



# Financial Stability Report

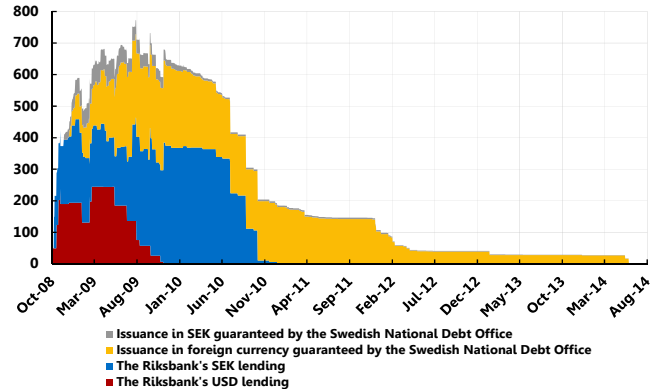
CHART SUPPLEMENT



# Chapter 1

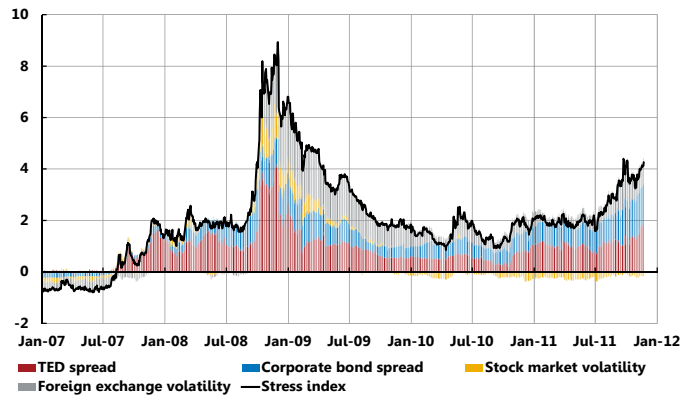
**Chart 1:1. Government support from the Riksbank and SNDO to financial institutions on the Swedish market**

SEK billion



Sources: SNDO (Swedish National Debt Office) and the Riksbank

**Chart 1:3. Swedish stress index**

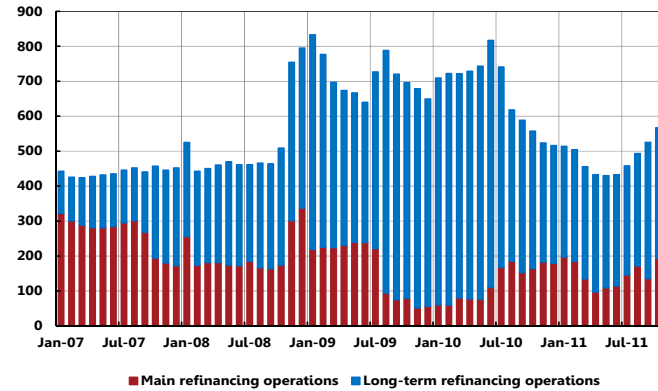


Note: The stress index is based on four broad indicators: stock market volatility, the bond spread, the basis spread and exchange rate volatility. The indicators are then weighted equally in the aggregate index. Financial stress is defined as deviations from the historic average, calculated for the years 1997-2007. For more details on the stress index, see the box "Financial Stress Index" in the Financial Stability Report 2009:2.

Sources: Reuters EcoWin, Bloomberg and the Riksbank

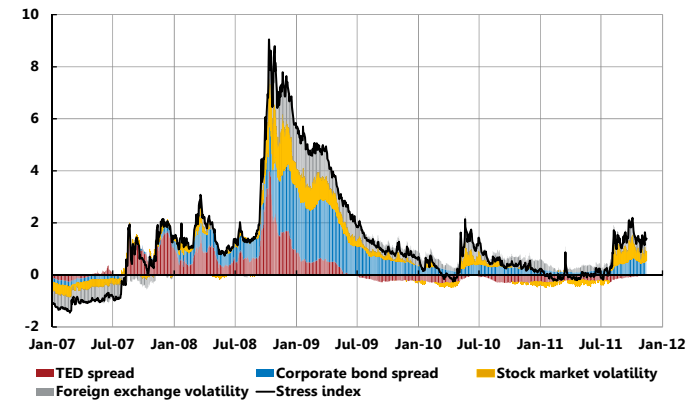
**Chart 1:2. ECB outstanding loans**

EUR billion



Sources: ECB and the respective central banks

**Chart 1:4. International stress index**

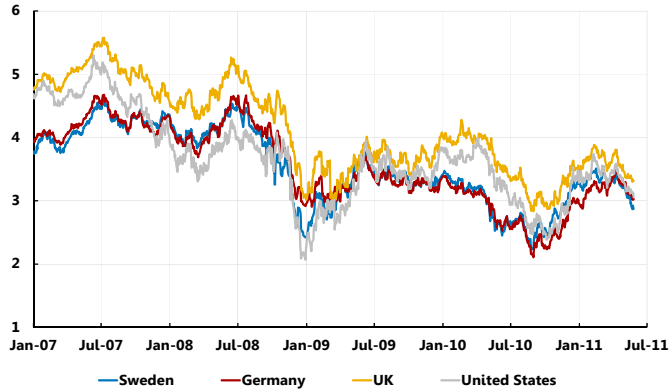


Note: The stress index is based on four broad indicators: stock market volatility, the bond spread, the basis spread and exchange rate volatility. The indicators are then weighted equally in the aggregate index. Financial stress is defined as deviations from the historic average, calculated for the years 1997-2007. For more details on the stress index, see the box "Financial Stress Index" in the Financial Stability Report 2009:2.

Sources: Reuters EcoWin, Bloomberg and the Riksbank

**Chart 1.5. Ten-year government bond yields in various countries**

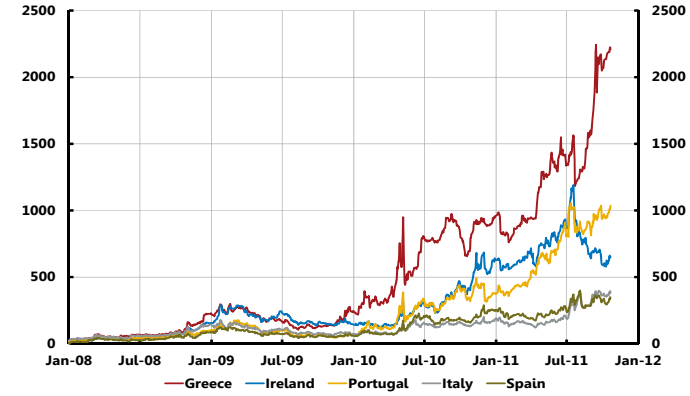
Per cent



Source: Reuters EcoWin

**Chart 1.6. The difference between interest rates on ten year government bonds and the German government bond with the same maturity**

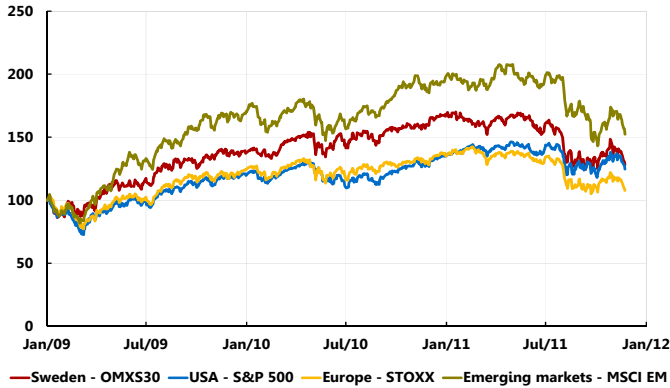
Basis points



Source: Reuters EcoWin

**Chart 1.7. Stock market developments**

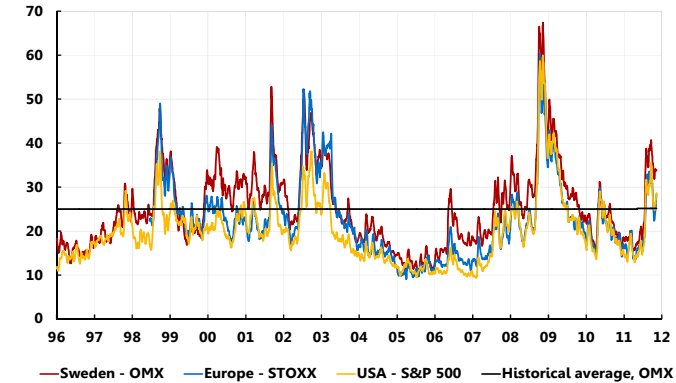
Index, 28 December 2007 =100



Source: Reuters EcoWin

**Chart 1.8. Implied stock market volatility**

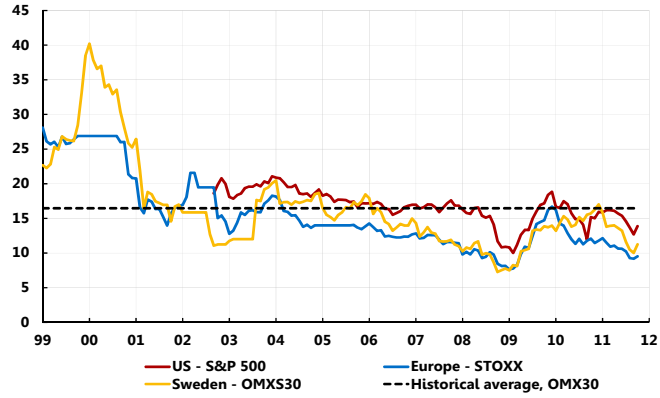
Per cent, 10 day moving average



Note: Historical average refers to the period November 1999 to November 2011.

Source: Bloomberg

**Chart 1:9. P/E ratios**

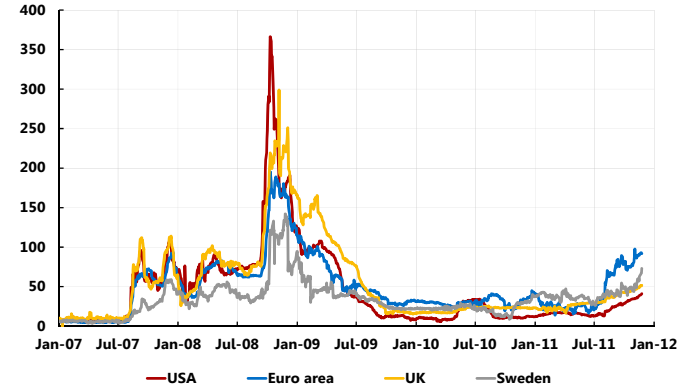


Note: Historical average refers to the period November 1999 to November 2011.

Source: Reuters EcoWin

**Chart 1:10. Risk premiums on the interbank market, 3 months**

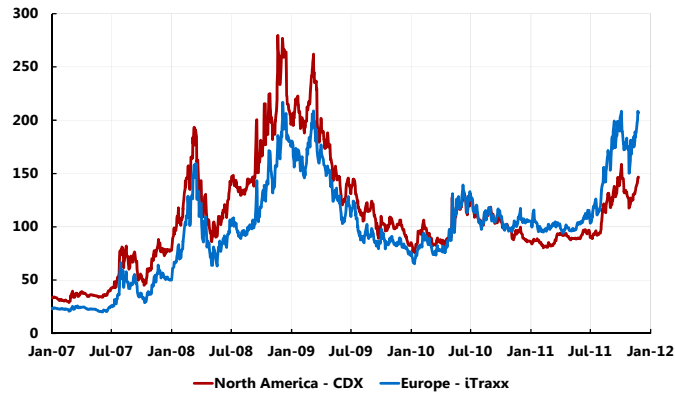
Basis points



Source: Reuters EcoWin

**Chart 1:11. Premia in the CDS indices**

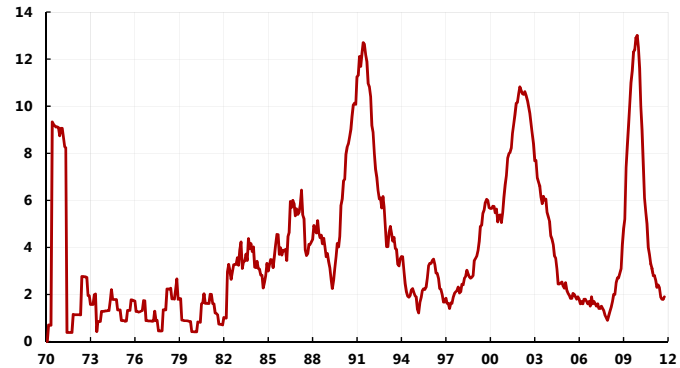
Basis points



Sources: Reuters EcoWin and Bloomberg

**Chart 1:12. Actual global default rate**

Per cent

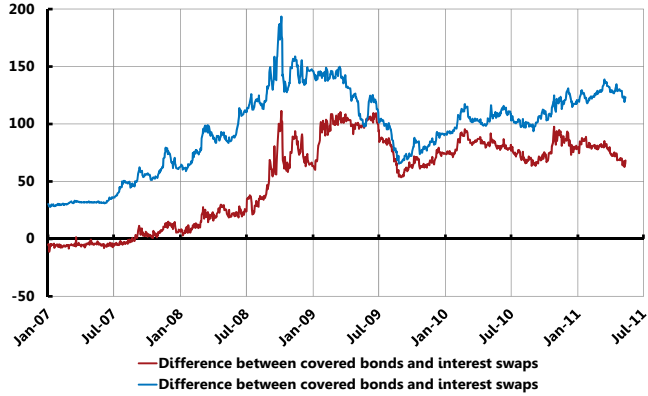


Note: The ' shows the proportion of companies classified as Ba/BB or lower by Moody's/Standard & Poor's to default, as the majority of total defaults take place among companies with this classification.

Sources: Reuters EcoWin and Moody's

**Chart 1:13. Difference between yields on covered bonds and government bonds or interest rate swaps yields with five year maturity**

Basis points

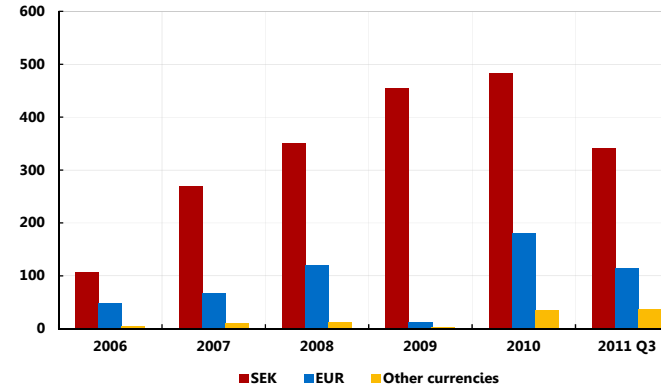


Note: The covered bond is a mortgage bond issued by Stadshypotek. The covered bond, the government bond and the interest rate swap have a constant maturity of five years.

Sources: Reuters EcoWin and the Riksbank

**Chart 1:14. Issuance of Swedish covered bonds**

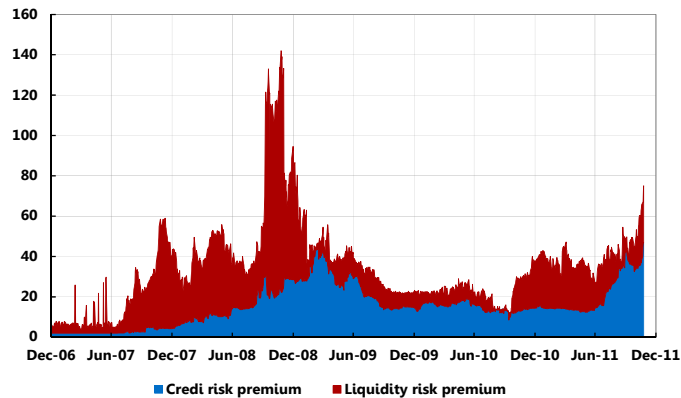
Billion SEK



Source: ASCB

**Chart 1:15. Indicative breakdown of the Swedish riskpremium, 3 months**

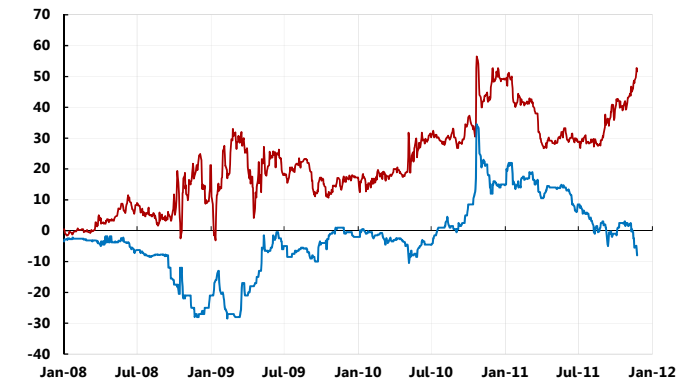
Basis points



Source: the Riksbank

**Chart 1:16. EUR/SEK cross currency basis spread, five years**

Basis points

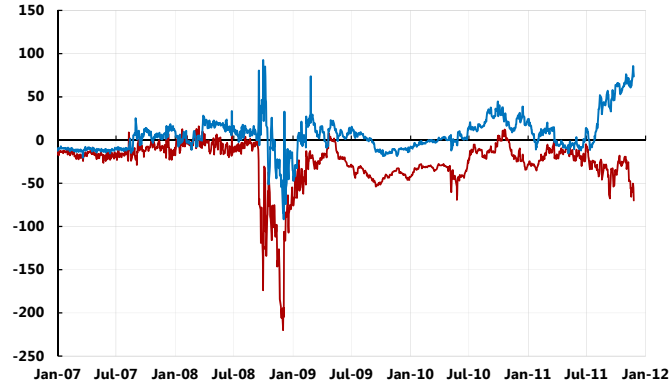


Note: The cross currency basis spread gives an indication of the cost of swapping a loan in euros into Swedish kronor

Source: Bloomberg

**Chart 1:17. Extra cost for borrowing of SEK abroad compared to domestic loan costs**

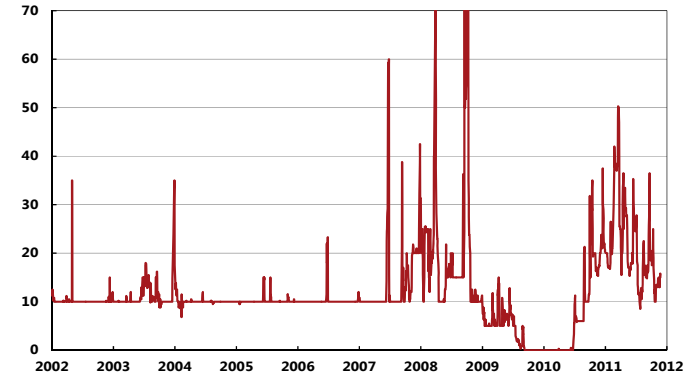
Basis points



Source: Bloomberg

**Chart 1:18. Difference between the short-term interbank rate and the Riksbank's repo rate**

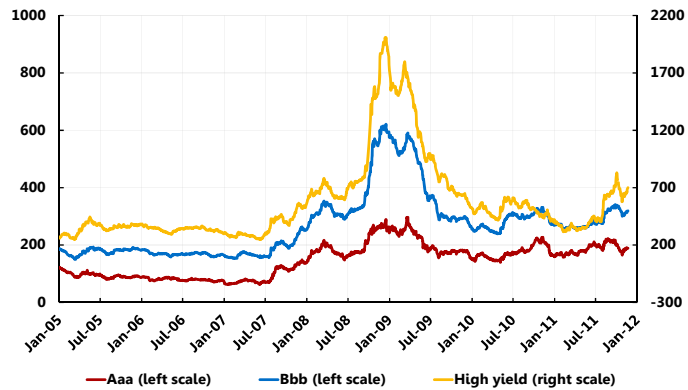
Basis points



Source: Reuters EcoWin

**Chart 1:19. Credit spreads for U:S: corporate bonds**

Basis points

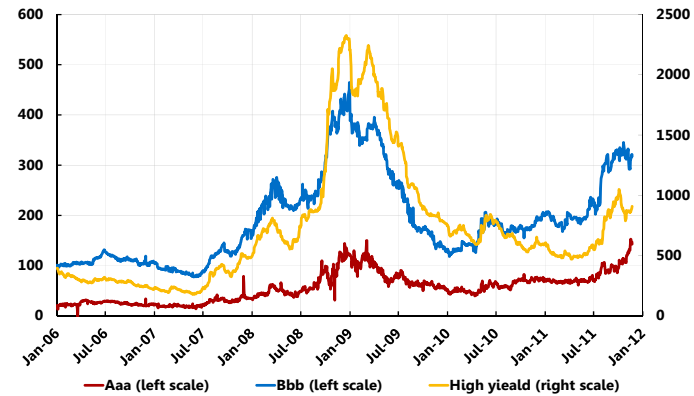


Note: Merrill Lynch has defined the high yield bonds to be included in the index. High-yield is classified by Moody's/Standard & Poor's as Ba/BB or lower.

Source: Reuters EcoWin

**Chart 1:20. Credit spreads for European corporate bonds**

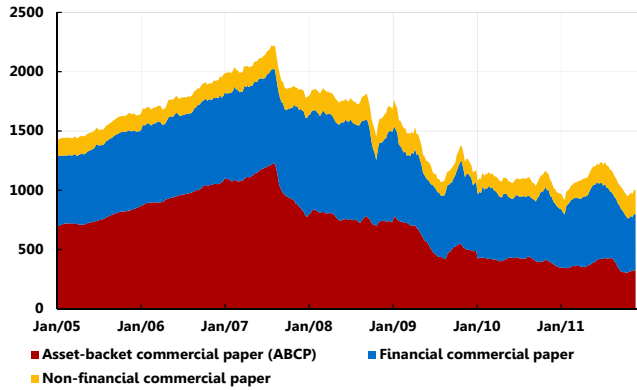
Basis points



Source: Reuters EcoWin

**Chart 1:21. Outstanding volume of commercial paper issued in the United States**

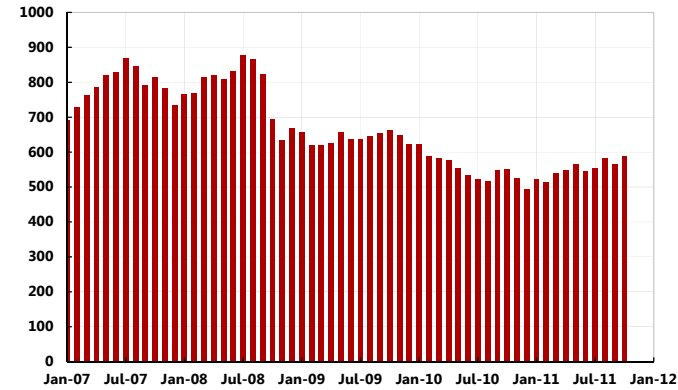
Billion USD



Source: Reuters EcoWin

**Chart 1:22. Outstanding volumes of Euro Commercial Paper**

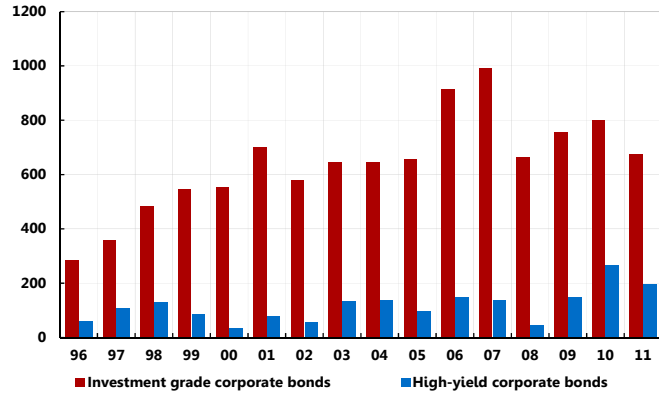
Billion USD



Source: Euroclear

**Chart 1:23. Issuance of corporate bonds in the American**

Billion USD



Note: The issue volume for 2011 is only calculated until October 2011.

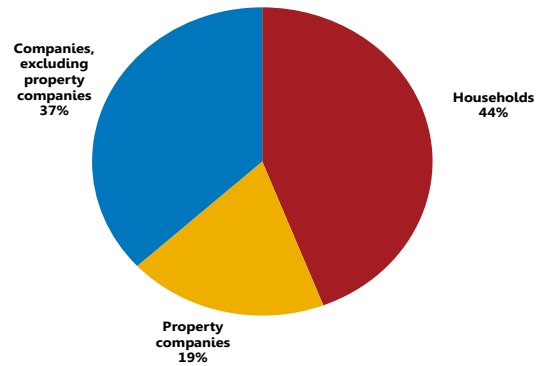
Source: SIFMA



# Chapter 2

**Chart 2:1. Lending activities of the Swedish banking groups by borrower category, September 2011**

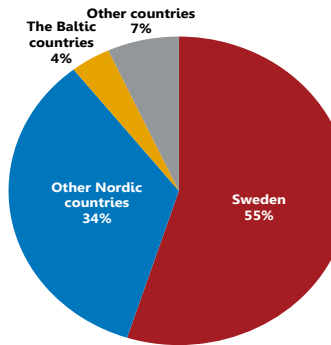
Per cent of total lending



Sources: Bank reports and the Riksbank

**Chart 2:2. Lending activities of the Swedish banking groups by geographical area, September 2011**

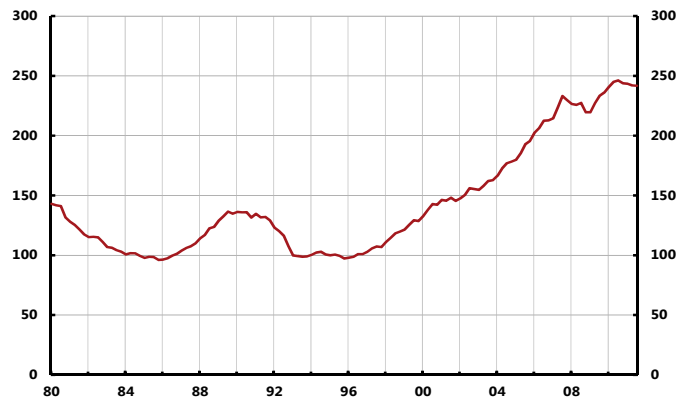
Per cent of total lending



Sources: Bank reports and the Riksbank

**Chart 2:3. Real house prices**

Index, quarter 1 1995 = 100

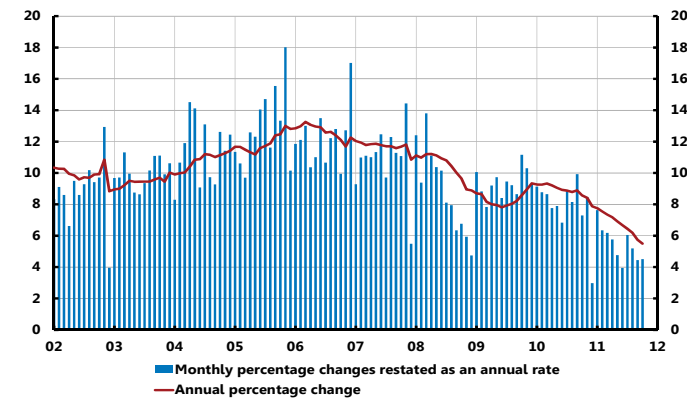


Note: Real house prices are defined as nominal house prices deflated by the CPI.

Sources: Statistics Sweden and the Riksbank

**Chart 2:4. Household borrowing**

Monthly change on an annual rate and annual change, percentage

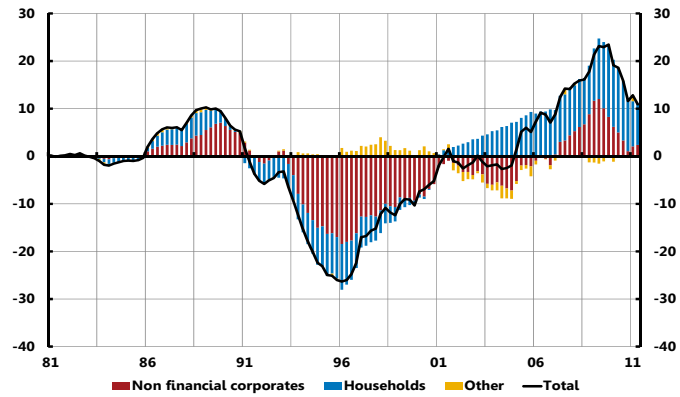


Note: Seasonally-adjusted data.

Source: The Riksbank

**Chart 2.5. Credit gap**

Per cent

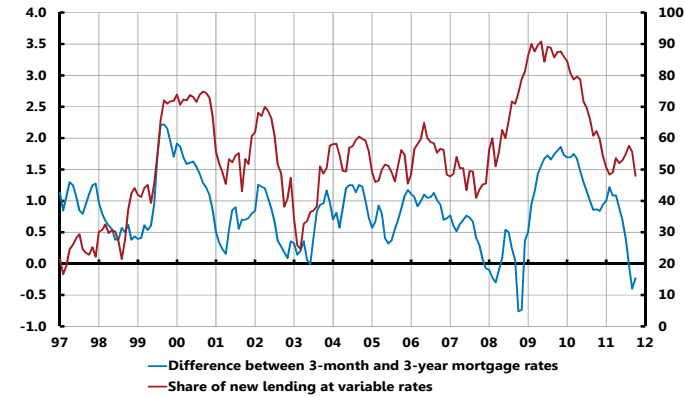


Note. The credit gap is defined as the distance from the underlying trend in total debt in relation to GDP. The total debt consists of total lending to the public and the non-financial companies' market funding.

Sources: The Riksbank

**Chart 2.6. Difference between three month and three year mortgage rates and the share of new lending at variable rates**

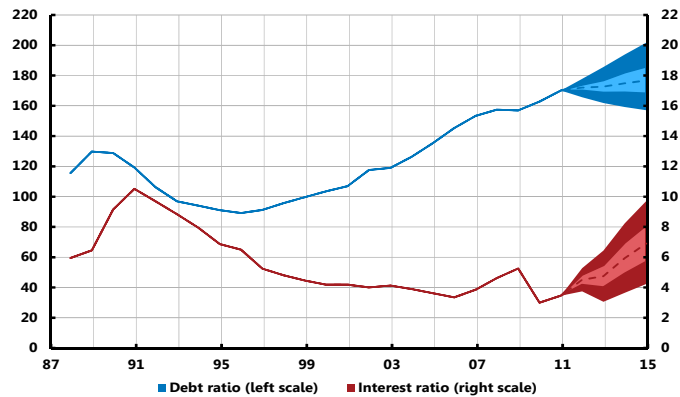
Percentage points and per cent



Source: The Riksbank

**Chart 2.7. Household debt and post-tax interest expenditure**

Per cent of disposable income

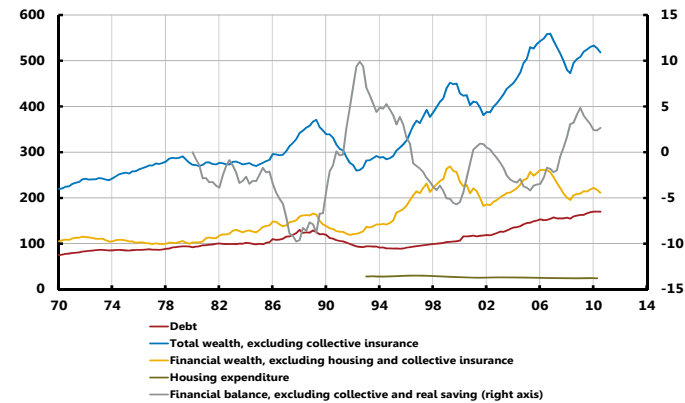


Note. The broken lines represent the Riksbank's forecast.

Source: The Riksbank

**Chart 2.8. Households' debts, assets, housing expenditures and savings**

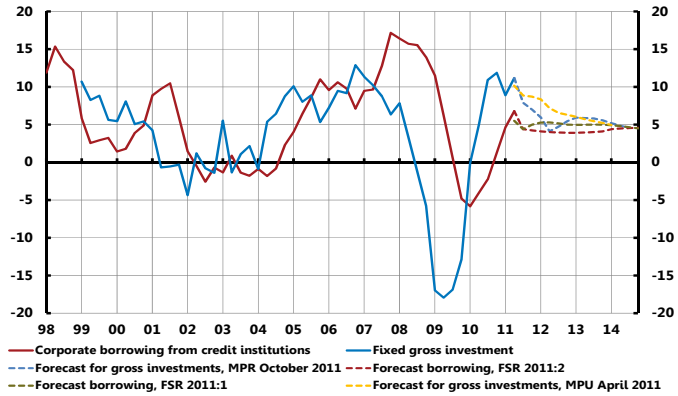
Per cent of disposable income



Sources: Statistics Sweden and the Riksbank

**Chart 2:9. Corporate borrowing from credit institutions and fixed gross investment**

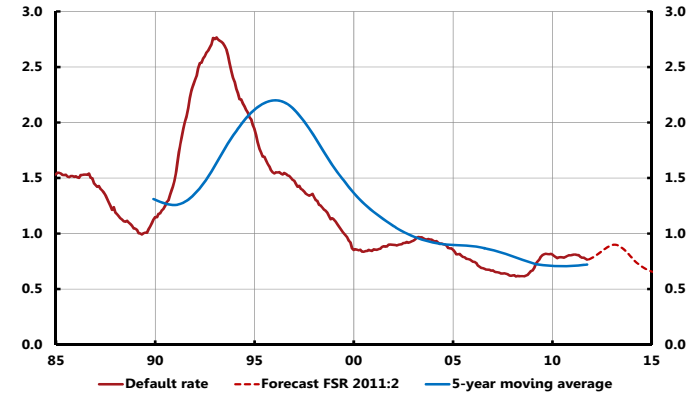
Annual percentage change



Sources: Statistics Sweden and the Riksbank

**Chart 2:10. Default rate for Swedish companies**

Per cent

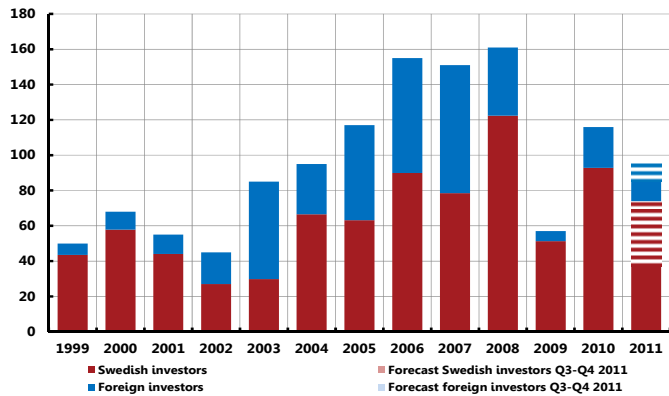


Note. The default rate is defined as the number of bankruptcies divided by the number of companies

Source: The Riksbank

**Chart 2:11. Transaction volumes for commercial properties**

SEK billion

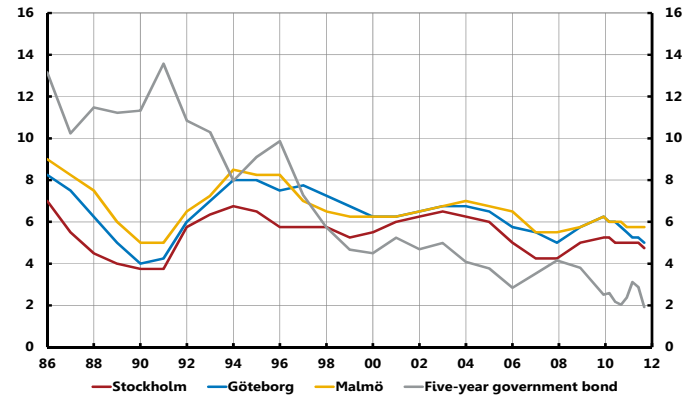


Note: Forecasts by the Riksbank

Sources: Saville and the Riksbank

**Chart 2:12. Average yield levels for modern office premises in city centres**

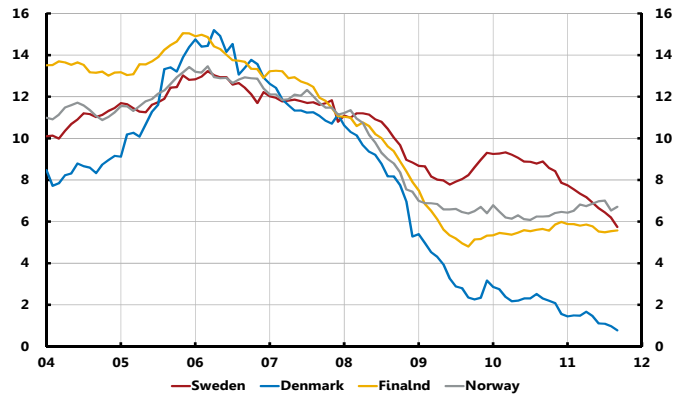
Per cent



Sources: Newsec and the Riksbank

**Chart 2:13. Household borrowing**

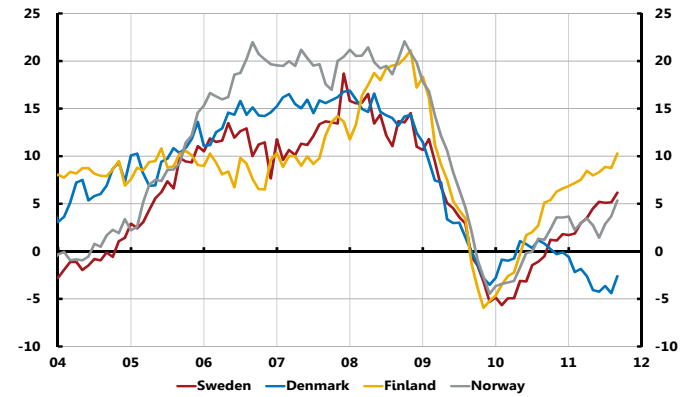
Annual percentage change



Sources: Reuters EcoWin and the Riksbank

**Chart 2:14. Corporate borrowing**

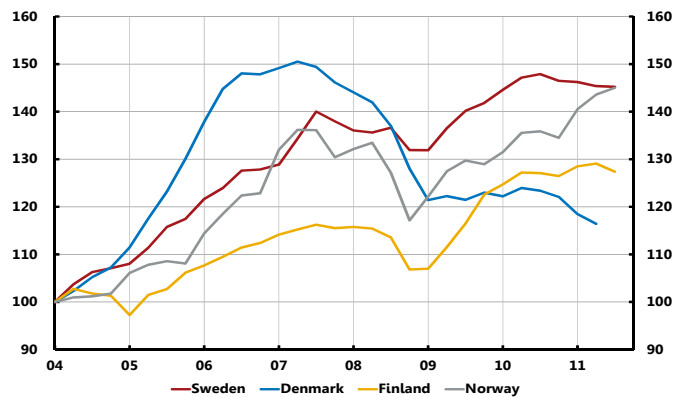
Annual percentage change



Sources: Reuters EcoWin, the ECB and the Riksbank

**Chart 2:15. Real house prices**

Index, quarter 1 2004 = 100

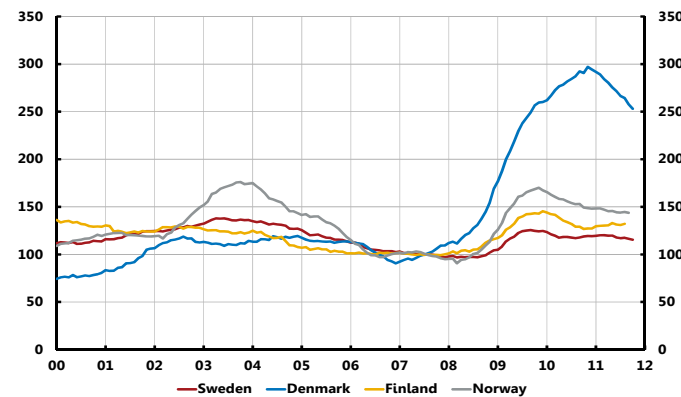


Note: Real house prices are defined as nominal prices deflated by the CPI.

Sources: Reuters EcoWin, Bank for International Settlements and the Riksbank

**Chart 2:16. Corporate defaults**

Twelve-month moving average, index, average 2007 = 100



Sources: Reuters EcoWin and the Riksbank

**Chart 2:17. Credit losses in the Danish banking sector from household borrowing**

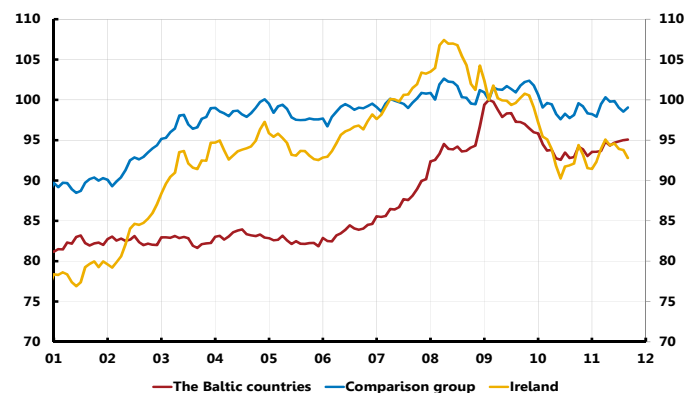
Per cent of total lending



Source: Danmarks Nationalbank

**Chart 2:18. Real exchange rates**

Index, January 2009 = 100

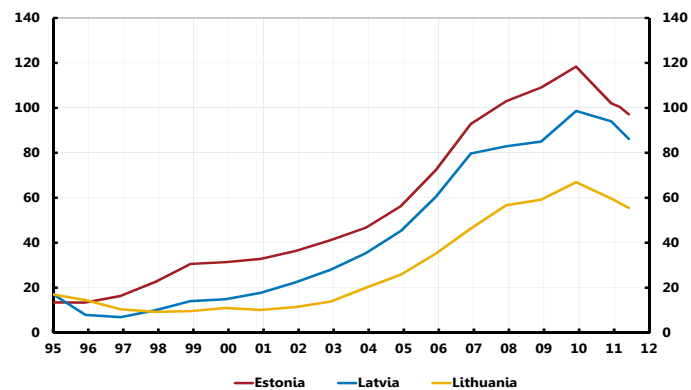


Note. The comparison group corresponds to Greece, Italy, Portugal and Spain. The data for the Baltic countries and the comparison group are unweighted averages. The exchange rates are corrected for the price level (CPI). The scale is inverted so that lower values indicate weaker real exchange rates.

Source: Bank for International Settlements

**Chart 2:19. Private sector debt**

Per cent of GDP

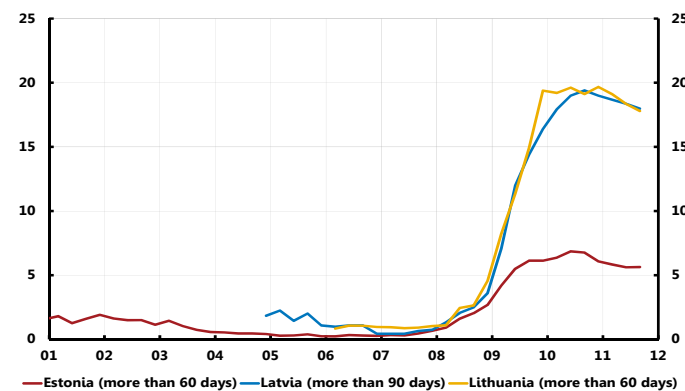


Note: Data for Estonia also includes leasing.

Sources: The national central banks, Latvijas Statistika and Reuters EcoWin

**Chart 2:20. Late payments**

Per cent of lending

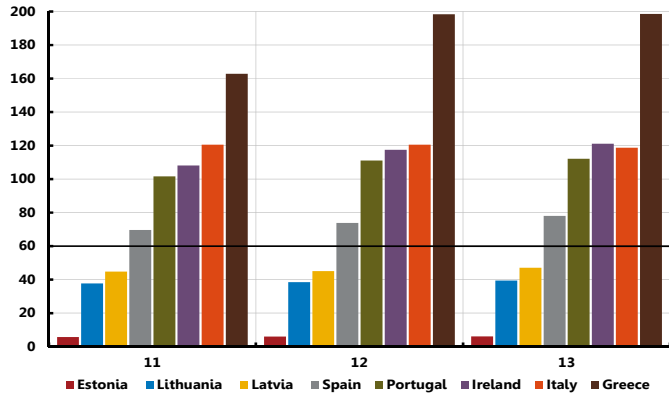


Note. The definition of late payments differs from country to country.

Sources: Eesti Pank, Financial and Capital Market Commission och Lietuvos Bankas

**Chart 2:21. Sovereign debt**

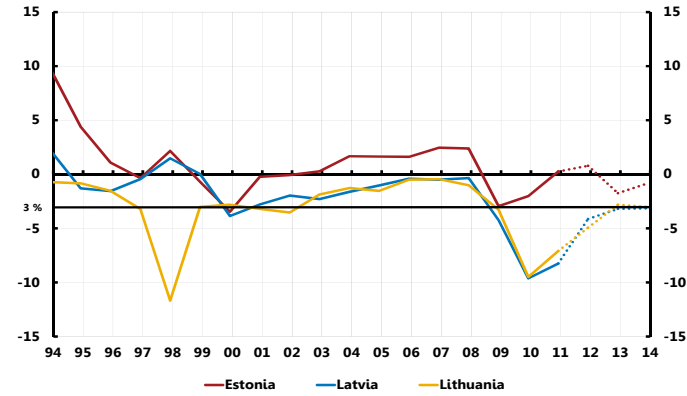
Percentage of GDP



Note. Data for 2011, 2012 and 2013 are the EU Commission's forecast.  
Source: European Commission

**Chart 2:22. Budget deficit in relation to GDP**

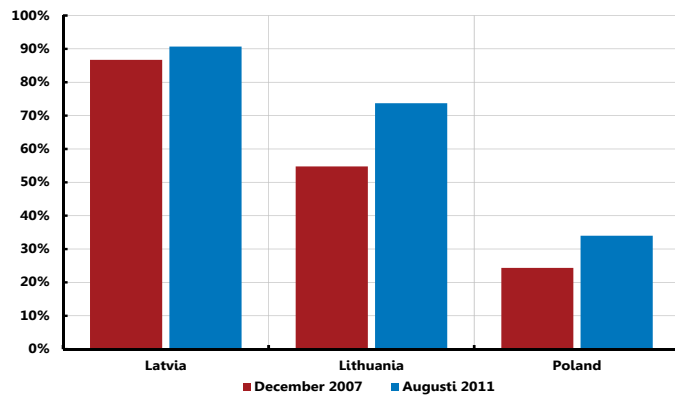
Per cent



Note. Data for 2011, 2012 and 2013 are the EU Commission's forecast. The line at minus three per cent marks the Maastricht criteria.  
Source: European Commission

**Chart 2:23. Lending in foreign currency to households and non-financial companies**

Per cent of total lending

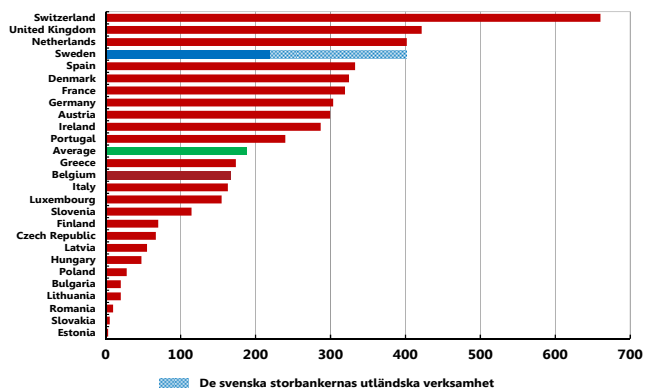


Source: European Systemic Risk Board (ESRB)

# Chapter 3

**Chart 3:1. Bank assets in relation to GDP December 2010**

Per cent

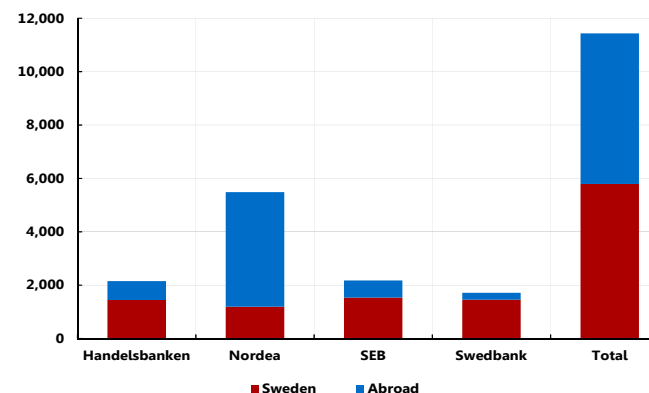


Note: The shadowed part of the blue bar shows the four major banks' assets abroad in relation to Sweden's GDP. In banking assets are included all of the assets of the national banking groups, that is both foreign and domestic assets.

Sources: ECB, the European Commission, the Swiss National Bank and the Riksbank

**Chart 3:2. Total assets of the major Swedish banks**

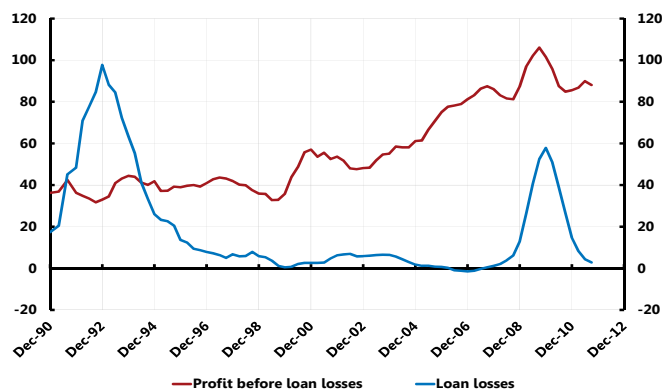
December 2010, SEK billion



Sources: Bank reports and the Riksbank

**Chart 3:3. Earnings before loan losses and loan losses in the major Swedish banks, March 2011**

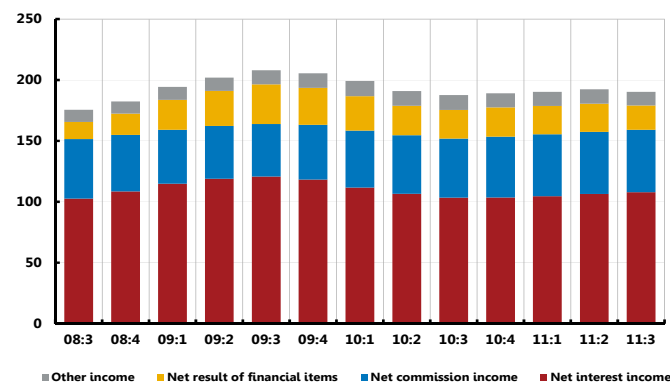
Totalled over four quarters, SEK billion, fixed prices, September 2011



Sources: Bank reports and the Riksbank

**Chart 3:4. The major Swedish banks' income**

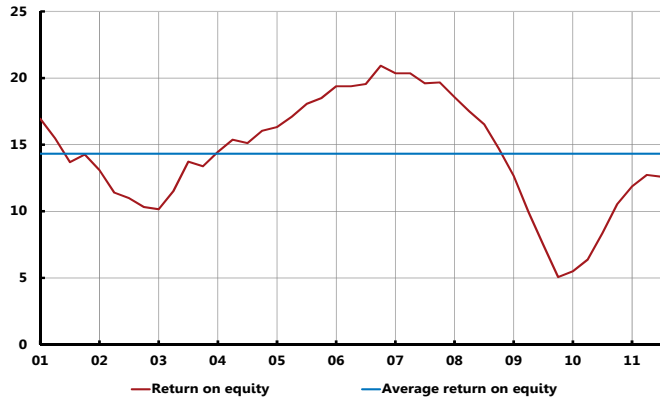
Rolling four quarters, SEK billion



Sources: Bank reports and the Riksbank

**Chart 3:5. The major Swedish banks' return on equity**

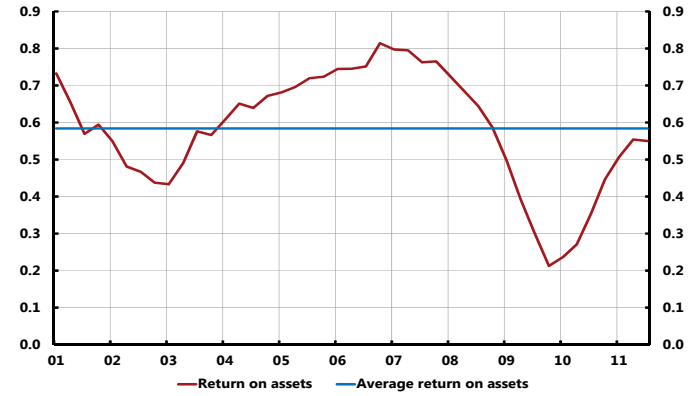
Four-quarter moving average, per cent



Sources: Bank reports and the Riksbank

**Chart 3:6. The major Swedish banks' return on total assets**

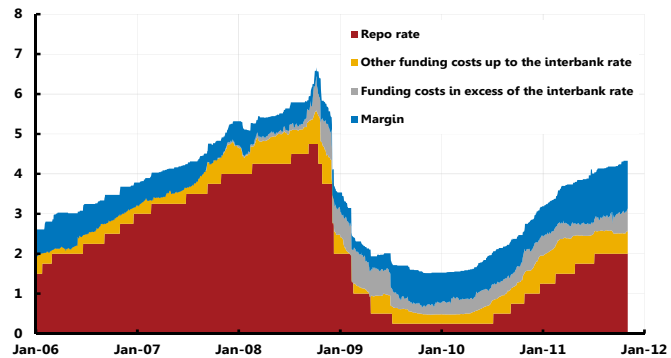
Four-quarter moving average, per cent



Sources: Bank reports and the Riksbank

**Chart 3:7. Breakdown of a mortgage loan with three-month fixed rate**

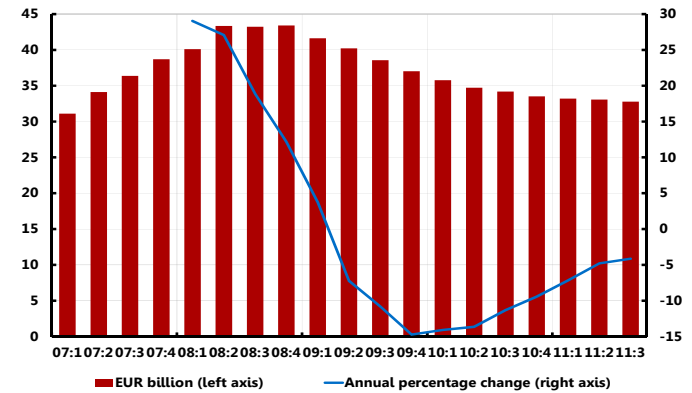
Per cent



Sources: Bank reports and the Riksbank

**Chart 3:8. Swedish major banks' lending to the public in the Baltic countries**

EUR billion and annual percentage change

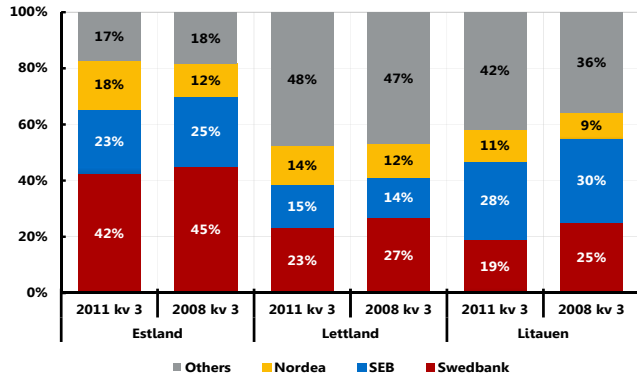


Sources: Bank reports and the Riksbank



**Chart 3:9. Market shares of lending in the Baltic countries**

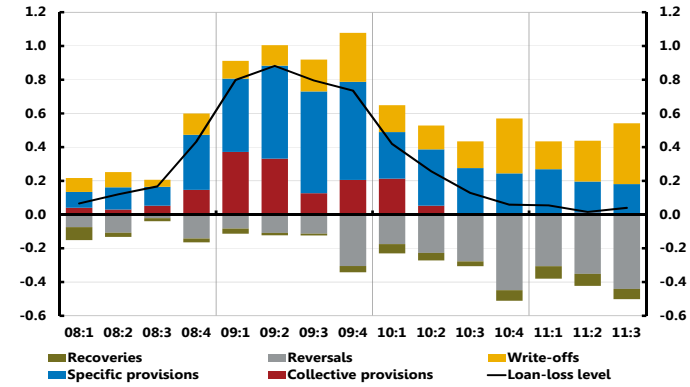
Per cent



Sources: Bank reports and the Riksbank

**Chart 3:10. The major Swedish banks' loan losses**

Percentage of lending at the start of the respective quarters

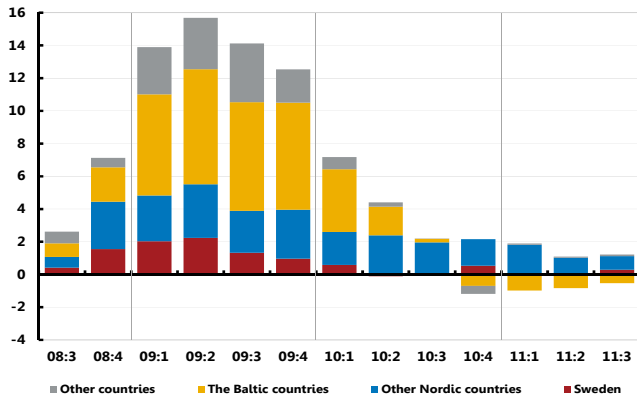


Note. Annualised data.

Sources: Bank reports and the Riksbank

**Chart 3:11. The major Swedish banks' loan losses per quarter**

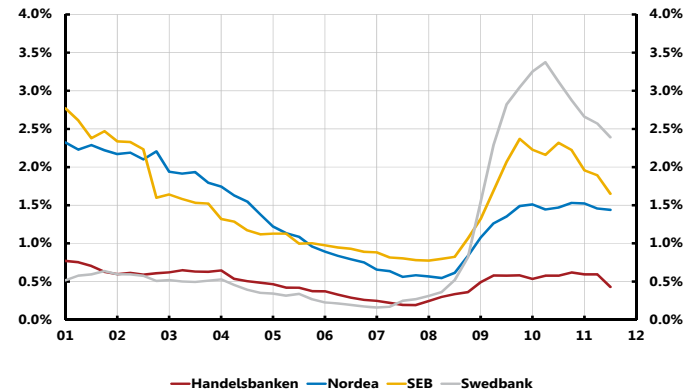
SEK billion



Sources: Bank reports and the Riksbank

**Chart 3:12. The major Swedish banks' impaired loans**

Percentage of gross lending

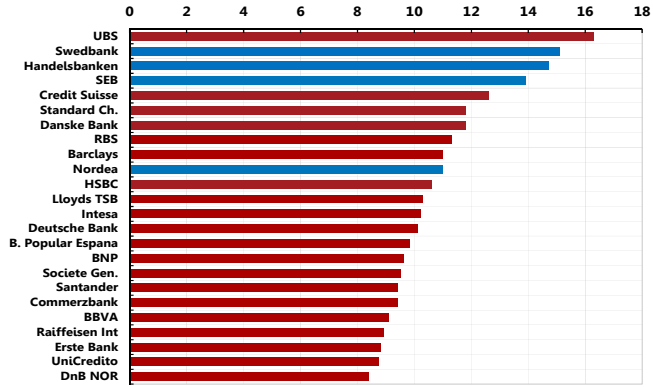


Note. Impaired loans in relation to gross lending, i.e. lending including provisions

Sources: Bank reports and the Riksbank

**Chart 3:13. Core Tier 1 capital ratios of Swedish and foreign banks as defined by Basel II**

September 2011, per cent

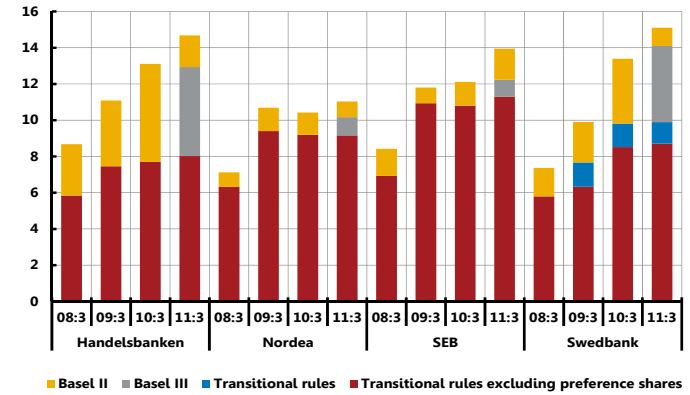


Note: The figures for Standard Chartered and Raiffeisen International refer to December 2010.

Sources: Bank reports and the Riksbank

**Chart 3:14. Core Tier 1 capital ratios**

Per cent

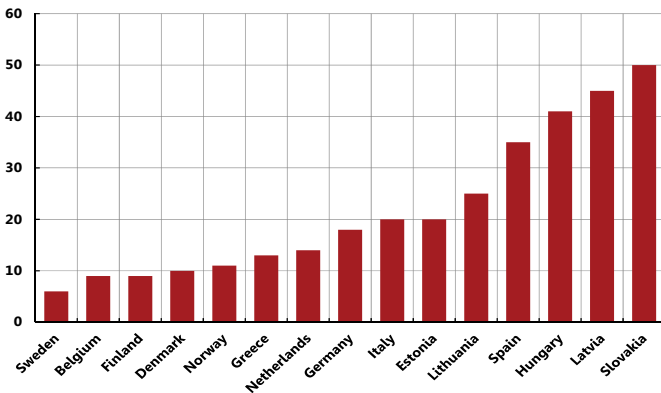


Note: The red area of the bars corresponds to the European Banking Authority (EBA) definition of Core Tier 1 capital.

Source: Bank reports and the Riksbank

**Chart 3:15. Risk weights on mortgages defined by Basel II**

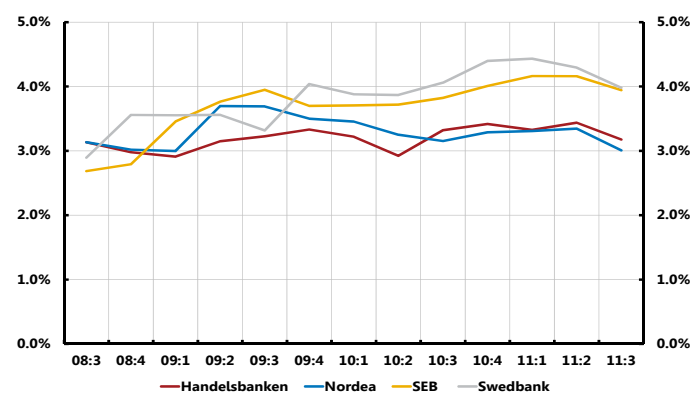
Per cent



Sources: National central banks and the Riksbank

**Chart 3:16. Core Tier 1 capital in relation to total assets**

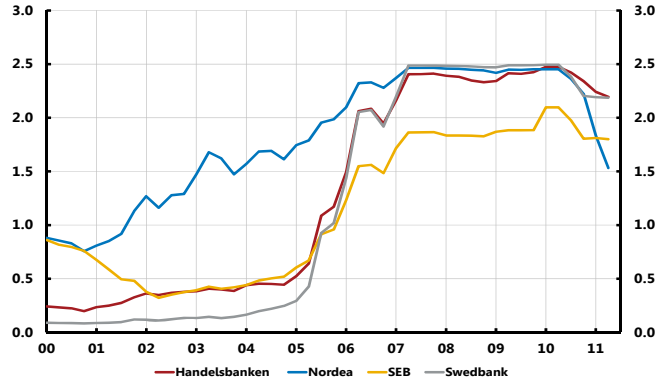
Per cent



Source: Bank reports and the Riksbank

**Chart 3:17. Countercyclical capital buffers for the Swedish banks**

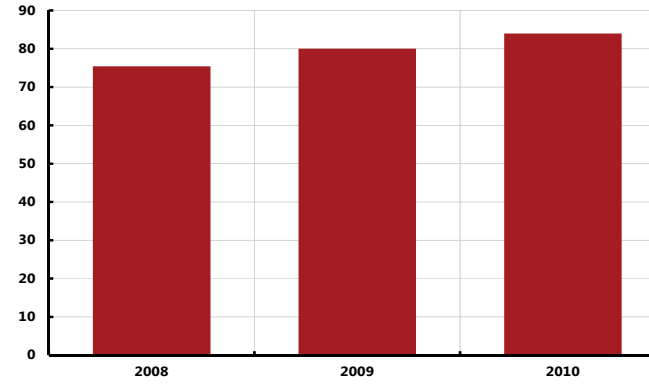
Per cent



Sources: Bank reports, Reuters EcoWin and the Riksbank

**Chart 3:18. The Riksbank's structural liquidity measure on an aggregated for the major Swedish banks**

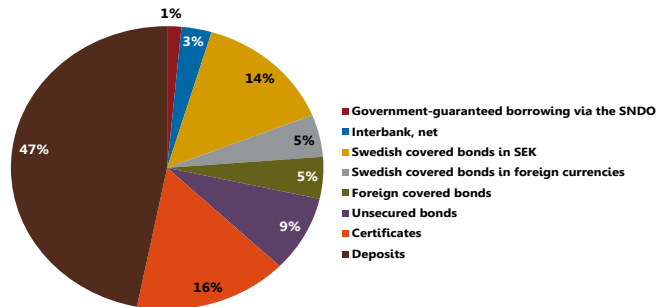
Stable funding in relation to illiquid assets, per cent



Source: Liquidatum and the Riksbank

**Chart 3:19. The major Swedish banks' funding, September 2011**

Per cent

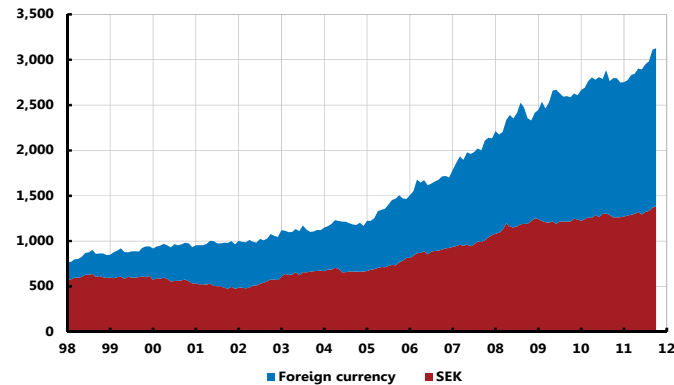


Note: The funding of the major banks amounts to approximately SEK 8,100 billion. SNDO (Swedish National Debt Office)

Sources: Bank reports and the Riksbank

**Chart 3:20. The major Swedish banks' market funding via Swedish parent companies and subsidiaries**

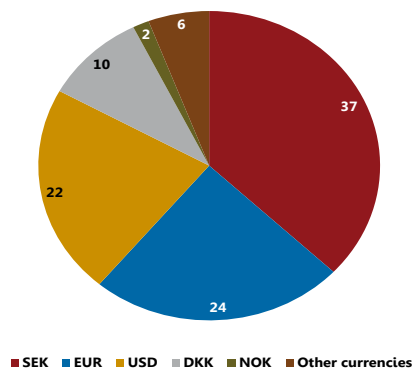
SEK billion



Sources: Statistics Sweden and the Riksbank

**Chart 3:21. The major Swedish banks' market funding, December 2010**

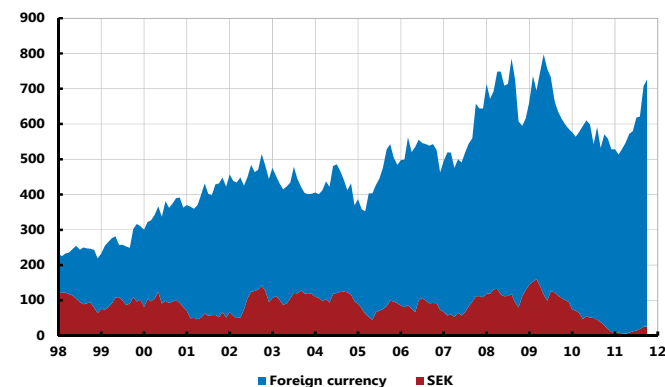
Per cent of total market funding



Sources: Bank reports and the Riksbank

**Chart 3:22. The major Swedish banks' short-term market funding via Swedish parent companies and subsidiaries**

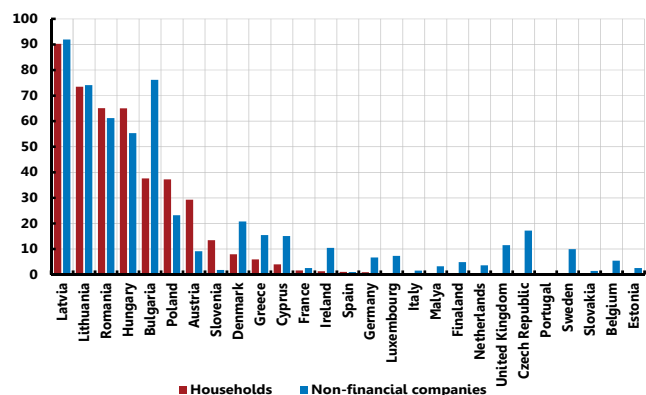
SEK billion



Sources: Statistics Sweden and the Riksbank

**Chart B3:1 Lending in foreign currency to households and non-financial companies**

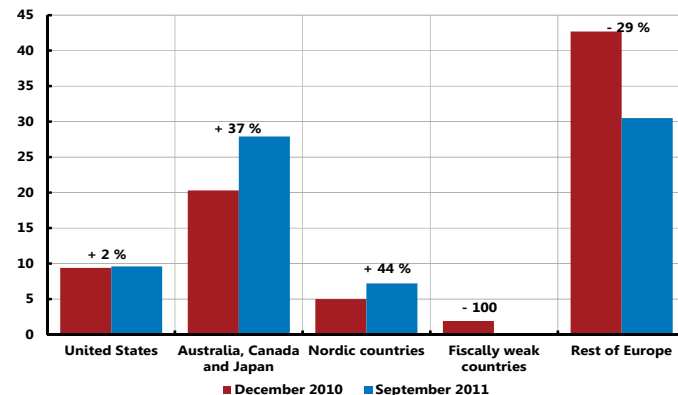
Percentage of total lending



Source: European Systemic Risk Board (ESRB)

**Chart B3:2. Distribution and change in U.S. money market funds' exposure to banks**

Per cent and percentage change

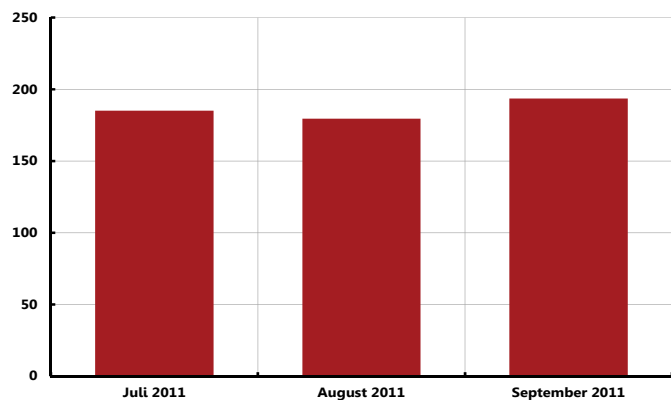


Note: Data is based on a sample of US money market funds. In September this sample accounted for 45 per cent of the US money market funds' total investment. The group of fiscally weak countries includes Portugal, Italy, Ireland, Greece and Spain.

Source: Fitch Ratings

**Chart B3:3. Average Liquidity Coverage Ratio (LCR) according to the Basel regulations**

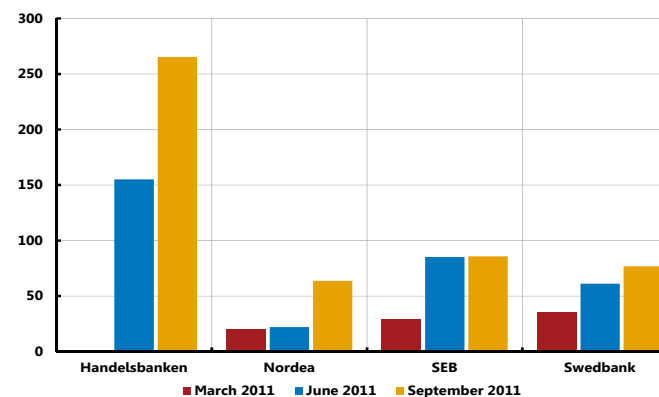
Per cent



Sources: Finansinspektionen and the Riksbank

**Chart B3:4. The major Swedish banks' reported liquid assets in US dollars**

SEK billion

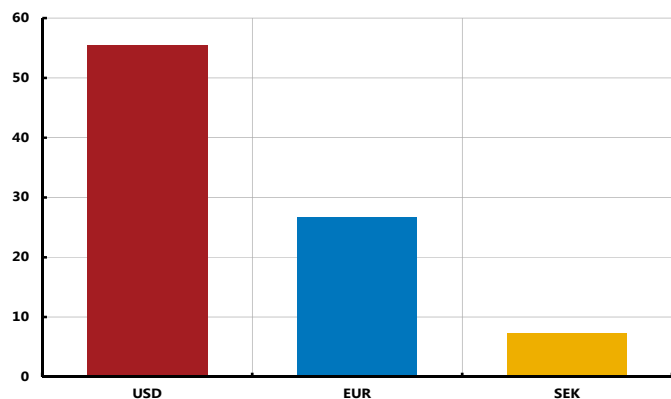


Note: Handelsbanken did not report its liquidity buffer by currency in its report for the first quarter.

Source: Bank reports

**Chart B3:5. Percentage of issued securities with original maturities of less than one year in the Swedish banking system**

September 2011, per cent

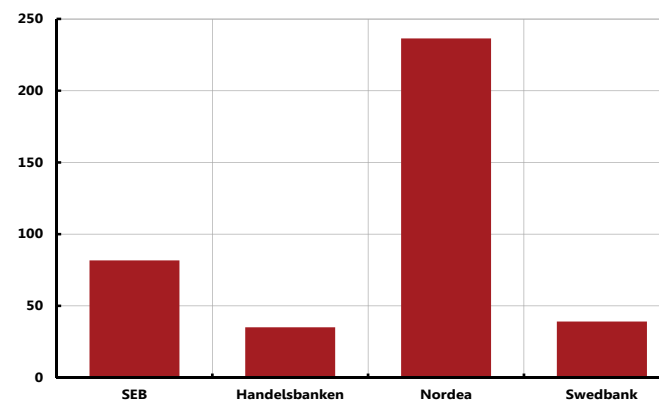


Note. The banks' foreign subsidiaries are not included in the statistics.

Source: The Riksbank

**Chart B3:6 The major banks' lending to the public in US dollars**

SEK billion

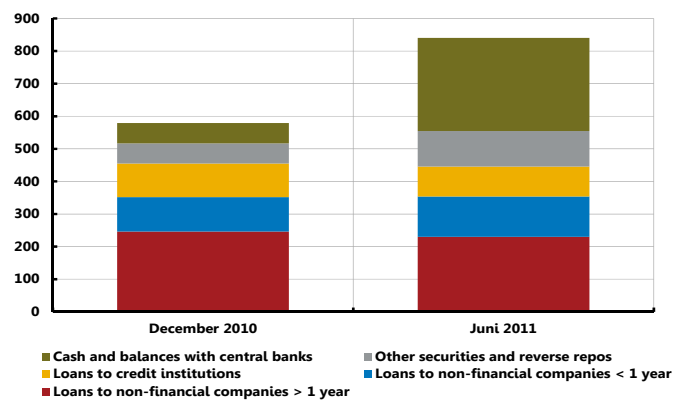


Note: Lending for Handelsbanken and SEB is per December 2010. Lending for Nordea and Swedbank is per September 2011.

Source: Bank reports

**Chart B3:7. Development of the major Swedish banks' dollar assets**

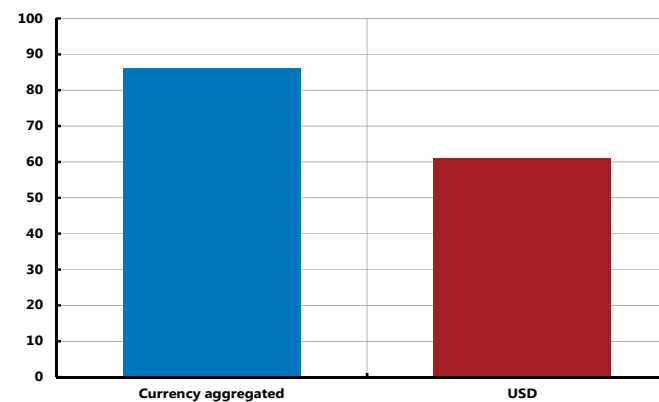
SEK billion



Sources: Bank reports and the Riksbank

**Chart B3:8. The Riksbank's structural liquidity measure**

Per cent



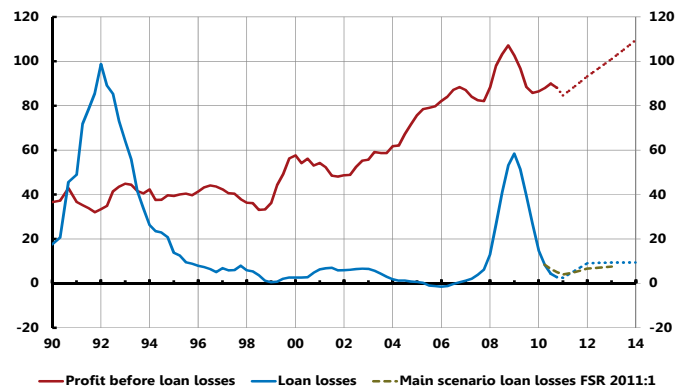
Note: The measure is the average value for the four major banks. The currency-aggregated measure is based on data for September 2011 apart from SEB, where the data is from December 2010. The dollar measure is based on data for June 2011 for all the banks.

Sources: Bank reports and the Riksbank

# Chapter 4

**Chart 4:1. Earnings before loan losses and loan losses in the four major Swedish banks**

Totalled over four quarters, SEK billion, fixed prices, September 2011

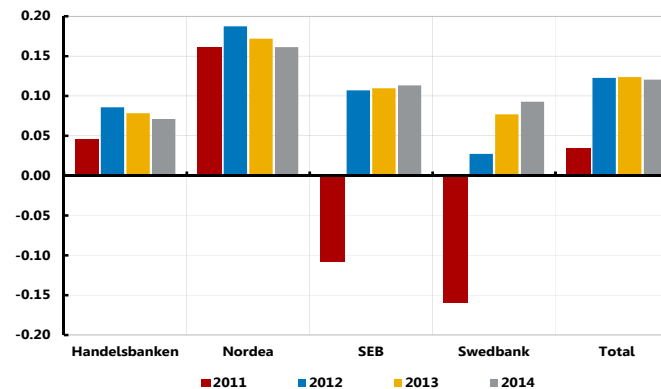


Note: The broken lines represent the Riksbank's main scenario according to the current and previous Financial Stability Reports.

Sources: Bank reports and the Riksbank

**Chart 4:2. Level of loan losses in the main scenario**

Per cent

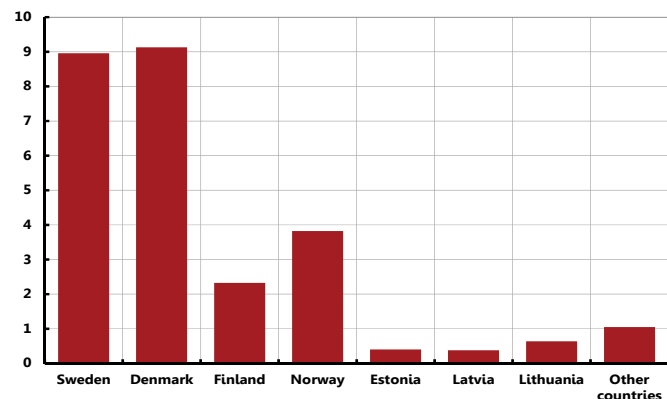


Note. A negative figure means that recoveries and reversals of earlier provisions are greater than new provisions for loan losses and realized loan losses.

Source: The Riksbank

**Chart 4:3. Distribution of loan losses per region in the period 2012–2014 in the main scenario**

SEK billion

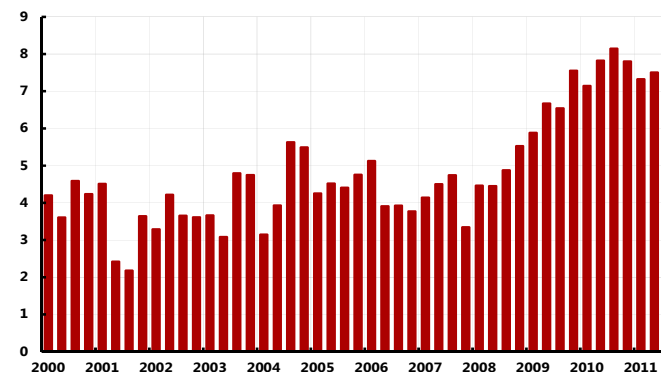


Note. A negative figure means that recoveries and reversals of earlier provisions are greater than new provisions for loan losses and realised loan losses.

Source: The Riksbank

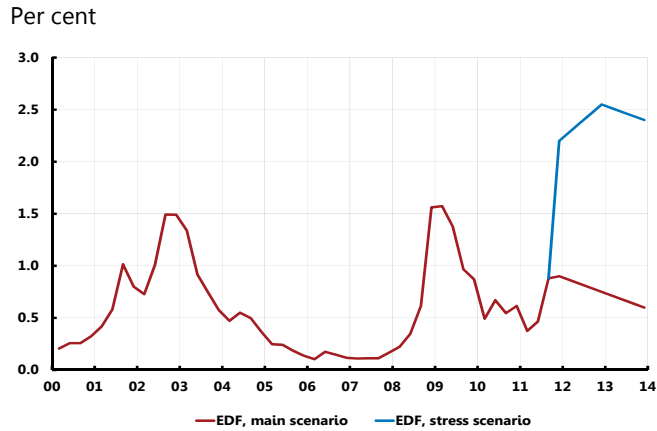
**Chart 4:4. The major Swedish bank with the lowest Tier 1 capital ratio after another major Swedish bank has defaulted on payments**

Per cent



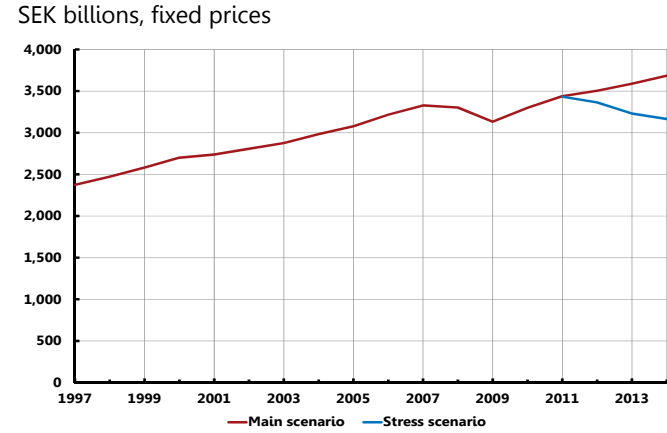
Note: The major bank with the lowest Tier 1 capital ratio is not necessarily the same bank on every occasion. The Tier 1 capital ratios are calculated in accordance with Basel II and transition rules. In the calculation of the core Tier 1 capital ratio according to Basel III, the last observation amounts to 8.2 per cent. Source: The Riksbank

**Chart 4:5. Expected default frequency (EDF) for the Swedish non-financial companies in the stress test and in the main scenario**



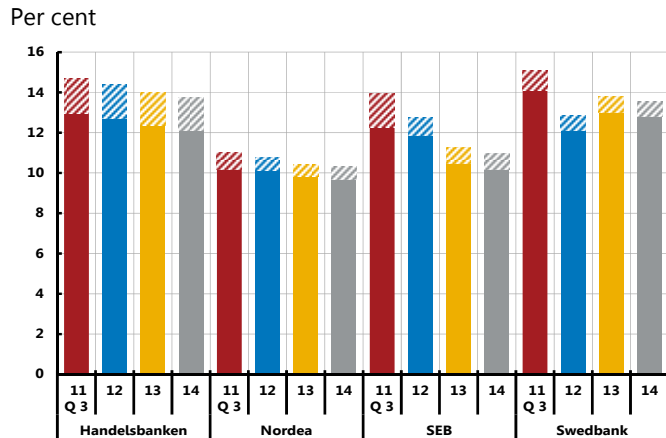
Sources: Moody's KMV and the Riksbank

**Chart 4:6. GDP for Sweden in the stress test and in the main scenario**



Sources: Statistics Sweden and the Riksbank

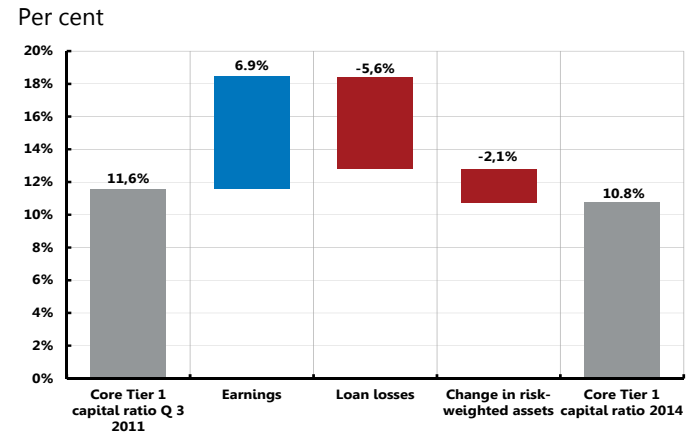
**Chart 4:7. The major Swedish banks' core Tier 1 capital ratios according to Basel II and Basel III, initially and in the stress test**



Note: Solid bars represent core Tier 1 capital ratios as defined by Basel III. Striped bars represent core Tier 1 capital ratios as defined by Basel II. The core Tier 1 capital ratios under Basel II have been calculated according to the fully implemented regulations. The core Tier 1 capital ratios under Basel III are based on the Riksbank's estimates.

Sources: Bank reports and the Riksbank

**Chart 4:8. Factors that contribute to changes in the banks' core Tier 1 capital ratios as defined by Basel III in the stress test**



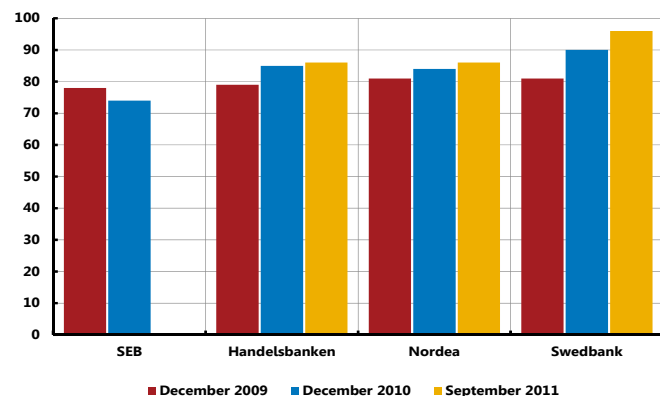
Note: Average for the four major banks. The ratios are based on the Riksbank's estimates.

Source: The Riksbanken



**Chart 4:9. The Riksbank's structural liquidity measure for the major Swedish banks**

Stable funding in relation to illiquid assets, per cent

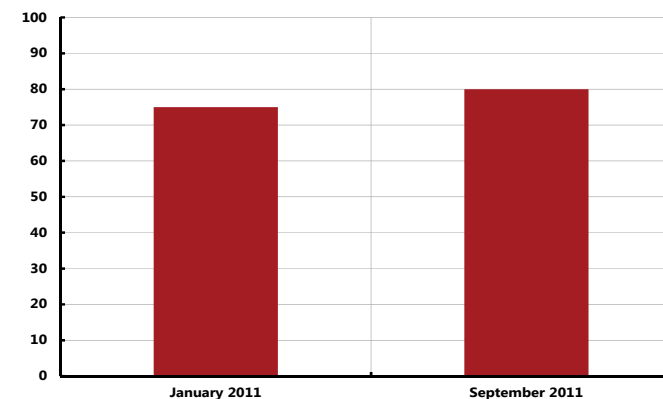


Note: Securities that have been reclassified to loans and receivables count as lending to the public. Swedbank has become the first Swedish bank to include NSFR in its public reporting. On 30 September 2011, the bank reported NSFR of 92 per cent. As SEB does not publish complete maturity data for assets and liabilities more than once per year, it has not been possible to update SEB's measurement since the last Financial Stability Report was published in May.

Source: Liquidatum and the Riksbank

**Chart 4:10. Aggregated Net Stable Funding Ratio (NSFR) for the major Swedish banks**

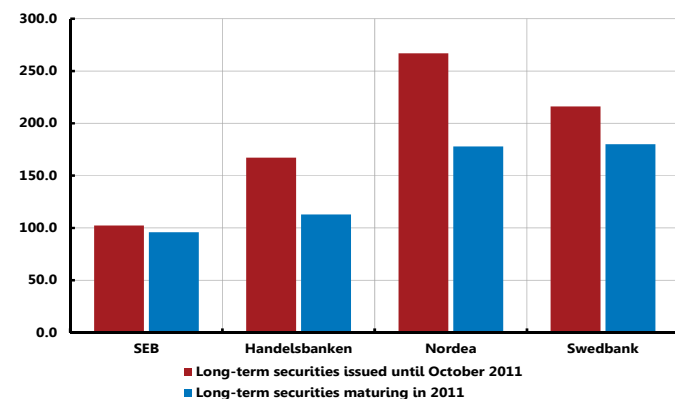
Per cent



Source: Finansinspektionen

**Chart 4:11. Issues and maturity, long-term securities**

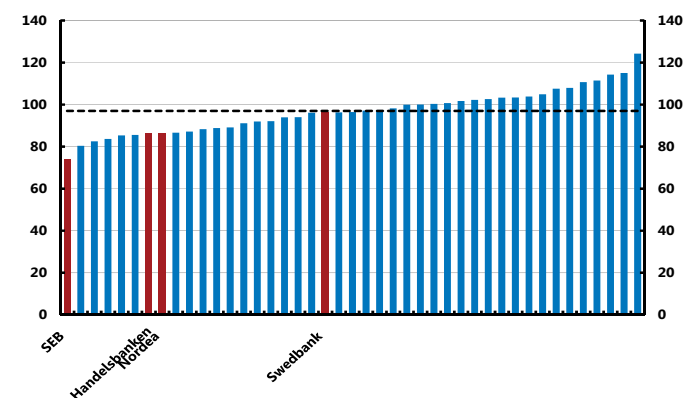
SEK billion



Sources: Bank reports, Bloomberg and the Riksbank

**Chart 4:12. The Riksbank's structural liquidity measure for the major Swedish banks and for banks in the European sample**

Stable funding in relation to illiquid assets, per cent

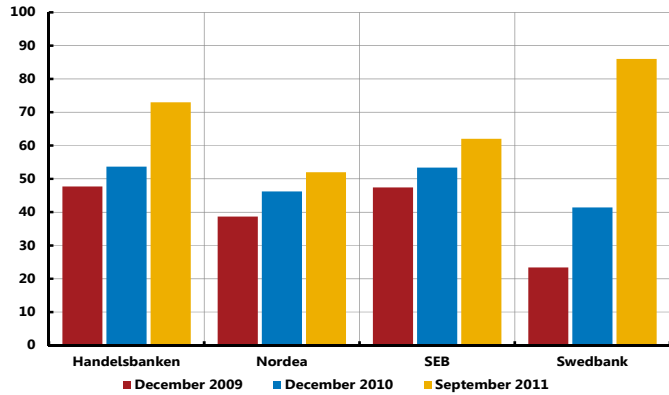


Note: Securities that have been reclassified to loans and receivables count as lending to the public. The 43 banks that are included in the sample have different business models. For the Swedish banks, apart from SEB, the measure is calculated for September 2011. For SEB and the European banks the measure is calculated for December 2010. This is due to the banks' reporting.

Sources: Liquidatum and the Riksbank

**Chart 4:13. The Riksbank's short-term liquidity measure for the major Swedish banks**

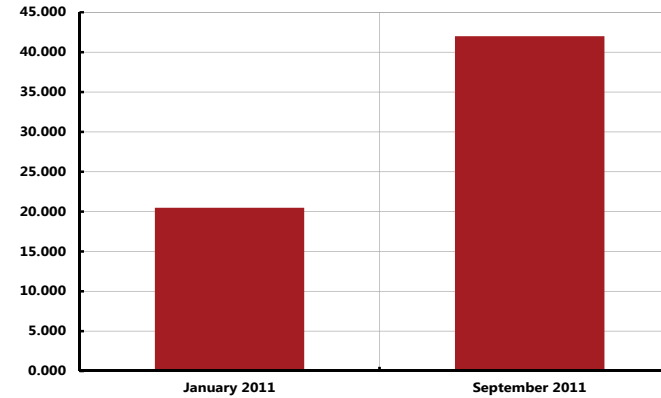
Survival period, number of days



Sources: Liquidatum and the Riksbank

**Chart 4:14. Aggregated LCR for the major Swedish banks**

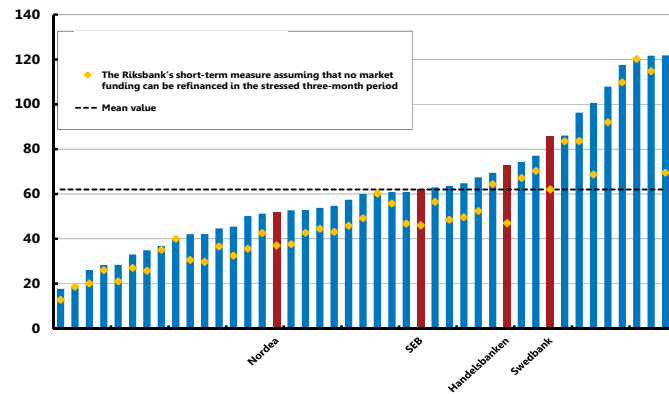
Survival period, number of days



Sources: Finansinspektionen and the Riksbank

**Chart 4:15. Överlevnadsperiod för de svenska storbankerna och för bankerna i det europeiska urvalet**

Överlevnadsperiod, antal dagar

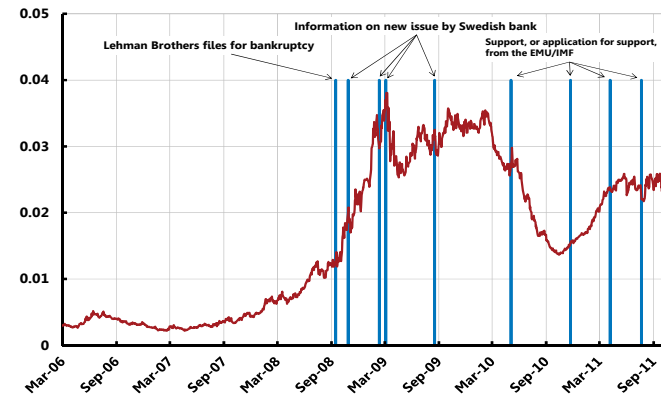


Note. The 43 banks included in the sample have different business models. The measure is calculated as of December 2010 for the European banks and as of September 2011 for the Swedish banks.

Sources: Liquidatum and the Riksbank

**Chart: B4:1. Systemic risk indicator, March 2006-October 2011**

Probability in per cent



Note. Vertical lines indicate the following important dates. 15/9 2008: Lehman Brother's applies for bankruptcy protection. 27/10 2008 and 17/8 2009: information regarding new rights issues by Swedbank. 10/2 2009 and 4/3 2009: information regarding new rights issues by Nordea and SEB. 4/5 2010 and 21/7 2011: Greece receives rescue packages. 22/11 2010 and 6/4 2011: Ireland and Portugal apply for rescue packages. The systemic risk indicator is the probability that all the four major banks falls into distress simultaneously. This probability is denoted JPoD in Segoviano och Goodhart (2009).

Sources: Bloomberg, Moody's KMV and the Riksbank

