and Steil, B. (2001) *Institutional investors*, Cambridge, MA: MIT Press.
de Goede, M. (2005) *Virtue, fortune and faith: A genealogy of finance*, Minneapolis: University of Minnesota Press.
El-Gamal, M.A. (2006) *Islamic finance: Law, economics, and practice*, Cambridge and New York: Cambridge University Press.
Engelen, E., Erturk, I., Froud, J., Leaver, A. and Williams, K. (2010) "Reconceptualizing financial innovation: Frame, conjuncture and bricolage", *Economy and Society*, 39(1): 33–63.
Erturk, I. and Solari, S. (2007) "Banks as continuous reinvention", *New Political Economy*, 12(3): 369–88.
Fung, A., Hebb, T. and Rogers, J. (2001) *Working capital: The power of labor's pensions*, Ithaca, NY: ILR Press, Cornell University Press.
Gonnard, E., Kim, E.J. and Ynesta, I. (2008) "Recent trends in institutional investors statistics", *Financial Market Trends*, 95(2): 1–22.
Gotham, K.F. (2006) "The secondary circuit of capital reconsidered: Globalization and the U.S. real estate sector", *American Journal of Sociology*, 112(1): 231–75.
Harvey, D. (1982) *The limits to capital*, Chicago, IL, and Oxford: University of Chicago Press and Blackwell.
Harvey, D. (2003) *The new imperialism*, Oxford and New York: Oxford University Press.
Hernandez, J. (2009) "Redlining revisited: Mortgage lending patterns in Sacramento 1930–2004", *International Journal of Urban and Regional Research*, 33(2): 291–313.
Hirschman, A.O. (1970) *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*, Cambridge, MA: Harvard University Press.
Ho, K. (2009) *Liquidated: An ethnography of Wall Street*, Durham, NC, and London: Duke University Press.
Iqbal, M. and Molyneux, P. (2005) *Thirty years of Islamic banking: History, performance and prospects*, Houndmills and New York: Palgrave Macmillan.
Karen, K.L. (1999) "Trying to explain home bias in equities and consumption", *Journal of Economic Literature*, 37(2): 571–608.
Knorr Cetina, K. and Bruegger, U. (2002a) "Global microstructures: The virtual societies of financial markets", *American Journal of Sociology*, 107(4): 905–50.
Knorr Cetina, K. and Bruegger, U. (2002b) "Traders' engagement with markets: A postsocial relationship", *Theory, Culture & Society*, 19(5–6): 161–85.
Knorr Cetina, K. and Preda, A. (2005) *The sociology of financial markets*, Oxford: Oxford University Press.
Krippner, G.R. (2005) "The financialization of the American economy", *Socioeconomic Review*, 3(2): 173–208.
Langley, P. (2008) "Sub-prime mortgage lending: A cultural economy", *Economy and Society*, 37(4): 469–94.
Lounsbury, M. and Hirsch, Paul M. (eds) (2010) *Markets on Trial: The Economic Sociology of the U.S. Financial Crisis, Part A*. Bingley: Emerald Group Publishing LTD.
Lounsbury, M. and Rao, H. (2004) "Sources of durability and change in market classifications: A study of the reconstitution of product categories in the American mutual fund industry, 1944–85", *Social Forces*, 82(3): 969–99.
MacKenzie, D. (2006) *An engine, not a camera : How financial models shape markets*, Cambridge, MA: MIT Press.
MacKenzie, D. and Millo, Y. (2003) "Constructing a market, performing theory: The historical sociology of a financial derivatives exchange", *American Journal of Sociology*, 109(1): 107–45.
Miller, M.H. (1986) "Financial innovation: The last twenty years and the next", *Journal of Financial & Quantitative Analysis*, 21(4): 459–71.

Pitluck, A.Z. (2008) "Moral behavior in stock markets: Islamic finance and socially responsible investment", in K. E. Browne and B. L. Milgram (eds) *Economics and morality: Anthropological approaches*, Society for Economic Anthropology Monographs, Lanham, MD: AltaMira Press, Rowman & Littlefield Publishers.

Pitluck, A.Z. (2011) "Distributed execution in illiquid times: An alternative explanation of trading in financial markets", *Economy and Society*, 40(1): 26–55.

Pixley, J. (2004) *Emotions in finance: Distrust and uncertainty in global markets*, Cambridge and New York: Cambridge University Press.

Preda, A. (2009) *Framing finance: The boundaries of markets and modern capitalism*, Chicago, IL, and London: University of Chicago Press.

Reinhart, C.M. and Rogoff, K.S. (2009) *This time is different: Eight centuries of financial folly*, Princeton, NJ, and Oxford: Princeton University Press.

Silver, B.J. (2003) *Forces of labor: Workers' movements and globalization since 1870*, Cambridge and New York: Cambridge University Press.

Sinclair, T.J. (2005) *The new masters of capital : American bond rating agencies and the politics of creditworthiness*, Ithaca, NY: Cornell University Press.

Social Investment Forum (2011) *2010 report on socially responsible investing trends in the United States*, Washington, DC: Social Investment Forum.

Stearns, L.B. and Mizruchi, M.S. (2005) "Banking and financial markets", in N.J. Smelser and R. Swedberg (eds) *The handbook of economic sociology*, 2nd edn., Princeton, NJ, and Oxford: Princeton University Press; New York: Russell Sage Foundation.

Tufano, P. (2003) "Financial innovation", in G. M. Constantinides, M. Harris and R. Stulz (eds) *The handbook of the economics of finance*, Amsterdam: Elsevier North Holland.

Useem, M. (1996) *Investor capitalism: How money managers are changing the face of corporate America*, New York: Basic Books.

Usmani, M.T. (2002) *An introduction to Islamic finance*, The Hague: Kluwer Law International.

Wallerstein, I.M. (2004) *World-systems analysis: An introduction*, Durham, NC: Duke University Press.

Warde, I. (2002) *Islamic finance in the global economy*, Edinburgh: Edinburgh University Press.

Warner, K. and Molotch, H. (1993) "Information in the marketplace: Media explanations of the '87 crash' ", *Social Problems*, 40(2): 167–88.

Westphal, J.D. and Bednar, M.K. (2008) "The pacification of institutional investors", *Administrative Science Quarterly*, 53(1): 29–72.

World Bank (2008) *Global development finance*, Washington, DC: World Bank.

World Bank (2010) *Doing business 2011: Making a difference for entrepreneurs*, Washington, DC: World Bank.

Wright, E.O. (2010) *Envisioning real utopias*, London: Verso.

Zaloom, C. (2006) *Out of the pits: Traders and technology from Chicago to London*, Chicago, IL, and London: University of Chicago Press.

Zuckerman, E.W. (1999) "The categorical imperative: Securities analysts and the illegitimacy discount", *American Journal of Sociology*, 104(5): 1398–1438.