Financial Stability Assessment

Debt must be measured against repayment capacity

Financial stability | 29 May 2019

Whereas recent economic and financial developments in Finland do not pose any immediate threats to financial stability, the permanent risks related to household indebtedness and the structure of the banking system have increased further.



Deterioration in cyclical conditions – cyclical risks to financial stability remain moderate

Growth in the Finnish economy slowed in 2018 and growth forecasts have recently been revised downwards. Escalation of the trade dispute between the United States and China as well as Brexit pose the biggest risks to the global economy, potentially contributing to the already weakening global growth, which would have adverse effects on a small open economy like Finland. For Finland, the biggest downside risk is faster-than-expected weakening of the euro area economic outlook.

The Finnish economy is expected to continue to grow. Slower growth in 2019–2021 will help to contain the risk of cyclical overheating on the credit and financial markets. However, slower

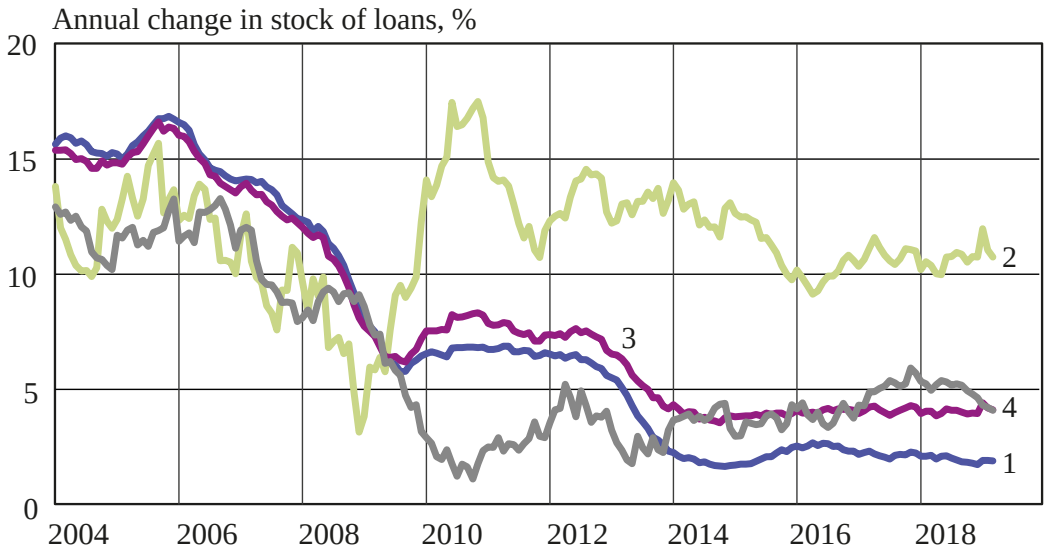
economic growth is not projected to significantly increase the downside risks to financial stability (See 'Corporate credit risk affected by business cycles and industry factors'). On the other hand, low interest rates encourage households to borrow also during economic slowdowns.

The Finnish financial system as a whole has been stable and reliable, and financial intermediation in the economy has been smooth. The cyclical vulnerabilities related to private sector credit have remained moderate. For example, the trend deviation of the private sector's credit-to-GDP ratio, used to measure systemic risks, has continued to decline (Chart 1).

Chart 1.

Households borrow from various sources for different purposes

1. Housing loans
2. Loans to housing corporations (incl. housing company loans)
3. Total housing finance
4. Consumer credit



Euro-denominated loans granted by Finnish MFIs to households and housing corporations.
Source: Bank of Finland.

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The lack of cyclical risks related to borrowing does not mean that the Finnish financial system is free from structural vulnerabilities. High household indebtedness may potentially amplify the

cyclical fluctuations of the economy and aggravate crises in the economy and the financial system. At the same time, Nordea's re-domiciliation to Finland further added to the size, concentration and interconnectedness of the Finnish banking sector.

Household indebtedness an even bigger risk than before

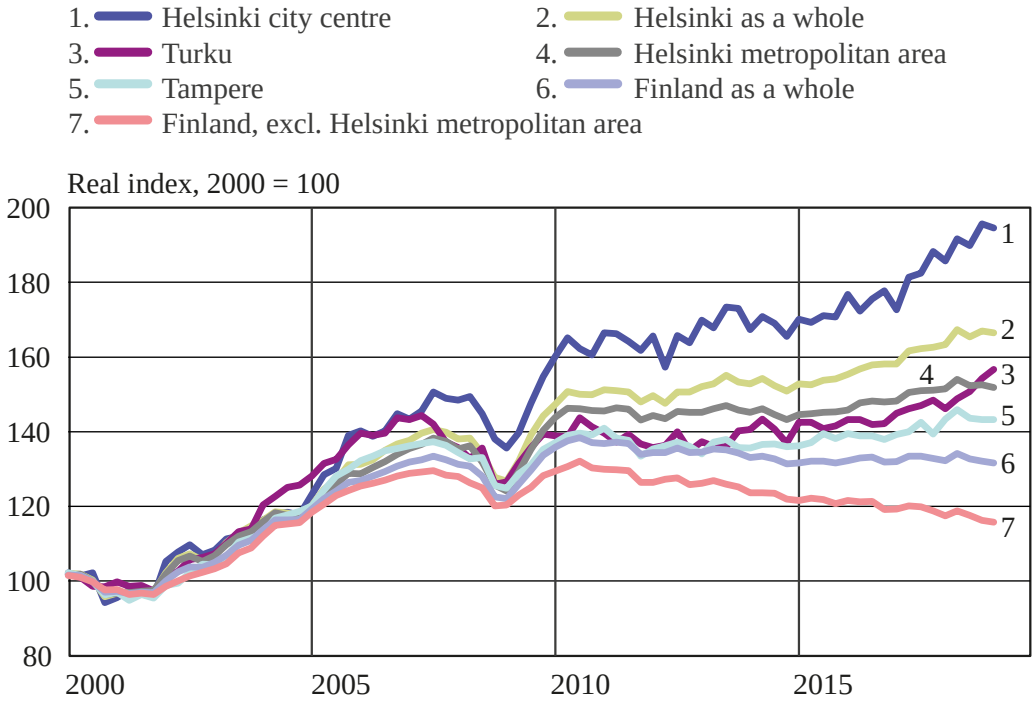
The growth of Finnish household debt has remained moderate in recent years. At the same time, its composition has changed and the related risks to the national economy have increased. In particular, housing company loans used to fund the purchase and construction of housing have grown at an alarming rate of over 10% per annum.

Housing company loans are formally held by housing companies, but in practice the repayment liability is assumed by the company's shareholders. The possibility to fund the purchase of housing largely via a housing company loan may encourage some households and residential investors to buy housing that is expensive relative to their income. An increase in interest rates or the expiration of a lengthy interest-only period often associated with housing company loans can significantly increase shareholder debt-servicing costs. If a shareholder is unable to service his or her share of the housing company loan, the rest of the shareholders may have to bear it.

Overall, total housing finance (housing loans and loans to housing corporations) granted by credit institutions has continued to grow at a steady annual pace of around 4% (Chart 2). The annual growth rate of the housing loan stock has slowed to around 2%. The slower growth of the housing loan stock indicates a change in the composition of housing finance and also the rapid amortisation of housing loans.

Chart 2.

Regional disparities in prices of old dwellings have increased in the 2010s



Source: Statistics Finland.

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Credit standards for new housing loans have eased. 25-year maturities on new housing loans have increased relative to loans with a maturity of 20 years. The amount of loans longer than 26 years has also increased, but they still constitute a marginal share of new housing loans, around 3–4%. Margins on new housing loans have come down to around 0.8 percentage points and the margins on housing corporation loans down to around one percentage point.

There is a wide variety of consumer credit on the market, and it is easy to get. The majority of consumer credit is granted by credit institutions operating in Finland, and the consumer credit stock has grown at a rate of about 5% in recent years (Chart 2). However, the importance of other lenders, such as vehicle financers, peer lenders and small loan companies, has grown rapidly. Households' consumer credit from abroad is also estimated to have increased significantly.

The rapid growth of consumer credit sustains and increases household indebtedness. Loans are

also offered to customers with a low credit rating, which contributes to the increasing number of payment defaults (see article 'New methods needed to rein in consumer credit').

Why does household debt have a broader significance?

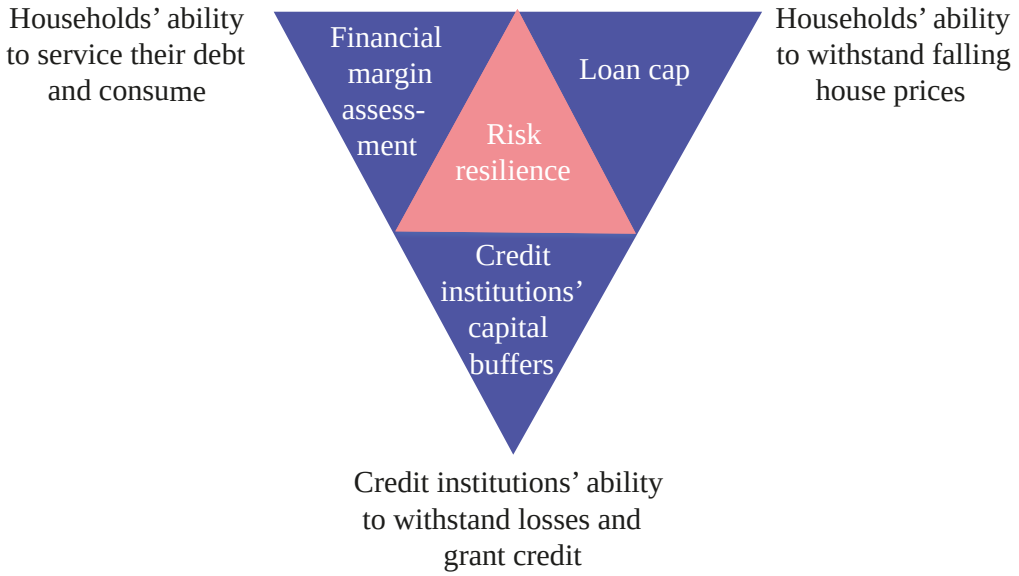
Traditionally, corporate loans have been the primary source of credit loss for banks. For example, in the Finnish banking crisis in the early 1990s, the majority of credit losses were attributable to corporate loans. However, research has shown that large-scale banking crises, in most cases, seem to be the result of strong growth in housing loans rather than of increasing corporate financing.[1,2]

Households with higher indebtedness relative to their income and/or net wealth cut back on spending in economic shocks in order to service their debts and save for an even rainier day (see 'The highly-indebted cut spending as the economy slows'). This decreases the demand for domestic products and services and weakens the profitability of domestic businesses.

Private consumption accounts for a big share of Finnish GDP. As a result, declining consumption dampens economic growth, which in turn influences bank credit losses.[3] Weak domestic demand increases lay-offs, loss of jobs and bankruptcies, tightens financial conditions and thereby further aggravates economic recessions (Chart 3). In economic downturns, excessive household indebtedness may therefore indirectly weaken companies' ability to employ, invest and service their debts. This causes a risk to financial stability and to the national economy as a whole.

Chart 3.

Many factors behind the financial system's ability to withstand housing market risks



Source: Bank of Finland.

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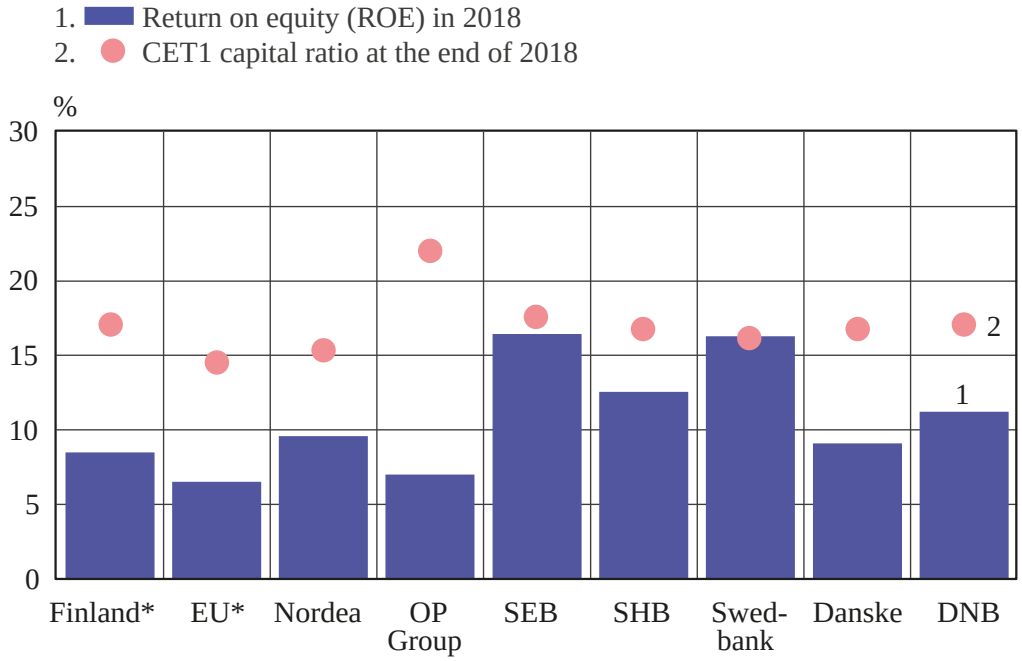
Real estate market divergence has grown depending on age, location and purpose

New housing construction has been exceptionally lively in recent years, driven by urbanisation and professional real estate investment. However, the decreasing number of new building permits shows that the cycle has reversed. The price trend is expected to continue to be largely moderate, as new apartment blocks are still being developed, especially in growth centres.

The prices of old dwellings are not showing signs of a worryingly rapid rise or widespread overvaluation. Price and demand differences on the Finnish housing market are large, and urbanisation has only further increased them. Real house prices have risen in the 2010s mainly in Helsinki and some other major cities, whereas in the rest of Finland prices have mainly fallen (Chart 4).

Chart 4.

Large Nordic credit institutions profitable and solid



* Weighted average of financial ratios for credit institutions operating in Finland/the EU.
Sources: Financial Supervisory Authority, EBA and SNL.

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The concentration of population in growth centres is also reflected in household indebtedness and the housing market. According to Statistics Finland's regional population projection released in 2015, the population aged under 65 will grow mainly in cities with more than 100 000 inhabitants. In February 2019, the Consultancy for Regional Development MDI published a population projection for ten urban areas,[4] according to which only the Helsinki metropolitan area and the Tampere and Turku areas will experience significant population growth by 2040. Insufficient supply of housing in the growth areas would increase the risk of dangerous price bubbles.

Loans to real-estate activities account for a significant, and increasing, share of loans issued by Finnish banks (see 'Finnish commercial property market increasingly intertwined with foreign markets'). Commercial property transaction volumes have increased and property valuations have risen, while foreign investors' share of the commercial property market has grown.

Falling commercial property prices abroad could also transmit to Finland through foreign investors' investment decisions. In general, the increased activity of international investors can increase fluctuations on the Finnish commercial property market. When the expectations of investment returns change, these investors may quickly either increase or decrease their investments on the commercial property markets of small countries.

Macroprudential policy curbs debt accumulation, not economic growth

The main objective of macroprudential policy is to reduce the probability and adverse effects on the real economy of financial crises and other severe disruptions to the financial system, and thereby to promote long-term economic growth. The competent authorities pursue this objective by mitigating macroprudential risks and vulnerabilities by means of macroprudential instruments and communication.

In accordance with its macroprudential strategy,[5] the Board of the Financial Supervisory Authority (FIN-FSA) has taken several complementary macroprudential measures in Finland. The measures are aimed at preventing systemic risks associated with household debt and structural vulnerabilities in the financial system and improving the risk resilience of the financial system.

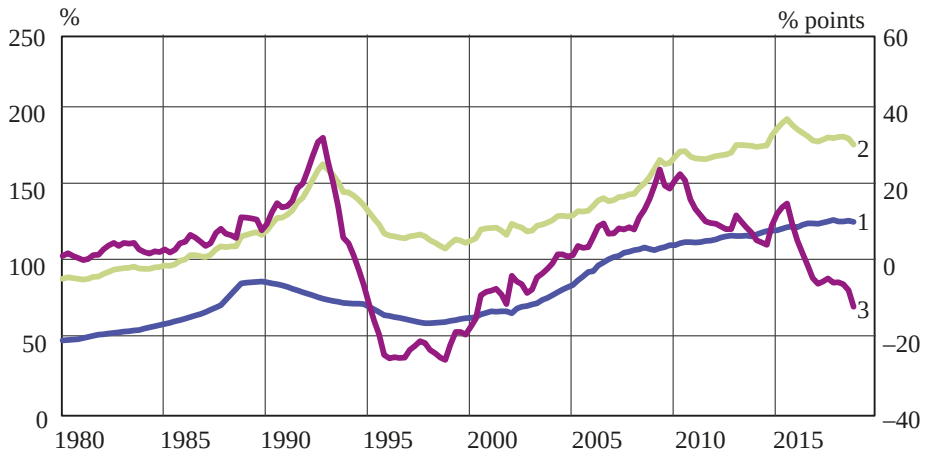
The maximum loan-to-collateral (LTC) ratio, i.e. the loan cap, was tightened to 85% for residential mortgage loans other than first-home loans with effect from July 2018.[6] The purpose of the macroprudential measure is to curb household debt accumulation in a situation in which household debt has already reached a historically high level (Chart 5). The direct effects of the tighter loan cap on new lending for house purchase are assessed as moderate.

The FIN-FSA has issued a recommendation to banks according to which they should calculate loan applicants' financial margin with a maximum repayment period of 25 years and an interest rate of 6%. Moreover, the calculation should also take into account the charge for common capital expenditures linked to housing company loans. The Bank of Finland and the Board of the FIN-FSA have also urged banks to avoid very long repayment periods and granting of interest-only periods without specific reasons.

Chart 5.

Private sector highly indebted, but credit growth has slowed

1. Credit to households relative to disposable income (left-hand scale)
2. Credit to households and non-financial corporations relative to GDP (left-hand scale)
3. Household and corporate credit-to-GDP ratio, trend deviation* (right-hand scale)



Credit to households includes housing company loans. Credit to non-financial corporations (incl. housing corporations other than housing companies owned by households) includes loans and debt securities within the sector.
* Deviation of the credit-to-GPD ratio from a Hodrick-Prescott (HP) filtered trend (lambda value = 400 000).

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The additional capital requirements imposed on Finnish credit institutions for macroprudential reasons maintain the institutions' lending capacity and loss-absorbing capacity in crisis situations. The FIN-FSA Board has set a risk weight floor for housing loans with effect from the beginning of 2018. By increasing the amount of own funds, the measure improves the risk resilience of credit institutions that have adopted the Internal Ratings Based Approach for the calculation of capital requirements.[7]

The purpose of the systemic risk buffer requirement, which will enter into force in July 2019, is to ensure that the capital adequacy of Finnish credit institutions sector is sufficient relative to the structural risks present in the financial system.[8] The requirement is set as follows: Nordea 3%, OP Group 2%, Municipality Finance 1.5% and other credit institutions 1%.[9]

The values of indicators guiding the imposition of a systemic risk buffer are higher in Finland than the corresponding values of other EU countries and are also elevated compared with Finnish historical data (Chart 6).[10] Systemic risks arise, among other things, from the large size of the

credit institution sector, the degree of concentration in the sector, its interconnectedness domestically and internationally, common risk concentrations, the sector's high importance in financial intermediation and the indebtedness of the largest customer groups.

Chart 6.

The structural vulnerabilities of the Finnish banking system relative to other EU countries and the Finnish history

Indicator	Higher or lower than the EU median	Higher or lower than the historical average in Finland
1. Housing loans granted to domestic households as a proportion of total loans granted by the credit institution sector to the private sector	Higher	Higher
2. Credit institutions' claims on construction and real estate companies as a proportion of credit institutions' total assets	Higher	Not higher
3. Credit institutions' domestic government bond assets relative to credit institutions' total assets	Not higher	Not higher
4. Domestic credit institutions' interbank deposits as a proportion of the total liabilities of the credit institution sector	Higher	Higher
5. Funding deficit of the credit institution sector in various countries	Higher	Higher
6. Combined balance sheet total of foreign banks' subsidiaries and branches relative to gross domestic product in various countries	Not higher	Not higher
7. Balance sheet of the credit institution sector relative to nominal gross domestic product	Higher	Higher
8. Combined balance sheet of the five largest credit institutions relative to the aggregate balance sheet of the entire credit institution sector	Not higher	Not higher
9. Loans granted by domestic credit institutions to households and non-financial corporations as a proportion of households' and non-financial corporations' total liabilities	Higher	Higher

10. Household sector's liabilities relative to households' disposable income	Higher	Higher
11. Non-financial corporations' indebtedness relative to gross domestic product	Higher	Higher
Based on data available on 9th April 2019.		
Sources: European Central Bank and calculations by the Bank of Finland.		

The macroprudential tools currently available in Finland are inadequate for mitigating long-term risks relating to household indebtedness or growth in said risks. The macroprudential toolkit should be replenished, e.g. with instruments that limit the maximum amount of household debt relative to the borrower's repayment capacity. International organisations such as the European Systemic Risk Board (ESRB) and the International Monetary Fund (IMF) have also prompted Finland to supplement the macroprudential tools designed to curb household indebtedness.

The Bank of Finland is a member in a working group established by the Ministry of Finance to examine new measures to restrain growth in household debt. The possible new measures include a cap on the debt-to-income ratio (DTI cap) or a cap on the debt-service-to-income ratio (DSTI cap) for households, a loan amortisation requirement especially at the beginning of the loan term, a maximum loan maturity and, in new-build transactions, a cap on the maximum share of housing company loan relative to the debt-free price of the dwelling.

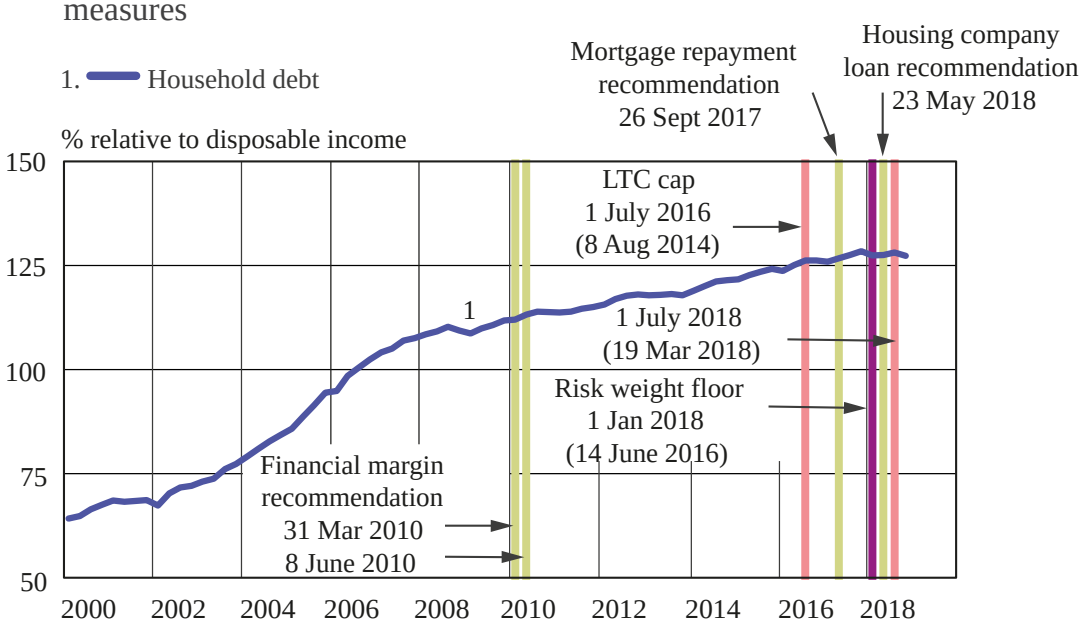
With the range of financial services becoming more versatile and increasingly digital, it is possible that non-bank funding and the share of loans other than mortgages in total household debt could increase further. To mitigate the risks associated with total indebtedness, the new macroprudential tools should cover all lenders and loans.

Debt-to-income cap would reduce the risk of financial crises

The capacity of the economy and the financial system to withstand risks posed by household debt accumulation rests on several safeguarding factors. These include the borrowers' sufficient repayment capacity, reasonable loan amounts relative to collateral and down payment and the lenders' capacity to withstand even high losses (Chart 7). The authorities should be allowed to strengthen each of these factors with macroprudential tools, as necessary.

Chart 6.

Finnish household indebtedness reined in by macroprudential measures



A vertical line shows the effective date of the measure, in brackets the announcement date.
Sources: Statistics Finland and Bank of Finland.

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Most major financial crises have been preceded by credit booms, subsequent asset price bubbles and excessive risk-taking. A cap on the loan-to-collateral ratio (LTC cap) applicable to housing loans cannot adequately mitigate overheating on the housing market or growth in households' total debt levels when excessive credit growth and rising house prices fuel each other during economic upturns. Higher house prices also boost the value of housing collateral, which weakens the impact of the LTC cap. In addition, the LTC cap calculation does not take into account all debts of a household, nor does it restrict debt accumulation relative to the borrower's repayment capacity.

To curb excessive growth in credit and total household debt, the maximum amount of loans per household should be restricted in Finland, for example by means of a cap on the debt-to-income ratio (DTI cap). Each lender should limit the maximum amount of credit granted to a household in a way that the ratio of total debt and participations in debts (incl. housing company loans) to the annual income of a household would not exceed a specific upper limit. Hence, the DTI cap would cover all loans and lenders.

A DTI cap would strengthen and maintain the household sector's debt-servicing capacity and capacity to consume during economic downturns and thereby improve the economy's ability to recover from crises. It would also dampen the occasional adverse feedback loop between house prices and credit, as household income, which impacts the maximum size of a loan, does not grow in tandem with house prices. The imposition of a DTI cap would help to ensure that the household sector's total debt level or its rate of growth would not jeopardise the stability of the financial system.

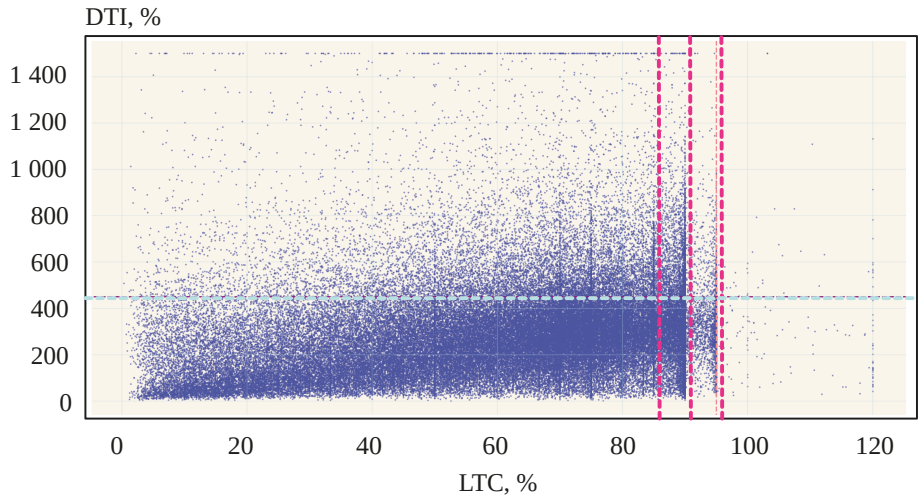
Households diverge significantly in terms of income, wealth and debt-servicing capacity. For example, for about 16% of households with a new housing loan, the level of total debt is over 4.5 times[11] their gross income (Chart 8) (see also 'Capping debt-to-income ratios complementary to housing loan cap').

Single indicators do not necessarily give a full picture of a borrower's debt-servicing capacity. For this reason, lenders should be granted a limited possibility to exceed the DTI cap for some borrowers. For example, a certain proportion of the number or euro-volume of new loans granted within a quarter could be allowed to exceed the DTI cap. The LTC cap, the DTI cap and the permitted deviations would also in future enable the supply of credit under a variety of circumstances. In some cases, these requirements would reduce the amount of loan granted.

Chart 7.

A debt-to-income cap would complement the loan-to-collateral cap

1. LTC cap of 85%, housing loans other than first-home loans (from 2018/III)
2. LTC cap of 90%, housing loans other than first-home loans (until 2018/II)
3. LTC cap of 95%, first-home loans
4. DTI cap in some countries



The blue dots present LTC and DTI ratios of households that have been granted a new housing loan between June 2017 and March 2018, at the loan approval date.
Sources: Financial Supervisory Authority and calculations by the Bank of Finland.

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EU Banking Package facilitates use of macroprudential instruments

Macroprudential instruments and the possibilities for their use differ across countries. Regulation on the macroprudential tools targeted at housing loans and other macroprudential instruments addressing the terms and conditions of credit is in the EU based on national regulation. In contrast, the use of additional capital requirements, the purpose of which is to strengthen the resilience of individual credit institutions or national credit institution sectors, is based on common rules.

The current EU Capital Requirements Directive and Regulation lay down a fairly tight framework for national authorities on the use of additional capital requirements for systemically important credit institutions, systemic risk buffers and risk-weight floors for housing loans. Revisions to the

Directive and Regulation are planned to enter into force in early summer 2019. These will provide more national room for manoeuvre in the use of the instruments after the transition period. For example, the reform package will make EU-level authorisation and notification procedures less burdensome and provide authorities the possibility to direct capital requirements more specifically at exposures that cause significant systemic risks.

Development of the macroprudential toolkit is part of a comprehensive set of reforms of EU financial regulation, i.e. the Banking Package. For example, the Banking Package implements the post-crisis regulatory reforms of the banking and financial sector agreed on a global level.

The Banking Package introduces a minimum leverage ratio requirement of 3% for credit institutions, i.e. the ratio between own funds and non-risk-weighted assets. The purpose of the Net Stable Funding Ratio (NSFR) requirement which regulates the minimum amount of credit institutions' long-term funding is to reduce the risks of an abrupt drying-up of credit institutions' own funding in a crisis situation. Moreover, the purpose of the amendments to resolution legislation is to ensure banks' lending capacity and the funding of resolution. The largest credit institutions in the EU must hold on their balance sheets a globally harmonised amount of own funds or eligible liabilities that can be converted into own funds in a crisis situation to absorb losses.

Euro area financial architecture must be reinforced by the Banking Union's common Deposit Insurance Scheme

The resilience of the euro area financial system has been improved significantly in recent years, but the conditions for economic growth and the financial architecture in the euro area need to be further reinforced to prevent crises and mitigate their effects.

Banks' exposures to national sovereigns should be reduced further, so that a sovereign debt crisis or a steep decline in the prices of government bonds would not weaken banks' ability to supply credit and capacity to absorb losses. More determined action in dismantling the barriers to the integration of capital markets would, in turn, promote economic growth and cross-border diversification of risks. To achieve these objectives, the EU's Capital Markets Union initiatives must be accelerated.

Completing the Banking Union with a common Deposit Insurance Scheme would reduce the risk of deposit runs and support the integration of euro area banking markets. Common deposit insurance would promote equal competition between banks and boost the entailing economic benefits.

The transfer of Nordea's domicile from Sweden to Finland in October 2018 harmonised the supervision of the largest banking groups operating in Finland, as Nordea moved under the scope of single banking supervision in the Banking Union. As a result of the change of domicile, responsibility for Nordea's resolution planning and execution was transferred to the Banking Union's Single Resolution Board, while responsibility for Nordea's deposit guarantee was transferred to the Finnish deposit guarantee scheme.[12] Consequently, the amount of covered deposits within the Finnish deposit guarantee scheme grew from approximately EUR 50 billion to slightly under EUR 130 billion.

Banking sector profitability good in the Nordic countries, elsewhere in Europe mixed

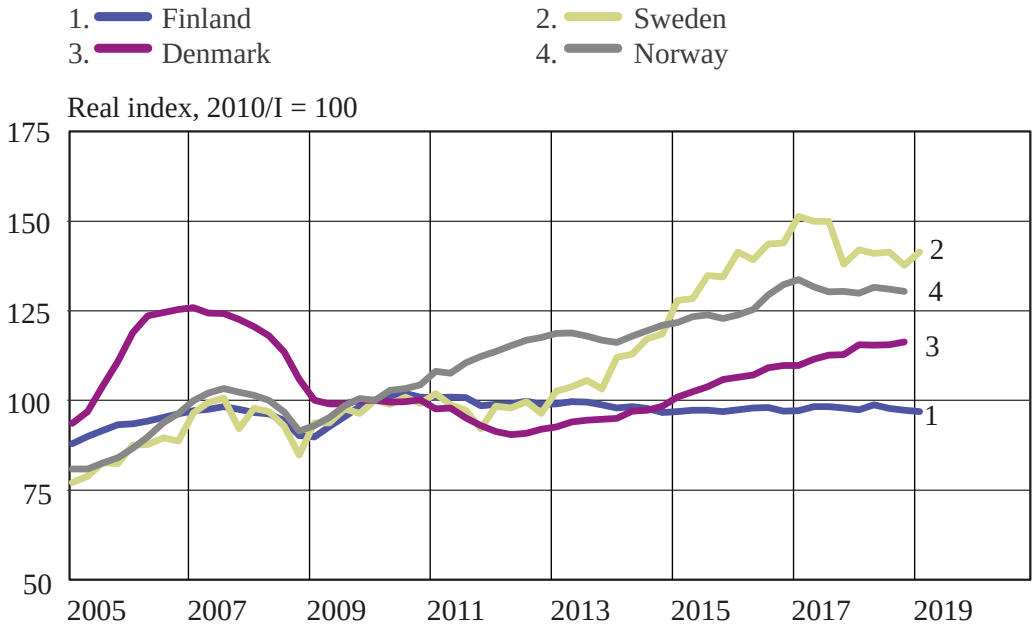
As a result of Nordea's re-domiciliation, the size of the Finnish credit institution sector grew and many key financial ratios changed significantly in late 2018. The credit institution sector's assets (incl. foreign subsidiaries) totalled approximately EUR 778 billion at the end of 2018, compared with some EUR 280 billion a year earlier.[13]

The comparable operating profit of the Finnish credit institution sector was in 2018 slightly weaker than a year earlier. Net interest income improved and was the largest income item, whereas other income declined and expenses increased. Net impairment losses remained low. Return on equity was in 2018 approximately 8.5%, i.e. higher than the average for banks in the EU (Chart 9).[14]

The capital ratios of the Finnish credit institution sector weakened considerably in late 2018, as expected.[15] The total capital ratio declined to 20.9% and the Common Equity Tier 1 (CET1) capital ratio to 17.2%. The indicator of non-risk based capital adequacy, i.e. the leverage ratio, fell to 5.8%. The sector's resilience however remained strong, and capital and leverage ratios at the end of 2018 were higher than the average for EU banks.

Chart 8.

Nordic house prices have moderated



Sources: Statistics Finland, Valueguard, OECD and calculations by the Bank of Finland.

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The profitability and capital adequacy of Nordic banks have remained mainly good, which has maintained the resilience of the Nordic banking system. A strong risk-bearing capacity is necessary because of the structural vulnerability of the Nordic banking sector, reflecting its large size and high degree of concentration. The largest banks operate in several countries, which increases the interconnectedness of the financial system and risks of contagion.[16]

Large Nordic banks are dependent on market-based funding, which exposes them to changes in risk sentiment on the global financial markets. Nordic banks have long enjoyed investor confidence and obtained market-based funding at favourable rates. Covered bonds, in particular, play a major role as sources of long-term funding and liquid investment for banks.

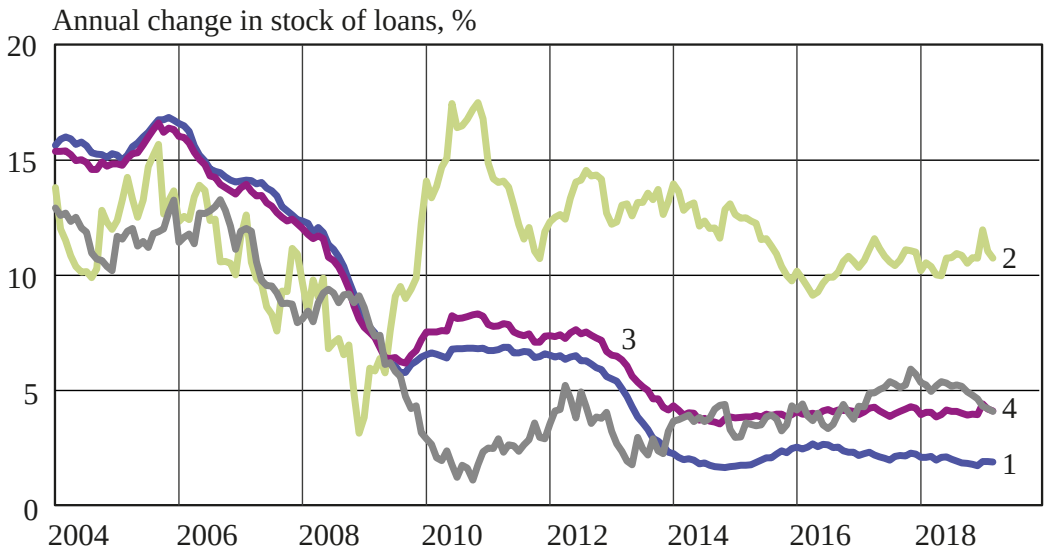
Suspected money laundering activity has recently eroded investor confidence in Nordic banks. Following the disclosure of suspected money laundering, share prices declined in the case of the banks that were subject to the most serious suspicions. In addition, hedging against credit risk became more expensive for Nordic banks during the autumn of 2018.

High household indebtedness and the major role of housing loans in the financial system increase the structural vulnerabilities of the financial system. Overheating of the Swedish and Norwegian housing markets following the global financial crisis also increased cyclical vulnerabilities as lending for house purchase grew rapidly and house prices rose at an alarming pace. In the past year, house prices have moderated, but prices remain historically high, particularly in Sweden and Norway (Chart 10).

Chart 9.

Households borrow from various sources for different purposes

1. Housing loans
2. Loans to housing corporations (incl. housing company loans)
3. Total housing finance
4. Consumer credit



Euro-denominated loans granted by Finnish MFIs to households and housing corporations.
Source: Bank of Finland.

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Due to the interconnectedness between Nordic banks, similar risks related to liquidity and funding and large exposures to real estate markets, risks in the financial system may materialise simultaneously in the Nordic countries. Disruptions may intensify and spread rapidly across countries, also via the real economy as a result of multilateral and global trade. A large-scale

materialisation of potential threats would increase losses from lending and investment activities and raise the cost of funding.

Nordic and Baltic financial stability authorities conducted in January 2019 a joint banking crisis simulation exercise concerning large cross-border banking groups. The exercise involved 31 national or competent authorities from European countries. The exercise followed a hypothetical crisis scenario involving fictitious financial institutions in eight countries. The exercise tested the cooperation and crisis management capabilities of central banks, financial supervisors, ministries of finance and resolution authorities. The crisis simulation generated a valuable outcome, on the basis of which the participants will develop cooperation and crisis management preparedness.

In other European countries, banking sector profitability has improved slightly but remains weak on average, and the differences across countries are large. The low level of interest rates has eroded net interest income, and some banks still have a large volume of legacy non-performing loans that have accumulated in a few countries. In the coming years, there will be pressure on banks to invest in a revamp of their IT systems. Digitalisation may bring about transformational changes to the competition between banks and may open the financial industry to greater competition from new actors (see 'The impact of digitalisation on bank profitability').

In an increasingly digital society, the financial system must be able to provide critical payment services for everyone. The availability of these services must be ensured also during serious disruptions. Reliable and secure payment and settlement systems are essential for ensuring financial stability and the functioning of society. Safeguarding service continuity requires smooth cooperation between authorities and the industry as well as determined action. As the payments landscape is undergoing major changes, we must also devote attention to the availability of cash services and the possibilities to use cash. Even though citizens' right to withdraw and deposit cash is protected by law, more detailed criteria are needed to assess the availability of services.

Notes

1. Büyükkarabacak, B. – Valev, N.T. (2010) 'The role of household and business credit in banking crises', Journal of Banking & Finance 34, 1247-1256; Detken, C. – Weeken, O. – Alessi, L. – Bonfim, D. – Boucinha, M. – Castro, C. – Frontczak, S. – Giordana, G. – Giese, J. – Jahn, N. – Kakes, J. – Klaus, B. – Lang, J.H. – Puzanova, N. – Welz, P. (2014) Operationalising the countercyclical capital buffer: indicator selection, threshold identification and calibration options. ESRB Occasional Papers No. 5. ↑
2. The results, however, to some extent depend on the credit growth indicators used. Tölö, E. – Laakkonen, H. – Kalatie, S. (2018) 'Evaluating Indicators for Use in Setting the Countercyclical Capital Buffer', Journal of Central Banking 14: 51–111. ↑
3. Pesola, J. (2011) 'Joint effect of financial fragility and macroeconomic shocks on bank loan ↑

losses: Evidence from Europe', Journal of Banking and Finance 35: 3134–3144; Sorge, M. – Virolainen, K. (2006) 'A comparative analysis of macro stress-testing methodologies with application to Finland', Journal of Financial Stability 2: 113–151.

4. 'In 20 years, Finland will have only three growing urban areas', 22 February 2019. ↑
5. See https://www.finanssivalvonta.fi/globalassets/en/publications/news-releases/fivajk-makrovakausstrategia-en.pdf. ↑
6. See https://www.finanssivalvonta.fi/en/publications-and-press-releases/Press-release/2018/macroprudential-decision-financial-supervisory-authority-tightens-the-loan-cap-for-loans-other-than-for-first-home-purchases2/. ↑
7. See https://www.finanssivalvonta.fi/en/publications-and-press-releases/Press-release/2017/macroprudential-decision-a-minimum-risk-weight-level-of-15-on-mortgage-loans-no-changes-to-the-loan-cap-no-countercyclical-capital-buffer-requirement2/. ↑
8. See https://www.finanssivalvonta.fi/en/publications-and-press-releases/Press-release/2018/financial-supervisory-authoritys-macroprudential-decision-on-structural-additional-capital-requirements-systemic-risk-buffer-to-be-imposed-on-credit-institutions2/. ↑
9. The FIN-FSA Board has also identified the individual credit institutions significant for the Finnish financial system (other systemically important institutions, O-SIIs) and set additional capital requirements (O-SII buffers) for them. Of the O-SII and the systemic risk buffer requirement, only the higher one is binding. ↑
10. Chart 6 compares the most recent Finnish indicator values with the median of the indicator values of the other EU countries. The most recent Finnish values are also compared with the average of Finnish historical data. ↑
11. A DTI cap of 4.5 is in use in the United Kingdom, for example. ↑
12. See press release by the Financial Stability Authority (https://rvv.fi/en/announcement/-/asset_publisher/nordean-kotipaikan-siirtyminen-muutti-kriisinratkaisua-ja-talletussuojaa-koskevia-viranomaisvastuita). ↑
13. See https://www.finanssivalvonta.fi/en/statistics/banks/key-financial-figures/. ↑
14. Based on equity at the end of 2018. For a more detailed analysis, see https://www.finanssivalvonta.fi/globalassets/fi/markkinoiden-vakaus/valtari_311218/pankkisektorin_valtari_q4_2018.pdf (in Finnish only). ↑
15. An examination of comparable figures shows that capital adequacy remained virtually unchanged. For a more detailed analysis, see https://www.finanssivalvonta.fi/globalassets/fi/markkinoiden-vakaus/valtari_311218/pankkisektorin_valtari_q4_2018.pdf (in Finnish only). ↑
16. See also https://www.bofbulletin.fi/en/2018/articles/risks-on-the-swedish-housing-market-also-a-cause-for-concern-in-other-nordic-countries//. ↑

Keywords

banking sector, banking union, financial stability, households, housing markets, indebtedness, macroprudential tools