

Abstract

This article argues that the financial instability of the 1980s following financial deregulation in Australia can be partly traced to a lack of attention to agency problems in banking. Because the market for corporate control and corporate governance structures in banking were unsatisfactory, the benefits of increased competition in financial product markets were offset by inadequate monitoring and controls on bank management. It is also argued that the current emphasis of prudential supervision on capital adequacy requirements can provide only a partial solution to achieving efficiency and stability in the financial sector—because it focuses only upon the agency relationships between owners and government/depositors. Complementary developments in corporate governance and control are required to address agency relationships involving bank management. Some recent developments in this area and in supervision of non-bank financial markets are assessed from the perspective developed in this article.

1. Introduction

The experience of Australian (and international) financial markets since the start of the 1980s is well known.¹ Deregulation of financial intermediaries was followed by financial excesses and increased failures (or near failures) of financial institutions, which has in turn been followed by what some have termed ‘reregulation’ in the form of capital adequacy requirements.²

This article attempts to shed some light on that experience, and on a number of current issues in supervision/regulation of financial institutions. It is based on one central point. Most analysis of the need for prudential supervision and the design of supervisory policies has treated financial institutions as a ‘black box’—ignoring the agency problems involving management inherent in such

institutions.³ The principal focus of most analysis has been upon the agency relationship between government and bank owners, and most discussion of supervisory developments in recent years has reflected this in concentrating upon capital adequacy requirements aimed at ensuring that bank shareholders provide an adequate buffer of risk capital.⁴

2. The Nature of the Agency Problem in Banking

Financial institutions are, by their very nature, 'opaque' institutions. Intermediation arises as a profitable activity partly because of imperfect information flows between potential borrowers and lenders. While banks consequently generate information as part of their business

activities, this is not readily available to various stakeholders in the institution. Nor is information about the decisions made and activities undertaken readily available to stakeholders if for no other reason than client concerns about confidentiality.

In such circumstances, agency problems can be expected to play an important role in determining the contractual relationships between stakeholders. Agency problems arise in circumstances where decision making responsibility for control over resources is delegated by a principal to an agent. If the incentives of the principal and agent are not aligned, and the principal cannot accurately assess the agent's actions and exert control, the potential for the agent to benefit at the expense of the principal is obvious. Because of that potential wealth transfer, significant costs may be incurred in designing and enforcing contracts between agent and principal to prevent such transfers. Alternatively, control systems which work to resolve agency problems may emerge.⁵ Two, which are particularly relevant to the subsequent discussion of banking regulation are, first, the existence of a market for corporate control which facilitates the ability to concentrate ownership and thus achieve effective control and, second, the ability to withdraw resources from the control of management.

Agency issues permeate the entire banking firm structure. Diamond (1984), for example, has characterised banks as 'delegated monitors' arguing that their activity of intermediation involves assuming responsibility as delegated principals in the monitoring of ultimate borrowers. But that analysis focuses only on a subset of the potential agency problems in financial institutions. In practice, at least four major stakeholder groups can be identified. They are shareholders, depositors/investors, management, and government/supervisory bodies. (Borrowers and employees are also stakeholder groups which are not considered in this article.) Agency problems arise because responsibility for decision making is (explicitly or implicitly) delegated from one stakeholder group to another, in situations where objectives between stakeholder groups differ and where full information enabling control to be exerted over the decision maker is not readily available.

Undoubtedly, the most studied agency problems in the case of financial institutions are those involving depositors and shareholders or government and shareholders. This reflects the past

tendency for much analysis to assume away (or ignore) problems of incentive conflict between management and owners.

The agency problem between depositors and shareholders reflects the typical conflict between debt-holders and stockholders. This problem has been intensively studied. As Smith and Warner (1979) point out, conflicts arise over dividend policy, claim dilution, asset substitution, and underinvestment. These conflicts involve actions whereby stockholders can take decisions, such as excessive dividend payouts, increased leverage (claim dilution), higher risk activities (asset substitution), which transfer wealth from bondholders to themselves, or where stockholders avoid taking socially desirable actions which could benefit current bondholders, because they have adverse effects on stockholders (the underinvestment problem).

In the case of banks, these problems take on particular significance because the nature of the deposit contract prevents priority ranking being given to current depositors over future depositors. This is aggravated by the absence of a secondary market in (most) deposit claims which means that there is no secondary market price which makes information observed (and acted upon) by some depositors more widely available. Claim dilution (through increased leverage) is thus a potentially severe problem (since new deposits rank equally with old), as are the problems of increased leverage through excessive dividend payouts and increased risk through asset substitution (since there is no secondary market in deposits where the effects of these actions are signalled in price movements).⁶

This potential problem is of significant importance in situations where bank depositors are not subject to government protection of some form. As is well known, the deposit of funds is akin to depositors granting shareholders a put option over the assets of the bank. Shareholders have an incentive to increase the value of that option by increasing the risk of the institution, either by increasing leverage, or by investing in higher risk asset portfolios.⁷

In practice, one solution to this problem has been the at-call or 'first come, first served' nature of the deposit contract, which enables individual depositors to discipline shareholders by withdrawal of resources if actions taken are deleterious to their welfare. While, in principle, that structure for the deposit contract provides something of a solution to the agency problem, it involves two significant practical difficulties. First, it creates the potential for 'bank runs' to emerge as a rational economic phenomenon (as Diamond and Dybvig, 1983, have shown). Second, it can only provide a satisfactory solution to the agency problem if depositors are well informed about bank actions. In practice they are not, and although 'first come, first served' increases incentives for monitoring, differences in information available to depositors suggest that agency costs may be borne disproportionately by the less well informed depositors.⁸

For both of these reasons, governments intervene to provide depositor protection in some form or other. Explicit deposit insurance is one approach, while explicit or implicit guarantees of deposits is another. In either case, general prudential supervision also occurs to limit the risk incurred by the insurer or guarantor. Where governments relieve depositors of risk, by guarantees or deposit insurance, they are effectively providing the owners of the bank with a free put option over the assets of the bank, enabling them to honour deposit obligations under all circumstances and converting deposits into risk free assets. (Alternatively, government protection can be interpreted as the government granting a put option to depositors, which offsets the put option granted by depositors to the bank owners, and thus removes their incentive to monitor bank actions.)

To control the incentive of bank owners to increase the value of the put option granted to them by deposit insurance or implied guarantees over deposits, governments typically enforce some controls over bank owners. These can involve limits on the range of activities (thereby possibly limiting the risk of the organisation); linking deposit insurance premiums to risk; and linking

capital adequacy requirements to business risk (thereby enforcing some element of risk sharing between government and owners).

While such controls may overcome the agency problem between government and bank owners, it must be asked how significant this problem is in reality. Few problems of instability in the Australian financial sector appear to be traceable to outside owners attempting to increase the riskiness of their institutions in order to exploit government guarantees. Rather, most causes for concern relate instead to management decisions which reflect agency problems involving management. Management may have different risk preferences from those of government and/or owners, or limited competence in assessing the risks involved in its decisions, and yet have significant freedom of action because of the absence of adequate control systems able to resolve agency problems.

3. Financial Deregulation in Retrospect

In practice, bank regulation prior to the 1980s was essentially regulation of bank management—which prevented many forms of risk taking, and possibly reduced the need or incentive for monitoring of bank management by shareholders, governments and depositors. The cost, of course, was the lack of competition and efficiency benefits such competition can generate.

Financial deregulation was premised on the view that greater freedom of action and competition would promote increased efficiency. The Campbell Inquiry, for example, noted that it was ‘asking that more confidence be placed in the discipline and processes of the market . . .’ (Committee of Inquiry into the Australian Financial System 1981, p. xxviii). From the textbook perspective of competitive markets—where the distinction between owners and managers is ignored—cogent arguments can be developed to support that view. But if significant agency problems exist which enable management to pursue their own goals, the conclusion is not so obvious.

Deregulation reduced constraints on management, reduced the ‘franchise’ value of a bank licence and managerial tenure, and facilitated the growth of a more complex financial system in which the ex ante assessment of financial management competence and expertise has become a more difficult task. Such changes altered the incentives for risk taking⁹ and the possibility of inadvertent risk taking, and thus required greater emphasis on monitoring of management.

Notably, however, deregulation was not accompanied by obvious improvements in corporate governance or market discipline which might have aligned managerial interests with those of other stakeholders in financial institutions, or have prevented incompetent management from inadvertently increasing bank risk. It is noteworthy that failures of financial institutions in the 1980s have been generally attributed to managerial decision making and failings in corporate governance, rather than being the result of increased risk taking desired by shareholders.

Bank deregulation may also have changed the incentives to risk taking for bank management. In the regulated environment, banks (it can be argued) had a high franchise value—whereby above normal profits could be expected over a long horizon. Bank failure meant that the beneficiaries of that supernormal income stream (shareholders and management) lost a source of value. Deregulation was intended to achieve increased competition in banking, and in the process remove the benefits of a long term source of above normal income.

For management, a potentially important component of the decline in franchise value can be found in the impact of competition upon market share and thus upon prestige and other perquisites of office. To the extent that market share could only be sustained by accepting increased risk, the incentives for risk taking by bank management increased, and was permissible in the new deregulated environment. Moreover, in the deregulated environment, the scope for

incompetent management to unknowingly take on increased risk (an agency cost to shareholders and government) while pursuing personal goals was increased. If deregulation was to have succeeded in improving efficiency, a requirement was that appropriate monitoring mechanisms were in place. In practice, they were not—because they were of less necessity in the regulated environment when risk taking was constrained. There is no obvious evidence that corporate governance procedures were satisfactory to ensure shareholder identification of undesired management decisions or incompetence and provide control over management. There is no obvious evidence of the market for corporate control (the stock market) anticipating the problems of the banking sector of the late 1980s.

4. The Current Prudential Framework

The current prudential framework in Australia is based around the risk weighted assets capital adequacy requirements. Under this framework, banks are not significantly restricted in their asset portfolio decisions, but have minimum capital requirements linked to the assessed risk of that portfolio. In effect, higher risk activities require use of a larger proportion of shareholders' funds and a smaller share of depositors' funds.¹⁰

The logic behind this approach is straightforward—if it is assumed that there is no agency problem between owners and managers. Because government guarantees or insurance of bank deposits provide bank owners with a free put option over the assets of the bank, owners have an incentive to increase the value of that option. This can be done by increasing leverage, or increasing the risk of the bank's activities. By forcing banks to reduce leverage if they increase risk, the adverse incentives are, it is hoped, reduced.

If it is not assumed that managers and owners have common incentives, it must be asked how decisions about asset risk made by managers are influenced by the capital requirements met by owners. If owners have increased incentives to monitor managers then desirable effects would seem likely to occur. In this regard, bank management protestations about 'excessive' capital requirements would seem to suggest that the approach is on the right track. Higher capital requirements transfer the emphasis of funding source towards equity and away from deposits which, given the differential exposure of both groups to bank management, would suggest an increase in monitoring is likely.¹¹

Further developments of the risk based capital requirements are currently in train. The Basle Committee on Banking Supervision has released discussion papers aimed at incorporating market and interest rate risks of banks' activities into the capital requirements. These proposals are quite technical, but reflect the basic premise of relating capital requirements to the measured risk of bank activities.¹²

In principle, the larger exposure of shareholders to management decisions induced by capital requirements should increase their incentive to monitor management. At one level, monitoring is required to ensure that the risk profile of the bank is that desired by the owners (and the supervisors if capital requirements have aligned incentives). At another level, monitoring is required to ensure that efficient management is occurring—for example to ensure that a given expected return is achieved at minimum risk.

On both scores, it can be questioned whether shareholders and other stakeholders have, under current institutional arrangements, sufficient ability to adequately monitor management. Studies of the ability of share (or deposit) markets to predict financial distress in banks or other financial institutions have a low strike rate.¹³

This is not particularly surprising. Bank depositors have little if any incentive under insurance or guarantee schemes to monitor bank risk taking. Sharemarkets are unlikely to have adequate

information to enforce market discipline on a bank's management which takes undue risks or which is inefficient. In these circumstances, it is important that corporate governance mechanisms be adequate to enable existing shareholders to adequately monitor and discipline management, and a number of deficiencies in current arrangements in this regard are discussed in the following section.

To summarise the preceding arguments in a slightly different manner, capital adequacy requirements of themselves do nothing to reduce the likelihood of bank management making decisions which lose money. They simply ensure that it is shareholders, or subordinated debt-holders, who bear the brunt of any such losses. As a result, shareholders may be more inclined to monitor bank management, but if bank performance is to be improved, mechanisms for effective monitoring need to be available. (Greater reliance by banks upon subordinated debt, which can be counted as part of required capital, may lead to improved monitoring because of the different nature of the exposure faced by this group of capital providers.)

If it is accepted that some of the critical concerns over institutional safety relate to management rather than shareholder objectives, the question must be asked about the sufficiency of current prudential requirements—since these appear to focus on shareholder–government agency issues. It may be that they serve to align the interests of government and shareholders, and thus enable more reliance upon shareholder monitoring as a partial substitute for greater government monitoring. For that to be the case, it is necessary that owners are adequately able to monitor and discipline managers, both in terms of their risk taking decisions and in terms of assessing their general competence. Some problems in that area are taken up below.

5. Corporate Governance and Bank Supervision

Agency problems arise from the misalignment of incentives, and the absence of perfect information. In practice, contractual arrangements between stakeholders (including corporate governance mechanisms) may be established to overcome those problems. Alternatively the market for corporate control or the ability of owners to withdraw resources may keep managerial actions consistent with goals of other stakeholders.

While capital adequacy requirements affect bank owners, and may affect their incentives to monitor management, the question arises of how suitable are the managerial control mechanisms prevailing in Australia. In this section, several issues of relevance to that question are considered.

5.1 Marking Banks to Market (Market Value Accounting)

Considerable interest currently exists in proposals to require banks to adopt 'market value accounting' (MVA).¹⁴ Under such a proposal, banks would be required to record assets and liabilities at market value, rather than at historical cost or some other method. Underlying this proposal is the recognition that it is market value rather than historical cost value which, firstly, conveys sensible information about the effect of management decisions to investors, and secondly, indicates the capital resources available to act as a buffer for protection of depositors.

In principle, there seems to be an overwhelming case for requiring MVA as one component of a strategy to reduce agency costs in banking. Supervisors can more readily assess the solvency of a bank and thus the need for corrective action. Given the agency relationship between government and bank shareholders arising from government protection of deposits, the rationale is obvious. But from the perspective of the shareholder–management relationship, MVA should reduce the information asymmetry so that shareholders can more readily assess the performance of bank management.

In practice, there are undoubtedly many impediments to implementing MVA for banks. For example, the non-traded nature of most bank assets (that is, loans) creates significant problems for marking such assets to market. However, opposition to MVA by bank management should perhaps be interpreted in the light of management self interest—which is better served by approaches such as historical cost accounting.

5.2 Executive Compensation¹⁵

An important component of solutions to agency problems is to devise compensation packages which align management interests with those of shareholders. Typically, the solution is to provide senior management with executive stock option plans. If the share price exceeds the option exercise price at the expiry date, management participates in the gains received by shareholders—and this it is hoped provides suitable incentives for actions aimed at maximising shareholder welfare.

In practice, such schemes have considerable problems. First, the value of an option depends significantly upon the volatility (risk) of the price of the asset over which the option is granted. Bank management holding such options are thus given an incentive to increase the risk of the bank in order to increase the value of their options. This is precisely the wrong incentive from the perspective of depositors and government. However, to the extent that management is non-diversified, and stand to suffer significant losses if the bank fails, the incentive to increased volatility is lessened. Unfortunately, there is little evidence to suggest that poor management does suffer such significant losses in the Australian context. Particularly under historical cost accounting, poor decisions may show up only with a lag—after those responsible have escaped with a golden handshake.

A second problem is that the share price of the bank is influenced by many factors outside the control of the bank management. The general level of market sentiment is an obvious example. A reward structure based on variables less subject to random external influences would appear warranted. Providing stock option schemes in which the exercise price was linked to the general level of share prices would make some sense. Alternatively, marking banks to market and relating compensation to bank value calculated in this way would also have some merits.¹⁶

5.3 The Role of External Auditors

An important element of the general monitoring of management for shareholders lies in the appointment of independent external auditors. In Australia, the Reserve Bank of Australia has adopted a policy of relying on reports from external auditors as part of its supervisory process, rather than developing its own inspection arrangements. Several problems with this approach should be noted. First, auditors represent shareholders, and are therefore concerned with the management–shareholder agency problem, not directly with the risks faced by creditors (depositors) of the institution. Second, it must be asked whether auditors can adequately assess risks in modern financial institutions. Recent Australian failures of financial institutions have raised several questions in this regard, and the general complexity of financial institutions demands a significant level of financial expertise for assessment. Indeed, if it is thought to be too hard to adopt MVA for banks, the ability of external auditors to assess the current viability of a bank must be questioned.

As an aside, the paradoxical situation currently prevailing in Australia regarding official inspection and auditors warrants comment. Since auditors are not directly concerned with shareholder–depositor agency issues their role is less relevant in depositor protection for stock

based companies, but they should be sufficient in mutual organisations where shareholders and creditors are one and the same. In practice, the Reserve Bank of Australia which supervises stock based institutions has eschewed official inspection, whereas AFIC which supervises mutual based institutions has opted for inspection in addition to external auditors.

5.4 *Corporate Boards and Liabilities of Directors*

Since the board provides the prime vehicle for shareholder monitoring of management, board composition and responsibilities/liabilities are important features of controlling risk taking and evaluating performance of management. As recent official inquiries into Australian financial institution losses have indicated, boards have not played adequate roles in monitoring management risk taking and performance.¹⁷

Currently, there is much interest both within Australia and overseas in the question of appropriate corporate governance structures.¹⁸ One important question is that of whether appropriate board structures for banks should reflect those found elsewhere. In practice, it seems likely that they will not, because of the different nature of stakeholder interrelations, and the special characteristics of banks. First, it should be noted that board members of banks will often be associated with companies which are bank customers—giving rise to potential problems of conflict of interest when matters involving other bank customers are involved. In the United States, the FDIC Improvement Act (1991) has required that financial institutions have audit committees comprised entirely of outside directors. As Booth (1993) has demonstrated, the requirements of that act, that eligible members of the audit committee must not also be involved with customers of the bank, will create significant changes in audit committee composition. Second, an important stakeholder is the government supervisory body, and contractual arrangements between it and management may affect management freedom. Third, banks have a significantly different capital structure to other companies involving much greater leverage, but where the major group of creditors (the depositors) have, as a result of perceived protection by government, little incentive to monitor management or owners. In essence, the monitoring role which might be played by depositors at an uninsured bank has been supplanted by government supervision. Finally, the market for corporate control is unable to operate freely because of the existence of the *Bank Shareholdings Act* (as discussed below) thus placing greater emphasis on the monitoring role of the board. Reflecting some of these concerns, the Reserve Bank of Australia in October 1994 issued new guidelines on bank board composition, including the prohibitions of multiple bank directorships and requirements for a majority of non-executive directors and non-executive chairpersons, although Turnbull (1994) has argued that without the introduction of cumulative voting, the consequent lack of independently elected directors will limit the benefits which might accrue.

5.5 *Bank Ownership Limitations*

Corporate finance suggests that one of the key controls over management lies in the market for corporate control provided by the stock market. Provided that investors can amass a significant concentration of voting power, incompetent management can be disciplined by takeover or by changes in board composition.

In Australia, this process is affected by the *Bank Shareholdings Act*, which limits the maximum equity interest which can be held by any investor. Underpinning that constraint is a concern over the possibility of a concentration of power in a 'special' industry. The freeing of entry into banking has reduced the significance of that concern, and whether the cost of the im-

pediment to the market for corporate control remains warranted is a question of continuing interest. However, as long as such a constraint remains, it reduces the overall oversight of bank management.

5.6 *Summary*

The preceding discussion indicates some significant problems in the structure of corporate governance mechanisms in Australian banking. While capital requirements may serve to better align shareholder and government interests and thus provide potential for greater reliance upon shareholder rather than government monitoring to ensure depositor safety, achieving that outcome will require greater attention to be paid to corporate governance issues in banking.

6. Prudential Supervision and Non-Bank Financial Institutions

The discussion so far has focused upon the prudential supervision of banks, emphasising the need to take into account the agency relationships inherent in financial institutions. One danger in the process of prudential supervision is that differences in agency issues between banks and other types of financial institutions may not be adequately recognised. It is thus appropriate to address some issues of safety and performance in other aspects of the financial system.

6.1 *Trustees, Unit Trusts and Superannuation*

An important feature of the structure of investment vehicles such as unit trusts and superannuation funds has been the role of trustees. Trustees can have an important role to play as agents for investors, providing delegated monitoring services over the management of the investment vehicle. To date, trustees, separate from management, have been required for these vehicles. Recent proposals from the Australian Law Reform Commission and the Companies and Securities Advisory Committee¹⁹ have advocated the removal of this requirement for collective investment schemes such as unlisted unit trusts. At the same time, however, the responsibilities of trustees of superannuation funds have been significantly increased as a result of the introduction of the Superannuation Industry Supervision legislation operating from 1 July 1994.²⁰

This apparent inconsistency in approach can be easily reconciled by noting the significant difference between the two types of investment vehicles and agency problems resulting. Regarding unlisted unit trusts, shareholders have the unusual feature that, if displeased with management, they are able to withdraw their share of assets of the organisation. Even though there is no market for corporate control, nor concentration of ownership, the ability of owners to discipline managers is significant. In this respect, the recent suggestions of removing the role of trustees from such organisations may have some merit. Provided that investors have sufficient information regarding performance of the fund, agency problems which would otherwise warrant use of an independent trustee may not be severe. For that to be the case, adequate information about market values of trust assets is required, which suggests that the agency problems may be less severe in the case of trusts investing in assets for which market valuations are available. Regular disclosure of asset composition would also seem to be necessary. Moreover, to align management interests more closely with those of investors, fee structures linked to performance and some exposure of the fund managers to losses due to incompetent management seems warranted. The proposed minimum capital requirements may serve this purpose.

However, it must be realised that the issues involved here extend well beyond the direct relationship between investors and fund management. Most investors make fund investment decisions based on advice from investment advisers, whose role as an agent for the investor can be compromised by their relationship with managers of competing funds. If trustees are to be removed, placing greater emphasis on investors for monitoring fund managers, there are likely to be implications for the financial planning industry.

In contrast to the proposals for unit trusts, superannuation legislation appears to be placing greater emphasis on the role of trustees. This divergence in approach is easily explained once it is noted that for superannuation funds, owners do not have the discretion to easily withdraw assets from the control of the managing organisation. Shifting assets from one superannuation scheme to another may only be possible by changing employment. If individual investors do not have information and discretion to withdraw resources from management control, some other mechanism for monitoring is required. Hence, the case for trustees to provide a method for concentration of ownership and managerial discipline is increased.

6.2 Cooperative and Mutual Deposit Taking Institutions

Cooperative financial institutions, by definition, do not have a class of ‘owner-shareholders’ identifiably different from their member- customers. As a result, the coincidence of owners and creditors (the depositor/members are the owners) eliminates the well-known agency costs associated with debt and equity—providing cooperatives with a potential competitive advantage over profit oriented institutions.²¹ On the other hand, agency problems arising from the divergent objectives of management and owners may be severe. Because of the one member – one vote rule, the ability of any member to generate a concentration of voting power may be limited, thereby increasing the job security of management and their ability to award themselves excessive remuneration.

How has prudential regulation of these institutions coped with these special characteristics? First, risk based capital adequacy requirements have been imposed—despite the fact that permanent capital is in principle inconsistent with the structure of these institutions, and despite the fact that there is no distinction between owners and depositors. Second, despite the fact that external auditors are acting simultaneously for owners and depositors, supervisory inspections are a major component of prudential regulation, unlike banking. Third, despite the fact that small credit unions may have significant information advantages about their customers, thereby reducing agency costs between the institution and its borrowers, there is a concerted push to get rid of small credit unions. (Indeed, the AFIC legislation prevents the creation of new credit unions by a ‘Catch-22’ provision— whereby a credit union can only operate if it has a certain level of capital reserves, which can only be acquired by past successful operation.)

Finally, there appears to be little recognition that mutual organisations may have an incentive towards excessive safety, due precisely to the agency problems arising from their structure. Because managers may be able to exploit the absence of shareholder monitoring to gain above normal compensation including lifetime tenure, they may have an incentive to minimise the risk of institutional failure. Counterbalancing this, however, are two factors which indicate the areas upon which prudential supervision should focus. First, incompetent management may be more easily able to avoid shareholder discipline, indicating a role for supervisory evaluation of management quality (as does occur through AFIC’s CAMEL ratings). Second, circumstances can arise in which management may have incentives to risk above normal long term compensation for significant one-off gains from increased risk taking by, for example, entering high risk ventures involving significant up front management and commission fees paid to

separate management companies or interests related to the management. A supervisory focus upon management remuneration arrangements and related party transactions would thus seem particularly relevant.

7. Conclusion

This article has addressed the nature of agency problems in financial intermediation with the objective of interpreting their relevance for financial regulation and supervision. It is argued that financial deregulation was premised upon a model which ignored agency issues involving bank management, and that capital adequacy requirements, by themselves, do nothing to address that specific agency problem. Consequently, there is a need for further attention to be paid to corporate governance issues which may have specific features arising from the special nature of banks.

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Endnotes

1. The Australian experience with deregulation and prudential issues arising from that experience are discussed in Grenville (1991) and Thompson (1991).
2. Problems which arose in the Australian financial markets included banks (State Bank of Victoria, State Bank of South Australia, and large loan write offs by most banks), building societies (Pyramid Building Society), credit unions (WA Teachers), friendly societies (OST), life offices (Occidental and Regal), unlisted mortgage trusts (Estate Mortgage), unlisted property trusts, and merchant banks (Rothwells).
3. There is a very large, but separate, literature focusing upon the nature of agency problems in financial institutions (see, for example, Mester 1989), but only a few analyses of the interaction of management–shareholder agency problems on issues, such as capital structure choice, which are relevant to prudential supervision (see, for example, Greenbaum & Thakor 1995, p. 524).
4. It should be noted that supervisory authorities have not neglected the role of management. CAMEL scores (based on assessment of Capital adequacy, Asset quality, Management ability, Earnings, and Liquidity) explicitly incorporate an allowance for management capabilities, and are used in Australia by the Australian Financial Institutions Commission (AFIC) which supervises credit unions, building societies, and friendly societies. The Federal Deposit Insurance Corporation Improvement Act (FDICIA) introduced in the United States in 1991 addresses issues of executive compensation and board compensation. Generally, however, the attention paid to management incentives and controls in Australia by supervisory bodies, such as the Reserve Bank and AFIC, has had less publicity than such explicit developments as capital adequacy requirements.
5. Jensen (1993) provides a classification of control systems able to resolve agency problems, comprising: capital markets; legal/political/regulatory systems; product and factor markets; and internal control systems headed by the board of directors.

6. The underinvestment problem is also a potentially significant problem, because of the inability to provide new depositors with claims secured against newly acquired assets. Securitisation has been argued by some as a solution to this problem. See James (1987).

7. See Davis (1991) for an outline of this problem.

8. The existence of informational differences has been used by Chari and Jagannathan (1988) to develop an informational theory of bank runs which extends the analysis of Diamond and Dybvig.

9. Chan, Greenbaum and Thakor (1992) provide an analysis, focusing on owner incentives, of how reduced franchise value of banks (arising from deregulation) would prompt greater risk taking.

10. See Davis (1990) for an overview and assessment of this approach.

11. Jensen and Meckling's (1976) classic analysis of the optimal ownership structure is also potentially relevant here. An enforced reduction in leverage, requiring larger 'outside' equity, means that the ownership share of management may be reduced. While larger agency costs between inside and outside equity may result, agency costs arising between debt and equity may fall—because the smaller share of management gains from wealth transfers between debt and equity may reduce the incentive for this form of exploitation. In Australia, however, the very small ownership share of management suggests that this is of minimal practical significance.

12. The proposals were first released in April 1993, and have been revised and extended since. See Basle Committee (1995).

13. For a survey of the evidence see Demirgüç-Kunt (1989).

14. See Shaffer (1992) and, for an Australian perspective, Hogan (1993).

15. This issue is one of those addressed in the FDIC Improvement Act enacted in the United States in 1991. See Booth (1993).

16. While many of the Australian banks' executive share option schemes have exercise conditions linked to profit performance, these are typically based on accounting measures of earnings.

17. In summarising the results of three official inquiries into losses incurred by State Government owned financial enterprises, the Reserve Bank (1993, p. 30) noted that 'In each case the inquiries attributed primary responsibility for the losses incurred to the management and boards of the institutions concerned'.

18. Recommendations of an Australian study by the Bosch Committee can be found in Bosch (1993).

19. See Australian Law Reform Commission (1992).

20. See Lockery (1993) for a discussion of these changes in trustee responsibility.

21. This potential advantage is however removed if other financial institutions, such as banks, can provide depositors with a guarantee of safety through deposit insurance schemes or (implicit or explicit) government guarantees, thereby removing the need for depositor monitoring of the institution's activities.

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Bank Deregulation, Supervision, and Agency Problems

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