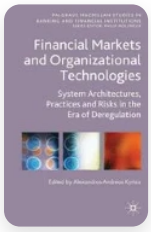
SPRINGER NATURE Link

Log in

Opening the Black Boxes of Global Finance

| Chapter

| pp 92–116 | Cite this chapter



Financial Markets and Organizational Technologies

Donald MacKenzie

Part of the book series: Palgrave Macmillan Studies in Banking and Financial Institutions ((SBFI))

275 Accesses **1** Citation

Abstract

In this chapter, I shall describe and advocate a' science-studies' approach to global finance.[1] 'Science studies' is the generic name for a collection of humanities and social-science specialisms that examine the contents and contexts of science and technology. These specialisms are diverse: some are historical, some philosophical, some sociological, some anthropological, some draw on literary theory.[2] They have no simple overarching theory or methodology, so it must be emphasized that what I am discussing is *a* science studies approach, not *the* science studies approach. References to other authors studying finance from a science-studies perspective will be found in an endnote,[3] but the topic is still a relatively new one for science studies, and the work done so far has only scratched the surface of what is possible. In advocating a science-studies perspective, in no sense do I wish to denigrate the contributions of other approaches. There is an exciting emergence or revival of interest in financial markets in economic sociology (e.g. Godechot

2001, 2007), anthropology (e.g. Zaloom 2006) and human geography (e.g. Leyshon and Thrift 1997); and of course international political economy has long been interested in finance (e.g. Mosley 2003). A science-studies approach is complementary to those of other disciplines, not in competition with them.

This is a preview of subscription content, log in via an institution to check access.

Access this chapter

Log in via an institution →

Subscribe and save

Springer+ from €37.37 /Month

- Receive 10 units per month
- Download 1 article/chapter for 1 unit
- Get selected eBooks for 7 units
- Cancel anytime

View plans →

Buy Now

eBook EUR 17.99
Price includes VAT (Poland)

- Available as PDF
- Read on any device
- Instant download
- Own it forever

Buy eBook →

Softcover Book EUR 106.99
Price includes VAT (Poland)

- Compact, lightweight edition
- Free shipping worldwide - view details

Buy Softcover Book →

Hardcover Book EUR 106.99

Price includes VAT (Poland)

- Durable hardcover edition
- Free shipping worldwide - view details

Buy Hardcover Book →

Tax calculation will be finalised at checkout

Purchases are for personal use only

Institutional subscriptions →

Preview

Unable to display preview. Download preview PDF.

Explore related subjects

Discover the latest articles, books and news in related subjects, suggested using machine learning.

Science and Technology Studies | International Security Studies | Expertise Studies | Sociology of Science | Space Studies | Sociology of the Financial Market | Economic Sociology of Financial Markets

Bibliography

Austin, J. L. (1962), *How to Do Things With Words*, Oxford: Clarendon Press.

Bachelier, L. (1900), 'Théorie de la Spéculation', *Annales Scientifiques de l'Ecole Normale Supérieure* third series 17: 22–86.

Barnes, B. (1983), 'Social Life as Bootstrapped Induction', *Sociology*, 17: 524–45.

Beunza, D. Hardie, I. and MacKenzie, D. (2006), 'A Price is a Social Thing: Towards a Material Sociology of Arbitrage', *Organization Studies*, 27: 721–45.

Beunza, D. and Stark, D. (2004), 'Tools of the Trade: The Socio-Technology of Arbitrage in a Wall Street Trading Room', *Industrial and Corporate Change*, 13: 369–400.

Biagioli, M. (ed.) (1999), *The Science Studies Reader*, New York: Routledge.

Black, F. and Scholes, M. (1972), 'The Valuation of Option Contracts and a Test of Market Efficiency', *Journal of Finance*, 27: 399–417.

Black, F. and Scholes, M. (1973), 'The Pricing of Options and Corporate Liabilities', *Journal of Political Economy*, 81: 637–54.

Bryce, R. (2002), *Pipe Dreams: Greed, Ego, and the Death of Enron*, New York: PublicAffairs.

Burgstahler, D. and Dichev, I. (1997), 'Earnings Management to Avoid Earnings Decreases and Losses', *Journal of Accounting and Economics*, 24: 99–126.

Callon, M. and Latour, B. (1981), 'Unscrewing the Big Leviathan: How Actors Macro-Structure Reality and How Sociologists Help Them to do So', in K. Knorr Cetina and A. V. Cicourel (eds), *Advances in Social Theory and Methodology: Toward an Integration of Micro-and Macro-Sociologies*, Boston, MA: Routledge and Kegan Paul: 277–303.

Cooper, D. J. and Robson, K. (2006), 'Accounting, Professions and Regulation: Locating the Sites of Professionalization', *Accounting, Organizations and Society*, 31: 415–44.

Douglas, M. (1970), *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, Harmondsworth: Penguin.

Dunbar, N. (2000), *Inventing Money: The Story of Long-Term Capital Management and the Legends Behind it*, Chichester: Wiley.

Galai, D. (1977), 'Tests of Market Efficiency of the Chicago Board Options Exchange', *Journal of Business*, 50: 167–97.

Gemmill, G. (1996), 'Transparency and Liquidity: A Study of Block Trades on the London Stock Exchange under different Publication Rules', *Journal of Finance*, 51: 1765–90.

Giddens, A. (1990), *The Consequences of Modernity*, Cambridge: Polity.

Gieryn, T. (1999), *Cultural Boundaries of Science: Credibility on the Line*, Chicago, IL: Chicago University Press.

Godechot, O. (2000), 'Le Bazar de la Rationalité: Vers une Sociologie des Formes Concrètes de Raisonnement', *Politix*, 13(52): 17–56.

Godechot, O. (2001), *Les Traders: Essai de Sociologie des Marchés Financiers*, Paris: La Découverte.

Godechot, O. (2007), *Working Rich: Salaires, Bonus et Appropriation du Profit dans l'Industrie Financière*, Paris: La Découverte.

Hayn, C. (1995), 'The Information Content of Losses', *Journal of Accounting and Economics*, 20: 125–53.

Hong, H. and Stein, J. C. (2003), ‘Differences of Opinion, Short-Sales Constraints, and Market Crashes’, *Review of Financial Studies*, 16: 487–525.

Hopwood, A. and Miller, P. (eds) (1994), *Accounting as Social and Institutional Practice*, Cambridge: Cambridge University Press.

Hume, N. (2002), ‘Hocus-Pocus Saves the Day’, *The Guardian*, 6 September.

Hume, N., Treanor, J. and Milner, M. (2002), ‘FTSE Closes Below 4,000 as Bush Intervention Fails’, *The Guardian*, 16 July.

Kalthoff, H., Rottenburg, R. and Wagener, H.-J. (2000), *Ökonomie und Gesellschaft, Jahrbuch 16. Facts and Figures: Economic Representations and Practices*, Marburg: Metropolis.

Knorr Cetina, K. and Bruegger, U. (2002a), ‘Global Microstructures: The Virtual Societies of Financial Markets’, *American Journal of Sociology*, 107: 905–51.

Knorr Cetina, K. and Bruegger, U. (2002b), ‘Inhabiting Technology: The Global Lifeform of Financial Markets’, *Current Sociology*, 50: 389–405.

Knorr Cetina, K. and Preda, A. (eds) (2005), *The Sociology of Financial Markets*, Oxford: Oxford University Press.

Latour, B. (1987), *Science in Action*, Cambridge, MA: Harvard University Press.

Leland, H. E. (1985), ‘Option Pricing and Replication with Transaction Costs’, *Journal of Finance*, 40: 1283–301.

Lépinay, V-. A. (2007a), ‘Decoding Finance: Articulation and Liquidity Around a Trading Room’, in D. MacKenzie, F. Muniesa and L. Siu (eds), *Do Economists Make Markets? On the Performativity of Economics*, Princeton, NJ: Princeton University Press: 87–127.

Lépinay, V-. A. (2007b), ‘Parasitic Formulae: The Case of Capital Guarantee Products’, in M. Callon, Y. Millo, and F. Muniesa (eds), *Market Devices*, Oxford: Blackwell: 261–83.

Leung, D. (2008), ‘Accounting in the Wild: An Adventure in Ethnoaccountancy’, Ph.D. thesis: University of Edinburgh.

Leyshon, A. and Thrift, N. (1997), *Money/Space*, London: Routledge.

Lowenstein, R. (2000), *When Genius Failed: The Rise and Fall of Long-Term Capital Management*, New York: Random House.

MacKenzie, D. (1990), *Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance*, Cambridge, MA: The MIT Press.

MacKenzie, D. (1992), ‘Economic and Sociological Explanation of Technical Change’, in R. Rod Coombs, P. Saviotti, and V. Walsh (eds), *Technological Change and Company Strategies: Economic and Sociological Perspectives*, London: Academic Press: 25–48.

MacKenzie, D. (2002), ‘What’s in the Bottle?’, *The London Review of Books*, 24(9): 21–2.

MacKenzie, D. (2003), ‘Long-Term Capital Management and the Sociology of Arbitrage’, *Economy and Society*, 32: 349–80.

MacKenzie, D. (2004), ‘Social Connectivities in Global Financial Markets’, *Society and Space (Environment and Planning D*) 22: 83–101.

MacKenzie, D. (2006), *An Engine, not a Camera: How Financial Models Shape Markets*, Cambridge, MA: The MIT Press.

MacKenzie, D. (2007), ‘The Material Production of Virtuality: Innovation, Cultural Geography and Facticity in Derivatives Markets’, *Economy and Society*, 36: 355–76.

MacKenzie, D. (2008a), ‘Producing Accounts: Finitism, Technology and Rule Following’, in M. Mazzotti (ed.), *Knowledge as Social Order: Rethinking the Sociology of Barry Barnes*, Aldershot: Ashgate: 99–117.

MacKenzie, D. (2008b), ‘End-of-the-World Trade’, *London Review of Books*, 30(9) (8 May): 24–6.

MacKenzie, D. (2009), ‘All Those Arrows’, *London Review of Books*, 31(12) (25 June): 20–2.

MacKenzie, D. and Millo, Y. (2003), ‘Constructing a Market, Performing Theory: The Historical Sociology of a Financial Derivatives Exchange’, *American Journal of Sociology*, 109: 107–45.

Madhavan, A. and Panchapagesan, V. (2000), ‘Price Discovery in an Auction Market: A Look Inside the Black Box’, *Review of Financial Studies*, 13: 627–58.

McMillan, J. (2002), *Reinventing the Bazaar: A Natural History of Markets*, New York: Norton.

Merton, R. C. (1973), ‘Theory of Rational Option Pricing’, *Bell Journal of Economics and Management Science*, 4: 141–83.

Miller, M. H. and Modigliani, F. (1961), ‘Dividend Policy, Growth, and the Valuation of Shares’, *Journal of Business*, 34: 411–33.

Millo, Y. (2003), ‘Where do Financial Markets Come From? Historical Sociology of Financial Derivatives Markets’, Ph.D. thesis: University of Edinburgh.

Millo, Y., Muniesa, F. Panourgias, N. S. and Scott, S. V. (2005), ‘Organized Detachment: Clearinghouse Mechanisms in Financial Markets’, *Information and Organization*, 15: 229–46.

Milyaeva, S. (2009), ‘Making Markets, Making Laws: Non-Deliverable Currency Forwards and the Amendment to Article 1062 of the Russian Civil Code’, Ph.D. thesis: University of Edinburgh.

Modigliani, F. and Miller, M. H. (1958), ‘The Cost of Capital, Corporation Finance and the Theory of Investment’, *American Economic Review*, 48: 261–97.

Mosley, L. (2003), *Global Capital and National Governments*, Cambridge: Cambridge University Press.

Muniesa, F. (2003), ‘Des Marchés Comme Algorithmes: Sociologie de la Cotation électronique à la Bourse de Paris’, Ph.D. thesis: École Nationale Supérieure des Mines.

Muniesa, F. (2005), ‘Contenir le Marché: La Transition de la Criée à la Cotation électronique à la Bourse de Paris’, *Sociologie du Travail*, 47: 485–501.

Partnoy, F. (2001), ‘Multinational Regulatory Competition and Single-Stock Futures’, *Northwestern Journal of International Law and Business*, 21: 641–55.

Partnoy, F. (2003), *Infectious Greed: How Deceit and Risk Corrupted the Financial Markets*, London: Profile.

Perold, A. (1999), *Long-Term Capital Management, L.P.*, Boston, MA: Harvard Business School Publishing.

Preda, A. (2006), ‘Socio-Technical Agency in Financial Markets: The Case of the Stock Ticker’, *Social Studies of Science*, 36: 753–82.

Preda, A. (2007a), ‘STS and Social Studies of Finance’, in E. Hackett, O. Amsterdamska, M. Lynch and J. Wajcman (eds) (2007), *Handbook of Science and Technology Studies*, Cambridge, MA: The MIT Press: 901–21.

Preda, A. (2007b). ‘Where do Analysts come from? The Case of Financial Chartism’, in M. Callon, Y. Millo and F. Muniesa (eds) *Market Devices*, Oxford: Blackwell, 40–64.

Preda, A. (2009), *Framing Finance: The Boundaries of Markets and Modern Capitalism*, Chicago, IL: University of Chicago Press.

Rosenberg, N. (1982), *Inside the Black Box: Technology and Economics*, Cambridge: Cambridge University Press.

Ross, S. A. (2001), ‘Neoclassical and Alternative Finance’, Keynote Address to EFMA Annual Meeting.

Rubinstein, M. (1985), ‘Nonparametric Tests of Alternative Option Pricing Models

Using all Reported Trades and Quotes on the 30 Most Active CBOE Option Classes from August 23, 1976 through August 31, 1978', *Journal of Finance*, 40: 455–80.

Salmon, F. (2009), 'Recipe for Disaster: The Formula that Killed Wall Street', *Wired Magazine*, 23 February.

Shleifer, A. and Summers, L. H. (1990), 'The Noise Trader Approach to Finance', *Journal of Economic Perspectives*, 4: 19–33.

Shleifer, A. and Vishny, R. W. (1997), 'The Limits of Arbitrage', *Journal of Finance*, 52: 35–55.

Taleb, N. (1998), 'How the *Ought* Became the *Is*', Futures & OTC World, Black-Scholes-Merton Supplement: 35–6.

Tett, G. (2009), *Fool's Gold: How Unrestrained Greed Corrupted a Dream, Shattered Global Markets and Unleashed a Catastrophe*, London: Little Brown.

UBS AG (2008), 'Shareholder Report on UBS's Write-Downs', Zurich: UBS AG, 18 April, available at www.ubs.com.

Underhill, G. R. D. (2000), 'State, Markets, and Global Political Economy: Genealogy of an (inter-?) Discipline', *International Affairs*, 76: 805–24.

Valdmanis, T. (1998), 'Accounting Abracadabra: Cooking the Books Proves Common Trick of the Trade', *USA Today*, 11 August.

Vogel, S. K. (1996), *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*, Ithaca, NY: Cornell University Press.

Vollmer, H. (2003), ‘Bookkeeping, Accounting, Calculative Practice: The Sociological Suspense of Calculation’, *Critical Perspectives on Accounting*, 3: 353–81.

Weber, M. (1970), ‘Bureaucracy’, in H. H. Gerth and C. W. Mills (eds), *From Max Weber: Essays in Sociology*, London: Routledge & Kegan Paul: 196–244.

Winner, L. (1993), ‘Upon Opening the Black Box and Finding it Empty: Social Constructivism and the Philosophy of Technology’, *Science, Technology, & Human Values*, 18: 362–78.

Zaloom, C. (2006), *Out of the Pits: Trading and Technology from Chicago to London*, Chicago, IL: Chicago University Press.

Zorn, D. M. (no date), ‘No Surprise Anymore: Securities Analysts’ Forecasts and Corporate Profit Reporting, 1981–2000’, Cambridge, MA: Department of Sociology, Harvard University.

Author information

Authors and Affiliations

University of Edinburgh, UK
Donald MacKenzie

Editor information

Editors and Affiliations

Department of Political Science and Public Administration, University of Athens, Greece
Alexandros-Andreas Kyrtsis (Professor of Sociology) (Professor of Sociology)

Copyright information

© 2010 Donald MacKenzie

About this chapter

Cite this chapter

MacKenzie, D. (2010). Opening the Black Boxes of Global Finance. In: Kyrtsis, AA. (eds) Financial Markets and Organizational Technologies. Palgrave Macmillan Studies in Banking and Financial Institutions. Palgrave Macmillan, London. https://doi.org/10.1057/9780230283176_4

.RIS .ENW .BIB

DOI	Publisher Name	Print ISBN
https://doi.org/10.1057/9780230283176_4	Palgrave Macmillan, London	978-1-349-31349-5

Online ISBN	eBook Packages
978-0-230-28317-6	Palgrave Economics & Finance Collection Economics and Finance (R0)

Keywords

Financial Market | Option Price | Earning Management | Hedge Fund | Short Seller

These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves.

Publish with us

Policies and ethics

Search

Search by keyword or author

Navigation

Find a journal

Publish with us

Track your research