I. Introduction

In the recent past, several large, internationally active firms have entered formal insolvency proceedings, among them Drexel, TWA, Barings, Maxwell, Olympia & York, Enron and Global Crossing. Others have come close to doing so, for example Long-Term Capital Management. The asset size of these actual or potential failures is increasing, and with it the risk of a disorderly and contentious outcome.

Since Herstatt, no major financial insolvency has been disorderly, although there have been some close calls. This is due to several contributing factors: a combination of improved risk management, greater transparency, a vastly superior legal framework, international cooperation among authorities, and good luck. This positive history, however, offers few reasons for complacency. The failures to date have been of firms of moderate and intermediate complexity. Firms and markets become ever more complex, more interrelated, and ever larger. An increasingly deregulated market environment is a less cosseted one: greater competition entailing greater risk of failure. Sovereignty remains a fact of life, but business operations are increasingly cross-border, placing greater strain on the legal system.

Therefore, the underpinnings of insolvency law are especially salient for large, complex and internationally active financial institutions, and the Financial Stability Forum has been considering issues in anticipating and managing such problems. Both general and financial firm-specific insolvency regimes are relevant. While the principal operations of such institutions are primarily housed in supervised entities, such as banks and securities firms, significant activities may take place in unsupervised holding companies or affiliates. Furthermore, there are now non-financial companies that undertake financial activities on a scale that approaches those of major financial institutions. These include General Electric and the world's major automobile companies, as well as the recently insolvent Enron. Furthermore, financial firms and markets often have large exposures to non-financial firms, as both creditors and counterparties. Finally, many countries do not have special purpose financial insolvency law, but rather treat bank insolvencies with minor modifications, if any, to their general insolvency system.

This report discusses the insolvency process - particularly that of banks - in countries with well developed economic, financial and legal infrastructures.

A. Role of the Contact Group

To explore these issues, the BIS formed the Contact Group on the legal and institutional underpinnings of the international financial system (the Contact Group). The Contact Group was formed in response to a suggestion at a G10 Deputies meeting by the Bank of Italy. Participation was voluntary. The members are representatives of the European Central Bank, the Bank of Italy, the Bank of Japan, the Netherlands Bank, the Bank of England, the Federal Reserve Bank of New York, the Bank for International Settlements, the International Monetary Fund, the Organisation for Economic Cooperation and Development and the World Bank.

The Contact Group has considered the legal and institutional arrangements for resolving the insolvency of financial institutions and of non-financial institutions that have substantial financial activities. The Contact Group has examined both general insolvency regimes and special regimes applicable to financial insolvency. Some of these financial insolvency regimes are applicable to particular categories of institutions (such as banks and non-financial corporations with significant financial activity). Others apply to a particular type of transaction or operation (such as the taking of collateral, the finality of settlement of transfers of funds or securities and netting transactions). A particular focus of this examination has been the resolution of institutions that conduct a wide range of activities on a large scale in many countries.

The Contact Group sought to explore two areas of the legal system of direct relevance for financial transactions: the nature of insolvency proceedings and rules governing contract enforcement in insolvency (including netting and collateral), first at the national level and then at the international level. The effort has involved two stages. Since law and legal rules are based on nationally defined jurisdiction, the Contact Group has conducted two comparative surveys of the legal situation in the jurisdictions represented within the group, namely the European Union, Italy, Japan, the Netherlands, the United Kingdom and the United States. Then, on the basis of the responses to the questionnaires, a number of policy issues have been identified and discussed.

The first survey compared legal and institutional arrangements for insolvency in different jurisdictions (the "insolvency survey"). The second survey compared the effect of insolvency arrangements on the performance of financial contracts (the "contract enforceability survey") in different jurisdictions. Appendix B contains analyses of these surveys.

B. Summary of findings

This report offers reflections on national insolvency regimes and the coordination of an international insolvency based on the results of the questionnaires, a review of academic literature and further analysis. It describes current insolvency law and its context from an economic perspective, and evaluates legal rules governing insolvency by three criteria: efficiency of the insolvency process, equity of treatment and reduction of uncertainty. Using this analysis, the Contact Group has identified two salient issues, discussed in turn in Sections II and III of this Report. It also discusses law reform efforts addressed to these issues, in Section IV.

1. Business environment and insolvency law

The first issue identified is the gap developing between the rapidly changing environment in which insolvencies occur and the slower evolution of national insolvency regimes. These regimes, largely developed in the 19th or early 20th century, have evolved over time. However, they have not kept pace with the dramatic changes in capital markets, globalisation, corporate governance and markets for corporate control, and techniques of financial management. On balance, the gap increases the demand for legal certainty and efficiency on the part of market participants.

Perhaps the most important source of uncertainty and inefficiency lies in the slowness of traditional insolvency processes. Insolvency processes tend to be initiated later than they should be, and to be very slow after their initiation. Both earlier initiation and faster resolution tend to be more efficient; faster resolution decreases legal uncertainty. Late initiation is a problem of incentives. Creditor incentives to initiate insolvency are strong, and creditor initiation is therefore made difficult in insolvency regimes. Debtor initiation is easy, but debtors seldom have incentives to declare early insolvency. Regulatory incentives are blunted, unless the regulator has a direct financial stake, eg as an insurer. Slow resolution is usually inherent in the ordinary legal rules governing insolvency, although some specialised bodies of insolvency law do emphasise speed, especially Japanese and US bank insolvency law.

The demands for legal certainty and efficiency are especially great for risk transfer mechanisms, such as derivatives contracts, which require active management. The development of a body of law on financial contract enforceability - still in the process of being extended and refined - is meant to address these issues. However, because such new law addresses only some of the issues and only some of the assets and liabilities of financial firms, it creates some tension with existing insolvency processes, because in effect it alters the priorities in insolvency. Enhancing the legal certainty and efficiency of the insolvency process beyond the current rules for financial contracts might relieve the tensions, without necessarily changing the equity concepts in national insolvency law.

2. Globalisation

The second issue stems from the increasing globalisation of financial activities and the global scope of financial institutions in a legal environment still defined by national jurisdictions. Sovereign jurisdiction over global activities raises the possibility of **forum shopping**.[*] Forum shopping sometimes creates a healthy competition among jurisdictions. But it can also increase ex ante uncertainty and creates a tendency for the relevant legal rules to be the ones most favourable to the party who can select the insolvency forum. Efficiency can decrease because the administration process can be complex and contentious and it may adversely affect incentives for creditors, debtors and regulators ex ante and ex post. As opposed to the national setting, where improvements in the general insolvency process can at least in concept be equity 00000neutral, in the international setting solutions to multi-jurisdiction issues need analysis of equity questions.

Even without forum shopping, globalisation creates many problems. Some of the problems are strictly legal, such as the uncertain choice-of-law rules governing collateral or netting. Other problems are inherent in the coordination of disparate insolvency proceedings.

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[*] Various technical economic and legal terms, when first introduced, are **boldfaced**. These terms are defined in a glossary, in Appendix D.

3. Law Reform

Many worthwhile insolvency-related reform efforts are already in progress, at both the national and international levels. For example, many jurisdictions are reducing settlement risk by improving their treatment of netting and closeout of financial contracts. Difficult choice-of-law issues are being addressed by international law reform efforts, emanating from organisations such as the European Union, the Hague Conference on Private International Law ("Hague Conference") or the United Nations Conference on International Trade Law (UNCITRAL). As part of this process, two EU directives and an insolvency regulation recently set out an approach for coordination of international insolvency processes that identifies a main insolvency proceeding for financial and non-financial firms within the European Union. Many jurisdictions are streamlining their insolvency procedures, with an eye towards adopting "best practice" from other jurisdictions.

II. Analysis of national insolvency processes

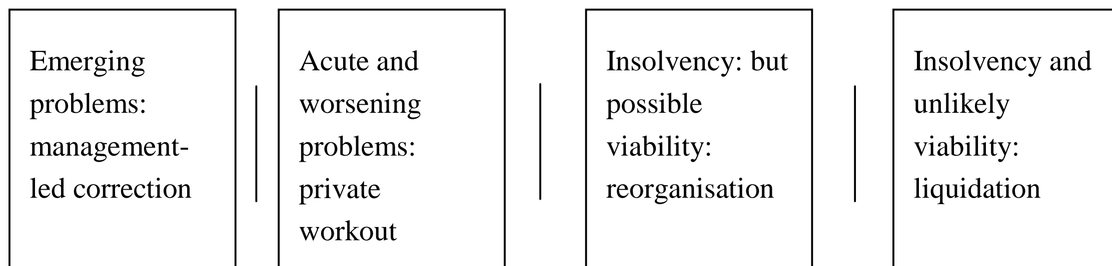
This section discusses insolvency processes of advanced jurisdictions. It is couched at a very general level, and is concerned with the structure and organisation of the processes rather than the specific legal rules associated with them.

It begins with an analytic framework by which to evaluate insolvency processes. The second subsection then describes insolvency processes, both mainstream and innovative. The mainstream processes (piecemeal liquidation and most forms of reorganisation) make some implicit assumptions about capital and related markets, globalisation, dynamism and the distinctiveness of financial services. As discussed in the third subsection, these tacit assumptions, although once probably true, seem outdated today. Some of the innovative processes may better accommodate the new rules of the game. The fourth subsection discusses the special insolvency rules pertinent to financial contracts. The section concludes with a recapitulation of some of the issues, phrased in terms of the analytic framework developed at the beginning of the section.

A. A framework for analysis

The process of resolving a troubled company, no matter whether or not it takes place under a formal insolvency regime, generally involves retrenchment and focusing on viable operations, and closing down or selling off operations that are either unprofitable or ancillary. It commonly also involves a restructuring of liabilities. The basic issues of insolvency can be most easily described in a timeline of financial distress for a firm, as shown in the following diagram[1]:

[1] The timeline of financial distress is adapted and extended from Matthias Kahl, "Economic distress, financial distress, and dynamic liquidation", *Journal of Finance* 62 (February 2002) pp.135-168.



A financial institution or financially active firm that experiences emerging problems - worsening loan quality, losses due to internal control lapses - has the option to develop business plans to address the underlying problems. Many problems are in fact resolved this way. If uncorrected, however, or if some other devastating blow occurs, the firm's difficulties may be severe enough to require a private workout.

A private workout usually involves some restructuring of debt, the possible issuance of additional equity, and sales of assets or businesses. Traditionally, a firm's "main bank" could pressure a liquidity-constrained firm to enter a workout, and in many cases where creditors rely primarily on a 'main bank', the ability of banks to encourage workouts persists. In the case of large, internationally active financial institutions and financially active firms, no one creditor has sufficient influence. But increasingly, far-seeing managements recognise the need for restructuring and initiate management-led private workouts in order to realise the maximum long-run value of the firm for shareholders. A notable example was the successful extensive restructuring of IBM in the early 1990s; currently many financially strong telecommunications companies are restructuring in the light of the industry's present overcapacity.

As the firm moves closer towards or into insolvency, it may seek to reorganise through an insolvency law procedure. Most frequently, management initiates such an insolvency reorganisation. A reorganisation gives management time and powers to restructure an insolvent firm as a going concern, effectively offering it a second chance to make the firm successful. If a firm is viable and can be turned around, a reorganisation benefits many creditors if the overall losses are lower than in a liquidation. If creditors are uncertain about the viability of the firm, they may still look favourably on reorganisation as a means of developing further information about the firm's viability.

Finally, usually either the creditors or the debtors can initiate a liquidation process if the legal condition(s) for insolvency is (are) satisfied. An important exception is banks and some other financial firms, where, in some jurisdictions, only the regulator or insurer can initiate insolvency.

The entire timeline can be viewed as steps in a process of “dynamic liquidation”[2] - firms may recover and exit the process, they may work their way through the entire process through a series of business disappointments, or they may leap to the final stage of liquidation. At each stage the firm traverses, the existence of the statutory possibility of liquidation provides an incentive for debtors and creditors to cooperate in private workouts and reorganisations, which thus take place “in the shadow of the law”. The extent to which formal insolvency procedures are debtor or creditor friendly affects the amount and nature of the risk that borrowers are prepared to take and the terms and conditions on which lenders are prepared to provide money.

The statutory frameworks dealing with insolvency can be explained by three underlying objectives of insolvency regimes: the reduction of legal and financial uncertainty, economic efficiency and the fostering of equitable treatment. Legal certainty and efficiency, and to some extent equity, contribute to lowering liquidity and systemic risks in that they reduce the potential for market disruption and large **deadweight losses**. The three dimensions are not strictly speaking mutually exclusive, but are relatively separate and intuitively appealing. Despite their overlap, some tension between them is inevitable. Each national legal framework tries to strike a balance between them on the basis of local preferences and tradition.

Legal uncertainty affects the ability of market participants to form a probability distribution around the outcomes of financial transactions. If legal uncertainty is too great, market participants cannot assess the risks in entering into contracts. In such circumstances, it may be very difficult to talk meaningfully about the efficiency or the equity of an insolvency regime. If legal uncertainty is sufficiently low, but not necessarily very low, market participants can estimate the probability of possible outcomes and make choices based in part on their willingness to bear risk. Reductions in legal uncertainty, therefore, generally represent an improvement for debtors, creditors and other stakeholders. Nonetheless, the benefits from increased legal certainty need to be weighed against any negative impact on efficiency or equity associated with the rules used to enhance legal certainty.

An improvement in economic efficiency can be achieved chiefly in three ways. One is aligning incentives for all parties to a transaction to maximise the long-run value of their respective firms and reducing incentives to waste resources in order to avoid the consequences of failure on the firm’s management or owners. In general, incentives that align actions with market outcomes are seen as improving efficiency (except in markets where market failure is inherent). A second is reducing the transaction costs involved in the insolvency process, especially deadweight cost. Finally, efficiency is improved by any other means that increases the total amount of wealth of all the parties in the insolvency, eg., rules or practices that preserve the value of **firm-specific assets** or increase information available to the parties.

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[2] This extends the concept set out by Kahl in the article cited in footnote 1 to describe the relationship between reorganisation and liquidation.

Issues of equity by their nature involve value judgments. In the case of insolvency law, that judgment has already been made in national laws and accepted practices which define the rights of debtors and the rights and relative priority of creditors and other stakeholders. Some jurisdictions seem more "debtor-friendly," in that they give management more opportunity and ability to protect the value of the firm's assets; others seem more "creditor-friendly" in that creditors (especially secured creditors) have greater ability to initiate and control an insolvency process or realise their collateral in order to maximise recoveries from the debtor's estate.

In the insolvency context, a fairly conservative standard of determining improving outcomes seems to work well. That standard is that one outcome is better than another if anyone is better off and no one is worse off in the first outcome than they are in the second, which economists call **Pareto superiority**. This standard works well since insolvency laws assign the order in which claims are paid and generally all claims of senior creditors are satisfied before the claims of more subordinate creditors are paid. Thus, if the insolvency estate is larger in one situation than another,[3] and the pre-existing debtor-friendliness and priority of claims is maintained, some creditors will receive more and all creditors will receive at least as much in the first situation as in the second.

B. The processes

1. The basic processes: workouts, liquidations, reorganisations and others

Insolvency law and practice have evolved through accretion of experience. Much of this experience has been national, adapted to a particular jurisdiction's unique traditions and social needs. But despite the diversity of insolvency law and practice, some common themes apply to all jurisdictions. All business insolvency laws must face the same problem: resolving the competing claims of stakeholders when the debtor firm may not have sufficient resources to satisfy all claims on time and in full.

Insolvency law has two traditional solutions to this problem: the "**liquidation**" and the "**composition**" (or "**reorganisation"**.) There are many traditional solutions outside insolvency law, of which the "**workout"** is most significant. A liquidation converts the insolvent entity's assets into cash, and distributes the proceeds to claimants. A composition or reorganisation seeks to preserve the entity and readjust the claims of stakeholders so that the entity can successfully meet the readjusted claims. A workout is similar to a composition or reorganisation, but proceeds outside insolvency law. A liquidation often serves as the backstop to an unsuccessful

[3] Technically, it is not the absolute size of the insolvency estate that is relevant, but instead the size of the estate minus the size of the claims. This distinction is particularly significant with asset securitisations and netting arrangements. Both devices decrease both the size of the estate and the number of claims against the estate, and may well be Pareto-superior. For simplicity, this report refers to "size of the estate."

reorganisation or composition. A reorganisation, in turn, often serves as the backstop to an unsuccessful workout.

To introduce various processes for dealing with financial distress, we shall begin with the classic distinction between liquidation and reorganisation. For our purposes, a liquidation acts on the *assets* side of the balance sheet. A liquidation has two steps: reducing the insolvent firm's assets (or business lines) to money, and then distributing the proceeds to creditors, in accordance with priority rules. As a result, the firm ceases to exist as an entity, although its business may be carried on by those who acquire its assets. A reorganisation, in contrast, preserves the firm as an entity. A reorganisation may affect assets, but operates on the *liabilities* side of the balance sheet. A reorganisation temporarily postpones liabilities, and uses the time gained to readjust the claims on a firm so that they correspond better to the firm's value and expected cash flows. A reorganisation does not necessarily affect the assets side, although asset and business line sales are common in reorganisations.

Liquidations often disrupt the going-concern value of an insolvent firm, but need not do so. In principle, the whole firm can be liquidated as a unit, preserving its economic value, albeit perhaps at distressed prices. But as is often the case, the troubled firm may not have much of a going-concern value or a **bulk liquidation** may be otherwise infeasible. In such cases, a **piecemeal liquidation** may be preferable, yielding a higher return to creditors, or at least a quicker return.[4]

Reorganisations are more complex, and may be divided into a number of categories. The most traditional category of reorganisation - the "composition" - is typically consensual, although some compositions may permit majorities to bind minorities.[5] In this process, the creditors negotiate with each other (and generally the debtor) to readjust the relative stakes in the organisation. The composition therefore resembles a debt workout, although it is generally aided by a court-imposed moratorium on debt collection procedures. Compositions suffer from most of the same weaknesses as sovereign debt workouts, and succeed - if they do - for the same reason: solidarity among creditors. This solidarity is achieved by use of creditors' committees composed of major creditors, and the common practice of paying many minor creditors (eg trade creditors) in full.

Nevertheless, compositions are at risk of holdout. Another class of reorganisation lowers this risk considerably. Such reorganisations generally resemble negotiated compositions. But if the negotiations fail, these reorganisations allow for substantive judicial intervention: binding holdouts who resist an appropriate majority of their class of creditors, or even imposing a new

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[4] One negative externality of piecemeal liquidations of banks is worth mentioning in margin. A piecemeal liquidation may reduce the availability of credit to smaller borrowers. These borrowers are forced to repay the insolvent's estate, but often cannot find replacement credit, because their credit information is lost in the liquidation proceeding. Although competition assures that this problem is usually temporary, it may be lethal to some otherwise viable small businesses.

[5] The old German Composition Code, for example, permitted a 75-80% majority to bind a minority. This was repealed on 01 January 1999.

capital structure on the firm if negotiations fail ("**cram-down**"). We shall call these reorganisations "**Chapter 11-style reorganisations**", because they were popularised in Chapter 11 of the United States Bankruptcy Code. For most purposes, this report will not distinguish between compositions and Chapter 11-style reorganisations, because the similarities between these two techniques far outweigh the differences. Indeed, many jurisdictions use various hybrids of the techniques discussed here.[6]

Indeed, the debt workout, the composition and Chapter 11-style reorganisation can all be viewed as part of a continuum. They all rely on negotiation between the debtor and creditors. All of them risk failure from holdout problems. In a bilateral workout (which is common for small firms with a single bank creditor), the holdout risk is between debtor and creditor. The more complex reorganisations share this risk, but also risk holdout by a minority of creditors. To cope with this problem, these different reorganisation processes employ different mechanisms of creditor solidarity. The workout uses a purely private mechanism: limiting the creditor class by excluding numerous (but low-value) creditors such as employees or trade creditors. These creditors are usually paid in full notwithstanding any formal parity between their claims and the claims of the financial creditors. (In some jurisdictions, their claims would have priority in any case.) Nevertheless, despite assuming an inferior position, financial creditors negotiate because negotiation is better than the alternatives: liquidation or a rush for assets. The other proceedings tend to mirror this approach (weak creditors do not negotiate but are often paid in full), but add additional techniques. The composition adds a judicial moratorium on debt collection. This increases creditor solidarity by precluding a rush for assets, leaving liquidation or negotiation as the sole alternatives. The Chapter 11-style reorganisation retains this moratorium, and contains a cram-down. Some variations of this procedure allow for an insolvency official to create its own reorganisation, if the parties cannot negotiate their way to one.

The **liability transfer** is very different from reorganisations, but leads to the same result: a transformed balance sheet. In this technique, an insolvency official (or court) assigns the old liabilities, and often, some portion of the old assets, to a solvent organisation. Liability transfers are particularly useful when the liabilities are contingent (eg. insurance or letter-of-credit liabilities), when the liabilities themselves are vested with going-concern value (eg a consumer bank deposit with appreciable switching costs), or when the liability structure is well-suited to the assets it supports (inexpensive funding or effective maturity matching). A liability transfer results in a restructured balance sheet, without the need for negotiations.

There are several kinds of liability transfers. We begin with the simple **merger**. A distressed firm may be purchased by another firm with a stronger balance sheet, transferring the assets and

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[6] For example, in the United Kingdom the reorganisation resembles a composition in some respects: lack of cram-down and moratorium on debt collection or liquidation of collateral. However, it does not contain a continuing role for existing management, and is less negotiation-intensive than either a classical composition or a Chapter 11-style reorganisation.

liabilities of the old firm into the new one. (Mergers are very common in declining industries that need to restructure and in dynamic industries in which comparative advantage shifts rapidly.) The merger is a private transaction that only works when a distressed firm has some net going-concern value, or has powerful synergies with its acquirer. However, other kinds of liability transfers, which involve public law, may be used with insolvent firms in general. The "bridge bank" technique used in US bank insolvency law is akin to a merger, but only a subset of the distressed firm's assets and liabilities are transferred into the bridge bank. The rest of the balance sheet remains behind, and is conventionally liquidated. A bank regulator or liquidator decides which assets are transferred, and which remain behind. Or in some cases (the "liability-based restructurings" of insurance law), individual assets and liabilities are transferred to a buyer, without a bridge institution.

As a final alternative, an insolvent firm may be reorganised with public funds. The public funds may either facilitate an otherwise uneconomic merger, or may recapitalise the firm so that it can exist as a stand alone entity. This method can always be exercised by a specific legislative appropriation of funds, but is subject to formal legal regulation only in Japan and the United States (which impose highly restrictive conditions). Because of its intended relative rarity, we do not analyse this alternative in this report.

2. Distinctions among the traditional processes

As discussed above, many of the differences between liquidations and reorganisations are self-evident. Liquidations conform to the statutory distribution scheme; reorganisations typically treat different classes of creditors in very different ways, depending on their negotiating strength and holdout power. The distribution of rights and powers affects the efficiency of the process, in terms of costs, incentives and the amount of post-insolvency wealth.

One important distinction is the respective role of the creditors and the person charged with the liquidation or reorganisation (eg an insolvency "**Official**" - sometimes called an administrator, liquidator, trustee or receiver - or a court). In a liquidation, the creditors do not act collectively, except perhaps to appoint, monitor, or receive information from the Official. Disputes are bilateral ones, between the Official and individual creditors on the one hand, and the Official and the debtors of the insolvent, on the other. In many reorganisations, the creditors are active, often acting collectively through creditors' committees. In these reorganisations, the court's (or perhaps Official's) role is less central, and is not always necessary (as is the case for some compositions). This leads to a useful distinction: that between a **stakeholder-centred** and an **Official-centred** insolvency process.

As a general rule, the Official-centred model tends to be dominant in liquidations and liability transfers, including many bank insolvency proceedings. The Official-centred model is also a norm in many jurisdictions' reorganisation procedures. Traditional compositions and Chapter 11-style reorganisations tend to be stakeholder-centred. In such proceedings, incumbent management tends to administer the insolvent firm, creditors' committees are institutionalised, and creditor

consent (at least a supermajority in each class) is usually expected, if not required as a matter of law.

This discussion is summarised in the Table 1:

Table 1

	Liquidations	Reorganisations
Official-centred	• Conventional and bank liquidations	• A speciality of bank insolvency law • Sometimes seen in Chapter 11-style reorganisations • Characteristic of traditional European reorganisation proceedings
Stakeholder-centred	• In conventional liquidations, only seen in governance, ie the reporting relation of the Official.	• Workouts • Conventional compositions • Explains most aspects of Chapter 11-style reorganisations

The structure of insolvencies affects the degree of legal certainty. The negotiated stakeholder-centred processes are inherently unpredictable both as to timing and as to outcome. Insolvency negotiations are slow. The outcome of negotiations is ex ante indeterminate, depending in part on the relative skills of the negotiators, in part on the holdout power of the negotiators, and in part on uncertainty in asset and liability valuation. Official-centred processes vary. Some of them - eg liquidations - are relatively determinate, with claimants' entitlements depending on the asset value of the firm and relatively predictable legal rules regarding the priority of claims. Some Official-centred reorganisations can be slower and more indeterminate than stakeholder-centred processes. Others eg US Official-centred bank insolvency proceedings) can be extremely fast, with relatively determinate distributions.

With respect to the nature of the process and its transaction costs, traditional liquidations and reorganisations have several common elements.

Both processes are highly lawyered, even in jurisdictions that use accountants as the primary insolvency professionals. Liquidations might involve a substantial amount of litigation, because debtors of insolvent firms often refuse to pay their debts voluntarily. They see little reputational cost to doing so, expect no ongoing relationship with the insolvent entity, and are likely to settle only after litigation. Also, the Official may well press claims - such as avoidances of preferential

or fraudulent transactions - that did not exist prior to insolvency. There is yet more litigation on the liabilities side: the Official is likely to dispute claims, especially contingent claims or undersecured claims, which may involve valuation of the security interest.

Reorganisations may require less litigation (at least of the claims collection variety), but require a great deal of negotiation. (Chapter 11-style reorganisation negotiations typically occur in the shadow of litigation, because an insolvency court must ultimately decide, if the stakeholders cannot agree among themselves.) And reorganisations are prone to their own litigation, especially that of undersecured creditors (who will argue valuation) and others who try to escape the proceeding entirely.[7]

As a result, these processes are usually slow. Some insolvency processes are inherently very slow because of the nature of the insolvent firm's balance sheet. An insurance liquidation, for example, must take a long time because of the large number of long-tail contingent liabilities on an insurer's balance sheet.[8] Similarly, real estate often takes a long time to liquidate, prolonging the liquidation of any firm with appreciable real estate on its books. Asset collections are often slowed by litigation, and the liquidator can be swamped by details so that insolvency processes can be slow even for firms with few contingent liabilities and liquid or short-term assets.

Stakeholder-centred reorganisations are inherently slow because the necessary negotiations are complex, and any adjudication can be even more complex. Also, some parties to the negotiation - especially junior claims such as subordinated debt and equity - tend to benefit from holding out. Junior creditors have an effective option on the firm during the pendency of the negotiation process. They will benefit if the firm increases in value during this process, and are unlikely to lose much if the firm decreases in value. The value of this option increases with time: an incentive to delay. As discussed above, Official-centred reorganisations can vary tremendously in speed, from extremely rapid to extremely slow.

Finally, both Official and stakeholder-centred processes typically suffer from serious governance problems, albeit of different kinds, which reduce efficiency. The governance problems of Official-centred processes are inherent in the protracted complex multilateral negotiations that are central to the processes. Official-centred processes do not have notably high negotiation costs, but suffer from agency costs associated with administration. Private Officials are fee-charging professionals, hired by a creditors' committee or a court; public Officials may have their own agency costs. Adequate incentives may not be place to ensure sufficient monitoring by creditors

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[7] The scope of an insolvency proceeding can be hotly contested, largely because of past transactions. An insolvency Official will seek to characterise these transactions as still open under insolvency principles, such as those based on preferences or fraudulent transactions; the counterparties will seek to characterise them as final and not subject to insolvency.

[8] Thanks to closeout netting, banks' balance sheets do not suffer from this problem, notwithstanding the long-term contingent nature of many derivatives contracts. The major concern for banks is with standby letters of credit and other independent bank guarantees, which generally expire within a few years of issuance.

or courts.[9] Similar agency costs attend stakeholder-centred processes, with their creditors' committees represented by professionals.

However, the most significant governance problem of any of these processes probably arises from their initiation, rather than their administration. By general consensus, insolvency procedures tend to be initiated too late. Too often, reorganisations do not result in profitable restructured firms.[10] In principle, if a liquidation is initiated at the moment of balance sheet insolvency, creditors should receive 100%, net of their administrative costs. In practice, the yield on liquidations is substantially less for banks, and far less for non-financial firms.

Insolvencies are often initiated by the debtor. The debtor owes its loyalty to the equity holders, who - as residual stakeholders - have only to gain by delaying insolvency in hope of resurrection. (For much the same reason, the management of a weak firm would prefer high-variance strategies, even if they have a negative net present value.)[11] Different jurisdictions have different strategies for reducing this problem. Some insolvency systems punish the management of insolvent firms, eg through management liability for insolvency, or for trading after insolvency. This may work in some cases, but gives management a powerful incentive to conceal insolvency in others. Chapter 11-style reorganisations favour the carrot, rather than the stick, and give incumbent management a major role in the reorganisation. However, as discussed in margin above, Chapter 11 reorganisations are probably not timely initiated, either.

Creditors do not have the same incentives for late initiation. Indeed, their incentives would be for initiating insolvency proceedings at the earliest possible time. However, creditors face two handicaps in initiating insolvency. First, they usually have less information on the firm's condition than the debtor. Second, they cannot immediately initiate insolvency when they suspect the firm is troubled: they must generally wait for a violation of loan covenants or a failure to make timely payment. Debtors will often not accept loan covenants with hair triggers, and even if they do, violations may not be readily apparent. Also, some legal systems are solicitous of possible strategic behaviour by a creditor. A creditor - especially one without an ongoing relationship with the firm - might wish to initiate insolvency for reasons completely unrelated to the prospects of the debtor firm, eg to escape an unfavourable change in interest rates. Therefore,

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[9] In one recent international bank insolvency proceeding, the receiver had collected around $10 million, with all but $1.75 million disbursed to it in administrative expenses (*In re* Treco, 240 F.3d 148, 159 2d Cir. 2001). Creditors had not yet been paid anything. This case is certainly not typical, but is illustrative. For a perhaps more typical example, see "Creditors fear fees tied to bankruptcy of global", *The New York Times,* 13 April 2002, p B1.

[10] Depending on the metric, somewhere between a fifth and a third of US Chapter 11 plans fail. Put another way, the average reorganisation produced firms that showed no profits. See Lynn M LoPucki and Joseph W Dougherty, "The failure of public company bankruptcies in Delaware and New York revisited", *Vanderbilt Law Review* (forthcoming), at http://www.law.ucla.edu/erg/pubs/Lopucki-DelawareRefilings-20020308.pdf

[11] Michael Jensen and William Meckling, "Theory of the firm: managerial behavior, agency costs and capital structure", 3 *Journal of Financial Economics* 305 (1976).

the insolvency laws of some jurisdictions make creditor initiation ("involuntary insolvency") more difficult and linked to more objective evidence.[12]

Bank insolvency law contains a third alternative: initiation by a neutral governmental official. In principle, governmental officials - especially supervisors - could have the correct mixture of information and incentives for timely insolvency initiation. But also in principle, timely initiation implies that creditors get paid in full. It is hard to escape the conclusion that even bank supervisors are in some instances too slow in initiating insolvency. Even bank supervisors are hindered, by limited information, bureaucratic inertia, political pressure, risk aversion and perhaps a reluctance to declare their pre-insolvency rehabilitation efforts a failure. However, they may be less imperfect than other parties, especially if the bank supervisor is also a bank insurer, and has a direct financial incentive to initiate timely insolvency.

3. National approaches to insolvency processes

A few of the approaches to insolvency discussed above are universally available in the surveyed jurisdictions. All jurisdictions surveyed permit mergers and workouts, as matters of private law outside formal insolvency proceedings. Similarly universal is the piecemeal liquidation. Reorganisations and compositions of some kind are in fact universal.

Table 2 summarises a survey by the Contact Group.[13] In the table "UK" refers to the law of England and Wales, and "US" law is an amalgam of federal law, New York State law and the Official Text of the Uniform Commercial Code.

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[12] The title of one article describing US law is instructive: Brad R Godshall and Peter M Gilhuly, "The involuntary bankruptcy petition: the world's worst debt collection device?", 53 *The Business Lawyer* 1315 (1998). Other jurisdictions are more creditor-friendly, eg that of England and Wales.

[13] The survey results are in Appendix B.

Table 2

	IT	JP	NL	UK	US
General liquidation	Y	2	Y	Y	Y
General composition	Y	Y	Y	2	N
General Ch 11 reorg	2	2	N	N	2
General liability transfer	N	N	N	N	N
Bank liquidation	Y	N*	N*	N*	3
Bank composition	N	N	N	N*	N
Bank reorganisation	Y	N*	Y	N*	2
Bank liability transfer	Y	Y	Y	N	Y

* No special bank proceeding. Jurisdiction uses general insolvency law for banks.

** Not controlled by legislation, but available through the political process.

"2" and "3" refer to the number of processes under this heading.

As shown in Table 2 some insolvency processes are less universal than others. Bank liability transfers, for example, have no equivalent in general insolvency law.

Interestingly, many jurisdictions have several classes of specialised proceedings. Bank and insurance proceedings are frequently specialised, but there are also specialised distinctions within general insolvency law, based on criteria such as size or significance. These distinctions are understandable: the liquidation of a large public corporation will be very different from the liquidation of a small shop. Some of these specialised proceedings are obsolete or used infrequently; some are fairly common.

4. Bank insolvency law

The insolvency survey shows that countries have chosen different approaches to the treatment of insolvent banks.[14] Some jurisdictions (eg the United Kingdom and, to some extent, the Netherlands) treat bank insolvency similarly or identically to ordinary insolvency. Other jurisdictions appear to have very distinct legal regimes governing bank insolvency, particularly the United States, Italy, and Japan. In some of these jurisdictions, the insolvency of credit institutions is regulated in the banking laws as a specific subset of insolvency rules, which may be

[14] See Appendix B.

supplemented by general provisions applicable to all insolvency cases in the jurisdiction in question.

There is one universal distinction between bank and ordinary insolvency. In the insolvency law of any of these jurisdictions, a bank regulator can initiate a bank insolvency proceeding, whether it is conducted under general or specialised insolvency law. However, if we look to trends, rather than universals, another distinction appears.

The slower kinds of proceedings - especially the stakeholder-centred ones - are disfavoured in bank insolvency law and the existing faster options - liquidations, mergers and liability transfers - are the norm.[15] Chapter 11-style reorganisations appear disfavoured in bank insolvency law, and compositions seem extremely rare or nonexistent. One reason may be that de facto bank reorganisations often take the form of bank supervisor-overseen (or -encouraged) workouts, outside any formal insolvency process, or with the formal approval of an insolvency court as the last step. In concept, however, there is no reason why procedures for an expedited stakeholder centred approach could not be developed. Forced mergers are common, even in jurisdictions whose bank insolvency procedures differ little from conventional insolvency procedures. Some jurisdictions (the United States and Japan) rely on the most activist procedure of all: the liability transfer. These fast proceedings often have supervisory involvement.

There may be several reasons for these distinctions in insolvency process between banks and non-financial firms.

Liquidity (and systemic risk) is almost certainly the most important of these reasons. Prolonged bank insolvency procedures destroy liquidity: either the liquidity of counterparties or that of markets. This raises the spectre of systemic risk through the very pendency of the insolvency process. Systemic risk creates a powerful need for rapid insolvency proceedings, deposit insurance, or both. Rapid insolvency proceedings - be they liquidations, recapitalisations or liability transfers - are best conducted by an activist Official.

It should be noted that bank reorganisation techniques that call for general moratoriums are particularly inappropriate to modern banking's need for liquidity. Moratoriums inherently block the payment stream, and for derivatives and foreign exchange contracts may be difficult to implement given that contracts can fluctuate from in-the-money to out-of-the-money and back again. Such moratoriums are also hard to reconcile with the needs of households and small business depositors and borrowers. Moratoriums have their necessary place in bank liquidations - they stop the run on the bank - but are singularly ill-suited to bank reorganisations.

Pervasive supervision may be significant. As discussed above, supervisory intervention, conducted well before the appearance of obvious financial distress, can be a good substitute for

[15] This is in contrast to insurance insolvency law, which often proceeds extraordinarily slowly, in large part because of long-tail contingent insurance liabilities.

rehabilitation. Regulation also plays a significant role in legitimising activist insolvency procedures, such as a liability transfer or overt government funding. Concerns about administrative intervention in the economy tend to be muted in the financial services sector.

Firm-specific assets, other than human capital, are less common in modern banks, as the loan book of a bank becomes increasingly transparent, thanks to the syndication and bond markets, and a widespread market for credit information. (This trend is still limited by close bank-firm relationships in some countries.) This greater transparency aids rapid sale of particular components of the balance sheet or particular operations. It also makes the liquidation of a bank as a whole easier, thus strengthening the case for liquidation, especially if a supervisor-overseen or encouraged workout has been unable to conserve going-concern value. (However, piecemeal liquidation will dissipate firm-specific human capital.) Finally, it argues that insolvency moratoriums should not apply to security interests in bank collateral. A moratorium is justifiable if the security interest is in a firm-specific-asset, such as machinery. Rapid foreclosure of such a security interest would destroy value. However, a moratorium is much more difficult to justify if the security interest is in a non-firm specific asset, such as most receivables and almost all securities. (The traditional justification for extending the moratorium to non firm-specific assets is that it serves as a temporary loan to the insolvent reorganisation. This justification implicitly assumes that no outside capital will be available to the insolvent firm: an assumption belied by modern capital markets and an active market in post-insolvency lending, such as debtor-in-possession financing.)

Bank creditors, at least traditionally, have been dispersed and weak. The governance problems of creditors' committees - always an issue in insolvency law - would be particularly pronounced in a bank insolvency. This problem is dispelled by supervisor-led proceedings, some of which place the supervisor in the role of an Official.

C. What has changed?

The basic framework of mainstream insolvency law had become established by the 19th century. The most significant advances in the 20th century were probably the Chapter 11-style reorganisation (inspired by procedures developed on pre-war US railroad insolvencies) and the "ancillary proceeding" of international insolvency law (developed in the wake of the Herstatt insolvency).[16] The elements of this framework were probably well-suited to the conditions in which they were established.[17] But do they equally fit the conditions of today?

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[16] Kurt H. Nadelmann, "Rehabilitating international bankruptcy law: lessons taught by Herstatt & Company", 52 *New York University Law Review 1* (1977).

[17] The discussion in the main text assumes that the conditions that formed modern insolvency law were exclusively economic. This is certainly too narrow a view: political considerations played a role. 19th-century insolvency law was shaped by 19th-century classical liberal political theory. This law stressed the quick and orderly resolution of the insolvent and the pro rata satisfaction of unsecured creditors from the assets of the estate. The main alternative

Many observers have highlighted the weaknesses of insolvency law, both for banks and for general firms. Much of the criticism centres around reorganisations or compositions, slow, costly and frequently ineffective.[18] Banks do not usually share these problems, because their reorganisations follow a different pattern: led or encouraged by supervisors and occurring before financial distress becomes public and forces the bank into insolvency. But bank liquidations often share the same problem as general firm liquidations: they are slow, costly and destructive of going-concern value.

This subsection argues that discontent with insolvency law is related to its age. The global financial system has evolved substantially in the last 20 years and the insolvency process has not kept pace. Apart from cross-border issues, the mainstream insolvency process has not responded to this evolution. International law reform efforts are plentiful, but innovation is largely in settlement risk reduction and the resolution of cross-border issues. Procedural reform efforts have been largely confined to adoption of Chapter 11-style reorganisations in jurisdictions without them. This adoption process will substantially improve the insolvency procedures of these jurisdictions. Nonetheless, the Chapter 11-style reorganisations have themselves been subject to criticism, as insufficiently responsive to market developments of the last few decades. Interestingly, most of these criticisms have come from the United States, the birthplace of the Chapter 11 process.

This subsection examines developments in rough order of their significance to insolvency: transformed financial markets, globalisation, a greater need for speed, and an increasing overlap of the banking and general sectors of the economy.

1. Financial, capital and managerial markets

The case for reorganisation proceedings is based on market incompleteness and, to some extent, market failure. If capital and managerial markets were complete and perfect, outside capital could simply purchase and operate all of the insolvent firm's assets, with the purchase proceeds distributed among the liability holders, after satisfying the claims of the secured parties. This would preserve the entire going-concern value of the insolvent firm, with minimal transaction costs and delay.

Of course, capital and managerial markets are not complete or perfect. Economic theory suggests that firms exist to coordinate the production of goods and services where markets do not provide that coordination. This suggests that a firm provides an **externality** in providing its output, which

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to the classical liquidation was the composition, which - consistently with classical liberalism - placed party autonomy at its centre. In the 20th century - particularly the latter part of the century - debtor protection and various social considerations became increasingly important: hence the trends toward weakening the security interest, creating wage priorities, and preservation of the debtor's enterprise. This Report does not speculate on the current political underpinnings of insolvency law reform, but merely notes that they are likely to be significant.

[18] See footnote 10 above.

is lost in the event of its failure - this is a motivation for giving priority to the rehabilitation of the firm in reorganisation.

However, the scope of markets has expanded dramatically, the information set available to participants has increased in both quantity and timeliness, and the functioning of markets has improved tremendously over the last 20 years or so. Inevitably, better functioning markets make assets less firm-specific, even if the assets themselves might be more difficult to evaluate.

First, the depth and liquidity of financial markets in general have increased, for several reasons. Transaction costs and risks of exchanging financial assets have decreased: a result of deregulation, improving technology and legal reform. The scale of financial firms and the growth of the institutional investor sector have brought more risk-bearing capacity to markets. Several jurisdictions have removed product segmentation among different classes of financial firms - further augmenting potential market-making capacity. Improvements in market liquidity and infrastructure have been particularly notable in the equity markets, and the ability of firms to raise equity capital at all stages of their life cycle improved notably. Activity in financial markets has expanded as transactions have shifted from banking to securities markets and as new products have developed to trade risk and assets. For example, low-transaction cost risk transfer products have developed in markets as diverse as pure credit risk and reinsurance.

Second, the depth and liquidity of markets for non-financial assets, both tangible and intangible, have increased: notably the market for firms (or business lines), and the related market for corporate control. The market infrastructure for takeovers is sufficiently strong that the market is limited only by the anti-takeover provisions of some jurisdictions' corporate law. Firms and business lines are frequently auctioned. The availability of merchant banking and institutional investment capital has made even the largest firms potential candidates for acquisition or restructuring, and the market seems to provide adequate information on targets. Furthermore, the market for managerial skills is becoming increasingly sophisticated. Lateral hiring of top executives is a routine matter these days, facilitated by consulting firms (a good source of non-firm-specific top managerial talent) and headhunter firms, which act as brokerages.

Third, in a development particularly significant for insolvency processes, the market for distressed financial and non-financial assets has developed and expanded dramatically over the last two decades, at least in some countries. Specialist investors - such as vulture funds, and firms that specialise in restructuring and remarketing the assets of troubled firms - have created a market in which distressed assets can be priced and transferred at reasonable transaction costs and reasonable speed. The markets for distressed assets rely on the wider array of markets in financial and non-financial assets for the eventual resale of recovering or restructured assets.

Insights from the corporate finance literature into the boundaries of firms (what activities occur inside the firm rather than in markets) have further weakened the case for reorganisation.[19] This literature often focuses on the problem of aligning incentives to produce goods and services, and the role of firm-internal decision-making, coordination and control mechanisms in that process. However, evolving corporate practices have highlighted the important role of sophisticated contracts in solving such incentive problems, aided by modern information technology. The widespread use of outsourcing, as well as the increased use of joint ventures and business alliances, suggest that the scope for rapid restructuring and disposition of assets has increased substantially.

In summary, most arguments for traditional insolvency reorganisation rely on the firm-specificity of management, assets and capital. If management, assets and capital are sufficiently firm-specific, any restructuring of the firm must rely on the firm's internal resources eg through reorganisation proceedings. If outside help is not possible, the firm must rely on its incumbent management, and liabilities must be restructured to fit the firms' assets and cash flows. But if outside markets can provide adequate capital and management to distressed firms or absorb these firms whole or piecemeal, the case for reorganisation or a highly administered liquidation process weakens. Liabilities need not be restructured when an outsider can buy the firm and pay off the liabilities in priority rank.

Although the case for traditional reorganisation has been weakened with time, it may still be valid, at least in some cases, and perhaps many cases. Small non-financial firms cannot yet take full advantage of modern capital and management markets, and only certain sectors of the labour market are becoming less firm-specific. Of course, the smallest firms are usually resolved informally in bank workouts, and reorganisations are reserved for firms with disparate stakeholders. But there are many firms in the middle, and even the largest firms have many specific assets, apart from team human capital. Moreover, as discussed in the framework section, many creditors may actually prefer reorganisation if the viability of the firm is uncertain and more information is needed to decide on bankruptcy.[20] We cannot conclude that reorganisation is obsolete; merely that it is no longer reflective of modern trends.

2. Globalisation

Law is promulgated by sovereign states, and affects those within the jurisdiction of those states. At one time, most firms could be attributed to a single jurisdiction, as could their acts. However, this is increasingly less true for modern firms, which have become international in both their physical presence and the geographical scope of their activities. Furthermore, the markets in

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[19] See for example Oliver Williamson, "The economic institutions of capitalism" (1985); Oliver Hart, Philippe Aghion and John Moore, "The economics of bankruptcy reform", *Journal of Law, Economics and Organisation* 8(3) (l992).

[20] See text accompanying footnotes 1 and 2 above.

which firms operate are becoming increasingly international. Finally, more economically significant acts are intangible, and thus difficult to accommodate to territorially-based jurisdictions. General business law is strongly affected by globalisation, as witnessed by the accelerating output of UNCITRAL Conventions and Model Laws. As with general business law, so with insolvency law.

As larger financial firms have become global in the last few decades, their business and management structure has evolved substantially. Extensive work by the Joint Forum, the organisation of banking, securities and insurance supervisors, documents several relevant features of many global financial conglomerates.[21] First, such conglomerates organise and conduct their business lines to operate across legal jurisdiction and geographical lines, with many jurisdictions then having some claim to being the insolvency jurisdiction. Moreover, key decision-making and financial and risk control activities are likely to be centralised in one or a few financial centres, the result of both economies of scale and the sound practice of consolidated risk management. Both practices are facilitated by modern communications and air travel.

Thus, even if the firm's business appears separable by jurisdictions,[22] as a practical matter, the business within a single jurisdiction could not be reorganised on a standalone basis. (This does not preclude sales of business lines, but limits sales of business offices.) The firm's executives across locations must cooperate for business strategy, management and risk control reasons. The accounting consolidation of subsidiaries further reduces any jurisdictional compartmentalisation of an organisation by subsidiaries. In any case, some organisations - notably banks - are unwilling to employ the subsidiary device for their principal operations, which tends to raise the cost of operations and degrade organisational creditworthiness. As a result of all these factors, the business activities of financial firms frequently overlap jurisdictional lines.

While global non-financial firms may have more physical assets that can be easily attributed to individual jurisdictions, their business line and management structure may have characteristics similar to those of global financial firms. Moreover, their financial management may have many similarities to global financial firm management. For example, some global non-financial firms centralise their treasury operations in one or a few centres.

In addition, many financial markets are now global. The same financial products are traded worldwide, among counterparties who may be anywhere, while settlement often remains located in a single centre, depending on the product. This gives rise to complex cross-border relations, which place stress on cross-border insolvency law. Collateral, for example, is often "located" in different jurisdictions than the "location" of the debt it secures. Location is a difficult concept for debt and many of the intangibles that comprise collateral. An intangible is located wherever a

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[21] Joint Forum on Financial Conglomerates, *Supervision of financial conglomerates,* BIS (February 1999).

[22] The most favourable case may be fairly typical: the subsidiary device used as a form of jurisdictional compartmentalisation, with relatively simple arm's-length cross-affiliate financial structures.

court says it is, raising potential problems of multiple liability and unpredictable perfection of security interests. Many international treaties have sought - often successfully - to mitigate this potential confusion. Some of them are discussed below.

3. The need for speed

Today's rapid marketplace conflicts with the slow, deliberate process inherent in most traditional insolvency processes. Insolvency has two sources of delay: it is often initiated late, when the value of the firm has greatly eroded, and it usually proceeds slowly once it is initiated. Late initiation was discussed above, in connection with insolvency governance.[23] This subsection focuses on the speed of insolvency, once initiated.

Reorganisations are inherently slow, because complex negotiation is part of the process. Liquidations can be fast in principle (especially if the firm is sold as a unit), but are often very slow in practice. Even if the assets are quickly sold, contingent liabilities can slow the distribution of assets, especially for firms with a large number of such liabilities on their balance sheets, such as insurers. The traditional processes, therefore, seem to have a basic time unit of months: months to initiate, months to organise the parties, and months for subsequent steps. Some processes may take only a month or even less, eg organising committees or an accelerated liquidation. Others may take tens of months: negotiations. And the insolvency may be initiated years later than it should.

The slowness of these processes contrasts with a financial market environment that can change in hours, a market for corporate information that acts in days or weeks, a product market environment that be transformed in a few months, and labour markets that often provide rapid opportunities for employment elsewhere. This gap generates another set of tensions in the insolvency process.

First, the increased volume and timeliness of information raises the potential for "fire sale" or adverse pricing, even at an early stage of restructuring or liquidation. When information was poorer and disseminated more slowly, troubled firms had time to work off large positions. In recent years, troubled firms, especially large firms or firms with large positions in financial or non-financial markets, have found that news of their problems travels fast. Markets rapidly incorporate information about possible asset sales or insolvency into prices, and thus the firm faces much more unfavourable conditions for restructuring or liquidation when that finally occurs. This development argues that to maximise the value to shareholders of a troubled firm, serious consideration of any restructuring needs to take place early, perhaps before the odds of insolvency become overwhelming.

Second, over the last 20 years, a far more active financial management approach has become necessary. This has been very noticeable in financial firms, which employ daily mark to market

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[23] See Section II-B-2.

accounting and active risk management for their financial contracting. This practice is in tension with slow insolvency law. Daily market, credit and liquidity risk management loses much of its utility if the surviving firm cannot quickly liquidate, adjust or fund its positions. In addition, skilled personnel need to be retained to manage such portfolios.

The need for active management in financial businesses applies more broadly to all businesses, because of more intense competition and rapid technological innovation. Firms in protracted reorganisation tend to lose value, and this tendency is more pronounced in a dynamic economy. A reorganising firm is probably less able to keep up with the changing markets and shortened investment cycles in which it must compete. Furthermore, human capital is seldom subject to reorganisation moratoriums,[24] and represents an increasing share of firm value. Much of this human capital is not so firm-specific that it cannot leave during the period of prolonged uncertainty of a reorganisation. This is especially true in advanced economy workforces that are increasingly professionalised and decreasingly bound to their employing organisations. In many industries, one can question whether the going-concern value preserved by the moratorium is exceeded by the value destroyed in a prolonged reorganisation process. Furthermore, intangible assets such as franchise value (not on the balance sheet) tend to decay in value over time if customers are not carefully monitored and the future of the franchise is not clear. This trend is especially pronounced in a service economy, in which customers expect an ongoing relationship with their suppliers, and thus are more sensitive to their suppliers' insolvency risk.

4. The overlap of banking, other financial, and non-financial firms

The convergence of the timing needs of banks and other firms is just part of an increasing overlap among different types of firms. Banks have traditionally been viewed as special, subject to special regulatory and (in some jurisdictions) insolvency law procedures. This may be changing to some extent. Non-bank firms are taking on more bank-like characteristics, such as liquidity- and market-sensitive trading activities, credit extension, and active risk management.

One principal reason is the well-known blurring of traditional business lines among financial firms with different licences or charters. Another reason is the growth of sophisticated financial activities at large non-financial firms, either in the management of their capital, funding and risks, or in providing financial services for customers, or both. The financial activities of some large non-financial firms are comparable to those of financial institutions.

More fundamentally, features of financial markets are increasingly being incorporated into non-financial markets, especially with the growth of the internet and widespread availability of sophisticated data processing. These include more price transparency, the greater speed of

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[24] There are some isolated exceptions, related to intellectual property and competition issues (eg trade secrets and covenants not to compete), and trade unions (which in some jurisdictions, can be ordered by courts not to strike). However, as a good first approximation, these exceptions are just that - exceptional. Most economies permit their workers to leave their jobs at will, regardless of their employers' financial condition.

transactions, easier price and product comparison, better secondary markets for existing goods and, especially, changes in the mechanisms for payment.

This increasing overlap is important to the extent that a jurisdiction has a special bank insolvency regime. Most of the distinctive aspects of specialised bank insolvency law are designed with banks' unique roles in mind. These unique roles are increasingly imitated in the non-financial sector, especially in the emerging B2B (business-to-business) marketplaces, which are often modelled on exchanges or auction mechanisms. Thus, the expedited procedures being developed for banks may be relevant. Banks accommodate liquidity, operate or participate in central clearing and settlement mechanisms, rapidly intermediate transactions between remote parties, and lack powerful creditors. Liquidity is impaired - perhaps systemically - if the failure of a major counterparty ties up the transaction flow. Bank insolvency and payment law therefore seeks to retain systemic liquidity, through precise finality rules, a preference for very rapid reorganisation over liquidation, fast liquidation procedures, and the like. Intermediation connotes the involvement of many entities in a single transaction - which demands sharply defined rights of all the entities, structured as clean bilateral relations. (In other words, adverse claims on funds are very difficult to establish.) Central clearing and settlement connotes an extensive reliance on collateralisation and netting, and thus the rapid enforceability of security interests and netting arrangements, even in insolvency.

D. Financial contracts at the national level

The differential rates of change between financial markets and insolvency practice have also created concerns about settlement risk of payments and financial instruments used for liquidity and risk management, for financial and non-financial counterparties alike. (Settlement risk extends to payment systems, securities transfers and financial contracts - including derivatives, securitisations and other contracts which may be collateralised.) Settlement risk in insolvency is incompatible with the operation of the payment and securities transfer systems, and the uses of financial instruments to manage risk.

Over the past 15 years or so, these risks have been mitigated through special legal exceptions to general principles of insolvency law, often called "carve-outs."[25] These laws include those enforcing closeout netting of derivative and foreign exchange contracts, multilateral netting of payment systems, collateral arrangements securing these contracts, and netting and collateralisation of financial securities contracts: securities settlement, repos and securities lending. For example, collateral used for financial contracts or the financial contracts themselves are insulated from the effects of insolvency arrangements (whether liquidation or reorganisation measures) either through laws permitting rapid liquidation, closeout and netting of obligations

[25] Some jurisdictions have promulgated fewer carve-outs than others, because their law was already relatively friendly to closeout netting and rapid liquidation of collateral. However, even most of these jurisdictions need special legal protection for financial specialties, such as clearing and settlement operations.

and collateral or title transfer mechanisms. Or, to take another example, securities transfers may be exempted from ordinary insolvency rules concerning preferential transfer, reducing the risk of reversing the transfer in insolvency. These special rules resolve either partly or fully large gross claims and gross liabilities between counterparties immediately upon insolvency, in effect placing or settling these claims ahead of other secured and unsecured creditors and other stakeholders.

These rules have certainly been successful in their own terms. They have undoubtedly reduced settlement risk in particular, and systemic risk in general. By way of comparison, the 1974 Herstatt insolvency created worldwide distress, whereas the 1995 Barings insolvency barely caused a ripple.[26] These insolvencies were certainly different in many respects, but decreased legal settlement risk was certainly a significant one. However, the scope of the carve-out rules is elastic. There is no widespread consensus on which contracts should be subject to these carve-outs. As markets rapidly evolve, the scope of these provisions is effectively widening. No static list of carve-outs can accommodate market evolution, and there are no common principles to fill the gap. Therefore, although most jurisdictions have carve-outs, each jurisdiction has a different list of carve-outs, and updates its current list at different rates than other jurisdictions. This creates frictions among jurisdictions, discussed in the section on cross-border insolvency.

It is difficult to evaluate the countervailing forces involved in the rules governing financial contracts. The argument for an insolvency regime supportive of legally certain netting and rapid enforcement of collateral is strong. If such regimes did not exist, creditors would avoid heavily netted contracts or contracts such as repos whose small margins are only justifiable if collateral enforcement is swift and certain. The result: a thinner market that cannot take advantage of modern risk transfer technology. The argument is even stronger for payment system netting, which could not support large payment volumes on little capital without strong netting and collateral enforcement rules.

However, if resolution regimes are too supportive of netting and collateralisation, the unsecured creditors of the firm will insist on compensation, in the form of higher interest rates, greater overdraft privileges or the like. Unsecured creditors who enjoy deposit insurance might not mitigate their risks, but instead pass it on to the insurer, who would therefore ultimately underwrite the cost of netting and collateralisation. Excessive netting and collateralisation might also render the insolvency process largely irrelevant. In the event of actual or impending default, creditors may merely seek to enforce their security or exercise rights of closeout. In such a regime, if firm-specific transactions are secured or netted, the institution will cease to exist, to the detriment of unsecured creditors, and with the loss of any firm-specific value, assuming some value exists.

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[26] The Barings insolvency was smooth for at least two reasons. First, most of the Barings derivatives liabilities were subject to adequate risk management, both that of Barings' counterparties and that of the Singapore exchange, which served as a central counterparty for many of Barings' exchange-traded liabilities. Second, Barings' bank was quickly sold as a unit, although the holding company was subjected to a prolonged liquidation.

E. Impact on legal certainty, efficiency and equity

The changes described above appear to have changed the relative importance among the three goals of legal certainty, efficiency and equity.

The gap between the market environment and insolvency processes suggests that the demand for legal certainty and for efficiency in the insolvency process by creditors and debtors has increased as market participants manage their risks more closely, as competition and globalisation have increased, and as assets have taken on a more intangible character that argues for quicker disposal. At the same time, the increasing liquidity of financial and non-financial assets, the growth of markets for corporate control, and the ability to fashion contracts to solve incentive problems in reorganisation or liquidation have increased the possibility of reducing the costs of legal uncertainty and inefficiency without changing the underlying concepts of equity. Slow and indeterminate negotiations can now be replaced with faster and surer market-oriented practices. In effect, the demand for more certain and efficient insolvency resolution has risen, while the supply (ie legal and transactional technology) for more certain and efficient insolvency has also expanded.

If uncertainty and inefficiency can be reduced, the overall value of the insolvent estate can increase. At a minimum in such circumstances, at least some creditors and other stakeholders can be made better off without making any other stakeholder worse off, and, if desired, basic equity relationships could be maintained.

The development of financial contracts represents a partial closing of the gap between the market environment and insolvency processes, for those instruments where the tensions are most acute. The special exceptions to insolvency law increase legal certainty and efficiency, but at the expense of reordering priorities within the insolvency regime.

The continued development and refinement of approaches to contract enforceability for financial contracts suggests that national jurisdictions have found the approaches, on balance, beneficial. A reasonable inference is that the private benefits in terms of legal certainty and efficiency and the market-wide benefits of limiting market disruption and sustaining liquidity outweigh any loss to other creditors or that the losses of other creditors are small. This inference is plausible: financial contracts do not involve those firm-specific assets whose value would be lost in case of contract enforcement.

In particular, the gains in legal certainty for financial institutions have broad spillover effects or external economies. Financial institutions are particularly susceptible to a loss of confidence. Anticipation of the closure of a financial institution can generate a run on the institution concerned and become a self-fulfilling prophecy. Regimes which seek to improve the chances of the institution remaining a going concern can reduce the risk of systemic shocks being transmitted through the financial sector. But such approaches are likely to be effective only if there is a reasonable degree of certainty that they would be adopted in a particular case. There may be

uncertainty about such adoption even in a single jurisdiction, and the interaction of different jurisdictions can make less clear what approach is likely to be taken in a particular case.

However, a gap remains between market possibilities and insolvency practice for other assets and liabilities of the insolvent firm. This gap suggests that additional opportunities exist to increase the legal certainty and efficiency of insolvency processes. This may involve greater use of market mechanisms such as auctions of business units in insolvency proceedings. Both the FDIC in the early 1990s and the bankruptcy trustee in the current Enron case used such methods. These present the possibility of essentially equity-neutral gains in efficiency and legal uncertainty.

More refined questions about the efficiency consequences of insolvency regimes lie somewhat outside the scope of this paper, but deserve at least some discussion. Insolvency regimes have incentive effects on the behaviour of firms and their counterparties. Some incentives enhance efficiency; others do not. This has been discussed above, in connection with the initiation of insolvency and subsequent insolvency processes[27] but also applies to other insolvency rules. For example, priority rules that shift insolvency risk from unsophisticated parties (eg employees or depositors) to financial creditors may enhance the efficacy of monitoring by the more sophisticated creditors.[28] (Such rules would also increase the cost of credit.) Or, to pick another example, legally certain and rapidly enforceable security interests decrease a secured creditor's interest in reorganising a firm.

III. Coordination of national insolvency processes: cross-border aspects of insolvency

Cross-border insolvency has received a tremendous amount of attention during the last decade, with genuine progress towards international law reform. This progress has been on two fronts: coordination of national insolvency proceedings and the problems unique to the insolvency of international financial firms: liquidity management, settlement risk and ensuing systemic risk.

This section begins with an analysis of the problems of coordinating cross-border insolvency. Problems in coordination apply both to insolvency processes and to substantive insolvency rules, notably the carve-outs discussed above. It then applies this analysis to the schemes actually used to coordinate cross-border insolvency, so-called "full universality," "modified universality," and "territoriality." It describes how cross-border coordination issues are somewhat different for banks than for general business firms. The section concludes with a brief review of current law reform movements. Appendix A chronicles this progress in detail, especially with regard to bank insolvency.

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[27] See Section II-B-2 above.

[28] This argument is a hardy perennial in discussions of deposit insurance. See for example Helen Garten, "Banking on the market: relying on depositors to control bank risks", *4 Yale Journal of Regulation 129* (1986).

The conclusions of this section are complex, and deserve a brief summary here. First, it is difficult to coordinate international insolvencies, and the appropriate coordination schemes for banks might not be those of general business firms. Second, the predominant (if not necessarily optimal) coordination model today is based on **comity**: voluntary cooperation among insolvency courts and Officials. Outside the European Union, there is little in the way of treaties that coordinate cross-border insolvency.[29] Third, although the coordination of cross-border insolvency *procedures* may be weak, there has been considerable progress in harmonising cross-border insolvency *rules*, notably those related to the conflict of laws, financial contract netting and rapid liquidation of financial collateral.

A. The problems of insolvency coordination in an international context

Legal certainty is as valuable in a cross-border world as it is within a single jurisdiction. However, legal certainty is more difficult to attain across borders. Which law will govern the insolvency proceeding or will multiple laws apply? Which law will determine whether a security interest is perfected or a netting contract is valid? These questions are particularly important for financial institutions. Within a particular jurisdiction, most financial contracts enjoy considerable legal certainty. Will this certainty be retained in an international context, especially in insolvency?

Uncertainty over financial contracting has two salient dimensions in an international context. One of them concerns the choice of an insolvency regime and the potential for forum shopping. The other concerns the frictions between different regimes, even after the relevant forum (or forums) have been selected.

1. Choice of an insolvency jurisdiction

Different jurisdictions have different distributional consequences in insolvency. Therefore, those who have the ability to invoke an insolvency regime have an incentive to invoke the jurisdiction most favourable to them: the “forum shopping” problem. If only one party were free to select a jurisdiction, forum shopping would not necessarily create uncertainty: it would merely mean that insolvency regime would be the most favourable one, from the party’s perspective. Since the relevant party is usually the debtor, we would expect to see pro-debtor regimes flourish, to the extent the debtor has a choice of jurisdiction.

However, the ability to initiate insolvency could rest with different parties, such as creditors, directors or shareholders in the institution concerned, or a relevant supervisory or regulatory authority or other administrative body. This creates genuine legal uncertainty, as well as the distortion mentioned above. Who will be the first to file? Another layer of uncertainty may exist where a court or other judicial body has discretion to decide whether the application proceeds or

[29] The Bustamente treaty, in force in much of South America, is perhaps the best-known example.

is successful, or perhaps to discontinue one type of procedure and substitute another on the application of other interested parties.[30] Finally, there is the prospect of two competing regimes, initiated by two parties with separate interests in the insolvency. As a result it may be difficult to predict whether and which regime will be triggered in any particular circumstances.

One can view forum shopping from two perspectives: ex ante and ex post.

Ex ante forum shopping is simple in concept. Business tends to seek the lowest-cost environment, for labour, capital and other inputs. This applies as much to the legal environment, as any other. If a firm could credibly associate itself with a jurisdiction having capital-friendly insolvency law, its cost of capital would decrease. This could, in principle, initiate a wholesome competition among legal systems for more capital-friendly insolvency law. In other words, there is not always a race to the bottom. However, this kind of forum shopping would undercut insolvency policies that give greater weight to labour and communities.

Although the prospect of ex ante insolvency forum shopping is intriguing, it is also at present not a major factor in choosing business location.[31] It is commonly believed that business, tax and corporate control reasons dominate the choice of principal jurisdiction, for firms that have such a choice. Most legal systems do not allow a free choice of principal jurisdiction. Differences in tax regimes in fact are known to drive choice of corporate domicile.[32] Under some circumstances, discussed below, differences in insolvency regimes might have a similar effect.

Ex post forum shopping, where it is possible, is more likely and more problematic. When a firm becomes distressed, management is likely to seek a jurisdiction that provides the best prospects for itself: a chance to participate in reorganisation and a minimum possibility of penalty for errors in management judgment or misconduct. Although ex ante forum shopping may be desirable, it is more difficult to justify *ex post* forum shopping.

Ex post forum shopping is not a major problem in current international insolvency law, because most legal systems discourage the practice. However, it is not at all hypothetical. It is a well-

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[30] Official discretion is a general problem, not limited to the cross-border context. It is common in ordinary insolvency law. For example, a liquidator might be able to decide which contracts to perform (in which case a counterparty will - in the absence of an enforceable contractual provision dealing with termination - still be under an obligation to perform the contract) or to repudiate (in which case the counterparty will only have a right in damages). Alternatively, a counterparty may find that its ability to realise security is exercisable only with the consent of the insolvency Official and/or the consent of the courts.

[31] A firm can engage in credible ex ante forum shopping only if the rules are clear and the choice is irrevocable (or at least difficult to reverse). Forum shopping can lead to a competition among legal systems only if there are few constraining relationships between the jurisdiction selection rule and the business activities, assets and locations of the firm. As a general matter, clear jurisdiction selection rules (eg situs of incorporation) are usually revocable, and often constrained.

[32] For example, many firms headquartered and operating in the United States have obtained Bermuda charters for tax reasons alone, eg Global Crossing, Tyco and Ingersoll-Rand.

known phenomenon in US general insolvency law,[33] and explains the popularity of pro-creditor bankruptcy courts in Delaware and New York. It is a potential problem whenever a firm can freely change its place of incorporation, incorporation is a sufficient contact for insolvency jurisdiction, and other jurisdictions are obligated to respect this contact. These conditions may be uncommon now, but may become more prevalent with increasing globalisation. We shall discuss the further problems of ex post forum shopping below.

2. Other cross-border dimensions of insolvency procedure

The choice of an insolvency jurisdiction is not the only important cross-border issue regarding insolvency processes. One closely related issue is the choice of jurisdiction for a firm's assets and liabilities, which can often have significant consequences in insolvency. (For example, the law governing setoffs and preferential transfers might be the law of the asset or liability, rather than the law of the insolvency forum.) The location of most liabilities is a matter of contract, especially for global firms. Many financial assets are some other firm's liabilities, and therefore also have a manipulable situs.

As another example, the rules regarding the treatment of subsidiaries within a group of insolvent companies have not been harmonised in all countries. Some jurisdictions apply the law of the main place of establishment to the insolvency of all entities within a group of companies affected by the insolvency. However, most jurisdictions do not consolidate in this fashion, and view the appropriate law separately for each entity within the group. The consolidation of subsidiaries is a particularly significant issue for financial firms, and is discussed in more detail below.

One fundamental question at the outset of major insolvency cases is whether a rescue attempt should be undertaken through reorganisation. Different countries may have different types of reorganisation measures, as well as different rules and criteria for the situations where a reorganisation of the insolvent entity may be attempted. In a cross-border insolvency case, these can create some obvious problems of inconsistencies. Proceedings taking place concurrently in different jurisdictions with different insolvency laws, where one party's proceedings are not recognised by the other, could lead to contrary conclusions on whether reorganisation or liquidation should be conducted.

3. Enforceability of contracts: netting and realisation of collateral

As discussed above, the enforcement of financial contracts in insolvency proceedings tends to be regulated by "carve-out" statutes. As a general matter, these statutes assure the enforceability of certain kinds of netting agreements notwithstanding insolvency, and assure that certain collateral arrangements can be enforced without hindrance from the insolvency. Unsurprisingly, no two jurisdictions' carve-outs are identical. This can complicate cross-border insolvencies

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[33] The United States permits a bankruptcy filing to be made in any state in which the insolvent party has an insolvent affiliate (28 U.S.C. § 1408(2)). For larger firms, this permits the possibility of substantial forum shopping.

tremendously. Some examples of different jurisdictional approaches to carve-outs are drawn from the Contact Group's questionnaire:

- The different treatment of "absolute transfer of title mechanism" under different laws, for instance under English law and under Italian law. While the majority of market participants using the ISDA credit support documentation have preferred title transfer arrangements subject to English law, under Italian law such arrangements are deemed vulnerable to re-characterisation as disguised security (these schemes could be recognised as valid and enforceable only if falling in the category of "repos").

- The different treatment of top-up collateral. While in some jurisdictions top-up collateral delivered in a specified period prior to the commencement of insolvency may be declared null and void (Japan) or ineffective (Italy), in other jurisdictions there is a special protective regime, in the sense that top-up collateral provided for in the context of an agreement relating to qualified financial contracts is valid and enforceable (United States).

- Differences in the valuation of obligations and currency conversions. While in some jurisdictions (Italy) there are mandatory rules for this valuation (with reference to replacement costs, using market values at the date of the declaration of insolvency), in other jurisdictions (Japan, Netherlands, United Kingdom, United States) as a general rule the non-defaulting party has the freedom to determine the valuation method (although in some jurisdictions, ie United Kingdom, the liquidator may have the ability to challenge such valuation if it is not based on "reasonable grounds").

In a cross-border insolvency, it is not enough to know if a particular carve-out rule is enforceable in one particular jurisdiction. What if the rule is enforceable according to the carve-out rules of the jurisdiction whose law governs the netting or collateral agreement, but not in the jurisdiction (however defined) of the insolvent party? (What are the choice-of-law rules for determining which law governs the agreement?) What if the insolvency proceedings are split among several jurisdictions, a distinct possibility discussed below? These questions may be arcane, but they are very significant. As discussed above, the carve-out rules are widely believed to reduce systemic risk. If they do not work in a cross-border context, they may be less effective than assumed.

4. Perfection of collateral

One important function of the carve-out rules is to permit parties to rapidly realise or enforce financial collateral in insolvency. The enforceability of collateral depends on whether the security interest has been "**perfected**" in the "appropriate" jurisdiction. (Collateral is generally perfected through publicising the security interest in a matter recognised by law, eg registration,

notification, control, physical possession, or the like.) The real cross-border problem is that of uniquely determining the appropriate jurisdiction in which the perfection is to occur. The problem is difficult. For the system to work, all jurisdictions must agree on the appropriate conflict-of-law rules to determine the means of perfection, and the conflict-of-law rules should lead to a unique jurisdiction's law. This very difficult problem in international cooperation has been universally solved for only one class of collateral: real estate. Jurisdictions are territorially based, and real estate is both territorial and immobile. All other classes of collateral are more difficult. Financial collateral (eg securities, receivables, derivative contracts, bank deposits, and the like) is intangible, and one might therefore expect that a solution to this problem is impossible. However, financial collateral has been the subject of considerable recent international law harmonisation efforts. These efforts promise to bear fruit over the next decade, and allow most jurisdictions to harmonise their rules on perfection of financial collateral.

The recent European Directive of the European Parliament and of the Council on financial collateral arrangements[34] ("EU Collateral Directive") is intended to determine the appropriate jurisdiction of perfection for cross-border use of financial collateral between EU member states. The Directive defines financial collateral to include transferable securities and cash deposits. (It also includes rules encouraging the rapid realisation of collateral and discouraging clumsy formalities in establishing a security interest.)

UNCITRAL has developed a Convention on the Assignment of Receivables in International Trade - which includes assignments used in factoring, forfaiting, securitisation, project financing and refinancing. The primary purpose of this Convention is to determine the appropriate jurisdiction for perfection of receivables. Although not yet in force, this Convention has been successful enough for UNCITRAL to be tasked with a broader study of secured credit law, with the purpose of identifying possible solutions, ranging from a "model law" to a "convention".

The Hague Conference on Private International Law is working on a draft Convention on the law applicable to dispositions of securities held through intermediaries, with the aim of implementing the "**PRIMA** approach". According to the PRIMA principle, the rights of a holder of such securities provided as collateral will be governed by the law of the country of the relevant intermediary which maintains the securities account.

The scope of the project of the Hague Conference is not to harmonise the substantive laws relating to securities (this project is being considered by UNIDROIT). It is limited to determining the relevant law governing perfection (and most other property rights) for securities held through intermediaries. The Hague Conference project has been anticipated by other legal systems (eg the US UCC Article 8 and the EU Settlement Finality Directive), but the Hague Conference project has the prospect of worldwide reach.

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[34] Directive 2002/47/EC of 6 June 2002, OJ L 168/43.

5. Implications for legal certainty, efficiency and equity

The problems described in this section suggest that in an international context, legal uncertainty can increase dramatically. The choice of insolvency regime can become uncertain, and sometimes even manipulable. Conflicting laws and an absence of mutual recognition can make the enforceability of contracts uncertain. The appropriate jurisdiction for perfecting a security interest in collateral can become nearly impossible to determine.

This uncertainty contributes to inefficiency. Uncertainty creates incentives for debtors and creditors to behave in a manner that protects their respective interest, but may undermine the ability of the insolvency process to maximise the value of the insolvency estate and may create spillover effects on third parties. In addition, the complexity of administration of multi-jurisdiction insolvencies, including the costs of negotiation and litigation, can generate substantial direct costs and delays. Finally, the ex ante costs of planning transactions to accommodate insolvency also increase: legal opinion letters become more profuse and less reliable.

As was discussed in the previous section, legal uncertainty and inefficiency can be reduced. But unlike the closed system of a national insolvency regime, these improvements cannot necessarily be made assuming that the distribution of the proceeds of the insolvency estate can be held constant. Since concepts of equity differ across national borders, a result of the democratic process in each country or region, the choice of regime(s) will affect the distribution of outcomes. To some extent, providing a clear understanding on how insolvencies across jurisdictions will be handled can mitigate the problem, in that market participants can gauge the probabilities of possible outcomes and incorporate them into their ex ante decision-making. It is also possible that more analysis can identify improvements in the coordination mechanism that are relatively equity-neutral.

Efficiency has another dimension - spillover effects to otherwise uninvolved third parties, especially in the form of systemic risk. There is no real disagreement with the objective of avoiding systemic risk and financial instability, particularly in view of the magnitude of the problems that could materialise in financial markets. Hence, the need for efficient and effective insolvency regimes has gained recognition as a means of contributing to the maintenance of financial stability. For instance, insolvency appears as an important item among the 12 standards for stable financial systems recently introduced by the Financial Stability Forum.[35]

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[35] *Final Report of the Follow-up Group on incentives to foster implementation of standards*, 11 September 2001, at p 8 on www.fsforum.org. Other publications include *UNCITRAL draft legislative guide on insolvency law*, 2001; Group of Thirty, *Reducing the risks of international insolvency*, Washington DC, 2000; *Orderly and effective insolvency procedures, key issues*, IMF 1999; *Principles and guidelines for effective insolvency and creditor rights system*s, World Bank, April 2001.

B. Approaches to the coordination of insolvency proceedings

The coordination of insolvency proceedings is the most difficult dimension of general cross-border insolvency law. It has implications for the problems discussed above: financial contracting, forum shopping, and the like. Coordination is difficult for several reasons. Substantive insolvency law varies considerably across jurisdictions, and international coordination of insolvency law may endanger valued local considerations of public policy. In contrast, the consensus on cross-border netting and collateralisation is much stronger, and coordination of choice-of-law rules concerning netting and collateral places far less strain on national autonomy.

Coordination may be viewed as a kind of continuum: from a completely centralised global proceeding at one extreme, to a set of completely independent proceedings along territorial lines, at the other. We here seek to assess the cross-border issue for banks, in the context of general cross-border insolvency law.

In both general and bank-specific insolvency law, three cross-border models are conceivable. The first two models go by several names: we shall call them the full and modified **universal model** of insolvency. Both full universal and modified universal insolvency assume a cross-border division of labour, with most "ancillary" jurisdictions acting in aid of a central insolvency process. In a full universal insolvency model, the "main" jurisdiction's insolvency law will govern the insolvency of the entire firm. Typical ancillary roles include collection of assets and imposition of a moratorium, both aiding the central insolvency proceeding, which either reorganises the liabilities or liquidates and distributes assets. These ancillary roles invoke the power of the local court, and some of the law of the ancillary jurisdiction. However, all of the specialised insolvency law - processes, preferences, priorities and the like - is that of the main jurisdiction.[36] As an example of this division of labour, an ancillary court may feel obliged to turn over all local property to the main jurisdiction, but may use its own law to define whether a property right exists.

Full universal insolvency implies a surrender of sovereignty: predefined rules which dictate the respective roles of jurisdictions. Modified universal insolvency retains insolvency sovereignty, but encourages a cooperative approach. Each jurisdiction decides whether it should take a central or ancillary role. Ancillary jurisdictions must decide which non-ancillary foreign jurisdiction should be treated as the "primary" jurisdiction, and which other non-ancillary foreign jurisdictions have the "secondary" role. In the modified universal insolvency model, jurisdictions are supposed to show some deference to the choices of other jurisdictions and to the needs of the system: the so-called "comity of law."

[36] Cf Council Regulation (EC) No. 1346/2000 of 29 May 2000 on insolvency proceedings, OJ L. 160, 30.6.2000, pp 1-18, Article 4(2). The Insolvency Regulation's list includes: the assets associated with the insolvent, debtor and liquidator powers in the proceeding, setoff, permissible claims, creditors' remedies and priorities.

These two models are sharply distinguished from the "**territorial**" insolvency model, which expects no international cooperation. In the territorial insolvency model, each jurisdiction acts independently of the others. The insolvent firm is simply liquidated or reorganised along jurisdictional lines.

Full universality - which requires an international treaty - is often considered attractive.[37] However, the surrender of sovereignty implicit in full universality is difficult to achieve, and modified universality is often viewed as a more attainable norm. The territorial insolvency model is commonly viewed as an outmoded system modelled after pre-war notions of sovereignty and globalisation.[38] However, as we shall see, it has its merits.

The following discussion describes the three models in operation. However, its principal goal is to show that the issues are different for banks. Some problems of each of these models are muted for banks; and some of the problems are accentuated.

1. Full universality

The notion of a coordinated worldwide insolvency proceeding is quite attractive, especially for multinational firms. Proponents of universal insolvency admit that full universality requires a very high degree of international legal cooperation, but otherwise believe that universal proceedings are a desirable goal, worth the transition costs.

A successful implementation of full universality is the new legal regime on financial insolvency adopted by the European Union, applicable to all of its member states, except for Denmark. However, the EU rules clearly represent a special case, not comparable with other attempts at international rule-making, given that this new European cross-border insolvency regime was adopted within the existing EU legal and institutional framework. Even with the advantages of the EU framework and the strong political commitment to general European integration, this initiative was under consideration for over a decade before its adoption. Outside the European Union, fully universalistic international insolvency treaties have been very rare.[39] It is extraordinarily difficult for one country to legislatively surrender its sovereignty to another, even in matters of private law. (Courts have a somewhat easier time surrendering sovereignty on a case-by-case basis: the so-called "comity of law," discussed below.)

In the end, these efforts led to the adoption of three legal acts with respect to the insolvency of different categories of legal entities. Non-financial firms are covered by the one of these acts: the

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[37] Professor LoPucki is a rare dissenting voice. See Lynn M. LoPucki, "The case for cooperative territoriality in international insolvency", *98 Michigan Law Review 2216* (2000).

[38] The universality and territoriality principles are distinct from the dichotomy between the single entity and separate entity doctrines of bank insolvency law. The single entity doctrine is universalistic. However, the separate entity doctrine is somewhat different than classic territoriality, in that the local insolvency may assert jurisdiction over some assets, generally those booked to the local branch.

[39] See footnote 29 above and Appendix A, Part 2.3.1.

so-called "Insolvency Regulation." Financial firms are subject to the other two acts, which take the form of EU directives, one for insurance companies and the other for credit institutions.[40] These legislative acts will coordinate national insolvency proceedings, but do not otherwise harmonise them.

The insurance and credit institution directives prescribe a form of full universality. The administrative or judicial authorities of the "home member state" (the member state where a firm has its head office) are the only ones empowered to implement reorganisation measures or winding-up proceedings concerning a firm, including branches established in other member states. No secondary proceedings may be started by the other member states. In contrast, the more general Insolvency Regulation permits a secondary proceeding under certain circumstances. The Insolvency Regulation therefore may be considered a form of modified universality, albeit one of the more closely coordinated forms.

Although the major objection to full universality is usually impracticability, the argument for universality has its weaknesses, even if the necessary international cooperation can be obtained. Some of these weaknesses are heightened in bank insolvency; others are attenuated.

Forum shopping is a potential problem inherent in universal insolvency proceedings. As discussed above, the problem is largely hypothetical at present (outside the United States), but might become prominent with increased globalisation and a decreased ability to associate a firm with a unique jurisdiction. In a globalised world, it is difficult to design rules that locate firms in a clean and natural fashion. The principal jurisdiction of many major international firms is at least mutable: consider Royal Dutch Shell, DaimlerChrysler, HSBC, AIG or Vivendi.

Implications for banks. Because of accepted international supervisory norms, banks are even less susceptible to ex post forum shopping than most non-financial firms. The comprehensive consolidated supervisor of a bank (or a banking group) is generally quite clear and subject to licensing, and cannot be changed by a quick filing procedure.

Priority inflation is another possible problem associated with universal insolvency models. It occurs when local lawmakers seek to safeguard the interests of their local constituencies. This is possible in a universal regime because the bankruptcy estate is global, but the priority scheme can

[40] Council Regulation (EC) No. 1346/2000 of 29 May 2000 on insolvency proceedings (the EU Insolvency Regulation), OJ L 160, 30.6.2000, pp 1-18 (the EU Insolvency Regulation is effective and directly applicable in all EU member states (except for Denmark) as of 31 May 2002; Directive (EC) No. 2001/17 of the European Parliament and Council of 19 March 2001 on the reorganisation and winding-up of insurance undertakings (the EU Winding-up Directive for insurance undertakings), OJ L 110, 20.4.2001, pp 28-39 (member states are required to implement the Winding-up Directive for insurance undertakings into their respective national legal regimes by 20 April 2003);. Directive (EC) No. 2001/24 of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding-up of credit institutions (the EU Winding-up Directive for credit institutions), OJ L 125/5.5.2001, pp 15-23 (the time frame for member states to implement the Winding-up Directive for credit institutions is by 5 May 2004).

disproportionately benefit local creditors, eg tax authorities and employees. The losers are unsecured non-priority creditors, who may be less local than the priority creditors.

There is less risk of priority inflation in the territorial insolvency model, because the total asset and liability pools are smaller than in the universal model, but the local creditor pool is likely to be about the same size. In other words, a territorial model cannot as easily externalise the benefits of local priority creditors onto foreign non-priority creditors. Instead, the costs of a priority regime must be borne more heavily by local non-priority creditors. (As discussed below, the modified universality model is also resistant to exorbitant priority inflation.)

Implications for banks. The problems of priority inflation seem no different for banks or non-financial institutions.

Corporate groups remain a complex problem, even in fully universal proceedings, including the EU insolvency directives. The usual rule in general business insolvency is that each corporation is liquidated separately, often subject to a separate insolvency law. Most attempts at international insolvency cooperation attempt to coordinate these separate liquidations, not merge them. The legal constructs of corporate separateness and affiliate independence are strong.

This anti-consolidation rule causes several classes of problem. First, business operations are frequently entangled among the individual corporate components of groups. This may not matter for merger or whole-firm liquidation, but can be very problematic with most other insolvency proceedings. Piecemeal attempts at reorganisation of a corporate group will tend to lose value.

Second, corporate groups generally have inter-affiliate exposures: often a parental guarantee of subsidiary liabilities, but sometimes far more complex exposures. These can be difficult enough in an ordinary proceeding, and different jurisdictions' rules on consolidation or inter-affiliate subordination can have significant effects in other jurisdictions. While regulatory limits to some extent control inter-affiliate exposures, the risk management and funding needs of financial firms tend to make inter-affiliate exposures of increasing importance as a risk management issue.

Finally, the boundaries of corporate groups are frequently vague: consider problems posed by joint ventures, minority shareholdings, cross-ownerships, and decentralised organisations.

Implications for banks: consolidated comprehensive supervision. The issues of corporate groups are especially important for large, internationally active financial institutions. These firms often adopt management and business line structures that cut across the legal entities in the corporate group. This organisation, plus efforts to centralise the risk management of key global activities, lead to large and diverse inter-affiliate transactions. The indistinct separation of corporate entities within a group is consistent with the "comprehensive consolidated supervision" ("CCS") concept of unified bank supervision. The CCS concept demands a central supervisor responsible for the entire financial group, no matter where the group entities are incorporated. Local supervision and entity-based supervision are not inconsistent with CCS, but the central supervisor is responsible

for the entire organisation. Local supervisors are discouraged from permitting entry of financial firms that do not enjoy CCS.

The CCS concept is extremely powerful, because it is a jurisdictional and organisational focal point that could facilitate universal insolvency proceedings applicable to corporate groups. CCS is not susceptible to forum shopping, because it is indisputable ex ante and (relatively) immutable ex post. It permits an organic connection between supervision and insolvency on an international scale, accommodating the business overlap across entity and jurisdictional lines.

CCS is not (yet) an element of financial insolvency law. Financial groups are subject to the same deconsolidated insolvency procedures as non-financial business groups. Agreement to CCS is not the kind of surrender of sovereignty necessary to support fully universalistic bank insolvency. Furthermore, CCS permits considerable diversity of practice, and accommodates a diversity of objectives between home and host country supervisors, and insolvency law. In particular, in some jurisdictions, including the United States, the host country supervisor has statutory responsibility to protect local depositors in the event of a foreign bank failure. Thus, the law provides scope for an insolvency proceeding in the host country's courts. Furthermore, advanced jurisdictions differ on basic questions, such as whether a special bank insolvency regime is advisable

Nonetheless, matters may change with time. The CCS concept is only about a decade old (although it has antecedents in the bank insolvencies of the mid-1970s and the 1970s principle on consolidation set out by the Basel Committee on Banking Supervision and the Basel Concordat), and has become increasingly accepted. The role of CCS in crisis management is increasingly appreciated, and crisis management is a supervisory kin to insolvency. Full universality might be an ideal in a world of sovereigns. If this ideal ever becomes a reality, CCS might play a major role, especially for financial firms.

It is worth noting that banks generally operate through branches, unlike most other international firms, which operate through local subsidiaries. The problem of corporate groups therefore does not apply to most international banks, viewed as standalone entities. (The separate entity doctrine, however, may require separate proceedings for individual branches.) However, as discussed above, larger banks commonly belong to a group and engage in substantial transactions with their non-bank affiliates, so the problems of corporate groups are applicable to banking organisations, even disregarding the separate entity doctrine.

2. Modified universality

In some cases, a modified universal insolvency is indistinguishable from a fully universal insolvency. Sometimes, one jurisdiction is clearly the appropriate one for the main insolvency proceeding. If the other jurisdictions recognise this, and their courts are sufficiently empowered, they can agree to serve as ancillary jurisdictions to the main proceeding. Thus, decentralised cooperative consent amongst courts in different jurisdictions ("comity") can play the same role as binding international law.

Modified universality is becoming the norm, even though full universality is still the ideal. The norm is embodied in the UNCITRAL Model Law on Cross-Border Insolvency, promulgated in 1997. This model law has already been adopted by a few jurisdictions including Mexico, Eritrea, Montenegro and South Africa, and is being considered in others, such as the United Kingdom and the United States. Because it does not sacrifice the sovereignty of insolvency courts, it is probably far easier to implement than full universality.[41] (To the extent that a court decides on an independent proceeding, the model law may be considered a co-operative form of territoriality.)

But although modified universality is similar to full universality, it contains some different strengths and weaknesses. Modified universality contains some safety valves that weaken the promises - and mitigate the weaknesses - of full universality.

- Priority inflation is less of a problem in the modified universal model. A jurisdiction is not likely to assume the ancillary role if the main jurisdiction's priorities are exorbitant.[42] The UNCITRAL Model Law does not compel a jurisdiction to recognise another.

- Forum shopping is more likely to be a different kind of problem in modified universality. The debtor - and creditors - have the option of shopping for multiple forums. However, it is less likely that the debtor can game the rules to select a totally inappropriate forum, because such a forum is unlikely to be recognised by other jurisdictions as the forum of the main proceeding.

- The same issues of corporate groups apply to modified universality.

- Reorganisation is more difficult in modified universality, because of the prospect of defecting jurisdictions. (This is less relevant to financial institutions, whose supervisor-led or -encouraged reorganisations usually occur without formal insolvency.)

- A comity-based system such as modified territoriality may become less stable as the largest firms regulated by the system grow in size and complexity, especially because a single uncooperative legal system can impose heavy costs on all others, if it contains enough assets. Fortunately, however, the legal systems of most major national economies appreciate the need for international cooperation.

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[41] It should be noted that the EU Insolvency Regulation also allows for secondary proceedings.

[42] See In re Treco, 240 F.3d 148 (2d Cir. 2001). In this case, the US court refused to assume an ancillary role with respect to a security interest, because the overseas proceeding accorded the administrator's expenses priority over security interests. Since the administrator had collected around $10 million, with all but $1.75 million disbursed to it in expenses, it appeared as if the US security interest would be completely worthless, if turned over to the administrator.

In summary, modified universality is no stronger than comity, which has worked well to date. Comity requires that a court favour systemic concerns over local ones. This implies both support of global concerns and some degree of insensitivity to local concerns. If local concerns are deeply felt - and bank regulation often raises strong local emotions - a court may be less likely to grant comity to another court.

3. Territoriality

Territoriality places fewer strains on international cooperation than full or even modified universality. It does not preclude cooperation among jurisdictions, but tends to encourage at best a modest degree of cooperation: information-sharing, ad hoc cooperation, and the like. It does not permit the more pernicious forms of forum shopping, but - as discussed above - may encourage some useful forms of jurisdictional competition for financial assets.

Inefficiency is probably characteristic of territoriality, as compared to universality. The territorial insolvency model involves multiple proceedings and races for assets by both Officials and creditors. (Intangible assets present the spectre of multiple liability, although this may soon be mitigated by the Hague Conference and UNCITRAL projects discussed above.) Some assets may be subject to no insolvency proceeding at all, eg if they are located in a territorial jurisdiction whose requirements for insolvency are not met. Inter-affiliate obligations - difficult enough in the universal model - become even more difficult to sort in the territorial model. Such an inefficient system is probably unfair, because stronger creditors tend to do better in a legal free-for-all.

Reorganisations of unsupervised firms are very difficult in the territorial model, unless the relevant jurisdictions are extremely cooperative. Reorganisations imply that the insolvent will be run as a going concern - something very difficult for a multinational business partitioned by an insolvency proceeding into territorial units. This is mitigated, to some extent, by non-financial firms' common practice of compartmentalising a multinational firm by subsidiaries that mostly follow jurisdictional lines. The reorganisation problem is potentially problematic for regulated financial services, since they are more likely to use branches than affiliated organisations, and are more likely to conduct the same business line using several affiliates. However, in banking and insurance, most reorganisations are conducted or encouraged informally by home-country supervisors, without use of the insolvency apparatus. Such reorganisations are not hindered by the territorial model, but require supervisory cooperation.

Forum shopping, at least in the forms seen in universal models, is not characteristic of territoriality. Territorial insolvencies occur where the assets are, not where the parties choose to file. But another kind of forum shopping is possible in territorial models. Most financial assets - and all liabilities - are intangibles: loans, securities, deposits and derivatives. At least with respect to securities and deposits (and possibly derivatives), a financial firm can often choose the location of its assets with a stroke of the pen, without substantially affecting its underlying business. A financial firm can also choose the location of its liabilities, at least for wholesale placements.

Therefore, a kind of ex ante forum shopping is possible in the territorial model. As discussed above, ex ante forum shopping may be desirable, under some circumstances.

Supervisory cooperation and competition are strongly affected by territoriality. In the territorial model, supervisors will tend to look out for their local balance sheets and thus have ex ante incentives to monitor the financial institution closely. In other words, territoriality reduces the externalities inherent in home-host divisions of supervisory responsibilities. However, vigorous host-country supervision of financial firms may face the same problems as in the universal model: business line organisations that cut across jurisdictional lines, centralised decision-making and control functions, and "global" books that include transactions originated in other jurisdictions. In other words, territoriality may provide good supervisory incentives for the host country, but the incentives are more compatible with the supervision of less complex firms.

The flip side of good supervisory incentives for the host country is a reduced chance of supervisory cooperation on the eve of insolvency, and during the insolvency process. In the territorial model, home and host supervisors will become unwilling to share financial information on weak firms once they suspect insolvency is imminent. This may make reorganisation more difficult, and any insolvency less efficient.

Cross-border carve-out rules can be conceptually difficult to reconcile with a pure territorial model. Why should an Official recognise the netting of a foreign debt against a domestic debt, when the Official is committed to ignoring foreign assets and liabilities? Or why should an Official recognise a domestic asset as securing a foreign debt that is outside the scope of the administration in any case? Few territorial models are pure, and some territorial models explicitly recognise cross-border netting.[43] Of course, there is nothing inherent to a universal or modified universal model that ensures that it will enforce cross-border netting and collateralisation agreements. However, it is safe to say that territorial models are less likely to be receptive to cross-border netting and collateralisation than universalistic models.

Financial and non-financial institutions are both affected by these problems. Banks rely on netting and collateralisation in their risk management, which could frequently be cross-border. Non-financial organisations frequently employ cross-affiliate guarantees, which have a cross-border component.

A coordinated international workout or insolvency of financial institutions is especially important to manage systemic risk. This places some real strain on territoriality. Without an effective coordinated response, a run on the institution is conceivable.[44] Even secured creditors and market

[43] NY Banking Laws § 618-a.

[44] The presence of deposit insurance will limit such behaviour but it may not prevent runs both because depositors will want to avoid the inconvenience of their funds being temporarily frozen until the insurance is paid and because there may be limits on the extent of cover (eg there may be an upper limit on the amount of insured deposits, or

counterparties may join the run if they doubt their position under at least some jurisdictions.[45] However, territoriality - although it impairs supervisory cooperation - tends to be less complex, and thus less legally uncertain, than modified universality or a poorly coordinated full universality.

C. Current initiatives in cross-border insolvency

This subsection summarises the recent history of cross-border insolvency reform efforts. It does not discuss the substance of these efforts - that is the role of Appendix A. Instead, it enumerates the efforts, places them in a chronology, and discusses the various players behind them.

Only some of these initiatives are statutory, ie model laws or conventions. Statutes are not the only mechanism of legal reform, and are generally promulgated only after a consensus on law reform has been developed by organisations without legislative power. These organisations may include public sector entities without legislative power (eg national central banks or various treaty organisations), or various kinds of private sector organisations. Although private sector organisations inherently have no legislative power, the trade codes and model agreements that they promulgate are often drivers for law reform and themselves quasi-legislative in effect, eg the ISDA model derivatives agreements or the ICC's efforts in letters of credit. (Cases of judicial decision-making can also be a significant driver of law reform, although we do not discuss them here.[46])

1. Legislative initiatives

Most of the international legislative initiatives have already been discussed, and merely need to be summarised here. They can most compactly be presented in tabular form. Particularly noteworthy are the recent dates of all the initiatives. Table 3 clearly shows that cross-border insolvency reform is new. The legislation is the fruit of efforts that began in the early 1990s, often originating from the private or financial policy sectors. These efforts had been preceded, in many jurisdictions, by national law reform efforts with the same scope: a trend to modified universality, and various netting and collateral rules that minimised settlement risk.

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foreign currency or overseas branch deposits may not be covered). Furthermore, depositors may be uncertain whether and how the deposit protection scheme applies.

[45] For market counterparties relying on rights of setoff or closeout netting, these may well be protected or enforceable notwithstanding liquidation proceedings or reorganisation measures, but there may in practice be confusion as to whether the relevant contractual right to trigger such setoff or closeout netting has indeed arisen (which may depend on whether any formal steps for the commencement of the resolution mechanism concerned have indeed been started). Such uncertainty will be more likely if the insolvency proceedings are in a "foreign" jurisdiction, and therefore of unfamiliar nature or extent.

[46] For example, the cooperation between English and US courts in the insolvency of the Maxwell companies was a significant part of the backdrop for the UNCITRAL Model Law on Cross-Border Insolvency.

Table 3

Leg. body	Name	Date	Subject
UNCITRAL	Model Law on Cross-Border Insolvency	1997	Modified universality
EU	Settlement Directive	1998	Netting payments/securities transfers and financial collateral enforceability
UNCITRAL	Receivables Convention	1999	Conflict of law - collateral perfection
EU	Insolvency Regulation	2000	Modified universality
EU	Winding Up - Banks	2000	Full universality
EU	Winding Up - Insurance	2000	Full universality
Hague Conference	Draft Convention on law applicable to securities held through indirect holding systems	--	Conflict of law - collateral perfection
EU	Collateral Directive	2002	Financial collateral enforceability and conflict of law
UNCITRAL	Draft Legislative Guide on Insolvency Law	--	Best practices - municipal insolvency law

2. *Private sector initiatives*

Private sector trade and professional associations have been very active in the international insolvency law revision process. Some of their products are quasi-legislative, such as the International Bar Association's Cross-Border Insolvency Concordat. These organisations also hold symposia, some of which are published, sometimes with seminal results.[47] Finally, these organisations are very active as NGOs in the international legislative process.

These organisations include (in alphabetical order): EMTA (Trade Association for the Emerging Markets), IBA (International Bar Association), INSOL International (International Federation of Insolvency Professionals), and ISDA (International Swaps and Derivatives Association).

Most of these groups represent the viewpoint of practitioners: chiefly insolvency lawyers, accountants and judges. This has many benefits: practitioners are more knowledgeable about the

[47] For example, Randall Guynn's 1996 article for the International Bar Association, *Modernizing securities ownership, transfer and pledging laws,* started the process that led to the Hague Conference project on securities held through intermediaries.

operational details of insolvency than any other group interested in insolvency. Furthermore, the practitioners represent all the players in an insolvency: officials, creditors and others. However, practitioners tend to view the world from an ex post prism, whilst financial institutions and their attorneys plan transactions ex ante.

3. International financial policymakers

As a core business practice, insolvency engages widespread attention. It is important to many beyond the group of lawyers, accountants and other practitioners who draft the rules and administer the processes. Insolvency is particularly important to international financial policymakers. This report, therefore, is part of a tradition of insolvency law reform that dates back at least to the BCCI insolvency of 1991. (The Herstatt insolvency of 1974 was an important antecedent that helped lead to the netting carve-out legislation of the late 1980s.) Subsequent milestones have included:[48]

- The G30's 1998 study group report *International insolvencies in the financial sector.*
- The BIS 1999 symposium on international bank insolvencies.
- The current IMF project on bank insolvency.
- The World Bank's Bank Insolvency Initiative.

These efforts consider insolvency primarily from a legal perspective and have had substantial input from insolvency practitioners.

IV. Conclusions and new directions

The analysis in this report suggests that the legal uncertainty, inefficiency and potential inequity resulting from the existing legal and institutional underpinnings of insolvency may be incompatible with important objectives of public policy related to financial stability. Moreover, the risks involved may be growing as the pace of change in the financial system continues to outstrip that of the insolvency framework.

This section describes some possibilities for what can be done in the medium and longer term. Many of these possible paths are complementary, and can be pursued in parallel. They are listed in very approximate order of priority.

[48] Most of the information here comes from the G30 study group report *Reducing the risk of international insolvency: a compendium of work in progress* (2000).

A. Financial contracts and collateral in national law

Financial contracts are not usually a major problem in general insolvency cases, but along with collateral loom large in the insolvency of financial institutions. General insolvency law places no particular stress on rapid liquidation of collateral; financial institution insolvency often does. Both general and financial insolvency law requires international consensus on the perfection rules for cross-border collateral.

Many of the problems are cross-border, and will be discussed immediately below. But at least two questions can profitably be viewed as matters of local law. First, when should national law recognise set-off? Second, when should it recognise rapid liquidation of collateral? The report hints at some criteria that are useful for answering both questions.

Some set-offs enable valuable practices or markets; others are merely wealth distributions from general to favoured creditors. The former set-offs should definitely be protected: automatically permitted without being subject to any moratoriums. These set-offs include payment system netting and derivatives closeouts, both of which substantially reduce settlement-related risk. Other set-offs do not enable financial market practices, and have a predominantly distributive effect among general creditors and setoff claimants. These set-offs may be safely left to individual jurisdictions' sense of equity.

Even clearer criteria exist for rapid liquidation of collateral, free from any insolvency moratorium. The conceptual key is firm-specificity of collateral. The economic value of firm-specific collateral would be dissipated if it were liquidated separately from the firm. This insight can justify the inclusion of such collateral (eg complex machinery) in a reorganisation proceeding, denying the secured creditor's enforcement rights. (Firm-specificity appears to be the main argument for reorganisation over liquidation.) Whatever the merits of this argument, it does not apply to non-firm-specific collateral. No value is dissipated if this collateral is liquidated by the secured creditor outside the insolvency proceeding: it is worth as much to the secured party as it is to the insolvent. Such collateral includes securities and receivables. This argument is especially salient for the collateral securing financial contracts, but applies to all non-firm-specific collateral.

There is a residual argument for including non-firm-specific collateral in the insolvency estate. A freeze on creditors' remedies temporarily provides valuable assets for recapitalising the firm. However, this argument is not consistent with the existence and availability of outside capital markets, including debtor-in-possession financing. It is worth noting that asset securitisations - which remove those securitised assets from the insolvency proceeding - almost always involve non-firm-specific assets, such as receivables.

B. Cross-border issues

There are many opportunities for improvement of cross-border insolvency law. There is much to be gained by broader adoption of existing international standards for general insolvency and

collateral law: the UNCITRAL Model Law on Cross-Border Insolvency, the UNCITRAL Convention on the Assignment of Receivables in International Trade, and - once promulgated - the Hague Conference's Draft Convention on law applicable to securities held through indirect holding systems. The EU Insolvency Regulation might also be desirable on a wider scale, despite the practical difficulties of implementing such ambitious legislation. The universality and comity approaches implicit in the EU insolvency legislation and the UNCITRAL Model Law are useful and effective developments in dealing with cross-border insolvency.

Several open questions remain. First, should the UNCITRAL Model Law on Cross-Border Insolvency be extended to banks or other financial institutions, which the Model Law leaves as a local option? There may be a conflict between currently different national approaches to bank insolvency law in a cross-border context when some jurisdictions adopt a single entity approach and others a separate entity approach. One example where the outcome was affected by these different approaches was the liquidation of BCCI. In the single entity approach assets are pooled and distributed to creditors according to priorities set for the whole entity (this requires comity of law to establish an accepted basis for determining the relevant jurisdiction - such as place of incorporation). In the separate entity approach certain assets (e.g. in a bank insolvency, those booked to local branches) may be subject to local jurisdiction and used first to meet local claims. Where jurisdictions adopt different approaches the outcome may not seem equitable to all creditors.

Second, will widespread adoption of the Hague Convention be sufficient for securities, or is harmonisation of substantive law also necessary? Securities, of course, are by far the most significant source of financial collateral in the market, and cross-border collateralisation is now common. Well-harmonised conflict of law rules are necessary, but may not be sufficient, for a harmonised cross-border legal regime.[49]

Third, is there a need for an international netting treaty for settlement risk, and - if so - should such a treaty be aimed generally or only at the advanced jurisdictions that pose the greatest settlement risk?

C. Contract- and market-based insolvencies

Since the mid-1970s or early 1980s, a large academic literature on alternatives to insolvency has developed on both sides of the Atlantic, associated with names such as Oliver Hart, Philippe Aghion, Mark Roe and Alan Schwartz.[50] These names include both economists and lawyers

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[49] Luca G Radicati di Brozolo, "Conflicts of laws issues of international payments", in *International Monetary Law (*M Giovanoli, ed, Oxford 2000).

[50] See for example Philippe Aghion, Oliver Hart and John Moore, "The economics of bankruptcy reform", 8 *Journal of Law, Economics & Organisation* 523 (1992); Lucien Arye Bebchuk, "A new approach to corporate reorganisation*s*", 101 *Harvard Law Review* 775 (1988); Michael Bradley and Michael Rosenzweig, "The untenable case for Chapter 11", *101 Yale Law Journal*, 1043 (1992); Alan Schwartz, "Contracting About Bankruptcy", 13

working in the law-and-economics tradition. This literature generally shows a great distrust for insolvency reorganisations, for many of the reasons discussed above in this report: particularly the structure of the governance of reorganisation, including attendant decision processes. The literature distrusts both Official-centred procedures and the negotiation process inherent in most stakeholder-centred procedures.

The policy prescriptions in this literature vary, from insolvency proceedings variable by ex ante contract to various auction or option proceedings.

Auction proceedings assume an outside source of capital: employing either all-cash or more complex bids to establish the value of the firm, and having the bids approved by the creditors through some kind of voting or tender procedure, which accommodates holdout problems. Insolvency auctions are not novel: many restructurings and even bulk liquidations employ auctions. However, in these contexts, auctions are not the centrepiece of the insolvency procedure, as has been recommended by some of the academic literature. Conventional Chapter 11-style reorganisations still assume that outside capital is the exception, rather than the rule.

Option procedures employ internal capital, eg by issuing options with appropriate exercise prices or redemption rights granted depending on the holder's position in the capital structure. Appropriate transferable options will create incentives for the option holders to, in effect, value the firm. Like the auction proceeding, an option procedure uses a market mechanism to replace the negotiation mechanism inherent in modern reorganisations. However, the option procedure does not require an outside capital market.

Insolvency-by-contract is a truly radical idea: that all creditors can contract in advance to a particular insolvency process or rule. This idea is probably infeasible if taken to its limit, because involuntary (ie tort) creditors cannot contract, and many voluntary creditors cannot meaningfully contract (eg trade creditors, employees). However, it might work well to adjust the claims of financial creditors, especially if they are viewed as coming serially to the firm and the monopoly advantages to the first creditor are not excessive. In this respect, it resembles a prepackaged reorganisation negotiated ex ante, before distress. (The usual scope of prepackaged reorganisations is limited to financial creditors; trade creditors are typically paid in full.)

Credit derivatives do not formally affect insolvencies, but may transform the incentives of the players, and thus indirectly insolvency proceedings. Credit derivatives permit a creditor to contract with a third party to hedge its claim on a debtor and to receive a payment immediately upon the occurrence of a default or other "credit event", with such a payment usually based on the actual or proxied market valuation of the claim. The third party usually becomes the creditor, generally without any pre-existing relationship with the debtor. Post-insolvency trading of claims ("vulture capitalism") is similar in this respect. Experience with insolvencies involving credit

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Journal of Law, Economics & Organisation, 127 (1997); Mark Roe, *Corporate reorganisation and bankruptcy* (Foundation 2000).

derivatives to date is probably too small (and the recovery process too understudied) to draw immediate conclusions. However, credit derivatives might plausibly reduce the pre-insolvency monitoring incentives of creditors (including their incentives to effect a workout), and create a class of specialised creditors-in-insolvency. The legal underpinnings of the law of credit derivatives are not those of insolvency law, but rather concern their enforceability: both as against the third party and against the insolvent.

D. Prepackaged reorganisations

So-called "prepackaged" reorganisations, although still fairly new, are popular among insolvency practitioners, and appear superior in some respects to conventional reorganisations. A prepackaged reorganisation relies on the same kind of negotiations as a conventional reorganisation, but mostly occurs before the insolvency proceeding is initiated. The initiation of insolvency is a fait accompli, intended only to insure legal protection to out-of-court agreements. A prepackaged insolvency, therefore, disposes with the moratorium, or at least shortens the moratorium period considerably, and probably lowers the costs significantly.

Prepackaged reorganisations are most plausible when a firm has no difficulty meeting its present obligations out of ordinary business revenues (and thus does not need a moratorium), but management nevertheless feels the need to restructure. Recent legal and market evolution has provided such opportunities. For example, some junk bond financings are not payable in the early years (or are "payable in kind"), but impose a severe cash drain in later years. During these early years, management might decide that it will not be able to meet the new cash obligations when they become due. (By no coincidence, prepackaged reorganisations first appeared around 1986, and became very popular by the early 1990s.) Prepackaged reorganisations are also potentially useful in settling pending mass tort cases. Such cases cannot always be settled with a cash payment, because their settlement value exceeds the value of the firm. A prepackaged reorganisation involving the tort creditors becomes a sensible way to settle such a case, resolving tort liability and financial structure simultaneously.

However, if management does not enter the process until the firm has cash flow problems, the prepackaged reorganisation is unlikely to succeed, unless the negotiations can somehow be accelerated. And, as discussed above, management will often have no incentive to do so.

E. Insolvency arbitration

Arbitration is an "alternative dispute resolution" procedure. An arbitrator's powers are akin to those of a judge, for the parties are bound by the arbitration agreement. An arbitrator, however, has no power over those who have not consented to arbitrate.

Insolvency arbitration is often proposed by insolvency practitioners. Proponents of insolvency arbitration believe that specialist insolvency practitioners are better than judges, especially outside advanced industrial countries. They therefore recommend insolvency arbitrations that

bind the debtor and its financial creditors (who can all consent), and pay other creditors in full.[51] Proponents of insolvency arbitration also believe that arbitration clauses should be enforced for bilateral insolvency disputes, such as claims resolution and asset collection.

F. Reducing the insolvency estate

As discussed above, modern firms have fewer firm-specific assets than they once had. This is responsible, in part, for a significant trend in insolvency law, which has not received the recognition it has deserved. This approach, in effect, segregates firm-specific assets from non-specific assets, and excludes many of the non-specific assets from the insolvency proceeding.

This new approach has at least three sources: the increasing use of off-balance sheet financing (particularly asset securitisations), the increasing popularity of outsourcing, and the new carve-outs to ordinary insolvency laws that protect financial contracting and liquidation of financial collateral. Outsourcing is usually considered a kind of exogenous factor, unrelated to insolvency. However, a heavily outsourced firm has a smaller balance sheet, and it will therefore have fewer assets tied up in a reorganisation or other insolvency proceeding. The more controversial measures involve off-balance sheet financing and financial collateral liquidation.

Asset securitisation finances various promises to pay, such as mortgages and trade receivables. These assets are not very firm-specific: they are worth almost as much to an assignee as they are to the original creditor. They are therefore easy to finance, using a **special purpose vehicle** structure, which has the legal form of an asset sale free from the insolvency proceeding, but the substance of a secured transaction.

Asset securitisation effectively shrinks the size of the insolvency estate, by carving some non-specific assets from the estate. (Securitisation reduces the estate's obligations pari passu.) Securitisation is attractive. The financier obviously benefits, because it can liquidate its claim outside of the deadweight losses imposed by insolvency proceedings. The debtor benefits through cheaper financing, extended because the financier bears less risk. The other creditors also benefit from the cheaper financing, which decreases the burden on the estate. However, this ex ante benefit to other creditors disappears ex post, when the parties have entered the insolvency process. Unsecured creditors get no benefit in insolvency from asset securitisation, because traditional reorganisations typically redistribute wealth from secured to unsecured creditors (at least with respect to many liquidation priority schemes.) The financiers may still rely on the insolvent bank for servicing and other ancillary activities.

The same result is achieved directly with financial contracts and collateral, in many jurisdictions. As with asset securitisations, this collateral does not have any appreciable firm-specific value in the hands of the insolvent. Furthermore, the ability to liquidate this collateral is essential in

[51] See UNCITRAL, "Alternative approaches to out-of-court insolvency processes," ¶ 24, Working Group A/CN.9/WG.V/WP.55.

preserving systemic liquidity: a special concern for financial institutions. As discussed above, this result is obtained with carve-outs from ordinary insolvency law.

Developments like these, driven by the markets, are likely to increase efficiency and legal certainty by some measures, but may not be equitable according to current national insolvency standards or consistent with financial stability. In unusual instances, such developments can on occasion impair financial stability. The markets, for example, favoured the so-called "walkaway clause" for derivatives contracts in the early 1990s, in which creditors who owed money to a defaulting counterparty after all contracts were netted had the right not to pay. In other words, an insolvent counterparty who would otherwise be "in-the-money" after closeout received nothing. This right, although jointly agreed by the counterparties, was inconsistent with the common goal of insolvency processes to maximise the value of the bankruptcy estate, and conceivably could have perverse incentives for debtors and creditors alike as a troubled firm approached insolvency. The walkaway clause only disappeared when bank regulators refused to recognise netting in computing capital requirements if the netting agreement contained such a clause.

However, such market-driven change is not necessarily inferior or inequitable relative to other approaches. After all, the key legal foundations of modern payment system risk reduction and derivatives netting have received powerful support - and frequently leadership - from market participants. Modern financial markets could not function safely without such foundations. With adequate disclosure, unsecured and secured creditors alike might experience much greater legal certainty relative to the status quo, permitting them to contract with much clearer expectations about the mean and variance of their losses net of recoveries, in the event of default.

G. The Official-centred restructuring

The Official-centred restructuring, when viewed as an emerging legal underpinning of insolvency law, is extremely controversial. In some jurisdictions, it has been long-tried and discredited. In other jurisdictions, it has been extremely successful over the past few decades.

The theoretical promise of Official-centred restructurings is easy to understand. In principle, it can offer the speed and efficiency of market-based restructurings, with far greater flexibility. Unitary decision-makers are far faster than a negotiation process. Liability transfers are possible: another degree of flexibility unavailable in a reorganisation. Finally, the agency costs of a creditor representative are almost certainly greater than the corresponding costs for bureaucrats. Or viewed the other way, an Official-centred restructuring can have most of the flexibility of a Chapter 11-style reorganisation, without the need for protracted negotiations. Many of these theoretical promises have proven themselves in practice, eg in the US Federal Deposit Insurance Corporation receivership, the staple of US bank insolvency law.

However, the practical failure of the Official-centred restructuring in many jurisdictions is also easy to understand. An Official generally has poor incentives to successfully reorganise a firm, compared to financial creditors. An Official generally gets little reward from a successful

restructuring, and may be subject to political pressures that are inconsistent with success. It is worth noting that the Federal Deposit Insurance Commission - which restructures US banks - is also the bank insurer, and has a direct financial stake as residual claimant. Official-centred restructurings may also suffer from some informational disadvantages compared to stakeholder-centred reorganisations.[52] These informational disadvantages may be mitigated, however, for supervised institutions.

Official-centred restructurings therefore can be promising if the incentives and institutions are right. But given current incentives and institutions, they appear at best as a speciality, limited to insolvencies of insured and supervised financial institutions. The range of historical experience across countries may provide some valuable lessons about incentives in the insolvency process as many firms become more bank-like in their activities and risk exposures.

H. Forum shopping and legal arbitrage

Two related issues also need consideration: forum shopping" and legal arbitrage. As discussed above, forum shopping exploits the power of an interested party to choose an insolvency forum (and thus insolvency regime) without regarding the interests of other parties. Forum shopping is currently difficult, but may become easier as firms become more global. Legal arbitrage involves choosing different parts of different national legal systems. In doing so, market participants may create a legal framework that does not exist in any national jurisdiction. Often, legal arbitrage is feasible even in the field of insolvency law, where the possibility to exploit this "à la carte" approach is generally limited due to the mandatory nature of insolvency rules.[53] The current level of legal arbitrage may be tolerable, but the trend to increasing arbitrage opportunities is worrisome. Rapid legal evolution promotes arbitrage, especially because the evolution is generally in the direction of greater party autonomy and fewer mandatory rules. Globalisation further increases the salience of this trend.

A degree of forum shopping and legal arbitrage provides incentives for individual countries to adapt their laws to changing conditions and market practices. Taken to an extreme, however, competition among jurisdictions can lead to wasted resources in the form of legal arbitrage and the possibility of efforts to change the insolvency venue in the late stages of distress that could alter the positions of creditors and other stakeholders.

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[52] Specifically, incumbent stakeholders may possess private information inaccessible to even a competent and well-motivated Official. Some of this information is related to the value of the firm; other information relates to risk preference. This latter information can be particularly significant in restructurings that transform claims, leading to different results for different general creditors, eg financial debt to equity, or short-dated debt to longer-dated debt. For strategic reasons, these preferences may be best revealed through a negotiation process.

[53] For example, some EU initiatives in the field of insolvency law seem to imply some forms of "legal arbitrage", since the law regulating the effects of insolvency on certain kinds of financial contracts is not the law governing the insolvency proceeding, but the law applicable to the transaction as chosen by the parties.

Hence, issues concerning forum shopping and legal arbitrage need to be examined closely to identify an optimal international solution, which should assure transparency of legal rules, certainty of financial transactions, reduction of informational problems and elimination of unintended effects such as moral hazard and cherry-picking.