On January 11, 2012, John Kay, a Financial Times journalist, and Vikram Pandit, the CEO of Citigroup, contributed short think pieces under a single heading to the newspaper’s series on capitalism in crisis. Kay’s article ended with a paragraph stating that “[s]loppy language leads to sloppy thinking. By continuing to use the 19th-century term capitalism for an economic system that has evolved into something altogether different, we are liable to misunderstand the sources of strength of the market economy and the role capital plays within it.” This paper proceeds from the proposition that any rigorous discussion of the need for reform and/or more or less regulation of the mostly private institutions that carry out financial transactions requires that we state clearly what we mean by the terms “bank,” “shadow bank” and “the shadow banking system.” In addition, determining what counts as an appropriate definition will depend, in part, on a consideration of the person using the term or terms: Is she trained in legal analysis, in the discipline of economics or in the discipline of economic history? Or is she a financial journalist? Each of these types of commentators may use the terms “bank” and “shadow bank” intending different implications, depending upon the lens she is using for her analysis and her intellectual formation. The usage may not be “sloppy,” in John Kay’s words, but rather result from the fact that different

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* Professor Emeritus, Boston College Law School.
1 John Kay & Vikram Pandit, Capitalism is the Wrong Target – But We Can Refine It, FINANCIAL TIMES, Jan. 11, 2012, at 9.
2 Id.
3 Here, immediately, is another opportunity for misunderstanding. Does the use of the word “private” signify a corporate entity majority-owned by members of the public as opposed to partial or full ownership by a state? Or does it mean simply a corporate entity whose shares are not issued to the public, however the securities laws of the entity’s jurisdiction define the term “public issue”? When I use the term “private” in this paper, I mean only that the entity is not a parastatal, as are some public utilities in the U.S. and as are most public utilities, railroads and communications companies abroad.
4 Kay & Pandit, supra note 1.
intellectual formations and professions may cause the users of the same words to intend significantly different meanings.\textsuperscript{5}

In preparing to write this paper, I read again\textsuperscript{6} Walter Bagehot’s \textit{Lombard Street: A Description of the Money Market}\textsuperscript{7}, Perry Mehrling’s \textit{The New Lombard Street: How the Fed Became the Dealer of Last Resort}\textsuperscript{8} and John Authers’ \textit{The Fearful Rise of Markets: Global Bubbles, Synchronized Meltdowns, and How to Prevent Them in the Future}\textsuperscript{9}. I also read two pieces by Saule T. Omarova, Assistant Professor of Law at the University of North Carolina at Chapel Hill School of Law, to compare my own lens as a legally trained writer to that of another.\textsuperscript{10} Bagehot, of course, was the Governor of the Bank of England when he wrote what Mehrling calls

\textsuperscript{5} This discussion excludes how a politician seeking office may choose to use these words, or indeed, choose to misrepresent the functions of central banks. Whatever academicians, including academic economists and law professors, may advocate, the political realities on both the domestic and the international stages may make the most worthy schemes, well, “academic.”

\textsuperscript{6} I first read Bagehot while obtaining a Master’s of Comparative Law in 1961-1963 at the University of Chicago Law School. As a female child of my time (born in 1934, in college from 1951-1955, and attending law school from 1956-1959), it had never occurred to me to study either economics or finance in college or corporate law at law school until my time as a summer associate at a Wall Street law firm with a major money center bank as one of its clients. The experience made me realize that the practice of banking and corporate law might interest me far more than the socially intractable problems of juvenile delinquents. As a result, I left the firm, which had hired me as a full time associate, after two years to study on a funded comparative law program during which I took economics courses at the Chicago School of Business. In one marvelous course in economic intellectual history, I read not only Bagehot, but a number of Keynes’ shorter tracts. I have been reading economists—those who keep their equations to their footnotes—ever since.

\textsuperscript{7} \textit{WALTER BAGEHOT, LOMBARD STREET} (1979).


\textsuperscript{9} \textit{JOHN AUTHERS, THE FEARFUL RISE OF MARKETS: GLOBAL BUBBLES, SYNCHRONIZED MELTDOWNS, AND HOW TO PREVENT THEM IN THE FUTURE} (2010).

his “magisterial” treatise in 1873 on how a central bank must react to a financial crisis.\footnote{MEHRLING, supra note 8, at 1.}

Mehrling is an economist and an economic historian. Authors is a financial journalist.

I begin this piece with the legal perspective on the definition of “bank” and follow with an analysis of Bagehot, Mehrling and Authors. As I explain, this analysis should have consequences for crisis prevention and crisis mitigation: I suggest that attempting to analyze the recent financial crisis\footnote{A plethora of books, articles and even a special issue of the Journal of International Economic Law analyze the crisis. For one such analysis, see The Quest for International Law in Financial Regulation and Monetary Affairs, 13 J. INT’L ECON. LAW 527 (2010) (compiling a series of articles in response to the financial crisis). All of the articles in this issue of the Journal of International Economic Law are by authors with legal training. For a recent paper by an economist, see Andrew W. Lo, Reading About the Financial Crisis: A 21-Book Review (Jan. 9, 2012) (unpublished manuscript), available at http://www.argentumlux.org/documents/JEL_6.pdf). (reviewing twenty-one books on the financial crisis, eleven written by academics trained in the disciplines of economics or finance, ten written by journalists, and one written by a former Treasury Secretary). As Lo states in his abstract, “[n]o single narrative emerges from this broad and often contradictory collection of interpretations, but the sheer variety of conclusions is informative . . . .” Id. at 1. In their introduction to The Quest for International Law in Financial Regulation and Monetary Affairs, the co-editors agree that “[T]he causes of the crisis remain controversial and manifold . . . .” Thomas Cottier & Rosa M. Lastra, Introduction, 13 J. INT’L ECON. LAW 527, 527 (2010).} in terms of the legal description of the various economic actors in the financial sector (“banks” as opposed to “shadow banks,” for example) is not very helpful.

Instead, the key issues for crisis prevention and mitigation is understanding (1) how credit intermediation works; (2) how in any particular period, that credit intermediation is accomplished; and, above all, (3) the effects of fear (also called “loss of confidence”) on that process.

I. \textit{Defining the Terms “Banks” and “Shadow Banks”}

A. \textit{Defining “Banks”: The Law’s Definition}

Although one would never know it from reading financial journalism since the enactment of the Gramm-Leach-Bliley Act (the
“GLBA”), the law clearly defines the term “bank.” The Banking Act of 1933, which Congress enacted in reaction to the crash of 1929 and the Great Depression, clearly defines the word “bank” as an institution that takes “deposits” and is regulated by and examined by either a state or federal banking authority. After the 1999 passage of the GLBA, which repealed enough of the Banking Act of 1933 to permit the combination of insurance, investment banking and commercial banking in one financial holding company, the press routinely began to call pure investment banks, i.e., “broker-dealers” regulated under the Securities and Exchange Act of 1934 like Bear Stearns and Lehman Brothers, “banks.” Neither of those investment banks, however, had access to the Federal Reserve Bank’s (“Fed”) discount window, nor were they regulated by Fed at the time of their failure. In fact—again, hardly recognized by discussion in either the press or academic papers—the GLBA never fully repealed the Banking Act of 1933. It is remains illegal—that is, subject to criminal penalties—for an entity to take “deposits” without being regulated and examined by a state or federal banking authority:

15 See, e.g., Gramm-Leach-Bliley Financial Modernization Act of 1999, Pub. L. No. 106-102, § 101(a), 113 Stat. 1338, 1341 (“Section 20 of the Banking Act of 1933 . . . (commonly referred to as the ‘Glass-Steagall Act’) is repealed.”); see also, e.g., Banking Act of 1933 § 20 (barring certain affiliations between investment banks and commercial banks).
16 See Cynthia Crawford Lichtenstein, Lessons for 21st-Century Central Bankers: Differences Between Investment and Depositary Banking, in INTERNATIONAL MONETARY AND FINANCIAL LAW: THE GLOBAL CRISIS 217, 218 (Mario Giovanoli & Diego Devos eds., 2010) [hereinafter Differences Between Investment and Depositary Banking] (“Since the USA repealed the remnants of its 1933 Glass-Steagall Act in 1999, both depositary institutions and securities firms have been uniformly lumped together by the media and many commentators under the term ‘banks.’”).
17 Id. at 227.
18 The public likely does not recognize the difference between a checking, or “transaction”, account in a regulated depositary institution and a mutual fund or money market fund, regulated under the Investment Company Act of 1940 by the Securities and Exchange Commission (“SEC”). Money market funds and mutual funds allow the owner of shares to draw checks against the fund. See AUTHORS, supra note 9, at 26 (explaining that “clients [of money market funds] could treat money market funds exactly like bank accounts, pulling out money instantly.”). This suggests their functional
[I]t shall be unlawful . . . [f]or any person, firm, corporation, association, business trust, or other similar organization to engage . . . in the business of receiving deposits subject to check . . . unless such person, firm, corporation, association, business trust, or other similar organization . . . shall be . . . subjected, by the laws of the United States, or of the State, Territory, or District wherein located, to examination and regulation.”

Thus, we can call a “bank” any entity that takes “deposits” without violating this statute or an entity that is both regulated and examined\(^20\) by a state or federal banking authority.

Understanding the term “banking authority” with specificity is important because securities regulation originated as a form of consumer protection and, at least in the beginning, did not concern itself explicitly with safety and soundness.\(^21\) The term refers specifically to a federal or state authority that regulates entities chartered under special legislation for the incorporation of “banks,” as distinguished from broker-dealers regulated by the Securities and Exchange Commission (“SEC”) under Federal law and under state securities law.\(^22\) During the crisis of 2007-2008, the culture and
equivalence. However, since the criminal sanctions prescribed under 12 U.S.C. § 378(b) (2006) for the taking of “deposits” (which arguably could include the solicitation of investments in a SEC-regulated money market fund), are under the jurisdiction of the Justice Department, the Federal Reserve (“Fed”) never acted to restrain and regulate the money market funds when they first began. See generally AUTHORS, supra note 9, at ch. 4 (summarizing the history of money market funds in the United States).

\(^{20}\) For a description of the difference between “regulation” and “examination,” see Lichtenstein, supra note 16, at 224-26 (distinguishing regulation from supervision by explaining that that the former punishes violations \textit{ex post}, while the latter takes an \textit{ex ante} oversight role).
\(^{21}\) Id. at 228.
funding sources of the SEC and the federal banking authorities remained distinct. At the time of passage of the GLBA, Congress believed in “functional” regulation; that is, if you are a securities firm, you are regulated and examined by the SEC, and if you are a “bank,” you are regulated by the federal banking authorities. The GLBA maintained this “functional” division, even though the GLBA amended the Banking Act of 1933’s prohibition on affiliation between securities firms and “banks.” Thus, when Bear Stearns began to fail, Fed did not have any information concerning the financial state of the firm in its files until Bear Stearns’ president called in the Fed’s examiners with the purpose of asking for federal support; as a securities firm, formally, it was a “shadow bank” operating without the access to Fed’s financial support extended to federally insured “banks.” This anecdote illustrates a consequence of falling outside the legal definition of a bank.

Being an entity that falls within the definition in 12 U.S.C. § 378(a)(2) also leads to a number of consequences. First, because the GLBA did not fully repeal the Banking Act of 1933, entities that are chartered as “banks” as well as any entities that comply with 12 U.S.C. § 378(a)(2) may not engage in any form of the securities business other than such business permissible to national banks.

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23 See Lichtenstein, supra note 16, at 227 (“[The SEC’s] entire culture has been consumer protection . . . .”).
24 Id. at 227 (“Congress, convinced of a notion of ‘functional regulation’ . . . not only allowed the [large complex banking organizations] to have full-scale securities subsidiaries for the first time . . . but also made the SEC the primary regulator of these subsidiaries.”). This may all change with the implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) [hereinafter “Dodd-Frank Act”], which was passed in reaction to the crisis.
26 Id. at 228 n.34 (“[T]he CEO of Bear Stearns, knowing that his firm was about to go under, called Fed’s examiners in to see what was the firm’s financial situation a few days before Fed made the arrangements (with considerable public backing) to have the firm sold to JP Morgan Chase. The SEC as Bear’s supervisor did not have the information.”).
27 See supra note 19 and accompanying text.
28 Id.
29 See 12 U.S.C. § 378(a)(1) (2006) (making it unlawful “[f]or any person, firm, corporation, association, business trust, or other similar organization, engaged in the business of issuing, underwriting, selling, or distributing, at wholesale or retail, or through syndicate participation, stocks, bonds,
The GLBA repealed the sections of the Act that forbade *affiliation* between securities businesses and depositary institutions. The significant term here is “securities business.” The Banking Act of 1933’s original prohibitions were intended to keep “member banks” from either acting as broker-dealers or affiliating with broker-dealers.\(^{30}\) National banks and, by extension, member banks were and are permitted, however, to own certain “eligible securities.”\(^{31}\) This detail of the law became highly significant when member “banks” began receiving regulatory permission from the bank holding company regulator, the Fed, to enter—through a bank holding company subsidiary—into a limited securities business.\(^{32}\) The significance of this special permission for “banks” to own—and, implicitly, to borrow against these holdings as collateral, i.e., to “repo”—will become clear when I discuss Mehrling. Under the GLBA, though, in order for a financial company both to take deposits in its “bank” subsidiary with access to the so-called federal “safety net” and to engage in investment banking in another subsidiary, the entity must form a financial holding company.\(^{33}\)
financial holding company can then simultaneously hold one or more “banks” in addition to subsidiaries with other functions. The non-bank subsidiaries may engage in any securities business in addition to those specially excepted categories of securities business that have always been statutorily permitted to national banks.34

Thus, the landscape changed from the original complete separation of investment banking and commercial banking under the Banking Act of 1933 to a system allowing the combination of the two as long as the investment banking business was run out of subsidiaries of a financial holding company. With the most recent adjustment of the GLBA to allow both types of financial business in a single entity35—the “Volcker Rule,”36 which prohibits certain investment banking subsidiaries from operating a “proprietary trading” desk—the regulatory posture in the United States looks quite similar to that into which the United Kingdom is moving with its Vickers Report.37 This parallel movement contradicts the

34 See id. § 1843(k)(4)(A) (listing “lending, exchanging, transferring, investing for others, or safeguarding money or securities” as activities that are “financial in nature” and thus permissible for financial holding companies). As is always true in U.S. banking regulation, which is a truly deformed structure largely for historical reasons, this issue of what types of securities business may be done by “banks” without violating the Glass-Steagall Act prohibition is a highly technical matter. After the passage of the Gramm-Leach-Bliley Act, the large financial conglomerates moved their securities business (at that time, handling “eligible securities”) out of their subsidiary banks and into their broker-dealer subsidiaries, probably due to the differing capital requirements for “banks” and for broker-dealers. For a discussion touching on these lawyerly technicalities, see Lichtenstein, supra note 16, at 220-21; supra text accompanying note 29. For a discussion of the Federal Reserve’s gradual expansion of the permissible securities activities for nonbank subsidiaries, see Omarova & Tahyar, supra note 10 (manuscript at 5-15).


37 See INDEP. COMM’N ON BANKING, FINAL REPORT RECOMMENDATIONS 10-11 (2011) (suggesting that authorities “ring-fence” banks “to isolate
laudatory view some commentators took toward Europe’s “universal bank” system of financial intermediaries in which depositary institutions could freely conduct securities business as well as insurance within the same entity during the run-up to the enactment of GLBA. Because the United States has not as yet completed the reforms mandated by the Dodd-Frank Act and the United Kingdom has not yet completed those recommended by the Vickers Report, it remains uncertain whether permitting the combination of securities business and commercial banking in a regulated financial holding company will prevent future financial crises on the scale of that experienced in 2008.

The regulation of “banking” through the supervision of financial conglomerates that hold both deposit-taking entities and other financial entities is not new to the U.S. regulatory system, however, and demonstrates the dominance of the idea of deposit taking as a central function of a “bank.” As first enacted in 1956, the

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39 This statement assumes, of course, that very large, lightly regulated financial conglomerates were at the heart of the 2007-2009 financial crisis. Others argue that the mortgage lending agencies Freddie Mac and Fanny Mae, as well as the housing policy imposed on those agencies, were the primary causes of the crisis. See, e.g., FIN. CRISIS INQUIRY COMM’N, THE FINANCIAL CRISIS INQUIRY REPORT 472 (2011) (Wallison, dissenting) (arguing that various mortgage servicing entities, including Fannie Mae and Freddie Mac, were “compelled to compete for mortgage borrowers who were at or below the median income,” causing underwriting standards to decline, increasing the number of risky loans and contributing to the housing bubble). Furthermore, in a seminal piece on the crisis, Rosa Lastra and Geoffrey Wood adopt the argument that the combination of securities firms and commercial banking was not a contributing cause of the Great Depression, citing economists who in the 1990s supported the legislation that eventually became the Gramm-Leach-Bliley Act. Rosa M. Lastra & Geoffrey Wood, The Crisis of 2007-09: Nature, Causes, and Reactions, 13 J. INT’L ECON. L. 531, 535 (2010).
Bank Holding Company Act (the “BHCA”)\(^{40}\) required that holding companies hold control of two or more “banks.”\(^{41}\) It is not necessary here to go into a history of the changing definitions of the word “bank” throughout the period that the BHCA has been in effect: Saule Omarova and Margaret E. Tahyar effectively trace this change from the legal perspective in *That Which We Call A Bank: Revisiting the History of Bank Holding Company Regulation in the United States.*\(^{42}\) Omarova and Tahyar’s piece, while attending carefully and effectively to the legal point of view, has a defect from the perspective of the authors of the books discussed in this piece. The references throughout Omarova and Tahyar to Fed suggest that they consider Fed as one more regulatory agency that “desire[s] to protect its administrative turf and further consolidate its own power,” and seeks to “preserve its independence . . . .”\(^{43}\) Though such claims are endemic in the economic literature, Omarova and Tahyar overlook Fed’s function as the United States’ central bank. Specifically, their history of the BHCA does not account for the fact that Fed, as the central bank ultimately responsible for the United States’ financial and monetary stability, desires to oversee the intermediaries that transmit its policy decisions through the economy.\(^{44}\) Of course, whether or not the central bank of a nation should also have regulatory authority over a nation’s “banks” is a hotly debated question in the literature. Omarova and Tahyar draw the important conclusion that legislative definitions create regulatory arbitrage opportunities.\(^{45}\) Nonetheless, they recommend solving this little difficulty with legislative definitions that “adopt[] a dynamic view of regulatory reform, which aims to anticipate potential market responses to legislative action and to build adjustment mechanisms into the regulatory regime.”\(^{46}\) This solution seemingly considers a


42 Omarova & Tahyar, *supra* note 10 (manuscript at 22-38).

43 *Id.* (manuscript at 19).

44 Significantly, in accordance with the Maastricht Treaty, the Fed’s statutory independence has been replicated in the legislation of all members of the European Union.

45 *Id.* (manuscript at 68) (“As this Article demonstrates, every cycle of restrictive legislation also created unforeseen opportunities for private industry actors to avoid the BHCA’s restrictions, often by exploiting definitional technicalities.”).

46 *Id.* (manuscript at 69).
central bank’s possible regulatory role without taking into account the central bank’s role as a sovereign’s monetary authority and the connection between that role and regulation of the transmitters of the monetary policy adopted by the authority. However, it is very hard to find in the macroeconomic literature much understanding of the legal detail of regulation.

Commentators, both contemporary and historical, have critiqued regulators’ ability to prevent economic crises, citing misunderstandings about how markets function. George Soros, the man who made his first millions by betting against the British pound and the French franc when the then-European Economic Community was attempting to keep the currencies of its members valued within a band, warned that:

[T]he European authorities [trying to deal with the Greek crisis] had little understanding of how financial markets really work. Far from combining all the available knowledge in the market’s movements, as economic theory claims, financial markets are ruled by impressions and emotions and they abhor uncertainty. To bring a financial crisis under control requires firm leadership and ample financial resources.47

This quotation echoes almost exactly Bagehot, whose book I discuss. Thus, however “flexible” legislative or regulatory “action” attempts to be, it likely will not be sufficient to prevent—or cure—financial crises without consideration of the central bank’s “lender (or dealer as Mehrling would have it) of last resort” function.

B. Defining “Shadow Banks”: The Economist’s Definition

Having dealt with the U.S. definition of a bank as a legal matter, I turn now to what might be a legal perspective on “shadow banks” or “the shadow banking system.” Unlike banks, legislators have not defined these terms in law and, thus, there is no legal definition of the terms. Instead, economists coined the term “shadow banking,” specifically Gary Gorton in his writings about the 2007-

2009 Crisis.  

Subsequently citing Gorton, Professors Rosa M. Lastra and Geoffrey Wood consider various causes of the crisis in *The Crisis of 2007-09: Nature, Causes, and Reactions*. In their discussion of the role played by “derivatives markets, unregulated firms, lightly regulated firms, and the shadow banking system,” Lastra and Wood describe the work of economists Nouriel Roubini and Gorton, but, refraining from drawing any conclusions, simply remark that studying history can help to make the “shadow banking system less vulnerable to panic.”

Lastra & Wood, *supra* note 39, at 532 n.2 (“Gary Gorton believes that it was the [wholesale] run on the sale-and-repurchase market (the repo market) during 2008, a bank run not so much on depository institution [sic], but on the shadow banking system, which caused the crisis.”). In Gary Gorton & Andrew Metrick, *Securitized Banking and the Run on the Repo*, (Nat’l Bureau of Econ. Research, Working Paper No. 15223, 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1440752, the authors argue that the 2007–2009 crisis was caused by turmoil in the repo market, a “short-term market that provides financing for a wide range of securitization activities and financial institutions.” Id. at 1. Repo transactions often use collateral in the form of securitized bonds. Id. Gorton and Metrick argue that the combination of securitization and repo finance drove the crisis. Id. Specifically, “[c]oncerns about the liquidity of markets for the bonds used as collateral led to increases in repo ‘haircuts’ . . . . With declining asset values and increasing haircuts, the U.S. banking system was effectively insolvent for the first time since the Great Depression.” Id.

Lastra and Wood write:

According to Roubini, broker-dealers, hedge funds, private equity groups, structured investment vehicles and conduits, money market funds, and nonbank mortgage lenders are all part of this shadow banking system. Other commentators relate the shadow banking system to the growth of the securitization of assets. Gary Gorton and others believe that it was the (wholesale) run on the repo market during 2008—the bank run not so much on depository institutions as on the shadow banking system—that caused the crisis. Gorton explains that, while in the past depositors ran to their banks and demanded cash in exchange for their checking accounts, the 2008 panic involved financial firms ‘running’ on other financial firms by not renewing repo agreements or increasing the repo margin, thus forcing sudden deleveraging and

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48 Lastra & Wood, *supra* note 39, at 532 n.2 (“Gary Gorton believes that it was the [wholesale] run on the sale-and-repurchase market (the repo market) during 2008, a bank run not so much on depository institution [sic], but on the shadow banking system, which caused the crisis.”). In Gary Gorton & Andrew Metrick, *Securitized Banking and the Run on the Repo*, (Nat’l Bureau of Econ. Research, Working Paper No. 15223, 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1440752, the authors argue that the 2007–2009 crisis was caused by turmoil in the repo market, a “short-term market that provides financing for a wide range of securitization activities and financial institutions.” Id. at 1. Repo transactions often use collateral in the form of securitized bonds. Id. Gorton and Metrick argue that the combination of securitization and repo finance drove the crisis. Id. Specifically, “[c]oncerns about the liquidity of markets for the bonds used as collateral led to increases in repo ‘haircuts’ . . . . With declining asset values and increasing haircuts, the U.S. banking system was effectively insolvent for the first time since the Great Depression.” Id.

50 Id. at 540.
51 Lastra and Wood write:
“[t]he expression ‘shadow banking system’ is imprecise and its contours are not clearly defined.”52

Omarova and Tahyar state that the Dodd-Frank Act “effectively expands the BHCA model of regulation and supervision, with some modifications, to all financial institutions designated as ‘systemically important’ and thus subject to consolidated supervision by the Federal Reserve.”53 “Systemically important” financial institutions,54 however, are not the same as “shadow banks.” Unfortunately, the Dodd-Frank Act does not define the term “shadow banking system.” Indeed, the legislation affects “shadow banks” only peripherally, although the Act imposes regulation on a number of entities engaged in the financial markets that previously were not subject to regulation at all.

I discuss herein three books to address what “shadow banks” and “the shadow banking system” might mean. I intend to show why the shadow banking system—as it is thought of by Roubini and Gorton—matters. I will also explain how it fits into Bagehot’s concept of the lender of last resort, and, thus, why Mehrling entitled his book, “The New Lombard Street.”

II. Bagehot, Authors and Mehrling

The three books I will discuss were not written by authors with legal training. Indeed, the first book was written by the Governor of the Bank of England, the second by a financial journalist, and the last by an economist and economic historian with a special interest in the history of central banking

leading to many banking insolvencies. Earlier banking crises have many features in common with the current crisis. History can help understand the current situation and guide thoughts about regulatory reform, by making the shadow banking system less vulnerable to panic.

Id. at 541 (citations omitted).

52 Id. at 540.

53 Omarova & Tahyar, supra note 10 (manuscript at 13).

54 In an article of this length, it is not possible to address the meaning—or meanings, as different commentators assign different connotations to the term—of “systemically important,” or even to review how the Dodd-Frank Act uses the term.
Our first author, Bagehot, chose to subtitle his 1873 book “A Description of the Money Market.” Although Bagehot argued that it should be possible to avoid the banking system’s collapse, Bagehot refers not to institutions, but instead to the money market. Bagehot does not suggest that it is possible to prevent panics. In fact, he never even suggests the causes of panics. A practical man, he seems to share George Soros’s view that “financial markets are ruled by impressions and emotions and they abhor uncertainty.”

Significantly, Bagehot begins the book with a simple description of leverage. Bagehot explains England’s position as “the greatest moneyed country in the world” as a result of the “ready balance—the floating loan-fund which can be lent to anyone for any purpose . . . .” Accordingly, lending enriches business because “English trade is carried on upon borrowed capital to an extent of which few foreigners have an idea, and none of our ancestors could have conceived.” Bagehot explains how “[i]n every district small traders have arisen, who ‘discount their bills’ largely, and with the capital so borrowed, harass and press upon, if they do not eradicate, the old capitalist.” This “old capitalist” uses exclusively his own funds in lieu of borrowed capital. Bagehot’s small trader can profit by using only $10,000 and borrowing $40,000, enabling him to sell his goods cheaper. Bagehot emphasizes that “[i]n modern English business, owing to the certainty of obtaining loans on discount of bills or otherwise at a moderate rate of interest, there is a steady bounty on trading with borrowed capital, and a constant discouragement to confine yourself solely or mainly to your own capital.”

This is all well and good, but from where, exactly, is Bagehot’s small trader to borrow money? Where else but “the money market”: Bagehot’s money market is the market provided by banks and acceptance houses in London where bills of exchange could be discounted. Its participants include those brokers and banks that will

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55 See generally BAGEHOT, supra note 7.
56 Soros, supra note 47.
57 Given its elegance, I believe Bagehot’s definition of leverage should be read in every law school course on corporate finance.
58 BAGEHOT, supra note 7, at 4.
59 Id. at 7-8.
60 Id. at 4.
61 Id.
62 Id. at 8-9.
accept, at a discount, the bills of exchange that the small trader receives for the sale of his goods in lieu of cash. A “bill of exchange” and an “acceptance” are the foundation of credit in the commercial world, since they facilitate the movement of goods. According to Mehrling in his history of the Federal Reserve and its discount window, the modern “real bills” doctrine grew out of Bagehot’s money market.63

This system for obtaining commercial credit worked, and continues to work today, in what might be called the “retail” discount market. In the following description of the retail discount market, I assume that each bill was drawn to pay for specific goods that the small trader was selling. That is, behind each bill was a tangible good; there was no “speculation” on market movements and the amounts lent out were limited ultimately by the amounts of goods sold. Since the amount of debt depended on the value of goods, the market did not create “money” simply out of thin air.

Suppose that a seller (“S”) sells, by agreement with a buyer (“B”), goods moving either in domestic trade—demonstrated by railroad or trucking shipping documents—or international trade — verified by “Bills of Lading” that embody the goods shipped. S and B have a commercial bank (“CB”) open a letter of credit (“L/C”) in favor of S. When S ships the goods, S either, as per the L/C, draws a sight draft on CB or a time draft for acceptance by CB. S then presents the draft together with the shipping documents to one of the banks in the L/C chain. That bank either pays S for the sight draft which was negotiated to the bank or “accepts” S’s draft in accordance with the terms of the L/C, paying S by discounting the acceptance. In both cases, the bank credits S’s account as payment for the goods that S has shipped, and S can continue manufacturing more goods to put into the stream of commerce.

In the meantime, the chain of banks that has financed the sale holds the commercial paper generated by the sale, and the shipping documents reifying the goods serve as collateral for the bank’s financing. Based on CB’s assessment of B’s creditworthiness, CB will have determined whether to require B to commit funds by debiting B’s account to pay out on the drafts and shipping

63 See MEHRLING, supra note 8, at 18-19 (“Bagehot’s world was based on a short-term commercial credit instrument known as the bill of exchange. . . . It was in this institutional context that the Bank of England developed the principles of central bank management that laid the foundations for modern monetary theory.”).
documents. In any case, B will not get her hands on the goods until she has paid for them or CB decides to extend her working capital, thereby releasing the “security” in the form of the shipping documents. This is the process of “commercial” finance and explains why “commercial banks” were originally so labeled.

In this way, commercial banks created money market instruments and financed commerce. In Bagehot’s London, those instruments then went to acceptance houses that provided liquidity to the money markets. In the United States, they were sent to the Federal Reserve Banks, who, within the scope of the Fed’s discount regulation, gave good funds at their discount windows to commercial banks that needed liquidity, discounting the instruments that had been created in the process of financing domestic and international trade in goods. Subsequently, most of the nation’s banks stopped using the Fed’s discount window, and instead simply adjusted their liquidity needs in the private “federal funds market.”

As noted above, when the commercial bills discounting process creates commercial credit or bank funding, the amount of goods that enter into the stream of commerce limits the amount of such credit. Furthermore, if the initial lender must realize on the collateral, markets for tangible goods in the stream of trade, even markets with goods sold at “fire sales,” do not suffer enormous volatility unless the goods are “commodities” of the kind now traded as “alternative investments.” With the exception of Mehrling, an

64 There is no time in a piece like this to either write in detail about the federal funds market or to give citations to the numerous books, including those issued by the Federal Reserve’s public relations department, that describe the market and its functions. Its workings are usually studied in undergraduate economics courses in “Money and Banking.” Unfortunately, few law schools teach anything about it.

65 This is another story which cannot be told here. While “commodities”, such as wheat or copper or cotton or whale oil (yes, whale oil – the old U.S. cases concerned speculation in the price of whale oil, and I, at least, imagine that the “widows’ walks” on the top of houses on the New England shore were used not only for the wives of seamen but also for those who were interested in the large quantity of whale oil that would be added to the market by returning ships), are “goods” in the Uniform Commercial Code sense, see generally U.C.C. § 2-105(1) (2010), their markets now are profoundly affected by the supervision of the Commodity Futures Trading Commission and the mutual funds and hedge funds that invest in and trade in commodity futures. See 7 U.S.C. § 2(a)(1)(A) (2006) (defining the scope of the Commodity Futures Trading Commission’s supervision).
economic historian, I have not read a single author writing about this latest economic crisis, whether trained in legal analysis or the discipline of economics, who addresses the link between the quantity of goods in trade and the creation of trade credit.

To illustrate the importance of this link, contrast this process with the financing process for the sale and trade of securities, commodity futures, mortgage obligations or what used to be called “conditional sale” paper. Securities are indeed bought and sold on credit. U.S. securities legislation recognizes this fact by allowing regulatory “margin” requirements, which may limit the amount that a purchaser of securities may borrow to finance the trade. Additionally, securities houses finance trades in the markets by pledging as collateral to their lenders the securities they have in inventory. The amount of credit that a bank is willing to lend to the particular house or hedge fund, however, limits the amounts that these entities can borrow.66 Furthermore, the value of the collateral, the securities pledged, may be highly volatile, depending on whether they are Treasury bills or market traded equities, and may be difficult to price, like collateralized debt obligations or private, not publicly-listed, equity. The contrast with Bagehot’s acceptances and sight drafts could not be more complete. These differences may explain why commercial banks were traditionally only permitted to own certain debt securities.

When Bagehot was in Lombard Street writing about the “duty” of the Bank of England as a central bank to lend freely and at a high rate during a crisis,67 he meant that when the private markets froze up because of fears about the health of the pound, the British central bank should put its funds into the money markets by buying acceptances from the acceptance houses in London. Once again, at that time, the quantity of those acceptances was limited to the amount of actual goods moving in trade. As a young lawyer in the banking department of a Wall Street firm in the 1960’s, I spent considerable time figuring out if paper was “eligible” for discount under Fed’s regulations then in place. This paper was generated through the trade financing described above and not limited in the ways Bagehot’s

66 The amount of credit that a bank could lend may also be limited by the SEC’s and Commodity Futures Trading Commission’s margin requirements. For a detailed description of the near-failure of Long Term Capital Management, at the time the largest hedge fund in terms of assets held in the United Staets, see AUTHORS, supra note 9, at ch. 12.
67 BAGEHOT, supra note 7, at 187-89.
was. Only if the paper was “eligible” under the applicable Fed regulation—which, at the time, limited eligibility to trade-generated paper having only six months to run—would it be acceptable to other banks or wholesale dealers in the money markets.

When in the 1960s Citibank convinced its regulator, the Comptroller of the Currency, that Citibank should have the corporate power to create “acceptances” and sell them into the money market, these “acceptances” consisted solely of Citibank’s promise to pay. They did not grow out of Citi’s financing of domestic or international trade in goods. They were not backed by the movement of real goods in international trade. These “naked” acceptances facilitated Citibank access to funding from the money markets. To this day, I wonder if the lawyers at the Office of the Controller of the Currency understood what they were doing when they declared that Citibank had the power to issue such paper.

Citibank’s participation in such activities ensured that other financial institutions would begin to follow course. Somewhat like Citibank in the 1960s, Northern Rock in the 2000s in the United Kingdom funded itself by selling mortgages without recourse to the bank should the obligor on the mortgage note default. Only the quantity of mortgage lending that it was willing to do limited Northern Rock’s access to funds, unless its regulator was to impose restrictions on the quantity and quality of its real estate lending. Thus, the now-infamous credit default obligations that were created out of bundles of mortgage obligations and sold by U.S. banks were yet another novel way those banks could fund themselves.

Historically, of course, “banks” have funded themselves with deposits, short-term lending by the public to banks used to finance trade or provide working capital. Commercial banks undertook this function: the lending of bank deposits to fuel commerce. These commercial banks functioned as intermediaries, providing the public with a safe place to keep its deposits, particularly following the establishment of the Federal Deposit Insurance Corporation. At the same time, they provided enterprises with working capital, as

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68 Without the requirement that the acceptance must be of a bill of exchange evidencing an actual sale of goods in trade, and given that Section 13 of the Federal Reserve Act—limiting a national bank’s borrowing authority—has been repealed, there is no limit on the amount of acceptances that a national bank can make. See generally Federal Reserve Act, ch. 6, § 13, 38 Stat. 251, 264 (1913), repealed by Garn-St Germain Depository Institutions Act of 1982, Pub. L. No. 97-320, § 402, 96 Stat. 1469, 1510.
opposed to capital generated by the issuance of stock or debt in the securities markets. Commercial banks were essentially the only “credit intermediaries,” which may explain why Congress in 1933 was willing to give them the public subsidy of deposit insurance.69 Since U.S. law forbids securities firms to take deposits,70 broker-dealers traditionally have financed their securities trading much like any other business: either by borrowing from banks or other lenders, or by issuing stock or debt instruments. Bank holding companies and financial services holding companies also obtain capital by issuing shares and debt instruments to the public.

However, the historical public function of securities houses was very different. Such firms aided businesses in the distribution of securities to the public through their “underwriting” function. They also bought and sold securities to “make markets.” Securities houses were not long-term lenders and, thus, were not “intermediaries” at all. Instead, they functioned as capital market facilitators. Insurance companies and pensions, neither of whom borrowed short-term, performed the long-term lending function in the capital markets. While insurance companies are liable to pay out on their insurance obligations, just when they may be called to fulfill these obligations depends on the calculations of their actuaries. Equally, pension funds may predict their obligations with considerable certainty. Both businesses differ completely from depositary institutions with funding from demand deposits. Thus, in Bagehot’s time, only “banks” were subject to runs during a panic when, for whatever reason, market participants lost confidence in credit markets. Bagehot’s solution, of course, was to support the commercial credit market by lending freely at a penalty rate.71

In Authers’s book, he explains how the work of “banks” and other financial entities72 in capital markets has been transformed over the years. The “fearful rise” of markets in Authers title describes a

69 When supplied, deposit insurance constitutes a subsidy because the institution that receives it is able to obtain funding for less than the market rate of interest. It is usually not understood that “deposits” are loans by the public to the depositary bank, with a checking account (or other “demand deposit”) being a truly short term loan and savings deposits being loans that come due upon their term, but rarely exceeding eighteen months at most.
70 See supra text accompanying note 19.
71 See BAGEHOT, supra note 7, at 187-89 (detailing what steps a central bank should take to stop a panic).
72 See supra note 51 and accompanying text.
complete transformation of the capital markets of Bagehot’s time to the profoundly interconnected, liberalized capital markets we have today. Consistent with Bagehot and Soros, Authers attempts to:

explain how the world’s markets became synchronized [and] how they formed a bubble. . . . Investment bubbles inevitably recur from time to time because they are rooted in human psychology. Markets are driven by the interplay of greed and fear. When greed swamps fear, as it tends to do at least once in every generation, an irrational bubble will result.73

Taking a journalistic approach, Authers describes clearly why the International Monetary Fund has not been able to function as a true international lender of last resort to help alleviate the effects of the inevitable bursting of these “synchronized bubbles.” Authers also explains why uncoordinated central bank actions in sovereign nations can lead to problems such as the “carry trade.”74 Furthermore, Authers clearly describes how commercial banks were replaced in their intermediation function by creatures of the “shadow banking system,” such as money market mutual funds75 and hedge funds.76

In Mehrling’s book, Mehrling analyzes the new forms of intermediation and compares how the new “intermediaries” fund themselves with the participants in the money market of Bagehot’s day.77 Unlike Authers, a particularly knowledgeable financial journalist, Mehrling is an economist and, just as importantly, an economic historian. Accordingly, he places the transformation

73 Authers, supra note 9, at 3.
74 Id. at ch. 8. I have written in the past that the failure of the Basel Committee to understand how today’s financial markets really work caused them to make a careless mistake in creating the capital requirements for international banks in the first Basel Accord. See generally Cynthia C. Lichtenstein, International Jurisdiction over International Capital Flows and the Role of the IMF: Plus Ça Change . . . ., in INTERNATIONAL MONETARY LAW: ISSUES FOR THE NEW MILLENNIUM 61 (Mario Giovanoli ed., 2000).
75 See Authers, supra note 9, at 25-31 (arguing that “[c]apital markets took over the core functions of banks . . . ”).
76 See id. at 83-89 (telling the story of Long Term Capital Management and its rescue.).
77 Mehrling, supra note 8, at 5.
described by Authers in the historical context of changing views of the purpose of a U.S. central bank. According to Mehrling, Bagehot took a “money view” of the job of a central banker, whereas what he calls the “economics view” and later the “finance view” influence those presently in charge of Fed.78 Mehrling writes in detail about what he describes as the “plumbing behind the walls.”79 He describes today’s wholesale “money market,” wherein the securities firms that are “prime dealers” work with Fed to create the market in which Treasury securities are “repoed” to permit Fed to adjust the federal funds rate. Mehrling’s book helps one understand Gorton’s argument80 that a run on the wholesale repo market caused the financial crisis.81 Mehrling writes about the inherent instability of credit and describes today’s markets for credit, which, unlike those in Bagehot’s time, are not acceptance markets, but markets for the short-term pledge of securities: the repo market. This market is where the new intermediaries, the “shadow banks,” get their funding, and it is this market that can suddenly, as it did with the fall of Lehman Brothers, seize up. Mehrling argues that Fed must address the failure of liquidity in this market with Bagehot-type intervention. Mehrling calls Fed's role with respect to this new market the "new Lombard Street" and the "dealer of last resort," but it could just as well be described as the last resort for the "shadow banking system."

78 See id. (“As a consequence of this long dominance of the economics and then finance views, modern policymakers have lost sight of the Fed’s historical mission to manage the balance between discipline and elasticity in the interbank payments system.”). We need not concern ourselves in this law review piece with these “views”, which probably concern economists in academia.

79 Id. at 9.

80 See Gorton & Metrick, supra note 48, at 1.

81 I cannot pretend to fully understand this book, not being up to date in macroeconomics and Federal Reserve policy management, but I am fascinated by it. At the time of Lehman’s bankruptcy, which almost all commentators seem to agree was the trigger for the global meltdown of the capital markets, I realized that I needed to understand more about “prime dealers”. This book has permitted that.