

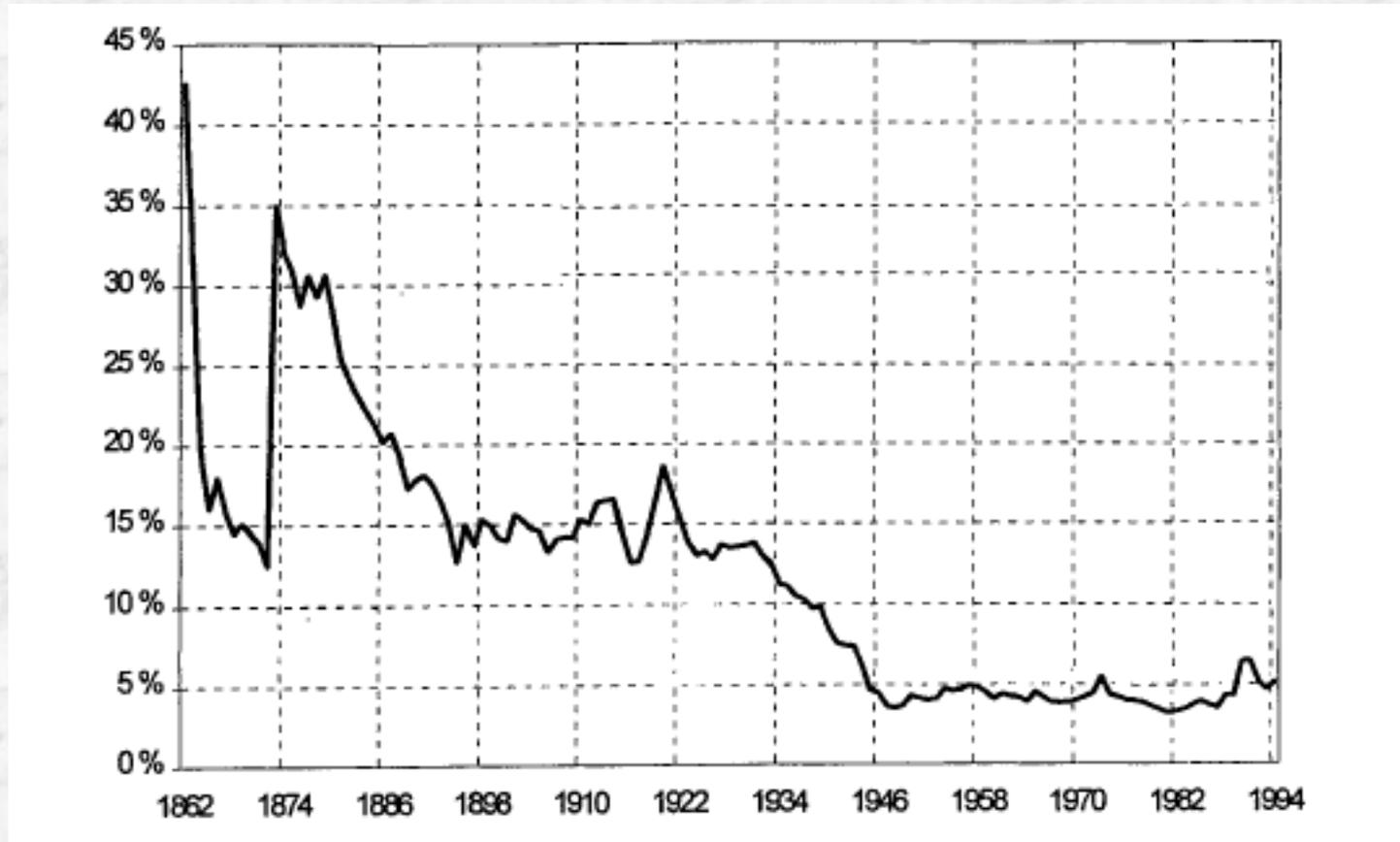
The Economic Development of Finland

Lecture 10: Economic crises during the era of markka

Financial development during autonomy

- Financial development of Finland truly started after markka was issued in 1865
- The first commercial bank, *Foreningsbanken*, had been established in 1862
- During that time, the financial sector consisted of the BOF (Bank of Finland), several savings banks and a mortgage society
- The number of commercial banks grew from three in the 1870s to over 10 by the end of the century, and to 24 in 1919, which is the all time historical peak
- Although the number of Finnish banks has been relatively small compared to Nordic standards, the size of Finland's banking sector to the economy (share of banks assets of GDP) has been fairly large by European standards since the 1880s

Banking sector solidity (equity/assets), 1862-1994



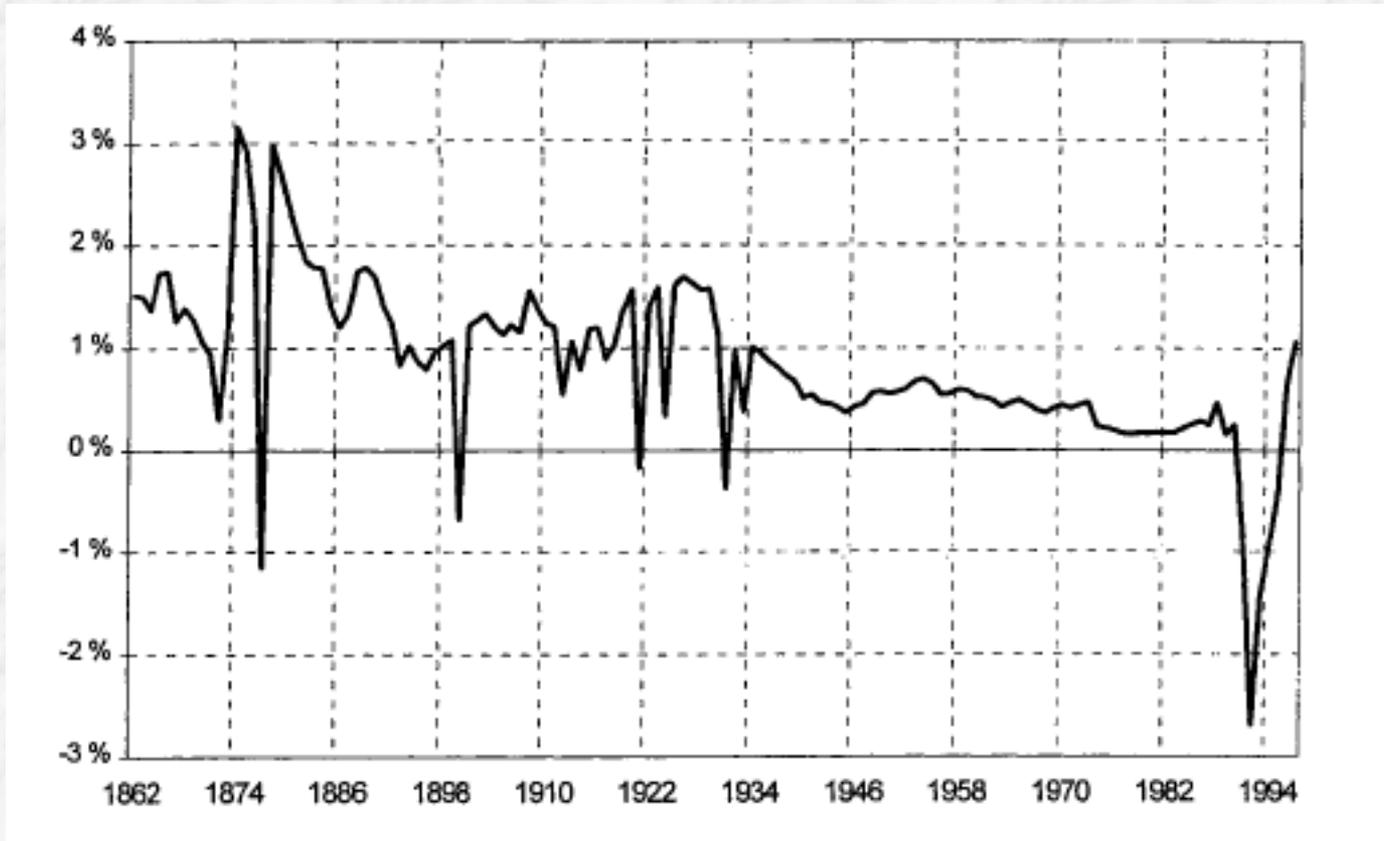
Banking crises

- A categorical feature of a banking crisis is a run on assets of the financial sector.
- Traditionally banking crises occurred when depositors demanded such a large-scale transformation of deposits into currency that the banking system could cover only a portion of this demand
 - These situations became known as 'bank runs'.

Banks' profits vs. crises

- Financial crises can be identified in several ways from which one of the criteria is the profitability of banking sector
- Using profits as a selection criteria, Finland has experienced five financial crises during the era of markka:
 - 1878
 - 1900
 - 1921
 - 1931
 - 1991-1994
- Crises have tended to occur at times of widespread developments in leading industrial or Nordic countries, with the exception of the crisis in the year 1900
- The issuing of Markka also caused several smaller crises in the 1860s, but we concentrate on the five major crises

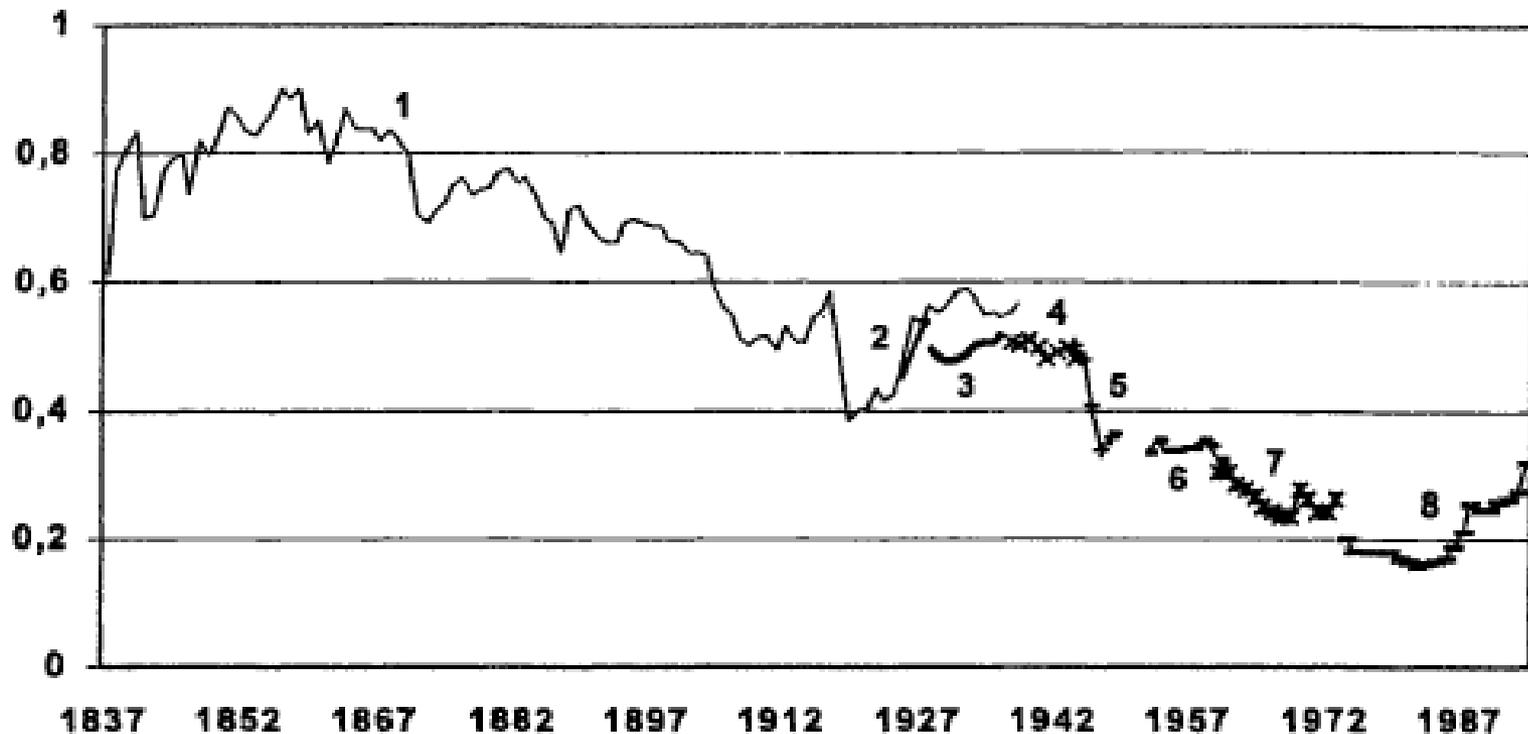
Banks' profitability (profits/assets), 1862-1994



Source: *Herrala (2011)*

Capital adequacy of Finnish industrial companies, 1837-1994

Figure 3 The solidity of industrial companies in selected studies, 1837-1994 (own funds/total assets)



Crisis of 1878

- In the 1870s, Finland's economic performance basically followed the price movements in the world market for forest products
- At the start of the decade, the Franco-German war ended, which led to a boom in forest products due to reconstruction efforts
- This led to a speculative boom in Finnish forest land
- Boom ended rather quickly when the prices of forest products dropped in the world markets
- This drove Finland's economy in to recession

Crisis of 1878

- Due to the speculative boom and the crash that followed, bankruptcies increased considerably especially among sawmills
- Losses of banks were magnified by a stock market losses caused by the collapse of *Pohjoismaiden Osuuspankki*
- Losses of the bank were covered by writing down the value of the bank's share capital (bail-in), cap was placed on the bank's dividend distribution and the size of bank's supervisory board was limited.
- To ease the crisis, state approved loans to the banks in order to alleviate their liquidity problems

Crisis of 1900

- The turn of the century crisis can be attributed to problems of a single bank, the *Maanviljelyspankki*.
- It had expanded its operations recklessly ever since it was established in 1897.
- Its growth was based on central bank financing, aggressive interest rate competition, active marketing of deposits and outright fraud (which naturally came evident only later)
- When the banks customers run in to trouble during turn-of-the-century recession, bank declared bankruptcy

Crisis of 1900

- In the legal proceedings that followed, emphasis was placed on management mistakes as the factor that triggered the fall of the bank
- It was the first bankruptcy of a bank in Finland that resulted to losses to the depositors of commercial banks
- During the crisis, Finnish state deposited funds in commercial banks to ease their liquidity positions

Prelude to the crisis of 1921

- During the period from 1914 to 1917, Finland was forced to quote an exchange rate that over-valued the ruble (see previous lectures).
- This led to substantial expansion of money supply (rubles flowed into Finland) and to the worst inflation during the markka era.
- Number of commercial banks almost doubled during that period when several highly specialized banks were established
 - Only few of the new banks had sufficient founding capital
 - They also usually only had only a handful of shareholders

Crisis of 1921

- The economy started to recover after the war, but banks suffered because markka depreciated strongly
 - Many banks had taken loans in a foreign currency and they became extremely expensive to repay
 - Collapse of the Russian empire also made basically all receivables from Russia worthless
- During the year 1921 loan write-offs of banks also increased considerably
- This led to bank failures and losses to shareholders as well as depositors
- First bank to get into trouble was Finnish Town Mortgage bank
 - It had no means of paying its short-term loans from Sweden, Denmark and Switzerland
 - It was decided that the BOF would cover half of its losses and guarantors of its loans would 'bear the prunt' of the other half.
- After repayments issues of foreign denominated build up, BOF decided the best option to handle the 'mess' was through mergers and takeovers of larger banks
- Crisis eventually passed after the banking sector was restructured (through bankruptcies and mergers)

Losses of the BOF during WWI and beginning of the independence

ROUBLE EXCHANGE RATE LOSSES AND WRITE-DOWNS 1914-21

million markkaa

1914	4.0
1915	35.7
1916	22.5
1917	165.4
1918	223.8
1919	29.4
1920	17.4
1921	9.3
Total	507.5

Source: Bank of Finland Yearbook 1921.

Crisis of 1931

- After economy had stabilized, the economy of Finland grew rapidly between 1925 and 1928.
- Economic boom, driven by an exceptionally strong reconstruction boom in Europe, led to a speculative activity in real estate markets,
- In 1928 agricultural sector of Finland was hit by a poor harvest which changed the trade balance from surplus to large deficit
- Recession of world economy led to a fall of the main export item, sawn timber
- The recession quickly deepened as the world economy plummeted into depression following the stock market crashes in the U.S.
 - Dow industrial average lost over 25 % in just two days (October 28 "Black Monday" and October 29 "Black Tuesday")

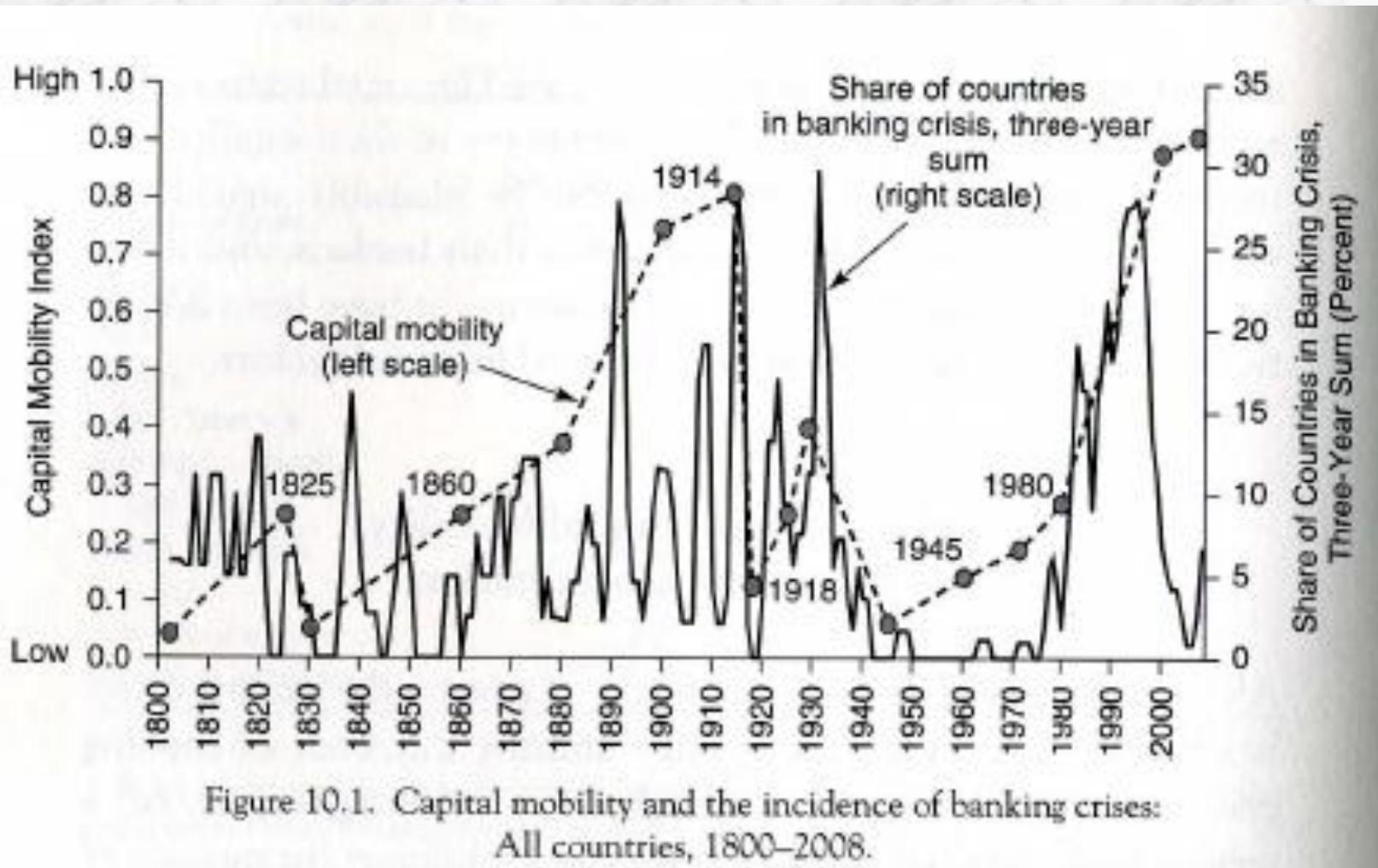
Crisis of 1931

- Because of the recession, bank's profits collapsed which led to numerous mergers and closures in Finland
- Merger of Atlas-pankki and Liittopankki with Helsingin Osakepankki results to losses to the shareholders of the first two of these banks
- Suomen Vientipankki and Etelä-Pohjanmaan pankki went 'belly up' causing losses to depositors as well as owners
- Turunmaan pankki and Svenska Finlands Landtmannabnk closed with the shareholders suffering losses
- BOF provided selective support to four banks, which received loans on advantageous terms.

Central banks

- Main task of modern central banks is to uphold price stability
- Other tasks may include: to support growth, maintain the stability of the currency, uphold monetary stability, etc.
- Central banks set interest rates, manage foreign-currency reserves, issue bank notes and (usually) oversee the functioning of financial markets
- Central banks can also "print" money, that is, create money to buy currencies, sovereign debt, etc.
 - Quantitative easing by the FED and the ECB)

Capital mobility and banking crises, 1800-2008



Credit as a source of crises

- Taylor and Schularik (2012) analyze data on 14 countries over the years 1870 - 2008.
- They find two different era of "financial capitalism": the first starting from 1870 and ending on WW2; and the second starting after the World War.
- The first era is described by stable growth of credit, whereas the latter exhibits strong growth in the ratios of bank loans to GDP and especially on bank assets to GDP, indicating increasing leverage in the economy.
- Their main finding is that credit boom (over the previous five years) has heightened the risk of financial crisis during the whole sample.
- Thus, according to S&T, as we currently live in the era of high leverage, financial crisis are prone to be more frequent.

Other factors

- Kirschenmann, Malinen and Nyberg (2014) evaluate the probability of a financial crisis when considering the predictive power of a broad set of potential financial and macroeconomic factors.
- What we find that the drivers of financial crises tend to vary in time and between crises.
- Credit booms play a significant role in creating financial instability, but other factors, like income inequality, play at least an equally important role.

Responses to banking crises

- There are several actions that government can take to respond to a financial (banking) crisis:
 - Country can let financial sector to sort itself out through bankruptcies and takeovers.
 - Country can recapitalize the banking sector or nationalize some or all of the trouble-ridden banks and other financial entities.
 - Government can also issue guarantees to bank loans or other assets, purchase troubled assets from the banking sector, freeze deposits, and order bank holidays

Finland's Great Depression (1990-1994)

- As explained in previous lectures the economy of Finland experienced a period of rapid growth between 1950 and 1980
- Finnish monetary and fiscal policies fostered growth by channeling resources towards industrialization
- There was an implicit understanding between industry and the central bank that low and stable interest rates and fixed exchange rate should be maintained to ensure stable and supportive investment environment
- Capital flows were also tightly regulated and interest rates were set below the market-clearing level

Prelude to the crisis

- Liberalization of financial markets started from the U.S. during the 1980's.
 - By the mid 1980s most of the regulations were removed in the U.S.
 - Finland was basically forced to abandon the policy of low interest rates and circulation of savings back to investments
- Due to financial liberalization, there was an explosion of domestic credit and capital inflows towards the end of the 1980s
 - Significant fraction of this was denominated in foreign currency
- The boom reached its peak in 1990

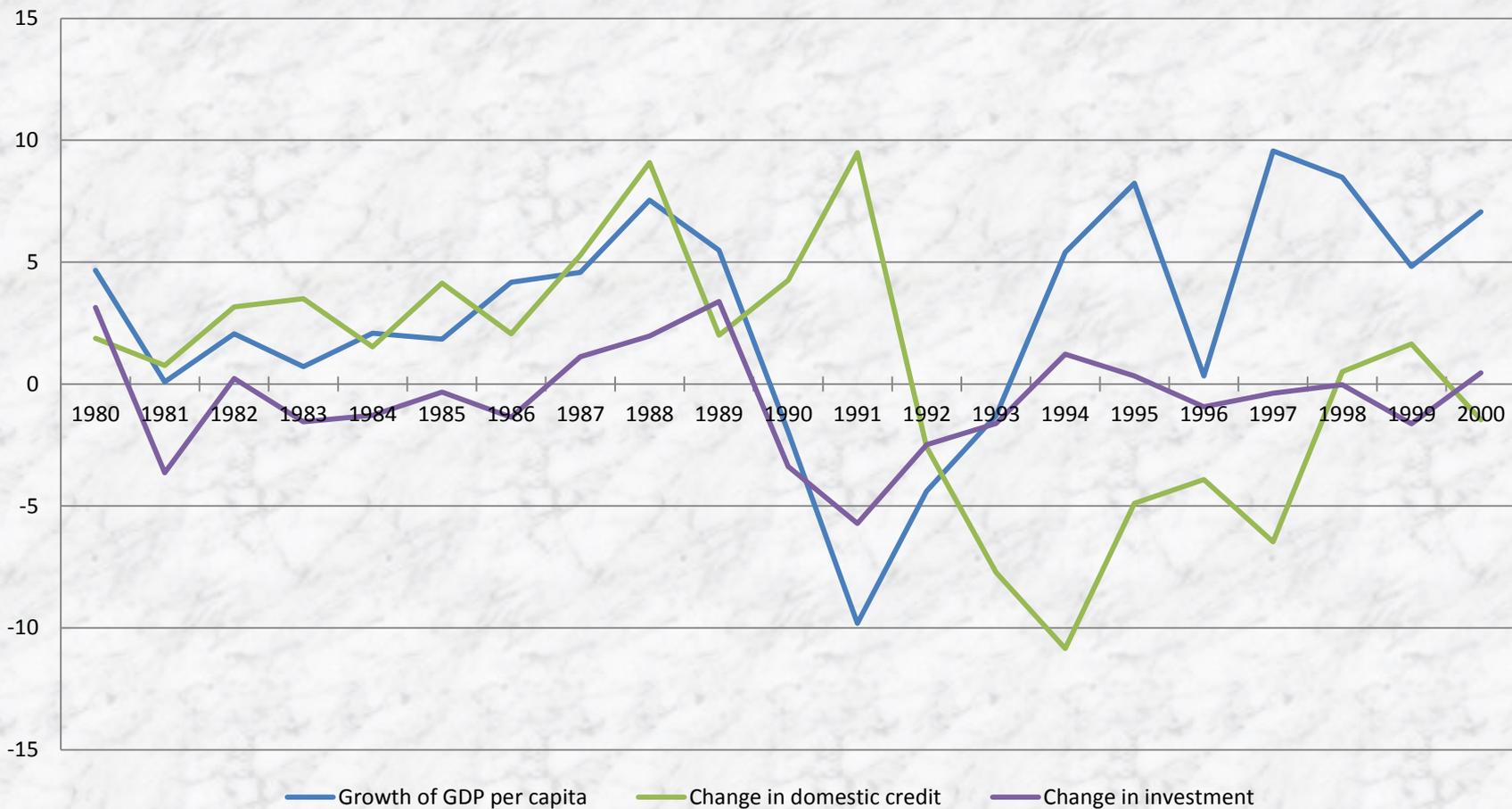
Crisis

- The Finnish export market declined substantially due to slowdown of global economy and fall of the Soviet Union in 1991
- Despite of the fall in exports, Bank of Finland defended the fixed exchange rate by raising interest rates (the policy of "strong markka"), but the currency of Finland came under heavy speculative attacks
 - High rates created a process of falling asset prices
- On 19 of September 1991, *SKOP* (the central bank of the co-operative saving banks) one of the largest banks of Finland collapsed due to losses tied to collapse of the stock market, real estate markets and foreign trade difficulties.
 - Most of its assets were written off
- After this the Finnish economy went into freefall.

Crisis

- Finland abandoned the fixed exchange rate in September 8 1992.
- Many of the loans of households and corporations were denominated in foreign currency and, because the foreign value of Finnish markka depreciated heavily, both the principal and interest rate costs of these loans rose heavily
- Shortly after the decision to 'float' the currency, large spreads between lending and borrowing rates emerged
- Firms and banks were highly leveraged (their loans to equity ratio was very high)
 - It was extremely unclear how big would the losses to banks would become and would foreign funding be available
- Credit became restricted and consumer consumption collapsed (households were not able to borrow)
- This lead to a wave of corporate bankruptcies.
- At one point, Finland was less than 5 minutes away from "bankruptcy"

Change in the GDP per capita, investment and credit, 1980-2000

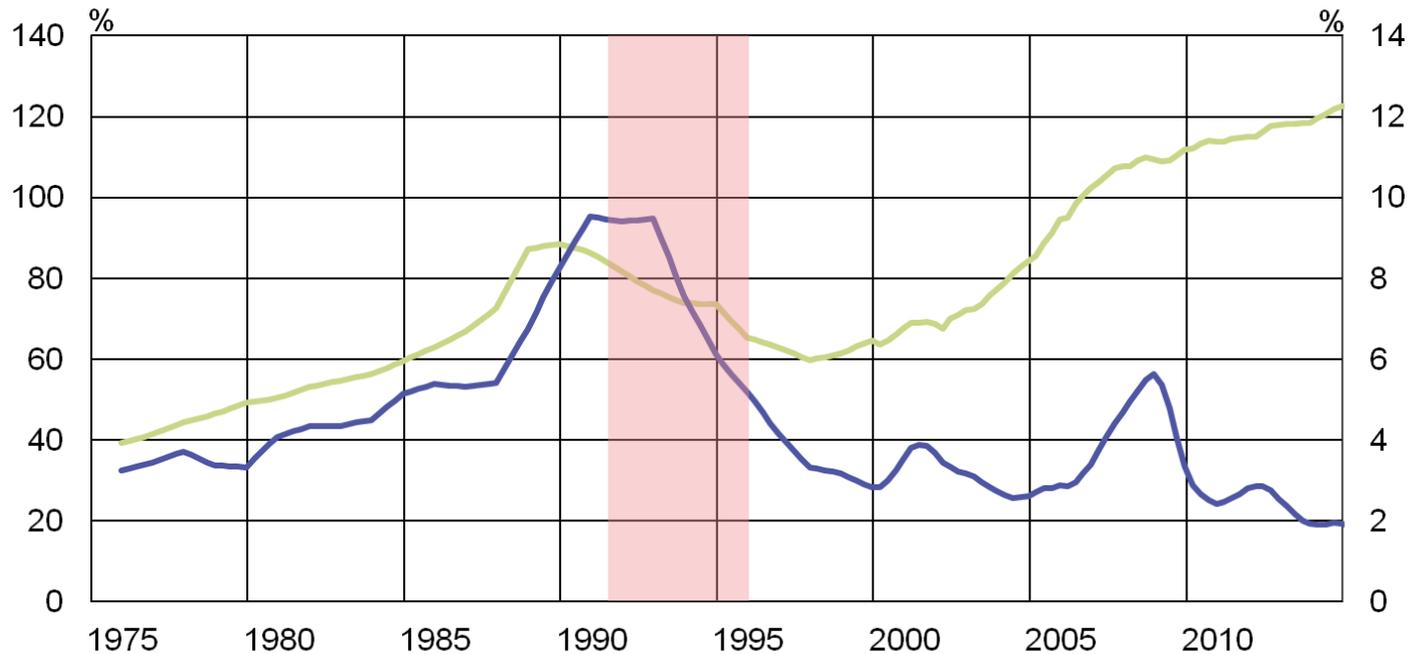


Household leverage (income vs. debt) and interest payments (% of income), 1975 - 2014



Kotitalouksien velkaantumisaste ja korkorasitus Suomessa

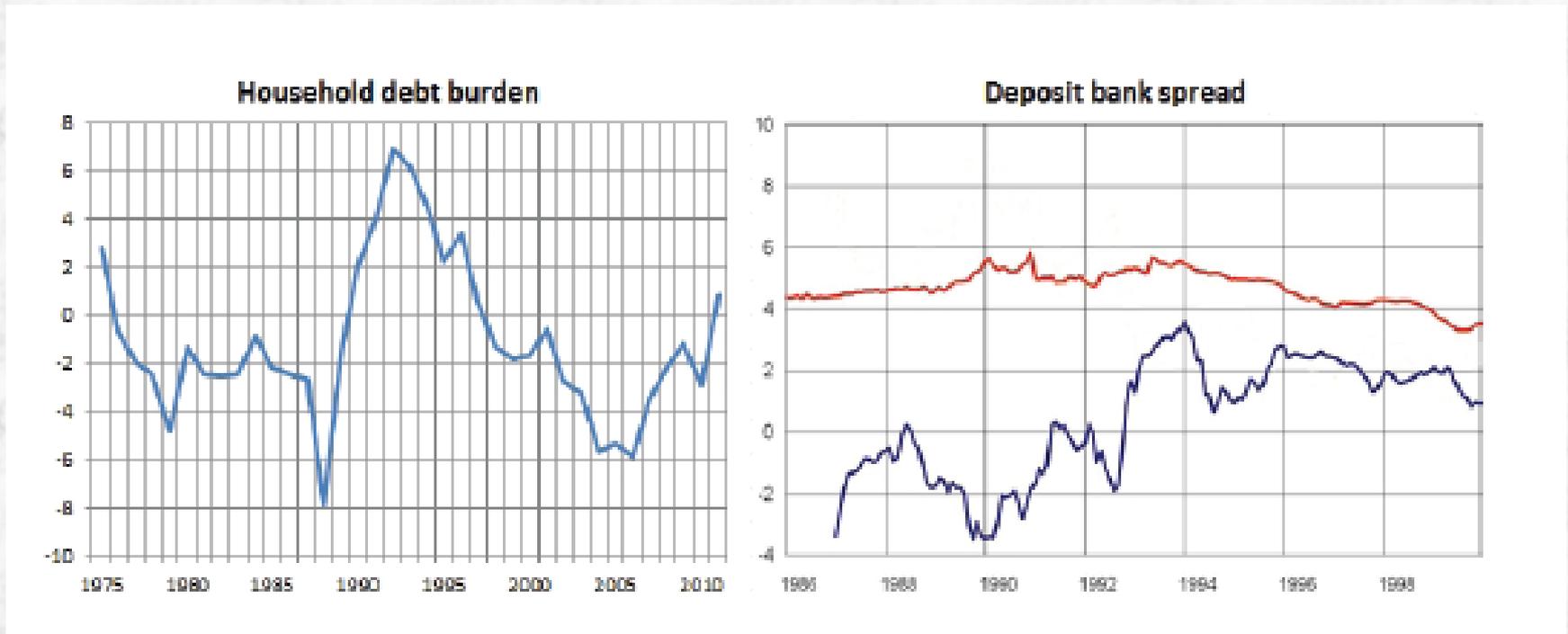
- Kotitalouksien velka, % käytettävissä olevasta tulosta (vasen asteikko)
- Kotitalouksien korkomenot, % käytettävissä olevasta tulosta (oikea asteikko)
- 1990-luvun alun pankki- ja asuntomarkkinakriisi



Lähteet: Tilastokeskus ja Suomen Pankin laskelmat.

30.6.2015

Household debt and bank spreads



Average loan rate – borrowing rate
Average loan rate - 12 mth Euribor

Responses to the crisis

- Finland did not seek for an outside help nor did she default on any of her domestic or foreign liabilities.
- Four factors lifted Finland out of the depression:
 - World economy started to grow and (heavy) currency devaluation gave a boost to Finland's export sector
 - Government cut its expenditures to balance the budget
 - Government also issued secured promissory notes, backed by the housing market property of the state, to finance its expenditures
 - In the mid 1990's Nokia Ltd. started its spectacular rise to the world largest mobile phone maker.
- In 1994, the economy of Finland 'turned the corner' (GDP grew by over 5 %) and recovery ensued

Costs of the crisis

- Finnish stock market collapsed by 70 %
 - Banking stocks fell by 90 %
- Housing prices fell by 50 %
- Between 1991 and 1993 the GDP of Finland contracted by 14 %
- Unemployment reached nearly 20 % of the workforce
- The total costs of banking crisis reached € 6 billion (around 9 % of GDP)

Why have crises emerged?

- All the major banking crises of Finland have been set in motion by a classic economic boom-and-bust cycles
- The crisis were preceded by an economic boom followed by a booms in the financial sector and asset prices.
- Crisis years were marked by an economic contraction and declining asset values, money supply and investments
- Four of the five crises (with the exception of the crisis in 1921) were affected by drop in the demand for exports, weakening of the current account and/or rise in the international level of interest (through, e.g., currency devaluation)
- Fixed exchange rate affected the severity of, basically, all of the crises