

# THE REGULATION OF INTERNATIONAL BANKING AND CAPITAL MARKETS

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## Summary

The regulation of international banking has a brief positive history and an almost nonexistent normative background. The theoretical design of optimal financial regulation is now an evolving area, but it lacks a specific focus on international finance

and banking. In this entry we see from the positive models of international banking regulation that many objectives can be identified. Some of these conflict with others. In general, the objectives tend to concern the need to establish safety nets for investors in the international banks, with particular attention paid to the most vulnerable and least informed investors, the depositors.

There is a more systematic pattern to the study of features of international bank regulation. Regulators are now conscious of the need to decide whose regulations apply to a foreign bank—home country or host country—and that there may be gains from reciprocal recognition of standards. Within this context, however, a plethora of types of regulation has evolved, with the emphasis in any one country mostly related to its regulator's priorities on the competing objectives for regulation. What is missing from the analysis in this entry, because it does not currently exist in the literature, is a systematic review of the possible interdependence between such regulations. For example, regulations about risk-based capital standards affect the regulations possibly adopted to require marking-to-market valuations.

Finally, we observe that international banks have not been silent or sleeping partners in their interactions with regulators. The banks have responded to the different types of regulation in their efforts to obtain their own optimal positions. In some cases, such as transfer pricing, the banks' actions are determined to offset tax policy. In other cases, such as the innovation of new risk-management financial instruments, the banks attempt to manage within the broader financial environment that has changed as a result of regulatory adjustment. In this case, the deregulation of the international financial markets that occurred globally through the 1970s to the late 1980s has tended to produce more volatility in the markets that mattered to banks. The entry shows how the banks have adjusted.

## **1. Introduction**

The theoretical basis for regulation of banking, domestic or international, has become a separate area of analysis in only the final two decades of the twentieth century. The long history of banking theory itself can often be seen as a story of how banks responded to varieties of individually imposed regulation—deposit insurance, reserve requirements, taxation. The development of a theoretically soundly based model for why banks might be regulated at all, however, tracing the likely economic consequences of regulation, is comparatively recent. This means the focus for much banking regulation has tended to be positive (analyze the consequences of particular regulations) rather than normative (the design of optimal regulatory rules).

It has been suggested that public regulation of economic entities is usually justified by market failures that may emerge from one of three sources: market power being held by one or more entities, the existence of externalities, or asymmetries between buyers and sellers in the Market power can be represented by the structure of the market itself (such as an actual monopoly supplier to competitive demanders) or by the shape of a demand curve (an inelastic demand curve can confer at least local monopoly power on a supplier even in a generally competitive market). Externalities—the existence of interdependencies among independently-taken economic actions—tend to attract regulatory attention when they confer uneven advantage to one or more market

participants or disadvantage to several. Asymmetries between buyers and sellers can differ from pure market power that is a result of unequal relative size of the participants. For example, there may be asymmetries of information when one side of the market does not disclose enough information for the other side to make optimizing decisions.

It is apparent that a common element of these justifications is that an unfair power is conferred on one side or the other of a market. Regulation then tends to work to “even up” the possession of power, to address the needs of the most vulnerable market participants. We shall see below that most banking regulation has this characteristic.

In many banking systems, the major corporate players are subject to substantial moral hazard and adverse selection effects. As a result investors in these enterprises must monitor their activities through screening, auditing, and intervention. These activities are complex and time-consuming, and hence expensive. Small depositors who cannot afford the activities primarily hold bank debt or deposits. Hence we can see regulation as an attempt to deal with a combination of market power and asymmetric information among market participants.

Further, there is a substantial free-rider incentive among the small depositors not to engage in the monitoring. In this case, the expense of monitoring discourages small investors, who assume that another, larger participant in the market will have sufficient resources to be able to afford the monitoring costs and will undertake this effort. The regulatory problem arises when a majority of the market participants are small and all assume the free-rider stance. In this case it is often argued that a need arises for large-scale private or public representatives of depositors. This has become known as the “representation hypothesis.”

We can use this insight to note a further issue, whether a system of private regulation for banks may not be preferable to a public one. In studies reviewing this discussion, the choice turns out to depend crucially on the assumptions made about how an economy would accommodate the possible systemic risks that may emerge with financial system failure. For example, the US Treasury considered in 1991 a proposal of mixed public-private bank deposit insurance. The idea was to calibrate the pricing of public deposit insurance by allowing some private insurers into the market. Three conditions were critical to the success of such a scheme. First, there was a requirement that the private deposit insurers themselves comply with capital adequacy requirements as did their clients, the banks. Second, the insurers could not collude with the banks insured since the latter organizations would gain from an aggressive low premium bid for the insurance would then exceed the loss incurred by the low bidder. Third, the scheme had to prevent banks gambling in hard times. Overall, it was felt that external interference from the regulatory authorities would have to be permitted in any case of violation of the three conditions. These conditions were considered unlikely to hold so the proposal was not adopted.

Systemic risk is often implicitly regarded as a justification for bank regulation. If a single bank should fail, it destroys the deposits of its own creditors. The failure, however, could have probable systemic effects for an economy associated with a loss of confidence by many depositors in all banks in which their funds are held. How likely is

this systemic failure? A rapidly developing literature considers this point. Some theories emphasize debt and financial fragility. “Excess” borrowing by entities during the upswing of a business cycle can leave those entities and their clients vulnerable to the inevitable downturn of the markets. The high level of borrowing pushes up interest rates, leading to “fragility” of the financial markets. Borrowing maturities shorten, more open (speculative) positions are taken for investment purposes, and financial institution margins narrow. This theory ignores the possibility that market structure may change during the cycle. It also assumes that the cycle itself will continue to occur yet continue to surprise the market participants.

Other theories of systemic risk link sectoral failure to the rest of the economy through banking panics that cause a sudden reduction in the money supply. The money supply depends heavily on the willingness of banks to lend for investment purposes. If the banks themselves are threatened by rapid and unexpected withdrawals of deposits from a run on them, their lending will be reduced and the overall money contraction will produce a collapse of asset values.

This monetarist approach can be seen as a parallel to the credit rationing model, in which banks may make sudden increases in rationing. The triggers for this behavior lie with a perception by banks of a rapid increase not in risk, but in uncertainty. Uncertainty is the possibility that more things may happen than will but that we cannot calculate a market value of expected loss because we cannot reduce the likelihood of adverse events occurring to objective probabilities. Hence we cannot insure against the events.

The frequently quoted official justification for banking regulation is the concept of a “safety net” for one or more groups in the economy. This justification in fact flows from the externalities criterion noted above. The challenge comes with the number of possibly competing groups to whom the safety net applies. If the number of competing groups is large, a regulatory authority will tend to see its role as one of maintaining balance among the groups. If we summarize the writings on this approach, we identify five objectives:

The regulatory authorities usually seek to maintain a “sound” and efficient payment system to ensure that commercial transactions are not disrupted by breakdowns in the ability of individuals and corporations to exchange payments for goods and services. Note that this is not the only reason advanced for regulation of financing institutions: if it were then we would not expect insurance companies or pension funds to be regulated in the same way as banks. Yet the financial regulations imposed on banks are often extended in similar forms to these other types of financial institutions.

Governmental and private sector concerns about inflation in recent years have tended to encourage regulatory authorities in the financial markets to seek to control liquidity based on the perceived link of availability of liquidity for trade and the overall inflation of prices of goods and services traded.

Some authorities have sought to allocate financial resources to support, or limit, particular sectors of their economies: subsidized lending for rural production at interest rates below market levels is an example of such an intervention in the market situation.

Control of cross-border capital flows is regularly considered an important role for bank regulation, especially for those related to multinational banks.

Today many regulators often adopt a goal of ensuring competition the financial and banking markets to bring about an efficient delivery of financial services at competitive prices.

The literature has noted that the first four objectives tend to increase regulations over all banks, and the fifth offsets the ill effects of increased regulation that relate to inefficiency.

The argument for extending regulation can be turned around to become a discussion about the limit of regulation. We can ask how extensive regulation of the financial sector should be. The actual outcomes in many countries tend to offer a menu of lightly regulated and regulated financial services to consumers of these services. This may be desirable. Households can usually benefit if they have a choice to use unregulated as opposed to regulated financial institutions, provided measures of the relative risks for the unregulated sector are available. Some minimal disclosure and antifraud features are probably required to produce this outcome.

That is, the outcomes of the balancing act can be different among different countries even if they start out with the same fundamental tools for regulation.

If the literature on general banking regulation is newborn and still growing up, the theoretical structure for multinational banking regulation is almost waiting to be born. There is almost no dedicated literature in the normative field on multinational banking, and the positive theory is confined to a few topics.

In light of this, we structure the discussion of this entry in the following way. We first outline a model providing a basis for an optimal (normative) theory of multinational banking regulation. In this, the driving force is the attempt by a country to establish a regulatory regime that maximizes the net gain to itself of imposing regulation. This model, although narrow in its design, does explain why we observe a growing tendency for national bank regulatory authorities to attempt to harmonize their regulations. The payoff to all countries from harmonizing their rules tends to be greater than the payoff to individual regulation.

The entry then reviews the positive principles that seem to have emerged among developed financial market regulators as guides for the construction of particular regulations. From these principles a number of specific types of regulation and regulatory activities have emerged, such as the establishment of the BIS capital adequacy guidelines from the 1980s. In general, the adoption of policies under the five areas for multinational banking tends to emphasize the second, fourth and fifth goals. Multinational banks are considered to be more likely to induce sudden large changes in

domestic liquidity, especially through uncontrolled cross-border capital flows. This was a concern about the development of the eurocurrency markets in the 1960s. The presence of multinational banks in a local economy is also perceived as providing a force for competition for local banks. To succeed in a foreign country, a multinational bank must be able to deliver services more cheaply or effectively than the locals. This is a common *ex post* argument to explain which multinational enterprises have succeeded—those that had some own advantage which enabled them to undercut the local firms.

In its final large section, the entry focuses on the financial institutions that are usually the subject of the regulations, the multinational banks. When they have a Net Regulatory Burden imposed on them, how do they react? If the NRB is a real cost, we would expect that the banks would adjust their behavior, including an effort to negotiate with the regulators prior to the imposition of new rules. We consider analytically a number of ways that the banks have acted in the evolving regulatory environment.

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### Biographical Sketch

**Christopher Adam** is currently Professor of Finance at the Australian Graduate School of Management, and Associate Dean-Faculty for the AGSM. The new AGSM was created in 1999 as a joint venture between The Graduate School of Business at The University of Sydney and the graduate management school of the University of New South Wales. Chris came to The Graduate School of Business at Sydney University in 1992 as its Professor of Finance. He became the Acting Director of The GSB in 1998 on

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