

# Rethinking Disclosure Requirements

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The U.S. banking industry is subject to many regulations intended to ensure the safety of depositors' money, financial soundness, and a competitive banking system. Regulations provide benefits, but they also impose costs. Among the various banking regulations, disclosure requirements are often cited as particularly costly. Some disclosure requirements provide regulatory agencies with the information they need to supervise the industry, while others are intended to protect consumers from

deception or other abuses and to stimulate competition by encouraging comparison shopping.

To aid regulators, banks are required to file periodic financial reports and to undergo on-site examinations. Other disclosure requirements restrict the manner in which banks may represent the interest rates charged on loans or paid on deposits, as well as other information relevant to the consumer. For example, the Truth in Lending Act of 1968 and the Fair Credit and Charge Card Disclosure Act of 1988 govern disclosure of loan rates and other credit-related terms, while the Truth in Savings Act, which was passed in 1991 as part of the Federal Deposit Insurance Corporation Improvement Act (FDICIA), covers the disclosure of deposit rates and service fees. In addi-

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tion, the Home Mortgage Disclosure Act of 1975 requires banks to report publicly certain details of their approval and rejection of mortgage and home improvement loan applications by census tract. Even plans to close a bank branch must be publicly announced in advance, under another provision of FDICIA.

Disclosure laws proliferated during the 1970s and 1980s, and new disclosure rules have been adopted recently. Additional disclosure requirements are under consideration for such activities as the sale of mutual funds.

One basic tenet of economic analysis is that good public policy should confer benefits that outweigh its costs. Thus far, most policy-makers seem to have taken for granted the net benefits of mandatory disclosure, a view that persists in the ongoing debate over proposed new disclosure requirements in banking. But neither economic theory nor historical experience provides universal support for this view. Recent studies suggest that disclosure requirements can impose substantial costs on an industry. If so, they should be employed only after careful analysis indicates that their benefits are likely to exceed their costs. Moreover, ongoing monitoring of the benefits and costs of particular disclosure requirements may be useful, both because preliminary estimates may be wrong and because disclosure requirements may not be needed after their original goals have been achieved.

### THE COST OF DISCLOSURE

According to several recent studies, the banking industry devotes significant resources to mandatory disclosure. For example, the U.S. Office of Management and Budget (OMB)

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has estimated that the banking industry must spend 7.5 million hours per year to comply with just one of the myriad disclosure requirements, Truth in Lending; an additional 1.5 million hours filing certain required financial reports; and 2.9 million hours to comply with regulations on electronic payments, which include disclosure requirements.<sup>1</sup> According to a separate survey by the American Bankers Association, the four most costly banking requirements are the Community Reinvestment Act (CRA), financial reports, on-site examinations, and Truth in Lending (Rehm, 1992b). The chief purpose of these last three is to compel disclosure, but even CRA, which primarily requires banks to meet the credit needs of their local service areas (including low- and moderate-income portions of those areas), also requires banks to document their performance

in fulfillment of this goal. A study by the Independent Bankers Association of America similarly found that Truth in Lending was second only to CRA in compliance costs, with

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<sup>1</sup>These figures compare with an estimated 3 billion total annual staff hours in the banking industry, computed as the product of 2000 work hours per year times the year-end 1993 figure of 1.5 million full-time equivalent bank employees as reported in Call Reports. The OMB's figures are somewhat imprecise, since they are based on survey estimates provided by the federal banking regulatory agencies, and each agency has a different estimate of the time needed for a given regulation. For example, the FDIC estimates that each bank must spend 23 hours to fill out the basic financial reports, while the Office of the Comptroller of the Currency estimates 35 hours for the same task (Rehm, 1992a). It may be, too, that each regulatory agency has some incentive to understate the burden of its regulations.

an annual cost approaching \$600 million for those banks that are locally owned and operated; examinations ranked third at about half that cost (*Independent Banker*). The total costs of examinations and Truth in Lending amounted to nearly 7 percent of community banks' pretax income in 1992, the same year as the survey. The majority of those costs comprise salaries and benefits for additional staff required for compliance, outside consultants and lawyers, employee training and associated materials, computer usage, postage, printing, and telephone bills (Rehm, 1992b).<sup>2</sup>

The banking industry now faces even higher mandatory disclosure costs because these surveys were completed before several new disclosure requirements—including Truth in Savings—took effect. Proposed revisions to CRA may increase its associated reporting costs to more than \$100 million annually, according to a more recent survey (Cummins).

While the exact numbers may be questioned in each case, the cumulative picture painted by these studies is one of a nontrivial cost of disclosure. An important issue (discussed below) is whether much of the disclosure would have taken place voluntarily even without regulations that mandated it. If so, the associated fraction of the reported cost of disclosure should be considered as a normal cost of doing business, rather than a cost of disclosure requirements per se. But even if banks would have disclosed all the information voluntarily, disclosure requirements can impose further costs in terms of extra documentation and adherence to a standardized format. For example, filing financial reports to regulators takes time even if the same numbers are also published in the bank's annual report. As previously recog-

nized by regulators, disclosure regulations may require banks to "create or revise printed forms, adopt conforming policies and procedures, provide training for personnel, and...make extensive data processing system changes" (Seger). Failure to comply with disclosure requirements, even if inadvertent, can expose a bank to the risk of substantial additional costs.<sup>3</sup>

### POSSIBLE BENEFITS OF DISCLOSURE REQUIREMENTS

Since disclosure requirements aren't without cost, they should provide some benefit to be justified.<sup>4</sup> And, in fact, it is not hard to imagine certain ways in which benefits could arise.

One benefit from disclosure requirements might be an increase in market efficiency, in terms of producing more output from a given set of resources. The stylized textbook model of perfect competition shows that a market economy can achieve the best possible economic efficiency, but it requires certain conditions to do so—one of which is the free availability of full information. When information is limited or costly, as it typically is in practice, economic efficiency suffers. For example, firms may take advantage of uninformed consum-

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<sup>3</sup>A recent example is the lawsuit *Rodash v. AIB Mortgage Co.*, which has spawned a number of class action suits. A ruling on the Rodash case in March 1994 by the United States Court of Appeals for the 11th Circuit allows borrowers to demand rescission of a loan in which the bank inaccurately disclosed fees (Hornblass). Rescission would force lenders to pay back interest and fees, at a potential aggregate cost that has been estimated as high as \$217 billion for the mortgage lending industry (Mortgage Bankers Association of America). In addition, inaccurate disclosure exposes a lender to direct monetary penalties under the Truth in Lending Act, which can range as high as \$500,000 (Hornblass).

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<sup>2</sup>Additional information on the cost of compliance with bank regulations can be found in the 1992 study by the Federal Financial Institutions Examination Council and references cited in its Appendix C.

<sup>4</sup>Previous studies have debated the cost-benefit tradeoffs of disclosure requirements; see Benston (1973), Lev and Ohlson (1982), and Friend (1984).

ers, raising the prices they charge and reducing the quantities or quality of what they sell. Or uninformed investors may make misguided decisions in their choice of investments, again leading to inefficient use of resources.

In this situation, it is logical to think that efficiency could be improved by requiring firms to disclose in a standardized manner relevant information about their prices, costs, quality, and other aspects of their operation and outputs. For example, without reliable information, investors typically demand a higher return on their investments (a "risk premium") to compensate them for accepting additional financial risk. Disclosure of information reduces the risk—the investors know more about what they are getting—and therefore allows the firm to attract investment and raise capital at a lower risk premium. As a result, total investment and output may be higher when more information is disclosed.<sup>5</sup> (The next section explains in more detail why disclosure might benefit firms.)

Mandatory disclosure requirements might also solve a *coordination problem* if each firm benefits from disclosure only if all other firms likewise disclose. For example, if a firm discloses the true quality of its products, consumers may have a hard time interpreting the information or comparing products across firms unless other firms making similar products also disclose the quality of their products. Therefore, the first firm to disclose will not reap the full benefit of its disclosure until other firms similarly disclose. So, unless disclosure is legally required, no firm will want to initiate disclosure, and the industry may find itself

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<sup>5</sup>At least one study of nonbanking firms appears to support this view, finding that the adoption of a particular disclosure requirement reduced the cost of equity capital of the affected firms (Dhaliwal, 1979). However, that study was not conclusive because it examined only a small group of firms and because of the difficulty of accurately measuring the cost of capital.

trapped in an inferior situation with each firm disclosing too little.

A related possibility is that disclosure confers *positive externalities* such that no firm is able to capture the full benefit of its own disclosure. For example, a bank trading futures and options with another bank could reveal some information about the overall risk of *both* banks by disclosing the size, type, and other details of those contracts. Investors in each bank—not just in the first bank—would benefit by such disclosure. Therefore, neither bank would reap the full benefit of its own disclosure, and so, since disclosure is costly, each bank will choose to disclose less than society would prefer unless disclosure requirements are adopted (Easterbrook and Fischel).<sup>6</sup> In this situation, a disclosure requirement—or an industry-wide agreement on disclosure, if one can be reached—would be beneficial.

Within the banking industry, an additional goal of disclosure is to enable regulators and investors to make decisions that reduce the likelihood and cost of bank failures, thereby reducing the risk of disrupting the interbank payment system as well. If financial disclosure is incomplete or misleading, a bank's regulators and shareholders may allow management to take actions detrimental to the bank's long-term health (Shaffer, 1992). The banking industry may suffer a higher failure rate as a result, increasing the cost of federal deposit insurance and inconveniencing depositors and borrowers.

Thus, disclosure requirements could potentially be beneficial in several ways. Proponents of mandatory disclosure may often have in mind some such arguments. But that's not the end of the story.

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<sup>6</sup>When only two banks are involved, it is perhaps reasonable to expect that they might be able to coordinate their disclosure decisions. But given that the U.S. has more than 10,000 banks, besides foreign banks and nonbank firms, the magnitude of the problem becomes apparent.

## ARE THESE BENEFITS REAL?

Contrary to this optimistic picture of disclosure, a number of recent theoretical and empirical studies have concluded that disclosure requirements may have neutral or even harmful effects. The mildest of these results is that mandatory disclosure may be redundant, since under certain conditions firms will voluntarily and truthfully disclose all relevant information about their financial condition or product quality.

Why might firms' managers voluntarily disclose financial information? One reason is that stockholders favor such disclosure, and they may be willing to pay higher prices for the stock of firms that disclose more information. Stockholders often benefit from firms' disclosing information for at least two reasons. First, the total cost of transmitting the information is lower if a firm incurs a single expense to report some item to the public than if shareholders must duplicate each other's cost and effort in collecting the same information on their own. Second, as noted above, information improves an investor's understanding of the nature of the investment. Stockholders will therefore favor disclosure; consequently, a firm would maximize its stock value by committing to a policy of disclosure (Diamond). In this case, we might expect managers to respond to shareholders' preferences, so that disclosure could occur without being mandated by regulators.

A study by Michael Smirlock and Howard Kaufold provided some limited historical evidence that particular banking disclosure requirements may have been at least somewhat redundant. Smirlock and Kaufold found that investors were able to discriminate (though

perhaps imperfectly) among banks with different levels of foreign lending exposure even before this information was required to be disclosed publicly. In other words, at least some information was apparently available even without the requirement.

Other studies have suggested reasons why firms may voluntarily disclose information to consumers about their product quality. For example, a theoretical study by Sanford Grossman examines the monopoly case, where we might ordinarily expect a firm with a low-quality product to benefit by misleading its customers. On the contrary, Grossman argues, consumers will understand this incentive and respond by purchasing only those products that are fully guaranteed or otherwise protected against misrepresentation. Grossman's conclusion (p. 183) is that "[i]t is not in a monopolist's interest to withhold information about product

quality. If information transmittal or warranties are costless, then there is no role for government intervention to encourage disclosure."

Of course, information is costly to convey in most circumstances—but this complication can actually worsen the effect of disclosure requirements. When firms' cost of disclosure increases with the amount of information reported, they may, under some conditions, voluntarily disclose even more information than society would prefer. Once a certain amount of information has been revealed, additional information is of relatively little value to investors or regulators. When so much information is disclosed that the cost of further disclosure exceeds its value, investors (and society in general) would prefer not to have additional disclosure.

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But it is easy to see how firms might choose to disclose beyond that level. For example, if faced with two firms of apparently similar profitability, investors will prefer the one that provides more complete and useful information, as discussed above, and they will express this preference by bidding up its stock price. In this case a firm can attract more investors and increase its stock price by disclosing more information. But suppose that both firms are initially reporting the maximum amount of information that society would prefer: even then, either firm would still benefit by increasing its disclosure a bit more than that of the other firm because it would attract additional shareholders at the expense of its rival. Each firm will therefore attempt to disclose more than the other, with the result that both firms would disclose more than society prefers (Fishman and Hagerty).

A similar outcome may occur with respect to consumers. For example, disclosure of full information about products can increase consumers' recognition of differences among products. Such recognition benefits firms at consumers' expense, because perceived differences across products tend to reduce the extent of price competition among firms (Eaton and Grossman). In this scenario, waste is incurred both from the direct cost of disclosure and from the loss of competition. In addition, if disclosure is mandatory, firms may respond by investing in efforts to increase the differences across their products, incurring a further direct expense that reduces competition still more.

When disclosure requirements are redundant, they add no benefit. If they impose any additional cost of their own, such as overhead costs, they are harmful, on balance. Moreover, where firms already disclose as much as (or more than) society would prefer, any further increase in disclosure—such as that mandated by regulation—would clearly be harmful (Grossman, pp. 183-84). A possible example of

excessive disclosure is mutual fund prospectuses, which the SEC and the Office of the Comptroller of the Currency have complained contain so much detail as to be confusing (Cope, 1994).

Disclosure requirements can be harmful in other ways as well. Paradoxically, such requirements can sometimes have the unintended effect of reducing the amount of useful information actually disclosed, from the perspective of investors (Barth and Cordes) or of consumers (Matthews and Postlewaite). This contrary result can occur if, for example, a poorly designed disclosure requirement omits some relevant information in favor of irrelevant information. Then firms, trying to economize on their total costs, may choose not to disclose certain items that are not required but which investors or customers may find more useful, and which the firms would have disclosed in the absence of any requirements. On the other hand, if firms respond to a requirement by simply increasing the amount of information they disclose, consumers or investors may suffer from information overload and be unable to distinguish important from unimportant details (Grossman, pp. 183-84).

#### WHAT'S NEEDED IN POLICY ANALYSIS

The variety of pitfalls of mandatory disclosure suggests that policymakers should not assume that particular disclosure requirements will always confer benefits. Rather, policymakers should closely examine the potential benefits and costs of a proposed disclosure requirement before adopting it, and they should periodically monitor the effects of the requirement after adoption to guard against unintended consequences.

The possibility of benefit requires a minimum of three conditions. First, there must be an existing problem. Examples might include monopoly power exercised by some firms, unrecognized risk, or unnecessarily high "risk premiums" or transaction costs as discussed

above. Second, there must be some way for additional disclosure to alleviate the problem. For the examples listed, improvements might involve reducing consumers' costs of searching for the best price or quality, revealing the full amount of risk in a market or firm, or reducing transaction costs. Third, disclosure requirements must be able to increase the total amount of useful information disclosed. That is, firms must be voluntarily disclosing too little information, and the proposed requirements must not inadvertently encourage firms to stop reporting some useful items that they currently disclose. In a related vein, disclosure requirements should be kept as simple and standardized as possible, both to minimize reporting costs and to maximize intelligibility of the information reported.

Three recent case histories from banking disclosure requirements can illustrate these principles.

**Truth in Lending and the Fair Credit and Charge Card Disclosure Act.** The Truth in Lending Act, passed in 1968, requires full and clear disclosure to borrowers of the terms of bank lending. Interest rates charged on bank credit cards subsequently remained much higher than the cost of funds and have tended not to follow occasional declines in other interest rates. Some observers interpreted this pattern as indicating imperfect competition, possibly of a sort that could be alleviated by stronger disclosure requirements. Following this logic, Congress passed the Fair Credit and Charge Card Disclosure Act, which took effect in 1988 and strengthened mandatory disclosure specifically for credit cards.

In this case, whether the first condition (an existing problem) was met remains a controversial issue. Some studies have concluded

that persistently high interest rates on credit cards could constitute evidence that the credit card market is not perfectly competitive (Ausubel; Calem and Mester). The historical fact that banks' credit card operations have been more profitable than other bank products, on average, further supports this view (Park; Daly; and Meece), as do certain statistical tests of pricing behavior (Shaffer, 1994). However, other studies have concluded that the observed pattern of interest rates may be consistent with competitive pricing (DeMuth; Canner and Lockett; and Mester). If the market for credit cards was fully competitive, there was no problem to be solved and, hence, no potential benefit from added disclosure requirements.

Moreover, if credit card issuers have market power, its source must be determined before we can judge whether increased disclosure will reduce it. Since the market for credit cards is

nationwide and there are about 5000 issuers in the U.S. (Park), we might expect vigorous competition apart from special factors. Economists have identified two main conditions that might allow card issuers to exercise some market power in this case: *consumer search costs* and *switching costs*.

According to the first of these explanations, banks are able to charge high interest rates because it is difficult for consumers to learn about other banks that charge lower rates (Ausubel; Calem). In this situation, increased disclosure would make it easier for consumers to shop around, eventually forcing all banks to match the lowest rates. This was the argument presented in Congress supporting the expanded disclosure requirements that took effect in 1988 (Calem, p. 12).

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According to the second explanation, it is costly for a consumer to transfer her credit card account to another bank, especially if there are outstanding balances on the old card that must be paid off before the new bank will approve the application (Calem). In this situation, any anticipated savings from a lower interest rate must be large enough to outweigh the switching costs before a consumer will change to the bank with the lower rate. Therefore, a bank can retain many of its existing credit card customers even if it charges somewhat higher interest rates than other banks and even if its customers are aware of that difference. Increased disclosure would primarily affect the competition for new customers and therefore would have less of an impact on interest rates than if there were no switching costs. Historical evidence that switching costs are important in the market for credit cards is found by Paul Calem and Loretta Mester.

Since the Fair Credit and Charge Card Disclosure Act of 1988 was enacted, spreads and profits on credit card operations have remained high relative to other bank products and services (Park; Daly; and Meece). A recent empirical study provides additional evidence that the pricing of credit cards has been substantially noncompetitive, on average, from 1988 through 1993. In fact, it has been no more competitive than in the years immediately preceding the expanded disclosure (Shaffer, 1994). The average profitability of credit card banks grew steadily relative to assets in at least the first three years after 1988 while the gap between interest rates charged on credit cards and those on automobile loans, personal loans, or Treasury bills has widened since 1989 (Park, Table 3 and Chart 3, and U.S. General Accounting Office, pp. 16-17). Thus, recent experience suggests that the Fair Credit and Charge Card Disclosure Act of 1988 has not increased the degree of competition, possibly because consumer search costs were not the primary reason for market power in credit cards.

**Truth in Savings.** Enacted as part of FDICIA in 1991, Truth in Savings was a legislative response to misleading descriptions of interest rates paid on deposits by a few banks. By not clearly stipulating such details as the balance on which interest payments were calculated (for example, average balance versus minimum balance over a given period), some banks may have been making interest payments lower than depositors had expected for the quoted interest rates. Laws governing the manner of disclosure were expected to safeguard against such abuses by ensuring a uniform standard of representing the calculations of rate payments across all banks.

On the face of it, this logic seemed above reproach. But there was no evidence that the problem was widespread. Consumer surveys prior to the act indicated that the vast majority of depositors were already receiving satisfactory disclosure regarding terms and conditions of their accounts; bank examiners similarly reported that most banks were providing comprehensive written disclosure; and only about 4 percent of all consumer complaints received by the Federal Reserve were related to deposit disclosure (Johnson; Seger). Thus, the potential benefit from the law was quite small. Not surprisingly, therefore, the legislation did not attract the support of regulators, bankers, or even consumer groups that might have been expected to benefit from a genuinely needed policy reform.

Moreover, the attempt to impose uniformity on the marketing of deposit accounts has actually reduced the variety of choice and possibly the amount of information available to the public. The wide variety of pricing schedules offered by various banks cannot all be adequately or accurately represented in a single practical formula. As predicted by Federal Reserve Governors Lawrence Lindsey and John LaWare, some banks have responded by discontinuing certain types of deposit accounts as a result of the law.<sup>7</sup> For example, Metcalf Sav-



ings Bank, a community bank in Kansas, announced plans to eliminate one of the two types of statement savings accounts it offered because it was too difficult to specify its rate according to the method prescribed by law.<sup>8</sup> Regulators had warned about these adverse consequences even prior to adoption of the act.

Furthermore, the costs of complying with Truth in Savings are severe. One study has estimated the start-up costs alone at \$337 million across the banking industry (Elliehausen and Lowrey), and per-bank costs have run as high as several hundred thousand dollars.<sup>9</sup> The Federal Reserve has estimated that banks' staff time required for compliance may total 1.9 million hours per year.

Imposing substantial compliance costs on all depository institutions in response to abuses by only a few is a predictable way to generate an unfavorable cost-benefit tradeoff. Ironically,

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<sup>7</sup>The various problems with Truth in Savings discussed in this section are reported in Johnson, 1986; Seger, 1989; Board of Governors of the Federal Reserve System, 1991; Cope, 1992; Piskora, 1993; Rehm, 1993; and Schoenke, 1993.

<sup>8</sup>From the consumer's standpoint, it is possible to have too much product variety. Consider, for example, the complexity of available airline fares. However, different depositors have different cash flow needs and tend to maintain different average balances, so it is difficult to make the case that all consumers would benefit by having only a small number of standardized accounts.

<sup>9</sup>Costs are less for smaller banks but can still be substantial. Community bankers have estimated that compliance is costing them about \$25,000 per bank on average (Cox, 1993), but in one reported case the start-up cost for compliance was more than \$30,000 for a bank with an annual operating budget of only \$172,500 (Cox, 1993 and Piskora, 1993). Credit unions alone spent an estimated \$250 million in the first year and may spend \$180 million per year in subsequent compliance costs. Regulations implementing the act ban certain pricing practices used by more than two-thirds of the credit union industry and may force more than 1500 smaller credit unions to automate or go out of business (Arndorfer, 1993).

in a competitive market the compliance costs must be passed on to customers, so that an ill-conceived disclosure law actually harms the depositors it was intended to protect. As a consequence, a measure of support has arisen within Congress to repeal the act. Representative William Orton of Utah introduced one such bill (H.R. 337) in January 1995.

**Derivatives Disclosure.** An issue currently under debate is whether banks should be required to disclose more detail about their holdings of financial derivatives such as futures, options, and swaps. Depending on whether they are used to hedge or to speculate, these instruments can either reduce or increase the overall risk of a bank. For example, if a bank uses short-term deposits to fund long-term fixed-rate loans, its earnings would fall if interest rates rise. Such a bank could hedge its earnings against rising interest rates by selling Treasury bill futures contracts. On the other hand, if it buys the same derivatives, the bank would increase both its potential profits if rates fall and its potential losses if rates rise (Shaffer, 1991); such a transaction would amount to a bet that interest rates will fall.

The rapid growth of the derivatives market in recent years has dramatically increased the potential impact of derivatives on financial risk, across the banking industry as a whole as well as at the level of the individual bank. As a result, many experts, practitioners, and policymakers have become concerned that the available information is inadequate to measure or control the risks reliably and have called for increased disclosure in this area.<sup>10</sup> (See *Disclosure of Banks' Derivatives*.) Improved

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<sup>10</sup>The U.S. General Accounting Office, the Bank for International Settlements, the Group of Thirty, the Securities and Exchange Commission, the Financial Accounting Standards Board, the Office of the Comptroller of the Currency, the Federal Reserve, and members of Congress are among those who have urged more complete disclosure.

## Disclosure of Banks' Derivatives

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All banks are currently required to report information about the types, amounts, and profits or losses of their financial derivatives in Schedules RC-L and RI of the financial reports collected each quarter by federal banking regulators (the Call Reports). For example, a bank must report separately the dollar amounts of its interest rate swaps, interest rate futures, interest rate options sold, and interest rate options bought; similar detail is required for each type of foreign exchange derivative. The aggregate book value and replacement cost of nonperforming derivatives must also be reported under a new requirement that took effect in 1994. In addition, the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC) impose separate financial disclosure requirements.

The Federal Financial Institutions Examination Council, which coordinates reporting requirements across the bank regulatory agencies, recently approved an expansion of the Call Reports to include more detail about financial derivatives, beginning in March 1995. The new reports will make a finer distinction among various types of derivative contracts, including separate categories for over-the-counter and exchange-traded options, for all banks. The latter distinction is useful because options traded on an exchange, like the Chicago Board of Trade or the Philadelphia Stock Exchange, are backed by a clearing corporation and therefore carry less credit risk than over-the-counter or bilateral options, which are guaranteed only by the individual counterparty.

Additional changes will affect banks larger than \$100 million in assets. These banks must distinguish between positive and negative (bought versus sold) amounts of each type of derivative contract; report fair values (market prices) of the contracts; and report the purpose of the contracts (amounts of each type used to hedge—that is, to reduce the bank's risk—versus amounts used for other purposes such as seeking to profit from anticipated changes in market conditions).

A further change for the larger banks will eliminate one current source of potential exaggeration of the risk. Sometimes a bank has multiple contracts with a particular counterparty (another bank or other firm), in which the bank owes its counterparty under some contracts but is owed by the counterparty under others. Whenever a *bilateral netting agreement* has been signed by both sides, the bank would be exposed only to the net loss implied by all such contracts if its counterparty defaults. In the new Call Reports, large banks will additionally report a single net credit exposure enforced by legal bilateral netting agreements across all derivative contracts and counterparties. Finally, banks will report the income they earned from derivative contracts, making a distinction between trading contracts and hedging contracts.

Federal Reserve Chairman Alan Greenspan has indicated that strengthening public disclosure on derivatives is a beneficial step in public policy. A bill introduced in Congress by Representative Henry Gonzalez in May 1994 (H.R. 4503) would have provided a legislative mandate for such revisions. In a report issued in the same month, the U.S. General Accounting Office likewise called for banking regulators, FASB, and the SEC to expand their disclosure requirements for derivatives.

In October 1994, FASB released Statement No. 119 containing final disclosure standards for derivative instruments. The expanded reporting requirements in this statement include similar information on the magnitude of derivatives activities, the purpose of those activities (trading or risk management), and the profits or losses from derivatives trading. The new standard took effect at the end of 1994 for institutions larger than \$150 million and will take effect one year later for smaller institutions. FASB rules already imposed some disclosure requirements for derivatives: FASB Statement 105 requires disclosure of risk stemming from activities (including derivatives) not reported on a bank's asset-liability statement, and Statement 107 requires disclosure of the fair (market) value of all financial instruments.

The SEC has general rules requiring the disclosure of information needed to understand an institution's financial reports and condition, but it does not impose specific standards for banks' disclosure of financial derivatives. The SEC has recently initiated talks with securities firms to urge adoption of voluntary standards regarding disclosure and capitalization of derivatives. However, the banking industry and its regulators appear to be in the forefront of progress here, as the SEC has reportedly urged the securities firms to compare their practices with those required for banks (Taylor and Lipin).

availability of certain information can allow firms to evaluate, price, and hedge the true risks more accurately, thereby improving safety and soundness as well as reducing transaction costs and risk premiums. Ideally, such information would include (1) the amount of each type of derivative contract held by a bank (including its market value or replacement cost); (2) an indication of the amount of risk associated with each type of contract (including both the risk of a change in the derivative's price and, for derivatives traded directly between firms rather than on an organized exchange like the Chicago Board of Trade, the creditworthiness of the other firm); and (3) how those derivatives fit into the bank's overall portfolio (in particular, whether they tend to offset other risks or add to the total risk). As Federal Reserve Chairman Alan Greenspan recently testified, "Improvements in public disclosure would aid derivatives participants in assessing the creditworthiness of their counterparties and would allow shareholders to gauge more accurately the effects of derivatives activities on public companies' risks and returns." Regulators would also be able to monitor and respond to overall risk more accurately. It is therefore easy to understand the broad-based support for increased disclosure.<sup>11</sup>

Nevertheless, we have not yet seen widespread voluntary disclosure at the level recommended.<sup>12</sup> Most banks seem to be waiting for a requirement before initiating expanded reporting. A coordination problem may exist, as discussed above, in which each bank would like to disclose but only if others similarly disclose. One example of a coordination prob-

lem could involve derivatives that are contracted between two individual banks, rather than traded over an organized exchange and backed by a clearing corporation. Then the market would not know how to interpret one bank's reported exposure to another bank unless the second bank fully disclosed its sources of risk as well, including similar information about its derivatives portfolio and who its trading partners were. The first bank would not receive the full benefit of disclosing unless the second bank also disclosed. A related possibility is that the banking industry, regulators, and society as a whole may benefit more from disclosure than would any individual bank and therefore would prefer each bank to disclose more information than the bank would choose to disclose on its own.

Some observers have commented on the potentially large cost of derivatives disclosure because of the amount of data required. However, one unique advantage of derivatives in this regard is that theoretical models of their valuation and hedging have been worked out in detail, specifying exactly the sorts of data needed to quantify their risk. Therefore, the types of information useful to disclose would be the same information that any bank or other user of derivatives would need to collect internally to maintain adequate understanding and control of its own operations. This overlap offsets some of the cost of mandatory disclosure. In addition, relatively few banks maintain large derivative positions, so the majority of banks would incur only minimal costs of disclosure.

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<sup>11</sup>Even the banking industry generally appears to favor increased derivatives disclosure, in contrast to their stance on Truth in Savings. However, one might suspect that this support is based on the fear that harsher regulations, such as limitations or prohibitions on the use of derivatives, might be adopted in the absence of disclosure requirements.

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<sup>12</sup>One exception is Banc One's voluntary, detailed disclosure of their derivative positions and philosophy in response to market forces (Klinkerman, 1993, and Layne, 1993). After falling some 12 percent over three months, Banc One's stock price began rising after plans to disclose were announced, and rose further the day of the disclosure (Layne, 1993, p. 22). Also, some banks, such as First Union, have begun to disclose additional detail in their annual reports.

This cost-benefit analysis suggests that mandatory disclosure for derivatives may well be beneficial. Even so, whatever requirements are adopted should be subjected to follow-up monitoring to ensure that the anticipated benefits materialize and that the costs are not excessive.

## CONCLUSION

Requiring disclosure of information imposes a cost on banks, as on any firm, and this cost must be offset by resulting benefits to be justified. There are reasons to expect that this tradeoff may be favorable, so that disclosure requirements confer net benefits, in certain cases. But theoretical analysis and the recent experience of the banking industry both warn that the desired benefits do not always emerge.

Therefore, we cannot assume that every new proposal for disclosure requirements will automatically promote social welfare. Rather, greater attention should be paid case by case to three particular aspects: (1) there must be a genuine economic problem to be solved; (2) the perceived problem must be amenable to alleviation by greater disclosure, as evidenced by underlying economic factors; (3) there must be a basis for believing that requirements will succeed in increasing the overall amount of relevant information actually disclosed.

No disclosure requirement should be adopted without passing all three of these tests. And since knowledge of these factors may be imperfect prior to adoption, subsequent monitoring of costs and benefits should be an important ongoing follow-up.

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