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# Does Financial Liberalization Increase the Likelihood of a Systemic Banking Crisis? Evidence from the Past Three Decades and the Great Depression

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**DOES FINANCIAL LIBERALIZATION INCREASE  
THE LIKELIHOOD OF A SYSTEMIC BANKING CRISIS?  
EVIDENCE FROM THE PAST THREE DECADES AND THE GREAT DEPRESSION**

Arthur E. Wilmarth, Jr.

**Introduction**

Over the past three decades, leading industrial nations and many developing countries have liberalized their financial markets by (i) removing foreign exchange controls, (ii) deregulating interest rates paid on bank deposits, (iii) expanding the powers of domestic financial institutions, and (iv) creating greater opportunities for entry by foreign banks. Unquestionably, the deregulation of domestic and global financial markets has produced major benefits, including more efficient intermediation of financial resources, more rapid economic development and faster growth in trade. However, banking crises have occurred with increasing frequency in international markets since 1973, and many crises have taken place in countries that deregulated their financial markets. This apparent linkage between deregulation and banking crises indicates that financial liberalization may have a “dark side,” because it tends to produce a banking system that is more vulnerable to systemic risk.

Several recent studies indicate that banking crises associated with deregulation occur in seven general stages. First, financial liberalization broadens the lending powers and permissible investments of banks, and deregulation also places greater competitive pressures on banks. As a result, banks have incentives to increase their profits by expanding their lending commitments and equity investments in the real estate and securities markets. Second, the expanded

availability of debt and equity financing produces an economic “boom.” Boom conditions are fueled by positive feedback between rising asset values and the willingness of creditors and investors to provide additional financing based on their belief that asset values will continue to rise. Third, asset markets ultimately “overshoot” and reach levels that cannot be justified by economic “fundamentals” (e.g., the cash flow produced by real estate projects and business ventures). Fourth, the asset boom becomes a “bust” when investors and creditors (1) realize that market prices for real estate and securities have diverged from economic fundamentals, and (2) engage in a panicked rush to liquidate their investments and collect their loans.

Fifth, the asset bust creates adverse macroeconomic effects, because it (A) impairs the liquidity and market value of assets held as investments or pledged as collateral for loans, and (B) discourages investors and creditors from making new investments or extending additional loans, thereby depressing economic activity and reducing the ability of borrowers to pay their debts. Sixth, the continuing fall in asset values and rise in nonperforming loans inflict large losses on many banks. Those losses impair the confidence of depositors and threaten a systemic crisis in the banking sector. Seventh, to prevent such a crisis, governmental authorities spend massive sums to protect depositors and recapitalize banks.

In sum, deregulated financial markets generally promote faster growth rates by providing more extensive financing to consumers and business firms during economic expansions. However, by encouraging a greater reliance on external funding, deregulation creates a higher risk that consumers and firms will become overextended and insolvent if external funding sources shut down during economic contractions. Thus, financial liberalization tends to amplify the business cycle, and it therefore creates a difficult tradeoff between (1) the important policy

goal of creating better conditions for economic expansion and (2) the equally important objective of minimizing the risk of a severe economic downturn.<sup>1</sup>

Part I of this article considers evidence that financial liberalization has increased the likelihood of systemic banking crises since the early 1970's. Particular attention is given to the Japanese banking crisis of the 1990's, the U.S. banking and thrift crisis of 1980-92, and the potential threat to banks posed by the boom-and-bust cycle in U.S. securities markets during 1996-2002. Part II describes the expansion of bank involvement in the U.S. real estate and securities markets during the 1920's, and the apparent links between the collapse of those markets and the systemic banking crisis of the Great Depression. The concluding section offers some general observations about the evidence presented in Parts I and II.

## **I. Financial Liberalization and Banking Crises since the 1970's**

### **A. Banking Crises in International Markets**

In the early 1970's, the breakdown of the Bretton Woods system of fixed exchange rates, together with dramatic increases in energy prices, brought an end to the postwar period of relative stability in global financial markets. By the late 1970's, advances in information

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<sup>1</sup> For discussion of lessons to be drawn from the apparent correlation between financial liberalization and economic crises since the early 1970's, see, e.g., Ben Bernanke & Mark Gertler, "Monetary Policy and Asset Price Volatility," 84 *Economic Review* No. 4 (Fed. Res. Bank of K.C., MO), 4th Qtr. 1999, at 17, 17-21; Claudio Borio & Philip Lowe, "Asset Prices, Financial and Monetary Stability: Exploring the Nexus," Bank for Int'l Settlements Working Paper No. 114, July 2002 (available at <[www.bis.org](http://www.bis.org)>); E.P. Davis, *Debt, Financial Fragility, and Systemic Risk* 152-278 (Clarendon Press, 1992); Int'l Monetary Fund, *World Economic Outlook*, May 2000: *Asset Prices and the Business Cycle* (available at <[www.imf.org](http://www.imf.org)>) [hereinafter cited as 2000 IMF *World Economic Outlook*], ch. 3; Luc Laeven, Daniela Klingebiel & Randy Kroszner, "Financial Crises, Financial Dependence, and Industry Growth," World Bank Policy Working Paper 2855, June 2002 (available at <<http://econ.worldbank.org>>); Hal S. Scott & Philip A. Wellons, *International Finance: Transactions, Policy and Regulation* 12-32 (Foundation Press, 8th ed. 2001).

technology and the creation of innovative financial instruments (including securitized debt and “junk bonds”) were undermining legal and institutional barriers that separated banks from nonbank financial intermediaries in many countries. Over the next two decades, government officials in both developed and developing countries progressively deregulated their banking systems by abandoning foreign exchange controls, tearing down geographic barriers to entry and removing restrictions on mergers and product diversification.

The competitive forces unleashed by innovation and deregulation created financial markets that were dynamic and more efficient, but also more interdependent, volatile and fragile. As a consequence, international markets have witnessed a series of financial crises since 1973. More than 130 countries encountered serious banking problems during 1980-96, and East Asia and Russia experienced devastating banking crises in 1997-98. In many nations, financial crises occurred in conjunction with a boom-and-bust cycle in the general economy. In reviewing such crises, analysts frequently concluded that a poorly-supervised deregulation of the banking sector had encouraged financial institutions to pursue aggressive lending and investment policies, thereby creating an unsustainable economic boom. In many cases, a rapid growth in financing was linked to speculative valuations of illiquid assets (e.g., real estate and corporate securities) that banks used for investments or as collateral for loans.<sup>2</sup>

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<sup>2</sup> For discussion of the links between deregulation, asset price booms and crises in international financial markets since the 1970's, see, e.g., Roberto Chang & Andres Velasco, “A Model of Financial Crises in Emerging Markets,” 116 *Quarterly Journal of Economics* 489 (2001); Davis, *supra* note 1, at 216-41, 256-73; Benton E. Gup, ed., *International Banking Crises *passim** (Quorum Books: Greenwood Pub. Group, Inc. 1999); Ari Hyytinen, “The Time Profile of Risk in Banking Crises: Evidence from Scandinavian Banking Sectors,” 12 *Applied Financial Economics* 613 (2002); George G. Kaufman, “Banking and Currency Crises and Systemic Risk: Lessons from Recent Events,” *Economic Perspectives* (Fed. Res. Bank of Chi., IL), 3d Qtr. 2000, at 9 [hereinafter cited as Kaufman, “Banking Crises”]; Henry Kaufman, *On Money and Markets*:

Numerous countries incurred losses ranging from 4-40% of their gross domestic product (“GDP”) in coping with financial disruptions. For example, the governments of Finland, Indonesia, Japan, Mexico, Norway, South Korea, Sweden and Thailand responded to systemic banking crises by protecting all depositors against loss, and they also spent massive amounts to recapitalize major banks during the 1990's. Mexico and South Korea each committed \$100 billion or more for this purpose, while Japan has spent or budgeted \$550 billion to support its deeply troubled banking system. The International Monetary Fund (“IMF”) assisted many of these bank rescue programs. During the 1990's, the IMF and its member nations supplied \$250 billion of assistance to debtor countries, including programs totaling \$145 billion for Indonesia, Mexico and South Korea.<sup>3</sup>

Japan’s banking troubles since 1990 provide a particularly striking example of the

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A Wall Street Memoir (McGraw-Hill, 2000) [hereinafter cited as Kaufman, *On Money and Markets*], at 46-83, 122-35, 242-46, 287-321; Carl-Johan Lindgren et al., *Bank Soundness and Macroeconomic Policy passim* (Int’l Monetary Fund, 1996); Ronnie J. Phillips & Richard D. Johnson, “Regulating International Banking: Rationale, History, and Future Prospects,” in Benton E. Gup, ed., *The New Financial Architecture: Banking Regulation in the 21st Century* (Quorum Books: Greenwood Pub. Group, 2000), at 1, 1-8; Arthur E. Wilmarth, Jr., “How Should We Respond to the Growing Risks of Financial Conglomerates?,” in Patricia A. McCoy, ed., *Financial Modernization after Gramm-Leach-Bliley* (LexisNexis Group, 2002), at 65, 68-70, 85-90; 2000 IMF World Economic Outlook, *supra* note 1, at 77-78, 91-107.

<sup>3</sup> See, e.g., Hyytinen, *supra* note 1, at 613, 616-17; Kaufman, “Banking Crises,” *supra* note 1, at 11-18; Allan H. Meltzer, “Back to Bailouts,” *Wall Street Journal*, Aug. 7, 2002, at A14; Arthur E. Wilmarth, Jr., “The Transformation of the U.S. Financial Services Industry, 1975-2000: Competition, Consolidation, and Increased Risks,” 2002 *University of Illinois Law Review* 215 [hereinafter cited as Wilmarth, “Transformation”], at 308-11. See also Charles A.E. Goodhart, *The Central Bank and the Financial System* 350-410 (1995) (finding, based on an analysis of 104 major bank failures in international markets during 1973-93, that governmental authorities (i) provided financial assistance or arranged mergers to rescue 73 of those banks without any loss to depositors, and (ii) protected all or most of the depositors in 20 of the 31 remaining cases).

apparent linkage between financial deregulation, asset booms, banking crises and impaired macroeconomic performance. In the last half of the 1980's, the Bank of Japan's lax monetary policy fostered a large increase in bank lending that produced a "bubble economy." Credit expansion led to rapid increases in market values for Japanese real estate and securities, which in turn encouraged banks to make further loans based on speculative valuations of land and stock used as collateral. Japanese banks also built up huge portfolios of corporate shares, due to their desire to profit from the booming stock market and to maintain strong cross-shareholding relationships with nonbank firms that were members of the banks' *keiretsu* (corporate groups). Japanese banks had two additional incentives to make real estate loans and equity investments. First, real estate loans helped to offset a decline in corporate lending that occurred when financial liberalization enabled large Japanese companies to obtain credit through the Japanese bond market and the Eurobond market. Second, Japanese regulators and the Basel Capital Accord of 1988 permitted Japanese banks to use unrealized capital gains from their stock portfolios to satisfy a significant portion of their capital requirements.

The Bank of Japan tightened its monetary policy significantly in 1990 to discourage further expansion of the "bubble economy." In response to more restrictive credit conditions, the Japanese real estate and stock markets both collapsed in the early 1990's, with values in each sector falling by more than two-thirds. Two of the twenty largest Japanese banks failed, and several other major banks were driven to the brink of insolvency. Two major securities firms and three large insurance companies also failed. By the fall of 2002, Japanese banks had written off more than \$600 billion of nonperforming loans, but private sector analysts estimated that the banks' remaining bad debts still exceeded \$1 trillion. Japanese banks also held severely

depreciated stock portfolios that impaired their ability to satisfy capital requirements. Japan's government failed to revive the economy after spending more than \$1 trillion on economic stimulus programs. The government also failed to restore the financial system despite spending \$200 billion and budgeting an additional \$350 billion to support Japanese banks.

Japan's banking crisis has crippled the Japanese economy in two ways. First, banks have been reluctant to collect or charge off loans owed by failing companies, because aggressive collection efforts would trigger a wave of corporate bankruptcies, and the required charge-offs would seriously erode the capital of many banks. Second, the banks' huge burden of uncollectible debts has undermined their ability and willingness to make new loans to viable Japanese businesses. The Japanese government's financial capacity to resolve the crisis remained doubtful in the autumn of 2002, because Japan was already saddled with a huge public sector debt burden that exceeded 150% of its GDP.<sup>4</sup>

## **B. U.S. Banking and Thrift Crises during 1980-92**

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<sup>4</sup> For discussion of Japan's "bubble economy" and its resulting financial crisis, see, e.g., Alan Ahearne et al., "Preventing Deflation: Lessons from Japan's Experience in the 1990s," Int'l Finance Discussion Paper No. 729, Bd. of Governors of Fed. Res. Sys., June 2002 (available at <[www.federalreserve.gov](http://www.federalreserve.gov)>); Tamim Bayoumi & Charles Collyns, eds., *Post-Bubble Blues: How Japan Responded to Asset Price Collapse passim* (Int'l Monetary Fund, 2000); Lynn E. Browne, "Does Japan Offer Any Lessons for the United States?," 2001 New England Economic Review No. 3 (Fed. Res. Bank of Boston, MA), at 3; Allan D. Brunner & Steven B. Kamin, "Bank Lending and Economic Activity in Japan: Did 'Financial Factors' Contribute to the Recent Downturn?," 3 *International Journal of Finance and Economics* 73 (1998); Takeo Hoshi & Anil Kashyap, "The Japanese Banking Crisis: Where Did It Come from and How Will It End?," in Ben Bernanke, ed., 1999 NBER Macroeconomics Annual 129; Wilmarth, "Transformation," *supra* note 3, at 308, 451-53. For analysis of Japan's continuing economic and financial problems in the autumn of 2002, see, e.g., Ken Belson, "A Sick Banking System Resists Therapy," *New York Times*, Oct. 29, 2002, at C1; James Brooke, "Fears of a Hard Landing Rattle Tokyo," *New York Times*, Oct. 10, 2002, at W1; Akio Mikuni & R. Taggart Murphy, "Trapped in Japan's Bank Crisis," *New York Times*, Oct. 29, 2002, at A31; Adam Posen, "For Japan, It's Every Which Way but Back," *Washington Post*, Oct. 20, 2002, at B5.

The banking and thrift industries in the United States were severely shaken during the 1980's and early 1990's by a systemic crisis that was associated with deregulation and a boom-and-bust cycle in the U.S. economy. Beginning in 1980, federal and state governments greatly expanded the real estate lending powers of banks and thrifts. Federal and state officials encouraged consolidation by liberalizing geographic restrictions on branching and relaxing antitrust rules governing mergers. Federal and state officials also permitted thrifts to make large investments in junk bonds, commercial real estate projects and a wide array of other ventures. Nor did federal regulators object when banks made extensive loans to energy producers and corporations engaged in leveraged buyouts (“LBOs”).

Legislators and regulators believed that deregulation would help banks and thrifts to overcome a significant erosion that was occurring in their traditional lending businesses. Corporate borrowers increasingly bypassed banks by selling commercial paper and issuing junk bonds in the credit markets. At the same time, inflation and securitization created a residential mortgage market that was more competitive, more volatile and less profitable for thrifts. Government officials concluded that deregulation would enable banks and thrifts to modernize their operations and “grow out of their problems.” Congress expanded deposit insurance coverage from \$40,000 to \$100,000 per depositor, while federal deposit insurers charged flat-rate premiums that failed to take account of the risk profile of each insured institution. Due to the low-cost funding opportunities provided by flat-rate deposit insurance and a nationwide network of deposit brokers, aggressive banks and thrifts had strong incentives to use insured deposits to finance their risky loans and investments.

In combination, deregulation and financial innovation produced a rapid expansion of

private sector credit for real estate development, energy production, LBO transactions and other corporate takeovers. Between 1980 and 1989, outstanding junk bonds increased from \$30 billion to \$210 billion, and junk bonds' share of the corporate debt market grew from 13% to 27%. During the same period, nonfinancial corporate debt rose by \$1.6 trillion, and real estate developers obtained financing to build more than \$1 trillion of commercial projects. Bank lending to business firms and real estate developers more than doubled during the 1980's, while thrift lending to such borrowers expanded at a comparable rate until 1986. By 1990, banks held about \$250 billion of commercial real estate loans and \$150 billion of LBO loans, while thrifts held more than \$100 billion of commercial real estate loans and \$12 billion of junk bonds.

The real estate, energy production and LBO markets all collapsed by the end of the 1980's, with devastating consequences for banks, thrifts and the U.S. economy. During 1980-94, U.S. regulators spent almost \$200 billion of deposit insurance funds and taxpayer revenues to resolve the failures of 2,900 banks and thrifts, which collectively held more than \$900 billion of assets. U.S. officials protected all insured depositors in failed banks and thrifts, and they also protected *uninsured* depositors and payments system creditors in several "too big to fail" ("TBTF") banks that failed or were threatened with failure during 1980-92. Some of the most aggressive and fastest-growing banks and thrifts of the 1980's (e.g., Bank of New England, Continental Illinois Bank, First City, First Republic Bank, CenTrust Savings, Imperial Savings and Lincoln Savings) became prominent casualties by the end of the decade. Regulators also granted extensive forbearance to some very large troubled banks, including Bank of America and Citicorp.

The banking and thrift crises of the 1980's produced a prolonged "credit crunch" that had

significant adverse effects on U.S. economic growth during the early 1990's. Bank and thrift failures disrupted credit relationships with many borrowers. Surviving institutions were generally reluctant to extend new loans until they had repaired their balance sheets and the economy had shown clear signs of recovery from the recession of 1990-91. Bank lending to businesses and real estate developers declined in each year during 1990-92, and did not show any significant recovery until 1994.<sup>5</sup>

### **C. The Recent Boom-and-Bust Cycle in U.S. Securities Markets**

During the 1990's, Congress and federal regulators adopted deregulatory measures that encouraged large commercial banks to expand geographically and diversify their lines of business. In 1994, for example, Congress removed all legal barriers to interstate bank mergers and acquisitions. The new nationwide banking regime promoted a consolidation movement that enabled the ten largest banks to increase their combined share of U.S. banking industry assets from 26% to 49% during the 1990's. In addition, by 1998 federal regulators and the courts had allowed banks to make substantial inroads into the securities and insurance sectors by exploiting loopholes in two statutes – the Banking Act of 1933 (popularly known as the “Glass-Steagall Act”) and the Bank Holding Company Act (“BHC Act”) – that previously had been viewed as

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<sup>5</sup> For discussions of the causes and consequences of the banking and thrift crises of the 1980's and early 1990's, see, e.g., Edward Chancellor, *Devil Take the Hindmost: A History of Financial Speculation* 255-82 (1999); Kaufman, *On Money and Markets*, supra note 1, at 273-81, 347-49; L. William Seidman, *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas* 139-97, 229-39 (Times Books: Random House, 1993); Wilmarth, “Transformation,” supra note 3, at 313-16, 327-28, 355-57, 412; Federal Deposit Insurance Corp., *History of the Eighties: Lessons for the Future* (1997), Vol. I, at 137-88, 235-54, 291-378. For narrative descriptions of major bank failures, and for data regarding bank and thrift failures and resolution costs during 1980-94, see Federal Deposit Insurance Corp., *Managing the Crisis: The FDIC and RTC Experience* 509-704, 794-99, 807-09, 860-63 (1998).

strong legal barriers to bank entry into the securities and insurance fields. Congress ratified this diversification of banking powers when it passed the Gramm-Leach-Bliley Act of 1999 (“GLB Act”), which authorized banks to affiliate with securities firms and insurance companies by establishing financial holding companies. In confirming this grant of “universal banking” powers to financial holding companies, the GLB Act repealed several provisions of the Glass-Steagall Act (“G-S Act”) and the BHC Act.

By the time Congress adopted the GLB Act, Citigroup, J.P. Morgan Chase and Bank of America had already established large investment banking operations that competed with the “big three” Wall Street firms (Goldman Sachs, Merrill Lynch and Morgan Stanley) and three major European universal banks (Credit Suisse, Deutsche Bank and UBS).<sup>6</sup> As domestic and foreign banks entered the securities business, they offered generous loan commitments to attract customers for securities underwriting and merger advisory work. The major Wall Street firms responded by offering their own “package deals” that included lending, underwriting and advisory services. This fierce competition for investment banking clients fostered a huge expansion in debt and equity financing for business firms in the United States. The annual volume of syndicated loans rose from less than \$400 million in 1993 to more than \$1 trillion in each year during 1997-2000. Similarly, the annual volume of underwritten public offerings of corporate debt and equity securities grew from less than \$900 billion in 1992 to more than \$1.8

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<sup>6</sup> In both 2000 and 2001, the foregoing nine institutions and Lehman Brothers were the top-ranked global underwriters of stocks and bonds. See “2001 Underwriting Rankings: Global Stocks and Bonds,” Wall Street Journal, Jan. 2, 2002, at R19 (also showing that those 10 institutions accounted for 75% of all global underwriting proceeds in 2000-01). For a discussion of the consolidation of the U.S. banking industry and the entry of U.S. and foreign banks into the securities and insurance businesses during the 1990's, see Wilmarth, “Transformation,” supra note 3, at 225-27, 250-56, 318-32, 418-21, 427-28, 438-50.

trillion in each year during 1998-2000.<sup>7</sup>

A similar surge of debt financing occurred in the consumer sector. Large banks, securities firms and finance companies created a nationwide market for securities backed by consumer debt. The growth of securitized consumer credit accelerated after federal courts issued decisions that effectively destroyed state-law limitations on maximum interest rates for consumer loans. By 2002, commercial and investment banks had sold asset-backed securities representing some \$7 trillion of consumer debt.<sup>8</sup>

The competition for market-based financing among banks, securities firms and finance companies has resulted in a dramatic increase in leverage and risk for both corporate and consumer borrowers. During 1990-2002, the outstanding debt of U.S. nonfinancial firms rose from \$2.4 trillion to \$4.9 trillion. Outstanding junk bonds tripled during the same period and reached \$600 billion. During 1995-2001, total U.S. consumer debt (including home mortgage loans) grew from \$4.5 trillion to \$7.2 trillion. Banks and nonbank lenders increasingly marketed

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<sup>7</sup> Emily Thornton et al., “The Breakdown in Banking,” *Business Week*, Oct. 7, 2002, at 40 [hereinafter cited as Thornton et al., “Breakdown in Banking”], at 41; Wilmarth, “Transformation,” *supra* note 3, at 326-28, 378-81, 411-12; Securities Industry Ass’n, 2001 Securities Industry Fact Book, at 12, 24-25.

<sup>8</sup> Keith Athreya, “The Growth of Unsecured Credit: Are We Better Off?,” 87 *Economic Review* No. 3 (Fed. Res. Bank of Richmond, VA), at 11, 11-15; Thornton et al., “Breakdown in Banking,” *supra* note 7, at 41; Wilmarth, “Transformation,” *supra* note 3, at 388-90. Federal courts have held that two federal statutes – 12 U.S.C. §§ 85 & 1831d – allow national banks and state banks that are insured by the Federal Deposit Insurance Corporation (“FDIC”) to “export” interest rates from any state in which they are “located” to borrowers residing in other states. Based on these decisions, large banks have avoided restrictive state usury laws by locating their consumer lending operations in states (e.g., Delaware and South Dakota) that are willing to attract those operations by abolishing all limitations on consumer lending rates. *See Marquette National Bank v. First of Omaha Service Corp.*, 439 U.S. 299 (1978); *Smiley v. Citibank (South Dakota), N.A.*, 517 U.S. 735 (1996); *Greenwood Trust Co. v. Massachusetts*, 971 F.2d 818 (1st Cir. 1992), *cert. denied*, 506 U.S. 1052 (1993).

credit services to higher-risk “subprime” consumer borrowers, and those borrowers held a third of all credit card loans and a tenth of all home mortgages and home equity loans by 2002. As a result of this rapid growth in private sector credit, (i) U.S. corporate debt rose to record levels as a percentage of both GDP and corporate profits, and (ii) U.S. household debt exceeded annual household income for the first time in postwar economic history.<sup>9</sup>

Rising debt levels and a slowing U.S. economy have produced a sharp rise in troubled corporate and consumer loans. By 2002, a record \$880 billion of corporate bonds were either in distress or in default, including 45% of all outstanding junk bonds. The volume of syndicated loans criticized by bank examiners rose to \$240 billion, a fivefold increase since 1998.

Delinquencies on consumer loans (including mortgage loans) reached their highest level since the recession of 1990-91. Growing consumer debt burdens also produced a large increase in personal bankruptcy filings, which rose from 700,000 in 1990 to more than 1.3 million in each year during 1997-2001.<sup>10</sup>

The greatest excesses of the financing boom of the 1990's occurred in the information

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<sup>9</sup> Carrick Mollenkamp, “Credit-Card Scrutiny Hits Lenders and Threatens to Damp Spending,” *Wall Street Journal*, Aug. 19, 2002, at A1; Wilmarth, “Transformation,” *supra* note 3, at 232, 383-85, 392-96; Heather Timmons, “Surprise! The Little Guy Loses,” *Business Week*, July 8, 2002, at 42; Gregory Zuckerman, “Debtor Nation: Borrowing Levels Reach a Record, Sparking Debate,” *Wall Street Journal*, July 15, 2000, at C1; “Dicing with debt,” *Economist*, Jan. 26, 2002, at 22.

<sup>10</sup> Patrick Barta, “Signs of Strain: After Long Boom, Weaknesses Appear in Housing Market,” *Wall Street Journal*, Oct. 3, 2002, at A1; Richard Cowden, “Large, Syndicated Loan Problems Rise,” 79 *BNA’s Banking Report* 599 (Oct. 14, 2002); Peter Coy et al., “Consumer Credit: A Crunch May Be Coming,” *Business Week*, Aug. 12, 2002, at 32; Loretta J. Mester, “Is the Personal Bankruptcy System Bankrupt?,” *Business Review* (Fed. Res. Bank of Phila., PA), 1st Qtr. 2002, at 31, 33 (Figures 1 & 2); Thornton et al., “Breakdown in Banking,” *supra* note 7, at 41-42; Wilmarth, “Transformation,” *supra* note 3, at 382-85, 394-98.

technology (“high-tech”) and telecommunications (“telecom”) industries. The Telecommunications Act of 1996 and the implementing rules adopted by the Federal Communications Commission deregulated the telecom industry and encouraged new firms to enter markets that had long been dominated by the regional Bell companies. Banks, securities firms and venture capital funds provided debt and equity financing to a myriad of high-tech and telecom firms, including many unproven, start-up ventures. During 1996-2001, the telecom industry received \$1.3 trillion in debt financing from syndicated loans and bond offerings, as well as hundreds of billions of dollars in equity financing from initial public offerings (“IPOs”). By 2000, new entrants into the telecom business included 6,000 Internet providers, 250 local telephone companies, and a half-dozen long distance carriers.

However, in early 2000 it became clear that these “new economy” firms would fall far short of their optimistic forecasts for revenues and earnings, because they had created operating capacity that far exceeded customer demand. For example, telecom firms installed millions of miles of fiber-optic cables with the expectation that Internet traffic would double every hundred days. Instead, Internet use grew at a much slower rate, and less than 3% of the installed fiber-optic lines were actually needed to meet customer demand. As a result of this glut of excess capacity, telecom firms suffered an estimated negative cash flow of \$60 billion in 2000. When market participants realized the magnitude of the telecom industry’s problems, they rapidly sold off shares of high-tech and telecom companies, and the debt and equity markets virtually shut down for those firms.<sup>11</sup> Investors similarly dumped the stocks of large energy companies that had

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<sup>11</sup> For discussion of the rapid expansion and collapse of the telecom industry during 1996-2002, see, e.g., Yochi J. Dreazen, “Behind the Fiber Glut: Telecom Carriers Were Driven by Wildly Optimistic Data on Internet’s Growth,” Wall Street Journal, Sept. 26, 2002, at B1;

aggressively expanded their energy trading operations after federal and state agencies deregulated energy markets in the 1990's.<sup>12</sup>

The collapse of high-tech and telecom stock prices triggered a broad downturn in U.S. equity markets during 2001-02. Investors manifested a general loss of confidence, due in part to stunning disclosures of fraudulent financial reporting and other serious misconduct at some of the most glamorous corporate “stars” of the 1990's (e.g., Adelphia, Enron, Global Crossing, Qwest, Tyco and WorldCom). Between March 2000 and September 2002, the NASDAQ market index (representing primarily the stocks of high-tech and telecom firms) fell by more than three-quarters, while the broader S&P 500 index declined by almost one-half. In the process, investors lost an estimated \$8 trillion in paper wealth.<sup>13</sup>

Like their U.S. counterparts, European equity markets experienced a prolonged slump in

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Remarks by Alan Greenspan, Chairman of the Federal Reserve Board (“FRB”), “World Finance and Risk Management,” Sept. 25, 2002 (available at <[www.federalreserve.gov](http://www.federalreserve.gov)>) [hereinafter cited as Greenspan, “Risk Management”]; Steven Pearlstein, “Fiber-Optic Overdose Racks Up Casualties,” Washington Post, May 2, 2002, at A1; Steve Rosenbush & Heather Timmons, “Telecom Lenders: Standing in Line for What?,” Business Week, Feb. 11, 2002, at 62; Jacob M. Schlesinger, “The Deregulators: Did Washington Help Set Stage for Current Business Turmoil?,” Wall Street Journal, Oct. 17, 2002, at A1; Arthur E. Wilmarth, Jr., “Controlling Systemic Risk in an Era of Financial Consolidation,” in Roy C. Baban, ed., Current Developments in Monetary and Financial Law (Int’l Monetary Fund, 2003), Vol. 3 (forthcoming) [hereinafter cited as Wilmarth, “Systemic Risk”], Part II(C)(3)(a); Special report: The telecoms crisis: Too many debts; too few calls, Economist, July 20, 2002, at 59.

<sup>12</sup> Peter Behr, Dynegy Ends Power-Trading Operations, Washington Post, Oct. 17, 2002, at E1; Schlesinger, supra note 11; Energy trading: Prepare to be shocked, Economist, May 18, 2002.

<sup>13</sup> Anthony Bianco, “The Angry Market,” Business Week, July 25, 2002, at 32; E.S. Browning, “Industrials Fall to 4-Year Low, Close Below 7600,” Wall Street Journal, Oct. 1, 2002, at C1; Greenspan, “Risk Management,” supra note 11; Joseph Nocera et al., “System Failure: Corporate America Has Lost Its Way,” Fortune, June 24, 2002, at 62.

2000-02. The end of the high-tech and telecom booms created economic hardships for a wide range of companies on both sides of the Atlantic. The U.S. economy struggled through a recession and a slow recovery, while economic growth in the European Union ground to a virtual halt. In both the U.S. and Europe, the prospects for a strong economic recovery appeared very doubtful in late 2002. Observers concluded that the surge of debt and equity financing in the late 1990's had created significant problems with overcapacity in many economic sectors.<sup>14</sup>

The bursting of the stock market “bubble” in 2000-02 has been blamed on a variety of factors, including (i) “irrational exuberance” that impaired the judgment of too many investors, (ii) “infectious greed” that tempted too many corporate executives, and (iii) conflicts of interest that undermined the effectiveness of too many outside monitors of corporate performance, including public accountants, securities analysts and credit rating agencies.<sup>15</sup> This article will

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<sup>14</sup> E.g., James C. Cooper & Kathleen Madigan, “Business Outlook: Why this Recovery Feels Like a Recession,” *Business Week*, Oct. 28, 2002, at 31; Craig Karman, “Stock Market Quarterly Review: Led by U.S. Tribulations, Third Quarter Held More Pain for World Markets,” *Wall Street Journal*, Oct. 1, 2002, at C13; Pam Woodall, “The unfinished recession: A survey of the world economy,” *Economist*, Sept. 28, 2002 (following p. 52); “Europe’s tumbling stockmarkets: Feeling for the floor,” *Economist*, Sept. 28, 2002, at 67.

<sup>15</sup> See Robert J. Shiller, *Irrational Exuberance* (Princeton Univ. Press, 2000) (quoting Alan Greenspan’s statement that the U.S. stock market exhibited “irrational exuberance” in late 1996, *id.* at 3, and offering reasons for the excessive optimism of investors during the “most dramatic bull market in U.S. history,” *id.* at 5); Federal Reserve Board’s Semiannual Monetary Policy Report to the Congress: Testimony of FRB Chairman Alan Greenspan before the Senate Committee on Banking, Housing, and Urban Affairs, July 16, 2002 (available at <[www.federalreserve.gov](http://www.federalreserve.gov)>), at 5 (stating that “corporate governance checks and balances” broke down during the late 1990's because “the rapid enlargement of stock market capitalizations . . . arguably engendered an outsized increase in opportunities for avarice” and thereby fostered an “infectious greed [that] seemed to grip much of our business community”). For evidence that a speculative “bubble” existed in the U.S. stock market in early 2000, which could not be justified by economic fundamentals, see, e.g., Shiller, *supra*, at 5-16, 183-93; 2000 IMF World Economic Outlook, *supra* note 1, at 79-88, 110-12. For evidence that conflicts of interest impaired the objectivity and reliability of securities analysts, public accounting firms and credit rating

focus on allegations that large commercial and investment banks promoted transactions that involved excessive risks to investors, the financial system and the broader economy.

By the autumn of 2002, government officials and private litigants had filed legal claims asserting that the following financial institutions had committed serious misconduct:

- Citigroup, J.P. Morgan Chase (“Chase”) and Merrill Lynch allegedly helped Enron’s fraudulent reporting schemes by entering into prepaid commodity forward transactions with Enron and with offshore entities that were established and controlled by the banks. These three-party derivatives contracts allegedly provided \$8 billion of debt financing to Enron but were recorded on Enron’s financial statements as commodity trades, thereby materially understating Enron’s debt and overstating its trading revenues.

- During 1997-2000, Citigroup’s Salomon Smith Barney unit became the leading investment bank for the telecom industry. During this period, Citigroup earned an estimated \$1 billion in fees and raised \$190 billion of debt and equity financing for its telecom clients. Jack Grubman, Citigroup’s main telecom analyst, played a key role in arranging financing and merger deals for many of the most aggressive firms in the telecom industry. Citigroup rewarded senior executives of its clients by allowing them to buy underpriced shares in IPOs underwritten by Citigroup. Grubman was also one of the most bullish cheerleaders for the telecom industry in his reports for investors. Ten large companies that Grubman advised and recommended to investors – including Global Crossing, Winstar and WorldCom – filed for bankruptcy by mid-2002.

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agencies during the late 1990's, see, e.g., Wilmarth, “Systemic Risk,” *supra* note 11, Part II(C)(2); “Financial Oversight of Enron: The SEC and Private-Sector Watchdogs,” Report of the Staff of the Senate Committee on Governmental Affairs, Oct. 8, 2002 [hereinafter cited as Senate Private-Sector Watchdog Report], at 26-28, 69-127.

Grubman failed to give timely warnings to investors about the grave problems confronting these firms, despite the knowledge he reportedly gained through his close ties to senior management.

- In May 2001, Citigroup and Chase acted as lead underwriters for an \$11.8 billion public bond offering by WorldCom. That offering enabled WorldCom to pay off outstanding loans owed to Citigroup, Chase and other banks. The offering also allowed WorldCom to satisfy its working capital needs in 2001 without requesting additional bank loans. WorldCom suddenly defaulted on its bonds and filed for bankruptcy in 2002, while disclosing that it had overstated its profits by more than \$7 billion since 1998. Bondholders alleged that (i) the self-interest of Citigroup and Chase as leading lenders to WorldCom conflicted with their duties as underwriters, and (ii) the banks failed to act with due diligence in ensuring that WorldCom's financial statements were accurate when WorldCom made its bond offering.<sup>16</sup>

- Credit Suisse, Merrill Lynch and other major financial institutions allegedly adopted promotion and compensation policies that pressured their securities analysts to issue strong recommendations in favor of existing or potential investment banking clients, without regard to the clients' actual financial condition or prospects. In addition, Credit Suisse and Goldman Sachs reportedly allocated underpriced shares in IPOs to executives of clients and venture capital

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<sup>16</sup> For discussion of the claims described in the preceding three paragraphs, see, e.g., Charles Gasparino, "New York Sues Telecom Executives over Stock Profits," *Wall Street Journal*, Oct. 1, 2002, at A1; Paula Dwyer et al., "Merrill Lynch: See No Evil?," *Business Week*, Sept. 15, 2002, at 68; Steve Rosenbush et al., "Inside the Telecom Game," *Business Week*, Aug. 5, 2002, at 34; Emily Thornton et al., "Crisis at Citi," *Business Week*, Sept. 9, 2002, at 35; Wilmarth, "Systemic Risk," *supra* note 11, Part III(C); Senate Private-Sector Watchdog Report, *supra* note 15, at 84-85.

firms for the purpose of winning investment banking deals.<sup>17</sup>

In sum, critics charged that the entry of large commercial banks into the investment banking business in the 1990's had (i) created structural conflicts of interest that impaired the objectivity of lending decisions, securities underwriting and investment advice, and (ii) promoted a highly competitive, deal-oriented culture that encouraged both banks and Wall Street firms to offer loans and underwrite securities that were not justified by any reasonable assessment of the long-term viability of the enterprises being financed.<sup>18</sup> Press accounts indicated, for example, that the quest for investment banking fees had produced the following perverse behavior among banks: (1) encouraging clients to endorse wildly optimistic business plans that would justify bigger mergers and larger securities offerings, (2) offering loans only to clients that agreed to retain the banks for underwriting or merger advisory services, and (3) threatening to cut off research coverage for firms that were former IPO clients but failed to retain the banks for

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<sup>17</sup> Susanne Craig, "Massachusetts Claims CSFB Stock Reports Led Investors Astray," *Wall Street Journal*, Oct. 22, 2002, at C1; Burton Malkiel, "Remaking the Market: The Great Wall Street?," *Wall Street Journal*, Oct. 14, 2002, at A16; Gretchen Morgenson, "Market Place: Documents Suggest Credit Suisse Linked Banking and Stock Ratings," *New York Times*, Oct. 8, 2002, at C1; Randall Smith, "Goldman Gave Hot IPO Shares to Top Executives of Its Clients," *Wall Street Journal*, Oct. 3, 2002, at A1; Randall Smith et al., "Something Ventured and Something Gained?," *Wall Street Journal*, Oct. 17, 2002, at C1; Ben White, "CSFB E-Mails Link IPO Shares, Banking Business," *Washington Post*, Oct. 22, 2002, at E1; "Face value: Ex-friends of Frank," *Economist*, Sept. 28, 2002, at 62; Senate Private-Sector Watchdog Report, *supra* note 15, at 80-89.

<sup>18</sup> E.g., Gretchen Morgenson, "Banks Are Havens (And Other Myths)," *New York Times*, July 28, 2002, § 3 (Money & Bus.), at 1; Jathon Sapsford & Paul Beckett, "Loss Leader: Linking of Loans to Other Business Has Perils for Banks," *Wall Street Journal*, Sept. 19, 2002, at A1; Schlesinger, *supra* note 11; Thornton et al., "Breakdown in Banking," *supra* note 7; "Flawed Financial Giants," *Business Week*, Sept. 9, 2002, at 156 (editorial).

continuing services.<sup>19</sup>

As of October 2002, the stock market slump and economic slowdown in the U.S. and Europe had not yet produced a severe banking crisis. However, twenty-seven U.S. banks and thrifts, holding combined assets of nearly \$7 billion, failed during 1999-2002, a failure rate that was significantly higher than the comparable figures for 1995-98.<sup>20</sup> In addition, leading U.S. and European financial conglomerates – including ABN-Amro, Allianz-Dresdner, J.P. Morgan Chase, Commerzbank, Credit Suisse, Deutsche Bank, FleetBoston, Merrill Lynch and Morgan Stanley – reported steep declines in earnings during 2001-02, due to problems with nonperforming loans, lower demand for investment banking services and large losses on equity investments. Analysts warned that major banks on both continents would probably confront much higher loan default rates if their economies endured a prolonged slump, because business firms and consumers were dangerously overburdened with debt.<sup>21</sup> Observers also cautioned that

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<sup>19</sup> Kathleen Day, “Banks’ Risky Reversal: As Industry Focuses on More Profitable Securities Business, ‘Tying’ Loans to Other Transactions Becomes a Hot Topic,” *Washington Post*, Nov. 18, 2001, at H1; Jeffrey A. Eisenach, “The Real Telecom Scandal,” *Wall Street Journal*, Sept. 30, 2002, at A16; Rosenbush et al., *supra* note 16; Jathan Sapsford, “Leading the News: NASD Probes Issue of Bank ‘Tying’,” *Wall Street Journal*, Sept. 20, 2002, at A3; Sapsford & Beckett, *supra* note 18; Randall Smith & Geeta Anand: “Cleaning Up Wall Street: Piper Jaffray Is Fined for Research Threat,” *Wall Street Journal*, June 26, 2002, at C1; White, *supra* note 16.

<sup>20</sup> Federal Deposit Ins. Corp., “Quarterly Banking Profile,” 2d Qtr. 2002, at 17 (Tbl. IV-C). Compare Federal Deposit Ins. Corp., “Quarterly Banking Profile,” 4th Qtr. 1998, at 17 (Tbl. IV-C) (showing that 18 banks and thrifts, with combined assets of less than \$2 billion, failed during 1995-98).

<sup>21</sup> Matthew Bishop, “Capitalism and its troubles: A survey of international finance,” *Economist*, May 18, 2002 (following p. 54), at 9-11, 16-18; Vanessa Fuhrmans, “Deutsche Bank Posts Quarterly Loss,” *Wall Street Journal*, Nov. 1, 2002, at A6; Anita Greil & Marcus Walker, “Credit Suisse Expects Large 3rd-Period Loss,” *Wall Street Journal*, Oct. 3, 2002, at C5; John Plender, “After the binge: The financial system has avoided a crisis over mounting debt but it is

U.S. and European economies were particularly vulnerable to a downturn in their housing markets, because consumers were relying heavily on increased home equity values to support their spending habits and offset declining shareholder wealth.<sup>22</sup>

Some commentators maintained that major banks did not face a significant threat in late 2002, because banks had transferred many of the risks of their lending and underwriting activities to institutional investors, including insurance companies, mutual funds and pension funds. It is true that large banks have used risk management vehicles – including syndicated business loans, securitized consumer loans, financial derivatives and credit derivatives – to transfer a wide variety of risks to institutional investors. However, the complex terms and/or proprietary nature of these transactions have made it much harder for regulators and the financial markets to evaluate the true risks and liabilities retained by banks. In addition, because banks are increasingly transferring their risks to other investors, analysts have questioned whether banks currently have short-term incentives for generating transactional fees that outweigh their long-term reputational interest in making prudent judgments about the creditworthiness of borrowers.

Yet another problem is that the liquidity, market value and enforceability of risk management vehicles have been subject to sudden adverse changes during financial crises of the

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still not in the clear,” *Financial Times* (London, U.K.), April 17, 2002, at 14; Marcus Walker, “Allianz Is Saddled with Dresdner’s Woes,” *Wall Street Journal*, Oct. 14, 2002, at C1; Marcus Walker & Eric Portanger, “Is the Selloff in Europe’s Big Banks Justified?,” *Wall Street Journal*, Oct. 10, 2002, at C1; Wilmarth, “Systemic Risk,” *supra* note 11, Part I(A); Wilmarth, “Transformation,” *supra* note 3, at 378-402; Woodall, *supra* note 14, at 3-5, 18-28.

<sup>22</sup> Patrick Barta, “Signs of Strain: After Long Boom, Weaknesses Appear in Housing Market,” *Wall Street Journal*, Oct. 3, 2002, at A1; Shawn Tully, “Is this house worth \$1.2 million?,” *Fortune*, Oct. 28, 2002, at 58; “Special Report: House prices: Going through the roof,” *Economist*, Mar. 30, 2002, at 59.

1980's and 1990's. During those disruptions, many syndications, securitizations and derivatives failed to perform as anticipated, because (i) their liquidity and market values were impaired by the actual or threatened default of either banks or their counterparties, or (ii) counterparties challenged the ability of banks to enforce these arrangements because of alleged violations of disclosure duties or other legal obligations. As a consequence, some observers have argued that major banks confront serious risks that are *not* accurately reflected on their financial statements and also are *not* adequately controlled by capital rules or other supervisory requirements.<sup>23</sup>

## **II. Financial Liberalization and the Great Depression of 1929-33**

### **A. The Expansion of Bank Involvement in the Real Estate and Securities**

#### **Markets after World War I**

Prior to 1900, national banks were prohibited from making real estate loans and were also

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<sup>23</sup> E.g., Bishop, *supra* note 21, at 9-13, 16-18; Peter Coy et al., “Where the Risk Went,” *Business Week*, Oct. 28, 2002, at 98; Kaufman, *On Money and Markets*, *supra* note 1, at 46-83, 122-35, 287-321, 327-49; Thornton et al., “Breakdown in Banking,” *supra* note 7, at 41-42; Heather Timmons, “Everybody Out of the Risk Pool?,” *Business Week*, Sept. 2, 2002, at 86; Wilmarth, “Transformation,” *supra* note 3, at 316-407, 454-75.

FRB Chairman Alan Greenspan has praised financial derivatives, credit derivatives, securitization and other risk management vehicles for accomplishing a beneficial “dispersion of risk” from banks to nonbank investors. See “World Finance and Risk Management,” remarks by Chairman Greenspan at Lancaster House, London, U.K., Sept. 25, 2002, at 2-4 (available at <[www.federalreserve.gov](http://www.federalreserve.gov)>). However, it is worth recalling that the FRB did not recognize the risks posed to global financial markets by Long-Term Capital Management (“LTCM”), a hedge fund which held massive and highly speculative investments in financial derivatives, until LTCM informed the FRB that it was about to collapse in 1998. Indeed, Chairman Greenspan had reassured Congress, shortly before the LTCM crisis began, that bank derivatives dealers were applying effective credit discipline to their hedge fund counterparties. See Wilmarth, “Transformation,” *supra* note 3, at 346-50, 358-59, 370-72.

largely barred from underwriting, dealing or investing in securities.<sup>24</sup> In response to changing competitive conditions, federal authorities granted significantly broader powers to national banks during the first three decades of the twentieth century. The Federal Reserve Act of 1913 permitted national banks headquartered in small cities and rural areas to make loans secured by farm land. In 1916, Congress authorized all national banks to make loans secured by any type of real estate with terms of up to one year. The McFadden Act of 1927 allowed all national banks to make real estate loans with terms of up to five years, provided such loans did not exceed 25% of a bank's capital and surplus or 50% of its time deposits.<sup>25</sup>

In the early 1900's, the Office of the Comptroller of the Currency ("OCC") informally allowed national banks to establish bond departments, which could underwrite, sell and invest in debt securities issued by federal, state and local governments and corporations. The McFadden Act of 1927 ratified the legality of the OCC's policy on bond departments. The McFadden Act did not authorize national banks to underwrite, sell or invest in corporate stocks. However, as a practical matter, this omission did not significantly restrain the securities activities of national banks. Since 1908, national banks had circumvented statutory restrictions by organizing affiliated corporations, which engaged in a full range of underwriting, selling and dealing activities involving both bonds and stocks. Prior to the Great Depression, federal authorities did

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<sup>24</sup> H. Parker Willis & John M. Chapman, *The Banking Situation* 199, 536 (Columbia Univ. Press, 1934); W. Nelson Peach, *The Securities Affiliates of National Banks* 38-51 (John Hopkins Univ. Press, 1941).

<sup>25</sup> C. D. Bremer, *American Bank Failures* 97 (Columbia Univ. Press, 1935); Willis & Chapman, *supra* note 24, at 199, 585-89.

not interfere with these securities affiliates.<sup>26</sup>

Federal authorities expanded the real estate lending and securities powers of national banks because they wanted national banks to compete more successfully with state-chartered banks and trust companies (which enjoyed similar or greater powers under state law). Both national banks and state banks had strong incentives to enter the real estate and securities markets after World War I. Commercial banks had been the primary providers of credit to large corporations before 1920. During the 1920's, however, major corporations greatly reduced their borrowing from banks and instead turned to the securities markets for most of their external financing. Commercial banks saw the real estate and securities markets as attractive new profit sources to offset the decline in their traditional corporate lending business.<sup>27</sup>

Federal officials also liberalized the deposit-taking powers for national banks to give them greater parity with state banks. Prior to 1900, national banks could accept only deposits that could be withdrawn on demand. In 1903, the OCC began allowing national banks to accept time (savings) deposits so that national banks could compete more effectively with state-

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<sup>26</sup> Peach, *supra* note 24, at 39-43, 50-70; Willis & Chapman, *supra* note 24, at 176-87, 536-37. In 1911, the Solicitor General of the United States submitted an opinion to the Attorney General declaring that securities affiliates were illegal under the National Bank Act. However, the Attorney General did not take action based on the Solicitor General's opinion. Similarly, Congress and the OCC did not take any formal steps to restrict the activities of securities affiliates of national banks until the Great Depression occurred. See Peach, *supra* note 24, at 143-51; Edwin J. Perkins, "The Divorce of Commercial and Investment Banking: A History," 88 *Banking Law Journal* 483, 488-96 (1971).

<sup>27</sup> Bremer, *supra* note 25, at 121-22; Harold van B. Cleveland & Thomas F. Huertas, *Citibank, 1812-1970*, at 127-28, 140-53 (Harvard Univ. Press, 1985); Raymond W. Goldsmith [Goldschmidt], *The Changing Structure of American Banking* 55, 60-67, 72-98, 130-45 (George Routledge & Sons, Ltd., 1933); Peach, *supra* note 24, at 22-31, 150; Willis & Chapman, *supra* note 24, at 192-93, 199-200, 527-32, 546-62, 610-21.

chartered commercial banks and mutual savings banks. The Federal Reserve Act of 1913 expressly authorized national banks and state banks that were members of the Federal Reserve System to accept time deposits. The Act (as amended in 1917) also made time deposits a very attractive funding source for member banks, because it prescribed reserve requirements for time deposits that were much lower than the reserve requirements applicable to demand deposits.<sup>28</sup> Time deposits in national banks almost tripled during 1919-29, and time deposits increased from 34% of total member bank deposits in 1921 to 46% of such deposits in 1931.<sup>29</sup> The longer maturities and higher yields for time deposits encouraged banks to invest those deposits in longer-term and less liquid assets that had a higher perceived potential for earnings, such as real estate loans, loans on securities, and investments in corporate and foreign securities.<sup>30</sup>

In sum, the liberalization of bank powers after 1900 was fueled by (i) competition for bank charters between federal and state authorities, and (ii) rivalry between the banking and securities industries. Commercial banks rapidly expanded their presence in the real estate and securities markets after 1918. Commercial banks more than tripled their real estate loans between World War I and the Great Depression. During the same period, national banks' real estate loans grew by a factor of ten. Most of this increase in real estate lending occurred in urban markets, which enjoyed boom conditions during most of the 1920's. In contrast, bank loans

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<sup>28</sup> Bremer, *supra* note 25, at 97-98; Willis & Chapman, *supra* note 24, at 180-81.

<sup>29</sup> Willis & Chapman, *supra* note 24, at 244 (Tbl. 48) (showing that time deposits at national banks grew from \$2.8 billion to \$8.1 billion during 1919-29); Goldsmith, *supra* note 27, at 41-43 (providing data from member bank deposits).

<sup>30</sup> Cleveland & Huertas, *supra* note 27, at 119-20; Goldsmith, *supra* note 27, at 77; Willis & Chapman, *supra* note 24, at 180-81, 193, 199.

secured by farm land showed very little growth after 1920, due to the agricultural economy's slump after World War I.<sup>31</sup>

During the 1920's, commercial banks greatly expanded three types of securities-related activities. First, bank loans on securities grew from \$5.2 billion to \$13.0 billion during 1919-30, with the consequence that loans on securities rose from 24% to 38% of total bank loans during that period.<sup>32</sup> Second, banks greatly increased their investments in more risky, higher-yielding securities and shifted away from safer, lower-yielding U.S. government bonds. The total securities investments of commercial banks grew from \$8.4 billion to \$13.7 billion during 1921-30. Four-fifths of this growth represented additional investments in state and municipal bonds, corporate bonds and foreign securities. As a result, the percentage of U.S. government bonds held in the securities portfolios of commercial banks declined from 35% to 26%.<sup>33</sup>

Third, commercial banks greatly expanded their involvement in securities underwriting during the 1920's, and they reached competitive parity with investment banks by the end of the decade. The number of commercial banks engaged in securities underwriting through bond departments or securities affiliates more than doubled, rising from 277 in 1922 to 591 in 1929. Banks and their affiliates originated 22% and participated in 37% of all bond issues in 1927. By

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<sup>31</sup> See Goldsmith, *supra* note 27, at 72-78, 293 (Tbl. 6) (stating that real estate loans made by all commercial banks increased from \$1.4 billion to \$5.0 billion during 1919-29); Willis & Chapman, *supra* note 24, at 552 (Tbl. 118), 558-59, 591-602 (reporting that real estate loans made by national banks increased from \$150 million to \$1.6 billion during 1915-32).

<sup>32</sup> Goldsmith, *supra* note 27, at 86-87, 293 (Tbl. 6).

<sup>33</sup> Bremer, *supra* note 25, at 115-16 (including Tbl. 26); James S. Olson, *Saving Capitalism: The Reconstruction Finance Corporation and the New Deal, 1933-1940*, at 5 (Princeton Univ. Press, 1988); Willis & Chapman, *supra* note 24, at 535, 546-47.

1929, banks and their affiliates originated 45% and participated in 51% of all bond issues.<sup>34</sup>

The leading bank securities affiliate was National City Company (“NCC”), which was established in 1911 by National City Bank (“NCB”). By 1929, NCC had built the world’s largest securities distribution network, which included more than fifty U.S. offices and sales representatives working in NCB’s eighty-nine foreign branches. NCC’s market power was demonstrated by (i) its origination or participation in offerings for a fifth of all domestic and foreign bonds issued in the United States during 1921-29, and (ii) its status as the largest distributor of domestic and foreign bonds issued in the United States during 1927-31. Chase National Bank (“Chase”) established the second largest securities affiliate, Chase Securities Corp. (“CSC”). By acquiring Harris Forbes & Co. in 1930, CSC built a selling network that also included more than fifty domestic offices and numerous foreign locations.<sup>35</sup>

Large-scale entry by commercial banks into the real estate and securities markets caused a dramatic change in their balance sheets. Real estate loans and loans on securities accounted for only 30% of commercial bank loans in 1919 but rose to half of such loans in 1929.<sup>36</sup> As previously noted, the investment portfolios of commercial banks grew by more than \$5 billion during the 1920's, and four-fifths of this growth was concentrated in higher-risk and less liquid

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<sup>34</sup> Peach, *supra* note 24, at 83 (Tbl. I), 109 (Tbl. III), 110 (Tbl. IV). See also Vincent P. Carosso, *Investment Banking in America: A History* 279 (Harvard Univ. Press, 1970) (stating that, by 1929, banks and their securities affiliates were “equal in importance to all investment bankers in the distribution of long-term capital and in the facilities and value of their [securities underwriting] business”).

<sup>35</sup> Cleveland & Huertas, *supra* note 27, at 139, 140 (Tbl. 8.1), 152-53, 385 n.15; Goldsmith, *supra* note 27, at 137; Peach, *supra* note 24, at 86-97.

<sup>36</sup> Goldsmith, *supra* note 27, at 293 (Tbl. 6).

securities.<sup>37</sup> While the primary assets of commercial banks in 1918 had been short-term, self-liquidating commercial paper and U.S. government securities, by 1929 the principal assets of commercial banks were “loans and investments whose liquidity depended on general capital values” in the securities and real estate markets.<sup>38</sup> The heavy reliance of banks on the health of the real estate and securities markets proved to be disastrous during the Great Depression.

**B. The Impact of Financial Liberalization on the Asset Boom of the 1920's and the Banking Crisis of 1930-33**

Senator Carter Glass, Representative Henry Steagall and other proponents of the G-S Act were convinced that banks had played a significant role in promoting unsustainable booms in the real estate and securities markets during the 1920's. As adherents of the “real bills doctrine,” Glass and his principal banking advisor, Professor H. Parker Willis, maintained that commercial banks should restrict their operations to the acceptance of demand deposits and the extension of short-term, self-liquidating loans to finance the production and sale of goods by business firms. Glass and Willis believed that these restraints on commercial bank activities would (i) maintain a basic equilibrium between prudent bank lending and legitimate business needs for credit, and (ii) prevent banks from financing illiquid and speculative investments that were likely to produce a

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<sup>37</sup> See supra note 33 and accompanying text (discussing changes in investment portfolios of commercial banks during the 1920's); Goldsmith, supra note 27, at 298 (Tbl. 12) (showing that national banks' investments in corporate, foreign, state and local securities rose from \$1.5 billion to \$3.6 billion during 1919-30, while their holdings of U.S. government bonds declined from \$3.2 billion to \$2.8 billion).

<sup>38</sup> Olson, supra note 33, at 5.

boom-and-bust cycle in the general economy.<sup>39</sup>

As one of the principal architects of the Federal Reserve System, Glass believed that the Federal Reserve Banks should (i) provide appropriate liquidity services to member banks by discounting short-term commercial paper, and (ii) discourage speculative activities by member banks, including loans or investments that facilitated “stock gambling.” By 1931, Glass and Willis concluded that the Federal Reserve System had failed to provide the liquidity needed by banks and had also been derelict in restraining speculative activities by banks. Glass and Willis therefore pushed for legislation that would prevent member banks from using the Federal Reserve discount window for speculative purposes, and would also separate commercial banks from the investment banking business.<sup>40</sup> In advocating such legislation, Glass, Steagall and their supporters argued that (1) banks had made unsound loans and investments that encouraged an “overbuilt” real estate market and an “immense over-expansion of real estate values,”<sup>41</sup> (2) banks had made imprudent investments in securities that undermined their solvency after the stock

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<sup>39</sup> Peach, *supra* note 24, at 9-15, 151-61, 169, 177; Perkins, *supra* note 26, at 497-505, 517-25.

<sup>40</sup> Peach, *supra* note 24, at 12, 151-54; Perkins, *supra* note 26, at 497-505. See also, e.g., 75 Congressional Record (“Cong. Rec.”) 9883-85 (1932) (remarks of Sen. Glass, arguing that the Federal Reserve System had failed to carry out the purposes of the Federal Reserve Act); 77 Cong. Rec. 3725 (1933) (remarks of Sen. Glass, declaring that the “main purpose” of his bill “was to prevent . . . the use of Federal Reserve facilities for stock-gambling purposes”); *id.* at 3835 (remarks of Rep. Steagall, stating that the bill would “call back to the service of agriculture and commerce and industry the bank credit and the bank service designed by the framers of the Federal Reserve Act,” and would prevent banks from engaging in “speculation, in stock gambling, and in aid of wild and reckless international high finance”).

<sup>41</sup> Senate Report No. 77, 73d Cong., 1st Sess. (1933) [hereinafter cited as 1933 Senate Report], at 3, 7.

market crashed,<sup>42</sup> and (3) banks had made excessive loans to finance the purchase of securities, and their affiliates had underwritten too many unsound and speculative issues, thereby contributing to the “overinvestment” in securities that jeopardized banks, investors and the general economy.<sup>43</sup>

Beginning in the 1980's, several prominent scholars challenged the factual premises and policy justifications for the G-S Act.<sup>44</sup> In adopting the GLB Act in 1999, Congress determined that the G-S Act's constraints on affiliations between banks and securities firms had become “unsuitable and outdated.”<sup>45</sup> A comprehensive analysis of the merits and shortcomings of the G-S Act is beyond the scope of this article. I plan to address that topic in a future work.

For present purposes, I wish to make three points. First, bank involvement in the real estate and securities markets during the 1920's was associated with unsustainable asset booms in both markets. Second, excessive exposure to real estate loans, loans on securities and investment securities was a major factor in many bank failures during the 1930's. Third, many of the largest

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<sup>42</sup> Id. at 6-7, 8, 11, 16; 77 Cong. Rec. 3835 (1933) (remarks of Rep. Steagall).

<sup>43</sup> 1933 Senate Report, *supra* note 41, at 3-4, 6-7, 8-10, 16-18; 75 Cong. Rec. 9883-85 (1932) (remarks of Sen. Glass); *id.* at 9904-06 (remarks of Sen. Walcott); *id.* at 9909-13 (remarks of Sen. Bulkley); 77 Cong. Rec. 3835-36 (1933) (remarks of Rep. Steagall); *id.* at 3907 (remarks of Rep. Kopplemann).

<sup>44</sup> E.g., George J. Benston, *The Separation of Commercial and Investment Banking: The Glass-Steagall Act Revisited and Reconsidered* (Oxford Univ. Press, 1990); Jonathan R. Macey, “Special Interest Groups Legislation and the Judicial Function: The Dilemma of Glass-Steagall,” 33 *Emory Law Journal* 1 (1984); Eugene N. White, “Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks,” 23 *Explorations in Economic History* 33 (1986) [hereinafter cited as White, “Glass-Steagall”].

<sup>45</sup> Senate Report No. 106-44, at 3-6 (1999). See also H.R. Report No. 106-74 (Part 1), at 97-98 (1999).

and most devastating bank failures during the 1930's involved institutions that were heavily involved in either the real estate market or the securities market or both. These large bank failures had severe macroeconomic effects that compelled the federal government to undertake a massive recapitalization program through the Reconstruction Finance Corporation (“RFC”) and a comprehensive deposit insurance program through the FDIC.

1. ***The contribution of banks to boom conditions in the real estate and securities markets.*** The involvement of banks in the real estate and securities markets helped to produce spectacular booms in both sectors during the 1920's. Commercial banks more than tripled their real estate lending during the 1920's, and securities affiliates of banks also competed with investment banks in issuing mortgage bonds to investors. By 1929, outstanding debts secured by real estate included \$37 billion of urban mortgages and some \$6-\$8 billion of mortgage bonds. Commercial banks held more than 10% of these obligations as assets on their balance sheets. Due to this massive influx of real estate financing, the volume of new construction activity rose from less than \$4 billion in 1921 to more than \$54 billion during 1922-28. Nearly \$35 billion was invested in building new homes during the 1920's, and many apartments, hotels and office buildings were also constructed. Analysts concluded that many urban real estate markets had become “overbuilt” and highly speculative by 1929.<sup>46</sup>

The boom in the securities markets was even more remarkable. Annual offerings of debt and equity securities by U.S. corporations nearly tripled, rising from \$2.8 billion in 1920 to an average of \$7.6 billion during 1927-29. Annual offerings of foreign stocks and bonds more than

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<sup>46</sup> Lester V. Chandler, *America’s Greatest Depression, 1929-41*, at 16-17 (Harper & Row Publishers, 1970); Goldsmith, *supra* note 27, at 77-79, 105, 296 (Tbl. 10); Willis & Chapman, *supra* note 24, at 587-600, 608; 1933 Senate Report, *supra* note , at 3, 7.

doubled, growing from \$600 million in 1920 to an average of \$1.4 billion during 1924-28. The number of shares traded annually on the New York Stock Exchange (“NYSE”) more than quadrupled, increasing from 230 million in 1920 to 1 billion in 1928-29.<sup>47</sup> Based on a widespread belief among investors that the U.S. economy had entered a “new era” of permanent economic growth, the Dow Jones Industrial Average (“DJIA”) skyrocketed from 64 in August 1921 to 382 in September 1929. The price-earnings ratio for the S&P Composite Index of stocks multiplied by a factor of six during the 1920's and reached 32.6 in September 1929, a record that lasted until the peak of the bull market in early 2000.<sup>48</sup>

Several scholars have concluded that the stock market boom produced a speculative “bubble” during its final, frenzied stage in 1928-29.<sup>49</sup> Those are the same two years during which (i) commercial banks and their affiliates accomplished the most spectacular growth in their securities underwriting and retail selling activities, and (ii) securities firms responded by organizing and selling units in hundreds of investment trusts (similar to today’s mutual funds) to

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<sup>47</sup> Carosso, *supra* note 34, at 243 (Exh. 7), 244 (Exh. 8); Ilse Mintz, *Deterioration in the Quality of Foreign Bonds Issued in the United States, 1920-30* (Nat’l Bur. of Econ. Res. 1951), at 9 (Tbl. 1).

<sup>48</sup> Chancellor, *supra* note 5, at 191-213; J.T.W. Hubbard, *For Each, the Strength of All: A History of Banking in the State of New York 190-96* (New York Univ. Press, 1995); Shiller, *supra* note 15, at 8-9, 103-07.

<sup>49</sup> See, e.g., John K. Galbraith, *The Great Crash, 1929*, at 12-92 (Houghton Mifflin Co., 3d ed. 1972); J. Bradford De Long & Andrei Shleifer, “The Stock Market Bubble of 1929: Evidence from Closed-end Mutual Funds,” 51 *Journal of Economic History* 675 (1991); Eugene N. White, “The Stock Market Boom and Crash of 1929 Revisited,” 4 *Journal of Economic Perspectives* No. 2, Spring 1990, at 67.

small investors.<sup>50</sup>

Speculative activities during the 1920's produced a rapid buildup of consumer and business debt, which left the U.S. economy in a highly leveraged state on the eve of the Great Depression. Mortgage loans and bonds on urban real estate quadrupled to almost \$40 billion by 1929, with half of that amount owed by homeowners. Consumer non-mortgage debt more than doubled to \$7.6 billion, as merchants encouraged consumers to buy cars, household appliances and other durable goods on installment credit. Banks financed a significant portion of this growth in consumer credit by purchasing installment paper from merchant creditors.<sup>51</sup> Banks also provided most of the loans on securities, including broker call loans. During the 1920's, loans on securities more than doubled to \$16 billion, which “represented 18% of the value of all listed stocks [in 1929], an enormous proportion to be held on credit.”<sup>52</sup> U.S. corporations issued nearly \$30 billion of bonds during the 1920's, increasing their total indebtedness to almost \$90 billion by 1929.<sup>53</sup> Debt service relative to GDP reached 9% for the United States in 1929, compared to only 3.9% for Canada. This high degree of leverage in the U.S. economy – which was spurred by rosy expectations of continued economic growth – exposed consumers, business

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<sup>50</sup> Carosso, *supra* note 34, at 278-99; Galbraith, *supra* note 49, at 49-70; Goldsmith, *supra* note 27, at 130-46; Peach, *supra* note 24, at 89-110; 75 Congressional Record 9910, 9913 (1932) (remarks of Sen. Bulkley).

<sup>51</sup> Chandler, *supra* note 46, at 8-9, 15-17, 73; Goldsmith, *supra* note 27, at 61-64, 72-77; Martha L. Olney, “Avoiding Default: The Role of Credit in the Consumption Collapse of 1930,” 114 *Quarterly Journal of Economics* 319, 320-23 (1999).

<sup>52</sup> Barrie Wigmore, *The Crash and Its Aftermath: A History of the Securities Markets in the United States, 1929-1933*, at 27 (Greenwood Press, 1985). See also Goldsmith, *supra* note 27, at 297 (Tbl. 11).

<sup>53</sup> Carosso, *supra* note 34, at 243 (Exh. 7); Chandler, *supra* note 46, at 8 (Tbl. 1-5).

firms, banks and institutional investors to devastating financial shocks during the Great Depression.<sup>54</sup>

2. *Bank failures resulting from exposure to the real estate and securities markets.* Losses from real estate loans and securities investments were major causes of bank failures during 1930-33. Default rates rose rapidly for both residential and commercial mortgages and reached crisis proportions by 1931-32. Real estate values in many urban areas fell by 25-40% during 1929-31, and a large number of urban real estate markets were essentially “frozen” by 1932. Banks often could not liquidate nonperforming loans by foreclosing on them, because no buyers were available to pay any reasonable price for the underlying property. For national banks, real estate loans as a percentage of capital and surplus rose from 24% in 1926 to 44% in 1930 and 57% in 1932. During 1930-32, the capital funds of national banks declined from \$3.9 billion to \$3.1 billion. The illiquid status of defaulted real estate loans was evidently a significant factor explaining the loss of bank capital during the early 1930's.<sup>55</sup> Moreover, as described in the next section, several of the largest clusters of bank failures occurred in urban

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<sup>54</sup> Ben S. Bernanke, “Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression,” 73 *American Economic Review* 257 (1983) [hereinafter cited as Bernanke, “Nonmonetary Effects”], at 260-66; Charles W. Calomiris, “Financial Factors in the Great Depression,” 7 *Journal of Economic Perspectives* No. 2, Spring 1993, at 61, 73-77; Chancellor, *supra* note 5, at 191-99, 207-11; Eugene N. White, “Banking and Finance in the Twentieth Century,” in Stanley L. Engerman & Robert E. Gallman, eds., *Economic History of the United States* (Cambridge Univ. Press, 2000), Vol. III, at 693, 752-63.

<sup>55</sup> Chandler, *supra* note 46, at 73; Goldsmith, *supra* note 27, at 79-84; Elmus Wicker, *The Banking Panics of the Great Depression* 16 (Cambridge Univ. Press, 1996); Wigmore, *supra* note 52, at 228-29, 308, 317, 430-31; Willis & Chapman, *supra* note 24, at 126 (Tbl. 1), 598 (Tbl. 139), 599-609. See also Mintz, *supra* note 47, at 46-48 (describing R. J. Saulnier’s study of urban mortgage lending by life insurance companies, which found that, by the end of 1934, lenders had foreclosed on 24% of mortgages made during 1920-24 and 41% of mortgages made during 1925-29).

areas that had the heaviest concentrations of bank real estate loans and investments.

Many banks were also devastated by depreciation in their securities portfolios. The market values of corporate and foreign bonds with less than an “A” rating fell sharply during 1930-32. Investor losses on South American and Eastern European bonds were especially severe, because three-quarters of those bonds defaulted during the 1930's.<sup>56</sup> One analysis of closed New York state banks found that their securities portfolios had suffered an average loss in market value of 37.5%. Similarly, a study of closed Michigan state banks determined that depreciation in their bond portfolios (especially with regard to real estate bonds) was a primary reason for their failure.<sup>57</sup> During 1929-32, the percentage losses suffered by national and state member banks on their securities investments exceeded their percentage losses on loans.<sup>58</sup>

Smaller country banks suffered the greatest percentage losses, because they had generally invested a larger share of their funds in higher-risk securities. Some commentators blamed country bankers for their imprudence in pursuing higher yields without regard to risk. However, members of Congress and other observers condemned securities firms and securities affiliates of

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<sup>56</sup> Goldsmith, *supra* note 27, at 103-07; Mintz, *supra* note 47, at 8-11, 29-43, 51-52; Wigmore, *supra* note 52, at 287-293, 302-05, 394-417.

<sup>57</sup> Willis & Chapman, *supra* note 24, at 537-40 (describing study of 34 failed New York state banks); Robert G. Rodkey, “State Bank Failures in Michigan,” 7 *Michigan Business Studies* 101, 101-02, 130-39 (1935-36) (presenting study of 163 failed Michigan state banks).

<sup>58</sup> Wicker, *supra* note 55, at 13-14 (showing that, during 1929-32, member banks lost \$6.84 for every \$100 of investments, compared to \$5.09 for every \$100 of loans); Goldsmith, *supra* note 27, at 302 (Tbl. 16) (reporting that member banks reported \$470 million of losses on securities during 1929-31, compared to \$630 million of losses on loans).

banks for encouraging unsophisticated country bankers to buy high-risk securities.<sup>59</sup>

Securities affiliates of banks did not escape the carnage. For example, the affiliates of NCB and Chase produced major losses for themselves and their sister banks. After making profits of \$25 million during 1925-29, NCC incurred net losses of more than \$100 million during 1930-33, including heavy losses on its equity investments. For its part, NCB held (i) \$80 million of frozen “bridge loans” extended to NCC’s customers in expectation of bond offerings that were never completed, and (ii) several million dollars of unpaid loans obtained by NCB’s officers for the purpose of buying NCB’s stock. NCB recorded total losses of \$170 million during 1930-34, amounting to two-thirds of its shareholders’ equity at the end of 1929.<sup>60</sup>

Similarly, CSC wrote down its capital by \$80 million during 1930-33, reflecting heavy losses on its equity investments. Chase’s losses for 1930-34 exceeded \$130 million, reducing its book value per share by 54% since the end of 1929. More than half of Chase’s losses resulted from (i) loans made to the Republic of Cuba to support of CSC’s Cuban underwriting activities, and (ii) loans and equity investments supporting General Theatres Equipment, a bankrupt company that had been a major client of CSC. The boards of directors of NCB and Chase dismissed the executives (Charles Mitchell and Albert Wiggin) who had led the banks into the

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<sup>59</sup> Milton Friedman & Anna J. Schwartz, *A Monetary History of the United States, 1867-1960*, at 312-13, 319, 355-57 (Princeton Univ. Press, 1963); Goldsmith, *supra* note 27, at 105-07, 190-91; Mintz, *supra* note 47, at 63-86; Wicker, *supra* note 55, at 13-15; Wigmore, *supra* note 52, at 291-93, 322-23, 394-95. See also, e.g., 75 Cong. Rec. 9883 (1932) (remarks of Sen. Glass, claiming that “the great banks in the money centers choked the portfolios of their correspondent banks from Maine to California with utterly worthless investment securities”); 77 Cong. Rec. 4416 (1933) (remarks of Sen. Wheeler, citing a Montana bank that failed after suffering defaults on bonds it bought from New York banks).

<sup>60</sup> Cleveland & Huertas, *supra* note 27, at 159-61, 171, 191, 390 n.44, 391-92 n.4.

securities business, and both banks liquidated their securities affiliates in 1934. NCB and Chase survived the Great Depression, even though they suffered tremendous reputational damage and their stock prices declined more than most of their peer institutions.<sup>61</sup> As discussed in the next section, many of their regional competitors did not fare so well.

### **3. *Major bank failures related to real estate and securities activities.***

A comprehensive discussion of bank failures during the 1930's is beyond the scope of this article. However, the following failures or near-failures of major banking organizations can be tied to their heavy involvement in the real estate and/or securities markets:

- Caldwell and Co. (“CAC”) established a large financial and industrial empire that included (i) a securities firm that underwrote municipal bonds, real estate bonds and industrial revenue bonds throughout the South, (ii) the largest chain of banks and the largest insurance group in the South, with combined assets of nearly \$450 million, and (iii) newspapers and industrial companies. In early 1930, CAC merged with BancoKentucky Co., which controlled a chain of banks with total assets of \$130 million. The entire structure was financially unsound and collapsed in November 1930. CAC’s demise precipitated the failures of more than 130 banks and inflicted a severe economic shock on several Southern states (including Arkansas, Kentucky, North Carolina and Tennessee).<sup>62</sup>

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<sup>61</sup> Carosso, *supra* note 34, at 329-35, 346-48; Cleveland & Huertas, *supra* note 27, at 172-88, 197-98; Goldsmith, *supra* note 27, at 139-42; Peach, *supra* note 24, at 113-39, 157-65; Wigmore, *supra* note 52, at 121, 173-75, 220-21, 238, 357-60, 468, 469 (Tbl. 14-6) (showing that, in 1933, the stock prices of Chase and NCB fell to 6% and 3% of their 1929 peak values).

<sup>62</sup> Goldsmith, *supra* note 27, at 225-26; John B. McFerrin, *Caldwell and Company: A Southern Financial Empire passim* (Vanderbilt Univ. Press reprint, 1969); Wicker, *supra* note 55, at 32-36, 43-59.

- Bank of United States (“BUS”), a large New York City bank with over \$200 million of assets, failed in December 1930. BUS expanded rapidly during the 1920's by purchasing five other banks, and it also established a large network of real estate and securities affiliates. BUS and its real estate affiliates made large loans to real estate developers and invested in real estate bonds. BUS also made substantial loans to its officers and securities affiliates to finance trading in BUS' stock. BUS was determined to support its stock price because of price guarantees it had issued to many shareholders. BUS failed when the real estate and stock markets slumped in 1930. While there has been scholarly debate over the macroeconomic effects of BUS' failure, BUS' demise probably had a significant adverse impact on public confidence in banks. A small New York bank and a medium-sized Philadelphia bank failed shortly thereafter, and the New York Clearing House was forced to defend Manufacturers Trust against a potential depositor run.<sup>63</sup>

- In 1931 banking panics occurred in Chicago, Pittsburgh, Philadelphia and several cities in the Cleveland district (including Akron, Toledo and Youngstown). Most of these failures occurred because of the banks' heavy exposure to defaulted real estate loans and depreciated real estate bonds. Each panic was brought to an end by collective action (including forced mergers) organized by the leading banks in each community. For example, the First National Bank of Chicago acquired Foreman State Bank and two other threatened Chicago banks were merged together to form Central Republic Bank. Similarly, the New York Clearing House

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<sup>63</sup> Friedman & Schwartz, *supra* note 59, at 308-12; Goldsmith, *supra* note 27, at 227-28; Joseph L. Lucia, “The Failure of the Bank of United States: A Reappraisal,” 22 *Explorations in Economic History* 402 (1985); Paul B. Trescott, “The Failure of the Bank of United States, 1930,” 24 *Journal of Money, Credit, and Banking* 384 (1992); Wicker, *supra* note 55, at 36-59; Wigmore, *supra* note 52, at 223-28.

helped Manufacturers Trust to acquire the Chatham Phenix Bank and several smaller New York City banks.<sup>64</sup>

- In 1932, a full-scale banking panic broke out in Chicago. Central Republic Bank was faced with imminent failure after the Insull utility empire collapsed, because half of Central's capital was tied up in loans that were collateralized by Insull securities. Central's problems threatened the city's two largest banks – Continental Illinois and First National – because they had also made extensive loans secured by Insull interests and their securities affiliates had underwritten Insull debentures. Chicago banks also confronted severe real estate lending problems, as \$1 billion of Chicago property was already in foreclosure. The Reconstruction Finance Corporation ("RFC") made an emergency loan of \$90 million to Central, which enabled Central to transfer its deposits and offices to a newly-chartered bank and liquidate its remaining assets in an orderly manner. The RFC's action effectively protected Central's depositors and thereby forestalled a likely depositor run on the other big Chicago banks. Similarly, the RFC headed off a threat to Bank of America, the largest bank in California, which was heavily burdened with nonperforming real estate loans. The RFC boosted Bank of America's liquidity by lending \$90 million to the bank and its affiliated mortgage company.<sup>65</sup>

- A nationwide banking panic was triggered by the failure of Detroit's two largest

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<sup>64</sup> Goldsmith, *supra* note 27, at 81-84, 158-59, 163-64, 227-32; F. Cyril James, *The Growth of Chicago Banks* (Harper & Bros., 1938), Vol. II, at 992-1006; Wicker, *supra* note 55, at 62-104; Wigmore, *supra* note 52, at 218-21.

<sup>65</sup> Goldsmith, *supra* note 27, at 91, 151 n.1, 175-76, 195-200; James, *supra* note 64, at 1030-41; Marquis James & Bessie R. James, *Biography of a Bank: The Story of Bank of America* 313-17, 337-38, 350-54 (Harper & Bros., 1954); Wicker, *supra* note 55, at 112-14; Wigmore, *supra* note 52, at 152-54, 247, 321, 344-48, 353-54, 360.

bank holding companies in February 1933. Detroit Bankers Corp. (“DBC”) and Guardian Detroit Union Group (“Guardian”) controlled four-fifths of the Detroit area’s banking assets. DBC and Guardian grew rapidly by acquiring numerous banks during the 1920's, and both companies had active securities affiliates. Both companies and their banks had heavy concentrations in real estate loans, real estate bonds and loans secured by their own stock. The severe slump in the automotive industry after 1929 devastated the Detroit economy and exposed both organizations to severe losses. The RFC tried to rescue Guardian and DBC, but its lending capacity was limited by its statutory mandate to obtain good collateral for its loans. Henry Ford refused to provide financial support for Guardian, and he threatened to pull his deposits out of DBC. Federal and state authorities therefore closed all of DBC’s and Guardian’s banks, and the Michigan governor declared a statewide bank holiday. The Michigan disaster rapidly spread to other states. For example, the two largest banks in Cleveland collapsed shortly after the Michigan debacle, due largely to their heavy exposure to failed corporate and real estate ventures promoted by the Eaton and Van Sweringen interests. By early March, nearly every state had imposed a general moratorium or other restrictions on deposit withdrawals. Upon his inaugural, President Franklin Roosevelt declared a nationwide bank holiday.<sup>66</sup>

The foregoing bank failures had a severe macroeconomic impact in two respects. First, bank failures had adverse monetary effects because (i) depositors increasingly converted their deposits into currency as major bank failures multiplied after 1930, and (ii) about \$7 billion of bank deposits were frozen in closed or suspended banks by 1933. Commercial bank deposits

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<sup>66</sup> Goldsmith, *supra* note 27, at 81-84, 91, 168-70, 235-36, 238 n.2; Olson, *supra* note 33, at 27-30; Wicker, *supra* note 55, at 116-29; Wigmore, *supra* note 55, at 433-45; 77 Cong. Rec. 4034-36 (1933) (remarks of Rep. Truax).

declined by over 42%, of \$18 billion, during 1929-33, which depressed the nation's money supply.<sup>67</sup> Second, bank failures also had serious nonmonetary effects, because they (1) disrupted lender-borrower relationships, (2) discouraged surviving banks from extending loans to smaller firms, which faced much greater risks to their viability in comparison with large corporations, and (3) encouraged banks and other institutional investors to invest only in U.S. government bonds and the securities of the largest and safest corporations. In short, banks sought to survive the Great Depression by shifting from loans to safe government securities, bond spreads between highly-rated firms and lower-rated firms grew to unprecedented levels and smaller firms were essentially shut out of the credit markets.<sup>68</sup>

It is noteworthy that thousands of small rural banks had failed during the 1920's (primarily due to the severe slump in agricultural markets after World War I), but those failures did not have a material impact on the national economy. Most studies have found that severe monetary effects (including currency hoarding) and nonmonetary effects (including widespread business failures) began with the failures of large banks that commenced in late 1930 and continued through the bank holiday of 1933 and the long resolution process that followed.<sup>69</sup> For a variety of reasons, the FRB failed to act effectively as lender of last resort to the banking system in the early 1930's. By 1933, collective action by banks and loans by the RFC could no

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<sup>67</sup> E.g., Friedman & Schwartz, *supra* note 59, at 310-52; Wicker, *supra* note 55, at 19-23, 155-65.

<sup>68</sup> E.g., Bernanke, *Nonmonetary Effects*, *supra* note 54; Calomiris, *supra* note 54.

<sup>69</sup> E.g., Bernanke, *supra* note 54; Calomiris, *supra* note 54; Patrick J. Coe, "Financial Crisis and the Great Depression: A Regime Switching Approach," 34 *Journal of Money, Credit and Banking* 76 (2002); Friedman & Schwartz, *supra* note 59, at 308-59; Goldsmith, *supra* note 27, at 7-8, 207-35; Wicker, *supra* note 55, at 5-19.

longer prevent a nationwide banking crisis. The federal government restored the banking system and depositor confidence only by (i) recapitalizing banks with RFC purchases of preferred stock and (ii) instituting a national deposit insurance scheme.<sup>70</sup>

### **Conclusion**

International banking crises since the 1970's and the U.S. experience during the Great Depression share a number of common elements. Financial deregulation typically encourages banks to expand their involvement in the securities and real estate markets, and it also intensifies competition between banks and nonbank financial intermediaries. As a result, financial liberalization tends to increase the vulnerability of the banking system to sudden collapses of asset values in the securities and real estate markets. For these reasons, deregulation has been associated with boom-and-bust cycles and banking crises in many countries since the 1970's, and

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<sup>70</sup> The RFC purchased \$1.3 billion of preferred stock in 6,800 banks during 1933-34. By 1934, the RFC held stock in half of all U.S. banks, and RFC contributions accounted for one-third of the total equity capital of U.S. banks. The RFC also made \$2 billion in loans to more than 8,000 open and closed banks during 1932-34. According to the RFC's chairman, Jesse Jones, only 20 of the banks selling preferred stock to the RFC did *not* need capital assistance. The new federal deposit insurance program effectively prevented further depositor panics and was the "structural change most conducive to monetary stability" after 1933. Friedman & Schwartz, *supra* note 59, at 421-42 (see *id.* at 427 n.4, as to Jesse Jones' remark, and *id.* at 434, 440-42, as to the authors' opinion regarding the benefits of federal deposit insurance). See also Calomiris, *supra* note 54, at 62-63, 68-75; Joseph R. Mason, "Do Lender of Last Resort Policies Matter? The Effects of Reconstruction Finance Corporation Assistance to Banks During the Great Depression," 20 *Journal of Financial Services Research* 77 (2001) (concluding that RFC loans during 1932 were unsuccessful in preventing bank failures, but the RFC's efforts were far more effective after Congress authorized the RFC to purchase preferred stock from banks in 1933); Olson, *supra* note 33, at 69-82 (describing the RFC's role in restoring the banking system after the national bank holiday of 1933); David C. Wheelock, "Monetary Policy in the Great Depression: What the Fed Did, and Why," 74 *Review* No. 2 (Fed. Res. Bank of St. Louis, MO), Mar./April 1992, at 3 (explaining why the FRB failed to provide effective "lender of last resort" assistance to banks during the early 1930's).

the same was true of the United States during the Great Depression.

Systemic bank crises have serious monetary and nonmonetary impacts on the general economy that are difficult and expensive to overcome. While government officials often proclaim their adherence to “market discipline” before a banking crisis occurs, the experiences of the Great Depression and more recent years have convinced most authorities that systemic banking crises cannot be left to run their course. The conventional response since the 1970's has been to take the same course which U.S. authorities adopted in 1933 – namely, to recapitalize large banks and protect depositors against loss. Given the virtual certainty of massive governmental intervention when systemic banking crises occur, regulators must give greater attention to the potential long-term economic risks of financial liberalization programs.