

Risks in Financial Group Structures

by

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This article looks at the types of risks that may be associated with complex financial groups and then sifts through the weight of the evidence in favour of, and against, the various alternatives used to address those risks. The conclusion drawn is that there is no magic bullet among the available policy options that is sufficient on its own to satisfy the three core policy objectives (i.e. safety and soundness, systemic stability, and conduct of business). Rather, this article argues that the greater financial and economic impacts associated with problems at larger institutions requires a holistic approach that combines transparency, governance, regulation and supervision.

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I. Background

As the market upheavals of the past few years confirm anew, the business of financial intermediation entails risk. Intermediaries exist to manage and transform credit, interest rate, maturity, and various other types of financial risks. Inevitably, some institutions will err in the process. A common goal of public policy in regard to finance is to ensure that such errors are not commonplace, and that the consequences are appropriately contained and do not spill over to innocent third parties or to the broader economy.

Financial crises are a critique of the success of the regulatory framework

Financial crises are obviously problematic in this regard, as they provide costly evidence that one of the core objectives of policy -- to prevent problems at individual institutions and markets from propagating -- has not been met. In cases of widespread distress, problems that might otherwise be attributed to poor management on the part of institutions themselves also tend to reflect poorly on supervision and enforcement, as deficiencies at many different institutions have been allowed to worsen under common external conditions.

Not surprisingly, crisis events prompt in-depth reviews of the existing framework in order to identify weaknesses and suggest necessary reforms. In fact, at any given time, many of the measures in place to address problems of instability and contagion will themselves be by-products of past crises. Inasmuch as all crises have their idiosyncratic elements, forward-looking measures to avoid such disruptions have not been readily forthcoming. And as the incidence and severity of past crises have varied across jurisdictions, no standard approach exists as yet.

Measures for containing risks in large financial groups can be grouped into three major types

In reaction to the recent crisis, which featured problems of contagion that spread from special-purpose entities to the affiliated institutions, and from entities engaged in securities activities to their parent or other members of their group, much attention has been directed at containing the risks posed by large integrated financial services groups. There are many mechanisms for regulating risks in large complex financial institutions. They may be preventive or corrective. Some are market-based, either in design or in implementation; others are imposed directly by regulation. Some measures focus on regulating group structures, while others focus on regulating group behaviour. Each approach has its prerequisites, as well as its strengths and weaknesses in meeting the perceived objective(s). This article looks at how the alternative approaches fit within the broader scope of the governance framework for financial services. And it places into this context some of the measures that have recently been adopted by jurisdictions participating in the OECD Committee on Financial Markets (CMF).

This article looks at the types of risks that may be associated with complex groups; it then sifts through the weight of the evidence in favour, or against, various alternatives used to address those risks. If a general conclusion emerges from the analysis, it is that there is no magic bullet among the common approaches. That being the case, this article argues that various

mixes and matches of policy options would be needed to meet core policy objectives (*i.e.* safety and soundness, systemic stability, and business conduct). There are, however, certain minimum requirements.

There is widespread agreement internationally on the need for a system-wide perspective on risks, as reflected in the various proposals for better macro-prudential oversight. And it is clear that something must be done to address the too-big-to-fail problems of large, complex institutions. But as to what specific measures should be adopted, policy makers have struggled to reach consensus. The debate surrounding systemic-risk levies is a case in point.

Some of the differences in recent positions can be traced back to differences in the intensity of oversight before the onset of problems, whereby authorities in some jurisdictions had maintained fairly strict rules in relation to the types of market-based activities that were implicated in the crisis. Where that is the case, the need for major structural changes in response to the crisis is apparently seen as less compelling. But even where the need for change is acknowledged, views diverge as to what types of measures are needed.

This article looks at the potential costs and benefits of various financial group structures and the policy measures used for addressing risk

The balance of the article is as follows: the next section looks at the general types of financial group structures, and at the potential costs and benefits of integration. It notes the need to look beyond structure to an institution's behaviour in order to gain a clear idea of the issue. This discussion is followed by consideration of the types of problems that have typically beset financial groups. The idea given is that the problems that arise in financial group structures reflect the same core weaknesses that arise more generally in finance: risks to safety and the soundness of individual institutions (prudential concerns); risks to the system as a whole (systemic risk concerns); and risks to clients (conduct of business concerns). But these risks can be magnified given a cross-sector, cross-border context. Taking these added complications into account, the succeeding section looks at alternative policy approaches for addressing these risks and notes the limitations that may be encountered. The next major section concludes.

II. Types of financial groups

The debate about financial groups has a long history, touching on numerous aspects of their operations, including concerns about their market power and other business-conduct considerations, prudential concerns pertaining to safety and soundness at the institution level, as well as broader, system-wide issues.¹ The existence of risks associated with integrated financial service groups is especially well-known in the financial supervisory community. A broad but incomplete list of risks is laid out in Box 1.

Box 1. Risks associated with financial groups

A non-exhaustive list of risks associated with financial groups may include:

- *Transaction risks*: all the risks involved in intra-group transactions, which may not be transparent, may result in inappropriate transfers, especially between regulated and unregulated entities, and may affect the soundness of regulated entities, etc.
- *Moral hazard risks*: when an entity of a group engages in excessive risk-taking under the assumption that the group as a whole, or another group entity, will assist it in the event problems occur.
- The *risk of double gearing*: the risk that funds will be committed several times, that is, for both the parent company and the subsidiaries. This could mean that their “net” or “consolidated” solvency is much lower than the sum of the funds owned by the members of the group.
- *Risk of contagion*: the reference here is to the risk that the financial problems, especially insolvency, of one member of a group will bring about deterioration in the condition of all other members.
- *Risk of reputation*: even in the case of strict legal separation, the danger of contagion could still exist in cases where the reputation and market-access of the financial group as one entity is harmed by the financial distress of one member.
- The *risk of decreasing competition and abuse of power*: the danger that institutions will take unfair advantage of their superior market power to the disadvantage of consumers or investors, or abuse a dominant market position vis-à-vis other market participants.
- The *risk of conflicts of interest*: with financial institutions operating on both sides of the savings-investment relationship, often using other people’s funds, the risk of potential conflicts of interest is more or less always present. Research indicates that the risk of such conflicts of interest increases with the number of activities or products offered.

Structure versus conduct

Numerous factors account for the large number of potential risks in various financial group structures

The large number of potential risks for financial groups derives from the multi-faceted nature of the issue. Relevant factors to be considered in the analysis include: the size of an institution; the types of constituent entities (*i.e.* banks, insurance companies, securities firms, asset managers, etc.); the degree of integration along various steps in the value chain; and the structure (holding company, universal bank, parent-subsidiary, etc.) But these same factors can prove to be financially beneficial. It all depends on how well they are managed.

Economies of scale and scope

Economically speaking, the market value of a publicly traded financial institution at a given point in time is at least in part a function of the present discounted value of its expected future profits, the same as for any other type of firm. Increases in expected future profits are derived from either reducing expected costs and/or increasing expected revenues.

Group structures can bring about potential economies of scale or scope, and more effective diversification

Integration in financial services (see Box 2), along the scale and scope dimensions (*i.e.* in-sector consolidation and cross-sector convergence) has often been justified on these grounds, namely that the proposed combination would be value-maximising. In the presence of economies of scale (costs decline with increases in the scale of operations) or economies of scope (costs decline owing to synergies associated with producing multiple products within a single firm), a greater degree of integration is beneficial. Integration could also be beneficial to the extent greater geographic or product diversification leads to lower costs stemming from the implied reduction in risk.²

Box 2. Terminology related to financial group structures

In most OECD economies, the financial services industry generally features a wide range of products and services, various types of service providers, and many different types of customers. Some financial institutions operate in niche areas or specialise in the provision of specific products and services, but many others offer multiple products, including some on a cross-border basis; a handful of large, integrated institutions have established a global reach.

The label *financial group* is used in this report to refer to financial institutions that provide a range of financial services through multiple legal entities. The term *homogeneous group* refers to groups that confine their activities to a given sector (*e.g.* banking, insurance, or securities activities). Financial groups with activities that span service sectors are called *mixed* or *hybrid* groups.

As used in this report, the term *integration* refers to the various ways in which constituent entities may be added to a group. In this context, integration can occur within a sector (*i.e.* consolidation) or across sectors (*i.e.* convergence), domestically or internationally (cross-border).

Studies confirm the existence of economies of scale, but not everywhere and not without limit

The arguments in favour of a beneficial relationship between cost and size or scope for financial firms have been the subject of much empirical research, especially in reference to the banking sector. If a general conclusion is to be drawn from this literature it is that economies of scale exist in some segments of financial services, but not everywhere and not without limit.

As for economies of scope, many studies have failed to confirm the existence of such economies in the banking, insurance, or securities segments of financial services. Rather, a number of studies have concluded that some diseconomies of scope may be encountered when a financial service institution adds new types of products to its product mix. The results are derived from comparison of the costs of joint production versus the combined costs of specialist producers operating under the same environmental conditions.

On the revenue side, the existence of profitable cross-selling potential (revenue economies of scope) has broad intuitive appeal for many practitioners. The classic reference is to a bank's potential to use its branch network to cross-sell to its existing bank-product customers various other types of products, such as insurance or asset management. But by the same token, an insurance organisation might have similar potential to cross-sell

products using a network of captive agents/brokers. Scope economies could exist in these arrangements if, for example, consumers perceived the all-in costs of purchasing them from one provider to be lower than the costs of obtaining them from multiple sellers.³

In summary, scale and scope economies do seem to exist in financial services, but they are not found in all service categories and are not unlimited. Therefore, an increase in a given institution's size and scope may or may not yield net benefits as regards to its financial performance, although admittedly size can convey other advantages, such as in the too-big-to-fail sense. For individual institutions, the implications of integration depend in part on the institutional setting in which the institutions operate and partly on their own conduct.

The institutional setting

The institutional structure considered most efficient for conducting financial activities generally changes over time and may differ across jurisdictions, as institutions respond both to competitive impulses and to changes in the policy environment. Public policy can play a fundamental role in the determination of group structures: for example, by mandating the separation of the production of certain types of financial products and services from the marketing and distribution; and public policy may set limitations on the form and scope of ownership linkages.

The regulatory principle of "separation" is one factor influencing financial group structures

The principle of "separation" is typically embedded in financial sector regulation at various levels. For instance, sector regulation (*e.g.* banking acts, acts on insurance, etc.) are often distinct pieces of legislation that act to prohibit the production of given products and services by entities other than appropriately licensed institutions and may limit their distribution (see Tables 1 and 2 in the addendum).⁴

In many OECD jurisdictions, rules of entry into financial services allow for cross-sector competition in the provision of certain products and services, either directly or via separately capitalised subsidiaries.⁵ But other jurisdictions preserve a higher degree of segmentation among market segments via legal restrictions on ownership linkages among the different types of service providers, or other line-of-business restrictions. These differences across jurisdictions are reflected in the types of institutional structures used for providing integrated financial services.

The different legal arrangements for financial groups include universal banks, holding companies, and parent-subsidiary structures

In some jurisdictions, financial products and services are provided mainly by *universal banks*, which typically combine commercial banking and investment banking activities in one corporate entity, with other financial services, especially insurance, carried out in wholly owned but separately capitalised subsidiaries. In other national markets, a *single bank or insurance parent* conducts core activities directly, with other financial service activities carried out through separately capitalised subsidiaries. In the *financial holding company* structure, a single holding company is created to hold most, or all, of the shares in separately incorporated and capitalised subsidiaries.

There may be single or multiple types of financial-service providers in the group, including perhaps some non-regulated entities.

Holding company structures typically embody complete legal separation between the parent and the subsidiaries. In the case of a non-operating parent, there is operational separateness as well, in the sense that the holding company operates solely as an investment company. In addition to these corporate business structures, some financial-services activities are carried out by limited partnerships and others by mutuals.

Varying degrees of specialisation vs. integration are possible

Varying degrees of *specialisation* versus *integration* are possible in theory, subject to the limits allowed by law or regulation, where integration can occur across products, across sectors, or across borders. At one end of this spectrum would be complete specialisation, as reflected, for example, in a single-sector, single-product institution, such as a mortgage broker that confines its activities to linking potential customers to lenders in a given jurisdiction. At the opposite end of the spectrum in terms of the degree of integration would be a *fully integrated* financial-services provider, which would combine the production and distribution of various financial products and services into a single corporate entity, with all activities supported by a single pool of capital.⁶ Of course, a wide spectrum exists between a financial services industry, consisting predominantly of financial conglomerates or other types of multi-purpose intermediaries, and an industry composed of more specialised entities; in practice, polar cases are rarely observed.

Institutional conduct: the business model

In general, the basic questions involved with legal structure concern: whether there is a single entity or multiple entities. If multiple entities are involved, is the parent an operating company or non-operating? Are the constituent members a part of the same sector (as in homogeneous groups) or cross-sector (as with hybrid or mixed groups)? If cross-border entities are included, are they branches or subsidiaries? In short, the legal structure has much to do with establishing what the constituent parts of the institution are.

Legal structure alone says little about how the various parts are actually managed

But legal structure says little about how the various parts and the group as a whole are managed. For example, branches in one group could conceivably be allowed to operate more or less autonomously, while separately capitalised subsidiaries in another could operate under the tight control of the parent, as part of a highly integrated business model (with for example common products and a single treasury operation). In practice, the choice is a function of the overall corporate strategy.

Institutional conduct refers to what an institution actually does within its legal structure. Conduct is to be sure a function of the types and combinations of activities in which institutions engage, so it relates to legal structure. But it also is a function of the strategic principles management applies in conducting activities. Two key aspects of strategy are: the *degree of integration of business activities*; and the *degree of centralisation versus decentralisation of control*.

It is possible, in principle at least, for financial groups to be formed in which there is very little true economic integration; that is, the constituent members of the holding structure are not bound by a common business strategy, although they may, for example, share back-office facilities or information and telecommunications infrastructures, accounting services, premises, etc. By contrast, if a group structure is to be value-maximising in a strategic sense, there need to be some complementary aspects in the activities conducted by the different parts of the organisation. The aim of the group structure is, thus, to exploit the synergies that are perceived to exist between the constituent entities.

The value-maximising approach is the most common in financial group formation

The so-called *value-maximising approach* is by far the most common in financial group formation. But there are many ways to do this, and there does not appear to be an “ideal” or optimal way.

For purposes of illustration, consider a mixed financial group with business activities encompassing retail banking, insurance, and securities activities, stretched across numerous entities. There are two polar strategies for integrating the activities. For example, retail banking can be treated as a single line of business (full integration), with each individual bank unit following a common strategy with common products. The opposite approach would entail allowing the individual banks to pursue separate strategies (full specialisation). The same approach would apply to the other product categories in which the group participates.

Corporate control functions can be centralised or left at local level

Along the other decision axis, corporate control functions, and hence the determination of business strategy, can either be centralised in a given unit or in the head office, or devolved to the individual local operating units. Viewing both decisions from the same plane results in four basic groupings.

For instance, with centralised control and integration, business strategies are determined centrally, along sector or even product lines, rather than by each legal entity on an autonomous basis. The legal entities are responsible for implementing the chosen strategy, but subject to close monitoring and oversight of the parent or central decision-making unit. The whole structure is in effect managed as one entity, with potential intra-group transactions or transfers as needed to achieve the overall corporate objectives. By contrast, for groups with strategies that fall on the frontier of the diagonally opposite quadrant, characterised by decentralisation and specialisation, local units operate more or less autonomously from the parent entity, with each having its own strategy and internal controls.

These descriptions represent broad stylised categories of financial group operating structures, but of course fail to capture fully the types of strategies that institutions adopt in practice. Examples of real-world strategies are provided in Table 3 in the addendum. They are taken from the descriptions institutions place in their annual reports. The list is drawn from some of the larger financial groups based in OECD economies.

One finds among the companies listed financial groups with a predominantly banking character, groups with a predominantly insurance

character, and groups with a fairly heterogeneous mix of activities. They operate out of holding-company or universal-bank structures, or with bank or insurance parents. Most feature a wide geographic dispersion of activities, through global local, global wholesale, or global operating services strategies.

Structure itself, however, does not tell how a particular strategy is implemented

What is missing in the information the institutions provide are the *micro-structure* considerations of strategy – the details of how a particular strategy is implemented. The micro-structure aspects of strategy explain why otherwise similar broad product and customer categories can give rise to vastly different revenue streams and performance outcomes. In effect, the balance sheets associated with the same general types of activities can differ considerably because the risks at the micro level are not the same. For example, some institutions operate with much higher levels of leverage. Table 1 shows recent outcomes for selected large groups with categories of activities that overlap to some extent, although there are important differences, such as in the share of investment banking activities.

Table 1. Selected balance sheet components for large financial groups (2008)

Financial Group	Year	Assets (\$ tn)		Tier 1 capital (\$ bn)		Leverage		Pre-tax profit (\$ bn)	
		2008	2009	2008	2009	2008	2009	2008	2009
Bank of America		1.82	2.22	120.81	160.39	15.06	13.84	4.43	4.36
Barclays		2.99	2.23	54.30	80.45	55.06	27.72	8.85	18.87
Citigroup		1.94	1.86	118.76	127.03	16.34	14.64	-53.06	8.45
BNP Paribas		2.89	2.96	58.18	90.65	49.67	32.65	5.46	12.22
Banco Santander		1.46	1.6	65.27	81.58	22.37	19.61	15.83	16.95
Deutsche Bank		3.07	2.16	43.28	49.58	70.93	43.57	-7.99	7.50
HSBC		2.53	2.36	95.34	122.16	26.54	19.32	9.31	7.08
JPM Chase		2.18	2.03	136.10	132.97	16.02	15.27	4.68	16.14
Royal Bank of Scotland		3.50	2.75	101.82	123.86	34.37	22.20	-53.15	-4.37
Mitsubishi UFJ		1.82	2.03	82.86	77.22	21.96	26.29	10.20	1.17

Source: The Banker database, Secretariat calculations.

It is necessary to look at the micro details of how categories of activities are conducted

To understand what distinguishes strategies, one needs to look through the categories of activities to the micro details of how they are conducted. Consumer mortgage lending provides a general example of how performance differences arise. For all lenders, such activities pose the same general types of risks, including the risks that borrowers will become delinquent, or worse, default on their obligations. But a given lender can engage in retail mortgage lending without taking on exposure to the subprime segment of the market. Such choices are at the core of the micro aspects of strategy.

In short, while institutions' participation in the same types of broad activities implies similar product categories and customers, at least in the broad sense, at the micro level there can be considerable differences. And these differences in the actual behaviour of institutions obviously matter for performance and for prudential concerns.

What can go wrong: strengths and weaknesses of alternative business models

The micro details matter a great deal in both risk-management and performance

For reasons implied above, large size and integrated business models may or may not prove to be profitable in all circumstances. The details matter, which relate in part to risk-management. On the plus side, a larger size may enable a financial institution to exploit operating economies of scale and attain high profits, which can provide an extra buffer to help increase its resilience to shocks. Similarly, the broader scope of an integrated institution may lead to lower variability in profits on account of enhanced diversification opportunities.⁷

But regardless of the size or scope of an institution, mistakes and accidents do happen. For example, the benefits expected to accrue from diversification might tempt institutions to take on levels of risk that can prove to be insupportable if actual gains disappoint. Also, there appear to be limits to managerial capacity, as institutions grow in size and complexity and stray from core competencies. Thus, an institution's size or scope can result in either a lower or higher probability of financial difficulty, depending on the extent to which its risk-taking is counterbalanced by improved diversification or simply by its having a larger capital base to absorb losses.

Risks to safety and soundness

Banks take on mainly credit risk, but also liquidity and market risk

Financial institutions operating in the banking, insurance, and securities areas are not passively managed asset pools. Their *raison d'être* is to take on various risk exposures and manage and transform them for an appropriate reward. For example, traditional retail banking involves collecting small denomination deposits and transforming them into larger denomination, longer-term loans. Credit risk is at the core of the process, but liquidity risk and market risk are also important.

Liquidity and market risks are also predominant for securities firms, but less important for insurance companies

These latter two risk types are the dominant exposures for securities firms, which typically mark their positions to market on a daily basis and fund themselves in overnight or other short-term markets. In contrast, liquidity risk is generally far less relevant for many insurance undertakings. Instead, technical and underwriting risks (whether the insurer's calculations of technical provisions prove accurate) dominate. For all groups, there are operational risks involved in managing different product areas.

The success of a group strategy depends importantly on the inter-relation among these risk factors. Factors that lead to increased cross-sector, cross-border, or cross-risk type correlations obviously limit diversification benefits. And such shifts can precipitate more severe problems if core risks have not been properly managed.

Common shocks can negatively affect all revenue sources to some extent, including perhaps some cross-border streams. Sudden (*i.e.* unexpected) changes in policy or macroeconomic shocks are examples of phenomena that can catch all institutions off-guard and might not reflect badly on particular business models.

Episodes of financial instability have, in fact, sometimes occurred in this way. But more often, episodes of instability have been linked to practices in institutions themselves. Problems have included: weak management of core risks; perverse links between institutions and clients that resulted in poorly defined and weakly enforced lending limits; inadequate control of operational risks; inadequate disclosure and lack of transparency; and poor governance and internal management.

The recent crisis featured weaknesses in a wide range of areas, including poor underwriting standards

In the recent crisis, all of the weaknesses were present in some form. As in many other crisis episodes, deficiencies in internal controls and risk management at lending institutions were a major contributory factor. In the lending business, banks have periodically relaxed their underwriting standards to gain or preserve market share. But too-lax underwriting standards tend to induce otherwise creditworthy borrowers to take on too much debt or enable borrowers of less-favourable credit quality to gain access to credit they subsequently have difficulty servicing or repaying..

In the case of serious asset-quality problems, banks typically begin to extend fewer new credits and cut their balance sheets by refusing to roll-over maturing loans. These steps can touch off another round of problems and a vicious deleveraging cycle can develop with substantial macroeconomic consequences. Similar cycles have emerged periodically in market-based finance.

Risks to the system

It is not at all obvious that large, integrated institutions should have a greater risk of failure than smaller institutions in such scenarios.⁸ In fact, larger institutions might fare better either because of the diversity of their activities or the diversity of their funding sources. However, it is clear that once serious problems do occur, the systemic consequences of failures grow as institutions become larger and more inter-connected.

Complexity and inter-dependencies raise the potential for problems to spread

Increased complexity and inter-dependencies raise the potential for problems at individual institutions to spread. The risk is inherent in the nature and scale of the funding and the trading inter-relationships among major market players, but it also reflects the large numbers of players in global financial markets and the high degree of complexity and lack of transparency associated with some of this activity.

With multiple inter-linkages and active trading strategies, it can be difficult for a given institution to track exposures with other institutions across currencies and market segments. In times of general market stress, which has often followed in the wake of the failure of a large institution, this lack of knowledge can generate considerable anxiety and may lead lenders and other counterparties to demand additional collateral (at a time when the market value of that collateral may be declining), or to withdraw credit lines entirely. Institutions facing funding problems in such circumstances may be left with little alternative but to liquidate assets, which only adds to the downward pressure on prices in the market and may well worsen, rather than alleviate, their condition. In worst-case circumstances, insolvency may ensue.

Isolated failures need not trigger other defaults, but there can be contagion in some circumstances

It is unlikely that an isolated failure would trigger other defaults, but depending on the size of the troubled firm's exposures, the probability is perhaps not zero. History provides numerous examples of the spillover of concerns to otherwise healthy entities. In some cases, contagion can result from the mere perception that institutions are in some respects similar to a troubled institution, even if there are limited or no direct linkages.

For integrated institutions, intra-group exposures can pose the same risks of contamination (guilt by association) and contagion, which relates in this case to the potential for problems, and certainly insolvency, in one member of a group to lead to deterioration in the financial condition of the other members. In times of trouble, the market may fail to draw a distinction between solvent subsidiaries and the impaired parts of a financial group. Even entities relatively insulated from the other activities of a group may have trouble financing themselves and continuing their operations under such conditions.

Risks to clients

Failures of institutions pose significant problems for customers and clients, especially individuals and SMEs

Failures of institutions obviously pose problems for the institutions' clients and customers, who must deal with all the attendant difficulties of business interruption, including reduced or no access to credit, and losses necessitating the pursuit of claims against the institutions' remaining assets. The difficulties may be compounded for smaller customers, such as individuals and SMEs, who may have been dependent on a long-term relationship with the failed service provider and must face the difficult prospects of establishing a new relationship with a new provider.

Apart from the potential for larger numbers of clients to be involved, failures of large integrated institutions again may not be unique in this respect. But there is one area where integrated structures and business models do stand out. In addition to safety and soundness issues, integrated structures and models can give rise to various *conflicts of interest*.⁹

Conflict-of-interest situations are a fundamental aspect of intermediated finance and arise in numerous circumstances

Financial intermediaries almost by definition operate on both sides of the savings-investment relationship, most of the time using other people's funds. The potential for conflicts of interest is more or less inherent in the process. A financial intermediary faces a potential conflict of interest when dealing with a client whenever it has a choice between two options: one of the options is preferable from its own perspective (or that of an affiliated party), while the other option is preferable from the client's perspective. A potential conflict of interest also arises for a service provider that has simultaneous dealings with two different customers whose respective interests cannot be jointly satisfied.

As these examples suggest, conflict-of-interest situations can be very basic in nature. They can arise easily for most institutions engaged in a wide range of different financial businesses. Consequently, for the typical large integrated institution, potential conflicts of interest are numerous, so much so that is not feasible to attempt a full accounting in this short space. Most combinations of different financial business activities in the same institution

will have potential conflicts associated with them, and conflicts of interest can also arise when different types of activities within the same class of business are combined, such as: trading securities on one's own account while engaging in the underwriting business or acting as a broker; trading on one's own account and providing investment research; or underwriting securities and engaging in the trust business or managing securities on behalf of clients.

The costs of realised conflicts can be substantial and need not be limited to retail clients

The costs of realised conflicts can include loss of funds, collateral, or securities holdings for individual clients, but can also entail more generalised problems. Financial transactions are based in part on a complex system of rules of conduct and relationships. At the core of this process is "trust". Consumers and investors are willing to commit their funds to financial markets only when they are confident that financial markets and institutions operate according to rules and procedures that are fair, transparent, and non-exploitive (*i.e.* free from fraud, manipulation, and other market misconduct).

And losses of confidence are not always confined to the retail market segment. Another potential conflict occurs when an institution is tempted to take on excessive amounts of leverage in an attempt to boost its return on equity, the benefits of which would accrue to shareholders or to managers (depending on the type of compensation arrangements), while the costs would pass on to creditors or other counterparties. Even professional market participants can suffer from a loss of confidence in their counterparties or markets at large, if potential conflicts of interest are realised. All told, the consequences of a loss of confidence often take the form of runs: on deposits, on collective investment vehicles, on repos and on market liquidity, etc.

III. Alternative policy approaches to risks in integrated structures and models

In short, there can be potential synergies from group structures, but also potential risks

The discussion up to this point suggests that there are potential synergies and complementarities among different product and service categories for individual institutions, and through efficiency gains, for the system as a whole. But the gains from integrated structures and business models do not accrue automatically. There can be errors of judgment and other shortcomings associated with the management of some integrated structures, and some business models may have inherent flaws. It is not often stressed in discussions about group structures and business models that the challenge to risk-management is ongoing. It's a contest with multiple rounds. The fact that an institution survives a particular manifestation of systemic risk (one round) does not necessarily mean it would survive others, or even a similar shock that propagates differently across counterparties, market segments, or the system as a whole, or one that meets with a different response from authorities. Imagine, for example, what might have transpired had US authorities not paid claims against AIG.

An institution's business model is flawed if its survival

It can be the case that the business model may have indeed been flawed; the institution may have simply been lucky in the particular event. If the success of an institution's business model depends in part on the expectation

depends on luck or on government intervention

of government support, as for example in a too-big-to-fail scenario (either for the institution in question or for its counterparties), the model is flawed.

The three broad areas of potential risks that can arise in such circumstances relate to: the safety and soundness of institutions (or prudential concerns); conflicts of interest (conduct of business concerns); and concerns about systemic stability. This section looks at the trade-offs involved in the choice of a regulatory strategy for addressing these risks.

Categorising the policy approach

Prudential concerns have both micro- and macro aspects, while conduct of business relates to both market and client interfaces

In a sense, financial groups raise two major types of concerns: (1) prudential concerns, which have micro and macro aspects; and (2) concerns about conduct-of-business, which also have two aspects, one related to institutions' interaction with one another and the market at large, and another related to their interface with clients. All of the risks identified in Box 1, for example, relate to one of these concerns, bearing in mind that micro-prudential concerns can have macro-prudential implications, if institutions are large enough, sufficiently interconnected, or systemically important in some other way.¹⁰

In practice, these distinctions are important because they are typically used to determine which policy approach should be followed. The choice of approach generally hinges on the perceived severity of the problems that would ensue were the potential risk actually to materialise. Combined, the policy choices consist of the following linked pairs:

- *ex ante* prevention or *ex post* correction;
- regulating structure or regulating behaviour; and
- market-based measures or government imposed measures.

Ex ante prevention – ex post correction

One policy dimension concerns whether an ex ante, “preventive” or an ex post “corrective” approach is required

One dimension to be considered is the degree to which the perceived risks require *ex ante* preventive measures versus *ex post* corrective measures. Risk-averse policy makers abiding by the precautionary motive would be expected to opt for preventive measures when the consequences of the event in question (*e.g.* institution insolvency, contagion, etc.) are considered to be prohibitively expensive or otherwise politically or socially unacceptable. In other cases, an *ex post* corrective approach may suffice.

The choice arises in numerous circumstances. Should, for example, monetary policy authorities act pre-emptively to prevent episodes of asset price inflation from developing into more costly bubbles, or wait to handle the fallout after any bubble that does develop bursts? Should policy makers step in to prevent the spread of innovations perceived as potentially harmful, or allow them to diffuse through the system and then respond to any subsequent problems? In the context at hand (the risks posed by financial

groups), which is the better approach for promoting financial system stability?

For systemic stability, up-front preventive measures are preferable

For most authorities, the high fiscal and social costs of widespread financial distress favour the adoption of up-front preventive measures. Operationally, if the goal is to preserve system stability, then failures of individual institutions must not result in contagion or become systemic in another way.

Inasmuch as contagion reflects a loss of confidence, preventive measures are often designed to preserve confidence in the integrity of the system. Deposit insurance is one such mechanism.¹¹ It is intended to eliminate the incentives for one type of contagion – a bank run, through provision of a guarantee.

Widespread losses of confidence have often followed in the wake of failure of a large institution. This tendency helps to explain why regulators in most OECD jurisdictions have been reluctant to allow large, globally active institutions to fail, which is precisely because of the potential for systemic problems to follow in the wake. Instead, they opt for prevention. A corrective approach would allow the failure to occur and attempt to deal with the fallout.

As an added complication, there may be a cross-country mismatch between the distribution of the failing institution's losses and the sources or causes, and there can be a mismatch as well between the distribution of losses and the location of liquid or marketable assets. Then, too, a failing institution may be systemically important by some definition in some jurisdictions, but not in others. All of these factors can result in differences across jurisdictions in the incentives to save an institution versus allowing it to fail.

If failure is not tolerable, institutions should not become too large relative to their capital

To ensure that these situations do not arise, failing institutions must not be too large relative to their capital, which means they should not be too highly leveraged or take on outsized risks, and they should not be too highly inter-connected. Otherwise, the option becomes to avoid failure, as the choice of an *ex post* corrective approach (to allow failures), is not feasible.

Financial risks can be magnified in the case of groups engaged in high levels of proprietary trading, market-making, and active portfolio management. If used properly, such activities have the potential to reduce an institution's risk exposure and increase its profitability. But if mistakes occur, institutions may be exposed to sudden, possibly significant losses, which raise the likelihood of failure.

The option for policy is to address the risks or devise acceptable exit arrangements

Policy makers have two options: either they address the risks to minimise the chances for systemic failures; or they come to some agreement regarding an exit for troubled institutions that avoids systemic repercussions.

Among OECD jurisdictions, there is no single common approach for doing so. Options are drawn from: the structure/behaviour nexus; and the policy nexus, either market-based or government-imposed.

The structure – behaviour nexus

There are two opposing views regarding the risks posed by financial group structures

At a fundamental level, the debate over the policy approach to financial groups raises the classic “form versus substance” discussion; that is, should policy focus on the structure of financial groups, or should it focus on their behaviour. A *per se* view holds that unacceptable forms or levels of risk are inherent in certain financial corporate structures. Certain types of financial business activities are not compatible from a direct risk or moral hazard standpoint and should not be combined. Where that is the case, the obvious policy option is to *regulate structure*.

An alternative view holds that the issue with respect to financial groups is not the formal corporate structure *per se*, but rather the implications of the corporate structure for proper risk-management. The real question then becomes whether the internal controls and risk management systems for the group are adequate for the task. Where such a view holds, policy measures may be directed at *regulating behaviour*.

Market-based measures or government-imposed measures

Policy measures are either market-based or rely on direct government intervention

Regardless of whether the emphasis of policy is on structure or on behaviour, there are two broad sets of policy measures from which to choose: market-based measures or direct government intervention. The latter may take the form of prescriptive rules, which require the adoption of specific behaviours or actions, or impose prohibitions on specific behaviours or actions. Market-based measures, in contrast, may entail the reliance on competition and market forces, or may reflect general, high-level expectations of behaviour on the part of the government, but where market participants are left to decide on the means by which they are to achieve these standards of behaviour, as through industry codes of conduct or best-practice guidelines.

Mapping the options to risks

The policy template consists of three linked pairs of options

The discussion in the preceding sections outlines a policy template consisting of choices from three linked-pairs of options:

1. whether to be *preventive* or *corrective*;
2. whether to look at *structure* or *behaviour*; and
3. whether to do so through *market-based measures* or *government imposed measures*.

These design questions have been the subject of considerable discussion over the years. In financial policy, there are multiple objectives, which taken to their logical end may not always be consistent; and there are multiple policy instruments, whose effects may cause them to work at cross-purposes, and which may require some level of international coordination to work optimally. And in practice, one size typically does not fit all.

In fact, changes in regulation have often been implemented in response to particular incidences of failure, rather than as part of a comprehensive and predetermined long-run plan. And as the incidence and severity of failures have varied across countries, so, too, have the specific modalities of policy design and implementation.

Structural controls as embodied in the “safety first” doctrine were widespread in the wake of the Great Depression

For instance, the doctrine of “safety first” was in vogue for a considerable period in many jurisdictions in the wake of the Great Depression, by which prudential policies, especially as applied to the banking sector, focused on the prevention of failures and the protection of retail customers. Structural controls were widespread as regulatory authorities directly monitored and controlled a wide range of financial activities to allay concerns that “excessive competition” was at odds with stability and raised consumer-protection issues. In addition, rules in some jurisdictions sought to prevent excessive concentration of market power by separating the banking and insurance businesses, while in other jurisdictions, traditional banking was separated from the securities business.

While most rigid controls have been removed, some form of the separation principle remains in most jurisdictions

While subsequent reforms removed most of the more stringent controls, some form of “separation” remains in place in all jurisdictions. For example, while rules in continental Europe generally permit the mixing of banking and securities activities, rules in all EU countries prohibit banking and insurance activities from being supported by the same pool of capital and also prohibit the simultaneous pursuit of life and non-life insurance business by a single legal entity. In fact, with few exceptions, separate licences are typically required for each sub-sector of the insurance business, or for multiple categories of insurance grouped under a common corporate umbrella. These restrictions are designed to ensure that the funds reserved for paying insurance claims, especially in the life segment, are not endangered by risks unrelated to the insurance business.

But tight limits on ownership and control also existed before in other financial-services sectors, as embodied for example in the Glass-Steagall Act in the US, which prior to its repeal in 1999 prohibited commercial banking and investment banking from being parts of the same corporate group (Box 3).

Box 3. The Glass-Steagall Act: Strict legal and operational separation

The Depression era Glass-Steagall Act in the United States is perhaps the prototypical example of strict legal separation. It imposed a fairly strict institutional separation (largely on grounds of avoidance of conflicts of interest) between traditional commercial banking and investment banking and a large number of other securities-related activities. The strict separation embodied in the 1933 Act sought among other goals to protect the interests of retail depositors.

To prevent contagion from the “riskier” securities-related activities to banks, the Act prohibited these two types of institutions from being parts of the same corporate group. Strict legal separation limited the types of risk exposure institutions could assume (either directly or indirectly) via contagion from other group members.

Chile, by contrast, allows group affiliation in various sectors, but prohibits control or direct mixing between the various subsidiaries (Box 4).

Box 4. Financial groups in Chile

In Chile, the regulatory framework imposes strict regulations on ownership-linkages among financial institutions. For example, the regulatory framework defined in the Banking Law clearly establishes the activities that banks can conduct. Any activity that is not included in said article may not be conducted.

Banks may conduct insurance brokerage through affiliate companies and may establish affiliate firms that provide social security advice. A corporate group may establish a bank, but the banking entity may only become involved in lines of business established in the Banking Law, and/or through its affiliate societies in businesses as defined by the Banking Law and related rules. Banking entities cannot invest in equities.

Securities brokers, commodities brokers, investment fund managers, insurance companies, etc. may only carry out their main lines of business and complementary lines of business as authorised by the Securities and Insurance Regulator. Hence, they cannot control other corporations or companies that are not necessary for their main business, nor carry out other non-authorised lines of business.

The legislation allows strategic alliances to be formed, and in a given financial group it is possible to find a bank and an insurance company, but those alliances must be between institutions with separate capital.

Based on the previously described template, these types of strict legal-separation arrangements typically exhibit the following qualities: **preventive; structure-oriented; government-imposed.**

Various organisational structures accommodate some measure of separation

There are, in fact, various structures that can accommodate the separation principle, at least to some extent (see Table 4 in the addendum). One structure is the parent-subsidiary model, whereby a financial institution (the parent) engages in other activities through separately capitalised subsidiaries. Another common structure is the holding company model, whereby a parent company owns (or controls) a number of separate, often cross-sector and cross-border subsidiaries.

Concerns have been raised about the status of the holding company itself, which can be “operating” (*i.e.* itself involved in one of the main financial activities of the group), or non-operating, and thus restricting its activities to some centralised activities, with its own revenues derived from dividends it receives from the subsidiaries.

The non-operating holding company approach enables group members to benefit from synergies, but should prevent the cross-subsidisation of risks

A structure that addresses concerns about the status of the parent is the non-operating holding company (NOHC) structure. The NOHC is similar to a traditional holding company structure in the sense that there may be single entities (*e.g.*, as in a one-bank holding company) or various types of subsidiaries in the group. In a strict form, each constituent entity could have its own shares listed, and its own separate board of directors. But even when the constituent entities are not separately listed, in a strict-form NOHC the holding company would not be able to exercise any control over the group members that would allow for an improper mixing of capital. The holding company structure enables group members to benefit from cost synergies associated, for example, with sharing back-office operations, accounting services, or

technology infrastructure. The structure also enables the parent to benefit from any revenue economies of scope or cross-sector diversification benefits. But it should not, in theory at least, allow for cross-subsidisation of risks.

The parent and subsidiaries deal with one another through “arms-length” transactions

Instead, the guiding principles for a NOHC are: 1) for the parent and affiliates to deal with each other through balance sheet-based transactions, on the same arms-length basis as they might use for outside entities; and 2) increased transparency, which should facilitate monitoring, regulatory compliance, and resolving problems with failing subsidiaries, given the presumed absence of complex inter-connections and risks.

If the terms under which group capital can be transferred are clearly specified under company law or regulation, the cost of capital for any given subsidiary should better reflect the risks it undertakes, as opposed to being clouded by perceived intra-group cross-subsidisation. In practice, however, the potential for matching a subsidiary’s own risks with own capital is less clear-cut.

Third parties may still expect subsidiaries to have the full support of the group, and this assumption may have legal backing

A subsidiary of a large group may enter into agreements presumably under its own name, but counterparties and clients may nonetheless have the implicit understanding that the activity has the group’s financial strength behind it. This idea is in fact sometimes enshrined in law. In the US, for example, banking regulation specifically enforces the “source of strength” concept by authorising regulators to force a NOHC to support its banking subsidiaries with all its available capital.

The Australian Prudential Regulatory Authority (APRA) has proposed a similar requirement as part of its efforts to extend its supervisory framework to conglomerate groups and to deal with the challenges posed by any non-regulated entities they contain. Among other requirements, APRA has proposed that groups containing material non-regulated entities would be subject to more stringent supervision, called “Level 3” supervision. Level 3 supervision would enable APRA to require additional capital if it determines that the total capital in a group is not commensurate with the group’s risk profile. It would also allow APRA to require that a sufficient portion of a group’s surplus of eligible capital be readily transferable among group entities, through a transferability assessment.

An alternative to control over ownership linkages is to limit particular activities

The “preventive – structure – government-imposed” option includes “softer” approaches to achieving a measure of separation that do not rely on strict control of ownership linkages. Instead, attention is focused on particular activities, which may be proscribed when certain conditions apply.

The so-called “Volcker rule”, named for former Federal Reserve chairman Paul Volcker, as incorporated in the US Dodd-Frank Act (Box 5), is a recent example of regulatory limits on permissible activities. The rule prohibits institutions that take retail deposits, which are guaranteed by the government, from engaging in proprietary trading. The ban serves to prevent deposit funds from being used to cross-subsidise risk-taking activities that could pose a threat to the safety and soundness of the institution itself, and in

the case of systemically important institutions, the broader financial system and thereby the financial safety nets. In principle, removing the element of cross-subsidisation should result in risk-taking activities being priced at a more appropriate (*i.e.* higher) market price.

In the Dodd-Frank Act (US), banks can only invest 3% of capital in hedge funds and private equity

In addition to the ban on proprietary trading, the rule limits to 3% of capital the amount of funds that banks can invest in hedge funds and private equity funds. And, in contrast to the requirements discussed above for banking subsidiaries, banks are barred from bailing out any funds in which they are invested, which again should address the cross-subsidy from the financial safety net.

Note that limits on permissible activities can be imposed by regulation, but could instead be implemented through industry codes of conduct or “best practice” guidelines, as part of a **preventive – structure – market-based** approach.

Strict legal separation limits risks, but at the expense of potential cost or revenue synergies

As noted above, of particular interest in the case of financial groups is whether the risks that arise in different lines of business are offsetting, as desired for diversification purposes, or reinforcing. Strict legal and institutional separation has the core objective of limiting the types of risk exposure institutions can assume, either directly through their own activities, or indirectly via contagion from other group members. But strict separation achieves this objective at the expense of any cost or revenue synergies that might exist among the different types of activities.

As a consequence, the question arises as to whether any division of function and activities should be legally imposed or whether the choice of specialisation versus integration should be left entirely to the managerial decisions of the financial institutions themselves. The real issue, however, may be: what measures can be introduced to minimise the attendant risks of integration of activities in the same corporate structure, without eliminating all potential synergies.

An alternative to the focus on separation is to target behaviour

Regulating behaviour has an entirely different focus from regulating structure. The rationale behind the approach is that it is not the structure *per se* that matters, but how the structure is used. Presumably, the asset-liability mix of an institution is constructed and managed in such a way as to generate an adequate return for investors without taking on undue risks. At issue is the extent to which management can be trusted to accomplish this by the shareholders, clients, counterparties, and the authorities. There are various inter-related considerations relevant to such a determination.

For conduct-of-business concerns, a corrective approach is often used

In a “corrective – behaviour – market-based approach”, for example, greater reliance is placed on internal controls and market discipline in lieu of structural limits. A corrective approach is often used for conduct-of-business concerns (*e.g.* conflicts of interest). For such concerns, attempting to prevent any abuse whatsoever from occurring would be exceedingly difficult if not impossible, given the ubiquitous nature of potential conflict-of-interest situations. And such an approach would no doubt be prohibitively expensive.

Box 5. The U.S. Dodd-Frank Act

In July, the **United States** enacted the new *US Dodd–Frank Wall Street Reform and Consumer Protection Act*, known in its short form as the *Dodd-Frank Act*. The Act addresses many of the perceived shortcomings with the existing regulatory and supervisory framework in the country, affecting the following main areas:

Consumer protection: The Act gives authority to an **independent consumer protection agency**, the Consumer Financial Protection Bureau, which will be housed within the Federal Reserve Board, with separate budgets and rulemaking authority. The agency will have authority to examine and enforce regulations for all mortgage-related businesses: banks and credit unions with more than \$10 billion in assets; payroll lenders; check cashers and other non-bank firms.

Addressing systemic risk: The Act introduces a new **Financial Stability Oversight Council (FSOC)**, which is to be chaired by the Treasury Secretary. The FSOC will include: the Federal Reserve Board; the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC); the Office of the Comptroller of the Currency (OCC); the Federal Depository Insurance Corporation (FDIC); the Federal Housing Finance Agency (FHFA); the National Credit Union Administration (NCUA); the new Consumer Financial Protection Bureau; and an independent appointee with insurance expertise.

Resolution authority: The Act requires regulators to seize and break up troubled financial firms that might cause systemic damage. Regulators would recoup losses via fees on firms with at least \$50 billion in assets.

OTC derivatives markets: Plain vanilla derivatives are to be traded on exchanges and routed through clearing houses. Customised swaps are to be reported to central repositories. Imposes capital requirements, margining, reporting, record keeping and business conduct rules on firms that deal in derivatives.

Credit rating agencies: The Act introduces a new **Office of Credit Ratings** to supervise credit rating agencies. The supervisor, which would fall under the SEC, will require Nationally Recognised Statistical Rating Organisations (NRSROs) to disclose their ratings methodologies. It aims to reduce conflicts of interests. In addition, investors have a right of action against rating agencies in the event of reckless failure.

Securitisation: The Act requires securitisation sponsors and originators to retain at least 5% of the credit risk. In addition, the originators will have to disclose the details and the quality of the underlying assets. The Act exempts low-risk mortgages that meet certain minimum standards.

Proprietary trading: Known as “the Volcker rule”, this section limits to 3% the amount of its own capital that a bank can invest in hedge funds and private equity firms. Banks are barred from trading with their own funds.

Greater reliance has been placed on market-based measures, such as disclosure and codes of conduct

In lieu of specifically imposed *ex ante* controls for such conduct-of-business concerns, market-based measures tend to be of primary importance. There are two main areas to be addressed: financial institutions’ behaviour in the market (including their relationship with one another) and their client interface. Various mechanisms can be used to ensure institutions have sufficient incentives to adopt administrative procedures that ensure consumers are competently and honestly served.

Common mechanisms include:

- Disclosure of relevant information for a proper identification of potential conflict-of-interest situations;
- Codes of conduct or rules of best practice that specify how potential conflicts should be handled.

Group-wide supervision is the primary instrument for overseeing behaviour

In contrast to the treatment for conflicts of interest, for prudential concerns the application of behavioural remedies typically shifts toward preventive measures and government-imposed measures. Group-wide supervision is the primary instrument. To be effective, the supervision of financial groups should seek to ensure the full capture and treatment of all risks and entities within the groups.

The larger the conglomerate is, and the more constituent entities that are involved in complex relationships, the more difficult it becomes for supervisors to have a clear understanding of the cost calculations, the localisation of business risks and the lines of control. Supervisors accept the fact that as financial groups centralise their internal controls and risk-assessment and management practises, it becomes more difficult to oversee these on a purely sectoral basis due to the increased complexity of the corporate structure and the inter-linkages therein. Conglomeration increases the need for information sharing, co-ordination and co-operation among the supervisory authorities with responsibility for the different institutional components of a financial group, and to ensure that group-wide assessment and management of risks is achieved.

The risks involved are magnified in the case of cross-border operations

These risks are magnified in the case of international groups, in the sense that the legal jurisdiction of national authorities is smaller in scope than the geographic area spanned by the institutions' business activities. Two key questions for supervisors are: (1) whether constituent entities of internationally active financial groups are managed centrally or locally; and (2) whether risk-management and other corporate control functions are centralised in the parent or another specific entity, or exercised locally.

Trade-offs in mapping options to risks

The various combinations of policy measures can differ markedly in terms of their costs and effects

These various combinations of policy measures, preventive or corrective, structural or behavioural, and market-based or government imposed can differ markedly in terms of their costs and effects. For example, the implementation of some policy instruments may give rise to negative incentive effects, if the activities of participants are not fully monitored. Guarantees and other insurance mechanisms are the classic examples. They may have moral hazard effects that offset the overall benefits of policy.

In this context, some officials have noted that it is necessary to avoid confusing regulatory or government failures with market failures when devising policy options. Doing so would help facilitate a proper identification of what it is that needs to be addressed when problems occur. There may indeed be market failures or broader economic and social needs that warrant intervention. But the form of intervention needs to be carefully considered to avoid introducing unexpected costs or complications that have unintended consequences, including the possibility that certain policies or approaches could lead to a build-up of risks rather than to a reduction.

Limits to separation (alone)

The premise behind the principle of separation is not invalid. The culture involved in retail banking (*i.e.* taking deposits and making loans) differs considerably from that involved in originating structured products and proprietary trading. And some forms of separation are deemed to be necessary in order to address concerns about safety and soundness and consumer protection; examples include the requirement for separate capital to conduct both banking and insurance, and the separation of the life segment of insurance from the non-life segment. One can perhaps make a valid case for other forms of separation, at least on specific grounds such as increased transparency. But the fact remains that separation alone is not sufficient to address all concerns.

Where source-of-strength rules apply, group members are forced to take into account risk-taking activity on the part of other members

Where source-of-strength rules apply, the fact that subsidiaries are separate legal entities does not mean that the other entities in the holding company can completely ignore a given subsidiary's risk-taking behaviour. And the market has not always recognised the separation either. The failure of systemically important subsidiaries has often resulted in cross-group contamination. In short, structure alone, imposed or not, may not be sufficient on its own to completely eliminate contagion risk, as group members could still become "tainted" by virtue of a shared brand name and the damage to the group's reputation from the failure of a subsidiary within the group. Even where no formal obligation to make good on claims against the failed subsidiary exists, group members could nonetheless suffer from a loss of reputational capital, which might affect their ability to fund themselves as before and may result in more serious financial difficulties.

Limits to market discipline (alone)

Any weaknesses in governance associated with misaligned or improper incentives will limit the effectiveness of voluntary measures

Measures that rely on market discipline are only as effective as the broader governance framework of which they are a part. Any weaknesses in the framework -- such as misaligned or improper incentives, weak management-information systems, and ineffective or incompetent Boards -- will mean that firewalls and related control mechanisms cannot be relied upon solely to control or mitigate conflicts of interest or other risks. Rather, as a general rule, internal controls and voluntary mechanisms should be subject to monitoring: authorities should be able to trust these controls and mechanisms, subject to verification, especially when the consequences of a failure could be severe.

Financial difficulties can result either from errors of execution or from inherent flaws in the business model

In hindsight, the flaws inherent in failed business models or errors of execution are always evident. But in many cases, the signs were evident long before problems emerged (*e.g.* credit underwriting standards becoming looser for borrowers of increasingly dubious credit quality, connected lending, high loan concentrations, over-reliance on wholesale funding sources, etc.). Who bears responsibility for performance problems? If institutions encounter difficulties through no direct actions of their own (for example under the influence of exogenous forces such as a natural disaster), blame is difficult to assign. But errors of commission are obviously different.

Managers have direct responsibility for ensuring a proper mix and the management of their institution's assets and liabilities. But the duty is not theirs alone. Inadequate internal risk controls are a sign that the corporate governance of the institution has failed. The failure exists regardless of whether crucial information ever reached the board of directors, whether Board members understood the true nature of the activities, or thought they did but went along with a given course of action anyway.¹² Auditors or other monitors may have been complicit in the problems. Shareholders, especially institutions and other professional investors do not completely escape blame, either.

Effective market discipline should provide an external constraint on managerial discretion

What happens if the internal governance apparatus of individual institutions fails to avert episodes of financial difficulty? Creditors and counterparties should have incentives to ensure that their own interests are not threatened by a troubled institution's problems, which means they should take protective steps to prevent the institution from taking on excessive exposures, or they should exit the contract long before the time when the institution's failure becomes imminent or a foregone conclusion. Effective market discipline should function in this way, as an external constraint on managerial discretion. If policy is to take a *laissez-faire* approach, both internal and external governance mechanisms must function properly.

Both mechanisms rely on the availability of relevant information and an ability to properly interpret it. Of course, such information is not always readily forthcoming. And the larger an institution is, the greater the number of constituent entities it embodies, and the more complex their relationships, the more difficult it becomes to obtain a clear understanding of risk exposures, owing in part to the potential for complex intra-group exposures to develop.

In complex structures, external mechanisms are at a disadvantage, which limits the ability of market forces to function correctly

It is extremely unlikely that external parties can readily sift through all the potential exposures.¹³ Authorities can help the process by imposing greater simplicity for corporate structures or mandating increased transparency (e.g. reporting requirements, centralised trading or clearing and settlement). Otherwise, greater reliance must be placed on regulatory measures, since during the normal functioning of a competitive system the chance always exists that some institution's asset-liability mix, risk-management techniques, or entire business model will prove to be deficient and result in losses, or in a severe case, to its failure. The question then becomes whether the problem is idiosyncratic, affecting just the one institution, or is it likely to spread to other institutions having a similar structure or business model, or to spread further still.

The recurrence of boom-and-bust cycles suggests that market discipline tends not to operate as needed

In any event, the fact that boom-and-bust cycles are recurrent phenomena suggests that the necessary degree of market discipline is typically not forthcoming or arrives too late in the cycle. If internal governance does not limit leverage or excessive risk-taking, and market discipline cannot be relied upon to do so, then supervisors must. Either way, a more heavy-handed approach is needed and the question really becomes how heavy it should be. Different jurisdictions may have different views in this regard. But in the aftermath of a crisis, the pendulum typically swings in the

direction of tighter controls, or at least towards addressing obvious gaps or weaknesses in the regulatory and supervisory framework.

Limits to supervision (alone)

The recent financial crisis has called into question the success of many existing arrangements for supervising financial groups. This has led to calls (in some circles) to limit the size and/or complexity of institutions in order to avoid having them perceived as being “too big to fail”, along with all the moral-hazard issues that perception entails. The efforts of a few supervisors have also been favourably viewed, but these are few and far between (quite literally in some respects).

Better supervision is obviously needed, but is not sufficient on its own to address all problems

To argue that supervision alone is sufficient to control the behaviour of participants ignores a considerable amount of history. It can be extremely difficult, in practice, to directly control behaviour without sacrificing some measure of efficiency and innovation or creating adverse incentive effects, which then need to be addressed.

Looking back, one observes that severe disruptions in the banking sector were widespread among OECD countries in the 1980s and 1990s and again in this decade, sparked in many cases by apparent price “bubbles” in the real estate or equity markets. Bank lending played a contributory role in the development of these episodes of high asset-price inflation, and banks may have added some impetus to the “bust” phases as well. The regulatory framework does not remain blameless through these problem episodes, which is why most such episodes have prompted a re-think about how to improve oversight. The recent crisis is no exception, and various reforms have been introduced (Table 2).

An important starting point to reform is to ensure all participants have correct incentives

The regulatory framework needs to impose limits on the behaviour of market participants, but it must also seek to align the *incentives* of the market participants with policy objectives, through a balance of compulsion, supervision, and market discipline. In particular, incentives must be appropriate for the full range of participants, from service providers to end-users. This condition is a necessary requirement if the financial system is to function as intended. Governance is based on inter-linkages, and system-wide governance is only as strong as the weakest link.

Management information systems are a critical component

Management information systems are critical in this respect, both at the level of individual participants and in the aggregate. At the time of the recent crisis, crucial information about risk exposures in the system was lacking, which proved to be a critical flaw once the chain of events resulting in crisis conditions had been triggered. Many institutions had centralised risk-management functions, but few if any had the ability to quickly obtain a consolidated view of the risk exposures across products, business lines, legal entities, and borders. And, of course, no one had an aggregate view. No one knew who bore which risks, and in that environment of shaken confidence many types of financial transactions basically ground to a halt.

Table 2. Template of recent policy measures to address risks in financial groups

MARKET-BASED MEASURES					REGULATORY MEASURES				
					Prudential Oversight		Structural Controls		Bonding Mechanisms
Contract Law	Market Forces	Disclosure	Codes of Conduct	Governance	Micro-Prudential	Macro-Prudential	Limits on Activities	Structural Controls	Guarantees
			USA ¹	USA ¹	FRA ²	EU ³	USA ¹	USA ¹	
					BCBS ⁴	(DNK, FIN, ISL, NOR SWE,) ⁵	BCBS ⁴		
					USA ¹	GBR ⁶			
						USA ¹			

1. See Box 5, the Dodd-Frank Act.
2. Merger of authorities responsible for oversight of banking and insurance entities.
3. Proposal for: 1) a European System of Financial Supervisors, consisting of a network of national financial supervisors to work in tandem with the new community supervisory authorities (the European Banking Authority, the European Securities and Markets Authority, the European Insurance and Occupational Pensions Authority); and 2) Community wide macro-prudential oversight via establishment of a European Systemic Risk Board charged with maintaining oversight of the financial system to prevent or mitigate systemic risks and to avoid episodes of widespread financial distress.
4. Revised capital standards (Basel III): higher minimum requirement plus a higher buffer for a total minimum common equity of 7%; limits on minority investments.
5. Memorandum of understanding related to establishment of supervisory college for the Nordea Group: requirements to share information between home and host supervisor; joint on-site examinations; but no specific rules *ex ante* as to how, or by whom, a crisis will be handled.
6. Proposed reform of the regulatory framework to include a revised tripartite model with three supervisory authorities: the Macro Prudential Regulation Authority; the Prudential Regulation Authority; and the Consumer Protection and Markets Authority. A Financial Policy Committee under the authority of the Bank of England would operate under the MPRA to monitor and address systemic or aggregate risks and vulnerabilities. The Independent Commission on Banking, headed by John Vickers, is examining a wide range of measures, which include: the separation of retail and investment banking; narrow banking and limited purpose banking; limits on proprietary trading and investing; structural separability (living wills); contingent capital; and surcharges for individual institutions. And for markets: limits on concentration in trading and other infrastructure, among other reform initiatives.

The threat of failure has to be a possibility if market discipline is to play its role in constraining risks

Clearly, a powerful mechanism to promote desired behaviour is to ensure that managers of financial institutions and their counterparties are aware of the possibility of their failure, and therefore the need to be concerned about risks. The threat of failure is a core component of market discipline; it keeps all participants honest.

This fact has received some attention in the measures that have been adopted. All three major risk categories are addressed by at least one reform measure, although admittedly not in all jurisdictions. By count, the majority of jurisdictions have focused their attention on the systemic stability concerns arising out of the crisis. The measures adopted have taken various forms, most often involving the establishment of clear responsibility for systemic stability in some entity or group. Steps in some jurisdictions also involve oversight structures for cross-border operations of financial groups, via integrated agencies, lead supervisor arrangements, colleges of supervisors, home-country control, host-country control, or memoranda of understanding.

The US has made greater use of structural controls, such as limits on permissible activities

The US stands out in the sense of making use of more stringent control measures, such as limits on permissible activities. Such limits are intended to adapt regulatory structures to the economic, technical and operational specificities of particular sectors and the risks they entail for the system as a whole, as well as to ensure adequate safeguards for consumers. In particular, the limitation on proprietary trading should serve to prevent deposit funds from being used to cross-subsidise risk-taking activities that could pose a threat to the stability of the institution itself, the broader financial system, and thereby the financial safety net. Presumably, institutions that wanted to risk their own capital in trading for their own account would be forced to give up access to retail deposits and the associated guarantees.

In other jurisdictions, proposed measures are geared more towards providing a means to pay for the resolution of failed institutions, and therefore they reflect an *ex post* corrective approach. Such measures take the form of fees or taxes on the industry, with a view toward amassing funds that can be used to fund crisis resolutions, in lieu of tax-payer money being used to do so.¹⁴

If a conclusion is to be drawn from the above discussion, it is that no single approach will suffice on its own

The discussion in this report has touched on the philosophy of regulation as regards, for example, the role of government versus the role of markets in achieving desired outcomes. Among the issues covered are the benefits of a proactive policy approach (*ex ante* preventive) versus a reactive approach (*ex post* corrective), and whether the appropriate policy response should entail *behavioural* versus *structural* remedies. If a conclusion is to be drawn from the arguments presented in this section, it is that no one approach will suffice on its own. There are overlapping prerequisites, which means that the effectiveness of any given approach will typically depend, in part, on aspects of another approach being in place. They should be viewed as complements and not as substitutes.

Complexity is a major problem,

Good information systems are critical in this respect, which means that complexity is a major problem. The obvious antidote for complexity is

which may need to be addressed through regulatory intervention

simplicity or transparency. If market discipline were functioning properly, there would be a penalty assessed for institutions with complex structures and business models. To the extent the required behaviour does not occur, it becomes necessary to impose it in some way. But that means moving beyond reliance on market forces. One approach is to impose restrictions on ownership and control; for example, by requiring the legal separation of certain activities, which would entail structural controls.

In short, there are no magic bullets among policy options to address the risks posed by financial groups

To conclude this section, we note that there are numerous trade-offs to be made in the policy options for limiting the risks of integrated structures and business models. As a consequence, there are no magic bullets among common measures for addressing any of the three risk categories (*i.e.* safety and soundness, systemic stability, and conduct of business). Depending on the risk -- and the perceived need for *ex ante* preventive versus *ex post* corrective measures -- a holistic approach is required that encompasses structure, governance, and supervision (Table 3).

Table 3. Mapping alternative policy measures to risks in financial groups

POLICY MEASURES	CATEGORY OF RISK		
	<i>Prudential concerns</i>	<i>Conflicts of interest</i>	<i>Systemic instability</i>
Market-based measures			
• Contract law (<i>e.g.</i> basic anti-fraud)		X	
• Market forces (<i>e.g.</i> competition, market discipline)	X	X	X
• Disclosure		X	X
• Codes of conduct (<i>e.g.</i> rules of best practice, conditions for doing business, Chinese walls)		X	X
• Governance (<i>e.g.</i> internal controls, risk management)	X	X	X
Prudential oversight			
• Micro-prudential (<i>e.g.</i> stricter capital requirements, leverage ratios)	X	X	X
• Macro-prudential (<i>e.g.</i> systemic risk boards, supervisory colleges)	X		X
Structural controls			
• Limits on activities	X	X	X
• Separation	X	X	X
Bonding mechanisms			
• Guarantees	X		X
• Govt. ownership or control	X		X

Source: OECD Secretariat.

VI. Conclusions

The recent crisis is not unique, in the sense that the financial services industry has been prone to periodic episodes of marked illiquidity, widespread insolvency, fraud and other misconduct to the detriment of clients and counterparties and the economy at large. Public policy generally aims to prevent problems at individual institutions and the markets from propagating and to preserve public confidence in the integrity of the financial system. To do so, authorities must find ways to protect the system against systemic risk and must ensure proper market conduct on the part of financial service providers, including adequate protection for financial consumers and investors.

Large integrated institutions present a number of challenges to the attainment of these objectives, posing risks to safety and the soundness of individual institutions, to systemic stability, and to consumers. As stated above, financial risks can be magnified in the case of large financial groups. And given the cross-sector and cross-border inter-linkages that have developed, once problems do erupt they tend to be transferred from one market segment or region to another. Thus, to be effective, the supervision of financial groups needs to ensure the full capture and treatment of all risks and entities in the group, including any unregulated companies.

The goal of public policy is not to make institutions completely failsafe and reduce the incidence of failure to zero. The threat of failure is a core component of market discipline. It serves to keep risk in the system to manageable levels. Participants have incentives to protect their own interests in situations in which they are not fully protected and to bear some risk of loss. It is not possible to eliminate the risk without eliminating the incentives that accompany it.

For service providers, the governance framework for each must be appropriate for its risk profile and business model. A necessary aspect of governance concerns the incentives given to managers, traders, loan officers, etc. to ensure their behaviour is consistent with the longer-term view of the institution as a going concern. More generally, the accountability of executives must be strengthened. The actual threat of punishment is sometimes one of the best and most robust tools to make sure that the rules of best practice are observed. And finally, the same governance framework that guides deposit-taking and consumer lending may not be appropriate for proprietary trading and other such riskier activities.

Internal governance needs to be supported by the external discipline of market forces. But market discipline can only function properly if clients and counterparties bear some risk of loss. It is important to clarify the contractual nature of promises in the system. There should be greater transparency as to whether clients are protected (or not) by the fiduciary duty of loyalty or care, in order to remove the potential for moral hazard.

And it must be noted that it is likely that policies adopted across jurisdictions will not be the same. As Ugo Mattei has observed, “every single institutional arrangement is generated within the limits of a precise historical context through

an evolutionary path, which is not necessarily linear and foreseeable. It responds to specific country needs and traditions”. There is no unique, universally agreed upon solution to address risks inherent in the structures and activities of financial groups. Jaime Caruana captured this notion specifically when noting that “we have to accept that there will never be total agreement across borders on what banks should and should not be allowed to do. There have always been differences in the business lines permitted to banks in different countries and there probably always will be. Hence, there can be a wide range of approaches, depending on the particular circumstances. But all measures should be consistent with internationally agreed standards to ensure that the playing field is level and that systemic risk is reduced.”¹⁵

Summing up, this article argues that policy makers should seek to ensure that the incentives that guide behaviour throughout the system, from supervisors to service providers to end-users, are not misaligned or inconsistent with the attainment of desired outcomes. The policy choices consist of three linked pairs: *ex ante* prevention; *ex post* correction, regulating either structure or behaviour; and policy measures, either market-based or government-imposed. The following observations are noted:

- Financial groups face risks that arise generally in finance, but also face additional risks related to the multiplicity of their components and the complexity of their structure. These risks can also be inter-related within or across sectors and across borders.
- Scale and scope economies may exist in some areas of financial services, but not everywhere and not without limit. Thus, reductions in the size of institutions need not conflict with economic considerations. The risk of failure may in fact not be greater for financial groups than for smaller institutions, but the consequences of failure have much greater impact.
- Various institutional structures and strategies may be used to exploit potential synergies. The degree of integration and the degree of centralization of control have important implications regarding the risks posed.
- That said, it is not structure *per se* that matters most, but how the structure is managed. Behaviour is key. It is important to look through the structure proactively to gain a clear idea of what risks exist and how adequate are the internal controls and risk-management systems to control them. Incentives must be properly aligned and consistent with policy objectives. There may be a need for clear responsibilities and fiduciary obligations, as well as the prospect of appropriate sanctions for misbehavior.
- That greater impacts associated with problems at larger institutions requires a holistic approach that combines transparency, governance, regulation and supervision. More work remains to be done on the resolution framework for internationally active institutions.

Notes

1. The OECD highlighted a number of such risks back in 1992 under the aegis of the Insurance Committee, now the Insurance and Private Pensions Committee. Among the potential risks discussed in that study were risks related to intra-group transfers of loans, etc. and risks associated with conflicts of interest.
2. Increased international integration can be beneficial as well, in the sense of contributing to risk-sharing and a more efficient allocation of capital.
3. Lower search costs could be a factor motivating such one-stop shopping. There could be a positive reputation effect as well, if customers associated an additional range of products and services with a proven brand name. The empirical research on revenue scope economies is mixed, but many studies support the existence of potential diversification benefits arising from combining different types of financial services in the same corporate entity.
4. In the particular case of insurance, rules have the effect of ensuring that only specially licensed entities can engage in insurance underwriting. But they also make sure that insurers do not engage in other activities, at least not via the same legal entity, and usually prohibit the combination of life and non-life activities in the same entity.
5. Cross-distribution has often been allowed, but not cross-production, prime examples being restrictions on deposit-taking and insurance underwriting.
6. The greater the degree of integration, the greater is the potential for exploiting scope economies.
7. See the discussion in Schich and Kikuchi (2004).
8. The assets of larger groups do tend to contain more risky elements, but at the same time, the degree of diversification also tends to be higher.
9. Research by the European Commission indicates that the risk of conflicts of interest increases with the number of activities or products offered.
10. The FSB and IMF are tasked by the G20 with specifying relevant criteria for identifying systemically important financial institutions.
11. Note that one can distinguish the instrument, which is offered *ex ante*, from how it is funded, which can be *ex ante* or *ex post*.
12. See the report by the OECD Corporate Governance Committee entitled “Corporate Governance and the Financial Crisis: Conclusions and emerging good practices to enhance implementation of the Principles” DAF/CA/CG(2009)3/FINAL.
13. And some assets may be difficult to value. Some bank loans, for example, are based on the banks’ internal ratings criteria and derived over the course of long-term relationships with the borrowers. Third parties cannot readily assess the market value of such non-traded assets.
14. See the discussion in Schich and Kim (2010) in this issue of *Financial Market Trends*.
15. Caruana (2010).

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