Financial Stability Report 2015:1

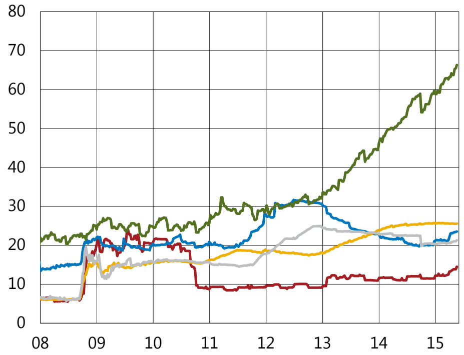
Appendix - Charts

June 3, 2015

Financial markets

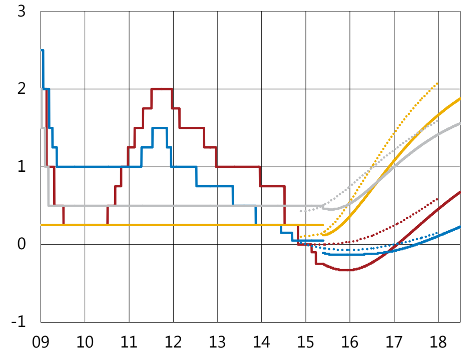
Continued expansionary monetary policy

Chart A1. Central banks' balance sheet in relation to GDP
Per cent



Sources: National central banks and Reuters EcoWin

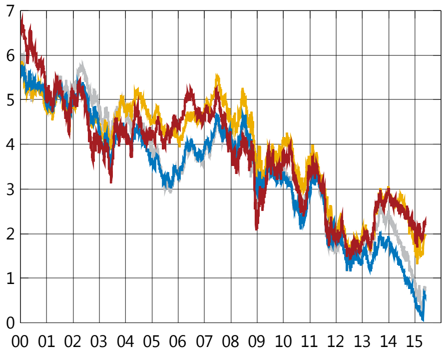
Chart A2. Policy rates and rate expectations according to forward rates
Per cent



Note. Forward rates describe the expected overnight rates which does not always correspond to the official policy rate. Lines are for the latest estimate, dotted lines are for information stop for FSR 2014:2 (2014-11-21).

Sources: Macrobond and the Riksbank

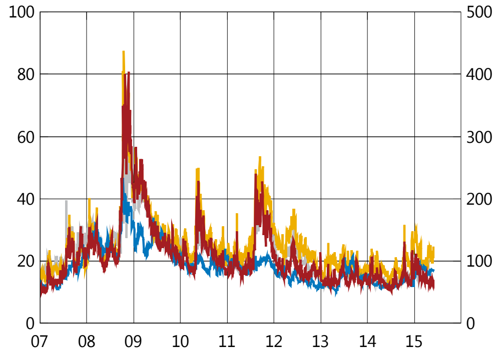
Chart A3. Ten year government bond rates
Per cent



Note. Benchmark bonds. The maturity could therefore potentially be different.

Souce: Macrobond

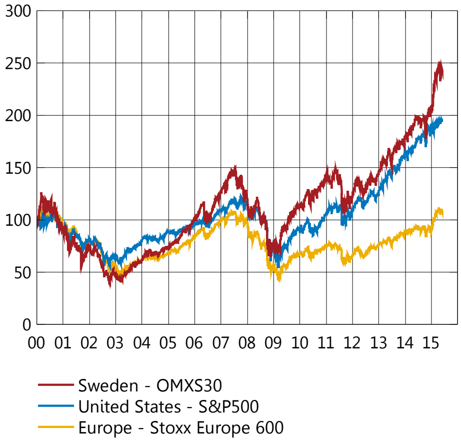
Chart A4. Expected volatility on the bond and stock markets
Index



Source: Reuters EcoWin

Investor demand for riskier assets has increased which is partly an intended effect of the monetary policy

Chart A5. Stock indices
Index, 1 Jan 2000 = 100



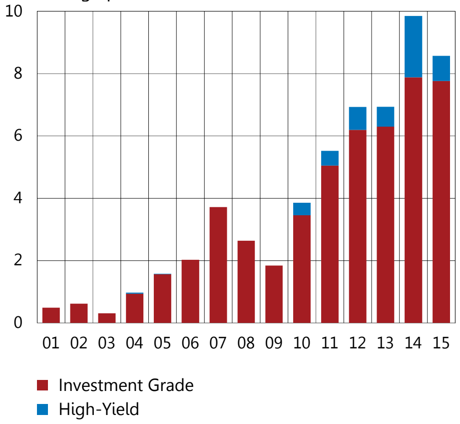
Sources: Bloomberg and the Riksbank

Chart A6. Difference in yield between corporate bonds with higher and lower credit worthiness
Basis points

Note. The series shows the spread between corporate bonds with different credit worthiness issued in different currencies. The dashed lines show the mean of the series since January 2010.

Source: Bloomberg

Chart A7. Issues on the Swedish market for corporate bonds
Average per month, SEK billion



Note. Some bonds have no credit rating from a credit institution and for these bonds the allocation between Investment Grade and High Yield is based on the banks' credit assessments of the companies. Issues until may are included for 2015.

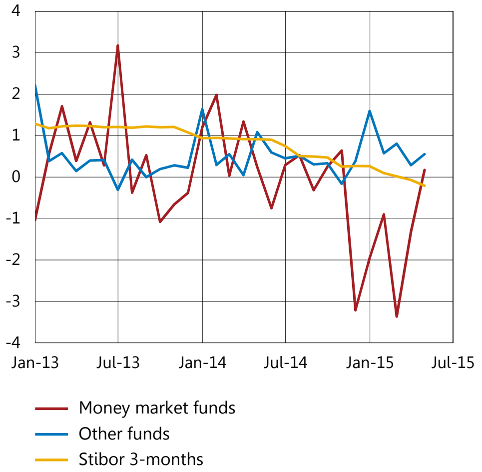
Source: Dealogic

Chart A8. Risk premia for Swedish corporate bonds
Basis points

Note. The index is based on indicative prices on the secondary market and reflects the difference between the average yield on a selection of Swedish corporate bonds and an interest-rate swap with a corresponding maturity.

Sources: Nasdaq and Bloomberg

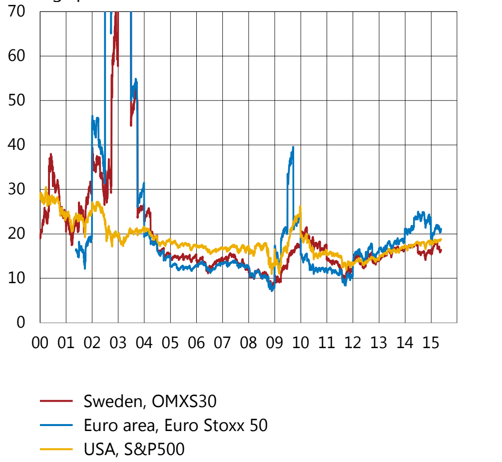
Chart A9. Monthly fund flows in relation to the fund's net assets for Swedish investors
Per cent



Sources: Swedish Investment Fund Association and Macrobond

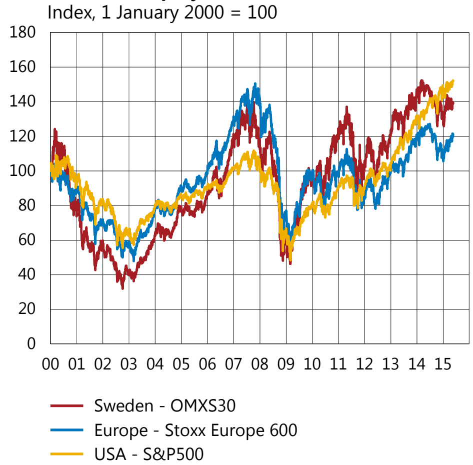
Increased risk-taking may at the same time be associated with risks if asset prices are inflated or if risks are not priced completely

Chart A10. P/E ratio for equity indices
P/E ratio, the price of a share relative to last year's earnings per share



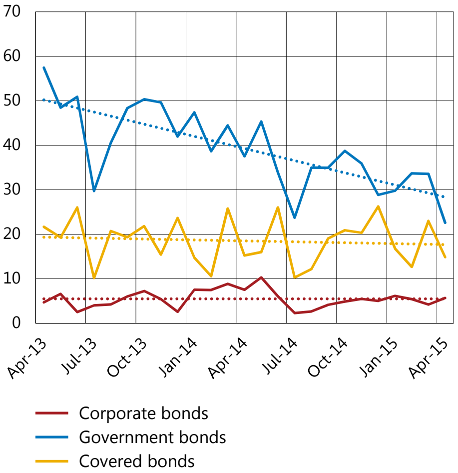
Source: Bloomberg

Chart A11. Equity indices in USD
Index, 1 January 2000 = 100



Sources: Bloomberg and the Riksbank

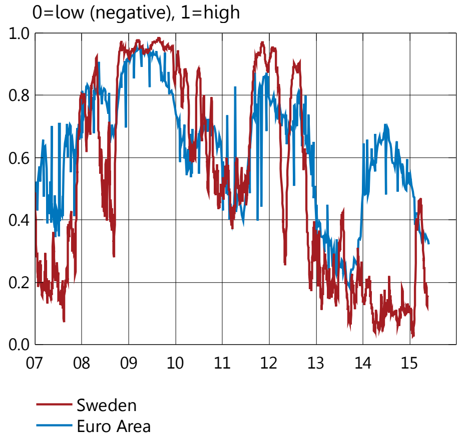
Chart A12. Turnover on bond markets in relation to outstanding volume
Per cent



Note. Turnover refers to the spot market. The Riksbank's purchases of government bonds are excluded.

Sources: Statistics Sweden and the Riksbank

Chart A13. Correlation between financial stress indicators in Sweden as well as the Euro Area
0=low (negative), 1=high

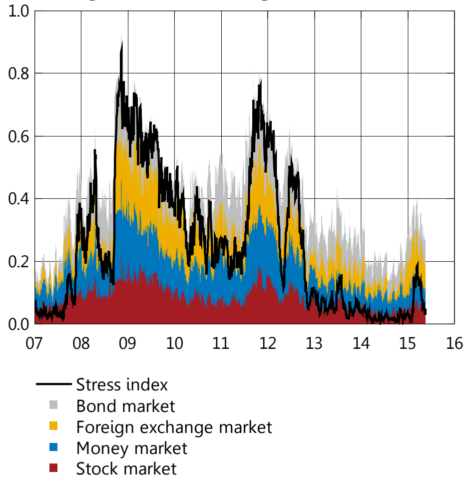


Note. The chart summarizes the correlation between the indicators that is part of the Swedish as well as the European stress index on a scale between zero and one. The methodology behind the two estimated lines are slightly different.

Sources: ECB and the Riksbank

Volatility has increased on the financial markets due to diverging monetary policy and appreciating US dollar

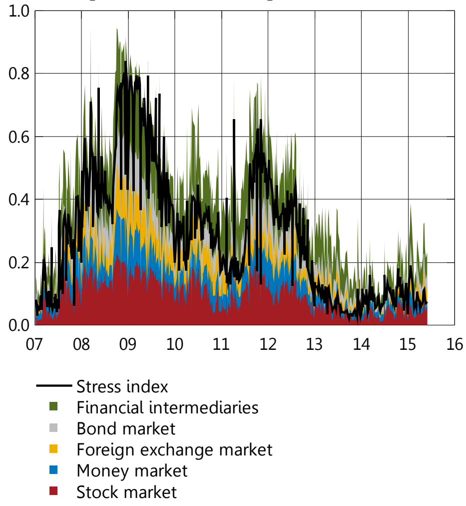
Chart A14. Swedish stress index
Ranking (0=low stress, 1=high stress)



Note. The Swedish stress index has been produced by the Riksbank using a method similar to that used by the ECB for the European stress index. See Johansson, Tor and Bonthron, Fredrik (2013), Further development of the index for financial stress in Sweden, Sveriges Riksbank Economic Review 2013:1. Sveriges Riksbank.

Sources: Bloomberg and the Riksbank

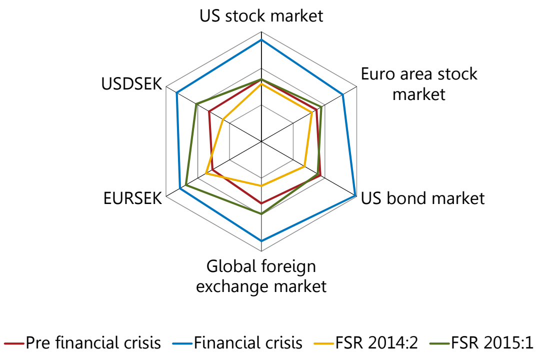
Chart A15. European stress index
Ranking (0=low stress, 1=high stress)



Note. The European stress index is published in the ESRB's Risk Dashboard and elsewhere. The stress level at a specific date is expressed as a value between zero and one, of which one signifies a historically high stress level and zero signifies a historically low stress level. See Holló et al., CISS – A composite indicator of systemic stress in the financial system, Working Paper Series no. 1426, March 2012, ECB.

Source: European Central Bank (ECB)

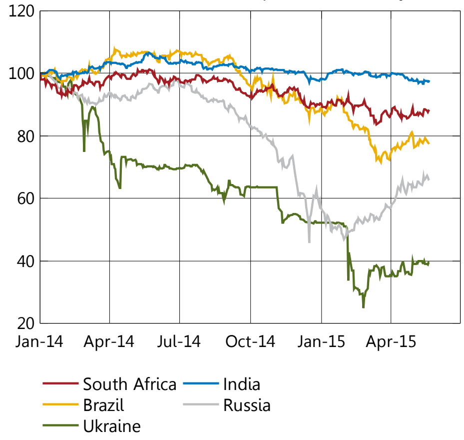
Chart A16. Volatility on financial markets
Standardised measures



Note. Pre financial crisis refers to the period from January 2003 to August 2007 and financial crisis refers to the period from August 2007 to December 2009.

Sources: Bloomberg and the Riksbank

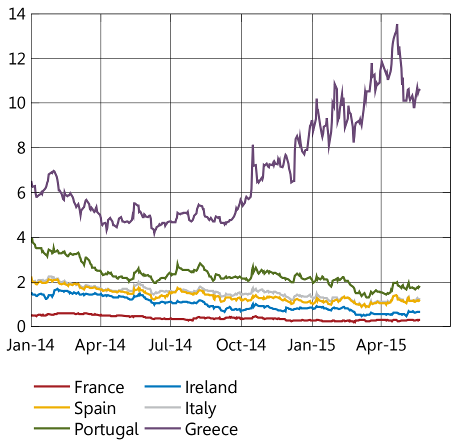
Chart A17. Emerging market currencies
Index 100 = Jan 2014, USD per local currency



Source: Macrobond

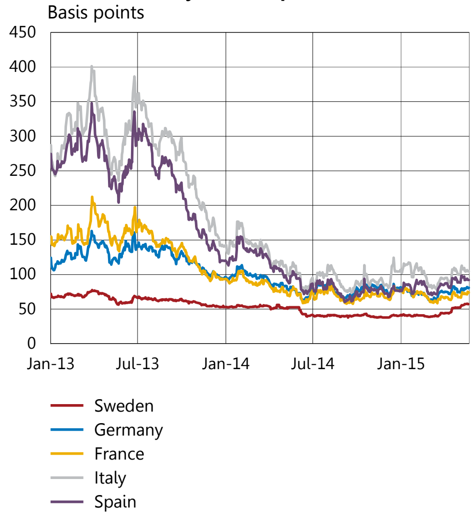
Falling oil prices, geopolitical conflicts and the situation in Greece have had limited impact on financial markets apart from on the markets directly concerned.

Chart A18. Ten year government bond rates, spread to Germany
Per cent



Sources: Macrobond and the Riksbank

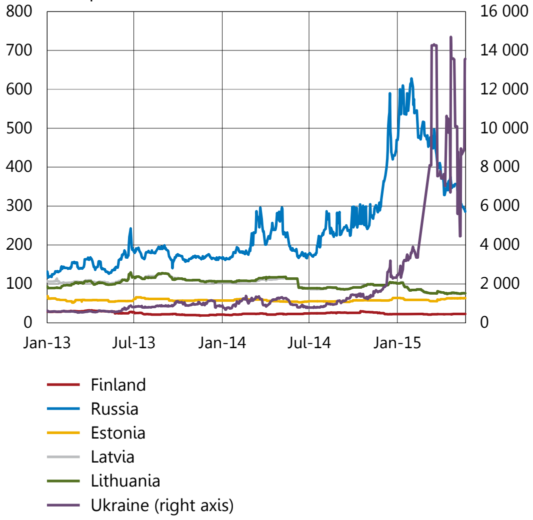
Chart A19. Five year CDS-spreads for banks
Basis points



Note. Average of comparable large banks domiciled in the respective country.

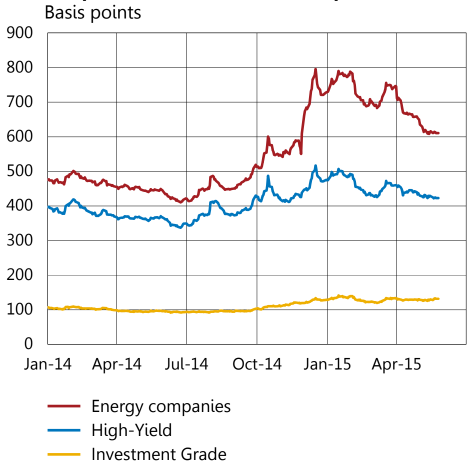
Sources: Bloomberg, Reuters EcoWin and Fitch

Chart A20. Five year CDS-spreads for governments
Basis points



Sources: Reuters EcoWin and Fitch

Chart A21. Risk premia on bonds issued by energy companies and non-financial corporations
Basis points



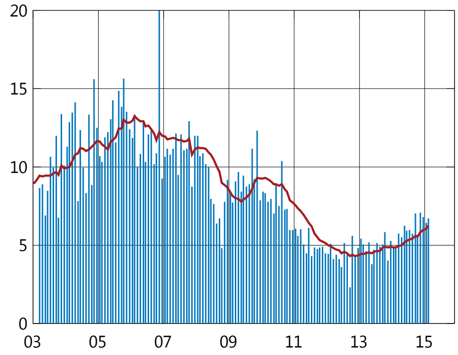
Note. The risk premia reflects the difference between the average yield on different selections of corporate bonds and an interest rate swap with a similar maturity.

Source: Bloomberg

The Swedish banking groups´ borrowers

Household debt are continuing to rise from high levels

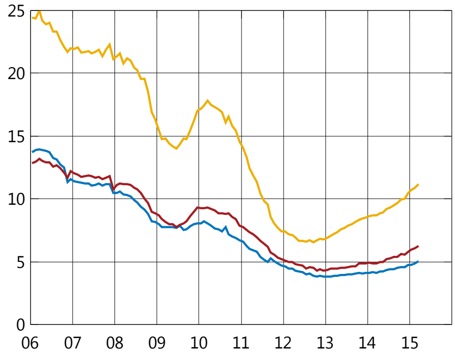
Chart A22. Loans to households in Sweden
Per cent



Annual percentage change
Monthly change, annualised rate

Note. Refers to loans from Monetary Financial Institutions (MFI).
Sources: Statistics Sweden and the Riksbank

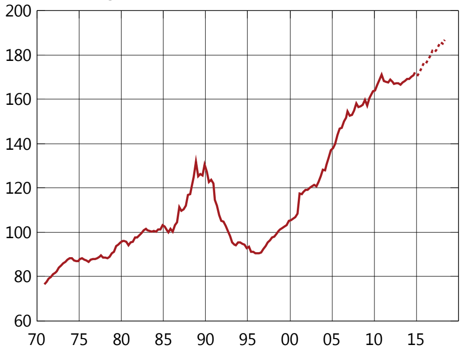
Chart A23. Loans to households per type of collateral in Sweden
Annual percentage change



Total
Loans with single-family houses as collateral
Loans with tenant-owned apartments as collateral

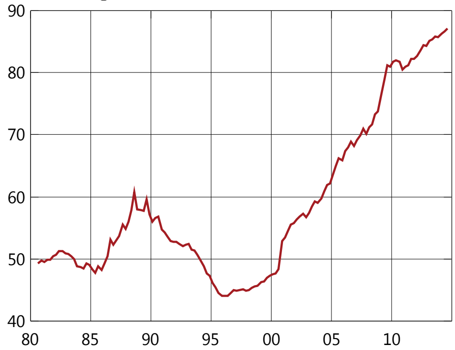
Note. Refers to loans from Monetary Financial Institutions (MFI).
Sources: Statistics Sweden and the Riksbank

Chart A24. Household debt-to-income ratio in Sweden
Percentage of disposable income



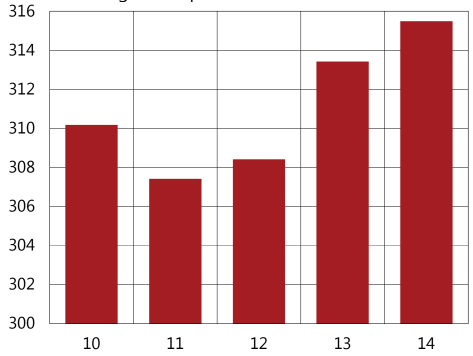
Note. The dashed line represents the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Chart A25. Household debt in Sweden
Percentage of GDP



Sources: Statistics Sweden and the Riksbank

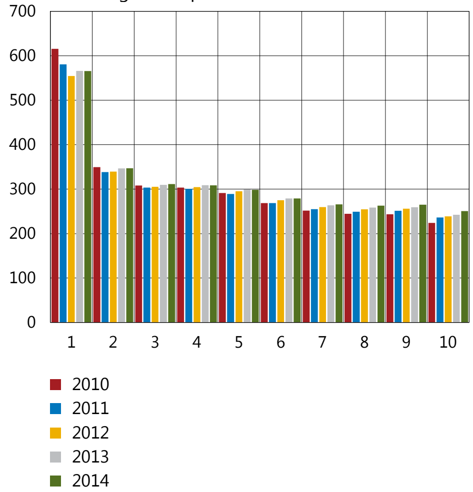
Chart A26. Average debt ratio for households with mortgages in Sweden
Percentage of disposable income



Note. Mean values for indebted households in July each year.

Source: The Riksbank

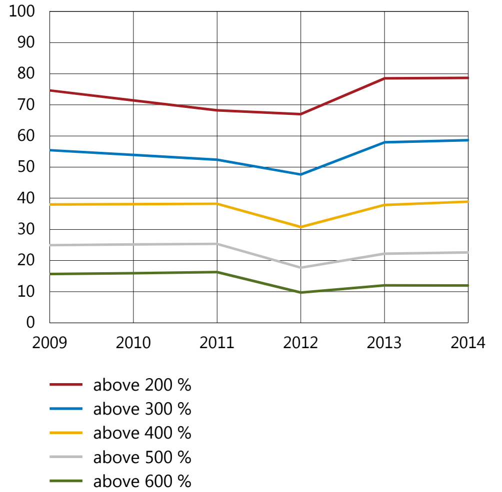
Chart A27. Swedish household debt ratios in different income groups, only mortgage borrowers
Percentage of disposable income



Note. The high debt ratio in the lowest income group should be interpreted with a certain amount of caution, as this group includes, among others, households with highly varied incomes such as households with negative income.

Source: Riksbanken

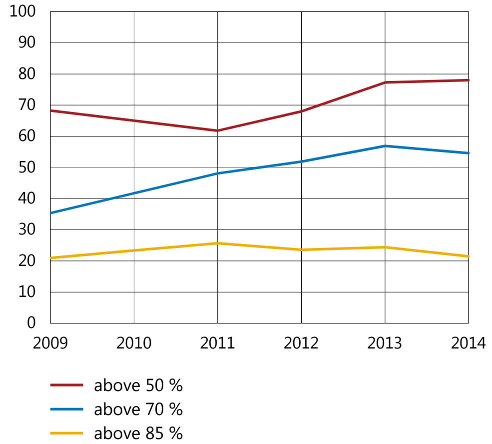
Chart A28. Proportion of new mortgage borrowers with a debt-to-income ratio above a certain level in Sweden
Per cent



Note. The vertical axis shows the proportion of new borrowers who are above the given debt-to-income ratio. The data is based on the survey on new mortgage borrowers from The Swedish Mortgage Market in 2009, 2011, 2012, 2013 and 2014. Values for 2010 are interpolated between 2009 and 2011. Debt-to-income ratios are winsoriserade at the 99th percentile for each year.

Sources: Finansinspektionen and the Riksbank

Chart A29. Proportion of new mortgage borrowers with a Loan-to-value ratio above a certain level in Sweden
Per cent

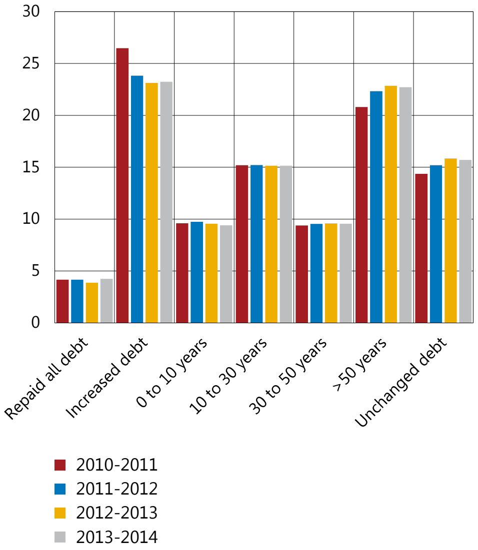


Note. The vertical axis shows the proportion of new borrowers who are above the given Loan-to-value ratio. The data is based on the survey on new mortgage borrowers from The Swedish Mortgage Market in 2009, 2011, 2012, 2013 and 2014. Values for 2010 are interpolated between 2009 and 2011. Loan-to-value ratios are winsoriserade at the 99th percentile for each year.

Sources: Finansinspektionen and the Riksbank

Chart A30. Repayment periods for indviduals with mortgages in Sweden

Per cent

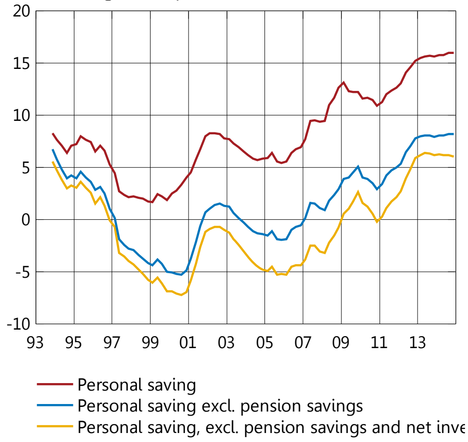


Note. Repayment periods refers to the time it would take for an individual to repay their loans, given the change in debt which is observed between the time periods.

Source: The Riksbank

Chart A31. Household saving in Sweden

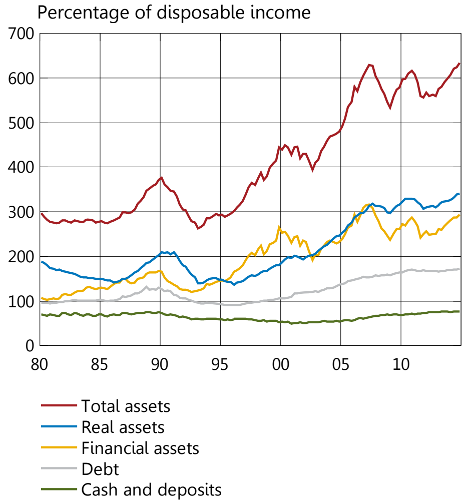
Percentage of disposable income



Sources: Statistics Sweden and the Riksbank

Chart A32. Household assets and liabilities in Swe-den

Percentage of disposable income

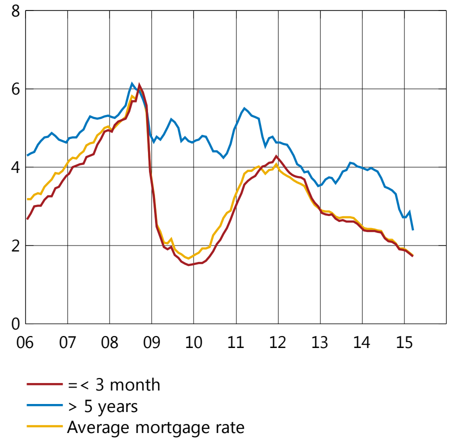


Note. Total assets exclude collective insurance. Financial assets refers mainly to cash, bank deposits, bonds, mutual funds and shares. Real assets refers to single-family houses, tenant-owned apartments and second homes.

Sources: Statistics Sweden and the Riksbank

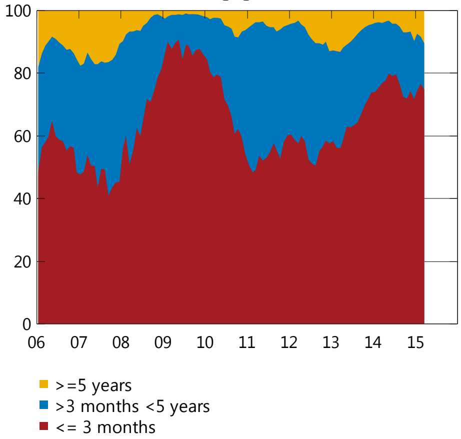
Chart A33. Mortgage rates to households in Sweden

Per cent



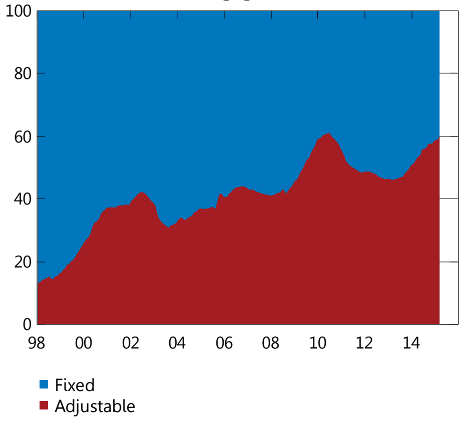
Source: Statistics Sweden

Chart A34. Fixed rate periods for new mortgage loans in Sweden
Per cent, share of mortgages



Source: Statistics Sweden

Chart A35. Fixed rate periods in the mortgage stock in Sweden
Per cent, share of mortgages



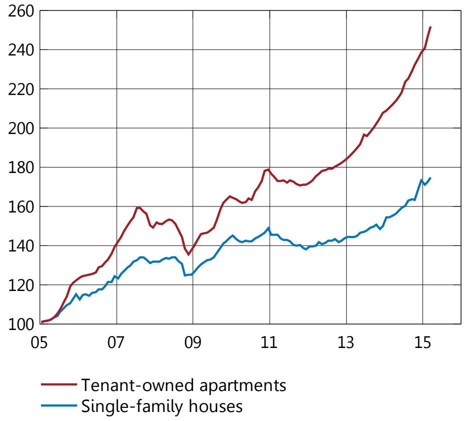
Source: Statistics Sweden

Chart A36. Household interest expenditure in Swe-den
Percentage of disposable income

Note. Interest expenditure is after tax.
Sources: Statistics Sweden and the Riksbank

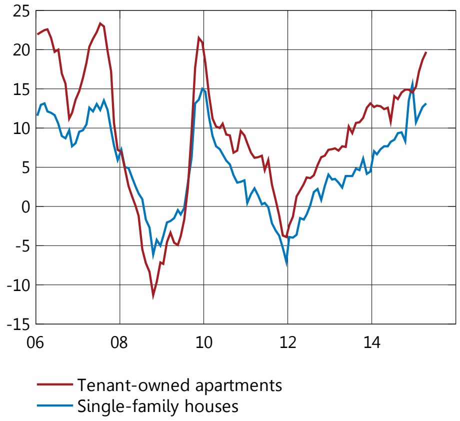
Housing prices are rising at an increasing pace

Chart A37. Housing prices in Sweden
Index, January 2005=100



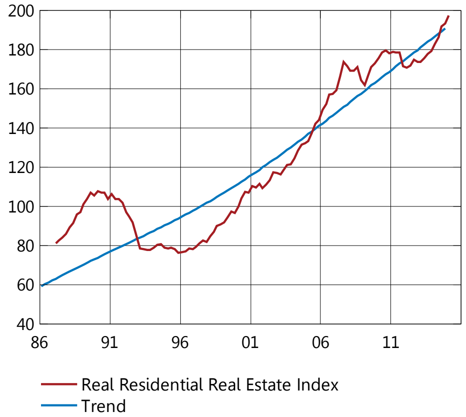
Note. Seasonally-adjusted housing prices.
Sources: Valueguard and the Riksbank

Chart A38. Housing prices in Sweden
Annual percentage change



Source: Valueguard

Chart A39. Real Residential Real Estate Index and statistical trend in Sweden
Index, Q1 2000=100

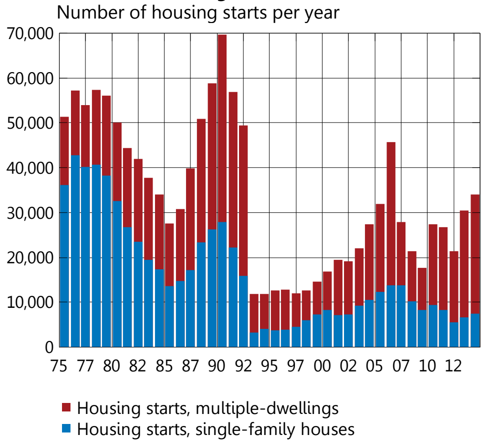


Note. Residential Real Estate Index is deflated with CPIF and refers to the increase in single-family houses. The statistical trend is calculated using a one-sided HP filter with the smoothing parameter equal to 400,000.
Sources: Statistics Sweden and the Riksbank

Chart A40. Households' expectations of housing prices in Sweden
Net total

Note. Net total is defined as the difference between the percentage of households who believe that housing prices will rise and the percentage who believe housing prices will fall.
Source: SEB

Chart A41. Housing construction in Sweden
Number of housing starts per year



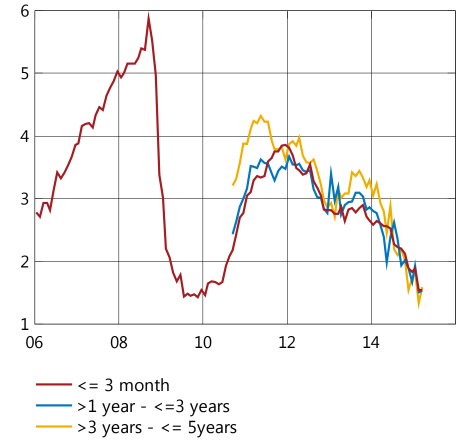
Sources: Statistics Sweden and the Riksbank

Chart A42. Loans to non-financial companies in Sweden
Annual percentage change

Note. Refers to loans from Monetary Financial Institutions (MFI).
Source: Statistics Sweden

Increased credit growth in the corporate sector and improved funding conditions

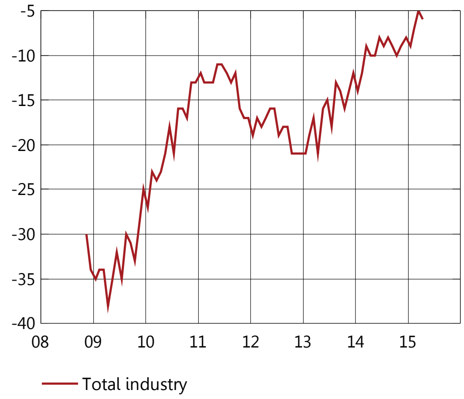
Chart A43. Interest rates on new loans to non-financial companies in Sweden
Per cent



Note. Refers to loans frpm Monetary Financial Institutions.

Source: Statistics Sweden

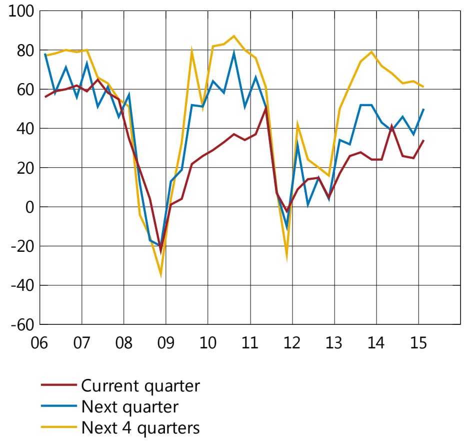
Chart A44. Lending standards for non-financial companies in Sweden
Net total



Note. Net totalis defined as the difference between the percentage of companies that estimate that lending standards are better or much better than normal, and the percentage who believes that lending standards are worse or much worse than normal.

Sources: National Institute for Economic Research

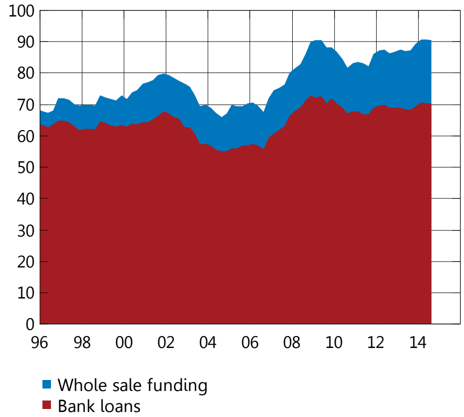
Chart A45. Banks' assessment of lending to non-financial companies in Sweden
Net total



Net totalis defined as the difference between the proportion of bank executives who believes that lending will increase or increase very much in the coming period, and the proportion who believes that lending will be less or considerably less in the coming period.

Source: ALMI

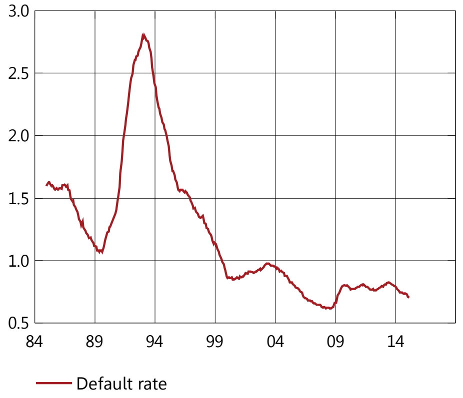
Chart A46. Non-financial companies debt levels in Sweden
Percentage of GDP



Note. Bank loans refers to loans in the short and long term. Whole sale funding refers to certificates and bonds.

Sources: Statistics Sweden and the Riksbank

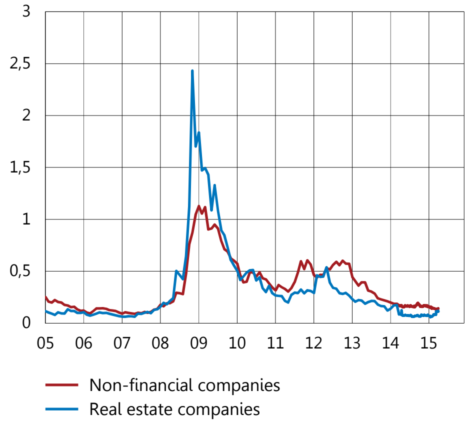
Chart A47. Bankruptcy rate for non-financial companies in Sweden
Per cent



Note. Bankruptcy rate is defined as number of bankruptcies divided by number of companies.

Sources: Swedish Companies Registration Office, Statistics Sweden and the Riksbank

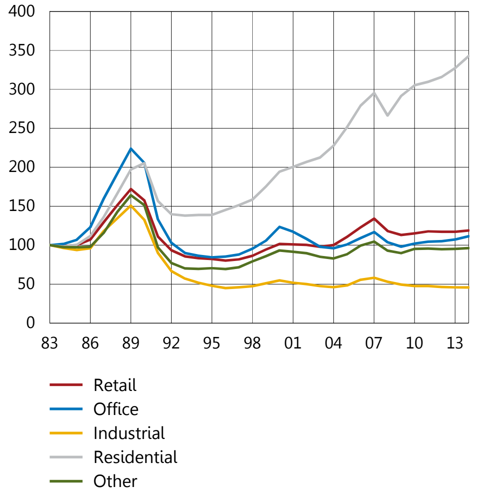
Chart A48. Expected default frequencies for listed non-financial companies in Sweden
EDF



Note. Expected default frequencies are calculated on the basis of a representative portfolio of listed non-financial companies.

Source: Moody's KMV

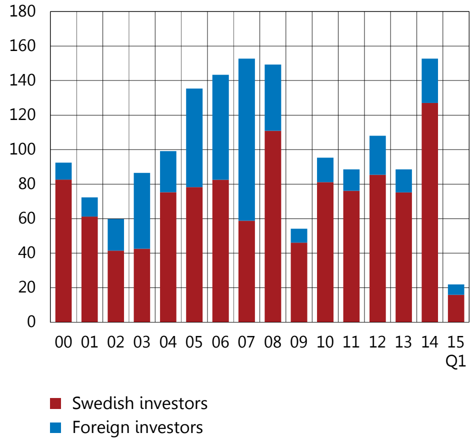
Chart A49. Capital growth of commercial property in Sweden
Index, 1984=100



Note. The series are deflated with CPI.

Sources: IPD and the Riksbank

Chart A50. Transaction volumes on the commercial property market in Sweden
SEK billion

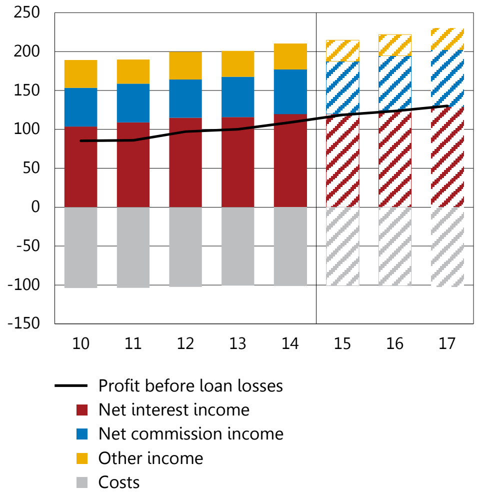


Source: Pangea Property Research

Developments in the Swedish banking groups

Continued strong profits and low loan losses in the major Swedish banks

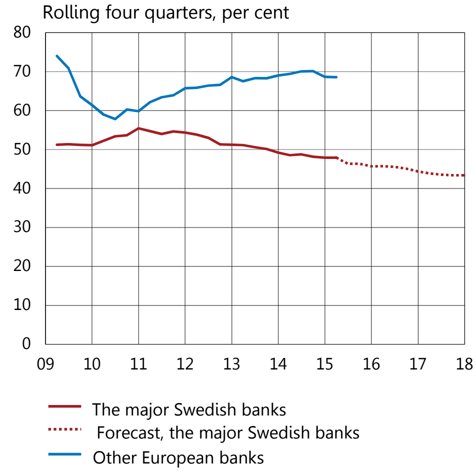
Chart A51. The major Swedish banks' income and costs
SEK billion



Note. The shaded bars show the Riksbank's forecast.

Sources: Bank reports, SME Direkt and the Riksbank

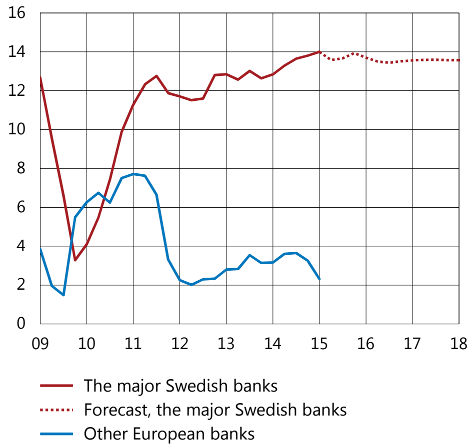
Chart A52. Cost-to-income ratio
Rolling four quarters, per cent



Note. Unweighted average. The blue line represents a sample of European banks, see footnote 109 in Financial Stability Report 2014:1.The forecast is based on lending continuing to grow at the same rate as in the last two years.

Sources: SNL Financial, SME Direkt and the Riksbank

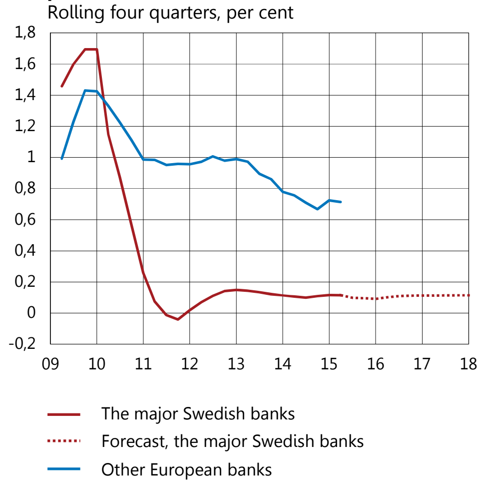
Chart A53. Return on equity
Per cent



Note. Unweighted average. The blue line represents a sample of European banks, see footnote 109 in Financial Stability Report 2014:1. The forecast is based on lending continuing to grow at the same rate as in the last two years.

Sources: SNL Financial, SME Direkt and the Riksbank

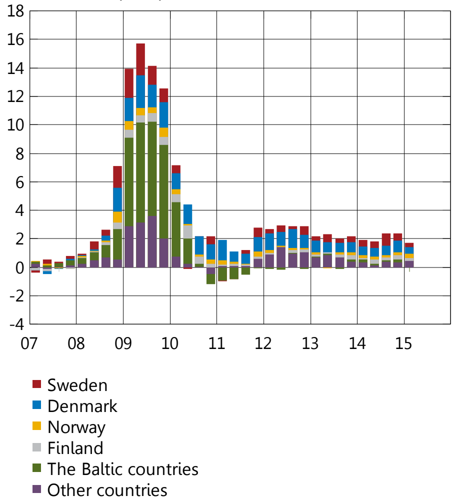
Chart A54. Loan losses in relation to lending to the public
Rolling four quarters, per cent



Note. Unweighted average. The blue line represents a sample of European banks, see footnote 109 in Financial Stability Report 2014:1. The forecast is based on lending continuing to grow at the same rate as in the last two years.

Sources: SNL Financial, SME Direkt and the Riksbank

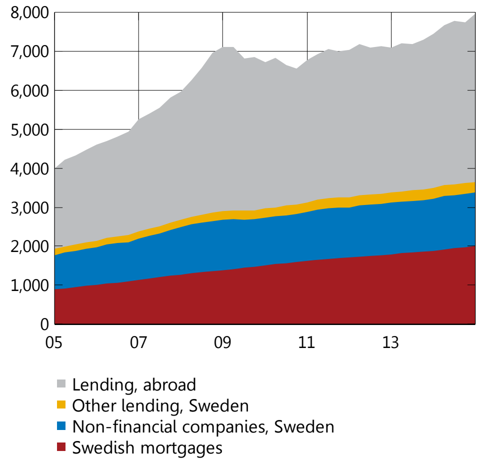
Chart A55. The major Swedish banks' loan losses
SEK billion per quarter



Note. The category "Other countries" refers to loan losses in the other countries in which the banks have operations as well as loan losses that are not allocated to a specific country in the banks' public reporting.

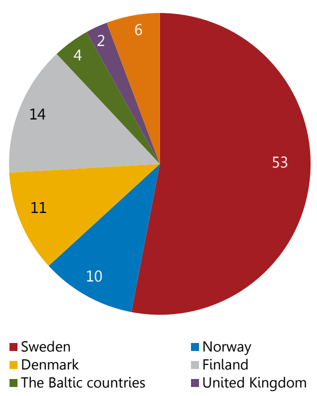
Sources: Bank reports and the Riksbank

Chart A56. The major Swedish banks' lending to the general public
SEK billion



Sources: Statistics Sweden, bank reports and the Riksbank

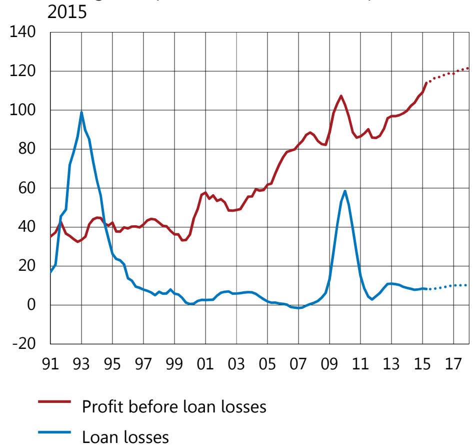
Chart A57. The major Swedish banks' lending by geography
Per cent



Note. The major Swedish banks total lending amounted to 7870 billion SEK in the first quarter 2015.

Sources: Bank reports and the Riksbank

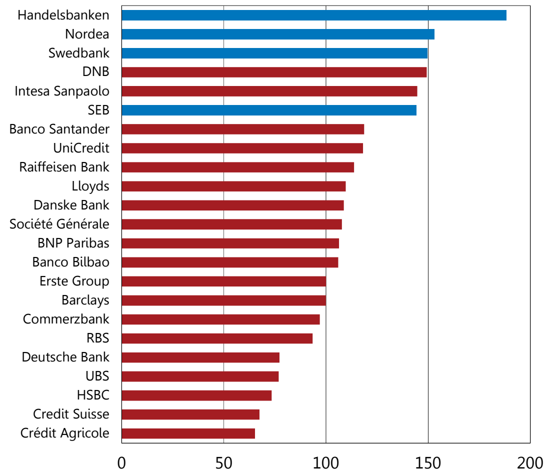
Chart A58. Profits before loan losses and loan losses in the major Swedish banks
Rolling four quarters, SEK billion, fixed prices, March 2015



Note: The broken lines refer to a forecast.

Sources: Bank reports and the Riksbank

Chart A59. Loan-to-deposit ratio
December 2014, per cent

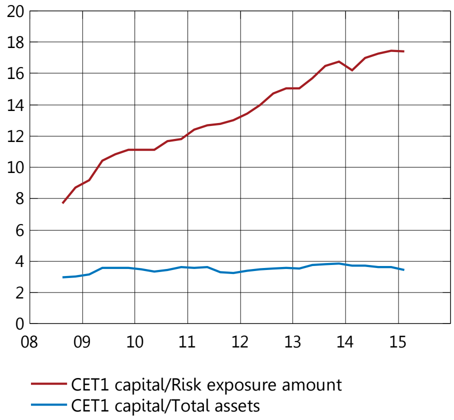


Note. An average over the last four quarters.

Sources: SNL financial and the Riksbank

Upward trend in CET 1 capital ratios but low leverage ratio

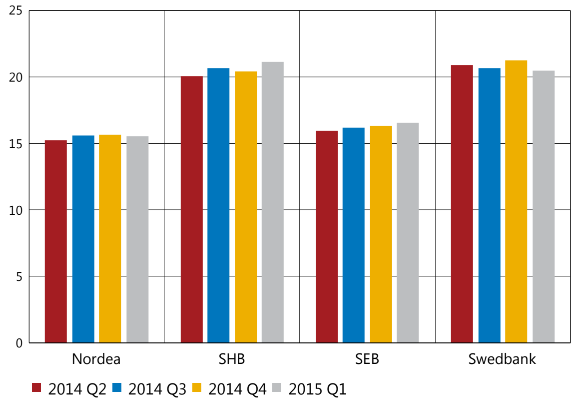
Chart A60. The major Swedish banks' CET1 capital ratios and CET 1 capital in relation to total assets
Per cent



Note. Weighted average.

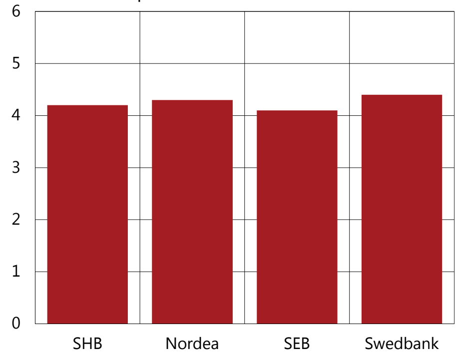
Sources: Bank reports and the Riksbank

Chart A61. CET1 capital ratios according to Basel III
Per cent



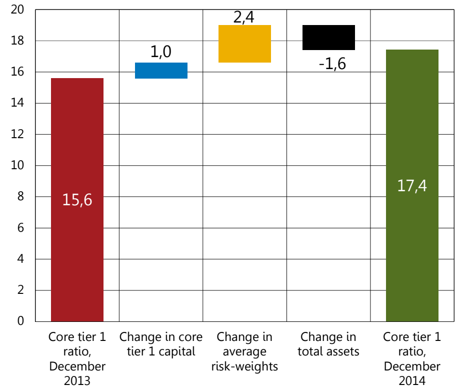
Source: Bank reports

Chart A62. Reported Leverage ratio
March 2015, per cent



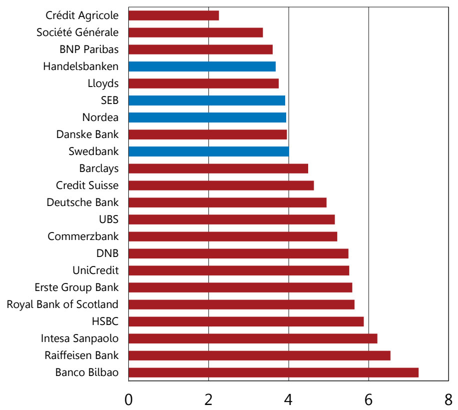
Source: Banks reports

Chart A63. Development of the major Swedish banks' CET1 capital ratios, Basel III
Per cent



Source: Bank reports and the Riksbank

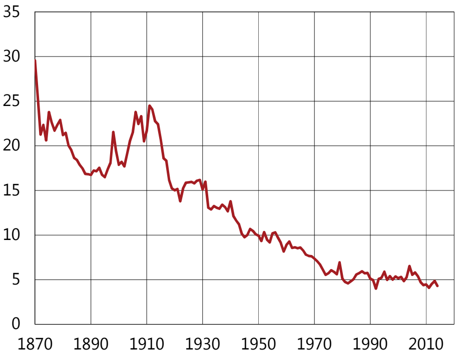
Chart A64. Leverage ratio
March 2015, per cent



Note.The metric is calculated by SNL as an approximation of the Leverage ratio and refers to Tier 1 common capital as a percent of total assets less derivatives. Data from some banks is from Q4 2014.

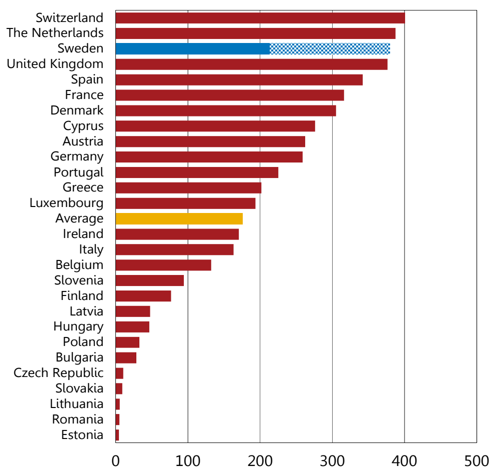
Sources: SNL Financial and the Riksbanks

Chart A65. Equity in relation to total assets, Swedish banks
Per cent



Sorces: Hortlund, Do Inflation and High Taxes Increase Bank Leverage?, SSE/EFI Working Paper Series in Economics and Finance, No 6122005, November 2005 and the Riksbank

Chart A66. The banks' total assets in relation to GDP
December 2013, per cent

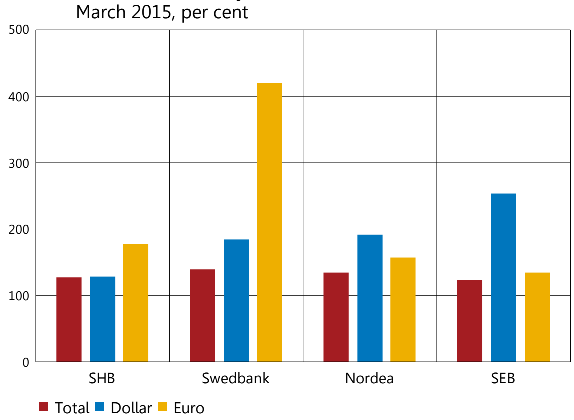


Note. Refers to all assets in the country's banking groups. The shadowed blue bar shows the major banks' assets abroad in relation to GDP.

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

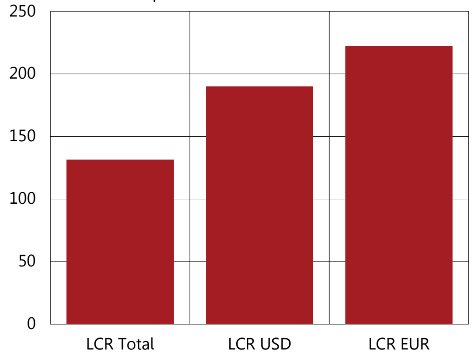
The banks can manage a very brief period of liquidity stress but the structural risks remain

Chart A67. The major Swedish banks LCR
March 2015, per cent



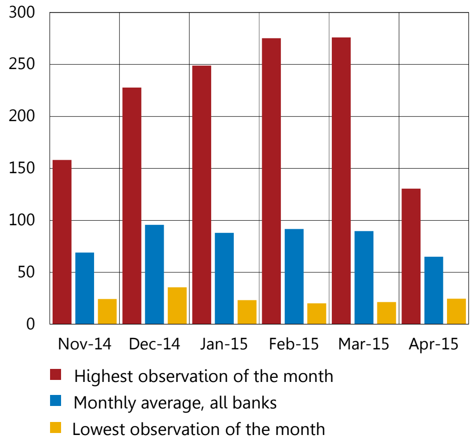
Source: Bank reports

Chart A68. The major Swedish banks' average LCR by currency
March 2015, per cent



Sources: Bankernas resultatrapporter and the Riksbank

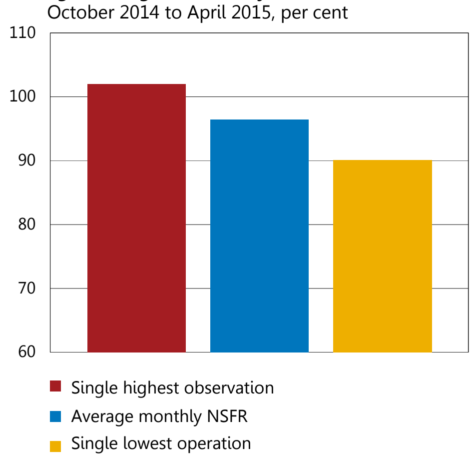
Chart A69. The major Swedish banks LCR in kronor
Per cent



Note. The major banks' average daily LCR in SEK per month, and the highest and lowest individual observation each month.

Source: The Riksbank

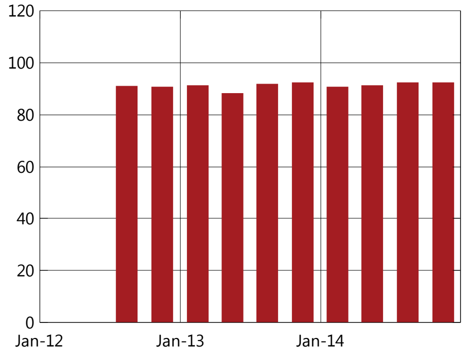
Chart A70. The major Swedish banks' lowest, average and highest monthly NSFR
October 2014 to April 2015, per cent



Note. Every month since November 2014, the Riksbank has collected the major banks' NSFRs in accordance with the Basel Committee's final definition. The chart shows the average since then for all of the banks, as well as the highest and lowest observations for a single month.

Source: The Riksbank

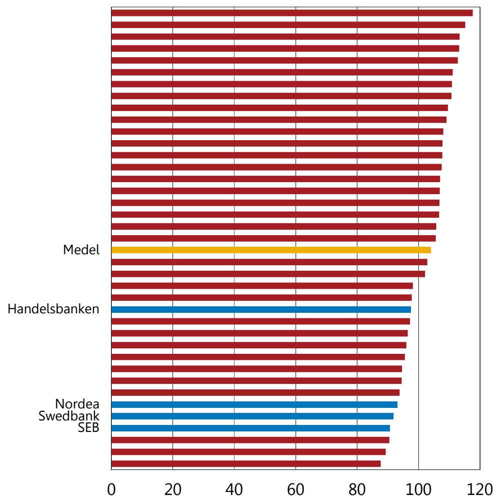
Chart A71. The Riksbank's structural liquidity measure
Per cent



Note. The measure compares a bank's stable funding with its illiquid assets. The higher a bank's results in the measure, the lower its structural liquidity risks.

Source: The Riksbank

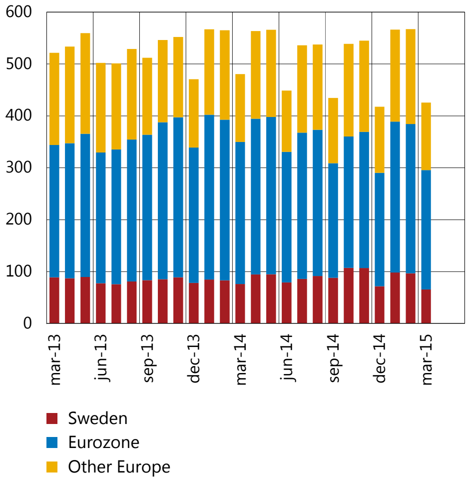
Chart A72. The Riksbank's structural liquidity measure
December 2014, per cent



Note. The red bars illustrate a group of European banks.

Sources: Liquidatum and the Riksbank

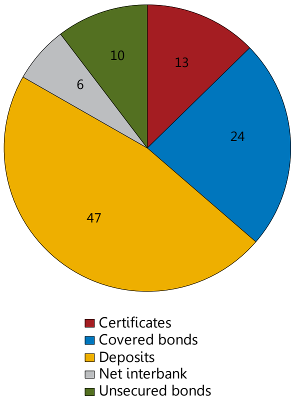
Chart A73. US Money Market Funds exposures
SEK billion



Sources: Investment Company Institute and the Riksbank

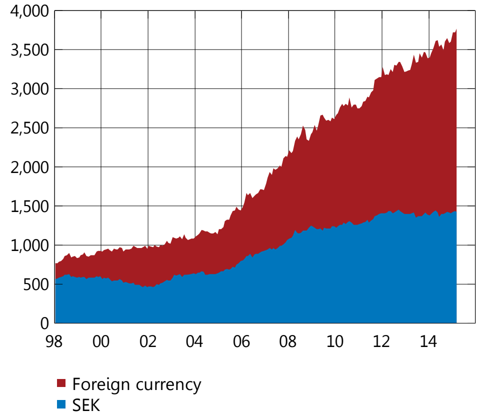
Large proportion of wholesale funding among Swedish banks, much of which is in foreign currency

Chart A74. The major Swedish banks' funding
Mars 2015, per cent



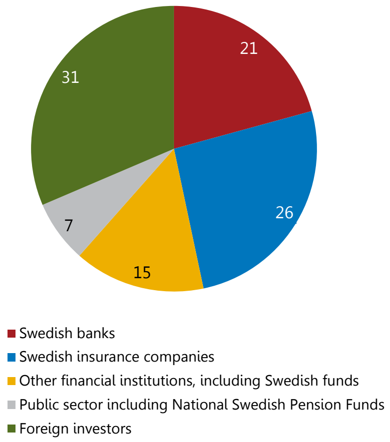
Sources: Bank reports and the Riksbank

Chart A75. The major Swedish banks' wholesale funding via Swedish parent companies and subsidiaries
SEK billion



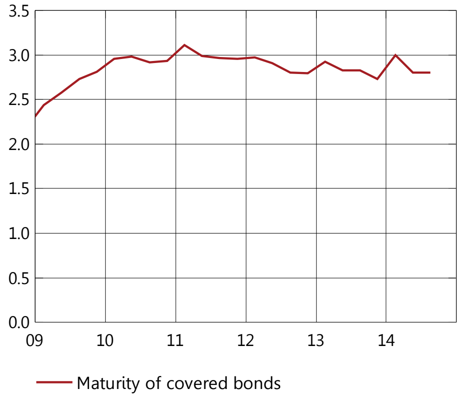
Sources: Statistics Sweden and the Riksbank

Diagram A76. Owners of Swedish Covered Bonds
December 2014, per cent



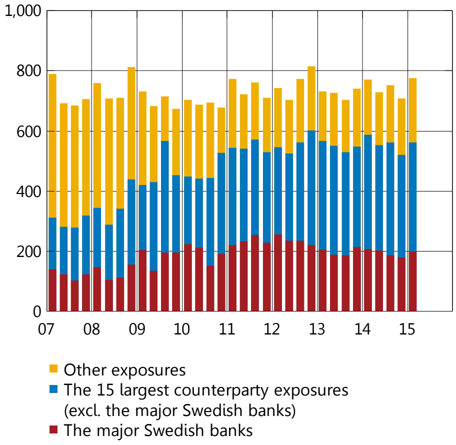
Sources: Statistics Sweden and the Riksbank

Chart A77. Average maturity of outstanding Swedish covered bonds
Number of years



Source: The Association of Swedish Covered Bond Issuers

Chart A78. The major Swedish banks' counterparty exposures through securities holdings
SEK billion

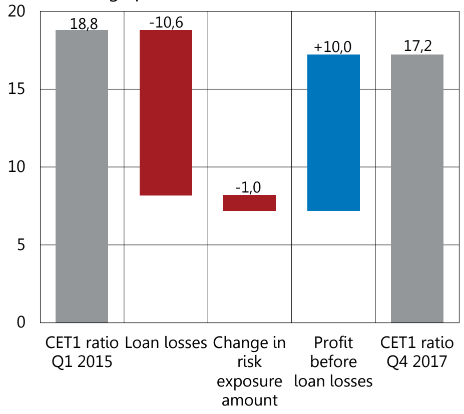


Note. The chart shows the breakdown of the major banks' total securities holdings on the basis of who issued the securities.

Source: The Riksbank

Stress test

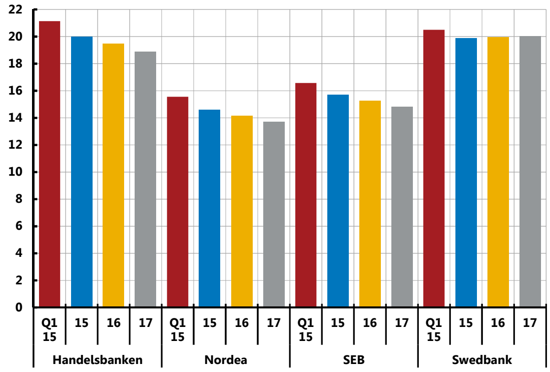
Chart A79. Changes in the Swedish major banks' CET 1 capital ratios in the stress test
Percentage points



Note. CET 1 capital ratios in accordance with Basel III.

Sources: Bank reports and the Riksbank

Chart A80. CET 1 capital ratios according to Basel III, initially and in the stress test
Per cent



Sources: Bank reports and the Riksbank