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### Finland's 1992 Capital Injection<sup>1</sup>

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### **Abstract**

Following a large-scale deregulation of the financial sector during the 1980s and subsequent massive credit expansion, a banking crisis in Finland caused a sharp contraction in the economy in the early 1990s. To prevent the collapse of the banking system, the government offered FIM 8 billion in capital injections. Parliament appropriated the funds in the spring of 1992 and terms were defined in June 1992. The program was open to all banks, in proportion to their size, regardless of their solvency. In the fall of 1992, FIM 7.9 billion was deployed to 56 cooperative banks and 22 savings banks of which FIM 5.0 billion went to five banks. By January 1996 FIM 6.6 billion had been paid back and by November 1999 FIM 7.9 billion had been paid back with only one institution outstanding.

**Keywords**: Capital Injection, Finland, Nordic Banking Crisis

<sup>&</sup>lt;sup>1</sup> This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering broad-based capital injection programs.

Cases are available from the *Journal of Financial Crises* at https://elischolar.library.yale.edu/journal-of-financial-crises/.

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### Finland's 1992 Capital Injection

#### At a Glance

Following a large-scale deregulation of the financial sector during the 1980s and subsequent massive credit expansion, a banking crisis in Finland caused a sharp contraction in the economy in the early 1990s. The contraction caused a sharp decline in property prices and a dramatic increase in banks' performing loans. To prevent the collapse of the banking system, the government offered FIM 8 billion in capital injections.

Parliament appropriated the funds in the spring of 1992, and terms were defined in June 1992. The program was open to all banks in proportion to their size, regardless of their solvency. In the fall of 1992, FIM 7.9 billion was deployed to 56 cooperative banks and 22 savings banks of which FIM 5.0 billion went to five banks. By January 1996, FIM 6.6 billion had been paid back, and by November 1999 FIM 7.9 billion had been paid back onlv one institution's debt with outstanding.

The broad-based capital injection was one of a number of actions taken by the Finnish government during the crisis. Other actions include the allocation of an initial FIM 20 billion (although later increased) for the creation of the Government Guarantee Fund, and the creation of the asset management company Arsenal to absorb the nonperforming loans of, first, the Savings Bank of Finland, then other struggling banks.

Summary of Key Terms		
Purpose: "The aim is to counteract the deterioration of deposit banks' solvency, which significantly limits their ability to lend and thus worsens the recession as investment and consumer demand decline." (Finland 1992)		
Announcement Date	Supplementary Budget: proposed March 1992; approved April 29, 1992; terms defined June 1992	
Operational Date	Autumn 1992	
Sunset Date	Not defined	
Program Size	FIM 8 billion (U.S. \$1.8 billion)	
Peak Usage	FIM 7.9 billion deployed to 56 cooperative banks and 22 savings banks of which FIM 5.0 billion went to five banks	
Capital Characteristics	Tier-1 capital, noncumulative convertible preferred shares with an interest rate set slightly above market rate that increased gradually	
Injection's Percent of Total Tier-1 capital	14% of the sectors' regulation- prescribed capital	
Key Features	-Offer to all banks regardless of their solvency	
	-Amount per institution was related to their RWA or in proportion to their balance- sheet size and their off-balance- sheet commitments	
	-Losses could only eat into the capital after a bank's distributable equity capital and the reserve fund had been exhausted	
	-Banks could apply only twice, final time in December 1992	

### **Summary Evaluation**

An academic study conducted by the Bank of Finland showed that, "capital growth via government capital injection exert[ed] a positive effect on lending in 1992" (Vihriala 1997) Historians at the Bank of Finland reported that, "without the capital injections that they had received in autumn 1992 the capital adequacy of many banks would have fallen below the statutory minimum" (Kuusterä and Tarkka 2012). An academic review of the Nordic Crisis by three economists at the Bank for International Settlements said, "[of the Nordic countries] the capital injection scheme most supportive of aggregate demand was adopted in Finland" (Borio et al. 2010)

Finland Context 1992		
GDP	\$113 billion in 1992	
GDP per capita	\$26.7 billion per capita in 1992	
Sovereign credit rating (five-year senior	As of 1992:	
debt)	S&P: AAA	
Size of banking system	\$103 billion in 1992	
Size of banking system as a percentage of	91.3% in 1992	
GDP		
Size of banking system as a percentage of	Unknown	
financial system		
Five-bank concentration of banking system	Unknown	
Foreign involvement in banking system	Unknown	
Government ownership of banking system	Unknown	
Existence of deposit insurance	Yes	

Sources: Bloomberg, World Bank Global Financial Development Database, World Bank Deposit Insurance Dataset.

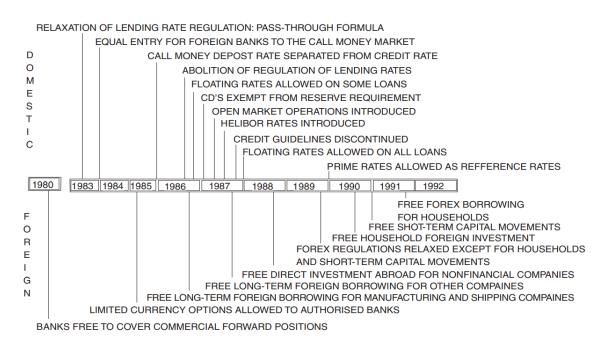
### I. Overview

### **Background**

### **Buildup**

During the 1980s there was a large-scale deregulation of the financial sector as outlined in the chart below. The government allowed banks to lend into areas where they had not lent before and therefore lacked market-specific knowledge. Regulatory decisions were subject to court challenges, and it has been theorized that this, "raised the threshold for introducing stricter supervisory practices" (Nyberg and Vihriälä 1994). In addition, regulators lifted strict limits on deposit and interest rates. More broadly, the supervisory authorities were viewed as relatively weak—"they lacked resources and qualified staff and did not prioritise on-site inspections" (Moe et al. 2004). The savings banks were taking extraordinary risks and were undercapitalized.

Figure 1: Financial market liberalization in Finland



Source: Nyberg and Vihriälä 1994.

During the same period, both household and corporate debt increased significantly. The Finnish, Norwegian, and Swedish "tax systems encouraged borrowing through very generous rules for deducting interest expenses from taxable income" (Moe et al. 2004). Household debt rose from 25% of GDP in 1980 to 45% in 1992, and corporate debt rose from 70% of GDP to nearly 90% of GDP in just a couple of years starting in 1989 (Mayes et al. 2001). Housing prices doubled between 1986 and 1989, and the Finnish stock market tripled between 1985 and 1988 (Mayes et al. 2001). Commercial property prices may have

increased even more than residential. This led to the traditional cycle where the increases in property prices lead to higher collateral values which facilitate an increase in bank lending.

Finally, there were two significant international events that affected the Finnish economy in the late '80s and early '90s. First, Finland was scheduled to join the European Union in 1995 and use the new Euro currency in 1999 (EU 2019). However, the steps taken to prepare caused a dilemma. Finland could use exchange-rate targeting in the late '80s and early '90s and make the transition to the Euro smoother, but the resulting interest rates would be lower than they naturally would have been, and borrowing would outpace growth. Alternatively, they could raise interest rates to dampen the borrowing but lose the exchange rate peg and risk a disruptive transition to the Euro. They chose the former (Mayes et al. 2001).

Second, Finnish exports collapsed with the fall of the Soviet Union (Moe et al. 2004). The Soviet Union had accounted for approximately 15% of the exports of Finland (Mayes et al. 2001). The decrease in exports to the former Soviet Union caused a negative demand shock of approximately 2.5% of GDP to the Finnish economy (Nyberg and Vihriälä 1994).

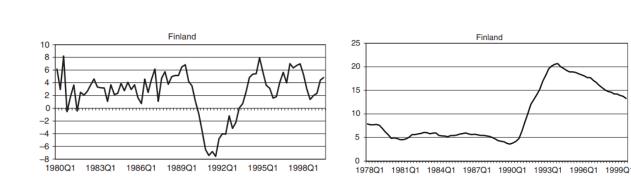
### The Crisis

GDP growth (%)

Finland was not alone in suffering a banking crisis and economic downturn during the early 1990s. Sweden, Norway, and Denmark experienced crises that, although they had distinct causes and effects, were similar in many ways. However, Finland suffered the most with a growth rate of -8% of GDP during the worst of the crisis years and a peak unemployment rate at over 20% (Mayes et al. 2001).

Figure 2: GDP Growth and Unemployment Rate in Finland in the 1980s and 1990s

Unemployment (%)



Source: Mayes, Halme, and Liuksila 2001.

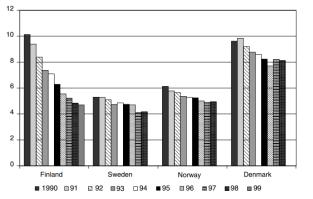
Lending to the public by all Finnish deposit banks more than doubled from FIM214b to FIM491b from 1985 to 1990 (Nyberg and Vihriälä 1994). Throughout the time period, GDP

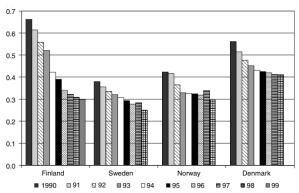
was growing at a similar pace, so this lending represented a consistent 75% of GDP (WBGDP). Then from 1991 to 1995 bank lending fell by more than a third. It would take nine years before bank lending returned to the pre-crisis levels (Moe et al. 2004). This dramatic build-up and then crash of the banking sector can be seen in the following two charts showing the decrease of employment in banking by more than half and, similarly, the closure of more than half of physical bank branches. By 1993, nearly one in five loans were non-performing (Klingebiel 2000).

Figure 3: Size of Banking Sector by Number of Employees and Branches in the 1990s

Banking employees per 1,000 people

Bank branches per 1,000 people





Source: Mayes, Halme, and Liuksila 2001

In mid-January 1992, the Prime Minister organized a working group with the goal of "draw[ing] up a concrete programme to safeguard the banking system" (Kuusterä and Tarkka 2012). The group was chaired by the Governor of the Bank of Finland and included members from the finance ministry and leadership from all of the major banks. The number-one recommendation from the group's March 16, 1992, report was, "to set aside funds [FIM 5 to FIM 10 billion] that could be used for capital investments to reinforce bank equity" (PMGroup 1992). This suggestion became the capital injection program authorized by parliament in April 1992.

Along with a number of suggested actions that the banks themselves could take—including: reduce operational costs and staff (3.3.1), avoid overcorrecting and limiting lending too much (3.3.2), and do better risk management (3.3.3) (PMGroup 1992)—the working group's other significant recommendation was that the government complete measures that had begun the previous autumn in establishing a Government Guarantee Fund (Kuusterä and Tarkka 2012). (See Nygaard's 2020 Finland-Arsenal YPFS case for more details on the Government Guarantee Fund and the asset management company.)

### **Program Description**

The Finnish Parliament acted quickly on the proposals from the working group's report. On April 29, 1992, approximately six weeks after the report's publication, Parliament authorized the Government's recommended bank capital injection as part of the 1992 Supplementary Budget Proposal. The proposal took the report's suggested FIM 5 billion to FIM 10 billion (Kuusterä and Tarkka 2012) and authorized up to FIM 8 billion. The budget explained the purpose of the capital injection as follows: "to counteract the deterioration of deposit banks' solvency, which significantly limits their ability to lend and thus worsens the recession as investment and consumer demand decline" (Budget 1992). An additional purpose was to "help banks avoid [further] emergency support" (Nyberg and Vihriälä 1994).

In June 1992, the Bank of Finland (BoF), which is the country's central bank, and the Ministry of Finance (MoF) outlined the terms of the capital injections (Vihriälä 1997). The voluntary program was open to all banks (Moe et al. 2004), regardless of their solvency. Banks received the funds in autumn 1992 (Kuusterä and Tarkka 2012) and were permitted to apply twice, the final time in December 1992 (Nyberg and Vihriälä 1994).

The size of the capital injection was determined by the size of the bank, as measured by their risk-weighted assets, balance sheet (Kuusterä and Tarkka 2012), and their off-balance sheet commitments (Vihriälä 1997). The injection was structured as non-cumulative, convertible preferred capital (Moe et al. 2004). The conversion could be executed by the government if interest remained unpaid for three years in a row or if the bank's solvency ratio fell below the legal minimum (Nyberg and Vihriälä 1994).

The variable interest rate set on the preferred shares was set slightly above market and, "gradually increase[d] in relation to market to incentivise banks to repay." Bank losses could only eat into the injected capital after the bank's distributable equity capital and reserve funds had been exhausted (Nyberg and Vihriälä 1994). Banks were permitted to pay back the full sum in installments or all at once (Teemu 1992). However, interest payments had to be made before dividends to other shareholders could be distributed (Report 1993).

### **Outcomes**

The government acknowledged the risk inherent in the bank capital injections. In the Supplementary Budget Proposal, passed in April 1992, the parliament admitted, "The return on an investment may be forfeited to the extent that the bank's distributable

<sup>&</sup>lt;sup>3</sup> The interest rates were calculated as follows:

<sup>1992-1997:</sup> one-year government debt + financial cost of debt + 50bp;

<sup>1997-2000:</sup> one-year government debt + financial cost of debt + 150bp;

<sup>2000-2007:</sup> same plus 200bp every year.

earnings are insufficient to pay the return" (Budget 1992). Of the FIM 8 billion parliament made eligible for the program, FIM 7.9 billion was deployed (Nyberg and Vihriälä 1994). That amount represented 7.1% of Finland's 1992 GDP (Borio et al. 2010) and 14% of the sectors' regulation-prescribed capital (Vihriälä 1997). The recipients included 56 cooperative banks and 22 savings banks (Vihriälä 1997), of which FIM 5.0 billion went to five of the largest banks (Borio et al. 2010). None of the preferred shares were ever converted to common (Moe et al. 2004).

As of Jan 1, 1996, FIM 6.6 billion outstanding with banks and FIM 1.427 billion interest accrued (Communication 1996). By Nov 16, 1999, FIM 7.9 billion had been repaid with only FIM 580 million outstanding with Skop Bank (Report 1999). (For the full story on the government's interventions with Skop Bank, see the YPFS Finland-Arsenal case, Nygaard 2020.)

### II. Key Design Decisions

1. Part of package: The Finnish government's capital injection was the first of two suggested policy decisions recommended by the Prime Minister's working group to safeguard the banking system.

A working group was established in early 1992 by the Finnish Prime Minister. The group included finance ministers and the heads of all of the major banks. They issued a report in March 1992 in which they outlined two recommendations: (1) offer a capital injection to the banking system of between FIM 5 billion and FIM 10 billion and (2) establish a Government Guarantee Fund, which was done in April 1992 (Kuusterä and Tarkka 2012).

Another action often associated with the two just mentioned was the government's public announcement in August 1992 that the stability of the banking system would be secured under all circumstances (Moe et al. 2004). The government also abolished a stamp duty on securities trading on stock exchanges (Budget 1992).

2. Legal authority: The funds for the capital injection program were apportioned as part of the Supplementary Budget of 1992.

The legislative process began with the Prime Minister's working group. The parliament then took up and added details to the working group's suggestions. The Finnish parliament chose to allocate FIM 8 billion for capital injections into the banking system. The money was included in the Supplementary Budget legislation passed on April 29, 1992. The legislation included the following introduction, "At the heart of the measures is the State's involvement in strengthening the capital structure of banks by making equity investments in the form of preferential equity certificates which would be included in its equity for the purposes of calculating the bank's solvency" (Budget 1992).

# 3. Communication: The government made public reports, program terms, and basic results public. They also issued a broad pledge of support for the banking system.

As the banking crisis began to unfold, the Prime Minister formed a group of government officials and leaders of the banking industry. The group made their report public on March 16, 1992 (Kuusterä and Tarkka 2012). The government published the terms of the capital injections in June of the same year (Vihriälä 1997). The list of banks that received injections was also made public in official government statistics (Borio et al. 2010; Vihriälä 1997).

The government made their most significant public announcement just before the capital was deployed. In August 1992 they issued a statement saying, the government would secure the banking system under all circumstances (Moe et al. 2004).

# 4. Administration and Governance: Government Guarantee Fund operated the capital injection with assistance from the central bank.

The FIM 8 billion was allocated via the Ministry of Finance (Budget 1992). All bank support operations were run by the Government Guarantee Fund (GGF), an off-state-balance-sheet entity created in late April 1992 to prevent a collapse in domestic and international confidence in the stability of the banking system and its claims. (See Nygaard 2020 for more information on how the GGF's worked with the government's asset management company Arsenal). However, the Bank of Finland did contribute personnel and had an observer on its Board.

### 5. Size, Source of Funding: FIM 8 billion was allocated via the Ministry of Finance.

Given the Prime Minister's working group's recommendation that between FIM 5 billion and FIM 10 billion would be needed (Kuusterä and Tarkka 2012), the parliament allocated FIM 8 billion in their Supplementary Budget of 1992 (Budget 1992). Eligible institutions could apply two times: by August 14, 1992, and later on December 16, 1992 (Teemu 1992).

Nearly all of the Supplementary Budget's FIM 8 billion was deployed in Autumn 1992.

# 6. Eligible Institutions: All banks were eligible to apply for the voluntary capital injections, regardless of solvency.

Regardless of solvency, all banks were eligible (but not required) to participate in the capital injections (Moe et al. 2004). In the end, FIM 7.9 billion of the FIM 8 billion was deployed (Nyberg and Vihriälä 1994) to 56 cooperative banks and 22 savings banks (Vihriälä 1997), of which FIM 5.0 billion went to five banks (Borio et al. 2010).

7. Individual Participation Limits: The amount of capital injected was determined by the size of the bank.

The amount of capital injected was determined based on a combination of banks': (1) risk weighted assets (Nyberg and Vihriälä 1994), (2) balance-sheet size (Kuusterä and Tarkka 2012), and (3) off-balance-sheet commitments (Vihriälä 1997).

8. Capital Characteristics: The capital injected was in the form of nonvoting, noncumulative, convertible preferred shares with variable interest rates set slightly above market rates.

The injections were structured as nonvoting preferred capital. The non-cumulative shares were convertible if interest remained unpaid for three consecutive years or if the bank's solvency ratio fell below the legal minimum (Budget 1992; Nyberg and Vihriälä 1994). The three-year target (1,080 days) was chosen because it was viewed as "enough time for the banks to put their houses in order" (Kuusterä and Tarkka 2012). None of the shares were converted (Moe et al. 2004).

The variable interest rate was set slightly above market rates "to incentivise banks to repay" (Nyberg and Vihriälä 1994).

9. Other Conditions: Losses to the government's investment could only be taken after a bank's equity capital and reserve fund had been exhausted, and banks were obliged to show a flexible attitude towards borrowers having trouble servicing their debt.

The government-injected capital could, "be used to cover losses after the bank's distributable equity capital and the reserve fund [had] been exhausted" (Nyberg and Vihriälä 1994). The government's investment was subordinate to bank debt, but senior to common equity. Interest payments had to be made before dividends could be distributed (Report 1993).

One source indicated that by accepting the capital injections, banks "were obliged to show a flexible attitude towards borrowers having trouble in servicing their debt. To the extent that their solvency permitted, banks were required to meet borrowers' needs for new loans. In addition, banks were not allowed to call in loans before maturity" (Borio et al. 2010). However, despite the obligation, the authorities did not develop an enforcement mechanism. Ultimately, banks were left in control of their loan books, something which was occasionally severely criticized later.

### 10. Restructuring Plan: No restructuring requirements were imposed.

After some internal debates at the Bank of Finland, the decision was made to leave the restructuring plans in the hands of the banks themselves.

# 11. Fate of Existing Board and Management: No changes in governance or management were required.

After some internal debates at the Bank of Finland, the decision was made that alternative professional executives (proficient in Finnish) in sufficient numbers were unavailable in Finland.

# 12. Exit Strategy: There was no formal exit strategy, but the capital injection was designed to incentivize banks to return to private markets as soon as possible.

It doesn't appear that there was an official sunset clause or claw-back timeline. However, the capital injections were designed to incentivize banks to pay the government back and return to private markets as soon as possible. The interest rates were set slightly above market rates and were set as variable rates so as the market rates fluctuated, the government's capital would remain expensive (Nyberg and Vihriälä 1994). The difference between market rates and the interest on the government capital also increased over time to further encourage speedy payback<sup>4</sup> (Teemu 1992). In the initial parliamentary approval for the FIM 8 billion capital injection, they anticipated the likelihood of not fully recovering their investment, "The return on an investment may be forfeited to the extent that the banks distributable earnings are insufficient to pay the return" (Budget 1992). All but approximately FIM 500 million was returned to the government by November 1999 (Report 1999).

### III. Evaluation

In the Bank of Finland's sweeping history of the central bank they report that, "without the capital injections that they had received in autumn 1992 the capital adequacy of many banks would have fallen below the statutory minimum" (Kuusterä and Tarkka 2012). In a different publication, economists at the Bank of Finland showed that, "capital growth via government capital injection exert[ed] a positive effect on lending in 1992" (Vihriälä 1997). An academic review of the Nordic Crisis by three economists at the Bank for International Settlements said, "[of the Nordic countries,] the capital injection scheme most supportive of aggregate demand was adopted in Finland, the country that suffered the deepest recession of the three" (Borio et al. 2010). In a different academic review of the banking crises in the Nordic countries during the early 1990s, an economist from the Bank of Norway concluded that, "creditors' confidence in the banking systems was quickly restored, banks returned to profitability fairly quickly and the impact on the economies of the banking problems seemed fairly modest" (Moe et al. 2004). They went on to suggest, "It can perhaps be

<sup>&</sup>lt;sup>4</sup>The interest rates were calculated as follows:

<sup>1992-1997:</sup> one-year government debt + financial cost of debt + 50bp;

<sup>1997-2000:</sup> one-year government debt + financial cost of debt + 150bp;

<sup>2000-2007:</sup> same plus 200bp every year.

argued that capital support in this form represented a subsidy to the existing shareholders."

### IV. References

Another Government proposal to Parliament to amend the Act on the State Guarantee Fund. 1992 (Proposal 1992a). In Finnish.

https://ypfs.som.yale.edu/library/another-government-proposal-parliament-amend-act-state-guarantee-fund.

Borio, Claudio, Bent Vale, and Goetz von Peter. 2010. "Resolving the financial crisis: are we heeding the lessons from the Nordics?" Bank for International Settlements Working Papers No 311.

https://ypfs.som.yale.edu/index.php/library/resolving-financial-crisis-are-we-heeding-lessons-nordics.

Finland Government (Budget 1992). 1992. "Finland Supplementary Budget Approval." April 29, 1992. In Finnish.

https://ypfs.som.yale.edu/library/finland-supplementary-budget-approval-1992.

Government Communication to Parliament on a Plan to Rehabilitate the Financial System, Means to Rehabilitate and Restore Government Assistance (Communication 1996). 1996. In Finnish. TaVM 26/1996 VNT 1/1996.

https://ypfs.som.yale.edu/library/government-communication-parliament-plan-rehabilitate-financial-system-means-rehabilitate.

European Union (EU 2019). 2019. "Finland Overview." Accessed June 1, 2019. https://europa.eu/european-union/about-eu/countries/member-countries/finland\_en.

Government Proposal to Parliament to Amend Section 55 of the State Guarantee Fund Act and the Act on the Activities of Deposit Banks (Proposal 1993). 1993. In Finnish. February 5, 1993.

https://ypfs.som.yale.edu/library/government-proposal-parliament-amend-section-55-state-guarantee-fund-act-and-act-activities.

Government Proposal to Parliament to amend the Act on the State Guarantee Fund (Proposal 1992). September 11, 1992. In Finnish.

https://ypfs.som.yale.edu/library/government-proposal-parliament-amend-act-state-guarantee-fund.

Government Proposal to Parliament to Amend the Law on the State Guarantee Fund and the Law on Credit Institutions (Proposal 1996). 1996. In Finnish. March 8, 1996. https://ypfs.som.yale.edu/library/government-proposal-parliament-amend-law-state-guarantee-fund-and-law-credit-institutions.

Government Report to Parliament on Bank Support (Report 1993). 1993. In Finnish. https://ypfs.som.yale.edu/library/government-report-parliament-bank-support-1993.

Government report to Parliament on bank support (Report 1999). November 16, 1999. In Finnish. VNS 4/1999 vp.

https://ypfs.som.yale.edu/library/government-report-parliament-bank-support-november-16-1999.

Klingebiel, Daniela. 2000. "The Use of Asset Management Companies in the Resolution of Banking Crises: Cross-Country Experience." The World Bank Financial Sector Strategy and Policy Group.

https://ypfs.som.yale.edu/index.php/library/use-asset-management-companies-resolution-banking-crises-cross-country-experiences.

Kuusterä, Antti and Juha Tarkka. 2012. "Bank of Finland 200 Years: Parliament's Bank II". Otava Publishing Company LTD Helsinki.

https://ypfs.som.yale.edu/index.php/library/bank-finland-200-years-parliaments-bank-ii.

Mayes, David G, Liisa Halme, and Aarno Liuksila. 2001. "The Financial Crisis of the Early 1990s and its Lessons."

https://ypfs.som.yale.edu/index.php/library/financial-crisis-early-1990s-and-its-lessons.

Moe, Thorvald G, Jon A Solheim, and Bent Vale (eds.). 2004. "The Norwegian Banking Crisis."

https://ypfs.som.yale.edu/library/norwegian-banking-crisis.

Nyberg, Peter. 1995. "The Banking Crisis in Finland."  $\,$ 

https://ypfs.som.yale.edu/library/banking-crisis-finland.

Nyberg, Peter and Vesa Vihriälä. 1994. "The Finnish Banking Crisis and its Handling (an Update of Developments Through 1993)". Bank of Finland Research Discussion Paper No. 7/1994.

https://ypfs.som.yale.edu/index.php/library/finnish-banking-crisis-and-its-handling-update-developments-through-1993.

Nygaard, Kaleb. 2020. "Finland's Asset Management Company Arsenal." Asset Management Company case series. Yale Program on Financial Stability.

https://ypfs.som.yale.edu/node/4717.

Report of the Working Group on Banking Prerequisites (PMGroup 1992). March 16, 1992. In Finnish.

https://ypfs.som.yale.edu/library/report-working-group-banking-prerequisites.

Teemu, Luukka. 1992. "The government decided on the criteria for the distribution of bank support of eight billion dollars still unresolved." Helsingin Sanomat.

https://ypfs.som.yale.edu/library/government-decided-criteria-distribution-bank-support-eight-billion-dollars-still.

Vihriälä, Vesa. "Banks and the Finnish Credit Cycle 1986-1995." Bank of Finland Studies E:7 1997. https://ypfs.som.yale.edu/library/banks-and-finnish-credit-cycle-1986-1995.

World Bank Data using Google Public Data (WBGDP). GDP. Website accessed June 1, 2019. https://www.google.com/publicdata/explore?ds=d5bncppjof8f9\_&met\_y=ny\_gdp\_mktp\_cd &idim=country:FIN:NOR:SWE&hl=en&dl=en#!ctype=l&strail=false&bcs=d&nselm=h&met\_y=ny\_gdp\_mktp\_cd&scale\_y=lin&ind\_y=false&rdim=region&idim=country:FIN:SWE:NOR:D NK&ifdim=region&tstart=-

303940800000&tend=1494820800000&hl=en US&dl=en&ind=false.

### V. Key Program Documents

### **Summary of Program**

Banks and the Finnish Credit Cycle 1986-1995.

An overview of the crisis and the government's response.

https://ypfs.som.yale.edu/library/banks-and-finnish-credit-cycle-1986-1995.

The Finnish Banking Crisis and its Handling (an Update of Developments Through 1993). *An overview of the crisis and the government's response.* 

https://ypfs.som.yale.edu/index.php/library/finnish-banking-crisis-and-its-handling-update-developments-through-1993.

Resolving the financial crisis: are we heeding the lessons from the Nordics? *An overview of the crisis and how it applies to the global financial crisis of 2008.* https://ypfs.som.yale.edu/index.php/library/resolving-financial-crisis-are-we-heeding-lessons-nordics.

### **Implementation Documents**

Finland Supplementary Budget Approval.

*Original budget that allocated the capital injection funds.* 

https://ypfs.som.yale.edu/library/finland-supplementary-budget-approval-1992.

#### **Media Stories**

The government decided on the criteria for the distribution of bank support of eight billion dollars still unresolved.

*News article on how the crisis was being handled.* 

https://ypfs.som.yale.edu/library/government-decided-criteria-distribution-bank-support-eight-billion-dollars-still.

### **Key Academic Papers**

The Financial Crisis of the Early 1990s and its Lessons. Summary of the crisis and actions taken to resolve it. https://ypfs.som.yale.edu/index.php/library/financial-crisis-early-1990s-and-its-lessons.

### **Reports/Assessments**

Government report to Parliament on bank support. Report from parliament regarding government efforts to rescue the financial system. https://ypfs.som.yale.edu/library/government-report-parliament-bank-support-november-16-1999.

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