Bad banks – how to deal with "bad" bank assets – Ireland and other case studies

The global financial crisis left many national economies and the global economy with the issue of how to deal with "bad" bank assets. Given the impact of these "bad" bank assets on the recovery and longer term performance of the global and national economies, there is an imperative need to learn from this experience, to share best practice and to put in place measures that will combat future crises.

Ireland is useful a case study because the events in Ireland ultimately threaten the whole future of the common European project. Almost all the liabilities of the Irish banking system were guaranteed by the Irish State to the tune of 440 bn euros in total. This in turn imperilled the solvency of the Irish State which in turn called into question Ireland's position as a member of the Eurozone and the future of the Euro as a common currency for Europe.

The Irish experience also requires re-examination of the standard international response for addressing financial crises. The Irish government insisted that its crisis resolution proposals were advanced on the basis of the best international advice, including the European Commission, International Monetary Fund and the European Central Bank. This standard toolkit has been employed successfully in the past in the US and Sweden but with a more mixed record in East Asian countries such as Malaysia in the aftermath of their 1997-1998 financial meltdown. Despite the overall rise in global prosperity, countries all over the world in the past 20 or so years have had to try to find solutions to the problems of failing banks and this state of affairs is not likely to change.

Background

The global financial crisis impacted particularly severely in Ireland because the crisis period had been preceded by a long property boom, marked by the rapid appreciation of prices and easy availability of credit for property development. The property market collapsed and Irish banks experienced large losses in the aftermath through excessive exposure to this sector. Tthe strategy employed by the Irish government has involved four elements:

(1) the issue of a near blanket government guarantee of bank liabilities;

(2) the reluctant and temporary taking into State ownership of insolvent banks;

(3) the transfer of impaired or potentially impaired bank assets to a centralized national asset management agency "NAMA" and

(4) subsequent recapitalization of the banks.

The approach of transferring "bad" assets to NAMA was used in preference to the alternative approach employed in the UK which involves the government insuring bank assets. The Irish approach has been commended on the basis that "it forces banks to clean up their balance sheets vigorously rather than to put off dealing with their problems or to insure impaired loans and just hope they improve." The idea is that once banks are cleansed of bad assets they will be able to function normally again through accessing funds from depositors and from the interbank lending market, and then will be in a position to channel these funds to the sectors of the economy that are perceived to be most productive.

International precedents

From a preliminary survey of the available evidence it appears that AMCs have had a mixed record in addressing the overhang of bad debt in the financial system attendant on a banking crisis and in contributing to crisis resolution. It is possible to distinguish between two main types of AMCs. The first is where an AMC has been established to guide the process of corporate restructuring. The second type is where the AMC has been set up to speed up the sale, or other disposition of "bad" assets. There are also hybrid examples and NAMA may be a case in point.

It seems that AMCs of the first kind have not necessarily been an effective and sharp tool to achieve restucturing but in the second scenario greater successes have been evident. According to one World Bank study "AMCs can be effectively used … for narrowly defined purposes of resolving insolvent and unviable financial institutions and selling of their assets. But even achieving these objectives required many ingredients: a type of asset that is easily liquifiable— real estate— mostly professional management, political independence, a skilled resource base, appropriate funding, adequate bankruptcy and foreclosure laws, good information and management systems, and transparency in operations and processes." [1]

Other studies suggest that a government has a good chance of recouping its investment in an AMC if certain prerequisites are satisfied namely:

---

[1] Klingebiel, D "The Use of Asset Management Companies in the Resolution of Banking Crises" Working Paper 2294. (Washington, World Bank, 2000).

• Bad assets are acquired at a "low" price

• It is possibly actively to manage the assets

• The AMC can involve financial experts with the necessary knowledge and expertise to deal with such assets

• The AMC has a long time horizon and is not pressurized into a fire sale of assets

• There is a clear governance structure for the AMC

On the other, if a market price for an asset does not exist, then the seller of the asset i.e. the ailing bank, has an informational edge over the buyer i.e. the AMC. It may be that the ailing bank will only transfer assets to the AMC whose "real" value is below the agreed-upon transfer price.[2]Moreover, fire sales to cover a shortage of liquidity may put downward pressure on asset prices and impact negatively on sale proceeds. Unless the AMC has sufficient capital to wait for an opportune moment to sell assets, it will incur unnecessarily high losses. Excessive costs for taxpayers can also result if the AMC lacks the necessary autonomy to carry out operations free from bureaucratic or government interference.

Case studies – the US, Sweden and Malayisa

United States - The US and Sweden are generally cited in the literature as the leading examples of countries where AMCs have been successfully employed in the past; albeit at some cost to the public purse.[3] In the US an AMC, the Resolution Trust Corporation (RTC), was founded in 1989 with government funding and some participation from private investors. The RTC was established to redress the financial problems afflicting home loans lenders, or Savings & Loan (S & L) institutions as they are termed in the US. These institutions had advanced long term loans at low interest rates but faced large losses when interest rate rose rates and they were forced to raise rates for depositors. Between 1989 and 1995, the RTC took over 747 bankrupt S&L institutions with an aggregate book value of 394 billion dollars. It is estimated that the crisis in

---

[2] See Akerlof, G "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism" (1970) 84 Quarterly Journal of Economics 488-500.

[3] See Macey J "Are Bad Banks the Solution to a Banking Crisis" (Stockholm, SNS, 1999) at p 2 "The Swedish government is quite proud of the way it handled the banking crisis …. It is holding out the strategies utilized during this period as a model for the rest of the world, particularly Asia. The critical feature of the Swedish strategy for resolving its banking crisis was the splitting of distressed financial institutions into so-called 'good' banks and 'bad' banks."

the S&L sector cost US taxpayers 124 billion dollars in total, of which 76 billion of which fell to the RTC.

In the financial meltdown of autumn 2008 there were loud and influential calls to resurrect the Resolution Trust Corporation in the US or at least the idea of the RTC. The former governor of the US Federal Reserve, Paul Volcker, and former US Treasury Secretary spoke of the financial system being clogged with "enormous amounts of toxic real-estate paper that will not repay according to its terms."[4] They suggested that a new RTC type entity should be put in place as a new temporary resolution mechanism. "This new governmental body would be able to buy up the troubled paper at fair market values …. Like the RTC, this mechanism should have a limited life and be run by nonpartisan professional management."

In the event the Emergency Economic Stabilization Act of 2008 was passed to alleviate the US financial crisis. It established the Troubled Assets Relief Program (TARP) which authorised the US Treasury to buy troubled assets from ailing banks and other financial institutions and then dispose of them. The focus of TARP quickly changed however. While some purchase of troubled assets took place under the Public-Private Investment Program (P-PIP), TARP instead of being used primarily as an asset acquisition and disposition agency was used to inject capital directly into ailing banks assets. The project will look at the reasons why the RTC precedent was not replicated exactly in the context of the current financial crisis. I will test various hypotheses. For instance, the severity of the crisis in autumn 2008 may have been a factor. There was a perceived need to restart lending quickly. Direct recapitalisation of financial institutions was easier to accomplish than the establishment of a complicated asset purchase facility. This was especially the case since the troubled assets consisted largely of financial derivatives in the shape of collateralised debt obligations (CDOs) that were relatively illiquid and difficult to value.

Sweden - In the early 1990s, the Swedish banking system fell into crisis and the authorities tried to overcome the crisis in part through the AMC technique. Toxic assets were shifted from ailing banks to the AMC (Securum) with a view to encouraging a flow of deposits and restoring confidence in the banking sector. It seems that Securum was successful in its objective of restructuring and/or selling off the bad assets within a relatively narrow time span. It closed its books in 1997, five years after its establishment, having disposed off 98 percent of its assets and minimised losses on the assets. It is estimated that the government bailout of the Swedish

[4] See Wall Street Journal, 17th September 2008.

banking sector eventually paid for itself. The Securum success has been put down partly to the fact that the assets consisted largely of commercial real estate. This may be easier to restructure and dispose than say manufacturing plant and operations and involves less contentious political considerations. Because of the nature of the assets transferred to Securum, it could be argued that Securum had a comparative advantage in terms of asset resolution and disposal. In addition, the assets transferred only amounted to 8% of the total assets of the banking system. Securum was also provided with professional management; it enjoyed political independence and was given appropriate funding. Finally and perhaps most importantly, both the Swedish economy and its property market recovered during the five year period when Securum was in existence.

Studies emanating from the Swedish Central bank suggest that there were seven key elements in the resolution of the Swedish banking crisis of 1991-93:

"(1) the importance of political unity behind the resolution policy,

(2) a government blanket guarantee of the financial obligations of the banking system,

(3) swift policy action where acting early was more important than acting in exactly the right manner,

(4) an adequate legal and institutional framework for the resolution procedures including open-ended public funding,

(5) full disclosure of information by the parties involved,

(6) a differentiated resolution policy minimizing moral hazard by forcing private sector participants to absorb losses before government financial intervention, and

(7) the proper design of macroeconomic policies to simultaneously end the crisis in both the real economy and the financial sector."[5]

Malaysia - In the wake of the Asian financial crisis in the late 1990s, AMCs were used in a number of jurisdictions with apparently a mixed record of success. Possible reasons for this include the lack of a supportive legal infrastructure or the absence of political institutions with the same degree of credibility. It seems that Malaysia exemplifies countries where the record on the AMCs has been more mixed.

[5] Jonung, Lars "The Swedish model for resolving the banking crisis of 1991-9: Seven reasons why it was successful" (Brussels, European Commission, 2009).

The Malaysian AMC, Danaharta, was set up in 1998 and wound up in 2005 after a seven and a half year experience. The reasons for its establishment were two fold – (I) to rid financial institutions of the distraction of managing non-performing loans (NPLs) thereby allowing them to concentrate on lending to support economic growth and (2) to maximize the recovery value of the NPLs in its portfolio. Despite some criticisms from international observers, the final report of Danaharta paints a picture of success stating that Danaharta has done its job. The report points out that the 1997 economic crisis had roiled the country's banking system. Danaharta was established to help avert the collapse of the banking system. It brought relief to beleaguered banks and, despite trials and tribulations, the banking system survived intact. Danaharta dealt with nearly 3,000 non-performing loan accounts, and its "final lifetime Loan Recovery Rate of 58% surpassed the typical 20 - 50% range experienced by similar agencies in Asia". [6]

Ireland and NAMA – its establishment, objectives and operations

NAMA was established by legislation in 2009 and followed in the wake of the financial crisis which came to a head in Ireland with the government guarantee of bank deposits and liabilities on September 30th 2008. "The banks got into trouble because they got caught up in the mass psychology of an unprecedented property bubble – the steepest and longest of the several national property bubbles of the late 1990s and early 2000s around the world."[7] The deflation of the property boom also had a major impact on the public finances in Ireland as the public sector had become very dependent very largely on revenue generated from this section of the economy. Declining tax revenues and greater expenditure due in part to rising unemployment compounded the effect of the recession leading to a large government deficit and a sharp increase in overall debt levels.

---

[6] See generally on the Malaysian experience with AMCs the Danahrata website – www.bnm.gov.my/websites/danaharta.com/. This contains the final report of Danaharta and a wealth of other information. The US and Sweden are also given as precedents for the use of the AMC approach in Malaysia.

[7] See Honohan, P "Resolving Ireland's Banking Crisis" (2009) 40 Economic and Social Review 207 at 209. Honohan in this paper explains the background to the property bubble.

The Irish government commissioned Dr Peter Bacon to consider possible options for resolving the banking crisis.[8] The Bacon report referred to the intuitive attractiveness of the Asset Insurance approach in that it did not involve upfront cost to the taxpayer. But the report also looked at the characteristic features of the Irish situation including the contingent liability aspect; the implications of loans remaining on the balance sheets of banks and the continuing capital requirements of property related projects. Bearing these factors in mind, the Asset Management approach was considered preferable in that it dealt with the impairment issue upfront and had the potential of maximising taxpayer returns, over the longer term. The Irish government adopted the conclusions of the report and proceeded with the creation of NAMA. "In early April 2009, the Government outlined its plans for a huge asset purchase scheme, designed to replace between €80 and €90 billion (book value) of loans from the banks' balance sheets with low risk and marketable Government-guaranteed bonds requiring less regulatory capital backing."[9]

NAMA was designed to facilitate the speedy removal of higher risk property related assets from the balance sheets of banks. Irish banks were seen as failing in their mission to support economic activity in that the ailing assets greatly hampered their ability to lend to creditworthy prospective borrowers. Banks had not fully written down the value of these assets on their balance sheets. This had two-fold consequences. Firstly, international counterparties were reluctant to deal with Irish banks because of the fear that the latter were hiding large unacknowledged losses and secondly, the Irish banks were inclined to guard against these losses by hoarding capital rather than advancing funds to borrowers. NAMA was intended to break this logjam.

During the Irish parliamentary debates on the legislation the Irish Minister of Finance explained how this was supposed to happen:[10] "The Agency will buy the land and development property loans and certain associated loans from the banks at prices well under the current book value. It will then manage these loans out over time to achieve the best possible financial return for the taxpayer. NAMA will start with the largest systemic exposures across the institutions …. NAMA

[8] Bacon, P "Evaluation of Options for Resolving Property Loan Impairments and Associated Capital Adequacy of Irish Credit Institutions: Proposal for a National Asset Management Agency (NAMA)" (National Treasury Management Agency, Dublin 2009).
[9] See Honohan, P "Resolving Ireland's Banking Crisis" (2009) 40 Economic and Social Review 207 at 225.
[10] See Irish Parliamentary Debates - National Asset Management Agency Bill Second Stage Reading 16th September 2009 – available on www.oireachtas.ie/.

will leave behind smaller, cleaner and better funded banks that can focus their resources on their core function of lending to the productive economy."

Section 2 of the National Asset Management Agency Act 2009 sets out the general overarching function of the Act as being "to address the serious threat to the economy and the stability of credit institutions in the State generally and the need for the maintenance and stabilisation of the financial system in the State". Section 2 (b) then sets out a number of more particular objectives including facilitating the restructuring of credit institutions of systemic importance to the Irish economy and removing uncertainty about the valuation and location of certain assets of these institutions. These are interspersed with more general objectives such as addressing the need for the maintenance and stabilisation of the Irish financial; restoring confidence in the banking sector and protecting the interests of Irish taxpayers.

Irish financial institutions, in theory at least, can decide whether or not to participate in the scheme established under the NAMA Act. [11]Once an institution decides to participate it has no discretion over which assets should be transferred to NAMA. If assets fall within the statutory definition of "eligible assets" it is up to NAMA to decide whether or not to acquire such assets. Under the Act there is no requirement imposed on NAMA to engage with individual borrowers whose loans are to be acquired until the transfer has been completed. It is only post-acquisition when NAMA will engage with the borrower by inviting the submission of a business plan that sets out how the loan is going to be managed and ultimately repaid.

If NAMA decides to acquire the assets, then the bank is paid the long term economic value of the assets rather than the lower current market value, or the higher book value. The borrower remains liable however for the full value of the loan even though NAMA has acquired the loan at a discount, perhaps a substantial discount, to the face value. Payment to the transferring bank is the form of Irish government guaranteed bonds which the bank can then use as collateral in the interbank lending market or in gaining liquidity from the European Central Bank. Instead of impaired or potentially impaired property related loans on their balance sheets, the Irish banks will now have government guaranteed bonds. Because the transfer to NAMA is at less than book value the Irish banks will take a capital "hit" but a smaller sounder balance sheet should in theory muster greater commercial credibility that a larger bloated one that is widely perceived to hide

[11] See section 62 of the Act.

large undisclosed losses. NAMA forces on the Irish banks an upfront recognition of losses that the banks were reticent about revealing because of a hope or belief that the property market would recover – a rising tide raises all boats, including ramshackle ones, so to speak.

NAMA is primarily an asset management agency which manages and disposes of the transferred assets with the objective of achieving the best possible return for the Irish taxpayer over a 7 - 10 year timeframe. It is supposed to deal expeditiously with the assets and protect or otherwise enhance the value of these assets in the interests of the State. Section 10 states that NAMA shall set out to obtain the best achievable financial return for the Irish State having regard to the cost of acquiring bank assets and dealing with these assets and NAMA's cost of capital and other costs.

NAMA was finally established in December 2009 and five financial institutions applied to and were approved to take part in the scheme. Under European Union State Aid rules the scheme required the approval of the European Commission since it involved the provision of state aid to the participating banks. The Commission signified its general approval for the establishment of NAMA in February 2010 but it also indicated that it would review the transfer prices of the bank assets on an ongoing basis as tranches of loans were transferred to NAMA. In August 2010, the Commission indicated that the transfer of the first tranche was in accordance with the approved scheme and with the guidance that it had issued on the treatment of impaired assets.

The valuation of assets is at the heart of the NAMA scheme and at the heart of the controversy surrounding the scheme. In accordance with the primary legislation and regulations made under it, valuers employ a valuation model that calculates the present value of the cash flows associated with the loan transferred to NAMA. There are two values calculated for each loan – current market value and its long-term economic value. NAMA appoints an audit coordinator to check the loan valuations and the supporting documentation and the audit coordinator carries out a series of validation checks to confirm the values calculated by the loan valuers. The long-term value for each loan is calculated by taking account of the value of the loan collateral - the present value of the cash that is expected to flow from the real estate collateral (after uplift for long-term economic value) and the current market value of non-real estate collateral. Adjustments are then made to take account of such factors as due diligence and enforcement costs that are likely to be incurred by NAMA; legal discounts and the value of associated financial derivatives.

NAMA pays for the loans it acquires by issuing debt and 95% of the payment is upfront in the form of government guaranteed bonds. The remaining 5% takes the form of subordinated debt and the redemption of this debt is dependent on NAMA's financial performance over its life time. The fact that subordinated debt is built into the payment terms is designed to cover the possibility that the assets acquired by NAMA may not in the end achieve the value ascribed to them.

Criticisms of AMCs in general and NAMA in particular

There has been a number of criticisms of the AMC concept in general and the NAMA scheme in particular by politicians, media commentators, banking experts and economists. These critics include Nobel Laureate Joseph Stiglitz who acted as an expert witness for a property developer in challenging the constitutional propriety and fairness of the NAMA scheme.[12] The criticisms, some of which have been expressed in strong terms, may be summarized as follows

1. Shifting assets bad assets from one institution to another i.e. from an ailing bank to NAMA does not necessarily mean that these assets magically become good. Losses associated with the bad assets remain in the financial system. They just fall on different shoulders.
2. There is no reason why the establishment of NAMA should necessarily result in businesses being able to access greater credit from their lenders. Former academic and current Irish Central Bank Governor Patrick Honohan has said that "Unless the loans are valued at unrealistically high prices, the NAMA process will leave the banks with insufficient capital. This is especially true considering the additional loan losses in non-property lending that are inevitable given the depth of the recession and which will have to be provided for."[13] The fact that the ailing banks have been infused with government bonds does not automatically mean that these quasi-cash injections will necessarily be paid out to borrowers. In fact, banks may use the infusions to rebuild their capital ratios. A further injection of government funds by way of equity subscription may be required to create the conditions for greater lending. This fact has been recognised but progress in

---

[12] See Dellway Investments v NAMA [2011] IESC 4.
[13] Honohan, P "Irish Banking Policy during and after the Crisis" Paper for the MacGill Summer School Glenties, Co. Donegal, 21st July 2009.

recapitalising the banks has been slow thereby adding to the credit contraction. In addition, the taxpayer is then ultimately faced with two bills: a bill for the establishment; running costs of NAMA and any shortfalls in its recoveries, and also the recapitalisation bill.

3. The seller i.e. the bank knows much more the value of the asset than the buyer i.e. NAMA. This is the problem of information deficits in credit markets identified by Akerlof and others.[14] The assets in question are essentially loans and associated collateral. The bank will know much more about the borrower's credit relationship and history and business plans than will NAMA. The information asymmetry between the parties makes the pricing of the assets particularly difficult.
4. Instead of a strong, sharp quick fix solution to restore confidence in the Irish banking sector, the NAMA saga has been long drawn out and protracted. The process and valuation of loan transfers has been far from smooth thereby adding to uncertainty in the credit markets.
5. The experience to date demonstrates the complexity and difficulty of the valuation question. At the time that the establishment of NAMA was being debated it was estimated that while the initial loan to value (LTV) ratio varied across different asset categories, generally it was in the order of 77%. Subsequent work by NAMA itself suggests that the initial LTV was closer to 100% than the 77% represented. Furthermore, the due diligence conducted by NAMA's on loans prior to transfer reveals "a picture of poor loan documentation, of assets not being properly legally secured and of inadequate stress-testing of borrowers and loans by the financial institutions."
6. The assumption underlying the NAMA scheme is that the long term economic value of the assets being transferred is greater than their current market value but there is no certainty that this is going to be the case. The experience of similar property crashes, as well the experience to date of the current crisis in Ireland, suggests that property values may decline for a number of years. The NAMA valuation assumptions seem predicated on a recovery of the property market.
7. The Irish government has tried to safeguard against the risk of over-valuation of assets by making provision for 5% partial payment through subordinated bonds but this does not

[14] See Akerlof, G "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism" (1970) 84 Quarterly Journal of Economics 488-500.

leave much of a margin for valuation error or subsequent declines in asset values. The Irish government has also talked about a levy on the banks participating in the NAMA scheme if NAMA is wound up still making a loss even after the subordinated bonds have been taken into account. This statement however is more in the nature of a political promise rather than a firm legal commitment. The experience in many countries suggests that political promises are not the soundest of currencies. Others have suggesting more robust loss sharing and recovery mechanisms. For instance, one possibility is for participating institutions to be given a low percentage of the value of the assets being transferred to NAMA in the form of government guaranteed bonds, and the remainder of the payment in the form of an equity participation in NAMA.

8. There is no requirement that the assets being transferred to NAMA should be impaired in any way. The category of "eligible assets" covers both impaired and unimpaired assets. NAMA may have an incentive to acquire unimpaired assets i.e. good assets to make up for possible shortfalls in the recoveries on impaired assets i.e bad assets, but if NAMA underpays for good assets then banks seeking recapitalisation will be worse off and so will the wider economy.
9. Asset transfers to NAMA are arguably value destroying and hurt the banks and the economy as well as good borrowers. Long-term relationships play an important role in the banking sector by promoting trust and reducing moral hazard and adverse selection problems. NAMA does not have the reputation, incentives, information or ability to reproduce the normal long-term relationships that are typical of the banking sector.
10. NAMA is essentially a statutory workout vehicle and not a bank. The fact this it is not a bank is emphasised in the legislation. While NAMA may have legal powers to advance credit it cannot meaningfully do so given its limited time horizon and therefore both NAMA and borrowers have the opportunity as well as the incentive to behave opportunistically. Potential buyers of NAMA-held assets are also in a strong bargaining position given NAMA's inevitable rule-based approach to asset disposals.
11. NAMA is given extraordinary legal powers such as to override contractual restrictions on the transfer of loan assets. It is also placed in a stronger legal position than other potential creditors of the borrowers There have been insufficient justifications advanced for disregarding standard legal protections and giving NAMA a status superior to that of other creditors.

12. The detailed legislative framework is defective and contradictory in certain respects. For instance in section 10 it is stated that NAMA is supposed to deal expeditiously with the assets and protect or otherwise enhance the value of these assets in the interests of the State. Prima facie, protection of the value of assets on the one hand, and enhancement of the value of these assets on the other hand, are two mutually incompatible objectives.

Conclusion – more questions than answers

One can ask a number of questions about the Irish example. These questions are listed below but the author does not necessarily have any answers at this stage!

1. What were the reasons for the use of an asset management (AMC) approach as distinct from the alternative approach of an asset insurance scheme?
2. How does NAMA fit in the overall context of other asset resolution measures such as the Sate guarantee of bank liabilities and the financial assistance package agreed with the EU/IMF in November 2010 that includes provision for fundamental deleveraging and downsizing of the financial sector?
3. How does NAMA fit in the context of the international precedents for the use of AMCs?
4. How does NAMA conform to generally accepted international practices in respect of the use of AMCs and does it adds to the typology of AMCs?
5. To what extent does the legislation establishing NAMA override contractual agreements and provisions of general law and what are the rationale for such overrides?
6. Are there appropriate tools used in the NAMA legislation to reduce information deficits and information asymmetries.
7. Are asset pricing methods used in the NAMA legislation appropriate and can they lead to undervaluation and/or over-valuation of assets?
8. Has NAMA been successful in achieving its prescribed objectives and how one can measure success for this purpose?

Short Bibliography

Borio, Claudio, Bent Vale and Goetz von Peter "Resolving the financial crisis: are we heeding the lessons from the Nordics?" (Basel, Bank of International Settlements, 2010)

Davison, Lee "Politics and Policy: The Creation of the Resolution Trust Corporation" (2005) 17 FDIC Banking Review 17.

Honohan, Patrick and Luc Laeven (eds), Systemic Financial Distress: Containment and Resolution (Cambridge, CUP, 2005).

Jonung, Lars "The Swedish model for resolving the banking crisis of 1991-9: Seven reasons why it was successful" (Brussels, European Commission, 2009)

Klingebiel, Daniela "The Use of Asset Management Companies in the Resolution of Banking Crises" Working Paper 2294. (Washington, World Bank, 2000).

Kokko, A and K Suzuki "The Nordic and Asian crises. Common causes, different outcomes?" chapter 9 in L Jonung, J Kiander and P Vartia, eds, The Crisis of the 1990s in Finland and Sweden The Nordic experience of financial liberalization (Cheltenham, Edward Elgar, 2009)

Laeven, Luc and Fabian Valencia "Resolution of Banking Crises: The Good, the Bad, and the Ugly" (Washington, IMF Working Paper 10/146, 2010)