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ADB Working Paper Series

**Financial Crisis and Crisis Management in Sweden.
Lessons for Today**

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Abstract

This paper gives an account of the Swedish financial crisis covering the period 1985–2000, dealing with financial deregulation and the boom in the late 1980s, the bust and the financial crisis in the early 1990s, the recovery from the crisis and the bank resolution policy adopted during the crisis. The paper focuses on three issues: the causes and consequences of the financial crisis, the policy response concerning bank resolution, and the applicability of the Swedish model of bank crisis management for countries currently facing financial problems.

JEL Classification: E32, E44, E63, F32, F34, G21, G32, G33

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1. INTRODUCTION¹

"It"—where "it" stands for a deep economic crisis—cannot happen here.² This was the common view in Sweden prior to the early 1990s. Why would a depression emerge in an advanced welfare state with a tradition of full employment and strong union influence on the design of economic policies? The economic record was one of stable growth, low unemployment and balanced financial development. Sweden seemed able to merge an egalitarian society with robust economic performance.

But, contrary to the prevailing opinion, "It" happened. In the beginning of the 1990s, Sweden faced a deep crisis, with declining real income, soaring unemployment and large budget deficits. The crisis revealed that the macroeconomic policy regime and the macroeconomic stability after World War II rested on extensive external and internal financial regulations. The capital account controls had isolated the country from the rest of the world and allowed the setting of interest rates and the allocation of capital by the Riksbank, the central bank, and the Ministry of Finance.

In the mid-1980s, Sweden's financial system underwent major deregulation. Sweden rapidly became financially integrated with world financial markets. This process was the main impulse behind a strong boom-bust cycle, with devastating macroeconomic consequences. Sweden entered into the deepest depression of the post-World War II period in the early 1990s.

The Swedish case makes an interesting case study for several reasons. First, the Swedish crisis management in the early 1990s is currently attracting international attention. It is regarded as a model for countries facing collapsing financial systems.

Second, the open and active public debate in Sweden provides us with a wealth of evidence concerning financial liberalization and crisis management. Policymakers, politicians, and bankers have produced memoirs covering this period, giving testimony that is not commonly available for many other countries.

Third, Sweden is a well-developed welfare state with a large public sector, a tradition of good governance, and a high gross domestic product (GDP) per capita. The lessons from a financial crisis in such a society are likely to be of interest to other rich countries hit by the present global financial crisis.

This paper gives an account of the Swedish financial crisis covering the period 1985–2000, dealing with financial deregulation and the boom in the late 1980s, the bust and the financial crisis in the early 1990s, the recovery from the crisis and the bank resolution policy adopted during the crisis. The paper covers three issues: the causes and consequences of the financial crisis, the policy response concerning bank resolution, and the applicability of the Swedish model of bank crisis management for countries currently facing financial problems.

¹ This report is based on Jonung (2008; 2009) and Jonung et al. (2009). The views expressed are those of the author.

² The "It" metaphor for the Great Depression of the 1930s in the United States is taken from Chapter 1 in Minsky (1982).

2. THE CAUSES AND CONSEQUENCES OF THE FINANCIAL CRISIS³

2.1 Economic policies prior to financial liberalization⁴

Sweden became a member of the Bretton Woods system in 1951, when its exchange rate was pegged to the United States dollar (US\$). The Swedish krona (hereafter krona) was set at 5.17 Swedish kronor to the US\$, and was kept constant by the Riksbank for 20 years. A pegged or fixed rate for the krona remained a major goal until the financial crisis of the 1990s.

World War II unleashed broad-ranging regulations of the Swedish economy. Capital account (foreign exchange) controls were introduced early during the war and remained in force until 1989. They were complemented in the 1950s by instruments such as liquidity ratios that allowed the Riksbank to set the interest rate and steer credit flows according to political priorities. The external and internal regulations of the financial system facilitated a policy of low interest rates, keeping interest rates below the levels that would have prevailed if there had been no regulatory system in place.

The capital account controls were the basis for post-war stabilization policies. They isolated Sweden financially from the rest of the world, in this way allowing for selective monetary and fiscal policies domestically. Commercial banking was turned into an almost risk-free business. Since nominal interest rates were kept low and the tax system allowed large deductions for the cost of borrowing, private sector demand for credit outstripped the available supply. The private sector remained in a permanent state of liquidity rationing.

In the early 1970s, the Bretton Woods system broke down. Still, after its demise, capital account controls remained in force in Sweden until the end of the 1980s. In the 1970s, full employment emerged as a major policy goal, one reason being the strong political position of the labor unions. This goal contributed to accommodative fiscal and monetary policies. This policy mix led to low rates of unemployment, high rates of inflation and several devaluations during the period 1976–82. The discretionary exchange rate flexibility allowed the necessary adjustment of real wages required for maintaining full employment and external balance.

The policy of devaluation peaked during the second oil crisis (OPEC II). The center-right government devalued the krona by 10% in September 1981. Immediately after the 1982 election, when the Social Democrats returned to power, an “offensive” devaluation of 16% was carried out to gain a competitive advantage for a few years. The devaluations of 1981–82 contributed to a rapid recovery after OPEC II.

Prior to the crisis of the 1990s, Sweden was known as a rich welfare state, immune to the high unemployment that plagued many Western European economies since the 1970s.⁵ Few understood that the macroeconomic policy regime rested on a system of strong capital account regulations which isolated the country from the rest of the world.

³ This section builds upon Chapter 2 in Jonung, Kiander, and Vartia (2009). See also Drees and Pazarbasioglu (1998) and Englund (1999) on the Swedish financial crisis.

⁴ On Swedish economic policies in the post-World War II period see also Henrekson, Jonung, and Stymne (1996).

⁵ For a survey of the post-World War II performance of the Swedish economy prior to the financial crisis, see Henrekson, Jonung, and Stymne (1996).

2.2 The boom of 1985–90

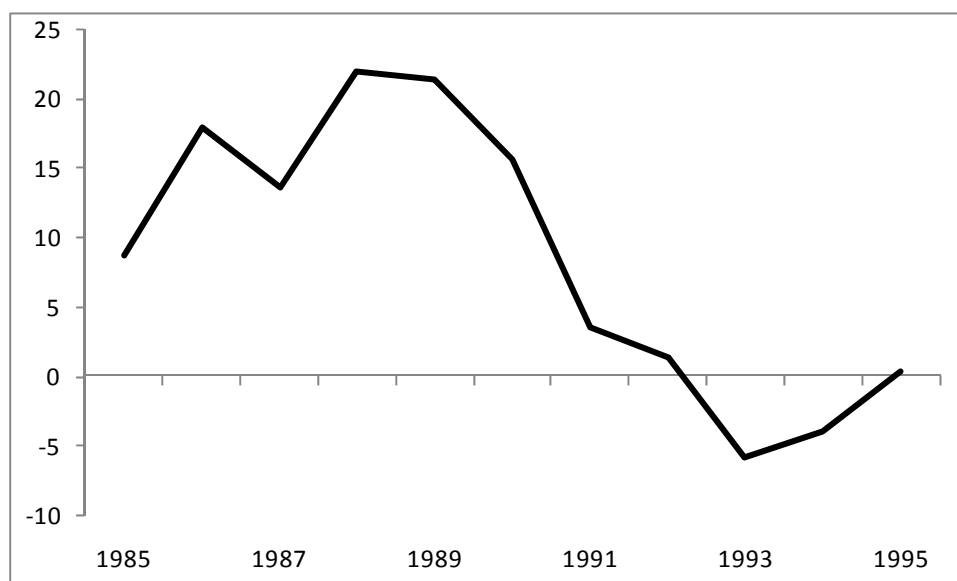
The financial regulations were gradually softened in the 1970s and 1980s. Shortly after the 1985 election, the Governing Board of the Riksbank abolished the quantitative controls on lending by commercial banks. This measure, later dubbed the "November revolution", had a significant, although unexpected and unintended, effect over the next 10 years. It was originally considered as a minor technical measure without any significant economic consequences. It turned out that the 1985 deregulation was an important first move in the build up towards the crisis of the 1990s.

The deregulation should be evaluated against the imbalances that characterized private sector portfolios prior to the November 1985 decision. Companies and households had been restricted in their choice of portfolios due to the regulations introduced in the 1950s. High inflation and, as a consequence, the expectation of further high inflation, together with a tax system that favored borrowing, compounded these portfolio imbalances.

The financial deregulation of 1985 gave strong incentives for companies and households to expand their borrowing at prevailing interest rates. It changed the incentives confronting commercial banks. Suddenly they were facing more open and aggressive competition for market share. They adjusted to the new situation by expanding credit, when borrowers tried to take on new debt.

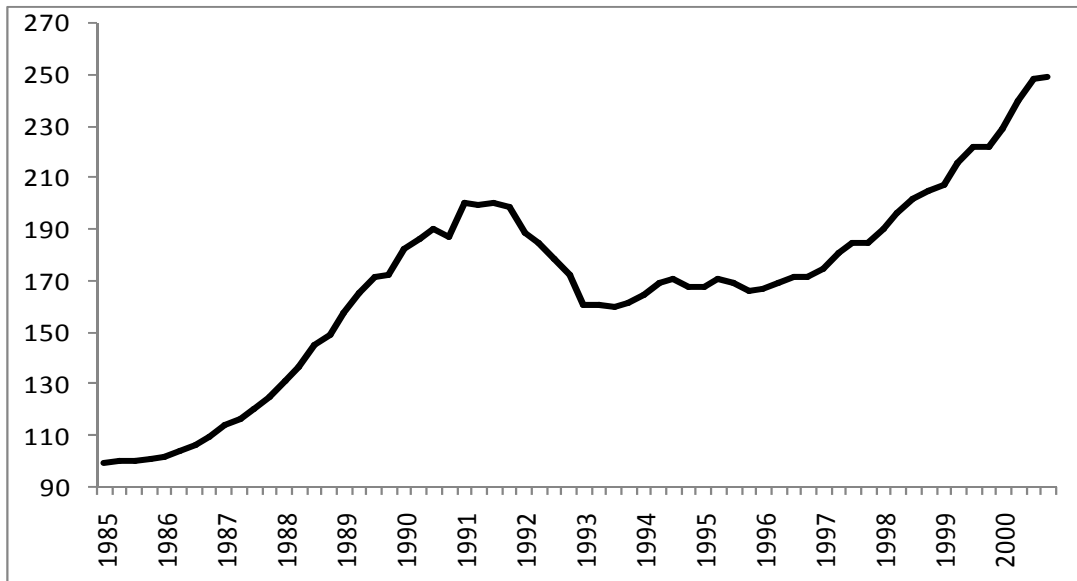
The outcome of the new incentives was that between 1986 and 1988 debt grew rapidly (Figure 1). A large part of the expanding volume of credit was channeled into property and share markets. House prices increased rapidly (Figure 2). The private sector utilized the rising value of real assets as collateral for additional borrowing. The process was fuelled by a rising rate of inflation, which peaked in 1990 (Figure 3). Inflation expectations followed the rise in the inflation rate. The real after-tax interest rate was negative for many investors due to the combination of high actual inflation, high inflation expectations and the rules of the tax system (Figure 4).

Figure 1: Annual Growth Rate of the Volume of Credit in Sweden, 1985-94 (in %)



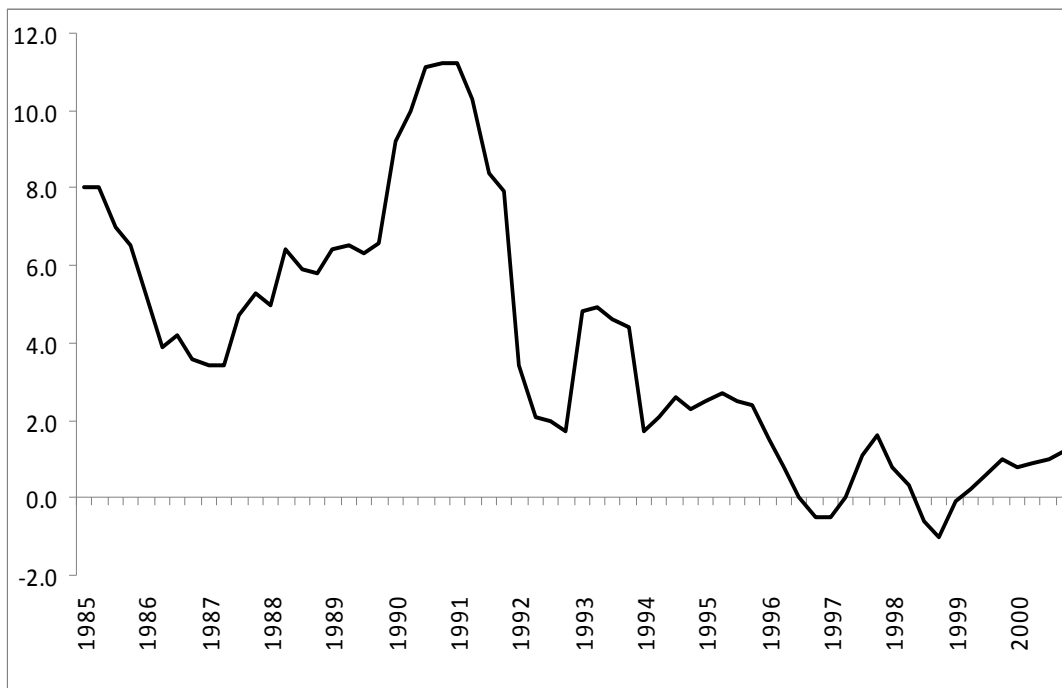
Source: Jonung, Kiander, and Vartia (2008).

Figure 2: House Prices 1985–2000 in Sweden. Index = 100 for 1985 (in %)



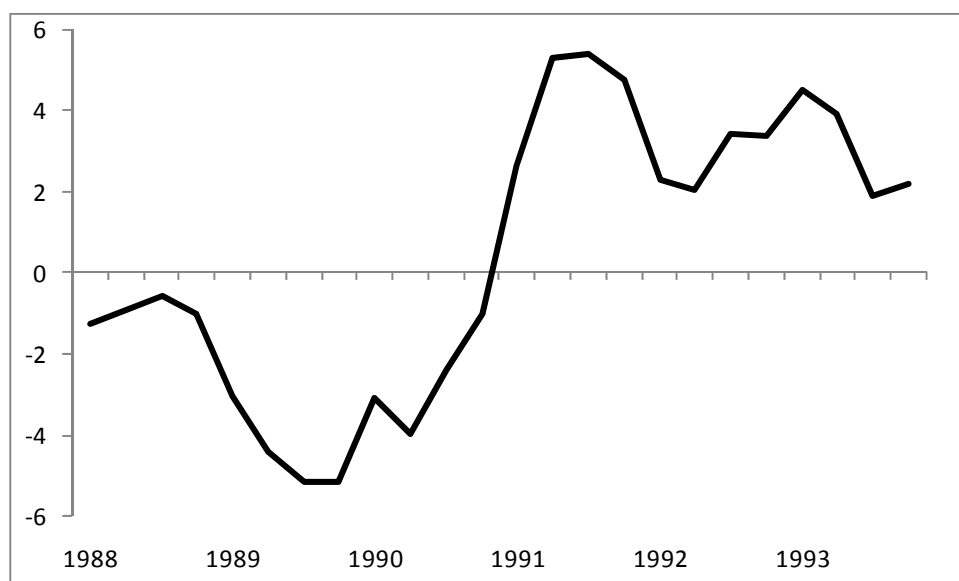
Source: Jonung, Kiander, and Vartia (2008).

Figure 3: The Rate of Inflation in Sweden, 1985–2000 (in %)



Source: Jonung, Kiander, and Vartia (2008).

Figure 4: The After-tax Real Rate of Interest, 1988–93 (in %)



Source: Jonung, Kiander, and Vartia (2008).

The low and commonly negative real interest rates made it tempting to take on additional loans for investments and consumption. The result was the creation of a financial bubble in the Swedish economy, built on excessive indebtedness within the private sector, and a corresponding overlending within the financial system.

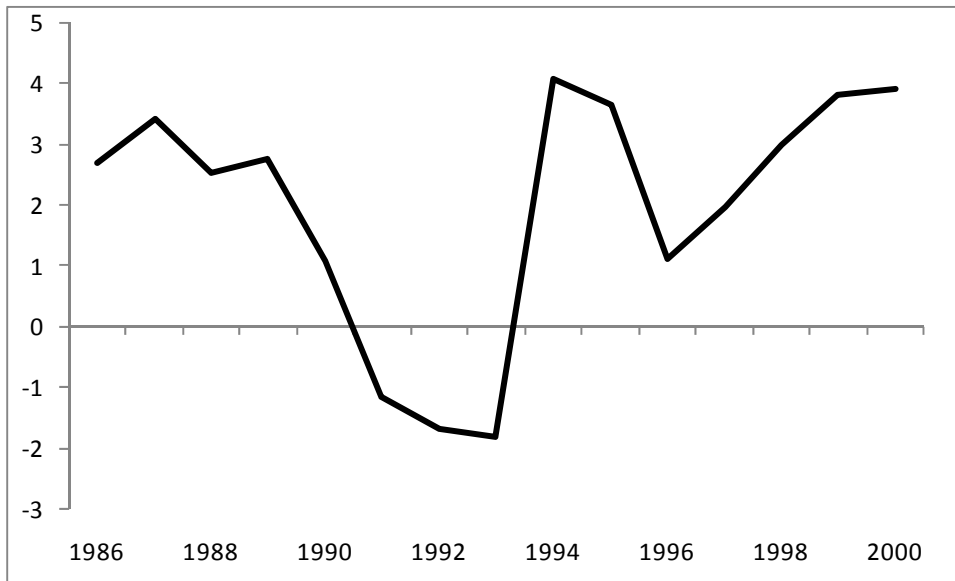
The credit boom was reflected within the real sector as well. Consumption became the driving force behind the overheating of the economy (Table 1). During the most intense part of the boom, households consumed more than their disposable income. Real income grew rapidly (Figure 5). Government finances improved during the overheating, since the sharp growth in consumption and income resulted in growing tax revenues from value added taxes (Figure 6). The budget showed a small surplus in the late 1980s, leading to a decline in the debt-to-GDP ratio.

Table 1: Real GDP and its Components in Sweden During the Boom, Bust, and Recovery, 1985–98 (% change during each phase)

| Item | Boom 1985–90 | Bust 1990–93 | Recovery 1993–98 |
|---------------------|--------------|--------------|------------------|
| Private consumption | 12.7 | 3.5 | 9.8 |
| Public consumption | 7.8 | 2.9 | 0.6 |
| Private investment | 32.8 | 38.2 | 36.9 |
| Exports | 16.1 | 7.6 | 68.8 |
| Imports | 28.2 | 6.2 | 62.0 |
| Real GDP | 12.0 | 4.7 | 15.5 |

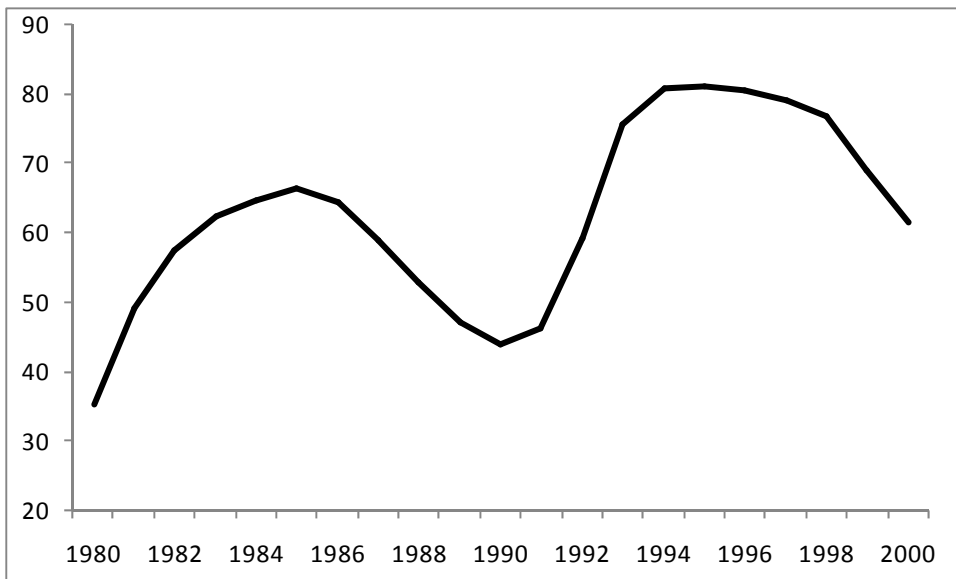
Source: Jonung, Kiander, and Vartia (2008).

Figure 5: Real Income Growth (GDP) in Sweden, 1986-2000 (in %)



Source: Jonung, Kiander, and Vartia (2008).

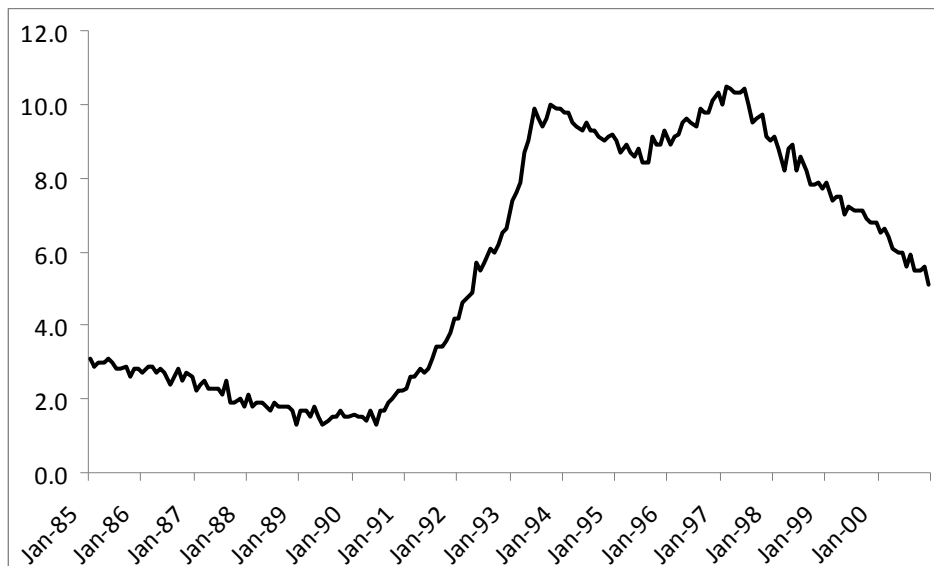
Figure 6: Public Debt in Relation to GDP, 1980-2000 (in %)



Source: Jonung, Kiander, and Vartia (2008).

The labor market was driven by strong demand from the domestic (non-tradable) sector, in particular from the construction sector. Construction benefited from the rise in the price of real assets. It was also subsidized through the government's housing policy. The labor market became overheated when unemployment was under 2% at the end of the 1980s (Figure 7).

Figure 7: The Rate of Unemployment in Sweden, 1985–2000 (in %)



Source: Jonung, Kiander, and Vartia (2008).

As a consequence of rapid domestic expansion, the export sector (the tradable sector) was squeezed. Exports declined while imports soared. The current account worsened toward the end of the 1980s after the recovery in the wake of the 1981–82 devaluations.

Other factors supported the economic upturn. The fall in oil prices in 1985 gave a positive impetus to the world economy. The long period of international economic growth that began in 1982–83 peaked in 1989–90, when all indicators pointed to an overheating of the Swedish economy, undermining the credibility of the pegged exchange rate for the krona.⁶

The expansionary impulse set off by financial liberalization was not countered by any contractionary policy measures until 1989–91. Monetary policy had been founded on the pegged exchange rate of the krona since 1982. The devaluation in 1982 was declared the last of its kind. As the Riksbank did not counter the overheating by revaluing the krona, responsibility for stabilization fell solely on the Ministry of Finance. After the 1988 election, a series of restrictive measures were adopted. In February 1990, the government proposed a freeze on all wages, prices and dividends for two years and a limitation of the right to strike. This package triggered a government crisis. The Social-Democratic government resigned, but returned shortly afterwards with a new Minister of Finance, taking over an economy that was moving into a deep crisis.

In October 1990, as a consequence of a speculative attack on the krona, a new austerity package was introduced. At the same time, the government announced that Sweden would apply for European Union membership, an attempt to shore up the credibility of the krona. In May 1991, the Riksbank strengthened the credibility of the krona by pegging the krona to the common European currency unit, the ECU. In September 1991, a major financial institution, Nyckeln, faced severe problems. This event is commonly regarded as the start of the bust phase.⁷ The very same month, the Social Democratic government lost the parliamentary elections. A four-party coalition formed the new government, with Carl Bildt from the

⁶ Lindberg and Söderlind (1991) demonstrate that expectations of a future devaluation of the krona were well developed in the financial markets throughout the 1980s—a sign that the pegged exchange rate for the krona was not credible.

⁷ The collapse of Nyckeln came as a complete surprise to the public. According to Jennergren (2002), there was no publicly available information that flagged the problems facing this company in advance.

Conservative Party as prime minister. The new government took over an economy in rapid decline.

2.3 The bust and crisis of 1991–93

The bust was driven by a strong and unexpected upturn in the real rate of interest adjusted for taxes (Figure 4). The Swedish rate of inflation declined sharply after a peak of about 10% in 1990 (Figure 3). Inflationary expectations, which followed actual inflation with a small time lag, started to decrease around 1991. A major tax reform introduced in 1990–91, heralded as "the tax reform of the century" in public debate, made the conditions for loan-financed investments worse and favored savings. In addition, the remaining capital account controls were abolished in 1989, prompting an outflow of capital from Sweden.

Swedish real interest rates were forced upwards by international factors, in particular the reunification of Germany, which led the Bundesbank to raise German, and thus European, interest rates. The krona was subject to several speculative attacks due to the falling credibility of the policy of a pegged krona rate. The Riksbank had to defend the krona rate by raising interest rates in Sweden by more than rates in the rest of Europe.

When the real rate of interest rose, the price of assets declined in a downward spiral. The fall in asset prices meant a reduction in wealth, since these had been financed through loans whose nominal value remained unchanged (Figure 2). The downturn was fuelled by expectations that asset prices would continue to fall.⁸ The number of bankruptcies increased dramatically.

The massive loss in the balance sheet of the private sector created by the increase in the real rate of interest can be calculated in various ways. Söderström (1996: 174–79) estimated that the value of tangible assets in Sweden declined by about 30%. He also showed that the private sector tried to counteract this loss of wealth by increasing its financial savings by making repayments on its loans and thereby trying to rebuild its equity.⁹

Households adjusted their portfolios by increasing savings and by reducing consumption, primarily of durable consumer goods. The savings ratio rose from a negative level at the end of the 1980s to about 8% in 1993.¹⁰ This change in private savings was a significant feature of the crisis.

At this point, it became apparent that the many years of regulated low interest rates had resulted in considerable overinvestment. The rise in the real rate of interest revealed excessive holdings of assets, mainly in the form of housing, at the beginning of the 1990s. Then this asset bubble burst. The revaluation of property and other assets brought with it an abrupt freeze in investment within the housing sector—a sector that had previously been considered a major engine of the Swedish economy.

The shock of high real interest rates created a sharp fall in aggregate demand. Unemployment increased from around 2% to close to the Organisation of Economic Co-

⁸ The real rate of interest determines the value of existing assets (capital stocks) as well as the value of planned investments (flow of new capital).

⁹ The size of the real rate shock within the private sector can be estimated in various ways depending on the choice of period, the real rate of interest used (ex ante or ex post) and choice of taxable entity. Söderström (1996: 176) set the real rate shock as an increase from minus 3% to plus 8%, i.e. a total increase of 11 percentage points.

¹⁰ See Jonung, Kiander and Vartia (2008).

operation and Development (OECD) average of over 8%. Employment fell sharply. The number of bankruptcies skyrocketed. In 1990 inflation was 10% per annum; in the mid-1990s it was down to 2%. Available indices for asset prices show deep deflation during the years 1990–93.

The weakening of the current account that had begun in the late 1980s continued throughout the crisis. It culminated in a deficit amounting to 3.5% of GDP in 1992. This reflected the cost crisis that had afflicted Sweden's export industry as a result of the overheating at the end of the 1980s.¹¹

As a consequence of the decline in economic activity, the rise in unemployment and government support to the financial sector, the budget deficit increased alarmingly. The national debt in relation to GDP reached the highest figure recorded since World War II, considerably higher than during OPEC II (Figure 6). The expansion of the national debt was not the result of discretionary decisions, but rather the result of the workings of automatic stabilizers.

The center-right government that came to power after the election in 1991 was firmly set to continue the pegged krona rate policy. From the start it chose to focus on supply-side policies to increase the growth potential of the Swedish economy. However, the new government soon faced catastrophic developments.

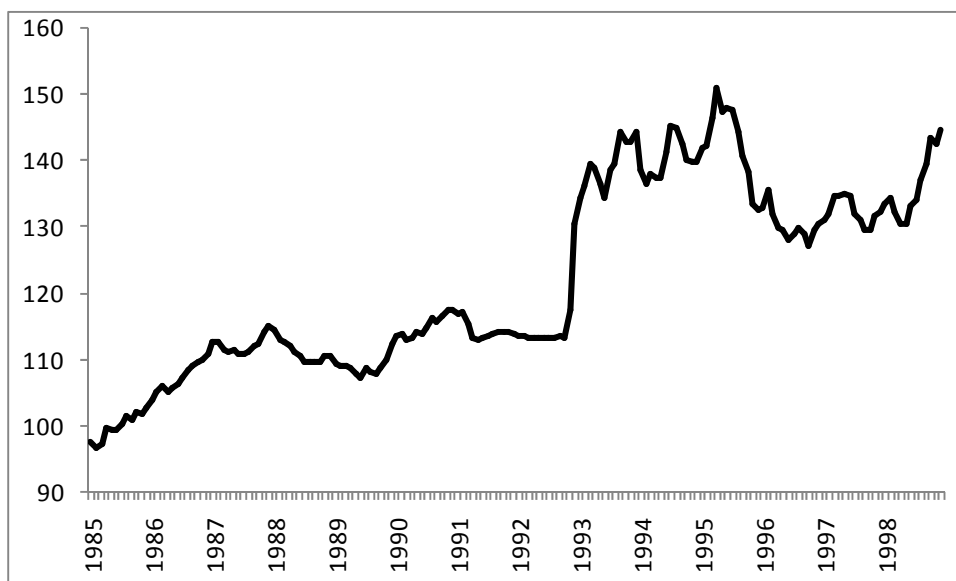
The rapid increase in real interest rates undermined the financial system, triggering a banking crisis. In September 1992, the government intervened to prevent a major financial collapse by announcing a blanket guarantee for the liabilities of the banking system. A bank support authority was set up a few months later, and two banks, Nordbanken and Gotabanken, ended up under government control.

Domestic developments—a growing financial crisis, falling industrial output and rising unemployment—undermined the credibility of the pegged krona rate. The authorities were trapped in a situation where external conditions (the currency crisis) required contractionary measures, while domestic considerations (the banking crisis) demanded an expansionary policy. The more the Riksbank tried to defend the pegged krona rate by raising interest rates, the deeper the domestic crisis became.

With the European currency markets facing unrest in September 1992, the Riksbank defended the krona by significantly raising its overnight rates. For a very short period, the marginal interest rate—the overnight rate—was 500%. The government and the opposition party, the Social Democrats, agreed in September to jointly back two austerity packages to avoid a devaluation of the krona. However, the defense of the krona broke down in November 1992 when it came under massive speculative attack. A floating exchange rate was introduced on 19 November 1992, amounting to a considerable depreciation of the Swedish currency (Figure 8).

¹¹ See Chapter 2 in Jonung, Kiander and Vartia (2009).

Figure 8: The Exchange Rate of the krona against the ECU basket, 1985–98



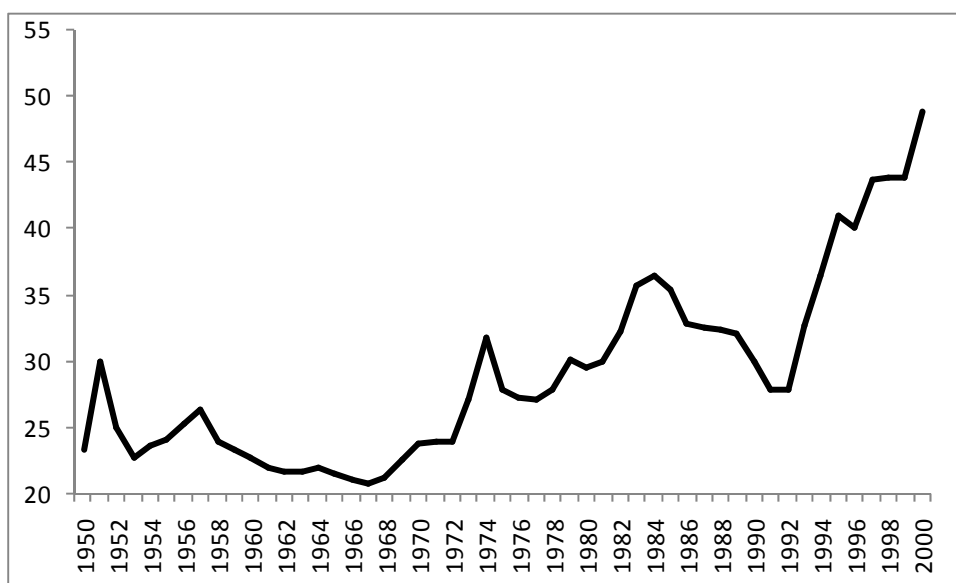
Source: Jonung, Kiander, and Vartia (2008).

2.4 The recovery

The depreciation of the krona in November 1992 marked the culmination of the crisis and the beginning of the recovery in Sweden. Because the krona was floating, interest rates were gradually lowered. The turnaround and the recovery started in 1993. Economic growth turned positive in 1993 and remained strong throughout the rest of the 1990s, apart from a short downturn in 1996/97 (Figure 5). Almost all indicators of economic activity showed positive numbers after 1993–94.

Exports were the major driving force behind the recovery, increasing as a share of GDP. Exports for 1992 amounted to 28% of GDP. By the end of the decade the number was over 45% (Figure 9)—a remarkable development within less than a decade. There is no other similar case in Swedish economic history.

Figure 9: Exports in Relation to GDP, 1950–2000 (in %)



Source: Chapter 10 in Jonung, Kiander and Vartia (2009).

Several factors contributed to this sharp expansion in exports. First, the large and persistent depreciation of the krona after November 1992 increased the competitiveness of Swedish goods. Wage moderation and improvements in productivity facilitated the growth of exports. Exports were also favorably affected by Sweden's entry into the European Union in 1995, which fostered trade both directly and indirectly by promoting foreign direct investment, not least in the rapidly growing information communication technology sector.

The rise in domestic demand during the recovery phase was markedly lower. Both private and public consumption grew more slowly than GDP in the years following the crisis. At the same time, the household savings rate remained at a higher level than before the crisis, indicating a continued improvement of the balance sheets of the private sector.

The effects of the crisis on employment were more prolonged. Unemployment rates in the 1990s never dropped back to the level that prevailed during the 1980s. Open unemployment began to decline from the high level of around 8–10% by the end of 1997 (Figure 7). The high and persistent rate of unemployment contributed to wage moderation in the 1990s and well into the new century.

The move from the pegged exchange rate regime to inflation targeting in 1992-93 had a profound impact on the behavior of the labor market participants. The new monetary policy regime of low inflation contributed to non-indexed, two-year collective wage agreements in 1993 and to three-year contracts from 1995 until 2008. Judging from the emergence of three-year collective wage agreements, confidence in the new regime of inflation targeting was quick to flourish. To that extent, it stands out as a successful regime, at least so far. Of course, there is no guarantee that the inflation targeting regime will remain associated with long-term contracts in the future.¹²

The fall of the krona in November 1992, which allowed the Riksbank to move to lower interest rates, meant the end of the pegged exchange rate for the krona. Policymakers were not ready to return to a fixed krona rate after the events in the autumn of 1992. Instead the Riksbank unilaterally announced a policy of inflation targeting in January 1993. The target rate of inflation was set at a 2% yearly increase within a range of plus or minus 1%. The Riksbank declared that the new target range was to be binding from January 1995. Initially there was some uncertainty about the Riksbank's new policy regime. However, the rate of inflation and inflationary expectation declined surprisingly quickly toward the level set by the Riksbank, suggesting that the new monetary policy regime had gained credibility.

The center-right government lost the election in the autumn of 1994 immediately after the crisis, ceding power to the Social-Democratic opposition. There was initially some uncertainty about the economic policies of the new government. Was it going to contract or expand fiscal policy? The uncertainty was dispelled, however, when the new government launched a program of fiscal austerity. As the crisis had caused huge budget deficits, the new government decided that large cuts in government expenditures and tax increases were necessary.¹³ As the economy was recovering after the floating of the krona, the deficit as a share of GDP decreased rapidly, and the government debt to GDP ratio was brought down significantly during the latter part of the 1990s (Figure 6).

¹² On this point, see Fregert and Jonung (2008) demonstrating that the inflation targeting regime after 1993 is associated with less macroeconomic uncertainty than any other policy regime since 1908.

¹³ It is an open question to what extent the fiscal policy tightening contributed to or dampened the recovery.

3. THE SWEDISH MODEL FOR BANK RESOLUTION¹⁴

As the banking and currency crisis was growing deeper, the government was forced to respond so as to maintain the stability of the financial system. The approach adopted developed piecemeal. Initially, measures were taken on an ad hoc basis. Eventually, as the crisis started to emerge as a major threat to the banking system, policymakers were forced to respond in a more consistent manner. This process developed into the Swedish model for bank resolution. In retrospect, this model consists of several features. The core is composed of the following seven elements.¹⁵

3.1 Blanket guarantee of bank liabilities

The government, in cooperation with the opposition, announced in a press release on 24 September 1992 that depositors as well as other counterparties of Swedish commercial banks and Swedish financial institutions in which the State was involved were to be fully protected from any future losses on their claims. According to the press release, the government was going to ask the parliament, the Riksdag, to agree on a legislative package later that autumn to address the financial turmoil.

The press release declared that the purpose of the blanket guarantee was that "households, enterprises and other holders of claims can feel secure".¹⁶ However, the immediate reason for the press release was actually the fear of losing foreign financing facilities. Swedish banks were heavily dependent on foreign financing. If this funding were to dry up, it would not be possible for the Riksbank to maintain the pegged krona rate.¹⁷ For the policymakers there was no alternative but to issue a blanket guarantee to support the krona.

In the currency turmoil of September 1992, where speculation had forced the central banks of the United Kingdom, Finland and Spain, among others, to let their currencies float, the peg of the krona came under heavy speculative attacks. The blanket guarantee—already a drastic measure in itself—was thus an attempt to dispel foreigners' fears that Swedish commercial banks would not be able to meet their financial obligations. The guarantee was successful in the sense that foreigners' confidence in the solvency of the Swedish commercial banks remained intact.

In addition, the blanket guarantee proved highly beneficial, as it expanded the options for the Riksbank to support commercial banks regardless of their financial position. Through the press release, the Riksbank was given the option of lending to any commercial bank operating in Sweden, even to those that were on the brink of insolvency, because the press release represented a State guarantee for the liabilities of the banks.¹⁸

¹⁴ This section is taken and adapted from Jonung (2009), which condenses the Swedish lessons from the bank resolution of the early 1990s. In a related study, Chen et al. (2009) bring out the lessons for China today from the Nordic experience of financial liberalization in the 1980s.

¹⁵ The following account is based on among others Andersson and Viotti (1999), Berg (1998), Bäckström (1997), Dennis (1998), Englund (1999), Englund and Vihriälä (2009), Heikensten (1998a and b), Ingves and Lind (1996, 1998 and 2008) and Lundgren (1998).

¹⁶ See the press release given in extenso in Appendix 1 in Jonung (2009).

¹⁷ The government, through the National Debt Office, was prohibited from carrying out any foreign net borrowing. This policy (*valutalånenormen*), launched in 1984, contributed to the private sector entering rapidly into foreign debt after the financial liberalization during the second half of the 1980s.

¹⁸ The Swedish experience of blanket guarantees ranks favorably in an international context. See Laeven and Valencia (2008b) for a survey of blanket guarantees in banking crisis.

3.2 Political unity

The blanket guarantee of September 1992 was based on an agreement between the government and the political opposition. This spirit of political unity became a central feature of the Swedish model of bank resolution policy from the very start. This unity was initially created by the determination of the political parties to defend the pegged exchange rate of the krona, but it persisted throughout the crisis, even after the floating of the krona.

The leadership of both political camps knew that behind the crisis lay a legacy of policy measures taken by two successive governments, first by the Social Democratic government of 1982–91, which initiated the financial deregulation in the mid-1980s and subsequently introduced the policy changes that caused the sharp increase in real interest rates and, secondly, by the center-right government that came into power in the election of autumn 1991, inheriting both the financial imbalances of the boom years and the ensuing bust and emerging depression.

Political unity guaranteed the passage through parliament of measures to support the financial system. In addition, representatives of the opposition had a full insight into the resolution process, thus maintaining political accord.

3.3 Swift policy action

Once it was fully understood that a serious financial crisis was in the making, the government, the parliament and the Riksbank responded by taking decisive steps to support the financial system and, particularly, banks in distress. In this way the confidence of depositors and counterparties in the financial system was strengthened at an early stage of the financial crisis. This made it possible to maintain confidence throughout the resolution of the crisis at a relatively low political cost. Swift action kept any uncertainty regarding policy measures to a minimum.

3.4 Adequate legal and institutional framework based on open-ended funding

In December 1992, the Swedish Parliament by an overwhelming majority passed legislation to establish a Bank Support Authority, the *Bankstödsnämnd*, as envisaged in the press release of 24 September 1992. The parliament decided that the *Bankstödsnämnd* was to be given open-ended funding, not a fixed predetermined budget. This was a deliberate choice in order to avoid the risk of the *Bankstödsnämnd* being forced to go back to the Riksdag to ask for additional funding at a later stage.¹⁹ The open-ended funding underpinned the credibility of the bank resolution policy. It clearly demonstrated that there were no political misgivings about the financial commitment to support the banking system.

The *Bankstödsnämnd* was set up as an independent agency at a distance from the government, the Riksbank and the *Finansinspektion* (the financial supervisory authority). This construction fostered credibility and trust in its operations. The Social Democratic opposition was given full insight into its activities. It was staffed by professionals and it began operation in the spring of 1993, shortly after it was established.²⁰ It worked closely with the

¹⁹ In this case the experience of Finland served as a warning. The Finnish parliament had first settled for a limit to its bank support, which subsequently had to be revised - at considerable political cost.

²⁰ Foreign firms like Arthur Andersen, McKinsey and Credit Suisse First Boston served as advisers to the Ministry of Finance and the *Bankstödsnämnd*. See Ingves and Lind (1998).

Riksbank, the *Finansinspektion* and the National Debt Office. In the few cases when these institutions were not in agreement, the Ministry of Finance acted as arbitrator.²¹

3.5 Full information disclosure

From the very start, the *Bankstödsnämnd* sought to obtain a clear picture of the financial problems facing the financial institutions through due diligence. Even before it began its work, and in its early stages, it tried to draw—whenever appropriate—on the available expertise for dealing with ailing banks by consulting and using external experts, many of whom were recruited from abroad. Banks that turned to the *Bankstödsnämnd* with requests for support were obliged to give full disclosure of all their financial positions, opening their books completely to scrutiny. This requirement facilitated the resolution policy, as well as making it acceptable in the eyes of the public.

3.6 Differentiated resolution policy

Banks that turned to the *Bankstödsnämnd* were dealt with in a way that minimized the moral hazard problem. In short, the aim was to save the banks—not the owners of the banks. By forcing owners of banks to absorb losses, public acceptance of the bank resolution was fostered. In this way, taxpayers were likely to feel that the policy was fair and just.

The general strategy was to divide the banks into three categories, depending on whether the statutory capital adequacy ratio would be breached and, if so, whether this breach was temporary. The first category included those banks that might deteriorate towards the capital adequacy limit, but would subsequently be able to achieve enhanced solvency on their own; the second category covered those that might fall below the limit for a time, but would eventually recover; and the third category was for those that were expected not to recover. Each of these three categories was treated differently by the *Bankstödsnämnd*.

Two bank asset management corporations (AMC) were set up to manage the bad debt (nonperforming loans) of two financial institutions, Securum as AMC for Nordbanken and Retriva as AMC for Gotabanken, as part of the resolution policy, as had been the case in other countries. A novel approach was adopted which involved splitting the assets of an ailing bank into "good" and "bad" assets, and then transferring the "bad" assets to the AMC, principally to Securum.²² In addition, when assets were placed under the administration of Securum and Retriva, they were assigned low market values in the due diligence process, effectively setting a floor for asset values. Because market participants did not expect prices to fall below this level, trading was maintained.²³

In the long run, i.e., about 10–15 years, the two bank AMCs proved to be successful in the sense that the fiscal cost of supporting the financial system was roughly balanced by the revenues received through the liquidation of the asset holdings of the bank AMCs.

²¹ See Ingves and Lind (2008).

²² See Bergström, Englund and Thorell (2002) and Heikensten (1998a and b).

²³ This is in sharp contrast to the Japanese policy of setting high values for "bad" assets, thus freezing the real estate market for about a decade.

3.7 The role of macroeconomic policies in ending the financial crisis

The bank resolution policy in Sweden was greatly facilitated by the design of monetary and fiscal policies. These measures allowed the Swedish economy, and hence the financial system, to recover fairly rapidly.

The fall of the pegged exchange rate of the krona on 19 November 1992 due to speculative attacks turned out to be an important move toward the recovery. Once the krona was floating, it depreciated sharply—by nearly 30 per cent. In the years that followed, exports became the engine of the Swedish economy.

Once the krona was floating, monetary policy was able to focus on domestic conditions. The Riksbank gradually lowered interest rates. The vicious circle of falling asset prices was halted. The ensuing fall in interest rates eased the pressure on the banking system, as the economy started to recover. In July 1996, the crisis legislation and the blanket guarantee were abolished.

Fiscal policies were supportive too. The government allowed huge deficits to develop during the crisis, mainly as a result of the workings of automatic stabilizers. The bank support policy contributed to the rise in the deficit. Viewed in an international context, the Swedish budget deficit grew exceptionally rapidly.

In short, the rapid recovery of the Swedish economy greatly facilitated the bank resolution policy. As soon as the economy was expanding, pressure on the banking system started to lessen. Balance sheets were strengthened. The banking system became profitable again.²⁴

3.8 Was the Swedish bank resolution a success?

The Swedish bank resolution policy is commonly regarded as successful in the international policy debate, although there are no firm criteria on how to evaluate resolution policies.²⁵ One reason for this positive view is the fact that the banking system continued to function during the crisis, there were no bank runs, hardly any signs of a credit crunch emerged, and the banking system was swift to move out of the crisis. The banking system remained largely privately owned and became profitable shortly after the crisis.²⁶

The exceptions to this rosy picture are Nordbanken and Gotabanken. Nordbanken, previously a government-owned bank that was partially privatized (25%) in the late 1980s, was renationalized. Gotabanken was taken over by the government and amalgamated with the former Nordbanken after the default of the bank holding company, Gota AB. The consolidated Nordbanken, however, was eventually privatized and emerged as a successful venture in the form of Nordea, now the first true pan-Nordic bank, currently active in Denmark, Finland, Norway and Sweden.

²⁴ See Englund and Vihriälä (2009).

²⁵ For positive assessments of the Swedish bank resolution approach, see among others Ergungor (2008). See also Calomiris, Klingebiel, and Laeven (2004) for a survey of alternative crisis resolution policies, although these authors draw no firm conclusions about the optimum design of resolution policies.

²⁶ The Swedish record looks attractive compared to that of Japan, where the banking system remained in distress for a much longer period than in Sweden.

Another reason for taking a positive view of the Swedish approach is that the net fiscal cost, more commonly referred to as the “cost to the taxpayer”, turned out to be very low or even a gain for taxpayers in the long run.²⁷ The gross fiscal cost for the bank support policy initially amounted to 3.6% of GDP.²⁸ By now, some 15 years after the crisis, the cost to the taxpayers is likely to have been repaid after the liquidation of the assets that were taken over by government institutions. The best estimate available, at least so far, suggests that the fiscal outlays for supporting the banking sector were recovered.²⁹

The Swedish crisis management was also a domestic affair. No international organizations like the International Monetary Fund (IMF) were involved, which probably contributed to public trust in the process.³⁰ Nevertheless, mistakes were made along the way, although these have not received as much attention as the policy successes. For example, the Financial Supervisory Authority (Finansinspektionen) tightened the accounting rules as the crisis evolved, putting additional pressure on the banking system.³¹ Complaints were made that even firms with a good credit record were transferred from commercial banks to AMCs, and thus left without an ordinary bank connection.³² However, these mistakes are minor in comparison to the positive effect of the overall policy of managing the financial crisis.

4. IS THE SWEDISH MODEL USEFUL TODAY?

To what extent can the Swedish model be applied to other countries currently suffering from financial tensions and severe banking problems? To answer this question, the Swedish crisis of the early 1990s has to be compared to the present global crisis.

Some similarities are striking. The causes of the two crises are similar. The impulse driving the boom that preceded the crisis can be traced to financial liberalization and financial innovations, setting off a credit boom that fuelled rapid increases in asset prices, particularly house prices. The boom was supported by lax monetary and fiscal policies. The private sector, households, firms and financial institutions ended up overindebted. Financial supervision and regulations were inadequate to prevent the boom and the emergence of large financial imbalances.

Eventually, boom turned into bust—with a declining volume of credit, deleveraging, falling asset prices, and distress in the financial system bringing the threat of bankruptcy of major financial institutions, and triggering heavy government intervention to support the banking system. The financial crisis impacted on the real economy, initiating a deep recession.

²⁷ The cost to society in terms of lost output, industrial production foregone and loss of employment was huge. See the summary in Jonung and Hagberg (2009).

²⁸ Data on gross and net fiscal costs are taken from Laeven and Valencia (2008a).

²⁹ The most complete and updated attempt to evaluate the cost and returns to the taxpayers is presented by Christner and Hagbjer (2007). Building on the work by Jennergren and Näslund (1998), they take the support paid by the government during the acute phase of the crisis as a starting point and then estimate the revenues from the selling of the “bad” assets taken over by the government. They conclude that “the Swedish government has neither lost nor gained any significant amount from the subsidies” once given to the banking system.

³⁰ The IMF indirectly took a part in the policy of defending the peg for the krona in 1992 by recommending budget consolidation. See Dennis (1998: 64) and Jonung (2008).

³¹ See Urwitz (1998: 63). The changes in the rules were reasonable per se. The problem was that the evaluation methods should have been changed prior to, not during, the crisis.

³² Representatives from small business also complained that commercial banks unduly cut off credit to viable firms forcing unnecessary bankruptcies and forced sales.

On the other hand, there are also considerable differences between the Swedish crisis of the 1990s and the current global financial crisis. Most important, the initial conditions for Sweden compared to those of most other countries today are significantly different. The Swedish crisis of the early 1990s was primarily a local phenomenon, or—more accurately—a Nordic one, as Finland and Norway also went into crisis at roughly the same time as Sweden.

Sweden, being a small open economy with a pegged exchange rate when the crisis peaked, was able to abandon the pegged rate in November 1992, thus obtaining a lasting depreciation of its currency that contributed to a prolonged recovery. This option of an export-oriented growth strategy out of the crisis is currently not open to the world, because the present crisis is a global one. An individual country can no longer rely on the rest of the world to maintain aggregate demand for its exports, as Sweden was able to do in the 1990s.

The small size of the Swedish financial system in the 1990s facilitated the bank resolution policy. Policymakers had to deal with a limited number of banks—only six major banks, in fact—in a global environment of trust in the banking system and in financial markets (except for the Nordics). The Swedish system was also bank-based, with few major financial actors outside the banking system. This is in sharp contrast to the US today, for example, where there are a large number of banks of different types and many nonbank financial actors and where public trust in the financial system and its actors (“Wall Street”) is extremely low.³³

The Swedish bank resolution policy was also confronted by a financial system that was much less sophisticated and much less globalized than the financial system of today. There were essentially no structured products, no sophisticated derivatives, hardly any hedge funds, a more limited supply of financial instruments, and less securitization, among other differences. Structured products were not traded in local and global markets, repackaged with increased leverage to create other securities, and then traded again.

In short, the Swedish financial system was much more transparent than is currently the case in most countries. Now, the lack of transparency has prevented the rise of a properly functioning interbank market, giving rise to large interbank spreads and a liquidity crisis, in spite of various government guarantees in several countries. A liquidity crisis of this type did not emerge in Sweden in the early 1990s, because the banking system remained transparent.

The ongoing global crisis is a banking crisis as well as a financial market crisis, in contrast with the Swedish crisis, which was primarily a banking crisis, and only later became a currency crisis. In particular, both local and global systemically important markets serving the short-term liquidity and funding needs for a wide range of financial institutions and hybrid financial/nonfinancial companies have been under severe stress—and at times not functioning at all—since the advent of the US subprime crisis in the summer of 2007.

Indeed, on this score, the ongoing crisis has been difficult for the authorities to manage, in part because some traditional central banking tools—particularly in the United Kingdom and the US—are not well suited, either legally or architecturally, to provide liquidity for the institutions most in need, including investment banks and insurance companies. By contrast, the Swedish blanket guarantee of September 1992 immediately created trust; one reason for this was the comparatively simple set of instruments available compared to the present case.

³³ Wages and bonuses paid to bankers created a public outcry in Sweden as well in the 1990s, thus becoming a problem for policymakers during the management of the financial crisis. Several attempts were made by the government to recover remuneration paid out by Nordbanken, but failed. See Lundgren (1998: 11).

In addition, Sweden has a long tradition of confidence in its domestic institutions, in its political system and in its elected representatives.³⁴ With this large social capital, it is easier for the government and the opposition to reach agreement on public policy actions that are stable and lasting. The tradition of open public debate makes it easier for policymakers to explain difficult and costly decisions to the public and to be trusted. Trust contributed to the belief that the *Bankstödsnämnd* was going to carry out its duties in a fair and correct way without favoring any of the parties involved. It may be difficult for other countries to mobilize the same type of social capital that was needed in order to make the Swedish approach successful.

Today, as a result of the global financial crisis, there is much more genuine uncertainty about the international financial architecture, about the regulation of the financial system and about the proper strategy for central banking than was the case in the early 1990s. The Swedish policymakers of yesterday designed their bank resolution policies in a more stable macroeconomic and financial global setting.

The above account of the differences between Sweden in the early 1990s and the global situation today suggests that it was far easier for policymakers to deal with a local financial crisis in a small open economy, like Sweden's, in the past than it is today to manage a global crisis characterized by strong and sophisticated financial and economic cross-border links. The international financial linkages suggest a need for international cooperation. Although policymakers trying to support the financial system today are facing greater challenges, the Swedish model of bank resolution can nevertheless serve as a source of inspiration—indeed as a benchmark or template—for countries facing financial crisis.

³⁴ The strong role of public trust in Sweden compared to the case of East Asia during the banking crises of the 1990s is highlighted by Kokko and Suzuki (2009).

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