**Financial Regulation** [**1**](http://www.hkma.gov.hk/eng/key-information/speech-speakers/altsheng/speech_080597b.shtml#footnote1)

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*"A state is better governed which has but few laws, and those laws are strictly observed"...Ren Descartes (1596-1650)*

**Introduction**

Financial markets today are the biggest markets in the world. The foreign exchange market turns over US$1.2 trillion daily, roughly one quarter of annual world exports. The regulation of financial markets therefore concerns us all. This paper covers the What, Why, Who and How of financial regulation.

Financial markets engage in the exchange of property rights. Financial assets are derivatives of physical or real assets, derivatives being property rights of property rights that are not "lumpy" or asset specific, and transactions costs in them being lower than transactions in real assets.

The first thing to remember about financial products is that they are all defined by the law. Therefore, all financial transactions are about transactions in legal products, under procedures regulated by rules or laws. Even financial institutions are strictly speaking legal constructs. To paraphrase another French philosopher: Man is born free, but after that he is bound by the law.

**What is Financial Regulation?**

The Palgrave Dictionary of Finance defines regulation as action that 'command and control' the individual decisions of firms, in an effort to prevent private decision-making that would take inadequate account of the 'public interest'. Regulation may be self-imposed, or as is usual, by a third party. The Government may intervene in a market or industry in the form of law, administrative rules, taxation or moral suasion. Self-regulation could be imposed through industry associations and codes of conduct.

The regulatory framework will shape market behaviour. Therefore, the design and practice of the regulatory framework determines the efficiency and performance of the regulated market.

**Why Regulations?**

There are a few theories that attempt to explain the existence and forms of regulation, including:

* the competition for regulation theory suggests that there exists a market for regulation, in which consumers and producers compete. Regulation will serve the interests of those who are willing to offer the most for the regulation. Since regulation can be regarded as a public good, the free-rider problem suggests that the benefit to the individual consumer is likely to be small relative to the producer. Therefore producers will have more incentive to try and obtain favourable regulation through industry associations. A countervailing force is therefore the consumer lobby; and
* capture theory suggests that producers capture regulatory agencies and control them in their own interests. Vested interests reinforce the regulatory framework to support their interests, but the danger is that such behaviour would result in non-competitiveness in the international market, leading to long-run social loss.

If we believe the above theories, and assume that regulations impose ultimately a cost on the consumer or taxpayer, it may be in the public interest to remove regulations and allow greater competition. This is the primary driving force behind current market deregulation policies prevalent in OECD markets.

A recent example of the deregulation drive to "make markets work better" is the report of the Australian Financial System Inquiry (Wallis Report), whose recommendations seek to:-

* create a *flexible regulatory* structure which will be more responsive to the forces for change operating on the financial system; clarify regulatory goals;
* increase the *accountability* of the agencies charged with meeting those goals;
* ensure that the regulation of similar financial products to be more consistent and promote competition by improving comparability; introduce greater competitive neutrality across the financial system;
* establish more *contestable, efficient and fair financial markets* resulting in reduced costs to consumers;
* provide more effective regulation for financial conglomerates which will also *facilitate competition and efficiency*; and
* facilitate the *international competitiveness* of the Australian financial system.

On the other hand, a market without regulation also does not work. Free banking and frontier capitalism results in control by the Mafia with huge losses inflicted on the innocent and unwary. The public interest theory argues that regulation is an attempt to correct for market failures, such as monopoly, externalities and lack of information. For example, the social cost of the failure of a financial institution may be much higher than the private cost to the institution itself. Therefore, financial institutions left to themselves will accept more risk than is optimal from a systemic point of view, thus forming the basic case for government regulation of banking activity and the establishment of capital requirements (Martin Feldstein, quoted in Dale, 1996).

On this basis, we can justify the case for external regulations on private sector behaviour on four broad grounds which all relate to market failure:-

* first, the moral hazard argument. If a market participant believes that the state will underwrite his losses, then behaviour will change. A good example is how deposit insurance encourages depositors and bankers to engage in risky behaviour that forces the state to pay in the end, thus undermining market discipline and entailing regulation.
* second, the widows and orphans argument. These regulations provide protection to poorly (asymmetrically) informed clients, based on the view that small depositors and investors cannot assess properly the riskiness of financial institutions they deal with.
* third, the public policy argument. In free market economies, public policy arguments call for competition and free trade. An example would be anti-trust laws in some countries to prevent monopolisation of certain markets.
* fourth, the systemic risk issue, which allows the state to prevent the failure of one participant to destabilize the whole system. This justifies the regulation, for example, of the payment system and the banking sector.

Regulation therefore has two important dimensions that must always be borne in mind. First, regulation is a cost that is like taxation: someone bears the cost of regulation. The public must always ask whether the benefits outweigh the costs. Second, regulation has a time element - regulations must change with the times. Old regulations may prevent or impede market growth. As markets change, so must regulations. Third, regulation should not prevent the effective working of the market force. For example, we should avoid bank failures, but not prevent all bank failures. Chairman Alan Greenspan of the US Fed (1997), said "our goal as supervisors should not be to prevent all bank failures, but to maintain sufficient prudential standards so that banking problems that do occur do not become widespread."

**What are we regulating?**

We can regulate products, functions or institutions or a combination of all three. Problems arise when we have overlapping regulatory terrain, competing regulatory agencies and confused regulatory objectives. There are also arguments for and against the concentration and competition in regulatory agencies. A good example of a one-stop regulatory agency is the Monetary Authority of Singapore, which combines the regulation of the banking system, the securities market and the insurance industry in one institution. At the other end of the spectrum, the US banking sector is regulated by at least four different agencies, the Federal Reserve system, the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC) and the state banking commissioners. Since US banks are increasingly engaged in securities areas, their functions are also subject to the Securities and Exchange Commission (SEC) and consumer lobbies. Regulation may be based on product types such that each regulatory authority specialises in one financial product. Under this framework, a securities regulator will concentrate in the oversight of securities activities, irrespective of the type of financial institutions that are carrying out this business.

Functional regulation is generally conducted by two separate regulatory bodies, an investor protection arm and a systemic stability arm. The investor protection arm deals with retail depositors and small investors to ensure fair conduct, equitable competition and customer protection.

The systemic stability agency, on the other hand, looks at the larger players and wholesale activities. It would also be responsible for the safety, structure and functioning of all payment systems and financial markets. Preventive measures include capital adequacy requirement; constraints on connected lending and other rules aimed at preventing insolvency; and an official safety net such as lender of last resort or deposit insurance.

This approach follows the Goodhart (1995) model, which suggests that the difference in focus and function of investor protection and systemic stability is large enough to justify two separate regulatory bodies in each country to share the regulatory responsibilities. According to Goodhart, the formulation of rules for the safety of the system should be the responsibility of the systemic stability arm. On the other hand, the monitoring and operation of the system should be divided between the two arms on the basis of their size, e.g. balance sheet.

Another regulatory framework, which developed historically, takes the form of institutional regulation. It reflects institutional segmentation within each country, with insurance companies, securities houses, mortgage lending companies and banks becoming the concern of differing regulatory bodies. Institutional regulation becomes less practicable as the barriers between operating in differing functional and geographical financial markets have been eroded.

In between, the regulatory system may be organised along mixed functional/institutional lines. As banks, securities houses and insurance companies compete in each other's turf, there is now a less meaningful difference between institutions and functions. One model, colloquially known as "Twin Peaks", consists a Financial Stability Commission, with responsibility for systemic risk, the prudential supervision of all major institutions, and conduct of business regulation of wholesale activities, and a Consumer Protection Commission, which could be in charge of conduct of business regulation in retail markets, as well as detecting market manipulation and insider dealing. It would also carry out prudential supervision of those stock brokers and fund managers who deal with private clients, and of independent intermediaries. This is essentially the model adopted by the Wallis Commission.

**Approaches to Regulation**

The latest mantra on financial regulation is the International Monetary Fund's approach, which calls for "Internal Governance, Official Oversight, and Market Incentives"(Lindgren, 1996). To this, I would add, "Robust Financial Infrastructure".

The first line of protection against bank failure must be internal management's own risk controls. The growing complexity and variety of banking business suggests that neither the authorities nor informed customers can prevent internal management from making mistakes if internal controls do not work. The best defense against mistakes and fraud are proper internal governance, or checks and balances. Internal dual controls, together with both internal and external auditors, plus a proper disclosure policy would give the best incentives for internal management to perform according to proper rules of behaviour.

Public disclosure rather than private channels of information would be cheaper and reduce unwarranted expectations of what a regulator or supervisor can actually achieve. However, it is difficult, if not impossible, to guarantee full disclosure. It is doubtful whether free markets work well enough in conditions where information is partial and asymmetrically distributed and externalities exist. Thus it is not really possible for the authorities to shift entirely to reliance on disclosure and to abandon their specialised supervisory function.

Increasingly, therefore, the public oversight function is one of monitoring and surveillance, to ensure that systemic risks are not incurred at excessive public costs. When best practices and market standards are applied, any behaviour by regulatees that deviate from the norm would be subject to public scrutiny. There is therefore greater pressure for establishing international norms of performance, such as capital adequacy standards and risk management tools. The Basle Committee has recently established "Core Principles" to guide the regulation of banks.

The application of certain regulatory tools, such as required capital ratios, exposure limits, constraints on self-dealing and CAMEL ratings are designed to ensure that market participants comply with minimal standards of capital and risk exposures. It should be emphasised that effective regulation requires proper compliance and enforcement. This embodies the idea of "bark versus bite". Teeth must also include sound exit policies - non-exit implies no enforcement, which is the case of state-owned enterprises in the Mainland of China. However, increasingly it is recognized that such rules should be kept simple and broad-brushed, in order to allow a rule-based environment to function. Too many rules imposed too heavy a regulatory cost, with redundant or excessive information burdens.

However, given very rapidly changing market conditions, some degree of discretion can be more practical than rigid rules. On the other hand, excessive discretion can lead to systematic forbearance (time inconsistency) that undermine rules and could even be subject to corruption and abuse. Therefore, the time inconsistency problem can be solved by authorities pre-committing to a sequence of automatic, graduated responses, giving the market time to adjust to rule changes or rule application.

However, it must be true that the incentive or pay-off structure is one that must not be overlooked. One of the main reasons why agents do not abide by established control procedures is because it is not in their own perceived interest to do so (Goodhart, 1996). The best way to control risks is the market incentive to do so. For the market to work, there must be adequate information transparency, and adequate pay (or penalty) structure that causes the private sector or market to regulate itself. For example, excessive bonuses may have caused the Barings management to overlook the risks assumed by Leeson. Low pay for internal auditors relative to dealers may prevent them from raising the alarm bell. Internal audit committees of financial institutions should signify that they have considered the implications for the risk preferences of key personnel of their pay structures.

It is now better recognized that a robust financial infrastructure is also a form of regulator on market participant behaviour. Modern financial infrastructure, such as automated payment systems, impose on market participants certain minimum standards of performance, such as time compliance in payments. Failure of one participant to perform would immediately expose the participant to market discipline. There is therefore peer pressure on market participants to comply with the standards demanded by international payment systems.

Costs of Regulation

Regulation is not without costs. The US estimates that regulation costs the consumer roughly 7% of GDP annually, both directly or indirectly. Bank regulation can be likened to deposit insurance - the higher the regulation and safety, the higher the insurance premium. One theory suggests that banks can elect to be one of three categories: super-safe banks, safe or normal. Super-safe banks are only allowed to hold super-safe assets, but in return have 100% deposit insurance. Normal banks are allowed to hold any asset, but depositors get no protection at all. But super-safe assets offer a lower yield than normal assets, so the safer the bank the lower the interest rate offered to the depositors.

The cost of regulation lies not only in the cost of preventing bank failure, but also the opportunity costs of foregone innovation. Excessive or outmoded regulation results in loss of international competitiveness, thus imposing future adjustment costs on the economy. Hence, there is a need to review regulations constantly and to de-regulate or re-regulate.

**Why are we deregulating?**

There are four major reasons why de-regulation is occurring:

* Globalisation
* Financial innovation and disintermediation
* Changing consumer behaviour, e.g. aging population
* Excessive costs

The globalisation of financial markets can be demonstrated by the tremendous increase in cross-border transactions. For instance, at the end of 1994 the stock of cross-border bank assets was more than 4.5 times its level of 15 years earlier, which represents an increase from 20% of the combined GDP of OECD countries in 1980 to around 35% in 1994. Between 1980 and 1994 cross-border securities transactions in industrial countries expanded from less than 10% of GDP to well above 100% of GDP. Within the equity sector, cross-exchange and cross-border transactions have increased rapidly as a percentage of world equity turnover to the point where one in four stock market trades conducted world-wide involves either a foreign security or a foreign counterparty.

The globalisation of financial markets may increase systemic risk, through contagious financial disorders originating in poorly regulated financial centres. As Alan Greenspan (1997) mentioned, 'the efficiency of global financial markets, engendered by the rapid proliferation of financial products, has the capability of transmitting mistakes at a far faster pace throughout the financial system in ways that were unknown a generation ago, and not even remotely imagined in the 19th century.' Depositors, investors and counterparties may be exposed to foreign jurisdiction risks which they are not in a position to monitor or control. Besides, the co-existence of uneven national regulations and global markets may severely distort competition between financial institutions.

The growing integration of markets calls for international cooperation among supervisors. Accordingly, the Basle Committee on Banking Supervision was established in 1974 and is involved in establishing a common regulatory framework. The Basle Committee and the International Organisation of Securities Commissions (IOSCO) issued co-ordinated guidelines on risk management on OTC derivatives business. IOSCO also adopted the so-called Windsor Declaration on co-operation between supervisors of futures and options markets. Industry initiatives also aimed at strengthening prudential standards in international financial markets. The Group of Thirty has proposed minimum standards relating to netting arrangements, settlement procedures and managerial oversight of derivatives risks. The International Securities Dealers Association (ISDA) has established good practice guidelines for the management of derivatives and FX business globally by broker-dealers. And in early 1996, 49 exchanges and clearing houses announced an agreement to exchange information on their members' risk exposures in different markets.

Another key development in international financial markets is the emergence of financial conglomerates which provides a wide range of services including insurance, securities, mortgage lending and banking services etc.. The fusion of different types of business is made possible by deregulation initiatives in major financial centres. In London, the rules of the Stock Exchange were amended in 1986 to allow acquisition of member firms by outsiders, including banks, thereby ending the separation of banking and securities businesses which had been a feature of the UK financial services industry for some 300 years.

In the US, the Glass-Steagall Act of 1933 still formally separates banking from securities businesses, but through liberal interpretation of this statute the US regulatory authorities have in recent years permitted the US banks to develop significant securities operations through special-purpose affiliates. Furthermore, there is a widespread consensus within the US that Glass-Steagall should be repealed. In Japan, the Financial System Reform Law that came into effect in 1993 allowed commercial banks and securities firms to expand into each others' business territory by establishing separate subsidiaries. In the European Union, capital adequacy directive's trading-book approach permits banks to engage freely in securities activities.

The revolution in information and data processing technology has transformed our financial markets and the way our financial institutions conduct their operations. In most respects, these technological advances have enhanced the potential for reducing transaction costs, to the benefit of consumers of financial services, and for managing risks. But in many respects they highlight the inadequacies of existing regulations.

The ease and cheapness of gathering, processing and disseminating information has encouraged financial innovation in a number of areas, including the development of screen-based trading systems, securitisation and the proliferation of derivative products.

One of the regulatory responses to financial conglomerates is the adoption of consolidated supervision. Regulators should consider whether various business within a conglomerate (banking, securities, insurance, etc.) should be consolidated in an accounting sense for the purpose of calculating capital adequacy and other prudential ratios, and for assessment in general. The more general view expressed, for instance, in European financial market directives and Basle regulatory guidelines is that like activities should be treated identically for supervisory purposes, regardless of the category of institution. It is also important that bank and securities regulators co-operate at the international level.

Financial innovation, e.g. derivatives trading, creates transparency problems for regulators, because of the speed and complexity of risk transformation. The appropriate response of market transparency is more extensive disclosure of financial information. But in the context of fast-moving derivatives business the difficulty is to formulate effective disclosure rules that do more than provide an outdated snapshot of risk exposures. For management of financial institutions, the main emphasis must be on internal controls. External regulators, such as Basle Committee and IOSCO, have responded and issued detailed guidelines on risk management. As trading position can be transformed swiftly through the use of derivatives and hence may not be reliable, regulatory focus has shifted to assess internal risk models, rather than the instruments held at a point in time. In addition to external regulation, the Group of Thirty in its 1993 study of derivatives made recommendations at strengthening risk-management techniques and procedures. Another industry initiative was JP Morgan's decision to release its own proprietary risk-management model for general use.

In addition, changing consumer behaviour resulting from aging population, for example, calls for new and sophisticated products like pension funds and long-term debt instruments. Also, consumers expectations are likely to be higher as they now have access to more choices from more diversified markets.

Finally, de-regulation has occurred because old regulations have not prevented the massive losses incurred by worldwide bank failures. In many countries, the losses caused by bank failures have been as high as 15% of GDP, with bank losses in Japan and France at an estimated 8% of GDP. In the light of these heavy costs, governments around the world have begun to look seriously at the cost of regulation. The latest initiative include the Japanese Big Bang, which would be complete by 2000.

**Should the Central Bank also act as the Supervisor?**

There are several arguments in support for the assumption of supervisory role by the central bank. The first is efficiency consideration. There is huge overlap between the areas of interest of, and information required by, and available to, both the supervisor and the central bank. Second, rescue or liquidity crisis will normally involve and require the immediate provision of liquidity, which can only be done by the central bank. This is facilitated by internalising the supervisory body within the central bank.

Others argue the reverse. First, since the finance of any large rescues involves government funding, the politicians have a direct interest and involvement in financial regulation. This may undermine the independence of a central bank if it also plays a supervisory role. Second, it is argued that an independent central bank in its conduct of monetary policy and responsible for banking supervision may be perceived as too powerful. Third, the failure of a central bank in its supervisory duties will harm its credibility in its conduct of monetary policy. There is an inherent conflict between supervision and monetary policy. Central bank assistance to bail out problem banks tends to be inflationary on money supply.

The arguments are finely balanced. Whether the regulatory power should be centralized or diffused will depend very much on the legal, constitutional and historical background for each financial system.

**Conclusion**

Regulation is an art, not a science. It involves complicated trade-offs between competing interests. As Walter Bagehot said over 120 years ago, money will not manage itself. The regulation of money will be debated in the years to come.

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**Footnote**

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