

# Evaluating and Controlling the Risks of Financial Product Deregulation

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The walls separating commercial banks and thrifts from non-bank financial institutions are beginning to show serious cracks. Market forces and rapid advances in technology are impelling both bank and non-bank<sup>1</sup> enterprises to search for loopholes in the highly complex legal framework governing financial organizations in order to expand into new markets and to offer new services. During its first term, the Reagan Administration proposed legislation that would have permitted bank holding companies to offer virtually any financial service through separate non-bank subsidiaries.<sup>2</sup> Since 1984, however, Congress has been stalemated on this issue,<sup>3</sup> reflecting both bitter divisions between the various financial interests involved<sup>4</sup> and continued disagreement over the likely effects of financial product deregulation.<sup>5</sup> This article takes advantage of

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1. References will be made throughout this article to "bank" and "non-bank" activities. Unless the context indicates otherwise, these terms are meant to be applied generically, so that the term "bank" also includes thrift institutions (savings and loan associations and mutual savings banks), and the term "non-bank" refers to entities not engaged in either commercial bank or thrift activities. The term "depository institution" is also used to describe banks and thrifts.

2. The Administration's proposal was introduced in the House as H.R. 3537, 98th Cong., 1st Sess., 129 CONG. REC. H5062 (daily ed. July 12, 1983), and in the Senate as S. 1609, 98th Cong., 1st Sess., 129 CONG. REC. S9707 (daily ed. July 12, 1983). For a more detailed discussion of various portions of the Administration's deregulation proposal, see *infra* text accompanying notes 56, 178-79, 189-90 & 206-07.

3. A modified version of the Administration's proposal, S. 2851, 98th Cong., 2d Sess. (1984), was passed by the Senate on September 13, 1984 by a vote of 89 to 5. 130 CONG. REC. S11,162 (daily ed. Sept. 13, 1984). No action on the Senate bill was taken by the House. For a detailed description of this legislation, see S. REP. NO. 560, 98th Cong., 2d Sess. (1984).

4. See generally Lemann, *Change in the Banks*, ATL. MONTHLY, Aug. 1985, at 60, 65-66 (discussing interest groups concerned with bank deregulation).

5. Arguments both in support of and in opposition to the granting of additional activity authority to banks can be found in recent Congressional hearings on financial product deregulation. See, e.g., *How the Financial System Can Best Be Shaped to Meet the Needs of the American People: Financial Deregulation: Hearings on H.R. 5734 Before the House Comm. on Banking, Finance and Urban Affairs*, 98th Cong., 2d Sess. (1984); *Financial Restructuring: the Road Ahead: Hearings on H.R. 5342, H.R. 4506, and H.R. 3537 Before the Subcomm. on Telecommunications, Consumer Protec-*

the apparent hiatus in legislative activity to examine the implications of financial product deregulation for the safety of the financial system.

In theory, product diversification would make it possible for banks to reduce the volatility of their earnings, thereby reducing their likelihood of failure.<sup>6</sup> This, in turn, would reduce the risk exposure of the federal agencies that insure bank deposits. The freedom to diversify, however, could increase instability in the banking system because of the danger that funds raised from insured depositors will be used to support unduly risky investments.<sup>7</sup> This danger arises not only from the fact that managers and shareholders of some banks may be risk-seeking, but also from the "moral hazard" created by fixed-rate deposit insurance.<sup>8</sup> The empirical analyses that follow suggest that, because substantial risk reductions could be achieved by limited product-line diversification, direct restraints on the permissible scope and manner of diversification can be imposed to limit risk-taking without destroying the benefits of such diversification.

This article is organized in four parts. Part I outlines the current legal framework for regulating risk-taking by depository institutions. Part II elaborates the theoretical reasons why financial product diversification might enhance the safety of depository organizations and provides empirical support for this proposition.<sup>9</sup> Part III discusses the implications moral hazard theory poses for financial product deregulation and reviews past risk-taking behavior of bank holding companies, commercial banks, thrift institutions, and non-depository organizations that have diversified into financial activities. It concludes that some depository organizations, or firms seeking to acquire or operate them, might diversify in a risk-enhancing fashion if existing product-line barriers were relaxed.<sup>10</sup> Part IV

*tion, and Finance of the House Comm. on Energy and Commerce*, 98th Cong., 2d Sess. (1984); *Competitive Equity in the Financial Services Industry: Hearings on S. 2181 and S. 2134 Before the Senate Comm. on Banking, Housing, and Urban Affairs*, 98th Cong., 1st Sess. (1984).

6. See *infra* text accompanying notes 63-67. Proponents of financial product deregulation also argue that deregulation will promote economic efficiency due to economies of scope in providing multiple financial services. See COUNCIL OF ECONOMIC ADVISERS, ECONOMIC REPORT OF THE PRESIDENT 159-60 (1984) [hereinafter cited as ECONOMIC REPORT OF THE PRESIDENT].

7. Deregulation could exacerbate the threat to the safety of the banking system if banks invest federally-insured deposits in high risk activities whose earnings are sufficiently correlated with the banks' earnings so that the resulting portfolios have earnings that are more volatile than those of banks. See *infra* text accompanying note 64.

8. See *infra* text accompanying notes 88-94.

9. This article examines whether the benefits from diversification could be achieved by combining banking activities with non-bank financial (as opposed to commercial) activities. Particular attention among the spectrum of non-bank activities is paid to the brokerage and underwriting (or development) of insurance, securities, and real estate, since these activities appear to be highest on the agenda of depository organizations seeking additional product-line authority.

10. In this respect, the article differs from much of the previous discussion of financial product deregulation, which either implicitly assumes that financial organizations would diversify efficiently or ignores the issue completely. For example, a recent Note in the Harvard Law Review reviewing the relevant economic and legal literature in this area does not even discuss this question. Note, *The*

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describes two broad methods for limiting the safety-related risks of financial product deregulation—indirectly, by removing the incentives for risk-taking created by the current deposit insurance system, and directly, by imposing specific restrictions on financial institutions seeking to diversify their activities.

### I. Current Restrictions on Banking Activities

Concerns about excessive risk-taking have often been invoked to justify the rigid limitations on activity authority that have been placed over time on commercial banks and thrift institutions, as well as on their holding companies.<sup>11</sup> These restrictions differ at the federal and state levels, reflecting the dual system of federal and state regulation and supervision that has long characterized the United States financial system.<sup>12</sup> Federal law restricts national banks and federally-chartered thrifts to activities directly related to commercial banking and mortgage lending,

*Demise of the Bank/Nonbank Distinction: An Argument for Deregulating the Activities of Bank Holding Companies*, 98 HARV. L. REV. 650 (1985).

11. See K. COOPER & D. FRASER, *BANKING DEREGULATION AND THE NEW COMPETITION IN FINANCIAL SERVICES* 54 (1984). Other policy considerations have also been invoked to support limitations on diversification. See, e.g., Benston, *Federal Regulation of Banking: Analysis and Policy Recommendations*, 13 J. BANK RESEARCH 216 (1983) (listing among other historic reasons the prevention of centralized power, allocation of credit to housing, and protection of banks from competition); Perkins, *The Divorce of Commercial and Investment Banking: A History*, 88 BANKING L.J. 483, 496-505 (1971) (Congress passed the Glass-Steagall Act in 1933 in an effort to eliminate potential and actual conflicts of interest between banks and underwriters).

Deposit-taking by banks across state lines has also been restricted to prevent transfers of funds away from smaller communities, as well as to prevent excessive concentration in the banking industry. Nationwide interstate banking has been effectively prohibited by the McFadden Act of 1927, ch. 191, § 7, 44 Stat. 1224, 1228 (1927) (codified as amended at 12 U.S.C. § 36 (1982)), which subjects national banks to the branching restrictions of the states in which they are located, and by 12 U.S.C. § 1842(d) (1982), known as the "Douglas Amendment" to the Bank Holding Company Act of 1956, which imposed similar requirements on bank holding companies. Beginning with Maine in 1975, however, states began to enact statutes allowing entry by out-of-state bank holding companies under certain conditions. M.E. REV. STAT. ANN. tit. 101, § 1013 (1980) (allowing entry of out-of-state institutions after January 1, 1978). Through 1984, 22 states had enacted some form of interstate bank expansion legislation. See Whitehead, *Interstate Banking: Probability or Reality*, ECON. REV. FED. RESERVE BANK ATLANTA, Mar. 1985, at 6. The most controversial state banking laws are those that grant entry only to out-of-state banks from certain well-defined regions. The Supreme Court upheld the constitutionality of these "regional compacts" in *Northeast Bancorp, Inc. v. Board of Governors of the Federal Reserve System*, 105 S. Ct. 2545 (1985). The benefits which may stem from geographic diversification are not examined in this article.

12. As has been widely noted, the dual banking system was not the product of any deliberate or conscious effort to share power between national and state regulators but rather an accident of history and the product of continuing tension between the two levels of government. See Hackley, *Our Baffling Banking System*, 52 VA. L. REV. 565, 570-71 (1966); Friedman & Friesen, *A New Paradigm For Financial Regulation: Getting From Here To There*, 43 MD. L. REV. 413, 416 (1984). See generally Scott, *The Dual Banking System: A Model of Competition in Regulation*, 30 STAN. L. REV. 1 (1977).

In 1984, the Reagan Administration proposed consolidation and reorganization of the federal financial regulatory system. See TASK GROUP IN REGULATION OF FINANCIAL SERVICES, *BLUEPRINT FOR REFORM* (1984).

respectively.<sup>13</sup> Somewhat greater freedom is allowed to bank holding companies and multi-thrift holding companies, although these organizations continue to be prohibited from most underwriting and brokerage activities in the insurance, securities, and real estate industries.<sup>14</sup> Certain states have allowed their state-chartered depository institutions to engage in one or more non-bank activities,<sup>15</sup> but the broadening of activity and asset powers remains highly uneven.

#### A. *Commercial Banks*

The dual system of bank regulation has spawned a complicated system of commercial bank regulation and supervision. National banks are federally-chartered, and directly regulated and supervised by the Comptroller of the Currency.<sup>16</sup> State-chartered banks, however, are supervised and regulated not only by their state bank regulatory agencies but also by the Federal Reserve Board, if they belong to the Federal Reserve system,<sup>17</sup> or by the Federal Deposit Insurance Corporation (FDIC), if they are not Federal Reserve members.<sup>18</sup> All national banks and state member banks are required to obtain federal deposit insurance, which is also available to non-member state banks upon application and qualification.<sup>19</sup>

The National Bank Act<sup>20</sup> governs the activities of commercial banks with federal charters, which in 1983 operated forty-four percent of all bank offices in the country.<sup>21</sup> Under the Act, national banks are provided charters for the purpose of "carrying on the business of banking"<sup>22</sup> and are specifically authorized to engage in a number of activities traditionally related to banking.<sup>23</sup>

13. See *infra* text accompanying notes 22-23 & 33-34.

14. See *infra* text accompanying notes 46-49 & 54.

15. See *infra* text accompanying notes 29-31 & 41-42.

16. 12 U.S.C. § 1 (1982).

17. 12 U.S.C. §§ 321-39 (1982).

18. 12 U.S.C. § 1817 (1982).

19. 12 U.S.C. §§ 1814-15 (1982).

20. The National Bank Act of 1864, ch. 106, 13 Stat. 99 (current version scattered throughout 12, 19 & 31 U.S.C.).

21. BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES 492 (105th ed. 1985) [hereinafter cited as STATISTICAL ABSTRACT].

22. 12 U.S.C. § 21 (1982). Nowhere in the Act, however, is the term "business of banking" expressly defined.

23. The activities specifically authorized include the discounting and negotiation of promissory notes, drafts, and bills of exchange, lending money, and receiving deposits. 12 U.S.C. § 24 (1982). The Act also expressly limits national banks in their holding of real estate. 12 U.S.C. § 29 (1982).

During the 1960's, the Comptroller of the Currency attempted to broaden the set of permissible activities for all national banks to include insurance brokerage, courier services, travel agency, personal property leasing, and data processing. These attempts were subsequently overturned by various federal appellate courts. See generally Dunn, *Expansion of National Bank Powers: Regulatory and Judicial Precedent Under the National Bank Act, Glass-Steagall Act, and Bank Holding Company Act*, 36 Sw. L.J. 765, 770-78 (1982).

The National Bank Act was amended in 1933 by legislation popularly known as the Glass-Steagall Act.<sup>24</sup> With several significant exceptions, Glass-Steagall prohibits national banks from engaging in the brokerage and underwriting of securities.<sup>25</sup> In recent years the effectiveness of the Glass-Steagall restrictions has been eroded significantly by a combination of legislative and regulatory developments at both the state and federal levels.<sup>26</sup> Despite the Act's general proscription of securities brokerage and underwriting by bank organizations, banks or their holding companies have been able to engage in a wide range of securities-related activities.<sup>27</sup>

State law governs the activities of state-chartered banks, which operate the majority of bank offices in the nation.<sup>28</sup> A number of states have traditionally allowed their banks to engage in a wider set of activities than those permitted national banks, notably the underwriting and brokerage of insurance.<sup>29</sup> Recently, several states have expanded the powers of their banks. California has authorized its banks to underwrite and sponsor mutual funds, engage in real estate development, and invest in corporate securities without limitation.<sup>30</sup> In 1983, South Dakota enacted a controversial provision allowing its banks to sell and underwrite insurance throughout the nation.<sup>31</sup>

### B. Thrift Institutions

Thrift institutions are chartered by both federal and state governments, and are authorized to engage in long-term mortgage lending. Thrifts

24. The four sections known as the Glass-Steagall Act were included in the Omnibus Banking Act of 1933, ch. 89, 48 Stat. 162 (1933) (codified as amended in scattered sections of 12 U.S.C.).

25. The securities exempted include U.S. Treasury obligations, and general obligations of states, municipalities, and certain federal agencies. 12 U.S.C. §§ 24 Seventh, 335 (1982).

26. See generally Note, *National Banks and the Brokerage Business: The Comptroller's New Reading of the Glass-Steagall Act*, 69 VA. L. REV. 1303 (1983).

27. These activities include underwriting and dealing in many types of state and federal securities, acting as financial adviser to issuers of state and local revenue bonds, acting as a "discount broker" (executing orders but not providing investment advice), underwriting and dealing in corporate securities of all types outside the U.S., acting as agent for corporations in arranging private securities placements, and acting as investment manager for individuals, trusts, pension funds, and investment companies. See Friedman & Friesen, *supra* note 12, at 436-38. For a thorough recent examination of the evidence supporting a total repeal of the Glass-Steagall Act, see DEREGULATING WALL STREET: COMMERCIAL BANK PENETRATION OF THE CORPORATE SECURITIES MARKET (I. Walter ed. 1985) [hereinafter cited as DEREGULATING WALL STREET].

28. See STATISTICAL ABSTRACT, *supra* note 21, at 492.

29. These states include Alabama, Indiana, Minnesota, Nebraska, North Carolina, and Wisconsin. See Wallison & Toomey, *Continued Banking Deregulation Seems Inevitable*, Legal Times, Mar. 5, 1984, at 14.

30. CAL. FIN. CODE §§ 751.3, 772, 1338 (West Supp. 1985).

31. S.D. CODIFIED LAWS ANN. § 51-18-30 (Supp. 1985). The South Dakota statute requires banks owned by out-of-state bank holding companies to conduct their insurance activities solely outside South Dakota. S.D. CODIFIED LAWS ANN. § 51-16-41 (Supp. 1985).

chartered under the federal Home Owners' Loan Act of 1933<sup>32</sup> have been strictly limited to investing in a class of conservative securities and residential mortgages.<sup>33</sup> The federal tax laws also provide a strong incentive for thrift institutions to maintain a high proportion of their assets in mortgages.<sup>34</sup> Federally-chartered thrifts are supervised by the Federal Home Loan Bank Board (FHLBB)<sup>35</sup> and insured by the Federal Savings and Loan Insurance Corporation (FSLIC).<sup>36</sup> State-chartered thrifts may obtain FSLIC insurance if they meet that corporation's eligibility criteria.<sup>37</sup>

Recent difficulties in the thrift industry have prompted Congress to widen the activity authority of federally-chartered thrifts to permit them to compete more effectively with banks and other financial institutions. In 1980, federal thrifts were authorized to offer NOW accounts and credit cards and to invest up to twenty percent of assets in consumer loans.<sup>38</sup> Two years later, Congress extended full deposit-taking powers to federally-chartered thrifts, permitted them to invest in commercial loans up to ten percent of assets, and raised the consumer lending ceiling to thirty percent of assets.<sup>39</sup> In addition, out-of-state banks and thrift organizations were permitted to acquire failing thrifts in an effort to minimize the financial assistance provided by the FSLIC.<sup>40</sup>

A number of states have been even more ambitious in expanding the activity authority of their state-chartered thrifts. California and Texas, for example, permit their savings and loans unlimited authority to invest in non-mortgage assets.<sup>41</sup> Other states have allowed their thrifts less expansive but nevertheless liberal direct investment authority.<sup>42</sup>

32. Home Owners' Loan Act of 1933, ch. 64, 48 Stat. 128 (codified as amended at 12 U.S.C. § 1461 (1982)).

33. 12 U.S.C. § 1464(c) (1982). The legal distinctions between commercial banks and thrift institutions have historically been maintained in an effort to allocate credit towards homeowners. *See* A. CARRON, *THE PLIGHT OF THRIFT INSTITUTIONS* 1, 5-11 (1982); Benston, *supra* note 11, at 233-34.

34. Savings and loans can substantially reduce their tax burdens through liberal reserves for bad debts by holding at least 82% of their assets in mortgages or Treasury securities. For savings banks, the minimum qualifying share is 72%. 26 I.R.C. § 593 (1982).

35. 12 U.S.C.A. § 1437 (West Supp. 1985).

36. 12 U.S.C. § 1726(a)(1) (1982).

37. 12 U.S.C. § 1726(a)(2) (1982).

38. Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, Titles III and IV, 94 Stat. 132 (codified at 12 U.S.C. § 3501 (1982)).

39. Depository Institutions (Garn-St. Germain) Act of 1982, Pub. L. No. 97-320, 96 Stat. 1469 (codified at 12 U.S.C. § 1811 (1982)).

40. Garn-St. Germain Act § 123, 12 U.S.C. § 1730a(m) (1982).

41. CAL. FIN. CODE § 6702 (West Supp. 1985); TEX. STAT. ANN. art. 342-114 (Vernon Supp. 1985).

42. *See, e.g.,* ARIZ. REV. STAT. ANN. § 6-446 (West Supp. 1985); FLA. STAT. ANN. § 665.0701 (Harrison Supp. 1983); OHIO REV. CODE ANN. § 1151.34 (Page Supp. 1984). Through 1983 existing state-chartered thrifts were generally reluctant to engage in the new activities. Newly chartered state thrifts have displayed greater willingness, however, to expand into non-mortgage

### C. *Bank and Thrift Holding Companies*

Following the Depression, national banks discovered they could evade the activity restrictions of the National Bank Act by forming holding companies and engaging in a variety of non-bank activities through their subsidiaries.<sup>43</sup> To regulate this practice, Congress enacted the Bank Holding Company Act of 1956,<sup>44</sup> which required holding companies owning more than one commercial bank to register with the Federal Reserve Board and to obtain approval, which was rarely granted, for expansion into non-bank activities.

In the 1960's, many banking organizations began to take advantage of the fact that unit-bank holding companies (that is, holding companies owning only one bank) were not covered by the 1956 Act. By 1970, over 700 unit-bank holding companies were engaged in a broad spectrum of non-bank manufacturing, commercial, and financial activities.<sup>45</sup> In that year, Congress plugged the one-bank holding company loophole but loosened other restrictions by authorizing all bank holding companies to engage in activities that are "so closely related to banking or managing or controlling banks as to be a proper incident thereto."<sup>46</sup> The Federal Reserve Board has since promulgated a list of eighteen permissible non-bank activities.<sup>47</sup> The Board has specifically ruled, however, that certain activities—including life insurance underwriting (unrelated to lending), operating a savings and loan, and real estate brokerage, development, and management—are not "closely related to banking."<sup>48</sup> In 1982, Congress expressly prohibited bank holding companies from engaging in insurance

lending activity. See Goodreau, *S & L Use of New Powers: Consumer and Commercial Loan Expansion*, ECON. REV. FED. RESERVE BANK ATLANTA, Dec. 1984, at 15; Eisenbeis, *New Investment Powers for S & L's: Diversification or Specialization?*, ECON. REV. FED. RESERVE BANK ATLANTA, July 1983, at 53.

43. See Savage, *A History of the Bank Holding Company Movement 1900-78*, in *THE BANK HOLDING COMPANY MOVEMENT TO 1978: A COMPENDIUM* 21, 38 (1978) [hereinafter cited as *THE BANK HOLDING COMPANY MOVEMENT*].

44. Bank Holding Company Act of 1956, Pub. L. No. 84-511, 70 Stat. 133 (codified as amended at 12 U.S.C. § 1841 (1982)).

45. There were approximately 1300 unit-bank holding companies registered at the end of 1970, 715 of which were engaged in one or more activities categorized as not closely related to banking. See *One-Bank Holding Companies Before the 1970 Amendments*, 58 FED. RESERVE BULL. 999, 1001 (1972).

46. 12 U.S.C. § 1843(c)(8) (1982). See also Bank Holding Company Act Amendments of 1970, Pub. L. No. 91-607, 84 Stat. 1760 (amending 12 U.S.C. §§ 1841-49). Significantly, the Amendments did not include a provision contained in the original House bill, H.R. 6778, 91st Cong., 1st Sess. (1969), which specified a set of permissible non-bank activities. See H.R. REP. 387, 91st Cong., 1st Sess. (1969). Instead, Congress delegated that task to the Federal Reserve Board.

47. The permissible activities include mortgage banking and financing activities, trust activities, real and personal property leasing, data processing and bookkeeping services for bank-related enterprises, credit life insurance underwriting, courier services, and certain management consulting services. 12 C.F.R. § 225.25 (1985).

48. 12 C.F.R. § 225.126 (1985).

brokerage.<sup>49</sup> The holding company format is now the dominant form of organization for commercial bank enterprises.<sup>50</sup>

Recently, certain non-financial corporations have discovered that they could circumvent the various restrictions on non-bank affiliations with commercial banks by opening depository institutions that do not make commercial loans.<sup>51</sup> By late 1983, at least fifty-nine non-bank organizations had opened or applied for permission to operate such "non-bank banks."<sup>52</sup> A federal appellate court decision in 1985, however, has clouded the legal status of the non-bank banks.<sup>53</sup>

Multi-thrift holding companies (that is, holding companies owning more than one thrift) are governed by the Savings and Loan Holding Company Amendments of 1967,<sup>54</sup> which contain restrictions on investments in non-thrift activities similar to those of the Bank Holding Company Act. Unlike the Bank Holding Company Act, however, the thrift holding company legislation has never been amended to include unit-thrift holding companies. It is through this exemption that such non-financial enterprises as Parker Pen Company, J.C. Penney, Sears, and National Steel have been able to purchase thrift institutions.<sup>55</sup>

#### D. *Recent Proposals For Reform*

The gradual blurring of the formerly rigid distinctions between depository and non-depository institutions has prompted numerous proposals for reshaping the legal framework governing financial institutions. In 1983, the Reagan Administration proposed its Financial Institutions Deregulation Act to allow depository institution holding companies, but not the insured institutions themselves, to engage in the underwriting and brokerage of real estate, insurance, and securities other than corporate

49. Garn-St. Germain Act, Title VI, 12 U.S.C. §§ 1536-38 (1982).

50. Banks owned by holding companies held 85.9% of all commercial bank assets in 1983. STATISTICAL ABSTRACT, *supra* note 21, at 493.

51. Under the Bank Holding Company Act, a "bank" must both accept demand deposits and extend commercial loans. Bank Holding Company Act § 101, 12 U.S.C. § 1841(c) (1982). By stripping an institution of one of these activities, an organization can escape the definition of bank under the Act, and therefore can expand into non-bank activities and across state lines. For a discussion of the emergence of non-bank banks, see Note, *supra* note 10, at 653-55.

52. See King, *Nonbank Banks: What Next?*, ECON. REV. FED. RESERVE BANK ATLANTA, May 1985, at 40, 41.

53. Florida Dep't of Banking v. Board of Governors of the Federal Reserve Board, 760 F.2d 1135 (11th Cir. 1985), *appeal pending* (reversing the Federal Reserve Board's approval of a non-bank operated by U.S. Trust Co. in Florida).

54. Savings and Loan Company Amendments of 1967, Pub. L. No. 90-255, 82 Stat. 5 (1968) (codified at 12 U.S.C. § 1730a (1982)). These holding companies are limited to engaging in certain activities related to their thrift subsidiaries, insurance agency, and such other activities as the FSLIC may approve as being a "proper incident to the operations of insured (thrift) institutions, and not detrimental to the interests of savings account holders therein." 12 U.S.C. § 1730a(c)(2)(f) (1982).

55. See *infra* Table 3.



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debt and equity instruments.<sup>56</sup> After considering a number of less expansive deregulation proposals, the Senate passed a deregulation bill in late 1984 that, among other things, would have authorized subsidiaries of bank holding companies to engage in discount securities brokerage and the underwriting of revenue bonds, mortgage-backed securities, and commercial paper; expanded the authority of the Federal Reserve Board to define permissible non-bank activities; allowed bank holding companies to acquire thrift institutions; and prohibited the so-called “non-bank banks” after a grandfather date of July 1, 1983.<sup>57</sup> The House, however, was unable to agree on a product deregulation bill in 1984.

Two federal regulatory agencies have stepped into the vacuum left by Congressional inaction by promulgating regulations designed to limit activity diversification by commercial banks and thrifts. The more restrictive course has been adopted by the FHLBB, which in early 1985 adopted a controversial rule designed to limit direct investments by state-chartered thrifts.<sup>58</sup> Specifically, the Board announced that it would automatically commence a “supervisory review” of any state-chartered thrift that has the greater of ten percent of its assets or twice its net worth devoted to direct investments in real estate, securities, or other non-loan assets.<sup>59</sup> The FDIC has adopted a more restrained approach. In late 1984, it issued a rule permitting the banks it directly regulates and supervises—state-chartered banks that are not members of the Federal Reserve System—to engage in both the underwriting and brokerage of securities, provided they do so through separate corporate subsidiaries.<sup>60</sup> Shortly thereafter, the FDIC proposed another rule that would require all federally insured banks to establish separate subsidiaries for real estate development and insurance underwriting activities, to the extent that those activities are permitted under relevant state or federal law.<sup>61</sup>

Despite such efforts, the distinctions between banks and non-bank financial institutions continue to blur.<sup>62</sup> Careful consideration of the benefits that can be derived from diversification and the likely patterns of

56. H.R. 3537, *supra* note 2, at § 11.

57. S. 2851, *supra* note 3, at §§ 103-05.

58. 50 Fed. Reg. 6912 (1985) (to be codified at 12 C.F.R. pt. 563).

59. As discussed *infra* at text accompanying notes 121-26, the Board adopted the direct investment limitation because of evidence demonstrating that thrifts with significant proportions of direct investment have displayed a greater risk in their asset and liability structures. The direct investment rules will automatically terminate on January 1, 1987, in the absence of further Board action. 50 Fed. Reg. at 6913.

60. 49 Fed. Reg. 46,709 (1984) (codified at 12 C.F.R. pt. 337).

61. 49 Fed. Reg. 48,552 (1984) (to be codified at 12 C.F.R. pt. 332). This proposal was later revised. 50 Fed. Reg. 23,963 (1985). For an extended discussion of the separate subsidiary requirement, see discussion *infra* text accompanying notes 164-83.

62. See Hertzberg, *Banks Find They Don't Need Congress to Help Them Expand Into Other Fields*, Wall St. J., Dec. 31, 1984, at 5, col. 2.

risk-seeking by banks in a deregulated environment is needed in order to construct a rational federal policy toward product diversification.

## II. The Potential For Risk-Reduction through Financial Product Diversification

Financial product deregulation would widen investment opportunities for both depository institutions and financial organizations seeking to acquire them. Modern portfolio theory suggests that these additional investment outlets would open opportunities for depository institutions to diversify their activities in ways that reduce overall risk.<sup>63</sup> The combination of banking with other activities will reduce risk if the returns of those activities are less volatile than or inversely related to that of banking.<sup>64</sup> This reduction in risk would yield important social benefits. While shareholders can offset the risks from their stockholdings in a firm by diversifying their own asset portfolios,<sup>65</sup> the federal insurance agencies do not have this luxury. Their "portfolios" are restricted to a single activity, commercial banks in the case of the FDIC and thrifts in the case of the FSLIC.<sup>66</sup> Accordingly, activity diversification by depository institutions that reduces the risks faced by the insurance agencies is, or very much should be, in the public interest.<sup>67</sup>

63. See generally E. FAMA, *FOUNDATIONS OF FINANCE* (1976); W. SHARPE, *PORTFOLIO THEORY AND CAPITAL MARKETS* (1970); H. MARKOWITZ, *PORTFOLIO SELECTION: EFFICIENT DIVERSIFICATION OF INVESTMENTS* (1959).

64. Even if the patterns of return on two activities are positively related but not identical, their combination can produce a lower level of risk. If two securities' rates of return are not too highly correlated, i.e. the correlation coefficient is less than the ratio of the smaller standard deviation to the larger, a combination of the two securities will produce a smaller standard deviation of return than either security taken alone. See W. SHARPE, *supra* note 63, at 48.

65. See R. BREALEY & S. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 706-07 (2d ed. 1984). Shareholders' abilities to diversify their own portfolios are nevertheless limited by the costs of assembling them. In addition, those shareholders who want to hold only a few stocks at a time gain from efficient diversification by the firms whose shares they hold.

66. As shown in Figure 1, discussed *infra* text accompanying notes 79-81, the risks associated with portfolios of commercial banking or thrift activities alone are greater than the risks associated with efficiently diversified portfolios of financial activities.

67. Reducing the number or average size of bank failures would not only benefit the insurance agencies. Large investors—particularly those who purchase uninsured certificates of deposit (CDs)—have typically demanded interest premiums during periods of financial instability or crisis. See Carron, *Financial Crises: Recent Experience in the U.S. and International Markets*, 1982 BROOKINGS PAPERS ON ECON. ACTIVITY 395, 399; J. Merrick & A. Saunders, Bank Regulation and Monetary Policy 9-10 (Dec. 1985) (paper presented at the American Enterprise Institute's Conference on Monetary Policy in a Changing Environment, Feb. 1985). These premiums have triggered increases in interest rates on the broad spectrum of assets, which can discourage investment and consumption.

### A. *The Portfolio Theory Framework*

Features of portfolio theory can be used to estimate how much the typical depository institution could reduce its risk exposure if it were permitted to engage in a wider range of financial activities. One limited technique is to compare the earnings pattern of the banking industry with the earnings patterns for non-bank activities.<sup>68</sup> This can be done by comparing the coefficient of variation of earnings, a measure of risk, for banking and other activities.<sup>69</sup> Banking organizations that enter non-bank activities with lower coefficients of variation of earnings than their own would experience a reduction in risk. The same result could also be realized through the combination of banking with non-bank activities with offsetting fluctuations in earnings.<sup>70</sup> For example, a banking organization could lower its risk exposure through entry into insurance underwriting—an activity that considered in isolation displays greater risk than banking—if the earnings pattern of the bank was negatively correlated with that of insurance.

Pair-wise risk comparisons are suggestive, but hardly definitive, demonstrations of the potential opportunities for risk-reduction offered through financial product diversification. They illustrate that the earnings of some non-bank activities, considered one at a time, have been less volatile than and/or negatively correlated with those of commercial banks and savings and loans over some time period. They cannot, however, provide precise estimates of the magnitude of risk reduction that could be produced by financial product diversification, or take account of the fact that simultaneous combinations of banking with two or more different non-bank activities could offer even greater opportunities for risk-reduction.

Both these shortcomings can be addressed by estimating an efficient frontier of diversified portfolios which represents, for different levels of risk (measured by the standard deviation of earnings patterns), the maximum return that can be achieved by assembling different combinations of bank and non-bank activities in a single portfolio.<sup>71</sup> The potential for

68. Examining historic bank earnings may lead one to overstate the potential benefits of product diversification if the volatility of bank earnings was to some extent the result of geographic restrictions. See *infra* text accompanying note 109. This approach will attribute to product diversification risk reductions that could be achieved by relaxing geographic restraints.

69. The coefficient of variation of earnings measures the standard deviation of earnings over a time period divided by the mean earnings level over the period. Standard deviation is a measurement of risk which quantifies the likely divergence of a given outcome from the mean. See W. SHARPE, *supra* note 63, at 23-24.

70. The relationship between the fluctuation of returns on two activities is measured by the correlation coefficient. See W. SHARPE, *supra* note 63, at 37-41.

71. See H. MARKOWITZ, *supra* note 63, at 129-187 (describing the concept and method of derivation of efficient portfolios). See also *infra* note 79.

reducing risk through financial product diversification can be measured by the difference between the risk displayed by banking and that of the efficiently diversified portfolio of financial activities with the same level of earnings.<sup>72</sup>

The discussion below reports the results from applying each of these techniques. The results are based on after-tax earnings as a percentage of assets<sup>73</sup> reported annually by the Internal Revenue Service.<sup>74</sup> As in previous analyses of this type, the approach in this section respects the distinction between banking and commerce by concentrating on diversification by depository organizations only among financial and real estate activities.<sup>75</sup>

72. Alternatively, the potential risk-reduction can be measured at the same level of risk, by the difference in earnings between banks and the efficiently diversified portfolio.

The portfolio theory framework treats the diversified financial organization as if it were a passively managed mutual fund containing the securities of each of the constituent activities. This is an unrealistically restrictive assumption to the degree that the holding companies and their banks are operated as integrated entities, as some evidence suggests is the case. See Rhoades, *Interstate Banking and Product Line Expansion: Implications from Available Evidence*, 18 LOY. L.A.L. REV. 1115, 1140-45 (1985); Eisenbeis, *How Should Bank Holding Companies Be Regulated?*, ECON. REV. FED. RESERVE BANK ATLANTA, Jan. 1983, at 42, 45; Mayne, *Bank Holding Company Characteristics and the Upstreaming of Bank Funds*, 12 J. MONEY, CREDIT & BANKING 209 (1980); Rose, *Bank Holding Companies as Operational Single Entities*, in THE BANK HOLDING COMPANY MOVEMENT, *supra* note 43, at 69-70. In particular, the passive mutual fund assumption leads to an understatement of the benefits of activity diversification if holding companies are able to achieve synergies or to realize economies of scope. An often-cited justification for financial product deregulation is that it would permit diversified financial organizations to offer a range of services at lower per unit costs than if the services were offered separately. See ECONOMIC REPORT OF THE PRESIDENT, *supra* note 6, at 159-60. In contrast, the benefits of diversification will be overstated by the efficient frontier analysis to the extent that the combination of bank and non-bank activities produces diseconomies, as certain studies have found for bank holding company entry into mortgage banking, personal finance, and equipment leasing. See *infra* text accompanying note 97.

73. Rates of return on equity are not used because they can be distorted by leverage at the holding company level and because non-bank subsidiaries of holding companies may be capitalized very differently. See Wall & Eisenbeis, *Risk Considerations in Deregulatory Bank Activities*, ECON. REV. FED. RESERVE BANK ATLANTA, May 1984, at 6, 14.

The results are based on industry-wide profit data, which necessarily conceals intra-industry variations among firms. The use of industry-wide profit data is likely to bias downward the estimated risks of each of the individual activities. See J. Boyd & P. Pithyachariyakul, *Bank Holding Company Diversification Into Nonbank Lines of Business* 5 (1982) (on file with the *Yale Journal on Regulation*). This does not necessarily negate the fact that significant reductions in risk exposure may be realized through activity diversification. A recent study suggests that even greater gains from diversification are estimated when firm-specific rather than industry-wide data are used. Stover, *A Reexamination of Bank Holding Company Acquisitions*, 13 J. BANK RESEARCH 101 (1982).

74. Although the IRS profit data do not provide all the details that could be desired (not all categories of insurance underwriting are broken out, the data for the securities industry do not distinguish between underwriting and brokerage functions, and profit information for real estate agencies is not separately listed), the IRS reports provide the most complete set of comparable industry-wide profitability data available for a wide range of financial activities.

75. See *infra* studies cited at notes 76 and 85. As it turns out, this limitation appears not to have a significant impact on the results, since the estimated efficient portfolios contain relatively few non-bank activities.

### B. *Pair-Wise Risk Comparisons*

The results from the pair-wise risk comparisons made by this author and in prior studies are shown in Table 1.<sup>76</sup> This table reports coefficients of variation for earnings in commercial banking, savings and loan, and a range of non-bank activities. It also reports correlation coefficients between earnings patterns for commercial banking and each of the other activities.<sup>77</sup> The coefficient of variation for commercial banking is higher than that reported for several of the activities listed in the table and commercial bank earnings are negatively correlated with those of at least several other activities in each of the periods shown. Taken as a whole, the estimates in Table 1 clearly illustrate that in each of the time periods examined the earnings of the typical commercial banking organization could have been made more stable by permitting the organization to engage in savings and loan, or any one of a number of non-bank activities.

The results shown in Table 1, however, display significant sensitivity to the time period examined. For example, examining only the data between 1962 and 1972, one would conclude both that many non-bank activities are less risky than commercial banking and that the earnings of most non-bank activities are negatively correlated with those for commercial banks. In contrast, the data for 1973 through 1981 demonstrate that few activities had earnings that were less variable than or negatively correlated with the earnings of commercial banking. The data for the entire 1962 through 1981 period yield results similar to those for 1973 through 1981, but notably none of the correlations between commercial banking and non-bank activities is statistically significant.<sup>78</sup> Thus, although this analysis suggests that opportunities for beneficial diversification exist, the evidence is inconclusive.

### C. *Estimating Efficient Portfolios of Financial Activities*

The estimated risks and returns of the financial activities used in constructing Table 1 can also be used to estimate an efficient frontier of

76. The prior studies include: Wall & Eisenbeis, *supra* note 73; Heggestad, *Riskiness of Investments in Nonbank Activities by Bank Holding Companies*, 27 J. ECON. & BUS. 219 (1974-1975); Johnson & Meinster, *Bank Holding Companies: Diversification Opportunities in Nonbank Activities*, 1 E. ECON. J. 316 (1974).

The time periods for the author's calculations illustrated in Table 1 cover 1962 to 1981 (the latest year for which data were available). Due to changes in methods of reporting, estimates are not available for all of the activities listed in Table 1 in certain time periods (1953-67, 1954-69, and 1962-72). The sub-periods (1962-72 and 1973-81) were chosen in order to test the stability of the various estimates over time.

77. See *supra* note 70.

78. Statistical significance is measured at the 95% confidence level.

TABLE 1  
Coefficients of Variation (CV) and Correlation Coefficients with Respect to Banking (CR)  
of After Tax Earnings as a Percent of Assets for Selected Industries

Activity	Heggestad (1953-67)		Johnson/Meinster (1954-69)		Wall/Eisenbeis (1970-80) <sup>c</sup>		Litan (1962-72)		Litan (1973-81)		Litan (1962-81)	
	CV	CR	CV	CR	CV	CR	CV	CR	CV	CR	CV	CR
Banks (except mutual savings and holding companies)	.25	N.A.	.33	N.A.	.21	N.A.	.23	N.A.	.22	N.A.	.23	N.A.
Bank Holding Companies	—	—	—	—	.20	.79	—	—	.21 <sup>a</sup>	.64 <sup>a</sup>	.21 <sup>a</sup>	.64 <sup>a*</sup>
Savings and Loan Associations	—	—	—	—	.34	-.46	.33	-.72*	.64	-.23	.50	-.39
Personal Credit Agencies	.11	.31	.58	.65	.33	-.70	.13	.65*	.54	-.46	.37	.01
Business Credit Agencies	.27	.60	.44	.48	.25	.77	.10	.50	.45	.41	.30	.35
Security Agencies	—	—	—	—	.35	-.40	.24	-.37	.26	.11	.36	-.08
Security brokers, dealers, flotation companies	—	—	—	—	.41	-.42	—	—	.32	.07	.44 <sup>b</sup>	-.09 <sup>b</sup>
Commodity contracts, brokers, dealers, security and commodity exchanges	—	—	—	—	.21	.66	—	—	.29	.52	.28 <sup>b</sup>	.37 <sup>b</sup>
Insurance Underwriting	—	—	—	—	.18	.41	.18	-.79*	.26	.29	.24	-.21
Life Insurance	—	—	—	—	.10	-.40	.13	-.87*	.32	-.03	.26	-.27
Mutual Insurance	—	—	—	—	.49	.31	.59	-.55	.41	.45	.52	-.21
Other Insurance	—	—	—	—	.43	.45	.18	-.46	.42	.43	.31	.09
Insurance Agents	.12	-.38	.15	-.42	.19	.70	.10	-.62*	.22	.25	.17	-.06
Real Estate	—	—	—	—	.22	.78	.05	-.69*	.21	.82*	.22	.24
Operators, lessors of buildings	.03	-.46	.18	.09	.20	.81	.04	-.53	.20	.89*	.23	.27
Lessors of railroad property and other	.38	-.56	1.02	.09	.12	-.61	.24	-.55	.10	-.25	.20	-.44
Subdividers and developers	.14	.36	.51	.29	.31	.75	.06	-.01	.31	.64	.24	.34
Agents, brokers and managers	.17	-.76	.31	-.63	—	—	—	—	—	—	—	—

Source: Articles cited in text and author's own calculations using data from the INTERNAL REVENUE SERVICE, CORPORATE SOURCE BOOK OF INCOME.

<sup>a</sup> Data available only for 1974-81.

<sup>b</sup> Data available only for 1965-81.

<sup>c</sup> Correlation coefficients for Wall/Eisenbeis computed from reported coefficients of determination.

\*Statistically significant at 95% confidence level.

N.A. = not applicable.

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diversified portfolios of financial activities. One estimated frontier based on 1965 through 1981 data is illustrated in Figure 1. The proportions of the various bank and non-bank activities in the efficient portfolios for both the 1965 through 1981 and 1973 through 1981 periods are reported in Table 2.<sup>79</sup>

Unlike the results of the pair-wise risk comparisons, which are generally highly sensitive to the time periods examined, the fundamental conclusions that can be drawn from the portfolio analysis are surprisingly robust. Significantly, the relative risk characteristics of commercial banking and the various other activities are largely the same in both the shorter and longer time periods.<sup>80</sup> Commercial banking is the least risky and least rewarding activity; at the other extreme, insurance agency is the riskiest and highest earning activity.<sup>81</sup>

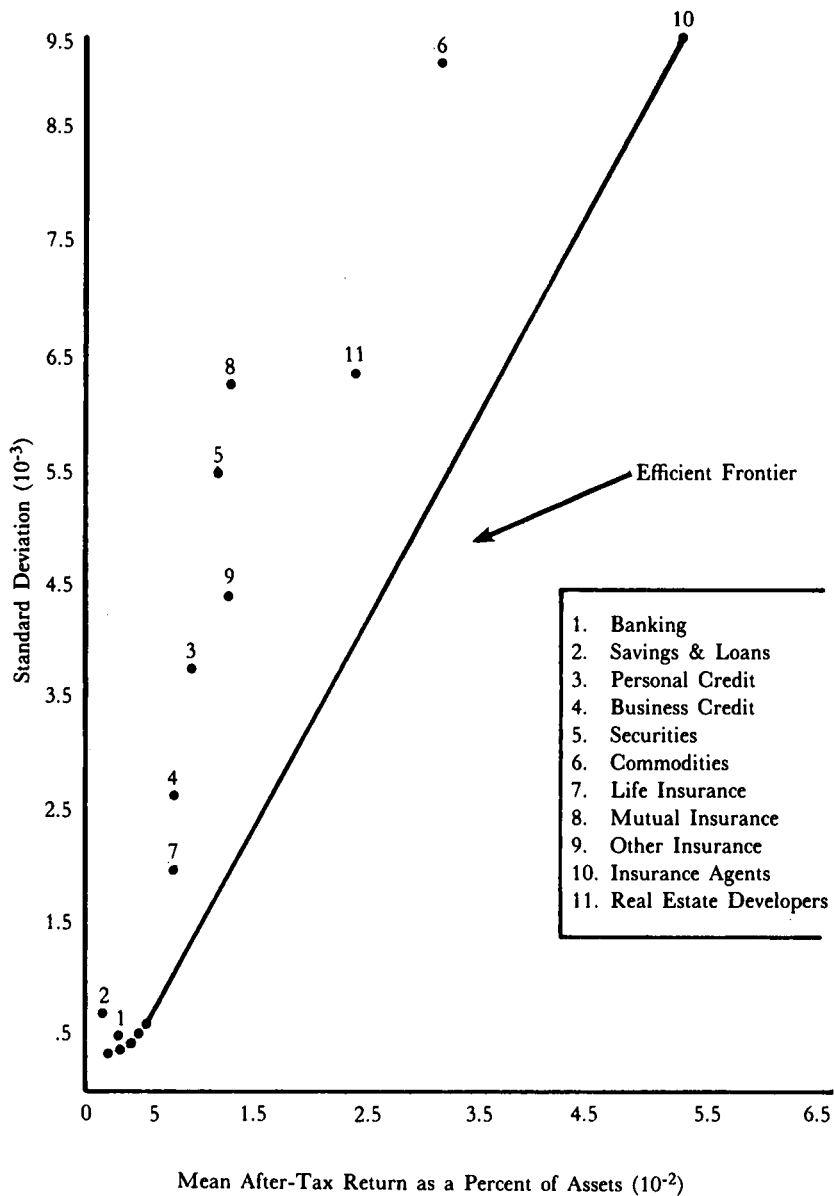
More importantly, the estimated efficient portfolios in both time periods contain significant proportions of savings and loan and non-bank activities, even at the same mean return that was earned by commercial banks alone in each of the time periods. For example, the efficient portfolio that would have matched the after-tax return actually earned by commercial banks over the 1965 through 1981 period (0.284% of assets per year) would have had 42.2% of total assets invested in savings and loan and non-bank activities; the corresponding proportion for 1973 through 1981 would have been 23.7% of assets. However, the proportion of the portfolio optimally invested in non-bank activities (that is, excluding savings and loan activities) is below 20% at most levels of portfolio earnings. In both time periods the optimal proportion of assets invested in commercial banking increases as the level of portfolio earnings increases up to 0.75% of assets, although the proportion of assets invested in commercial banking

79. The computational procedure for estimating the portfolios along the efficient frontier was drawn from E. FAMA, *supra* note 63, at 257-70. The 1965-81 period was chosen (rather than 1962-81) because profit data for securities brokerage were not reported by the IRS before 1965. In addition, efficient frontiers could only be calculated for a maximum of 11 activities, due to programming limitations. Accordingly, several of the less important non-bank activities for which coefficients of variation and correlation coefficients are shown in Table 1 and for which data for the 1962-81 period were available (operating and leasing of buildings, railroad leasing, and other insurance) were excluded from the efficient portfolio computations. This probably had little effect on the analysis since, as the results in Table 2 reflect, the estimated efficient frontiers generally contained less than half of the 11 available activities.

80. The mean standard deviation positions of selected financial activities over the 1973-81 period, as computed by the author, were very similar to those shown for the 1965-81 period in Figure 1.

81. The relatively low coefficient of variation of insurance agency across all time periods shown in Table 1 conceals the fact that insurance agency, measured by volatility of earnings alone, appears to display considerable risk.

FIGURE 1  
Risk and Returns of Selected  
Financial Activities  
(1965-81)



Source: Data from the INTERNAL REVENUE SERVICE, CORPORATE SOURCE BOOK OF INCOME; computations by the author.



TABLE 2  
Composition of Estimated Efficient Portfolios

Portfolio Characteristics:		1973-81								1965-81							
		.25	.294*	.30	.40	.50	.75	1.5	2.0	.25	.284*	.30	.40	.50	.75	1.5	2.0
Mean After Tax Returns (As a Percentage of Assets)		.00047	.00053	.00054	.00070	.00086	.00129	.00268	.00363	.00037	.00039	.00041	.00054	.00063	.00104	.00226	.00311
Standard Deviation																	
Portfolio Composition (%)																	
Banking		.698	.763	.771	.845	.874	.887	.679	.541	.593	.578	.588	.805	.730	.909	.764	.666
Savings & Loans		.302	.186	.171	.039	—	—	—	—	.390	.389	.361	—	—	—	—	—
Personal Credit		—	—	—	—	—	—	—	—	—	—	—	—	.048	—	—	—
Business Credit		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Securities		—	—	—	—	—	—	—	—	.016	.017	.019	.031	.011	—	—	—
Commodities		—	—	—	—	—	—	—	—	.001	.010	.011	—	.019	—	—	—
Life Insurance		—	.051	.058	.102	.086	—	—	—	—	.002	.017	.158	.156	—	—	—
Mutual Insurance		—	—	—	—	—	—	—	—	—	.003	.004	.006	.011	—	—	—
Other Insurance		—	—	—	—	—	—	—	—	—	—	—	—	.025	—	—	—
Insurance Agents		—	—	—	.009	.025	.073	.173	.239	—	—	—	—	—	.091	.236	.334
Real Estate Developers		—	—	—	.006	.015	.041	.148	.220	—	—	—	—	—	—	—	—

Source: Underlying data from the INTERNAL REVENUE SERVICE, CORPORATE SOURCE BOOK OF INCOME; computations by author.

\*Mean return for banking alone. The standard deviation for banking alone is .00064 for the 1973-81 period and .00056 for the 1965-81 period.

and savings and loans combined generally declines as portfolio earnings increase.

Notably, none of the efficient portfolios contain all non-bank activities. Indeed, for the 1973 through 1981 period, the only non-bank activities to enter the efficient portfolios are life insurance underwriting, insurance agency, and real estate development. Securities and commodities brokerage, as well as certain of the other non-bank activities, enter the estimated efficient portfolio for the 1965 through 1981 period but only play a minor role. Taken as a whole, these findings suggest that most of the gains from efficient risk diversification may be realized with only a limited number of non-bank activities and that the idealized financial supermarket offering all financial services may not be the most efficiently diversified.

Perhaps the most consistent of the portfolio composition results over the two time periods is that savings and loans represent a significant investment in the portfolios at earnings levels near the mean earnings of commercial banking alone and that the only non-bank activities to enter the optimal portfolios at the higher earnings levels (0.75% of assets and above) are insurance agency and real estate.<sup>82</sup> At first impression, the strong representation of savings and loans is somewhat surprising, given that until 1981 that industry had earnings that were lower and more variable than those of commercial banks.<sup>83</sup> This apparent paradox is explained by the strong negative correlation between the earnings of commercial banks and those of savings and loans. Nevertheless, in light of the poor performance of the thrift industry throughout the 1980's, it is likely that thrift activities would not assume the same level of importance in a diversified portfolio estimated with more recent data.<sup>84</sup>

Finally, the results shown in Table 2 suggest that the ability to diversify into other activities would have offered the typical commercial bank significant opportunities for risk-reduction over both time periods.<sup>85</sup> The

82. At the higher earnings levels, however, the standard deviation of the efficient portfolio is higher than the standard deviation of commercial banking on a stand-alone basis. If banks were permitted to diversify into such high earning portfolios, the federal insurance agencies would bear increased risks.

83. See Figure 1.

84. The estimated gains from diversification presented here rest solely on historical data through 1981 and thus illustrate only the potential benefits of diversification that could have been realized in the sample time periods examined, ignoring the decline in earnings suffered by banks and thrifts in recent years. This qualification, however, is not likely to disturb the qualitative conclusion that significant opportunities for risk-reduction may be available if existing restrictions against financial product expansion were lifted. As argued earlier, portfolio theory suggests that at least some gains may be realized through activity diversification. To the extent that the addition of more recent data would increase the variability of the earnings patterns of banks and thrifts, it might even lead to increased estimates of the gains from financial product diversification.

85. The foregoing results are broadly consistent with the findings of earlier studies of optimal portfolios of financial activities, based upon both accounting and market value data. See, e.g., Stover,

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average commercial bank could have reduced the volatility of its earnings, without changing its mean earnings, approximately fifteen to thirty percent if financial product-line barriers had not been in place.<sup>86</sup> The estimated benefits of activity diversification would have been even greater for thrift institutions. The average thrift could have doubled its earnings without increasing its exposure to risk if allowed to diversify its activities—in particular, to combine with or engage in commercial banking activities.<sup>87</sup> The precise magnitude of the risk reduction achievable through financial activity diversification is not as important, however, as the fact that such diversification need not, in principle, produce additional risks—either to financial organizations or the federal agencies that insure them.

### III. The Dangers of Financial Product Diversification

Unfortunately, financial product deregulation may not result in actual risk reduction for two reasons. First, some depository institutions or firms that would be allowed to acquire them may be guided by risk-seeking managers and shareholders, who could use the investment opportunities

*supra* note 73, at 106 (activity diversification over the 1959-68 period could have enhanced the market value of the typical bank holding company); Meinster & Johnson, *Bank Holding Company Diversification and the Risk of Capital Impairment*, 10 BELL J. ECON. 683, 688-92 (1979) (based on cash flow, an efficiently diversified bank holding company would have displayed lower risk than commercial banking alone); Eisemann, *Diversification and the Congeneric Bank Holding Company*, 7 J. BANK RESEARCH 68, 73 (1976) (based on stock price data banking organizations could have more than doubled their expected returns at the same level of risk between 1961 and 1968 if they had entered a wide range of other financial activities); Johnson & Meinster, *supra* note 76, at 318-19 (based on IRS data, portfolios constructed of commercial banking and twelve non-bank activities generally showed lower risk over the 1954-69 time period than commercial banking alone).

Only one study did not find potentially significant benefits from financial product diversification. See Boyd, Hanweck & Pithyachariyakul, *Bank Holding Company Diversification*, in PROCEEDINGS OF CONFERENCE ON BANK STRUCTURE AND COMPETITION: FEDERAL RESERVE BOARD OF CHICAGO 105, 113 (1980) [hereinafter cited as Boyd]; J. Boyd and P. Pithyachariyakul, *supra* note 73, at 15 (updating original study). The conclusions reported in this study, however, are premised on the view that bank holding companies should be maximally risk-averse, in that they seek to minimize the risk of bankruptcy. By definition, this narrows the potential gains achievable through diversification. Even the results in this study show that holding company management that is slightly less risk averse—but still facing a risk of bankruptcy labeled “nil”—could almost double the return on assets by investing just short of 10% of the typical firm's assets in non-bank activities. See J. Boyd and P. Pithyachariyakul, *supra* note 73, at 23.

86. For example, over the 1965-81 period commercial banks alone averaged after-tax earnings equal to 0.284% of total assets, with a standard deviation of 0.00056. Table 2 indicates that the holding company with an efficient portfolio could have attained the same mean level of earnings with a standard deviation of only 0.00039, or a 30% improvement in terms of exposure to risk. A similar calculation for the 1973-81 period (at the mean earnings of 0.294% of assets for commercial banks alone) yields a reduction in risk of 15% (from a standard deviation of 0.00064 to 0.00054).

87. Based on the author's computations, thrift earnings averaged 0.15% of total assets in both periods, with standard deviations of 0.00074 over 1965-81 and 0.000942 over 1973-81. The results in Table 2 indicate that, if allowed to diversify its activities in these time periods, the average thrift organization could have earned 0.30% of total assets, with standard deviations of 0.00041 and 0.00054, respectively.

created by deregulation to take greater risks. Second, and perhaps more important, these institutions might abuse the opportunities provided by deregulation because of the "moral hazard" created by the present system of federal deposit insurance.<sup>88</sup> The second danger, in particular, deserves further elaboration.

#### A. *The Moral Hazard Problem*

A typical non-financial corporation whose debt is not guaranteed by the federal government will be required by the market to pay higher interest rates (that is, a risk premium) on its debt if the market determines that the funds are being used for risky activities. The added cost of funds might deter the corporation from undertaking risky investments. In contrast, an insured depository institution need not pay a risk premium on deposits when it invests the proceeds in risky high-earning investments. Under current law, premium assessments for deposit insurance are computed as a constant percentage of domestic deposits and thus do not vary with the risks of an institution's asset portfolio.<sup>89</sup> The marginal cost of federally insured funds is thus largely insensitive to the risks of the activities in which these funds are invested.<sup>90</sup> As the FDIC has stated in

88. The term "moral hazard" comes from the insurance literature; it describes the tendency of those who are insured to ignore the costs of their behavior once those costs are placed on the insurer. See generally Pauly, *The Economics of Moral Hazard: Comment*, 58 AM. ECON. REV. 531, 535 (1968). See also BLACK'S LAW DICTIONARY 647 (5th ed. 1979) (defining "moral hazard" as the risk in fire insurance of the destruction of the insured property, as measured by the character, interest and habits of the insured owner and the gain he would collect or loss he would suffer if the property was destroyed).

Numerous commentators have noted that the present system of deposit insurance creates a moral hazard. See, e.g., Benston, *Deposit Insurance and Bank Failures*, ECON. REV. FED. RESERVE BANK ATLANTA, Mar. 1983, at 4, 8-9 (deposit insurance creates an incentive for banks to invest depositors' funds in risky assets); Flannery, *Deposit Insurance Creates a Need for Bank Regulation*, BUS. REV. FED. RESERVE BANK PHILADELPHIA, Jan./Feb. 1982, at 17, 20 ("banks have a clear incentive to become more risky when FDIC begins promising to absorb their default losses"); Kareken & Wallace, *Deposit Insurance and Bank Regulation: A Partial-Equilibrium Exposition*, 51 J. BUS. 413, 414-15 (1978) (voicing the assumption that under a flat-rate insurance system banks will hold the riskiest portfolios they are allowed to hold); J. Merrick & A. Saunders, *supra* note 67, at 38 (using an option pricing analysis to show that flat-rate deposit insurance creates a "perverse risk incentive").

89. The annual assessment rate is one-twelfth of one percent of deposits. 12 U.S.C. § 1817(b) (1982). Insured banks receive a credit against the following year's premium based on the excess of the FDIC's premium income over losses and expenses. 12 U.S.C. § 1817(d) (1982).

90. Insured depositors certainly have little incentive to demand interest premiums on deposits of risk-seeking banks. The same is increasingly true for uninsured depositors (or those with account balances in excess of \$100,000), since federal policy has favored the merger of troubled banks and thrifts (particularly if they are large) with healthy institutions, which helps conserve the limited resources of the insurance agencies but provides implicit guarantees to all depositors whose accounts are assumed by the surviving entities. The FDIC arranged mergers in 129 of 164 commercial bank failures that occurred between 1980 and mid-November, 1984. During the same period, the FSLIC resolved 148 thrift failures, 137 of them through merger. See THE WORKING GROUP OF THE CABINET COUNCIL ON ECONOMIC AFFAIRS, RECOMMENDATIONS FOR CHANGE IN THE FEDERAL DEPOSIT INSURANCE SYSTEM 20 (1985) [hereinafter cited as THE WORKING GROUP]. The FDIC's

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seeking deposit insurance reform, this has “the effect of removing the considerations of bank risk from business decisions.”<sup>91</sup> If product or service expansion decisions are affected by such moral hazard incentives, deregulation could expose the insurance agencies to higher risk levels than would occur in a regulated environment.

It is true, of course, that banking organizations do not need additional product-line authority to take risks. Banking activities alone—notably, lending, off-balance sheet guarantees, and foreign exchange trading—provide more than ample outlets for risk-seeking banks to obtain higher, but more uncertain, rewards. Each of these activities, however, is subject to close federal and state supervision. Financial product deregulation, on the other hand, would offer depository institutions an opportunity to take added risks that could not be as closely supervised by bank regulators, who have limited resources and competence to examine and supervise non-bank activities.<sup>92</sup> Moreover, as discussed in Part II, many non-bank financial activities are more risky than banking, at least when considered in isolation. As a result, there is reason to be concerned that the risk-enhancing influence of deposit insurance could motivate some financial institutions in a deregulated environment to diversify their activities in a way that would increase the risks to which they and the federal deposit insurance agencies are exposed.

The moral hazard created by deposit insurance could theoretically be eliminated if each insured depository organization were required to pay premiums fully reflecting the risks assumed by the insurance agencies. In practice, however, a risk-adjusted system of assessing deposit insurance premiums is extremely difficult, if not impossible, to design.<sup>93</sup>

Managers of depository institutions still have reasons to avoid excessively risky undertakings. Bank and thrift managers lose their jobs if their institutions are liquidated by the federal insurance agencies and often are unable to keep their jobs in a forced merger with a healthier institution. Managers also face pressure from unsecured depositors, shareholders, and subordinated creditors who may suffer substantial losses as a result of a federal rescue.<sup>94</sup> The combination of these prospects—loss of employment

liquidation of the Penn Square National Bank in 1982 was a notable exception to the merger policy. Indeed, Penn Square is the only bank with assets exceeding \$100 million that the FDIC has liquidated. See Isaac, *The Role of Deposit Insurance in the Emerging Financial Services Industry*, 1 YALE J. ON REG. 195, 202-03 (1984).

91. FDIC, *DEPOSIT INSURANCE IN A CHANGING ENVIRONMENT* ch. 3, p. 1 (1983).

92. See *infra* text accompanying notes 155-58.

93. See *infra* text accompanying notes 159-63.

94. As seen in the case in 1984 when Continental Illinois Bank teetered on the brink of collapse, stockholders can suffer significant losses in a federal rescue. Under the FDIC's assistance plan, the stockholders of the Continental Illinois holding company retained only a 20% ownership interest in the restructured company. See FDIC ANN. REP. 5 (1984).

for management, loss of wealth by shareholders and subordinate debt-holders, and deposit runs despite the presence of federal guarantees—limits the risk-seeking incentives created by deposit insurance. Nevertheless, there is a consensus that the moral hazard remains, at least to some degree.

### *B. Likely Patterns of Diversification in a Deregulated Environment*

Admittedly, no crystal ball can predict whether and to what extent the dangers created by moral hazard would countervail the potential benefits of diversification opportunities if existing financial product-line barriers were removed. The best that can be done is to draw inferences from past behavior by depository institutions and by those non-depository firms most likely to engage in depository activities in a deregulated environment. As demonstrated below, there is evidence that such institutions have displayed risk-seeking behavior in the past, reinforcing concerns that product deregulation could threaten the safety of our banking and deposit insurance system in the absence of adequate protections.

#### *1. Bank Holding Companies*

One method for assessing the risks of financial product-line diversification is to examine the results of prior diversification efforts by bank holding companies under current law. Table 1 reports the volatility of bank holding company earnings compared to that of their banking subsidiaries. The data suggests that between 1974 and 1981, the typical bank holding company had diversified in a risk-reducing manner. During this period, the average coefficient of variation of earnings for bank holding companies (0.21) was slightly below that for commercial banking alone (0.22).

Similar information for a group of thirty-one large bank holding companies followed by Salomon Brothers between 1978 and 1983 demonstrates that on average these major holding companies experienced greater stability in their after-tax earnings (0.18) than their subsidiary banks (0.20).<sup>95</sup> These averages, however, conceal important variations among the individual bank holding companies. Sixteen of the thirty-one holding

95. The numbers in the text represent the weighted average (based on 1983 bank holding company assets) of the coefficient of variation of after tax earnings as a percent of assets between 1978 and 1983 for 31 bank holding companies and their subsidiary banks, respectively. The simple average of the coefficient of variation of the bank holding company earnings was 0.17 compared with 0.22 for the subsidiary banks. The computations by the author are based on data from SALOMON BROTHERS, A REVIEW OF BANK PERFORMANCE (1984); SALOMON BROTHERS, A REVIEW OF BANK PERFORMANCE (1979); SHESHENOFF & CO., BANKS (1984); SHESHENOFF & CO., 1,000 LARGEST U.S. BANKS (1983); SHESHENOFF & CO., BANKS (1982). Salomon Brothers regularly tracks 35 large bank holding companies, but only 31 companies were followed continuously from 1978 through 1983.

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companies in the Salomon Brothers sample reported a less stable earnings pattern than their subsidiary banks, indicating that many holding companies in recent years have not diversified in a risk-reducing fashion.<sup>96</sup>

Concerns about the ability or inclination of bank holding companies to offset the earnings fluctuations of their subsidiary banks are reinforced by the results of a number of other related studies. Several researchers, for example, have found that non-bank activities operated by holding companies—including mortgage banking, finance companies, and equipment leasing—have been less profitable than the same activities conducted by independent firms.<sup>97</sup> There is also evidence that the subsidiary banks of bank holding companies are operated in a riskier fashion than independent banks.<sup>98</sup>

Perhaps most significant are the findings of two studies which suggest that bank holding companies have diversified in a less than efficient manner. In Eisemann's study of bank holding company diversification in the 1960's—when unit-bank holding companies were permitted to engage in any kind of non-bank activity—holding companies were found to have entered data processing, which, as Eisemann's data showed, was mainly in high-risk efficient portfolios.<sup>99</sup> Holding companies also had entered mortgage banking which was not included in any of the estimated efficient portfolios.<sup>100</sup> A more recent study used firm-specific data collected by the Federal Reserve between 1971 and 1977 to conclude that bank holding companies had actually diversified in ways that raised their exposure to risk, as measured both by the standard deviation of holding company returns and the probability of holding company bankruptcy.<sup>101</sup>

96. The tendency of certain bank holding companies to assume greater risks than their subsidiary banks could be more prevalent in a deregulated environment. Without experience in the securities, insurance, and real estate industries, banking and thrift organizations could find their ventures into these industries to be less rewarding and more risky than they are to existing independent firms, thereby weakening both holding companies and their subsidiary depository institutions. The FHLBB, for example, has reported that direct investments by thrift institutions have performed poorly where their employees and officers had little expertise in direct investments. 50 Fed. Reg. 6891, 6901 (1985).

97. See Rhoades, *supra* note 72, at 1154 n.107 (citing several studies which compare operating performance of bank holding company subsidiaries with their independent counterparts).

98. Studies reviewed by the Federal Reserve staff in 1978 found that banks held by holding companies exhibited riskier portfolios (measured by loans extended as a percentage of assets) and had more leveraged capital positions than unaffiliated banks. See THE BANK HOLDING COMPANY MOVEMENT, *supra* note 43, at 6-7, 9-10.

99. Eisemann, *supra* note 85, at 75. In comments on an earlier draft of this article, Larry Wall, an economist at the Federal Reserve Bank of Atlanta, had speculated that the entry of the holding companies into data processing in Eisemann's sample may have resulted from the shifting of data processing operations by banks into a bank holding company subsidiary. If so, then such entry would have simply reflected corporate reorganization rather than an attempt at diversification in an effort to reduce risk.

100. Eisemann, *supra* note 85, at 72-75.

101. See J. Boyd & P. Pithyachariyakul, *supra* note 73, at 12-15. See also Boyd, *supra* note 85. Nevertheless, the extent of the risk-seeking behavior documented in this study was relatively

## 2. Commercial Banks

Recent behavior by commercial banks provides a second source of evidence for projecting whether banking organizations would diversify their activities in a risk-avoiding or risk-seeking manner. Unlike prior bank holding company diversification patterns, however, which shed light directly on how financial holding companies might diversify in a deregulated environment, previous bank performance produces only indirect evidence of what attitudes toward risk the parents of such companies might display in their activity diversification decisions.

Opponents of financial product deregulation argue that the recent volatility in the commercial banking industry<sup>102</sup> provides evidence that banks have taken unwarranted risks or acted irresponsibly and therefore cannot be trusted in a deregulated environment to diversify in a fashion consistent with the public interest.<sup>103</sup> As the following analysis demonstrates, however, it would be a mistake to attribute all of the problems recently encountered by the commercial banking industry to excessive risk-seeking behavior. The banking industry's financial difficulties in recent years may actually stem from unforeseeable exogenous forces, including the severity of the 1981 through 1982 recession, the fall in energy prices, the sharp increase in the U.S. budget deficit, and the steep rise of the dollar (which has severely dampened the competitiveness of American farmers). Given the fact that financial product diversification at least theoretically holds out the opportunity for reducing bank risk, the critical issue is whether and to what extent this poor performance has resulted from a deliberate willingness by banks to assume greater risks.

The evidence surveyed below suggests that several factors have contributed to the decline in bank performance. First, most recent bank failures have involved small banks located in states with restrictive branching laws, suggesting that their problems were not due so much to excessive

insubstantial. The typical holding company in the data sample earned greater than 40 basis points more on assets than the optimally diversified holding company, but still faced a risk of bankruptcy labeled "nil." J. Boyd & P. Pithyachariyakul, *supra* note 73 at 23.

102. The annual bank failure rate rarely entered double digits between 1946 and 1981, but jumped to 42 in 1982, increased to 79 in 1984, and proceeded at an annual pace of 104 through the first half of 1985, the highest level recorded since 1938. Bovenzi, *Current Trends*, ECON. OUTLOOK FED. DEPOSIT INS. CORP., June 1985, at 1, 2-3; FDIC ANN. REP. 13 (1984); FDIC ANN. REP. 6 (1982). The problems in the banking industry are also reflected in its recent profit performance. Between 1980 and 1984, after-tax earnings as a percentage of assets for all insured commercial banks fell from 0.79% to 0.66%. Over the same period, after-tax returns on equity dropped from 13.7% to 10.9%. Wall, *Profitability: SE Banks Fare Better than Most*, ECON. REV. FED. RESERVE BANK ATLANTA, June/July 1985, at 18, 21-22.

103. Berry, *Banks in Turmoil: Can the System Sustain Shocks?*, Wash. Post, May 27, 1984, at F1, col. 5, F4, col. 3 (Rep. St. Germain, Chairman of the House Banking Committee, noted that the problems bankers were experiencing in their traditional businesses provided a powerful reason for not relaxing the existing financial product-line restrictions).



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risk-taking as to legal restrictions on the geographic range of their banking activities.<sup>104</sup> Nevertheless, a significant portion of the increase in the bank failure rate over the last three years cannot be accounted for by general economic variables, indicating that an increase in risk-taking by some institutions may have contributed to the rising bank failure rate. Recent evidence also suggests that large banks have adopted more aggressive attitudes in their investment portfolios, suggesting that large banking organizations in particular might pursue risk-enhancing strategies in a deregulated environment.

### a. *Bank Failure Patterns*

Analysis of bank failure patterns suggests that the recent rise in bank failures has resulted from both unfavorable exogenous economic conditions and increased risk-seeking by banks themselves. Much of the increase in the bank failure rate in the 1980's can hardly be a surprise. The 1981 through 1982 recession was the deepest the nation has experienced since the Depression. Abnormally high levels of real interest rates and the exchange rate value of the dollar during the subsequent recovery widened disparities in performance between sectors that are sensitive to interest rates and trade and those that are not.<sup>105</sup> Small banks located in depressed geographic regions, or whose loan portfolios are heavily concentrated in depressed sectors, have been most susceptible to failure.<sup>106</sup>

The combined influence of these factors is nevertheless difficult to capture statistically. An estimated regression fitting the bank failure rate to

104. Based on the author's computations, 78% of all failures between 1982 and 1984 (128 of 165) were concentrated in states with branching restrictions (limited or unit), although these states held only 46% of all nationwide banking deposits. Significantly, 31 failures occurred in Texas and Illinois alone, both unit-banking states, and another 26 in Tennessee, which permits only limited branching. See FDIC ANN. REP. 46-49 (1984) (bank failures and deposits); FDIC ANN. REP. 54-55 (1983) (bank failures and deposits); *Bleak Year for U.S. Banking*, N.Y. Times, Dec. 27, 1984, at D1, col. 3, D19, col. 4 (bank failures and deposits); C. GOLEMBE & D. HOLLAND, *FEDERAL REGULATION OF BANKING* 1983-84 120 (1983) (type of branching permitted by state).

105. This is highlighted by the recent escalation in the failure rate of "agricultural banks"—or those with at least 25% of their portfolios invested in farm loans. Whereas agricultural banks accounted for 16% of all bank failures in 1983, by 1985 (through Sept. 18) that percentage had climbed to 54%. See Nejezchleb, *Current Trends*, ECON. OUTLOOK FED. DEPOSIT INS. CORP., Sept. 1985, at 1, 3.

106. A close examination of the rising bank failure rate over the last three years reveals that most banks that have failed have been small banks located in less populated areas and thus have had limited opportunities for diversification. Between January 1, 1982, and June 30, 1985, 179 of the 221 bank failures (81%) involved institutions with deposit bases of less than \$50 million. Only 14 of the failures (6%) involved banks with deposits of more than \$300 million. See Bovenzi, *supra* note 102, at 2-3.

The recent bank failure pattern is strikingly similar in character (but not in number) to the wave of failures that swept across the banking system in the 1920's. Of the bank failures that occurred between 1921 and 1929, 82% involved small, state-chartered institutions. S. KENNEDY, *THE BANKING CRISIS OF 1933* 205 (1973).

the current and lagged unemployment rate (a variable representing the cyclical nature of the economy) accounts for only 109 of the 169 bank failures that occurred between 1982 and 1984.<sup>107</sup> Similarly, a recent FDIC study of the causes of bank failures finds that, at best, only seventy percent of the variation in the quarterly bank failure rate between 1970 and June 1984 can be accounted for through multiple regression techniques alone.<sup>108</sup>

In short, there is evidence that much of the recent increase in the bank failure rate has been due to economic forces over which banks themselves have had little control and that the adverse effects of these forces have been felt primarily by institutions that were ill-equipped to diversify their risks, due to location and to restrictive state branching laws. These effects could have been mitigated if banks were permitted to diversify their risks over broader geographic regions, either through liberalized state branching rules or interstate banking.<sup>109</sup> At the same time, however, the failure rate over the 1982 through 1984 period appears somewhat higher than what might have been expected based on historical relationships with standard economic variables. This suggests, but does not prove, that some portion of the increase in the failure rate has been due to risk-taking by certain bank organizations.

#### b. *Recent Behavior of Large Banks*

A broader perspective on risk-taking by commercial banks can be obtained by examining the performance of larger banks and their parent companies, which in an environment of financial product deregulation would be the most likely institutions to diversify into non-bank activities. Time series data clearly suggest that large banks as a group have assumed

107. The estimated equation, based on data for the 1967-84 period, is as follows:

$$BF = -30.4 + 7.5 U - 7.0 U_1$$

(2.33)      (3.76)      (2.23)

$$R^2 = 0.45 \quad D.W. = 0.83$$

where BF = annual number of bank failures; U = current year unemployment rate; and  $U_1$  = last year's unemployment rate. Pre-1967 data were not used because the bank laws were tightened in 1966 when Congress passed the Financial Institutions Supervisory Act, Pub. L. No. 89-695, 80 Stat. 1028 (codified as amended in scattered sections of 12 U.S.C.), to curb unsafe and unsound banking practices that up to that time had been responsible for most bank failures following the end of World War II. Indeed, in virtually every bank failure between 1946-1965, one or more individuals had misused the assets or the money-raising potential of the banks for commercial gain. See *Recent Bank Failures—Why?*, MONTHLY REV. FED. RESERVE BANK RICHMOND, Sept. 1965, at 2, 4.

108. Bovenzi & Nejezchleb, *Recent Bank Failures: Why Are There So Many?*, ECON. OUTLOOK FED. DEPOSIT INS. CORP., Aug. 1984, at 6, 11-12. The best performing equation in this study regresses the failure rate against a variable measuring the corporate debt burden (lagged five quarters) and other cyclical variables, including the unemployment rate.

109. See Wallich *Suggests that Deregulation Could Promote Banking Industry Safety*, WASH. FIN. REP. (BNA) No. 23, at 940 (Dec. 10, 1984) (comments of Federal Reserve Board Governor Henry C. Wallich).

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greater risks in recent years. The loan-to-asset ratio for money center institutions (the largest thirteen banking organizations) climbed from 55.4% to 61.6% between 1980 and 1983 while remaining roughly constant for all banks.<sup>110</sup> Loans are riskier assets than marketable securities. The money center banks were also less concerned about liquidity than large regional banks over much of this period. Between the end of 1979 and 1983, the proportion of the total investment portfolio held in investments maturing in one year or less rose steadily for the regional banks followed by Salomon Brothers, from an average of 17.2% to 27.0%.<sup>111</sup> In contrast, the same ratio for money center banks fell from 21.3% to 18.7% between the end of 1979 and 1982, before rising to 21.8% at the end of 1983.<sup>112</sup>

Evidence of greater risk-taking by large banks can also be found in the composition of bank liabilities. Although all banks modestly increased their reliance on large uninsured time deposits between 1980 and 1983, the money center banks had a substantially larger proportion of their liabilities in these volatile deposits in 1983 than in 1980.<sup>113</sup> Similarly, large banks permitted their capital ratios to decline substantially during the 1970's and early 1980's until the federal regulatory agencies intervened to encourage large banks to increase their capital ratios.<sup>114</sup>

A somewhat different picture of risk-taking by large banks emerges, however, when the recent behavior of large banks is examined on a cross-sectional basis. Among the thirty-five large banking organizations followed by Salomon Brothers, the rate of asset growth between 1979 and 1983 was uncorrelated with average loan losses (as a percentage of total loans) and average equity (as a percentage of total assets), and negatively correlated with average loans and net purchased liabilities (both as a percentage of total assets).<sup>115</sup> These results refute the commonly-held view that the most rapidly growing institutions have achieved their growth by taking greater risks.

110. See Danker & McLaughlin, *Profitability of Insured Commercial Banks in 1983*, 70 FED. RESERVE BULL. 802, 813-17 (1984).

111. These findings are based on author's calculations using data reported in SALOMON BROTHERS, *A REVIEW OF BANK PERFORMANCE* (1984).

112. *Id.*

113. Between 1980 and 1983 the money center banks increased their reliance on large time deposits from 11.1% of assets to 13.3%, whereas all banks increased their reliance on large time deposits from 12.8% of assets to only the same 13.3% level. See Danker & McLaughlin, *supra* note 110, at 813-17.

114. See S. Talley, *Bank Capital Trends and Financing 2* (Feb. 1983) (Federal Reserve Staff Paper 122) (the ratio of equity to total assets for commercial banks with more than \$5 billion in assets declined from 5.34% in 1970 to 4.12% in 1981). See also *infra* note 141.

115. The negative coefficient on average loans as a percentage of assets is statistically significant at the 95% level when this variable is the only regressor. It is not statistically significant in a regression in which five independent variables are included in the regression. The results of the author's regression analysis of asset growth rates are reported below.

The mixed evidence from the recent performance of the commercial banking industry suggests that policymakers should approach financial product deregulation with caution. Based on recent trends in the industry, one cannot dismiss the possibility that, if allowed through deregulation to expose the deposit insurance system to greater risks through product diversification, some banking organizations would do so.

### 3. Thrift Institutions

Recent thrift institution behavior provides a third source of evidence for determining whether, and to what extent, depository institutions would diversify their activities in a risk-enhancing manner if existing financial product-line restrictions were relaxed. Since the financial difficulties experienced by the thrift industry have been substantially worse than those encountered by commercial banks, the potential for risk-taking by thrifts takes on special significance.<sup>116</sup> With so many insured thrifts literally having nothing to lose, the danger exists that many will endeavor to

Regressions of Asset Growth Rates (Dependent Variable) as a Function of Other Selected Performance Measures (Independent Variables) for 35 Major Banking Organizations, 1979-83

Equation #	Independent Variables*					Adjusted R <sup>2</sup>
	Regression Coefficients and (t-ratios)					
	Average Net Loan Losses as % of Total Loans	Average Equity as % of Assets	Average Loans as % of Assets	Average Net Pur- chased Liabilities as % of Assets	Average Return on Equity	
1	1.76 (0.32)	—	—	—	—	.003
2	—	0.31 (0.48)	—	—	—	.007
3	—	—	-0.36 (3.54)	—	—	.253
4	—	—	—	-0.18 (3.31)	—	.227
5	—	—	—	—	1.16 (4.67)	.380
6	2.85 (0.76)	-0.85 (1.41)	-0.14 (1.45)	-0.16 (2.53)	0.86 (3.53)	.541

Source: Data from SALOMON BROTHERS, *A REVIEW OF BANK PERFORMANCE* (1984); Computations by author.

\* All independent variables are averages over 1979-83.

116. Between 1980 and 1984, there were more than 500 thrift institution failures. Measured by the Regulatory Accounting Principles (RAP) used by the federal regulatory agencies, 71 thrifts had negative net worth positions at the end of 1984. By the more realistic Generally Accepted Accounting Principles (GAAP), the number with negative net worth positions stood at 434. For the thrift industry as a whole, net worth as a percentage of total assets calculated according to GAAP was only 2.87% in 1984, below the minimum net worth standard of 3%, *see infra* note 141, and far below the 5.26% level that prevailed in 1980. Measured by market value, the industry's net worth as a percentage of total assets was a negative 3.99% in 1984, a level substantially higher than the negative 17.32% recorded in 1981. *See* J. Barth, R. Brumbaugh, Jr., D. Sauerhaft & G. Wang, *Thrift Institution Failures: Causes and Policy Issues 3-4* (May 1985) (paper presented to the Conference on Bank Structure and Competition, Fed. Reserve Bank of Chicago) [hereinafter cited as J. Barth].

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climb back to financial health by assuming greater risks if diversification is permitted.

Extremely rapid asset growth by many thrifts provides a strong basis for this concern. In 1984, thrift institutions with approximately one-seventh of the industry's assets were growing at a rate that resulted in a doubling of their size in two years or less.<sup>117</sup> Although some growth of thrift assets and deposits was necessary to correct the effects of the maturity mismatch that burdened the industry in the early 1980's,<sup>118</sup> this extremely rapid expansion severely diluted equity-to-asset ratios.<sup>119</sup> The poor capital position of the industry renders the FSLIC insurance fund particularly vulnerable to risk-taking.<sup>120</sup>

The FHLBB attempted in 1985 to restrain this growth by raising thrift capital requirements and limiting direct investments.<sup>121</sup> The evidence cited by the FHLBB in adopting its direct investment rule is consistent with the findings presented earlier that certain bank holding companies in diversifying their activities have increased, rather than diminished, their exposure to risk. Among other things, the FHLBB reported that thrift institutions with significant direct investments in service corporations or real estate have grown more rapidly, have had asset portfolios with

117. See E. Hemel, Statement of the Director of the Office of Policy and Economic Research of the Federal Home Loan Bank Board Before the Subcomm. on Financial Institutions Supervision, Regulation and Insurance of the House Comm. on Banking, Finance and Urban Affairs 3 (Sept. 11, 1985). Much of the rapid growth among thrifts has been achieved through increased reliance on potentially volatile purchased liabilities. In 1976, large uninsured CDs held by thrifts amounted to just \$6.8 billion, representing 2% of all thrift deposits. By September 1984, CDs held by thrifts had jumped to \$109 billion, or 15% of total thrift deposits. THE WORKING GROUP, *supra* note 90, at 12. Significantly, through the first half of 1984, large time deposits and repurchase agreements represented from 20% to 30% of total liabilities of the thrifts whose asset bases had grown most rapidly (above 25% per annum) in that period. Mahoney & White, *The Thrift Industry in Transition*, 71 FED. RESERVE BULL. 137, 150 (1985).

118. See A. CARRON, *supra* note 33 at 15 (discussion of maturity mismatch).

119. The equity-to-asset ratio for savings and loan associations measured by Regulatory Accounting Principles dropped from 5.26% in 1980 to 3.86% in 1984. See J. Barth, *supra* note 116, at 4.

120. As of October 1985 the FSLIC fund had reserves of about \$3.2 billion but had plans to take over 70 ailing thrifts at a cost of \$1.5 billion. See Langley, *Bank Board to Take Over 70 Thrifts*, Wall St. J., Oct. 18, 1985, at 3, col. 2. The FHLBB has asked Congress for the authority to impose a one-time additional assessment on insured thrifts to augment the FSLIC's insurance fund by as much as \$8.5 billion. See Langley, *Bank Board Seeks Authority*, Wall St. J., Oct. 17, 1985, at 4, col. 1. For a discussion of FHLBB proposals to increase insurance premiums, see *infra* note 159.

121. The net worth amendments adopted by the Board eliminated the previous system under which all thrifts were required to maintain regulatory net worth of at least 3% of assets, based on a moving five-year average. Under the new system, minimum net worth is based on liability growth. An institution growing at a rate of 15% or less is now required to increase its minimum net worth by 3% of liability growth. Growth rates in excess of 15% will require additions to net worth based on a graduated scale of 3% to 5% of liability growth. In addition, five-year averaging will be eliminated. Thrifts will be required to meet the new standards on a quarterly basis. 50 Fed. Reg. 6891 (1985) (to be codified at 12 C.F.R. pts. 561, 563, 570, 571, and 584).

The direct investment rule is set forth at 50 Fed. Reg. 6912 (1985) (to be codified at 12 C.F.R. pt. 563). For a discussion of the rule, see *supra* text accompanying notes 58-59.

significantly more credit risk, and have had less stable liability structures than the average savings institution.<sup>122</sup> In two cases, the Board noted, "loans" that in substance amounted to direct investments were major contributing factors to the failure of a thrift.<sup>123</sup>

In reaching its decision on the direct investment limitation, the FHLBB rejected the findings of an analysis submitted on behalf of the thrift industry by Professor George Benston.<sup>124</sup> Based on 1983 financial information for all 1155 FSLIC-insured thrifts in the eleven states with liberal thrift powers, Benston found positive relationships between the level of direct investment on the one hand and both thrift profitability and reliance upon uninsured liabilities on the other, which he cited as evidence that sophisticated creditors did not find direct investment to pose undue risks.<sup>125</sup> To the FHLBB, however, the finding that thrifts with higher proportions of uninsured funds tended to be more active in direct investments was viewed as a dangerous rather than a comforting sign. Indeed, the Board emphasized that Benston's own analysis revealed that a disproportionate reliance on uninsured liabilities was the reason why so many failed thrifts had negative interest rate spreads, which contributed to their failure.<sup>126</sup>

The dispute between Professor Benston and the FHLBB does not resolve how the institutions that have made significant direct investments would have behaved had they been subject to the Board's new ten percent limitation. The Board's evidence, however, that direct investment activity tends to be associated with other measures of risky behavior is disturbing.

122. The Board's examination of the relationship between thrift growth and FSLIC losses is described in its November 1984 proposal for increasing net worth requirements. 49 Fed. Reg. 47,852, 47,862 (1984).

123. The failed institutions were Empire Savings and Loan Association (Mesquite, Texas) and San Marino Savings and Loan (San Marino, California). 50 Fed. Reg. at 6900. Through the end of 1984, the costs of liquidating these two institutions (an estimated \$160 million for Empire and \$193 million for San Marino) represented the two largest losses in the history of the FSLIC. See Noble, *Thrift Unit Fund May Raise Fees*, N.Y. Times, Jan. 3, 1985, at D1, D4.

The Board also cited a recent study highlighting the increased credit risk posed by "equity participation loans" made by a number of Texas-chartered thrifts, noting that this study had found that many of these "loans" were viewed as direct investments by the institutions. 50 Fed. Reg. at 6899 (citing J. Crockett, C. Fry & P. Horvitz, *Equity Participation in Real Estate by Savings and Loans: Implications for Profitability and Risk* (1985)).

124. 49 Fed. Reg. 48,743, 48,748 (1984). See also Letter from George Benston to Steven Goldstein, Department Director for Financial and Quantitative Analysis, Federal Home Loan Bank Board (Oct. 31, 1984) (on file with the *Yale Journal on Regulation*) (transmitting results of statistical study) [hereinafter cited as Benston Letter].

125. Benston Letter, *supra* note 124, at 4-7.

126. 49 Fed. Reg. at 48,749. Benston also found that diversification by thrifts into traditional non-thrift activities appeared to play no role in the 164 thrift failures between 1981 and mid-1984. Of the institutions that failed, 66% had less than 1% of their assets in direct investments, and 94% made direct investments equal to less than 5% of their assets. Benston Letter, *supra* note 124, at 10-13, table 9. The Board faulted this analysis because the time period chosen reflected no significant direct investment; only eleven of the failed thrifts in Benston's sample had more than trivial direct investment. 49 Fed. Reg. at 48,749.

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It suggests that risk-seeking thrift institutions are more likely than those that are conservatively managed to diversify their activities, a tendency that reinforces the concerns already voiced about risk-seeking behavior.

### 4. *Non-Bank Financial Institutions*

The final body of evidence useful for assessing the likely risk implications of financial product deregulation relates to diversification patterns by firms not presently engaged in depository services but likely to offer them in a deregulated environment. For example, financial conglomerates such as Sears, Merrill Lynch, and American Express, among others, have already opened or acquired deposit-taking institutions.<sup>127</sup> Most recently, in August 1985, Ford Motor Company announced its acquisition of a controlling interest in the First Nationwide Financial Corp., the nation's ninth largest thrift organization.<sup>128</sup>

The recency of the financial conglomerate movement makes it difficult to assess how additional entry by non-banks into banking would affect the risks borne by the federal insurance agencies. One of the few studies relevant to this question suggests that these risks might not be significant. An analysis of eleven recent mergers involving financial organizations did not find that mergers between financial and non-financial firms were associated with a statistically significant effect on bond prices of the surviving corporations.<sup>129</sup>

A broader perspective on the implications of the entry by non-depository firms into banking can be achieved by examining prior earnings patterns and conducting the type of pair-wise risk comparisons that were shown in Table 1. In this instance, pair-wise comparisons are useful since they permit estimates to be made of the impact on risk resulting from adding banking to a combination of activities in which the likely entrant is already engaged. If the earnings of the likely entrant are both more variable and positively correlated with the earnings of the typical banking organization, then it can be inferred that the typical bank would be exposed to greater risk if made a part of the entrant's organization.

Table 3 illustrates that only eleven of thirty firms already active in a number of financial service activities had earnings as a percentage of assets that were negatively correlated with the earnings pattern of the

127. See *infra* Table 3.

128. See Darlin & O'Boyle, *Ford to Acquire S & L Company For \$493 Million*, Wall St. J., Aug. 2, 1985, at 2, col. 1.

129. Wall & Eisenbeis, *supra* note 73, at 17. The mergers involved purchases by non-financial firms of financial firms (e.g., Sears Roebuck/Dean, Witter Reynolds in 1981), bank purchases of discount brokers (e.g., Bank America/Charles Schwab & Co. in 1981), and acquisitions by financial firms of non-bank banks (e.g., Walter E. Heller/American National Bank Trust in 1982).

commercial banking industry between 1973 and 1983. More significant is the fact that the earnings of all of the firms listed in the table were more variable, as measured by coefficients of variation, than those for commercial banks as a whole. Taken together, these results suggest that entry by non-bank institutions into banking could increase the risk exposure of some depository organizations associated with non-banks, notwithstanding the lower risks it could produce for some non-bank parents.

TABLE 3  
After-Tax Earnings as a Percent of Assets of Selected Non-Bank Firms with  
Financial Subsidiaries or Affiliates, 1973-83

Firm	Financial Activities	Mean Return on Assets (%)	Standard Deviation of Returns	Coefficient of Variation	Correlation of Return on Assets with Average Return on Assets for Commercial Banks
1) Aetna Life & Casualty	f,i,j,l	1.32	0.53	0.40	0.64*
2) American Can Company	a,e,h,i,l	3.35	2.76	0.82	0.11
3) American Express Co.	a,d,f,h,i,l	1.98	0.31	0.16	0.47
4) American General Corp.	c,e,h,i,j,l	2.30	0.84	0.37	0.69*
5) Amoco Credit Corp.	d	8.17	1.02	0.13	0.36
6) Armco Inc.	f,g,i,j,l	2.34	7.87	3.36	0.62*
7) Avco Corp.	a,c,i,l	1.65	1.81	1.10	-0.13
8) Beneficial Corp.	a,c,f,g,i,l	1.98	1.26	0.64	-0.18
9) Borg Warner Corp.	f,g,h,i	6.55	1.47	0.22	0.51
10) Bradford National Corp.	i,l	0.70	1.35	1.93	0.17
11) Chrysler Corp.	f,g,i,j	-2.94	9.99	-3.40	-0.81*
12) Control Data Corp.	a,c,f,g,i	3.52	1.94	0.55	0.82*
13) Dana Corp.	b	7.38	2.24	0.30	0.14
14) Dreyfus Corp.	a	13.88	4.38	0.32	0.22
15) Equitable Life Assurance Society of the U.S.	i,j,l	3.22	0.37	0.12	0.16
16) Ford Motor Company	c,f,i,j	2.98	5.09	1.71	-0.35
17) General Electric	e,f,g,h,i,l	7.94	0.58	0.07	0.29
18) General Motors Corp.	e,f,g,i	6.93	4.80	0.69	-0.25
19) Greyhound Corp.	f,g,i,l	5.48	0.99	0.18	0.37
20) Gulf and Western Industries Inc.	a,c,f,g,i,j,l	3.33	2.66	0.80	0.53
21) Walter E. Heller International Corporation	f,g,j,l	0.58	0.40	0.69	0.43
22) Household International Corporation	a,f,g,i,l	2.74	0.84	0.31	-0.30
23) IBM	f	13.44	0.86	0.06	-0.41
24) ITT	c,f,h,i	4.34	0.82	0.19	-0.33
25) Merrill Lynch Company	b,g,h,i,j,k,l	1.18	0.40	0.34	-0.10
26) Mobile Corp.	d	6.02	1.61	0.27	0.71*
27) National Steel Corp.	b,c,e,g,j,l	0.84	6.58	7.83	0.37



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TABLE 3 (cont.)

Firm	Financial Activities	Mean Return on Assets (%)	Standard Deviation of Returns	Coefficient of Variation	Correlation of Return on Assets with Average Return on Assets for Commercial Banks
28) Parker Pen Company	a,b,c,i,l	9.49	3.04	0.32	0.67*
29) J.C. Penney Company	a,b,d,i,j	5.82	1.02	0.18	-0.42
30) Prudential Insurance Company of America	e,h,i,l	4.66	0.82	0.18	-0.13
31) RCA Corp.	c,g,i,l	3.97	1.48	0.37	0.21
32) Sears Roebuck and Co.	b,d,e,h,i,j,k,l	4.46	1.64	0.37	0.13
33) Transamerica Corporation	c,e,f,g,i,j,k,l	2.20	0.71	0.32	0.59
34) Westinghouse Electric Co.	f,g,j,l	3.72	2.05	0.55	-0.30
All Commercial Banks	N.A.	0.73	0.04	0.05	N.A.

Sources: MOODY'S INDUSTRIAL MANUAL, 1974-84.

MOODY'S BANK & FINANCE MANUAL, 1975-84.

MOODY'S TRANSPORTATION MANUAL, 1977 and 1984.

STANDARD & POOR'S CORPORATION RECORDS, 1984.

70 FED. RESERVE BULL. 809 (1984); 68 FED. RESERVE BULL. 460 (1982); 66 FED. RESERVE BULL. 445 (1978).

Financial Activities:

- |                     |  |
|---------------------|--|
| a. Banking          | g. Leasing   |
| b. Thrift           | h. Securities Underwriting and Brokerage   |
| c. Consumer Lending | i. Insurance Underwriting  |
| d. Credit Cards     | j. Real Estate Investment/Development  |
| e. Mortgage Banking | k. Real Estate Brokerage   |
| f. Financing        | l. Other activities including factoring, investment advisory services, mutual fund management, data processing services, purchasing of installment contracts, trust services, venture capital services, merchant banking, pension fund management, travellers' checks, and money orders. |

\* Statistically significant at 95% confidence level.

N.A. = not applicable.

Historical patterns of earnings variation can provide only a limited basis for projecting the risk implications of entry by non-bank institutions into banking. The ultimate question is how institutions with no previous "bank culture" or experience in running or owning a bank would operate banks they acquired or started *de novo*. On balance, however, one would expect that firms engaged in largely unregulated lines of business would bring to depository institutions a more competitive and less risk-averse attitude than has traditionally been seen in the banking industry, and pair-wise analysis reinforces that expectation.

In sum, despite ample evidence that financial product deregulation would provide opportunities for depository institutions to diversify in ways that reduce risk, the moral hazard created by the present system of deposit insurance and the likelihood that some risk-seeking firms would view financial product deregulation as opening new opportunities for risk-taking counsel caution. Without measures to offset or mitigate these

dangers, it is possible that the relaxation of financial product restrictions would expose certain depository institutions and the federal insurance agencies to greater risks than they now face. How much additional risk would be created is difficult to estimate. To the extent that financial product deregulation directly or indirectly induces failures of banks of similar size to those that have failed during recent years, the added cost to the insurance agencies should be manageable.<sup>130</sup> Nevertheless, the larger concern is that financial product deregulation could trigger failures of much larger institutions—as in the case of the Continental Illinois Bank—which would place very serious strains on the insurance funds.

#### IV. Policy Implications

Given the uncertainty regarding the response of depository institutions to financial product deregulation, Congress should not permit commercial banks or thrifts to engage in new and potentially riskier activities without first taking measures to limit excessive risk-taking. Risk-taking can be reduced in two ways—by creating mechanisms which reduce the incentives for risk-taking or by directly restricting the extent of permissible diversification.

##### A. *Creating Incentives to Deter Inefficient Risk-Taking*

One method for limiting or deterring imprudent risk-taking by depository institutions would be to establish market or regulatory incentives to offset the moral hazard created by deposit insurance.<sup>131</sup> Unfortunately, it becomes apparent upon closer examination that no single actor can be relied upon to discipline bank risk-taking effectively. Depositors, especially, are in a poor position to deter risk-taking. Some progress toward mitigating the moral hazard, however, could be made by simultaneously

130. Between 1970 and 1984, the average deposit base of failed banks had ranged between \$50 and \$400 million. The average cost to the FDIC per bank failure over this period had been lower, ranging from less than \$1 to \$60 million. See FDIC ANN. REP. 45-46 (1984). These averages are understated because the federal regulators took action to prevent Continental Illinois Bank from failing. Nevertheless, if deregulation produced as many as 50 additional bank failures per year of institutions with associated costs at the upper end of size range of previously failed banks, the annual payouts from the FDIC insurance fund would probably rise by no more than \$1 billion. In 1984, when the number of bank failures soared to a post-World War II high of 79, the FDIC's income totaled \$3.03 billion, consisting of \$1.25 billion in premium assessments and \$1.78 billion in interest income, while its expenses and losses totaled only \$1.30 billion. *Id.* at 51.

The FSLIC fund is in greater danger of becoming depleted. See *supra* note 120.

131. For a discussion of the merits of such proposals, see Goodman & Shaffer, *The Economics of Deposit Insurance*, 2 YALE J. ON REG. 145, 161 (1984); Isaac, *supra* note 90, at 206; Scott & Mayer, *Risk & Regulation in Banking: Some Proposals for Deposit Insurance Reform*, 23 STAN. L. REV. 857, 869-71 (1971).

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strengthening the discipline provided by shareholders, subordinated debt holders, and federal regulators.

### 1. Depositors

Depositors are the dominant source of funds for depository institutions, having provided 77.7% of the funding for bank assets in 1983.<sup>132</sup> Insured depositors, however, have little or no incentive to discipline depository institutions against excessive risk-taking.

Some analysts have proposed that deposit insurance coverage be scaled back by lowering the insurance ceiling and/or by introducing fractional coverage on insured accounts,<sup>133</sup> but such proposals are flawed.<sup>134</sup> Depositors may not perceive that reduced or fractional coverage puts them at any increased risk given the predilection of the insurance agencies for arranging the purchase and assumption of troubled institutions.<sup>135</sup> In the wake of the federal rescue of Continental Illinois, depositors at large banks in particular have the comfort of knowing that the government is unwilling to permit these institutions to fail.<sup>136</sup> The Continental Illinois episode also demonstrated that uninsured depositors are highly unstable sources of discipline. The very exercise of their power—the withdrawal of their deposits—can precipitate the collapse of solvent but temporarily illiquid institutions, thereby depriving the institutions of the opportunity to recover.

### 2. Shareholders

Shareholders are also ineffective monitors of bank risk-taking because their attitudes toward risk-taking do not coincide with those of the federal insurance agencies.<sup>137</sup> First, shareholders will be willing to permit their

132. See Danker & McLaughlin, *supra* note 110, at 813. The percentage of bank deposits that is insured has steadily risen, from 42% in 1945 to 75% in 1983. FDIC ANN. REP. 52 (1984).

133. Partial deposit insurance protection exists in the United Kingdom, where 75% of deposits in failed banks are reimbursed up to a ceiling amount. For a discussion of fractional coverage systems, see ECONOMIC REPORT OF THE PRESIDENT, *supra* note 6, at 168-70. The FDIC has been considering a procedure for partial immediate payment of depositors based on estimates of the ultimate total recovery on the assets of failed banks. See Isaac, *supra* note 90, at 210-11.

134. For a critique of partial insurance coverage plans, see Goodman & Shaffer, *supra* note 131, at 155-58; Scott & Mayer, *supra* note 131, at 869-71.

135. Moreover, one recent survey has concluded that there is "no clear-cut evidence that bankers respond to the potential discipline of large [uninsured] depositors." Gilbert, *Disclosure and Market Discipline: Issues and Evidence*, ECON. REV. FED. RESERVE BANK ATLANTA, Nov. 1983, at 70, 73.

136. See *supra* note 90.

137. This does not imply that the capital markets are totally ineffective in disciplining risk-taking. One study has found that changes in bank stock prices have signaled problems with banks well before the regulatory agencies placed them on the "problem" bank list. See Pettway & Sinkey, *Establishing On-Site Bank Examination Priorities*, 35 J. FIN. 137, 145 (1980). At a minimum, therefore, stock market activity can at least help regulators impose discipline on those banks whose shares are actively traded.

companies to assume risks when justified by expected returns.<sup>138</sup> The insurance agencies, however, bear only the cost and do not reap the benefits of risk-taking. Second, shareholders can diversify against the risks of any single stock in their portfolios and thus will not penalize a company for assuming unsystematic risk.<sup>139</sup> Insurance agencies, as the guarantors of only insured bank and thrift deposits, cannot diversify against unsystematic risk.<sup>140</sup>

Government-imposed capital standards, however, can be utilized to improve shareholder discipline.<sup>141</sup> Capital requirements provide a cushion against loss for insurance agencies and reduce the attractiveness to shareholders of high-risk ventures.<sup>142</sup> The FDIC has recently proposed that all insured banks be required to maintain capital of at least nine percent of total assets, one-third of which could be subordinated debt.<sup>143</sup> If implemented, the FDIC proposal would require the commercial banking industry to increase its capital base by forty-five percent, or forty-nine billion dollars.<sup>144</sup>

138. Because shareholders hold residual claims on earnings their interests will often diverge from those of creditors of the firm. See Levmore, *Monitors and Freeriders in Commercial and Corporate Settings*, 92 YALE L.J. 49, 52 (1982) (discussing risk alteration); Smith & Warner, *On Financial Contracting*, 7 J. FIN. ECON. 117, 119 n.4 (1979) ("stockholders will have incentives to purchase projects with negative net present values if the increase in the firm's variance rate from accepting those projects is sufficient in large. Even though such projects reduce the total value of the firm, the value of equity rises."); J. Merrick & A. Saunders, *supra* note 67, at 33.

139. See R. BREALEY & S. MYERS, *supra* note 65, at 125-26.

140. The FDIC and FHLBB cannot diversify against the unsystematic risk exhibited by the commercial banking and thrift industries, respectively. See *supra* text accompanying note 66.

141. It was not until December 1981 that the three federal bank regulatory agencies were able to agree upon a common bank capital requirement. This initial standard applied to regional and community banks and their holding companies and mandated primary capital (common and preferred stock and retained earnings) equal to 5.0% of bank assets. The 1981 standards also required secondary capital (including subordinated debt and limited-life preferred stock) of 5.5% of assets for regional banks and 6.0% for community banks. In 1984, a common primary capital standard equal to 5.5% of assets was set by all three agencies for banks and bank holding companies in all size categories. See Nagle & Petersen, *Capitalization Problems in Perspective*, in HANDBOOK FOR BANKING STRATEGY 293, 303 (R. Aspinwall & R. Eisenbeis eds. 1985).

Federal regulators of the thrift industry have been slower to tighten capital standards for thrift institutions. During the 1970's and early 1980's, net worth standards were steadily reduced by the FHLBB to the point where, by late 1983, thrifts were required to maintain net worth of only 3% of a five-year moving average of total deposits. This 3% standard was especially flexible given the FHLBB's more liberal definition of primary capital. *Id.* at 303-04. Only in 1985, after a wave of thrift failures, did the FHLBB raise net worth standards. See *supra* note 121.

142. See Benston, *Brokered Deposits and Deposit Insurance*, ISSUES IN BANK REG., Spring 1984, at 24 (capital requirements reduce bank risk-taking); Sharpe, *Bank Capital Adequacy, Deposit Insurance and Security Values*, 1978 J. FIN. QUANTITATIVE ANALYSIS 701, 716-17. But see Koehn & Santomero, *Regulation of Bank Capital and Portfolio Risk*, 35 J. FIN. 1235, 1240 (1980) (capital requirements create an incentive for relatively risky banks to reshuffle their portfolio of assets to become more risky).

143. 50 Fed. Reg. 19,088, 19,090 (1985).

144. *Additional Bank Capital Required Under FDIC's Proposed 9% Standard*, ECON. OUTLOOK FED. DEPOSIT INS. CORP., June 1985, at 4 [hereinafter cited as *Additional Bank Capital*].

It is likely that increased capital requirements would limit the expansion of depository institutions and thereby their willingness to undertake risks,<sup>145</sup> but several cautions must be added. First, any capital requirement can be circumvented by potentially risky off-balance sheet transactions such as loan guarantees, letters of credit, and interest rate swaps.<sup>146</sup> Second, even without off-balance sheet maneuvers, some institutions may seek to meet any balance sheet requirement by extending riskier loans at higher interest rates and thereby raising the earnings on its asset portfolio.<sup>147</sup> Finally, the choice of any particular capital requirement and measurement technique must be made arbitrarily and will not necessarily reflect the economic value of the cushion that required capital is intended to provide.<sup>148</sup> These caveats do not imply that capital regulation is useless for discouraging risk-taking by depository institutions. They do warn, however, that capital regulation is not a panacea for the moral hazard problem.

### 3. Subordinated Debt Holders

Of all the parties capable of monitoring risk-taking by depository institutions, holders of subordinated debt have attracted the greatest attention.<sup>149</sup> As noted, the FDIC proposal to raise minimum capital requirements for banks from six to nine percent of assets would allow the increased requirement to be met through the issuance of subordinated debt.<sup>150</sup> The rationale is clear. Since subordinated debt holders are not

One noted bank economist has suggested that banks be required to maintain capital and subordinated debt as high as 20% of total assets. Wall, *The Future of Deposit Insurance: An Analysis of the Insuring Agencies' Proposals*, ECON. REV. FED. RESERVE BANK ATLANTA, Mar. 1984, at 26, 35. There is also a growing interest in "risk-based" capital standards. See THE WORKING GROUP, *supra* note 90, at 61. In relating capital standards to risk, however, one faces the same problems that affect the design of risk-based deposit insurance premiums. See *infra* text accompanying notes 159-63.

145. See 50 Fed. Reg. at 6894-95.

146. The federal regulatory agencies have recently recognized this problem and are exploring methods of incorporating off-balance sheet transactions into a capital standard. See *Fed Chairman Proposes Major Changes In Several Areas of Banking Regulation*, Wall St. J., Sept. 12, 1985, at 3, col. 2.

147. See O'Hara, *A Dynamic Theory of the Banking Firm*, 38 J. FIN. 127, 139 (1983); Koehn & Santomero, *supra* note 142, at 1240-43.

148. The Regulatory Accounting Principles used by the FHLBB to measure thrift capital conceal the extremely poor condition of hundreds of institutions. See *supra* note 116. Although GAAP-based capital standards are an improvement, they nevertheless fail to reflect the current market condition of an institution since GAAP measurements are based on historical costs. A capital standard based on market values would produce an accurate reflection of the current economic net worth of an institution, but market valuation is difficult, if not impossible, given the lack of a secondary market for a substantial portion of the assets held by depository intermediaries (i.e. loans).

149. Currently, bank subordinated debt is required to have an original maturity of at least seven years if it is to be counted toward a bank's capital ratio. Subordinated debt with shorter remaining maturities is given less than 100% credit toward calculating the capital ratio, based on a sliding scale (down to one year maturity). See Wall, *supra* note 144, at 34.

150. See *supra* text accompanying note 143.

eligible for federal deposit insurance and cannot, like depositors, withdraw their investments at will, they have strong incentives to discipline depository institutions, either by demanding higher interest premiums or by refusing to purchase subordinated debt issues. Either outcome would encourage institutions to avoid risk and would assist the regulatory agencies in identifying problem institutions. In addition, strengthened disclosure requirements could enhance the effectiveness of any subordinated debt requirement, since additional information can help the debt market police risk-taking.<sup>151</sup>

It may not be feasible, however, to require depository institutions to maintain a significant volume of subordinated debt. The market for subordinated bank debt is thin, and virtually non-existent for smaller institutions. As of the end of 1984, subordinated debt for the banking industry as a whole amounted to \$6.3 billion, as compared to \$154.3 billion in total equity capital, a ratio of 4.1%. For banks with assets under \$1 billion, subordinated debt totalled \$1.4 billion, or just 1.9% of the \$71 billion in equity at these institutions.<sup>152</sup> A subordinated debt requirement would thus either have to be restricted to large depository organizations or be phased in to permit the capital markets to become familiar with the subordinated debt offerings of smaller institutions.<sup>153</sup> In addition, many troubled institutions—in particular the large number of troubled thrifts—would probably have to be exempted from the requirement since

151. The securities laws currently require larger banks and bank holding companies registered with the Securities and Exchange Commission to adhere to the disclosure standards applicable to all public companies so registered. There are about 3300 insured commercial banks registered with the SEC—23% of all banks. See Gilbert, *supra* note 135, at 74. Among other things, these requirements mandate the disclosure of past-due status and concentration of loans, as well as dealings involving insiders. See Coulson, *Full Disclosure: The SEC's Requirements Relating to Bank Holding Companies*, ECON. REV. FED. RESERVE BANK ATLANTA, Nov. 1983, at 62. Federal bank regulatory agencies also require disclosure by all banks of data filed on their regular call reports. These reports were recently revised to require disclosure on a quarterly basis of past-due loans, a detailed breakdown of remaining maturity of loans and other interest-bearing assets (to reflect interest rate risk), and some information on off-balance sheet transactions. Gilbert, *supra* note 135, at 74. In May 1985, the FDIC announced its intention to publish in press release form all final enforcement orders issued against insured banks. 50 Fed. Reg. 20,609 (1985).

Those who argue that market discipline could be improved typically point to the need for timely disclosure of examination reports on banks and thrifts conducted by the supervisory agencies, which are now secret. A task force of the Association of Reserve City Bankers recently made such a recommendation for commercial banks. DAILY EXEC. REP. (BNA) No. 141 at A-19 (July 23, 1985). Although disclosure of such information could conceivably improve market discipline, it might also be counterproductive by encouraging deposit runs. Perhaps more significantly, a policy of disclosing the results of examination data could reduce the quality of information produced by examinations themselves. The current system of secrecy enhances the ability of examiners to draw out information from bank officers and employees. This ability would be damaged or lost if examination reports were made public.

152. *Additional Bank Capital*, *supra* note 144, at 6.

153. See Wall, *supra* note 144, at 26; Forrestal, *Bank Safety: Risks and Responsibilities*, ECON. REV. FED. RESERVE BANK ATLANTA, Aug. 1985, at 4, 11.

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they would almost certainly be unable to sell any unsecured and uninsured debt to private investors.

### 4. *Federal Regulatory Supervision*

Historically, regulatory supervision has been the principal means through which the federal government has attempted to mitigate the moral hazard created by deposit insurance.<sup>154</sup> There is widespread agreement that current supervision of banks and thrifts is inadequate.<sup>155</sup> The number of examiners at the three federal bank regulatory agencies was down to 4400 in July 1985, as compared to approximately 5000 in 1980.<sup>156</sup> In addition, there is concern about the high turnover and limited competence of examiners,<sup>157</sup> particularly in view of the increasing sophistication of the transactions they are required to review. Additional funding to increase the number of examiners and their salaries would certainly be beneficial, but there are limits to how effective any supervisory and enforcement program can be, since current systems for predicting bank failures well in advance are imperfect.<sup>158</sup>

Inherent limits to the effectiveness of direct regulatory supervision of banks have prompted significant interest in risk-based deposit insurance premiums as an alternative or supplement to other techniques for disciplining depository institutions.<sup>159</sup> There are problems, however, in

154. See Flannery, *supra* note 88, at 17.

155. See Kaufman, *Reshaping the Financial System*, N.Y. Times, July 14, 1985, at F2.

156. Langley, *Federal Bank Examiners Are Drawing Fire*, Wall St. J., July 16, 1985, at 6.

157. These problems are aggravated by the limited salaries of supervisory jobs relative to private-sector opportunities and by the frequent travel that diminishes the morale and quality of life for examiners over time. See COMPTROLLER GENERAL OF THE U.S., *THE FEDERAL STRUCTURE FOR EXAMINING FINANCIAL INSTITUTIONS CAN BE IMPROVED* (1981).

158. See Benston, *Financial Disclosure and Bank Failure*, ECON. REV. FED. RESERVE BANK ATLANTA, Mar. 1984, at 5, 11.

It is far from clear whether detailed examinations of depository institutions add much to the ability to predict failures based on institution-generated financial data alone. A recent study correctly predicted 64% of 73 bank failures between July 1, 1980, and July 1, 1983, using publicly available data compiled one year in advance. Prediction accuracy increased to only 67% when examination data were added to the prediction model. See Bovenzi, Marino & McFadden, *Commercial Bank Failure Prediction Models*, ECON. REV. FED. RESERVE BANK ATLANTA, Nov. 1983, at 14. Recent models developed at the Federal Home Loan Bank Board appear to be more accurate in predicting thrift institution failures. See J. Barth, *supra* note 116.

159. As directed by the Garn-St. Germain Act of 1982, each of the federal deposit insurance agencies issued a report in 1983 evaluating the present system of deposit insurance. See FEDERAL DEPOSIT INSURANCE CORPORATION, *DEPOSIT INSURANCE IN A CHANGING ENVIRONMENT* (1983); FEDERAL HOME LOAN BANK BOARD, *AGENDA FOR REFORM: A REPORT ON DEPOSIT INSURANCE* (1983); NATIONAL CREDIT UNION ADMINISTRATION, *CREDIT UNION SHARE INSURANCE: A REPORT TO THE CONGRESS* (1983).

In March 1985, both the FHLBB and FDIC submitted legislative proposals for introducing risk principles into deposit insurance pricing. The Bank Board's proposal would permit additional premiums to be assessed against thrifts with asset investments outside or in excess of the investment limitations applicable to federally-chartered thrift institutions. See S. 759, 99th Cong., 1st Sess., 131 CONG.

developing meaningful risk-adjusted premiums.<sup>160</sup> Risks posed to the financial system as a whole are virtually impossible to assess. Although some elements of institution-specific risk can be measured, the most important element—the credit risks of an institution's loan portfolio—cannot be objectively quantified.<sup>161</sup>

Even if risks could be quantified, a system of risk-related insurance pricing would only be effective if it produced differentials in premiums that were sufficiently large to affect banks' behavior. The FDIC's premium rebate proposal,<sup>162</sup> for example, fails this test. Based upon historical levels of the rebate, the proposal would introduce a maximum risk penalty on the order of four to five basis points. Given typical spreads between marginal lending and borrowing rates of interest of 100 basis points or more, a maximum penalty of five basis points would provide little deterrence to the risk-seeking bank.<sup>163</sup>

### B. *Direct Regulation of Activity Diversification*

As the foregoing discussion makes clear, shareholders, subordinated debt holders, and regulators can provide only limited discipline against excessive risk-taking by depository institutions. For this reason, it is necessary to examine other, more direct methods of limiting the risks of financial product deregulation.

Financial product deregulation can be restricted in the following three ways: first, by requiring that bank and non-bank activities be conducted by separate subsidiaries; second, by limiting and/or closely supervising transactions between the bank and non-bank divisions or subsidiaries; and

REC. S3454 (daily ed. Mar. 26, 1985); H. R. 1680, 99th Cong., 1st Sess., 131 CONG. REC. H1378 (daily ed. Mar. 21, 1985). The FHLBB's proposal also would authorize an additional annual assessment against all insured thrifts up to one-eighth of one percent of deposits but only until the total amount of insurance premiums assessed on all federally-insured thrifts equals the losses and expenses of the FSLIC. The FDIC's proposal would adjust the rebate on premiums paid by insured banks based on risk. See S. 760, 99th Cong., 1st Sess., 131 CONG. REC. S3466 (daily ed. Mar. 26, 1985); H.R. 1833, 99th Cong., 1st Sess., 131 CONG. REC. H1688 (daily ed. Mar. 28, 1985). The total amount of the current rebate is equal to 40% of the FDIC's net assessment income. The concept of risk-based pricing of deposit insurance is also addressed in the recent analysis of the deposit insurance system completed by Reagan Administration's Cabinet Council on Economic Affairs. See THE WORKING GROUP, *supra* note 90. For a recent analysis of alternative deposit insurance reforms, see E. KANE, *THE GATHERING CRISIS IN FEDERAL DEPOSIT INSURANCE* (1985).

160. See Isaac, *supra* note 90, at 207-08; Goodman & Shaffer, *supra* note 131, at 153-55.

161. Isaac, *supra* note 90, at 207.

162. The proposal is outlined in Isaac, *supra* note 90, at 208.

163. See Goodman & Shaffer, *supra* note 131, at 154.

These criticisms do not imply that some methods of introducing risk into deposit insurance premiums would fail to improve upon the current system. For example, higher premiums might be set for all large banks, whose failures pose the greatest risks to the banking system as a whole. Another suggestion is to charge higher premiums for institutions with capital ratios that are low relative to the average ratio for all institutions of similar size.



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third, by restricting the permissible scope of financial product diversification. The Reagan Administration's proposed Financial Institutions Deregulation Act (the "Administration bill") and the Financial Services Competitive Equity Act passed by the Senate last year (the "1984 Senate bill") each contained limitations of these three types. Given the risks of deregulation highlighted in Part III of this article, certain additional actions in each of these areas appear warranted.

### 1. *Separate Non-Bank Subsidiaries*

A separate subsidiary requirement would ensure that the assets and liabilities of the bank and non-bank activities are completely segregated, reducing concerns about risk. Legal segregation would also facilitate the separate regulation and supervision of the bank and non-bank activities of diversified financial organizations. Both the Administration and Senate bills would have required that banking and thrift organizations which choose to engage in a broader range of financial activities conduct such activities through corporations separate and distinct from insured depository institutions.<sup>164</sup>

The relegation of the non-bank activities to separate corporations, however, raises two important and controversial questions. First, should such corporations merely be established as separate legal entities, or should they also be *operated as such*, with different officers, locations, and names than their depository affiliates? Second, should these separate entities be permitted to operate as subsidiaries of the insured institutions themselves or only as separate subsidiaries of common holding companies?

#### a. *Separate Operating Requirements*

There are a number of advantages to requiring that non-bank corporations actually be operated as totally separate entities. Prohibiting non-bank and bank corporations from sharing common officers and directors would minimize the danger that the moral hazard influencing the management of the bank would affect the conduct of the non-bank subsidiary or affiliate.<sup>165</sup> Such a requirement would also help ensure that non-bank operations are staffed by individuals knowledgeable in the relevant fields rather than by bankers or thrift managers who are likely to have little or no experience in non-bank activities. Requiring the different entities to be operated in different locations and under different trade names would

164. H.R. 3537, *supra* note 2, at § 2; S. 2851, *supra* note 3, at § 101(a).

165. Separate managements can be especially helpful in preventing inter-affiliate transactions that could potentially weaken a depository institution in favor of the non-bank affiliates or subsidiaries. Clark, *The Regulation of Financial Holding Companies*, 92 HARV. L. REV. 789, 803 (1979).

reduce the likelihood that depositors would withdraw funds from their bank upon hearing news that non-bank subsidiaries were in financial trouble.<sup>166</sup> Each of these rationales was recently cited by the FDIC, which has required state non-member banks to conduct securities activities only through separate subsidiaries and has proposed that all insured banks do the same in their insurance underwriting and real estate development activities.<sup>167</sup>

Separate operating requirements also impose costs. Prohibiting the use of common employees, officers, directors, and locations clearly would detract from the potential economies that could be realized from activity diversification.<sup>168</sup> Similarly, banning the use of common trade names could reduce some of the marketing advantages of diversification. This disadvantage, however, could be minimized by permitting diversified organizations to market separate bank and non-bank services jointly or to advertise a non-bank entity as affiliated with a bank or its holding company.<sup>169</sup>

Unfortunately, there is no reliable empirical evidence on the relative magnitudes of the costs and benefits of the various separate operating requirements. The highly-charged political atmosphere in which financial product deregulation has thus far been considered, however, will likely tip the scales in favor of most, if not all, of the separate operating requirements if financial product-line restrictions are eased. Given the risks of financial product deregulation outlined in Part III, this would be a prudent outcome.

166. The 1984 Senate bill would have precluded the securities affiliates of bank holding companies from having a similar name as the bank or advertising in any way that the bank subsidiary was responsible for the obligations of the affiliate. S. 2851, *supra* note 3, at § 105. The Administration proposal contained the second restriction, but not the first. H.R. 3537, *supra* note 2, at § 15(b). For an early discussion of why depository institutions and their non-bank affiliates should not share common names, see Clark, *supra* note 165, at 838.

167. See 49 Fed. Reg. 46,709 (1984) (codified at 12 C.F.R. pt. 337) (securities activities engaged in by insured state-chartered non-member banks); 49 Fed. Reg. 48,552 (1984) (codified at 12 C.F.R. pt. 332), and 50 Fed. Reg. 23,963 (1985) (to be codified at 12 C.F.R. pt. 332) (insurance underwriting and real estate development by all insured banks). In each case, the FDIC established nine specific minimum criteria for the "bona fide subsidiary." These included adequate capitalization, physical separation from the bank (although the non-bank and bank offices could access through a common lobby), use of different trade name from the bank, separate officers and employees (except those performing "bank-office" functions), and a requirement that a majority of the directors of the subsidiary be neither directors nor officers of the bank. Significantly, the FDIC's December 1984 and June 1985 proposals would not mandate that banks engage in real estate brokerage or insurance agency activities through separate subsidiaries.

168. Similar complaints have been registered against the Federal Communications Commission's requirements that AT&T and the new Bell Operating Companies (BOCs) be required to offer unregulated products and services through separate subsidiaries. See Baumol & Willig, *Telephones and Computers: The Costs of Artificial Separation*, REG. MAG., Mar./Apr. 1985, at 23.

169. This is (or would be) permitted under the FDIC's separate subsidiary requirements. See 49 Fed. Reg. at 46,712; 50 Fed. Reg. at 23,982-83.

### b. *Location of the Non-Bank Subsidiaries*

Determining the proper location for the non-bank activities—as subsidiaries of depository institutions or of their holding companies—also poses its own set of vexing questions. Both approaches are reflected under existing law. Non-bank activities are currently operated by state-chartered banks and by service subsidiaries of thrift institutions.<sup>170</sup> At the same time, non-bank activities are operated by both bank and thrift holding companies, subject to the restrictions of the Bank Holding Company Act and the Savings and Loan Holding Company Amendments.<sup>171</sup>

Each alternative has its supporting arguments. Allowing non-bank activities to be conducted directly through subsidiaries of insured institutions would ensure that benefits of activity diversification and economies of scope that could be realized through multi-product offerings would flow directly to those institutions.<sup>172</sup> Whether benefits of the same magnitude could be realized if non-bank activities were placed in a holding company structure is uncertain, and would depend on the degree to which federal regulators permit the holding companies to operate as integrated entities.<sup>173</sup> The direct subsidiary approach could also be less costly than the holding company device for financial organizations seeking to engage in both bank and non-bank activities, since it would eliminate the need for creating new holding companies. This consideration is particularly important in the case of smaller banks and thrifts.<sup>174</sup>

These arguments are outweighed by factors favoring the holding company mechanism. Requiring all non-bank activities to be operated within a holding company structure would end the growing disparity between the range of non-bank activities open to bank holding companies, regulated at the federal level by the Federal Reserve, and to state-chartered banks in

170. The Federal Reserve has allowed state-chartered banks to engage through their subsidiaries in activities not permitted to bank holding companies, provided those activities are authorized under applicable state law. 12 C.F.R. 225.22(d) (1985). Since most thrift institutions are organized in the mutual form, they cannot be owned by holding companies and thus must engage in non-thrift functions, to the extent they are so permitted, through service corporation subsidiaries. Section 113 of the Senate bill would have established a substitute arrangement under which mutual institutions would be permitted to create wholly-owned subsidiaries to function as insured depository institutions. The mutual organizations would continue as parents of the depository institutions, as well as of any other non-thrift corporations allowed under the bill.

171. See *supra* text accompanying notes 44 & 54.

172. See Clark, *supra* note 165, at 819-25, 844.

173. To achieve the benefits of diversification non-bank assets must be drawn upon to help financially troubled bank affiliates. See also *infra* text accompanying notes 181-83.

174. To minimize this cost, the Financial Institutions Deregulation Act proposed by the Reagan Administration would exempt simple conversions of banks and thrifts to holding company structures from the registration requirements of the securities laws and from the regulatory approvals required under the Bank Holding Company Act and Savings and Loan Holding Company Amendments. H.R. 3537, *supra* note 2, at §§ 8 & 21.

certain states where banks may engage directly in non-bank activities not approved for bank holding companies.<sup>175</sup> Placing non-bank corporations in a holding company structure would also eliminate the funding advantage they might otherwise receive if they were subsidiaries of insured depository institutions.<sup>176</sup> Perhaps most importantly, requiring that financial activity diversification proceed only through the holding company mechanism would vest all responsibility for supervising the transactions and affiliations between the non-bank and bank activities at the federal level. This would minimize jurisdictional overlaps between state and federal agencies, as well as unnecessary duplication in oversight of non-bank activities in which depository organizations may be engaged.<sup>177</sup>

The Administration's deregulation proposal would require all financial activity diversification by depository organizations to be carried out only through the holding company structure.<sup>178</sup> Both bank and thrift holding companies would be placed on a "level playing field," since each would be authorized to engage in the same non-bank activities. The current advantages enjoyed by unit-thrift holding companies—which are not currently subject to any non-bank activity restrictions—would be ended by treating them exactly like bank holding companies.<sup>179</sup>

The common argument that the holding company approach would better assure the segregation and thus the safety of depository institutions,<sup>180</sup> however, should be viewed with considerable skepticism. Other factors being equal, it is certainly conceivable that depository institutions would be more likely to be held legally responsible for the debts or obligations of non-bank corporations which they own directly than of those with which they are affiliated through a common holding company.<sup>181</sup> The more

175. See *supra* text accompanying notes 29-31 & 41-42.

176. See *Competition in Financial Services: Hearing on H.R. 3397 and H.R. 3537 Before the Subcomm. on Commerce, Transportation, and Tourism of the House Comm. on Energy and Commerce*, 98th Cong., 1st Sess. 62, 64 (1983) (testimony of Peter J. Wallison) ("Because holding companies—and not depository institutions themselves—will be capitalizing nonbanking enterprises, those enterprises will not have the unfair advantage of depository institutions' ability to raise funds at lower cost").

177. For a summary of arguments favoring the holding company approach to financial product deregulation, see *Id.* at 64-65.

178. Banks and stock-formed thrifts would be precluded from entering new non-bank activities through service subsidiaries. H.R. 3537, *supra* note 2, at § 11.

179. H.R. 3537, *supra* note 2, at § 19.

180. See Black, Miller & Posner, *An Approach to the Regulation of Bank Holding Companies*, 51 J. BUS. 379, 394-405 (1978).

181. Courts are generally reluctant to pierce the corporate veil by holding one corporation liable for the debts of another unless the two corporations are commonly controlled and that control is used to cause harm through fraud or other wrongdoing. See W. CARY & M. EISENBERG, *CORPORATIONS: CASES AND MATERIALS* 80-83 (5th ed. 1980). It has also been commonly remarked that courts are especially unlikely to pierce the corporate veil in the banking context, because of the system of bank regulation and supervision. See Clark, *supra* note 165, at 834; S. Chase & D. Waage, *Corporate Separateness as a Tool of Bank Regulation* (1983), reprinted in *Competitive Equity in the Financial*

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important practical consideration, however, is that, legal distinctions aside, the resources of depository institutions are as likely to be drawn upon to help troubled non-bank affiliates as they would be to assist non-bank subsidiaries. Parent holding companies and depository institutions are equally likely to fear that when their non-bank subsidiaries or affiliates encounter financial difficulties, customers of the depository institution will infer that the insured institution itself is troubled and thus will withdraw their deposits. Direct aid from the depository entity to the non-bank enterprises can prevent such runs and thus can be prudent even if the potential future profit opportunities offered by the subsidiary or affiliate may not otherwise justify an infusion of additional capital.<sup>182</sup>

In short, Congress should operate on the assumption that financial holding companies—the preferred vehicle for permitting greater financial product diversification—operate as integrated entities.<sup>183</sup> This view has two important implications. First, it exposes as an illusion the belief that a troubled non-bank corporation is less likely to have an adverse impact on the depository institution if it is owned by a common holding company than if it is owned by the institution itself. Second, it also suggests that any moral hazard that may influence the behavior of the insured depository institution in its activity diversification decisions may also affect the same decisions by the holding company. Indeed, it is this second

*Services Industry, Part II: Hearing on S. 2181 and S. 2134, Before the Senate Comm. on Banking, Housing and Urban Affairs, 98th Cong., 2d Sess. 249 (1984).* These commentators, however, have restricted their analyses to non-bank subsidiaries of holding companies rather than of banks directly. Because the exercise of control over the non-bank subsidiary is clearly greater where the bank itself is the parent, it is possible to argue that, other factors being equal, the corporate veil is more likely to be pierced if non-bank subsidiaries are owned directly by the depository institution.

182. As former Citicorp Chairman Walter Wriston has observed:

It is inconceivable that any major bank would walk away from any subsidiary of its holding company. If your name is on the door, all of your capital funds are going to be behind it in the real world. Lawyers can say you have separation, but the marketplace is persuasive, and it would not see it that way.

*Financial Institutions Restructuring and Services Act of 1981: Hearings on S. 1686, S. 1703, S. 1720, and S. 1721 Before the Senate Comm. on Banking, Housing, and Urban Affairs, 97th Cong., 1st Sess. 589-90 (1981).* See also Isaac, *supra* note 90, at 206-07.

During the 1970's, many banks came to the rescue of real estate investment trusts (REITs) that they had sponsored and advised even though the REITs were not technically part of their organizations. See J. SINKEY, JR., *PROBLEMS AND FAILED INSTITUTIONS IN THE COMMERCIAL BANKING INDUSTRY* 237-55 (1979). In addition, several bank failures in the 1970's were attributable, in varying degrees, to problems with non-bank affiliates. See Cornyn & Talley, *Activity Deregulation and Bank Soundness*, in *PROCEEDINGS OF A CONFERENCE ON BANK STRUCTURE AND COMPETITION*, FEDERAL RESERVE BANK OF CHICAGO 22, 33-34 (1983) (Hamilton National Bank of Chattanooga and Beverly Hills Bancorp); Mayne, *New Directions in Bank Holding Company Supervision*, 95 *BANKING L.J.* 729, 731 (1978) (American City Bank Trust Co. of Milwaukee, Wisconsin and Palmer First National Bank Trust Co. of Sarasota, Florida). Most recently, federal regulatory authorities felt compelled to save the Continental Illinois holding company as well as its subsidiary bank. The regulators feared that the demise of Continental's non-bank affiliates could trigger still additional runs on the beleaguered bank. See *FDIC ANN. REP.* 3-6 (1984).

183. There is ample empirical evidence that this is the case. See *supra* note 72.

implication that justifies the cautious approach to financial product deregulation that is recommended in this article.

## 2. *Restrictions on Inter-Affiliate Transactions*

Regulation of transactions between depository institutions and their non-bank affiliates is a second mechanism for directly limiting the safety-related risks of financial product deregulation. Several restrictions of this type already exist. The Federal Reserve Board currently monitors inter-affiliate transactions to ensure that bank subsidiaries of holding companies do not divert income to their non-bank affiliates by overpaying for assets and services they buy from those firms.<sup>184</sup> Section 23A of the Federal Reserve Act limits the volume of transactions between a bank and any one of its affiliates and with all affiliates in the aggregate.<sup>185</sup> The more restrictive Savings and Loan Holding Company Amendments prohibit savings and loan subsidiaries of multi-thrift holding companies from investing in, or making loans and guarantees to, holding company affiliates.<sup>186</sup> Finally, banks are subject to restrictions on payment of dividends and capital reductions,<sup>187</sup> and savings and loan subsidiaries of multi-thrift holding companies must give advance notice to the FSLIC of proposed dividends.<sup>188</sup>

The Administration bill and the 1984 Senate bill would moderately strengthen these interaffiliate transaction regulations. Both would add a new section to the Federal Reserve Act that would require member banks to engage in any transactions with affiliates only on arms-length terms, so as not to disadvantage non-affiliated companies. This section would permit banks to purchase securities underwritten by an affiliate during the underwriting only if a majority of the bank's outside directors approved the purchase in advance.<sup>189</sup> Furthermore, a bank could not purchase in its fiduciary capacity any securities from an affiliate unless such a purchase

184. The Board has the power to take formal action—obtaining written agreements or issuing cease-and-desist orders—where inter-affiliate pricing distortions have a material and adverse effect on the bank. See Wall, *Insulating Banks from Non-Bank Affiliates*, ECON. REV. FED. RESERVE BANK ATLANTA, Sept. 1984, at 18, 23.

185. This section limits "covered transactions" between a bank and any one non-bank affiliate to 10% of bank capital and surplus, and the sum of all covered transactions to all affiliates to no more than 20% of bank capital and surplus. Covered transactions include loans, purchases of securities or assets, the acceptance of securities as collateral, and the issuance of guarantees, acceptances, or letters of credit. 12 U.S.C. § 371(c) (1982).

186. 12 U.S.C. § 1730a(d)(1)-(5) (1982).

187. In the absence of prior regulatory approval, all national and member bank dividends are limited to the sum of the current year's earnings and the prior two years' retained earnings. Insured state non-member bank dividends generally are limited by similar state restrictions. See Wall, *supra* note 184, at 24.

188. 12 U.S.C. § 1730a(f) (1982).

189. H.R. 3537, *supra* note 2, at § 15; S. 2851, *supra* note 3, at § 105.

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was permitted by the instrument establishing the fiduciary relationship, by court order, or by the law under which the trust is administered. Finally, the Administration proposal reaffirms the authority of the Federal Reserve Board to examine bank holding companies and each of their subsidiaries, although it directs the Board to minimize the scope and frequency of examinations of the non-bank subsidiaries.<sup>190</sup> A major objective of this last limitation is apparently to minimize any competitive disadvantages that a diversified bank holding company might face relative to financial service firms that are not affiliated with banks and therefore not regulated by the Federal Reserve.

Except for this last limitation, both the Administration and 1984 Senate bills move in the right direction. Neither goes far enough, however, in establishing restraints on risk-taking, since holding companies can find ways to circumvent even the more restrictive requirements contained in both bills to the detriment of their depository subsidiaries and thus the deposit insurance agencies. Holding companies can divert resources out of their depository subsidiaries by requiring them to pay higher service or management fees, by increasing their depositories' tax reimbursements to parent companies, or by making subtle adjustments in inter-affiliate pricing.<sup>191</sup> In addition, holding companies can pressure their depository subsidiaries to issue greater dividends, thereby encouraging them to take larger risks in the hope of increasing earnings to support an increase in dividends.<sup>192</sup>

These potential risks are inadequately addressed in the Administration and 1984 Senate bills. Moreover, both bills fail to address the potential third party transactions that could tempt banks into unwarranted increases in their risk exposure. Under both bills for example, banks could still extend risky loans to customers of their security underwriting affiliates in the hope that their generosity would improve the chances that these customers would call upon the affiliate to underwrite new securities. Similarly, ownership of real estate brokerage or development affiliates by depository institutions might provide strong incentives for these organizations to extend credit for transactions in which affiliates are involved. In both cases, the consequences of the added risk may not show up for years, while fee income generated on all parts of such transactions would be realized immediately.

190. The Board is directed to utilize, where feasible, reports of the regulatory agencies that oversee the operations of the non-bank subsidiaries. H.R. 3537, *supra* note 2, at § 13.

191. See Cornyn & Talley, *supra* note 182, at 35; Saunders, *Conflicts of Interest: An Economic View*, in DEREGULATING WALL STREET, *supra* note 27, at 207.

192. See Wall, *supra* note 184, at 25.

Several additional steps should be taken to minimize these risks. At a minimum, the Federal Reserve should not be discouraged from conducting its own examinations of non-bank subsidiaries when the Board believes such examinations are necessary.<sup>193</sup> In addition, requiring the depository institution and its affiliates to have different employees, officers, and directors would minimize the opportunities for individuals in diversified organizations to divert funds from the depository subsidiary.<sup>194</sup> Although both measures would impose some costs on diversified financial organizations, they should be viewed as the minimum price that must be paid for the right to engage in both depository and non-depository activities.<sup>195</sup>

Finally, measures should be taken to minimize the dangers posed by risky bank loans to customers of bank securities or real estate affiliates (as well as to partners or co-venturers of real estate development affiliates). The FDIC's recent rule allowing state-chartered non-member banks to engage in securities underwriting offers one approach—prohibiting such banks from extending credit to current customers of the affiliate whose securities are being underwritten by the affiliate, unless these securities are of "investment grade quality."<sup>196</sup> This approach could be toughened by dropping the exception for investment grade quality securities. Alternatively, quantitative restrictions could be applied to bank loans made to customers or partners of affiliates, both on total lending to any single customer or partner and on such lending in the aggregate.

### 3. *Restrictions on Product Diversification*

The final method for limiting the risks of financial product deregulation is to restrict the extent of permissible diversification. This type of restriction could be implemented either by limiting financial activity diversification in the aggregate but giving financial organizations themselves freedom to choose the nature of their non-bank activities, or by defining the specific activities that are permitted.

193. Large bank holding companies must currently report all inter-company transactions to the Board of Governors of Federal Reserve System on Form FR Y-8. 12 C.F.R. § 225.5(b) (1985).

194. The Administration's proposal and the Senate bill would permit crossovers in personnel. H.R. 3537, *supra* note 2, at § 3; S. 2851, *supra* note 3, at § 101(b).

195. An extreme solution advanced by Clark is simply to prohibit inter-affiliate transactions except for dividends from subsidiaries to parents and parent capital contributions to subsidiaries. Shared services among affiliates would also be permitted where the organization could demonstrate the benefits to the regulators by a "preponderance of the evidence." Clark, *supra* note 165, at 839-46. Given the dangers of self-dealing between affiliates, Clark's proposal has much to recommend it. Of all the inter-affiliate restrictions discussed thus far, however, Clark's would have the greatest impact in reducing any organizational efficiencies that might be realized from financial product diversification.

196. 49 Fed. Reg. at 46,716.



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### a. *Aggregate Limits*

Two models are available for placing aggregate limits on financial activity diversification. One approach is to subject total investment in non-bank activities to a percentage of asset or capital limitation, in the mold of the FHLBB's recent rule limiting direct investments by thrift institutions to ten percent of total assets.<sup>197</sup> Alternatively, total investment in non-bank activities could be deducted from an institution's capital for purposes of capital regulation, as the FDIC recently proposed for bank investments in subsidiaries engaged in insurance underwriting and real estate development.<sup>198</sup>

Concentration of investments in specific non-bank affiliates or subsidiaries can also be limited. For example, the financial deregulation bill proposed by Senator Garn in 1983<sup>199</sup> would have prohibited large holding companies—those with consolidated U.S. deposits of at least 0.3% of all domestic deposits—from acquiring any firm outside the bank or thrift industries if, as a result of the acquisition, the holding company would have investment in any single non-bank activity exceeding twenty-five percent of consolidated capital. Senator Garn estimated that this restriction would have applied only to the twenty-five largest bank holding companies.<sup>200</sup> Nevertheless, non-depository organizations seeking entry into banking or thrift activities would complain that such a limit on bank holding company diversification would severely constrain their ability to engage in depository activities.<sup>201</sup>

In theory, constraining investment in non-bank activities is inconsistent with the notion that risk can be reduced, rather than increased, through activity diversification. The aggregate investment limits can nevertheless be defended. They prevent excessive risk-taking without eliminating the risk-reducing benefits of diversification.<sup>202</sup> As the empirical evidence presented in Part II suggests, the efficiently diversified financial organization would place no more than a quarter of its assets in non-depository activities, at most levels of targeted earnings.<sup>203</sup> Moreover, as pair-wise

197. See *supra* text accompanying notes 121-26.

198. 50 Fed. Reg. at 23,984.

199. S. 2181, 98th Cong., 1st. Sess. (1983).

200. 129 CONG. REC. S17031-32 (daily ed. Nov. 18, 1983) (statement of Sen. Garn).

201. For example, if holding companies were limited to investing no more than 25% of their consolidated assets in non-bank activities, a financial organization not presently engaged in banking would be required to acquire a bank so large that the bank's assets represented at least 75% of the combined organization's total assets after the acquisition. In contrast, existing bank holding companies would be free to enter non-bank activities up to the aggregate 25% of asset limitation.

202. Aggregate limits would also help constrain the growth of financial institutions and thereby alleviate concerns about undue increases in aggregate concentration of financial wealth. See Note, *supra* note 10, at 656.

203. See *supra* Table 2.

risk comparisons in Table 3 suggest, the entry into banking by financial conglomerates will in many cases lead to increased risks for the insurance agencies.<sup>204</sup> In short, a moderate amount of permitted diversification can be a good thing, but too much may permit certain financial organizations to assume an undesirable level of risk.

b. *Activity Limits*

A second approach for limiting the extent of diversification would be to define the specific non-bank activities that depository organizations or their holding companies can undertake.<sup>205</sup> The Administration bill—the broadest financial deregulation proposal thus far—would specifically permit financial holding companies to engage in, among other activities, bank and thrift activities, the underwriting of municipal securities and mutual funds but not corporate equity and debt instruments, insurance underwriting and brokerage, and real estate development and brokerage up to five percent of the holding company's capital.<sup>206</sup> It also would permit the Federal Reserve to define other permissible activities that are "closely related to banking" or of a "financial nature."<sup>207</sup>

Several more restrictive approaches could be envisioned. Congress could add specific permissible non-bank activities to those currently authorized by the Federal Reserve Board under Section 4(c)(8) of the Bank Holding Company Act.<sup>208</sup> For example, following the recent suggestions of Anthony Solomon, former President of the Federal Reserve Bank of New York, financial holding companies might be allowed to engage in only the brokerage of insurance, securities, and real estate but not permitted additional underwriting or development authority in any of these fields.<sup>209</sup> Such a distinction could be justified on the basis of the widely shared perception that brokerage activities are less capital-intensive and less risky than underwriting and development functions.

The main drawback of any effort by Congress to define permissible non-bank activities in legislation is that, however justified any particular

204. See *supra* Table 3 and accompanying text.

205. Of course, unless all product-line restraints are removed, some definition of permissible activity will be required.

206. H.R. 3537, *supra* note 2, at §§ 10-12.

207. H.R. 3537, *supra* note 2, at § 10. In contrast with current law, holding companies would not need prior approval to engage in non-bank activities. Instead, the Federal Reserve and FSLIC would have limited authority to prevent holding companies from engaging in non-bank activities where the safety of the depository subsidiary would be threatened, the impartiality of credit allocation by the depository subsidiary would be affected, or the holding company lacked the necessary financial and managerial resources.

208. See *supra* text accompanying notes 46-47.

209. Solomon, *Banking Deregulation: Where Do We Go From Here?*, Q. REV. FED. RESERVE BANK NEW YORK, Autumn 1984, at 1, 3.

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definition may be, the give and take of the political process would likely result in a list very much different from what may be appropriate. Accordingly, an alternative method of providing such definitions is to continue allowing the Federal Reserve Board to define permissible non-bank activities but to relax the current standard. The 1984 Senate bill, for example, would have retained the “closely related to banking” test but would have required the Federal Reserve to “take into account technology or other innovations in the provisions of banking-related services” in interpreting that standard.<sup>210</sup> The “financial nature” test in the Administration’s proposal would broaden the standard even further and could be viewed as a substitute for the authorization of specific non-bank activities included in that proposal.

Given the strongly competing interests involved in the financial deregulation debate, financial product-line deregulation is likely to proceed very gradually, if at all. The failure to gain House support for the 1984 Senate bill—which only modestly expanded permissible non-bank powers of bank holding companies—highlights the difficult uphill political struggle faced by advocates of further deregulation. It may be possible to reach a consensus, however, by combining aggregate limits on activity diversification with federal agency determination of permissible non-bank activities under a more liberal standard of the type included in the Administration’s proposal. The first element would help allay the fears of opponents of deregulation that depository organizations would stray too far afield from banking in a deregulated environment. The second element would keep the definitional process out of the political spotlight, where opposing forces have forced a total standoff on product-line deregulation, and would permit the Federal Reserve to relax product-line barriers in a coherent fashion.

## Conclusion

The case for financial product deregulation rests, at least in part, on the view that it would permit both bank and non-bank organizations to diversify their activities and thereby lower—or at least not increase—the risks faced by the federal deposit insurance agencies. The evidence reviewed in this article substantiates the argument that deregulation would offer potentially significant opportunities for risk-reduction by financial service firms. Past behavior by depository institutions and their holding companies, however, suggests that at least some depository organizations and institutions seeking to acquire them would be influenced in their activity

210. S. 2851, *supra* note 3, at § 104(d).

diversification decisions by the moral hazard created by deposit insurance and, as a result, would diversify in a risk-enhancing, rather than risk-reducing, fashion.

There are two broad categories of proposals for limiting the risks of financial product deregulation. The first approach is to eliminate or substantially reduce the moral hazard problem created by deposit insurance by using tools such as increased or modified capital or subordinated debt requirements, stricter disclosure standards, tougher supervision, and risk-based pricing of deposit insurance premiums. Although there is promise in some of these proposals, it is doubtful that they can be counted on to eliminate the moral hazard. As a result, more direct measures will be needed to limit the risks. Both the Reagan Administration's proposed deregulation bill and the Senate bill passed in 1984 offer useful suggestions. A range of strengthened safeguards, however, including separate operating requirements for bank and non-bank activities, stringent examinations by the Federal Reserve Board of non-bank subsidiaries of bank holding companies, increased restrictions on inter-affiliate transactions, aggregate limitations on activity diversification, and regulatory agency determination of permissible activities, can be employed to limit risks without significantly detracting from the potential benefits promised by financial product deregulation.