

U.S. Corporate and Bank Insolvency Regimes: A Comparison and Evaluation

by

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Abstract

In the U.S., the insolvency resolution of most corporations is governed by the federal bankruptcy code and is administered by special bankruptcy courts. Most large corporate bankruptcies are resolved under Chapter 11 reorganization proceedings. However, commercial bank insolvencies are governed by the Federal Deposit Insurance Act and are administered by the FDIC. These two resolution processes—corporate bankruptcy and bank receiverships—differ in a number of significant ways, including the type of proceeding (judicial versus administrative); the rights of managers, stockholders and creditors in the proceedings; the explicit and implicit goals of the resolution; the prioritization of creditors' claims; the costs of administration; and the timeliness of creditor payments. These differences derive from perceptions that “banks are special.” This paper elucidates these differences, explores the effectiveness of the procedural differences in achieving the stated goals, and considers consequences of the different structures.

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I. Introduction

When firms become financially insolvent, legal processes are required to efficiently and equitably resolve the claims of creditors and other stakeholders. Unlike most other countries, in the U.S., two distinct legal processes exist for resolving the failures or bankruptcy of commercial banks and most other corporations.¹ Underlying these two regimes are different assumptions, goals, and strategies for resolution. In contrast, in most countries, resolution of bank insolvencies is guided by the general corporate bankruptcy code, e.g. Germany and the United Kingdom, although in some of these countries special provisions for banks apply, e.g., Italy, France, and Switzerland.²

Bank insolvencies are resolved differently primarily because banks provide a vital service in among other things, issuing liquid deposits, which tend to serve as money, extending credit, and processing payments. It is believed that any interruption in these activities, with resulting losses to participants, would have more serious adverse impact on the economy of the insolvent bank's market area than any interruption in the operation of other insolvent firms.

In the United States, the declaration and resolution of financial insolvencies at most nonbank corporations, including parent bank and financial holding companies, though not their subsidiary banks, are governed by the Federal bankruptcy code (11 U.S.C. 101–1338). Commercial banks, as well as insurance companies and some other financial firms, are specifically exempted from the corporate bankruptcy code (11 USC 109(b)(2)), (Clark, 1976). Instead, the declaration and resolution of bank insolvencies are governed by the provisions of the Federal Deposit Insurance Act (the FDI Act, 12 U.S.C.

¹ The term “bankruptcy” is derived from the Italian “banca rotta” which means broken bench and refers to the medieval practice of breaking a merchant’s bench in the market place when the merchant became insolvent (Jackson, 1986, p.1). We use the term bankruptcy in its generic sense of an insolvency proceeding. Strictly speaking bankruptcy applies to corporations subject to the bankruptcy code and following the initiation of bankruptcy proceedings by a court. For banks, “bankruptcy” occurs when the bank is placed into receivership or conservatorship by its chartering agency or primary federal regulator. In neither case is insolvency *per se* a necessary precondition for an “insolvency proceeding.” See also Clark (1976) for alternative definitions of failure and insolvency.

² A review of bank insolvency codes in many foreign countries appears in Hüpkes (2000, 2003).

1821–1825). The special code for banks differs significantly from the general federal corporate bankruptcy code in a number of ways enumerated in Table 1.

The general corporate bankruptcy code in the U.S. strongly favors debtor corporations over their creditors and, in its Chapter 11 proceedings, which are common for large insolvent firms, attempted rehabilitation and in-place managers rather than liquidation. In contrast, the bank insolvency code favors depositors (usually the major class of bank creditors, and encourages speedy legal closure and resolution at the expense of in-place management and attempts at rehabilitation. Differences with the existing general corporate bankruptcy code are further widened through an emphasis on insolvency rather than default, formalized early intervention to forestall insolvency, quick declaration of insolvency when it is imminent, prompt termination of the bank charter and shareholder control rights, strict enforcement of creditor classes, potential speed of resolution, lack of creditor standing, limited judicial review, and administrative, rather than judicial, proceeding. The fundamentally different approaches to insolvency resolution of banks and non-banks derive in part from perceived differences in externalities of insolvencies which result in differences in the goals that these procedures seek to achieve.

Section II outlines the economic and regulatory rational for a separate insolvency process for banks. Section III reviews the history of bank insolvency laws and procedures as they developed in the U.S. Section IV compares the difference in goals of nonbank corporate bankruptcy and bank insolvency resolution. Section V analyzes differences in a number of the areas used in Table 1 between the provisions in the FDI Act for banks and the federal bankruptcy code for general corporations. Section VI considers the issue of multiple jurisdictions that may arise in the failure of large and complex firms. Section VII concludes.

II. Why a Separate Insolvency Regime for Banks?

Banks are exempted from the general corporate bankruptcy code and subject to special provisions because they are frequently viewed as “special” and different from other firms in their importance to the aggregate economy, in their financial fragility and

vulnerability, and in the seriousness of the adverse effects of their insolvency on others.

Reasons for these perceived differences include:

- Banks are among broadest of financial institutions and some are individually large relative to GDP.
- Bank deposits (debt) are held by a large proportion of the population, including those of limited financial means and expertise, and in a wide range of denominations, including very small amounts.
- Bank deposits collectively comprise the largest share of the country's money supply and are the primary medium of exchange.
- Banks have a large proportion of their liabilities in very short-term debt that can easily be withdrawn (run).
- Bank deposits represent a significant portion of the public's most liquid assets.
- Banks are major providers of credit to households, business firms, and governments.
- Banks are central to the operation of the payments system.
- Bank assets are widely perceived to be less transparent than assets of most non-bank firms.
- Ownership of bank assets can be transferred quickly and cheaply.
- Banks are closely interconnected through inter-bank deposits and loans.

Evidence clearly demonstrates that the financial health of the banking industry as a whole is vital to the efficient performance of the macro economy. Furthermore, individual bank failures, and particularly large bank failures, are widely perceived to be more damaging to the economy than the failure of other firms of comparable size and to generate particularly significant negative externalities. It is therefore argued that banks require special handling to reduce the societal cost of their insolvency.³ From the earliest days of U.S. banking, banks were required to obtain special charters from the state specifying their permissible activities, minimal capital requirements and requiring their owners to be evaluated on their moral standards. Bank charters were sometimes further restricted to limit competition and thus enhance safety. The potential disruptions from bank failures may also be reduced by tailoring the resolution process to the unique

³ See *inter alia* Carnell (2005), Clark (1976), Corrigan (1983) and Hüpke (2000). The “banks are special” argument focuses primarily on the banking system as whole and individual large systemically important banks. Less of a case has been articulated for the special importance of individual small banks.

features that make their failures particularly costly. In particular, bank insolvency procedures attempt to reduce both credit and liquidity losses to depositors and other creditors by permitting—though not necessarily guaranteeing—early, quick, broad, and decisive actions by the delegated government regulator both when insolvency threatens and after the bank is declared insolvent.⁴ Lastly, deposit insurance is provided to protect targeted depositors against credit losses. This paper discusses only the special solvency resolution procedures applied to banks and banking.

Credit losses to depositors and other creditors occur when recovery values from the sale of the insolvent bank or its assets fall short of the par value of the creditor claims. Liquidity losses occur when depositors are denied immediate access to the insured par value or, in the case of uninsured depositors, the recovery value of their accounts. If the FDIC as receiver does not immediately transfer all of the deposits (insured and uninsured) to another bank and protect them in full as it generally did before 1992, the deposits may become frozen and depositor access temporarily blocked until the FDIC collects the proceeds from the sale of the bank’s assets. This reduces the moneyness of demand and other short-term deposits by effectively transforming a short-term liquid deposit into a time deposit of uncertain maturity. Delaying payment of the par value of insured deposits and expected recovery value of uninsured deposits (on demand or as they come due in the case of time deposits) is may produce substantial negative externalities in the markets served by the bank, in addition to those produced by the ultimately-realized credit losses (Kaufman, 2004a).

III. History of the U.S. Bank Insolvency Regimes

Bank and nonbank insolvency laws and procedures have evolved along different paths in the U.S. Early in U.S. history similar procedures and venues applied to both types of firms, but with the increase of federal involvement in the banking system the processes diverged.

Article 1, Section 8 of the Constitution of the United States authorizes the Federal Government to “establish...uniform laws on the subject of bankruptcies.” Nevertheless,

⁴ As discussed below, a bank need not be economically or even book-value insolvent to be closed by regulators though insolvency is one possible reason for closure. We will use the term “insolvency resolution” for the process that follows the involuntary closing of a bank for any reason.

Congress was unable to enact a permanent bankruptcy code until 1898.⁵ When a permanent Federal bankruptcy statute was finally enacted, the act specifically exempted chartered banks.⁶ In this period, states dealt with the insolvency of state-chartered banks by suspending or not renewing their charters and appointing a receiver. For the most part, the resolution of insolvent state-chartered banks by states appears to have been conducted similarly to the resolution of non-banks.⁷ The bankruptcy processes were initiated by creditors or state officials who petitioned the courts for appointment of a receiver to liquidate the bank. The receiver was regarded as an officer of the court and accountable to it. Because insolvent banks were generally required by law to collateralize their note issues with specie or government bonds, note holders were typically treated as secured creditors. Thus, collateralization of notes was designed to protect one class of creditors, much as deposit insurance does today.

Resolution of bank insolvencies appears to have been a long-standing distinct concern in the United States. In the 19th century most states had special provisions of one sort or another granting state banking regulators a role in bank insolvency resolution.⁸ Beginning in the early 1800s, a number of bills were introduced in Congress attempting to provide special bankruptcy treatment for state-chartered banks. Although not enacted, their introduction reflected widespread public concern about resolving bank failures, particularly as the banks were providing effectively all the country's currency through their note issuance and the notes were in wide circulation across state lines. In 1864, Congress authorized the chartering of national banks. The National Bank Act also provided for the resolution of failed national banks by specifying that

... on becoming satisfied ... that any [national bank] association has refused to pay its circulating notes ... and is in default, the Comptroller [of the Currency] may forthwith appoint a receiver ... under the direction of the Comptroller.

⁵ Congress passed bankruptcy codes in 1800, 1841, and 1867 which were repealed in 1803, 1843, and 1878, respectively. The 1898 law was the first "permanent" general bankruptcy law in the U.S. (Jackson, 1986, p.1). See also Swire (1992).

⁶ Swire (1992)

⁷ Upham and Lamke (1934).

⁸ Upham and Lamke (1934).

By providing for the Comptroller rather than the courts to declare insolvency, terminate the bank's charter, and appoint and direct the actions of the receiver, the Act recognized the need to resolve banks differently than other firms by providing for speedy administrative action outside the slower judicial system.⁹ The statutory bank receiver could be granted powers that other receivers were ordinarily not granted.¹⁰ The grounds for appointment of a receiver for national banks were broadened by Congress in 1876 to include operating in an unsafe and unsound manner.¹¹ In the late 19th century, states began to modify their insolvency regimes for state-chartered banks in a similar fashion. The special statutory regimes granted state regulators a greater role in declaring a bank insolvent and provided for the appointment of a statutory receiver independent of the courts.¹²

In 1933, the newly created FDIC was made the sole receiver for insolvent national banks and could be appointed receiver by state banking agencies for state chartered banks. This marked a departure from previous practice of employing private receivers and bankruptcy theory by appointing a major creditor as administrator/adjudicator rather than a financially disinterested party.¹³ In addition, the Comptroller was granted the authority to appoint the FDIC as a conservator, rather than a receiver, if it preferred to attempt to rehabilitate the bank, at least temporarily, as a stand-alone entity rather than liquidating or merging it quickly with a solvent bank.¹⁴ The 1933 act reinforced the

⁹ A number of states adopted similar legislation for their banks, giving the state regulatory agency the authority to appoint and direct the operations of the receiver, although not necessarily granting the receiver all the powers granted by the federal statute (Swire, 1992). However, a number of states continued to resolve their state-chartered banks under their state bankruptcy laws (and courts) as late as 1894 (Todd, 1994).

¹⁰ The duties of a receiver are discussed in Upham and Lamke (1934), pp. 22-23.

¹¹ Upham and Lamke (1934), p. 19.

¹² Swire (1992).

¹³ Provisions in Chapter 11 give management, not a disinterested party, initial control of the process, but the court, which has no financial interest, oversees their actions and reorganization plans are subject to collective creditor approval. Reasons offered for appointing the FDIC as receiver, given in Clark (1976), include the need to reduce losses to the insurance fund, knowledge of the banks affairs, expertise in financial matters, greater ability to discover insider misconduct, and need for speed and reduced cost.

¹⁴ There are two types of conservatorships: A pass-through conservatorship that is used for technical legal reasons in conjunction with a receivership to facilitate the resolution of a savings institution for which there is no authority to charter a bridge bank. A straight conservatorship is used as a means of operating the bank on a temporary basis under the control of the conservator, without revoking the charter. Straight conservatorships have been extremely rare.

Comptroller's 1876 powers to preemptively legally close banks,¹⁵ as it did not require explicit evidence of insolvency but only a need "...to conserve the assets of any bank for the benefit of the depositors and other creditors" (Todd, 1994, p.2). In 1987, the Competitive Equality Banking Act, granted the FDIC additional authority to charter a new temporary national "bridge" bank¹⁶ as an alternative to liquidation under receivership or administration under conservatorship to keep all or parts of insolvent banks operating under new FDIC-appointed management and FDIC ownership while the bank is resolved in an orderly manner. In both straight receivership liquidations and bridge banks, which are chartered after the bank is placed into receivership, the old bank's charter is revoked, shareholder control interests are terminated, and typically senior management is changed.

In 1991, the FDIC Improvement Act (FDICIA) enhanced the powers of the FDIC and Federal Reserve by expanding their authority as a state chartered bank's primary federal regulator to legally close a state-chartered bank under their jurisdiction and appoint the FDIC as its statutory receiver or conservator. Previously, this power rested solely with the chartering state banking agency, although the FDIC could remove insurance coverage. FDICIA also expanded and strengthened the powers of the primary federal regulators to legally close a bank beyond the previously legislated causes of finding of insufficient assets to meet its obligations, unsafe and unsound banking practices, or threatened losses that would deplete the bank's capital. Included as part of the newly enacted prompt corrective action (PCA) provisions (12 USC 1831o), the new criterion affirmatively requires (rather than merely permitting) the appropriate regulators to appoint a receiver or conservator within 90 days (and allowing for two 90-day extensions) of a finding that a bank's book value tangible equity capital has declined and remained below the "critically undercapitalized" ratio to a bank's total assets. This ratio is currently set by the bank regulators at the two percent minimum prescribed in the

¹⁵ Bank "closure" refers to termination of the bank's charter and placing it into receivership. It does not necessarily mean that the bank is physically closed and ceases operations, any more than bankruptcy means that a nonbank corporation ceases doing business. However, historically, bank closures usually resulted in physical closure and liquidation.

¹⁶ A bridge bank is a newly chartered national bank, frequently under a similar name, owned and operated by the FDIC, to which some or all of the bank's assets and liabilities are effectively transferred when the bank is closed. The life of a bridge bank is statutorily limited to two years, with two 1-year extensions permitted.

legislation. Thus, a bank need not be book-value insolvent or predicted to be so in order to be considered regulatorily insolvent and placed into receivership.¹⁷ Among other things, this provision reduced the discretion of bank regulators to decide when to appoint receivers (“forbearance”), which often resulted in closure delays at a cost of continuing, if not worsening, the insolvent bank’s losses. These provisions, designed to precipitate resolution before an actual event of economic insolvency or financial default, mark another important departure from corporate bankruptcy law and provides regulators, including the FDIC, with a powerful tool for mitigating losses to creditors.

Lastly, in 1993, the Depositor Preference Act (12 U.S.C. 1821(d)(11)) modified the priority of payment of claims on insolvent banks to give priority to domestic deposits, generally those payable at the bank’s domestic offices, over other types of deposits¹⁸ and other creditors (though behind tax liabilities, unpaid wages, and administrative costs incurred by the FDIC in administering the resolution). The FDIC, standing in the shoes of insured depositors, was put on an equal basis with the uninsured domestic depositors and ahead of general creditors.

IV. Goals of Bankruptcy

As noted earlier, banks and general corporations are subject to different bankruptcy codes because the goals of resolving insolvencies differ for the two types of firms. The goals of corporate bankruptcy are not explicitly spelled out in the code. Different scholars have defined them in various ways. Common elements in these definitions include solutions of a collective action problem—coordinating the debt collection efforts of multiple creditors to maximize overall recovery value (Jackson, 1986); maximizing the realized value of the bankrupt firm’s assets (Hüpkes, 2000);

¹⁷ If a bank is resolved at a gain to the FDIC after making all depositors and other creditors whole, the excess is paid to the old shareholders.

¹⁸ The legal definition of “deposit” is specified in the FDI Act (12 USC 1813(l)(5)(A)) and regulatory interpretation, and is broadly limited to deposits payable at domestic offices (branches and subsidiaries located in the U.S.). Deposits payable only at foreign offices are generally excluded as are some types of deposits at domestic offices, for instance International Deposit Facilities. See Curtis (2000) for a full discussion. For ease of exposition, we will refer to those deposits that qualify for deposit insurance (up to allowed limits) and under depositor preference as “domestic deposits” or simply “deposits,” those deposits that do not qualify we subsume under the term “foreign deposits.”

distributing the assets equitably to the creditors¹⁹ (Hüpkes, 2000), if it is determined that the firm should be liquidated (U.S. Chapter 7); or restoring the firm to financial solvency by renegotiating creditor claims, if it is determined that the firm has “going concern value” and creditors as a group would be better off if the firm is restructured rather than liquidated (U.S. Chapter 11).

In contrast, since FDICIA the goal of bank insolvency resolution is explicit. It is to achieve a resolution, subject to the legally-mandated creditor priorities, that “is the least costly to the deposit insurance fund of all possible methods” (12 USC 1823(c)(4)(A)(ii)). This is referred to as “least cost resolution.” In pursuit of this goal, the FDIC is required to “maximize the net present value return from the sale” of assets (12 USC 1823(d)(3)(D) (i)). Because the FDIC and uninsured domestic depositors have equal priority, achieving least cost resolution for the FDIC also achieves least cost to (uninsured domestic) depositors.

Banking law traditionally considers the impact of bank resolution, not only on the bank’s creditors, but also on the local economy and financial markets more broadly, while bankruptcy procedures focus more narrowly on the interests of creditors, managers, and stockholders. Thus, the bank insolvency code is more concerned with adverse externalities for the general community. For example, under FDICIA, the FDIC may, under restrictive conditions, bypass the least cost resolution requirement if adhering to it, and imposing losses on uninsured depositors and other creditors, “would have serious adverse effects on economic conditions and financial stability and any action or assistance ... would avoid or mitigate such adverse effects” (12 USC 1823(c)(4)(G)). This is referred to as the “systemic risk exemption” (Kaufman, 2004b). Likewise, in asset sales, the FDIC is directed to “...fully consider adverse economic impact...” (12 USC

¹⁹ “Equitably” means according to legally defined priorities and within the priority classes on a pro rata basis, taking into account valid security interests (collateral) and contractual subordination agreements (e.g. subordinated debentures). Most creditors, including secured creditors (to the extent that their claims exceed the liquidated value of their collateral), fall into the “general creditor” class. See Bhandari and Weiss (1996) for a collection of articles on this and related issues in the economics of bankruptcy.

1821(h)(1)). No comparable concern for the impact of insolvency resolution on third parties appears in bankruptcy law.²⁰

To minimize the impact on the economy, bank insolvency law requires speedy initiation of legal closure, but permits keeping distressed banks in business temporarily through an FDIC conservatorship in order to rehabilitate them. However, such conservatorships are currently rarely used. Today, bridge banks (12 USC 1821(n)) provide a more frequently used alternate means of keeping a legally closed bank effectively operating while the final disposition is being worked out. Most corporate bankruptcies are liquidations (Chapter 7), but large bankruptcies are, at least initially, Chapter 11 administrations, initially under the control of existing (pre-filing) management. Thus, banking law places an emphasis on minimizing immediate losses to the FDIC and depositors through prompt initiation of legal closure and resolution primarily through liquidation; while corporate bankruptcy is more likely to weigh perceived long-term going-concern value.²¹ That is, banks, even large banks, have their charter revoked when they are placed into receivership and the bank per se disappears as a stand-alone entity; on the other hand corporations that file under Chapter 11 generally attempt to survive under their own name on a stand-alone basis.

V. Differences in Code Provisions

The statutes governing bankruptcy and bank insolvency resolution in the U.S. differ in many ways, some of which are detailed in Table 1. This section examines a number of the salient areas.²²

²⁰ The failure of corporate bankruptcy procedures to explicitly consider externalities does not necessarily reflect an implicit belief that corporate failures do not engender significant externalities—occasional government bailouts of large “critical” corporations, protective trade policies, and recurring news stories of the impact of the failure of major employers on local economies, suggests otherwise. A more likely explanation lies in the origin of corporate bankruptcy law in common law with its emphasis on parties “in interest” with legal standing (hence an emphasis on debtor and creditor and not employees, suppliers, let alone local communities). Bank insolvency procedures, in contrast, have their origins in regulatory policy with a clearer focus on markets and economic effects.

²¹ In cases where an insolvent bank is quickly sold and reopens under a new name, it may be argued that little going concern value is lost

²² A comparison of banking law with that for government sponsored enterprises (GSEs) appears in Carnell (2005).

A. Initiation of Bankruptcy

Most nonbank corporations are subject to the Federal Bankruptcy Code (11 USC 109(b) defines who is “a debtor”). Involuntary bankruptcy may be initiated either by a minimum number of creditors, whose claims are in default, or voluntarily by the firm itself in anticipation of a default or for strategic reasons.²³ In either case, a petition is made to one of a number of regional federal bankruptcy courts. Court approval of the creditors’ petition or merely filing a voluntary petition initiates the process.

Unlike corporate bankruptcy law, where either creditors or management may initiate the process, bank resolution is initiated exogenously by the chartering agency or the institution’s primary federal regulatory agency, or the FDIC.²⁴ The decision is based on one or more reasons enumerated in the FDI Act (12 USC 1821(c)(5)), for example, if the relevant authority believes that the bank is not being operated in a safe and sound manner, and that the bank is unlikely to meet its deposit obligations. Perhaps the most significant of the reasons for bank closure, since the passage of FDICIA in 1991, is becoming “critically undercapitalized” while the bank is still book value solvent, defined as a minimum of two percent equity capital to total assets, and possibly even market value solvent.²⁵ Thus, the mandatory “critically undercapitalized” criterion serves as a backstop intended to prevent regulators from delaying closing a bank for other discretionary prudential reasons.

Once legally closed, the bank’s charter is revoked by the chartering agency and it is passed on to the FDIC, who serves as receiver or conservator. The old bank’s senior managers are typically ousted and shareholder control rights are terminated, although

²³ Examples of strategic motives include fixing open-ended tort claims (e.g. asbestos litigation), restructuring labor contracts, and off-loading pension and health plans. Bankruptcy may be also be used to sell a firm free and clear of potential claims arising from pre-sale events.

²⁴ Chartering agencies are the Comptroller of the Currency (OCC) for nationally chartered banks, state bank regulator agencies for state chartered banks and thrift institutions, and the Office of Thrift Supervision, (OTS) for federal thrift institutions. Primary Federal regulators are the OCC for nationally chartered banks, the Federal Reserve for state chartered member banks, the FDIC for state chartered non-Federal Reserve member banks, or the OTS for federal thrifts. The FDIC may also appoint itself conservator or receiver (12 USC 1821(c)(4)).

²⁵ Thus, there are three distinct forms of insolvency: book-value insolvency defined by book values determined according to appropriate accounting standards; regulatory insolvency, also defined in terms of book values but set at a higher threshold; and economic insolvency, determined by the market value of assets and face value of liabilities.

shareholders maintain a claim on any residual value remain after creditors' claims are satisfied.

No such anticipatory initiation of insolvency proceedings is available under the corporate bankruptcy laws.²⁶ However, solvent non-bank institutions (as well as banks) which rely heavily on short term financing, are subject to liquidity crises that may precipitate economic insolvency if markets believe that a solvent institution is insolvent. Creditors can also write acceleration clauses into debt and derivatives contracts that are triggered short of insolvency and default (e.g. "due on downgrade" clauses).²⁷ Acceleration, like withdrawal of short term credit, can induce a liquidity crisis leading to actual default and insolvency. The downside of runs and acceleration as bankruptcy initiation devices is that in response to a creditor demands to liquidate claims an institution may engage in forced liquidation of assets at fire sale prices in an effort to avoid default, thus destroying value. However, management does have the alternative of voluntary filing of bankruptcy if it wishes.²⁸ Thus, while creditors cannot legally initiate insolvency procedures without an act of default (as bank regulators can), efforts by creditors to withdraw short-term credit or accelerate claims may achieve the same result.

B. Stays

The ability to temporarily prevent creditors from pursuing their claims (termed "stays") is central to the corporate bankruptcy process. Stays permit the bankruptcy court "call time out" to collect and validate claims, to determine the best way to dispose of assets in an orderly, value-maximizing manner, and to treat all like-priority creditors equally. Stays prevent creditor runs and keep contracts in force—the counter party is bound by the contract; claims on the insolvent firm remain pending; and collateral may usually not be liquidated. This facilitates the coordination of creditor claims. The ability of bankruptcy courts to impose stays on most creditor claims is explicit in the corporate bankruptcy code. In Chapter 11 reorganizations, the ability of courts to stay contracts is

²⁶ Creditors may write clauses into their contracts that are triggered short of insolvency and default (e.g. due on downgrade clause), and these may in turn trigger a default precipitating the bankruptcy filing.

²⁷ These clauses require immediate termination of the contract and payment in full if contractually stipulated "credit events" occur. These credit triggers, such as minimum working capital ratios or minimum debt ratings, are designed to terminate contracts in advance of insolvency.

²⁸ Voluntary filing is possible for both banks and non-banks. It is more common for large non-banks, in part because it preserves management control. It is rare for banks since management is usually replaced immediately.

crucial for the firm to preserve productive capacity (assets), while creditor claims are being renegotiated.

Under the FDI Act, the FDIC's ability to stay is limited to requesting a maximum stay of 60 days of judicial actions (law suits) to which the closed bank is a party or becomes a party.²⁹ The request must be honored by the courts. However, the FDI Act contains no general power to stay contracts, including deposit contracts. In particular, the FDIC cannot keep contracts in force while preventing counter parties from exercising their rights under those contracts. Thus, unlike bankruptcy courts, the FDIC cannot stay "self-help remedies" such as liquidation of collateral, for most contracts.³⁰ However, the FDIC as receiver has broad powers to disaffirm or repudiate contracts (12 USC 1821(e)(1)) within "a reasonable time" (12 USC 1821(e)(2)). As they cannot compel performance under the repudiated contract, the effected counter parties remedies are limited to ex post damages (12 USC 1821(e)(3)). Unlike the general corporate bankruptcy stay that keeps contracts in place, this procedure is more akin to the close-out mechanism found in derivatives contracts.³¹ When FDIC terminates a contract, it creates a claim that has the status of a general creditor.

Certain qualified financial contracts (e.g., derivatives master agreements, see Bergman et al, 2004) are exempt from the stays that apply to most contracts under the corporate bankruptcy code. These derivative master agreements contain close-out provisions which, when triggered, allow the solvent counter party to immediately terminate the contract (and all transactions under the master agreement), net the values, and pay the net amount due or file a claim if the net amount is owed.³² However, these rights are not immediately enforceable for banks placed unto receivership or conservatorship. The FDIC has the power to prevent close-out for one business day in the case of receivership and indefinitely in the case of conservatorship or for contracts that are transferred to a bridge bank, for virtually any reason excepting non-performance

²⁹ 12 USC 1823(c)(2)(C) and Simmons (2001).

³⁰ Simmons (2001).

³¹ See Bergman *et al* (2004).

³² The benefits and disadvantages of this exemption to the usual staying of contracts during an insolvency proceeding are discussed in Bliss and Kaufman (2006b).

(default or failure to meet collateral calls).³³ Thus, while most contracts, with the exception of qualified financial contracts, are automatically stayed by courts in the event of a corporate bankruptcy, the opposite situation obtains in the event of a bank's insolvency.

C. Management of the Insolvency Process

Corporate bankruptcies are resolved in special federal bankruptcy courts. The proceedings are judicial in nature with each party being represented by its own lawyers. The court appoints an agent to co-ordinate the process. For a liquidation this agent would be a receiver and for reorganization, a trustee. In Chapter 11 reorganization proceedings, the insolvent corporation's senior management is usually allowed by the court to continue operating the company and has exclusive rights to formulate a reorganization plan during an exclusion period of 120 days. The bankruptcy court may, at its discretion, grant extensions of this period and has routinely done so in the past.³⁴ Creditors may, however, petition the court to appoint an independent trustee under certain circumstances. All creditors have "standing" to be represented in the proceedings, although the dynamics of voting may lead to certain minority blocks being effectively frozen out. Each creditor group, and in reorganizations also management and shareholders, must vote to approve the plans proposed by management, receiver, or trustee.³⁵ Decisions undertaken during the course of the proceedings (e.g., releasing collateral to secured creditors, partial payment of claims, paying employees, new post-insolvency—debtor-in-possession (DIP)—borrowing) are taken by the receiver/trustee with the approval of the court (the

³³ An important question concerns the status of in-the-money qualified financial contracts transferred to a bridge or other bank or kept in force in a conservatorship. The FDIC may effectively guarantee the values of these contracts (which will continue to fluctuate in response to changes in value of the underlying sources of risk), thus removing the element of credit risk from these contracts if they are not disavowed (and permitted to close-out) within the stipulated one business day. It is not clear how this would be squared with least cost resolution without requiring that the systemic risk exemption be invoked, a complicated and potentially time consuming process, since the derivatives counter parties, who are technically subordinated to domestic depositors, would in effect receive full value on their positions.

³⁴ It is not unusual for large Chapter 11 proceedings to remain under management control for several years, e.g., United Airlines remained in bankruptcy for some three years before emerging in February 2006 under new ownership. The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 now limits extensions of the exclusion period to 18 months for filing a management plan and 20 months for approving such a plan.

³⁵ Voting is done by creditor classes. Classes are determined by the court with the intention that all members of a class have similar interests (priority, security interests, etc). Voting within creditor classes is by claim amount and number of creditors. One large creditor cannot freeze out other members of the class, nor can one small creditor "hold up" the other members of the class.

judge overseeing the case). Some decisions taken by the court, for instance granting extensions of the exclusion period to allow management to remain in control, may not be in the interests of all existing creditors. However, major decisions, such as approval of a reorganization plan, are subject to unanimous agreement by all creditor classes. If a plan is voted down, the parties continue to seek agreement, possibly under a new receiver/trustee. Eventually, if the parties cannot agree the court can “cram down” the plan that it considers most equitable. Decisions undertaken by the bankruptcy court may be appealed to higher courts, and many decisions are litigated before they finally take effect.³⁶

In contrast, bank insolvencies are handled in an administrative proceeding. The bank’s charter is revoked and shareholder control interests are terminated by the bank’s primary regulator, and senior management is removed by the FDIC as receiver or conservator, all without involvement of any court.³⁷ Following its appointment as receiver or conservator, FDIC is solely in charge. As receiver or conservator, the FDIC collects information from the bank, its depositors, and other creditors, determines the validity of claims and then, within the confines of the law and its own regulations, disposes of the assets and pays off or transfers the liabilities. The FDIC unilaterally makes all decisions necessary to carry out the liquidation or reorganization. No separate oversight authority—equivalent to the court/trustee relationship—exists. Furthermore, once the receiver or conservator is appointed, there is no mechanism for creditors, management, or shareholders to participate in the decision making process beyond the filing of claims and the provision of requested information. In effect, claimants have no standing and very limited rights to appeal decisions before they are executed. However, some decisions of the FDIC are subject to ex post judicial review, although damages are

³⁶ A bankruptcy court typically rules on numerous intermediate matters (for instance, the choice of a trustee or disposition of assets). The parties may then choose to appeal these rulings, during which time the court may stay its own ruling until the appeals are resolved.

³⁷ One exception, however, is that the FDI Act grants the directors of a bank 30 days following self-appointment of the FDIC as conservator or receiver in which to file an appeal (12 USC 1821(c)(7)). This right appears to have been rarely exercised and never successfully. No right of appeal exists for a primary regulator-initiated bank closure.

the only available remedy. Other decisions, for instance to disallow creditor claims, are not subject to judicial review.³⁸ (12 USC 1821(d)(5)(E)).

D. Priorities, Collateral, and Offsets

Legal priority, security interests, and right of offset, where protected, jointly determine what a creditor is entitled to under the law.³⁹ Both bankruptcy law and the FDI Act provide a list of priorities specifying the order in which creditors should be paid off (11 USC 507(a) and 12 USC 1821(d)(11)(A)). In both cases, the costs of administering the insolvency come first. These costs can be very substantial in the case of corporate insolvencies. Bris *et al* (2004) report the mean (median) ratio of total direct expenses—including attorneys’, accountants’ and trustee’s fees—as a percentage of reported assets at time of filing to be 8.15% (2.50%) for Chapter 7 bankruptcies and 16.9% (2.00%) for Chapter 11 proceedings.⁴⁰ The bankruptcy code lists a number of unsecured creditor classes that receive favored or priority status (11 USC 507(a)). However, except for taxes (and for bank and financial holding companies, agreements with regulators), these are likely to be of little practical importance. The large majority of unsecured corporate creditors are lumped together as general creditors.⁴¹ In Chapter 11 proceedings, creditors are generally paid in securities of the reorganized firm, often in more junior securities.

In 1993, the Depositor Preference Act created a large, special class of senior creditors, namely domestic depositors, including the FDIC through its subrogation of the insured depositors’ claims are given priority over other unsecured general creditors.⁴² Insured depositors are paid in full by the FDIC, which steps into their shoes and assumes

³⁸ These powers, which go far beyond those enjoyed by a bankruptcy trustee or court, have been termed “super powers” by Baxter, Hansen, and Sommer (2004).

³⁹ “Priority” refers to the order in which various unsecured creditor classes are paid to be off from the assets of the bankruptcy estate. “Security interest” refers to liens on property that reduce the assets available to the estate; collateral being a common example. “Offset” is the process of combining (netting) offsetting multiple contracts between the insolvent firm and a given counterparty to reduce both the assets available to the estate (amounts owed by the counterparty) and unsecured claims against the estate (amounts owed to the same counterparty); bank loans and deposits are an example.

⁴⁰ Costs can be large in absolute numbers as well. In the Chapter 11 reorganization of United Airlines which lasted from 2002 to 2006, legal and consulting costs exceeded \$300 million

⁴¹ A number of creditors have subordinated claims. These include subordinated debenture. However, such subordination is contractual rather than statutory. The default priority for creditors under the Bankruptcy Code is “general creditor.”

⁴² A number of states had previously provided for depositor preference in their banking legislation, which applied to state-charter banks that were resolved under state laws (Kaufman, 1997). State laws, which govern insurance company insolvencies, frequently grant policy holders priority over other creditors.

(subrogates) their claims. Uninsured domestic depositors and the FDIC share equally (on a pro rata basis) in any recoveries, up to the par amount of the deposit liabilities. Any excess recoveries are distributed to general creditors, and then to shareholders (including parent company equity interests).⁴³ Because of depositor preference, general creditors of banks usually recovered a smaller percentage of their claims than general creditors at non-bank firms.⁴⁴

Commercial law provides mechanisms for creditors to establish security interests in the property of the debtor through collateralization of their claims. If the proper legal forms have been followed, bankruptcy courts will enforce these rights. Thus, secured general creditors may enjoy higher recoveries than would unsecured creditors. Banking law discourages collateral arrangements on the part of a bank's depositors. In the U.S., generally only U.S. Treasury, state, and municipal governments can secure their deposits with collateral. Non-deposit creditors (including foreign depositors) have greater opportunity to secure their claims through collateralization, repurchase agreements, etc. Federal Reserve lending through the discount window is also fully collateralized.

During Chapter 11 rehabilitation, the bankrupt firm can contract, with the court's permission, for additional debtor in possession (DIP) financing to allow it to continue operating. This new debt is effectively given priority over the existing, pre-bankruptcy debt.⁴⁵ Such borrowing may reduce ultimate payments to existing creditors, if economic firm value continues to be eroded. While there is no external (financial market) DIP financing for banks, pre-closure financing in the form of Federal Reserve discount

⁴³ Nearly all large commercial banks in the U.S. are currently fully owned subsidiaries of bank or financial holding companies.

⁴⁴ In recent years, it is rare that general creditors have recovered anything in bank insolvencies. However, recent banks failures which have been small, with few non-domestic deposit claims and usually structurally simple (NextBank and Superior were small but complex banks). It would be hazardous to extrapolate from this evidence how general creditors in a large complex bank resolution might compare with general creditors in comparable-size corporate reorganizations.

⁴⁵ Most DIP financing of ongoing regular business expenses (e.g., wages) is classified as "administration expenses" and thus enjoys the senior priority that the law awards such costs (in both bank and general corporate insolvencies) over other unsecured creditors. Under such terms, banks are frequently willing to provide working capital to Chapter 11 insolvencies. It is also possible, though rare, for courts to award DIP financing a senior secured status displacing previous secured creditors. Bankruptcy procedures, though they may not always be successful, are designed to ensure that post-filing lending is not employed to obtain preferential recoveries on pre-filing debt.

window lending and FDIC-provided open bank assistance have in the past served much the same purpose.⁴⁶

While corporate bankruptcy law generally frowns on offsets—the canceling of reciprocal obligations to arrive at a net amount to be owed or claimed—both the courts and the FDIC support offset for bank loans and deposits. A solvent bank depositor can offset an uninsured deposit he or she is owed by an insolvent bank against a performing loan it owes to that bank up to an equal face value. This protects the value of the uninsured deposit and avoids having it treated as a general creditor claim subject to loss. For corporations subject to the bankruptcy code, reciprocal contracts are generally treated separately and are not offset. Amounts owed by solvent counterparties must be paid as they come due, even though the same party may be owed funds from the insolvent counterparty; the solvent counterparty becomes a general creditor for amounts it is owed and subject to losses. However, non-bank firms are less likely than banks to have significant numbers of reciprocal creditor/debtor contracts. Only offset of qualified financial contracts, e.g. many derivatives under master agreements, is supported for both banks and non-banks.

E. Legal Certainty of Claims

The dynamics of the corporate bankruptcy process increases the uncertainties as to both the value and timing of creditor recoveries. The straightforward priorities of payoff under bankruptcy law only apply in liquidation. An essential element of corporate reorganization is that creditors participate in a renegotiation of their claims, the outcome of which, while subject to collective approval, may depend as much on bargaining power of the different claimants as on their theoretical priorities in liquidation. Furthermore, security interests may lead to apparent, if not real, redistribution between theoretically

⁴⁶ Since distressed bank financing by regulators is fully collateralized, the risk of reduced recoveries by uninsured depositors, and indeed the FDIC itself, is present in such efforts to avoid insolvency. Both discount window lending and open bank assistance are intended to keep a bank viable while it is returned to financial health, as DIP financing is intended to allow a non-bank corporation to attempt to return to financial health.

Insofar as the financing of a firm that is experiencing operating losses delays the resolution and erodes the recoveries by creditors, the distinction between post-filing financing (DIP) and pre-closure financing (discount lending, open bank assistance) is not material to analyzing whether the efforts to rehabilitate a firm that these mechanism make possible are in the creditors' interests. In both, cases it is not the post-distress credit providers that bear the consequences. In both cases the danger lies in the possibility that the firm may in fact not be viable and that delays facilitated by these financing mechanisms will further erode value.

equal-priority creditors. The corporate bankruptcy process, with its use of class voting and the possibility of junior holdouts, may also reduce at least the present value of the aggregate final recovery value. This frequently leads to dynamics where more senior creditors give up part of their legal claim in the hopes of achieving a settlement that yields a larger present value recovery (smaller, more immediate portion of a bigger, or at least more certain, pie). Leaving aside the possibilities that claims will be disallowed for various reasons, the precise distributional outcome of reorganization under bankruptcy is uncertain.

Bank insolvencies generally do not suffer from this problem. Offset and collateral are usually not major issues (particularly, for small and medium banks), and depositor preference is usually adhered to.⁴⁷ Absolute priority may be violated in bank insolvencies only under two conditions. Firstly, if the systemic risk exemption is invoked and some general creditors are made whole, while uninsured depositors and the FDIC are not. Secondly, if least cost resolution is achieved by transferring some non-insured deposit liabilities—for instance complex financial contracts—to a bridge bank rather than liquidating them, thus protecting those creditors from the credit losses that other creditors may incur. Neither of these two conditions is likely to occur frequently, but both are more likely to occur in large bank failures.

Despite the fact that the PCA closure rules are stated in terms of a positive minimum equity level, the superimposition of depositor preference on least cost resolution may have made foreign depositors and unsecured general creditors less certain about their recovery amounts than domestic depositors. Because the FDIC has equal priority with domestic depositors and is senior to other creditors, the general creditors' funds operate as a buffer against its losses (effectively “capital”).⁴⁸ To the extent the law requires that regulators operate to minimize losses only to the deposit insurance fund, depositor preference may unintentionally provide them an incentive to be less aggressive in legally closing insolvent banks within the discretion available to them under PCA, and the FDIC may be less assiduous in disposing of assets of closed banks in the most

⁴⁷ The insolvency resolution of Superior Bank, which failed in 2001, may be a possible exception. The FDIC negotiated with the previous owners of the failed bank to share the part of the proceeds of litigation against the bank's auditors, Ernst and Young, arguing that this would result in a higher total recovery, rather than paying all the proceeds to the uninsured depositors. See Johnson (2005).

⁴⁸ See discussion in Kaufman (1997).

efficient manner. Thus, non-domestic depositors and other creditors have an incentive to run or collateralize their claims. These incentives are an unintended consequence of superimposing depositor preference on FDICIA, rather than a deliberate policy decision.

Another major uncertainty in some bank insolvencies surrounds the ability of banking regulators to extract assets from the parent holding company for the benefit of the closed bank's depositors (including the FDIC) and general creditors under the Federal Reserve's "source of strength" doctrine (see Section VI below).

F. Timeliness

The timeliness of insolvency resolution has two components: the ability to initiate the process before the potential credit losses to debt claimants become large, and the ability to resolve the insolvency and pay the depositors and other creditors the recovery values of their claims in an expeditious manner once it is initiated minimizing liquidity losses. Prompt legal closure deprives shareholders and managers of the option to gamble for resurrection at the depositors' and creditors' expense and minimizes credit losses, while prompt resolution mitigates both credit losses, if asset values decline after insolvency has been declared, and liquidity losses to depositors and creditors, who have their funds tied up in the insolvent bank.

As was noted earlier, there is no mechanism for non-bank corporate creditors to preemptively precipitate a bankruptcy proceeding so as to limit their losses except in some instances through runs and acceleration, both of which may also exacerbate the losses. Absent such creditor-precipitated liquidity crisis, creditors must await an event of default that permits them a basis for petitioning the court to place the firm into bankruptcy. So long as firms can meet current financial obligations, including through asset liquidations, there is little that creditors can do even if the firm is believed to be insolvent. Managers can and sometimes do file for bankruptcy, usually Chapter 11, in anticipation of an actual default. However, in such a voluntary action the managers may not always be acting solely in the creditor's interests. On the other hand, bank regulators have broad powers to legally close a bank on the basis that it may get into financial trouble (i.e., operating in an unsafe and unsound manner) and a positive requirement to close it before it becomes book-value insolvent. However, when a bank becomes financially distressed, bank book values are likely to exceed market or economic values

by increasing amounts and regulators may be unaware of the true economic solvency of a bank until it is well and truly economically insolvent, particularly for small banks.

Nonetheless, evidence suggests that in most instances banks are resolved with proportionally smaller losses relative to combined depositors' and other creditors' claims than to creditors' claims in corporate bankruptcies, both before and after the establishment of the FDIC.⁴⁹

Once initiated, the FDIC as receiver can move with self-determined speed and has done so in the past. The bank may be sold immediately, generally over the first weekend, in part or whole; converted into a temporary bridge bank; and/or liquidated more slowly through time. More recently, banks have been kept in receivership while the assets are sold.⁵⁰

The FDI Act recognizes the special character of bank deposit claims, specifically that because of their liquidity they serve as money. Thus, the FDI Act requires that "payment of the insured deposits... shall be made by the Corporation [FDIC] as soon as possible" (12 USC 1821(f)) and authorizes the FDIC "to settle all uninsured and unsecured claims with a final settlement payment" based on average past recovery values in order "to maintain essential liquidity and to prevent financial disruption" (12 USC 1821(d)(4)(B)). The FDIC also has the authority to make advance dividend payments to claimants based on its estimates of recovery values for the bank being resolved.⁵¹ Like the prompt payment of insured deposits, advanced dividends on uninsured deposits minimize liquidity losses. However, advanced dividends are likely to be less than par value, so that the uninsured claimants may suffer credit losses, at least initially. Thus, because of the prompt payment of insured depositors at par and the potential for accelerated payment of the expected recovery value of uninsured deposits, liquidity issues are potentially separate from the time in receivership.

Except for insured depositors, whose claims are usually settled immediately by transferring the deposits to another bank and are made immediately available, both

⁴⁹ Bris *et al* (2004) and Kaufman (1994).

⁵⁰ The ability of the FDIC to sell the bank quickly may have been constrained by the least cost resolution of FDICIA, in combination with the relatively greater importance of fraud in small bank failures which makes it difficult to arrange whole bank transfers at a loss to the FDIC. Purchase and assumption, which used to be common, now appears to be rare.

⁵¹ The FDIC is also empowered to pay advanced dividends to uninsured claimants based on past average recovery values rather than expected recovery values (12 USC 1821(4)(B)(iii)), but has not done so.

uninsured depositors and other creditors, once their claims have been approved by the FDIC are given receivership certificates. These are paid in cash as this becomes available through sale of assets, or earlier through the aforementioned advanced dividends. The timing and amount of any dividends are determined by the FDIC and may be spread over several months or years. Liquidation of a bank's assets, once it has been legally closed, is not immediate and asset values may deteriorate as they do in Chapter 11 proceedings.⁵²

Prior to FDICIA it was common practice to use purchase and assumption to resolve bank failures. This process transferred all of the insolvent bank's assets and liabilities to an acquiring bank, usually over a weekend. This ensured liquidity for all creditors, but at the cost of indiscriminately bailing all of them out at par value, undermining market discipline, and potentially exacerbating moral hazard. Following the introduction of least cost resolution, purchase and assumption transactions became infrequent. For a brief period of time in the early 1980s, the FDIC used its powers to pay advanced dividend payments to holders of receivership certificates, thus providing a measure of liquidity and maintaining the ability to impose credit losses. Since the introduction of FDICIA in 1991, the FDIC has paid advanced dividends progressively less frequently and has relied more on regular dividends. In the absence of advanced dividends, the FDIC pays out "traditional" dividends on remaining claims as it liquidates assets, the proceeds of which are shared first by the FDIC and the uninsured depositors, followed, after all domestic depositor claims have been paid in full, by general creditors (including foreign depositors), and finally shareholders. These dividends, which depend on the progress of the resolution, may be spread over a number of years. This has caused liquidity losses, but the involved banks have been comparatively small and the adverse effects have usually been limited to the local economy.⁵³

Delays in payment to uninsured depositors have sometimes been substantial. There is substantial variation around the average length of time the bank is in FDIC

⁵² It is important to remember that delay does not necessarily produce asset value erosion, though egregious examples of loss of value in some FDIC resolutions (e.g., NextBank in 200?) and during Chapter 11 proceedings focuses the attention on that possibility. Rapid liquidation of assets under adverse market conditions or without proper incentives to maximize value can be similarly deleterious to the welfare of creditors.

⁵³ A history of attempts to deal with liquidity losses in the resolution of bank insolvencies in the U.S. appears in Kaufman (2004a).

receivership and the timeliness of bank insolvency resolution and payment of depositors appears to have changed over time. Of the 24 bank insolvencies between 2000 and 2005:

- One bank was sold immediately
- Four banks have paid final dividends (two in less than 6 months, two after more than 2 years).
- The remaining 19 banks (apparently) remain unresolved after periods ranging from 6 to 50 months (the mean is 28 months).

All 19 have paid intermediate dividends. The mean time from legal closure to first dividend was 4.4 months, and the mean dividend amount was 54%.

In corporate bankruptcy there is no immediate resolution, and the average length of time the firm is in Chapter 7 or 11 may be long and variable (See Bris *et al*, 2004). Creditor liquidity in corporate bankruptcy is tied more closely to the time spent in bankruptcy than in bank insolvency resolutions as there are only limited arrangements for payments to creditors before proceeds are received from the sale of assets or approval of the reorganization plan.⁵⁴ Thus, the final resolution of banks may be faster than for non-banks, but need not be, and for domestic depositors, bank insolvency usually provides some recovery prior to the final resolution.

VI. Multiple Jurisdictions

Both bankruptcy and bank insolvency laws and procedures reflect an implicit assumption that a single venue (court or administrative proceeding) is resolving a single firm. This is true for most small firms and small banks. However, single firm/single venue is unlikely to apply for large multinational firms and financial institutions. The resulting multiplicity of jurisdictions is likely to reduce the efficiency and increase the cost of failure resolution.⁵⁵ The involvement of multiple jurisdictions in the insolvency resolution of a single firm can arise for two reasons: international operations and

⁵⁴ A market may exist for bonds and perhaps equity of firms in bankruptcy, allowing those creditors to sell their claims and realize their current market value. No pre-existing market currently exists for insolvent bank receivership certificates.

⁵⁵ See Bliss (2006) for a full discussion.

organizational structure.⁵⁶ In both cases, the operation of parallel, sometimes adversarial, proceedings can lead to complexities, with creditors bearing the resulting costs.⁵⁷

Multinational firms, be they banks or non-banks, are subject to multiple jurisdictions when they fail. There are two approaches to this problem: to treat the firm as a single entity and to have one court take the lead in guiding the resolution (the universal approach) or for each jurisdiction to conduct separate proceedings using the assets under its control for the benefit of local creditors (the territorial approach).

Recent revisions to the U.S. corporate bankruptcy laws in the 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 international insolvencies. This focuses on the universal approach. However, both the UNCITRAL model law and U.S. legislation specifically exempt banks. The U.S. approach to bank insolvency is inconsistent. It is territorial with respect to foreign banks that have branches in the U.S., and universalist with respect to domestic banks having foreign branches. U.S. subsidiaries of foreign banks are chartered as separate legal entities and are subject to the same resolution laws and regulation as are domestic banks. If a foreign bank with U.S. branches fails, as did BCCI in 1991, U.S. regulators would seize all assets they can in the U.S. and use those to satisfy all domestic depositors and creditors of the branches (including uninsured claimants) before passing any surplus to foreign courts for distribution to foreign creditors. However, if a U.S. bank with foreign offices were to fail, the FDIC asserts claims over the world-wide assets of the bank and seeks to use those to pay off creditors under depositor preference rules which give priority to domestic depositors.

In the U.S., if banks are embedded in bank or financial holding companies multiple jurisdictions arise because of the different codes that apply to the parent and the bank subsidiary. U.S. bank and financial holding companies are non-bank corporations subject to the bankruptcy code, while their subsidiary banks are subject to the FDI Act.

⁵⁶ It is possible for creditors of a nonbank holding company subsidiary to initiate proceedings in a different jurisdiction than creditors of the holding company itself thus setting up a similar multiple-jurisdiction problem. These cases are rare as most domestic U.S. bankruptcies are consolidated into a single venue.

⁵⁷ In some instances, one group of creditors may benefit at the expense of another depending on the distributions of claims and assets across jurisdictions. For example, in the case of BCCI, U.S. depositors and creditors were paid in full, while foreign creditors suffered varying degrees of losses.

Where the bank insolvency leads to failure of the parent holding company, as is frequently the case, or the reverse, which is less frequent, different parts of the organization are simultaneously resolved in different venues. These simultaneous resolutions are occasionally adversarial particularly when there are significant non-bank assets at the holding company level. Conflicts may arise when the FDIC expects to suffer losses in the resolution of the bank and seeks to extract assets from the holding company, necessarily putting it in conflict with the creditors of the holding company. U.S. law provides little structure for handling bank/holding company insolvency proceedings. If the holding company has been induced to enter into a capital maintenance agreement to recapitalize the subsidiary bank, such agreement has priority over general creditors. In the absence of such an agreement, the Federal Reserve, as regulator of bank and financial holding companies, asserts under its “source of strength” doctrine that a holding company has an obligation to support its subsidiary banks, even if they are insolvent. Efforts to decide the matter in court have been the subject of considerable litigation to date without clear resolution (the relevant cases having been settled).⁵⁸ Although the Fed’s application of PCA provisions of FDICIA that require parent holding companies to recapitalize undercapitalized bank subsidiaries may lessen the importance of this policy.⁵⁹

VII. Economic Analysis

The differences in the legal features of the two insolvency resolution schemes analyzed in the previous sections have implication for the economic welfare and performance of the affected participants, be they customers of the distressed firms, employees, investors, or residents of either the areas served by these firms or of the broader economy. The major structural differences between Chapter 11 corporate bankruptcy and bank insolvency resolution (under the FDI Act) processes can be summarized as a coordinated negotiation among creditors and managers supervised by a

⁵⁸ Important cases are MCorp and Bank of New England Corp. The former involved attempts by regulators to enforce asset transfers from the holding company to the subsidiary banks after insolvency proceedings had begun; the latter involved pre-insolvency asset transfers that were challenged as fraudulent conveyances by the bankruptcy trustee. Both cases were settled before the underlying source of strength claims was finally ruled on.

⁵⁹ 11 USC 1831o(e)(2)(C)(ii) subject to 1831o(e)(2)(E).

“disinterested”⁶⁰ court aimed at increasing the long-run payoff for all stakeholders in the aggregate on the one hand versus, on the other hand, an administrative process conducted by the FDIC (itself a major creditor and therefore an “interested” party), with limited participation by other parties, subject to limited judicial review, designed for speed by terminating the controlling interest of shareholders and managers, and mitigating both credit and liquidity losses through prompt closure and payment, and for minimizing the costs to the FDIC (deposit insurance fund). Insofar as these differences are intended to achieve different objectives, they are justified only if they are both necessary and effective in achieving their desired ends.

The FDIC provides for liquidity to creditors. The prompt and full payment of insured depositors claims at legally closed institutions before the FDIC may have collected the proceeds from selling the assets has gone a long way to reducing the liquidity losses of most depositors. Frequently, when banks are perceived to be distressed, uninsured depositors leave, and banks attempt to replace them with insured deposits. Then when the bank fails a greater proportion of the depositors are insured and made whole and liquid immediately. Advanced dividends paid to uninsured claimants promptly on the estimated recovery value, enhances liquidity further. One advantage of having the FDIC pay depositors quickly and assume (subrogate) their claims is to ensure financial market liquidity by transferring depositors’ claims to the FDIC, who generally has less liquidity needs than other creditors. This process, however, does not require that the deposit insurer manage the insolvency, only that the insurer has funds available to it to make the statutorily required and other advance payments.

The FDI Act attempts to minimize credit losses to uninsured depositors, other creditors, and the FDIC through a closure rule at positive book value capital.⁶¹ In part because most bank insolvencies since the adoption of PCA and depositor preference in 1993 have been small banks with few non-deposit liabilities, the current structure appears to have worked reasonably well in achieving this goal. The powers granted regulators

⁶⁰ The disinterestedness of the court and officers appointed by the court to act on behalf of the bankruptcy estate refers to absence of direct (or indirect) financial interests. This is not to say that, in practice, courts may not have a bias in favor of one party or the other, or that managers and creditor may not attempt to take advantages of such biases by “forum shopping” that is seeking to file their cases where they expect to receive a favorable hearing. However, such biases are not structural in nature and are not direct necessary consequences of the insolvency process.

⁶¹ See Shibut *et al* (2002) for a discussion of the pros and cons of two percent threshold.

under FDICIA to close banks preemptively appear to have encouraged many troubled banks to resolve their situation outside of formal bank insolvency procedures. A large fraction of distressed banks are voluntarily liquidated, merged with solvent banks, or recapitalized rather than being placed in receivership or conservatorship. This suggests that PCA may be forcing owners to reveal the true economic value of their bank. They either found a private solution if the bank was perceived to be economically viable, or abandon the bank if it was perceived not to be—rather than delaying recognition of the underlying problems. Nonetheless, the fact that almost all banks that have been closed by regulators since FDICIA were economically insolvent, usually imposing total losses on general unsecured creditors and losses on uninsured depositors and the FDIC is evidence that the objectives of prompt corrective action are not entirely met. In addition, loss rates on individual bank closures were not much different after FDICIA than it was before.⁶² It may be argued that this failure is due both to the small size of the failed banks in that period, the reliance on book value-based triggers, the low numerical value of the PCA trigger, and that prompt corrective action has created incentives for private resolutions (e.g., merger) for many distressed banks, so that only the worst cases needed to be closed. Although not reducing the loss rate on banks that are legally closed, the latter has probably reduced aggregate losses.

As a result of superimposing deposit preference in 1993 on least cost resolution in FDICIA, the incentives for the FDIC to protect non-depositor creditors may have been weakened. This is particularly likely when the insolvent bank has substantial amounts of non-deposit creditors. This is likely to be the case with the very largest, systemically important banks, as well as with some smaller specialized banks. Losses to other creditors are partially controlled by the FDIC through the choices in terms of speed and realized value made in disposing of the insolvent bank's assets; choices which may not effect the losses to the insurance fund.⁶³ Bankruptcy law, for all its complexity, is

⁶² Evidence of before- and after-FDICIA losses in bank resolutions is somewhat ambiguous; see Kaufman (2004c).

⁶³ Least cost resolution and concomitant prudential management of insolvencies creates positive incentives for the FDIC to delay disbursement of funds until it is sure that they will not be needed for unanticipated expenses of the administration, including litigation. While the FDIC and remaining uninsured depositors might benefit from reducing the pool of uninsured depositors through its powers to disallow claims, there is little evidence that the FDIC has used its powers to do so in the past (*Adagio v. FDIC* being an isolated instance where the courts found that deposits had been improperly reclassified).

designed to ensure that all creditors have representation and the process is supervised by a neutral party (the court) to protect all creditors' interests. On the other hand, bank insolvency law is explicitly designed to primarily protect the interests of senior creditors by giving the FDIC as senior creditor control, limiting oversight, and mandating least cost (resolution only for the senior creditor). No neutral party is interposed in the process to protect the interests of the other creditors as is the case in corporate bankruptcy.

Thus, while administrative proceedings have certain advantages, in terms of speed, lower litigation costs, and efficiency, making the deposit insurer, rather than another more disinterested (i.e., neutral) agent, the administrator may not be necessary to achieve the other objectives outlined above. Expertise in the distressed bank's condition is apt to be greatest at the bank's primary supervisor, which may not be the FDIC. Expertise in resolving banks is built up through experience and such expertise could reside in an alternative specialized resolution authority. Timeliness and low cost of resolution are characteristic of an administrative process rather than who is the administrator. Moreover, making the deposit insurer the administrator results in a resolution agent who has a direct financial interest, while leaving the other creditors fewer rights in an administrative process than they would have in a judicial bankruptcy proceeding. Regardless of what agent is the administrator, the interests of all creditors would be served best if the primary objective of bank insolvency proceedings was to maximize the recovery value of the insolvent bank's assets, as was implicitly the case before the introduction of depositor preference, rather than minimizing losses to one senior creditor as is now the case under least cost (to the insurance fund) resolution.

If the adverse externalities of bank insolvencies, including systemic risk, are in fact greater than for the failure of other firms of comparable size and are primarily directly related to the magnitude of credit and liquidity losses at the insolvent banks—so that the greater these losses, the greater the adverse effects—then a special bank insolvency resolution regime designed to minimize or eliminate, if possible, these losses is desirable. A resolution regime that encourages timely legal closure at a positive capital ratio facilitates these objectives, as does an administrative rather than judicial process. One may, of course, argue whether a book value, as specified in the FDI Act, rather than a market value-based closure rule is optimal; whether the minimum two percent book

value equity ratio closure rule provides sufficient margin to ensure against closure at negative economic capital with concomitant losses to depositors or other creditors; or whether the incentives for regulators to achieve on-time closure are sufficiently great.

The FDI Act appears to provide the FDIC with sufficient authority to minimize liquidity losses. It can pay insured deposits at par value the next business day or so and pay advanced dividends on uninsured deposits against the bank's estimated recovery value as soon as possible, so that consumer access to these accounts is not frozen. Liquidity losses may be further reduced by transferring loans and insured deposits and advanced dividends on uninsured deposits and other creditors' funds to a newly chartered temporary bridge bank. This permits borrowers at the insolvent institution ongoing access to their credit lines. The more recent reluctance by the FDIC to pay advanced dividends and the time taken in paying regular partial dividends to uninsured depositors suggests that liquidity provision is not as quick as is legally possible. However, the experience even of these creditors is far better than could be expected under general corporate bankruptcy where most payments to creditors are usually delayed until final resolution.

Adverse externalities from bank insolvencies may be reduced further by reducing uncertainties surrounding the bank insolvency resolution process. This is achieved in the FDI Act by not only attempting to minimize credit and liquidity losses, but for the most part providing absolute priority, prohibiting ex-ante appeals of decisions by the receiver and limiting ex-post appeals, and reducing discretion in the application of corrective sanctions on a timely basis. The increased certainty may also reduce the incentives for banks to engage in excessive risk taking moral hazard behavior. Lastly, the incentive for uninsured deposits to run may be reduced if the depositors believe that they will suffer no or at most minimal credit losses and have prompt access to their funds.

What drawbacks or disadvantages may there be to such a separate bank insolvency regime? To the extent that shareholders and junior creditors view themselves as disadvantaged by not being permitted to attempt to rescue and rehabilitate their banks, aggregate investment in banks may be reduced and the fairness of the process may be questioned. The latter could possibly ignite a search for less efficient political solutions. More importantly perhaps, the current bank insolvency process deprives creditors of the

full range of protections available in corporate bankruptcy proceedings. The subordination of non-depositor creditors to depositors under the Depositor Preference Act may result in these creditors seeking to protect themselves through security arrangements, e.g., repurchase agreements, offset, or other potentially less efficient means in advance, or through runs at the first sign of distress.

VIII. Conclusions

Bank and non-bank insolvency proceedings in the U.S. contain significant, and in many respects fundamental, differences. These differences largely reflect different goals: for non-banks to protect creditors' rights, for banks to mitigate credit and liquidity losses through rapid resolution. In practice, both processes fail to fully achieve their goals. For non-banks, the control granted managers in Chapter 11 has created dynamics that undermine creditors' ability to realize the maximum amount of their claims. Supported by the ability to obtain debtor-in-possession financing on preferential terms to continue the distressed firm in operation, this leads to managers and junior creditors extracting concessions that they would not obtain if senior creditors controlled the process. The resulting protraction of the bankruptcy process is in the interests of managers, junior creditors, and the lawyers and other professionals involved, but is disadvantageous to senior creditors, unduly expensive and destructive of firm value, and has been widely criticized.

If the adverse effects of bank insolvencies, including systemic risk, are in fact greater than for the failure of other firms of comparable size and are primarily directly related to the magnitude of credit and liquidity losses at the insolvent banks—so that the greater these losses, the greater the adverse effects—then a special bank insolvency resolution regime designed to minimize or eliminate, if possible, these losses is desirable. A resolution regime that encourages timely legal closure at a positive capital ratio facilitates these objectives by reducing credit losses, as does an administrative rather than judicial process by reducing liquidity losses.

In addition, the FDI Act appears to provide the FDIC with sufficient authority to minimize liquidity losses. It can pay insured deposits at par value the next business day or so and pay advanced dividends on uninsured deposits against the bank's estimated

recovery value as soon as possible, so that consumer access to these accounts is not frozen. Liquidity losses may also be reduced by transferring loans to a newly chartered temporary bridge bank. This permits borrowers at the insolvent institution ongoing access to their credit lines.

In practice, U.S. bank insolvency resolution has been fairly successful in reducing credit losses in insolvency by legally closing banks more promptly than is the case for non-banks, though the evidence we have is limited to the sample of relatively small banks that have failed. Nonetheless, bank insolvency resolution has fallen somewhat short in recent years in reducing liquidity losses to uninsured depositors. The means for providing liquidity available in the law have not always, particularly recently, been utilized in instances where losses were imposed on uninsured depositors and other creditors.

Reducing uncertainties surrounding the bank insolvency resolution process should further reduce the adverse externalities from bank insolvencies. This is achieved in the FDI Act not only by attempting to minimize credit and liquidity losses, but for the most part providing absolute priority, prohibiting ex-ante appeals of decisions by the receiver and limiting ex-post appeals, and reducing discretion in the application of corrective sanctions on a timely basis. The increased certainty may also reduce the incentives for banks to engage in excessive risk taking moral hazard behavior. Lastly, the incentive for uninsured deposits to run should be reduced the more certain depositors are that they will not suffer credit losses in the resolution process and will have prompt access to their funds.

Unfortunately the empirical evidence that we currently have on the effectiveness of the resolution of bank insolvencies since the adoption of PCA and FDICIA in 1991 and depositor preference in 1993 is too limited to permit meaningful comparison with the greater evidence on the resolution of non-bank insolvencies and evaluate the strengths and weaknesses of the two regimes. Moreover, most bank insolvencies have been small, while we have ample evidence of large non-bank insolvencies. Conclusions concerning the superiority of one regime over the other awaits further observations and analysis.

Table 1: Selected Differences between the Corporate and Banking Bankruptcy Codes

Provision	Corporate	Banking
Objective	Maximize value of firm as “going concern” or liquidation	Minimize loss to FDIC (least cost resolution)
Exception to Objective	None	Systemic risk exemption, if threat to stability of financial system
Pre-failure intervention	By negotiation (voluntary)	Statutory (prompt corrective action and other statutory grounds) (involuntary)
Initiation (declaration) of insolvency	Major creditors and/or management petition bankruptcy court	Chartering or primary federal regulator
Creditor stays	General (explicit)	Less general, major exception is insured depositors (implicit)
Receiver/trustee	Appointed by court	FDIC (statutory)
Management of entity during bankruptcy	Court appointed management (trustee; in Chapter 11 usually the existing management initially)	FDIC
Supervisor of receiver/trustee	Bankruptcy court	FDIC
Structure of Process	Judicial	Administrative

Deviation from Priorities	Negotiated among stakeholders	1) Systemic risk exemption 2) If consistent with least cost resolution ¹
Legal standing of creditors	By statute	None
Creditor Representation	Representative process	None
Creditor Approval	Unanimous agreement	None
Timeliness of bankruptcy initiation	Requires default event	Regulators can act preemptively
Final word	Bankruptcy court	FDIC (with limited right of judicial review)
Judicial Review and appeal	Ex-ante	Ex-post
Legal Certainty	Weak	Strong
Right of offset	Variable	Strong
Creditor payment form	Liquidation—cash Reorganization—securities of reorganized firm	Cash Receivership certificates
Legal and administrative expenses	High	Low
Shareholder Interests	Weak and subject to negotiation	Terminated, except for residual value
Post insolvency financing	Debtor in possession	n/a

¹ This is the position of the FDIC, but has not been legally tested.

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