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Opening the black boxes of global finance

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ABSTRACT

This paper advocates the application to global finance of one of the central heuristics of science studies: open the black box. Black boxes are devices, practices, or

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Notes

- 1 The introduction to the field that best captures this diversity is Biagioli's reader ([Biagioli 1999](#)).
- 2 See, e.g., [Brügger \(2000\)](#), [Izquierdo \(1998\)](#), [Izquierdo \(2001\)](#), Knorr Cetina and [Bruegger \(2000\)](#) and [\(2002\)](#), [Lépinay and Rousseau \(2000\)](#), Millo (forthcoming a & b), [Muniesa \(2000a\)](#), [2000b](#), and [2003](#), [Preda \(2001\)](#) and [\(2002\)](#).
- 3 See [Godechot \(2000\)](#) and [\(2001\)](#), p. 218-30). My own fieldwork amongst Chicago derivatives traders also suggests a prevalence of chartist beliefs and practices that would be surprising to the financial economist.
- 4 A high proportion of the written records of ancient civilizations is comprised of records of ownership and taxation: 'The earliest known written documents - marks baked in clay - are
- 5 I think heuristic itself is v
- 6 See, e
- 7 See  at science and tech microstructure theory is [gesan](#) [\(2000\)](#). F
- 8 This is [er \(1970\)](#).

9 See, e.g., [Giddens \(1990\)](#).

10 This critique is, of course, the basis of the infamous 'science wars.' My thoughts on these will be found in [MacKenzie \(2002\)](#).

11 Perhaps most vocal in this critique has been Langdon Winner e.g. [Winner \(1993\)](#).

12 See [MacKenzie \(1990\)](#), pp. 209-214) for a discussion of the design of accelerometers and of the bearings upon which their gyroscope wheels spin.

13 [MacKenzie \(2003c\)](#).

14 There was much earlier work on option pricing by [Bachelier \(1900\)](#)., which was not taken up for fifty years.

15 To short sell an asset is to sell an asset one does not own, for example by borrowing it, selling it, and later repurchasing and returning it. A short seller profits from a price decline, because the asset can be repurchased for less than the proceeds of the initial sale.

16 See the remarks of a trader quoted by [Godechot \(2001\)](#), p. 227-8)

17 A 'derivative' is a security or contract the price of which depends upon the price of another asset (or index level or interest rate): an option is one example of a derivative in that its price depends upon that of the block of shares or other underlying asset.

18 Data from Bank for International Settlements, www.bis.org

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[Vishny 1997](#).): much real-world arbitrage, including the real-world counterparts of some



of the classic arbitrages of finance theory, demands capital and involves at least some risk. See [MacKenzie and Millo \(2003\)](#) on options arbitrage.

24 This is the key insight of [Shleifer and Vishny \(1997\)](#), a prescient piece of work in that it models one key feature of 1998: the flight of arbitrage capital in the face of improving arbitrage opportunities. It does not, however, model the other key feature: the imitative superportfolio. For Shleifer's own remarks on LTCM, see [Shleifer \(2000\)](#), (107-111).

25 Since completing the first draft of this article I discovered an excellent study in the 'law and economics' tradition of the regulatory background to single-stock futures: [Partnoy \(2001\)](#).

26 Q.v. [Douglas \(1970\)](#). Millo (forthcoming b) .discusses the key outcome of SEC-CFTC negotiation: the Shad-Johnson Accord. It is telling that regulatory bodies should have needed this 'peace treaty.'

27 See [Partnoy \(2003\)](#) on the barriers to short selling. Of course one should not exaggerate these barriers. Thus Harvard University's endowment fund took a large short position on Enron via the hedge fund Highfields Capital Management ([Bryce 2002](#): 268) and must have profited handsomely from so doing.

28 In principle, a futures contract requires delivery of the underlying asset at the contract's maturity. In practice, delivery is seldom or never required, and economically equivalent gains or losses are achieved by futures exchanges requiring daily payment or refund of balances held by the exchange clearing house.

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discretion as to the jurisdictions within which they operate. Since completing the first draft of this article, I discovered Vogel's fine study of liberalization in Britain and Japan. His title, *Freer Markets, More Rules* ([Vogel 1996](#)), captures precisely the point I wish to make.

32 That an interview is an act of hospitality that imposes obligations can be forgotten when, as is overwhelmingly the case in the social sciences in general, the interviewee is lower in the socio-economic scale or otherwise less powerful than the interviewer. Obligations to the less powerful are, of course, notoriously easier to ignore.

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