WP/07/173

IMF Working Paper

The Case for a European Banking Charter

Martin Čihák and Jörg Decressin

INTERNATIONAL MONETARY FUND

 WP/07/173

IMF Working Paper

European Department

The Case for a European Banking Charter

Prepared by Martin Čihák and Jörg Decressin[1]

Authorized for distribution by Michael Deppler

July 2007

Abstract

Most financial institutions in the European Union (EU) are still based in one country, but a number of large financial institutions (LCFI) have systemic cross-border exposures. The paper explains how, despite much progress, nationally-segmented supervisory frameworks and national accountability for financial stability hinder optimization across borders of banks' operations and efficient and effective LCFI supervision. A full-fledged EU-level prudential regime that operates along-side national regimes—a European Banking Charter (EBC)—could harness market forces to establish a level playing field for financial sector competition, while plugging some significant gaps in Europe's financial stability framework without concentrating excessive powers.

JEL Classification Numbers: G21, G28

Keywords: European Union, Financial System, Financial Stability, Banking Charter

Authors' E-Mail Addresses: mcihak@imf.org, jdecressin@imf.org

---

[1] We would like thank, without implicating, Wim Fonteyne, Daniel Hardy, Nico Valckx, Jan-Willem van der Vossen, Steven Seelig, and participants of a seminar at the IMF and informal seminars at the DG-ECFIN and at the Dutch Ministry of Finance for many useful comments and discussions. All remaining errors are our own.

Contents Page

I. Introduction

This paper explains how establishing a specific EU-level prudential regime—a European Banking Charter (EBC)—could foster European financial integration and stability. Much work is underway to achieve this, notably in the context of the EU Financial Services Action Plan (EU FSAP) and the Lamfalussy framework.[2] The charter is an alternative route that could be pursued and, like national charters, would come with a full-fledged EU-wide prudential framework. All banks would be free to choose under which charter and supporting prudential framework—EBC or national—to operate, affording market forces a greater role in balancing EU-wide against national regulation and supervision.

The charter could achieve a prudential level playing field for European banks, while helping to remedy more rapidly problems presented by the national segmentation of Europe's financial stability framework. This segmentation stands in the way of better supervision and optimization across borders of banks' operations. The EBC therefore aims at leveling the playing field for cross-border banking business—which is essential to boost competition and productivity in Europe's financial services sector[3]—and improving the cross-border supervision of large, complex cross-border financial institutions (LCFI).[4]

The key point is that creating an EU-level prudential regime need not imply taking a one-size-fits-all approach and creating a single European regulator/supervisor. The need for a streamlined and harmonized EU-level prudential regime is most urgent for those financial institutions that have cross-border ambitions, notably the LCFI, not for the vast majority of Europe's 8,000 banks that cater mainly to national markets. This raises two considerations:

- First, it is difficult for policymakers to determine exactly how much prudential convergence is required and what prudential issues are the most critical to quickly level the playing field for banking business. Financial markets are extremely complex and thus the "marginal product" of regulatory action is very difficult to assess. Prudential convergence therefore becomes, to some extent, a lengthy process of trial and error. The EBC directly involves market players in establishing the right mixture of centralized versus decentralized prudential policies and practices and therefore reduces the potential for errors along a key dimension of the integration process.

---

[2] For details, see http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm and http://ec.europa.eu/internal_market/securities/lamfalussy/index_en.htm.

[3] Empirical estimates suggest that about a half of the productivity growth gap between the United States and the Euro Area in 1995–2005 can be traced to the financial sector (excluding insurance) (IMF, 2006).

[4] Some of the literature uses the abbreviation LCFIs for all large complex financial institutions. In this paper, we focus on those large and complex institutions that also have a substantial presence in more than one country.

- Second, a harmonized EU-level prudential regime is crucial to improving the supervision of LCFIs, which are rapidly changing the banking landscape in Europe. Introducing an EBC would allow faster progress on this front, complementing national banking charters with an alternative that is tailored to these LCFIs. To that effect, the EBC's supporting EU-wide prudential (regulatory and supervisory) framework would have to build on *joint responsibility and joint accountability* of *national* prudential authorities. This would ensure that national supervisors would pay due attention to the external spillovers of their domestic actions on cross-border EBC banks, which can be very large, particularly in crisis situations.

More fundamentally, the single prudential framework is essential to overcome the basic dilemma facing national policymakers between allowing cross-border market integration while retaining accountability for national financial stability.[5] This is a specific challenge for the EU for two reasons. First, under the EU's supervisory set-up foreign branches of banking groups are subject to home rather than host-country supervision. These branches can be of systemic importance in host countries, leaving host-country financial stability exposed to home-country actions.[6] Second, the EU's aim is to create a single financial market, which entails allowing financial institutions to structure their business freely, without regard to national borders.

Building on previous IMF work on Europe's financial stability framework (e.g., Decressin, Faruqee, and Fonteyne, 2007; Čihák and Tieman, 2006), the paper identifies the problems with the existing financial stability framework, and discusses the major principles of the proposed charter. The structure of the paper is as follows. Section II overviews the European financial system and the existing framework, and outlines the fundamental problems. Section III spells out the European Banking Charter, presenting its features and attractions. It also discusses implementation issues relating to the charter, as well as the charter's alternatives. Section IV concludes.

---

[5] The focus here is on banks, but the EBC can be extended to apply also to financial conglomerates. Throughout the paper, we refer to banking for simplicity, because banks dominate the European financial sector, and it is banking supervision where most of the policy discussion has concentrated so far. However, the arguments apply to various extents also to non-bank financial institutions. Given the presence of financial conglomerates in Europe, it may be useful to extend to coverage of the charter accordingly, into a *European Financial Institutions Charter* (incidentally, in Canada, there are federal and provincial financial institutions charters). Nonetheless, for simplicity of exposition, the focus here is on banking.

[6] The issue is similar with respect to host-country subsidiaries of groups with home-country centralized treasury and risk management. Some supervisors are therefore arguing that independently operating subsidiaries must have adequate core functions and not be "quasi" branches with limited or no core functions (e.g., see Bednarski and Bielicki, 2006).

II. The Current Financial System and Framework

A. The European Financial System

The vast majority of Europe's approximately 8,000 banks are mainly doing national business and are likely to continue to do so over the foreseeable future. For retail (customer) business, the cross-border component does not exceed 5 percent and has not shown any marked increase over time (see, e.g., Dierick, Freund, and Valckx, 2007). As a result, banking is still the least "Europeanized" sector of the economy according to some measures (Véron, 2006). This partly reflects the continued importance of proximity to the customer and of local market knowledge as well as other factors, but can also be attributed to the fragmentation of the European regulatory framework.

Nonetheless, large cross-border banks are emerging in Europe, and have a substantial market share. European banking integration is gaining momentum in terms of cross-border flows, market share of foreign banks in several domestic markets, and cross-border mergers and acquisitions of significant size (e.g., Schoenmaker and Oosterloo, 2005; and Dermine, 2005). There is a rapidly growing number of LCFI that engage significantly in cross-border business. The bulk of this business is in wholesale markets, which are now relatively well-integrated, notably interbank and corporate bond markets (in contrast, there is considerable scope for further integration in equity, securitization markets, and arms-length financing). A mapping exercise of EU banking groups with significant cross-border activity carried out by the Banking Supervision Committee of the European System of Central Banks revealed that some 46 LCFIs hold about 68 percent of EU banking assets; of these, 16 key cross-border players account for about one third of EU banking assets, hold an average of 38 percent of their EU banking assets outside their home countries, and operate in just under half of the other EU countries (Trichet, 2007).[7] The legal, regulatory, and supervisory framework has not been able to keep up with this rapidly growing cross-border presence, notably the centralization of treasury and risk management functions of the LCFIs.

B. What Is Already in Place?

Prudential policies and practices are partly fostering the trend toward pan-European players, partly hindering it, and, in significant ways, playing catch up with it. The Second Banking Directive of 1993 accelerated the move toward a level-playing field with respect to prudential policies and practices. To that end, it introduced home-country control and mutual recognition, resulting in a "single passport" for branching across the EU: any bank licensed in any EU country was subsequently free to open branches in other EU countries provided it met some common, minimum standards. In principle, the freedom to branch could over time lead to something akin to a "single rules book" covering prudential policies and practices,

[7] Further information on the mapping exercise can be found for example at ECB (2005, 2006).

provided that good regulatory competition is fully embraced by national authorities. For the national authorities, however, this entails a loss of control over domestic financial stability, for which they remain accountable. For financial institutions, market entry via branching is often less attractive than via establishing subsidiaries.[8] Thus, the "single rules book" and level playing field have not materialized, although considerable progress has been made.

Regulation

Regulatory convergence has been a priority. Much progress has been made through the broad common framework of financial sector directives under the EU FSAP and the work of the Lamfalussy committees (such as the Committee of European Banking Supervisors, CEBS), which focus on the development and implementation of legislation. There has been much legislative and regulatory convergence, pushed forward in particular by the 2006 Capital Requirements Directive (CRD) for banks and investment firms, the forthcoming Solvency II Directive for insurance companies, and the Markets in Financial Instruments Directive for financial markets (e.g., De Rato, 2007).

Nonetheless, the existing framework stops short of delivering a level playing field for banks across the EU. Considerable cross-country differences persist in the legal and regulatory framework for bank operation. Implementation of the EU directives has not leveled the playing field for business, mainly because of remaining national discretion. Even for the CRD, for example, there are roughly one hundred national specificities (Kager, 2006), leading some LCFIs to consider limiting the adoption of the advanced approach to their headquarters. The practice of "goldplating" by national authorities adds further national requirements over and above those allowed for under EU directives. Aside from stability concerns, the lack of convergence implies a high regulatory burden for cross-border financial institutions, which runs counter to the objective of a unified financial market.

Supervision

On the supervisory front, the framework for cooperation has been strengthened, to some extent reacting to increased merger and acquisition activity among large European banks. Memoranda of Understanding (MoUs) have become a common device for collaboration and information exchange among various regulators. At the EU level, several directives and MoUs specify a general framework for cross-border supervision and general principles for cooperation and information sharing.

However, the MoUs are rather general and by their nature nonbinding. Hence, they do not resolve fundamental tensions between supervisors that are likely to emerge in times of crisis

---

[8] Subsidiaries accounted for 56 percent of cross border presence in the EU (70 percent for the euro area) in 2005 (Dierick, Freund, and Valckx, 2007). Centralization of business functions makes the distinction between branches and subsidiaries less relevant from an operational point of view.

(see next section), do not make clear who has the final authority to make the key decisions in a stressful situation, and stop short of ensuring that all necessary information is accessible in real time to the relevant supervisors. This, to varying degrees, also holds for institution-specific MoUs (e.g., for the Nordea and Sampo groups—see Appendix I).

Crisis Management and Resolution

There has been partial progress in the area of crisis handling. The MoUs of 2003 and 2005, the CRD, and the Conglomerates Directive, have established some basic principles of crisis management, in particular with respect to information sharing during a crisis. Additionally, countries have signed financial institution-specific MoUs and several crisis-management exercises have helped establish channels of communication and provide insight into how cross-border crises could be handled within the current institutional framework. Moreover, the Winding-Up Directive has allocated responsibilities and introduced some basic principles for failing banks but left most decision-making power at the national level.

However, there are many important weaknesses. There is a lack of fully effective pre-crisis sanctions and tools in many countries, partly because of EU shareholder rights legislation (Hüpkes, 2005). As regards deposit insurance, EU law mandates that depositors in foreign branches be as well covered as home depositors. Other than that, however, there are large differences in country deposit insurance schemes. Also, many countries do not have bank-specific insolvency regimes, meaning that LCFI-crisis resolution would likely be a drawn out judicial process, where national-level decision making and LCFI cross-border business structures entail that systemic issues are unlikely to be addressed satisfactorily (Hüpkes, 2005).

C. What Are the Fundamental Problems?

The existing framework has problems with respect to rapidly increasing the contestability of national financial services markets while safeguarding their stability. Financial institutions face 27 different prudential regimes and this limits the contestability of national markets. The financial stability concerns can be summarized into several basic economic concepts. These include the external spillovers of domestic actions that are likely to arise during LCFI crises; the diverse incentives of national supervisory agencies, who are accountable only to their domestic authorities; the dispersed and asymmetric information among the supervisory bodies both at the macroeconomic (e.g., regarding the optimal response to housing market booms) and the microeconomic (e.g., concerning cross-border transfers of assets by large groups as well as cross-border business and deposit insurance) level; and the resulting collective action problems and moral hazard in the large institutions.

Level playing field issues

Despite progress, the existing framework does not deliver a level playing field for banks across the EU. Accordingly, European financial institutions have been calling for a streamlined and more coherent, consistent, and cost efficient EU prudential framework.[9] Ensuring uniform implementation of the directives by national prudential authorities is the responsibility of Level 3 (committees of supervisors) and 4 (enforcement by the Commission) of the Lamfalussy framework; however, progress on this front has been mixed.

Fundamentally, the Lamfalussy committees do not have a clear and strong mandate for action. On the one hand, they have been charged by the European Commission and European Parliament with helping design and delivering convergent prudential policies and practices. On the other hand, they are staffed with representatives from national prudential agencies that operate by consensus and are ultimately accountable to their national authorities. This makes for a slow process of integration and numerous implementation options that cater to national interests. The result is, to some extent, a collection of national rather than a single set of best prudential policies and practices. As a result, policymakers now increasingly emphasize "convergence" over "harmonization," together with mechanisms for "mediation" among national authorities. More ambitious proposals call for qualified majority voting in these committees, supported by the introduction of specific EU-related references in mission statements of the national prudential authorities (e.g., Trichet, 2007).

From theoretical perspective, the lack of level playing field can also be explained by models of public good provision by local communities (Tiebout, 1956). Using this approach, Hardy (2004) presents a model of "regulatory capture" in banking, finding that if banks are able to influence regulators to favor their interests, differences in regulatory regimes across jurisdictions are likely to persist. The reason is that captured regulators may differentiate their regulatory "product" to discriminate in favor of the dominant incumbent institutions. The reasons why regulators can become fully or partly captured include budget constraints and managerial and bureaucratic interests (as discussed in detail, e.g., by Kane, 2001).[10]

Cross-border financial stability issues

The need for more EU-wide intervention is also justified by the potential for market failures associated with the presence of LCFI. While a cross-border LCFI crisis may have a low probability, the need for effective coordinated arrangements to deal with it is pressing

[9] See, for example, European Financial Services Round Table, July 28, 2006, letter to EC President Barroso, EU finance ministers, Lamfalussy bodies, and others at www.efr.be.

[10] For example, some supervisory agencies have their income tied to the asset size of the locally incorporated financial institutions that they supervise (meaning that, e.g., a switch of a foreign bank subsidiary into a branch may have an impact on the supervisory income). In some cases, industry representatives have an even more direct say on the determination of the income side of the supervisory budget.

because, in their absence, the costs may be very large.[11] LCFI can be "too large to fail" and also "too large to save," because they are too big relative to the home country's resources (e.g., Dermine, 2005). The costs of such failures are likely to be spread over a number of countries. Moreover, LCFI failures have a high potential for negative externalities (e.g., a payment system gridlock or liquidity crunch). Also, LCFIs are intertwined through their operations in capital markets, so a failure in an LCFI can trigger a domino effect of failures in other LCFIs, threatening financial stability as an important public good (Crockett, 1997).

Even if a country could bring up the necessary resources, it may not be willing or politically able to make massive cross-border transfers to the benefit of foreign depositors (Goodhart and Schoenmaker, 2006). With the home country unable or unwilling to save such a bank as a whole in case of insolvency, host countries would have to decide whether they want to bail out the bank's local operations, thus bearing the cost of decisions made by the home country authorities in the run-up to and the handling of the insolvency.[12] LCFI host country activities may not seem worthy to save to home country authorities although they are of systemic proportions for the host country.

Information about systemic financial groups is dispersed over a large number of national agencies. Rapid access to full information is key for first best crisis prevention, management, and resolution. However, supervisors often do not have access to the same set of information. In a consolidated or lead supervision system, information about the systemic financial groups is dispersed over the different consolidating supervisors. As a result, no supervisory (or other) authority has a full overview of systemic risks across groups.[13] Moreover, different supervisors can apply different methodologies, leading to inconsistencies in supervision between groups located in the same single financial market.

The various national regulators have different objectives; these divergences in incentives would come to the fore when problems emerge. The national regulators are accountable to national legislators and thus are likely to look for solutions that are preferable from a national perspective (specifically, those that lower costs to the country's taxpayers). The lack of

---

[11] There have been several notable cases of past bank failures with cross-border dimensions that have provided lessons for policymakers (e.g., Herstatt Bank, BCCI, and Barings—see IMF, 2007), but financial systems and policymakers have not yet been tested by a full-blown crisis involving a significant cross-border LCFI.

[12] Moreover, if host country authorities were to seek to salvage the local operations of a branch of an insolvent foreign bank, they would be hamstrung by existing restrictions on ring-fencing of branches and by the Winding-Up Directive's approach, which puts all assets and liabilities of a bank and its EU branches in one estate managed by the home country receiver and subject to equality of treatment.

[13] Some useful real-time information about systemic risk can be obtained from prices of securities issued by LCFIs. However, even if all LCFIs had securities traded in very liquid markets (which is not always the case), this information is still very noisy and it can be only as good as the information that is available to the market participants (which is still relatively limited compared to the information usually available to supervisors).

common cross-border resolution and liquidation procedures and decision-making gives national authorities incentives to maximize the assets and minimize the liabilities a troubled bank holds in their jurisdiction. This means that home country authorities will want to centralize assets, while host country authorities will want to ring fence assets. Hence, a resolution process would likely result in a "chaotic scramble for assets" (Herring, 2002).

Microeconomic theory (specifically, the literature on mechanism design) suggests that collective action failures are very likely to arise, particularly in crisis situations when the financial stakes are high. The tensions arising from each national authority acting in isolation without taking into account the impact of its actions on other authorities across its borders have sometimes been compared to the game theory's well-known "prisoner's dilemma" (see, e.g., Dierick, Freund, and Valckx, 2007). However, the standard prisoner's dilemma assumes complete information (the only remaining issue being coordination—something that turns out possible in repeated games), while in the case of supervision, private information of the individual players (supervisors, banks, and their counterparts) is at the core of the issue. The mechanism design literature (Green and Laffont, 1979) studied this class of problems. The literature's conclusions suggest that for a group of national supervisors acting in their own "self-interest" (i.e., in line with their nationally-based accountability) in an LCFI crisis-type setting, no collective choice function exists that would be implementable in dominant strategies and ex-post efficient (Box 1). Concretely, in a crisis situation the dominant strategy for each country's supervisory agency is not to share information with the other supervisors (notwithstanding any MOUs), and to use its information advantages to minimize the loss to its country's treasury.[14] With the optimal collective solution likely depending on full information, these dominant strategies are not ex-post Pareto optimal, i.e., at least one player loses unnecessarily. The approaches followed to deal with this dilemma in the EU (e.g., signing of nonbinding MOUs on information sharing, pledges of more cooperation, and a further harmonization of the regulatory and supervisory framework) do not address this underlying problem. What is needed is joint responsibility and accountability of national supervisors, rather than "self-interested" behavior driven by national accountability.

[14] In theory, this problem may be less acute in an infinitely repeated game setting when players discount the future to a sufficiently small degree (see explanation of folk theorem, e.g., in Mas-Collel, Whinston, and Green, 1995). Financial crises, however, are no infinitely repeated games nor, judging by their actions, do policymakers have horizons suggesting that they have small discount rates.

Box 1. Impossibility of Implementing Ex-Post Efficient Dominant Strategies

An important feature of settings in which *collective* decisions must be made is that individuals' preferences are not publicly observable. As a result, individuals must be relied upon to reveal this information. How this information can be elicited, and the extent to which the information revelation problem constrains the ways in which *collective* decisions can respond to individual preferences, is known as the *mechanism design problem* (e.g., Mas-Collel, Whinston, and Green, 1995). This problem is a fitting description of the cross-border financial supervision framework: a number of diverse agents (the national supervisory agencies, supervised entities, and their counterparts) are involved, all with private information and preferences that are generally not known to the other agents. To illustrate the resulting problems, limit the setting to *I national supervisors*, indexed by $i=1, ..., I$. They must address a cross-border financial crisis by collectively choosing from a set X of possible resolutions a specific resolution x. Prior to the choice, however, each supervisor i privately gathers an information signal, θ_i (drawn from a prior distribution), that determines his ranking of possible resolutions. The set of possible rankings of resolutions for supervisor i is denoted Θ_i. Each supervisor i is assumed to maximize expected utility, with a Bernoulli utility function $u_i(x, \theta_i)$. The ordinal preference relation over the various resolutions x in X associated with utility function $u_i(x, \theta_i)$ is denoted $\succ_i (\theta_i)$. Supervisor i's set of possible preference relations over X is therefore given by

$$\Re_i = \{\succ_i : \succ_i = \succ_i (\theta_i) \quad for\ some\ \theta_i \in \Theta_i\},$$

i.e., his preference ordering over alternative resolutions x is a function of the information signal θ_i. Furthermore, assume that the optimal collective decision depends on the full information set $\theta= (\theta_1, ..., \theta_I,)$ because of the likely cross-border spillovers of domestic actions in a financial crisis. To capture this dependence, the literature introduces the notion of a collective choice function, defined as a function f: $\Theta_1 \times ... \times \Theta_I \rightarrow X$ that, for each possible profile of the supervisors' information signals $(\theta_1, ..., \theta_I,)$, assigns a collective choice $f(\theta_1,...,\theta_I) \in X$, henceforth f(.).A desirable feature of the collective choice function is ex-post efficiency, defined as a situation when for no set of information signals $\theta= (\theta_1, ..., \theta_I,)$ there is an $x \in X$ such that $u_i(x, \theta_i) \geq u_i(f(\theta), \theta_i)$ for every i, and $u_i(x, \theta_i) > u_i(f(\theta), \theta_i)$ for some i: in other words, no x exists that makes one supervisor better off without making someone else worse off. Another desirable feature is dominant strategy implementation: if a mechanism implements f(.) in dominant strategies, we can be fairly confident that a rational supervisor who has a (weakly) dominant strategy will indeed play it. This implementation will be robust even if supervisors have incorrect, and even contradictory, beliefs about the distribution of information signal realizations.

Unfortunately, in many cases, including a cross-border financial crisis, it is impossible to implement ex post efficient collective choice functions in dominant strategies. If the set of possible information signals is sufficiently rich (which is the case in major cross-border bank failures), then no collective choice function that is implementable in dominant strategies is also ex post efficient (Green and Laffont, 1979, provide a proof). Specifically, a resolution alternative is now a vector $x=(k, t_1,..,t_I)$, where k denotes the resolution choice out of the set K and t_i monetary transfers between national economies. Suppose that for each supervisor i = 1, ..., I, $\{v_i(\cdot,\theta_i) : \theta_i \in \Theta_i\} = \upsilon$, that is, every possible valuation function from K to $\Re$ arises for some $\theta_i \in \Theta_i$. In other words, each supervisor is likely to see many possible resolutions to a crisis and, depending on his private information signal θ_i, orders and values these resolutions differently based on their expected costs to the national economy. Even allowing for monetary transfers among the supervisors' national economies, there is no collective choice function $f(\cdot) = (k^*(\cdot), t_1(\cdot),...,t_I(\cdot))$, where k^* denotes a function that for all $\theta_i \in \Theta_i$ satisfies $\sum_{i=1}^{I} v_i(k(\theta),\theta_i) \geq \sum_{i=1}^{I} v_i(k,\theta_i)\ for\ all\ k \in K$ and where $\sum_{i=1}^{I} t_i(\theta) = 0$. Thus, ***with "self-interested" behavior*** (i.e., behavior reflecting the nationally-based accountability of supervisors) ***and private information***, there is no mechanism (including burden sharing) that makes each supervisor confident that he can reveal his private information without costs to his national economy. What is needed for efficiency is collective (joint) responsibility and accountability of national supervisors, including collective crisis cost minimization.

As a result of the weaknesses, there is no credible threat of business exit for the LCFI in Europe, leading to problems of moral hazard. There is a widespread perception among market participants and regulators that a troubled systemic financial institution would receive some form of direct or indirect solvency support (Fonteyne, 2007).[15] The reasoning is that the closure of a systemic bank would be unacceptably costly in economic and political terms (in part due to relatively low levels of deposit protection), and would in any case exceed the capacity of present deposit insurance arrangements

National prudential issues

Addressing national prudential issues can also warrant an EU-wide approach. Many countries, for example, do not have sufficient pre-crisis sanctions and tools, their deposit insurance schemes are still far from optimal, and their insolvency regimes not fully attuned to the needs of systemic cross-border institutions. There is a risk that if each country reforms its financial stability framework on its own initiative, heterogeneity will become larger rather than smaller. Specifically, in reforming prudential frameworks countries would cater to national interest groups first and these groups may then have to make concessions at a later stage to advance cross-border integration. A time-consuming national reform process would be followed by a time-consuming convergence process, likely leaving prudential frameworks to permanently play catch up with the high pace of financial market innovation. One concrete and ongoing manifestation of this problem relates to securitization: many countries are putting in place regulatory frameworks that foster this activity. These frameworks differ across countries, implying that the nation-based approach to coming up with regulatory regimes for securitization will ultimately stand in the way of a single European securitization market that likely will take a long time to establish.

III. The Proposal: A European Banking Charter

Level-playing field and financial stability issues are inextricably intertwined and this is what the EBC offers to address. Accordingly, the EBC would build on the "single passport," extending it to subsidiaries and providing a supporting prudential framework. The latter is key for the EU because of the fundamental dilemma facing national policymakers between giving up control in an integrating market on the one hand but maintaining domestic accountability for financial stability on the other.

[15] This is illustrated, for example, by the 2005 MoU that involves Ministries of Finance in crisis resolution, by rating agencies varying their ratings in function of the likelihood of government support (Nguyen and Praet, 2006), and by statements of academics and insiders (e.g., Goodhart, 2004b; Mayes, 2004b).

A. Features

The EBC would be available in each participating EU member state and would consist of a single prudential regime. Thus, it would be equivalent to a 28th regime for the operation of financial institutions in Europe. To play its role, it would need to be a true, fully integrated regime, without country-level specificities or exemptions (found in many of the existing "28th regimes"). The idea is that institutions chartered under the EBC would compete on a truly level playing field within the EU with respect to prudential policies and practices. An important feature of the regime is that it would be neutral with respect to the legal form of the cross-border operation (branch or subsidiary): branches and operationally-integrated subsidiaries would be treated the same way for prudential purposes. One way to achieve this would be to require institutions to transform into a European Company before chartering under the EBC (Appendix II).[16]

An important feature of the EBC, as proposed and discussed in this paper, is the freedom of choice for banks between the EBC and the national charters ("licenses"). This freedom of choice is key for addressing level playing field concerns and allowing market forces to determine an appropriate mix of EU-level and national-level regulation. In theory, it is possible to envisage a (different version of the) EBC that would be mandatory for a certain type of banks, e.g. all banks that are systemically important on the EU level. However, defining precisely what "systemically important" means would be a complex and likely subjective undertaking that would be, in the end, open to a level-playing field criticism. To be more specific, this point can be illustrated by the plethora of studies that attempt to identify the LCFIs in Europe, each providing a somewhat different list of the LCFIs.[17] The results are sensitive with respect to the variables used to measure bank activity and with respect to the cut-off points for the bank size and for the extent of its cross-border activities.[18] Arbitrary cut-off points are acceptable in academic research and practical empirical work, but they could create important level playing field issues if used for mandating the prudential treatment of one bank compared to another. There is thus significant merit to allowing all banks to choose between the EBC and the national charters (to some extent, they can already choose among the national charters). At the same time, it is important to calibrate the EBC in a way that is attractive for the LCFIs.[19]

---

[16] This, however, would likely require addressing issues with respect to value-added taxation under the European Company Statute.

[17] See, e.g., Dermine, 2005; Schoenmaker and Oosterloo, 2005; ECB 2005, 2006; Dierick, Freund, and Valckx, 2007; and Decressin, Faruqee, and Fonteyne 2007.

[18] For example, the papers differ on how large is large. Also, should we include among LCFIs institutions that have at least 25 percent of assets abroad and presence in at least 25 percent of the member countries, or at those that have presence in at least half of the countries, or to use a different definition?

[19] In Section III.C, we discuss the pros and cons of regulatory competition in more detail.

The EBC would probably have to be implemented via EU regulation, which would require consensus among the participating countries. Setting it up would require the involvement of the Lamfalussy bodies, the Commission, the European Parliament, the European Council, and broader consultations with key stakeholders. An EU regulation is directly applicable and binding in all EU Member States without the need for any national implementing legislation. In contrast, an EU directive only binds Member States with respect to the objectives to be achieved within a certain time-limit, while leaving the national authorities the choice of form and means to be used.[20] Going the route of a directive is unlikely to result in a truly level prudential playing field. Regulation would therefore be a preferable way, but it would require considerably more agreement or consensus than a directive. While this will be difficult to achieve, there are two attenuating considerations: (i) the regulation would apply only to those banks that choose to register under the EBC, not countries' entire financial sectors; and (ii) the regulation would mostly cover technical issues, namely prudential policies and practices. The EBC would leave non-prudential legal and regulatory regimes untouched. Banks chartered under the EBC would, for example, still have to abide by nation-specific taxation, consumer protection, financial product market, and corporate governance regimes. Unlike the European Company Statute—which took more than 30 years to establish—the EBC could largely steer clear of controversial issues that reach much more deeply into the fabric of national economies and societies.[21]

For the single regime to work, it is key to establish joint responsibility and accountability of European supervisors for EBC-chartered banks, which would have to build on a commitment to EU-wide bank crisis cost minimization (Box 1). For example, supervision under the EBC could be carried out by national supervisors with a specific European mandate for EBC banks and accountability to the European Parliament. Furthermore, for institutions chartered under the EBC, there should be a complete EU-wide financial stability arrangement. This arrangement would have to provide for: harmonized supervisory powers and practices (notably, a single set of pre-crisis sanctions and tools, which are relatively less developed in many EU countries); uniform prudential regulation; a single deposit insurance scheme; and, ideally, an EBC-specific bank insolvency regime.

Regarding the organization of cross-border supervision, one among many possibilities would be to significantly build on national resources, in line with the subsidiarity principle. National supervisors could agree on an ongoing supervisory program for each LCFI—in a way that need not differ much from what is already current practice for some LCFI (Appendix I)—that is conducted by designated supervisory teams, presumably staffed mainly with

---

[20] For further details see www.europa.eu.int/eur-lex/en/about/pap/process_and_players2.html#1; and http://en.wikipedia.org/wiki/European_Union_regulation.

[21] Company law touches on a much broader range of issues than prudential policies and practices, including, for example, employment contracts, pensions, taxation, consumer protection, and corporate governance structures (including worker involvement). Also, company law affects all sectors of the economy.

representatives from the supervisory agencies of the countries where the specific LCFI maintains a significant presence. LCFI supervisory teams would routinely and systematically exchange information and report on individual LCFI to all national supervisors. If significant disagreements emerge within the teams or major supervisory (e.g., remedial actions, initiating insolvency) decisions are needed, national supervisors/regulators could call a council meeting where decisions are taken by qualified majority voting. They would be jointly accountable for such decisions to the European Parliament (e.g., via an elected head). They would also be accountable to the public at large (e.g., via a regular report on their activities).[22]

With respect to changes to the EBC regulation, the same "hub and spokes" approach could be followed. Regulation could, for example, be developed in the context of the Lamfalussy framework and adopted in a council meeting of national regulators with qualified majority voting. Again, regulators would be jointly accountable to the European Parliament and the public for their decisions.

However, it is important to stress that this is just one example of how supervision and regulation of EBC-chartered banks could be implemented. There are many other possibilities involving more or less integration and these would need to be explored to get a better feel for pros and cons. Crucial is the need for joint accountability and responsibility of supervisors/regulators; systematic exchange of supervisory information, including with the European Central Bank; a single, streamlined supervisory framework within which an EBC-chartered bank can operate within the participating countries; consideration of linkages between LCFI; and for a forum were broader, pan-European financial stability issues can be discussed and decisions taken.

B. Attractions

The main attraction of the EBC is that it allows to resolve the tension between the level playing field and the financial stability objective. It can do so by relying on market forces to a greater extent than current approaches to integrating national financial stability frameworks. An important element of the EBC proposal would be that financial institutions are free to choose between registering under the national charters or the European charter. It would allow them to pick the regulatory regime that best fits their business profile. For regulators, this could provide a useful feedback on what works and what does not.

---

[22] To economize on supervisory resources, the organization of supervision of EBC-chartered institutions could be differentiated, depending on the risks for significant cross-country spillovers. The supervision of "low risk/low impact" EBC-chartered institutions could be handled entirely locally; that of institutions with higher risk or higher impact would feature enhanced cross-border collaboration.

Specific attractions of the EBC include the following:

- Cost savings both for taxpayers—because supervisory duplication could be eliminated and gaps be plugged—and for European financial institutions (and their customers), notably those heavily engaged in cross-border business, because of a single supervisory and regulatory framework that is adapted to their business structure, such as the increasingly less relevant distinction between branches and operationally-integrated subsidiaries. These cost savings could be passed on to customers.
- A supervisory and regulatory level playing field for all of Europe's financial institutions without the need for arduous, top-down and significantly unnecessary harmonization of national prudential policies and practices, including insolvency laws as they apply to banks. Harmonization is likely to require painful and long-lasting work on converging national policies and practices. This is likely to be neither efficient nor effective. It would ignore the differential needs of small/national versus large/cross-border financial players and be extremely difficult for insolvency proceedings. The EBC offers a solution that should be easier and faster to implement and that gives space to market forces. However, the extent of agreement among participating countries that would be needed to implement the EBC is major.
- An EU-wide financial stability framework that resolves the tension between integration and domestic accountability for financial stability. This presently stands in the way of full financial integration, notably the dependence of host countries on the regulation, supervision, deposit protection, LOLR policies, resolution proceedings, and solvency support policies of the home countries. Via joint responsibility and accountability the EBC would deliver efficient and effective crisis prevention, management, and resolution mechanisms and thus savings for Europe's taxpayers.
- A regulatory framework that is attuned to business needs. The benefit of registering under the EBC would be greatly streamlined supervision and reporting requirements. The price would be operating under rules and practices that are not perfectly attuned to the needs of each individual national market. The regime would also beneficial for customers who, depending on their needs, could turn to a pan-European or national financial institution.

C. Issues

Centralization of regulation and supervision

The issue facing Europe is *not* about centralized versus decentralized regulation and supervision. The case for nationally-based regulation and supervision is clear and rests on inherent variations in national markets and the consequent need for local intelligence gathering and knowledge of laws and regulations. Financial services essentially revolve around contracts and contract law is essentially national law, differing significantly across

EU countries. Moreover, differences in consumer protection and taxation mean that for many banks going cross-border is not a profitable proposition. Indeed, the vast majority of Europe's approximately 8,000 banks are mainly doing national business and are likely to continue to do so over the foreseeable future.

The real issue is about *finding the right balance* between decentralized regulation and supervision that (i) is consistent with a level playing field for financial institutions and (ii) addresses financial stability concerns. There is a tension between the two objectives, because the EU-wide financial stability concerns mostly relate to a relatively small sub-group of institutions that account for less than 1 percent of European financial institutions in terms of their number but for a majority of the EU banking assets (see Section II.A for details). These are the institutions that increasingly engage in cross-border business and whose potential failures (however unlikely at present) are reasons for EU-level financial stability concerns. Trying to unify all country-level crises preparedness, management, and resolution frameworks because of these few institutions would be an extremely arduous process. Trying to unify these frameworks only for a selected (mandated) group of banks would create serious questions about the level playing field. The EBC offers a way to resolve this dilemma.

Funding supervision

While the EBC would likely make supervision cheaper for European taxpayers, matters on this front are complicated in Europe because supervision is funded differently across countries. In some it is paid for by the industry (e.g., Germany, the United Kingdom) in others by the budget (e.g., France, Italy, Spain). At the European level, industry funding would probably be the least complex solution. This would leave migration to the EBC less attractive for those institutions that presently do not have to contribute fees for funding supervision. But in return they would benefit from a streamlined supervisory process under the EBC and lower compliance costs. A more fundamental concern is that migration of funding makes the entire EBC regime a less attractive proposition to those regulators who are industry funded. This is a thorny issues that would have to be addressed.

Funding financial crisis resolution

Sharing supervisory responsibility for EBC-chartered banks also means sharing crisis costs. The purpose of shared responsibility is for national supervisors to pay due attention to the external spillovers of their domestic actions concerning cross-border banks. These can be very large, particularly in crisis situations, where a rushed restructuring with a "scramble" for assets can severely undermine the value of the institution involved. However, shared responsibility in the run-up to a crisis and during a crisis might be difficult to implement in the absence of an agreement to share crisis costs.

How should costs be shared to meet the principle of shared responsibility? This question lies beyond the scope of this paper. One principle is essential: the arrangement must be such that countries cannot walk away if a solution that minimizes collective costs entails higher costs for them than a solution where they act in their self interest. While such a conflict may not arise in practice and may not be very acute in a repeated game setting where countries negotiate over all kinds of issues and have long horizons, history suggests that financial crises are (i) better considered one-shot games; and (ii) exceptionally expensive relative to other issues over which countries routinely negotiate in the EU. The need for some ex-ante arrangement is thus difficult to dismiss.

One starting point for an ex-ante arrangement is deposit insurance. Under the EBC, there could be an EU-wide deposit insurance system. For political economy reasons, it might be best for the deposit insurance system to be funded by the industry; however, this needs to be carefully calibrated so as not to make joining the EBC a too expensive proposition compared to the national deposit insurance arrangements. An EU-wide deposit insurance system could be better diversified than the national funds are, which should enable it to charge lower fees or hold a larger risk-adjusted buffer (Srejber, 2006). An important issue is ability to handle cost-efficiently a large bank failure (or several failures). This would require the deposit insurance operator to have the ability to issue bonds backed by a full-faith guarantee of participating countries. In other words, the deposit insurance scheme would need backing by government guarantees from all the EU member states. This would in turn require some sort of burden sharing arrangement among countries in case banks subsequently do not replenish the scheme (Srejber, 2006).

Over and above deposit insurance matters become even more complex.[23] Sometimes operationalizing efficiently and effectively the principle of the primacy of private sector solutions to crises could require some public support (e.g., guarantees covering a difficult to evaluate loan portfolio of an LCFI that is to be rapidly sold off). Some countries have provided for the possibility of such support in the context of bridge bank schemes. In a cross-country setting with joint responsibility the complexity that this introduces relates to which country contributes how much to public support; and how to make sure that pledges for support are honored.

The extent to which the EBC needs to address these problems to become operational is open to question. A burden-sharing formula cannot possibly be perfect under all circumstances, and for the sake of efficiency and overall welfare maximization, burden sharing will have to involve at least some inequities. However, the EBC could contribute to addressing the problem (and limiting the costs) by putting all the necessary information on the table (i.e., using transparency as a disciplining device), by emphasizing exit as a disciplining device,

[23] A theoretical alternative would be a credible commitment not to bail out any financial institution. However, this is not a realistic approach given the political economy constraints. Another option proposed in the literature is for countries to commit ex ante to contribute to any bail-out according to a burden-sharing formula (see Goodhart and Schoenmaker, 2006; and Fonteyne, 2007 for a more detailed discussion). But, as argued in Box 1, this would only deliver efficient outcomes with collective responsibility of national supervisors.

and by coming with a prudential toolkit that does better at containing crisis costs than Europe's present financial stability framework.

Addressing insolvency

There is a strong case for having a bank-specific insolvency regime in Europe that takes a pan-European approach. Presently, there is no pan-European legal and administrative framework or common decision-making structures with respect to bank insolvency (Appendix III). For branches, the Winding Up Directive allocates responsibility to initiate insolvency proceedings to the home country but for subsidiaries the proceedings of the host country would matter. Thus, for an LCFI with many branches and operationally-integrated subsidiaries the "single economic entity" view would not hold. Externalities risk not being given due consideration and this would be detrimental to the valuation of an LCFI that is to be restructured or liquidated. Matters would be worse because of the absence of bank-specific insolvency regimes in most EU countries: standard judicial insolvency regimes typically are cumbersome and slow to operate, while in financial crises speed is often of the essence to limit costs. As a result, the European tax payer is likely to pay more than necessary to resolve a financial crisis.

Creating a single EU-wide bank insolvency regime may be quite challenging but could be made easier if institutions are required to convert to European Companies when chartering under the EBC. However, if creating a European bank-specific insolvency regime proves too time consuming, a practical alternative may be to launch the EBC first as a single EU-level prudential regime, and add the single EU-wide bank insolvency regime only at a later stage. But this would mean that crises might not be resolved in a way that minimizes collective EU costs, potentially creating problems that could stand in the way of supervisory collaboration during normal times.

Regulatory competition

Multiple banking charters exist in various countries and—when combined with the freedom of choice for the supervised institutions—can introduce regulatory competition, which may be controversial. For example, federally and locally chartered deposit-taking institutions operate in Canada and the United States and used to operate in Australia.[24] In some cases there is ample room to choose between incorporating under the federal or local charter, in others less so. With multiple charters often (but not always) come multiple supervisors. In

[24] Financial services are regulated to varying degrees at federal and local levels in a number of other countries.

some instances these supervisors operate at distinct levels of government, in others there is overlap between federal and local supervision.[25]

Various authors discuss the risk that the quality of supervision becomes diluted by supervisory competition. This "race to the bottom hypothesis" is based on the argument that if the supervisory agency's budget depends in part on the number and size of the firms it regulates, regulators might compete against each other by offering lenient treatment in order to attract firms (e.g., Dell'Ariccia and Marquez, 2001; Blair and Kushmeider, 2006). There are theoretical models suggesting that depending on their budget constraints, supervisors may indeed have motivation for engaging in such a race to the bottom (Weinberg, 2002).

A number of authors, however, view "regulatory competition" as beneficial, providing a market test for optimal regulation and supervision. The presence of alternative regulators provides banks with the ability to escape ill-advised or onerous regulation on the part of any one regulator, by changing their charters (e.g., Greenspan, 1998). These arguments are based on a set of well-established models in the regulation literature. In a seminal paper, Tiebout (1956) presented a model of public good provision by local communities that can be used to show that under certain conditions (including no externalities and costless mobility), regulatory competition leads to optimal standards setting. This model has, for example, been used to justify arguments for local control of securities regulation (Romano, 1998).

The theoretical literature also indicates that there may be limits on regulatory competition. For example, Hardy (2004) finds that a "captured" regulator may impose tight prudential requirements to reduce negative spillovers of risk-taking by weaker banks. In these circumstances, differences in regulatory regimes across jurisdictions may persist despite regulatory competition, because each regulator may differentiate their regulatory "product" to discriminate among the dominant incumbent institutions ("clients"), thus avoiding direct competition. This finding can also be traced back to Tiebout (1956).[26]

Empirical evidence on actual impacts of competition among regulators is limited but some studies suggest that regulatory competition can foster financial innovation.[27] Little research is

---

[25] Going beyond the federal versus local distinction, many countries have different charters for different types of deposit-taking institutions—for instance, commercial banks, savings banks, and cooperative banks. In most cases, those are supervised by the same supervisors, but in some cases those have different supervisors.

[26] As mentioned earlier, the reasons why regulators can become captured include budget constraints and managerial and bureaucratic interests (see, e.g., Kane, 2001).

[27] There are several studies of competition among regulators that focus on state corporate governance rules. When firms switch the state in which they are incorporated, stock prices show no significant reaction or slight increases suggesting that the ability to switch regulators may have benefited firms (Bradley and Schipani, 1989, and Romano, 1985). On the other hand, when states pass laws making it easier for firms to avoid hostile takeovers, stock prices fall suggesting a race for the bottom (Alexander, Spivey, and Marr, 1997; and Karpoff and Malatesta, 1989)

available on regulatory competition with multiple charters in countries other than the United States.[28] For the United States, commentators have observed that a separate system of state banks "allows the states to serve as laboratories for innovation and change, not only in bank powers and structures, but also in the area of consumer protection" (e.g., Smith, 2003). Blair and Kushmeider (2006) document that US state-chartered banks pioneered the introduction of interest-bearing checking accounts, adjustable-rate mortgages, home equity loans, and automatic teller machines in the 1970s. Also, during the 1980s the states took the lead in deregulating the activities of the banking industry, with many states permitting banks to engage in direct equity investment, securities underwriting and brokerage, real estate development, and insurance underwriting and agency.

The most comprehensive empirical study of the effects of having multiple regulatory agencies in banking is Rosen (2003), which studied US bank charter flips and found no evidence supporting the "race to the bottom" hypothesis. On the contrary, his evidence points to beneficial effects of competition: banks that switched regulators increased their return following the switch while their risk changed little. He also finds evidence of specialization among the agencies, which is in line with the models by Tiebout (1956) and Hardy (2004). This specialization of regulators appears to have beneficial impacts on banks in Rosen's estimates, since it allows banks to pick the regulator that best matches their business strategy, and ultimately allows banks to move to a better risk–return tradeoff. Another benefit indicated by the study is that if bank examiners are making it difficult for banks to make value-adding changes, then banks can improve performance by switching to a new examiner at a different agency.[29]

Empirical evidence for Europe also suggests that some regulatory competition is beneficial. This is evident in international financial markets: the Eurobond market and the London swaps market both developed (at least in part) in response to U.S. regulatory burdens. The widespread adoption, through the efforts of the International Swaps and Derivatives Association, of enforceable master agreements has been motivated by the desire of countries to keep their financial institutions "in the game." If derivatives markets were not international

---

[28] The US system is characterized by the co-existence of parallel state and federal banking systems ("dual banking system"). The federal system is based on a federal bank charter, powers defined under federal law, operation under federal standards, and oversight by a federal supervisor. The state system is characterized by state chartering, bank powers established under state law, and operation under state standards, including oversight by state supervisors. The (free) choice of charter determines which agency will supervise the bank: the primary supervisor of nationally-chartered banks is the Office of the Comptroller of the Currency (OCC), whereas state-chartered banks are supervised jointly by their state chartering authority and either the Federal Deposit Insurance Corporation (FDIC) or the Federal Reserve System (Federal Reserve).

[29] Over time, regulatory competition has resulted in a substantial narrowing down of the differences between national (federal) and state bank charters (Blair and Kushmeider, 2006). For bankers, charter choice is now to a large extent a question of whether the higher assessment cost associated with a national charter is offset by the benefits of operating on a US-wide basis under a single set of prudential regulations. The issue of the differences between costs of supervision is an important, and a much debated, one (see, e.g., Hawke, 2002).

and fluid, many countries would have found it difficult to adopt this important mechanism for mitigating risk.

Matters for the EBC would be different with respect to regulatory competition. The legal and regulatory regime governing the EBC must be supported by national authorities and supervisors. Presumably, these have no incentive to regulate themselves out of business. A more pertinent concern would be the opposite: that they calibrate the EBC at a level that makes this charter unattractive for Europe's major banks. This incentive is particularly strong for those regulators who rely on contributions from the industry for their funding. Nonetheless, the commitment to a single prudential regime, the calls from important members of the industry for more supervisory convergence, and the accountability to the European Parliament and involvement of other stakeholders would present important counterweights. Ultimately, calibration will be an evolutionary process, responding to market developments and the European political economy and probably not without some problems. The natural alternative would, of course, be to make the EBC mandatory for all LCFI. But, as outlined above, this is unattractive for various reasons. More fundamentally, if LCFI do not have an incentive to sign up for a unified prudential regime, then there is likely to be a problem with the regime that deserves policymakers' attention.[30]

D. Alternatives

There are currently various alternatives on the table to foster financial integration and stability, spanning from a single European supervisor to a re-enforced Lamfalussy structure.[31] Among LCFIs, the alternative that finds much support is the lead supervisor concept, according to which all authority for a banking group would rests with the home supervisor. A key problem with this proposal is that it neglects the financial stability concerns of host countries.[32] It fails to resolve the fundamental tension between financial integration on the one hand and domestic accountability for financial stability on the other.

---

[30] A practical issue related to the freedom of choice among the charter is who will decide on granting the license (charter) to a bank that has applied for an EBC. From the perspective of this paper, it does not matter much whether it would be a single EU agency, a national agency, or a group of agencies; what matters is that it should be a body (an agency or group of agencies) with a European accountability.

[31] We do not discuss here alternatives that go completely beyond the current discussion. For example, if all the relevant information on LCFIs that is usually available to supervisors were made publicly available, market discipline could do an important part of the job usually done by supervisors. While there is clearly room for more market disclosures, we do not think that a complete reliance on market disclosures and market discipline is a realistic alternative in the current EU setting.

[32] For detail, see European Financial Services Round Table, "On the Lead Supervisor Model and the Future of Financial Supervision in the EU, June 2005.

A proposal presently advocated by many policymakers in Europe is to develop the current system of MoUs. Recognizing that the EU-wide MoU framework is not sufficient to efficiently and effectively address concerns with respect to LCFI, some country authorities have gone beyond the EU framework. In particular, the authorities in the Nordic countries have signed three additional cross-border MoUs: (i) a general MoU between the supervisors of all five Nordic countries; (ii) institution-specific MoUs between various sub-groups of the Nordic supervisors for the Nordea and Sampo groups; and (iii) an MoU on crisis management between the five Nordic central banks.[33] Appendix I provides some details on the institution-specific MoUs.

Some policymakers and practitioners suggest that institution-specific MoUs, such as those for the Nordea and Sampo groups, can be a practical way of harmonizing and integrating the prudential practices in the EU. Figure 1 illustrates this argument in a graphical form, with each cell representing a prudential regime in one EU country.[34] At the initial stage ("stage 1"), prudential regimes in individual countries are different, which is illustrated by the different shades and patterns. There are two institution-specific MoU among various subgroups of the EU countries, indicated by full and dotted lines. Over time, through day-to-day interactions among supervisors and regulators (including conflict resolution), possibly in the context of supervisory colleges, the prudential practices among these countries become more harmonized, which is indicated by all the countries with MOUs arriving at the same pattern (i.e., the same parameters of the prudential regime) in "stage 2" in Figure 1. Also, other MoU among other groups of countries will be signed as the financial integration process continues (thick line in stage two). This will bring further integration of supervisory practices ("stage 3"). Ultimately, this will bring a full integration of prudential practices in the EU (the last panel of Figure 1).[35]

This MoU-based approach has weaknesses. First and foremost, judging by present developments, this institution-by-institution process required for creating a complete EU-wide prudential framework is likely to be lengthy, protracted, and constantly catching up with market developments. It would not ensure that harmonization leads to the most efficient of practices, notably the right balance between centralized and decentralized supervision without potential distortions to competition among banks. Second, it does not address fundamental concerns about differences between regulatory regimes and the incentives of national supervisors: MoU are by their nature nonbinding. Third, institution-specific

[33] See, e.g., Majaha-Jartby and Olafsson, 2005. There are also short additional Nordea-specific MoUs among the Nordic central banks.

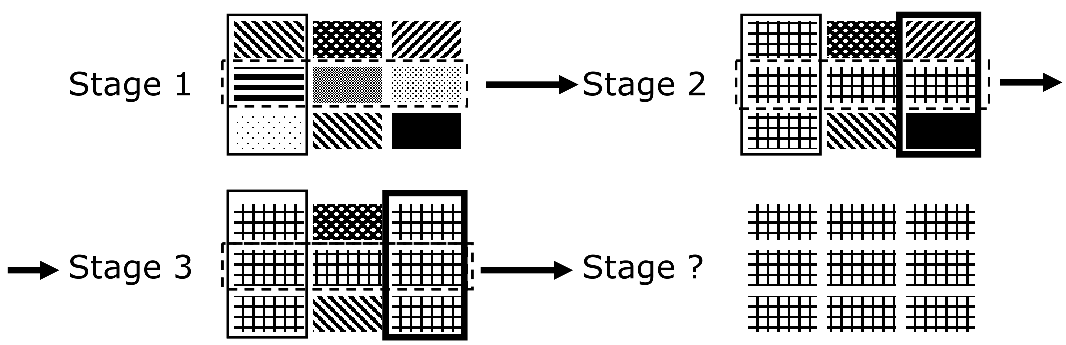
[34] Only 9 countries are shown in this chart for simplicity. In practice, the problem is much more complex due to the bigger number of countries.

[35] This description captures our understanding of the MOU-based approach to harmonizing and integrating the prudential practices in the EU, based on numerous discussions with our European colleagues.

arrangements cannot take into account pan-European financial stability issues, including linkages between institutions.

Nonetheless, the MoU-based approach can play a useful complementary role in the EBC framework. Even in a system with an EBC, there will still be scope for MoUs as a framework for supervising financial institutions that do not sign up for the EBC and yet have substantial cross-border operations. In this context, the above weaknesses do not mean that a network of MoUs is of no use. Having an MoU in place often helps clarify the modalities of supervisory cooperation, especially under normal, "no-crisis" conditions. Also, there might be scope to address some of the above mentioned weaknesses (e.g., by replacing the current non-binding MoUs by arrangements that are binding, i.e. include enforceable sanctions for deviations from agreed behavior).

Figure 1. Adjustments in Prudential Practices Through Institution-Specific MOUs



IV. Conclusion

This paper identifies two main objectives to be addressed by a financial sector framework in Europe: creating a level playing field and ensuring financial sector stability. There is tension between the two objectives. On one hand, financial stability concerns relate mostly to a small group of large cross-border financial institutions, but on the other hand, creating a prudential framework mandatory for these LCFIs would lead to level-playing field issues. The alternative, building a completely uniform European financial sector framework for all institutions based on the needs of LCFIs, would be extremely arduous, and ultimately largely unnecessary and too costly.

The European Banking Charter—a full-fledged EU-level regime for banking operation serving as an alternative to national charters—is a possible tool to address some of these challenges. The EBC would carry Europe's single banking passport to its logical conclusion by dropping the increasingly artificial prudential distinction between branches and operationally-integrated subsidiaries and providing for a supporting European financial stability framework. A key part of the proposed framework would be a freedom of choice of banks between national and European charters. This would deliver a prudential level playing field (all banks would have the choice) and allow market forces to play a role in determining the optimal mixture of EU-level and national-level prudential frameworks.

The EBC can be thought of not only as a piece of paper ("license"), but also as a relatively robust process to find a prudential framework in a way that is consistent with a level playing field and attuned to market needs. In so doing, the EBC could also help fill in some important gaps in Europe's financial stability framework without fundamental institutional reform. The many changes that are necessary to plug these gaps could presumably be implemented without an EBC, through work on converging national prudential policies and practices, including insolvency law as it applies to banks. This risks turning out inefficient and ineffective for two reasons: (i) it would come at the cost of limiting the room for innovation and customization at the national level; and (ii) it would be a painful and long-lasting process, where national mandates for financial stability would permanently collide with the quest for a single market and the loss of control this entails over financial operators. The charter offers an avenue to resolve this fundamental tension with its emphasis on joint responsibility and accountability.

In sum, the EBC is not a panacea, but it has important attractions. The EBC would leave non-prudential legal and regulatory regimes untouched, so banks chartered under the EBC would still have to navigate nation-specific taxation, consumer protection, financial product market, and corporate governance regimes, and so on. Also, by itself, the charter would not resolve some of the underlying thorny issues identified in this paper (e.g., how to design an EU-wide deposit protection scheme). To launch the EBC, it would be important for the national authorities to agree on these issues. The main attraction of the EBC is that it limits the extent of these issues by focusing on the prudential framework and on LCFIs; and provides a useful "heading" or frame of reference for the discussions of these issues. Importantly, once agreement on these issues has been reached, it offers an implementation tool that rapidly establishes a level playing field without the need for full harmonization. Furthermore, it allows market forces to steer the process of continued and broader prudential convergence and reform.

APPENDIX I. NORDICS: INSTITUTION-SPECIFIC MOUS ON SUPERVISORY COOPERATION[36]

Currently, there are two institution-specific MoUs in the Nordics. They relate to cooperation in the supervision of the Nordea Group and Sampo Groups and have been concluded between Kredittilsynet (the Banking, Insurance, and Securities Commission) in Norway; Finansinspektionen (the Financial Supervisory Authority) in Sweden; Rahoitustarkatus (the Financial Supervision Authority) in Finland; Vakuutusvalvontavrastu (the Insurance Supervision Authority) in Finland; and, in the case of the Nordea MoU, but not the Sampo MoU, Finanstilsynet (the Financial Supervisory Authority) in Denmark. Both MoUs are organized along similar lines and contain the same main provisions.

The MoUs contain a definition of the groups and subgroups (i.e., holding companies and their subsidiaries), and the responsibilities of each of the supervisory agencies with respect to supervising the groups and the various parent companies, subsidiaries, and branches. The most detailed content of the MoUs is under the heading "Conduct of Supervision," which provides:

- For each group, a supervisory college is established, comprising members from each supervisory authority. The college shall convene regularly and at least quarterly. The establishment of the college does not override the authority of the national supervisory authorities.

- The main responsibility of the supervisory colleges is to coordinate the supervisory activities of the various national supervisory authorities. The colleges' main tasks will be to: (i) conduct a regular overall risk appraisal of the entire group; (ii) draw up a joint supervisory plan; (iii) ensure appropriate exchange of information between the supervisory authorities; (iv) conduct joint examinations; (v) ensure proper coordination and notifications of inspections carried out by individual national supervisory authorities in order to avoid, as far as possible, unnecessary duplication of work for the authorities and the groups; and (vi) meet with representatives of the groups. The colleges will also be responsible for the maintenance of contacts with foreign supervisory agencies outside of the MoU concerning matters reviewed by the colleges.

- The supervisory colleges shall present an annual overall risk assessment of the groups, which shall include an analysis of all significant risks. Based on this risk assessment, the supervisory colleges shall put forward a proposal for an annual supervision plan. The plan shall contain scheduled supervisory measures on a group level, as well as on a company level, as well as an inspection plan worked out jointly

[36] This appendix is based on the Nordea and Sampo MoUs and on Majaha-Jartby and Olafsson (2005).

by respective authorities, listing the planned on-site examinations conducted both on a group and institution level. There are special provisions in the MoUs on the responsibilities of each national supervisory authority and the form and frequency of exchange of information between the authorities on a regular basis and during supervisory actions. It is also stated that wherever possible group-level inspections shall be carried out jointly by the supervisory authorities concerned.

- Each supervisory agency shall inform the other agencies of any material events affecting the groups in any way that they become aware of, such as imminent crises. A contingency plan shall be drawn up for the groups. The plan shall contain necessary contacts with the ministries of finance and central banks in the respective countries. Each of the agencies shall maintain contacts with the respective national MoF and central bank. Any sanctions or any substantial actions planned against any of the institutions in the groups must be mentioned to the other supervisory authorities. The Swedish FSA acts as a secretariat for the supervisory group for the Nordea Group, while the Finnish FSA fulfills this function for the Sampo Group.

Regular staff exchanges among agencies are facilitated to promote information sharing, cross-fertilization of supervisory experiences, and synergizing of the shared responsibilities. The MoUs are subject to modification or total revision whenever deemed necessary.

APPENDIX II. THE EUROPEAN COMPANY STATUTE

The European Company Statute is a legal instrument based on European Community law that gives companies the option of forming a European Company–known formally by its Latin name of 'Societas Europeae' (SE). An SE can operate on a European-wide basis and be governed by Community law directly applicable in all member states. The European Company Statute is established by two pieces of legislation, namely a regulation (directly applicable in Member States) establishing the company law rules and a directive (which will have to be implement in national law in all member states) on worker involvement.

The creation of the European Company Statute will mean in practice, that companies established in more than one member state will be able to merge and operate throughout the EU on the basis of a single set of rules and a unified management and reporting system. They will therefore avoid the need to set up a financially costly and administratively time-consuming complex network of subsidiaries governed by different national laws. The statute, however, does not cover all aspects of company law. It does not provide for supporting taxation arrangements, nor does it cover employment contracts and pensions. Also, it leaves significant scope for national discretion with respect worker involvement.

A specific issue relating to the European Company Statute implementation with respect to financial institution is the treatment of value added tax (VAT) on intra-group cross-border transactions. The basic issue that for a group registered locally, no VAT is paid on local intra-group transactions due to the group registration; in contrast, for a centralized group, VAT would have to be charged cross-border, increasing the VAT costs. In some cases, the VAT costs would increase so much that they would make otherwise beneficial centralization unprofitable (for details, see e.g. Leijonhufvud, 2006 and Battiau, 2006).

The first proposal for a European Company Statute was tabled in 1970. The reason it took so long to establish are partly because the European Company, in order to be based on Community law valid in each member state, had to be established by a regulation (directly applicable in all member states) as opposed to a directive (implemented through national law). Agreement therefore required consensus amongst all member states on aspects of company law where there are still widely varying rules in national law. Moreover, it required finding common ground between those member states with a tradition of worker involvement (anxious that European Companies should not be used as a means to avoid national worker involvement requirements) and those Member States where worker involvement is not imposed (anxious that European Companies should not be used to introduce worker involvement obligations). In the end, it required a compromise at the EU's highest political level, the European Council (at Nice).[37]

[37] For further details, see http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/04/235&format=HTML&aged=0&language=en&guiLanguage=en.

APPENDIX III. BANK INSOLVENCY IN EUROPE

There is a strong case for banks having a special insolvency regime. The common answer in the literature is that banks play a special role in a country's economy, in that, collectively, their functions are so important as to constitute a sort of public service. Reference is commonly made to three characteristic functions of banks: (i) the asset-liability mismatch and potential for banks runs: insolvency affects financial stability, which is a public good; failure to handle failure well can cause confidence crisis; (ii) banks perform financial services fundamental to the functioning of an economy, such as processing of payments; (iii) banks constitute an important "transmission belt" for monetary policy (see, e.g., Hüpkes, 2005). For LCFIs, the additional arguments include the facts that (i) some LCFIs are locators of critical financial infrastructure, (ii) an LCFI failure could cause major negative externalities, such as a liquidity crunch, fire sale of assets, and spillovers to other banks via the interbank market.

However, national insolvency rules in Europe are based predominantly on principle of territoriality (contrasting with the principle of consolidated supervision in banking regulation).[38] There is no pan-European legal and administrative framework or common decision-making structures with respect to bank insolvency (Hadjiemmanuil, 2004). For branches, the Winding Up Directive allocates responsibility to initiate insolvency proceedings to the home country. This is a version of the universality doctrine, under which one jurisdiction conducts the main insolvency proceeding, and secondary proceedings may not be opened. However, this does not apply to subsidiaries, for which it still holds that insolvency proceedings can be brought in every jurisdiction where a failed bank maintains an establishment. Matters become very complex for an LCFI with numerous branches and operationally-integrated subsidiaries. Subsidiaries are part of a whole, with capital adequacy determined on the basis of the totality of the business. Yet, for subsidiaries even in EU territoriality still applies. Thus, in bankruptcy, the single economic entity (consolidated) view no longer holds.

Conceptually, universality across the board would be the soundest approach. It would reflect the bank's business structure, regardless of whether it is organized in branches or subsidiaries—indeed, many banks have both. This facilitates bank reorganization because it allows a "global administration" of the bank and therefore likely increases the value of the estate in comparison with territorialist systems; also, it reduces legal complexities and transactions costs in general.

[38] Comparing legal systems in advanced economies, there are two main models of bank insolvency (Hüpkes, 2005). In most European countries, a general insolvency law (lex generalis) applies to banks and is administered by bankruptcy courts. In Canada, United States, and Italy, the law provides for special rules for bank insolvency, which are administered by the supervisor or the deposit protection agency. For example, in the United States, the deposit protection fund (FDIC) has been the exclusive receiver for failed national banks. The reason for this is that the bank supervisor is in a better position than ordinary bankruptcy judge to determine (i) whether bank is viable; (ii) what systemic consequences of closure/continuation are.

References

Aghion, Philippe, Oliver Hart, and John Moore, 1992, "The Economics of Bankruptcy Reform," *Journal of Law, Economics and Organization*, Vol. 8, pp. 523-546.

Alexander, John C., Michael F. Spivey, and M. Wayne Marr, 1997, "Nonshareholder Constituency Statutes and Shareholder Wealth: A Note." *Journal of Banking and Finance* Vol., 21, pp. 417–432.

Basel Committee on Banking Supervision, 1992, "The insolvency liquidation of a multinational bank," in Chapter III: Other supervisory issues, BCBS Compendium of Documents, International Supervisory Issues, Volume III (May 2001).

———, 2002, "Supervisory Guidance on Dealing with Weak Banks," March, 52 p.

Barth, James R., Daniel E. Nolle, Triphon Phumiwasana, and Glenn Yago, 2003, "A Cross-Country Analysis of the Bank Supervisory Framework and Bank Performance," *Financial Markets, Institutions & Instruments*, Vol. 12, No. 2.

Battiau, Piet, 2006, "The Need For VAT Reform In Changing Financial Markets," *Modernizing the VAT Rules for Financial Services and Insurances*, Joint Conference of European Commission and European Banking Federation, http://ec.europa.eu/taxation_customs/common/consultations/tax/article_2541_en.htm.

Bednarski, Piotr and Grzegorz Bielicki, 2006, The case for defending a host supervisor's powers," *Global Risk Regulator*, Vol. 4, No. 1.

Blair, Christine E., and Rose M. Kushmeider, 2006, "Challenges to the Dual Banking System: The Funding of Bank Supervision," *FDIC Banking Review*, Vol. 18, No. 1.

Bollard, Alan, 2005, "Being a Responsible Host: Supervising Foreign-Owned Banks," in: Evanoff, Douglas D. and George G. Kaufman (eds.), *Systemic Financial Crises: Resolving Large Bank Insolvencies*, pp. 3-15.

Boot, Arnoud W.A., 2006, "Supervisory arrangements, LoLR and crisis management in a single European banking market," *Penning- Och Valutapolitik* 2/2006, pp. 15-33.

Bradley, Michael, and Cindy A. Schipani, 1989, "The Relevance of the Duty Care Standard in Corporate Governance," *Iowa Law Review*, Vol. 75, pp. 1–74.

Borchgrevink, Henrik, and Thorvald Grung Moe, 2004, "Management of financial crises in cross-border banks," Norges Bank Economic Bulletin 2004 Q4, pp. 157-165.

Canadian Bankers Association, 2006, *The Banking Industry in Canada: Taking a Closer Look* (Toronto: Canadian Bankers Association), available at www.cba.ca.

Čihák, Martin, and Alexander Tieman, 2006, "How Good is Financial Sector Supervision and Regulation in Europe? Euro Area Selected Issues Paper, IMF Country Report No. 06/288 (Washington: International Monetary Fund).

Comptroller of the Currency, 2003, *National Banks and The Dual Banking System* (Washington, DC: Comptroller of the Currency), www.occ.treas.gov.

Dahl, Drew, and Michael F. Spivey, 1995, "Prompt corrective action and bank efforts to recover from undercapitalization," Journal of Banking & Finance 19, pp. 225–243.

Decressin, Jörg, Hamid Faruqee, and Wim Fonteyne (eds), 2007 forthcoming, *Integrating Europe's Financial Markets* (Washington: International Monetary Fund).

Dell'Ariccia, Giovanni, and Robert Marquez, 2001, "Competition Among Regulators," IMF Working Paper 01/73 (Washington: International Monetary Fund).

De Rato y Figaredo, Rodrigo, 2007, "A European Financial Stability Framework," in: Sprenger, Jeroen, Joost Smits, and Philip van Veller (Eds.), *Per Saldo. Overheidsfinanciën en fiscaliteit na twaalf jaar minister Zalm* (Den Haag: Sdu Uitgevers, 128 pp).

Dermine, Jean, 2005, "European Banking Integration: Don't Put the Cart before the Horse," paper presented at the Federal Reserve Bank of Chicago conference on Cross-Border Banking, Regulatory Challenges, 6-7 October 2005.

Dierick, Frank, Corinna Freund, Nico Valckx, 2007, "Cross-border banking in the European Union: developments and policy implications," ECB Occasional Paper (Frankfurt: European Central Bank, forthcoming)

European Central Bank, 2005, *EU Banking Structures*, October 2005 (Frankfurt: European Central Bank). http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

———, 2006, *EU Banking Structures*, October 2006 (Frankfurt: European Central Bank). http://www.ecb.int/pub/pdf/other/eubankingstructures2006en.pdf.

European Shadow Financial Regulatory Committee, 2005, "Reforming Banking Supervision in Europe," Statement No. 23.

Federal Deposit Insurance Corporation, 2003, "Resolutions Handbook." Available at: http://www.fdic.gov/bank/historical/reshandbook/index.html.

Financial Stability Forum, 2001, "Guidance for Developing Effective Deposit Insurance Systems."

Fonteyne, Wim, 2007, "Crisis Resolution and Burden Sharing for Systemic Cross-Border EU Banks." (Washington, DC: International Monetary Fund). Mimeo.

Garcia, Gillian G. H., and María J. Nieto, 2005, "Banking crisis management in the European Union: Multiple regulators and resolution authorities," *Journal of Banking Regulation*, Vol. 6, No. 3, pp. 206-226.

Goodhart, Charles A.E., 2004a, "Some New Directions for Financial Stability," Per Jacobsson Lecture (Basle: Bank for International Settlements).

———, 2004b, "Multiple Regulators and Resolutions," Paper presented at the Federal Reserve Bank of Chicago conference "Systemic Financial Crises: Resolving Large Bank Insolvencies," Sept 30-Oct 1.

———, and Dirk Schoenmaker, 2006, "Burden sharing in a banking crisis in Europe," Penning-Och Valutapolitik 2/2006, pp. 34-57.

Green, J.R., and J.-J. Laffont, 1979, *Incentives in Public Decision Making* (Amsterdam: North-Holland).

Greenspan, Alan, 1998, "Our banking history," Remarks Before the Annual Meeting and Conference of the Conference of State Bank Supervisors, Nashville, Tennessee, May 2, 1998, http://www.federalreserve.gov/boarddocs/speeches/1998/19980502.htm.

Hadjiemmanuil, Christos, 2005, "Europe's Universalist Approach to Cross-Border Bank Resolution Issues," in: Evanoff, Douglas D. and George G. Kaufman (eds.), Systemic Financial Crises: Resolving Large Bank Insolvencies, pp. 217-235.

Hardy, Daniel C., 2004, "Regulatory Capture in Banking," Working Paper No. 06/34 (Washington: International Monetary Fund).

Hawke, John D., 2002, Remarks before the 38th Annual Conference on Bank Structure and Competition, Chicago, Illinois.

Herring, Richard J., 2002, "International financial conglomerates: implications for bank insolvency regimes," Wharton School, University of Pennsylvania.

———, 2004, "BCCI & Barings: Bank Resolutions Complicated by Fraud and Global Corporate Structure," Paper presented at the Federal Reserve Bank of Chicago conference "Systemic Financial Crises: Resolving Large Bank Insolvencies," Sept 30-Oct 1, 35 p.

Hoelscher, David, and Marc Quintyn, 2003, "Managing Systemic Banking Crises," IMF Occasional Paper No. 224 (Washington: International Monetary Fund).

Horvitz, Paul M., 1995, "Banking regulation as a solution to financial fragility," *Journal of Financial Services Research*, December, pp. 369–380.

Hüpkes, Eva H.G., 2004, " 'Too big to save' – towards a functional approach to resolving crises in global financial institutions," Paper presented at the Federal Reserve Bank of Chicago conference "Systemic Financial Crises: Resolving Large Bank Insolvencies," Sept 30-Oct 1, 19 p.

———, 2005, "Insolvency – why a special regime for banks?," in: Current Developments in Monetary and Financial Law, Vol. 3, International Monetary Fund, pp. 471–513.

International Monetary Fund, 2006, *Euro Area Policies: Staff Report*, IMF Country Report No. 06/287, August (Washington: International Monetary Fund).

———, 2007, *Global Financial Stability Report*, April (Washington: International Monetary Fund).

Jones, David S., and Kathleen Kuester King, 1995, "The implementation of prompt corrective action: An assessment," *Journal of Banking & Finance* Vol. 19, pp. 491–510.

Kager, Marianne, 2006, "The Perspective of a Practising Banker," in *Cahier Comte Boël*, No. 12, European League for Economic Cooperation, p. p21–24.

Kane, Edward J, 2001, "Dynamic Inconsistency of Capital Forbearance: Long-Run vs. Short-Run Effects of Too-Big-to-Fail Policymaking," Pacific Basin Financial Journal, Vol. 9, No. 4 (August), pp. 281–99.

Karpoff, Jonathan M., and Paul H. Malatesta, 1989, "The Wealth Effects of Second-Generation State Takeover Legislation," *Journal of Financial Economics* Vol. 25, pp. 295–312.

Kremers, Jeroen J.M., Dirk Schoenmaker, and Peter J. Wierts, 2003, "Cross-Sector Supervision: Which Model?" Brookings-Wharton Papers on Financial Services.

Krimminger, Michael H., 2004, "Deposit Insurance and Bank Insolvency in a Changing World: Synergies and Challenges," paper presented at an International Monetary Fund Conference, May 28.

Leijonhufvud, Margareta, 2006, "Nordea Bank and VAT," *Modernizing the VAT Rules for Financial Services and Insurances*, Joint Conference of European Commission and European Banking Federation, http://ec.europa.eu/taxation_customs/common/consultations/tax/article_2541_en.htm.

Majaha-Jartby, Julia, and Thordur Olafsson, 2005, "Regional Financial Conglomerates: A Case for Improved Supervision," Working Paper No. 05/124 (Washington: International Monetary Fund).

Mas-Collel, Andreu, Michael D. Whinston, and Jerry R. Green, 1995, *Microeconomic Theory* (Oxford: Oxford University Press).

Mayes, David G., 2004a, "Who pays for bank insolvency?," *Journal of International Money and Finance*, Vol. 23, pp. 515–51.

———, 2004b, "The role of the safety net in resolving large financial institutions," Paper presented at the Federal Reserve Bank of Chicago conference "Systemic Financial Crises: Resolving Large Bank Insolvencies," Sept 30-Oct 1.

———, 2006, "Cross-border financial supervision in Europe: Goals and transition paths," Penning- Och Valutapolitik 2/2006, pp. 58-89.

———, 2007, "Avoiding Financial Crises," Paper prepared for the Estonian Economists Association 2nd annual conference in Pärnu, January 12.

———, María J. Nieto, and Larry D. Wall, 2006, "Multiple Safety Net Regulators and Agency Problems in the EU: Is Prompt Corrective Action Partly the Solution?" Mimeo.

Mishkin, Frederic S., 1999, "Financial Consolidation: Dangers and Opportunities," *Journal of Banking and Finance*, Vol. 23, pp. 675–691.

Murton, Athur J., 2005, "Resolving a Large Bank: The FDIC's Perspective," in: Evanoff, Douglas D. and George G. Kaufman (eds.), Systemic Financial Crises: Resolving Large Bank Insolvencies, pp. 415-420.

Nguyen, Grégory, and Peter Praet, 2006, "Cross-border crisis management: a race against the clock or a hurdle race?" National Bank of Belgium Financial Stability Review, pp. 151–173.

Organization for Economic Cooperation and Development (OECD), 2002, "Experiences with the Resolution of Weak Financial Institutions in the OECD Area," in: *Financial Market Trends*, No. 82 (June), pp. 107–46.

Revesz, Richard L., 2000, "Federalism and Regulation: Extrapolating From the Analysis of Environmental Regulation in the United States." *Journal of International Economic Law* Vol. 3, pp. 219–233.

Romano, Roberta, 1985, "Law as a Product: Some Pieces of the Incorporation Puzzle," *Journal of Law, Economics, and Organization*, Vol. 1, pp. 225–283.

———, 1998, "Empowering Investors: A Market Approach to Securities Regulation." *Yale Law Journal* Vol. 107, pp. 2359–2430.

Rosen, Richard J., 2003, "Is Three a Crowd? Competition Among Regulators in Banking," *Journal of Money Credit and Banking*, Vol. 35, No. 6 , pp. 967–998.

Schinasi, Garry J., and Pedro Gustavo Teixeira, 2006, "The lender of last resort in the European single financial market," IMF Working Paper 06/127 (Washington: International Monetary Fund).

Schoenmaker, Dirk, and Sander Oosterloo, 2005, "Cross-Border Issues in European Financial Supervision," forthcoming in David Mayes and Geoffrey Wood (eds), The Structure of Financial Regulation, (London: Routledge).

Scott, Kenneth E., 1977, "The Dual Banking System: Model of Competition in Regulation," *Stanford Law Review* 30, 1–49.

Shim, Ilhyock, 2006, "Dynamic prudential regulation: Is prompt corrective action optimal?," BIS Working Paper No. 206 (Basel: Bank for International Settlements).

Smith, Joseph A., 2003, "Testimony of the North Carolina Commissioner of Banks, on behalf of the Conference of State Bank Supervisors, before the House Committee on Financial Services," June 4, 2003, available at http://www.csbs.org/government/legislative/testimony/leg_testimony_ 060403.htm.

Srejber, Eva, 2006, "Are we ready to deal with a cross-border banking crisis in Europe?," Speech delivered in Gdansk, Poland on May 12 (htttp://www.riksbank.com/templates/Page.aspx?id=21522).

Stover, Roger D., 1997, "Early resolution of troubled financial institutions: An examination of the accelerated resolution program," *Journal of Banking and Finance* 21, pp. 1179-1194.

Tiebout, Charles, 1956, "A Pure Theory of Local Expenditures," *Journal of Political Economy* Vol. 64, pp. 416–24.

Trichet, Jean-Claude, 2007, "Towards the Review of the Lamfalussy Approach—Market Developments, Supervisory Challenges and Institutional Arrangements," Keynote speech by at the First CEBS Conference, London, 9 May, in: BIS Review 45/2007 (Basel: Bank for International Settlements).

Véron, Nicolas, 2006, *Farewell National Champions*, Bruegel Policy Brief (Brussels: Bruegel).

Weinberg, John A., 2002, "Competition Among Bank Regulators," *Federal Reserve Bank of Richmond Economic Quarterly*, Vol. 88, No. 4 (Fall).