

Policy Remedies for Conflicts of Interest in the Financial System

*Frederic S. Mishkin**

Introduction

In his long career at the Bank of Canada, Chuck Freedman has focused not only on monetary policy, but also on how to make the financial system function more efficiently. This paper follows in the tradition set by Chuck by examining policies to remedy conflicts of interest in the financial services industry.

With the end of the stock market boom in 2000, financial markets have been jolted by one corporate scandal after another. The cycle began with the spectacular bankruptcy of Enron Corporation in December 2001, once valued as the seventh largest corporation in the United States, and the indictment of Enron's auditor, Arthur Andersen, one of the big five accounting firms. Subsequently, there have been revelations of misleading accounting statements at numerous other corporations, including WorldCom, Tyco Industries, and more recently, Ahold, which have added to the doubts about the quality of accounting information in the corporate sector. Criminal cases have also been brought against investment banks for encouraging their stock analysts to hype stocks that they had serious doubts about and that turned out to be disastrous investments.

* I thank my discussant, Ron Parker, and other conference participants.

These scandals have received tremendous public attention, both because resulting bankruptcies have cost employees of these firms their jobs or their pensions, and because of the subsequent stock market decline of over 40 per cent (S&P 500) and 65 per cent (Nasdaq) from March 2000 to March 2003. At the root of these scandals may be conflicts of interest in which agents who were supposed to provide the investing public with reliable information had incentives to hide the truth in order to further their own goals. What are these conflicts of interest and how serious are they? Have they been the source of recent financial market woes? What should be done about them?

This paper seeks to provide answers to these questions and is a summary of a larger study that I have written with Andrew Crockett, Trevor Harris, and Eugene White (Crockett et al. 2004). This paper outlines a framework for answering these questions by first discussing the crucial role of information in financial markets. This framework provides an understanding of what conflicts of interest are and why we should care about them. The paper then presents a brief survey of the different types of conflicts of interest in the financial system. The paper concludes by developing a framework for analyzing policies to remedy conflicts of interest and outlines specific policy recommendations.

1 Information and Financial Markets

To understand why conflicts of interest are important, we need to step back a bit and think about the function of financial markets in the economy. Well-functioning financial markets perform the essential economic function of channelling funds from individuals and firms who lack productive investment opportunities to those who have such opportunities. By so doing, financial markets contribute to higher production and efficiency. And reliable information is the key to this function.

A crucial impediment to the efficient functioning of the financial system is asymmetric information, a situation in which one party to a financial contract has much less accurate information than the other party. For example, managers of corporations usually have much better information about the potential returns and risks associated with the investment projects they plan to undertake than do potential purchasers of the corporation's stock. Asymmetric information leads to two basic problems: adverse selection and moral hazard.

Adverse selection is an asymmetric information problem that transpires before the transaction occurs, when parties who are the most likely to produce an undesirable (*adverse*) outcome for a financial contract are most likely to try to enter the contract and thus be *selected*. For example,

managers who want to siphon funds for their personal use are likely to be the most eager to enlarge their company by raising funds. Since adverse selection makes it more likely that investments in firms will turn out badly, investors may decide not to invest even if there are attractive investments in the marketplace. This outcome is a feature of the classic “lemons problem” analysis first described by Akerlof (1970). Clearly, minimizing the adverse-selection problem so that capital flows to productive use requires that investors have the information to screen out good from bad investments.

Moral hazard occurs after the transaction takes place because the provider of funds is subjected to the *hazard* that the receiver of funds has incentives to engage in activities that are undesirable from the lender’s point of view (i.e., activities that make it less likely that the investment will be a good one). Moral hazard occurs because the receiver of funds has incentives to misallocate funds for personal use or to undertake investment in unprofitable projects that increase personal power or stature. As a result, many investors will decide that they would rather not provide firms with funds, so that investment will be at suboptimal levels. To minimize the moral-hazard problem, investors must have information so that they can monitor the activities of managers to ensure that they use the funds to maximize the value of the firm.

As the discussion of asymmetric information problems of adverse selection and moral hazard illustrates, the provision of reliable information is crucial to the ability of financial markets to perform their essential function of channelling funds to those with productive investment opportunities. For investors to be willing to provide funds for investment projects, they must be able to screen out good from bad credit risks in order to avoid the adverse-selection problem, and they also need to monitor those to whom they provide funds in order to minimize the moral-hazard problem. But how is the information that investors require to be provided?

2 The Role of Financial Institutions in Financial Markets

An obvious answer to the question above is that private investors could collect the necessary information themselves to enable them to screen and monitor their investments. There are two barriers to their doing so, however. First is the free-rider problem.

The free-rider problem occurs when people who do not spend resources on collecting information can still take advantage of (free ride off) the information that others have collected. The free-rider problem is particularly important in securities markets. If well-informed investors are able to buy in advance of others on the basis of their superior research, they can benefit

from their superior information. But, if other investors who have not paid for this information obtain it quickly enough, they may be able to capture some of the value. If enough free-riding investors can do this, investors who have acquired information will no longer be able to earn the entire increase in the value of the security arising from this additional information. The weakened ability of private investors to profit from producing information will mean that less information is produced in securities markets, so that the adverse-selection problem, in which overvalued securities are those most often offered for sale, is more likely to impede a well-functioning securities market.

Possibly even more important, the free-rider problem makes it less likely that there will be sufficient monitoring to reduce incentives to commit moral hazard. By monitoring borrowers' activities to determine whether they are complying with restrictive covenants and enforcing the covenants if they are not, lenders can prevent borrowers from taking on risk at their expense. Similarly, the monitoring of managers can help ensure that they do not divert funds for their personal use or make expenditures that bring them prestige or perquisites rather than raise shareholder value. However, because monitoring is costly, the free-rider problem discourages this kind of activity in securities markets. If some investors know that other securities holders are monitoring and enforcing restrictive covenants, they can free ride on the monitoring and enforcement of other securities holders. Once these other securities holders realize that they can do the same thing, they may also stop their monitoring and enforcement activities, with the result that not enough resources are devoted to monitoring and enforcement. The outcome is that moral hazard is likely to be a severe problem in financial markets.

Financial institutions can help mitigate the free-rider problem by acquiring funds from the public and using them to purchase and hold assets in a diversified portfolio based on the specialized information they collect. As financial intermediaries, they can act as delegated monitors (Leland and Pyle 1977). They are not as subject to the free-rider problem and profit from the information they produce because they can make investments such as bank loans that are often not traded. Because the investments are not marketed, other investors cannot buy them. As a result, investors are less able to free ride off financial intermediaries and bid up the prices of the securities, which would prevent the intermediary from profiting from its information production activities. Similarly, it is hard to free ride off these financial intermediaries' monitoring activities when they make bank loans. Financial institutions making private investments thus receive the benefits of monitoring and are better equipped to prevent moral hazard on the part of borrowers or managers.

While this strategy works for non-depository intermediaries if their shareholders participate in the information discovery or are given signals by the managers, depository intermediaries would be subject to the same challenge as businesses in signalling the value of the portfolio of assets in which they have invested. Rather than signal by their own substantial holding of deposits, the solution for depository intermediaries is the issue of demandable deposits. Deposits that are quickly redeemable enable depositors to discipline managers if they believe that risk has increased by withdrawing their funds (Calomiris and Kahn 1991).

A second barrier to private production of information is that investors may not be able to sufficiently diversify or operate on a sufficient scale so that information production is too costly. Financial institutions are able to reach a sufficient size so that they can diversify and reduce average screening and monitoring costs (Diamond 1984; Ramakrishnan and Thakor 1984). However, a financial institution must persuade the primary investors that it is adequately monitoring the business it is funding. To do this, it must conduct internal monitoring of its employees so that they engage in the appropriate level of screening and monitoring of investments.

In the literature described thus far, financial institutions are treated as focusing on only one type of informational asymmetry. Indeed, one could rationalize many different types of financial institutions on the grounds that each type addresses a different informational asymmetry. However, the information that any one institution possesses may be useful beyond the provision of one narrow type of service. For instance, banks, owing to their long-term customer relationships, obtain reusable private information about firms' resources, cash flows, and other characteristics. For individual customers, they gather information, often confidential, beyond what is publicly available, and this information is obtained by the provision of services over time. The closeness of a relationship over time may induce the customer to reveal more confidential information and thereby gain some advantage with the financial firm (Boot 2000).

Financial institutions gain a cost advantage in the production of information because they develop special skills to interpret signals and exploit cross-sectional information across customers. Furthermore, the reusability of information gives them another advantage as the initial information producer specializing in its production and distribution (Chan, Greenbaum, and Thakor 1986; Greenbaum and Thakor 1995). Thus, not only are they lower-cost producers of information for one type of financial service, but they can also be lower-cost producers of information for multiple financial services, which become complementary activities. It is also usually assumed that institutions that combine several financial services have advantages over

specialized ones. By providing a broader set of financial products, an institution can develop wider and longer-term relationships to firms that may be the source of further economies of scope (Santos 1998). A financial institution may learn more about a firm by the provision of more types of financial instruments from which it can collect more varied information and which may give it more monitoring and disciplinary power.

3 What Are Conflicts of Interest?

While the presence of the synergies or economy of scope described above may offer substantial benefits, they also create potential costs in the form of conflicts of interest. These conflicts exist “whenever one is serving two or more interests and can put one person in a better position at the expense of another” (Edwards 1979). Because conflicts of interest are present in almost all aspects of our lives, we need to be more precise about those of concern here. Given the crucial role of information in financial markets, this paper uses the following definition for conflicts of interest:

Conflicts of interest arise when a financial service provider, or an agent within such a service provider, has multiple interests that create incentives to act in such a way as to misuse or conceal information needed for the effective functioning of financial markets.

Conflicts of interest may occur within specialized financial institutions. However, conflicts of interest stand out most sharply when an institution provides multiple financial services, thereby creating an opportunity for exploiting the synergies or economies of scope by inappropriately diverting some of their benefits. Combinations of services that bring together any group of depository intermediaries, non-depository intermediaries, or brokers or allow any of these to directly invest in business have attracted the greatest criticism for putative conflicts of interest.

4 Why Conflicts of Interest Are Important

We care about these conflicts of interest because if they sufficiently reduce the amount of information in financial markets, they increase asymmetric information and prevent financial markets from channelling funds to those with productive investment opportunities. There are clearly broader definitions of conflicts of interest than the one stated above, and many of these conflicts of interest are exploited to the detriment of individuals and the economy. However, this paper restricts itself to a narrower view, because conflicts of interest require public policy intervention only if they lead to less efficient financial markets.

5 Types of Conflicts of Interest

There are four areas of financial service activities that have the greatest potential for conflicts of interest that reduce information in financial markets. They are described below.

5.1 Underwriting and research in investment banking

The information synergies from underwriting, research, and market making provide a rationale for combining these distinct financial services. This combination of activities leads to conflicts of interest, however. The conflict of interest that raises the greatest concern occurs between underwriting and brokerage, where investment banks are serving two client groups, issuing firms and investors. Issuers benefit from optimistic research, while investors desire unbiased research. If the incentives for these two activities are not appropriately aligned, there will be a temptation for employees on one side of the firm to distort information to the advantage of their clients and the profit of their department. When the potential revenues from underwriting greatly exceed brokerage commissions, there will be a strong incentive to favour issuers over investors or risk losing the former to competitors. As a result, analysts in investment banks might distort their research to please issuers, and the information they produce on securities will not be as reliable, thereby diminishing the efficiency of securities markets.

5.2 Auditing and consulting in accounting firms

The traditional role of an auditor has been to act as an efficient monitor of the quality of information produced by firms so as to reduce the inevitable information asymmetry between the firm's managers and stakeholders, especially its suppliers of capital. In auditing, threats to truthful reporting arise from several potential conflicts of interest that can lead to biased outcomes. The conflict that has received the most attention lately occurs when an accounting firm provides auditing as well as non-audit consulting services—tax advice, accounting, or management information systems, and strategic advice, commonly referred to as management advisory services. These multiple services enjoy economies of scale and scope, but create two potential sources of conflict of interest. The most commonly discussed conflict is the potential to pressure auditors to bias their judgments and opinions to limit any loss of fees in the “other” services. The second more subtle conflict is that auditors often evaluate systems or structuring (tax and financial) advice that were put in place by their non-audit counterparts within the firm. Both conflicts may lead to biased audits, with the result that

less information is available in financial markets, which will make it harder for them to efficiently allocate capital.

5.3 Credit assessment and consulting in rating agencies

Ratings are widely used by investors as a guide to the creditworthiness of the issuers of debt, and in financial covenants. As such, they play a major role in the pricing of debt securities and in the regulatory process. Conflicts of interest can arise from the fact that there are multiple users of ratings; and, at least in the short term, their interests can diverge. The investor and regulators are interested in a well-researched, impartial assessment of credit quality; the issuer in a favourable rating. Because issuers pay to have their securities rated, there is a fear that credit agencies may bias their ratings upwards in order to attract more business. A more serious concern is that rating agencies have begun to provide ancillary consulting services in recent years. Rating agencies are increasingly asked to advise on the structuring of debt issues, usually to help secure a favourable rating. In this case, the credit rating agency would be in the position of “auditing its own work,” raising conflicts of interest similar to those in accounting firms when they provide both auditing and consulting services. Furthermore, providing consulting services creates additional incentives for the rating agencies to deliver more favourable ratings in order to further their consulting business. The possible reduction in the quality of credit assessment by rating agencies could then increase asymmetric information in financial markets, thereby reducing their ability to allocate credit.

5.4 Universal banking

Although commercial banks, investment banks, and insurance companies originally arose as distinct financial institutions, there were economies of scope that could be attained by their combination, thus leading to the development of universal banking in which all of these activities are combined in one organization. Yet, given that activities within a universal bank serve multiple clients, there are many potential conflicts of interest. If the potential revenues from one department surge, there will be an incentive for employees in that department to distort information to the advantage of their clients and the profit of their department. For example, issuers served by the underwriting department will benefit from aggressive sales to customers of the bank, while these customers are hoping to receive unbiased investment advice. A bank manager may push the affiliate’s products to the disadvantage of the customer or limit losses from a poor public offering by placing them in the bank’s managed trust accounts. A bank with a loan to a firm whose credit or bankruptcy risk has increased, has private knowledge

that may encourage it to use the bank's underwriting department to sell bonds to the unsuspecting public, thereby paying off the loan and earning a fee. A bank may make loans on overly favourable terms in order to obtain fees from activities like underwriting securities. To sell its insurance products, a bank may attempt to influence or coerce a borrowing or investing customer. All of these conflicts of interest may lead to a decrease in accurate information production by the universal bank, thereby hindering its ability to promote efficient credit allocation.

6 When Are Conflicts of Interest a Serious Problem?

The analysis of conflicts of interest here begins with the observation that they present their main problem for the financial system when they lead to a decrease in information flows that makes it more difficult for the system to solve adverse-selection and moral-hazard problems that can slow the flow of credit to parties with productive investment opportunities. Even though a conflict of interest exists, it does not necessarily reduce the flow of information, because the incentives to exploit the conflict of interest may not be very high. Exploitation of a conflict of interest that is visible to the market will typically result in a decrease in the reputation of the financial firm involved. Given the importance of maintaining and enhancing reputation, exploiting the conflict of interest would then decrease the future profitability of the firm, because it will have greater difficulty selling its services in the future, thus creating incentives for the firm to prevent exploitation of the conflict of interest. The evidence surveyed in Crockett et al. (2003) suggests that these incentives do work to constrain conflicts of interest in the long run, but the extent to which they are effective in the short run depends on factors such as transparency and incentive structures within firms.

One example occurs in credit rating agencies. At first glance, the fact that they are paid by the firms issuing securities to produce ratings for these securities looks like a serious conflict of interest. Rating agencies would appear to have incentives to gain business by providing firms issuing securities with higher credit ratings than they deserve, making it easier for them to sell these securities at higher prices. However, there is little evidence that rating agencies engage in this conflict of interest: considerable research (surveyed in Bank for International Settlements 2000) has shown that, despite prominent counter-examples, such as Enron, there is a reasonably close correlation between ratings and default probabilities. The conflict of interest does not appear to be exploited because giving higher credit ratings to firms that pay for the ratings would result in decreased credibility of the ratings, thus making them less valuable to the market. The market is

eventually able to assess the quality of biased ratings down the road because it can observe poorer performance by individual securities. Furthermore, rating agencies themselves provide evidence on the relationship between their ratings and subsequent default history (Brand and Bahar 1999; Keenan 1999). The resulting loss of trust in the information provided by the rating agency if this conflict were to be exploited would lead to a costly decline in its reputation, thus providing incentives not to exploit this conflict of interest.

Similarly, the apparent conflicts of interest when commercial banks underwrote securities before the Glass-Steagall Act do not appear to have been generally exploited. When a commercial bank underwrites securities, the bank may have an incentive to market the securities of financially troubled firms to the public because the firms will then be able to pay back the loans they owe to the bank, while the bank earns fees from the underwriting services. Evidence for the 1920s suggests that this conflict of interest caused markets to find securities underwritten by bond departments within a commercial bank to be less attractive than securities underwritten in separate affiliates where the conflicts of interest were more transparent (Kroszner and Rajan 1994). In order to maintain the bank's reputation, commercial banks shifted their underwriting to separate affiliates over time, with the result that securities underwritten by banks were valued as highly as those underwritten by independent investment banks (Ang and Richardson 1994; Puri 1996; Kroszner and Rajan 1997). When affiliates were unable to certify the absence of conflicts, they focused on more senior securities where there was less of an information asymmetry and conflicts were less severe. Again, the market provided incentives to control potential conflicts of interest. It is important to note, however, that the market solution was not immediate, but took some time to develop.

The responsiveness of the market can also be seen in the apparent conflict of interest for investment banks when underwriters who have incentives to favour issuers over investors pressure research analysts to provide more favourable assessments of issuers' securities. It has been observed that lead underwriters make more buy recommendations for initial public offerings (IPOs) than other firms' analysts for the same securities, yet the stock prices of firms recommended by lead underwriting investment banks declined during the Securities and Exchange Commission's (SEC's) 25-day quiet period while other banks' choices rose (Michaely and Womack 1999). Over a two-year period, the performance of other analysts' recommended issues was 50 per cent better than the performance of underwriters' recommendations. Hence, the market appears to recognize the difference in the quality of information when there is a potential conflict of interest.

There are fewer empirical studies in auditing, but even this limited evidence suggests that the market perceives and adjusts for potential conflicts of interest. There is evidence that clients who are concerned that conflicts of interest from the joint provision of auditing and management advisory services will reduce the value their audit opinions limit non-audit purchases from incumbent auditors (Parkash and Venable 1993).

These examples do not indicate that the market can always contain the incentives to exploit conflicts of interest. For the market to prevent exploitation of conflicts, it needs to have information on whether this exploitation might be occurring. In some cases, divulging information that would reveal whether a conflict of interest is being exploited may not be available to the market. In other cases, providing such information would reveal proprietary information that would help a financial firm's competitors, thus reducing the incentives to reveal this information.

As brought out in the recent scandals, what are particularly worrisome are conflicts of interest whose exploitation leads to large gains for some members of the financial firm even if it reduces the value of the entire firm. Compensation mechanisms inside a firm, if inappropriately designed, may lead to conflicts of interest that not only reduce information flows to credit markets but end up destroying the firm. In other words, damaging conflicts of interest are likely to arise from poor management. Indeed, the story of the demise of Arthur Andersen illustrates how the compensation arrangements even for one line of business, such as auditing, can create severe conflicts of interest, in this case because partners in regional offices had incentives to please their largest clients even if this was detrimental to the overall firm. The conflict of interest problem can become even more severe when several lines of business are combined and the returns from a particular activity—underwriting, consulting—are very high and expected to be brief, so that a compensation scheme that worked reasonably well at one time might become very badly aligned.

The extraordinary surge in the stock market created huge temporary rewards, permitting well-positioned analysts, underwriters, or audit firm partners to take advantage of the conflicts before incentives could be realigned. The reason these conflicts of interest are so dangerous is that they are not readily visible to the market and may not even be visible to the top management of the firm. In the most severe cases, opportunistic individuals were able to capture the firm's reputational rents. The exploitation of these conflicts of interest clearly damaged the reputation of such investment banks as Merrill Lynch, Solomon-Smith-Barney of Citigroup, and Credit Suisse First Boston, and perhaps the credibility of analysts in general. Audit firms have lost much of their non-audit business, while Arthur Andersen was destroyed.

7 A Framework for Evaluating Policies to Remedy Conflicts of Interest

The information view of conflicts of interest proposed here also provides a framework for evaluating whether they require public policy actions to eliminate or reduce them. Some combination of financial service activities may result in incentives for agents to conceal information, but they may also result in synergies that make it easier to produce information. Thus, preventing the combination of activities to eliminate the conflicts of interest may actually make financial markets less efficient. This reasoning suggests that there are two propositions that are critical to evaluating what should be done.

- *The fact that a conflict of interest exists does not mean that it will have serious adverse consequences.* Although a conflict of interest exists, the incentives to exploit it may not be very high. Exploitation of a conflict of interest that is visible to the market will typically result in a decrease in the reputation of the financial firm involved. Given the importance of maintaining and enhancing reputation, exploiting the conflict of interest would then decrease the future profitability of the firm because it will have greater difficulty selling its services, thus creating incentives for the firm to avoid taking advantage of the conflict of interest. Hence, the marketplace may be able to control conflicts of interest because of the high value of a firm's reputation. When evaluating the need for remedies, this proposition raises the issue of whether the market has the information and incentives to control conflicts of interest.
- *Even if incentives to exploit conflicts of interest remain strong, eliminating the conflict of interest may be harmful if doing so destroys economies of scope, thereby reducing information flows.* In evaluating possible remedies, therefore, we also need to examine the issue of whether imposing the remedy will do more harm than good by reducing the flow of information.

In considering remedies for specific conflicts, it is worth discussing five generic approaches. These approaches are listed in the order of their intrusiveness, from least to most intrusive.

- (i) *Leave it to the market.* This approach has a powerful appeal to many economists, and may be a sufficient response in many cases. Market forces can work through two mechanisms. First, they can penalize the service provider if they exploit conflicts of interest. For example, a penalty may be imposed by the market in the form of higher funding costs or lower demand for its services, in varying degrees, even to the point of forcing the demise of the firm. Second, market forces can

promote new institutional means to contain conflicts of interest, for example, by generating a demand for information from non-conflicted organizations. This is exactly what happened when security affiliates took pre-eminence over in-house bond departments in universal banks in the United States in the 1920s.

The advantages of market-driven solutions include the fact that they can hit where it hurts most—through pecuniary penalties. Moreover, they may help avoid the risk of overreaction. It can be difficult to resist the temptation to adopt non-market solutions to appease public opinion that may reduce information production in financial markets. On the other hand, market-based solutions may not always work if the market cannot obtain sufficient information to appropriately punish financial firms that are exploiting conflicts of interest. Memories may be short in financial markets; once a triggering event has faded from memory, conflicts may creep back in unless reforms have been “hard-wired.”

- (ii) *Regulate for transparency.* A competitive market structure does not always adequately reduce information asymmetries. The gathering of information is costly, and any individual economic agent will gather information only if the private benefit outweighs the cost. When the information becomes available to the market, the free-rider problem may become serious. Information has the attribute of a public good, which will be undersupplied in the absence of public intervention. To some extent, mandatory information disclosure can alleviate information asymmetries and is a key element of regulation of the financial system.

Mandatory disclosure of information that reveals whether a conflict of interest exists may help the market to discipline financial firms that engage in conflicts of interest. In addition, if a financial institution is required to provide information about potential conflicts of interest, the user of the institution’s information services may be able to judge how much weight to place on the information this institution supplies.

On the other hand, mandatory disclosure could create problems if it reveals so much proprietary information that the financial institution is unable to profitably engage in the information production business. The result could then be less information production rather than more. Also, mandatory disclosure may not work if financial firms are able to avoid the regulation and continue to hide relevant information about potential conflicts of interest. The free-rider problem might also result in insufficient monitoring of conflicts of interest, because the benefits of monitoring and constraining these conflicts accrue only partially to the monitors.

- (iii) *Supervisory oversight.* If mandatory disclosure does not work because firms are still able to hide relevant information, because the free-rider problem is severe or because mandatory disclosure would reveal proprietary information, supervisory oversight can come to the rescue and contain conflicts of interest. Supervisors can observe proprietary information about conflicts of interest without revealing it to a financial firm's competitors so that the firm can continue to profitably engage in information production activities. Supplied with this information, the supervisor can take actions to prevent financial firms from exploiting conflicts of interest. As part of this supervisory oversight, standards of practice can be developed, either by the supervisor, or by the firms engaged in a specific information-production activity. Enforcement of these standards would then be in the hands of the supervisor.

Supervisory oversight of this type is very common in the banking industry. In recent years, bank supervisors have increased their focus on risk management. They examine a bank's risk-management procedures to ensure that the appropriate internal controls on risk taking are in place. In a similar fashion, supervisors can examine the internal procedures and controls to restrict conflicts of interest. When they find weak internal controls, they can require the financial institution to modify them so that incentives to engage in conflicts of interest are eliminated.

Although supervisory oversight has been successful in improving internal controls in financial firms in recent years, if the incentives to engage in conflicts of interest are sufficiently strong, financial institutions may be able to hide conflicts of interest from the supervisors. Furthermore, as recent banking crises illustrate, supervisors have sometimes engaged in regulatory forbearance in which they do not sufficiently enforce penalties on financial firms engaged in undesirable behaviour. There is always the issue of whether supervisors can be sufficiently insulated from short-term political pressures to let financial institutions off the hook (i.e., avoid regulatory capture) and can be made sufficiently accountable to prevent conflicts of interest from getting out of hand. On the other side, supervisors could become overbearing and interfere with the efficient function of financial firms in order to avoid having a scandal occur on their watch.

- (iv) *Separation of functions.* Where the market cannot obtain sufficient information to constrain conflicts of interest because there is no satisfactory way of inducing information disclosure by market discipline or supervisory oversight, the incentives to exploit conflicts of interest may be reduced or eliminated by regulations enforcing separation of functions. There are several degrees of separation. First, there is separation of activities into different in-house departments with firewalls between them. The second degree is to conduct different

activities in separately capitalized affiliates. The third is prohibition of the combination of activities in any organizational form.

Separation of functions has the goal of ensuring that “agents” are not placed in the position of responding to multiple “principals” so that conflicts of interest are reduced. Moving from less to more stringent separation of functions, conflicts of interest are reduced. However, more stringent separation of functions reduces synergies of information collection, thereby preventing financial firms from taking advantage of economies of scope in information production. Deciding on the appropriate amount of separation thus involves a trade-off between the benefits of reducing conflicts of interest and the cost of reducing economies of scope in producing information.

- (v) *Socialization of information production.* The most radical response to conflicts of interest generated by asymmetric information is to socialize the provision or the funding source of the relevant information. For example, much macroeconomic information is provided by publicly funded agencies, recognizing the argument that this particular public good is likely to be undersupplied if left to private provision. It is conceivable that other information-providing functions, for example, credit ratings and auditing, could also be publicly supplied. Alternatively, if the information-generating services are left to the private sector, they could be funded by public sources or by a publicly mandated levy to help ensure that information production is not tainted by obligations to fee-paying entities with special interests.

The problem with this approach, of course, is that a government agency or publicly funded entity may not have the same incentives as private financial institutions to produce high-quality information. Forcing information production to be conducted by a government or quasi-government entity, although it may reduce conflicts of interest, may result in the reduction of information flow to financial markets. Furthermore, there is a compensation problem in government agencies, because they may not be able to pay market wages to attract the best people. This problem may be even more severe if there are economies of scope: for example, analysts in an investment banking firm are likely to receive additional compensation when their research has multiple uses. A government agency interested in only one use of research may not provide a level of compensation adequate to produce high-quality information.

8 Evaluating Remedies

The above framework suggests that in evaluating specific conflicts of interest, it is important to ask two questions:

- *Do markets have the information and incentives to control conflicts of interest?* As we have seen, the marketplace may be able to control conflicts of interest because there is a high value to the reputation of financial firms.
- *Even if the incentives to exploit a conflict of interest are strong, would a policy that eliminates the conflict of interest destroy economies of scope, thereby reducing information flows?*

If the answer to either question is yes, the case for a policy to remedy a particular conflict of interest is substantially weakened. Putting the remedy into practice would then likely reduce the overall information in the marketplace, thus doing more harm than good.

In designing appropriate remedies, it is important to remember that conflicts of interest did not create the boom or bubble in the stock market. Rather, the conflicts were opportunities to exploit the very rapid rise of stock prices in certain sectors. Conflicts may be largely eliminated by a complete separation or segregation of each type of financial activity, but that would clearly entail a huge cost by drastically reducing the economies of scope. Stock market booms are infrequent events. The only cases that parallel the events of the late 1990s are the late 1920s and possibly 1986–87. To impose segregation remedies on the financial industry to prevent the exploitation of conflicts in the rare spectacular bull markets will result in excessively high costs. The imposition of the Glass-Steagall Act's separation of commercial and investment banking after the boom of the 1920s is a clear example of an excessive response that imposed large and unnecessary long-term costs on the financial industry. Exploitation of conflicts of interest examined here was never uniform across each industry, and litigation may be the appropriate response to discipline specific firms and individuals as part of an overall market solution. However, legal liabilities and penalties need to be carefully designed, as witnessed by the behaviour of audit firms seeking to avoid the extremely high litigation risk from class-action lawsuits.

In evaluating remedies it is also important to remember that there are many types of agents in the financial system who provide information to the market, ranging in degree from those with the least access to proprietary information to those with the most. Analysts have the least access, and rating agencies have more. Auditors probably have the most privileged access along with government regulators charged with supervisory oversight. This scale of access to proprietary information should reflect the

ability of agents to discover the true financial condition and performance of the firms that they observe. Their ability to discover this information will also be determined by their compensation and other incentives provided to them. Although these agents provide some overlapping information, one is not a substitute for another. This lack of substitution is not solely because they provide different types of information or signals to the public. These agents are all subject to various pressures and conflicts of interest that may diminish their ability to perform their task of discovery. Analysts may be well compensated and have substantial research resources at their disposal, but they may be too favourable to the firms for which their bank is lead underwriter and they have the least access to proprietary information. Ratings agencies are largely insulated from conflicts of interest and have better access to proprietary information; but enjoying an oligopoly, their research effort may be reduced. Auditors enjoy superior access to proprietary information and operate in a competitive industry, but the value of their opinions may be reduced by conflicts between audit and non-audit activities and a litigation-risk-induced focus on rules rather than principles. Finally, regulators/supervisors may have the best access to proprietary information, yet their capacity to monitor is limited by the resources they have been allocated and political pressures for forbearance. To ensure that the capital markets are adequately served, it is necessary to have multiple agents working to reduce the information asymmetries. One may become less useful at one point, but maintaining the quality of information delivered by these different agents engaged in overlapping work is more likely to provide sufficient monitoring. Appropriate remedies should increase the effectiveness of all four types of agents.

The review of the evidence on conflicts of interest in this paper suggests that the market is often able to constrain conflicts of interest to a considerable degree, even though at first glance they seem to be severe and there is a learning process. Furthermore, it is dangerous to prevent exploitation of synergies in information production because this could substantially reduce the amount of information available in financial markets, thereby reducing the efficiency of these markets in channelling funds to those with productive investment opportunities. I may be showing my bias as an economist, but when it can be made to work, the market is the most effective and desirable way of disciplining conflicts. So the first focus of solutions to remedy conflicts of interest should be on strengthening market discipline. Only when one is convinced that market discipline cannot constrain serious conflicts of interest that reduce information flows, should they recommend non-market solutions. It is also important to note that market solutions work in the long run; non-market solutions work in the short run, but they can hinder or prevent the emergence of more efficient market solutions in the long run.

9 Policy Recommendations

Using the information-oriented framework developed above leads to the following recommendations on remedies for conflicts of interest in the financial services industry.

- (i) *Increase disclosure for investment analysts, credit rating analysts, and auditors to reveal any interests they have in the firms they analyze.* Disclosure plays an important role, enabling markets to acquire information that can be used to punish financial firms that exploit conflicts of interest. Provision of this information makes it more likely that financial services firms will develop internal rules to ensure that conflicts of interest are minimized so that their reputation remains high, thus enabling them to continue to profitably engage in the information-production activities. Recent efforts by the SEC and other government agencies to increase disclosure of conflicts of interest are moves in the right direction.
- (ii) *Improve corporate governance.* Remedies for controlling conflicts of interest cannot be effective in a vacuum. Without good corporate governance, markets are unlikely to work well and so the remedies discussed here would be unlikely to solve conflict of interest problems. Improving corporate governance is a huge topic that is well beyond the scope of this paper. However, there is one particular area of corporate governance that is critical to the quality of information in the financial system. Auditors need to be hired by, compensated by, and report to audit committees whose responsibility is to represent stakeholders other than management, as provided for in the Sarbanes-Oxley Act. Proper implementation of this reform is an important function for the Public Company Accounting Oversight Board (PCAOB).
- (iii) *Establish codes of conduct developed by industry participants in cooperation with supervisors.* Given their experience, financial service providers in the private sector are capable of designing effective internal controls and codes of conduct. But government supervisors can help because they can monitor internal controls at many firms and observe what is best practice. It is important that these codes be dynamic. The marketplace in financial services is in a continuous state of flux, and best practice to control conflicts of interest will of necessity change over time.
- (iv) *Increase supervisory oversight.* Mandatory disclosure may not always be sufficient to enable the market to constrain conflicts of interest, especially as it may be necessary to limit disclosure of proprietary information. There is thus a strong role for supervisory oversight. It has an important role in containing conflicts of interest, because many of the most damaging conflicts of interest arise from agency problems

within firms, the result of poorly designed internal compensation mechanisms that are difficult for markets to observe.

Banking supervisors already have powers to supervise universal banks and to monitor their internal control procedures to make sure that they do not take on excessive risk. Bank supervision has been expanded in recent years to focus on *operational risk*, and conflicts of interest can easily be viewed as a form of operational failure. Thus, the focus of bank supervisors on universal banks' internal controls and compensation mechanisms with regard to conflicts of interest is a natural development. Controlling conflicts of interest in universal banks also has a growing importance for preserving the safety and soundness of banks (and so is important from a prudential perspective) because banks may lend on favourable terms in order to obtain fees from other activities, like underwriting securities. Just as bank supervision has become more oriented to focus on risk management in recent years, it needs to increase its focus on control of conflicts of interest.

The SEC and its equivalents in other countries have a clear interest in the activities of investment analysts to monitor whether they are involved in conflicts of interest that undermine market integrity. However, in the past they have often focused on issues such as insider trading. Clearly, the recent corporate scandals and legal actions against financial service providers indicate that a greater focus on conflicts of interest is needed in agencies that supervise securities markets.

The newly created PCAOB has the authority to monitor internal controls at accounting firms, and the creation of this oversight board by Sarbanes-Oxley is one of the most desirable features of this legislation. An important task of the PCAOB will be to ensure that auditors are independent of management and report to audit committees. Also, the PCAOB will need to monitor and encourage best-practice compensation mechanisms inside accounting firms that continue to conduct auditing and management advisory services under the same roof.

- (v) *Provide adequate resources to supervisors.* Supervisors must have sufficient resources to monitor conflicts of interest. Supervision has failed when supervisors were starved for resources. In the 1980s, limited resources weakened the power of supervisors during the U.S. banking crises (e.g., see Federal Deposit Insurance Corporation 1997). Only after the recent emergence of serious conflicts of interest that rocked the financial system did the SEC have its funding substantially raised. Starving supervisors of resources is often the result of strong lobbying efforts by the supervised industry. In the financial service industry this problem may become worse during good times when financial service providers are making huge profits. Although resources for supervisory oversight of the financial service industry

have risen recently, it is important that the lessons of the 1990s not be forgotten and that supervisors continue to be given adequate resources and their employees compensated to ensure high-quality expertise is available.

- (vi) *Enhance competitiveness in the rating agency industry.* While analysts, auditors, and most financial institutions operate in highly competitive markets, rating agencies are protected from competition by high entry costs and the official sanction of their ratings by regulators. The barriers to competition for rating agencies need to be reduced to enhance the discipline of the market and ensure that adequate resources are invested in their activities.
- (vii) *Prevent the co-option of information-producing agents by regulators and supervisors.* Currently, a severe problem arises from the increasing standardization of ratings and their designation for regulatory purposes. This practice should be limited since it encourages firms to package their financing to meet certain targets. Excessive dependence of supervisors on rating agencies limits their effectiveness as monitors and thus their potential contribution to information.

In a similar vein, overly standardized, detailed prescriptive accounting rules have the unintended consequence of decreasing the amount of information in auditors' reports. Instead, the focus should be on a "true and fair view" of the financial performance and financial position of the audited firm.

- (viii) *Avoid forced separation of financial service activities except in unusual circumstances.* I am generally skeptical of forced separation of financial service functions to solve conflict of interest problems. In many cases, the market leads financial service firms to separate activities, either with firewalls or by setting up separately capitalized affiliates, in order for the firms to attest to the quality of the information they provide and thus sell their services profitably. This is exactly what happened in the banking industry before the Glass-Steagall Act. In hindsight, we know that this act created a costly and rigid separation of commercial and investment banking that reduced the efficiency of the financial system and prevented the development of market mechanisms to contain conflicts.

Both the segregation of the audit business envisioned in the Sarbanes-Oxley Act and radical changes for analysts imposed by the global settlement by the New York Attorney General, the SEC, and other regulators appear to be misdirected and excessive responses to the collapse of the bull market. Because they segregate the activities of auditors and analysts, altering the compensation and forcing a sharing of information by the latter, economies of scope will be reduced and the quantity and quality of information may well decline. Complete segregation is an extreme and usually inappropriate remedy. Litigation, industry standards, and supervisory oversight should be

sufficient to erect the limited firewalls needed in most cases, while the market disciplines firms that are perceived to take advantage of conflicts of interest.

There is some role for regulations enforcing limited separation under unusual circumstances. For example, forcing banks to have separately capitalized affiliates to conduct investment banking, insurance, and other non-banking activities makes good sense in order to limit extending the safety net beyond banking activities. A government safety net for banks has the rationale that it is needed to prevent bank panics. However, a government safety net creates moral-hazard incentives for risk taking that require more extensive regulation and supervision to ensure the safety and soundness of the banking industry. This problem is even more severe because the government cannot credibly commit to avoid a too-big-to-fail doctrine. Extending the safety net to other financial service activities has a much weaker rationale and would create further incentives for risk taking that could be highly damaging.

- (ix) *Do not socialize information for the financial service industry.* Socialization of information carries many hidden dangers for the quality of the information generated, and is generally unwarranted. Socialization could potentially take a variety of forms, including official provision of certain services (e.g., research, auditing) and the financing of independent private sector services by taxation or a levy. I am, however, most skeptical of any remedy that mandates the socialization of information production in financial markets. In its extreme form, this approach negates the benefits of multiple, competing agents. Even where service providers themselves remain in the private sector, there are threats to the quality of information provided. For example, if rating agencies are protected from competition and their ratings are standardized and mandated for risk assessment, they have little incentive to devote effort to thorough analysis or to improve their assessment techniques. If auditors are induced to produce opinions that are exclusively rule-based rather than principle-based and the rules are tightly defined by the regulators, then they too become part of the regulatory system and do not contribute any independent judgment. A form of socialization has been incorporated in the global settlement reached with the largest investment banks, where firms are required to purchase outside research and share their own research. Although socialization of information production would reduce incentives to exploit conflicts of interest, it is likely to reduce the quality of information in the marketplace, and therefore make the financial system less efficient, rather than more efficient.

These recommendations rely on the combination of market discipline, supplemented by mandatory disclosure of conflicts, and supervisory oversight to keep conflicts of interest from damaging information production in the financial system. In other words, policies should almost always be based on the first three approaches to remedying conflicts of interest. These approaches are complementary and are oriented to help make markets work better. Market discipline, supplemented by mandatory disclosure and supervisory oversight is usually sufficient to control conflicts of interest. It is important to recognize that markets do not immediately create optimal structures to solve conflict of interest problems. As the history of universal banking suggests, financial markets move to manage conflicts effectively over time.

The bottom line is that radical solutions to conflict of interest problems that involve socialization of information production or a very stringent separation of financial service activities are likely to do far more harm than good. With increased disclosure of information and supervisory oversight, plus additional reforms of rules governing audit opinions and official use and sanction of ratings, the problems created by conflicts of interest can be minimized. More radical approaches have the potential to reduce, rather than increase, the quality of information in financial markets, with the result that channelling funds to those with productive investment opportunities, which is so crucial to strong economic growth, could be severely compromised.

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