

K.J. Luke Working Paper Series

K.J. Luke Working Paper WP00-17

Financial Regulation in the Twenty-First Century

Jeffrey Carmichael AO

Contacting Author: Jeffrey Carmichael AO
Chairman
Australian Prudential Regulation Authority

**Asia-Pacific Financial Markets Research Center
College of Business Administration
University of Hawai'i at Mānoa**

Financial Regulation in the Twenty-First Century

Introduction

In choosing financial regulation in the 21st century as my topic, I was influenced by the forward looking nature of many of the sessions scheduled at the conference. If I could get across just one message I would be that regulating financial markets and institutions in the 21st century is going to be just as difficult as running them – so at least we are on an equal footing.

Over the next 20 or so minutes, I want to say a few words about:

- the need for regulators to keep the basics firmly in mind;
- integration as a means of achieving efficient regulation;
- the emerging two-tiered approach to financial regulation; and, finally
- the technological challenge ahead.

Let me start with the basics.

Regulatory Basics

First, what do I mean by regulatory basics? Simply that for regulators to remain relevant in the 21st century, it is likely to become increasingly critical that regulatory structures and practices are properly aligned with the rationale for regulating.

As a principle, this probably seems so obvious as to be trite. However, I suggest that, unlike most of our economic models of behaviour, regulation rarely starts with a logical process of axioms, simplifying assumptions and an objective function consistent with those foundations. Let me illustrate.

First, what would the objective function of a financial regulator look like? It will come as no surprise to you that there is no universally-agreed set of regulatory objectives. Even within the academic literature we usually find regulatory objectives couched in terms such as:

- safeguarding the system against risk;
- protecting consumers against opportunistic behavior by suppliers of financial services;
- enhancing the efficiency of the financial system; and sometimes even
- achieving a range of social objectives (such as increasing home ownership or channeling resources to particular sectors of the economy or population).

While there is nothing objectionable about these objectives *per se*, they tend to start one level too high. Protecting consumers, safeguarding against risk, and enhancing efficiency only make sense after we have first identified why these outcomes do not occur naturally. That is, they start with the presumption that regulation is needed for these outcomes to occur.

In fact, markets in general, are quite effective at producing safe, efficient, welfare-enhancing outcomes – indeed, that proposition is a foundation stone of the market economy. The rationale for regulation arises from the fact that even the best of markets can fail, and for a variety of reasons.

The case for regulatory intervention rests on market failure and the impact of that failure on economic efficiency, safety and fairness. This idea is bread and butter to those who analyse non-financial regulation, but is often overlooked when we come to financial regulation. This line of reasoning is a good reminder that

the decision to intervene to alter the natural functioning of a market should be justified on the grounds that the cost of the market failure is greater than any costs (either direct resource costs or losses of efficiency) imposed by regulation. It also reminds us that the measures employed by regulators should be those that best address the resolution of the market failures involved.

As those of you who have read the Wallis Report will know, in it we identified four main sources of financial market failure:

- anti-competitive behavior;
- market misconduct;
- information asymmetry; and
- systemic instability.

What is interesting about these four sources of market failure is that, by and large, they require different regulatory tools to counteract the market failure. Let me expand briefly.

Anti-Competitive Behaviour

Governments generally support the fostering of competition in the financial sector because of the benefits it brings to the economy overall. These benefits include improved access to capital for business, cheaper credit and housing loans to consumers, a better match between the financing needs of deficit and surplus units, cheaper transactions, and a greater ability to manage risks.

Market forces are the main determinant of competition. The role of competition regulation is to ensure that these forces operate effectively and are

not circumvented by market participants. The key measures used in competition policy are:

- rules designed to deal with industry structure (merger or antitrust laws);
- rules designed to prevent anti-competitive behavior (e.g., collusion); and
- rules designed to ensure that markets remain contestable (by ensuring that there is relatively free entry and exit).

Market Misconduct

Financial markets cannot operate efficiently and effectively unless participants act with integrity and unless there is adequate information on which to base informed judgements. Because of this fundamental need, all markets face potential problems associated with the conduct (or misconduct) of their participants.

The two areas of misconduct that are most common in financial markets are:

- unfair or fraudulent conduct by market participants; and
- inadequate disclosure of information on which to base investment decisions.

Regulation to address these sources of market failure is usually referred to as market integrity regulation. This form of regulation seeks to protect market participants from fraud or unfair market practices. By protecting markets in this way, market integrity regulation seeks to promote confidence in the efficiency and fairness of markets.

Market integrity regulation typically focuses on:

- disclosure of information;
- conduct of business rules (prohibiting insider trading, market manipulation, false and misleading advertising, non-disclosure of commissions etc);
- entry restrictions through licensing;
- governance and fiduciary responsibilities; and
- some minimal financial strength conditions (capital requirements where the nature of the financial promises warrant it).

Asymmetric Information

The third source of market failure, information asymmetry, arises where products or services are sufficiently complex that disclosure, by itself, is insufficient to enable consumers to make informed choices. This occurs where buyers and sellers of particular products or services will never be equally well informed, regardless of how much information is disclosed.

The issue is one of complexity of the product and of the institution offering it. This problem is common in areas such as drugs and aviation and it is particularly relevant in the area of financial services.

The form of regulation involved in counteracting asymmetric information problems is usually referred to as 'prudential regulation'. Prudential regulation overcomes the asymmetric information market failure in part by substituting the judgement of a regulator for that of the regulated financial institutions and their customers. To the extent that the regulator absorbs risks which would otherwise be born by financial institutions and their customers it faces a 'moral hazard'

problem, whereby the implicit guarantee offered by the regulator actually induces the institution to take on more, rather than less, risk.

The incentive problems associated with moral hazard explain the particular approaches that prudential regulators normally adopt to different aspects of prudential regulation.

The primary distinction between the methods used by prudential regulators and those used by competition and market integrity regulators is that the former are largely preventative (i.e., they primarily seek to avoid promises being broken), while the latter are largely responsive (i.e., they primarily involve prosecution of those who break their promises or who disobey the rules).

The measures used by most prudential regulators include:

- entry requirements;
- capital requirements;
- balance sheet restrictions;
- liquidity requirements; and
- customer support schemes (such as deposit insurance and industry guarantee funds).

Systemic Instability

The fourth, and final, source of market failure is systemic instability. It is a fundamental characteristic of parts of the financial system that they operate efficiently only to the extent that market participants have confidence in their ability to perform the roles for which they were designed.

The more sophisticated the economy, the greater its dependence on financial promises and the greater its vulnerability to failure of the financial system to deliver against its promises. The importance of finance and the potential for financial failure to lead to systemic instability introduces an 'overarching externality' that warrants regulatory attention.

Systemic instability arises where failure of one institution to honor its promises can lead to a general panic as individuals fear that similar promises made by other institutions may also be dishonored. A crisis occurs when contagion of this type leads to the distress or failure of otherwise sound institutions.

Perhaps the greatest vulnerability to systemic crisis is in the payments system. The integrity of the payments system, in which obligations are settled between financial institutions, lies at the very core of the stability of modern financial systems.

The primary defense against systemic instability is the maintenance of a sustainable macroeconomic environment, with reasonable price stability in both product and asset markets. This responsibility falls directly to Government in its formulation of monetary and fiscal policy. Systemic stability is also supported by having a prudentially sound system of financial institutions. Thus, policies designed to combat market failure arising from asymmetric information automatically support policies designed to combat market failure arising from systemic instability.

Beyond these general macroeconomic and prudential measures, the additional regulatory tools most appropriate to resolving this type of market failure are the lender of last resort facility and direct regulation of the payments system. In concluding my comments on the need for financial regulators to keep a clear focus on why they regulate and the costs and benefits of regulatory intervention, let me make the fairly obvious point that those who don't are likely to find themselves regulating ever diminishing financial sectors. As markets and institutions become increasingly mobile in the 21st century, they will not seek out the jurisdictions that offer the lowest cost – as is often argued – but rather, those jurisdictions that offer the best cost/benefit ratio.

Integration as a Means of Efficient Regulation

The second point I want to make is about the growing relevance of integrated regulation as a means of extracting regulatory efficiencies.

Just on a year ago we formed an international group of integrated regulators to share experiences and thoughts among the select few who had brought together the regulation of different institutional groups under the one roof. Members included Canada, several Scandinavian countries, the UK, and Japan, as well as a couple of our closer Asian neighbours.

At the time, there had just been an explosion of integrated regulators, virtually doubling in number from 5 to 9 over the space of about two years. That I am aware of, the number is now closer to 18 or 20, if we count those who are in the process of restructuring.

With integrated regulation taking on fad status – and in some cases being championed as the solution to a wide range of regulatory failures – I thought it might be useful to spell out some of the issues and misunderstandings behind the explosion.

It is easy to see why integration has become fashionable if we think of the sorts of criteria we might put forward for measuring efficient regulation. Typically we would include criteria such as:

- regulatory neutrality;
- cost effectiveness;
- transparency;
- flexibility; and
- accountability

While integration does not guarantee any of these, it does make several of them easier to manage.

For example, regulatory neutrality requires that the regulatory burden applying to a particular financial promise should apply equally to all financial institutions that make promises of that type. This should be easier to achieve within a single regulator than within a structure of industry-specific regulators.

As another example, cost effectiveness requires:

- a presumption in favor of lighter regulation unless a higher level of regulation can be justified in cost-benefit terms;
- an allocation of regulatory functions among regulatory agencies which minimizes overlaps, duplications and conflicts;

- efficient use of regulatory resources;
- a clear distinction between the objectives of financial regulation and broader social objectives; and
- the allocation of regulatory costs to those who enjoy the benefits.

An integrated regulator should, in principle, have a stronger base from which to attract regulatory resources, greater scope to allocate resources where they are most needed, and almost no excuse for gaps, duplication and conflicts.

I say 'almost' no excuse, because in practice, there are as many different models of integrated regulation as there are varieties of Heinz soups and many of these efficiencies still come down to human management. Leaving the management issue aside, let me talk for a moment about the varieties of integration.

In Australia, we took a functional approach in that we have assigned one regulator to each source of market failure. Thus, for example, all institutions that offer financial promises that are affected by material asymmetric information problems are regulated by APRA in respect of prudential considerations; this includes banking, insurance and superannuation products. At the same time, ASIC, which regulates market integrity regulates all firms for conduct and disclosure - including those prudentially regulated by APRA. Similarly, the ACCC is responsible for system-wide competition regulation and the Reserve Bank manages systemic stability through monetary policy, the lender of last resort function and regulation of the payments system. To the best of my knowledge, this functional split is still internationally unique.

Other models include putting market integrity and prudential regulation under the one roof, putting some but not all prudential regulation under the one roof, putting parts of market integrity and competition regulation in with prudential regulation and so on. Obviously, some of the models differ according to the definition of 'material' in drawing the boundaries around products facing material asymmetric information failure.

I don't have time now to elaborate on what I see as some of the strengths and weaknesses of the different models. Indeed, at this early stage, evaluation of the differences is more a matter of intuition than of experience. Suffice to say that some of these structures are going to work better than others in achieving efficient regulation. It is important that those of us who have turned to integrated regulation in one form or another keep alert to the costs and benefits as they emerge and to adjust our structures if adjustments are warranted.

I believe that we have a strong structure in Australia, with a logical foundation. At the same time, if experience shows that the structure has problems or that others have advantages that ours doesn't, then I will be among the first to recommend further change.

Two-Tiered Regulation

The third point I want to make is more a statement of a pattern that is evolving in the regulatory world – most notably in the international banking regulations - and that is the trend towards two-tiered prudential standards. This new approach, which started with the Basle standard on market risk, reflects an attempt by regulators to better understand the business of banking and to

establish regulations that are more “incentive compatible” with those of the institution.

The idea behind the 2-tiered standards is to have one that is fairly blunt in its application, and a second that is built around the bank’s own risk management systems. Anyone who has been reading APRA’s recently-released draft harmonised standards for ADIs and our discussions papers for general insurance will be well aware of this new 2-tiered approach.

The message of the 2-tiered approach is not that we see the universe of financial institutions as falling into 2 categories: good risk managers (those who use sophisticated techniques) and poor risk managers (those who don’t). That would be paternalistic in the extreme and rather dangerous in view of the messages from some recent high-profile financial collapses. Rather, we recognise that financial institutions will come to risk measurement and its associated risk management disciplines of risk-based capital allocation, risk-based pricing, risk-based performance measurement and risk-based provisioning in stages – hopefully in stages consistent with the risk management demands of their businesses. We believe that it is important that our prudential structures do not inhibit this process or clash with it in a counterproductive way.

The 2-tiered approach is the start of trying to get this balance right. It, like the industry’s adoption of risk management, will be in stages and still has a long way to go. Its comprehensive application will ultimately depend on a measure of convergence within the industry about measurement methodologies, model calibration and benchmarks.

In the longer term, one of the biggest challenges, both to industry and regulators, is the development of a single comprehensive risk management framework that is capable of application to any financial institution or group of financial institutions, regardless of the combination of financial products and services that it provides. That is, a single framework that can break an institution down into its basic risk components of market risks, credit risks, underwriting risks and operational risks, then re-aggregate them in a meaningful way. While the field of risk management has made some important advances in the past decade, I suspect we are still a long way away from this single framework. This is one area where I am looking to academics to contribute in a major way.

The Technological Challenge

Finally, let me turn very briefly to the great unknown – technology.

At the time of the Wallis Inquiry, roughly 3 years ago, we talked about technology as an express train hurtling down the track at us. We didn't know when the express train would hit or whether it would bring a paradigm shift or just a lot of tinkering at the edges.

Since that time, and notwithstanding the Asian crisis, many of the more obvious technological implications that we discussed in the Wallis Report have come to pass. Yet still, we sit on the rails of the express train without a clear vision of how it will change the world of finance. Many regulators around the world, for example, still seem quite sanguine about the impact of internet selling of financial products.

There seems to be an implicit assumption that those who are computer literate are definitionally financially literate – in other words that there is less of an asymmetric information problem for those that deal on the internet. That may turn out to be true, but my suspicion is that a fool and his money are even more easily parted on the net, than they are in the street.

While the net and other related technological advances will be a challenge for prudential regulators in the 21st century, the headache will be even greater for market integrity regulators.

On balance, I suspect it will not be critical for regulators to anticipate every twist and turn of the technological maze. What will be most important is that they respond to the changing environment within a consistent philosophical framework. This takes me back to where I started – namely, to the need for regulatory structures and practices to be properly aligned with the rationale for regulation – though I have a feeling that, in the 21st century, this is going to be a lot easier to say than to achieve.