**Financial Market Regulation**

**Kevin Davis**

**(Notes for an APEC studies training program, March 2000)**

**Executive Summary :**

* governments have the right and responsibility to influence or control the institutional structure of the financial system (what types of institutions are allowed to do what)

1. the “optimal” regulatory structure and institutional structure are intertwined and need to be determined jointly, recognising the ongoing interplay between regulation and innovation which causes the system to evolve
2. the focus of regulation and supervision should be on the efficient and fair performance of economic functions, but implementation of regulation involves dealing with products through which those functions are performed and institutions dealing in those products
3. simple distinctions between financial product groups which might be suggested as a basis for allocation of regulatory responsibilities are often inappropriate
4. an optimal regulatory system will pay particular attention to the incentives, monitoring and accountability of decision makers, both private and public
5. a prime factor creating distortions in the financial system is the tendency for perceptions of a government guarantee of products and institutions to emerge when prudential supervision occurs, and institutional arrangements need to be designed to control this
6. **Institutions, Products, and Functions**
   1. A financial system performs a number of economic functions through the creation and trading of financial products and services by financial institutions and end users. While it may be argued that the underlying economic functions are largely unchanging (although perhaps differing in importance) over time, innovation, regulation and technological change affect both the nature of products and services involved and the institutional structures involved. Recognising the threefold distinction between:
7. economic functions (clearing and settlement, pooling and diversification, resource transfers, risk management, information provision, efficient contracting, monitoring and incentive arrangements)
8. products (the explicit and implicit contracts between parties involved) and
9. participants (financial institutions and end users)

is important to the appropriate design of a regulatory and supervisory structure for the financial system.

* 1. The objective of regulation and supervision is to facilitate the efficient and fair performance of economic functions, but a practical regulatory structure must deal with (and will influence) the products and institutions through which those functions are performed. This creates considerable complexities because there is no unique relationship between functions, products, and institutions. Several products might perform the same function, some functions might involve several products, institutions can provide a range of products, and these relationships can be changing over time, in response to technological change and in ways influenced by the existing regulatory structure.
  2. One focus of financial regulation is upon the characteristics of financial products, which are explicit or implicit contracts between parties, entered into with certain expectations on the basis of information held by those parties. Financial regulation stems in large part from the undesirable consequences of participants entering contracts with inappropriate expectations based on imperfect information. Participants may be unable to obtain information to appropriately evaluate the ability of a counterparty to meet a contractual obligation (such as payment of an insurance benfit), or may be given incorrect information which leads them to form inappropriate expectations of performance (such as of a managed fund).
  3. Unfortunately for the design of a regulatory structure, concerns about products quickly lead into concerns about institutions. The inability of a product to deliver the expected contractual or implied obligation, can be expected to impinge upon the future viability of the institution involved. There are some such “delivery failures” (including anticipated ones) where the solvency of the institution is called into question (default on deposit or debt obligations), and others where the counterparty bears the loss and may take business elsewhere (inferior funds management performance), threatening the long run economic viability of the institution. A critical distinction between financial products would thus appear to be not whether they promise different types of returns, but how “delivery failure” impacts upon the survival of the institution. Concerns about institutional survival become important for three reasons. First, expectational disappointments can arise because of unfounded expectations. Second, unwarranted institutional failure can cause the destruction of valuable social knowledge capital built up over time through the activities of the institution. Third, failure of an institution can have adverse externality type effects upon other institutions, either through contractual relationships or contagion effects. In this way, regulatory concerns about systemic stability and consumer protection are inherently intertwined.
  4. Ultimately, the focus of a regulatory structure must be on the welfare of the end users. Financial products are contracts between two parties, issued under specific legal arrangements. While there may be an argument that individuals have a “natural” right to enter into such contracts as deposit takers, there is no “natural” right possessed by institutions which allows them to do so. That is recognised internationally by financial legislation of most nations which impose certain socially determined criteria upon institutions (institutional form, identity of owners, competence of managers, compliance with prudential standards etc.) if they are to be allowed to undertake such activities.
  5. A particularly important reason for such constraints is that it may not be feasible to rely on the legal process to provide appropriate redress for non-fulfilment of contracts. Not only does limited liability mean that owner /individuals benefiting from the activities of an institution are shielded from costs associated with non - fulfilment of a contract, but recent experience suggests that there are significant difficulties in proving, prosecuting, and obtaining adequate compensation in such cases. In the absence of a perfectly functioning legal system which would deter antisocial activities and provide full ex post compensation in cases of wrong, it may be socially efficient to impose constraints on the ability of certain institutions to undertake certain activities.
  6. The design of a regulatory structure and that of the institutional structure of the financial marketplace are interdependent. The allocation of regulatory responsibilities between some (to be determined) number of regulatory bodies will depend upon the institutional structure (the types of functions performed and products provided by various institutions) encouraged and permitted by government. At the same time, determination of an appropriate institutional structure to encourage or permit will need to take into account the practicality of effective supervision and regulation of various structures.

1. **The Focus of Regulation**
   1. It is important that the regulatory focus not ignore the various stakeholders in financial institutions and the relationships between them, which give rise to different types of agency problems. While much prudential regulation (such as capital adequacy requirements) is, in effect, focused on resolving agency problems between owners, governments, and creditors, decision making is undertaken by management. It can be argued that the problems following the deregulation of the early 1980s reflected the fact that regulatory constraints were removed from management of financial institutions and not immediately replaced by effective market based monitoring and control mechanisms. An effective regulatory system needs to recognise the divorce between management and ownership in most financial institutions and focus upon the incentives, monitoring, and accountability of decision makers.
   2. An effective regulatory system will need to focus on the role of decision makers in the financial system, and ensure that they face appropriate incentives, monitoring and disciplinary actions. Financial institutions should not be treated as “black boxes”.
   3. Both public officials and private sector participants need to face a regulatory structure which:
2. provides appropriate incentives for socially desirable behaviour and the honouring of commitments
3. provides incentives for exposing inappropriate behaviour of other participants
4. holds participants accountable for the consequences of their actions
   1. Much recent discussion has focused on the distinction between *institutional* versus *functional* regulation. Such a distinction is useful, but omits an important factor in thinking about financial system design and regulation, since there is a three-fold classification of relevance. Various economic functions (provision of payments services, savings services, investment services, monitoring, overcoming search costs etc.) are performed by the financial system. Particular financial products (deposits, insurance policies, units in mutual funds, capital market securities, investment advice, funds management services etc) provide combinations of these services in varying degree. Finally, institutions develop and market a variety of financial products which provide various economic functions.
   2. Regulatory and supervisory activities in the financial sector could be structured according to classifications based on differences in institutions, products or functions. However, there are good reasons for a functional distinction. As Professor Ed Kane has argued, the evolution of the financial system is characterised by a *regulatory dialectic*, whereby regulation and innovation continually interact and prompt further responses. A regulatory structure needs to be designed to cope with this process, and an approach directed at functions seems less likely to artificially distort financial system developments.
   3. An alternative distinction which is sometimes drawn as a basis for a regulatory structure is based on product differences. In particular, some analysts look to a distinction between investment linked products and defined benefit products. This distinction, which would see unit trusts, defined contribution schemes, equities, futures products etc distinguished from deposits, debentures, defined benefit schemes etc., is appealing but misleading. The reason is simple. Finance theory demonstrates that purchase of a debt/ deposit type security can be replicated as equivalent to a risk free investment plus a written put option over the assets of the issuer. While the precise nature of the investor’s exposure to the underlying asset risk differs between the cases, it cannot be argued that there is a fundamental difference.
   4. Recognising the similarity between these products leads to an important insight. A rationale for regulation may exist where participants’ expectations about the exposure of their position is incorrect because of imperfect information. This could occur where misleading information is provided about the nature of asset returns, or where the investor does not understand the nature of the put option they have written. Trying to arbitrarily draw a distinction on “product” lines will lead to difficulties. For example, a unit trust which is able to undertake borrowing to lever its position involves similar concerns for investors as those involving depositors.
5. **The Structure of Regulation and Supervision**
   1. Some popularity surrounds the notion that regulation and supervision can be divided into a “twin peaks’ framework, whereby concerns over systemic risk and consumer protection are treated as separable, and a regulatory/supervisory structure designed accordingly. (This is reminiscent of the macroeconomics literature on the assignment problem - where the number of instruments needs to at least equal the number of targets and suffers from the same concern - that the optimality of a strict assignment of instruments to targets in a world of imperfect information is open to question). The notion that these issues can be so readily separated is open to dispute, as can be seen by noting that both social problems arise from a common factor. Systemic risk arises when concerns about the ability of certain market participants to meet expected or contractual obligations arises, and then spreads to a concern about other participants. This may occur either directly through contractual interlinkages (such as settlement arrangements or other exposures) or indirectly through the inability of participants to distinguish between specific and general (wide spread) factors giving rise to problems. Consumer protection issues arise from the same basic problem, that of certain participants not meeting expected or contractual obligations. While consumer protection may be thought to focus on situations where false expectations have been deliberately created by misinformation or exploitation of market power, it realistically overlaps into prudential supervision which jointly concerns safety of products and institutions in situations where information is “naturally” imperfect.
   2. An alternative perspective is that there are at least three, intertwined, objectives of regulation. These are:
6. contractual integrity: ensuring commitments are honoured, appropriate information is provided
7. market efficiency: ensuring no excessive concentration of market power, and that market participants face appropriate incentives for efficient operations
8. system stability: ensuring that exit of institutions takes place in an “orderly” fashion which does not disrupt the financial sector or economy.
   1. In designing a regulatory structure, the problems of disentangling the issues should be recognised. The twin peaks approach has appeal because of its apparent simplicity and precision of the proposed regulatory solution, but to adopt it raises the possibility of being precisely wrong rather than approximately right. The interdependencies which make the approach inadequate can be seen by noting that systemic risk involves institutional failure which arises when the institution cannot meet contractual obligations on its products which, in turn, involves harm to consumers of those products.
9. **Supervision, Regulation and Guarantees**
   1. The perceived need for governments to ensure financial system stability and to provide some form of consumer protection creates probably the greatest bias in the institutional structure. Where government bodies are involved in supervising and regulating, public perceptions inevitably seem to take the form that guarantees of safety exist. Political realities generally lead to those perceptions being reinforced.
   2. The nature of government involvement takes two main forms. One is the desire to control the risk characteristics of certain products such as deposits, long term savings schemes, or insurance products. The other is to ensure orderly exit of insolvent institutions from the market place. Both, unfortunately, lead to perceptions that the institutions involved are subject to some form of government protection.
   3. Institutions operating under such *de facto* guarantees are advantaged (since they can raise funds on terms close to risk free interest rates, despite the true underlying risk) unless they are charged appropriate insurance premiums. Even where there is no perception of guarantee, the existence of a prudential regulation framework may provide benefits to the institution and its owners. Prudential regulation imposes compliance costs on an organisation, but can provide a substitute for the costly monitoring activities which customers might otherwise need to undertake. The net cost of prudential regulation to an institution needs to take into account the extent to which agency costs, which would otherwise have been incurred, are diminished.
   4. The bias is exacerbated where institutions operate across a wide range of activities and are able to extend the image of guarantee across a wider range of activities than was initially intended. Thus, for example, protection of uninformed depositors, or of the payments system, or of certain parts of the financial system may call for certain financial products or financial functions to operate under an umbrella of government protection. They do not call for institutions spanning an extremely wide range of financial functions to operate under that umbrella.
   5. The dilemma is that supervision and regulation are based on ensuring that certain products and functions are protected. In practice, it is difficult to prevent the image of protection from being attached to the institution involved and extending across its entire range of activities.
   6. One solution would be to expressly limit institutions operating in protected areas to those areas alone – such as proposals for “narrow banking”. This has the downside of precluding benefits arising from any economies of scope which may exist. An alternative solution would be to charge an appropriate insurance fee - although determining the appropriate fee is difficult, particularly where the umbrella of protection alters the probability of crises occurring. Nevertheless, where government protection is perceived to exist, there is a strong case for limiting the range of activities of those institutions subject to such protection.
10. **The Institutional Structure**
    1. The institutional structures of financial systems have been influenced by several regulatory factors. First, there have been constraints on the competitive structure of the financial industry, taking the form of constraints on ownership and on merger activity. Second, there have, in the past, been significant regulatory distinctions drawn between the banking/deposit taking industry and that of insurance and funds management.
    2. If a functional approach to regulation is taken, it is no longer clear that such institutional classifications are appropriate. Regulatory arrangements should relate to the performance of particular functions, and implications for institutional structure flow out of that. For example
11. Institutions engaged in clearing and settlements activities need to be subject to some form of prudential oversight, since institutional failure has impacts upon other participants and can lead to systemic disruption. The objective of supervision and regulation is then to ensure that only “orderly” exits from the industry will occur. It is not immediately apparent that a distinction should be drawn between, for example, traditional payments clearing systems and settlements systems such as those involved in organised exchanges such as the ASX or SFE. As experience with the latter cases illustrates, supervision may involve ensuring that adequate privately based arrangements are in place rather than prescribing particular arrangements.
12. Institutions engaged in providing the economic function of “resource transfer through time”, ie providing savings vehicles, should be treated equivalently. A case can be argued that retail investors should have access to such savings vehicles which are free of default risk. The dilemma here arises from the fact that delivery failure (default) on such products involves a failure of the institution, which may be undertaking a much wider range of activities (which may have contributed to the failure). Institutions and products become entangled in the public perception. A sensible institutional and regulatory structure would ensure a clear demarcation between those products and institutions which are “risk free” due to government involvement, and other products and institutions. This could be achieved by “narrow banking” proposals, which could take the form of explicit protection of funds placed with legally distinct subsidiaries of financial conglomerates, where the usage of those funds (and capital specifically allocated to the subsidiary) is subject to appropriate constraints.
    1. An objective of the regulatory process should be to ensure that there is a competitive (or contestable) market for each of the economic functions performed by financial markets. Thus, for example, economic efficiency arguments may lead to a case for competition in the provision of payments services, or in retail deposit taking etc. The link between concern about the market conditions in terms of economic functions and the market as defined in terms of a particular product or in terms of a set of institutions is neither clear nor unchanging over time.
    2. Cogent arguments can be advanced against permitting an excess of concentration of economic power in any particular economic market. This is particularly the case where the underlying markets are characterised by imperfect information, marked differences in economic power between buyers and sellers, and where implicit guarantees favour certain participants. Even stronger concerns arise when economic power is concentrated in the hands of a few institutions operating across a wide number of financial markets.
    3. It is important to note that the continued existence or freedom of action of financial institutions are not, of themselves, appropriate objectives for government policy. Institutions are a means to an end, which is the social welfare of individuals who may be owners, employees, customers, or other stakeholders in those institutions. Placing constraints on what particular institutions may do does not necessarily constrain those individuals. For example, limiting certain institutions to certain subgroups of activity does not prevent owners from establishing separate institutions to engage in all those different subgroups. Moreover, to the extent that there are costs perceived by owners arising from such constraints it needs to be asked whether they are truly social costs or distributional effects reflecting inability to exploit economic power.
    4. Concerns about the concentration which might arise if mergers are permitted between large financial service providers are based on the concentration of economic power which may arise. Constraints on mergers may be justifiable. There is no strong evidence that large financial institutions are more cost efficient than smaller institutions, nor that mergers between financial institutions lead to social gains, nor that large institutions are more profitable on average.
    5. Moreover constraints on mergers in the financial sector do not prevent shareholder/owners from diversifying their ownership across financial institutions and achieving a similar exposure as would occur if mergers were permitted. Although a larger number of participants does not necessarily imply greater competition, customers most likely benefit from there being a larger number of participants. If there are benefits from increased size, this can be achieved by institutions growing their own business (by outperforming the competition) rather than by takeovers. The one group of stakeholders in the financial system for which benefits from mergers would seem to be apparent is the management of large financial institutions.