15. One example of the unwillingness of the early government-chartered banks to act as central bankers was that the Bank of England was slow and reluctant to take on any general responsibility as a lender of last resort. One of the reasons White offers to deny the ultimate dependence of Scottish banks upon the Bank of England (see Sechrest, *FB* 91) was that the Bank did not explicitly consider itself to be a lender of last resort to them during the Scottish free-banking period. True, but the Bank did not consider itself a committed LOLR to the English banks, either. White also claims that, unlike England, Scotland "did not develop an inverted-pyramid structure of specie reserve. It rather maintained a system of 'each tub on its own bottom.' Each bank held onto its own specie reserve" (*EFB* 179). But as he then reveals in footnote 11, these reserve ratios were, by the standards of the time, extraordinarily low in the first half of the nineteenth century, "ranging from 0.5 to 3.2 percent" (186). While he is, I am sure, correct to claim that Scottish banks did not hold much of their reserves directly in Bank of England liabilities, they *did* hold much of their reserves in the form of claims (bills) on the London money market, and the Bank played a significant part in maintaining that market's viability. Sechrest, a critic of White's claims about the purity of the Scottish free banking episode, repeats (*FB* 87) the following passage from Checkland: "The Scottish system was one of continuous partial suspension of payments. No one really expected to be able to enter a Scots bank . . . with a large holding of notes and receive the equivalent immediately in gold or silver. At best, they would get a little specie and perhaps Bills on London" (185).

In my view the touchstone of whether a banking system is a satellite of another separate system and central bank is whether, if the latter either changes regime, or closes, the former system can carry on unchanged. On this criterion White demonstrates that the Scottish system *was*, indeed, a satellite of the London financial center and the Bank of England, as also was that of Ireland (see Bodenhorn, *EFB* ch. 8) and Switzerland on Paris and the Banque de France (Landmann, 1911, "The Swiss Banking Law," Senate Document No. 401, in *Banking Studies in Sweden and Switzerland*, National Monetary Commission, Vol. XVII (Washington, D.C.: Government Printing Office), 13–15. Thus White (*EFB* 181) writes that "upon receiving news of the [1797] suspension, the managers of the four leading banks in Edinburgh at this time . . . met and decided to follow the Bank of England's example. Had they made specie available when the Bank of England refused, they feared English demand would rapidly have drained them of their reserves." Just why White emphasizes *English* demand when the Scottish banks had net claims on England is unclear to me, but the satellite role is confirmed here. The case of Canada, however, remains much more debatable.

16. Sechrest argues convincingly against Hayek's proposals for a system of competitively issued, inconvertible, non-legal tender currencies (*FB*, 6–10).

17. One argument that crops up occasionally is that the existence of a single, monopolistic central bank might facilitate and encourage a switch by governments from a gold standard to a fiat money regime. I doubt whether this argument ever had much real weight. At the start of World War I belligerent countries switched to fiat money regimes whatever the status of their central bank. Governments have known for centuries how they can, in times of war and crisis, extort command over real resources from seignorage. It is not possible to put that genie back into the bottle. The existence of a free banking system of multiple note-issuing banks, with such notes convertible into gold, might delay the adoption of a fiat money regime on such crisis occasions by a few weeks, perhaps—long enough to print government notes—but not much more (note the behavior of the federal government in the U.S. Civil War).
18. As described by Oliver Sprague in his *History of Crises under the National Banking System* (Washington, D.C.: Government Printing Office, 1910).
19. As noted by Schuler, *EFB* 91.
20. Just what the *Illinois* banks thought that they were doing by securing two-thirds of their notes on *Missouri* bonds (see *EFB*, 212) is not revealed.
21. The one fact that makes me pause uncomfortably is that the Great Depression was as severe in Canada, where no banks failed, as in the United States (Schuler *EFB*, 90–91). If the bank failures were so important in the U.S. experience, as Bernanke, for one, argues, why did Canada suffer just as badly?
22. Selgin (n6 above).
23. Daniel Orr, *Cash Management and the Demand for Money* (New York: Praeger, 1970).
24. Douglas W. Diamond and Philip H. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91, no. 3 (June 1983): 401–19.
25. Charles J. Jacklin and Sudipto Bhattacharya, "Distinguishing Panics and Information-Based Bank Runs: Welfare and Policy Implications," *Journal of Political Economy* 96: 568–92.
26. Insofar as the typical bank run is caused by fear of insolvency, rather than simple illiquidity, does that make less attractive as a possible cure for runs Dowd's proposals for granting banks an option clause whereby they can, at the bank's volition, suspend convertibility on the payment of a pre-arranged higher interest rate? If the bank can protect itself from withdrawals for a short, defined period, when its capital is already impaired, would it not have an overwhelming incentive to take on a very-high-risk, potentially-high-return portfolio in the interim? Whether or not these concerns have validity, the question of the desirability of the option clause is a fascinating historical and theoretical issue which deserves continuing attention.