Multiple Regulators and Insolvency Regimes: Obstacles to Efficient Supervision and Resolution

by

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Abstract

Financial markets and the large complex financial institutions that dominate them span borders and traditional lines of business with seeming ease. The regulators who supervise these markets and the institutions that resolve failures when they occur do not. This gives rise to two direct sets of problems: ex ante, the multiplicity of regulators and regulatory regimes weakens supervision and may compromise early intervention; ex post, conflict and competition among resolution authorities heightens legal uncertainty and undermines the efficient resolution of financially distressed institutions.
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Introduction

Financial markets and the large complex financial institutions that dominate them span borders and traditional lines of business with seeming ease. The regulators who supervise these markets and the institutions that resolve failures when they occur, do not. This gives rise to two sets of direct problems: ex ante, the multiplicity of regulators and regulatory regimes weakens supervision and may compromise early intervention; ex post, conflict and competition among resolution authorities heightens legal uncertainty and undermines the efficient resolution of financially distressed institutions. Markets and firms respond to these problems constructively by devising mechanisms for reducing legal uncertainties and strengthening the enforceability of their claims. They lobby for widespread adoption of consistent laws governing certain types of contract, make increased use of secured transactions, and structure their contracts defensively. Some firms, however, may find in these problems an opportunity for malfeasance.

These problems are inherent in the national and sometimes narrow, functional character of regulatory institutions and laws. They are exacerbated by the inconsistent objectives and philosophies underlying these institutions and laws, the tendency for historically-based structures to become entrenched, and the disincentives for co-operation across groups. None of these factors is unique to the regulatory and legal environment of financial markets.

This paper will explore the legal and regulatory environment in which large complex financial institutions operate today, the historical antecedents that have produced this structure, and through examples show how this environment has led to undesirable outcomes. Much of the discussion will focus on the United States. This is not simply due the importance of large U.S. financial firms in international markets, but rather because the U.S. presents a uniquely complex legal and regulatory environment that may directly effect countries that host branches and subsidiaries of U.S. financial institutions and foreign institutions that operate branches and subsidiaries in the U.S. Ongoing developments in the European Union provide examples of both recognition of
and concrete efforts to ameliorate the problems inherent in multinational financial conglomerates.

**Structure of Large U.S. Bank Holding Companies**

Today virtually all major U.S. “banks” are organized as bank or financial holding companies. Table 1 provides summary statistics for the largest five bank holding companies. The first point to note is their legal complexity as indicated by the number of distinct entities falling under the holding company structure. Many of these are trusts and other bankruptcy-remote special purpose entities. Nonetheless, a large number of operating subsidiaries in different countries are also represented. Some of these involve multiple layers of ownership—holding company/bank/foreign subsidiary/trust—up to eight layers deep.

These bank holding companies and the major banks within them are not solely or invariably even primarily lending institutions. Loans and leases count for less than one half the assets of three of the largest five banks and four of the largest five bank holding companies. While deposits fund a majority of liabilities at all five lead banks and at three of the bank holding companies, the liability structure contains significant amounts of non-depository debts. CitiCorp and J.P. Morgan/Chase derive less than half their liabilities from deposits and only a small fraction of their funding is derived from domestic deposits.¹ Bank of America also has significant foreign deposits.

The implicit assumption underlying U.S. bank resolution procedures, that non-deposit liabilities are not material, is not tenable for LCFOs and some specialized smaller banks. This may have important consequences for creditor and regulatory incentives. On the one hand, if the non-depository creditors run, these banks will quickly become illiquid and the ability of the regulators to conduct an orderly resolution will be compromised. On the other hand, the large buffer of non-depository creditors may create incentives for the primary bank regulator (focusing on protecting the deposit insurance fund) and the FDIC to delay closure and once closed to delay resolution. For banks such as J.P. Morgan Chase and Citibank, it would be extraordinary if the FDIC did not obtain full recovery for domestic depositors (and itself) even if prompt corrective action fails to

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¹ As explained below only “domestic deposits” are insured (up to $100,000) and protected under depositor preference legislation.
achieve early intervention. If prompt corrective action works as intended, the general creditors (non-deposit creditors, foreign depositors, etc), will have major claims on the banks assets and no effective representation in the process for discharging their claims (see below).

In cases where the failed banks assets do not cover the domestic deposits, the FDIC acting with the Federal Reserve would likely seek to become a creditor of the holding company through a source of strength claim (as happened with MCorp), effectively nullifying limited liability for equity positions in subsidiary banks and setting up litigation between the holding company’s creditors and the FDIC.2

**Financial Regulation in the U.S. and EU**

**The U.S. Regulatory Environment**

The regulation of financial institutions in the U.S. is uniquely complex. This complexity is the result of historical developments and the asymmetric evolution of markets and governmental institutions. Furthermore, the U.S. political system has, at least in the last several decades, exhibited considerable difficulty in responding to changes in financial markets.3

There has always been a historical tension between state and federal governments in the U.S. as to the scope of their legal and regulatory powers. This derives from the original limited definition of federal government powers under the constitution and subsequent evolution of those powers, generally increasing the role of the central government. Initially the central government was not involved in the regulation of financial institutions. Instead, banks were chartered and supervised, to varying degrees, by the states in which they were located. These state bank charters imposed various restrictions on banking activities. It was not until the National Banking Act of 1864 that a national banking charter was created to compete with state banks. This act also created

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2 A claim on the holding company would arise if the Federal Reserve induced the holding company management to “agree” to recapitalize the bank (the Federal Reserve has considerable powers of persuasion), failing which it may issue an administrative order to do so. Such agreement, if it predated the insolvency, would have priority over the holding company’s general creditors. In MCorp, the Federal Reserve attempted to impose such an administrative order after the subsidiary banks had failed and the holding company was in bankruptcy. Resulting litigation failed to clarify the Federal Reserve’s right to do so, the case being settled years later with the recapitalization of the remaining solvent subsidiaries.

3 Contrast the overnight creation of the Financial Services Authority in the U.K. with the decades’ long efforts leading up to the much less sweeping Financial Modernization Act of 1999 in the U.S.
the Comptroller of the Currency to supervise those banks that chose to take a national charter. However, since the national charter was neither required nor initially attractive, the result was that state chartered and supervised banks coexisted with federally chartered and supervised ones. Throughout the latter 19th and early 20th centuries, banking and financial markets in the U.S. evolved in scope and complexity. While most banks remained what we now call community banks—that is small, local institutions—a few major banks, mostly located in New York, became powerful domestic and international institutions, engaged in a wide variety of “universal” banking activities.

The Federal Reserve Act of 1913 created the Federal Reserve in large part to ensure “an elastic currency”, that is to provide liquidity in times of crisis. For banks to have access to this liquidity they had to become members of the Federal Reserve System. Membership was mandatory for nationally-chartered banks and open to state-chartered banks. Inter alia, the Federal Reserve Act granted both the OCC and the Federal Reserve authority to supervise member banks. This overlap of authority was resolved in 1917 with the OCC supervising national banks and the Federal Reserve supervising state member banks. However, state banks remained simultaneously subject to state supervision.4

The banking crises of the early 1930s that accompanied the Great Depression led to the enactment of a series of laws which laid the foundation of today’s U.S. regulatory environment. The Banking Act of 1933 (a.k.a. Glass-Steagall) required separation of commercial and investment banking. Since that time, the term “bank” has had a narrower meaning in the U.S. than elsewhere. The Securities Exchange Act (1934) created the Securities and Exchange Commission to set and enforce standards for securities markets and broker/dealers i.e., investment banks. Thus, universal banks in the U.S. were divided into commercial banks (depository institutions) and investment banks, each with their own regulatory regime.

The Glass-Steagall Act also created the FDIC with the authority to resolve failed banks, but left the authority to close banks with their respective regulators—state, Federal Reserve, OCC—or the bank’s directors. This had the effect of creating for banks a resolution process that was entirely separate from the bankruptcy process that applied to other corporations (and individuals).

4 Spong (2000)
So long as banks confined themselves to the traditional banking activities of deposit taking, lending, and payments processing, and maintained simple organizational structures, the potential effects of this arrangement were improved supervision and efficiency of the closure process. However, pressures developed for expansion of banks across state lines (and, within unit-banking states, outside their local market) and for expansion of banks into non-traditional activities prohibited under banking laws. Bank holding companies provided a means of realizing these goals. To rationalize this development, which had previously proceeded by means of individually-negotiated arrangements with regulators and state authorities, Congress passed the Bank Holding Company Act in 1956 permitting formation of multi-bank holding companies (subject to state interstate laws) and allowing some non-banking activities to take place under the holding company though outside the subsidiary banks. The Bank Holding Company Act gave the Federal Reserve supervisory authority for bank holding companies, but not for the constituent banks unless they were already subject to Federal Reserve oversight as state member banks. The Bank Holding Company Act was amended in 1970 to permit one-bank holding companies; that is, holding companies that control a single bank along with one or more non-bank subsidiaries.

Throughout this development, insurance company regulation and insolvency resolution remained a state matter. Insurance companies are state chartered and regulated. They are resolved under state law when they fail (rather than under the Federal Bankruptcy Code). No national charter exists for insurance companies and attempts to create one have consistently failed. Thus, the three major financial services industries—commercial banking, investment banking, and insurance—are, in the U.S., subject to different regulators and different legal processes for handling failures.

The Financial Modernization Act of 1999 (Gramm-Leach-Bliley) removed a number restrictions on banking activity that had been imposed under Glass-Steagall. Gramm-Leach-Bliley also permitted combining banking, securities, and insurance subsidiaries under a single newly-defined financial holding company structure. The Act gave the Federal Reserve the power to authorize formation of financial holding companies, and to serve as “umbrella regulator”. However, Gramm-Leach-Bliley further entrenched the separate functional regulators who regulate insurance, securities
broker/dealers, and commercial banks within the financial holding company. The Federal Reserve’s powers as umbrella regulator are mitigated by requirements to defer to functional regulators in numerous ways.\(^5\) The Federal Reserve has considerable powers once a threat to the deposit insurance fund or more broadly a systemic concern has developed, but considerably less power to co-ordinate processes aimed at early detection and distress avoidance.

**European Unified Regulators**

While the U.S. financial regulatory structure remains firmly rooted in the functional regulation model, members of the EU have moved away from functional regulation and towards unified regulators. In 1997, the incoming Labor government in the U.K announced the merging of banking and securities regulation into a single Financial Services Authority (FSA), with enabling legislation being passed in 2001. Subsequent regulatory mergers rolled the remaining functional regulators into the FSA, creating a single regulator responsible for all aspects of financial institutions and markets. Though much of the internal regulatory framework remains functional, the role of single regulator has allowed the FSA to provide “a coherent and integrated approach to supervising” large complex financial groups.\(^6\) In 2002, German financial regulation was unified under the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). While, these and a number of other EU countries have moved towards a unified regulator, the 2002 EU Financial Groups Directive legislation has mandated consolidated supervision of large complex financial groups operating in the EU for purposes of safety and soundness and systemic risk.\(^7\) This requirement extends to non-EU firms operating in the EU. Where the non-EU

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\(^5\) The Federal Reserve must “to the fullest extent possible” accept functional regulators reports, forego examination of functionally regulated subsidiaries, and cannot impose capital requirements on functionally regulated subsidiaries or require non-bank subsidiary assets be used to recapitalize bank subsidiaries (under the “Source of Strength” doctrine) without the permission of the functional regulator.

\(^6\) http://www.fsa.gov.uk/supervision/

\(^7\) Consolidated supervision, in contrast to functional regulation by multiple regulators, requires only that a single regulator examine and supervise a given firm in its entirety for safety and soundness. Consolidated supervision does not necessarily imply a single regulator for all financial firms—domestically or globally—nor does it mean that multiple regulators could not address different unrelated issues, for instance work place safety, fair lending, or equal employment opportunities.
parent’s country does not meet the requirements of the directive, the firm’s EU operations must be placed in a separate subsidiary subject to EU supervision. This has caused considerable concern for large U.S. firms and U.S. regulators since it is not immediately obvious that the U.S. umbrella regular model meets the requirements. Accommodations within the U.S. functional regulatory framework have been recently negotiated.

**Multiple Regulators**

Multiple regulators arise for a number of reasons and in a number of forms. Alternative regulators arise where firms have a alternative regulators to choose from. In U.S. banking, this choice is exercised through the charter that the bank chooses. Functional regulators arise where a firm is simultaneously regulated by multiple regulators. These functional regulators may regulate different parts of the same firm or they may regulate different aspects of the firm’s behavior.

Excepting for regulators with completely distinct regulatory objectives (safety and soundness, work place safety, equal opportunity) it is difficult to identify multiple regulators that have arisen by design. Multiple financial regulators have usually developed to serve distinct, minimally-overlapping industry segments, which later merged either through business extension into common areas or through holding company formation.

For more-or-less distinct sectors and specialized firms, multiple regulators have certain advantages, though not without possible disadvantages. Alternative regulators also present potential advantages and disadvantages. However, when structural changes in the industry result in different regulators simultaneously regulating different parts of the same firm, a wholly new set of issues is created.

**Alternative Regulators**

U.S. bank regulation has a multiplicity of bank supervisory authorities, all serving the same basic function—ensuring the safety and soundness of individual banks. Some observers view this “regulatory competition” as beneficial, providing a market test for optimal regulation and supervision. The presence of alternative regulators provides banks

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8 Different regulators may have additional, non-overlapping objective: The Federal Reserve is concerned with systemic risk, the FDIC with managing deposit insurance.
with the ability to escape ill-advised or onerous regulation on the part of any one regulator, by changing their charters. The alternative view is that competition for clients will lead to a regulatory “race for the bottom,” providing lax supervision and permitting inappropriate risk taking in order to attract fee-paying banks\(^9\) and/or to justify regulatory staffing levels. In fact, regulators have little flexibility to compete in a dynamic sense. While different supervisory structures impose different costs, and may have some differences in policies or examination practices, the differences tend to be static. Rosen (2003) explored the two alternative hypotheses and found some evidence for beneficial competition, though on a local level. Banks that wanted to change their strategy, but found their local supervisors resistant, sometimes changed charters to obtain the desired approval. However, there was no consistent direction of change of charter, say from OCC regulated national bank to Federal Reserve state member bank. Changes occurred in all directions suggesting that the motivation was tied to local supervisors rather than to agencies’ policies. Rosen found no evidence supporting the “race to the bottom” hypothesis, at least in U.S. banking. Further evidence of successful regulatory competition 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 and fluid, many countries could have forgone adopting this important mechanism for mitigating risk.\(^{10}\)

LCFOs with multiple bank subsidiaries can and do maintain portfolios of charters with more than one supervisory agency, each examining and supervising a different group of subsidiaries. This may be for reasons of strategic flexibility. If a proposed activity is not approved by one regulator, another regulator may be more accommodating. However, since the regulatory policies are similar and idiosyncratic variation in

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\(^9\) The OCC and the state bank examiners rely at least in part of examination fees for their budgets. The Federal Reserve and FDIC do not.

\(^{10}\) See Bergman, et al (2003) for a discussion of whose risks are being mitigated. Cogent arguments can be made for both sides of the proposition that this is an example of beneficial competition. Bliss and Kaufman (2005a) discuss the interdependence between the special legal treatment derivatives contracts and the structure of derivatives markets.
individual supervisory decisions unpredictable, the effect on approved risk taking is probably marginal. However, one effect is to divide the constituent parts of the holding company into distinct parts each with its own regulator, a further deepening of the compartmentalization produced by functional regulation.

**Functional Regulators**

Functional regulation is not unique to the U.S. Countries with unified regulators may still organize their supervision along functional lines. Functional regulation is a natural consequence of historical distinctions between different financial services—traditional banking, insurance, securities broker/dealers. These financial sectors present different issues for regulators to address. Where financial firms specialize in single sectors and the activities are distinct, functionally-separate regulators are more likely to address the interest of their constituencies, including lobbying for sufficient resources to carrying out their responsibilities. Indirect evidence of regulatory champions is provided by the persistence of niche regulators—e.g. Office of Thrift Supervision—and the strong resistance by client industry groups to changes in the regulatory structure that would absorb “their” regulator into another agency, even though their market overlaps with those of other groups (e.g. community banks and savings and loans). A risk of regulatory specialization is an increased chance of “regulatory capture” as the interests of the regulator (staffing, resources) become aligned with the interests of the regulated (market share, profits, barriers to entry). Since regulation is generally intended to benefit the public and not the regulated firms, such identification of interest can have adverse consequences.

As financial markets became more sophisticated and the interests of firms in different sectors came into conflict, the presence of separate regulators may make these conflicts and the resulting policy debates more transparent and provide each constituency with representation in the formulation of policy. Unitary regulators responsible for functionally different industry sectors may internalize conflicts between the sectors, making the policy discussions less transparent. Furthermore, allocation of scarce

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11 Banks desiring to sell insurance, banks underwriting securities, lending (and loan syndications) by investment banks, and banks and securities firm competing in derivatives markets are just a few area where changes in financial market practices have blurred the lines separating institutional types.
resources within an organization may leave some sectors less well served than would be the case if each sector had its own regulator.12

**Multiple Regulators of LCFOs**

Functional regulators usually have differing, sometimes overlapping, objectives. These objectives are rooted in the problems the underlying, historically separate, regulatory institutions were designed to address.

Bank regulators have always been concerned with safety and soundness of both individual banks and the financial system as a whole. This concern derives from the “banks are special” view that banking functions—deposit taking, payments processing, liquidity provision—are particularly important to the functioning of the economy, so that failures of banks, particularly if they be large or widespread, are likely to generate negative externalities that are best avoided. The existence of deposit insurance, explicit or implicit, raises concerns about tax payer liability, reinforcing the desire of bank regulators to avoid or limit bank failures. Banking regulators, particularly when they are also monetary authorities, are also concerned with the functioning of the financial system as a whole. Concerns about systemic risk are more likely to be discussed in the context banking and payments than in security dealing and insurance.13 A number of other objectives have been added to bank regulators function over the years—consumer protection (e.g., fair lending), ensuring consumer access to credit (e.g., Community Reinvestment Act requirements), criminal law enforcement (e.g., money laundering)—but these ancillary functions, though important, are not at the core of banking regulation.

In contrast, securities regulation has its origins in investor protection and law enforcement. The policing of various criminal activities—fraud, money laundering, market manipulation, insider trading—remains a primary focus of securities regulation. Considerable less attention has been traditionally paid to the safety and soundness of securities firms. Securities regulators have also been involved in market structure—

12 The assumption made here is that resources are more easily reallocated within institutions than across institutions.
13 It is noteworthy that while systemic risk is most frequently discussed in terms of the banking system, a number of real or perceived systemic crises have arisen in non-bank securities markets—the U.S. silver crisis of 1980, the stock market crash(es) of 1987, and Long Term Capital Management in 1998—all prompting central bank intervention.
ensuring a level playing field. Recently they have become more assertive in areas of corporate governance and accounting.

Insurance regulators appear to focus on consumer protection. Because insurance policies are not usually insured by the state, insurance regulators do have an interest in safety and soundness. Nonetheless, the focus is on consumer protect rather than financial system protection. Frequently insurance regulators will also become involved in consumer access and pricing issues, particularly where insurance commissioners are elected as they are in some U.S. states. Where insurance regulators are geographically fragmented, as they are in the U.S., their interests are inevitably focused on their own constituents (citizens) rather than on broader questions of wide-spread impacts of potential failure.  

Differences in core regulatory objectives lead to a number of important differences that make cross-function cooperation difficult. Information collected by regulators is tailored to their own purposes and thus is likely to be incompatible across functional areas. Where different information is being collected (likely using incompatible data systems) it becomes difficult if not impossible to aggregate information for consolidated supervisory purposes.

A more subtle potential friction arises from the intellectual and cultural backgrounds of the persons staffing and dominating different regulators. Regulatory agencies employ lawyers, economists, and accountants in varying degrees, but the internal power structure and hence culture is apt to favor one group or another. Central banks are frequently dominated by economists. Bank examination is largely an accounting function. Securities regulation tends to focus on legal issues. These groups—lawyers, economists, accountants—may approach (even) common objectives with different implicit intellectual frameworks. This intellectual diversity is a potentially powerful source of improved regulation and supervision. But the lack of common intellectual framework and modes of addressing issues can also have adverse effects if no

14 This problem has important parallels in the EU with home-country/host-country issues of bank supervision, deposit insurance provision, and economic impact of bank failure. See Mayes (2005) and Eisenbeis and Kaufman (2005).
15 Even firms with similar lines of business and information needs frequently face enormous problems following mergers in linking or replacing their legacy accounting and risk management systems.
(or weak) mechanisms exist for coordinating across organizations. Where different
groups dominates each organization and each sets their own organization’s agenda, then
cross-organizational cultural differences may impede rather than aid over-arching
regulatory goals, even where the different groups can articulate broad collective goals.

The mere existence of different groups can impede the pursuit of common goals.
It is a basic instinct of humans to identify with their own group and subgroup and to
derdifferentiate their group from other groups. Even where “outside” groups are clearly
working towards the same objective, there is a tendency to perceive differences; to
perceive others as less trustworthy, competent, or well motivated; and for cooperation
within organizations to be stronger than across organizations. These social-
psychological influences are inherent in human nature and cannot easily be ameliorated
as long as group separateness is preserved. Combining functional regulators into a single
unified regulator does not necessarily solve the problem if functional separateness is
preserved in different departments of the new organization. The formation of special
cross-functional groups within the organization and separate from the functional
departments, for instance to deal with complex financial groups as has been done in the
U.K. FSA, may be expected to break down these barriers by creating a new group
identity, and incorporating within that group most of the persons needed to achieve the
overall organization goal.

Finally, multiple regulators may have different objectives and be answerable to
different constituencies. Goodhart (2005) analyses the potential problems inherent in
failure resolution when decision making is spread across multiple agencies: the central
bank, which is able to provide emergency liquidity, the bank supervisor, who has detailed
knowledge of the bank’s situation, and the Treasury, representing political and tax payer
interests. Goodhart’s analysis is in terms of the U.K. regulatory structure, but similar
multi-agency decision making structure exist in other countries: for instance, in the U.S.
invoking the “systemic risk exemption” to least cost resolution requires approval by a
committee representing a similar span of interests. Committees representing diverse
interests can serve an important role in balancing those interests. But as Goodhart (2005)

16 A striking example of this phenomenon was the failure of U.S. intelligence agencies to cooperate prior to
9/11, and even within agencies for head quarters to cooperate with field offices.
points out, they can also impede decision making when their agendas, information, and competencies differ, particularly when decision making is taking place in a crisis.

**EU Regulation of LCFOs**

The problems of cross-border supervision and regulation are particularly acute in the EU where financial liberalization is leading to within-EU, cross-border expansion of banking. The EU has solved the potential problem of multiple regulators by mandating home-country supervision. This achieves clarity, but leaves open a number of issues. Countries within the EU differ as to their banking laws, the rigor of their financial supervision, and their deposit insurance. Potential exists for banks to locate where supervision is lax, and this may be exacerbated by locating most business outside of the country in which the bank is technically domiciled so as to further reduce incentives of home country supervisors to supervise.

Home country supervision also does little to solve incentive problems that may arise in crisis management of failed banks, particularly when combined with deposit insurance issues. Indeed where there is separation of place of business (and the concomitant stakeholders) and the locus of regulatory control, an agency problem is created with all the attendant problems.

The adoption of home country supervision is essentially a political rather than economic decision. It serves to clarify who will supervise without asking who is best able to supervise or who will suffer from regulatory failure. Not all supervisory agencies enjoy the same resources, trained staffs, or political independence. Home country rules may theoretically permit host countries to take action (deny access or insist on host country supervision), but such action would be so politically costly that it is unlikely to be

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17 Progress has been uneven at best, and cultural, political, and structural barriers continue to impede cross-border expansion and consolidation. However, EU financial liberalization legislation is decidedly aimed at achieving a unified financial services market and progress has been made in Scandinavia and the new members states which did not have entrenched domestic banking institutions prior to 1990.

18 Economic reasons are more likely to determine strategic home country decisions than deliberate efforts to elude supervision. However, home country regulatory deference has in the past played been a contributing factor to outright fraud. BCCI was domiciled in Luxemburg, but carried out no significant business in that country. As a result Luxemburg regulators had little interest in supervising it (and limited resources in any case), leaving it effectively unsupervised on a global basis.

19 Mayes (2005) discusses these issues with particular reference to Scandinavia and deposit insurance, while Eisenbeis and Kaufman (2005) look at countries that effectively outsource their banking systems to foreign parented banks (e.g New Zealand).
undertaken, certainly not before a major failure had occurred. Thus, absent convergence of legal, regulatory and supervisory standards, home country supervision remains a problematic solution to the problem of multiple regulators. And even with convergence, asymmetries in potential loss sharing may bedevil its application.

**Failure Resolution and LCFOs**

**Function of bankruptcy proceedings**

All developed legal systems provide legal processes for resolving the claims of insolvent firms. The central purpose of these processes is to coordinate the claims of multiple creditors and, in some cases, the interests of other stakeholders (including management). Some legal systems favor creditors over management and shareholders, while others favor debtors.\(^{20}\) Regardless of orientation the role of the bankruptcy court is to provide a coordination mechanism for resolving the collective interests of the parties concerned. Absent such coordination, creditors would seek to seize and liquidate assets to satisfy their own claims. The seizure of assets would necessarily result in the destruction of any going-concern value (if there was any).

The liquidation of assets by individual creditors sets up perverse incentives that encourage runs on an insolvent firm. If the law requires creditors to pay excess recoveries (realized liquidation values in excess of the amounts of their claims) into a common pool, then creditors in possession of assets would have little of no incentive to maximize the recovery values once their claims are satisfied. If creditors get to keep any excess recoveries, then they have incentives to maximize recoveries, but this is of little benefit to creditors as a group.

For this reason, bankruptcy courts (and alternative insolvency administrators) seek to first gain control of the firm’s assets and to collect and validate creditor claims. The court then, in principal, attempts to determine how best to protect the collective interests of creditors.\(^{21}\) Central to this deliberative (and usually very slow) process is the

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20 See Bliss (2003) for a discussion.

21 There is a tension between the protection of the collective interests of creditors (and other stakeholders) on the one hand, and the contractual and legal priority of claims and treatment of security interests on the other. The discussion of this problem is beyond the scope of this paper.
ability of courts to stay execution of contracts (in effect to call a “time out”) so that assets are not dissipated while the court carries out its tasks.\textsuperscript{22}

While stays are explicitly provided for in most legal frameworks, the neutrality of adjudicator is an implicit component. Conflicts of interest among creditors (and between creditors and shareholders and management) are inherent in the bankruptcy process. With few exceptions bankruptcies are ultimately administered and overseen by judges (or administrative officers) who have no direct financial interest at stake. The neutrality of the controlling authority is important to lend credibility to the process. Where the neutrality and fairness of the bankruptcy process is lacking, creditors may adapt in ways that are not in the interests of financial markets and society. Creditors may seek to gain control of assets prior to the bankruptcy filing, thus precipitating the “rush to the exits” that bankruptcy attempts to avoid. They may demand collateral, raising the effect costs of borrowing and limiting credit to firms that have good (liquid) collateral to pledge. Creditors may seek to conduct business in jurisdictions that are more creditor friendly forcing companies to follow them setting up potential conflicts of law should the firm fail in multiple jurisdictions. Or creditor may simply price the risks they face in bankruptcy into their contracts, raising the price of credit.

In some jurisdictions, for instance in the U.S. under Chapter 11 reorganizations, immediate control of the firm and the resolution planning is at least initially vested in management which does have strong personal and financial interests that may not be aligned with those of creditors. Nonetheless, the management’s actions are usually subject to court oversight and the resolution process is itself designed to protect the interests of all (or most) creditor classes. In particular, creditors usually have standing to appeal decisions of the bankruptcy trustee/administrator and in some instances to vote on final plans for liquidation or reorganization.

A major exception to the general practice of having a neutral authority oversee the administration of a bankruptcy and to provide all creditor with standing to participate in the process, is the treatment of bank insolvencies in the U.S. When a U.S. bank fails the

\textsuperscript{22} Derivatives and some other financial market contracts are noteworthy exceptions to the ability of courts to prevent creditors from acting outside of the bankruptcy proceeding. See Bergman \textit{et al} (2003).
insolvency is solely administered by the FDIC which is also a major creditor. While depositor preference laws align the interests of other depositors with those of the FDIC, these laws leave other creditors (including foreign depositors) with residual claims. “Least cost resolution” requires the FDIC to conduct resolutions to minimize its own losses rather than the collective losses of all creditors. This combination of a residual class and a mandate to minimize own losses, creates little incentive for the FDIC to maximize recoveries of liquidated assets once its own claims are covered. The process of U.S. bank resolution provides creditors with only extremely circumscribed means of appealing the actions of the FDIC.

Handling International Insolvencies

The failure of an LCFO will inevitably present multiple challenges to this paradigm of coordinated resolution of creditor claims supervised by a neutral authority. A failed LCFO, like any major international firm will have assets and creditors in multiple legal jurisdictions. In the U.S., the situation is complicated by the existence of multiple domestic venues to handle different parts of a failed LCFO. There are two methods for dealing with international insolvencies: The universal or single entity approach and the territorial approach. The universal approach seeks to achieve a coordinated resolution of insolvency by having the courts in the relevant jurisdictions act in concert with one court taking the lead role and other courts conducting ancillary proceedings to support the activities of the lead court: gaining control of local assets, collecting local creditor claims, enforcing judgments of the lead court, etc. The territorial approach, on the other hand seeks to conduct simultaneous independent proceedings in each relevant jurisdiction, with each court seeking to gain control of assets under its jurisdiction in order to satisfy the claims of its own creditors.

The universal approach can, in principal, achieve a coordinated resolution, however the actions of ancillary courts are often subject to local laws. Where courts attempt to enforce differing local laws within the context of ancillary proceedings,

23 The FDIC becomes a creditor by paying off insured deposits and then taking over (subrogating) their claims. The FDIC may also become a creditor through pre-insolvency extension of credit, though this is increasingly rare.

24 While U.S. banking law provides for conservatorship of a distressed bank, in practice, U.S. bank insolvency inevitably results in the sale or liquidation of an insolvent bank.
creditors recoveries can differ. These potential disparities may undermine the incentives of courts to fully cooperate. It is unclear whether it would be possible to conduct a multinational reorganization through the courts in different countries operating under materially different laws. The incentives of courts to take actions that would potentially undermine their own domestic creditors’ potential positions—whether by allowing asset transfers or reducing creditors’ claims—may make collectively optimal solutions difficult to achieve. On the other hand, the territorial approach offers no hope of reorganization as each jurisdiction operates independently and in the interests of its domestic creditors. The territorial approach also suffers from the problem that incentives for courts to maximize recoveries of liquidated assets are much diminished once their own domestic creditors’ claims have been satisfied.

Thus, any cross-border bank insolvency is apt to fall far short of the ideal of coordinate and cooperative resolution of collective creditor claims. Some creditors may be advantaged, while other would necessarily be disadvantaged. Moreover the impediments to cooperation and coordination must necessarily mean that going concern value will be sacrificed and total recoveries (other than by lawyers) diminished. Fortunately, complex cross-border insolvencies are rare, but this means that great uncertainty exists as to how they might play out. Such uncertainty may itself create incentives for regulators to intervene prior to insolvency to prevent triggering legal processes. Such intervention may take the form of facilitating a market solution (recapitalization) as was done in the case of Long Term Capital Management. The alternatives, regulatory recapitalization (bail-out) or refusing to close a bank, raise both coordination (across regulators) and morale hazard problems.

Recent revisions to the U.S. bankruptcy laws (Bankruptcy Abuse Prevention and Consumer Protection Act of 2005) have adopted many of the provisions of the United Nations Commission on International Trade Law (UNCITRAL) model law for governing international insolvencies. These provisions may come into play in the insolvency of a

25 For instance, in the case of BCCI, the main European proceeding was in Luxemburg with U.K. courts acting in an ancillary role. However, the U.K. courts applied U.K. netting rules, which differed from those used by the Luxemburg court. Since most of BCCIs European assets were located in the U.K. this ruling lead to many U.K. creditors realizing higher recoveries than creditors whose claims were settled in Luxemburg.
U.S. bank holding company. However, both the model law itself and U.S. law specifically exempt banks from the UNCITRAL framework.

**U.S. Failure Resolution Regimes**

The U.S. has specialized insolvency regimes for depository institutions (“banks” in the U.S. sense), broker/dealers, insurance companies, and housing-related agencies. Individuals and most other corporations fall under the federal Bankruptcy Code. The Bankruptcy Code has two major forms: Chapter 11 is intended to preserve the company as a viable entity, and Chapter 7 is intended to liquidate the company. Chapter 11 initially gives management the sole right to propose a workout. This right is limited in time and if the proposal is not adapted a trustee can be appointed to carry on the negotiations. The plan however must be approved by the creditors and stockholders. This gives junior claims considerable leverage, resulting in frequent violations of apparent legal and contractual priority of claims. In Chapter 7, the creditors elect or the court appoints a trustee to oversee the settlement of claims, subject to approval of the court. Both Chapters 7 and 11 provide creditors with the right to be represented, to vote on proposed settlements, and to appeal bankruptcy court rulings. Importantly, no interested creditor has absolute control of the process.

U.S. bank resolution is complex, indeed Byzantine. Firstly, closure authority lies with the primary regulator. There is no mechanism for a bank’s depositors or other creditors to petition for an insolvency proceeding to be initiated. While prompt corrective action (PCA) legislation specifies seemingly precise rules for when the primary regulator must close a bank, these rules are tied to financial statements. Financial statements are subject to considerable judgment (and occasional misrepresentation), and examiners have some discretion as to when to require restatement of disputed values. The

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26 See Bliss and Kaufman (2005b) for a detailed discussion.
27 These include the Federal Home Loan Banks, and mortgage agencies Fannie Mae and Freddie Mac.
28 The federally-charter housing agencies—Federal Home Loan Banks, Fannie Mae and Freddie Mac—are exempted from the Bankruptcy Code, though no alternative venue is provided for liquidating them or resolving their creditors claims.
29 However, since the parent bank holding company falls under the Bankruptcy Code, the holding company’s creditors can initiate proceedings if a holding company event of default occurs. This is usually the result of prior or imminent closure of the lead bank subsidiary. It is unclear whether initiation of a bankruptcy proceeding against a bank or financial holding company would force bank regulators to move against the subsidiary banks. It seems likely that this might happen if only to shield the bank’s assets from the bankruptcy court and holding company creditors.
result is that the closure rules under PCA are less useful than they should be.\textsuperscript{30} Once closed, resolution of virtually all banks is handled by the FDIC. The FDIC acts as conservator (though rarely) or receiver, taking immediate control of the bank’s assets. It is able to act expeditiously; its powers are sweeping and its actions are not subject to judicial review.\textsuperscript{31} The FDIC pays off the insured depositors and assumes their claim, thus becoming itself the major creditor in the proceeding it is administering. Depositor preference legislation (see Kaufman, 1997) effectively aligns the interests of the FDIC with those of the uninsured domestic depositors as any recoveries must be shared pro rata by the FDIC and domestic depositors. Claims of foreign depositors (depositors in foreign branches), and other creditors are subordinated to those of the domestic depositor and the FDIC.

In carrying out its resolution duties, the FDIC is required by law to maximize recoveries for all creditors and simultaneously minimize losses to the deposit insurance fund. However, the focus of both legislation and regulatory practice is on the latter goal. The FDIC is required to choose the resolution option that is expected to minimize losses to the FDIC as deposit insurer (“least cost resolution”), rather to all creditors. This goal is met when the FDIC’s losses are zero, though the uninsured, non-domestic-depositors and general creditors may be whipped out.\textsuperscript{32} There is no requirement in law or policy to choose among those options that minimize losses to the FDIC that option which minimizes losses to other creditors.

The Federal Reserve is the supervisor of bank and financial holding companies. However, Federal Reserve policy explicitly seeks to protect the bank subsidiaries, rather than the holding company’s creditors. Under the Fed’s source of strength doctrine, holding companies must do everything possible to ensure that the bank subsidiaries are well capitalized and are required to recapitalize them if they fall short. The statutory and

\textsuperscript{30} Under PCA rules banks should be closed when their equity is still marginally positive, leaving uninsured depositors and general creditors protected. In fact, it is rarely the case that general creditors receive payment and frequently the case that uninsured depositors suffer losses.

\textsuperscript{31} It is possible in some cases to sue the FDIC for actual, though not punitive, damages, after the fact, but not usually possible to stay the FDIC’s actions.

\textsuperscript{32} The FDIC itself expects that this will usually be the case. “[i]nasmuch as most liabilities of a failed institution are deposit liabilities, the practical effect of depositor preference in most situations is to eliminate any recovery for unsecured general creditors.” FDIC Resolution Handbook, 2003, p.72; available online.
legal support for this doctrine is weak, except in the case of approving mergers. The regulatory perspective that the primary function of the holding company is to protect bank subsidiaries aligns the interests of Federal Reserve with those of the FDIC rather than the holding company and its creditors.

This depositor-focused resolution procedure is well suited to banks whose only liabilities are deposits. This liability structure is apt to be substantially true for the multitude of small U.S. banks, either because they have few non-deposit liabilities or because by the time they fail those uninsured creditors that they did have have already run. For these banks, the efficiency of the FDIC resolution process may be superior to the uncertainties of the bankruptcy process, though it does ignore the interests of non-financial market claimants such as suppliers and employees.

Tensions in U.S. law between insolvency regimes for holding companies and their constituent bank, securities, and insurance subsidiaries, and a strong tendency for U.S. banking law to disadvantage foreign interests (see the Appendix) are all apt to undermine cooperation with foreign courts in any major LCFO insolvency involving U.S. firms. Similarly, cooperation between U.S. insolvency venues is uncertain.

EU Approach to LCFO Resolution

The EU has adopted a universalist approach to cross-border, intra-EU insolvencies. Paralleling home country regulation and supervision, in an insolvency home country courts would take the lead and host country courts would conduct ancillary proceedings. This structural cooperation is however mitigated by fundamental differences in bankruptcy law across countries. Host country courts may either apply home country laws that conflict with their own laws resulting in creditors being treated differently in the same court from case to case, or they may apply host country laws resulting in different creditors being treated differently from venue to venue in the same case. The former

33 No explicit affirmative granting of powers asserted under the doctrine appears in legislation. Several courts have ruled that the Federal Reserve may impose source for strength requirements of limited duration as a condition for approving regulatory actions. Broader claims of unlimited duration or unrelated to a regulatory approval process have not been support by courts. The source of strength doctrine is mentioned in Gramm-Leach-Bliley only for purposes of prohibiting its application to subsidiaries regulated by other agencies without their approval (while remaining silent on whether it can be applied to the holding company and unregulated subsidiaries.)

outcome is likely to be viewed as unfair and lead to political pressures, while the latter outcome will cause differential recoveries by otherwise identical creditors, leading to disincentives to cooperate if own-country creditors are to be adversely affected.

Significant differences in pro-creditor and pro-debtor orientation across EU jurisdictions raise the possibility of strategic home country selection. As in the U.S. where managers sometimes preemptively file for Chapter 11 because it serves their interests, managers might be tempted to position their headquarters where the laws give them greatest leverage against creditors. This possibility seems remote however. To the degree that home country positioning is an active business decision, as apposed to an artifact of the company’s history, the choice is more likely to be determined by factors that affect the firm as a going concern, such as taxes and corporate governance laws.35

Conflicts Between Resolution Agents

In the event of an LCFO failure, the ideal cooperative resolution of the insolvency is likely to be undermined by failure of resolution authorities to cooperate in pursuit of collective solutions. Adversarial conflicts between resolution authorities or agents may even arise, particularly if U.S. financial institutions are involved. The failure of BCCI produced a ring-fenced proceeding in the U.S. that result in all U.S. creditors being paid in full, while coordinated proceedings in Europe were subject to different, host country, laws so that different European creditors were treated differently. Each venue simply pursued their own solution, in the light of their own laws and legal standards. However, information sharing between venues appears to have been cooperative, even if common solutions were not the primary goal. On the other hand, the failures of two U.S. bank holding companies—MCorp in 1989 and Bank of New England Corp (BNEC) in 1991—resulted in extensive litigation between regulators and trustees of the holding company. Both cases are informative of the potential for multiple resolution authorities pursuing their own interests to lead to a total break down of the cooperative/collective ideal of insolvency administration.

35In the U.S. the state of Delaware developed a reputation for having manager-friendly courts, and over time developed a body of case law that favored the interests of managers over those of stockholders and other parties. As a result, a large fraction of businesses were incorporated in Delaware. More recently, other states have adopted similar laws to attract incorporations. Thus, strategic incorporation was an impetus for legal harmonization, though advocates of stockholder rights may decry the legal philosophy on which harmonization converged—an example of race to the bottom.
When a number of MCorp’s subsidiary banks were closed in 1989 and taken over by the FDIC, the holding company filed for Chapter 11 protection. The Federal Reserve as supervisor for the holding company sought to compel the bankruptcy court (and trustee) to downstream assets from the holding company to the banks, in effect transferring assets from the holding company creditors to the FDIC (as creditors of the failed banks). The Federal Reserve asserted its claim under its “source of strength” doctrine. The matter was litigated all the way to the U.S. Supreme Court. The substantive issue (the claim that the FDIC stands ahead of other holding company creditors) was never resolved and the matter was finally settled.

Prior to the failure of BNEC in 1991, the holding company transferred substantial assets to its distressed Bank of New England subsidiary with the full knowledge of the regulators (Federal Reserve and OCC). Following the asset transfers, the subsidiary banks were declared insolvent and closed, thus precipitating the bankruptcy filing of the parent holding company. Resulting litigation between the FDIC and the bankruptcy court trustee concerned, among other issues, the pre-closure asset transfers. The bankruptcy trustee sought to void the transfers (claw pack the assets) on the theory that the managers and regulators knew that the subsidiary bank was insolvent and thus the transfers were fraudulent conveyances. Resulting litigation continued for years and again was finally settled without reaching an adjudicated decision (the FDIC transferred substantial sums to the holding company bankruptcy estate).

Without judging the merits of the MCorp and BNEC cases, they both point out the potential for conflicts of interest between regulators—who tended to act on behalf of the deposit insurer rather than creditors as a whole—and bankruptcy courts and their trustees—who act on behalf of the holding company creditors. These conflicts of interest resulted in costly and protracted adversarial proceedings, rather than orderly collective resolution of claims. The BCCI case presents a less extreme case, but nonetheless illustrates the limits of cooperation between jurisdictions that see their primary duty in local terms (local laws, local creditors).

36 It is unclear to what degree regulators encouraged the asset transfers.
Recommendations

The forgoing analysis strongly suggests that the insolvency of an internationally active LCFO is likely to be costly and inefficient. Rather than providing a forum for the coordinated resolution of claims, the multiplicity of insolvency regimes that will be involved and their natural tendency to favor local interests, reinforced by positive legal requirements to do so in many cases, is likely exacerbate the problems that bankruptcy is intended to solve. Given the potential systemic importance of such an institution, the inability of the legal framework to mitigate the costs of failure, suggests that recourse to legal closure is to be avoided if at all possible.

This does not mean that bail out is inevitable. Indeed, it may be difficult for multiple regulators, wary of committing resources to other countries’ creditors’ benefit, to agree on a bail-out. Rather it suggests that early, pre-insolvency intervention to close or arrange recapitalization of a distressed, though still solvent firm is essential.

Early intervention however presumes both early detection and the legal and moral authority to compel remedial action. As argued above, multiple supervisors set up dynamics that undermine the oversight necessary to reliably detect distress before it is too late. Therefore, it appears to be preferable, for systemically important LCFOs at least, that a single agency conduct safety and soundness supervision of the entire firm on a consolidated world-wide basis. Such oversight is not currently provided for U.S. financial and bank holding companies. This also means that home country supervisors must be able to examine foreign incorporated subsidiaries with the same rigor that they can examine subsidiaries in the home country. This requires cooperation between regulators to allow supervisors access and to compel foreign-parented firms to cooperate with home country supervisors.

Laws and practices that discriminate between domestic and foreign firms and creditors undermine the international supervisory cooperation necessary to ensure effective early intervention. They also make post-insolvency cooperation across jurisdictions difficult, if not impossible. Attempts by regulators to position assets in advance of insolvency necessarily rely on asymmetric information between different regulators. Such non-cooperative behavior undermines early intervention. A narrow view
by regulators that their role is to protect one potential creditor group at the expense of another undermines the purpose of consolidated supervision: to detect and minimize the costs of distress, rather than to detect distress for the purpose of minimizing losses to one group of creditors.

Finally, early intervention requires the legal means for intervening. In the U.S. a solvent bank can be closed if it is undercapitalized or even if the regulators deem it in danger of becoming so. No such power exists to close a holding company that has not actually defaulted on its obligations. And while regulators have considerable means of influencing holding companies to take actions they desire, their legal means of forcing action should moral suasion fail may be limited. For early intervention to work it is necessary that regulators be able back up their moral suasion with the legal authority to close a troubled institution in an orderly manner while the institution still has positive net worth. Only then can the adversarial and destructive scramble for assets across creditors and jurisdictions be averted.
Appendix: Domestic/Foreign Distinctions under U.S. Law

U.S. law and regulatory practice, as it applies to financial institutions, distinguishes between foreign and domestic institutions and individuals in important ways.

- Under U.S. law, deposits are given priority in settlement of a failed bank’s creditors’ claims.\(^{37}\) However, the definition of a deposit effectively limits the scope of that term to domestic deposits.\(^{38}\) Foreign deposits—those held at foreign branches—are not “deposits” under the law and thus become general credits, subordinated to domestic deposits, unless payable in the U.S. The same is true for deposits held in U.S. banks in International Business Facilities.
- At U.S. branches of foreign banks, only deposits of U.S. citizens, residents and businesses are insured.\(^{39}\)
- Where a branch or agency of a foreign bank becomes insolvent, the receiver can attach (seize) all of the foreign parent’s assets and property in the U.S. even if they are part of a different non-bank subsidiary.\(^{40}\) When a domestic bank becomes insolvent, the FDIC cannot seize the assets of the non-bank affiliates, it can however hold affiliated bank subsidiaries of the same holding company liable for any losses.
- In contrast to its ring-fenced or territorial approach to the failure of a foreign bank with U.S. branches, in resolving a failed U.S. bank, the FDIC will attempt to gain control of all the bank’s worldwide assets—in effect taking a universalist stance.\(^{41}\) These world-wide assets will then be used to payoff domestic depositors first, thus affording domestic creditors preferential treatment over foreign creditors.
- While Gramm-Leach-Bliley reaffirms functional regulation for Financial Holding Companies, the Federal Reserve in approving FHC applications for foreign financial institutions strongly favors them to have comprehensive consolidated supervisions of the foreign parent lead bank.\(^{42}\)

\(^{37}\) 12 USC 1821(d)(11)(A)  
\(^{39}\) 12 USC 1813(m)(2)(A)  
\(^{40}\) 12 USC 3102(j)(1).  
\(^{41}\) Mattingly et al. (1999), p. 270.  
\(^{42}\) Federal Reserve Reg Y §225.92(e)(2)
Table 1: Summary Information on 5 Largest U.S. Bank Holding Companies\textsuperscript{43}

<table>
<thead>
<tr>
<th></th>
<th>CitiCorp</th>
<th>Bank of America</th>
<th>JP Morgan Chase</th>
<th>Wells Fargo</th>
<th>Wachovia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets (US$, millions)</td>
<td>1,396,568</td>
<td>1,039,764</td>
<td>817,763</td>
<td>420,305</td>
<td>418,441</td>
</tr>
<tr>
<td>Loans (% of Assets)</td>
<td>37.0</td>
<td>47.0</td>
<td>24.8</td>
<td>63.2</td>
<td>42.4</td>
</tr>
<tr>
<td>Total Deposits (% of Liabilities)</td>
<td>40.5</td>
<td>61.0</td>
<td>49.9</td>
<td>69.7</td>
<td>64.1</td>
</tr>
<tr>
<td>Domestic Deposits (% of Liabilities)</td>
<td>14.2</td>
<td>55.4</td>
<td>29.7</td>
<td>66.0</td>
<td>62.0</td>
</tr>
<tr>
<td>Number of distinct entities</td>
<td>1616</td>
<td>1891</td>
<td>992</td>
<td>672</td>
<td>972</td>
</tr>
</tbody>
</table>

Table 2: Summary Information on 5 Largest U.S. Banks\textsuperscript{44}

<table>
<thead>
<tr>
<th></th>
<th>Bank of America</th>
<th>JP Morgan Chase</th>
<th>Citibank</th>
<th>Wachovia</th>
<th>Wells Fargo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets (US$, millions)</td>
<td>706,888</td>
<td>654,641</td>
<td>648,243</td>
<td>368,871</td>
<td>364,698</td>
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<tr>
<td>Loans (% of Assets)</td>
<td>48.3</td>
<td>25.3</td>
<td>54.0</td>
<td>45.4</td>
<td>64.2</td>
</tr>
<tr>
<td>Total Deposits (% of Liabilities)</td>
<td>73.3</td>
<td>55.4</td>
<td>71.4</td>
<td>74.3</td>
<td>82.9</td>
</tr>
<tr>
<td>Domestic Deposits (% of Liabilities)</td>
<td>60.9</td>
<td>35.4</td>
<td>20.0</td>
<td>70.2</td>
<td>77.1</td>
</tr>
</tbody>
</table>

\textsuperscript{43} This information is taken from the 30 June 2004 “Consolidate Financial Statements for Bank Holding Companies” FR-Y-9C, available on the Federal Reserve Board’s WEB site.

\textsuperscript{44} This information is taken “Consolidate Report of Condition for Insured Commercial and State-Chartered Savings Banks for 30 June 2004” Schedule RC, available on the Federal Reserve Board’s WEB site.
References


