What does international experience tell us about regulatory consolidation?

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Introduction

For at least 20 years there have been efforts made by United States (US) administrations and in Congress to streamline and simplify the financial regulatory structure. There is a bewildering array of different federal and state regulators; many financial institutions are supervised by several different agencies, while other institutions have been barely regulated, if at all. With the catastrophic financial crisis that has engulfed the United States and the rest of the world, new questions are being asked about the regulatory failures that may have contributed to the crisis, especially the fact that regulators did not anticipate or prevent the crisis from developing in the years prior to 2007. No one thinks that the complex regulatory structure in the United States was the sole cause of the crisis[2], but the complexity may have played an important role by reducing the accountability of any single agency, and because there was no agency powerful enough to ride herd on the large financial institutions as they took on excessive risks.

At recent hearings before the Senate Banking Committee, members questioned the heads or acting heads of the main federal regulatory agencies, together with Daniel Tarullo, a governor at the Federal Reserve. Several senators suggested that a consolidation of regulatory agencies was long overdue and challenged the witnesses to explain why that should not take place. The basic answer given was that having multiple regulators could not have been a cause of the crisis because other countries with consolidated regulation had suffered from the financial crisis also. The United Kingdom (UK) drew particular attention in this regard. London is by far the largest financial center outside the United States, and some years ago a reorganization of bank regulation created the Financial Services Authority (FSA), which has sole authority to regulate banks and non-bank financial institutions, covering both

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[2] See Baily and Elliott, paper presented at the Chicago Federal Reserve Bank, September 2009.

prudential regulation and conduct of business regulation. The Bank of England, which had been the main regulator prior to this time, was given independent control over monetary policy, and its mandate was to avoid a return to high inflation years, a problem that had plagued Britain in the 1970s and '80s. When the financial crisis struck in 2007, the UK bank Northern Rock very quickly got into financial difficulties and had to be taken over by the state. Subsequently, several other financial institutions, including the huge Royal Bank of Scotland, fell victim to the crisis, and the UK is still trying to dig out of the mess left behind. The FSA model clearly did not prevent the financial crisis hitting the UK.

The example of the UK does prove that having a single regulator is not *sufficient* to ensure financial stability in the face of a global crisis. It confirms the point made earlier that the US system with multiple regulators could not have been the sole cause of the crisis. However, it leaves open the question of whether or not streamlining the US regulatory structure would be a positive step towards financial stability.

In this short paper we look at the structure of financial regulation to see what lessons there may be for the United States. This is a summary not a detailed research effort, but we believe that even a summary effort could be helpful in order to dispel the idea that the experience of other countries makes it a waste of time to attempt substantial consolidation of regulatory agencies in the United States.

Constructive Competition or a Race to the Bottom?

In general, competition is a good thing in market economies. It encourages companies to become efficient and productive, and it protects consumers by giving them choices. That same argument has been advanced for having multiple regulators, because this encourages competition among them, and gives them an incentive to be innovative in carrying out their tasks. Different regulators could specialize in different parts of the financial system and develop special expertise in their areas of core competency.

The counter argument is that government regulatory agencies are not market entities, and the rules of the game for good regulation are not the same as for private markets; in fact, competition among regulators can have very adverse effects. It is human nature for an agency to want to expand, or at least maintain, its size and staff. Since the regulatory agencies are funded largely by fees levied on the banks they regulate, there is an incentive for them to see the banks as their main "customers", and to satisfy those customers by providing a lenient supervisory regime that allows them to be very profitable. Competition among regulators can generate regulatory arbitrage, the practice of shopping on the part of regulated institutions for the best deal for themselves. Of course the agencies vehemently deny that this is the case, and no doubt there are many dedicated employees trying to serve the public interest. But economic incentives have a way of creeping into the system. When American International Group (AIG) decided to expand its business into credit default swaps (CDS), they chose to use a small thrift institution through which to channel the multibillion dollar expansion of this highly risky activity. The Office of Thrift Supervision (OTS) was out of its league in trying to regulate this part of AIG; in addition, it was run out of London, making it even harder to track. It takes very skilled and experienced financial experts to determine whether a given institution is highly profitable because it is well run and has developed new products that are in customers' interests, or whether it is highly profitable because it is taking excessive risks. OTS failed that test in its dealing with AIG—Senator Schumer remarked to the acting head of OTS that whatever came out of the financial reform effort, OTS was "toast".

Furthermore, the US system exhibits a lack of adaptability. Understaffed, underpaid and underfunded relative to the financial institutions that they oversee, regulators in the US have been playing an unending game of catch-up, while financial innovation has exploded and institutions invest enormous efforts in trying to maneuver around their regulators in order to enhance profits. Another issue is that the lines between various types of financial institutions have blurred. OTS was set up to regulate thrift institutions, small local banks with the mission to lend to local homeowners, and not to regulate a giant insurance company. In the face of momentous changes in financial institutions, US regulators have not been able to adapt to their changing environment.

Although a discussion of the theory of regulation is appealing, at least to economists, the practical reason why there has not been more consolidation of regulation is because of turf issues. Any agency that has been around for a long time has developed its defenders. Its leaders do not want their agency to disappear, and they feel strongly about preserving the jobs of their employees. The congressional committees that oversee the agencies develop relationships with them, and do not want the scope and power of their committees reduced. These are not good enough reasons to leave the system unchanged, however. The financial crisis has been a disaster of the first order and policy changes must be made that improve the chances of avoiding such a crisis in the future. The stakes are too high not to act.

This paper uses the example of other countries to see what lessons can be learned for the US about the pros and cons of different regulatory structures in practice. There are always idiosyncratic differences across countries, making exact comparisons difficult, but there is nevertheless a great deal to learn from how other countries have gone about structuring their own financial regulators. We provide information on the structure of regulation in several countries (notably Canada, the UK and Australia), the process by which such structures were devised, how they fared during the recent financial crisis, and finally, a synthesis of commentary on the relative merits of the models.

Regulatory Approaches

The four most commonly utilized regulatory approaches are described below. While the US employs some aspects of the functional and institutional approaches described below, the high degree of complexity in the US system makes it difficult to accurately classify the US system.

The Integrated Approach

In an integrated approach, a single regulator oversees all types of financial institutions and provides both prudential regulation as well as conduct-of-business (otherwise referred to as consumer protection) regulation. The integrated approach is designed to eliminate regulatory arbitrage, facilitate greater communication and information-sharing among regulators of a given institution, and consolidate rule-making and application. A system with a single regulator would generally be set up with two main divisions, the larger part focused on prudential regulation and the second part on conduct of business regulation and consumer protection. If the single regulator has been created by combining pre-existing separate regulators, however, the old functional or institutional linkages may remain in place. The same people may end up supervising the institutions they have always supervised. Thus, the creation of an integrated regulator, without attention paid to reform that creates a more communicative and adaptable internal structure, is unlikely to realize the full potential of an integrated approach.

The Twin Peaks Model

The twin peaks approach relies on two types of regulators: a prudential regulator and a conduct-of-business (consumer protection) regulator. Although defined as separate entities, these two regulators generally employ a high level of coordination, as they are each responsible for overseeing the functioning of different aspects of the same institutions. The twin peaks approach is generally considered, like the integrated approach, to offer the type of flexibility needed to deal with rapid innovation in the financial sector, and the blurring of lines between what were once considered the "traditional" actors in finance.

The Functional Approach

The functional approach seeks to regulate financial institutions based on the type of business they undertake, with disregard for how a given institution is defined legally. Therefore, various branches of the same institution could be under the purview of different regulators as a result of the business that they conduct. For the functional approach to operate most effectively, a great deal of coordination is required among the various functional regulators to ensure that no branch of a given institution escapes oversight. Achieving the necessary degree of coordination can be difficult, but with proper coordination, the functional approach can be effective, though it still lacks much of the flexibility of the two aforementioned approaches. The US structure is most akin to the functional approach.

The Institutional Approach

Under an institutional approach, the legal status of an institution determines its regulatory supervision —for example, thrift institutions in the United States started in the 19^{th} century as groups of people pooled their savings and started thrift banks. These community banks became troubled in the depression and the OTS (or rather its predecessor agency) was established to supervise thrifts around the country. The institutional approach is one of the least flexible, proving difficult to adapt to the blurring lines between types of financial institutions. Despite a given legal status, many financial institutions have engaged in increasingly broad operations outside of the relatively narrowly-defined confines of that status. Furthermore, shifting their legal status allows institutions to engage in regulatory arbitrage. The US structure incorporates some institutional aspects in addition to its functional components. (As well , AIG, GE Finance and American Express bank chose to operate under the OTS).

Canada

Overview of the Canadian Regulatory Structure

- Banking regulation conforms to a twin peaks approach.
- There are two main banking agencies, one focused on prudential regulation, the Office of the Superintendent of Financial Institutions (OSFI) and another focused on business conduct regulation the Financial Consumer Agency of Canada (FCAC).
- Securities and credit union regulation falls mostly under provincial regulators and in total there are seven regulatory agencies for all the different financial institutions. The great bulk of the sector falls under the OSFI and the FCAC, however.
- Some attempts have been made to integrate provincial regulators; for example, a “passport system” now allows all provinces except Ontario to recognize regulatory decisions made in other provinces, in order to discourage geographic regulatory arbitrage.
- Criticism focuses on the disconnect between federal level and provincial level regulation, and also on continuing problems integrating provincial level regulation between all of the provinces.

The Financial Crisis in Canada

Canada did experience some of the same problems as those in the US when the financial crisis hit, but with much less severity. A few banks and insurers experienced major losses, though the majority of financial institutions faced no serious problems. In the Canadian housing market there have been limited losses in homeowner equity, and while homeowner prices have declined sharply since the crisis began, they had not become inflated in the same manner as the US. Insulating it from the effects of the global downturn, Canada has benefited from lower public debt as compared to the US; while demand for raw materials has slackened, Canada has nevertheless been able to maintain its current account surplus throughout the crisis. Its economy is closely linked to the US economy, and Canada has faced a recession as the US moved into recession.

Canada followed mortgage-related policies that did not encourage the formation of an asset price bubble in housing akin to that of the US. Canada's subprime market was only a fraction of the size of the US subprime market, and less than a quarter of all mortgages issued are securitized, the rest residing on the issuing bank's balance sheet.[3] The Canadian regulator also demands higher capital requirement than in the US; the requirements of the US and Canadian systems are 18:1 and 25:1, respectively.[4] The Canadian system has also been credited with having a solid separation of power and responsibility between the policymaking process and its independent regulatory agencies, protecting regulation from political pressures.

The Canadian Banking Association has argued that Canada benefited in the financial crisis from having banks that are national in scope with the five largest banking institutions having branches in all ten of Canada's provinces, allowing them to better weather regional downturns such as a localized slump in housing prices without recourse to securitization. Furthermore, Canadian policies and regulations discourage home buyers from taking out mortgages they cannot afford, or purchasing homes for which they are not prepared. Canada does not offer tax incentives for home purchases, nor does it provide an easy foreclosure process; in addition, Canadian mortgage regulation stipulates that mortgages for more than 80% of the value of a home must be insured.[5]

Le Plan, Canada's Economic Action Plan (2009), argues that the Canadian system has allowed the country to better survive the financial crisis without having sacrificed competitiveness or innovation in

[3] Kiff, 2009
[4] Nivola, 2009
[5] Richburg, 2008

the process. That may be too positive a perspective. Canadian non-financial companies went to New York or London for wholesale banking services, while the large national banks avoided strenuous competition and were highly profitable in their protected domestic retail banking business.

The Canadian Regulatory Structure in More Detail

Canada has separate regulators for banking, insurance, securities and credit unions. The Bank of Canada retains control of monetary policy and market stability while reserving authority over regulating systemically important payments systems, but does not supervise banks.

Regulatory jurisdiction is also divided between federal and provincial level authorities. There are two agencies which share responsibility for banking regulation in what amounts to a two-peak approach: the Office of the Superintendent of Financial Institutions (OSFI), established in 1987, and the Financial Consumer Agency of Canada (FCAC), established in 2001. The OSFI supervises all of the federally chartered depository institutions and insurance companies in Canada. It also oversees those securities dealers owned by the country's banks. However, bank subsidiaries usually find themselves monitored by provincial regulators, though Ontario remains an exception. On the other hand, the FCAC sees that consumers have information about financial products and services, and oversees compliance with consumer protection laws for all federal-level financial institutions. The FCAC also regulates bank conduct in Canada; it oversees compliance with voluntary codes of conduct and public commitments. In essence, the OSFI operates as the prudential regulator while the FCAC oversees conduct-of-business regulation.

The securities industry and credit unions fall mostly under the regulatory authority of the provinces. These provincial commissions have formed the Canadian Securities Administration (CSA) to facilitate inter-provincial cooperation on regulatory matters. Securities regulation has also been coordinated by all of the provinces except Ontario through the so-called "Passport System" implemented in 2005, wherein provinces in some cases allow firms to operate in other provinces without requiring further regulation from the new province. The second phase of implementation to be completed in 2009 will fully allow firms who have gained regulatory approvals from their own provincial regulator to have those approvals recognized throughout the other provinces.

In addition to the OSFI and the FCAC, two other important federal-level securities regulators exist. These are the Investment Industry Regulatory Organization of Canada (IIROC) which was formed in 2008 by merging two older agencies, and which regulates the conduct of investment dealers and enforces trading and market integrity rules on equity marketplaces; and the Mutual Fund Dealers Association (MFDA) which was formed in 2008 to regulate the sale of mutual funds.

Commentary on the Canadian Regulatory Structure

Criticisms logged against the Canadian regulatory system lie first in the continued division of parts of the regulatory system by the type of financial activity overseen by regulators, and second in the divisions between provincial and federal level regulation in the securities and credit unions industries. While there is progress in coordination among the higher level federal agencies within themselves, and among the provincial level agencies within themselves, bridging the divide between regulation at the federal and provincial levels has not yet occurred. Although, on the whole, Canada's regulatory approach has been regarded as efficient, independent, and well-functioning, maintaining the necessary degree of cooperation between the prudential and conduct-of-business regulators to facilitate an effective twin peaks approach remains an ongoing challenge.

The process under which the OSFI and the FCAC were created is considered to be thoughtful, timely and measured. The OSFI was a result of recommendations made in the Estey Commission Report, in response to the failure of two Canadian banks in the 1980s. The establishment of the FCAC in 1996 was also the result of a commissioned report, published after five years investigating the state of business conduct regulation in Canada. In each case, Canada managed to avoid the trap of extreme reactive measures undertaken in haste.

One problem currently facing the FCAC is a lack of funding. The 2008-2009 annual budget for the agency is only Can$10.7 million[6], and it has been forced to partner with outside consumer protection organizations, non-profits and provincial departments to make up for insufficient funding. Establishing an effective regulatory structure represents only one challenge on the path to good regulation; the other is providing the regulator with the budget and the autonomy to act in its stated interests.

United Kingdom

Overview of the UK Regulatory Structure

- Financial regulation follows an integrated approach under the FSA.
- Within the single regulator are two main branches which oversee retail markets and wholesale markets: within each of these branches are institutional-style divisions which focus on specific types of institutions: banks, stock markets, mutual funds, etc., with some cross-over between regulation which falls under retail markets versus wholesale markets.
- Approach to regulation seeks to focus on desired outcomes rather than detailed rules, allowing institutions to choose how to arrive at the outcomes themselves, though the "rule book" is still extensive.
- Criticism focuses on the rapid development of the FSA, with little discussion or planning of its structure or potential alternatives
- FSA is also criticized for an internal structure that is not fully integrated, with remaining institutional divisions, and lack of explicit prudential and conduct-of-business oriented regulation.

The Financial Crisis

[6] Slattery, 2009

The United Kingdom's experience with the financial crisis has been well documented, and is perhaps epitomized by the collapse of Northern Rock in September 2007, and its subsequent nationalization early the following year. More than any other country besides the US, the UK has suffered as a result of the financial crisis. Given London's status as a global financial center it was to be expected that the UK would face problems in the global crisis, but it is surprising that the extensive regulatory reforms undertaken in the late 1990s did not better insulate the country from the effects of the financial crisis.

To date, the UK has spent approximately $740 billion on capital injections and debt guarantees for the country's largest banks, including the Royal Bank of Scotland (RBS), Barclays, HSBC and Lloyds, and in June 2009 was considering additional measures to keep its banking system afloat and to facilitate lending. Northern Rock had prospered moderately by taking consumer deposits and making mortgage loans. It decided to expand its mortgage business by using very short term borrowing, often overnight borrowing that had to be constantly rolled over. For awhile this worked well, because they could borrow easily at only a few basis points above the LIBOR. When the liquidity crisis hit they could not roll over their debt except at very high interest rates, and they became insolvent. Other UK banks were hard hit due to their holdings in problematic securitized mortgage products from the US; in addition, mortgages made to UK borrowers moved into defaults as UK housing prices crashed. And some UK banks were just as leveraged, if not more so, as their US counterparts. In June 2008 Barclays had a capital ratio of 61:1, while HSBC's was 20:1 and RBS' was 19:1.[7]

The UK had its own housing crisis. In the UK less than 3% of residential mortgages fell into the combined category of subprime and Alt-A, but housing prices rose by as much as 90% between 2002 and 2007, and have since fallen back by around 20% from their peak.[8] Much of the growth was due to an increase in the issuance of buy-to-let mortgages. These mortgages, used to finance investment properties which

[7] Barr, 2008
[8] Nationwide Building Society, 2009

are usually rented out, jumped from only 1% of issued mortgages in 1990 to nearly 10% in 2006.[9] And many of the UK's non-conforming loans – both subprime and Alt-A combined – were more than 90 days delinquent by early 2009, resulting in increased home repossessions. The delinquency rate of 30% in the UK even exceeded that of US, which stood at only 27%.[10]

The UK Regulatory Structure in More Detail

The UK has a single regulator for all financial institutions, including banks. The Bank of England retains no regulatory authority, and instead is responsible for monetary policy and maintaining market stability.

In 1997 with the victory of Tony Blair's Labour Party, the UK overhauled its financial regulatory system, combining a myriad of independent regulatory authorities (including the Bank of England, the Securities Investment Board, and the Securities Futures Board, among nine total) into a single entity; the Financial Services Authority (FSA). The decision to make this radical shift in regulatory approach was pushed by then Chancellor of the Exchequer Gordon Brown who argued, with some merit, that the distinctions between banks, securities firms and insurance companies had broken down, and that in this new era of more fluid and interchangeable institutional definitions, the old regulatory divisions no longer made sense. The FSA's statutory objectives are to maintain market confidence, to promote public awareness on financial matters, to protect consumers, and to reduce financial crime. To achieve those ends, the FSA employs broad investigatory, enforcement and prosecutorial powers.

With the FSA overseeing all types of financial regulation, the Bank of England was still responsible for maintaining market stability, and the HM Treasury maintained responsibility for financial and economic policy and the institutional structure of the overall financial system. These three institutions form the Tripartite Authorities. They employ a memorandum of understanding which delineates their respective

[9] Council of Mortgage Lenders, 2007
[10] Glover, 2009

roles in the financial system, and in particular what occurs during a financial crisis. The memorandum specifically states that during a crisis the FSA is responsible for "the conduct of operations in response to problem cases affecting firms, markets and clearing and settlements systems" and can change "capital or other regulatory requirements and [facilitate] a market solution involving, for example, an introduction of new capital into a troubled firm by one or more third parties."[11]

Although the external structure of regulation in the UK may appear simple enough, there is a great deal of internal complexity. There are two main branches within the FSA; one branch which deals with retail markets, and another branch which focuses on wholesale and institutional markets. Within each branch, there are further divisions based on specific financial activities and institutional design, including insurance, banking and mortgages, asset management, and credit unions. There also exist some internal groups which look at specific financial activities in each the retail and wholesale sectors. Therefore, the internal organization is not structured around the idea of having one sector focused on prudential objectives and another focused on business conduct objectives. So, even within the FSA itself, the UK has not moved in the direction of a twin peaks approach and instead has preserved some of its older agency divisions, albeit under a new umbrella.

Nevertheless, the UK FSA has made progress in adopting a principles-based regulatory policy. That is, desirable regulatory outcomes, rather than detailed rules and requirements, are laid out by the FSA. This allows firms subject to regulation to determine the most cost-effective means of satisfying those outcomes, as opposed to becoming mired in satisfying individual rules that may leave open loopholes which confuse desired outcomes. Currently the details of the desired outcomes are somewhat lacking in clarity and specificity, but the FSA has claimed to be aware of this shortcoming and is taking steps to address the issue.

Commentary on the UK Regulatory Structure

[11] Pan, 2009

The UK example raises important questions about the effectiveness of the integrated approach. Most notably, the UK experience raises the question of how a financial giant such as Northern Rock could fail under the watch of the FSA. In fact the FSA has admitted on its own to significant failings over Northern Rock. An internal FSA report cited inadequate resources devoted to overseeing the institution, including high personnel turnover and limited direct contact with the institution (no one had visited the bank for three years), and a failure to push management at the bank to modify an eventually disastrous business model.[12] The FSA's internal failings, exemplified by those related to Northern Rock, have put the regulatory agency in the line of fire for a great deal of criticism. This criticism focuses on the haste with which the FSA was formed, and the failure of the new integrated regulator to fully overcome the old institutional divisions of its former approach to regulation.

The announcement of the consolidation of the panoply of regulatory agencies into the FSA came just nineteen days after Blair's Labour government assumed power in 1997, leading some to believe that there was not an adequate timeframe to discuss the merits of the consolidation, and how to achieve regulatory goals effectively through reform. Additionally, the consolidation came as a surprise, given that the Labour Party rhetoric up to that moment had indicated a preference for small changes and slight reform, and nothing as dramatic as the abolishment of nine regulatory agencies and the creation of an entirely new entity.

Although Brown's rationale for such a move – citing the continued breakdown in distinctions between various types of financial institutions – made sense, there was little public or private debate about alternatives to the single regulator that might also have dealt with the changing nature of financial institutions and their activities. The resulting structure of the FSA, in part a product of its relatively hasty design, has led to a second important criticism; that it remains overly complex and unnecessarily preserves antiquated regulatory approaches. It is not entirely clear that the creation of a single regulatory authority has actually decreased divisions in how financial entities in the UK are regulated. The internal divisions of the FSA resemble remarkably the inter-agency divisions that used to exist, and

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[12] Hughes, 2008

those internal divisions are numerous and complicated. In fact, it was not until early 2009 that the UK FSA unveiled regulatory reforms which would fully ensure that financial institutions experience regulation based on the nature of their activities, as opposed to the nature of their legal status.

Additionally, the main division within the FSA between retail markets and wholesale markets could be interpreted as signifying the necessity of a different level of regulatory protection for retail investors as opposed to institutional investors [13]. Using this division as opposed to the more widely propounded division between prudential and business conduct regulation does not appear to have provided the FSA with any particular advantage in effectiveness, and may be costing it in efficiency.

The UK is the largest economy so far to have implemented a principles-based approach to regulatory policy. The UK adopted this approach in large part to make London an attractive place for financial companies to do business. It was competing against New York, to perhaps attract those firms or lines of business that had run afoul of the rules-based approach in the US or elsewhere. Yet a principles-based approach does leave institutions with more of the burden and risk of determining what counts as appropriate action towards achieving desired outcomes. And critics have also argued that, even with a principles-based approach, the UK has an extensive list of financial rules which may offer little reprieve to institutions looking to operate in a more flexible regulatory structure.

Australia

Overview of the Australian Regulatory Structure

- Financial regulation conforms to a twin peaks approach.
- The Australian Prudential Regulatory Authority (APRA) is responsible for prudential regulation while the Australian Securities and Investment Commission (ASIC) oversees conduct-of-business regulation

[13] Pan, 2009

- A cross-agency commission seeks to resolve conflicts of overlap and facilitate communication between the two agencies

The Financial Crisis in Australia

The Australian economy weathered the financial crisis better than many other developed countries, and its experience is somewhat on par with Canada. Australia owes much of its better-than-average performance during the financial crisis to sound policy choices and the effectiveness of its financial regulation.

While many banks in countries located outside the US invested heavily in US securities backed by troublesome mortgages, Australian banks had only limited exposure. During the years preceding the onset of the crisis, Australian banks tended to focus on domestic lending opportunities rather than looking oversees for new investments. In addition, Australia was not in the midst of a housing boom and was not plagued by debt-ridden consumers attempting to buy mortgages that they could not reasonably afford. Australia's housing boom had occurred in the early 2000s, and by 2003 prices, though rising, were increasing at a similar pace to real earnings.[14] Furthermore, an excess supply of housing did not develop, eliminating any substantial downward pressure on prices after the crisis had hit.

There was also not the same erosion in lending standards as had occurred in the US. This was in part due to stricter regulation of mortgage lending. Australia's prudential regulator had raised capital requirements for banks investing in riskier mortgage products.[15] Consumer protection laws and foreclosure laws also discouraged borrowers from taking out mortgages that they could not afford. Finally, Australian tax law encourages early loan repayment and provides a means of precautionary saving, thus buffering against lost equity.

[14] Ellis, 2009
[15] Ellis, 2009

Despite these many differences, Australia was not entirely immune to the global downturn. After Lehman's collapse, Australia's bank share prices fell dramatically, although such drops were never as substantial in magnitude as in the US. And while the US banks' share prices continued to fall sharply through the end of the year 2008, Australia banks' share prices bottomed out and began to climb back to within 70% of their original value by the middle of 2009.[16] Despite some exposure to US mortgage backed securities, no Australian bank has been in danger of a dramatic collapse like that of Lehman Brothers or Northern Rock.

The Australian Regulatory Structure in More Detail

The Australian regulatory system is based on a twin peaks approach with one regulator which oversees prudential regulation, and another which oversees conduct-of-business regulation. The Reserve Bank of Australia retains authority over monetary policy and market stability, but employs no regulatory authority.

Until 1998 Australian financial regulation resided with the country's Central Bank and took an institutional approach. Following a review of the country's overall financial system, a twin peaks approach was put into place, creating the Australian Prudential Regulatory Authority (APRA) as the prudential regulator, and the Australian Securities and Investment Commission (ASIC) as the conduct-of-business regulator. The APRA's purview is deposit institutions, insurance companies and retirement funds. The APRA functions primarily as a supervisory agency, and promotes stability, efficiency and competitiveness in financial markets by measuring and managing various risks in financial services firms' business, such as capital adequacy requirements. As in the UK, the APRA's regulation is a largely principles-based approach, relying heavily on dialogue between the regulators and the regulated institutions.

The ASIC oversees securities market and financial services providers. ASIC has the power to impose criminal or civil sanctions against financial firms or individuals. As a corporate regulator, ASIC oversees

[16] Ellis, 2009

company directors and officers, capital raising, takeovers, financial reporting, etc. It also provides licensing and monitoring for financial services firms. In addition, ASIC has been tasked to protect consumers against misleading or deceptive conduct related to financial products and services.

To resolve any conflicts between the two agencies, there exists a joint working group which exists to facilitate information-sharing and to resolve issues where jurisdictions appear to overlap.

Commentary on the Australian Regulatory Structure

Most commentary on the Australian regulatory approach is positive in nature, though lacking in concrete specifics. The approach is often cited as a model for other countries, such as the US, (see the Paulson Treasury's blueprint). Of course, while Australia's financial system has performed comparatively well during the financial crisis, it would be imprudent to attribute the entirety of this performance to sound regulation. Doubtless, Australia's regulatory authorities have played an important role, but as described previously, there were a number of other factors that contributed to Australia's ability to weather the crisis.

One aspect of the Australian regulatory approach that could serve as a model to other countries considering reform is the process by which it arrived at reform. Where the road to reform in the UK was hasty and lacked adequate consideration, the Australian reform process was more akin to that of Canada. The Wallis Inquiry began in 1996 to review how financial system reform could be structured in Australia. The inquiry looked specifically at how prior attempts at deregulation had affected the Australian financial system, what forces were at work changing the system further, and what would provide the most efficient, effective and competitive regulatory structure for the country going forward. Based on the inquiry's recommendations, a number of agencies were reorganized and combined to form the APRA and the ASIC.

A Bullet-Point Summary of Other Countries

France

- Financial regulation conforms to the functional approach with some elements of a twin peaks model.
- The French regulatory system was reformed as recently as 2003, but it still has more regulatory bodies than comparable countries that have just as recently undertaken reform, such as the UK and Germany (see below).
- Prudential supervision of banks and investment firms remains with the Bank Commission under the Bank of France, which was unwilling to relinquish this duty after already giving monetary authority to the EU Central Bank.
- The Financial Markets Authority (AMF) undertakes conduct-of-business responsibilities, safeguarding investments in financial products, keeping order in the financial markets, and ensuring accurate dissemination of financial information to investors.
- The Committee of Credit Institutions and Investment Firms (CECEI) under the Bank of France regulates credit institutions and investment firms, the Financial Markets Authority (AMF) oversees the smooth functioning of financial markets and seeks to protect small investors, and the Insurance and Mutual Societies Supervisory Authority (ACAM) oversees insurance activities.
- A board exists to coordinate between the various agencies, but it lacks formal powers.
- The French financial system, part of one of the largest EU economies, and home to numerous globally integrated institutions, has been hard hit by the financial crisis.
- The French government has invested in two separate bank bailout plans, worth nearly $30 billion, to facilitate increased lending and to relieve banks of toxic debt obligations, in addition to hundreds of billions more in guarantees.[17]
- Housing prices fell 7-8% in 2008 from their peak in 2007, and are expected to drop by as much as 15% through 2009, while real estate transactions slowed by more than 25% in 2008, and real estate firms have registered an increase in bankruptcies of nearly 30%.[18]

[17] EU Business, 2009

- France has been at increasing odds with countries such as the UK and US over its desire create dramatically tougher and more universal financial regulation standards, believing that the problems experienced in the French economy were the result of contagion which originated out of lax regulation in financial hubs such as New York and London.

Germany

- Financial regulation follows an integrated approach under the Federal Financial Supervisory Authority (BaFin).
- Prior to 2002 Germany operated under an institutional approach where there existed separate regulators for banking, securities and insurance.
- BaFin oversees banking, securities and insurance, and its internal structure is still segmented along this institutional approach, and has not been transformed into anything resembling twin peaks.
- The Bundesbank does retain some oversight over banking, and as defined by a memorandum of understanding with BaFin, this oversight mostly amounts to operational tasks in banking supervision and crisis management.
- Some insurance regulation as well as supervision of stock exchanges is carried out by the individual states.
- Overall the German system invites many of the same criticisms registered against the UK FSA – that the integrated regulator is merely a new hat for out-dated approaches to regulation, and that the reform process did not tackle fundamental problems in the regulatory system.
- There is even physical separation in where the BaFin's insurance and securities operations are located, in Bonn and Frankfurt respectively.

[18] Matlack, 2008

- Like France and Spain, Germany has been hard hit by the financial crisis, and has spent around $670 billion in capital injections and loan guarantees to shore up its banking sector, along with hundreds of billions of further funding to purchase troubled assets.
- German state-owned banks have been especially hard hit, given that their ability to make profits is often predicated on making very high risk investments, which has left state and municipal authorities to clean up the messes with taxpayer funds to prevent any bank collapses.

Hong Kong (HK)

- Financial regulation conforms to an institutional approach, with some functional elements.
- Regulatory structure is considered just as fragmented and convoluted as the US, owing to a rather ad hoc/trial and error-type development process over many years.
- The Hong Kong Monetary Authority (Central Bank) retains a prudential supervisory role for banks.
- Other financial regulatory agencies include the Securities and Futures Commission (SFC), the Office of the Commissioner of Insurance (OCI), and the Mandatory Provident Fund Schemes Authority (MPFA).
- Many of these institutions date from the early 1990s and helped to facilitate HK's transfer from the UK to China, though the MPFA dates from 2000.
- HK's economy has suffered during the financial crisis, though neither its financial institutions nor its housing sector have seen the same severity of problems as in the US or Europe.
- HK has experienced slowdowns in the residential property market beginning in the second part of 2008, with prices and rental rates falling by 18% and 19% from their peaks the previous year.[19]

[19] Zhang and Wong, 2009

- HK's stock market, the Heng Seng, also lost nearly 50% of its value in 2008 over the previous year.[20]

Japan

- Financial regulation conforms to an integrated approach under the Financial Supervisory Agency (FSAI).
- The transition to an integrated approach occurred in the late 1990s as a reaction to weaknesses in the Ministry of Finance and concern that regulation had become politicized.
- Of note, Japan always had a single regulator, but the creation of the FSAI merely severed the links between regulation and politics that had existed previously under the Ministry of Finance.
- The integration coincided with a shift in regulatory tactics from those which emphasized limiting entry to the market and restricting available financial products and services, to those which emphasize liberal market entry, enhanced transparency and investor protection rules.
- The transition to an integrated approach occurred over a couple of years before it was made more concrete, allowing for some experimentation with different approaches.
- When government intervention in a troubled institution is required, the Financial System Management Council (FSMC) is triggered to oversee crisis management as quickly and efficiently as possible.
- Members of the FSMC include the Prime Minister, Chief Cabinet Secretary, Minister of Financial Services, Minister of Finance, Commissioner of Financial Services and Governor of the Central Bank.
- Japan's financial system has not been as hard hit by the financial crisis owing to a relatively underdeveloped mortgage-backed securities market, and a less pronounced housing boom.
- However, the economy as a whole has been stagnant for most of the past decade, leading the current financial crisis to compound many economy-wide problems.

[20] Zhang and Wong, 2009

- As of late 2008 only 0.4% of Japanese MBSs had been downgraded or defaulted compared to a worldwide average of 7.4%.[21]

Netherlands

- The financial regulatory structure in the Netherlands adheres most closely to a twin peaks approach.
- The De Nederlandsche Bank (DNB), the Dutch Central Bank, takes responsibility for prudential regulation and systemic stability.
- The Netherlands Authority for Financial Markets (AFM) acts as the conduct-of-business regulator.
- Reform was undertaken in the late 1990s, with the reform process fully complete by 2007.
- Prior to the twin peaks approach, an institution approach was in effect, overseen by the DNB, the Securities Board (STE) and the Pension and Insurance Supervisor (PVK).
- The move to the twin peaks approach was the result of consolidation of Dutch financial institutions previously engaged in diverse operations, and developments in cross-sector financial products.

Spain

- Financial regulation in Spain is currently a hybrid of the functional approach and the twin peaks approach as the reform process brings the country from the former to the latter.
- Three prudential regulators currently exist for banks, investment firms and insurance companies: the Bank of Spain (BDE), the National Securities and Exchange Commission (CNMV), and the General Directorate of Insurance and Pension Funds (DGSFP).
- The CNMV also maintains conduct-of-business responsibility.
- Spanish regional governments also retain some regulatory authority over financial intermediaries domiciled in their territory.

[21] Nomura, 2008

- With the largest property boom in the EU during the early 2000s, it comes as no surprise that Spain was hit hard by the housing bubble bursting and the financial crisis.
- While many countries have been hit by the failure of securities backed by securities rooted in the US housing market, much of Spain's trouble has been caused by the non-performance of loans that its own banks have made for properties within the country's borders.
- Housing prices have fallen by as much as 10% between the same quarter of 2008 and 2009, on top of addition declines from 2007 to 2008.
- The Spanish government pledged about $12.5 billion in capital to shore up troubled banks in 2009, as non-performing loans have crept above 4% of total loans on bank balance sheets.[22]

Switzerland

- On January 1, 2009, Switzerland became the newest country to adopt an integrated approach.
- The Federal banking Commission, the Federal Office of Private Insurance and the Anti-Money Laundering Control Authority were merged into the Federal Financial Markets Supervisory Authority (FINMA).
- The previous regulatory structure was functional in approach.
- It's too early to know how the new integrated regulator will operate, or what its finalized structure will be.
- Switzerland has suffered severe disruption as a result of the crisis, with large losses at UBS and smaller losses at Credit Suisse. The New York operations of UBS played heavily in the CDO market and suffered very large losses when that market collapsed.
- When their large banks faced financial difficulties, the Swiss were in danger of mass withdrawals from accounts held by foreigners in their banks. Like Ireland and Iceland, the banks were bigger than the resources of the country. With assistance from the European Central Bank and the Federal Reserve, the Swiss central bank was able to weather the storm and restore confidence in its banks.

[22] Bjork, 2009

- Going forward, the Swiss are trying to figure out how to operate as a major financial center in a small country.

Summary and Conclusions

The most important factor in determining the response of the different systems to the crisis is whether or not regulators were actively involved in making sure that their institutions, especially large institutions, were not taking excessive risks and speculating in risky assets. The particular designs of the regulatory systems do not show a clear enough pattern to make a definitive case for one specific approach. However, all of the countries described here undertook programs of regulatory consolidation in recent years in response to the changing nature of their financial sectors. Having a fragmented regulatory system did not strike any country as a particularly good idea, especially as financial institutions constantly moved across the traditional boundaries and between different financial activities.

Some of the desirable characteristics for regulatory systems that this cross-country comparison has suggested to us are:

- A twin peaks system with a high level of communication between the two agencies and with the central bank.
- Genuine consolidation as opposed to the tactic of lumping separate regulators together without creating unified agencies.
- Time and care given to the regulatory reform and to the execution of the plan.

- The regulators had the authority and capabilities to control excessive risk taking, and protect taxpayers and the system from abuse.

In its blueprint for reform, the Paulson Treasury pointed to the Australian regulatory system as one that had many strong characteristics and our summary supports that view. Australia does not have a major financial hub and cannot provide a direct model for the United States, but the overall regulatory structure created in Australia and the care given to its implementation are strengths we should emulate.

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