BCCI & Barings: Bank Resolutions Complicated by Fraud and Global Corporate Structure

by Richard J. Herring*

Introduction

Although countries differ with regard to bankruptcy procedures, there appears to be widespread agreement on the goals that such procedures should accomplish. This paper draws on the examples of two international banks that failed due to fraud, the Bank for Credit and Commerce International (BCCI) and Barings, to show how fraud and a global corporate structure can undermine the effectiveness of bankruptcy procedures in achieving these goals.

Hart (2000, p. 3-5) has identified three goals that all good bankruptcy procedures should meet.[1] First, a good procedure should deliver an *ex post* efficient outcome that maximizes the value of the bankrupt business that can be distributed to stakeholders. Second, a good procedure should promote *ex ante* efficient outcomes by penalizing managers and shareholders adequately in bankruptcy states so that the bonding role of debt is preserved. Third, a good procedure should maintain the absolute priority of claims to protect incentives for senior creditors to lend and to avoid the perverse incentives that may arise if some creditors have a lower priority in bankruptcy states than in normal states.[2] These objectives apply equally to banks and non-financial corporations.

---

* Jacob Safra Professor of International Banking, Director of the Lauder Institute, Co-Director of the Wharton Financial Institutions Center, The Wharton School, University of Pennsylvania. I am grateful to Kevin Pang for research assistance in the preparation of this paper.

[1] Given that economists do not have a satisfactory theory of why parties cannot design their own bankruptcy procedures, Hart (2002, p. 6) is careful not to describe these procedures as “optimal”.

[2] Hart (2002, p. 8) also allows for the possibility that it may be useful to reserve some value for shareholders in order to constrain moral hazard incentives.

But, in the case of banks, a fourth objective is usually appended: a good bankruptcy procedure also limits the costs of systemic risk. Thus a good bankruptcy procedure for a bank is one that maximizes the ex-post value of the firm's operations subject to the constraints that management and shareholders are adequately penalized, ex ante repayment priorities are retained and systemic costs are appropriately limited.

Kaufman (2004) has recently proposed a four-part procedure for resolving large, insolvent banks that is largely consistent with these objectives.[3] First, prompt recognition of economic insolvency and legal "closure" according to a disclosed, explicit "closure rule."(This penalizes shareholders and managers in the event of insolvency.) Second, prompt estimation of recovery values and the corresponding losses to be allocated across uninsured depositors and other creditors according to *ex ante* priority of repayment. (This maintains repayment priorities in the bankruptcy state and helps limit systemic costs by giving creditors prompt access to their funds.) Third, prompt reopening of the bank under temporary government agency control with full guarantee of existing deposits net of imposed losses, if any. (This also helps limit systemic costs in two ways: (1) by permitting the bank's viable customers, including counterparties in risk transfer instruments, which must actively mange their positions, to continue doing business without interruption and (2) by protecting depositors from additional losses and thereby, removing their incentive to run.) Fourth, prompt privatization through recapitalization or liquidation. (This facilitates realization of the maximum total value for the bank either through a merger or piecemeal liquidation.)

[3] Kaufman and Seelig (2002) provide a broader discussion of the need for speed in providing insured depositors and other creditors with access to their funds. Mayes (2004) and Mayes and Liuksila (2004) have made similar proposals.

Kaufman stresses prompt action because delay may prevent even good bankruptcy procedures from accomplishing the four goals. Insolvency procedures tend to be initiated later than they should be, often long after a bank is deeply insolvent. Not only does this directly increase the loss to be allocated across creditors, but also this may contribute to an acceleration of losses if the insolvent bank gambles for resurrection. In addition, once initiated, resolution tends to move very slowly. This may further exacerbate losses if assets cannot be adequately safeguarded and actively managed. Moreover, it increases the probability of systemic spillovers to the extent that counterparties are unable to clarify and hedge their positions, borrowers are unable to make use of their collateral or draw on outstanding commitments and depositors lose access to their funds.

Fraud has the potential to undermine the effectiveness of even a good insolvency procedure. A successful fraud may delay recognition of insolvency long after the point of economic insolvency. Moreover, it impedes the insolvency process once initiated in several ways. It may delay procedures by necessitating a lengthy process of discovery to identify assets and institute forfeiture proceedings. The *ex ante* priority of claims may be disrupted if fines or criminal penalties are imposed before creditors are paid. The loss of reputation associated with fraud will erode the remaining going concern value (if any) and may reduce the amounts outsiders are willing to bid for the bank's assets. Furthermore, the entire process will certainly be more heavily lawyered and the transactions costs greater than if the an insolvency of comparable magnitude occurred without fraud.

Similarly, the international scope of a bank's operations may also impede the effectiveness of good insolvency procedures. The fragmentation of oversight that is inherent in a global network is likely to delay recognition of insolvency, quite apart from the expanded scope that it affords managers to conceal insolvency if they wish to do so. Once insolvency is recognized, moreover, it is much more difficult to institute insolvency proceedings. First is the question of which jurisdiction initiates the proceedings. The jurisdiction in which the bank is chartered? The jurisdiction in which most of the bank's assets are located? The jurisdiction from which the bank is managed? (As we shall see in cases below, these need not be the same.) A related question, since the answer may vary from jurisdiction to jurisdiction, is what entity initiates the insolvency proceedings. The creditor? A bankruptcy court? A regulator? Or the insolvent bank?

Moreover, it is quite possible for insolvency proceedings to be initiated more or less simultaneously in several different jurisdictions that have conflicting rules on how the resolution should be conducted including such details as the perfection of collateral, the right of set off (if any) and the recognition of close-out netting. At a minimum there will be substantial coordination challenges with regard to information sharing, the allocation of business units to legal entities and regulatory domains, procedural differences in the acceptance of claims against the bankruptcy estate, differences in the treatment of custody assets, and differences in repayment priorities such as depositor preference schemes or subrogation rights of the deposit insurer (if any). Even under ideal conditions, the resolution of an international insolvency will incur much heavier transactions costs than the resolution of a purely domestic institution with comparable losses.

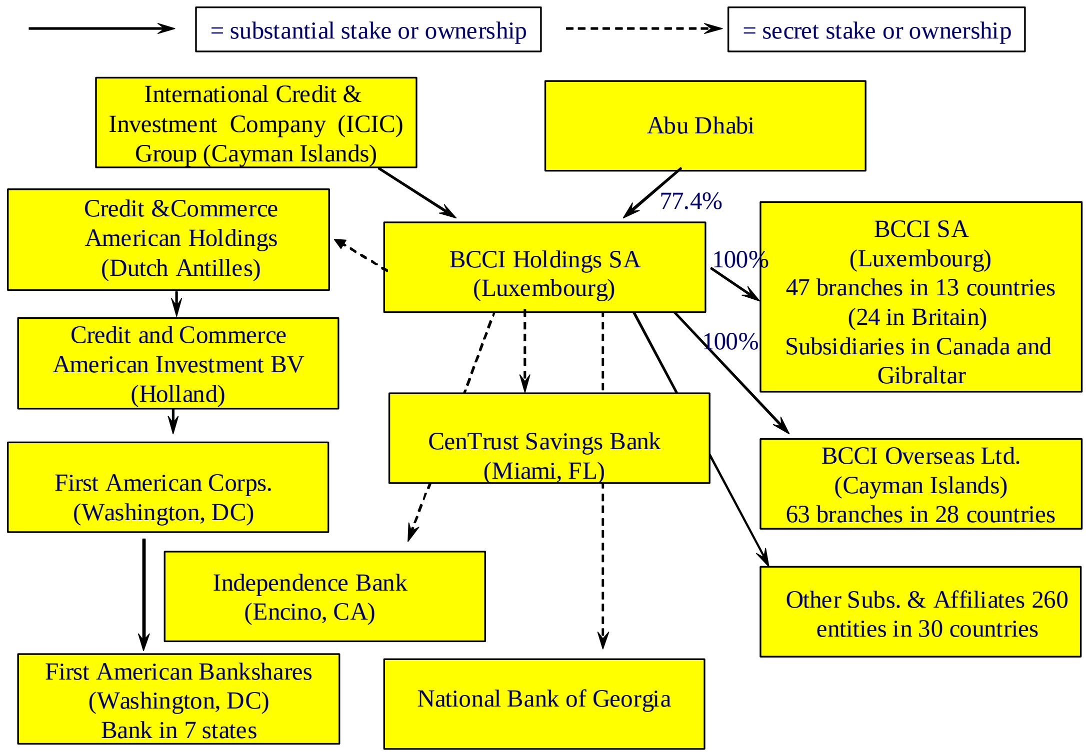
BCCI and Barings provide interesting examples of these challenges to efficient resolution. Each failed because of fraud and each had an international network of operations. But there are substantial differences as well. While BCCI failed because of a massive, widespread fraud, Barings succumbed to massive fraud by a single individual. And, while BCCI designed an international organizational structure to defy external scrutiny, Barings had adopted a much more transparent international structure that, nonetheless, escaped effective oversight by an external entity. First we will review the collapse of BCCI. Then we will take a closer look at Barings.

BCCI

How fraud and international corporate structure delayed the recognition of insolvency

With the benefit of years of investigations it now appears that BCCI's financial statements were falsified ever since the bank was founded in 1972 (Basel Committee, 2004, p. 49). That this escaped detection for nearly twenty years shows how effectively the complex international corporate structure it devised shielded it from scrutiny by external accountants, supervisors or regulators. Figure 1 shows the structure of BCCI just before it was closed. (The dashed lines indicate the American offices that were secretly controlled by BCCI.) We shall focus first on the known holdings which included more than 400 offices in 69 countries. From the outset, BCCI adopted a dual banking structure. The non-bank holding company established in Luxembourg in 1972 (BCCI Holdings SA), under the protection of very tight secrecy laws, owned two separate banks that were licensed and supervised in two separate jurisdictions, well insulated by

Figure 1. The Structure of the BCCI Group



bank secrecy laws: BCCI SA in Luxembourg and BCCI Overseas in the Cayman Islands. Although BCCI SA was registered as a bank in Luxembourg, its banking business was conducted not in Luxembourg, but through 47 branches in 13 countries. BCCI Overseas did conduct a banking business in the Cayman Islands as well as through 63 branches of BCCI Overseas in 28 countries. As the Shadow Financial Regulatory Committee (1991) noted, "BCCI's headquarters were established in countries with weak supervisory authorities, strong secrecy laws and neither lenders of last resort nor deposit insurers who would have financial reasons to be concerned about the solvency of banks that are chartered in their jurisdictions." Contrary to what the organization chart seems to imply, neither Luxembourg nor the Cayman Islands was the operational headquarters of BCCI. Instead, most managerial decisions were made in London with oversight from the founder, Aga Hassan Abedi. After Abedi sustained a serious heart attack in 1978, his chief lieutenant, Swaleh Naqvi took charge until late in 1990 when investors in Abu Dhabi acquired a controlling interest and shifted the locus of decision making to Abu Dhabi.[4]

This dual banking structure made it difficult for any one supervisory authority to monitor the activities of BCCI on a consolidated basis. To further fragment external scrutiny of the bank, moreover, BCCI hired separate auditing firms for each bank, a situation which continued into the late 1980s when Price Waterhouse refused to sign the accounts unless it could audit the entire group.

The Basel Concordat on Banking Supervision gave Luxembourg responsibility for exercising consolidated supervision over the BCCI group. But since BCCI conducted no banking business in Luxembourg and Luxembourg did not offer deposit insurance or lender of last resort facilities to the group, the local bank supervisory authority lacked an incentive to oversee BCCI. Moreover, it lacked the resources to monitor the worldwide operations of BCCI. It urged the Bank of England to accept the responsibility because the operational headquarters for the BCCI group and its largest branch network were in England. The Bank of England, however, was unwilling to accept the burden of supervising the global operations of a bank that it did not charter.

After the collapse of Banco Ambrosiano in 1983, a bank with a corporate structure remarkably similar to that of BCCI, the Basel Concordat had been revised to deal with institutions that had adopted corporate structures that exploit gaps in the international supervisory framework. Unfortunately, this proved largely ineffectual with

[4]Much of what we know about how the massive fraud was perpetrated is thanks for the plea bargain Naqvi reached with the US authorities. Because Naqvi was “under restraint” in Abu Dhabi, he did not give testimony to the Bingham Commission (Bingham, p.81).

regard to BCCI. BCCI had already entered most major markets before the revision of the Concordat in 1983. When a foreign bank seeks entry, the local supervisory authorities have significant leverage in applying fit and proper test. But once the foreign bank has received a banking license, the scope for exercising discretion weakens considerably. In most jurisdictions the authorities must have evidence that the bank has committed serious violations of local laws or is insolvent before a license can be revoked and any such ruling is sure to be tested in court.[5,6] Finally, supervisors are understandably reluctant to take actions that diminish the prospects that depositors will be repaid and so, in the absence of objectively verifiable evidence that BCCI was insolvent, they permitted the bank to continue operations.

Since the supervisory authorities believed that they lacked the authority to compel BCCI to modify its corporate structure so that it could be supervised on a consolidated basis, they improvised a cooperative oversight structure, a regulatory "College," to gain a broader view of the activities of the bank.[7] The College included representatives from the Caymans, France, Hong Kong, Luxembourg, Spain, Switzerland and the United

---

[5] On July 6, 1992, the Basel Committee (1992) strengthened the Concordat in order to prevent a repetition on the BCCI scandal. The new feature was to require that a bank obtain the consent of both its home country regulator and host country regulator to establish a branch in a jurisdiction outside its home country. And if the host country is uncomfortable with the quality of home country supervision, it can impose "restrictive measures" on the branch. Such measures may range from closing the branch to obliging the branch to be restructured as a separately capitalized subsidiary to setting a deadline for the bank and its home supervisory authority to meet acceptable standards.

[6] Subsequent changes in legislation in many countries gave regulators For example, in the United States the "Foreign Bank Supervision Enhancement Act of 1991," gave the supervisory authorities greater powers to deal with an international banking group that is not supervised on a consolidated basis by a competent authority. For example, the Federal Reserve Board obtained primary supervisory responsibility for all foreign banking entities in the United States. The post-BCCI Directive in the EU strengthened the powers of EU host countries in dealing with foreign banks seeking entry. Among other features, the host country would be required to determine whether the banking group's home-country supervisors have the responsibility to monitor the banks' global operations on the basis of verifiable consolidated data and the authority to prohibit corporate structures that impede supervision and to prevent banks from establishing a presence in suspect jurisdictions.

[7] See Bingham (1992) for an account of the regulatory college and its seven meetings.

Kingdom.[8] The US Federal Reserve Board was not a member of the group, but participated occasionally in an observer status and did share information with the College (Group of 30, p. 86). This improvised arrangement proved wholly inadequate to the challenge of monitoring BCCI.

The discovery and disclosure of the massive fraud at BCCI and the subsequent closure of the group occurred because of the confluence of three different pressures. First, in June 1990 Luxembourg gave notice to BCCI that it must leave Luxembourg within twelve months. Managers of BCCI and the College believed that the group would collapse if it could not establish a new regulatory home (Bingham, p. 86). This led to an attempt to rescue BCCI with subsidies from Abu Dhabi and a new three-part organizational structure with separately incorporated subsidiaries in Abu Dhabi, the Cayman Islands and the United Kingdom. None of these three potential host countries, however, was willing to take over responsibility for consolidated supervision of the group.

Second, pressure from the New York District Attorney's office, Congress and the Fed with regard to on-going investigations concerning charges of money laundering, drug trafficking, wire fraud and the concealment of BCCI's control over First American, Independence Bank and the National Bank of Georgia (connected to BCCI Holdings S.A.

---

[8] Understandably, other countries which hosted offices of BCCI felt that their exclusion from information flows within the College unfairly contributed to losses experienced by their residents.

by dashed lines in figure 1).[9] It was anticipated that revelation of these charges would make it impossible for BCCI to continue operation.[10]

Third, irregularities in the 1990 accounts for BCCI led the Bank of England to commission a report from Price Waterhouse, which by this time had become the sole external auditor of BCCI. A draft of this Section 41 Report was delivered to the Bank of England on June 22, 1991. It described fraud on a massive scale including (Bingham, p. 140) "(i) falsification of accounting records; (ii) external vehicles used to route fund transfers and "park" transactions; (iii) the use of nominee and hold-harmless arrangements; (iv) the fraudulent use of … [funds belonging the rulers of Abu Dhabi]; (v) the creation of 70 companies to facilitate and disguise lending to the Gulf Group; (vi) collusion with third party banks to make loans to BCCI customers, so as to avoid disclosure of such lending on BCCI's balance sheet; [and] (vii) collusion with customers and others to give false confirmations to the auditors of fictitious and non-recourse loans and loans received as nominees…." Price Waterhouse concluded they could not give an opinion on the 1990 accounts and could not even be sure that BCCI SA was a going concern.

On July 5, at mid day the Bank of England applied to the UK court for appointment of a provisional liquidator. The Luxembourg authorities took parallel action

[9] Senator John Kerry, acting as chairman of the Senate Foreign Relations Committee's Sub Committee on Terrorism, Narcotics and International Operations wrote to Alan Greenspan about BCCI on 12 April 1991. He emphasized BCCI's lack of consolidated supervision and objected that the reorganization of the group into three banks would still not provide consolidated supervision. He urged the Fed not to approve any transfer of asset of BCCI or Credit and Commerce American Holdings until the Fed could be satisfied that the assets would be subject to the oversight of a single, consolidated supervisor. (See Bingham, p.123).

[10] The US authorities were thought to be critical of their European colleagues (Bingham, p. 126) because they "had not inspected BCCI sufficiently rigorously, … had enabled BCCI to exploit the fragmented structure of the group so as to indulge in intra-group transactions designed to deceive the US authorities,.. had taken too narrow a view of their local responsibilities,.. had failed to keep the US authorities informed, … had been insufficiently ruthless in pursuing the truth and … had placed too much reliance on the auditors."

as did the Governor of the Cayman Islands. The US quickly followed as did many other jurisdictions in an attempt to safeguard the bits of BCCI that were within their control.

How fraud and the international corporate structure of BCCI complicated resolution[11]

The closure of BCCI was accomplished with remarkably little impact on financial markets. Not only was this due to the care with which the authorities implemented the intervention, but also to the fact that most sophisticated market participants had cut lines to BCCI long before. Moreover, BCCI was not a major participant in payment and settlement systems nor was it active in the OTC derivatives markets. The aftermath, however, left customers of the 380 banking offices of BCCI in nearly 70 countries, mostly retail depositors,[12] to deal with the chaos of an international bankruptcy proceeding. Only some of these deposits were insured and none of the deposit insurance schemes gave depositors immediate access to the insured amount.[13]

The Basel Committee's (1992b) review of the insolvency liquidation of BCCI identified four major conflicts in national insolvency regimes that complicated the liquidation of the BCCI's assets and reduced the amount that could ultimately be distributed to creditors.

First, different countries may have very different insolvency regimes for banks and branches. The United States follows a separate-entity doctrine in which the agency or branch of a foreign bank is treated as if were a separately incorporated legal entity for

[11] This section draws heavily from Herring (2003).
[12] Several local authorities in the UK and third world central banks also suffered loss.
[13] The British scheme offered coverage for 75 percent of sterling deposits up to a limit of £20,000. Jackson (1996, p. 40) notes this largest payout from the Deposit Protection Fund, almost £100 million. Oddly, the amount paid out appears to have been less than what depositors were entitled to claim. Under the British scheme, only sterling-denominated deposits were eligible.

purposes of liquidation (Basel Committee, 1992b, p. 2). Creditors of a US agency or branch would be paid from the assets of the agency or branch and other assets of the bank in the United States as well as all of the assets of the agency or branch worldwide that the US liquidator could marshal. Only after all of the claims of creditors of the US agency or branch were satisfied would creditors of other offices of the bank have access to the remaining assets of the agency or branch, if any.

In contrast, Luxembourg and the United Kingdom follow a single-entity doctrine in which the bank and all of its foreign branches are treated as offices of a single corporate entity. All creditors of the bank and its branches worldwide are entitled to participate in the liquidation, with no preference given to claims of the creditors of a particular branch. The attempt to secure a claim to the worldwide assets of the single entity clearly conflicts with the efforts of countries that follow a separate entity doctrine to withhold the assets of the local branch for satisfaction of the claims of creditors of that branch.[14] In addition to the United States, notable other countries that followed the separate entity doctrine in the liquidation of BCCI included France and Hong Kong.

The two approaches have differing implications for market discipline. Although pooling all assets for distribution in a single, home-country liquidation appears to treat all creditors more equitably, it may undermine incentives for creditors with international operations to seek to do transactions in well-supervised jurisdictions. The US agency of BCCI had assets that exceeded its liabilities because the US supervisory authorities had increased BCCI's asset-maintenance requirement to 120 percent of liabilities to

[14] The Basel Committee (1992b, p. 2) notes an apparent inconsistency in the US approach to bank liquidation. While the US applies the separate-entity doctrine to the liquidation of agencies and branches of foreign banks, it applies the single-entity doctrine to the liquidation of US-chartered banks with foreign branches.

unaffiliated persons in January of 1991 (Group of 30 (1998, p. 87). Supervision in other jurisdictions was not nearly as intense.

Second, different countries have different liquidation procedures. In the United States, general bankruptcy law does not apply to banks. Instead, the primary bank supervisor would liquidate the branch of a foreign bank. Although the Federal Deposit Insurance Corporation has a number of options to consider with respect to an insolvent bank with insured deposits (see III below), the only option with regard to a foreign branch is liquidation (Basel Committee (1992b, p.3).

In contrast, in Luxembourg and the United Kingdom, the supervisor is not the liquidator. Courts in the United Kingdom apply the same liquidation law to banks as to other commercial entities, while in Luxembourg the court will decide on a case-by-case basis whether to apply the general commercial liquidation law to a bank. Supervisors in Luxembourg also have more flexibility than their counterparts in the UK and the US with regard to options for dealing with a foreign branch that may include a conservatorship or suspension of payments. Not only do different liquidators have different powers, they may have different objectives as well. These may vary from maximizing returns to domestic creditors or to creditors worldwide to safeguarding financial stability, preserving going-concern value or protecting employment. Clearly conflicts among liquidators can delay the ultimate resolution of an insolvent institution and reduce the amount available for distribution to all creditors.

Third, the right of set-off differs across bankruptcy regimes. The Basel Committee (1992b, p. 3) defines set off as “a nonjudicial process whereby mutual claims between parties, such as a loan and a deposit, are extinguished.” The right of set-off can be exercised in the United States with regard to claims denominated in the same currency with regard to the same branch. Claims denominated in different currencies or on different branches may not be set-off (Basel Committee (1992b, p. 4). In contrast, consistent with the single entity approach in the United Kingdom the claims need not be denominated in the same currency, on the same branch or even on branches in the same country. Although Luxembourg also adheres to the single entity doctrine, the right to set-off may not be exercised after a liquidation order and may be exercised before a liquidation order only when the claims "are fixed in amount, liquid and mature."

In principle the right of set-off gives a bank creditor who also owes money to that bank, a position like that of a secured creditor. In practice, however, the right may be severely circumscribed and subject to considerable uncertainty depending on the particular circumstances. For example,[15] the position of a depositor in a bank headquartered in Luxembourg with branches in London and New York may differ markedly depending on where the deposit and loan are booked. The depositor would appear to be in the strongest position if the deposit is placed with the London branch because English law provides the broadest scope to exercise the right of set-off. But the Luxembourg liquidator might attempt to sue the depositor for full repayment of the loan nonetheless. And, if the loan is booked in New York, the US liquidator may sue for full repayment of the loan even though the depositor has exercised the right of set-off in England.   The situation is still more complex if the bank has a branch in a jurisdiction that does not permit set-offs. The Basel Committee (1992b, p. 11) concluded, "The lack of an international convention providing for mutual recognition of insolvency set-off or

[15] This example is drawn from the Basel Committee (1992b, p. 10).

of generally applicable choice of law rules can mean that the expectations of parties at the time contracts are entered into may not be fulfilled….” In the event of the insolvency of a large, multinational bank, this uncertainty could itself be a source of inefficiency and instability.

Finally, the closure of BCCI revealed another wildcard in the international bankruptcy deck that can trump normal insolvency procedures. In the United States, criminal charges may be levied against a bank, even when it has entered insolvency procedures. BCCI was, in fact, prosecuted under the Racketeer Influenced and Corrupt Organizations Act (RICO). The RICO proceeding gathered all of the US assets of BCCI with the notable exception of the assets of the deposit agencies in California and New York, which had been ring-fenced for the benefit of local depositors. (Only the surplus above the amount owed to local depositors was forfeited.) As the Basel Committee (1992b, p. 4) observes, RICO gives the authorities broad prosecutorial powers authorizing them "to seize and forfeit assets in pursuit of the fruits and proceeds of a crime. Assets can be traced into the hands of innocent parties, in effect upsetting expectations about the finality of transactions."

This could override *ex ante* repayment priorities and reduce the amounts available for distribution to creditors. But in this instance, RICO proceedings substantially increased the returns to creditors. More than $1.2 billion was realized from BCCI assets in the United States. Judge Green, who presided over the BCCI case, the longest-running forfeiture proceeding in the history of federal racketeering law, reported (Green, 1999, p.2) that "Most of that sum … [was] forwarded for distribution to the victims of BCCI's collapse."

The RICO prosecution might have intensified the worldwide scramble for assets, but the US Attorney General negotiated an unusual plea agreement, which forged an alliance with the court appointed liquidators of BCCI in England, Luxembourg and the Cayman Islands ("the Liquidators"). The Liquidators had agreed to pool whatever assets could be recovered to be distributed equitably among all BCCI depositors and creditors.[16] In return for cooperation from the Liquidators in identifying BCCI assets in the United States and agreeing to plead guilty as successor to the BCCI corporations, the US Attorney General agreed to remit half of all forfeited assets to a Worldwide Victims Fund to be distributed by the Liquidators. The other half was designated as a US Fund. After covering the costs of prosecution from the US Fund, the residual was also transferred to the Liquidators. This alliance was opposed by competing liquidators of ring-fenced branches elsewhere in the world as well as various other creditors who had hoped to secure preferential access to BCCI's assets in the United States. Judge Green (p. 13) rejected those competing claims noting that the plea agreement "reflects on a truly global measure extraordinary efforts and amazing cooperation of a multitude of signatories representing a myriad of jurisdictions to fully settle actions against the corporate defendants… and to locate and protect all realizable assets of BCCI for the ultimate benefit of the depositors, creditors … and other victims of BCCI."

The nearly eight years of litigation required to complete the RICO proceedings is an indication of the complexity of resolving a bank that has experienced massive, widespread fraud. The RICO proceeding was highly unusual in that the criminal

[16] The pooling agreement reflected the view that the intermingling of the affairs of BCCI SA and BCCI Overseas was so extensive that it would have impracticable without very considerable delay and enormous expense to determine their separate assets and liabilities. BCCI SA Bahrain, BCCI Overseas China, BCCI SA Cyprus, BCCI SA Japan and BCCI SA United Arab Emirates also participated in the pooling agreements. Later the pooling agreement was extended to the principal ICIC companies.

defendants, represented by the Liquidators, invested significant resources in assisting the US in identifying and realizing forfeitable assets that included not only bank deposits, but also real estate and undeveloped land. As a result of these efforts the list of forfeited property was amended six times from 1992 to 1998 to include substantial additional assets. Judge Green decided 175 claims against the forfeiture, including objections from liquidators of BCCI branches, depositors, commercial banks whose wire transfers of funds were interrupted by the closures,[17] trade creditors and tort claimants against BCCI such as the Republic of Panama and employees who claimed to have been stigmatized.

RICO charges were also brought against the sovereigns of Abu Dhabi, who had formally taken control of BCCI in 1990 and were record shareholders of First American, as well as six individuals. The resolution of the civil and criminal charges against the sovereigns of Abu Dhabi increased amounts remitted to the fiduciaries by more than $170 million and led to the transfer of six plane loads of BCCI records that enabled the Liquidators to identify additional assets and prosecute additional cases. RICO judgments were also reached against six individuals amounting to a total of $8.78 billion (Green, p. 70).

The net result of this aggressive litigation on behalf of the creditors of BCCI is that they have fared much better than expected. When BCCI was closed, the Liquidators projected a loss of $10 billion which would yield a return to shareholders "between zero and ten cents on the dollar."[18] Although creditors had to wait until December 10, 1996 for their first payment equal to 24.5 percent of the face value of their claims, by June 25,

[17] Judge Green (p.50) concluded that most of the interrupted wire transfers were subject to forfeiture ruling that "Persons who have…voluntarily transferred their property interest to the defendant are no longer the owners of that property, and are in no greater position to asset a claim to that property …than are other creditors and victims who cannot trace their former property into the defendant's account."
[18] Green (p.9).

2003 they have received payments amounting to 75 percent of the face value of their claims.[19] The costs of the English liquidation have amounted to 21 percent of the amount recovered.[20]

In summary, BCCI revealed some of the complications that could arise in the insolvency of a multinational banking organization. Lack of agreement on an international insolvency regime means that conflicts may arise with regard to the treatment of deposits and assets at branches in different countries, with regard to what entity will act as liquidator and what objectives that liquidator will pursue, and with regard to the right of set-off, if any. Moreover, criminal prosecution in the United States may preempt these normal, if chaotic, bankruptcy procedures. In view of these complications, it is not surprising that the uninsured creditors of BCCI have incurred substantial legal expenses and been obliged to wait a very long time for the settlement of their claims.

Barings

How fraud and international structure delayed recognition of insolvency

While losses at BCCI cumulated gradually over a number of years, the fatal losses at Barings occurred over a few weeks because they were attributable to highly leveraged bets in futures markets. Nonetheless, in the case of Barings as well as that of BCCI, it is clear that fraud and the group's international structure delayed recognition of the insolvency.

[19] BCCI SA (In Liquidation) p. 2.
[20] BCCI SA (In Liquidation) p. 9.

Leeson joined Baring Securities Ltd (BSL) in 1989, working primarily in the settlements department. Early in 1992 he had applied for registration as a dealer with the Securities and Futures Authority (SFA) in London. The SFA discovered that he had made a false statement regarding unsatisfied judgments against him and BSL withdrew the application. In April 1992 Leeson was posted to Baring Futures Singapore Ltd (BSL) to establish settlement operations and also to be a floor manager at the Singapore International Monetary Exchange (SIMEX). This was clearly inconsistent with one of the most fundamental principles of risk management – separation of the trading function from the clearing and settlement function and presumably justified as a defensible economy measure in a small office far from headquarters. Although Leeson made a similar false statement in his application to SIMEX, it was not challenged by BSL or SIMEX. Leeson's trading role was to be limited to agency business, the execution of orders placed by clients of other entities in Barings Group companies or the occasional external client of BFS. By the third quarter of 1993, however, he was heavily engaged in proprietary trading. Indeed, by the end of 1994 Leeson was thought to have generated 60 percent of the revenues of BSL's worldwide derivatives operations.[21]

His mandate as a proprietary trader was to arbitrage differences between the prices quoted for identical contracts on SIMEX and the Tokyo Stock Exchange and Osaka Securities Exchange. The opportunity for profitable arbitrage was assumed to arise because of differences in market structure between SIMEX and the other two exchanges. SIMEX operated an open outcry system while Tokyo's and Osaka's systems were computer based. Although Leeson was permitted to have limited intra-day unhedged positions, he was not authorized to maintain unhedged positions overnight.

[21] Reserve Bank of Australia, p. 3.

Because differentials across the three exchanges, when they exist, are likely to be very small, Leeson was expected to take large (assumed to be hedged) positions in order to generate significant profits. The Reserve Bank of Australia (1995, p.5) has noted that this kind of authorized activity "provided camouflage for unauthorized activities. The authorized activities involved exceptionally large (though theoretically riskless) positions spanning exchanges in two countries, four subsidiaries (viewed as clients on some occasions and 'in house' counterparties at other times) and involved margining requirements…."

Almost as soon as Leeson began trading on SIMEX, he used his control over the back-office function at BFS to set up a secret account, designated 88888, to record unauthorized transactions. The transactions recorded in 88888 were large and grew quickly. They were unhedged and consistently reflected losses. Occasionally transactions were transferred from other Baring Group accounts to generate a artificial profit for those accounts, with a corresponding loss to 88888. Könert (2003, p. 198) has provided a period by period breakdown of the losses in the secret account (see Table 1.) The fraud continued for nearly three years. Yet, as Table 1 shows, if it had been detected as late as the middle of 1994, it would have been devastating, but perhaps not fatal. At that time the recorded Group capital was roughly £350 million and the cumulated loss, £116 million.

Table 1. Losses from Concealed Transactions & Total Losses*

(Losses in millions of £s)

	1992II&IV	1993	1994 I&II	1994 III&IV	1995 to February 27
Loss from previous period	-	2	23	116	208
Period Loss	2	21	93	92	619
Total loss	**2**	**23**	**116**	**208**	**827**
+ Additional losses resulting from market movements after February 27th, 1995					42
+Losses resulting from foreign exchange (¥ against £)					55
+SIMEX costs					3
= Total loss after liquidation					**927**

*Source: Körnert (2003, p. 198)

Leeson adopted an aggressive trading strategy in January 1995 premised on the assumption that Japanese equity prices would rise, Japanese bond prices would fall and volatility would decline. He acquired long positions in Nikkei futures; short positions in Japanese Government Bond futures; and a short volatility position in exchange traded options on the Nikkei index. In the final two weeks of February, after the Kobe earthquake, both the stock market and the bond market turned against him and his losses soared.[22]

Although Leeson's control over back office operations explains how he was able to initiate the fraud, weaknesses in internal and external oversight explain how the fraud escaped detection over so long a period. The Singapore report on the collapse of BFS noted a number of missed opportunities (Lim and Tan). In principle, the Baring Group's risk positions, trading limits, trading performance and the allocation of funding were monitored each day by an Asset and Liability Committee (ALCO). Since Leeson's

[22] Reserve Bank of Australia, p. 2.

mounting losses had to be funded from elsewhere in the group, BFS was ultimately drawing funds that exceeded its total assets. But apparently the ALCO meetings focused on how to meet Leeson's funding requirements rather than why the requirements were so large. As late as February 20, 1995, the Chief Executive Officer of the Barings Group is reported to have informed ALCO that he concurred with Leeson that his positions should not be reduced.[23]

One might also have expected the Financial Controls Department to have discovered account 88888. But the Department viewed its responsibility as furnishing management with daily reports of profits and losses rather than ascertaining whether these reports reflected the true profitability of the activities of the Baring Group.

Since some of the funds used to finance the 88888 account were purportedly to fund client positions and were recognized by BSL as loans to clients, it seems plausible that the credit control function would have taken steps to verify the identities and creditworthiness of the clients receiving loans. Any attempt to do so would have revealed that there were no such clients. But no attempt was made.

Profitable arbitrage opportunities are not likely to persist in today's highly competitive international markets, and so one might have expected Leeson's supervisors to have been somewhat skeptical about the profitability of his operations. But his profitability was "regarded with admiration rather than skepticism."[24] Indeed, when unauthorized trading was ultimately disclosed at the end of 1994, Leeson received a bonus rather than a reprimand.

---

[23] Lim and Tan (paragraph 11).
[24] Lim and Tan (paragraph 14).

Although the large exposures reported to regulators were understated (until January 1995) they were still very large. For example, the exposures to SIMEX and the Osaka and Tokyo exchanges exceeded 75 percent of Barings' capital. But neither Baring's management nor the Bank of England seemed clear about whether these exposures should be subject to the 25% large exposure limit. On February 1, 1995 the Bank of England made a determination that they were subject to the limit, but permitted the BSL time to bring its exposures down.

BFS had only four clients, three of which were other Barings entities. Its activities were funded almost entirely by its affiliated companies. Yet the affiliated companies appear not to have reconciled the funds they had sent to BFS against the trades for which the funds had been requested. If such a reconciliation had taken place, Leeson's scope for unauthorized trading would have been greatly reduced.

Finally, the settlement operations of BFS were linked to BSL Settlements by computer. Although Leeson had suppressed information regarding trades booked to account 88888, information pertaining to margin requirements necessarily included account 88888. Nonetheless BSL Settlements "claimed that it never used the margin feed, a simple one page document, to resolve the unreconciled balances."[25]

During the third quarter of 1994, BFS was subject to an internal audit. The report emphasized the risk, inherent in Leeson's position as chief trader and head of settlements, that internal controls could be overridden. Ironically, the report went on to note that since almost all of Leeson's trades were for affiliates this risk, inherent in Leeson's dual roles, was mitigated because his trades would be subject to reconciliation controls in the affiliates. Unfortunately, these trades were not reconciled. Ironically, when BSL made a

[25] Lim and Tan (paragraph 17(iii)).

decision to upgrade its Treasury function to improve risk management in Asia, it decided not to focus on BFS.

Leeson's ability to sustain the fraud was also facilitated by the international corporate structure of Barings. In contrast to BCCI, Barings did not adopt an opaque international structure to fragment oversight and conceal activities from the regulators. Nonetheless, the complexities of overseeing even the relatively transparent structure of Barings permitted the fraud to continue longer than it otherwise might have done and delayed recognition of the insolvency.

Figure 2 summarizes the corporate structure of Barings. Barings PLC organized its businesses within three principal subsidiaries comprising more than one hundred companies: (1) Baring Brothers & Company (BB&C), an authorized bank in London with branches in Hong Kong and Singapore and subsidiaries in France, Germany, Italy and Japan as well as subsidiaries engaged in trading sterling bonds, private equity and venture capital; (2) Baring Securities Limited (BSL) incorporated in the Cayman Islands, but headquartered in London, with subsidiaries that included Baring Futures Singapore (BFS), the legal entity in which the fraud took place; and (3) Baring Asset Management.

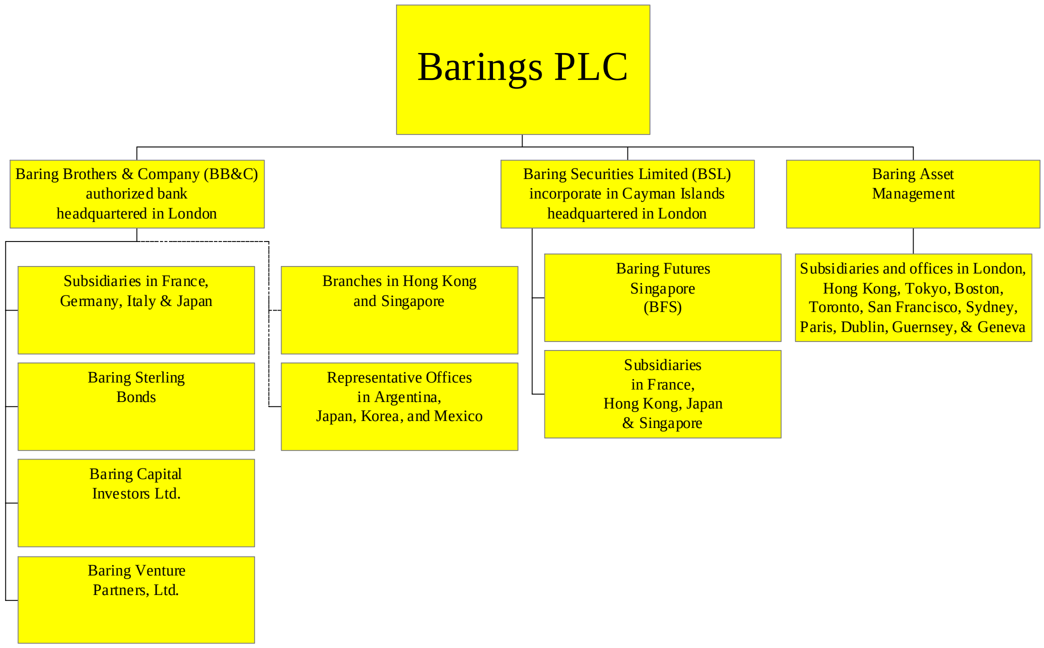
Barings employed a matrix approach to managing this global network. Traders reported to a local manager regarding operational and administrative matters and to product managers, who had responsibility for the profitability of their transactions. Proprietary trading reported to a different product manager than agency trading. Back-office managers reported to a local manager and their functional head in London. This matrix management structure fragmented the oversight of Leeson's activities. In principle, Leeson reported to product managers in London, a local manager at Baring

Securities Singapore, and a regional operations manager for Southeast Asia. In practice Leeson evaded effective supervision altogether.

The Bank of England was responsible for supervising BB&C and for acting as lead regulator for the consolidated supervision of the group as a whole. Its oversight responsibilities extended to the other activities of the group insofar as such activities could threaten the financial soundness and reputation of BB&C.[26] The Bank of England placed reliance on functional regulators and a variety of local regulators (both governmental authorities and self regulatory organizations) to monitor the affiliated and overseas businesses of Barings PLC. For example, The Securities and Futures Authority (SFA) in London was the regulator of BSL. But the SFA viewed its responsibilities as much more limited in scope. The Bank of England Report on the Collapse of Barings (Bank of England, 1995, part 13.7) concluded that the "SFA did not regard itself as required to consider the activities or financial position of the subsidiaries of BSL and considered that its responsibilities with regard to subsidiaries were limited to the express notification of requirements relating to subsidiaries set out in its rules." This narrower scope of oversight is often true of regulators of securities firms and insurance companies

[26] For more extensive discussion of the Bank of England's supervisory role, see Bank of England (1995).

Figure 2. The Corporate Structure of Barings PLC



outside of the European Union (Herring and Schuermann (2002)) and is one of the fundamental challenges the authorities face in developing an overall view of an international financial conglomerate.

In the early 1990s Barings began including results for BSL in the set of returns submitted by BB&Co to the Bank of England. This had the effect of treating BB&Co and BSL as one entity for purposes of monitoring capital adequacy and large exposures and may have obscured the massive flows of funds from BB&Co to BSL used to finance (what the managers believed to be) customer positions at BFS. In fact, they were mainly used to fund the mounting losses incurred by Leeson.

The Board of Banking Supervision sought to determine why the massive losses were not identified earlier. Not only did they elude external auditors as well as the various supervisors and regulators, but all of the internal checks and balances as well. The Board of Banking Supervision concluded there was a near total failure of risk management systems and controls as well as confusion within the management group. The Singapore inquest on BSL was less charitable (Lim and Tan, paragraph 36 (vii)) concluding that managers of Barings "could have remained ignorant of the account up to the time of collapse only if they had persistently shut themselves from the truth… [The] explanation that Mr. Leeson's trading activities posed little (or no) risk to the Baring Group, but yielded very good returns, is implausible and in our view, demonstrates a degree of ignorance of market reality that totally lacks credibility."

How fraud and the international corporate structure complicated resolution of Barings

During the last week of February, after Leeson fled Singapore, Barings made an attempt to close out some of the largest positions it could discover at a discount, making the argument that the counterparty would realize an even smaller return if BSL should fail. But there was too little time and the Japanese regulators objected that Japanese banks could not buy BSL's positions because it would constitute illicit, off-exchange trading in derivatives (Körnert, p.206).

When Barings attempt to initiate a private workout failed, it turned to the Bank of England in the hope of obtaining assistance in meeting its margin requirements in Asia the following Monday. The Bank of England faced a decision about whether the systemic implications of the failure of Barings justified official intervention.[27] Meanwhile, Barings was frantically trying to reconstruct its account in order to determine the extent of is losses. Barings faced not only uncertainty about the size of these open positions, but also uncertainty about how rates would move. Given the uncertainty of the extent of losses at Barings, no other financial institution was willing to support or purchase Barings and the Bank of England concluded that the idiosyncratic nature of the problem at Barings was unlikely to lead to a contagious collapse of confidence in London.[28] With no prospect of a rescue, Barings turned to the bankruptcy court on Sunday evening, February 26th.

The Bank of England announced its willingness to provide liquidity to the UK banking system to forestall market disruptions. It also facilitated the unwinding of Barings' positions. To avoid the possible seizure of payments from Barings during the clearing and settlement process, the Bank of England undertook transactions on behalf of Barings on a fully collateralized basis. Losses at Baring Securities threatened to spillover to the exchanges on which it traded. This foreshadowed the potential collateral damage that could occur if procedures for sharing losses in securities exchanges were activated. Indeed, some firms were reported to have been prepared to abandon membership in these

[27] This paragraph is based on the account in Hoggarth and Soussa (2001, Annex 2).

[28] We may have gotten an (inadvertent) glimpse of the opposing arguments in a *Financial Times* story (Gapper 1995), titled "The Barings Crisis – Bank Decides a Rescue is the Only Option," that apparently went to press before the Bank of England announced its decision. The article noted that if the Bank of England had allowed Baring to fail, "it could have had enormously destabilizing effects on world financial markets." The article noted that the immediate effect would have been manageable, but warned that with a rescue "there was a danger of spiraling falls in world financial markets on fears over the possibility of linked collapses of banks, as well as the uncapped liability of Barings' contracts…According to brokers' calculations, a fall of 1,000 points in the Nikkei 225 index would have increased the amount Baring owed on the contract by £150 m."

exchanges and thus cause a collapse of these markets rather than share in Barings' losses (Group of Thirty, 1998, p.95).

For the relatively brief period – after Barings entered bankruptcy administration on February 27, but before the announcement on March 5th, that the Dutch financial conglomerate, ING, agreed to purchase most of the assets and liabilities of Barings Plc (except for BFS) for £1– the final disposition of Barings was in doubt. During that interval we had a glimpse of some of the problems that would occur when normal bankruptcy procedures are applied to a financial institution that trades actively in world financial markets. Counterparties found that their positions were frozen and could not be liquidated, transferred or rehedged. They faced the prospect of substantial losses due to fluctuations in the dollar price of the yen and the Nikkei index in the wake of the collapse of Barings (Group of Thirty, 1998, p. 94).

This interval exposed a serious tension between the bankruptcy administrator's attempt to protect the status quo through use of a stay and the needs of active trading firms that depend on their ability to hedge dynamically in volatile markets to protect their net worth. It raised the possibility that delays imposed to liquidate the insolvent firm in an orderly manner could cause other firms to default as well. Concerns about losses increased, moreover, when it was learned that omnibus accounts with Barings for trading futures and options in Asia were not protected by practices that strictly segregate customer funds in other jurisdictions such as the United States, and that these funds were being used to meet BSL's expenses.[29] Thus not only counterparties, but also some customers of Barings faced constraints on their access to funds.

---

[29] Cohen (1995) notes that many of Baring's UK and European asset management clients had not only agreed to use Barings as their custodian, but had signed a separate agreement with the bank allowing their

In response to the potential problems for derivatives exchanges highlighted by the collapse of Barings, regulatory authorities from 16 countries who have oversight of the major futures and options markets met at Windsor, England to discuss ways to strengthen supervision in May 1995. The resulting Windsor Declaration announced a consensus on measures to strengthen cooperation between market authorities and coordinate action in emergencies, protect customer positions, funds and assets, and improve procedures for dealing with a default on a securities exchange.

In summary, the collapse of Barings highlighted some of the problems of dealing with the failure of an international bank active in international financial markets. Although the banking and securities businesses of Barings were lodged in separately incorporated units, BB&Co was used to fund massive losses in BSL. The separate functional regulators lacked a full picture of the group's consolidated positions and failed to share information that might have flagged emerging problems before the losses mounted.[30] It also raised longstanding questions about the sharing of information between host and home country supervisory authorities. It raised new questions, as well, about the possibility of the contagious transmission of shocks across derivatives exchanges. Although luckily the sale of most of Barings assets and liabilities to ING brought a quick end to the insolvency process, it became clear that the imposition of a

---

cash to be placed on deposit there. When the parent company collapsed, more than £600m in client cash was frozen…Similarly, other fund management clients whose cash was locked up in the bank had to sit and wait while their portfolios remained static …."

[30] See Baxter (1999) for a discussion of the problems posed by secrecy laws for combating corruption in banking.

stay on the claims of counterparties and some customers could jeopardize the solvency of other firms.[31]

Concluding Comment

Fraud is a particularly insidious cause of bank failures because it may evade detection for long periods and cause an institution to become deeply insolvent before the insolvency is recognized and insolvency procedures can be initiated. Moreover, it can delay insolvency procedures as the bankruptcy officials attempt to ascertain the true condition of the bank and identify and safeguard all of its assets. When, as in the case of BCCI, fraud occurs in a global corporate structure, insolvency procedures are likely to take even longer given the formidable coordination issues that must be dealt with. Nonetheless, fraud is less likely to be associated with systemic crises than other causes of bank failure because it tends to be idiosyncratic. It can destroy one institution, but unless a large number of other institutions have large exposures to that institution, it is unlikely to weaken the banking system. This was particularly clear in the case of BCCI. While the collapse of BCCI was very hard on its creditors, its involvement in interbank markets was so limited that it had virtually no impact on the rest of the financial system. The same cannot be said of Barings.

In contrast to BCCI, Barings was heavily involved in interbank markets and traded actively (more actively that its managers realized) on international exchanges. If the fraud at Barings had been as complex and pervasive as at BCCI, the bankruptcy administrators might not have found a buyer who was willing to take on most of its assets

[31] The International Swap Dealers Association (ISDA) has made a concerted effort to deal with this latter problem by developing Master Agreements that permit closeout netting in the event of default and lobbying for changes in national laws to support such agreements. But the subsequent near collapse of LTCM revealed the darker side of close-out netting. See Herring (2003).

and liabilities and Barings would have been subjected to the same, lengthy insolvency proceedings that were applied to BCCI. We saw, in the brief interval before a buyer was found, what the consequences might have been. If the stays are imposed on counterparties and creditors of the bank for a lengthy period, an integral part of conventional bankruptcy proceedings, it can have very damaging spillover impacts, especially when applied to financial instruments that are actively traded in global markets.

Conventional bankruptcy proceedings would not have achieved all of the goals of a good insolvency procedure. Although the conventional approach could have penalized managers and shareholders adequately and maintained the absolute priority of claims, it would not have maximized the value available for distribution to creditors and it would not have limited systemic costs adequately. Since Barings' positions needed to be dynamically hedged to contain additional losses, the process could not have delivered an *ex post* efficient outcome. Similarly, counterparties in contracts that change in value moment by moment as market prices vary would have been seriously affected and the uncertainty about the magnitude of their loss would have been difficult to hedge.

To be sure, neither BCCI nor Barings was sufficiently large to raise serious concerns about systemic risk. But they were sufficiently complex to highlight some of the issues that must be dealt with in the unhappy event of the insolvency of a much larger international bank. Although it is not generally possible to anticipate fraud (and so emphasis should be placed on prevention or early detection) , it is possible to anticipate the complications that will arise when a bank with an international network of offices becomes insolvent. Although official were ultimately able to improvise a workable means of cooperation in the case of BCCI, it would be unwise to count on inspired improvisation a second time. Moreover, we now know that conventional bankruptcy procedures are too slow for firms that are heavily involved in global financial markets. Both problems need to be addressed in period of relative calm, before a crisis erupts. Both deserve a prominent place on the agenda of the Basel Committee.

References

ACTM, *Barings Collapse – A Lesson for Operators in Derivatives*, ACTM Research Center, IFCI Risk Institute, www.actmindia.org/pages/dec-cs.htm.

Bank of England, 1995, *Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings*, July 18.

Basel Committee on Banking Supervision (Basel Committee), 1983, "Principles for the Supervision of Banks' Foreign Establishments," May.

Basel Committee, 1992a, "Minimum Standards for the supervision of international banking groups and their cross border establishments," in Chapter I: The Basel Concordat and Minimum Standards, *BCBS Compendium of Documents, International Supervisory Issues*, Volume III, (May 2001).

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

Basel Committee, 2004, "Bank Failures in Mature Economies," Working Paper No. 13, April.

Baxter, Thomas C., Jr., 1997, "Breaking the Billion Dollar Barrier – Learning the Lessons of BNL, Daiwa, Barings and BCCI," *Journal of Money Laundering Control*, Vol. 1, June, pp. 15-25.

Baxter, Thomas C., Jr., 1997, "Breaking the Billion Dollar Barrier – Learning the Lessons of BNL, Daiwa, Barings and BCCI," *Journal of Money Laundering Control*, Vol. 1, June, pp. 15-25.

BCCI SA (In Liquidation), 2004, *Report to the Secretary of State for Trade and Industry Pursuant to Regulation 14 of the Insolvency Regulations 1994 for the Period 16 January 2003 to 15 January 2004*, High Court of Justice Chancery Division, available at www.bcci.info.

Bernard, Alicia, 1995, *The Barings Collapse (A): Breakdowns in Organizational Culture & Management*, IMD, IMD001,v.11.12.2002.

Bernard, Alicia, 1995, *The Barings Collapse (B): Failures in Control and Information Use,* IMD, IMD002, v.11.12.2002.

Board of Banking Supervision, 1995, *Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings*, Her Majesty's Stationery Office, 18 July.

Cohen, Norma, 1995, "Survey of Global Custody (3) – Doubts Raised Over Bank Deposits," *Financial Times*, November 6.

Gapper, John, 1995, "The Barings Crisis – Bank Decides a Rescue is the Only Option," *Financial Times*, February 27.

Green, Joyce Hens, 1999, *United States of America v. BCCI Holdings (Luxembourg), S.A., Bank of Credit and Commerce International, S.A., Bank of Credit and Commerce International (Overseas) Limited ,and International Credit and Investment Company (Overseas) Limited, Defendants*, Criminal Acton No. 91-0655 (JHG) Defendants 1-4, United States District Court for the District of Columbia, decided July 12.

Green, Joyce Hens, 1999, *BCCI Holdings (Luxembourg)S.A., et al., Plaintiffs, v. Abdul Raouf Hasan Khalil, et al., Defendants*, Civil Action No. 95-1252 (JHG), United States District Court for the District of Columbia, June 23.

Hart, Oliver, 2002, "Different Approaches to Bankruptcy," Harvard Institute of Economic Research Discussion Paper no. 1903.

Herring, Richard J., 1993, "BCCI: Lessons for International Bank Supervision," *Contemporary Policy Issues*, Vol XI, April, pp. 1-11.

Herring, Richard J., 2003, "International Financial Conglomerates: Implications for National Insolvency Regimes," in *Market Discipline and Banking: Theory and Evidence*, Elsevier, edited by George Kaufman, pp. 99-129.

Herring, Richard J. and Til Schuermann, 2004, "The Regulation of Position Risk in Banks, Securities Firms and Insurance Companies," in *Risk-Based Capital Regulation*, edited by Hal Scott and Phil Wellons, Oxford University Press.

Hoggarth, Glenn and Farouk Soussa, 2001, "Crisis Management, Lender of Last Resort and the Changing Nature of the Banking Industry," in *Financial Stability and Central Banks*, CCBS and the Bank of England, edited by Richard Brealey et al, London: Routledge.

Jackson, Patricia, 1996, “Deposit Protection and Bank Failures in the UK,” *Financial Stability Review*

Jackson, Patricia, William Perraudin, and Norvald Instefjord, 1997, “Controlling Securities Fraud,” *Financial Stability Review,* No. 3, Autumn.

Kaufmann, G. and Seelig, S., 2002, “Post-resolution treatment of depositors at failed banks: Implications for the severity of banking crises, systematic risk, and too big to fail,” *Economic Perspectives*, 26.

Körnert, Jan, 2003, *“The Barings Crises of 1890 and 1995: Causes, Courses, Consequences and the Danger of Domino Effects,” Journal of International Financial Institutions & Money*,” vol. 13, pp. 187-209.

Lim, Michael Choo San and Nicky Tan Ng Kuang, 1995, *Baring Futures (Singapore) Pte Ltd: Investigation pursuant to section 231 of the Companies Act (Chapter 50); the report of the inspectors appointed by the Minister of Finance,* Singapore: Ministry of Finance.

Mayes, David G., “Who Pays for Bank Insolvency?” *Journal of International Money and Finance*, April 2004, pp. 515-551.

Mayes, David G. and Aarno Liuksila (eds.), 2004, *Who Pays for Bank Insolvency?* Hampshire, U.K.: Palgrave Macmillan.

Reserve Bank of Australia, 1995, “Implications of the Barings Collapse for Bank Supervisors,” *Reserve Bank of Australia Bulletin*, November, pp. 1- 5.

Richards, J. P., 2004, *Re: Bank of Credit & Commerce International SA (In Liquidation) Report to the Secretary of State for Trade and Industry Pursuant to Regulation 14 of the Insolvency Regulations 1994 for the period 16 January 2003 to 15 January 2004*, available at www.bcci.info.

Shadow Financial Regulatory Committee, 1991, *Statement No. 74: Bank of Credit and Commerce International*, September 16.