The Need for Reform of the Australian Financial Regulatory System

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Abstract

It is being increasingly acknowledged that the benefits of deregulation of the financial system have failed to materialise, not so much because of flaws in the conduct of banks, but because of failure to adapt and change the overriding regulatory system to meet the challenges of deregulation, internationalisation and globalisation. In this article a four point system of reform is advocated, either on grounds of theoretical validity, or by reference to regulatory practices in other more advanced financial systems.

I. Introduction

On 25 October 1990, the then Treasurer, the Hon. Paul Keating, MP, referred to the House of Representatives Standing Committee on Finance and Public Administration, an inquiry into the Australian banking industry. The Committee was requested to inquire and report to Parliament by 30 June, 1991 (subsequently extended) on:

(a) the importance of the banking system to the Australian economy;

(b) the profitability of the banking sector through time and in
comparison with other industries;

(c) the effectiveness of competition in the banking sector, including the impact of any barriers to competition; and

(d) the benefits of competition to different sections of the community including:

(i) access to financial services;
(ii) product innovation;
(iii) choice and quality of financial services;
(iv) information to users.

Very few of the submissions to date have focussed on the important role of the regulatory system in achieving the goals of deregulation first planned by the Campbell Committee. This paper highlights certain areas of the legislation and of the practice of supervision and examination of the banks, in order to raise the level of the debate from a mere criticism of the credit and delivery risk assessments of banks, to an analysis of the ultimate causes of bank behaviour - the system of checks and controls that govern the financial system. It also proposes a total regulatory reform package.

The deregulation of the financial system has been accompanied, and perhaps thwarted by the use of direct controls on bank behaviour, namely, those relating to ownership and mergers (discussed in Section I) and those relating to liquidity (Section II). Removal of these could encourage the growth of deregulatory benefits such as operational cost savings and a lower cost of capital to business. In return the use of more indirect controls and checks would promote more optimum risk taking behaviour, in areas of credit assessment, interest rate,
liquidity and foreign exchange risk management. For this is in fact the true meaning of deregulation - the removal of direct controls, which are costly and can be circumvented and their replacement with indirect controls, which are cost effective and cannot be thwarted. Unfortunately the meaning of deregulation has become confused with the concept of unregulated markets, with no checks or controls (Metnick, 1984). This was never the original intent of the Campbell Committee (Committee of Inquiry into the Australian Financial System, 1981).

Comparison of the regulatory regime enforced in Australia compared to those in other advanced industrial nations exposes several glaring anomalies. For instance, the Reserve Bank of Australia is the only central bank out of twelve industrial nations that does not conduct regular or surprise on site examinations, and is the only central bank that relies on one set of auditors to report on both Company and Banking Law matters. The arguments for the use of this indirect check on the banking system as a tool to achieve the original goals of deregulation is discussed in Section III.

Section IV then looks at changes to the methods of depositor protection in order to promote the role of market discipline in containing bank risk, and in ensuring bank closure is conducted in the least costly manner to the economy as a whole.

It must be emphasised that the reforms proposed herein are a total package. Adoption of the proposal to remove direct controls is intrinsically linked to the
substitution of indirect controls. Just as possible damage to the financial system may have been caused by the adoption of only some of the Campbell Committee’s recommendations, so too would adoption of only part of the reform package proposed in this paper.

In the 1980s the entry of a large number of new banks (initially 16) may have induced the type of bank behaviour and strategic positioning that leads to bank failure. Strategies adopted by Australian banks, in particular the State banks, to meet the competitive threat, resemble those adopted by certain US banks in the late 1960s to early 1970s that led to their failure. These banks moved from a go-slow to go-go philosophy (Graddy et al, 1985) -

"(1) the banks involved broke abruptly with their traditional mission and aggressively entered new markets; (2) the banks exhibited a willingness to speculate; (3) they adopted aggressive liability management policies; (4) they substituted judgment of an individual for a functioning internal control system; and (5) they suffered from some element of bad luck in their attempt to anticipate their operating environment."

That is why the first area of regulation of the financial service sector which is queried in this paper is that connected with the concept of ownership and control of banks, as such regulations appear to have become erroneously linked with theories of competition. These regulations now may prevent a rationalisation in
the financial services sector which is fundamentally necessary to the stability of our financial system.
II. On the Need for Rationalisation in the Financial Service Sector

Both Japan and the U.S.A. are allowing and actively promoting mergers and acquisitions of banking units in the financial service sector, while in Australia, the official attitude is very aptly explained by Edwards (1986) -

"The fear of power in the hands of bankers is as old as banking itself. Credit and money are viewed as imbued with mystical powers that bestow on bankers a pivotal role in economic systems. The fear that bankers, by amassing resources, could gain control of these mystical powers is responsible for many of the banking laws and regulations that we have today."

With over 30 banks operating in Australia, a dramatic slide in profitability over the last eighteen months, largely attributable to a blow out in non performing loans, the pressures for amalgamations of banking units in Australia is likely to increase. The costs of closure by the RBA or arrangement of necessary capital injections would far outweigh any costs to the economy through a market arranged merger.

Hogan and Sharpe (1990) have criticised the maintenance of legislation preventing large shareholdings in banks, and amalgamations, partnerships and restructuring, without the Treasurer's approval. These are embodied in the Bank (Shareholding) Act (limiting maximum shareholding to 15%) and Banking Act (1959), which restricts a bank selling or reconstructing its business without the Treasurer's approval (Part VII, Section II). They claim theoretical and empirical
evidence is inconclusive which attempts to link diffuseness of bank ownership and bank risk, and that the introduction of risk-adjusted capital adequacy rules, as well as the possible establishment of a deposit insurance scheme, removes any justification for such strict controls on the ownership of banks.

Another argument apart from the ownership/risk viewpoint is the contention that benefits of deregulation will only flow on in a market which approaches perfect competition, where oligopolies and monopolies are eliminated.

This argument ignores the fact that the marketplace for financial institutions is unique and that theories of perfect competition, oligopoly and monopoly are not relevant in explaining or prescribing the behaviour of financial institutions.

The marketplace for financial institutions is unique by virtue of,

- the type of regulatory bodies that exist to supervise it;
- the licences that are required to carry on a banking business;
- the limits and restrictions that exist on the issue of a banking licence;
- the other natural barriers to entry, both cost and technological, that exist.

A theory of market behaviour applicable to financial institutions has been developed by Baumol et al (1982), called the theory of contestable markets. This theory focuses on entry and exit conditions, and thus emphasises barriers to entry
and exit.

Perfect contestability is in essence a world of completely free exit and entry. Barriers to entry and exit are cost disadvantages borne by the entrant firm, not borne by incumbent firms.

In the marketplace for financial institutions, the main barrier to entry is sunk costs. For instance consider the position of new foreign entrants.

They have to form a separate company - and therefore maintain both an adequate risk adjusted capital ratio and prime asset ratio in order to satisfy Reserve Bank of Australia requirements. Additionally they need to establish an expensive branch network and invest in computer technology to facilitate funds transfers and Treasury related transactions.

These costs can become sunk costs of exit and entry, arising from both natural and legislative barriers. Consider the position of any banking entrant seeking an orderly withdrawal from the market. With restrictions on new entrants, ownership, mergers and takeovers, these financial institutions are very unlikely to be able to recover sunk costs by selling out at a profit.

The conclusion from this is that the structure of the industry is endogenous to the technology and cost conditions. If one knows the technology one can predict the
best structure.

For instance, if the technology is such that a large number of products can be produced, then economies of scope are possible from the simultaneous production of two or more products in a single enterprise or branch, as opposed to simple economies of scale, where cost savings result from growth in size.

Theoretically, permitting mergers between institutions with similar functions would improve the mobilisation of savings and provision of loan capital to businesses and households, and would allow those institutions to achieve both economies of scale and scope. A situation of perfect contestability could be approached where,

1. all above normal profits are precluded in equilibrium, even in a situation of structural monopoly;
2. production is efficient, both in terms of the number and size of firms and in choosing techniques;
3. Prices equal marginal costs, where two or more firms produce the product or product range, and as a corollary, even in the case of structural monopoly, product cross subsidisation is precluded (Hatch, 1988, p.63).

Imperfect contestability only exists because of barriers to entry and exit which prohibit reduction in cost structures via mergers and takeovers. The Bank
Shareholdings Act and the Treasurer's policy towards mergings of bank with bank, (such as the ANZ with NAB), or bank with insurance company (such as the NMRB with ANZ), are examples of barriers to entry and exit.

The importance of the theory of contestability is that it allows the analyst or policy maker to see that measures which may have been introduced for perfectly valid reasons (such as protecting the banking sector from foreign ownership and control, and from monopolistic behaviour), may not have any relevance whatsoever in a deregulated, internationalised and globalised marketplace.

It is more than likely that the most effective way to achieve the original aims of deregulation, which have not yet eventuated, is to permit mergers between banks or reciprocal shareholdings between banks and banks, and banks and insurance companies, banks and superannuation funds, but with an upper limit on the percentage of shares held in the case of insurance companies. This idea is modelled along the lines of Japanese groups, where only small cross shareholdings are permitted.

Similarly by a process of natural attrition, banks are merging with or absorbing their non bank financial institutions (NBFIs). Since this latter sector has posed the greatest risk to the banking community via intercompany loans and a contagion effect, a policy of actively promoting either bringing these under the supervision of the Reserve Bank, or promoting their acquisition by banks, may best promote
the original aims of deregulation. Then both economies of scope and scale will be realised, with a reduction in interest costs of both the household and corporate sector, with greater innovation and product development.

Obviously this would involve some major policy revisions and the consideration of such problems and solutions as follows:

(1) The creation of a mega regulator, which would combine the RBA functions with those of the Insurance and Superannuation Commissioner - this could achieve the dual purpose of tightening up regulation in this latter area, which some has claimed is poorly lacking (AFR, 1.8.91). Such aspects as insurance companies being prescribed corporations, and not having to provide the same detail in registered prospectuses seem unfair on the grounds of equity and promoting a uniform standard of regulation in the capital markets. Combining regulators produces its own economies, as well as providing greater insights into the financing and investing functions.¹

(2) The problem of ensuring that no insurance claims can possibly be made on the banking arm. Just as all investors in bank owned funds management companies must be made aware that the bank is not guaranteeing either the performance or capital of the managed trust, so too must holders of insurance policies realise that they have no claims on the banking shareholder.

¹ The role of superannuation funds and life insurance companies as financial institutions is discussed in Knox (1988) and in Fiedler (1988).
(3) Understanding that the effect of increased concentration on competition is to increase it not lower it.

Removal of barriers to entry and exit is given some credence by the argument that diversification increases returns and lowers risk -

"There is no evidence supporting limiting activities to financial activities, nor is there evidence suggesting that banks not be permitted into commerce" (Eisenberg, 1986).

Regarding the relationship between concentration and competition, Edwards (1986, p.158-9) addressed the same problem in the U.S.A. that the Australian financial regulatory system is now facing -

"If in the absence of regulatory protections many banks and financial firms become economically unviable, the question arises as how to eliminate without disrupting our financial system...The solution is to permit widespread mergers among existing financial institutions. Thus more mergers and increased concentration at least at some market levels is a necessity if we are to make the journey safely from our present patchwork financial system to one that is more in tune with current and future economic realities. In this sense increased market concentration can be seen more as a solution than as problem."
III. The Cost of Australian Liquidity Regulations to Foreign Owned Bank Subsidiaries and to Australian Banks.

As outlined above, the high setup cost for a foreign entrant work against the benefits of deregulation flowing through to the household and corporate sector, such as greater loan funds availability at a lower cost.

Consider the impact or interest burden of having to comply with the Prime Asset Ratio and the Non Callable Deposit Ratio. The analysis below is based on that of De Lucia et al (1990, pp. 90-93).

Banks must hold 1% of aggregate Australian dollar denominated (AUD) on balance sheet assets, less their capital base and favourable overnight settlement balances in Non Callable Deposits (NCDs) with the Reserve Bank. The interest rate on NCDs is set monthly at 5 percentage points below the average yield at tender of the previous 13 week Treasury notes. As a further requirement, banks must hold 6% (reduced from 12% to 10%) of AUD on balance sheet assets, less their capital base and favourable overnight settlement balances in Prime Asset Ratio (PAR) assets. Funds held in NCD accounts with the RBA representing 1% of AUD assets can be counted as prime assets.

Hence for every $100 of total AUD costs, banks must hold at least $1 in NCDs and $5 in their PAR assets. Clearly the interest rate burden from holding assets in PAR and/or NCD's will depend on the interest rate differential between the
NCD/PAR rate and the cost of funds as well as the rate earned on advances. Some simple breakeven equations illustrate how banks need to boost their required earning rate on advances to compensate for holding NCD and PAR assets.

In fact these cost disadvantages have been blamed by Maisel (1981) and Hogan and Sharpe (1983, 1984) for banks increasing their risk profiles in order to earn higher returns on their loan portfolios, to compensate them for their returns on PAR assets and NCDs.

**Interest cost of PAR and NCD**

Assuming - Australian dollar denominated assets totalling $100,
- no shareholders' funds,
- deposit interest rate cost of Australian and foreign currency denominated deposits of 15%,
- earnings rate on advances of 15%,
- earnings rate on NCD funds of 5%,
- earnings rate on PAR funds of 13%

\[
\text{Loss on funds} = \text{Earnings on advances on NCDs} + \text{Earnings on PAR employed} - \text{Cost of funds invested on NCDs} + \text{Earnings} - \text{Cost of funds invested on PAR} \\
= \left[\left(\$94.00 \times 0.15\right) + \left(\$1.00 \times 0.05\right) + \left(\$5.00 \times 0.13\right)\right] - \left(\$100 \times 0.15\right) \\
= -\$0.20
\]

Similarly we can derive a breakeven formula for NCD and PAR assets. Ignoring capital adequacy criteria, a bank's loan product will breakeven if:
cost of funds = earnings on + earnings on + earnings on
    asset class    PAR assets    NCDs

OR

\[ r_D = r_A^* + r_{PAR}^* + r_{NCD}^* \]

(1)

where:

D - deposits held to fund assets, PAR and NCD
A - asset class in question
PAR - holdings of PAR assets required
NCD - holdings of NCD assets required

\[ r_D \] - rate paid on deposit
\[ r_A \] - rate charged on assets
\[ r_{PAR} \] - rate earned on PAR assets
\[ r_{NCD} \] - rate earned on NCD deposit

as \( D = A + PAR + NCD \)

and \( NCD = 0.01 \times D \)

and \( PAR = 0.6 \times D - NCD \)

then, simplifying we get

\[ r_D = 0.94^*r_A + 0.05^*r_{PAR} + 0.01^*r_{NCD} \]

(2)

re-writing to derive the break even earnings rate required on our assets we get

\[ r_A = r_D - 0.05^*r_{PAR} - 0.01^*r_{NCD} \]

(3)

0.94

For on balance sheet assets not funded by deposits such as bankers acceptances, only PAR and NCD assets will have to be provided. For every $100 of non cash funded assets, $6 of deposits will need to be raised.
Therefore for non-cash funded assets:

\[
\text{Total Net Return} = 0.94 \times \frac{\text{Return on Non Cash}}{\text{Cost of Deposits} - \text{Return on PAR and NCD Assets}}
\]

If we wish to derive the breakeven return required on non cash funded lines we set Net Return = 0

then,

\[
\text{Return on non cash} = \frac{0.06 \times (\text{Cost of Deposits} - \text{Return on PAR and NCD Assets})}{0.94}
\]

Thus, for non cash funded assets, the equation above therefore, reduces to:

\[
r_A = 0.1 \times \left( r_D - 0.05 \times r_{\text{PAR}} - 0.01 \times r_{\text{NCD}} \right)
\]

This is a close approximation since the actual result is only achieved through iteration (De Lucia et al, 1990, p.93).

A foreign owned subsidiary which is forced to meet PAR and NCD requirements may also, by its existence, force its parent to meet certain liquidity requirements in its home country, if it is fully consolidated.

In view of the possible effect on earnings variability (via interest rate mismatching
and transaction costs) and in view of the fact that PAR assets by virtue of their locked in nature are not liquid except in an extremity (Hogan and Sharpe, 1990, pp.134-135) it appears that the only rationale for liquidity rules as well as capital adequacy is to falsely engender public confidence in banks. In any case the RBA can more effectively control and monitor the liquidity flows of a bank through the Exchange Settlement Account System (Carew, 1991, pp.98-99). Also it is claimed that our regulatory system is modelled on that of the U.K., yet the Bank of England imposes no liquidity requirements (Bank of England, 1990).

If other indirect checks were brought in, as proposed below, direct liquidity controls safely could be jettisoned for all banks on grounds of regulatory duplication and inefficiency. In addition allowing foreign banks to operate as branches, subject to reciprocal rights in the country of origin, and subject to on site examinations and parent provided lines of credit, may result in cost savings to borrowers and depositors.
III On The Need For On Site Examination of Banks by the Reserve Bank of Australia

A study was made last decade of the relative roles of banking supervisory authorities and independent external auditors by IBCA Banking Analysis Ltd., a U.K. based rating service then specialising in assessing the stability of financial systems and the creditworthiness of their banks. The results of their study are summarised in Table 1 (IBCA, 1985). The principal conclusions that can be drawn from their study regarding comparisons of different systems of prudential supervision are as follows:-

1. Of the twelve countries surveyed - the Netherlands, Spain, Sweden, Switzerland, the U.K., the U.S.A., Belgium, Canada, France, Germany, Italy, Japan - all central banks demanded prudential returns from the banks, while nine out of the twelve conducted in depth inspections of the banks. In addition, all but one, the Bank of England, would themselves carry out inspections and investigations in special circumstances. The Bank of England would commission auditors, and not necessarily the existing Company Law auditors, to carry out special investigations. Thus the central banks of the three countries not carrying out in depth inspections - Switzerland, the U.K. and Canada - all carried out special investigations. Hence all twelve countries surveyed conducted in depth inspections and/or special investigations.
2. In addition, nine of the twelve countries surveyed carried out surprise or spot inspections. Of the three countries not using this tool of prudential supervision, two - the U.K. and Canada - had unlimited access to the bank's records. The third country, Switzerland, appoints special Banking Law auditors, which produce a detailed annual report as laid down by banking law.

3. Belgium, Canada, Germany, Netherlands, Spain, Sweden and Switzerland, countries with a relatively stable financial system, appoint Banking Law auditors in addition to the Company Law auditors that are appointed by the owners of the bank. In general, the function of these Banking Law auditors is to report to the central bank on compliance with Banking law and other matters. Banking Law auditors have no liaison with Company Law auditors except in Belgium.

4. Of the five countries with no separate Banking Law auditors, two, the U.K. and the U.S.A., encounter problems. The Bank of England may demand information from Company Law auditors, but this raises the issue of client confidentiality and the fact that unless it is legislated for, there is no obligation for the client to report unprompted to the bank. In the U.S.A., the regulatory authorities could subpoena auditors to supply information, but there is no mandatory obligation for the Securities Exchange Commission, to whom auditors report, to liaise with banking authorities. In the other
<table>
<thead>
<tr>
<th>Country</th>
<th>Belgium</th>
<th>Canada</th>
<th>France</th>
<th>Germany</th>
<th>Italy</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory Authority</td>
<td>Banking Commission</td>
<td>Office of the Inspector General of Banks</td>
<td><em>Banque de France</em></td>
<td>President of the Supervisory Office</td>
<td>Bank of Italy</td>
<td>Bank of Japan (BOJ)</td>
</tr>
<tr>
<td>Approx. no of supervisory staff</td>
<td>20</td>
<td>40</td>
<td>100</td>
<td>40</td>
<td>100</td>
<td>4,100</td>
</tr>
<tr>
<td>Powers of supervisory authority</td>
<td>Licensing of banks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Regulatory oversight</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Prudential returns from banks</td>
<td>Yes - regular</td>
<td>No specific power</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
</tr>
<tr>
<td>In-depth inspection of banks</td>
<td>No - irregular</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Directives to banks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Inspections/investigations in special circumstances</td>
<td>Yes, but generally assisted by external auditors</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Approx. no of institutions covered, including co-ops</td>
<td>500</td>
<td>500</td>
<td>2,500</td>
<td>3,500</td>
<td>1,100</td>
<td>5,500</td>
</tr>
<tr>
<td>Surprise/spot inspections</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Remarks</td>
<td><em>All these bodies are linked</em></td>
<td><em>FBSO fines banks for late submission of returns</em></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:** comments on external auditors

1. Company law auditors:
   - New appointed | By owners | By owners | By owners | By owners | By owners | By owners |
   - Duties | Annual audit | Annual audit | Annual audit | Annual audit | Annual audit | Annual audit |
   - Availability of reports | Published | Published | Published | Published | Published | Published |

2. Banking law auditors:
   - New appointed | By Banking Commission | By owners; auditors must meet Bank Act qualifications |
   - Duties | Audit of returns to the Commission | Solicitation to report to Inspector General |
   - Availability of reports | To Bank's board and to Commission | Annual report to *FBSO* |
   - Remarks | To bank's chief executive and to Inspector General | - |

**Company Law Auditor & Banking Law Auditors:**

- The two types of audit sometimes carried out by the same individuals but if so, they have dual functions.
- The two types of audit sometimes carried out by the same individuals but if so, they have dual functions.
- The Bank Act requires joint auditors who must not audit together for more than two consecutive years.

**Listed Bank Supervisory Authority and Auditors:**

- Coacting law auditors report to Commission and work jointly with Company Law Auditors.
- None.
- None.
- None.
### Table I (Cont.)

#### Relative Roles of Banking Supervisory Authorities and Independent, External Auditors of Banks (11)

<table>
<thead>
<tr>
<th>Supervisory Authority</th>
<th>Switzerland</th>
<th>Spain</th>
<th>Markets</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity of countries</strong></td>
<td>133</td>
<td>168</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td><strong>Agent in charge of supervisory staff</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Powers of supervisory authority:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercising of banks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitoring of banks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Precautionary powers</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
</tr>
<tr>
<td>Independence of inspectors</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
<td>Yes - regular</td>
</tr>
<tr>
<td>Directing to banks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Inspections/Investigations in special circumstances</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Agent in charge of institutions covered, including range</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveys, spot inspections</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Role of Independent External Auditors

1. **Company law auditors:**
   - **By owners:**
   - **By bank:**
   - **Rutles:** Annual audit, annual audit
   - **Reliability of reports:** Published, published
   - **Possibility of independence from bank:** High, low
   - **Creditability of audit work:** High, low
   - **by appointment:** By bank, by bank

2. **Banking Law auditors:**
   - **by appointment:** By bank & Banking Commission
   - **Possibility of independence from bank:** High, medium, low
   - **Creditability of work:** High, medium, low
   - **Reliability of reports:** Audit of financial statements
   - **Possibility of independence from bank:** Published
   - **Creditability of work:** Medium, high
   - **Reliability of reports:** To bank's board and to EIB
   - **Possibility of independence from bank:** Medium, high
   - **Creditability of work:** High, medium

#### Remarks

- The "Banking Law audit" is not a legal requirement, but is a bank of Spain recommendation.
- The same firm cannot perform both auditing assignments.
- **By owners:**
  - **Annual audit:** Published, published
  - **Annual audit:** Published, published
- **By bank:**
  - **Annual audit:** Published, published
  - **Annual audit:** Published, published
- **By bank & Banking Commission:**
  - **Annual audit:** Published, published
  - **Annual audit:** Published, published
- **By bank & Banking Commission:**
  - **Annual audit:** Published, published
  - **Annual audit:** Published, published
- **By bank & Banking Commission:**
  - **Annual audit:** Published, published
  - **Annual audit:** Published, published

#### U.S.A.

- **United Kingdom:**
  - **Accounting principles:**
  - **Auditors:**
    - **External auditors:**
      - **Annual audit:** Published, published
      - **Annual audit:** Published, published
    - **By owners:**
      - **Annual audit:** Published, published
      - **Annual audit:** Published, published
  - **By bank:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published

#### U.S.A.

- **United Kingdom:**
  - **Accounting principles:**
  - **Auditors:**
    - **External auditors:**
      - **Annual audit:** Published, published
      - **Annual audit:** Published, published
    - **By owners:**
      - **Annual audit:** Published, published
      - **Annual audit:** Published, published
  - **By bank:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published
  - **By bank & Banking Commission:**
    - **Annual audit:** Published, published
    - **Annual audit:** Published, published

#### Remarks

- The bank can select an external auditor from auditors, but this may raise concerns of clients. Confidentiality obligations for client's account by external auditors do not apply to clients, and the bank can select an external auditor without the client's consent.
- The regulatory authorities should ensure that auditors are independent and have experience in providing financial services to banks.
three countries, Japan, France and Italy, which appoint no Banking Law auditors, the supervisory body or bodies (Bank of Japan and Ministry of Finance) all conduct in depth in depth inspections and special investigations themselves.

The RBA’s Approach to Examination

The supervisory information collected by the RBA on risk exposures falls into three categories - published audited accounts of banks, statutory returns submitted by banks and checked by the Auditor General, and other returns requested by the supervision unit. In comparison to the systems reviewed the RBA,

* conducts no regular in depth inspections, special investigations or surprise on site examinations or inspections of banks, unlike the majority of advanced industrial nations,

* relies totally on one set of auditors to report on both Company law and Banking law matters.

Hogan and Sharpe (1990, pp.137-143) detail various flaws in this approach, which is totally out of line with the system of checks, balances and control in other countries with a similar standard of living and stability in the financial sector -

20
1. Reliance on the flow of information from banks on separate areas of potential risk does not consider the interdependencies between the areas eg. liquidity and interest rate risk. No measure of total bank risk has been developed, as has been done in the U.S.A.

2. The RBA relies on the banks to describe their risk management system rather than conduct on site examinations. All of the countries reviewed in the IBCA study cited above conduct on site examinations in one capacity or other. To check such systems against a desirable norm can only be carried out through hands on inspections rather than ‘consultations’. The RBA can help improve systems in banks by offering suggestions.

3. The RBA relies on external auditors whose role is dictated primarily by the Corporations Law, and who are appointed and paid by shareholders of individual banks, to report to the RBA through the bank concerned, on whether the bank’s internal management systems and controls are adequate, whether the prudential standards set by the RBA are being observed, whether the statistics provided by the bank are reliable, whether the bank’s risk management systems are effective and are being observed, whether all statutory requirements have been complied with, and whether there are any matters which may have the potential to prejudice materially the interests of depositors. Precedents for this type of procedure have been established by the Insurance Commissioner and the NCSC. Whether this
means it is the most desirable practice is dubious in view of the lack of precedent overseas and two serious flaws:-

i. the indirect reporting procedure may lead to suppression of knowledge of high-level fraud within the bank. The recent case of the Westpac/PPL letters is a perfect example of this. Moreover the failure in the past of auditors to report "problems" to the NCSC mean that this safety valve embodied in the Companies Code and now in the Corporations Law is virtually useless.

ii "A further issue relates to the capacity of external auditors to monitor risk, for while the shifting of part of the responsibility for risk evaluation from the RBA to external auditors relieves the RBA of a task in which it has little experience and no obvious expertise, what is not clear is whether the external auditors are any better equipped" (Hogan and Sharpe, 1990, p.140).

4. The RBA will not use the powers conferred by the Banking Act to ask the Treasurer to direct the Auditor-General to investigate the books, accounts and transactions of the banks (Part VII, Section 61). Hogan and Sharpe (1990, p.139) explain the reluctance to use these provisions in a number of ways:

"First, the exercise of the Treasurer's powers under Section 61(2) of the Banking Act could be seen by the RBA as endangering confidence in the stability of the banking system."
Second, by involving an external examining authority in the workings of each bank, the RBA could be less well placed to maintain confidentiality of each bank's business.

Thirdly, the RBA could be concerned that use of these procedures would reduce its role in the examination process.

Finally, the RBA could be concerned that it would have to rely on investigations and interpretations of a staff not directly connected with the efficient workings of the banking system."

All of the above reasons for failure to utilise powers to direct on site examination are rather remarkable when the RBA has been conducting ongoing discussions with major audit firms regarding conducting such inspections. The potential for conflict of interest of one firm auditing another appear to far outweigh the advantages of utilising the existing provisions of the Banking Act, in directing the Auditor-General to conduct such examinations. He can always employ consultants if he feels existing expertise is lacking in his department, or a special bank examining unit could be set up in the RBA or the deposit insurance agency proposed in the next section.

A second source of problems with the regulatory system is implementation difficulties with existing sanctions available to the RBA for dealing with
transgressions. These provide for a $2000 penalty for each day during which non compliance occurs. Where the bank is convicted of an offence against the Banking Act or regulations, the Attorney-General may apply to the Federal Court of Australia to direct compliance by the bank, and if this does not occur the Federal Court of Australia may authorise the RBA to assume control of, and carry on, the business of the bank.

Problems with such sanctions is the triviality of the financial penalty and the need to adapt such penalties to reflect the scale and operations of each bank. A fixed penalty is both too rigid and discriminatory.

Assuming control of the bank in the event of non compliance is unlikely to be a policy option except in dire circumstances, because of deleterious effects on system stability.

A better alternative would be to improve the system of prudential control by introducing a system of in depth and special on site examinations and inspections, combined with a system of onerous penalties and sanctions for banks whose risk management system does not comply with a standard norm, and for banks which have not complied with RBA directives in other respects. Central banks in Sweden, the U.S.A., Germany and Japan have administrative powers to penalise and "punish" banks. (IBCA, 1985)
IV. **Supervisory Intervention and Deposit Insurance**

Guttentag and Herring (1982, p.99) claim that, "the development of deposit insurance has eliminated the possibility of runs at most financial institutions, and converted potential runs into walks at others."

In Australia before the development of lender of last resort there have been financial crises, such as in 1843, 1893, 1929 whereby the suspicion of illiquidity or insolvency would precipitate a run by depositors and if the bank was unable to borrow from banks or liquidate assets, it was forced to close, as in 1893 when 13/23 banks suspended operations (Butlin, 1968).

Lender of last resort facilities (LLRs), and deposit insurance have been developed in other countries because of the peculiar vulnerability of banks to runs, and because of the social costs of banking crises (Guttentag and Herring, 1981). While LLRs attempt to prevent banks being overwhelmed by runs, deposit insurance aims at preventing runs altogether by making the soundness of banks irrelevant to deposits -

"This device performs the dual functions of insuring individual deposits against loss and protecting the banking system against crises. In addition, because deposit insuring agencies can consolidate the claims of creditors they are strategically positioned to dispose of insolvent banks in the most advantageous way". (Guttentag and Hering, 1982, p.102.)
In the Australian regulatory system various views exist as to whether the Reserve Bank of Australia fully guarantees all deposits or whether the Banking Act is less than a full guarantee with no assurance of bank solvency (Johnston, March 1985, p.572). Ambiguity as to whether repayment means repayment in full or whether all depositors rank equally, both large corporates and small household depositors, means there could be different views as to the definition of a depositor - whether the holder of a certificate of deposit, a bank accepted or endorsed bill, or even a bond, represents a depositor.

Public perception of what bank risk is, and bank backed and guaranteed means, has proved a severe problem with subsidiaries of banks, such as funds management companies and bank managed investments, such as property trusts. As Hogan and Sharpe (1990) clearly warn, if public perception is promoted by official statements that the RBA would not allow depositors to lose in the event of a liquidation, there is little hope for the market mechanism to monitor the risk of a bank by the placement or withdrawal of funds, or the selling down of shares on the stock market. The result of the full operation of the market mechanism is the eventual replacement of the bank management that caused the problem to the bank in the first place.

The cost of protecting depositors by an implicit or explicit RBA guarantee is totally unrelated to the risk. If the RBA has to intervene and arrange a merger of an insolvent bank the ultimate cost is assumed by the Commonwealth
Government. Costs of monitoring banks and meeting capital adequacy and liquidity requirements cannot be recouped, and are in no way related to the risk of each banking unit. The situation of State banks is even more onerous, with the State Governments effectively guaranteeing 100% of the liabilities.

The use of a deposit insurance scheme for small depositors combined with the abolition of liquidity requirements, has advantages in utilising large depositors as a source of market discipline. It constrains risk taking by making the deposit insurance premium charged to each bank reflect that bank’s risk, reducing the ambiguity in the wording of depositor protection, as well as the likelihood of the RBA funding severe bank losses out of tax revenues (Hogan and Sharpe, 1990).

Many claim that deposit insurance schemes have not worked in the USA. This ignores historical comparisons and other differences between regulatory systems in the USA and elsewhere. Before the introduction of the Federal Deposit Insurance Corporation in 1933, most bank closures were forced by the market. Also before 1933, the Federal Reserve attempted to prevent panicky reactions terminating a sound bank, but would not carry a bank indefinitely and usually required collateral to protect itself. Non-member banks and thrift institutions had only uncertain access to private LLRs (Guttentag and Herring, 1982).

Between 1921 and 1933, 13,400 banks suspended operations. After the introduction of federal insurance from 1946 to 1982 only 182 banks failed (Graddy

In the U.S.A. now, largely because of deposit insurance, administrative decisions can be made to allow continuance of the institution indefinitely, or merger or termination. Solvency determination and subsequent disposition is more efficient under an insurance system, as capricious runs and the contagion effect are reduced. In addition the going concern values of a solvent bank can be preserved, as the FDIC can consolidate all the creditor claims against a bank (Bulow and Shoven, 1978 and White, 1981).

The means by which ailing banks are assisted is described in Figure 1 (Guttentag and Herring, 1982, p.100). The term regulatory intervention refers to actions taken by a bank regulator (which may or may not be the insuring agency) to affect the behaviour of a problem bank. Such actions may range from suggestions to cease-and-desist orders to suspension of insurance or removal of management. Supervisory intervention means actions taken by insuring agencies to deal with insolvent banks.

A final explanation of possible flaws in the US regulatory system that are attributed erroneously to the existence of a FDIC, is the multitude of legislation, (see Table II), consisting of twenty six separate arts, and plethora of regulators - seven in total (see Table III). This means that it is not possible to isolate a cause
<table>
<thead>
<tr>
<th>Date</th>
<th>Law</th>
<th>Key Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1863</td>
<td>National Currency Act</td>
<td>Established Office of the Comptroller of the Currency; authorized national bank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>notes; limited asset choices of banks issuing national bank notes; established</td>
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<tr>
<td></td>
<td></td>
<td>a system of reserve requirements.</td>
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<tr>
<td>1864</td>
<td>National Banking Act</td>
<td>Authorized the granting of federal bank charters; origin of dual banking system</td>
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<td></td>
<td></td>
<td>attributed to this and the 1863 law.</td>
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<tr>
<td>1913</td>
<td>Federal Reserve Act</td>
<td>Established system of Federal Reserve Banks to serve as a lender of last resort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to commercial banks, promote an elastic money supply, provide a nationwide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>payments system and closer supervision of banks.</td>
</tr>
<tr>
<td>1919</td>
<td>Edge Act</td>
<td>Permitted banks to establish subsidiaries outside their home territory for the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>purpose of conducting international banking.</td>
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<tr>
<td>1927</td>
<td>McFadden-Pepper Act</td>
<td>Permitted national banks to branch if state banks in the same state could; left</td>
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<td></td>
<td></td>
<td>interstate branching decisions to the states.</td>
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<tr>
<td>1932</td>
<td>Federal Home Loan Bank Act</td>
<td>Established Federal Home Loan Bank System to serve as a lender of last resort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to S&amp;Ls.</td>
</tr>
<tr>
<td>1933</td>
<td>Banking Act of 1933 (</td>
<td>Prohibited the payment of interest on demand deposits; mandated ceilings on</td>
</tr>
<tr>
<td></td>
<td>Glass-Steagall Act)</td>
<td>deposit interest rates; separated Fed member banks from the securities industry;</td>
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<td></td>
<td></td>
<td>established the FDIC; further restricted asset choices of national banks.</td>
</tr>
<tr>
<td>1933</td>
<td>Home Owners' Loan Act</td>
<td>Authorized the granting of federal charters for S&amp;Ls, under the supervision of</td>
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<tr>
<td></td>
<td></td>
<td>the FHLBB.</td>
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<tr>
<td>1933</td>
<td>Securities Act of 1933</td>
<td>Required registration of new securities and disclosure of truthful financial</td>
</tr>
<tr>
<td></td>
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<td>information on issuers.</td>
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<tr>
<td>1934</td>
<td>Securities Exchange Act</td>
<td>Established the SEC.</td>
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<tr>
<td>1934</td>
<td>National Housing Act</td>
<td>Established the FSLIC.</td>
</tr>
<tr>
<td>1934</td>
<td>National Credit Union Act</td>
<td>Established a federal credit union regulator which later became the NCUA;</td>
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<tr>
<td></td>
<td></td>
<td>authorized the granting of federal charters for CUs.</td>
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<tr>
<td>1935</td>
<td>Banking Act of 1935</td>
<td>Strengthened the power and autonomy of the Federal Reserve Board; gave</td>
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<tr>
<td></td>
<td></td>
<td>Comptroller more discretion in the granting of national bank charters.</td>
</tr>
<tr>
<td>Date</td>
<td>Law</td>
<td>Key Provisions</td>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>1940</td>
<td>Investment Company Act</td>
<td>Required disclosure of financial statements and investment objectives by investment companies; specified shareholder rights</td>
</tr>
<tr>
<td>1940</td>
<td>Investment Advisers Act</td>
<td>Required individuals or firms selling investment advice to register with the SEC</td>
</tr>
<tr>
<td>1945</td>
<td>McCarran-Ferguson Act</td>
<td>Established the right of the federal governemnt to regulate insurance companies if states fail to do so adequately</td>
</tr>
<tr>
<td>1956</td>
<td>Bank Holding Company Act and Douglas Amendment to the Act</td>
<td>Gave the Fed control over the formation, expansion, and supervision of multibank holding companies; identified factors to be used in evaluating bank holding company acquisitions; prohibited multibank holding companies from acquiring out-of-state banks</td>
</tr>
<tr>
<td>1966</td>
<td>Interest Rate Adjustment Act</td>
<td>Extended Reg Q ceilings to thrifts</td>
</tr>
<tr>
<td>1968</td>
<td>Consumer Credit Protection Act (Truth-in-Lending)</td>
<td>Required disclosure of lending terms to consumers</td>
</tr>
<tr>
<td>1970</td>
<td>Amendments to Bank Holding Company Act</td>
<td>Extended Federal Reserve authority over one-bank holding companies; limited holding company acquisitions to businesses “closely related” to banking</td>
</tr>
<tr>
<td>1970</td>
<td>Amendments to Federal Credit Union Act</td>
<td>Established NCUSIF</td>
</tr>
<tr>
<td>1974</td>
<td>Equal Credit Opportunity Act</td>
<td>Prohibited discrimination in the granting of credit</td>
</tr>
<tr>
<td>1974</td>
<td>Employee Retirement Income Security Act</td>
<td>Imposed fiduciary responsibility on pension fund managers; provided for vesting of benefits and full funding of pension funds; established the PBGC</td>
</tr>
<tr>
<td>1975</td>
<td>Securities Acts Amendments</td>
<td>Mandated the development of a national securities market</td>
</tr>
<tr>
<td>1977</td>
<td>Community Reinvestment Act</td>
<td>Required depository institutions to consider the needs of all economic groups in their communities when granting credit</td>
</tr>
<tr>
<td>1978</td>
<td>International Banking Act</td>
<td>Imposed insurance premiums and branching restrictions on foreign banks operating in the United States</td>
</tr>
<tr>
<td>Table III</td>
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<tr>
<td>Depository Institutions and Their Regulators (continued)</td>
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<table>
<thead>
<tr>
<th>Table IV</th>
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<tbody>
<tr>
<td>Depository Institutions and Their Regulators</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chartering and Licensing</th>
<th>Branching</th>
<th>Interstate</th>
<th>Interstate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. National Banks</strong></td>
<td>Comptroller</td>
<td>Interstate</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>B. State Member Banks</strong></td>
<td>State authority</td>
<td>Federal Reserve and state authority</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>C. Insured State Nonmember Banks</strong></td>
<td>State authority</td>
<td>FDIC and state authority</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>D. Uninsured State Banks</strong></td>
<td>State authority</td>
<td>State authority</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>E. Savings Banks (1) Federal Mutual</strong></td>
<td>FHLBB</td>
<td>FHLBB</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>(2) State Mutual</strong></td>
<td>State authority</td>
<td>FDIC and state authority</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>F. Savings and Loan Associations (1) Federal</strong></td>
<td>FHLBB</td>
<td>FHLBB</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>(2) State</strong></td>
<td>State authority</td>
<td>FHLBB and state authority</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>G. Credit Unions (1) Federal</strong></td>
<td>NCUAB</td>
<td>NCUAB</td>
<td>Interstate</td>
</tr>
<tr>
<td><strong>(2) State</strong></td>
<td>State authority</td>
<td>State authority</td>
<td>Interstate</td>
</tr>
</tbody>
</table>

(1) Federal credit unions are not required to receive approval from the NCUAB before opening a branch.
(2) While the McFadden Act prevents interstate branching by national banks, state member banks, and insured state nonmember banks, banks can provide certain services on an interstate basis.
(3) The McFadden Act's interstate branching restrictions are generally not applicable to uninsured state banks.
(4) As a matter of policy, the FHLBB has prohibited interstate branching by federal thrifts. Limited exceptions have been made in cases of failing institutions.

<table>
<thead>
<tr>
<th>Mergers, Acquisitions, and Consolidations</th>
<th>Interstate</th>
<th>Interstate</th>
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<tbody>
<tr>
<td>Interstate</td>
<td>Interstate</td>
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<thead>
<tr>
<th>Reserve Requirements</th>
<th>Access to the Discount Window</th>
<th>Deposit Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>Interstate</td>
<td>Interstate</td>
</tr>
</tbody>
</table>

(5) The Comptroller must approve the merger or acquisition if the resulting bank is an insured state bank.
(6) The Federal Reserve must approve the merger or acquisition if the resulting bank is a state member bank.
(7) The FDIC must approve the merger or acquisition if the resulting bank is an insured state nonmember bank.
(8) In addition to state authority, the FDIC must approve mergers or acquisitions between insured and uninsured banks.
(9) The FDIC must approve the merger or acquisition if the resulting bank is an insured bank other than a federal savings bank.
(10) The NCUAB must approve the merger or acquisition if the resulting bank is an insured federal credit union.
(11) The McFadden Act prevents interstate branching by national banks, state member banks, and insured state nonmember banks. However, the Garn-St. Germain Depository Institutions Act of 1982 provides a statutory framework within which the FDIC and the FSLIC may arrange interstate and interindustry acquisitions or mergers of failing federally insured depository institutions. Similar authority has also been granted to the NCUAB with regard to credit unions.
(12) Under the Depository Institutions Deregulation and Monetary Control Act of 1980, the Federal Reserve is required to set a uniform system of reserve requirements (Regulation D) for virtually all depository institutions. These requirements will be phased in by September 1987. Noninsured state banks that are eligible for deposit insurance may be subject to reserve requirements.
(13) Nearly all depository institutions in the United States, including branches and agencies of foreign banks, have access to the Federal Reserve Bank. These depository institutions are expected to make reasonable use of their usual sources of funds before turning to Federal Reserve Banks. For example, S&Ls and credit unions should first attempt to borrow from the Federal Home Loan Banks and the Central Liquidity Facility, respectively.
(14) Deposits that are not insured by the FDIC may be insured by state insurance funds.
(15) Depositors in federal savings banks are insured by the FSLIC. Deposits in state savings banks are insured by the FDIC. However, under the Garn-St. Germain Depository Institutions Act, state savings banks that convert to federal charters may continue to have their deposits insured by the FDIC. Deposits in savings banks that are not insured by either of these federal deposit insurance agencies may be insured by state insurance funds.
(16) Deposits in federal S&Ls as well as in many state S&Ls are insured by the FSLIC. Deposits in nonfederally insured institutions may be insured by state insurance funds.
(17) Shares in all federal credit unions and many state credit unions are insured by the National Credit Union Share Insurance Fund, which is administered by the NCUAB. Shares in some state credit unions may be insured by state insurance funds.

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### Table III
Depository Institutions and Their Regulators (continued)

<table>
<thead>
<tr>
<th>(1) Federal Mutual</th>
<th>Comptroller</th>
<th>Comptroller</th>
<th>Federal Reserve and state authority</th>
<th>Federal Reserve and state authority</th>
<th>Federal Reserve and state authority</th>
<th>FDIC and state authority</th>
<th>FDIC and state authority</th>
<th>FDIC and state authority</th>
<th>FDIC and state authority</th>
<th>FDIC and state authority</th>
<th>Federal Reserve and FHLBB</th>
<th>FHLBB</th>
<th>Federal Reserve and FHLBB</th>
<th>FHLBB</th>
<th>Federal Reserve and state authority, or FHLBB (20)</th>
<th>Federal Reserve, FHLBB, FSLIC, or state authority (21)</th>
<th>Federal Reserve and state authority</th>
<th>Federal Reserve and state authority</th>
<th>State authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) State Mutual</td>
<td>FDIC and state authority</td>
<td>FDIC and state authority</td>
<td>FHLBB</td>
<td>FHLBB</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
<td>FDIC and state authority</td>
<td>FDIC, state authority, or FHLBB (20)</td>
<td>Federal Reserve, FHLBB, FSLIC, or state authority (21)</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and FHLBB</td>
<td>FHLBB</td>
<td>Federal Reserve and FHLBB</td>
<td>FHLBB</td>
<td>Federal Reserve and state authority, or FHLBB (20)</td>
<td>Federal Reserve, FHLBB, FSLIC, or state authority (21)</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
</tr>
<tr>
<td>(1) Federal</td>
<td>FHLBB</td>
<td>FHLBB</td>
<td>FHLBB</td>
<td>FHLBB</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
<td>FDIC and state authority</td>
<td>FDIC, state authority, or FHLBB (20)</td>
<td>Federal Reserve, FHLBB, FSLIC, or state authority (21)</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and FHLBB</td>
<td>FHLBB</td>
<td>Federal Reserve and FHLBB</td>
<td>FHLBB</td>
<td>Federal Reserve and state authority, or FHLBB (20)</td>
<td>Federal Reserve, FHLBB, FSLIC, or state authority (21)</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
</tr>
<tr>
<td>(2) State</td>
<td>FSLIC or state authority (19)</td>
<td>FHLBB or state authority</td>
<td>NCUAB</td>
<td>NCUAB</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
<td>FDIC and state authority</td>
<td>FDIC, state authority, or FHLBB (20)</td>
<td>Federal Reserve, FHLBB, FSLIC, or state authority (21)</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and FHLBB</td>
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<td>Federal Reserve and FHLBB</td>
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<td>Federal Reserve and state authority, or FHLBB (20)</td>
<td>Federal Reserve, FHLBB, FSLIC, or state authority (21)</td>
<td>Federal Reserve and state authority</td>
<td>Federal Reserve and state authority</td>
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</tbody>
</table>

(18) The FDIC has the right to examine state savings banks that have converted to federal charter but whose deposits continue to be insured by the FDIC.
(19) Federally insured S&Ls are supervised and examined by the FSLIC: nonfederally insured state S&Ls by state authority.
(20) The FHLBB may share enforcement responsibility over savings banks that are members of the Federal Home Loan Bank System.
(21) The FHLBB would not have enforcement responsibility over state S&Ls that are neither members of the Federal Home Loan Bank System nor insured by the FSLIC.

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<th>Comptroller</th>
<th>Office of the Comptroller of the Currency</th>
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<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
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<td>FHLBB</td>
<td>Federal Home Loan Bank Board</td>
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<td>Federal Reserve</td>
<td>Board of Governors of the Federal Reserve System/Federal Reserve Banks</td>
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<tr>
<td>FSLIC</td>
<td>Federal Savings and Loan Insurance Corporation</td>
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<tr>
<td>NCUAB</td>
<td>National Credit Union Association Board</td>
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<td>NCUSIF</td>
<td>National Credit Union Share Insurance Fund</td>
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<td>S&amp;L</td>
<td>Savings and Loan Association</td>
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Figure -1. Schematic Overview of Regulatory Assessment and Disposition
and effect relationship between regulatory failures and the existence of a national deposit insurance scheme (Gardner and Mills, 1988). Failure to properly monitor an institution is caused by failure to enforce regulation, not by the existence of a deposit insurance scheme itself.

One aspect that needs careful consideration is the insurance agency's solvency. The reserves of the agency must exceed the difference between total deposits of problem banks and their assets, (Sharpe, 1978).

While the economy is in a stationary mode, such a situation is feasible. In a growing economy this is hardly possible. Insuring agencies need access to other sources of funds, such as the Government or the RBA.

"Indeed, since there is always some shock to the banking system that would exhaust the insuring agency's reserves, complete credibility is not possible without one of these sources as a fallback when needed." (Guttentag and Herring, 1982).

However the situation of a problem bank would be solved more expeditiously and efficiently with the establishment of a new supervisory agency together with an insurance scheme, instead of our present cumbersome scheme where regulatory intervention comes too late and in a costly mode and where 100% of all deposits or all liabilities (in the case of government banks) are guaranteed. Such a
situation, if continued, will perpetuate bad bank management trading off an implicit RBA guarantee.

V. **Conclusion**

Regulation of financial institutions is dynamic. Moore et al (1990) claim recent moves towards a deregulated financial environment can be seen as a return to Australia's historical norm. However this view misunderstands the true meaning of deregulation. It does not mean unregulated markets, not governed by any legislation or central body. It means the use of indirect checks and controls to induce correct market behaviour, while obviating the necessity for heavy handed market inefficient direct controls. The requirement to hold capital equal to 8% of risk rated assets induces a different pattern of lending. It makes risky lending and asset investment decisions more costly. This is an indirect check unlike PAR, which a costly direct control on banks' liquidity. Similarly prohibitions on mergers and level of shareholdings are rules designed more to control the economic power of banks and those who own them, rather than foster cost reductions and promote the competitive advantage of Australian banks seeking to operate in an international market.

On site examinations, regular, surprise and specific purpose, are a way to individually check, control and monitor the banking system in view of problems encountered in the credit risk management areas by the State Bank of Victoria, State Bank of SA, BNZ and so on. It will counteract the effort of removal of direct
liquidity and ownership controls. The threat of a visit to check risk management systems will promote greater internal control and vigilance.

Finally, the introduction of a deposit insurance scheme inputs another indirect way of letting the market control the risk behaviour of banks.
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