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David G. Mayes
Research Department
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An approach to bank insolvency in transition and emerging economies

Suomen Pankin keskustelualoitteita
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Abstract

In the light of the inequity of the way losses from bank insolvencies and their avoidance through intervention by the authorities have been distributed over creditors, depositors, owners and the population at large in transition and emerging economies, this paper explores a number of regulatory reforms that would alter the balance between seeking to avoid insolvency and lowering the costs of insolvency should it occur. In particular it considers whether a lex specialis for dealing with banks that are in trouble through prompt corrective action and if necessary resolving them if their net worth falls to zero, at little or no cost to the taxpayer can be applied in the institutional framework of transition and emerging economies.

Key words: insolvency, banks, transition, emerging economies

JEL classification numbers: K23, G21, O16, G28, E53

Pankkien konkurssit kehittyvissä ja siirtymätalouksissa

Suomen Pankin keskustelualoitteita 4/2004

David G. Mayes
Tutkimusosasto

Tiivistelmä

Pankkien vararikosta aiheutuvat taloudelliset menetykset sekä viranomaiskustannukset vararikon välttämiseksi jakaantuvat epäoikeudenmukaisesti luotonantajien, tallettajien, omistajien ja yleisemmin veronmaksajien kesken siirtymätalouksissa ja kehittyvissä kansantalouksissa. Tässä tutkimuksessa tarkastellaan joitakin sääntelyä koskevia uudistusehdotuksia, jotka muuttaisivat vararikon välttämiseen tarkoitettujen toimenpiteiden ja mahdollisesti toteutuvasta vararikosta aiheutuvien kustannusten välistä tasapainoa. Erityisesti pohditaan voitaisiinko kehittyvien ja siirtymätalouksien institutionaalisessa rakenteessa soveltaa erityislainsäädäntöä. Tämän lainsäädännön myötä pankkien ongelmiin tartuttaisiin viivyttelemättä, ja mikäli pankin varat ovat huvenneet, sen toiminta lopetettaisiin tarpeen vaatiessa kokonaan ilman, että siitä koituisi veronmaksajille ylimääräisiä kustannuksia.

Avainsanat: vararikko, pankit, siirtymätaloudet, kehittyvät kansantaloudet

JEL-luokittelu: K23, G21, O16, G28, E53

Contents

1 Introduction

The last two decades have seen an unwelcome rash of banking difficulties round the world. The difficulties have resulted in substantial losses not just to those directly involved in the banking system as owners, creditors and depositors but to society at large as taxpayers, consumers and savers. At over $1trillion, the fiscal cost alone over the last ten years exceeds cumulative value of foreign aid (Passamonti, 2003). In response there has been substantial analysis of the causes of such difficulties and a multitude of advice about how to avoid such difficulties in the future and how to handle such difficulties as do occur.[1] There has also been very considerable institutional and regulatory change, with the setting up of stronger independent supervisory authorities, a focus on 'financial stability reviews' and the improvement of information on both the economy and on the banks themselves. The 'Basel' network has been highly active both with the original Capital Accord and the new, Basel2, proposals (Basel Committee, 2003) and the Financial Stability Forum. We can go on. However, remarkably little has been done to assess the distribution of costs and the degree to which various resolution techniques might affect both the cost and its distribution.

In Mayes et al (2001) (MHL) and Mayes and Liuksila (2003) we suggested a scheme for handling bank exit in a manner that would minimise the costs to taxpayers and would generally seek to place the costs of banking difficulties on those who had voluntarily taken the risk or were responsible for the losses. These proposals were made very much in the context of the European Economic Area (EEA)/EU, where there has been a reluctance to let any but small banks fail and a consequent redistribution of the losses.[2] The position in transition and emerging markets is different. In the Asian crisis, Indonesia, South Korea and Thailand all took a considerable number of banks into public ownership[3] but they also allowed the liquidation of a significant number of other banks (Hoggath et al, 2002). It is the purpose of the present paper to explore the nature of those differences and the extent to which the proposals can be applied in transition and emerging economies.

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[1] The list is long but Asser (2002), Basel Committee (2002), Campbell and Cartwright (2002), Giovanoli and Heinrich (1999), Group of Thirty (1998), Gup (1998), Hoggarth et al (2002), Hüpkes (2000), Lastra and Schiffman (1999), Ramsey and Head (2000), and Stern and Feldman (2003) give some idea of the flavour of what is available on the handling of difficulties.

[2] These proposals are part of a much larger package of supervisory reform (chapter 4–7 of MHL) where the emphasis is on increasing the role of 'the market' and market discipline in particular – see Mayes (2000) for an exposition. Appendix 2 includes a version of the discussion of the role of market discipline from Mayes and Liuksila (2003).

[3] In the South Korean case the state ended up owning over half the banking system.

This paper considers four principal questions:

(i) What conditions make it more likely that banks will become economically insolvent and difficult to reorganise in transition and emerging economies compared to more advanced countries?
(ii) Given that there are large losses that need to be resolved, why is it difficult for transition and emerging economies to take appropriate actions? What actions might they take to make things better?
(iii) In the light of the above, what can be done to limit the chances that banks become economically insolvent?
(iv) If all else fails who should pay?

The structure of the rest of the paper is therefore the following: Section 2 sets out the context. It begins by explaining why the problem of insolvency is different for banks than for other companies and hence why it is difficult to apply general insolvency law to banks. It then goes on to consider in the light of this why the authorities frequently look for exceptions to insolvency in practice. The cases of large banks or many banks facing problems at the same time are highlighted. The section ends by investigating the moral hazard involved in having such exceptions. Section 3 then proposes a legal framework for a less costly and more equitable approach to handling banks facing insolvency. This takes the form of a lex specialis for banks which enables all sizes of banks to be resolved rapidly and without interruption to their business in the event of insolvency without the need for public money except in the form of a guarantee for the new institution. Section 4 is the heart of the paper. It assesses the problems of implementing these proposals satisfactorily in the transition and emerging economies. Section 5 concludes.

2 Problems facing robust exit policies in transition and emerging economies

While avoiding bank failures may have been the norm in much of the EEA in recent years, such failures have been much more widespread elsewhere, including in the United States. Outside the OECD countries failures have often occurred not so much because the government chose not to bail out the troubled banks but because they did not have the resources to do so. This potential conflict of objectives complicates an already complex problem generated by uncertainty. The probability of a bank bailout will be heavily contingent, not just on the particular bank, its importance to the financial system, the political leverage of its owners and the cause of the problem but on the financial position of the government and

the extent of any competing claims at the time. This uncertainty will have an impact on the traditional moral hazard that stems from the possibility of a bank being bailed out should it get into difficulty.

While transition and emerging economies have much in common there is also much that differentiates them in the structure and quality of the banking system and its regulation. There is a spectrum, some of which clearly overlaps the position of OECD countries to whom the scheme outlined in Section 3 could readily be applied. The ensuing discussion is thus very much one of extent rather than a black and white classification of all transition and emerging economies.

2.1 Banks pose problems for the application of general insolvency law

The business of banking involves taking calculated risks in taking deposits from one group in society and lending to others, particularly when deposits can be withdrawn rapidly and loans have a longer time to maturity. Banks price the expected risks in the cost of their lending, along with a margin for profit, and hold a cushion of capital against the unexpected. Since bank failures can have expensive knock-on effects, the authorities tend also to insist on a minimum capital cushion and on safeguards to try to ensure that risks are well managed. These safeguards include constraints on who may own and run banks, corporate governance structures, risk management systems, risk concentration and requirements for disclosure of information. Even if banks are well managed the taking of risks means they will occasionally be unlucky or subject to a special event such a major fraud. Hence failures will always be possible.

The incidence of bank failures or circumstances that would lead to failure without intervention will be substantial in transition and emerging economies for a number of reasons. Banks will tend to be small and hence find it relatively difficult to diversify risks. In some of the transition countries, the authorities were positively keen to see quite a large number of new banks appear, to provide a market and an alternative to the monolithic state banks (Enoch et al, 2002). Managements and supervisors may also tend to have limited experience. This will be particularly true in a rapidly changing environment, where new firms, products and markets are emerging all the time. Information about borrowers is likely to be inaccurate and accounting and auditing standards generally may make it difficult to assess the quality of the banks themselves. Secondly economic structures in such economies may lead to volatility and to correlated risks if the economies are not particularly diversified.

Furthermore, the transition and emerging economies may also be distinguished by the extent of the loss in the event of failure compared to total

assets of the banking system, deposit insurance funds, government borrowing ability and GDP. If losses are small relative to the resources available then reallocations to enable greater equity may be readily possible. As they become larger, so it becomes more difficult to offset the impact of their initial distribution. Most of the largest proportionate losses considered in the Hoggarth et al (2002) survey lie in emerging economies.

Bank failures are different from the failure of other companies in at least five important respects that lead to governments wanting to intervene:

- the extent to which ordinary individuals are affected in their normal lives
- the ability to take informed decisions
- the consequences of the time it takes to complete an insolvency
- the knock-on effects in the economy
- the nature of insolvency and the ability to run down assets.

The effect on ordinary people. In the event of failure of other companies customers are only exposed to the extent of their current transactions and even then, where substantial sums are advanced before delivery, as in the travel industry, it is customary to insure such advances or keep them legally separate from the assets of the firm so they cannot be attached in the event of failure. In banking, depositors are exposed to the full extent of their deposits, which could represent people's life savings. Even if losses are only partial, having one's assets tied up for the long periods typical in insolvency could have a major impact on the well-being of those involved, particularly if they have few other resources to draw on. The authorities have therefore tended to respond by insuring deposits, at least up to some limit that covers the sorts of balances that ordinary private individuals hold. However, most insurance funds are structured on the basis of relatively small financial 'accidents' and larger events bring the cost straight through to the public budget.[4] The FDIC, for example, is based on 1.25 percent of insured deposits for normal risks. In Brazil the funding element is 5 percent (Beck, 2003).[5]

The less financially developed the economy the less ordinary people and particularly the less informed and poorer groups in society will be exposed. However, financial development is likely to be an aim of governments in the hope this can improve the rate of development of the economy as a whole, so offering

[4] Unless the fund is held in the private sector, then in effect the whole balance will form part of the public sector's net debt and changes in it will affect the year to year public sector deficits.

[5] To get an idea of how readily such funds can reach their limits, the savings and loan debacle in the US, which was not big enough to register any decline in GDP, nevertheless exceeded the resources of the Federal Savings and Loan Insurance Corporation and had to be replenished from public funds.

security to people in their early dealings with banks will be particularly important. This will be of particular relevance for transition economies where previously the vehicles for deposits will have been part of the state apparatus and hence automatically viewed as being underwritten. A switch to the commercial remuneration of deposits can act as an incentive for people to switch to much more risky institutions without realising it.

The lack of information. The reasoning for protecting depositors in this way thus also includes the fact that it is unreasonable to expect the ordinary person to be informed about the risks that individual banks are running. However, banks are relatively opaque by the nature of their business, even to the authorities. Most people cannot be expected to appraise the risks they are taking on.[6] There are further consequences of this lack of information. First, in the event of difficulty, the more informed larger depositors and creditors will be able to get their money out first.[7] Second, depositors in other banks, whether or not sound, may feel their deposits are at risk and start to withdraw them, thereby contributing to an expensive contraction of the financial system, as banks seek to realise assets in a slack market at discounted prices.[8] Informational asymmetries are likely to be larger in the transition and emerging markets. The less effective is market discipline, both in normal and problem times then the more misaligned prices are likely to be and the greater the chance of problems becoming larger before they are recognised and the more difficult it is to piece together a solution that does not involve financial intervention by the authorities.

The element of time. Insolvency is a time consuming process. It can take a long time for cases to pass through the judicial system. It can take even longer, in the case of banks, to work through the process of determining and valuing all the various claims and realising the loans to maximise the return to the creditors. Indeed, in some emerging economies the process may be impractical (De Luna-Martinez, 2000). It may make more sense to forbear on impaired loans because borrowers may be able to recover and service a loan sufficiently well that it can then be sold to another bank. In the short run, particularly in small economies, it may be very difficult for the private sector to find the resources to buy the impaired assets, even at deeply discounted prices. This increases the probability in

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[6] The banks themselves face the problem of limited information. Repayment of loans depends on future circumstances, such as the returns on projects and household incomes, whose current predictability will be difficult.

[7] Such asymmetric information applies in OECD countries; in the case of BCCI the major counterparties had already largely eliminated their exposures before the bank was closed but smaller depositors had not reacted (Herring, 2003).

[8] Although bank runs tend to be more talked about than observed in OECD countries (Kaufman, 1996) there have been panics in emerging and transition economies in recent years, Albania, Argentina and Indonesia for example.

emerging markets that the state will be involved.[9] The alternative of selling to foreign interests, even if politically acceptable in concept, might effectively involve a substantial net transfer of resources.[10] Even if it is possible to make an interim payment, creditors' and depositors' assets will be tied up in the resolution process for substantial periods of time. This may then have knock on effects to their suppliers and creditors in a contractionary spiral. It is worth noting that this deflationary spiral occurs on both sides of the balance sheet. Liquidators may take a harsher view of extending loans and cause a contraction in the enterprise sector of the economy, increasing the number of bankruptcies and defaults along the way (King, 1994). The authorities thus also have to consider the impact on debtors, who are not a party to insolvency proceedings, yet are affected by them, as part of assessing the general equity of the outcome.

Knock-on effects In addition to the direct knock-on effects we have just noted to creditors and borrowers alike, there are knock-on effects within the financial system as banks have substantial exposures to each other, particularly in short-term and unsecured instruments. While netting and other closure rules may mitigate this (at the expense of other creditors and depositors) this runs the risk of exporting the problem to otherwise healthy banks. The evidence for the size of such contagion is mixed even in the advanced countries (de Bandt and Hartmann, 2000) but this may be an area where markets are less developed in transition and emerging economies, particularly in areas such as derivatives which pose special problems in the US (Herring, 2003). Even more contentious is the suggestion that depositors themselves lose confidence in the system as a whole and seek to withdraw their deposits from healthy banks, thereby tipping them too into difficulty through premature sale of assets (Lastra and Schiffman, 1999). However, in this case the central bank should step in as Lender of Last Resort as this is problem of illiquidity not insolvency.

The special nature of bank insolvency and the ability to run down assets. In the case of an ordinary company, insolvency normally occurs when it is unable to pay its bills and not because its balance sheet shows liabilities greater than its assets. It is usually triggered by a cash flow problem. Most of a nonfinancial company's assets will be already used as collateral for loans and hence there is little opportunity for it to alter the balance sheet in a major manner.[11] A nonfinancial company insolvency will therefore tend to result in a substantial loss to unsecured creditors given default. A bank on the other hand normally trades with its assets clearly exceeding its liabilities, not least because the authorities

[9] This trend towards forbearance has been clearly observed in the US (Kane, 1992, for example).

[10] Since overseas purchasers of the business are buying both sides of the balance sheet there may be no capital inflow.

[11] Although some companies have effectively been able to raid the pension fund in the short run (Draghi et al, 2003).

require it to have a substantial capital cushion. Much of its assets would be of value to competitors. If it gets into difficulties it can run down its assets a long way to pay off the liabilities that are called, before it reaches a cash flow constraint. In this process it can pass through the point where its liabilities exceed its assets yet still have a long-list of unencumbered assets that it can continue to liquefy, albeit at a discount. It can thus continue trading at the expense of continuing to deepen the insolvency. If a bank can be caught early, the extent of the insolvency may be quite small and the loss given default relatively minor to all but the most junior creditors. This impels the authorities to put in place requirements for Prompt Corrective Action,[12] so that banks do not have the opportunity to worsen their position substantially. These requirements usually inhibit the owners from expropriating the creditors and push them to coming to agreements that will recapitalise the bank.

Unfortunately the evidence, even in the countries with the strongest PCA requirements such as the US, is that the authorities tend to delay and allow the problem to mount (Kane, 1989; Benston and Kaufman, 1989). In emerging and transition economies this problem is likely to be considerably greater even if there are no problems from the authorities being open to pressure to forbear from the government and other vested interests. It may be more difficult to determine the extent of the problem, to find potential buyers and impose sanctions on those involved, for example. The ownership form of the bank is particularly important in this regard. If a bank is not a quoted company and does not have any marketed subordinated debt it may be very difficult to get any effective market signals about its condition. There will be few other forces encouraging the management and owners to restrict their risk-taking and the exposure of the creditors. If the deposit insurance fund does not have enough resources to cover the potential loss then it too may seek to put off declaring insolvency (Eisenbeis and Wall, 2002).

2.2 The pressure to make exceptions: 'Too big to fail', too many to fail and the assessment of losses

The sheer size of the financial crises in recent years has impelled governments to act. If many banks are in difficulty at the same time and the financial and economic system are under threat a government cannot sit idly by, even in circumstances where there is little it can do, as that would be political suicide. One of the dangers of this experience is that it leads people to think that this is a normal reaction to banking problems, and Section 2.3 considers the moral hazard

[12] Structured Early Intervention and Resolution (SEIR), in the terminology of Benston and Kaufman (1988), Benston et al (1989) and Shadow Regulatory Committee (1992).

this involves. Traditionally, the approach has been that in normal circumstances individual banks facing failure would not be saved, even if there were substantial compensation for depositors and creditors. The choice over what to do depends upon the extent of the loss and the quality of the bank's remaining business. At 'best' there would be an assisted merger in the private sector, probably with a division of the bank into a saleable part and into non-viable 'bad' bank, or the creation of a 'bridge bank', run by the authorities in some temporary form of nationalisation. Hoggarth et al (2002) have a neat exposition of the choices available. However, in some cases, where the authorities think that the existing bank has a future, loans have been made in an extension of Lender of Last Resort into what is effectively Investor of Last Resort. The collateral for such loans may be of disputable value if the bank is insolvent in the sense of having negative net worth. The less transparent the regime, then the easier it is to offer such support and the more likely it is that interest groups will be able to push the government into making such loans. Indeed many governments have not needed pushing and have been prepared to advance loans to institutions that are of political value to them. Even among the most advanced financial systems such support can occur (Hadjiemmanuil, 2003). Goodhart and Schoenmaker (1995) show in a study of failing banks in 24 countries that bailing out with public funds is more than twice as frequent as permitting liquidation. However, it is important to bear in mind that at the time the central bank may not be sure if it is lending to an insolvent bank if it receives what appears adequate collateral (Goodhart and Huang, 1999).

Too big to fail. At some point, however, even in regimes like the United States where the framework is relatively transparent and the scope for support limited, the potential costs of failure of a large bank may be thought too large for the authorities to contemplate. This is normally because of their potential spillover into the rest of the system. Stern and Feldman (2003) contend that this argument is readily overdone and indeed encourages banks to try to grow or play such a role that they are 'indispensable' to the success of the financial system. They suggest that it is possible to run the regime, in the US at any rate, in such a way that no bank is 'Too big to fail'. The proposals in Section 3 are certainly designed to enable that to be the case.

However, it is difficult to avoid the 'Too big to fail' argument in economies where the banking system is highly concentrated, as in the Nordic-Baltic region (Sigurðsson, 2003) and in many other transition and emerging economies. The same applies if the problem is not detected before it becomes very large, even though it applies to only one bank. A major loss representing a noticeable proportion of GDP may have a harsher effect on the economy as a whole if its impact is concentrated on those immediately affected rather than if it is spread more widely or indeed spread over time through public debt and later taxation.

In a sense the description 'Too Big To Fail' is a misnomer. Something more along the lines of 'too big to be closed and liquidated' (Hüpkes, 2003) is meant.

At some point a bank is so big that the consequences of its ceasing to trade are unacceptable. Some form of resolution is required that, while it may wipe out the existing shareholders and impose losses on unsecured creditors, nevertheless allows the business to continue. If a solution can be found that avoids liquidation then it is much less likely that the losses involved will be 'too big' for those exposed to bear.

Too many to fail. The argument for government action is, however, most persuasive when the banking problem runs across many institutions at the same time – a problem of 'Too many to fail' rather than too big to fail. Ingves (2003) argues that such circumstances normally have either macroeconomic or microeconomic causes (although a combination is likely). In the macroeconomic case the problem may be a major external shock or natural disaster. The collapse of the former Soviet Union was a contribution in the case of the Finnish crisis at the beginning of the 1990s. The ripples from the Asian crises in 1997 extended to other countries, such as the Czech Republic, even though they were not directly affected. In such general 'no blame' circumstances, governments try to stabilise the macroeconomy against the consequences of the shock. It is easy to extend the argument to generalised support for the financial system to avoid the external shock leading to a debt-deflation spiral (King, 1994). However, such macroeconomic problems are often also the consequence of government action (Kaminsky and Reinhart, 1999). Following unsustainable policies, say in the form of an exchange rate peg, will result in rapid adjustments when the last straw is added. Such a policy, in trying to track the ERM was clearly an important contribution to Finland's crisis, similarly failure to address fiscal management problems in Argentina meant that confidence evaporated when the real exchange rate appreciated. A government can thus be responsible for the crisis in the sense of having a system that is prone to generate such drastic adjustments. There is therefore an argument that if the shock is external, society at large should pay, not just those exposed in the more marginal banks.

It is difficult to see where such an argument should end. It is clearly easier to apply in small open economies, particularly those with relatively undiversified systems. They always find it relatively difficult to attain a stable exchange rate regime, hence solvency-threatening shocks will be more likely. However, rather than responding through bailing out, it may be possible to increase the economy's resilience to shocks. A move to inflation targeting and a fully flexible exchange rate may offer rather more protection from extreme shocks (Sepp and Randveer, 2002), for example.[13] Even where the alternative end of spectrum is used to anchor the system, as with the currency board in Estonia, the consequence of a

[13] In agricultural societies, where losses of income may be massive when a harvest fails and not reversible until the following year, farmers, their suppliers and financing institutions all operate with much larger cushions, hence reducing the threat of insolvency to levels tolerable elsewhere.

shock such as the Russian crisis of 1998, can be amplified by the banking system (Kaasik et al, 2003).[14] In such circumstances it by no means clear that the appropriate response is through support for banks rather than macroeconomic adjustment.

The argument is equally open to misuse in the case of the 'microeconomic' causes, which in Ingves's terminology implies that it is the regulation and supervision of the banking sector that is not being run satisfactorily. Thus if banks are being allowed to evade capital adequacy requirements or run very risky strategies, then in some sense it is the authorities' fault that they get into difficulty and the authorities' responsibility to help get them out of it. One of the most common examples is financial deregulation/liberalisation; Gruben et al (2002) explore this for Mexico and Argentina.[15] With stronger market discipline lending did not increase rapidly in Argentina, unlike Mexico (and Canada). Removing barriers faces banks with competitive threats and market opportunities that they have not previously dealt with. Even prudent organisations will make serious strategic errors in these circumstances. If there are strong possibilities of first mover advantage then banks would be foolish not to try to move rapidly into the new business. Yet just that rush for the market is bound to create a fallout. Not everyone can succeed, as is obvious from the development of new industries. The internet boom of the late 1990s was a rational response to the probability of major gains for the successful few. For banking authorities the fallout is more complex and arguably, therefore, the way in which liberalisation is introduced has to be preceded by changes in the supervisory framework and risk management regime within banks (Gruben et al, 2002; de Juan, 2002).[16] Such novelty for both supervisors/regulators and bank managements will tend to be larger for transition and emerging markets even if they follow templates laid down by the IMF or OECD countries. Managing regime change well is a particular challenge for emerging and transition economies.

Inadequate assessment of the net costs of different strategies under insolvency. A third factor that contributes to the willingness of the authorities to act by bailing out banks is a failure to unpick the consequences of different bank exit policies from the overall effects of the crisis. The costs of the Finnish banking crisis of the early 1990s are variously estimated between around 7 percent of

[14] Estonian banks cut back lending sharply rather than raising interest rates. This reflects a common problem in transition and emerging markets. Because the market-clearing interest rate would be very high, given that many existing borrowers feel locked in and obliged to borrow more to pay the interest, quantitative restraint is the only sensible way for banks to proceed.

[15] It was also a feature contributing to the Finnish crisis.

[16] It has to be said that despite this being well-known by the second half of the 1980s (Hunn et al, 1989), the Nordic countries, with the exception of Denmark implemented the liberalisation process in a manner that contributed to the subsequent crisis by having banks and supervisor who were insufficiently prepared.

GDP, if one takes the net injection of public funds into the banking system, and around 50 percent of GDP, if one considers how long it took to regain the level of GDP implied by projecting the longer run trend that prevailed before the crisis. Indeed, if one takes unemployment as part of the cost, that cost is still continuing and even on optimistic forecasts is not expected to reach pre-crisis levels in the current decade (Mayes and Liuksila, 2003, ch.1; Jonung and Hagberg, 2002; Hoggarth et al, 2002). In the face of such frightening numbers, it is not surprising that governments feel inclined to act. In the main, however, they will be gross over-estimates of the costs of one form of bank resolution compared to another, as they assume that all of the costs of the crisis are due to the banking problems and that the comparator should be a zero effect. The drawbacks of the approach can be seen from the fact that of the 32 cases considered by Hoggarth et al (2002) five were followed by an increase in GDP compared with previous trends – not a loss. Even a fall in GDP may not represent a net welfare loss, as crises may easily be therapeutic and enforce changes that would otherwise be difficult to achieve (see Bollard and Mayes, 1993, for a discussion of the mid-1980s crisis in New Zealand).

Thus, these numbers do not tell us the difference in impact between one approach to banking problems compared to another. In particular they do not tell us the difference in effect between a strong preventive regime and a regime where there is a swift reaction in the event of a crisis. In a very helpful and comprehensive comparison Hoggarth et al (2002) show how costs vary in a sample of 32 crises according to the measures used.[17] Nevertheless, there is an obvious reverse causation problem here. Larger difficulties will result in larger payouts even if larger payouts reduce the size of a given crisis.

Even though we can estimate for a particular bank what the direct fiscal cost of different methods of exit are likely to be *before* taking a decision, a much more comprehensive model is required to estimate the feedback effects onto the rest of the economy. Ex-post estimation of the net fiscal costs, as in the case of Ingves and Lind (1997), does not offer a clear answer either, even if the results are appropriately discounted to allow for the delays. Ex-ante the costs face a probability distribution for the likely future receipts on selling assets or repayment of loans. Once one is no longer prepared to take the current market valuation as being correct, the whole area becomes open to debate. This is a particular worry for economies where very little of the banks' assets and liabilities has a market price or any reasonable means of marking to market. Then ex-ante valuations will

[17] Costs are measured by 'fiscal' costs (how much was paid out gross from public funds) and two measures of output (GDP) costs (deviation in growth rates during the crisis period from the previous 3-year trend; deviation in GDP level during crisis period from previous 10 year trend). It is not clear how much these sums include all of the ancillary costs and contingent liabilities, such as administrative and legal costs, which can be several percentage points of the assets of a bank.

be highly contentious and there will be considerable scope for the authorities and interested parties to produce optimistic valuations that coincide with their objectives.

It is clear from the analyses of Daniel (1997) and Daniel et al (1997) that governments have used a variety of devices over the years to disguise the extent of the costs to the taxpayer of intervention in the banking system. A common device is to value nonperforming loans at artificially high levels. According to De Luna-Martinez (2000), the Mexican government purchased nonperforming loans at book value from the banks. This bolsters the banks at the time and effectively enables the government to write off the non-performance over a long period. Governments are likely to be subject to much lighter accounting rules for their assets than they themselves impose on banks. While the US system assumes that the cost to the deposit insurer, FDIC, is as good a proxy as any for the cost to the taxpayer, the number of routes available to the FDIC in the event are actually quite small – bailing out not being one of them. Furthermore wider costs are not considered, particularly any distributional consequences.[18] If the real choice between courses of action, given the circumstances, were considered by having even reasonably accurate assessments of their costs, then it is highly likely that the arguments in favour of a bail out would be much weaker.

2.3 Moral hazard

The biggest problem in assessing the potential cost of different approaches to bank exit is that expectation of the regime that will be applied, should failure threaten, affects people's behaviour, particularly that of bank owners and management *prior* to insolvency. Thus if creditors and depositors expect a blanket guarantee in the event of widespread banking problems they will be much more prepared to lend to banks without regard to the risks involved, as they have less to lose. If on the other hand bank management expects to lose its job and bank owners see a good chance of the value of their shares wiped out, they will have much greater regard to the prudence with which the bank is being run. 'How much?' is a much more difficult question to answer.

Granlund (2003) suggests that the impact of bank exit regimes on bank financing costs could be as much as 30–40 basis points in the major markets. The valuation by Fitchratings of implicit governmental guarantees is of the order of two ratings classes, again nontrivial. However, there is very little evidence that larger banks actually run greater risks as a result of their too big to fail status.

[18] Wider concerns are only possible in the US case if it is decided to invoke Too Big To Fail, which has not been done since the 1988 FDICIA reform and could only apply to between 10 and 30 of the largest banks.

Even if disciplining devices exist in the form of subordinated debt, Bliss and Flannery (2000) find that bank managements may not respond. The extent of the moral hazard involved from expected bailout is therefore difficult to judge. Stern and Feldman (2003) regard it as being significant even in the US, which has a regime strongly geared against bailing out.

The potential impact of moral hazard in transition and emerging economies seems likely to be more complicated. Bank deposits tend to be a smaller ratio of GDP and hence the ability to bail out may be greater. On the other hand the probability of default and the loss given default may also be larger, hence reducing the ability of the fund to pay in the event of default. In the face of a lack of clear rules to the contrary, practical difficulties in the implementation of insolvency proceedings, and generalised worries over the fragility of the financial system the chance of the moral hazard being greater seem good. The idea of 'constructive ambiguity' works in the opposite direction to that often suggested. While the risk averse may react to uncertainty about whether they will be bailed by being more cautious, those more inclined to take risks and hence be those most likely to encounter problems are more likely to take an optimistic view and hence take more risk. The spread of prudential behaviour by banks may increase if the authorities are ambiguous about their likely actions under potential bank failure. Since it is the tail of the distribution, which matters for bank failures, this is likely to increase both the number of potential failures and their size.

The discussion of moral hazard in this context normally revolves round the existence of deposit insurance, particularly if the financing of that insurance places little burden on banks or their customers (Beck, 2003). However, it is not at all clear that the general run of insured smaller scale depositors pay much attention to the riskiness of banks even where insurance does not exist. This is in part because of the existence of implicit guarantees. Even though deposits may be uninsured, as in New Zealand, for example, it would be very surprising if one of the main banks were to fail and no funds were made available to small depositors if large numbers of them seemed set to lose a lot of money. The insurance may deter a run on the bank by the uninformed mass of depositors but it is the larger uninsured depositors and creditors who have the main interest in monitoring and disciplining the bank. Since the deposit guarantee fund becomes a major holder of contingent liabilities it may exert a strong influence where there was little beforehand.

Thus, taken together, there are factors that enhance and factors that inhibit moral hazard in transition and emerging economies compared to their OECD counterparts. A reason for thinking the hazard might be larger, despite failures to bail out in the past is simply that by and large, the larger banks in the OECD countries appear not to have exploited the hazard entailed by too big to fail. In smaller communities bank owners can be well aware of the likely pressures on them from their neighbours. Though few like the owner of the bank in Telluride in

the Depression would be prepared to go to jail for obtaining loans from banks in New York to payout their customers when default seemed inevitable.

3 The scheme[19]

There is a downward slope of difficulty down which problem banks tend to slide and which requires increasingly drastic action to be taken. Although categorisation is arbitrary, there are four main tiers of 'problem' banks that have encountered losses:

(i) Banks whose capital is inadequate from a market (or their own) point of view but who meet regulatory standards
(ii) Banks that breach regulatory capital standards but are generally thought to be solvent
(iii) Banks that breach regulatory capital standards and are economically but not legally insolvent (net worth is negative)
(iv) Banks that are insolvent and can no longer continue trading without a capital injection.

Our concern in this scheme is with tiers (iii) and (iv). Banks in tier (i) do not require regulatory intervention but their plight will have been reflected in market prices and eventually in their ratings. Here we would expect private sector solutions. The bank might be able to continue by raising more capital from its owners and making drastic improvements to the business – cutting costs, selling profitable non-banking or banking parts of the business to improve both the capital position and the cash flow. More likely, they will find themselves in merger or takeover talks.

Banks in the remaining tiers require action by the authorities. Asser (2001) labels them jointly as banks in 'distress', although terminology tends to differ among authors. The Basel Committee (2002) refers to 'weak' banks 'one whose liquidity or solvency is or will be impaired unless there is a major improvement in its financial resources, risk profile, strategic business direction, risk management capabilities and/or quality of management.' (p. 1) Banks in tier (iv) have reached the point of closure or taxpayer bailout, everything else having failed (or the shock being too large). There are some circumstances, as with Barings, where the shock (loss) is so large that the bank goes straight into tier (iv) without any prior warning. In those cases a market solution may still be possible because it has not

[19] A summary of the MHL scheme drawn from chapter 1 of Mayes and Liuksila (2003) is included as Appendix 1.

previously been tried. It is well known that a bank is worth more alive than dead (Guttentag and Herring, 1983) even though its value may be negative. In any case, whatever the value of the bank is will be reflected in its purchase price.

Banks in tiers (ii) and (iii) can continue trading at least for a while even if what they are effectively doing is realising their assets at steadily deeper discounts in order to pay off depositors and uninsured creditors who are unwilling to bear the increased risk. The crucial difference between the two is that in tier (iii) there is no longer enough value in the bank to pay out all the creditors and depositors if they should wish it. Such a bank is not legally insolvent, as it is still able to meet its day to day obligations. In some environments it could continue almost indefinitely in this state, for example, if the market believes that the bank will be bailed out should it ever fail to meet its obligations. However, banks that are in this tier, either where there is no guarantee or where the market's belief in the implicit guarantee is erroneous, are in effect trading at the expense of the uninsured depositors and creditors and the underwriters of the insurance fund. The window in which the junior or subordinated debtors will receive anything much in the way of payout in the event of failure is quite small as the costs of insolvency normally mop up quite a substantial part of the value of the company, all of which is set off against the claims of the creditors in reverse order of seniority. We argue that banks in tier (iii) should be treated in the same way as tier (iv), as they are only viable through the contingent claim on the taxpayer.[20]

To meet the concerns of Section 2 any efficient and equitable approach to bank exit has to include:

- those involved in running banks and exercising control over management as shareholders, creditors, depositors etc. have to believe it will be applied – without exceptions
- it should cut in rapidly at an early stage in the process so that there is less opportunity for losses to mount
- it has to be capable of being applied very quickly so that the business of the bank can be continued on the next trading day
- it needs to offer an outcome no worse than the parties would get under insolvency and it needs to respect priority of creditors under insolvency
- losses should fall first on the owners and managers of the bank to the extent of their liability
- it should avoid calling on taxpayers, except in the process of ensuring the smooth functioning of deposit insurance and ensuring public confidence in the subsequent arrangements

[20] We deal explicitly with the treatment of banks in tier (ii) in a framework of Prompt Corrective Action (or SEIR, Structured Early Intervention and Resolution) in Llewellyn and Mayes (2003).

– it should apply equally to all banks whatever their size and ownership and the actions of the authorities in applying it should be public and transparent.

Such a programme cannot of course stand on its own and will need to form part of a wider system respecting the rules of good corporate governance, bank regulation and supervision. Deposit insurance is not fundamental to the scheme as such. However, the structure of any insurance schemes that do exist will affect both the credibility of the exit regime and the institutional arrangements required to deal with the priority of the insurance fund in insolvency. Moreover any such scheme will be in addition to other measures being implemented for reducing the chance of banking crises and the early detection of factors that might lead to such crises.

The MHL (2001) scheme seeks to meet these concerns. It provides a credible means for resolving any bank that is facing insolvency in a manner that avoids the use of public money and yet appears equitable in the face of the normal balance of interests applied in a country under insolvency. The scheme wipes out the shareholders first and leaves the creditors and uninsured depositors to bear any remaining loss according to the priority principle that would apply under insolvency. It can be applied very rapidly, so there is no need for the bank as a business to suspend trading even though ownership changes and it is applied early in the process of distress so that the chances of developing very large losses is reduced.[21] This means that the problems of too big to fail are likely to be avoided in the event of idiosyncratic shocks. However, too many to fail pressures might still emerge. The key impact of the scheme is expected to be largely deterrent. Managers, owners and uninsured creditors would have an increased incentive to see that the banks in which they have a stake are managed prudently and avoid getting into difficulty. If difficulty is encountered then there is a strong incentive to work quickly towards some private sector injection of capital, as the losses are likely to be larger if the state has to intervene.

The scheme has three principal ingredients

– the authorities are required to take control of the bank according prescribed benchmarks
– the new administrator of the insolvent bank values the assets and liabilities up front and writes down the claims far enough to return the bank to operational solvency
– the bank reopens for business under new control/ownership with no material break in operation.

[21] We assume that the reorganisation process would take place over a 'weekend' so that a problem revealed on one trading day has a solution that results in trading being resumed on the next trading day.

It is worth filling in a little more of the detail before considering how well the scheme might operate in transition and emerging economies. The scheme is designed to meet the normal prerequisites for a good insolvency law. Aghion et al (1992) and Hart (1999) for example suggest three goals for a good insolvency law, each of which is aimed at making the process efficient.

(i) a good insolvency law should maximise the total value (in money terms) available to be divided amongst the insolvent firm's appropriate stakeholders;
(ii) it should adequately penalise incumbent management and shareholders so as to preserve the bonding role of debt, and
(iii) observe the absolute priority of contracts negotiated ex ante.

The Bank for International Settlements (2002) identifies three similar goals: efficiency (in terms of more to be shared out), equity (people getting what they should, relative to each other) and the reduction of legal and financial uncertainty.[22]

The key starting point is that bank insolvency needs to be covered by a lex specialis (public law) that enables the authorities to step in and take control of the bank from the existing shareholders. A lex generalis, private law approach to insolvency means that the process has to be handed over to the courts and that quick resolutions are much less likely. Hadjiemmanuil (2003) (and to a lesser extent Blowers and Young (2003)) argue in favour of the 'London approach', whereby the courts manage the process under general insolvency law but normally act closely under the advice of the competent regulator, now the Financial Services Agency and previously the Bank of England. The UK has the benefit of having operated this partnership for some time. It is not immediately clear that other regimes would be able to operate this in a non-conflictual manner. Courts would have to make it very clear that private petitions that could upset and delay the process would not normally be entertained without very good cause, otherwise the scheme would fall at the first hurdle and the reorganisation would not be rapid enough to keep the business of the bank operating. To quite some extent such systems work on trust rather than simply the letter of the law. Transition and emerging economies are relatively unlikely to have the history that would make such an arrangement possible. The Swiss proposals (Hüpkes, 2003) come much closer to the balance MHL (2001) had in mind.

The second requirement is a straightforward required intervention point for the authorities that cannot be evaded. MHL suggest it should be zero net worth or 'economic insolvency', so that value of the bank is zero and hence in taking over the bank from the shareholders they are not being deprived of anything (except

[22] I am grateful to Bethany Blowers and Garry Young for this formulation (ch. 5 in Mayes and Liuksila, 2003).

worthless claims). As we have noted, determining the net worth is a non-trivial matter but it is necessary not just for intervention but for writing down the claims to the point that the value becomes positive.[23] In the US the mandatory intervention point for closure is when regulatory capital falls to two percent of assets. It is judged that at this point a bank will clearly have negative net worth. MHL did not follow this lead because it involves using a valuation that is expected to be misleading and may in practice permit considerable insolvency before the intervention point is reached. Nevertheless, having a hard fast intervention point based on supervisory measures as in the US is better than having inexplicit benchmarks.

The third requirement is institutional. In many countries a whole variety of organisations plus the courts have to be involved in bank resolution. The problems are even worse if the bank is part of a complex financial organisation that runs across both sectors and countries. Some institution needs to have the lead and the administrators who can be put in to implement the change have to form part of a panel that is agreed in advance. The list of possible candidates for taking the lead includes the central bank, the bank supervisory authority, the deposit insurance agency and some high level corporate regulator or commerce commission. It should not include the ministry of finance or any other organisation that might have direct access to funds that could be used in a bailout. Clearly the rules, priorities and forms of consultation need to be agreed in advance, particularly where one country is going to act on behalf of all the interested parties in a single action. The more complex and opaque the set up, the less plausible it is that it will be able to act in a robust manner in the event of a problem and the more likely that powerful interests can negotiate support or at least forbearance.[24]

The MHL proposals are thus very similar to what exists in the US since FDICIA but are somewhat more encompassing and have a different suggested intervention benchmark. They also form part of a much wider supervisory framework for banks, that includes requirements for corporate governance structures, public disclosure, transparency in the regulatory process and accounting/auditing standards.[25]

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[23] The Reserve Bank of New Zealand suggested to us that the claims should be written down to the point that the new bank met the capital adequacy requirements and that the creditors/depositors in effect became the new owners of the bank, receiving an equity for debt swap in proportion to the absolute write down of their claims. This is similar to the Aghion et al (1992) proposals but these have not to our knowledge been implemented.

[24] Das et al (2003) show that these elements of regulatory governance are clearly related to financial system soundness.

[25] Chapters 8–10 of Mayes et al (2001) outline the proposals for bank exit policy while chapters 4–7 set out the wider proposals for reforming banking supervision, drawing heavily on the arrangements that have been in place in New Zealand since 1996.

4 The problems of implementing the scheme in transition and emerging economies

Since our proposals represent a substantial change to existing procedures, many reasons can be advanced as to why they might pose problems in implementation. This section considers the most obvious that might apply in transition and emerging economies. The introduction listed six issues that might inhibit the implementation of the proposed scheme:

- a weak *history* of regulatory, supervisory and banking practice
- *poor quality information available to bank management*
- *poor quality of information available to the market and supervisors*
- *limited tools available particularly market discipline*
- *limited skills and experience of those involved*
- *strong influence of interest groups and limited transparency of processes.*

These impinge in a number of different ways.

4.1 The problem of history

There is a dilemma in the introduction of any more rigorous regime. On introduction it is likely to reveal problems, as it does not start with a clean slate. Bad lending and regulatory practices in the past may have created a substantial 'black hole' of largely valueless assets and a major contingent liability in the expectation that the state will look after the future.[26] The extent of problems with some banks may greater than their creditors and unsecured debtors realised. If introduction of the scheme is going to result in a string of bank failures and loss of confidence by many in the existing banking system then there will be an understandable reluctance by the authorities to implement the scheme. The

[26] However, many economies, particularly the transition countries, have already experienced major banking crises that have entailed radical change in the system, resulting in substantial foreign ownership of banks and closure of the black hole. Fleming et al. (1997) set this out for the Baltic States and Enoch et al.(2002) for Bulgaria, Mongolia and Lithuania. Much of the initial problem arose from the nature of conversion of the state banks to the new regime and the proliferation of new banks. Having a very permissive approach to new entrants created considerable problems and the poor functioning of the court system hindered their resolution. However, having gone through the experience the position is now considerably improved, in terms not just of bank quality and management but in the institutional structure of supervision and the stability of macroeconomic policy. In the early days of transition, banking was heavily hampered by the lack of a proper framework of property rights that could give concepts such as collateral a viable meaning.

chances of rehabilitating the banking system may be small and the expectation may be that come the first serious pressure there will indeed be a crisis and the banks will close. The experience of Indonesia in 1997 provides helpful illustration. The closure of 16 banks on 1st November 1997 was not very effective in establishing confidence in the rest of the system, as it was not clear whether there would be further closures (or backtracking)[27] (Boorman and Hume, 2003). A good time to introduce a reform in legislation and indeed in the structure of the authorities responsible is indeed shortly after a crisis (as was the case in the Nordic countries). However, it is hardly responsible to wait for a crisis before making changes in the public interest. The problem is to match the legislative change with other actions to ensure confidence in the system. Some sort of guarantee for the continuing banks is the normal way to proceed (Lindgren et al, 1999).

Furthermore it is unlikely to be the introduction of the robust exit policy per se that contributes to a loss of confidence in the banking system. That is more likely to come from the improvement in standards of information necessary for an efficient supervisory system, discussed in Sections 4.3 and 4.4. Indeed, an improved exit policy is likely to be one of the features needed when information improves.

Similarly, limitations imposed by a lack of credibility in the existing supervisory and regulatory institutions, as a result of their history, need to be tackled irrelevant of exit policy. Wholesale change is often more effective than rehabilitation, as it is difficult to demonstrate that an existing organisation has fundamentally changed if it is still staffed by the same people doing the same job. Such institutional change is therefore likely to be implemented before progressing with exit policy, or at least as part of the same legislative reform. The next section therefore turns to these practical limitations before moving on to the quality of information and the lack of market discipline.

4.2 Barriers to action

The biggest barriers to effective action in the run up to insolvency are institutional and legal. If clear and predictable means of resolving problem banks do not exist then every problem becomes a political one. If the supervisors or whichever is the relevant agency charged with ensuring compliance with the regulations and prompt corrective action in the event of noncompliance do not have both the freedom and duty to act, then resolution will be difficult.

[27] The President's son owned one of the banks and was effectively able to reopen it under a new name – an example of the operation of effective political pressure under the last of six headings of difficulties in the case of transition and emerging economies set out in the introduction.

In transition countries, in particular, the authorities face a major problem in handling insolvency, in that many of the significant banks will be foreign owned and hence not primarily under their control. However, in normal circumstances, this is likely to be a second-order problem, as this same foreign ownership is likely to impart more stability and better management of risk, hence reducing the chance of insolvency or serious banking difficulties. The foreign parent is likely to have more than adequate resources to meet the losses of its subsidiaries in smaller markets and indeed the reputational incentive to do so. However, should insolvency threaten the foreign banking group as a whole, the host country of the branch or subsidiary will not have much of a say in the resolution of problems, which will be undertaken by the lead regulator, who will be in the home country.

This presents two potential problems. In the first place a bank that is important in the host country, in the sense that their closure or problems may have systemic implications, may not be systemic in the home country. The home country authorities may therefore be prepared to encounter all the problems of insolvency and allow the bank to shut. Even if they do not, the form of resolution of the problem they choose may be very different from that the host country might apply (Mayes and Vesala, 2000). For many emerging and transition economies the discrepancy in size can be very large, take Estonia and its Swedish-owned banks for example (Riksbank, 2003).

The second difficulty that emerges is that if public funding or insurance is to be used in the home country it will not extend to the host country to the same extent or possibly at all. The degree to which the authorities in one country will be prepared to bail out or otherwise compensate the depositors or creditors in other countries is likely to be decidedly limited. Indeed the natural reaction, as in insolvency itself, would be for each country to try to find a solution that is to its relative advantage, as was demonstrated in the BCCI failure.

Although the worst of the of the opportunities for beggar-thy-neighbour solutions have been reduced since the BCCI affair the problem has not disappeared, even in the EU, with the Winding–up Directive (Hadjiemmanuil, 2003; Campbell, 2003). Although the EU now has an approach to handling banks whose operations run across borders through branches, there are still discrepancies in the case of subsidiaries. The single entity approach to the resolution of companies is normally thought to be the way of maximising value for the creditors. It is then possible in the resolution of the group as a whole to consider the selling of parts for the benefit of the group's creditors, wherever they happen to be.

Outside the EU/EEA the authorities have discretion over whether foreign banks should be allowed to set up or acquire subsidiaries and can reject solutions that would change the management of banking subsidiaries in their jurisdiction in ways they find unacceptable. However, in rejecting a resolution, they might

precipitate a closure of the subsidiary instead.[28] In the EU/EEA, the 'passport' and the principle of home-country control make the position clearer but not necessarily easier and may actually make resolution of bank insolvency for a transition country entering the EU, become somewhat more difficult.

Supervisory authorities have a network of memoranda of understanding (MoUs) such that they can share information in order to co-ordinate the supervision of large and complex cross-border banks. While these may be slanted to provide more information in the event of difficulty, it is clear that each supervisor will be concerned to resolve the problem from its own point of view. More importantly, this co-operation does not normally extend to the use of powers for resolution or the injection of public funds. Here it is still the case that the authorities expect to act on a case by case basis. When actions have to be taken in a hurry then it would be difficult to include the views of second countries even where the home country is keen to do so. When the problems result in an extended period of 'prompt' corrective action then the opportunity for such discussions exists (Brouwer et al, 2003).

The foregoing discussion presupposes that countries have the resources to handle such cross-border banking problems if they occur. This is not the case even for the OECD countries. One of the key issues for some of the smaller EEA countries is that they are rather small compared to their largest banks, which are international. The problem applies even more to Switzerland where UBS and Credit Suisse while headquartered in Switzerland have most of their operations elsewhere.[29] Transition and emerging market economies are not normally in that position as a home country, but may readily be a host with a bank whose home country cannot cover the world-wide losses.[30] However, they can readily find the cost of a banking crisis or of demands on a deposit insurance fund can be greater than the fund can bear. While for advanced countries the solution may be simply to issue some more debt in the short run this option may not be open.

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[28] Clearly there are attractions in having locally incorporated subsidiaries that are themselves required to hold adequate capital against risks. Then the authorities have a functioning entity that can be compulsorily acquired and placed under new ownership in the event of insolvency. However there must also be attractions to having branches or other arrangements where local depositors are insured by home (foreign) country, as is the case for Deutsche Bank in New Zealand (Deutsche Bank New Zealand Group, 2003, 2–3).

[29] Schoenmaker and Oosterloo (2993) show that around a third of Europe's 30 largest banks have at least half of their assets outside the home country and would pose major problems of saving for their home authorities.

[30] Where such countries are acting as an offshore 'haven' for foreign banks then they may very well have banks that are large compared to the country's resources but in those cases no one is expecting a bailout. Indeed, the lack of protection for depositors and creditors normally forms part of the objection to the existence of such havens.

The extent of the problem is readily illustrated by Finland, which went from having a trivial public sector debt to GDP ratio to nearly 60 percent as a result of the crisis. Although by far the largest of the Nordic crises this crisis was still not by any means the largest in international terms. Switches of this size may well be impossible to sustain. Two outcomes are therefore possible. One is to allow the deposit insurance fund to default. The other is to start monetising the debt. The second leads to all sorts of other problems but limiting the liability of the deposit insurance fund has a lot to recommend it. In Switzerland the liability of the fund is limited to 4bnCHF.[31] The Finnish problem is simply that with international banks it becomes much more difficult to follow a solution that is manageable for the domestic economy and suitable for all the countries involved. It would be difficult to justify a major expenditure by taxpayers in one country to support depositors in another. In these circumstances banks would be 'too big to save'. However, the necessary international co-operation to address the problem seems more likely to occur after the first serious crisis in this regard rather than before it (Brouwer et al, 2003; Riksbank, 2003).

The MHL proposals go down this road by a different route, which is to limit the potential demands on the fund by acting early. This reduces the chance of a large claim, except when there is an economy-wide problem. In those circumstances, of course the better remedies themselves are macroeconomic rather than financial. However, the other tightening up of the supervisory arrangements should reduce the chance of banking induced financial crises. In this respect the proposed scheme therefore offers improved prospects for transition and emerging economies than current arrangements.

4.3 Quality of information, accounting standards and transparency – disclosure by banks

One of the inherent problems in monitoring banks is opacity. Banks themselves can only estimate the risks they face and second-hand observers, whether market analysts, rating agencies or supervisory authorities, will always be at a disadvantage. The more open banks are, the greater the chance that outsiders will be able to detect problems and force earlier action. However, the main aim is deterrence, if banks expect that they may be found out, then they become more reluctant to run the risks that may cause the problem. No disclosure regime will provide enough detail but the Basel2 proposals, by falling short in some respect of what is already disclosed in New Zealand, for example – quarterly reports with

[31] Such a limit is in addition to any that may be applied on each individual depositor or to the share of the liable capital (30% in the case of Germany, for example).

short delays, regularly audited, with disclosure of peak exposures, not end period figures or period averages – are not offering a great deal of assistance to outside monitors (or indeed to shareholders).

The key incentive in the New Zealand case is to make bank directors liable for the disclosure statements made (rather more forcibly than the controversial requirements in the US following the Enron collapse). By making them responsible for the accuracy of what is disclosed directors, whether executive or nonexecutive, have an incentive to ensure that they are convinced that the management in the company are revealing what is actually the case and so on down the chain of responsibility. Fining rich people and banks for infringements is always likely to be ineffective but making bank directors liable for up to three years in gaol simply for false disclosures sharpens the focus considerably. (Fining banks when they are in difficulty is singularly unhelpful as it simply makes the problem worse. It does not even work as a deterrent as it is the uninsured depositors and creditors who pay. In countries where the deposit insurance fund does not have priority in claims it results in one part of the public sector paying another. If it is private sector funded then the successful banks and their depositors pay and not those responsible in the failed bank.)

Given that many of the OECD countries have problems with the extent and quality of disclosure it is only to be expected that transition and emerging economies will find the problems even more difficult. However, disclosure of information is of little value if what is being disclosed is itself rather inaccurate. In many countries, even where accounting standards are adhered to, the conventions relate largely to historical values and hence produce information that is of little value for decision-making. This provides one of the biggest barriers to assessing the extent of problems in EEA countries, for example. Information is not produced in a form that enables the assessment of net worth. The trend is towards more market valuation but slowly and with considerable reluctance. Ensuring audits that are both independent and informative is a widespread problem, as has been revealed in the US. In some jurisdictions auditors are not obliged to show adequate independence and are not open to court action for the accuracy of their statements. It is interesting in this regard that the Japanese authorities have used auditing and accounting standards as a means of forcing banks to admit their insolvency, as in the case of Resona earlier this year. Simply disclosing the problem and the extent to which the taxpayer is going to pay is a better route to resolving the issue than leaving the extent and incidence of the loss uncertain. In that case, households will seek to protect themselves, by building up saving outside the banks, helping to induce deflation.

It is easy to blame banks for the poor quality of the information they disclose but the same difficulties will apply to the banks themselves in trying to obtain information from actual and potential customers. Insofar as the information they can gather about borrowers is rather suspect, then banking relationships tend to be

built on other more informal bases. With a lack of reliable credit histories or indeed means of establishing an independently verifiable record of good performance, banks have to operate on a more collateralised basis or with guarantees from others with some sort of record. However, this same collateral and the guarantees may be difficult to value. The proper valuation of a contingent liability is only revealed if the contingency materialises. It is only then that the bank discovers that the guarantee is not honoured or the collateral is not worth its face value despite audit statements.

IAS was only introduced in the Baltic States in the mid-1990s and lack of familiarity with its provisions and insufficient focus on the information contributed to the banking crises (Fleming et al, 1997). Tax rules and the ability to make loan loss provisions were only introduced after several years of transition.

4.4 A lack of tools – market discipline

It is clear from the foregoing that the transition and emerging economies may lack not just the appropriate institutional structures to apply effective supervisory regimes but that other tools are missing, particularly the minimum information set. Both supervisors and bank management need the necessary skills and experience but a system that relies heavily on enforcement by supervisors is bound to face more difficulties, as they will always have an information disadvantage. Market discipline plays a crucial role in supporting the efforts of supervisors both to maintain prudent risk management in banks and to resolve problems swiftly through the market mechanism (ie private sector solutions including insolvency). In general it requires highly developed, deep and well-informed markets to work well. This implies immediately that it is less likely to be effective in transition and emerging economies. The question is whether that limited operation will be sufficient. However, although the term market discipline is widely used in the context of supervising and regulating banks it is largely undefined. The new Basel proposals (Basel Committee, 2003) do not offer a definition despite labelling the ‘third pillar’, ‘market discipline’.

While market discipline is a general concept, which can be applied to all activity, there are many special features that affect its application in the field of banking. First of all the authorities restrict its operation by controlling entry and the range and nature of products. Borrowers have difficulty taking their business elsewhere, particularly when their bank is in trouble, while depositors can usually do so with all too much ease for the stability of the system. Discipline on banks through the product market is therefore severely impaired in many countries and this in itself should be a cause for concern to regulators in designing and supervising the operation of the system.

Attention in the banking industry therefore tends to focus on factor markets, primarily on the provision of financial capital. However, particularly since banking is a service industry, the labour market is an important ingredient in the process. In investment banking, teams can be bid away from one bank to another and the business will tend to move with them. The operation of the labour market is particularly important for senior management. One of the key features governing how problem banks behave relates to the expectations of senior management over their future. In the market for corporate control, the senior management may be part of what the acquirer wishes to purchase or they may be precisely what the acquirer wishes to dispose of as being the main reason for poor performance of the company compared to its potential.

The functioning of the market for corporate control is likely in many cases to be the most important in handling a problem bank. The existing owners retain control of the bank up to the point of insolvency or takeover by the authorities, although their actions may be increasingly circumscribed as the problems worsen. If a bank can be bought on the open market either directly or through an open bid for the holding company then the discipline on the bank from the 'market' will be much more effective. If the bank has a mutual structure, is largely private in character or part of a large industrial group (or owned by central or local government) then these pressures will operate very differently. It is clear therefore that in the current context 'market discipline' will be very uneven. There may be few alternative buyers and little pertinent information for such buyers as there are to make informed decisions except at very substantial discounts – they may want to be paid to take on the problem bank.

It is because of all the possible constraints on the other markets that there has been a focus in the literature (see Evanoff and Wall, 2002, for a survey) on the market for subordinated debt. If all banks had to hold a proportion of their capital in the form of subordinated debt that was actively traded and needed to rolled over frequently, then it might be possible to get a some fairly clear market signals that would act as a disciplining device on the bank. This seems a rather unlikely source of finance in most emerging markets but inter-bank finance will be normal. Here, in a less developed market, different pressures may emerge. With relatively few players it may well be possible for the other banks to gang up on a bank thought to be in trouble and in effect refuse to lend to it, in the hope that they, as the most likely purchasers, can extract a discount. This market closure then pushes the authorities towards intervention.

In any case it is necessary to have more than a clear market signal for it to act as a disciplining device (Bliss and Flannery, 2000). Bank managements or the

other stakeholders, including the authorities, that are involved have to respond.[32] Thus the vital ingredients for market discipline are twofold: that there should be an open active market with sufficient well-informed players that the resulting 'price' signal reflects a general view.[33] Second that the corporate governance of the bank and the financial system should be such that this signal is translated into action. Given the constraints we have mentioned affecting markets that impinge on banks it is likely to be a combination of effects on all of the 'stakeholders' in the bank that is required to offer effective market discipline. Lewellyn (2000) suggests it is possible to identify at least seven necessary conditions for market discipline to work effectively, which between them comprise a viable framework.

The disciplining role of the markets (including the inter-bank market) was weak in the crisis countries of South East Asia in the 1990s. This was due predominantly to the lack of disclosure and transparency of banks, and to the fact that little reliance could be placed on the quality of accountancy data provided in bank accounts. This is not an issue for less developed countries alone. For instance, market discipline has not operated efficiently in Japan due largely to insufficient financial infrastructure (weak accountancy rules, inadequate disclosure etc). The lack of monitors in the form of rating agencies, market analysts and even competitors will be a substantial limitation in many small and emerging markets.

An exit regime merely provides an endpoint to the continuing sequence of pressures that assist the maintenance of prudent banking behaviour. If there is little pressure through the market then the main effort with have to come through the supervisory authorities who are not best placed to exercise it. If exit is not thought likely then banks may also refuse recapitalisation plans offered by the authorities that involve stringent conditions (Corbett and Mitchell, 2001).

4.5 The role of interest groups and lack of transparency in official actions

One of the most effective barriers comes not just from the rules or the institutional framework itself but from *the ability to delay*. If action can be sufficiently delayed then the ability to run a robust exit policy will be effectively removed. The

[32] The relevant stakeholders include: supervisory agencies, rating agencies, market traders, shareholders, debt-holders, depositors, managers, borrowers and employees. The list is not necessarily complete. The group clearly includes borrowers as they may be heavily affected as a bank gets into difficulty. Loans may be called in rather than rolled over and new business may become difficult.

[33] Regard also needs to be paid to 'quantity' signals. When senior staff leave or a bank withdraws from the subordinated debt market this is just as clear a signal as the change in the price of its debt.

incentives for delay are considerable in all circumstances but they may well be particularly large in emerging and transition economies if the authorities are less immune from political pressure and the banks wield greater influence, especially if they can claim with some justification that their lending has been directed towards riskier projects by the government.[34] The banks themselves will be keener on delay if they can manage to abstract more value for the owners at the expense of the creditors. Debtors may also be able to form a rather effective lobby group, if they constitute strategic firms in the economy, whether from the point of view of export earnings or employment. In so far as public ownership is more prevalent then the government may face a conflict of interest over whether to keep its own problems as unrecognised bad loans in the banks or as acknowledged liabilities to depositors or new owners of the bank. The poorer the information available and the less the transparency of the supervisory purpose, the easier it will be for the supervisor to feel that decisions can be postponed. Supervisors will be particularly keen to avoid precipitating closure if they think they rather than the bank's management may be blamed for the problem. The authorities also have a strong incentive to let banks continue of they do not have the resources to meet the costs of insolvency in terms of the demands on the deposit insurance fund.

Transparency is equally important for the supervisory authority. If the supervisors know that their actions will be audited by parliament and hence publicly they need to make sure that their procedures in respect of each bank are followed through properly and that their actions fit with their objectives. This form of liability for public servants is not common in many societies but helps avoid the tendency to forbear and to hope that problems may go away (Tison, 2003). It also makes for consistency of treatment across banks. Applying it in a relatively small agency such as banking supervision where staff need to be well qualified may increase the chance of successful introduction and avoiding generating labour disputes in a way that may not be true of the public sector at large. The Finnish supervisory agency even includes transparency for its management methods. If subject banks need to monitor their risks effectively, the supervisory authority setting a good example in its own management methods should be a help.

There are some clear problems here. Ingves (2003), for example, argues for 'clear [legal] protection for supervisors' (p. 7) so they can withstand pressures from the interested parties. However, such protection has to be carefully phrased if it is not also to allow them to make arbitrary decisions in favour of particular groups. The opening up of public authorities and officials to the consequences of their actions if not performed within the terms of the regulations or indeed from applying regulations that do not meet adequate standards is a reasonably new

[34] Raina (2002) cites the case of directed lending by the state banks in Turkey in their banking crisis.

concept. Having an ombudsman who can exercise separate impartial review is not universally accepted. In many societies the opportunity for officials to fully a predetermined line and avoid political pressure at the time of a crisis is small. Recourse to courts even if available in theory may not be a practical possibility.

Problems with public transparency apply right across government. Boorman and Hume (2003) suggest that a lack of transparency in Indonesia about the crisis in 1997 and about the government's actions to counter it, helps explain why Indonesia took so much longer to control its problems than did South Korea or Thailand, for example. Similarly, in the case of Malaysia, the lack of independence of the supervisors means that decisions are effectively taken by the government (Das et al, 2002).

5 Concluding remarks

Taken together the list of six drawbacks discussed in Section 4 suggests that emerging and transition economies will tend to have more problems in handling problem and insolvent banks that their more advanced market counterparts. This will inevitably put more pressure on the authorities to intervene and will tend to result in the distribution of the losses entailed across the economy in ways many would find both arbitrary and inequitable. This increases rather than diminishes the advantages from having a simple and robust scheme of bank exit that not just pushes the authorities into early action before the problems become unmanageable and turn into a crisis but also pushes the banks themselves towards wishing to keep out of the problem territory and to find private sector solutions.

That said, the authorities in emerging and transition economies are likely to find themselves increasingly in the hands of the advanced country authorities, as foreign ownership of banks becomes more pervasive. While this is likely to help in the maintenance of prudent practices it may pose additional difficulties as banking problems emerge. The home authorities may be prepared to take decisions that have a harsh impact on small host markets, where the banks may be more systemically important, yet those authorities may have little requirement or willingness to contribute to the costs this imposes. As the European transition economies join the EU they may be able to negotiate a way out of this through local agreements or regional co-operation but generalised international agreement, even at the EEA/EU level, seems a rather distant prospect at present.

The institutional arrangements made to cover problem banks interact, particularly the protection of depositors and robust exit policy. If the deposit insurance company does not have a strong incentive to ensure that banks are well supervised in order to protect its funds, then a robust exit policy may be relatively ineffective in encouraging prudence by banks and may still shift the risks onto the

taxpayer in an inequitable manner. If the fund is inadequately capitalised this will still push the cost onto the smaller and less informed depositors (households) and can lead to wider economic consequences in the form of an economic downturn or a spreading financial crisis. In many transition and emerging market economies the incentives in the deposit insurance scheme are inadequate (Beck, 2003). A wider range of changes than just bank exit law is required if the allocation of losses in the occurrence and avoidance of bank insolvency is not to be inequitable for the groups in society less able to protect themselves.

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Appendix 1

The MHL (2001) scheme[35]

Step 1: The authorities are required to take over control of the bank according to prescribed benchmarks.

The fundamental requirement for being able to move rapidly in the case of difficulty is that the authorities have the power to intervene, assume control of the problem bank without having to consult the existing shareholders (whose shares are in any case valueless in the case of insolvency) and apply a sufficient haircut to the claims of the creditors that the insolvency is ended (assets are no longer less than liabilities). This means in practice that bank insolvency has to be dealt with by a lex specialis under public law rather than by a lex generalis under private (company) law, as the latter does not normally offer the opportunity for such swift intervention. The United States is probably the best example of this lex specialis regime. But the MHL scheme differs in one crucial respect from the US counterpart, namely, that the scheme is not necessarily implemented on behalf of the deposit insurance fund. In some countries deposit insurance schemes do not exist, while in others they are funded by the state or co-funded.[36]

Like the US arrangements, the MHL scheme requires the authorities to act at certain points and is structured to restrict the opportunity for forbearance. Ambiguity is not constructive if banks interpret it to mean that there will probably be forbearance and ultimately a bail out. The scope for official discretion is limited in the scheme not just by prescribed published rules for prompt action[37] but by requirements for transparency/disclosure on the part both of banks and of

[35] This section is drawn from pp. 33–39 of Mayes and Liuksila (2003).

[36] One point we return to later is that the US scheme has an important logic to it that is missing from many other deposit insurance schemes. Namely, in the US the FDIC not only succeeds to the claims of the insured depositors under insolvency but it then has effective priority in the resolution of the problem owing to the size of its claim and can direct the solution towards the interests of the fund. In other countries, including Finland, the deposit insurer becomes liable to pay out depositors to the full extent of their insurance but has to take its place with the other claimants in a court directed insolvency process. Insofar as such funds are inadequate or state provided there will be an extra exposure of the taxpayer to losses, at least temporarily, compared to the US system. Under MHL the loss to be minimised by the authorities in resolving the problem is the loss to society as a whole insofar as it has not taken on a specific risk through deliberate exposure to the bank in trouble, largely in the sense of the taxpayer.

[37] The MHL scheme is complementary to the normal proposals for Prompt Corrective Action (Basel Committee on Banking Supervision (2002), for example) but it will normally shorten the process of seeking solutions to an undercapitalised bank's problems by commencing the 'exit' procedure earlier.

the supervisory authorities. Thus not only will it be impossible to keep the existence and extent of a bank's problems confidential for long but the authorities will be publicly accountable for their actions after the event. In any case information tends to leak out and the well-informed professional investors have an advantage.[38]

Defining the prescribed intervention point is a problem. If the bank were thought to be technically solvent under normal private law definitions then closure could be thought to deprive the shareholders, managers and indeed possibly some of the employees of rights. However, enforced bank closure of solvent banks is already possible under certain circumstances (in addition to cases of criminal behaviour or failure of a 'fit and proper persons' test). For example, it is normal to insist on the meeting of at least the Basel criteria for permission to operate as a bank. Rescinding a banking licence in the event of undue delay in recapitalisation is a normal feature of most prompt corrective action regimes.[39] If such a bank is not insolvent then it should be possible to achieve an orderly winding up where depositors do not lose access to their funds and there is no systemic fall out from the closure. Unfortunately, however, the capital adequacy ratios as computed under the Basel criteria do not equate with measures of solvency. The Basel criteria relate to risk-weighted capital on a book-value basis not to the concept of economic capital relevant to measuring insolvency. Capital as measured under the Basel criteria can be clearly positive when net worth is negative and the changes proposed under Basel2 will not alter this. The US regulations address this by requiring that a bank must be closed if its capital ratio falls below 2 percent.[40] The chances are that such a bank is already insolvent in the sense that sale of its assets will not meet the total of the claims.[41] The Tier One capital of a bank does not represent an unencumbered pile of cash that can be used to pay out depositors and creditors but an obligation that ceases on the insolvency of the bank, in the case of shareholder capital. Tier 2 capital is simply junior debt.[42] In any case the size of

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[38] In a careful survey of experience since FDICIA, Eisenbeis and Wall (2002, p. 39) note that even in the US there has been a drift away from trying to minimise the insurance losses: 'Recent supervisory efforts appear to be directed towards the long-standing goal of minimizing the probability of bank failure'. They see Basel2 in particular as a move away from trying to minimise the social costs of bank failure and eliminate moral hazard.

[39] Basel Committee on Banking Supervision (2002) provides a comprehensive exposition of the recommended types of prompt corrective action.

[40] Tangible equity capital to total assets ratio.

[41] Berger et al (1991) provide an early exposition of the accounting valuation problems involved.

[42] While meeting the Basel requirements probably involves simultaneous solvency in the MHL sense, the authorities would be well advised to switch to focusing on solvency if the minimum Basel conditions are breached, in deciding upon the appropriate course of action. Market views of the riskiness of the bank, as expressed in the spreads on subordinated debt, will also provide useful information to the supervisor on the need for action.

these measures of 'regulatory' capital depends on the degree to which the bank chooses to recognise the extent of its problems and the degree to which the authorities impose that recognition (Evanoff and Wall, 2002).[43] Typically loan portfolios tend to be overvalued in these circumstances. The Mexican government was not unusual in buying non-performing loans at face value (De Luna-Martinez, 2000).

MHL suggested that an appropriate benchmark for intervention might be a concept of 'economic insolvency' or zero net worth. At this point the current value of the liabilities just exceeds the market value of the assets. The rationale is simple: this is the point at which creditors and depositors could not expect to be paid back sufficiently rapidly and hence the point at which a run on the bank would be a sensible strategy. 'Economic insolvency' differs from legal insolvency in that, in the legal insolvency case, the circumstances can only be determined after the event when the assets are eventually sold and the expenses deducted, which may take a period of many years. Net worth is normally on a 'present value' basis. Legal insolvency is triggered either by failure to pay due liabilities or the expectation of failure to pay in the view of the courts.[44]

A different way of looking at economic insolvency would be the point at which the central bank could no longer continue to lend against available collateral, because that collateral was exhausted.[45] The two would not be the same because the central bank is prepared to take a longer-term view of asset valuation than the market. In any case the fact that the distressed bank had been unable to find a market solution for its problems might imply that even taking the value of 'goodwill' into account it could not come up with a positive net value. The concern was to try to find a benchmark where the information could be readily

[43] As Evanoff and Wall (2002) point out the Basel2 proposals are largely aimed at improving the measurement of the denominator of the capital adequacy ratio. Many problems remain with the measurement of 'capital' in the numerator. Since recognising losses automatically reduces the ratio and encourages supervisory intervention there is bound to be a tendency for the acknowledged ratios to overstate the real position even if accounting is on an economic value rather than an historic cost basis.

[44] It is important to call a halt as early as possible in the process of declining net worth, as otherwise a bank can continue to liquidate its unencumbered assets at a discount to pay out those depositors and creditors who request it at the expense of the uninsured depositors or creditors who are not aware of the problem. Non-financial companies cannot usually realise their assets in a similar way as they are normally collateral for loans although there have been some notorious examples of gaining access to the employee pension fund. If the problem can be caught early then the loss and its systemic implications will be smaller and the chances of arranging a solution without recourse to the taxpayer greater.

[45] This is effectively the concept of 'liquidity-based insolvency' described by Ramsey and Head (2000).

available and where it would be difficult for shareholders or creditors to complain that they were being worse treated than under insolvency.[46]

Step 2: The administrator of the insolvent bank values the assets and liabilities up front and writes down the claims so as to return to operational solvency[47]

The authorities need to make a rapid assessment of the value of assets and liabilities in order to make an appropriate write down. This entails that normal supervisory requirements will entail both bank structures and reporting are sufficient to make this feasible. (In the same way, bank structures have to be such as to make seizure feasible. A requirement, which is particularly difficult in the case of complex multinational institutions, to which we return below.) Such an assessment will no doubt be inaccurate. Hence, while creditors and shareholders will not have the right to challenge the actions of the authorities in resolving the bank, as delay could effectively kill the scheme, they would have the right to seek compensation after the event, should the assessment be more unfavourable than they would have received under insolvency.

In writing down the claims the administrator will need to respect the priority of claims. One of the 'neat' features of the US system is that state moves into the driving seat through the FDIC becoming decision-maker in succession to the claims of the insured depositors. This is not a feature of some European systems, where despite the liability for paying out on deposit insurance the state does not get to control the decision over how to resolve the bank.

Having got the bank back from insolvency the authorities would have to find a means of recapitalising the bank. In the interim, however, to give confidence to depositors and all those involved in future transactions the authorities would no doubt have to issue a guarantee against loss by the new, resolved institution.[48] A variety of methods have been advanced for recapitalisation (and the initial write down), including a suggestion by the Reserve Bank of New Zealand that the creditors should in effect swap debt for equity and become the new owners of the bank. The Aghion et al (1992) proposals are a related approach whereby each group of creditors can effectively auction off their claims in increasing order of priority. It is of course always open to the state to recapitalise the bank and then

[46] An inherent part of any resolution process is that it should take due account of the 'franchise' value of the bank. This helps explain the keeness among regulators to keep the business of the bank going and the relative rarity of solutions that do not at least involve separating the failed institution into a 'good' and a 'bad' bank.

[47] We use the generic term 'administrator' to embrace the possible regimes of receivers, conservators etc and cases where the authority involved may be an organisation or an individual.

[48] This temporary organisation is usually labelled a bridge bank in the US.

sell it at some later date. MHL do not make a choice between the methods, as the particular choice is not crucial to the principle of the reorganisation scheme.

There are, however, some important issues about who should be responsible that need to be resolved. The structure will depend very much on the nature of the regulatory system, with roles for the central bank, as provider of liquidity to the market or individual institutions in the traditional lender of last resort framework (ie collateralised lending to institutions thought solvent in the sense of having adequate collateral), the supervisors of the relevant financial sectors, the bank licensing authority, the deposit insurance fund and the ministry of finance. MHL largely describe this in the simplest framework, where the central bank is also responsible for supervision and licensing. A key issue however is that to preserve incentives it is important to separate the responsibility for instituting and managing the insolvency resolution from the authority with access to public funds. Even where it is the central bank, it is essential not mix the lender of last resort function with responsibility for the closure of individual banks. It would be easy to use lender of last resort as a means of advancing the public sector up the priority of claimants on an insolvent institution.

Step 3: The bank reopens for business under new control/ownership with no material break in operation

It is anticipated that such a reorganisation would normally take place over a 'weekend'. More than a working day or so of closure would be likely to start generating the systemic consequences that the scheme is intended to avoid. Unless the government wishes to get into the business of banking, it would presumably wish to return the bank to normal private sector ownership and recapitalisation as soon as possible, whether by merger, acquisition, flotation or other means of disposal. Where there are no systemic concerns then orderly closure still remains possible and the choice of solution would presumably depend on the public cost.

It is of course always open to the authorities to decide that they wish to use public funds to compensate the losers, fully or in part, presumably only if they could show that the alternative involved a larger net present value of the loss to the taxpayer.[49]

[49] MHL refer to the 'taxpayer' as the body with respect to whom the loss is minimised. This is a representation of some form of social loss minimisation, ie that it is the cost to society as whole that should be minimised in dealing with actual and potential bank failure.

A1.1 Cross-border complications

The discussion thus far treats the problem of handling bank insolvency as if it were an issue for a single jurisdiction. Indeed it does not even address the issue of complex national financial firms in more than a few words. Both regards are considered more important and more intractable by MHL than the foregoing. The largest bank in Finland is spread over Finland, Sweden, Norway, Denmark and indeed the Baltic States (with branches in Poland and Russia). The second largest bank is not only operating in more than one country but is also the second largest insurance company. In general the EU is not well organised for handling problems with cross-border institutions. Although the responsibility for consolidated supervision and deposit insurance may be clear and Memoranda of Understanding exist for the sharing of information among supervisors, it is not at all clear how the failure of a major cross-border bank would be handled (Brouwer et al, 2003).

Whereas in the case of very large national institutions the expectation is currently that they will be bailed out in the face of insolvency (ie that the authorities will provide emergency funds to keep the business trading, even if in the form of purchase and assumption), the position for cross-border banks is much more difficult. The position is very clear for Switzerland, where both UBS and Credit Suisse have the majority of their operations outside Switzerland. The new Swiss legislation, which is very similar to the MHL proposals and is described by Hüpkes (2003), explicitly places a ceiling of 4bnCHF on the payout for any one institution. Otherwise the liabilities for deposit insurance funds and taxpayers in small countries could become unsustainably large.[50] Such banks can be 'Too Big to Save', for a small country (Sigurðsson, 2003). Since many of the losses will accrue to people in other countries from operations in those countries it is not likely that the authorities in the headquarters' country will be willing to make too extensive payments. In the case of the US it is possible to discriminate against foreign depositors but not in the EEA, where equal treatment is required, especially with respect to depositors in other EEA countries. In order to stop a grab for local assets, the Winding-up directive requires the treatment of insolvency on a group basis, although frequently administrators would want to sell

[50] Many deposit insurance 'funds' are not really funded as such but as in the US can draw on public funds. Premiums paid in advance are similar to hypothecated taxation. Similarly, increases in premiums after depletion of the 'fund' are levied on surviving banks to replenish the notional balance.

off viable subsidiaries early on in a liquidation process in order to maximise the realisable value of the assets (Moss et al, 2002).[51]

MHL argue that the same process described at the national level should also apply at the cross-border level in the EEA. This would require making one authority responsible for decision-making regarding the international banking group. While in the longer-term it may appear sensible to create a European level organisation for the purpose, at present it would be necessary at least to have a panel of acceptable people who can be called upon to act in the event of the failure of a multinational bank. Such administrators might very well face considerably greater problems over obtaining the information to value claims up front. The national supervisors would have to be collating information on a continuing basis to make this possible. Secondly they may well face a *conflict of interest*. A bank with systemic implications for one country in which it operates may not be regarded as systemic by the authorities in the headquarter (home) country, where the decisions will be taken.[52] It is thus necessary to know in advance what the attitude of the participants is.

In contrast with the national position it is not clear what the fall back will be in the case of difficulty. One clear possibility is insolvency, if the home country does not feel it has adequate resources for a rescue and other parties cannot be got round the table in time. If this were the case then the incentives for prudent management and early private sector resolution might be sharper than in the national case and the moral hazard smaller. However, such a 'disorderly' outcome for unfortunate practical reasons would not represent responsible regulation. Some form of credible system needs to be in place by the time of the first crisis. The inhibiting factor in achieving this is that it is a 'small country' problem in a forum where decision-making is dominated by larger countries that do not necessarily face such a pressing need.

All of the other issues raised for national banks are writ large for complex cross-border institutions – clarity of corporate structure, availability of adequate information produced according to coherent accounting standards and reputable audit. Although the issues may have been adumbrated by Brouwer et al (2003) it is by no means clear that they are well on the way to be addressed.

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[51] Other than the EU Winding-up directive for credit institutions (2001/24/EC) there are few rules governing international insolvency, other than the UNCITRAL Model Law on Cross-Border Insolvency of 1997 and the International Bar Association Concordat on Cross-Border Insolvency of 1995 (see Contact Group (2002) for a discussion).

[52] When the EEA expands in May 2004, with the addition of ten new members, the chance of a bank being viewed as systemic in a second country but not in the headquarter country will rise noticeably, given the degree of foreign ownership of banks in the accession countries.

Appendix 2

The role of market discipline and corporate governance[53]

Trying to ensure a strong measure of market discipline forms a major part of supervisory regimes both in normal operation and in the resolution of problems. The key feature of market discipline is that it should provide incentives to all of the stakeholders in the bank, whether shareholders, managers, depositors, creditors or supervisors, to see that the bank is prudently managed. This discipline exists because the market players can act on the basis of the information that is available on the bank, not just in absolute terms but relative to its competitors in the sector.

While the recommendations in the Basel2 proposals for the amount of information to be publicly disclosed by banks meets much of the arguments we set out in MHL for efficient market discipline, its timeliness does not. If the information available is six months or more out of date, the actual position of a bank has been able to change markedly from that published. Market players will then try to rely on more informal information, which may not only be less accurate and comparable but will not be equally available to all the stakeholders. The ability to put off knowledge of the true circumstances and the size of any revelations that may then occur can on the one hand contribute to the instability of the market and on the other make it more difficult for the process of trying to take over the bank as a going concern to succeed.

Banks that are not performing as well as the rest of sector tend to be subject to takeover bids. Such bids will occur when the bank is still readily meeting the regulatory criteria. If the market can react to these more marginal signals then the chance of getting into severe difficulty will be reduced. The problem comes for banks whose governance structures do not permit the ready exercise of market discipline. Obvious examples are where the bank is privately owned, say as part of an industrial group, or its shares are not directly quoted, where it is state owned or where it is a more mutual organisation, as in the case of a cooperative or savings bank. In these circumstances, not only is it difficult for the signals to be observed but there is much less pressure that those who are affected can place on the back to see change. For this reason it is often suggested that all banks should be forced to face significant exposure to the market, say, by being required to have a significant amount of subordinated debt, which has to be rolled over in the market in the short run, so it is actively priced (Calomiris, 1999). Even though this finance may in some sense be superfluous it results in signals to which others, including the authorities, react (Evanoff and Wall, 2002).

[53] This Appendix is drawn from pp. 43–47 of Mayes and Liuksila (2003).

On the whole the nature of the incentive structures from market discipline is relatively clear. The employees of the bank clearly have something at stake, in terms of income in the short run. It is however, more difficult to say whether the failure of the bank they work for harms or advances their careers in the longer term. When it comes to the managers or directors who can in some way be thought responsible, then it may harm their career prospects and those who have suffered losses as a result of those actions will no doubt think that only appropriate. Once one is dealing with the higher echelons of management where part of their remuneration is linked to the performance of the bank then the potential losses from failure will be greater and hence the incentive to avoid it and have a less ignominious exit also greater. Thus the incentive to avoid or take excess risks will have an extra facet when problems occur, depending upon the likely action of the authorities. If senior managers think the authorities may keep the institution in being and allow them to retain their jobs if they respond in a risk-averse manner (as was arguably the case for some US thrifts in the 1980s) then they will do so. But if the only real hope of retaining their jobs is through taking a large gamble then that too is likely to be the choice they will make.[54]

The position for depositors is complicated when their deposits are insured. In the first place, to the extent their deposits are insured, particularly if they can access them rapidly after a failure, they will have little incentive to monitor the bank. In any case it is normally thought that the general run of depositors are not sufficiently well informed to either process or act on the information available. Only the larger depositors are likely to be in that position. The deposit insurance organisation therefore tends to act on behalf of the depositors it insures. While it may rely on the supervisors to look after its interests when the bank is performing normally it can have a much greater role in the event of difficulty, ending up as the lead organisation in a reorganisation in the case of the US FDIC, for example. However, having the authorities take the lead on behalf of depositors is not the same as having them take account of both those who are directly exposed as taxpayers and those who are indirectly exposed as the customers of other banks or as taxpayers. It is therefore important to recognise that borrowers and their customers, creditors etc. are also exposed. If a bank has to retrench it may not roll over some loans and prefer to remain in liquid assets. Some of their clients may themselves then go out of business or shrink if this experience is fairly widespread in the banking sector. MHL therefore argue that it is this wider public interest that should be taken into account in deciding how to act.

Market valuations of assets can be decidedly procyclical, as can assessments of risk, particularly those like KMV that make use of equity prices. The market can therefore be a very harsh judge of the value of a bank, as the valuation reflects not just the underlying position of the bank under consideration but also the

[54] I am grateful to Larry Wall for this point.

position of the potential purchasers. This double valuation approach is the appropriate way to value a problem bank from the point of view of the stability of the system as a whole, as the problem does not disappear, but is merely acquired by another bank in the system. The weakness applies to the system as a whole and not just to the problem bank in these circumstances. However, this valuation implies that the risks are borne by the shareholder side of the market. It is a valuation based on the full extent of creditor claims. If the bank were declared insolvent and the creditor claims written down then the valuation to an acquiring bank would be different. Similarly the valuation would be different again if the acquirer were only acquiring various of the assets and liabilities of the troubled bank and not the business as such.[55] Acquiring access to the customer base is likely to have a clear value and indeed it is normally argued that despite the 'fire sale' element in market valuations, the valuation of the bank as a going concern tends to exceed that under insolvency (Hoggarth et al, 2002, James, 1991). Guttentag and Herring (1993) suggest that 'banks usually are worth more alive than dead even when their value alive is negative'. This in itself helps explain the authorities' enthusiasm for finding market solutions prior to failure.

The most important aspect in this regard in the event of insolvency is that the time horizon of the parties involved differs. If the assets of the bank are to be sold off under insolvency proceedings and maximum discounted value extracted from the non-performing loans then a rather longer time horizon will be adopted than would be the case in a more rapid sale with the aim of staying in business. This dilemma is reflected in the accounting standards for valuation and in the internal methods of valuation used by the bank. In general, US practice under GAAP tends to result in a valuation closer to the immediate market prices than the IFAS approach (although the two are coming close to a generalised agreement). This poses both problems of international comparability and of rapid valuation in the case of a resolution. Typically a regulator would not be able to get an immediate valuation on the ideal basis for taking a decision about how to proceed. However, it is arguable that this is precisely the information that the supervisors should insist on obtaining, rather than simply regulatory capital measures, which will be

[55] In effect therefore there are three valuation bases:
– valuing the entire bank (or its parts) as a going concern
– market valuation of the assets/liabilities of the bank – including off-balance sheet items
– valuation of the bank under insolvency,
none of which are totally transparent. Until a bid for part or a whole of the bank is completed, the price can only be estimated not known. Marking some parts of the bank's balance sheet to market is very difficult, although the position has improved in recent years as markets have deepened and valuation techniques improved and been standardised, and many off-balance sheet items such as guarantees and contingent liabilities can be even harder. Similarly, valuation under insolvency is only something which can be known at the end of the process and can only be estimated along the way.

increasingly less relevant as failure approaches. Problems are of course much worse if accounting and auditing standards are not up to international best practice. Halme in Halme et al (2000, p. 58) points out that 'Skopbank was apparently one of the most solvent banks in Finland at the start of the 1990s. However the bank was taken over by the Finnish central bank in September 1991.'[56] The fact that the authorities can take a longer term view than markets for the assets of a bank in difficulty means that there can be a role for a lender of last resort. The major question then becomes how far down the list of collateral the authorities are prepared to go, particularly when the discussion extends, say, to the mortgage portfolio.

In so far as the authorities step in, even in the form of liquidity assistance, problems can emerge from altering the ranking of creditors. The central bank for example can indulge in collateralised lending earlier to reduce the chance of uncollateralised or weakly collateralised lending later. Actions within what can be described as the market framework can nevertheless have implications if insolvency actually materialises.[57]

As Edwards and Scott (1976) point out, the value of the capital buffer varies very considerably depending on the routes used and available to an undercapitalised bank in tackling its problems. If a bank can raise new capital, albeit at relatively high cost, then it does not have to sell assets, merely write down the value of impaired assets according to the prevailing rules. If a bank has to realise assets in order to handle losses then it faces a much more difficult downward spiral, as many such assets will have to be sold at a discount while liabilities are met at par.[58]

Effective pressure from markets thus depends crucially on two factors: the ability to obtain meaningful values and prices; and on the ability and willingness of the current and potential stakeholders in the banks to act on the basis of that information.

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[56] She cites similar problems in the savings and loans crisis in the US where regulatory accounting rules (RAP) were less strict than US GAAP.

[57] In the US case the roles of the FDIC in triggering and managing insolvency and of the Federal Reserve in exercising the Lender of Last Resort are clearly distinguished. Not only are there limitations to the length of Federal Reserve lending according to the CAMELS rating (five days for a critically undercapitalised bank) but the FDIC can claim restitution if the Federal Reserve's actions have materially increased the costs to the FDIC.

[58] They argue that this discriminates against small banks as they will find it more difficult to raise capital on the market.

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