



Financial Stability Report

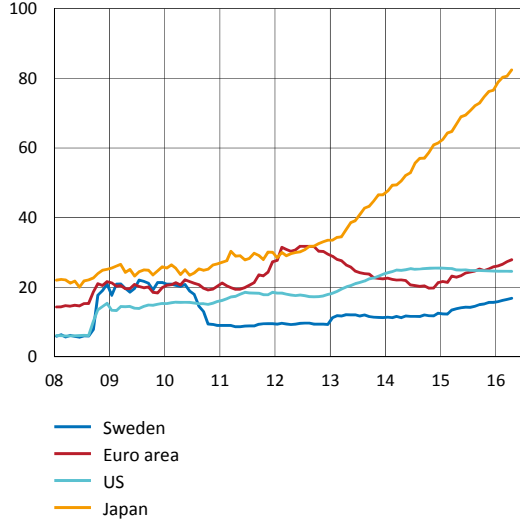
2016:1

Appendix - Charts

25 May 2016

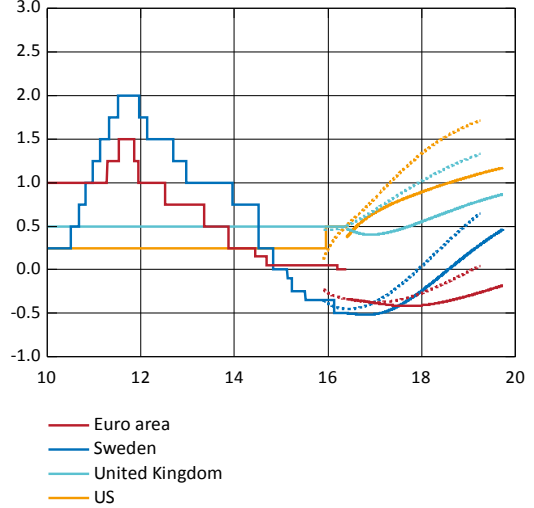
Financial markets

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



Source: Macrobond

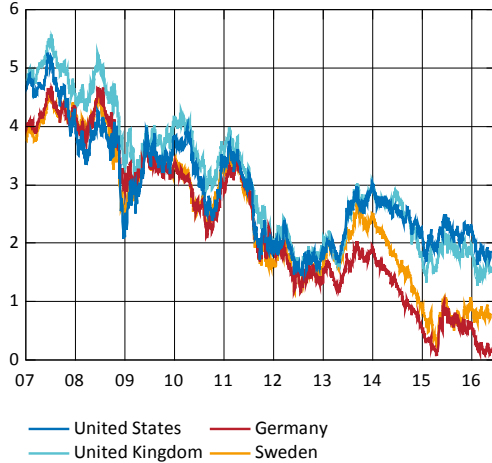
Diagram A2. Policy rates and rate expectations according to forward rates
Per cent



Note. Forward rates describe the expected overnight rates which do not always correspond to the official policy rate. Lines are for the latest estimate, dotted lines are for the day after the publishing of FSR 2015:2 (2015-11-26).

Sources: Macrobond and the Riksbank

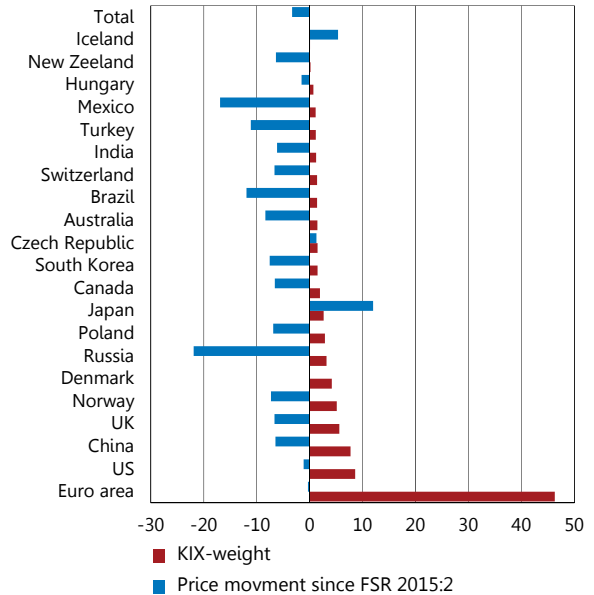
Diagram A3. 10-year government bond rates
Per cent



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

Source: Macrobond

Diagram A4. FX-rate movements for the Swedish krona
Per cent



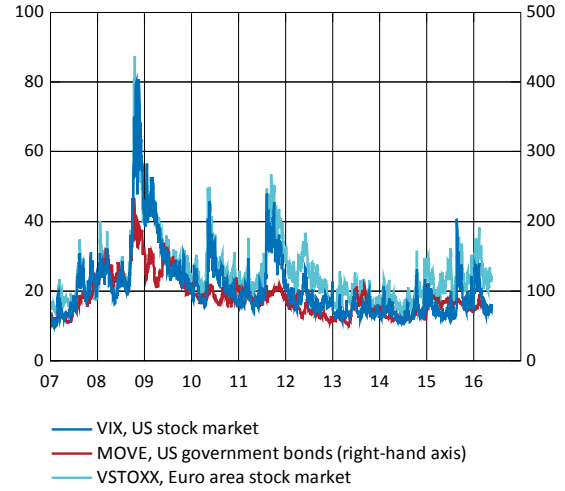
Sources: Macrobond and the Riksbank

Diagram A5. Stock indices
Index, 1 Jan 2001 = 100



Source: Bloomberg

Diagram A6. Expected volatility on the bond and stock markets
Index



Source: Reuters EcoWin

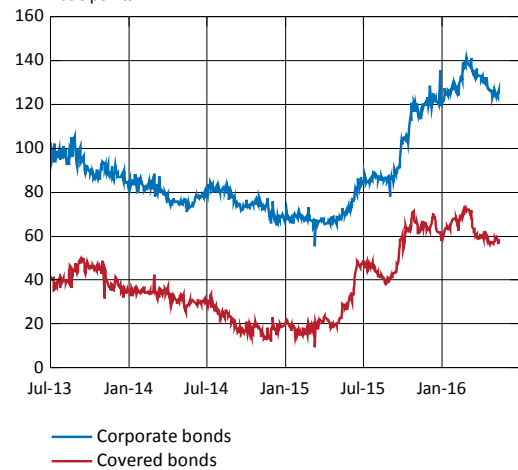
Diagram A7. Difference in yield between corporate bonds with higher and lower credit worthiness
Basis points



Note. The series shows the spread between corporate bonds with differend credit worthiness issued in different currencies. The dashed lines show the mean of the series since January 2013.

Source: Bloomberg

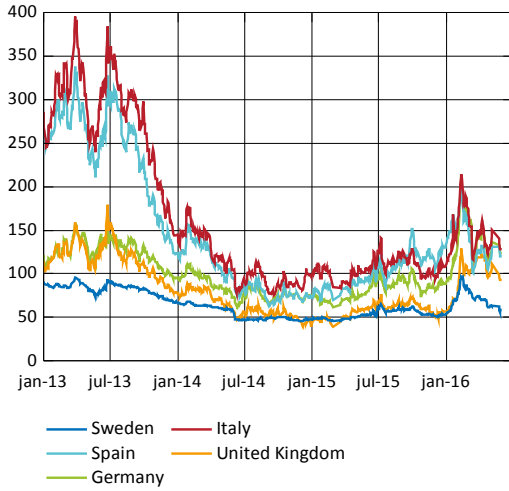
Diagram A8. Five year risk premias on the Swedish bond market
Basis points



Note. Difference between bond yields and swap rate.

Source: The Riksbank

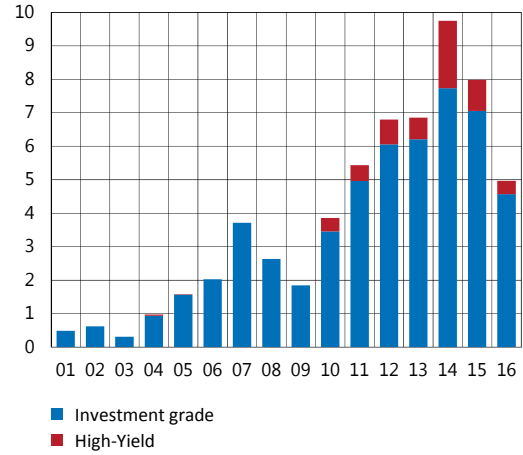
Diagram A9. 5 year CDS-spreads for banks
Basis points



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

Sources: Fitch and the Riksbank

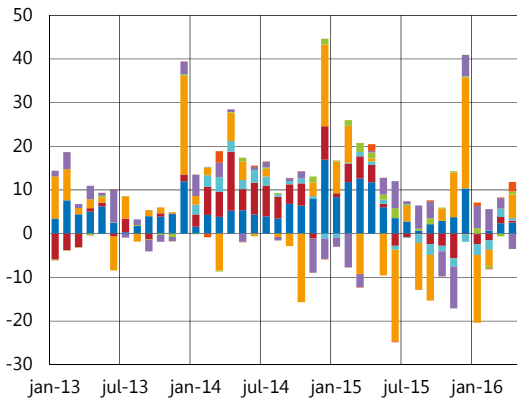
Diagram A10. Bond issues on the Swedish corporate bond market
Average per month, SEK billion



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.

Source: Dealogic

Diagram A11. Swedish fund flows
SEK billion

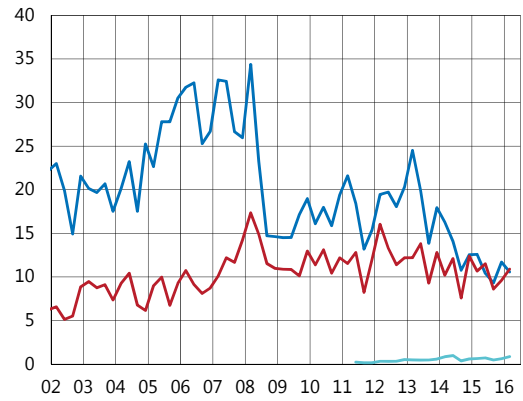


Legend:
 ■ Balanced Funds
 ■ Bond Funds
 ■ Corporate Bond Funds
 ■ Equity Funds
 ■ Hedge Funds
 ■ Money Market Funds
 ■ Other Funds

Note. Separate reporting of corporate bonds funds was introduced in 2014.

Source: Swedish Investment Fund Association

Diagram A12. Turnover on the Swedish bond market
Per cent

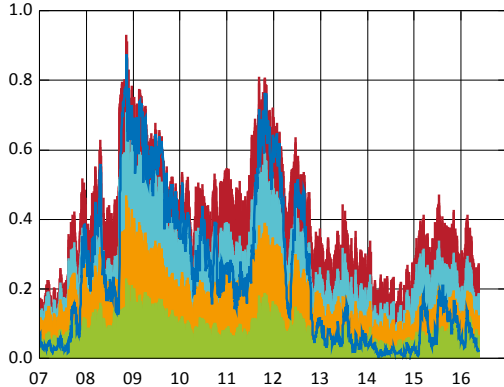


Legend:
 — Government bonds
 — Covered bonds
 — Corporate bonds

Note. Refers to quarterly average of daily spot turnover in relation to outstanding volume.

Sources: Statistics Sweden and the Riksbank

Diagram A13. Swedish stress index
Ranking (0=low stress, 1=high stress)

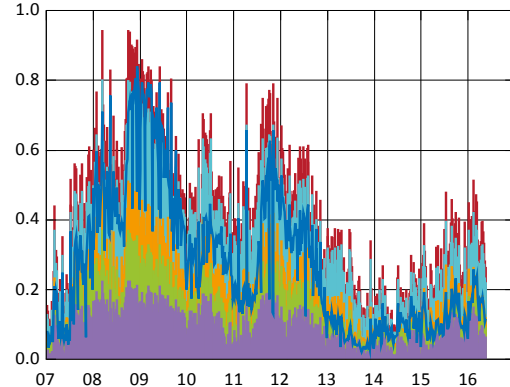


- Stress Index
- Bond Market
- Foreign Exchange Market
- Money Market
- Stock Market

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

Diagram A14. European stress index
Ranking (0=low stress, 1=high stress)

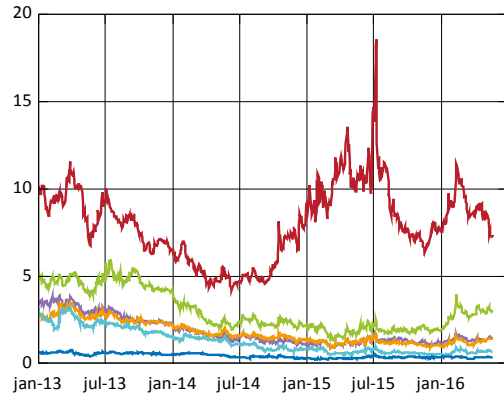


- Stress Index
- Bond Market
- Financial Intermediaries
- Foreign Exchange Market
- Money Market
- Stock Market

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)

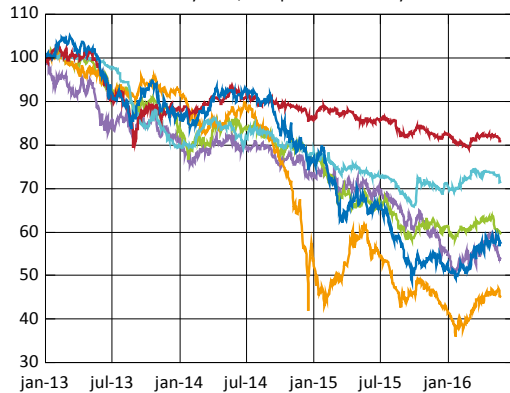
Diagram A15. Ten year government bond yields, spread to Germany
Per cent



- France
- Greece
- Ireland
- Italy
- Portugal
- Spain

Source: Macrobond

Diagram A16. Emerging market currencies
Index 100 = 1 January 2013, USD per local currency

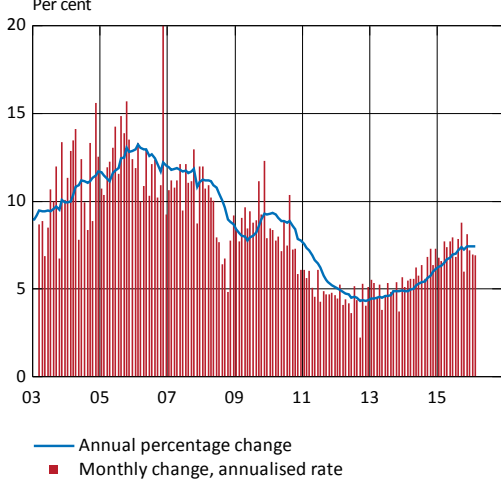


- Brazil
- India
- Indonesia
- Russia
- Turkey
- South Africa

Source: Macrobond

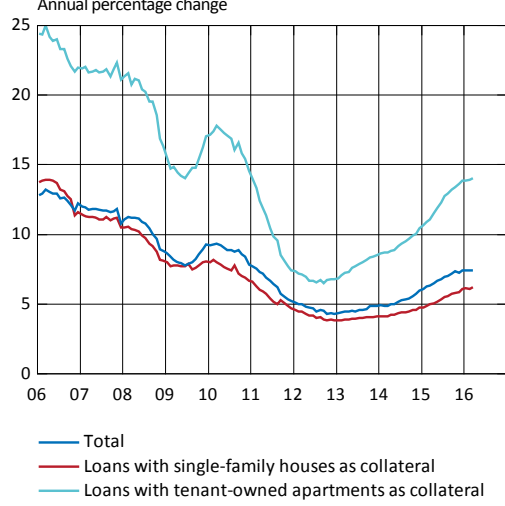
The Swedish banking groups' borrowers

Diagram A17. Loans to households in Sweden



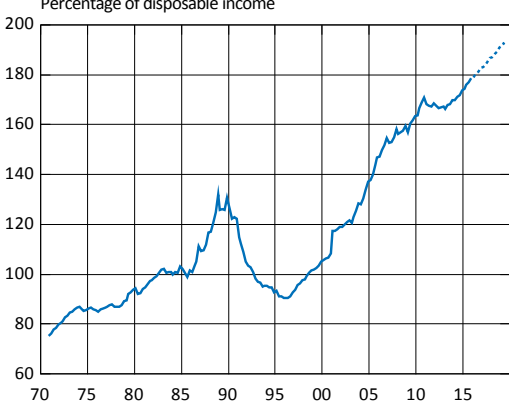
Note. Refers to loans from monetary financial institutions (MFI).
Sources: Statistics Sweden and the Riksbank

Diagram A18. Loans to households per type of collateral in Sweden



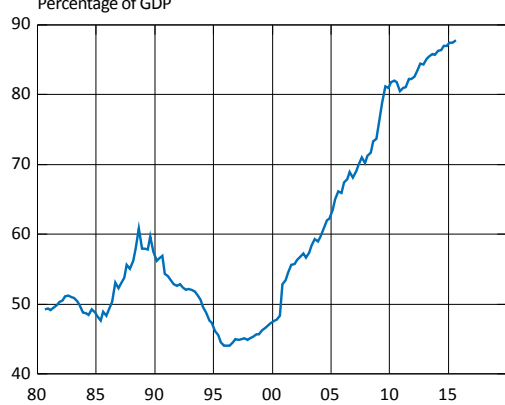
Note. Refers to loans from monetary financial institutions (MFI).
Sources: Statistics Sweden and the Riksbank

Diagram A19. Household debt-to-income ratio in Sweden



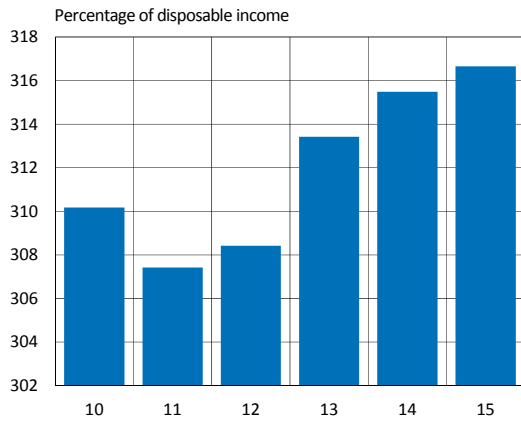
Note. The dashed line represents the Riksbank's forecast.
Sources: Statistics Sweden and the Riksbank

Diagram A20. Household debt in Sweden



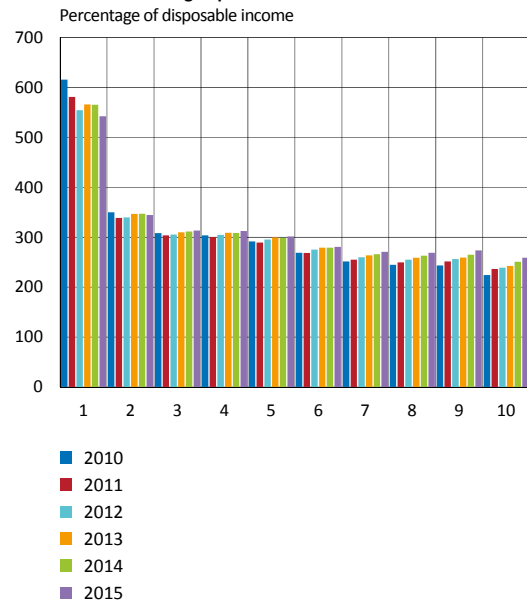
Sources: Statistics Sweden and the Riksbank

Diagram A21. Average debt ratio for households with mortgages in Sweden



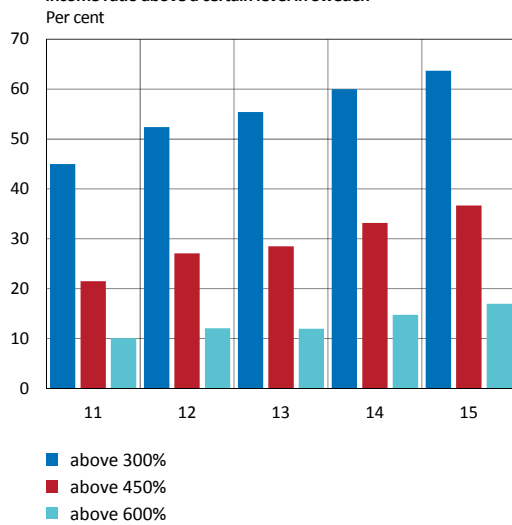
Note. Mean values for indebted households in July each year.
Source: The Riksbank

Diagram A22. Average debt ratio for households with mortgages in different income groups in Sweden



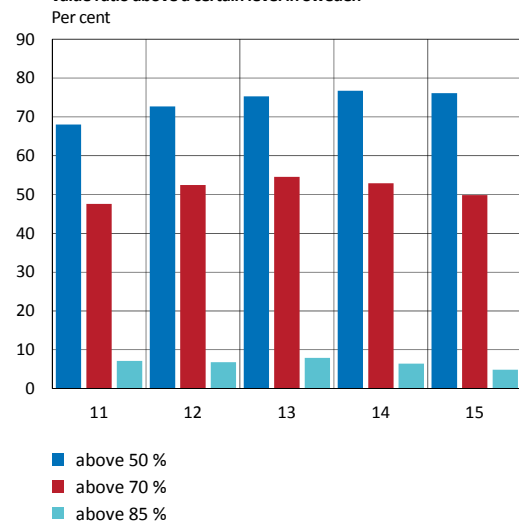
Note. The high debt ratio in the lowest income group should be interpreted with a certain amount of caution, as this group includes, among others, households with highly varied incomes such as households with negative income.
Source: Riksbanken

Diagram A23. Proportion of new mortgage borrowers with a debt-to-income ratio above a certain level in Sweden



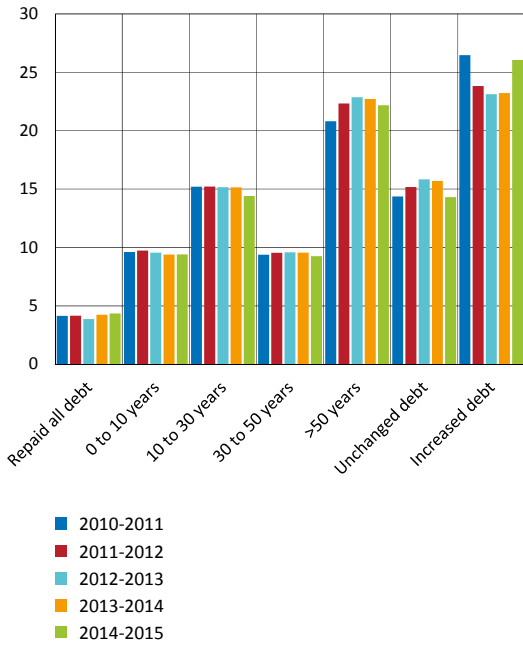
Note. The vertical axis shows the proportion of new borrowers who are above the given debt-to-income ratio. The data is based on the survey on new mortgage borrowers from The Swedish Mortgage Market in 2011, 2012, 2013, 2014 and 2015.
Sources: Finansinspektionen and the Riksbank

Diagram A24. Proportion of new mortgage borrowers with a Loan-to-value ratio above a certain level in Sweden



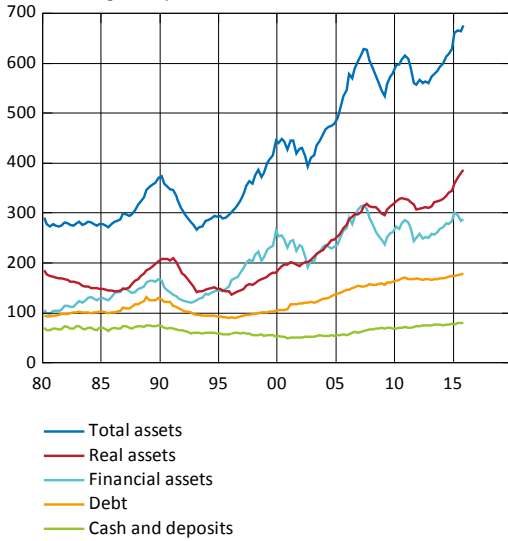
Note. The vertical axis shows the proportion of new borrowers who are above the given Loan-to-value ratio. The data is based on the survey on new mortgage borrowers from The Swedish Mortgage Market in 2011, 2012, 2013, 2014 and 2015.
Sources: Finansinspektionen and the Riksbank

Diagram A25. Repayment periods for individuals with mortgages in Sweden
Per cent



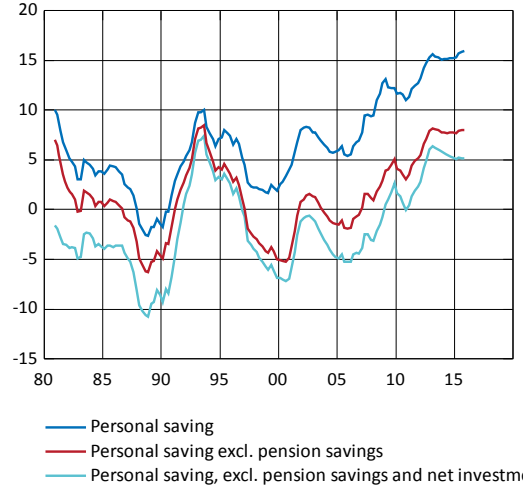
Note. The repayment period refers to the time it would take for an individual to repay his or her loans, given the change in debt which is observed between the time periods.
Source: The Riksbank

Diagram A27. Household assets and liabilities in Sweden
Percentage of disposable income



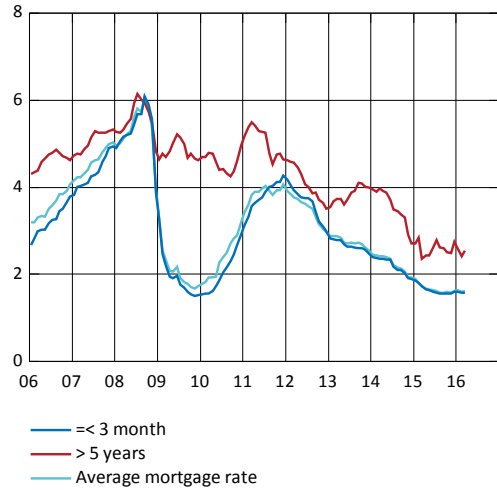
Note. Total assets exclude collective insurance. Financial assets refer mainly to cash, bank deposits, bonds, mutual funds and shares. Real assets refer to single-family houses, tenant-owned apartments and second homes.
Sources: Statistics Sweden and the Riksbank

Diagram A26. Household saving in Sweden
Percentage of disposable income



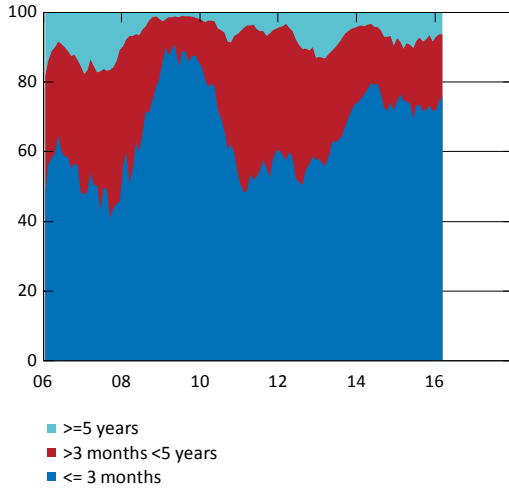
Sources: Statistics Sweden and the Riksbank

Diagram A28. Mortgage rates to households in Sweden
Per cent



Source: Statistics Sweden

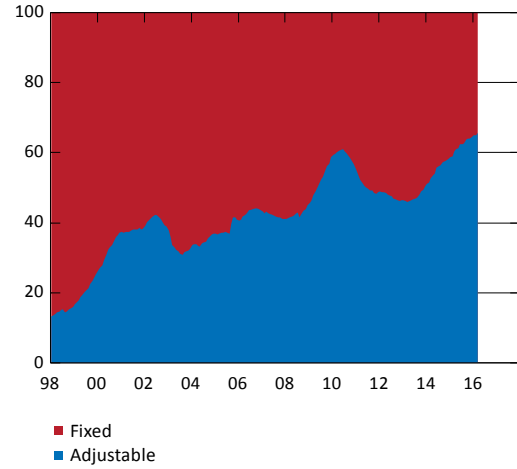
Diagram A29. Rate fixation periods for new mortgage loans in Sweden
Per cent, share of mortgages



Note. The share of mortgages in each category is based on mortgage values.

Source: Statistics Sweden

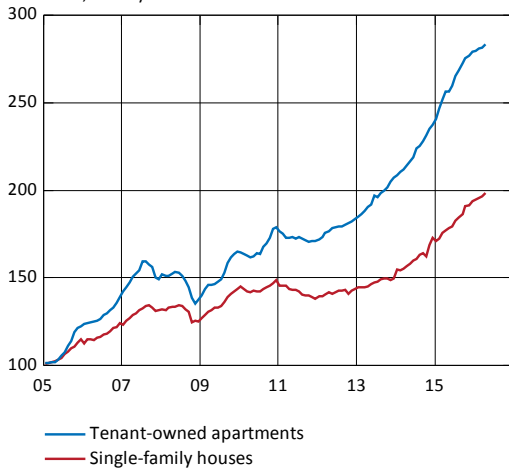
Diagram A30. Rate fixation periods for the mortgage stock in Sweden
Per cent, share of mortgages



Note. The share of mortgages in each category is based on mortgage values. Adjustable rate refers to rate fixation periods up to 3 months. Fixed rate refers to rate fixation periods above 3 months.

Source: Statistics Sweden

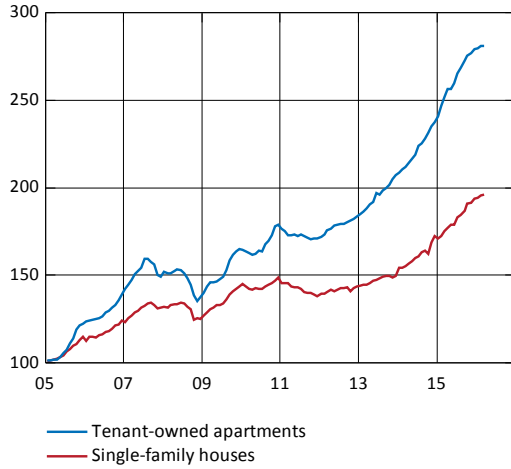
Diagram A31. Housing prices in Sweden
Index, January 2005=100



Note. Seasonally-adjusted housing prices.

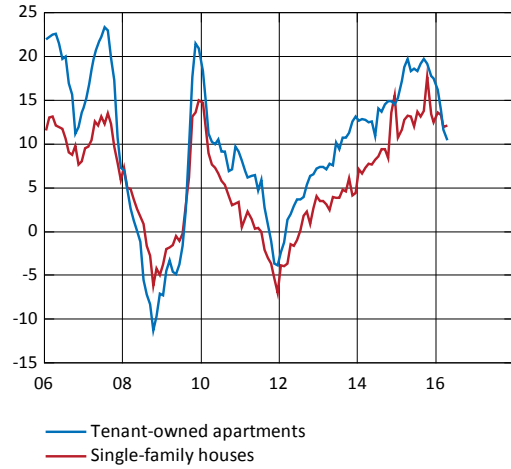
Sources: Valueguard and the Riksbank

Diagram A32. Housing prices in Sweden
Index, January 2005=100



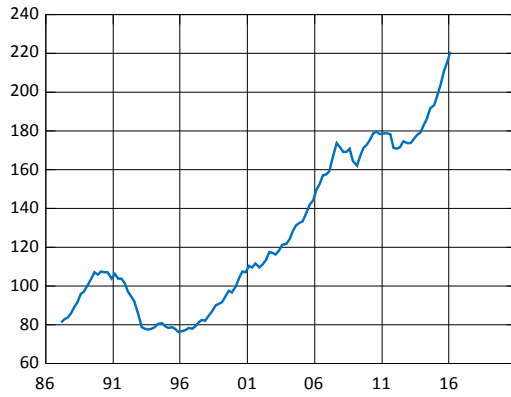
Note. Seasonally-adjusted housing prices.
Sources: Valueguard and the Riksbank

Diagram A33. Housing prices in Sweden
Annual percentage change



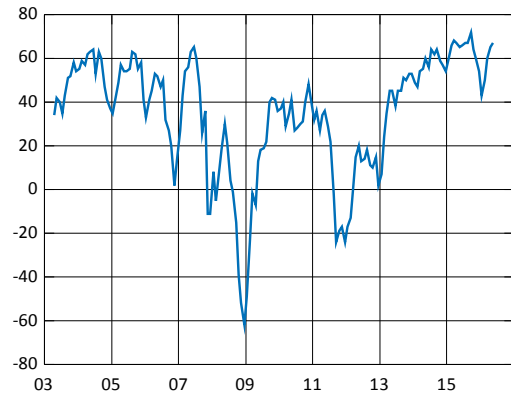
Source: Valueguard

Diagram A34. Real Residential Real Estate Index i Sverige
Index Q1 2000 = 100



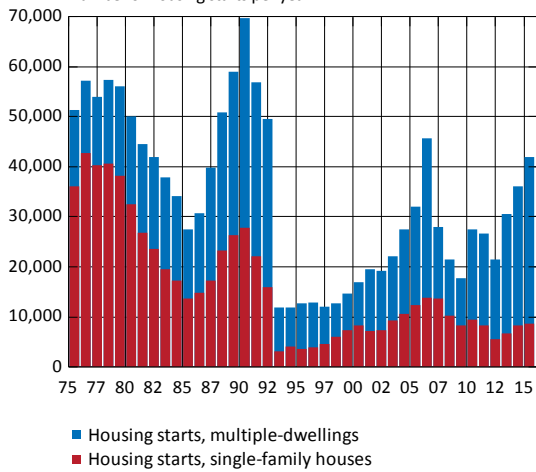
Note. Deflated with CPIF. Refers to the increase in single-family houses.
Sources: Statistics Sweden and the Riksbank

Diagram A35. 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 that housing prices will fall.
Source: SEB

Diagram A36. Housing construction in Sweden
Number of housing starts per year



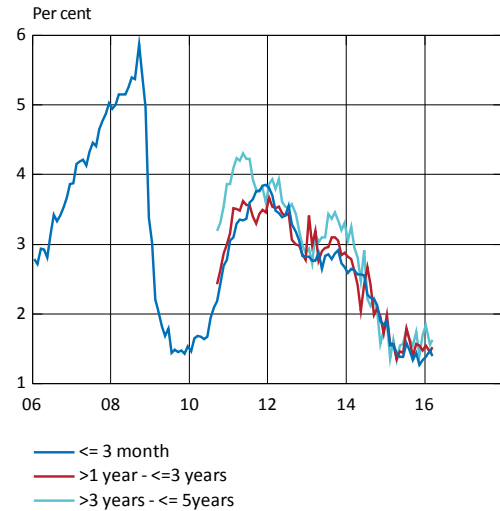
Sources: Statistics Sweden and the Riksbank

Diagram A37. Loans to non-financial companies in Sweden
Annual percentage change



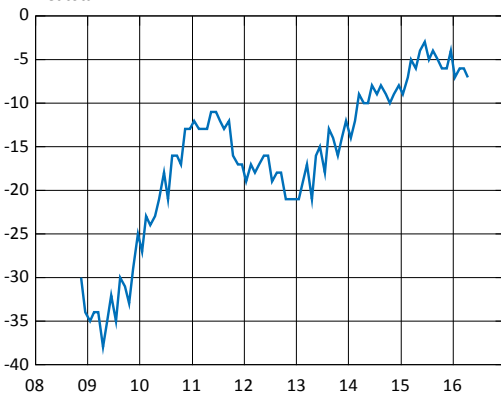
Note. Refers to loans from monetary financial institutions (MFI).
Source: Statistics Sweden

Diagram A38. Interest rates on new loans to non-financial companies in Sweden
Per cent



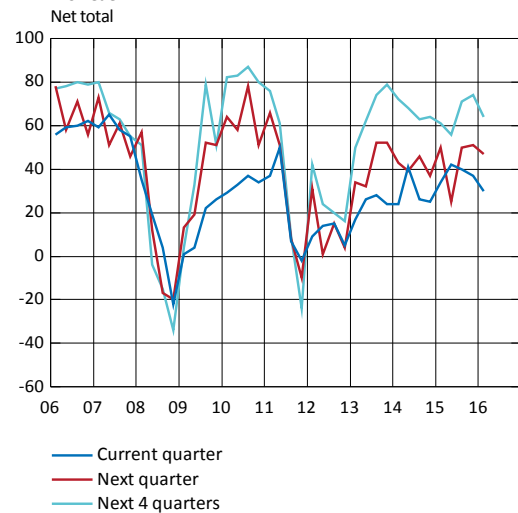
Note. Refers to loans from monetary financial institutions (MFI).
Source: Statistics Sweden

Diagram A39. Lending standards for non-financial companies in Sweden
Net total



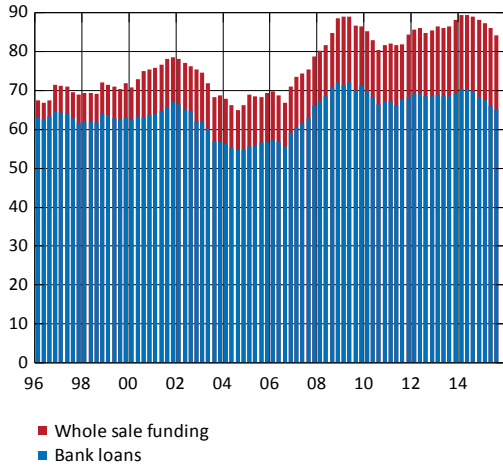
Note. Net total is defined as the difference between the percentage of companies that estimate that lending standards are better or much better than normal, and the percentage who believes that lending standards are worse or much worse than normal.
Source: National Institute for Economic Research

Diagram A40. Banks' assessment of lending to non-financial companies in Sweden
Net total



Note. Net total is defined as the difference between the percentage of bank executives who believes that lending will increase or increase very much in the coming period, and the percentage who believes that lending will be less or considerably less in the coming period.
Source: ALMI

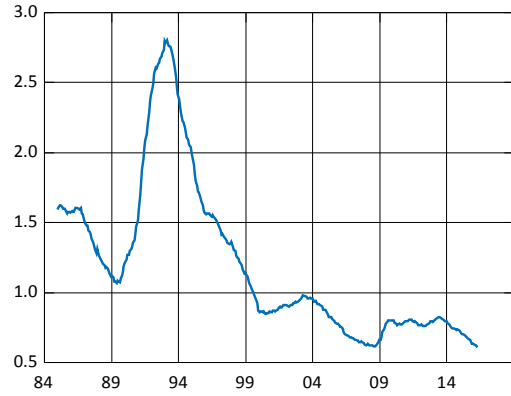
Diagram A41. Non-financial companies' debt levels in Sweden
Percentage of GDP



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

Sources: Statistics Sweden and the Riksbank

Diagram A42. Bankruptcy rate for non-financial companies in Sweden
Per cent

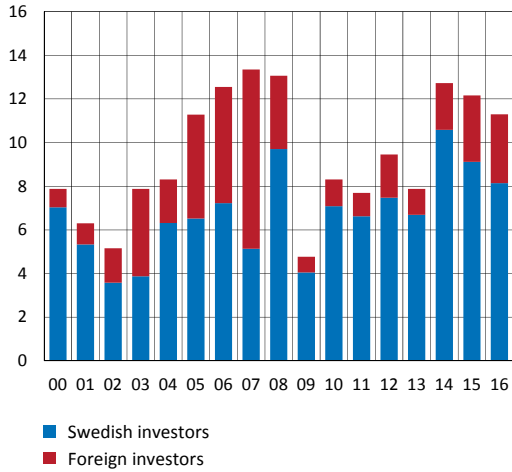


Note. Bankruptcy rate is defined as the number of bankruptcies divided by the number of companies.

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

Diagram A43. Transaction volumes on the commercial property market in Sweden

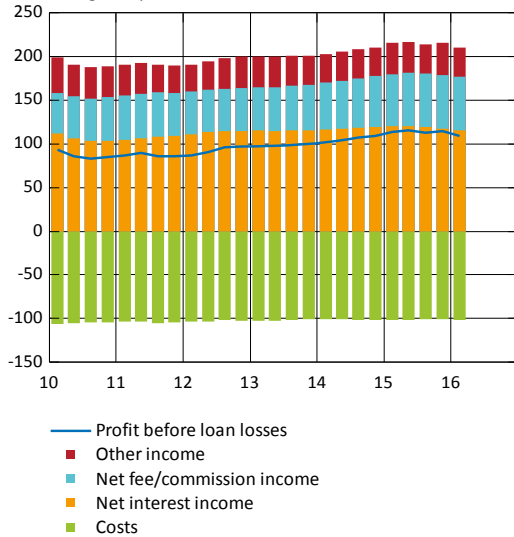
Monthly average, SEK billion



Source: Pangea Property Research

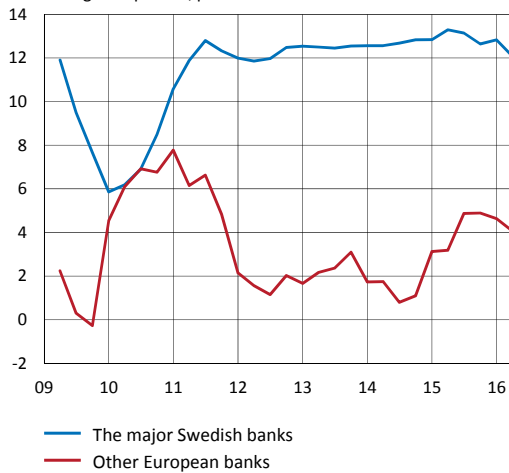
Developments in the Swedish banking groups

Diagram A44. The major Swedish banks' income and costs
Rolling four quarters, SEK billion



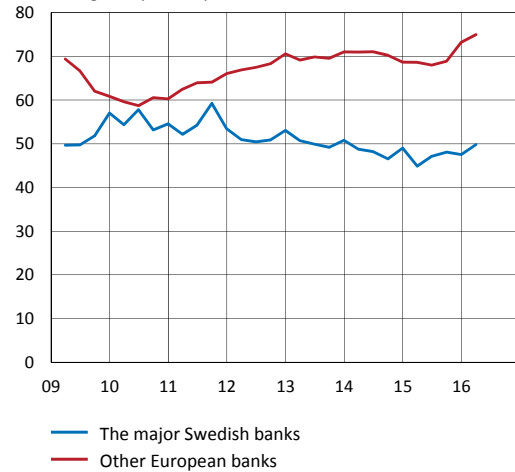
Sources: Bank reports, SME Direkt and the Riksbank

Diagram A46. Return on equity
Rolling four quarters, per cent



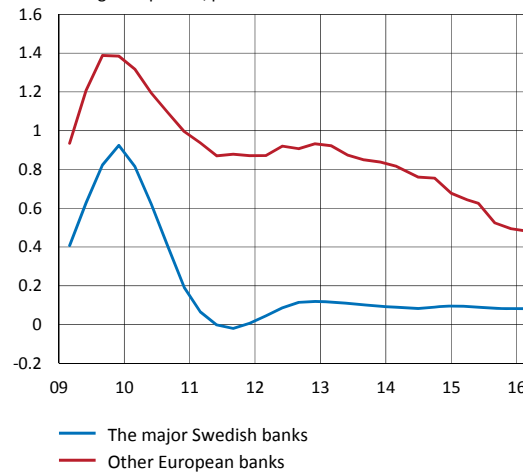
Note. Unweighted average. Adjusted for one off costs for the Swedish banks. The blue line represents a sample of other European banks.
Sources: SNL Financial and the Riksbank

Diagram A45. Costs-to-income ratio
Rolling four quarters, per cent



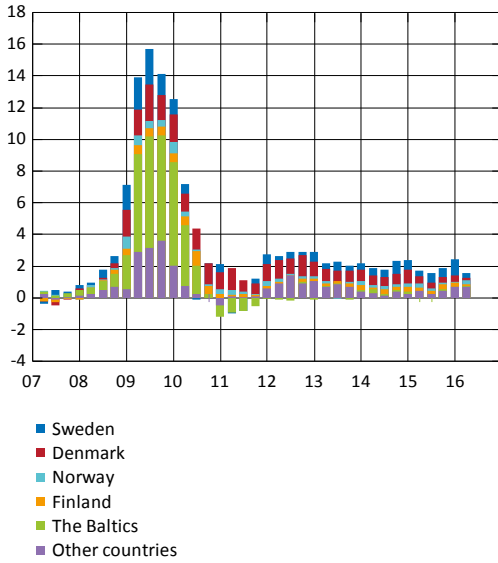
Note. Unweighted average. Adjusted for one off costs for the Swedish banks. The blue line represents a sample of European banks.
Sources: SNL Financial and the Riksbank

Diagram A47. Loan losses in relation to lending to the public
Rolling four quarters, per cent



Note. Unweighted average. The blue line represents a sample of other European banks.
Sources: SNL Financial and the Riksbank

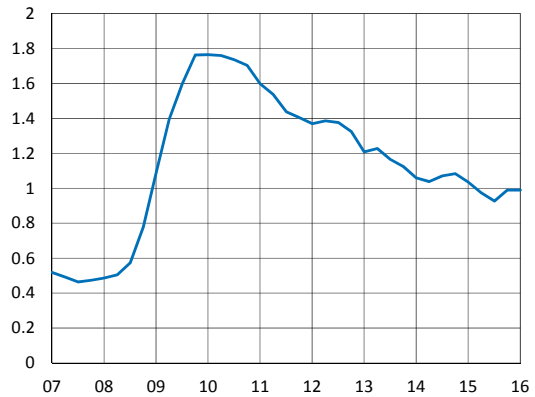
Diagram A48. The major Swedish banks' loan losses
SEK billion per quarter



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.

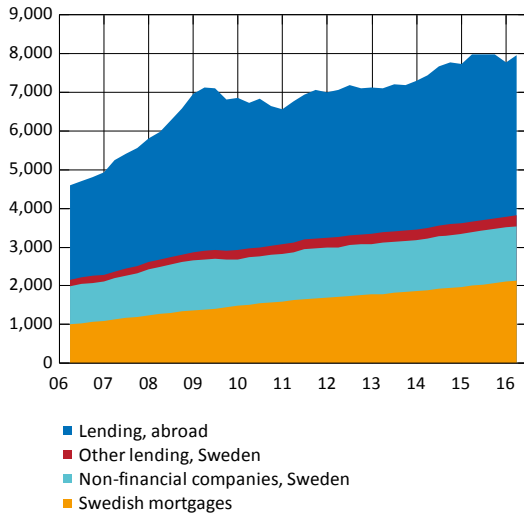
Sources: Bank reports and the Riksbank

Diagram A49. The major Swedish banks' non performing loans in relation to total lending
Per cent



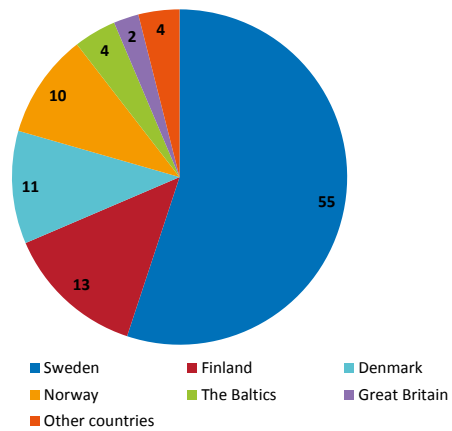
Sources: Bank reports and the Riksbank

Diagram A50. The major Swedish banks' lending to the general public
SEK billion



Sources: Statistics Sweden, Bank reports and the Riksbank

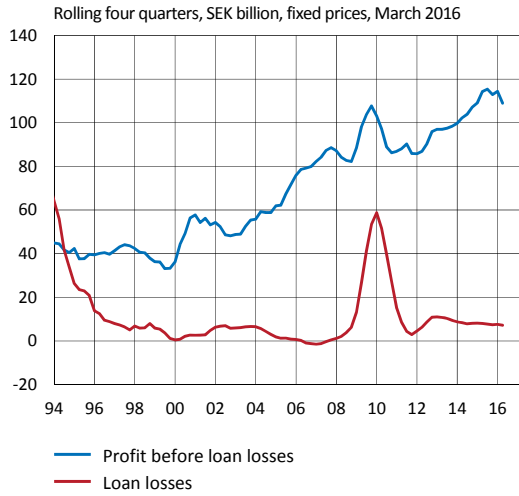
Diagram A51. The major Swedish banks' lending by geography
March 2016, per cent



Note. The major Swedish banks' total lending amounted to 7798 billion SEK in the first quarter of 2016

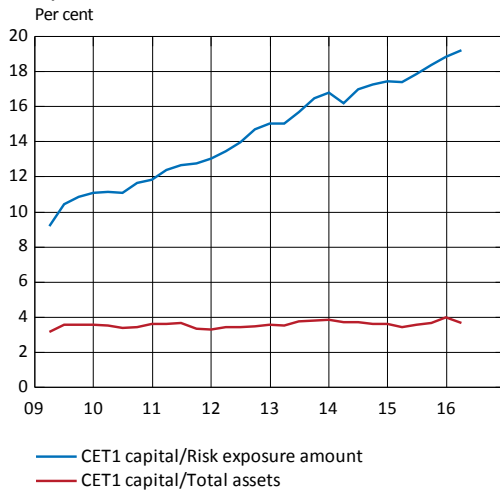
Sources: Bank reports and the Riksbank

Diagram A52. Profits before loan losses and loan losses in the major Swedish banks



Sources: Bank reports and the Riksbank

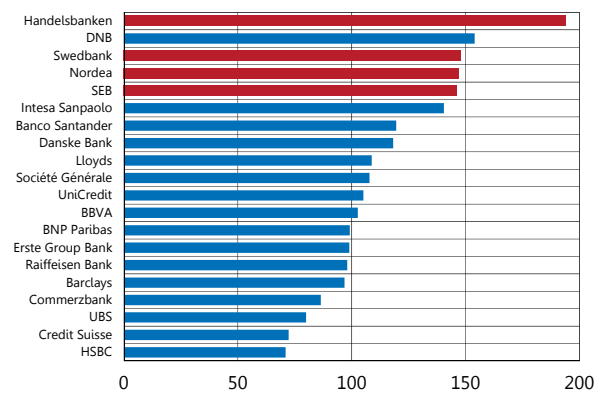
Diagram A54. The major Swedish banks' CET1 capital ratios and CET 1 capital in relation to total assets



Note. Weighted average.

Sources: Bank reports and the Riksbank

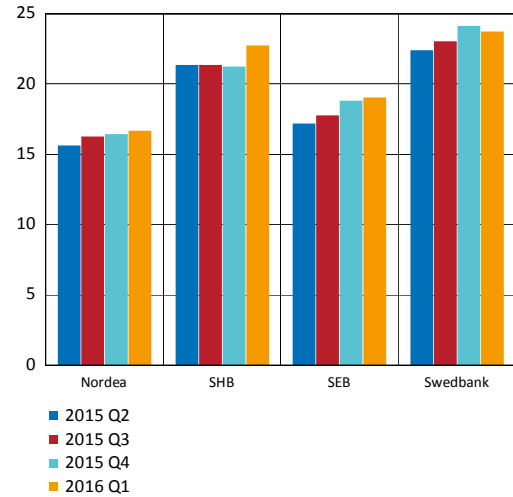
Diagram A53. Loan to deposit ratio
March 2016, per cent



Note. An average over the last four quarters, except for Nordeas' figure based on the second quarter of 2015.

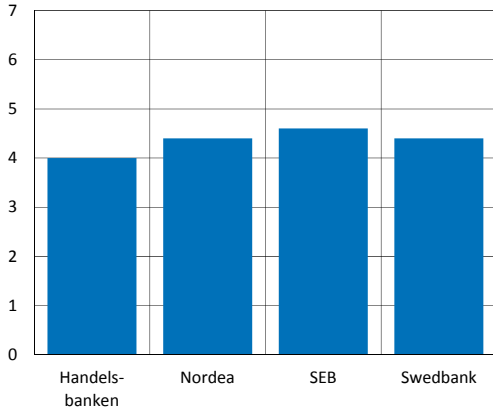
Sources: SNL Financial and the Riksbank

Diagram A55. CET1 capital ratios according to Basel III
Per cent



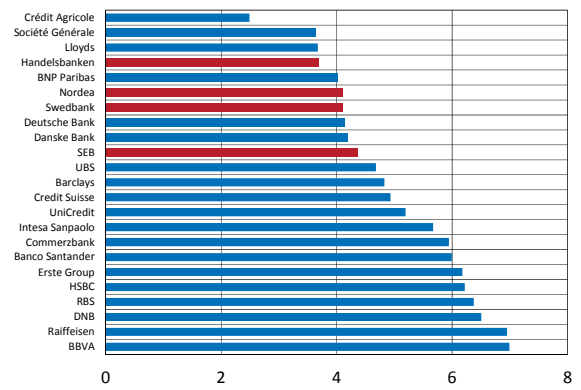
Source: Bank reports

Diagram A56. Reported leverage ratio
March 2016, per cent



Source: Banks reports

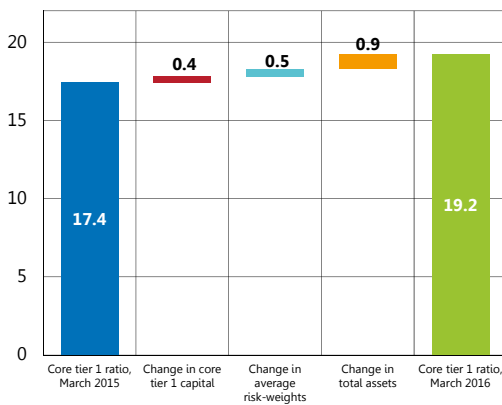
Diagram A57. Leverage ratio
March 2016, per cent



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. The numbers for BBVA, HSBC, Banco Santander, UniCredit, Lloyds och Crédit Agricole are from December 2015.

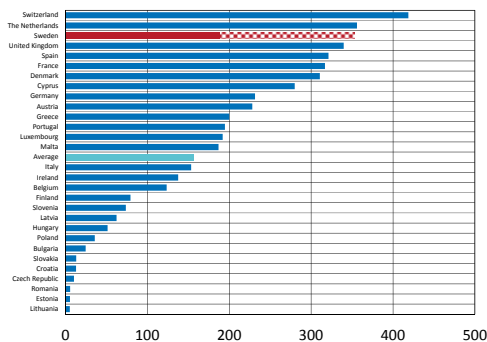
Sources: SNL Financial and the Riksbank

Diagram A58. Development of the major Swedish banks' core Tier 1 capital ratios, Basel III
Per cent



Sources: Bank reports and the Riksbank

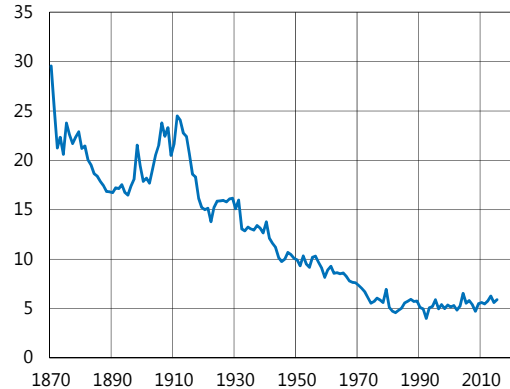
Diagram A60. The banks' assets in relation to GDP
December 2014, per cent



Note. In banking assets are included all of the assets of the national banking groups, that is both foreign and domestic assets. The banks' insurance operations are, however, excluded. The shadowed part of the red bar shows the four major banks' assets in foreign subsidiaries and branches in relation to Sweden's GDP.

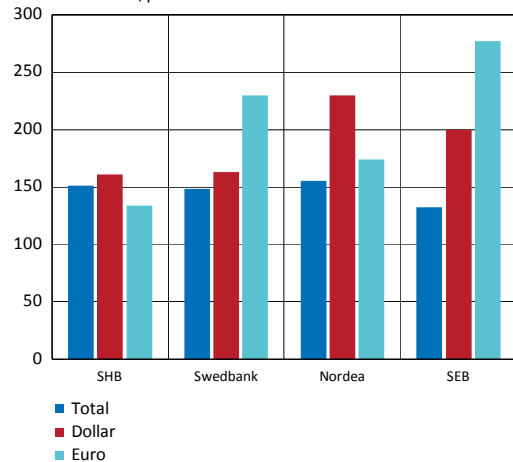
Sources: The ECB, Eurostat, the Swiss Bankers Association, the Swiss Statistics, bank reports and the Riksbank

Diagram A59. Equity in relation to total assets, Swedish banks
Per cent



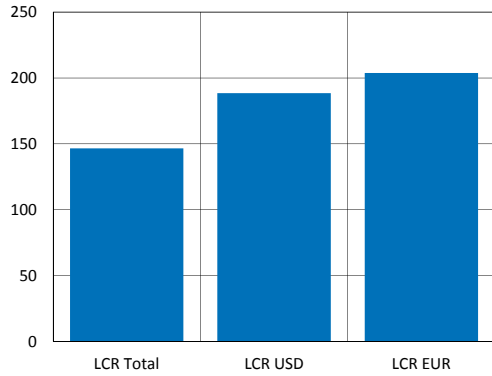
Sources: Hortlund, Do Inflation and High Taxes Increase Bank Leverage?, SSE/EFI Working Paper Series in Economics and Finance, No 6122005, November 2005 and the Riksbank

Diagram A61. The major Swedish banks LCR
March 2016, per cent



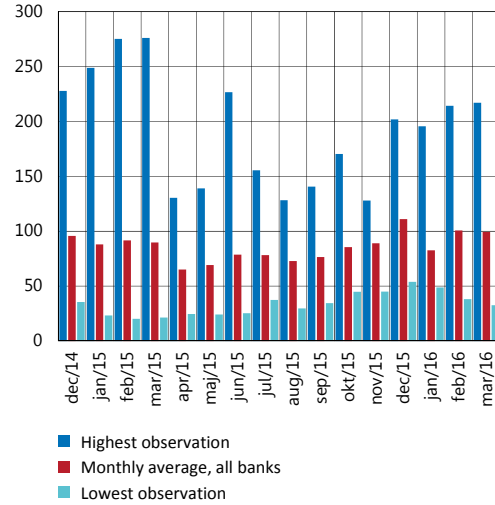
Source: Bank reports

Diagram A62. The major Swedish banks' average LCR by currency
march 2016, per cent



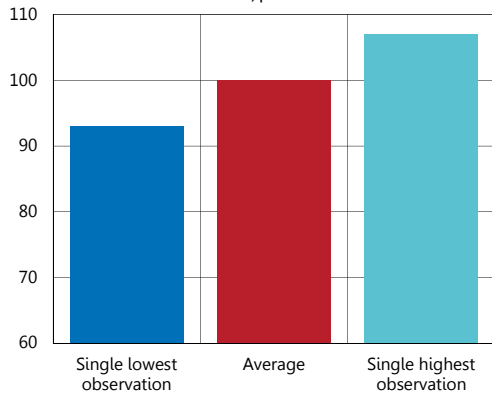
Sources: Bank reports and the Riksbank

Diagram A63. The major Swedish banks daily LCR in kronor
Per cent



Source: The Riksbank

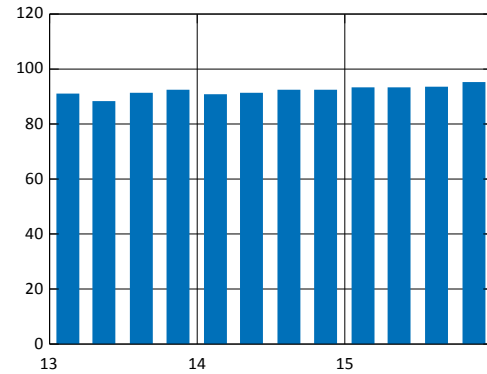
Diagram A64. The major Swedish banks' lowest, average and highest monthly NSFR
March 2015 to March 2016, per cent



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 during the last year for all of the banks, as well as the highest and lowest observations for a single month.

Source: The Riksbank

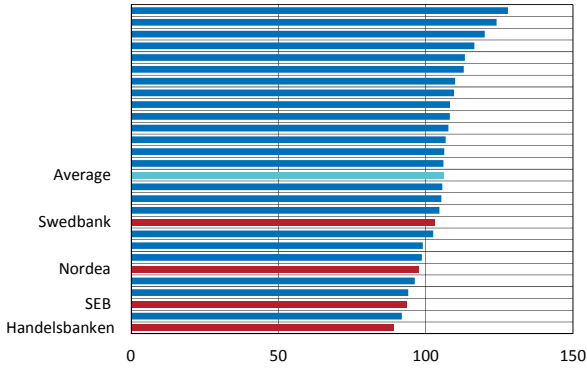
Diagram A65. The Riksbank's structural liquidity measure
Per cent



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.

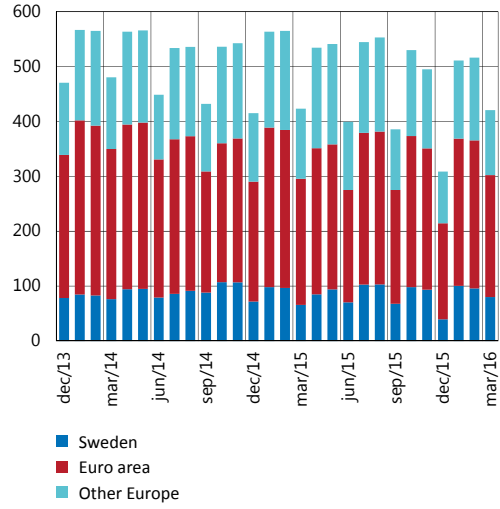
Source: The Riksbank

Diagram A66. Riksbankens strukturella likviditetsmått
December 2015, per cent



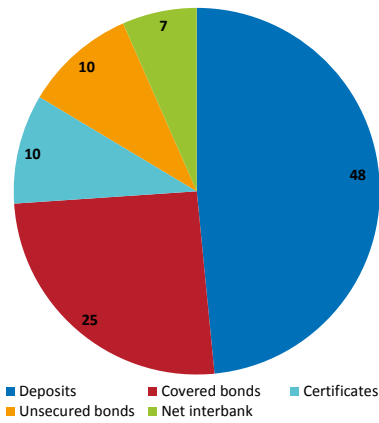
Note. The blue bars represents a group of other European banks.
Sources: Liquidatum and the Riksbank

Diagram A67. US Money Market Funds exposures
USD billion



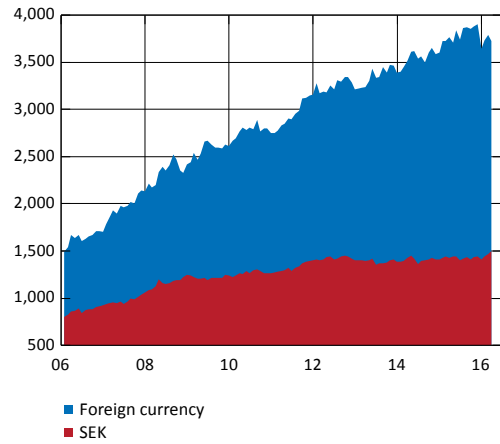
Sources: Investment Company Institute and the Riksbank

Diagram A68. The major Swedish banks' funding
March 2016, per cent



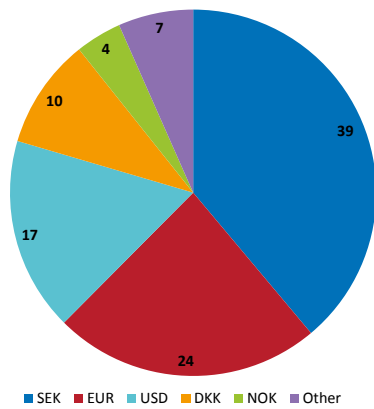
Sources: Bank reports and the Riksbank

Diagram A69. The major Swedish banks' wholesale funding via Swedish parent companies and subsidiaries
SEK billion



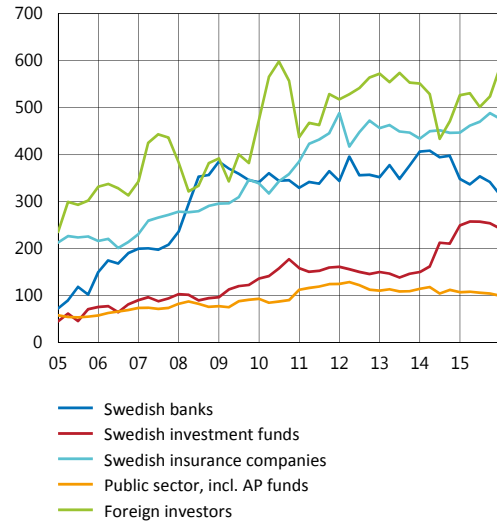
Sources: Statistics Sweden and the Riksbank

Diagram A70. The major Swedish banks' funding by currency
December 2015, per cent



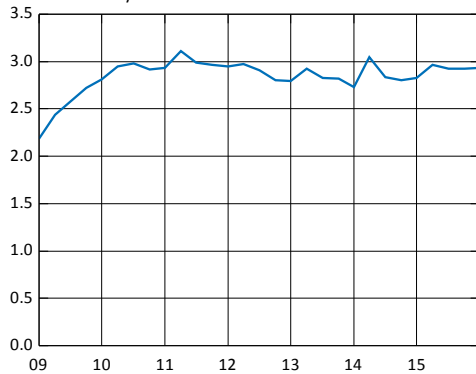
Note. The chart shows bank funding from deposits and securities.
Sources: Bank reports and the Riksbank

Diagram A71. Holders of Swedish covered bonds
SEK billion



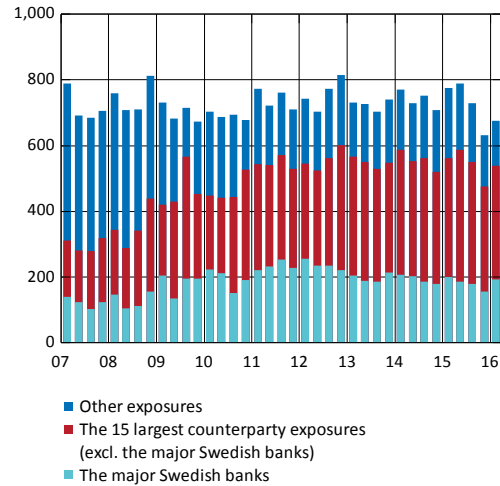
Sources: Statistics Sweden and the Riksbank

Diagram A72. Average maturity of outstanding Swedish covered bonds
Number of years



Source: The Association of Swedish Covered Bond Issuers

Diagram A73. 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