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A stricter amortisation requirement for households with high loan-to-income ratios

Summary

Finansinspektionen decides to amend regulations regarding amortisation requirements. This is taking place subsequent to the Swedish Government having provided its consent on 30 November 2017 to Finansinspektionen adopting these regulations.

The amendment entails that new mortgagors with mortgages that are greater than 4.5 times their gross income must amortise at least 1 per cent of the debt in addition to the existing amortisation requirement. The aim of the measure is to increase the Swedish households' resilience to shocks. The grounds for and design of the stricter requirement are presented in this Decision Memorandum. The amended regulations enter into force on 1 March 2018.

Mortgages serve an important function in the economy since they enable households to use their future income to pay for a home. Hence, households do not have to save for the entire expense of a home before acquiring it. However, household debt, which largely comprises mortgages, also creates risks for the Swedish economy. High house prices, low mortgage rates and a strong economy mean that households are borrowing a lot. The mortgages of Swedish households amount to approximately SEK 3,000 billion and constitute households' largest financial commitment. Mortgages also constitute almost half of the Swedish banks' lending. Future developments in the housing market and household debt are therefore of considerable importance for households and Sweden's economy.

The risks associated with household debt are primarily related to the possibility that highly indebted households may sharply reduce their consumption in the event of a macroeconomic shock. This development was noted in other countries during the financial crisis in 2008–2009. If many households reduce their consumption at the same time, this can amplify an economic downturn. Because loan-to-income ratios are high and rising among many borrowers, they represent an elevated macroeconomic risk. The amortisation requirement introduced in 2016 was associated with the loan-to-value ratio, i.e. the mortgage in relation to the value of the home. It lowered the size of the mortgages among new mortgagors and thus increased their resilience to

macroeconomic shocks. However, many new mortgagors continue to have high debt in relation to their income, and the loan-to-income ratio in the mortgage stock has continued to rise. This means that household debt is continuing to increase significantly faster than income. Studies show that households with high loan-to-income ratios are more sensitive to income shocks than households with lower loan-to-income ratios. Finansinspektionen's analyses also show that there is a relatively weak connection between households' loan-to-income ratios and loan-to-value ratios. FI therefore concludes that the impact of the current amortisation requirement on loan-to-income ratios is insufficient.

Sweden does not currently regulate loan-to-income ratios. This type of regulation is applied in Denmark, Norway and the UK. Finansinspektionen makes the assessment that a stricter amortisation requirement for mortgagors with high loan-to-income ratios will gradually encompass more new mortgagors, reduce their debt and in the long run make households less vulnerable to shocks. More households will be affected if house prices continue to rise faster than income. If the price increase levels off, fewer households will be affected by the requirement. The requirement thus works as a stabilising mechanism. Finansinspektionen therefore makes the assessment that a stricter amortisation requirement will make the Swedish economy more resilient to macroeconomic shocks. The measure falls within the framework of Finansinspektionen's assignment to counteract financial imbalances, but it also promotes consumer protection. The measure is also judged to strengthen financial stability.

Finansinspektionen concludes that the requirement ensures that mortgage firms will apply terms of repayment for new mortgages consistent with a sound amortisation culture and which prevent excessively high household debt. The advantages of the measure are deemed to be significantly greater than the costs.

Table of Contents

1 Stricter mortgage amortisation requirement

Finansinspektionen's position: Finansinspektionen has decided to issue amended regulations concerning the requirement to amortise mortgages. This amendment entails a stricter amortisation requirement for households with high loan-to-income ratios (mortgage in relation to gross income).

Consultation memorandum: The proposal had the same content.

Consultative bodies: Several of the consultative bodies share Finansinspektionen's concern about the risks associated with high household loan-to-income ratios. *The Riksbank* believes that the high and rising level of household debt in Sweden constitutes a serious threat to financial and macroeconomic stability. The Riksbank supports the proposal and makes the assessment that it should be implemented without delay. *The Swedish National Debt Office* supports the proposal in the light of the fact that action needs to be taken to continue suppressing the increase in household debt. *The Confederation of Swedish Enterprise* believes that the high and rising level of household debt in Sweden constitutes a risk to future economic development and therefore supports the proposal. *The National Board of Housing, Building and Planning* believes that it is important that action is taken to counteract the build-up of financial imbalances in the housing market and therefore supports the proposal. *The Swedish Consumer Agency* considers that the proposal is positive in terms of consumer protection.

Finansinspektionen has consulted the *European Central Bank (ECB)* in accordance with Article 2.1 of Council Decision 98/415/EC of 29 June 1998 on the consultation of the European Central Bank by national authorities. Given that house prices and the household debt have increased sharply in Sweden since the mid-1990s, the ECB welcomes the proposal for an amortisation requirement. *The Swedish Accounting Standards Board, the Swedish Tax Agency, the Swedish Competition Authority, the Swedish Inspectorate of Auditors, Statistics Sweden, the Swedish Better Regulation Council, the National Board of Trade* and *Svensk Hypotekspension* have no objections to the proposal.

A number of consultative bodies have objections to parts of the proposal, but they are neither rejecting nor supporting the proposal. *The Administrative Court of Appeal in Stockholm* and *The Administrative Court of Appeal in Jönköping* believe that the regulations should be made clearer in certain respects. *Bluestep Bank AB (Bluestep Bank)* has a positive view of increased amortisation rates for households with high levels of debt, but believes that some exceptions should be introduced.

Several consultative bodies share the view that rising levels of household debt may entail a macroeconomic risk, among them *the Department of Economics at Lund University, the Swedish Bankers' Association, Stockholm Chamber of*

Commerce, the Association of Swedish Finance Houses, the Swedish Federation of Business Owners, the Swedish Trade Union Confederation (LO), *the Swedish Confederation of Professional Employees (TCO)* and *the Swedish Homeowners' Association*. But they point out that the rising level of debt is caused by structural factors including tax regulations that favour home ownership, low interest rates and the lack of housing in areas where there is a high demand for homes. These bodies argue that the problem cannot be solved without taking action that is targeted at the underlying causes and therefore rejects the proposal.

The Swedish Savings Banks Association, the HSB National Federation, the Swedish Federation of Wood and Furniture Industry (TMF) and *the Swedish Investment Fund Association* have similar objections but do not explicitly reject the proposal. In addition to these, several consultative bodies reject the proposal, including *the Swedish Bar Association, the Swedish Association of Estate Agents,* the special interest group *Bostadsrätterna, Board of Swedish Industry and Commerce for Better Regulation* and *SPF Seniorerna.* They justify their rejection on the grounds that the proposal would have far too detrimental an impact on the economy as a whole. Groups that are highlighted as being particularly affected are young first-time buyers, workers who are members of LO and the elderly. Several consultative bodies also mention a risk that matching in the labour market may be impaired because the stricter amortisation requirement makes it harder for those who want to move to larger cities in order to find work. Another risk that is mentioned is that this measure may lead to growth in the consumer credit market.

Other consultative bodies, among them *the National Institute of Economic Research, the Swedish Property Federation* and *the Swedish Construction Federation,* reject the proposal on the basis that there is no wider analysis of the impact of the proposal and no comparison with alternative measures. *The Swedish National Audit Office* has similar points of view but does not reject the proposal. Some also argue that the analysis of the macroeconomic risks of household debt does not have sufficient support. *Professor Emeritus Peter Englund* and *Professor Lars E.O. Svensson* (*Englund and Svensson*) have submitted a private opinion. Both professors question the argument that households with high loan-to-income ratios would reduce their consumption in a recession and thus intensify the downturn. They also suggest that there is a lack of empirical support for Finansinspektionen's view that consumption should be more income sensitive among highly indebted households. *Professor John Hassler* (*Hassler*) has also submitted a private opinion.[1] He shares Finansinspektionen's assessment that households with high loan-to-income ratios may be a macroeconomic vulnerability in certain scenarios. However, he

[1] Both Professor Emeritus Peter Englund and Professor Lars E.O. Svensson and Professor John Hassler have submitted opinions to the consultation in their capacity as private individuals, after the proposal was referred to the Department of Economics at Uppsala University, the corresponding department at Stockholm School of Economics and the Institute for International Economic Studies at Stockholm University.

does not believe that Finansinspektionen has analysed the risks associated with such scenarios in a convincing manner.

Finansinspektionen's reasoning: Finansinspektionen's assessment is that the macroeconomic risks associated with household debt demand that Finansinspektionen take further action and that a stricter amortisation requirement is currently the most appropriate option that Finansinspektionen has at its disposal. Several consultative bodies share this assessment. However, a number of consultative bodies question Finansinspektionen's assessment of the risks associated with household debt.

Englund and Svensson question the notion that households with high loan-to-income ratios would reduce their consumption in a recession. The Riksbank would probably reduce the policy rate in a recession, which would mean that the cash flow of households with high loan-to-income ratios would improve more than that of households with low levels of debt. They would therefore be able to increase their consumption more. Finansinspektionen shares the view that monetary policy would normally have a greater impact on this group, but makes the assessment that this would not necessarily be the case during a financial crisis. Bunn and Rostom's study[2] indicates, for example, that British households with high loan-to-income ratios cut back on their consumption more than those with low levels of debt during the financial crisis of 2008. In addition, the reduction in consumption occurred during a period of low and falling interest rates, which contradicts Englund and Svensson's argument that households with high loan-to-income ratios results in monetary policy having a greater impact and lessen the macroeconomic risks. Bunn and Rostom's explanation for this result is that during the crisis, households with high levels of debt became more concerned about their ability to repay their debts in future and their borrowing potential was impaired.

Finansinspektionen also assesses there to be a risk that monetary policy does not achieve its full impact in a recession if this coincides with a period of financial uncertainty. It is then conceivable that mortgage firms' creditors would require a higher risk premium in order to finance their lending than during the current economic boom. This could lead to the bank's mortgage rates rising, even in scenarios where the Riksbank's policy rate falls. If a similar development were to take place in Sweden, there is a risk that households with high levels of debt in relation to their income cut back on their consumption and intensify the recession. *Hassler* shares the assessment that the interest rate paid by mortgagors can be altered by factors outside of the Riksbank control, but argues that Finansinspektionen has not analysed the size and frequency of such changes sufficiently. Finansinspektionen has conducted studies which show that an increase in mortgage rates by one percentage point

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[2] See Bunn, P. and Rostom, M., "Household debt and spending", *Bank of England Quarterly Bulletin*, 2014, Q3.

can lead to consumption decreasing by 0.2–0.8 per cent.[3] It is probable that households with high levels of debt in relation to their income would account for a substantial proportion of the reduction in consumption. Finansinspektionen also believes that there is no generally accepted economic explanation for changes in the difference between the banks' mortgage rates and the policy rate. Consequently, it may be difficult to substantiate and justify a frequency and size for such changes that would be representative of Swedish conditions.

Several consultative bodies share Finansinspektionen's assessment of the risks associated with household debt, but believe that measures other than the proposed stricter amortisation requirement would be more appropriate. Finansinspektionen agrees that further action is required in order to solve the underlying problems in the housing market that have contributed to the rising levels of household debt. The majority of the measures discussed by the consultative bodies are, however, outside of Finansinspektionen's mandate. Finansinspektionen's remit includes counteracting financial imbalances, which provides justification for this measure.

Several consultative bodies, including *LO*, *TCO, SPF Seniorerna, TMF, Stockholm Chamber of Commerce, the Swedish Homeowners' Association* and *the Swedish Bar Association*, believe that this measure will have far too detrimental an impact on certain demographic groups, e.g. the elderly and young first-time buyers, and those who want to move to a larger city to look for work. Finansinspektionen's analyses indicate that the borrowing opportunities for households with lower incomes are generally not affected by the stricter amortisation requirement. In their case, the banks' credit assessments contain requirements that mean these households are not permitted to borrow as much as 4.5 times their income. For this reason, it is not primarily young first-time buyers, pensioners and others with low incomes that will be covered by the stricter amortisation requirement. Instead, it is primarily households with good incomes that are affected. Some consultative bodies point out that older households who want to move from a large to a smaller home may be affected by the stricter amortisation requirement. However, Finansinspektionen's assessment is that the difference between the price of the new home and the realisable value of the old home should normally mean that older households do not need to take out such large loans in relation to their income. Finansinspektionen's analyses also indicate that households in the over-65-year-old age group are covered to a lesser extent than the average.

The National Institute of Economic Research and *the Swedish National Audit Office* call for a comparison with both other measures that are within the scope

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[3] See also Finansinspektionen, "Households' interest rate adjustment periods – an economic vulnerability?", FI Analysis No. 9, 2017, http://www.fi.se/en/published/reports/fi-analysis/2017/fi-analysis-9-households-interest-rate-adjustment-periods--an-economic-vulnerability/.

of Finansinspektionen's current powers and with measures that require new powers within the scope of the work to provide Finansinspektionen with additional macroprudential tools. With regard to measures that fall within its existing powers, Finansinspektionen refers to the decision memorandum for the current amortisation requirement.[4] This states e.g. that measures to increase the banks' capital requirements do not sufficiently reduce the macroeconomic risks associated with households with high levels of debt. The National Institute of Economic Research also calls for a wider impact analysis in which the costs and benefits of the proposed measure are weighed up against each other. A similar assessment is made by *the Swedish Construction Federation*. In the impact assessment, Finansinspektionen has described the effects of the stricter amortisation requirement on household debt. It also elucidates a range of other impacts such as lock-in effects, redistributive effects and the costs to banks. Both the proposed measure and other alternative measures, which require new powers, have also been analysed in section 1.3 of this memorandum and in other publications.[5]

The Swedish National Audit Office points out that the lack of a quantitative target for the measure makes it difficult to evaluate how precise the measure is. In the memorandum, Finansinspektionen makes the assessment that households with high loan-to-income ratios constitute an elevated macroeconomic risk and that households with a loan-to-income ratio that exceeds 4.5 shall be covered by the requirement (see sections 1.5 and 2.4). Accordingly, a reasonable starting point for an evaluation of the measure may be developments in terms of new borrowing among households that have loans in excess of the threshold. However, Finansinspektionen believes that there are no grounds to provide a more specific quantitative target for the measure.

In summary, Finansinspektionen's assessment is that the macroeconomic risks associated with household debt provide justification for Finansinspektionen to take further action and that a stricter amortisation requirement is currently the most appropriate option that Finansinspektionen has at its disposal. The stricter requirement is deemed to have substantial positive effects on macroeconomic stability, at the same time as the economic costs of the regulations are limited compared with other regulatory approaches. Nevertheless, Finansinspektionen shares the opinion of the consultation bodies that an amortisation requirement, as with many other regulations, is associated with some negative economic impact. However, Finansinspektionen makes the assessment that the benefit of the regulations is greater than their negative impact. Finansinspektionen provides more detail about the reasons why an amortisation requirement is an appropriate means by which to manage the risks associated with household

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[4] FI Ref. 14-16628-12, pp. 11–12.

[5] E.g. Finansinspektionen, "Macroeconomic effects of debt-to-income limits", FI Analysis No. 5, 2016, http://www.fi.se/en/published/reports/fi-analysis/2016/fi-analysis-5-macroeconomic-effects-of-dept-to-income-limits/ and "Consequences of a stricter amortisation requirement", FI Analysis No. 11, 2017, http://www.fi.se/en/published/reports/fi-analysis/2017/fi-analysis-11-consequences-of-a-stricter-amortisation-requirement/.

debt in sections 1.1–1.3. The authority also provides its view on the economic effects in the impact assessment in section 3, below.

1.1 Risks associated with household debt

Finansinspektionen's position: Household debt, expressed as loan-to-income ratio, is high in Sweden in an international and historical comparison. Households with high levels of debt may constitute a risk to both financial stability and to the Swedish economy as a whole.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *Englund and Svensson* believe that Finansinspektionen is not interpreting several of the empirical studies cited in the consultation memorandum correctly. More specifically, they argue that these studies show that households with high levels of debt cut back on their consumption during the financial crisis of 2008–2009 as a result of overconsumption prior to the crisis and because they were affected by restrictions on credit and liquidity during the crisis.

Finansinspektionen's reasoning: Finansinspektionen stands by the assessment that Swedish household debt constitutes a macroeconomic vulnerability. If households are not able to repay their debts, companies that lend to households, primarily banks and credit market companies (mortgage firms), may incur losses. In turn, this can threaten financial stability. Finansinspektionen's current assessment is that the risks to financial stability associated with household debt are relatively small. This is because mortgagors generally have good potential to continue paying the interest and amortisation on their loans, even if interest rates rise or their incomes fall. On average, households have comfortable margins with which to cope with a fall in house prices. Swedish mortgage firms are also deemed to have satisfactory capital buffers should credit losses still arise.

The risks currently associated with household debt thus primarily relate to the fact that highly indebted households may end up reducing their consumption if interest rates rise, if household income falls or if both of these happen at the same time, and that this, in turn, may intensify a future economic downturn. A study from the United Kingdom indicates that it is primarily highly indebted households that reduce their consumption in a crisis. British households with mortgages that were more than double their gross income reduced their consumption by 17 per cent between 2007 and 2012, while households with lower debts reduced their consumption by 11 per cent over the same period. High levels of household debt are deemed to have intensified the drop in consumption by two percentage points in the United Kingdom over this period. Large and rising levels of debt is also deemed to have exacerbated the economic downturn during the financial crisis in countries such as the United

States and Denmark.[6] Despite the risks to financial stability being assessed as low at present, the trend of high and rising loan-to-income ratios among many borrowers thus means that there is an elevated macroeconomic risk.

Finansinspektionen does not believe that the studies cited have been misinterpreted. For example, Bunn and Rostom's study shows that households with high levels of debt in relation to their income cut back on their consumption more during the financial crisis in 2008. Moreover, the authors issue an explicit policy recommendation that increases in the proportion of households with high levels of debt should be limited through regulation.[7] Englund and Svensson also argue that there are no indications in Sweden that mortgages would be used to finance overconsumption, although they concede that there is limited access to individual data concerning household consumption and saving. Finansinspektionen shares the assessment that there is insufficient good data concerning household assets, debt and consumption to make an assessment of whether and to what extent highly indebted households use mortgages to finance overconsumption.[8] However, Finansinspektionen deems there to be risks associated with waiting for improved access to such data.

The amortisation requirement introduced by Finansinspektionen in 2016 has increased household resilience to macroeconomic shocks. Finansinspektionen makes the assessment that the requirement has disrupted the upward trend in loan-to-income ratios among new mortgagors, but that there are still many new mortgagors who have a high loan-to-income ratio. This means that aggregate household debt is continuing to increase significantly faster than income. House prices in Sweden have risen more than 30 per cent in the past three years and they are at historically high levels in relation to household income.

Several international organisations have recently criticised the risks associated with the high levels of household debt in Sweden and have recommended that Finansinspektionen take action. In September 2016, the European Systemic Risk Board (ESRB) issued a warning to Sweden about the price trend in the housing market and high levels of household debt. The ESRB recommended that further action, in addition to the mortgage cap and the current amortisation

[6] E.g. Baker, S.R., "Debt and the Consumption Response to Household Income Shocks", working document, 2014, (issued by Journal of Political Economy); Andersen, A.L., Duus, C. and Jensen, T.L., "Household Debt and Spending During the Financial Crisis: Evidence from Danish Microdata", *European Economic Review* 89, pp. 96–115, 2016.

[7] "The analysis presented […] illustrates how high levels of household indebtedness have led to a material adverse impact on aggregate household spending and overall demand over the recent past. A clear policy implication of these results is that limiting any further increase in the number of households with high levels of debt will limit the extent to which there is potential for large adverse impacts on aggregate demand following future negative shocks." (Bunn & Rostom, 2014)

[8] The Riksbank also calls for access to anonymised data at the individual level in order to analyse risk in the financial system.

requirement, be taken in order to dampen the growth in household debt.[9] In October 2016, the International Monetary Fund (IMF) recommended that Sweden introduce a loan-to-income ratio cap. This recommendation was at the top of the list of recommended measures to combat macroeconomic imbalances.[10] In February 2017, the Organisation for Economic Co-operation and Development (OECD) issued the same recommendation in its country report on Sweden. In February 2017, the European Commission (the Commission) pointed out that Sweden is facing significant imbalances in the form of high levels of debt, overvalued homes and house prices that continue to rise. The Commission believes that despite action having been taken in the field of macroprudential policy, this remains insufficient in order to address the growing imbalances.[11]

[9] See Warning ESRB/2016/11 on medium-term vulnerabilities in the residential real estate sector of Sweden.
[10] IMF, "2016 Article IV Consultation with Sweden – Concluding Statement of the IMF Mission", 28 September 2016.
[11] See European Commission, Country Report Sweden 2017, SWD(2017) 92 final, Brussels, 22 February 2017.

1.2 Previous measures introduced to manage the risks with rising household debt

Since 2010, Finansinspektionen has among other things introduced a mortgage cap, increased capital requirements for mortgages and, at the behest of the Government, proposed individually tailored amortisation plans.[12] In addition, Finansinspektionen has adopted, following an amendment to the Banking and Financing Business Act (2004:297), Finansinspektionen's regulations (FFFS 2016:16) regarding amortisation of loans collateralised by residential property (the amortisation regulations), which entered into force on 1 June 2016. Finansinspektionen makes the assessment that these measures are not sufficiently reducing the macroeconomic risks associated with household debt.

A previous account of the mortgage cap, the increased capital requirements on mortgages and the proposal for individually tailored amortisation plans can be found in the decision memorandum concerning the current amortisation regulations.[13] The mortgage cap and the current amortisation regulations are described in brief below.

1.2.1 The mortgage cap

Finansinspektionen decided in 2010 to introduce the mortgage cap (Finansinspektionen's general guidelines [FFFS 2010:2] regarding limitations to the size of loans collateralised by homes). The mortgage cap means that a firm that issues a loan collateralised by a home should limit this credit so that the loan-to-value ratio for the home, i.e. the size of the loan in relation to the value of the home, does not exceed 85 per cent of its market value. The mortgage cap is justified on consumer protection grounds and focus on the economic risks for individual households. Although the mortgage cap means that households should have a certain buffer against falling house prices, it does not entail a long-term reduction in household debt. Consequently, the mortgage cap provides only limited protection against significant changes to household consumption in the event of economic shocks. Accordingly, Finansinspektionen's assessment is that the measure has not sufficiently reduced the risks to macroeconomic stability posed by highly indebted households.

1.2.2 Current amortisation regulations

Finansinspektionen's regulations concerning the amortisation of new mortgages entered into force on 1 June 2016. This measure means that borrowers with a loan-to-value ratio of 50–70 per cent must amortise at least one per cent of the mortgage each year. Borrowers with a loan-to-value ratio greater than 70 per cent must amortise at least two per cent of the mortgage each year. A description of the background to Finansinspektionen's decision to

[12] See, for example, FI Ref. 12-11920 and 14-6258.
[13] See Decision Memorandum in case FI Ref. 14-16628.

introduce amortisation regulations in June 2016 can be found in Finansinspektionen's decision memorandum.[14]

The amortisation requirement has resulted in a sharp increase in both the proportion of households (with new mortgages) that amortise and the size of amortisation payments.[15] This is especially the case for new borrowers with a loan-to-value ratio of between 50 and 70 per cent. The share that amortise in this group has increased from 51 to 84 per cent. Amortisation payments also increased for new borrowers with loan-to-value ratios of more than 70 per cent. Of these, 97 per cent amortised in 2016.[16] Also, the amortisation payments increased for new borrowers with a loan-to-value ratio of over 70 per cent. The increase amounted to about a half per cent of the debt annually. For new borrowers with a loan-to-value ratio of 50–70 per cent, the increase was somewhat smaller at an average of 0.25 per cent of the debt.

The average loan-to-income ratio reported in the mortgage survey decreased from 406 per cent in 2015, to 402 per cent in 2016.[17] This implies that the trend of constantly rising loan-to-income ratios for households with new mortgages has been broken. This trend had been in place since measurements began in 2011. Finansinspektionen's analysis of the effects of the amortisation requirement show that households have purchased cheaper homes, borrowed less and paid larger deposits.[18] This is estimated to have resulted in the loan-to-income ratio decreasing by nine per cent compared to a scenario in which the requirement had not been introduced.

Finansinspektionen's analyses also show that there is a relatively weak connection between households' loan-to-income ratios and loan-to-value ratios. This means that the current amortisation requirement, which is based on loan-to-value ratio, only partly influences borrowers with a high loan-to-income ratio. If house prices continue to rise rapidly, the proportion of households that have high loan-to-income ratios may increase and these households may become more vulnerable to macroeconomic shocks. The assessment is therefore that the current amortisation requirement is not sufficiently dampening the increase in household loan-to-income ratios.

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[14] See Decision Memorandum in case FI Ref. 14-16628.

[15] See Finansinspektionen, "The Swedish Mortgage Market 2017", 2017, http://www.fi.se/en/published/reports/swedish-mortgage-reports/the-swedish-mortgage-market-2017/.

[16] Please note that there are some potential exemptions from the amortisation requirement for borrowers who have a loan-to-value ratio of over 50 per cent.

[17] See Finansinspektionen, "The Swedish Mortgage Market 2017", 2017. The loan-to-income ratio is defined there as total borrowing in conjunction with a home purchase in relation to disposable income.

[18] Finansinspektionen, "Amortisation requirement reduced household debt", FI Analysis No. 10, 2017, http://www.fi.se/en/published/reports/fi-analysis/2017/fi-analysis-10-amortisation-requirement-reduced-household-debt/.

1.3 Alternative measures to manage the risks associated with high levels of household debt

Finansinspektionen deems high levels of household debt to primarily constitute a risk to macroeconomic developments; high levels of household debt may intensify an economic downturn through a sharp reduction in consumption. There are several measures, both within and outside of Finansinspektionen's area of responsibility, that may contribute to counteracting this risk. The measure put forth in this decision memorandum is a stricter amortisation requirement for mortgages that exceed 4.5 times the borrowers' gross income. For new mortgages that exceed this limit, the borrowers must amortise at least one percentage point more than stipulated by the current amortisation requirement. Finansinspektionen has analysed some alternative measures within the field of macroprudential policy that can potentially reduce the risks associated with high household loan-to-income ratios. These measures are illustrated and compared to the stricter amortisation requirement in this section.

1.3.1 A limit for total debt in relation to income

One measure that in a direct way would reduce the risks associated with high loan-to-income ratios is a loan-to-income limit, i.e. a limit on new borrowers' total debt (including debt other than mortgages) as a proportion of their income. Finansinspektionen's analyses indicate that a loan-to-income limit of this type could result in relatively strong dampening of the growth in household debt and loan-to-income ratios. This dampening effect would be stronger than the effect of a stricter amortisation requirement at a comparable level.[19]

In itself, a loan-to-income limit based on total debt may be a relatively hard regulation. The reason is that the measure does not allow mortgage firms or other lenders to issue loans in excess of the threshold, even if the mortgagor were to have financial circumstances (e.g. large savings) that could allow this. Consequently, in those countries that have introduced this type of regulation, mortgage firms have the possibility to exempt a proportion (e.g. 15 per cent) of mortgagors. One disadvantage is that this exemption itself may have an impact on competition between different mortgage firms. Some mortgage firms in Sweden, because of their geographical focus, have many customers with high loan-to-income ratios, while others have few such customers. A loan-to-income limit with exemptions may therefore mean that certain customers would be forced to apply to mortgage firms that have not filled their quota of exemptions. This may give mortgage firms with few customers who exceed the loan-to-income limit a competitive advantage. A stricter amortisation requirement does not have this impact on competition between mortgage firms.

One advantage of a loan-to-income limit for total household loans is that it sets an upper limit for how vulnerable to shocks an individual household can become. In the major metropolitan areas where house prices are high, however, there is a risk that a large proportion of new lending to households becomes

[19] See Finansinspektionen, "Consequences of a stricter amortisation requirement", FI Analysis No. 11, 2017.

concentrated over time at precisely the upper loan-to-income limit. Because a loan-to-income limit does not involve any requirement to amortise (aside from the current amortisation requirement), there is a risk that the loan-to-income ratios of households with low loan-to-value ratios will only decrease at a slow rate, especially in macroeconomic scenarios involving persistently low income growth. A stricter amortisation requirement leads to the loan-to-income ratios falling faster over time and thus contributes to improved resilience, especially in the event of low income growth.

At the same loan-to-income threshold, a loan-to-income limit is a harder regulation than a stricter amortisation requirement. The reason is that under a stricter amortisation requirement it is still possible to borrow more than the threshold .[20] However, those households that borrow more than this level must amortise at a faster rate. The requirement for a higher rate of amortisation may mean that mortgage firms' usual credit assessments do not allow them to grant loans of similar size. However, this effect is deemed to be smaller than it would be with a loan-to-income limit in place.

1.3.2 A limit on total mortgages in relation to income

A similar measure is a limit on new borrowers' mortgages in relation to their income. A loan-to-income limit of this type entails a restriction on how much households are able to borrow using their home as collateral. Accordingly, the impact of this measure is dependent on households' potential to take out unsecured loans in order to finance home purchases above the limit. A limit of this type may result in growth in the market for unsecured loans. According to Finansinspektionen's analyses, this could result in a sharp increase in unsecured lending in conjunction with home purchases. This measure suppresses the growth in household debt and loan-to-income ratios, but the overall effect is deemed to be less than that of a loan-to-income limit based on total debt. Household debt would, however, be suppressed more by this type of limit than by a stricter amortisation requirement. This is because the interest rate on unsecured loans tends to be higher than that of mortgages.

A larger market for unsecured loans would be an undesirable side effect of this measure. Companies whose primary business is unsecured lending may be more vulnerable to financial shocks than mortgage firms because their lending is unsecured. They may therefore be more likely than mortgage firms to suffer from funding problems or runs on deposits during a crisis. A larger market for unsecured loans may thus contribute to making lending to households more procyclical and increase the risks to stability. In addition, lower requirements are placed on companies whose primary business is unsecured lending than on mortgage firms. Consequently, Finansinspektionen deems that the risk of a larger market for unsecured loans constitutes a disadvantage of a loan-to-income limit based on mortgages. A stricter amortisation requirement may also

[20] A loan-to-income limit with exemptions is a more lenient regulation for borrowers who are granted exemptions by the credit institution, but is a harder regulation for borrowers who are not.

result in increased unsecured lending to the extent that borrowers take out unsecured loans for the purpose of keeping themselves under the threshold for a stricter amortisation requirement. Nevertheless, it is Finansinspektionen's assessment that the extent of this would be significantly smaller than if a loan-to-income limit based on mortgages were introduced.

As with a loan-to-income limit based on total debt, a limit based on total mortgages may mean that mortgages are concentrated at the threshold and are only suppressed slowly over time. Similarly to a loan-to-income limit based on total debt, this is also a harder regulation than a stricter amortisation requirement. However, a loan-to-income limit based on mortgages means that mortgagors are able to borrow more than the limit, although in other forms of borrowing that often entail higher interest rates and higher amortisation payments.

1.3.3 A cap on household debt service payments

A third option is a cap on the household debt service ratio, i.e. interest and amortisation payments as a proportion of disposable income. This measure is similar in several respects to a loan-to-income limit and therefore has very similar advantages and disadvantages.[21]

1.3.4 A stricter amortisation requirement is deemed to be the most appropriate measure

Finansinspektionen's overall assessment is that a stricter amortisation requirement best achieves the goal of limiting the risks resulting from the fact that many households take out loans that entail high loan-to-income ratios. Finansinspektionen also makes the assessment that this is a regulation associated with some advantages when compared to a loan-to-income limit. Under a stricter amortisation requirement, it will still be possible to borrow more than the stated threshold, provided the borrower amortise more. The requirement also dampen loan-to-income ratios over time. The risk of an increase in the size of the market for unsecured loans is also lower and competition between mortgage firms is judged not to be affected to any larger extent. Nonetheless, Finansinspektionen does not rule out the potential need to consider a loan-to-income limit should loan-to-income ratios continue to rise.

1.4 Measures in other countries

Denmark, Ireland, Norway and the United Kingdom are some of the countries that have introduced regulations concerning household loan-to-income ratios in order to prevent debt increasing too rapidly in future. The most common form is a loan-to-income limit that restricts either mortgages or total debt as a proportion of income.

Denmark introduced mortgage guidelines in 2016 and these include a type of loan-to-income limit. If the loan-to-income ratio is between four and five times gross income, the borrower must still have a positive net wealth[22] if property prices fall by ten per cent. If the loan-to-income ratio is in excess of five times gross income, the borrower must have a positive net wealth if property prices fall by 25 per cent. In 2015, Ireland introduced a requirement which means that a maximum of 20 per cent of the lending volume may consist of mortgages that are in excess of 3.5 times household gross income. In 2015, Norway introduced a loan-to-income limit which means that a borrower's total debt may not exceed five times their gross income. There are exemptions for eight to ten per cent of mortgage firms' new lending. In 2015, the United Kingdom introduced a recommendation which implies that a maximum of 15 per cent of a mortgage firm's new borrowers may take out mortgages exceeding 4.5 times household gross income.

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[21] It is customary for a regulation pertaining to the household debt service ratio to be based on a fixed standardised interest rate. In such cases, this measure is comparable to a loan-to-income limit.

[22] Net wealth is the value of a borrower's assets minus their debts.

1.5 The objective and effects of a stricter amortisation requirement

1.5.1 The objective of a stricter amortisation requirement

The aim of the current amortisation regulations is to counteract risks to macroeconomic and financial stability associated with household debt. The requirement was introduced with the support of a new provision in Chapter 6, Section 3 b of the Banking and Financing Business Act, which states that mortgage firms shall apply repayment terms that are consistent with a sound amortisation culture and prevent excessively high levels of household debt. Finansinspektionen's intention with the stricter amortisation requirement is to further strengthen households' resilience to macroeconomic shocks. The stricter amortisation requirement is therefore intended to increase households' ability to deal with macroeconomic shocks, without reducing their consumption sharply. The stricter amortisation requirement may also contribute to enhancing financial stability by increasing confidence in mortgage firms. As with the current amortisation requirement, this measure also aims to protect consumers.[23]

As mentioned previously, a high proportion of new mortgagors in Sweden have mortgages that are large in relation to their income. Some studies indicate that households who take out mortgages that are large in relation to their income may be vulnerable to shocks and thus constitute a risk to macroeconomic stability (see section 1.1). Finansinspektionen's own analyses support the view that mortgagors with high loan-to-income ratios are more vulnerable to various types of shock. Table 1 shows the cash flow margin for new mortgagors according to Finansinspektionen's latest mortgage survey, distributed by loan-to-income ratio and loan-to-value ratio. The cash flow margin is defined as the monthly amount that remains of the borrower's disposable income after interest and amortisation payments and a standardised cost.[24]

[23] The government bill concerning the new provisions in the Banking and Financing Business Act stated that the proposal also aims to protect consumers (see Govt Bill 2015/16:89 p. 24).
[24] The standardised cost is based on an average household's monthly expenses.

Table 1: Cash flow margin (in SEK) in the event of an interest rate for new mortgagors of five per cent, distributed by loan-to-income ratio and loan-to-value ratio

	Loan-to-value ratio (per cent)		
Loan-to-income ratio (per cent)	**0–50**	**50–70**	**70–**
500–	10,816	9,174	6,488
450–500	12,846	11,493	9,914
400–450	13,976	13,631	10,484
350–400	15,614	16,244	12,356
0–350	19,129	19,538	15,495

Source: Finansinspektionen.

The table shows that households with high loan-to-income ratios have lower cash flow margins than households with low loan-to-income ratios, which means that they are more sensitive to shocks.[25] Households with high loan-to-income ratios are sensitive to increased interest rates because their monthly expenditures are affected more than those of households with lower loan-to-income ratios. They are also somewhat more sensitive to loss of income, for example if they become unemployed. There is a risk that these households cut back sharply on their consumption in the event of an increase in interest rates or loss of income, which may intensify an economic downturn. These households are only partly affected by the current amortisation requirement. Consequently, it is Finansinspektionen’s assessment that further measures should be targeted at these households, with the aim of strengthening their resilience and thus reducing the risks associated with their large debts.

1.5.2 The effects of a stricter amortisation requirement

The current amortisation requirement has led to households purchasing cheaper homes and borrowing less. Households are also amortising a larger share of their mortgages than they were before the requirement came into force. The requirement has altered the behaviour of households and mortgage firms. The higher housing expenses resulting from the amortisation requirement has made it less attractive for households to take on large loans, as doing so would reduce the scope for consumption or other savings. This reduces that demand for homes and mortgages, which in turn dampens house prices. This, in turn, also reduces the amount households need to borrow to buy a home. Also, the supply of mortgages may be reduced by an amortisation requirement since increasing housing expenses affects how much mortgage firms will allow a borrower to lend at a given income level.

[25] Refer to the analysis in Finansinspektionen, “Consequences of a stricter amortisation requirement”, FI Analysis No. 11, 2017.

Finansinspektionen deems that a stricter amortisation requirement has similar effects for new mortgagors with high loan-to-income ratios. Some households will probably choose to borrow less in order to get a loan-to-income ratio under the threshold. Other households will probably continue to borrow more than 4.5 times their income, but somewhat less than without the stricter requirement. This in order to limit the increase in monthly debt service payments. In addition, the stricter amortisation requirement may have an impact on the calculations mortgage firms use in their credit assessments.

A stricter amortisation requirement also means that household debt decrease more rapidly than would otherwise be the case. Lower debt means that households' interest payments will be lower than they would otherwise have been. Consequently, this mitigates the risk that certain households underestimate the impact on their finances of future interest rate rises or lower income due to, for example, retirement, and that they, consequently, do not generate sufficient margins in their finances. Larger margins also increase households' ability to deal with other shocks such as unemployment or major unexpected expenses. Households that do not reduce their debt to a level below the threshold have to amortise one percentage point more than under the current amortisation requirement. Accordingly, the loan-to-income ratios of mortgagors will become lower over time, compared to a scenario in which the amortisation requirement had not been made stricter.

Increased amortisation payments may also help to mitigate the risks associated with excessively optimistic expectations concerning house prices and interest rates. Households that consume a lot and save little in the expectation of continued house prices increases and low interest rates may react drastically if these expectations are not met. A stricter amortisation requirement reduces the debt of households with high loan-to-income ratios over time. Thus, any adjustments owing to reduced consumption may also be less dramatic.

All in all, the combination of higher amortisation payments and behavioural effects is expected to strengthen households' resilience, both immediately and over time. A stricter amortisation requirement thus limits the risk that a period of substantial debt accumulation will intensify an economic downturn.

At the same time, a stricter amortisation requirement leads to higher debt service payments, i.e. interest and amortisation payments. If it is not flexible, an amortisation requirement could therefore contribute to reducing households' resilience. For this reason it is important that the regulations continue to include the potential for mortgage firms to provide households with the opportunity to suspend their amortisation payments if they are affected by economic shocks. If this is not the case, the stricter amortisation requirement may mean that households' resilience to shocks is reduced.

1.6 Current and future amortisation regulations

Before the amortisation regulations came into force, there was no legal requirement in Sweden concerning the amortisation of mortgages.[26] Nor was there any such requirement in the legislation that preceded the Banking and Financing Business Act. Chapter 2, Section 13 of the Banking Business Act (1987:617) included a provision concerning credit assessment which stated that credit could be granted only if there was good reason to expect that the borrower would be able to honour their loan commitment (the security rule) and that satisfactory collateral was provided for the loan (the collateral rule). When the Banking Business Act was repealed and replaced by the Banking and Financing Business Act, the preparatory work stressed that the provisions concerning credit assessment should become more flexible in terms of the factors to be included in the credit assessment.[27] In the light of this, Chapter 8, Section 1 of the Banking and Financing Business Act now states that a loan shall only be granted if there is good reason to expect that the commitment will be honoured.

Finansinspektionen's general guidelines (FFFS 2014:11) regarding consumer credit state that a lender should perform a housing cost calculation as part of its assessment of a consumer's repayment capacity. However, both Chapter 8, Section 1 of the Banking and Financing Business Act and the general guidelines regulate mortgage firms' credit assessment and not how a loan is to be amortised.[28] Provisions concerning amortisation were first introduced in 2016 by the legal requirement in Chapter 6, Section 3 b of the Banking and Financing Business Act, which means that credit institutions which provide individuals with loans that are collateralised by a home shall apply repayment terms that are consistent with a sound amortisation culture and prevent excessively high levels of household debt. Finansinspektionen has subsequently issued, pursuant to Chapter 5, Section 2, point 5 of the Banking and Financing Business Ordinance (2004:329), the amortisation regulations that are currently in force. Before Finansinspektionen adopted these regulations, the authority obtained the Government's consent.

The current amortisation regulations only use the loan-to-value ratio as a basis for calculating whether there is an obligation to amortise and, if so, what size the annual amortisation payments shall be. The regulations only apply to new mortgages and provide the mortgage firm with the potential to grant exemptions to the amortisation requirement if there are specific grounds.

At the EU level, the Mortgage Credit Directive was adopted on 4 February 2014.[29] The directive regulates how mortgage firms and other actors in the

[26] Govt Bill 2015/16:89 p. 13.
[27] Govt Bill 2002/03:139 p. 323.
[28] Sections 12 and 12 a of the Consumer Credit Act also contain provisions concerning credit assessment, but these provisions do not contain any legal requirement for amortisation either.
[29] Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010.

mortgage market are to act in relation to the consumer in matters pertaining to mortgages, e.g. with regard to information. It contains no requirements for amortisation on mortgages, but it does not prevent domestic regulations being put in place in this area.[30] The directive has been implemented in Swedish law through legislation including the new Mortgage Business Act (2016:1024) and Finansinspektionen's regulations and general guidelines (FFFS 2016:29) regarding mortgage lending businesses. The provisions entered into force on 1 January 2017.

In conjunction with the implementation of the Mortgage Credit Directive in Swedish law, some amendments were made to the provisions of the Consumer Credit Act (2010:1846). These included the introduction of provisions concerning individually tailored amortisation plans (Section 13 d). These provisions do not entail any direct requirement for the amortisation of mortgages. Instead, mortgage firms have to discuss amortisation with the consumer and propose an individually tailored amortisation plan. Under Section 13 a of the Consumer Credit Act, this must take place when an offer of credit is provided.

The preparatory work states that the substance of the amendments concerning individually tailored amortisation plans is that mortgage firms must discuss with the consumer how various amortisation options affect their debt. Appropriate formats for this discussion include the mortgage firm showing the consumer how the debt can be reduced and how this affects, for example, their interest payments at various times in the future.[31]

The Mortgage Credit Directive also requires the mortgage firm to provide information to the consumer on an information sheet that must include information about amortisation. The information sheet is standardised within the EU, so its content cannot be altered through national provisions. There is also a specific provision in Chapter 6 of the Consumer Credit Act that concerns the general information that must be provided in conjunction with a mortgage.

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1.7 Legal conditions for issuing regulations regarding amortisation requirements

Finansinspektionen's position: If the Government so consents, Finansinspektionen may introduce amendments to the amortisation regulations with the support of its existing powers to issue regulations concerning the

[30] In the preparatory work, the Government agrees with the assessment that a requirement for individually tailored amortisation plans for mortgages should be introduced. The Mortgage Credit Directive does not constitute any obstacle to the introduction of such provisions either. However, the information provided in this respect must be presented alongside the information the consumer has to be provided within the European Standardised Information Sheet (see Govt Bill 2015/16:197 p. 113).
[31] Govt Bill 2015/16:197 p. 267.

amortisation of mortgages (Chapter 5, Section 2, point 5 of the Banking and Financing Business Ordinance).

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Administrative Court of Appeal in Jönköping* believes it would be desirable to await the outcome of the proposal "Ytterligare verktyg för makrotillsyn" (Additional macroprudential tools), which was referred to the Council on Legislation for consideration on 22 June 2017. A couple of other consultative bodies, among them *the Board of Swedish Industry and Commerce for Better Regulation*, argue that the proposal has a direct impact on the mutual financial relationship between individuals and that it should therefore be adopted through an act of law, in accordance with Chapter 8, Section 2, first paragraph of the Instrument of Government. *The Swedish Bar Association* believes that "Finansinspektionen's impact analyses illustrate that it is inappropriate and possibly illegitimate" for a decision with such consequences for redistribution, regional and demographic policies to be made by an administrative authority.

Finansinspektionen's reasoning: Finansinspektionen has for some time had the task of ensuring that the financial system is stable and characterised by a high level of confidence. The authority has also been given an extended mandate to take action in order to counteract financial imbalances for the purpose of stabilising the credit market.[32] Finansinspektionen has found that, taking all factors into account, further action need to be taken in order to dampen the macroeconomic risks associated with high levels of household debt.

The current amortisation regulations were introduced with the support of a new provision in Chapter 6, Section 3 b of the Banking and Financing Business Act and an authorisation under Chapter 5, Section 2, point 5 of the Banking and Financing Business Ordinance. According to the preparatory work, the purpose of the provision in the Banking and Financing Business Act is to counteract risks to macroeconomic and financial stability that are associated with household debt. The preparatory work states that the amortisation requirement may also be viewed as a means to protect consumers.[33] In addition, the preparatory work states explicitly that the loan-to-income ratio may be one further parameter in new provisions concerning amortisation requirements.[34] Consequently, Finansinspektionen deems that its existing powers allow it to supplement the current regulations with a requirement to amortise a mortgage if the borrower has a loan-to-income ratio in excess of a certain level. However, to allow Finansinspektionen to make a decision in line with the proposal, the Government is required to provide its consent, in accordance with

[32] Finansinspektionen's Instructions Ordinance (2009:93).
[33] Govt Bill 2015/16:89 p. 24.
[34] Govt Bill 2015/16:89 pp. 10, 13 and 24.

Chapter 5, Section 2 a of the Banking and Financing Business Ordinance. This consent was provided by the Government on 30 November 2017.

On 1 September, the Council on Legislation issued its opinion on the proposal "Ytterligare verktyg för makrotillsyn", which the *Administrative Court of Appeal in Jönköping* mentioned in its response to the consultation. The proposal referred to the Council on Legislation for consideration contained a proposed requirement that credit institutions operate in a manner that does not contribute to financial imbalances in the credit market. The proposal referred to the Council on Legislation for consideration also contained a proposal for a regulation concerning amortisation payments in the Mortgage Business Act (2016:1024) similar to that which was introduced into the Banking and Financing Business Act in 2016. Finansinspektionen's assessment is that the Council on Legislation's opinion does not have an impact on the assessment of the legal basis of the introduction of a stricter amortisation requirement. It can be added that the Government has subsequently submitted a government bill to the Riksdag in the legislative matter.[35]

1.8 Preparation of the matter

As part of the work to draw up the new regulations, Finansinspektionen has – in addition to submitting the proposal for consultation – engaged in a dialogue with representatives of the Swedish Bankers' Association, the Swedish Savings Banks Association and the Swedish Consumer Agency. Given the relatively short period that has passed since the current amortisation regulations entered into force, no formal external reference group has been appointed.

On 13 November 2017, Finansinspektionen's Board of Directors decided to send a proposal for an amendment to the amortisation regulations to the Government. On 30 November 2017, the Government decided to provide its consent to Finansinspektionen adopting the regulations as proposed (Ministry of Finance ref. Fi2017/04301/B and Fi2017/04524/B).

[35] Govt Bill 2017/18:22.

2 Reasoning for the formulation of the stricter amortisation requirement

2.1 Main features of the regulations

The stricter amortisation requirement shall encompass new mortgages where the borrowers' combined mortgages are greater than 4.5 times their gross income. Given that Finansinspektionen deems the macroeconomic risks to be greater the higher the loan-to-income ratio is, the amortisation requirement shall be one percentage point higher than the current amortisation requirement for mortgagors with a loan-to-income ratio over the threshold. The amortisation payments shall be determined as a proportion (at least one, two or three per cent) of the total borrowing on the home the loan applies to. This is described in more detail in section 2.1.

The borrowers' combined mortgages – including loans secured on homes other than that to which the loan in question applies – shall form the basis on which the loan-to-income ratio is calculated. This means that a new debt definition, *LTI-based loan amount*, is being introduced in conjunction with the stricter amortisation requirement (more information in section 2.3). Consequently, the combined mortgages must be considered in relation to the income in order to calculate the loan-to-income ratio. The stricter amortisation requirement shall also be based on *gross income*. The calculation of gross income shall be based on the established earned income, but it shall also be possible for other income the mortgage firm deems to be confirmed and permanent to be included. Further information about this position can be found in section 2.3. The choice of loan-to-income threshold is discussed in section 2.4.

As with the current amortisation requirement, the amortisation amount shall be based on the *largest loan amount*. This position is developed on in section 2.5. It shall be possible to apply the alternative rule for mortgagors who have loans that have been taken out prior to 1 March 2018. The alternative rule provides an opportunity for mortgage firms to allow supplementary loans to be amortised at a rate of at least ten per cent per year (further information in section 2.6).

The stricter amortisation requirement, as is the case for the current amortisation requirement, shall only apply to new mortgages. 'New mortgages' denotes, as a basic premise, loan agreements that have been entered into subsequent to the amended regulations having entered into force. Further information about this position can be found in section 2.7. The possibility to change mortgage firm without this resulting in a change to amortisation terms shall also remain in place (further information in section 2.8). The same firms that are covered by the current amortisation requirement shall be covered by the stricter requirement (further information in section 2.9).

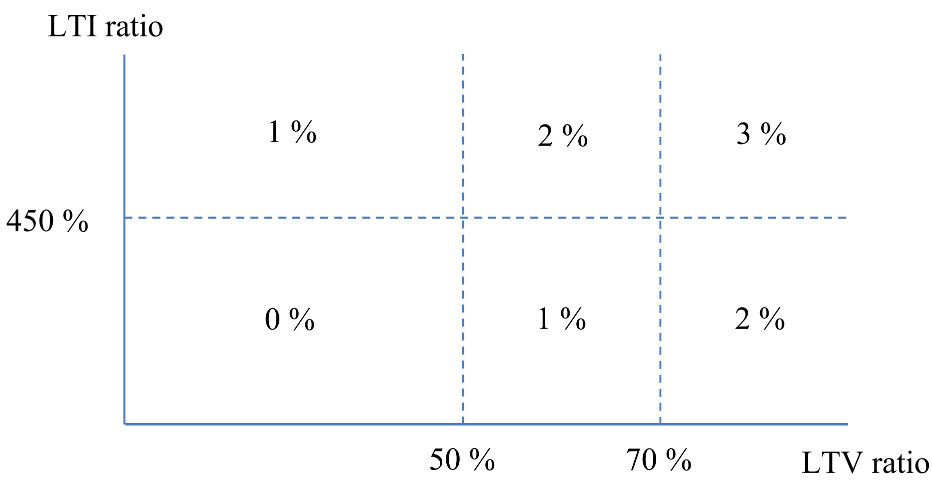
A stricter amortisation requirement may increase households' total debt service payments, i.e. their total expenditure on interest and amortisation payments. An amortisation requirement that does not have exemptions may decrease households' resilience to shocks in the short term and thus increase the risks for both households and the economy as a whole. It must therefore be possible to grant exemptions. Under the current amortisation requirement, mortgage firms are permitted to allow mortgagors not to amortise for a limited period on special grounds. This exemption shall also apply to the stricter amortisation requirement. This pertains to situations in which the financial circumstances have deteriorated significantly subsequent to the mortgage being issued. This position is developed on in section 2.10.

Unlike the current amortisation requirement, which encompasses both natural and legal persons, the stricter amortisation requirement will only apply to natural persons. This is developed on in section 2.11.

2.2 The amortisation requirement is based on both loan-to-value ratio and loan-to-value ratio

Finansinspektionen's position: The stricter amortisation requirement shall encompass new mortgages if the borrowers in question have a loan-to-income ratio in excess of 4.5 times their gross income. The requirement shall apply in addition to the current amortisation requirement. This means that the amortisation payments will increase by an amount that is equivalent to at least one percentage point more in relation to the amount that applies under the current amortisation regulations. Figure 1 illustrates the amortisation rate for different levels of loan-to-income ratio and loan-to-value ratio.

Figure 1: Amortisation rate at a given loan-to-income (LTI) ratio and loan-to-value (LTV) ratio



Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* believe that the proposal creates extensive complexity for both mortgage firms and mortgagors. They are of the opinion that the proposal should be revised and simplified, if it is to be implemented. *The Swedish Homeowners' Association* believes that Finansinspektionen should instead set requirements for the amortisation rate for each individual firm's aggregate mortgage portfolio.

Finansinspektionen's reasoning: The stricter amortisation requirement means that, for mortgages that are issued to mortgagors with a loan-to-income ratio over the threshold (450 per cent), the total amortisation requirement that applies is at least one per cent if the loan-to-value ratio is lower than 50 per cent, at least two per cent if the loan-to-value ratio is over 50 per cent but under 70 per cent and at least three per cent if the loan-to-value ratio is over 70 per cent.

The design of the requirement is such that the amortisation requirement gradually increases as you move up and to the right in Figure 1. The regulations thus incentivise mortgagors to reduce both their loan-to-value ratio and loan-to-income ratio.

Finansinspektionen agrees with the consultative bodies' assessment that the regulations may entail some increase in complexity. Both the current and the stricter amortisation requirement are grounded on risk-based principles. This means that households are primarily covered by a requirement to amortise if they are deemed to constitute an elevated risk to macroeconomic stability. The design is justified by factors including Finansinspektionen not wanting to intervene in individual households' savings decisions if they are not deemed to constitute a macroeconomic vulnerability. The disadvantage of a risk-based design is that is also entails greater complexity compared with, for example, a simple amortisation requirement that applies to the entire mortgage. Finansinspektionen would, however, like to point out that the complexity primarily arises in specific cases, e.g. when a mortgage is shared with borrowers who have loans that are collateralised by other homes or when borrowers have previous loans that have been taken out under other amortisation rules. In the majority of cases, it should be relatively simple to determine how much a mortgagor has to amortise. All in all, Finansinspektionen believes that the advantages of a risk-based design outweigh the disadvantage that arise as a result of this leading to more complex management in certain cases.

The Swedish Homeowners' Association believes that the amortisation requirement should be targeted at firms' mortgage portfolios and not at individual households. Finansinspektionen is of the opinion that it is highly indebted households that constitute a macroeconomic vulnerability. If the requirement was targeted at mortgage firms' total mortgage portfolios, the firms themselves would be able to choose which borrowers would have to amortise. Finansinspektionen's assessment is that mortgage firms would not necessarily demand amortisation payments from those households that constitute the greatest macroeconomic risks. A regulation targeted at the bank's total mortgage portfolio would also risk giving mortgage firms an incentive to change the terms of existing loan agreements. For example, a mortgage firm could demand amortisation payments from a household that has already bought a house and been granted an interest-only mortgage in order to achieve a certain average amortisation rate. This could have a detrimental impact on individual households' financial circumstances if they have taken out a mortgage in the expectation of a lower amortisation rate.

2.3 Loan-to-income ratio

The loan-to-income ratios shall be calculated as the mortgagors' combined mortgages, termed the LTI-based loan amount, in relation to their combined gross income. When issuing a new loan, a current loan-to-income ratio is calculated by the mortgage firm. The loan-to-income ratio and loan-to-value ratio together determine the mortgagors' minimum amortisation rate, i.e. the proportion, expressed in per cent, of the debt they have to amortise each year.

2.3.1 The definition of income

2.3.1.1 Gross income

Finansinspektionen's position: The calculation of borrowers' loan-to-income ratio shall be based on their combined *gross income*. The basic premise is that gross income shall be the latest established earned income, in accordance with what is stipulated in Chapter 1, Section 5, second paragraph of the Income Tax Act (1999:1229). Certain other sources of income shall also be permitted to be taken into account when calculating a mortgagor's gross income, namely sources of income that are confirmed and permanent. In such cases, income also denotes those tax-free sources of income that are raised in Chapter 8 of the Income Tax Act, for example child allowance, scholarships and other transfers. The gross income of all mortgagors who are jointly and severally liable for the mortgage shall be added together.

Consultation memorandum: The proposal had substantially the same content.

Consultative bodies: *The Riksbank* argues that conceptually it would have been better if the calculations had been based on disposable income, but can see the practical advantages of using gross income and, taking everything into account, believes that the definition of income used is acceptable. *The Administrative Court of Appeal in Stockholm* and *the Administrative Court of Appeal in Jönköping* believe that the definition of gross income in Section 2, point 4 a in the regulations should specify which paragraph in Chapter 1, Section 5 of the Income Tax Act is being referred to. *Bluestep* proposes that the definition of income used be the same as that used by the credit institutions themselves in credit assessments in accordance with Section 12 a of the Consumer Credit Act. In addition, several consultative bodies, including *the Riksbank, the Administrative Court of Appeal in Jönköping, the Swedish Bankers' Association* and *the Swedish Savings Banks Association*, believe that there should be clarification of what is meant by a confirmed and permanent source of income.

Finansinspektionen's reasoning: One important question is what definition of income shall form the basis on which the loan-to-income ratio is calculated. A natural starting point is disposable income, i.e. income after tax, as this will be used for debt service payments. Accordingly, it would, from an economic perspective, be most reasonable to use disposable income. In a proportional tax system, i.e. a tax system in which the tax rate is the same regardless of income, it would make no difference whether the calculation was based on gross income or disposable income. However, because the Swedish tax system is progressive, this choice will have some impact on which households are affected. Nevertheless, Finansinspektionen's analyses indicate a high degree of overlap between the households that would be affected by a loan-to-income threshold based on gross income and those affected by a threshold based on disposable income. Around 90 per cent of the households that are covered by a loan-to-income threshold based on disposable income would also be covered by a comparable threshold based on gross income.[36]

Finansinspektionen believe that it is important that mortgagors and mortgage firms can obtain information about the relevant income relatively easy. A mortgagor's earned income is confirmed annually by the Swedish Tax Agency and is therefore relatively simple to obtain information about and verify. However, there is no authority that confirms disposable income. It may therefore be more difficult, not least for mortgagors, to calculate disposable income and estimate whether the loan-to-income ratio on a given loan is in excess of the threshold.

Finansinspektionen's overall assessment is that there are grounds to choose gross income over disposable income as the basis on which the loan-to-income ratio is calculated.

The confirmed earned income (commonly referred to in the past as taxable earned income) can include both income from employment and income from business activity. Confirmed earned income is income after general deductions. However, confirmed earned income is not to be confused with taxable earned income, which is confirmed earned income minus national retirement pension contributions and the basic deduction. The latest confirmed earned income denotes the amount that appears on the latest tax assessment. Only natural persons can have an earned income. As described in section 2.11, the stricter amortisation requirement only applies to natural persons.

It is the mortgage firm that shall assess which other sources of income, aside from the confirmed earned income, shall be included when calculating gross income. In order to be included in the gross income, the other sources of income must be confirmed and permanent. The term confirmed means, for example, that an authority has made a decision concerning payment of an allowance or that an employer has decided to increase the salary. Permanent means that the income is not temporary but is paid out for a certain period or recurs each year. It shall be possible to include the annual amount received from such sources of income in the calculation of a mortgagor's gross income. *The Riksbank*, *the Administrative Court of Appeal in Jönköping*, *the Swedish*

[36] This analysis is based on the 2015 mortgage survey and compares two loan-to-income thresholds based on gross income and disposable income, respectively, each of which affect the same number of borrowers. The loan-to-income threshold based on gross income encompasses fewer people with a high income than a threshold based on disposable income.

Bankers' Association and *the Swedish Savings Banks Association* believe that there should be clarification of what is meant by a confirmed and permanent source of income. However, Finansinspektionen deems that mortgage firms are best placed to assess which sources of income are to be considered permanent and confirmed and that no further clarification is necessary. Finansinspektionen interprets the comment by *Bluestep Bank* as suggesting that there should be greater flexibility in terms of choosing which sources of income that may be included in the calculation of loan-to-income ratio. However, Finansinspektionen believes that the chosen definition of income provides mortgage firms with sufficient flexibility in this respect.

In light of the comments provided by *the Administrative Court of Appeal in Stockholm* and *the Administrative Court of Appeal in Jönköping*, the regulations have been clarified in that they now refer specifically to Chapter 1, Section 5, second paragraph of the Income Tax Act.

2.3.1.2 Income from capital

Finansinspektionen's position: Income from capital may be added to the gross income if this income is permanent and confirmed.

Consultation memorandum: The proposal had the same content.

Consultative bodies: No objections to the proposal.

Finansinspektionen's reasoning: This rule means that sources of income such as profit from the sale of a home cannot be included in the calculation of gross income as this is not a permanent source of income. Because the gross income is based on the confirmed earned income, variable forms of remuneration (e.g. bonuses) are handled differently depending on whether they are taxed as income from employment or income from capital. If a variable form of remuneration is taxed as income from employment, it is included when it is confirmed. If the form of remuneration is taxed as income from capital (e.g. outcome from options), it must also be confirmed and permanent in order to be included in the gross income. Mortgage firms do however have the opportunity to handle variable remuneration in another way in their credit assessments, provided the mortgagor amortises at least in accordance with the stricter amortisation requirement.

2.3.1.3 Self-employment

Finansinspektionen's position: The self-employed sometimes have the opportunity to split up their income into primarily income from business activity and income from capital. Sometimes, the self-employed are also taxed on their income from employment. Sources of income from capital must fulfil the requirements that they be confirmed and permanent if they are to be included in the gross income.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Federation of Business Owners* and *the Stockholm Chamber of Commerce* suggest that the proposal may have far-reaching negative consequences for the funding of new and small businesses because it reduces the opportunity for individuals to use their home as collateral to borrow in order to invest in their own business.

Finansinspektionen's reasoning: In general, income from capital fluctuates more than income from employment. This provides justification for the requirement that income from capital be confirmed and permanent in order to be included in the gross income. *The Swedish Federation of Business Owners* points out that sole proprietors often have an insecure and irregular income, which may make it difficult for them to meet the requirement for their income to be confirmed and permanent. Finansinspektionen believe that mortgage firms are careful when lending to self-employed who have an insecure and irregular income. Consequently, it is not obvious that the stricter amortisation requirement will impair the funding opportunities for new and small businesses to any great extent. In addition, mortgages themselves already constitute an advantageous form of funding for the self-employed because the interest charges and repayment terms are generally more favourable than those of business loans. It will remain possible for self-employed to take out mortgages, but a high level of debt in relation to income may entail a requirement to amortise more for a period of time.

2.3.1.4 Tax-exempt income

Finansinspektionen's position: Tax-exempt income may be added to the gross income if this income is permanent and confirmed.

Consultation memorandum: The proposal had the same content.

Consultative bodies: No comments on the proposal.

Finansinspektionen's reasoning: Tax-exempt sources of income include inheritance, gifts, lottery prizes, competition prizes, scholarships, maintenance payments, child allowance, maintenance support, housing allowance, income support, endowments and compensation in the event of illness and accidents.[37] The basic principle is that the income can be included if the mortgage firm deem it to be confirmed and permanent. Many of the examples listed above are excluded due to the requirement that they be permanent. Others, e.g. child allowance awarded by Försäkringskassan, may be deemed to be permanent and confirmed. Some tax-exempt scholarships that run for a longer period may also be considered both permanent and confirmed. When it comes to income from other countries (that are not taxed in Sweden in accordance with the Swedish tax regulations or applicable double taxation agreements), the mortgage firm shall also decide whether the income is permanent and confirmed.

2.3.1.5 Increase or reduction in gross income

[37] See Chapter 8 of the Income Tax Act.

Finansinspektionen's position: If a mortgagor's income has increased subsequent to having been granted a mortgage, the mortgage firm may recalculate the loan-to-income ratio and change the amortisation amount on the basis of this. A recalculation of this type may also take place when an existing loan is to be shared with additional mortgagors. As a rule, the loan-to-income ratio shall be recalculated if more than one mortgagor has taken out a new loan and one or more of these mortgagors ceases to have joint and several responsibility for the debt. One exemption from this rule is borrowers who ceases to be liable as a result of their death.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Riksbank* and *the Administrative Court of Appeal in Stockholm* believe that the regulations need to specify more clearly what discretion mortgage firms have with regard to the right to recalculate the loan-to-income ratio following a change in income. *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* believe that it should be clarified that the mortgagor in relation to the bank has a possibility and not a right to obtain a lower amortisation rate as a result of a recalculation of their loan-to-income ratio if their gross income increases.

Finansinspektionen's reasoning: An increase in the mortgagor's total gross income, or a new mortgagor being added as jointly and severally responsible, may lead to the loan-to-income ratio decreasing under the threshold. In these circumstances, the mortgage firm may grant a reduction in the amortisation amount. However, if an increase in income is not reflected in the latest confirmed earned income, the mortgage firm is required to assess whether it is confirmed and permanent before it may be added to the gross income. As a consequence of the definition of loan-to-income ratio in Section 2, point 9 of the amortisation regulations, the loan-to-income ratio shall be calculated as the *current* LTI-based loan amount in relation to the *current* gross income. Therefore, if the LTI-based loan amount or the gross income, or both, change, the loan-to-income ratio will also be affected. Consequently, Finansinspektionen believes that further clarification of what discretion mortgage firms have to recalculate the loan-to-income ratio, as proposed by *the Riksbank* and *the Administrative Court of Appeal in Stockholm*, is unnecessary.

The mortgage firm is thus permitted at any time to recalculate the loan-to-income ratio and alter the amortisation rate if the new ratio falls below the threshold. *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* have requested clarification of when a mortgagor has a right to obtain a lower amortisation rate as a result of a recalculation of their loan-to-income ratio. Finansinspektionen would like to stress that it shall be regarded as a possibility for the mortgage firm to change the amortisation amount in such cases, not an obligation. Nor is the mortgage firm obliged to alter the amortisation amount if the borrower's income decreases, even if their loan-to-income ratio were to rise above 4.5 times their gross income. The loan-to-income ratio that is calculated when the loan is issued continues to apply.

The amended regulations contain an explicit provision stating that the mortgage firm shall recalculate the loan-to-income ratio in the event that more than one mortgagor has taken out a new loan and one or more of these mortgagors ceases to be jointly and severally liable for the debt. The reason for this provision is that it should not be possible to circumvent the purpose of the regulations by being a co-signer for only a limited time. However, this provision also becomes applicable in other cases when a mortgagor will no longer be jointly and severally liable for the loan. One exemption from this rule is borrowers who ceases to be liable as a result of their death. This provision means that mortgage firms have to ensure it is possible to unilaterally demand higher amortisation payments if the circle of borrowers changes. This provision shall also be applied if a previous mortgagor is replaced with a new mortgagor.

The opportunity to grant an exemption on special grounds in the current amortisation regulations may be brought to the fore in the event of a loss of income (further information in section 2.10).

Box 1: Examples of sources of income that shall be included when calculating the loan-to-income ratio

Example 1
According to their notice of final assessment, Borrower A has a confirmed earned income of SEK 120,000. Since the latest confirmed earned income, Borrower A has changed jobs and been given a raise. Instead of SEK 10,000 per month, she now has a monthly salary of SEK 35,000, i.e. SEK 420,000 per year. On top of the confirmed earned income, she may thus add SEK 300,000 (SEK 420,000-120,000) if the mortgage firm deems the increase in income to be confirmed and permanent.

Example 2
Borrower B owns a close company and has received a dividend on his shares. Dividends up to a certain threshold are taxed as income from capital at a rate of 20 per cent (30 per cent on 2/3 of the dividend). The portion part that is in excess of this threshold is taxed as income from employment. The portion part that will be taxed as income from capital is SEK 50,000. Income from capital is thus SEK 50,000 and may be added to the gross income if the mortgage firm has deemed this source of income from capital to be permanent and secureconfirmed. Borrower B also received child allowance at a rate of SEK 48,000 per year, which may be added to the gross income if the mortgage firm has deemed it to be permanent and confirmed. Borrower B's notice of final assessment states that he has a confirmed earned income of SEK 250,000. Borrower B may therefore add his capital income surplus of SEK 50,000 and child allowance to the confirmed earned income. His gross income is therefore a total of SEK 348,000 (SEK 250,000+50,000+48,000).

Example 3
Borrower C lives in Sweden, but has worked in Norway for a long time. He has no confirmed earned income in Sweden because, in accordance with Swedish double taxation rules, he is only taxed in Norway (country in which he works) on his income from employment. However, he has an income from employment equivalent to SEK 980,000 per year in Norway. Borrower C may include this income on condition that the mortgage firm believe deem the income from working in Norway as is confirmed and permanent.

2.3.2 The definition of debt

2.3.2.1 The choice of mortgage or total debt

Finansinspektionen's position: The debt amount shall be calculated on the basis of all the mortgages held by the borrowers in question.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Riksbank* believes that all loans held by the borrowers in question provide a more accurate picture of their total debt, but can see some practical difficulties in using a broad definition of debt as Sweden has no nationwide loan register. The Riksbank also believes it is important that the stricter amortisation requirement be introduced without delay and is therefore of the opinion that Finansinspektionen's definition of debt is acceptable under the circumstances. *The Swedish Savings Banks Association* believes there is good reason to also take into account debt other than mortgage debts, e.g. consumption loans, and that the definition of debt used should be investigated further. The association states that an investigation of the loan applicants' total indebtedness is always conducted as part of a credit assessment and therefore does not constitute an additional administrative cost. However, *the Swedish Bankers' Association* believes that it is simpler and thus better to use total mortgages and not total debt to calculate the loan-to-income ratio.

Finansinspektionen's reasoning: When choosing which debt amount is to be used to calculate the loan-to-income ratio, Finansinspektionen has compared the two main options. The first option is for the debt amount to be calculated on the basis of all the mortgages held by the borrowers in question.[38] The other option is for the debt amount to be calculated on the basis of all the loans held by the borrowers in question.

The latter option, which is also advocated by *the Swedish Savings Banks Association*, provides a more accurate picture of the borrowers' total indebtedness. However, there are a number of arguments against using the borrowers' total debt as a basis. These include the fact that it is deemed hard for mortgage firms to obtain an overall picture of borrowers' total consumption loans. A credit check does not include all types of consumption loans and there is normally a delay in updating this with loans that have been taken out. A mortgagor may also have been granted a line of credit that they have not used or have only partly used. The fact that the loan-to-income ratio is a snapshot also results in assessment difficulties. When financing the purchase of, for example, a car or a boat, the borrower has the opportunity to lease the object instead. In such cases, it is the leasing company that takes out the loan, but the person leasing the object normally has the same payment liability as they would have had if they had borrowed the money themselves. If consumption loans are included when calculating the debt amount, this may eventually

[38] The amended regulations contain a definition of mortgage.

motivate borrowers to choose leasing when financing the purchase of, for example, a car or a boat, which is not something that Finansinspektionen would like to influence with the stricter amortisation requirement. A further argument in favour of not including consumption loans when calculating the debt amount is that these loans are typically a small proportion of borrowers' total credit exposure. In addition, they are already normally amortised at a fast rate, usually between 10 and 20 per cent per year. The interest on such loans is also normally higher, which motivates borrowers to amortise these loans faster than they do mortgages. The Swedish Savings Banks Association states that including loans other than mortgages would not entail any additional administrative cost. However, Finansinspektionen stands by its assessment that verifying and documenting all loans would be an administrative burden for mortgage firms and borrowers. Nevertheless, mortgage firms always have the opportunity to include loans other than mortgages in their own loan-to-income calculations and to demand higher amortisation payments than stipulated in the regulations.

All in all, Finansinspektionen's assessment is that the mortgagors total mortgages paint a satisfactory picture of the majority of their loan commitments. The debt amount primarily encompasses those loans that, in some cases, are not amortised at all or are amortised at a slow rate. Consequently, Finansinspektionen makes the assessment that this option is the most suitable to use when calculating the debt amount.

2.3.2.2 More detail about the LTI-based loan amount

Finansinspektionen's position: The LTI-based loan amount shall be calculated as the sum of all mortgagors' existing and new mortgages. Mortgages with joint and several liability shall be distributed in proportion to the number of borrowers.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Bankers' Association* and *Bluestep Bank* believe that the loan-to-income ratio calculation leads to far too much complexity and therefore propose that the loan-to-income ratio only be based on loans secured by the home the new loan applies to. *The Administrative Court of Appeal in Jönköping* believes that the loan should be divided up by the borrowers' share of the loan if this is not divided equally between the borrowers. Bluestep Bank also believes that short-term mortgages, for example deposit loans or bridging loans, that are secured by a home should be excluded from the LTI-based loan amount. This is because these loans are only intended for a short period and are not covered by the grounds cited in the same way as long-term mortgages.

Finansinspektionen's reasoning: Under the current amortisation regulations, all loans that are secured by the same home shall be included when calculating the loan-to-value ratio. Under the stricter amortisation requirement, other mortgages that have previously been granted to the mortgagor who is taking out the new mortgage shall be included in the loan amount. If more than one mortgagor is taking out the mortgage jointly, other mortgages that these borrowers already have shall also be included in the loan amount. In the regulations, the sum of these loans is called the LTI-based loan amount.

The Swedish Bankers' Association and *Bluestep Bank* propose instead that only loans that are secured by the same home as the new loan applies to be included. This would simplify the loan-to-income calculation, but Finansinspektionen believes there are also some disadvantages to this option. For example, it allows a mortgagor to take out loans secured by different homes that, when combined, exceed 4.5 times the mortgagor's income without being covered by an amortisation requirement. This would go against the purpose of the regulations. In addition, it would create an incentive to include co-signers on the loan in order to circumvent the purpose of the regulations. Finansinspektionen's assessment is that the disadvantages of this option outweigh the advantages.

When one or more mortgagors takes out a new loan collateralised by a home, the LTI-based loan amount consists of both the new mortgage and the sum of existing loans that the borrower or borrowers have that are secured by the same or other homes. The calculation of the LTI-based loan amount will therefore be dependent partly on the circle of borrowers and partly on whether the borrowers have loans that are collateralised by other homes.

One simple case is a mortgagor who does not have joint loans with other people. In this case, the LTI-based loan amount is the sum of that mortgagor's mortgages. Another simple case is one where two or more mortgagors have loans on one or more home together and no other people have loans secured by these homes. In this case as well, the LTI-based loan amount is the sum of the mortgagors' mortgages.

More complicated cases, where the mortgagors have mortgages in various constellations, may occur. One example is a mortgagor who is going to take out a loan on a tenant-owner apartment. The mortgagor owns a holiday home together with one or more relatives who do not have loans secured by the tenant-owner apartment. The mortgagor and their relatives have a joint loan on the holiday home. One important question in such cases is the extent to which loans on other homes shall be included if they are shared with people who do not have loans that are secured by the home to which the new loan applies.

One possible basic premise is for the whole of the joint loan to be included when calculating the LTI-based loan amount because the mortgagor has joint and several liability for the entirety of this loan. However, this may appear unreasonable if it results in a requirement for increased amortisation payments, especially if the holiday home is shared by many relatives. This could make it less attractive to co-own homes with, for example, relatives. In addition, it may result in the same loan amount being counted more than once as it will also be included when calculating the loan-to-income ratio of the other mortgagors. An alternative option is therefore for the loan on the holiday home to be distributed in proportion to the number of borrowers who have the loan on the holiday home. An arrangement of this type may appear to conflict with the principle of joint and several liability. However, the aim of a stricter amortisation requirement is primarily to lessen the macroeconomic risks associated with high loan-to-income ratios. Accordingly, Finansinspektionen is of the opinion that mortgages with joint and several liability shall be distributed in proportion to the number of borrowers. A distribution of this type is deemed to be a better reflection of the macroeconomic risks than if the entire joint loan were to be included.

As pointed out by *the Administrative Court of Appeal in Jönköping*, borrowers may choose to distribute loan payments between themselves in a way that is not proportionate to the number of borrowers. Fundamentally, however, there is joint and several liability for the loan. For this reason and for the sake of simplicity, Finansinspektionen believes that the loan shall also be distributed proportionately to the number of borrowers in these cases. If, however, liability for the loan is distributed between different borrowers, it is not a loan with joint and several liability. In these cases, only those loans that the borrowers in question are liable for are included when calculating the loan-to-income ratio. Finansinspektionen believes that this appears in the regulations.

Finansinspektionen agrees with Bluestep Bank’s assessment that short-term loans taken out in conjunction with moving to another home should not lead to a stricter amortisation requirement. For this reason, Finansinspektionen has introduced a new exemption from the amortisation obligation in the regulations (further information in section 2.10).

The LTI-based loan amount is calculated using all mortgagors’ existing and new mortgages. This means, for example, that if a parent has its own mortgages, these shall be included in the calculation if that parent takes out a new mortgage together with their child. The new joint mortgage will in future be included in the calculation if the parent decides to take out a new mortgage at a later stage.

Mortgages shall be included in the calculation, regardless of which mortgage firm is the lender. In order for this to work in practice, the mortgage firm that is issuing the new loan will need to obtain information about existing loans through a credit check. However, the credit check does not show which other borrowers have taken out the loan. Consequently, it is important that, when handing over information, the mortgage firm that issued an earlier loan also provides a clear specification that shows whether the mortgage has more than one borrower.

2.3.2.3 Other changes

Because of the new term LTI-based loan amount, Finansinspektionen has made minor changes to the applicable definition of the total loan amount.

Box 2: Examples of loans that shall be included when calculating the loan-to-income ratio

Example 1
Borrower D and Borrower E take out a new loan of SEK 1 million in order to buy a holiday home, using the new holiday home as collateral. They already have a joint loan of SEK 2.5 million that is collateralised by their permanent home. In addition to this, Borrower D has a car loan of SEK 220,000 and a credit card debt of SEK 50,000. Borrower E has no other loans. When calculating the LTI-based loan amount, the new loan of SEK 1 million and the existing mortgage of SEK 2.5 million shall be added together. The other loans are not to be included. The LTI-based loan amount is therefore SEK 3.5 million.

Example 2
Borrower F and Borrower G help their eldest child (Borrower H) to buy a home. The parents already have a mortgage of SEK 2 million, but no other mortgages. Borrower H has a student loan of SEK 170,000. In order to help Borrower H, the parents have taken out a new loan of SEK 200,000 using their home as collateral. Borrower G also takes out a new loan of SEK 1 million together with Borrower H, using the new home as collateral. In this example there are two LTI-based loan amounts. The first calculation is performed when the parents take out the new loan of SEK 200,000. On this occasion, the LTI-based loan amount is SEK 2.2 million (SEK 2 + 0.2 = 2.2 million). This amount will be used to calculate the parents' loan-to-income ratio in conjunction with taking out the loan of SEK 200,000. The second calculation is performed when Borrower H and Borrower G take out a joint loan of SEK 1 million. On this occasion, Borrower G has SEK 2.2 million in loans collateralised on her own home for which she is jointly and severally liable. This loan is distributed equally between Borrower G and Borrower F (SEK 1.1 million each). Borrower H's student loan shall not be included in the calculation because it is not a mortgage. The LTI-based loan amount for Borrower G and Borrower H is therefore SEK 2.1 million (SEK 2.2 x 0.5 + 1 = 2.1 million).

Example 3
Borrower I and Borrower J take out a new loan of SEK 200,000 on their permanent home. They already have a joint loan of SEK 1.5 million on their permanent home. In addition to this, Borrower J has a loan of SEK 400,000 together with his three siblings on a shared holiday home. Borrower J's proportion of the loan is 0.25. Together with Borrower I's mother, Borrower I and Borrower J also have a loan of SEK 600,000 that is collateralised on another holiday home. Borrowers I and J's proportion of the loan is 0.66. When calculating the LTI-based loan amount, all mortgage that Borrower I or Borrower J are listed as borrower on shall be added together, weighted according to their share of the loan. The LTI-based loan amount is therefore SEK 2.2 million (SEK 1.5 + 0.2 + 0.4 x 0.25 + 0.6 x 0.66 = 2.2 million).

2.3.3 Other considerations

Finansinspektionen's position: Finansinspektionen does not believe that a revaluation delay rule for income is justified. Finansinspektionen's considerations regarding the matter of the existing rules concerning revaluation of the home (the revaluation delay rule) remain and the authority is therefore not introducing any amendment to these.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* support the proposal not to introduce a revaluation delay rule for income. Nonetheless, the Swedish Savings Banks Association believes that Finansinspektionen needs to investigate the impact of the existing revaluation delay rule and consider an alternative format that is linked to the potential to revalue the home. The Swedish Bankers' Association believes that the revaluation delay rule should be abolished so that the loan-to-value ratio is based on current market value and current debt.

Finansinspektionen's reasoning: Section 4, second paragraph of the amortisation regulations states that a revaluation of the home for the purposes of calculating loan-to-value ratio may only be carried out after five years at the earliest (the revaluation delay rule). Finansinspektionen has considered whether an equivalent rule concerning income should be introduced for the calculation of the loan-to-income ratio. Finansinspektionen has not found any substantive grounds on which to introduce such a provision (see also section 2.3.1.5). The current revaluation delay rule is justified on grounds including that the debt trend would otherwise risk becoming more procyclical. If revaluation of the home is allowed after a short period of sharply rising house prices, many mortgagors would be able to obtain a lower amortisation requirement as a result of their loan-to-value ratios falling below either the 50 or 70 per cent threshold. The effect of this would be that the aggregate debt trend not being dampened to the same extent as if these mortgagors had continued to amortise at the same rate. Consequently, Finansinspektionen's considerations on this matter still stand.

A revaluation delay rule for the income used to calculate the loan-to-income ratio is not deemed to have equivalent advantages. Even though incomes can fluctuate in line with the economic cycle, they are not deemed to be as cyclical as house prices. The income trend is thus not deemed to be as strong a driving force as house prices in terms of the household debt trend.

Nevertheless, the stricter amortisation requirement may result in the debt trend being dampened sufficiently to make the revaluation delay rule for the loan-to-value ratio less important in the future.

2.4 The loan-to-income threshold

Finansinspektionen's position: The loan-to-income threshold shall amount to 4.5 times gross income.

Consultation memorandum: The proposal had the same content.

Consultative bodies: No objections to the proposal.

Finansinspektionen's reasoning: Experience from some countries suggests that households with a high loan-to-income ratio reduce their consumption more than other households in the event of an economic crisis. Finansinspektionen's analyses also suggest that household cash flow margins are lower at higher loan-to-income ratios. It is difficult to pinpoint where exactly the boundary between a low and a high loan-to-income ratio lies. The choice of loan-to-income threshold is based on a number of considerations, which are described below.

The proportion of households that are affected by a stricter amortisation requirement is decisive to how large an impact the measure will have on the debt trend in the short term. The higher the threshold, the smaller the immediate impact on debt will be. According to Finansinspektionen's analyses, the immediate impact of a stricter amortisation requirement will be that the households affected will buy cheaper homes and borrow less. This effect is relatively large. The assessment is that the stricter amortisation requirement will reduce by almost one half the number of new mortgagors who have loan-to-income ratios over the given threshold (see section 3.1.2.2). Because households amortise more over a given threshold, the total level of debt in the Swedish economy will also be affected more in the longer term if the threshold is lower.

The choice between a lower and a higher loan-to-income threshold can be justified on the basis of the intention of the measure. A lower threshold would affect more households in the short term and thus lead to a stronger immediate suppression of household debt. Conversely, a higher threshold would affect fewer households in the short term and thus would also mean that the level of debt was suppressed less in the short term. However, if house prices continue to rise sharply, a stricter amortisation requirement with a higher threshold would cover an increasing number of households over time. A higher threshold can therefore be regarded as an insurance policy against future increases in the loan-to-income ratio. Finansinspektionen makes the assessment that the chosen loan-to-income threshold primarily constitutes an insurance policy against future increases in the loan-to-income ratio because the assessment is that the measure will only affect around 14 per cent of new mortgagors (see section 3.1.1).

When choosing the threshold, Finansinspektionen has also taken into account the assessed impact on house prices, both in the country as a whole and in the major metropolitan areas. The current amortisation requirement covered about the same proportion of households in the major cities as in the rest of the country. The stricter amortisation requirement would, however, encompass a significantly larger proportion of mortgagors in Stockholm (just over 30 per cent) than in the country as a whole (15 per cent). The impact on house prices in Stockholm should therefore also be larger than in the rest of the country. However, the impact on prices is deemed to be relatively mild, even in the major metropolitan areas. It should be pointed out that the impact is estimated on the basis of the current amortisation requirement. There are factors that suggest the impact of the stricter requirement may be larger (further information in section 3.1.2).[39]

Although the estimated impact on prices is associated with uncertainty, the measure should be regarded in the context of house prices and household debts that have been rising sharply for a long period of time. This has been driven by a unique economic situation with high growth and low interest rates. If these underlying driving forces remain in place, house prices and debt levels may continue to rise sharply. In such a scenario, it is important that the measure dampens the trend of continued increases in loan-to-income ratios.

The stricter amortisation requirement also has a countercyclical feature. As illustrated by Diagram 11 in section 3.1.3, an increasing number of households would, over time, be covered by the measure if house prices continue to rise at a higher rate than incomes. Correspondingly, a decreasing number of households would be covered by the stricter amortisation requirement if house prices were to rise at a lower rate than incomes. Even if house prices were to fall, a decreasing number of households would be covered, especially those who are buying their first home. This gives the stricter amortisation requirement an automatic stabilising effect on sharply rising house prices.

Finansinspektionen's overall assessment is that a loan-to-income threshold of 4.5 times gross income should dampen the trend towards increasingly high loan-to-income ratios to an extent sufficient to reduce the vulnerability to macroeconomic shocks. Moreover, the loan-to-income threshold is deemed not to result in too drastic an impact on prices in the housing market.

2.5 Amortisation amount

Finansinspektionen's position: As under the current amortisation regulations, the amortisation amount shall be calculated on the basis of what is termed the *largest loan amount*. This is the total loan amount when it was at its maximum following the most recent valuation of the home to which the new loan applies (see the definition in Section 2 of the current amortisation regulations).

Consultation memorandum: The proposal had the same content.

[39] See also Finansinspektionen, "Consequences of a stricter amortisation requirement", FI Analysis No. 11, 2017.

Consultative bodies: *The Swedish Bankers' Association* believes that the largest loan amount should be removed as this adds to the difficulties involved in information exchange when changing banks and because it is difficult to explain to mortgagors. The association is of the opinion that the amortisation amount should be based on the current level of indebtedness at the time each new loan is issued. *The Swedish Savings Banks Association* also believes that the largest loan amount is associated with challenges in terms of explaining it to mortgagors. Both bodies point out that it is illogical not to allow recalculation of the amortisation amount following a large one-off amortisation payment, e.g. in conjunction with an inheritance.

Finansinspektionen's reasoning: When assessing what loan amount is to form the basis on which the amortisation amount is calculated, Finansinspektionen has used simplicity as the starting point.

One alternative to the *largest loan amount* would have been to use the LTI-based loan amount to calculate the amortisation amount. However, it is Finansinspektionen's assessment that this option would be both problematic and incorrect. For example, one effect of this would be that a mortgagor with more than one mortgaged home would be at risk of activating an amortisation requirement at an amount that is based on the mortgages on all their homes. A small loan on a holiday home could therefore lead to a disproportionately high amortisation amount.

Finansinspektionen's overall assessment is that there are considerable advantages to calculating the amortisation amount on the basis of the largest loan amount.

The circumstance under which the largest loan amount is to be recalculated are described below. These provisions are no different from those in the current amortisation requirement, but are described below for the sake of clarity.

The largest loan amount may be recalculated in the event that the home is revalued and shall be calculated as the current total loan amount that is collateralised by the same home. If this results in a decrease of the largest loan amount, this leads to a lower amortisation amount. The highest loan amount is thus linked to the revaluation delay rule (see section 2.3.3). As pointed out by *the Swedish Savings Banks Association*, this construction means that the amortisation amount may remain high, even after large one-off amortisation payments. However, Finansinspektionen's considerations on the matter of the revaluation delay rule remain and the authority is therefore not introducing any amendment on the matter of the amortisation amount's link to the largest loan amount.

In the event of supplementary loans[40] that result in the total loan amount exceeding the largest loan amount determined previously, the largest loan amount, and thus the amortisation amount, shall be recalculated. As established by *the Swedish Bankers' Association*, the amortisation amount may, however, not be recalculated in conjunction with supplementary loans if the total loan amount is lower than the largest loan amount determined previously. In conjunction with the adoption of the current amortisation regulations, Finansinspektionen concluded that it would be unreasonable if it were to be possible for the amortisation amount to be reduced as a result of the mortgagor taking out a new mortgage.[41] Finansinspektionen has not changed its position on this point.

One effect of using the largest loan amount as the basis is that this covers all loans that are secured by the home, even when there are different mortgagors who are liable for these loans. Under the stricter amortisation requirement, the amortisation rate is not affected by the loans of anyone other than the borrowers because it is based on the LTI-based loan amount. In some cases, however, the amortisation amount may end up being changed on the basis of someone else's loans because this amount is based on the largest loan amount. For example, this may be the outcome if two borrowers have individual loans (without joint and several liability) that are collateralised by the same home and one borrower obtains a loan-to-income ratio that is above the threshold.

2.6 The alternative rule

Finansinspektionen's position: In the event that supplementary loans are issued to borrowers who have mortgages that have been taken out prior to the amended regulations entering into force (existing mortgages), there shall be an opportunity for the mortgage firm to grant an alternative amortisation rate.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* have a positive view of the proposal that the alternative rule shall also apply to supplementary loans taken out prior to the stricter amortisation requirement entering into force. However, both bodies believe that the alternative rule should be extended to apply irrespective of when the first loan was taken out. The reason is that the main rule can often result in threshold effects that lead to the amortisation amount not being perceived as corresponding reasonably to the size of the most recent loan. An extended alternative rule would reduce such threshold effects. The Swedish Bankers' Association also believes that it would make matters a great deal easier for mortgage lenders and borrowers if they did not have to keep track of various dates. The Swedish Bankers' Association also call for a clarification of whether the alternative rule can only be applied if the borrowers who are taking

[40] Supplementary loans denotes new loans collateralised by a home that is already mortgaged.
[41] Decision Memorandum, FI Ref. 14-16628, p. 29.

out a supplementary loan are the same as those who have previously used the same home as collateral.

Finansinspektionen's reasoning: The current amortisation regulations (Section 7) contain an alternative rule for the amortisation of supplementary loans. This means that a mortgage firm may allow a borrower who takes out a supplementary loan to amortise this at a rate of at least ten per cent of the supplementary loan's original amount per year, instead of at a rate of at least one or two per cent of the largest loan amount per year. One condition for applying the alternative rule is that the borrower has previously been issued loans secured by the same home prior to the current amortisation regulations entering into force, i.e. before 1 June 2016.

When the amortisation regulations were introduced, the alternative rule was justified on the basis that if a supplementary loan was small in relation to the existing mortgage, the amortisation amount could become very high in relation to the size of the supplementary loan. Finansinspektionen believed that such a substantial increase in expenditure entailed a significant risk that borrowers would choose to apply for unsecured loans instead.

For example, if a mortgagor had taken out an interest-only mortgage of SEK 5 million (equivalent to a loan-to-value ratio of 60 per cent) prior to the amortisation regulations entered into force and after they enter into force, takes out a supplementary loan of SEK 100,000, the amortisation amount would be set at one per cent of SEK 5.1 million, i.e. SEK 51,000 per year.

However, Finansinspektionen did not find that an alternative amortisation rate for supplementary loans was justified if no part of the mortgage had been issued prior to the amortisation regulations entered into force.

The introduction of stricter amortisation requirement has an impact on the amortisation of supplementary loans similar to that which motivated the alternative rule in the current amortisation regulations. It should therefore be possible to apply the alternative rule for mortgagors that have loans that were issued prior to entry into force on 1 March 2018. This means that households that have taken out mortgages in the period 1 June 2016–28 February 2018 are also given the opportunity to take out supplementary loans under the alternative rule, instead of being covered by the stricter amortisation requirement.

The Swedish Bankers' Association calls for clarification of the conditions under which the alternative rule may be applied. One of the conditions for applying the alternative rule to a supplementary loan is that it is being taken out by someone who has also taken out the original loan. As long as this condition is met, both loans do not need to be taken out by exactly the same borrowers. For example, Person A has the original loan; Person A and B are taking out the supplementary loan and may apply the alternative rule. Correspondingly, Person A and B have the original loan; Person A is able to take out a supplementary loan and may apply the alternative rule. Finansinspektionen does not believe that there is any need to clarify the regulations in this respect.

Finansinspektionen has also considered extending the alternative rule in accordance with the proposal from the Swedish Bankers' Association and *the Swedish Savings Banks Association*. This extension would make it possible for all new loans to be amortised according to the alternative rule, regardless of whether the mortgagor already has a mortgage. An expansion of this type would mean that mortgagors who take out new loans after the stricter amortisation requirement has entered into force would, in certain cases, have lower amortisation payments than they would under the main rule. The main rule is associated with what are known as threshold effects, which means that mortgagors may also see a sharp increase in their amortisation payments when they take out small new loans. An extension of the alternative rule would reduce such threshold effects. For example, a mortgagor with a loan-to-income ratio of 4.75 times gross income would be able to split the mortgage into two parts, with one part that is under 4.5 times their gross income. This part would not then be covered by the stricter amortisation requirement if the other part is amortised under the alternative rule. The amortisation amount is therefore lower than under the main rule. It would also be simpler for mortgage firms and borrowers as they do not have to keep track of the dates the mortgages have been taken out. One disadvantage is that it would reduce the average amortisation rate when compared with both the current and the proposed design of the amortisation requirement. This means that the macroeconomic risks would not be lessened to the same extent. One further disadvantage is that it may result in a larger administrative burden for mortgage firms, especially over time, because more mortgagors would probably choose to use the alternative rule. For these reasons, Finansinspektionen has chosen to retain the current design of the alternative rule.

Finansinspektionen is making no change as regards the impact of the alternative rule when calculating loan-to-value ratio. In order to create consistency, this principle shall also apply when calculating the LTI-based loan amount (loan-to-income ratio). This means that mortgages that are amortised under the alternative rule shall not be included when calculating the total loan amount or the LTI-based loan amount. A mortgage that is amortised under the alternative rule shall not affect the amortisation obligation or amortisation rate of other loans.

There is no requirement to amortise mortgages at a rate of ten per cent per year until the loan has been repaid in full. Amortisation under the alternative rule may be discontinued at any time and the loan shall then be added to the loans that are not being amortised under the alternative rule. The amortisation obligation and the amortisation rate shall then be calculated on the basis of the total borrowing that is being managed under the main rule.

2.7 The stricter amortisation requirement shall apply to new mortgages

Finansinspektionen's position: The stricter amortisation requirement shall encompass mortgages that are taken out from the date on which the requirement enters into force, 1 March 2018. As a rule, a mortgage shall be regarded as new if it is issued through a loan agreement that is entered into after the regulations have started to apply.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *Svensk Hypotekspension* and *Bluestep Bank* believe that equity release loans should be exempted from provisions concerning amortisation requirements based on both loan-to-value ratio and loan-to-income ratio.

Finansinspektionen's reasoning: Finansinspektionen addressed the question of whether a new mortgage agreement would count as new lending in a number of practical situations in the decision memorandum for the current amortisation regulations.[42] In the majority of the situations addressed, the proposed amendments to the amortisation regulations involve no changes to what is stated there. Two exceptions are changing of mortgage firm and replacing old mortgages with new at the existing lender (see section 2.9). Otherwise, it is the following practical situations that are referred to (all page references pertain to the decision memorandum for the current amortisation regulations):

- The borrower moves home and wants to keep the existing loan (p. 35).
- The purchaser of a home takes over existing mortgages on the home (p. 36).
- A mortgage firm acquires a loan portfolio from another mortgage firm (p. 36).
- Change in the terms of a mortgage that is not covered by amortisation requirements (p. 36).
- The home is acquired before the amortisation requirement begins to apply, but the mortgage is issued subsequently (p. 37).
- The borrower receives a loan commitment before the amortisation requirement begins to apply (p. 37).
- Construction loans (p. 38).
- Increasing the size of mortgages (p. 39).
- Equity release loans (p. 39).
- Additional mortgagors (p. 42).
- Separations etc. (p. 42).

In the example of separations, the exemption for new lending in the current amortisation regulations is partly tied to the transitional provisions. There are corresponding provisions in the amended regulations. In the event of a separation, the change in the number of borrowers may also lead to the loan-to-income ratio having to be recalculated. See section 2.3.1 for more information.

[42] See Decision Memorandum in case FI Ref. 14-16628.

Svensk Hypotekspension and *Bluestep Bank* believe that equity release loans should be exempted from the amortisation requirement. There is no exemption for equity release loans in the current amortisation regulations, instead these loans are covered by the amortisation requirement in the same way as other mortgages.[43] The Mortgage Credit Directive has been implemented in Swedish law since the amortisation regulations were adopted. One aspect of this implementation has been the addition of provisions concerning equity release loans to the Consumer Credit Act. These provisions mean that, in certain respects, separate rules apply to such mortgages where the loan will only be paid back in conjunction with the property that is provided as collateral being transferred because the borrower reaches a certain age or due to the borrower's failing health or death (see, for example, Section 4, fourth paragraph, second sentence and Section 12 a, third paragraph of the Consumer Credit Act). The distinction made in the specified provisions in the Consumer Credit Act thus means that an equity release loan cannot be amortised. There may therefore be grounds to provide an exemption to the amortisation requirement for equity release loans in order not to make this form of financing impossible; something which is also pointed out in the government bill "Ytterligare verktyg för makrotillsyn".[44] Finansinspektionen is monitoring the legislative process and intends to return to the matter at a later date.

2.8 Changing mortgage firm

Finansinspektionen's position: Changing mortgage firm shall not trigger a stricter amortisation requirement.

Consultation memorandum: The proposal had the same content.

Consultative bodies: No consultative bodies objected to this proposal. Nonetheless, *the Swedish Bankers' Association* and *the Swedish Savings Banks Association* do conclude that the rules concerning switching mortgage firm are a factor that has contributed to the complexity of the regulations. The Swedish Savings Banks Association argue that changing bank is complicated because it must be investigated at which points in time previous loans have been issued. In addition, the Swedish Bankers' Association believes that Finansinspektionen should clarify what is meant by "the terms that apply to the loans issued previously" in Section 5. The Swedish Bankers' Association is of the opinion that the rules when changing mortgage firm are not sufficiently clear because amortisation payments for loans taken out after 1 June 2016 shall be calculated in accordance with Section 6, while loans taken out before this are not covered by the amortisation requirement.

Finansinspektionen's reasoning: In the current amortisation regulations, matters associated with changing lender or taking out new mortgages to replace old loans from the same lender are dealt with through transitional provisions.

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[43] See Decision Memorandum, FI Ref. 14-16628, pp. 39 ff.
[44] Govt Bill 2017/18:22 p. 28.

The aim of these transitional provisions was to exempt loans issued prior to the amortisation requirement's introduction from the requirement, even when the borrowers change mortgage firm or remortgage after the regulations entered into force. However, under the stricter amortisation requirement other situations may arise. For example, if a borrower changes mortgage firm and the new loan-to-income ratio is above the threshold, changing lender could trigger an amortisation requirement.

Finansinspektionen is of the opinion that it should be possible for loans that are not subject to the amortisation requirement to be replaced by new loans from the same or another lender without triggering an amortisation requirement. Since Finansinspektionen believes that the provision should also cover loans issued after the introduction of the stricter amortisation requirement, this matter should no longer be regulated through a transitional provision. The provision has therefore been reformulated and inserted into Section 5 of the amortisation regulations. The new provision means that a loan replacing a previous loan shall in and of itself be regarded as new lending, but the lender may allow the new loan to be amortised under the terms that apply to the loan issued previously. This provision will only be applicable if the new loan is not in excess of the loan it is replacing, if it has been collateralised by the same home and the circle of borrowers remain unchanged. Loans that are issued in order to pay off an interest rate differential are also covered by the above provision in Section 5.

Finansinspektionen agrees with the consultative bodies' opinion that the provision contributes to making the regulations complex. However, Finansinspektionen would like to point out that the provision is necessary in order to prevent the amortisation requirement from reducing borrowers' incentives to change mortgage firm. In light of *the Swedish Bankers' Association's* comment regarding Section 5, Finansinspektionen has clarified the provision.

2.9 Which mortgage firms shall be covered by the regulations?

Finansinspektionen's position: The stricter amortisation requirement shall apply to banks and credit market companies.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Bankers' Association* objects to the fact that other actors, aside from credit institutions, that issue or mediate mortgages (known as mortgage institutions) are not covered by the regulations. *The Administrative Court of Appeal in Stockholm* also questions the appropriateness of this.

Finansinspektionen's reasoning: The applicable amortisation regulations apply to banks and credit market companies (credit institutions). The reasons behind this decision are set out in the decision memorandum for these regulations.[45] Finansinspektionen is not now changing its assessment of which firms should be subject to the regulations.

The purpose of the proposed amendments to the regulations – aside from dealing with the macroeconomic risks associated with household debt – is to protect consumers. This means that foreign firms which issue mortgages in Sweden through a branch or in some other way are also subject to the regulations. A basic premise for regulations issued in Sweden to protect, for example, consumers is that they apply to all actors operating in the country. This arises from Chapter 1, Section 2 of the Banking and Financing Business Act.[46] Accordingly, the assessment is the same as when the amortisation regulations were introduced. A Swedish credit institution that issues a mortgage for a home in Sweden but through a foreign branch is also subject to the regulations.

As stated above, the Mortgage Credit Directive has been implemented in Swedish law. There are now legislation and regulations that regulate actors other than credit institutions which issue or mediate mortgages (mortgage lenders and mortgage intermediaries). As pointed out by *the Swedish Bankers' Association* and *the Administrative Court of Appeal in Stockholm*, these firms are not subject to the amortisation regulations because Finansinspektionen does not yet have the power to issue such regulations for these firms. This power is proposed in the government bill "Ytterligare verktyg för makrotillsyn"[47], but Finansinspektionen believes it is essential that a stricter amortisation requirement be introduced without delay and is therefore choosing to act prior to any forthcoming regulation of these firms.

2.10 Exemptions from the stricter amortisation requirement

Finansinspektionen's position: The possibility for a mortgage firm to grant a borrower an exemption to the amortisation requirement for a limited period, should special grounds arise during the term of the loan, shall also apply to the stricter amortisation requirement. The possibility to grant an exemption in the event of new lending issued in return for collateral in a newly built home or agricultural unit that apply under the current regulations shall also apply to the stricter amortisation requirement.

A mortgage firm shall be able to grant an exemption to the stricter amortisation requirement for a limited period if, at the time the new loan is issued, the loan-to-income ratio only exceeds 450 per cent as a consequence of loans that will be settled in conjunction with the sale of an existing home.

When issuing new loans for the acquisition or construction of a home, the mortgage firm may grant an exemption to the stricter amortisation requirement

[45] Decision Memorandum, FI Ref. 14-16628, pp. 26 f.
[46] Govt Bill 2002/03:139, p. 510.
[47] Govt Bill 2017/18:22.

if an agreement concerning acquisition or construction of the home has been entered into prior to 1 March 2018. A mortgage firm may also grant an exemption from the stricter amortisation requirement when issuing new loans that serve to replace loans issued prior to 1 March 2018, as a consequence of changes in ownership that entail only part of the home changing ownership. In such cases, the exemption may apply to the portion of the new lending that does not exceed the loans being replaced.

Consultation memorandum: The proposal did not contain any opportunities for exemptions in situations in which the loan-to-income ratio exceeds the threshold only as a consequence of loans that will be settled.

Consultative bodies: *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* agree there is a need to be able to grant exemptions to the amortisation requirement under special circumstances. The Swedish Savings Banks Association believes that Finansinspektionen should specify in exhaustive detail the situations in which exemptions on special grounds may be granted and that explicit exemptions should be granted for short-term loans issued in order to finance the borrower's purchase of a new home prior to the sale of their previous home. The Swedish Bankers' Association believes there should be an opportunity to grant an exemption for a household that has bought a new home while remaining the owner of their existing home and that the exemption for newly built homes should be removed. *The Riksbank* believes that there should be clarification of which loan-to-value ratio and loan-to-income ratio shall apply following the purchase of a newly built home when the five-year exemption from the amortisation requirement has ceased to apply. *Bluestep Bank* believes that mortgage firms should be able to grant exemptions from the stricter amortisation requirement for up to ten per cent of their new lending.

Finansinspektionen's reasoning: Section 9 of the amortisation regulations states that a mortgage firm may allow a borrower not to amortise for a limited period should specific grounds for this arise during the term of the loan. Finansinspektionen believes that this opportunity to grant exemptions shall also apply to the stricter amortisation requirement. *The Swedish Savings Banks Association* believes that the situations in which exemptions may be granted on special grounds should be specified in exhaustive detail. The decision memorandum for the current amortisation regulations states that this denotes situations in which the financial circumstances have deteriorated significantly subsequent to the mortgage being issued.[48] It also states that the intention is for there to be scope for mortgage firms to determine what shall be deemed special grounds on a case by case basis. There are many circumstances and situations that could constitute special grounds for allowing a borrower to refrain from amortising for a period. The typical situations listed were unemployment, long periods of absence from work due to illness and the death of a close relative. Finansinspektionen stands by its assessment that mortgage firms are best

[48] Decision Memorandum in FI Ref. 14-16628, pp. 49 ff.

placed to assess in which situations an exemption may be granted on special grounds. Accordingly, Finansinspektionen believes that there is no reason to specify in more detail when special grounds can be considered to exist.

The stricter amortisation requirement means that events resulting in a change to the number of borrowers may have a greater impact than is the case under the current amortisation requirement, e.g. in the event of a separation. A change to the number of borrowers does not normally affect the loan-to-value ratio, but it does affect the combined gross income and thus the loan-to-income ratio. The basic principle is that the loan-to-income ratio shall be recalculated when the number of borrowers decreases (see section 2.3.1). However, Finansinspektionen deems that it should be possible for separation to be one of the special grounds on which the mortgage firm may allow a borrower not to amortise for a period of time. Finansinspektionen's assessment in this matter is consistent with what is stated with regard to amortisation requirements in the preparatory work to the provision in Chapter 6, Section 3 b of the Banking and Financing Business Act.[49]

Point 2 of the entry-into-force and transitional provisions of the amortisation regulations states that new lending denotes a loan that is issued for acquisition or construction of the home that is being used as collateral for the loan if the agreement concerning acquisition or construction has been entered into before the regulations entered into force, i.e. prior to 1 June 2016. The second paragraph of the same point also states that new lending does not denote loans that are replacing loans that have been issued before the regulations entered into force in the event of changes in ownership that permanently entail only part of the home changing ownership. However, this only applies to that portion of the loans that is of the same amount or less than the loans issued before the regulations entered into force.

The consequence of the loans mentioned in the previous paragraph not constituting new lending is that they are not covered by the current amortisation requirement. For the same reason, they will not be covered by the stricter amortisation requirement either.

In situations that correspond to the current transitional provisions but where agreements concerning acquisition or construction of the home have been entered into, or the loans that are being replaced have been issued after the amortisation regulations entered into force, the current amortisation requirement applies. With regard to the stricter amortisation requirement, however, Finansinspektionen believes that there are grounds to introduce specific rules for situations that correspond to those covered by the current transitional provisions, and that this should be done through the mortgage firm being permitted to grant exemptions from the stricter amortisation requirement. The mortgage firm should therefore be permitted to grant an exemption from the stricter amortisation requirement if an agreement concerning acquisition or

[49] See Govt Bill 2015/16:89, p. 18.

construction of a home has been entered into prior to 1 March 2018. The mortgage firm should also be permitted to grant exemptions to the stricter amortisation requirement in the event of changes in ownership that entail only a portion of the home changing ownership, provided the loans that are being replaced have been issued prior to 1 March 2018. The exemption may apply to that portion of the new lending that is not in excess of the loans it is replacing.

Finansinspektionen agrees partly in the view of *the Swedish Bankers' Association* and *the Swedish Savings Banks Association* that exemptions from the stricter amortisation requirement should be granted for periods in which a borrower has double mortgages as a result of moving home. *Bluestep Bank* has expressed similar views (see section 2.3.2.2). Consequently, Finansinspektionen has amended the regulations to include the possibility for a mortgage firm to grant an exemption to the stricter amortisation requirement if, at the time the new loan is issued, the loan-to-income ratio only exceeds 450 per cent as a consequence of loans that will be settled in conjunction with the sale of an existing home. This exemption may be granted for a maximum of six months. This exemption may be granted in situations when e.g. the loan-to-income ratio that was calculated when the mortgage was approved only exceeds 450 per cent because the mortgage secured by the old home is included in the LTI-based loan amount. Another example is where the loan-to-income ratio only exceeds 450 per cent because the mortgagor is also taking out a bridging loan collateralised by the new or the old home, and this bridging loan will be settled when the former home has been sold.

The scope of this exemption is illustrated in Box 3.

Box 3: Examples of exemptions in the event of double mortgages

Example 1
A has a loan of SEK 1,000,000 secured by her home (Home 1). Her gross income is SEK 500,000. She buys a new home (Home 2) that she takes possession of on 1 April. In order to finance the purchase of this home, she takes out a new mortgage of SEK 1,500,000 secured by Home 2. She intends to settle the old mortgage in conjunction with the sale of Home 1 on 1 June. Taking only the new mortgage into account, the loan-to-income ratio is 300 per cent. However, because A still has the old loan at the time the new loan is taken out, the loan-to-income ratio is 500 per cent. Because A already has a mortgage on another home and intends to settle this loan, and as her loan-to-income ratio only exceeds 450 per cent as a result of the previous mortgage, the mortgage firm may grant an exemption from the stricter amortisation requirement for a maximum of six months. In this example, A will settle the old loan after only two months, the mortgage firm may thus calculate a loan-to-income ratio that is based solely on the new mortgage.

Example 2
B has a loan of SEK 1,000,000 that is secured by his home (Home 1). His gross income is SEK 500,000. He buys a new home (Home 2) that he takes possession of on 1 April. In order to finance the purchase of this home, he takes out a new mortgage of SEK 1,500,000 secured by Home 2. He also takes out two bridging loans of SEK 250,000 each, secured by Home 1 and Home 2, respectively. B intends to settle both the old mortgage and the two bridging loans in conjunction with the sale of Home 1 on 1 June. Taking only the new mortgage of SEK 1,500,000 into account, the loan-to-income ratio is 300 per cent. However, because B still has the old loan at the time the new loan is taken out, and is also taking out the two bridging loans, the loan-to-income ratio is 600 per cent. Because B already has a mortgage on another home and intends to settle this loan, and as his loan-to-income ratio only exceeds 450 per cent as a result of this mortgage and the two bridging loans (which will also be settled), the mortgage firm may grant an exemption from the stricter amortisation requirement for a maximum of six months. In this example, B will settle the old loan and the two bridging loans after only two months, the mortgage firm may thus calculate a loan-to-income ratio that is based solely on the new mortgage.

Finansinspektionen does not consider it appropriate to introduce a more general possibility to grant exemptions from the stricter amortisation requirement, in cases where the mortgagor has double mortgages for a transitional period in conjunction with moving home.

The exemptions that apply under the amortisation regulations to newly built homes (Section 10) and agricultural property (Section 11) shall also apply to the stricter amortisation requirement. *The Riksbank* calls for clarification of which loan-to-value ratio and loan-to-income ratio will apply to the purchase of a newly built home. Finansinspektionen considers the regulations sufficiently clear, in stating that the loan-to-value ratio and loan-to-income ratio shall be calculated when a new mortgage is granted, also in the case of the acquisition of a newly built home. However, these are exempted from the amortisation requirement for a period of up to five years. Following this period, the previously calculated loan-to-value ratio and loan-to-income ratio apply. However, the mortgage firm may then allow both a revaluation and a recalculation of the loan-to-income ratio. Finansinspektionen's assessment is that there is no need to clarify the regulations in this respect.

Bluestep Bank believes that mortgage firms should have the possibility to grant exemptions for up to ten per cent of their new lending. As stated in the impact assessment, the stricter amortisation requirement is deemed to affect approximately 14 per cent of new borrowers (see section 3.1). An exemption for ten per cent of new lending would therefore result in the regulations having a very limited impact on the debt trend and the macroeconomic risks, at least in the short term. In addition, Finansinspektionen deems that this would be a direct intervention in the competition between mortgage firms in a similar manner to that described in section 1.3.1. Accordingly, Finansinspektionen believes that an opportunity to grant exemptions such as that called for by Bluestep Bank should not be introduced.

2.11 Only natural persons are covered by the new requirements

Finansinspektionen's position: The stricter amortisation requirement will only encompass natural persons.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Administrative Court of Appeal in Stockholm* believes that regulations should clarify that the stricter requirement only applies to natural persons.

Finansinspektionen's reasoning: The stricter amortisation requirement is based on the borrowers' loan-to-income ratio, which is calculated on the basis of earned income (see section 2.3.1). Only natural persons can have earned income. This means that only mortgages issued to natural persons can be covered by the stricter amortisation requirement, not mortgages to legal entities. One consequence of this is that individual owners of private corporations who buy a home through the company will not be covered by the stricter requirement. This may incentivise individual owners to purchase homes through their own corporation. However, Finansinspektionen's assessment is that this problem is limited. It is common for mortgage firms to apply a stricter credit assessment when a home is being bought by a private corporation. For example, the use of a limited liability corporation entails a limited personal liability, which results in a higher credit risk. These factors counteract the incentive to purchase homes through private corporations. This problem is therefore not deemed to have any material impact on the macroeconomic risks associated with high levels of household debt. Furthermore, legal entities may still be covered by an amortisation requirement based on loan-to-value ratio.

As pointed out by *The Administrative Court of Appeal in Stockholm* the regulations should clearly state that the stricter requirement only applies to natural persons. Finansinspektionen has therefore clarified the provision in this respect.

2.12 Information provisions

Finansinspektionen's position: The stricter amortisation requirement involves no change to the applicable information requirement when changing mortgage firm.

Consultation memorandum: The proposal had the same content.

Consultative bodies: *The Swedish Bankers' Association* and *the Swedish Savings Banks Association* believe that the information requirement when changing mortgage firm under the current amortisation requirement is already extremely difficult to administer, and that the complexity will increase with the introduction of the stricter amortisation requirement. The Swedish Bankers' Association questions whether the information exchange required is compatible with bank confidentiality. The Swedish Bankers' Association notes that mortgagors can indirectly gain insight into other borrowers' loan situation through the amortisation plan that is drawn up in conjunction with the loan agreement, which may be perceived as a violation of privacy.

Finansinspektionen's reasoning: The current amortisation regulations impose no requirement on mortgage firms to continually inform each other about the amortisation situation of every borrower, neither at the time the amortisation requirement first arises nor later. Finansinspektionen also does not believe that such a requirement should be introduced. The information requirement that is currently in place when borrowers change mortgage firm means that the borrowers state which new mortgage firm is to have the information, after which this is sent. The current regulations thus mean that any mortgage firm that considers reducing the amortisation amount must, at that time, obtain information either from the other mortgage firms using a power of attorney or the consent of the borrowers, or directly from the borrowers.

According to Section 8 of the amortisation regulations, the borrowers shall receive information in writing concerning the data that forms the basis of the calculation of the amortisation requirement. Finansinspektionen is not changing this requirement as the Consumer Credit Act also contains supplemental provisions concerning the scope of this information and when it shall be provided (see, for example, Sections 6 a and 9 of the Consumer Credit Act).[50] The decision memorandum that preceded the current amortisation requirement stated that the data concerned encompasses data about the value of the home used to calculate the amortisation amount, the size of the loan that forms the basis of the calculation and the loan-to-value ratio.[51] The stricter amortisation requirement results in a new parameter being added to the basis of the calculation, namely the loan-to-income ratio. This means that the mortgage firm shall also provide information in writing to the mortgagors concerning the data that forms the basis for the calculation of the loan-to-income ratio. Finansinspektionen understands the consultative bodies' points of view regarding how the complexity will increase in conjunction with changing mortgage firm. However, the information requirement is necessary in order to ensure that changing mortgage firm will not become more difficult.

Even under the existing credit assessment rules, situations can arise in which a borrower is able to obtain information about their co-signer's other loans. One example of such a situation is when the bank does not grant a loan because the co-signer has large loans with other co-signers. Finansinspektionen's assessment is that the transfer of information referred to in the regulations is of the same character as during a bank's credit assessment. Consequently, Finansinspektionen does not share the Swedish Bankers' Association's fear that the requirement would be incompatible with bank confidentiality. Finansinspektionen also believes that mortgage firms should be able to design their application forms and information in a way that makes it possible for sufficient information for the calculation of the loan-to-income ratio to be reported for borrowers who are applying for loans with joint and several liability, without giving them insight into other borrowers' loan circumstances in breach of bank confidentiality.

2.13 Entry into force

Finansinspektionen's position: The amended amortisation regulations shall enter into force on 1 March 2018.

Consultation memorandum: Contained a proposal concerning entry into force on 1 January 2018.

Consultative bodies: *The Administrative Court of Appeal in Stockholm* believes that there should be consideration of whether consequential amendments are required to the transitional provisions in the current regulations as a result of the proposed Sections 14 and 15 having the same implications as parts of point 2 in the transitional provisions of the current

[50] The borrower's opportunities to obtain information within a certain period appears in Section 9 of the Consumer Credit Act, which states that the consumer shall be given information without unnecessary delay once the consumer has provided information about their wishes and needs, as well as the data required for credit assessment. The hand-over shall also take place a reasonable period prior to a loan agreement being entered into.
[51] FI Ref. 14-16628 p. 33.

amortisation regulations. *The Swedish Savings Banks Association, the Swedish Bankers' Association* and *the Swedish Federation of Business Owners* believe that the proposed amendments should not enter into force as early as 1 January 2018. The Swedish Savings Banks Association and the Swedish Bankers' Association state that, because the proposed amendments are complicated, a reasonable amount of time is required in order to train staff, build up system support and produce the necessary documents. The proposed time is also inappropriate in the light of end-of-year processes in IT systems. The Swedish Bankers' Association believes that the amendments should enter into force at least six months after the new regulations have been decided on conclusively.

Finansinspektionen's reasoning: The stricter amortisation requirement involves a loan-to-income ratio being calculated on new loans that are issued as of the date the stricter amortisation requirement enters into force. Accordingly, mortgages that have been issued prior to this are not covered by the requirement. This also applies if the borrowers take out new mortgages using the same home as collateral after the requirement enters into force. In such cases, it is only the new loan that is to be amortised in accordance with the stricter amortisation requirement. However, the previous loan shall be included when calculating the LTI-based loan amount and the highest loan amount. The borrowers will have the opportunity to return to the original amortisation requirement when the sum of loans secured by the home has been amortised to the level it was, prior to the stricter requirement's entry into force.

For mortgages taken out in the period 1 June 2016–28 February 2018, the current amortisation requirement will continue to apply, i.e. the amortisation rate shall be at least two per cent when the loan-to-value ratio is over 70 per cent, and one per cent when the loan-to-value ratio is over 50 per cent but under 70 per cent.

Finansinspektionen is not introducing any specific transitional provisions. As noted by *the Administrative Court of Appeal in Stockholm*, provisions corresponding to those that are found in point 2 of the entry-into-force and transitional provisions of the current regulations have been inserted in Sections 5, 15 and 16 of the amortisation regulations. As stated in section 2.10, these transitional provisions mean that some loans are not regarded as new lending and as a result, they are also not covered by the provisions concerning new lending in the amortisation regulations. This is not affected by the amendments to the regulations. Therefore, Finansinspektionen does not believe there is a need for any consequential amendments to the transitional provisions.

Finansinspektionen believes there is reason to comply with the consultative bodies' requests to postpone the entry into force of the new regulations. At the same time, Finansinspektionen is concerned that mortgage firms begin applying the regulations promptly. For these reasons, entry into force has been delayed until 1 March 2018, which means there is a longer period of time between the regulations being decided upon, and their entry into force.

3 Consequences of the regulations

Pursuant to the Regulatory Impact Assessment Ordinance (2007:1244), Finansinspektionen is obliged to report the impact of a regulation. In its submission to the consultation, the Swedish Better Regulation Council has reviewed the impact assessment and has found that it complies with the requirements in Sections 6 and 7 of the ordinance.

The stricter amortisation requirement is being introduced to have an impact on new lending to households that are taking out large mortgages in relation to their income, in order to reduce the macroeconomic risks. Accordingly, the impact on households is described in the initial section. Subsequently an account is provided of how the stricter requirement affects mortgage firms and Finansinspektionen.

3.1 Impact on households

Finansinspektionen uses data from the 2016 mortgage survey in the impact assessment.[52,53] In section 3.1.1, Finansinspektionen describes which new mortgagors are expected to be affected by the stricter amortisation requirement. Section 3.1.2 contains an account of how the stricter requirement is deemed to affect new mortgagors' amortisation payments and debt on the basis of an estimated change in their behaviour.[54]

3.1.1 Which new mortgagors are covered by the stricter amortisation requirement?

Diagram 2 shows a scatter plot of loan-to-income ratio and loan-to-value ratio for mortgagors in the 2016 mortgage survey. The different loan-to-value ratio thresholds under the current amortisation requirement and the loan-to-income threshold under the stricter amortisation requirement are illustrated using red dashed lines. The diagram thus shows the households that would have been covered by the stricter requirement if it had applied in 2016. A total of 15 per cent of the new mortgagors have debts that exceed 4.5 times their gross income (see Table 1).[55] One per cent of these are already amortising so much that they comply with the stricter requirement, which means that 14 per cent of new borrowers are affected by the measure. This can be compared with the 56 per

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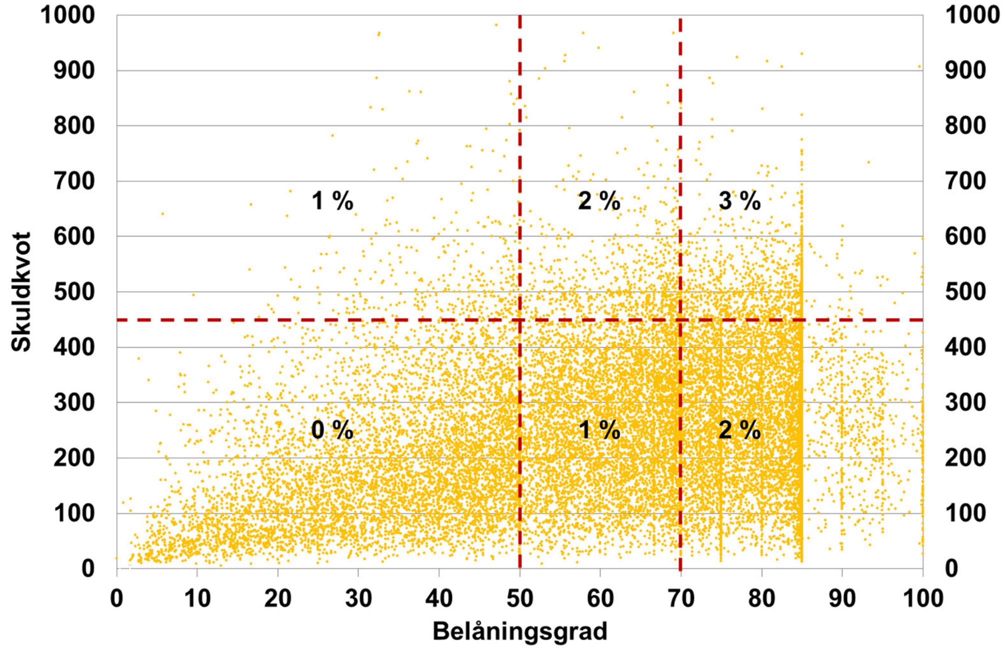
[52] See Finansinspektionen's report "The Swedish Mortgage Market 2017", 2017.
[53] In the mortgage survey, banks report borrowers' total debt and total mortgage debt. Total household debt is used in the impact assessment.
[54] *Covered* denotes those who have a loan-to-income ratio of over 4.5 times gross income. *Affected* denotes those who are covered by the stricter requirement and are not already amortising in accordance with the requirement.
[55] The definitions of debt and income used in the diagram are not entirely identical to those in the regulations, which is partly due to Finansinspektionen not having data for this. The results are not deemed to differ to any great extent.

cent of new mortgagors who were affected when the current amortisation requirement was introduced.

Diagram 2. Amortisation rate at a given loan-to-income ratio and loan-to-value ratio



Source: Finansinspektionen's own calculations and random samples from the 2016 mortgage survey.

Table 1. Proportion of new mortgagors with debts that are greater than 4.5 times their gross income, distributed by loan-to-value ratio

(Per cent)

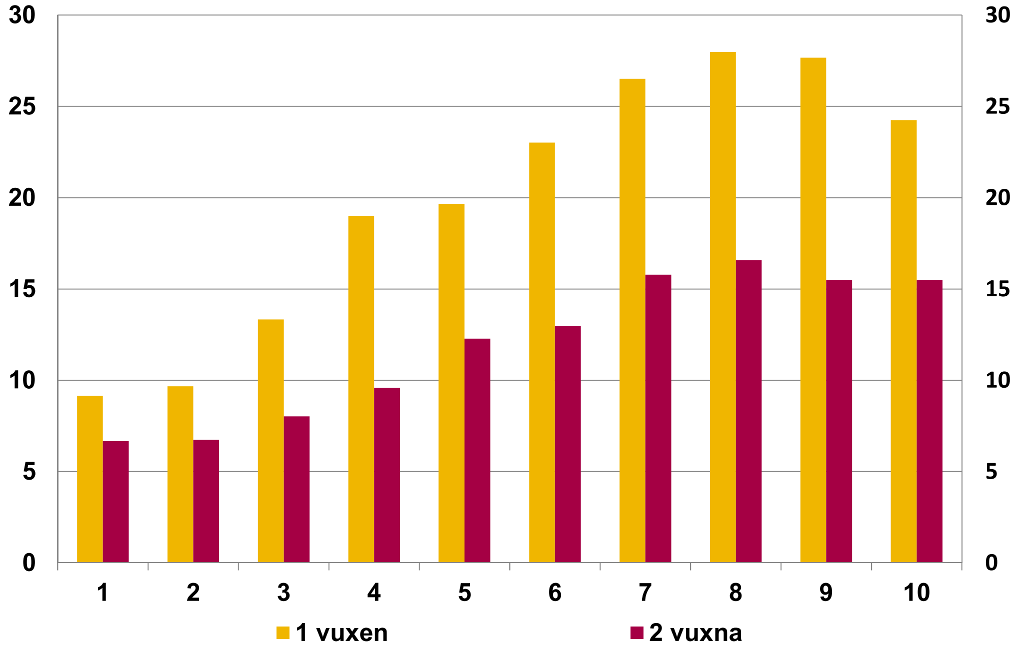
	Loan-to-value ratio (per cent)		
Loan-to-income ratio (per cent)	Under 50	50–70	Over 70
Over 450	2.9 (2.5)	4.7 (4.4)	7.2 (7.0)

Note: The figures in parentheses denote the proportion who do not comply with the stricter requirement.

Source: Finansinspektionen.

Diagram 3. Proportion of new mortgagors affected, per income decile

(Per cent)

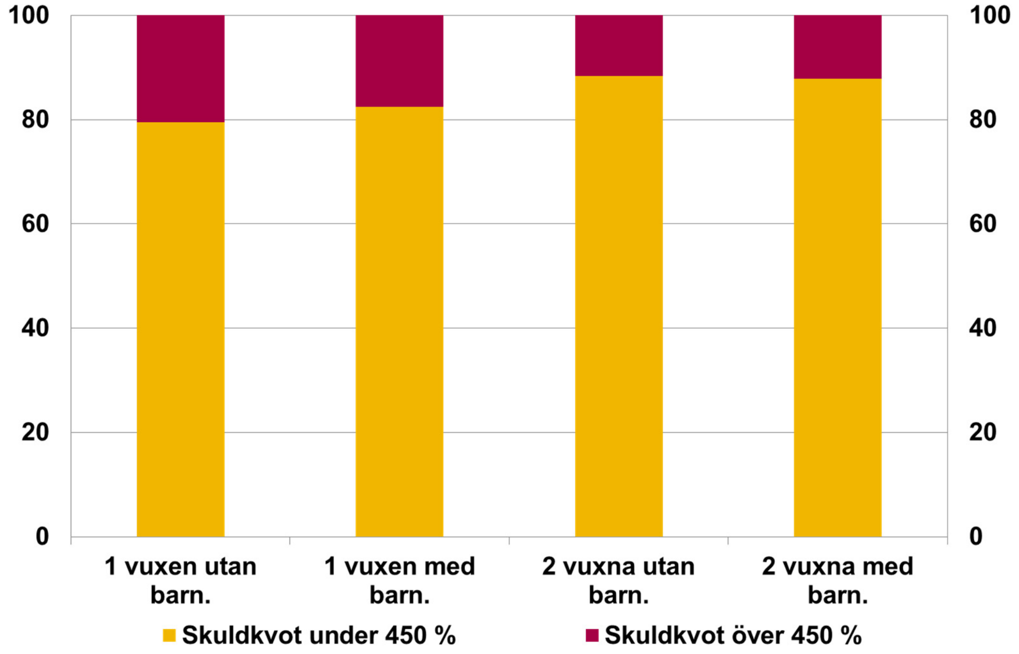


Note: The deciles are calculated separately for households with one adult and those with two adults. The deciles are created by dividing households into ten equally sized groups on the basis of the size of their disposable income. The first decile consists of the ten per cent of households whose incomes are lowest.

Source: Finansinspektionen.

The stricter requirement encompasses a larger proportion of households with one adult than households with two adults. The proportion covered by the stricter amortisation requirement increases with income within both the group with one adult and the group with two adults.

Diagram 4. Proportion of new mortgagors that are covered, distributed by size of household
(Per cent)

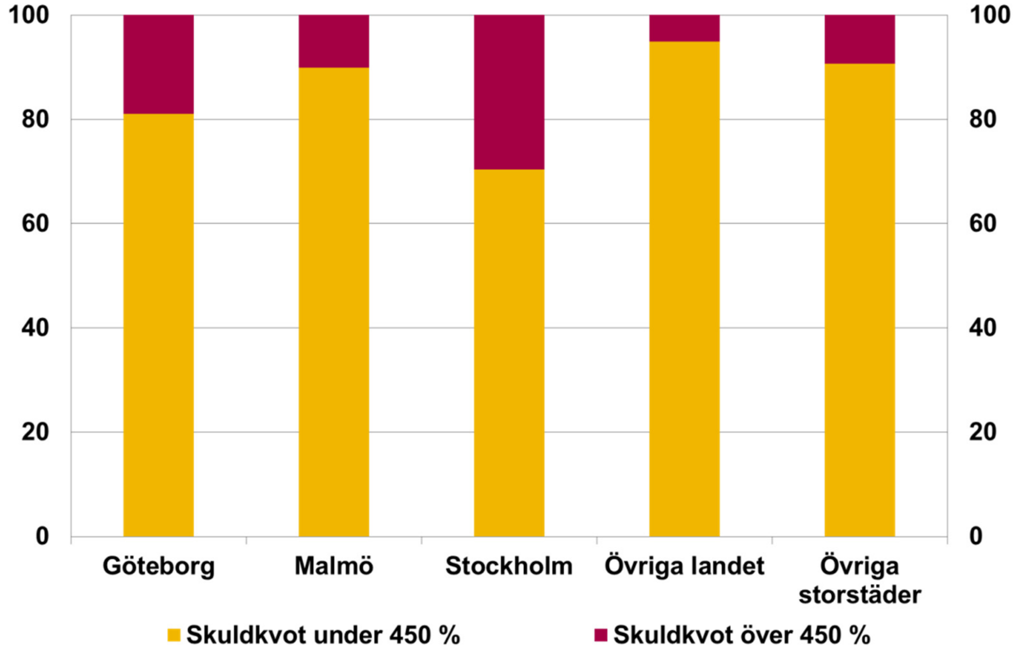


Source: Finansinspektionen.

Today, around 20 per cent of households with one adult would be covered by the measure (see Diagram 4). The proportion is significantly lower for households with two adults. The fact that households with one adult are more likely to have high loan-to-income ratios may be due to this category containing more younger households, who generally have a lower income.

Diagram 5. Proportion of new mortgagors affected, per region

(Per cent)

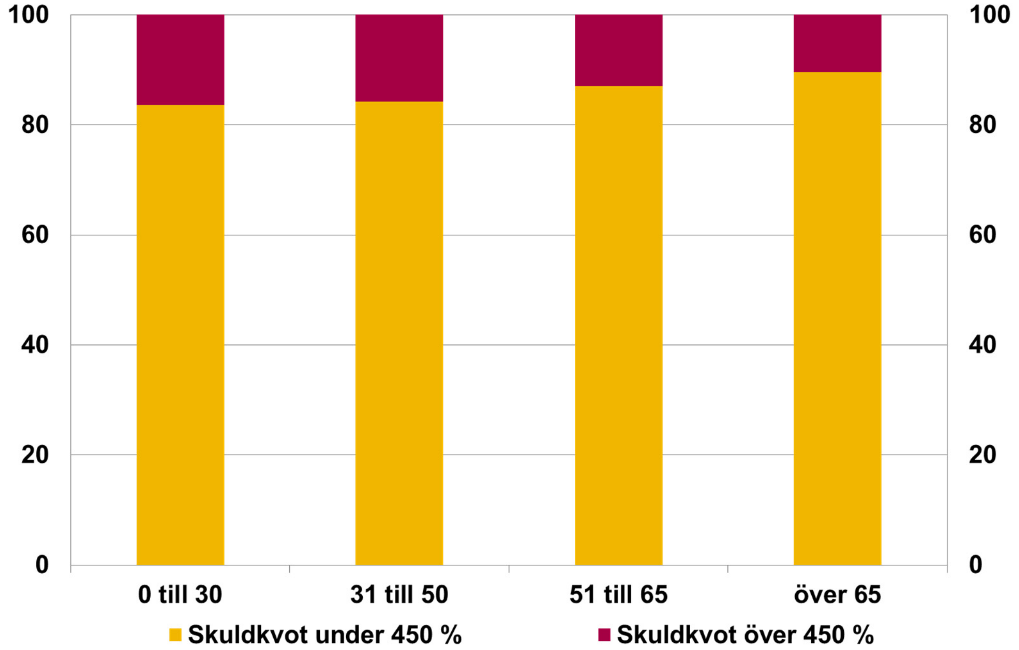


Source: Finansinspektionen.

A stricter amortisation requirement will encompass a relatively large number of new mortgagors in Stockholm and Gothenburg (see Diagram 5). Just over 30 per cent of new mortgagors in Stockholm and 19 per cent in Gothenburg have a loan-to-income ratio over 4.5 times their gross income. The reason is that house prices are significantly higher in these cities, while incomes do not differ considerably from other parts of the country. Accordingly, this means that the levels of debt in Stockholm and Gothenburg are significantly higher.

Diagram 6. Proportion of new mortgagors affected, per age group

(Per cent)



Source: Finansinspektionen.

Households under the age of 50 will be covered by the measure to a greater extent than older households (see Diagram 6). Around 16 per cent of new mortgagors under the age of 50 have loan-to-income ratios in excess of the threshold, while the equivalent proportion is around ten per cent for mortgagors over the age of 65. This is probably because younger households have less wealth and their incomes are generally lower than those of older mortgagors, with the exception of pensioners. The fact that mortgagors in the 31–50-year-old age group are also affected to a large degree may be because these households, as the size of the household grows, may borrow more in order to buy larger and thus more expensive homes.

3.1.2 Effects of the stricter amortisation requirement on new mortgagors

The amortisation requirement introduced by Finansinspektionen in June 2016 caused households to amortise more, purchase less expensive homes, borrow less and make larger deposits.[56] Households borrowed in aggregate terms nine per cent less and purchased homes that were three per cent less expensive as a result of the amortisation requirement. Finansinspektionen has used these estimates, together with information about the increase in household debt service payments following the introduction of the amortisation requirement, to calculate what effect the change in debt service payments may have on household borrowing and house prices.[57] Finansinspektionen is assuming that interest rates remain at their present level and that household amortisation

[56] See Finansinspektionen, “Amortisation requirement reduced household debt”, FI Analysis No. 10, 2017.

[57] The calculations are described in Finansinspektionen, “Consequences of a stricter amortisation requirement”, FI Analysis No. 11, 2017.

payments increase in accordance with the stricter requirement. On an overall level, the impact of the stricter requirement is expected to be less than was the case when the current requirement was introduced, because fewer households are affected. However, looking only at those who are affected, the impact may be greater.

3.1.2.1 House prices are dampened

The calculations indicate that the stricter amortisation requirement will result in house prices in Sweden as a whole being about 1.5 per cent lower than they would otherwise have been.[58] House prices in Stockholm are calculated to become three per cent lower than they would otherwise have been.

Estimates of this type are associated with a high degree of uncertainty. There are factors that suggest the impact on house prices may be larger. The current amortisation requirement reduced debt more than house prices. This means that households financed the purchase of homes using means other than mortgages to a greater extent than was previously the case. Finansinspektionen's estimate of the impact on house prices assumes that households also act similarly when a stricter amortisation requirement is introduced. However, it is not certain that households with high loan-to-income ratios that are covered by the stricter amortisation requirement have the same opportunity to finance the purchase of homes through means other than mortgages. If the alternative for these households is to reduce their debt by choosing even cheaper homes, the impact on house prices will be greater.

In addition, the current amortisation requirement has resulted in parents who have lower loan-to-value ratios borrowing against their homes in order to help their children. By such means, younger home buyers may have reduced their loan-to-value ratio in order to avoid or lessen the impact of the amortisation requirement. It is not certain that parents have the same opportunity to help their children finance the purchase of a home under the stricter amortisation requirement. Parents who have owned their home for a long time may have a low loan-to-value ratio due to the value of the home having increased, but it is not certain that their loan-to-income ratios are so low that they are able to take out additional loans without becoming covered by the stricter amortisation requirement themselves. This also suggests that the impact on house prices, debt and amortisation payments may be larger.

When the current amortisation requirement was introduced, Finansinspektionen assessed that it would dampen house price growth by up to five per cent. Finansinspektionen has subsequently evaluated the impact of the amortisation requirement and has made the assessment that the requirement has dampened house price growth by three per cent. In the first twelve months since the introduction of the requirement, however, house prices continued to rise. The

[58] Notenote that the comparison is made to what the prices would be without the stricter amortisation requirement. The figures presented do not necessarily mean that the prices are expected to fall.

current amortisation requirement is thus deemed to have only reduced the growth rate, rather than the level. Finansinspektionen's assessment is that the unique economic situation, with high growth and low interest rates, may cause house prices to continue rising. Consequently, Finansinspektionen does not expect the stricter amortisation requirement to lead to a sharp drop in prices.

3.1.2.2 Households borrow less

The stricter amortisation requirement will reduce debt immediately in several ways. Some households will choose to borrow less in order to obtain a loan-to-income ratio that is less than 4.5 times their gross income and thus avoid the stricter amortisation requirement. Others will borrow more than 4.5 times their gross income, but less than they would have done had the requirement not been in place, in order to limit the increase in their monthly amortisation payments. In addition, the stricter amortisation requirement may have an impact on the calculations mortgage firms use in their credit assessments. If household behaviour – buying less expensive homes and borrowing less – changes in the same way under the stricter amortisation requirement as it did when the current requirement was introduced, only seven per cent of households will borrow more than 4.5 times their gross income, compared with 15 per cent today (see Table 2). The 15 per cent of new mortgagors who have a loan-to-income ratio over the threshold under the current amortisation requirement can therefore be divided up into those who are already complying with the stricter amortisation requirement (one per cent), those who would reduce their loan-to-income ratio under the threshold (seven per cent) and those who would amortise in accordance with the stricter requirement (seven per cent).

Table 2. Proportion of mortgagors by loan-to-value ratio and loan-to-income ratio under the stricter amortisation requirement

(Per cent)

	Loan-to-value ratio (per cent)		
Loan-to-income ratio (per cent)	Under 50	50–70	Over 70
Over 450	2 (3)	2 (5)	3 (7)
Under 450	27 (25)	24 (21)	42 (39)

Note: The figures in parentheses are the proportions prior to taking behavioural changes into account.

Source: Finansinspektionen.

In aggregate, one in three households affected by the stricter amortisation requirement will need to amortise a higher proportion of their loan each year. Of the new mortgagors who are affected, twelve per cent reduce their debt so much that they end up with a lower amortisation rate than under the current amortisation requirement. This means that they do not just get a loan-to-income ratio under the threshold, they also get a lower loan-to-value ratio. In turn, this means that half of those households affected by the stricter requirement will amortise the same proportion of their loan each year as under the current amortisation requirement, but with a smaller loan than they would have had if the amortisation requirement had not been made stricter.

The average new mortgage in the 2016 mortgage survey is almost SEK 1.8 million. Under the stricter amortisation requirement, the average size of new mortgages is expected to fall by SEK 70,000. This is a reduction of four per cent, which can be compared with a reduction of nine per cent when the current amortisation requirement was introduced. Those households that are affected by the stricter requirement reduce their debt by an average of about

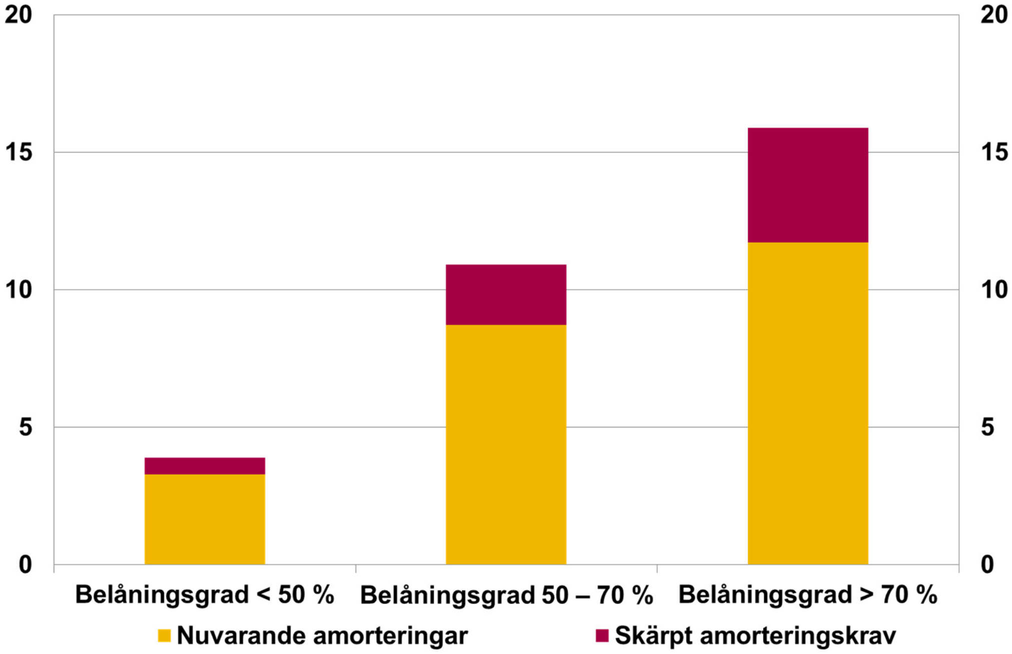
SEK 500,000, which corresponds to 17 per cent of the original loan. It is primarily households with loan-to-value ratios under 50 per cent that take out smaller loans.

3.1.2.3 Households amortise more

Those households that choose to take out loans that are over the threshold need to amortise at least one per cent more than under the current amortisation requirement. This means that they will allocate an average of one to four per cent more of their disposable income to amortisation payments, depending on the household's loan-to-value ratio (see Diagram 7).

Diagram 7. Amortisation payments in relation to income

(Per cent)



Note: The diagram shows how amortisation payments change in relation to income as a result of the stricter amortisation requirement, calculated on the basis of estimated impact on behaviour, for households with loan-to-income ratios over 4.5 times their gross income and different loan-to-value ratios.

Source: Finansinspektionen.

Amortisation payments increase by an average of almost SEK 2,000 per month for households that have both high loan-to-income ratios and high loan-to-value ratios. Households with high loan-to-income ratios and loan-to-value ratios of 50–70 per cent increase their monthly amortisation payments by an average of almost SEK 1,000. One in ten households with a loan-to-income ratio over the threshold will increase its amortisation payments by at least SEK 3,000 per month.

Some households reduce their amortisation payments under the stricter requirement. These are households that reduce their borrowing so much that their loan-to-income ratio is below the threshold. They are therefore able to amortise at the same or a lower rate than under the current amortisation requirement. The size of the amortisation payments in kronor decreases because they are borrowing less.

3.1.2.4 Impact on different groups of household

The behavioural changes mean that those households that are affected by the stricter amortisation requirement take out a smaller new mortgage because their amortisation payments increase. To limit the increase in their debt service payments, some households borrow less and thus reduce their loan-to-income ratio to below the threshold. This applies primarily to large households (two adults with children), families in Stockholm and mortgagors in the 31–50-year-old age group. The proportion of older borrowers and families with two adults and no children who continue to borrow more than 4.5 times their gross income is higher, relatively speaking.

Table 3. Changes in debt and amortisation payments for those households that are affected by the stricter amortisation requirement

		Proportion (per cent)		Amount (SEK)	
		Covered	Under the requirement	Debt	Amortisation payments
	Gothenburg	19	52	-430,000	400
	Malmö	10	52	-430,000	300
	Stockholm	30	63	-520,000	100
	Rest of Sweden	5	50	-460,000	0
	Other major cities	9	45	-470,000	100
	18–30	16	46	-340,000	-100
	31–50	16	62	-510,000	300
	51–65	13	43	-500,000	600
	Over 65	10	41	-590,000	800
One adult	No children	21	49	-370,000	300
	With children	18	57	-550,000	-100
Two adults	No children	12	36	-430,000	900
	With children	12	69	-620,000	100

Note: The proportion covered (in per cent) are the households in each category that have debts that are more than 4.5 times their gross income. The proportion under the requirement (in per cent) shows what portion of those who are affected by the requirement reduce their debts to under 4.5 times their gross income. The reduction in debt and monthly amortisation payments are stated in kronor.
Source: Finansinspektionen.

The reduction in debt as a result of the stricter amortisation requirement is relatively similar across the various regions. In Stockholm, debt is estimated to be reduced by SEK 520,000, in Gothenburg and Malmö by SEK 430,000 and in other cities by SEK 470,000.

New mortgagors over the age of 65 reduce their debt by an average of SEK 590,000, which is almost double the figure for younger households. Households with children reduce their debt more than households with no children. Large households (two adults with children) reduce their debt by an average of SEK 620,000 and single parents reduce their debt by an average of SEK 370,000.

As households choose to take out smaller mortgages this implies that amortisation payments do not increase by so much on average but may increase substantially for individual households. In Gothenburg and Malmö, amortisation payments increase by an average of SEK 300–400 per month for all new mortgagors who are affected. Households in Gothenburg, Malmö and Stockholm that continue to borrow more than 4.5 times their gross income after having reduced their debt will amortise an average of around SEK 1,000 more per month.

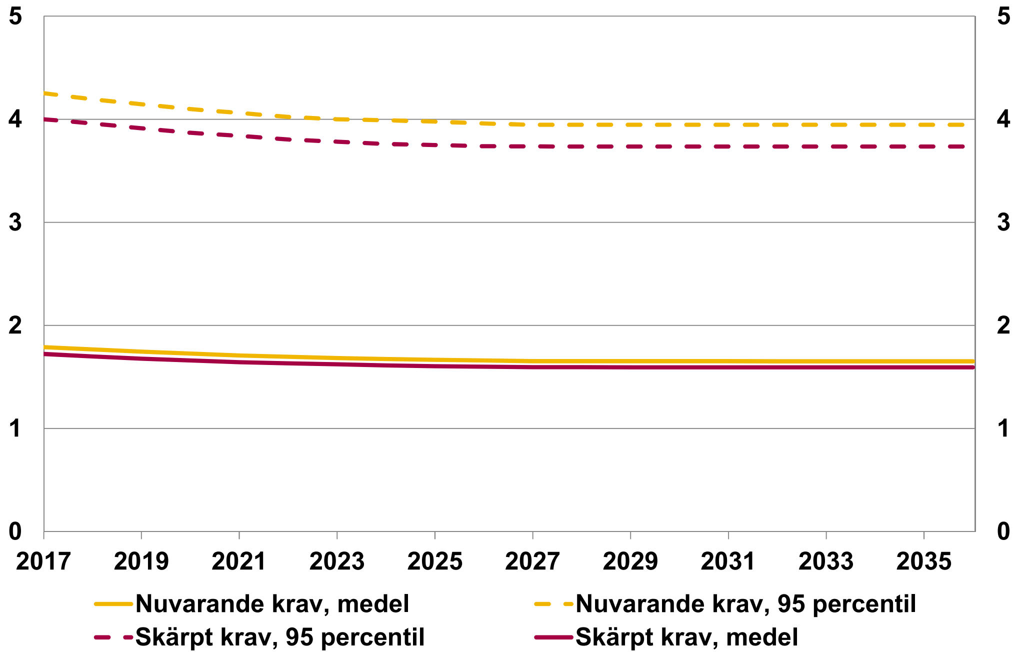
A higher proportion of the youngest mortgagors and borrowers in the 31–50-year-old age group are affected by the stricter amortisation requirement. However, the youngest borrowers, those in the 18–30-year-old age group, reduce their amortisation payments on average. This is due to the reduction in debt, but also because they are already amortising most. The oldest households not only reduce their debt most, they also increase their monthly amortisation payments most. In terms of the size of households, it is primarily households with two adults and no children that have higher amortisation payments under the stricter amortisation requirement.

3.1.2.5 Debt is reduced further over time

Levels of debt also decrease when households amortise their mortgages. That is why a household's loan-to-income ratio and loan-to-value ratio decreases over time.

Diagram 8. New mortgages in 2016, average and 95th percentile

(MSEK)



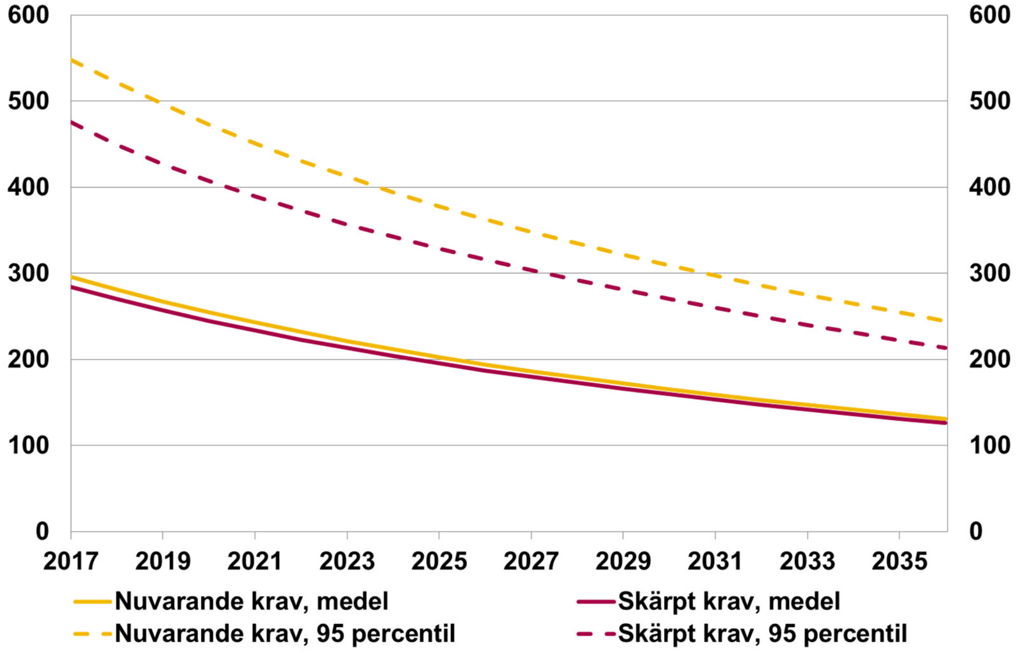
Note: The diagram shows the change over time for new mortgagors in 2016. The stricter requirement is calculated taking into account an estimated change in behaviour and the mortgage firms' credit assessment.

Source: Finansinspektionen.

Under the current amortisation requirement, the average mortgage for households in the 2016 mortgage survey will be SEK 1.7 million in 2020 and will then continue falling to SEK 1.65 million when their loan-to-value ratios have fallen below 50 per cent and they are no longer covered by the requirement (see Diagram 8). Under the stricter amortisation requirement, the average mortgage will be around SEK 50,000–70,000 lower, depending on the point in time at which the comparison is made. The reduction is greater for households with large loans. The stricter amortisation requirement reduces the size of the mortgage by SEK 250,000 or more for households with the largest debt (95th percentile).[59]

Diagram 9. Loan-to-income ratios, average and 95th percentile

(Per cent)



Note: The diagram shows the change over time for those who took out a new loan in 2016. The stricter requirement is estimated taking into account behavioural effects and the mortgage firms' credit assessment.

Source: Finansinspektionen.

Loan-to-income ratios also decrease over time. This reduction is due to both amortisation of the loans and increasing household income. The average debt of new mortgagors in 2016 is about three times gross income (see Diagram 9). The current amortisation requirement, together with the increase in income, which is assumed here to be four per cent per year, reduces the average loan-to-income ratio to 2.5 times gross income in 2020. Under the stricter amortisation requirement, the loan-to-income ratio is initially estimated to be eleven percentage points lower. The impact of the requirement is greater for households that have large loans and high loan-to-income ratios. In 2035, the

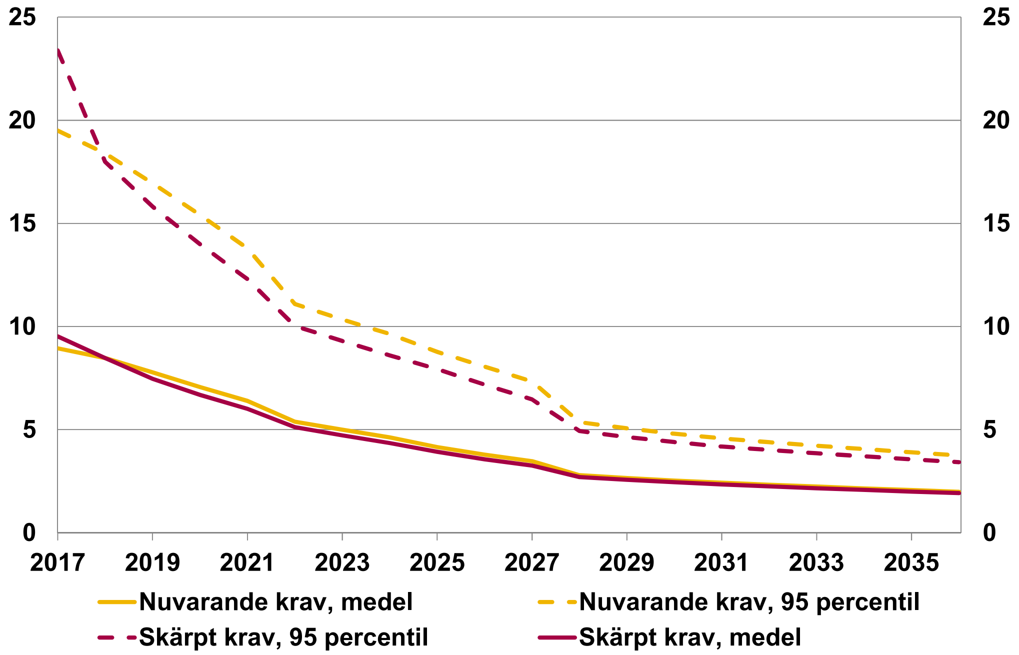
[59] The 95th percentile specifies a debt level that 5 per cent of households exceed.

loan-to-income ratio for mortgagors with the largest debts will be, on average, 70 percentage points lower under the stricter amortisation requirement compared to the current amortisation requirement.[60]

[60]Denotes the 95th percentile.

Diagram 10. Debt service payments as a proportion of disposable income, average and 95th percentile

(Per cent)



Note: The diagram shows the change over time for those who took out a new mortgage in 2016. The stricter requirement is calculated taking into account estimated behavioural effects and the mortgage firms' credit assessment.
Source: Finansinspektionen.

When debt is reduced, debt service payments also decrease. A household's debt service payments consist of interest payments and amortisation payments. Under the current amortisation requirement and today's interest rates, debt service payments amount to an average of nine per cent of disposable income for those households that took out new mortgages in 2016 (see Diagram 10). The proportion of income taken up by debt service payments decreases over time as a result of amortisation and increased income. Under the stricter amortisation requirement, average debt service payments initially increase to almost ten per cent of disposable income. The increase in debt service payments as a result of the stricter requirement is partly counteracted by households borrowing less. The stricter requirement leads to seven per cent of households amortising at a faster rate than under the current amortisation requirement. These households rapidly come down to a loan-to-income ratio that is under the threshold and then amortise in the same manner as under the current amortisation requirement. Households with large debts are affected more, both by the initial increase in debt service payments and by the long-term reduction.

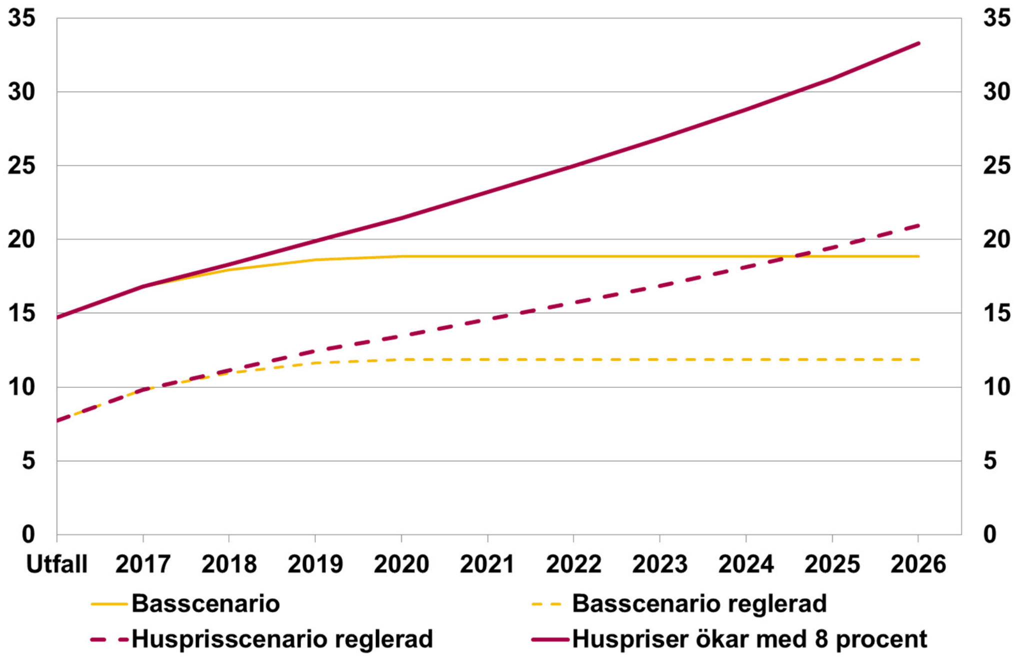
3.1.3 The impact of the stricter amortisation requirement on total debt

The stricter amortisation requirement only applies to new mortgages, but as homes are sold and bought, an increasing number of households will be covered. This is why the stricter amortisation requirement will gradually come to affect total debt. In order to obtain an idea of the impact of the stricter amortisation requirement on total debt, a forecast of how debt, house prices and income would change in future without a stricter amortisation requirement has been produced. This forecast is based on the National Institute of Economic Research's assessment from March 2017 and Finansinspektionen's econometric model for household debt. The baseline scenario is that debt and house prices grow faster than income until 2020. Loan-to-income ratios also increase during this period. In 2020, approximately 19 per cent of households have a loan-to-income ratio over the threshold under the current amortisation requirement (see Diagram 11). Subsequently, loan-to-income ratios do not increase as the levels of debt and income are assumed to grow at the same rate.

In an alternative scenario (the house prices scenario) house prices are assumed to grow faster than in the baseline scenario, but without income growing at the same rate. In 2026 in this scenario, just under one in three new mortgagor will have a loan-to-income ratio over the threshold under the current amortisation requirement.

Diagram 11. Proportion of new mortgagors with debts that are greater than 4.5 times their gross income in the event of different trends in house prices

(Per cent)



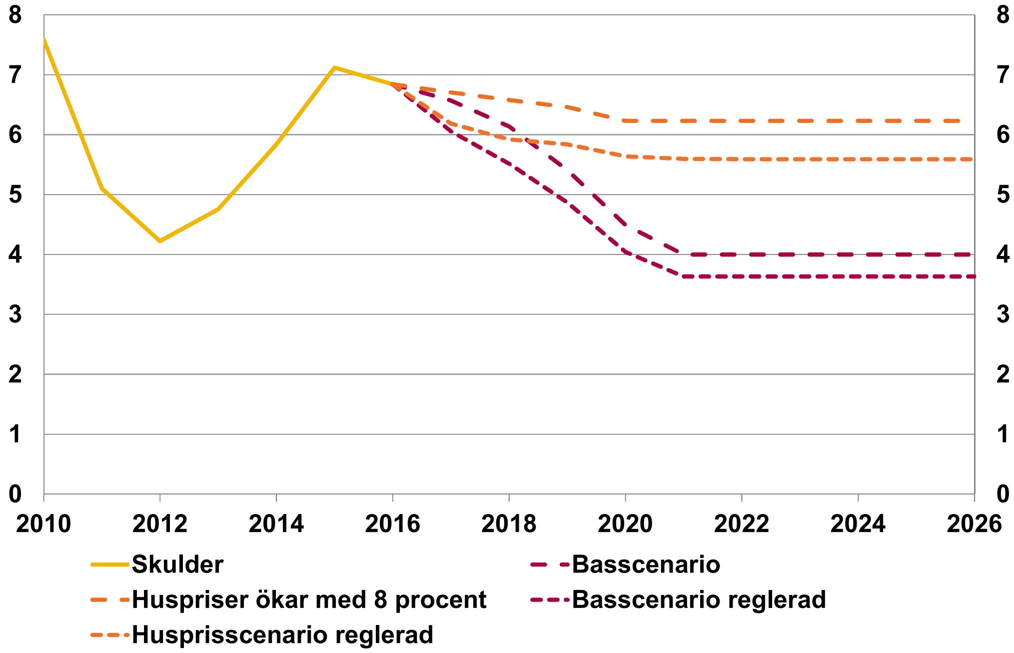
Note: The yellow line (baseline scenario) shows the proportion of households with a loan-to-income ratio over 4.5 times their gross income if the income develops in line with the National Institute of Economic Research's assessment from March 2017 and debt in line with Finansinspektionen's Bayesian VAR model. The red line shows the corresponding proportion if house prices (and new lending) increase by eight per cent and income by four per cent per year.

Source: Finansinspektionen.

The impact of the stricter amortisation requirement in the baseline scenario is that the proportion of new mortgagors with a loan-to-income ratio over the threshold decreases to seven per cent initially and becomes twelve per cent as of 2020 (see Diagram 11). In the house prices scenario, this proportion becomes just over 20 per cent in 2026 under the stricter requirement. The stricter amortisation requirement immediately reduces new lending by approximately four per cent. Subsequently, new lending is dampened by approximately six per cent in the baseline scenario and by up to ten per cent in the house prices scenario.

Diagram 12. Aggregate debt, with and without regulation

(Annual percentage change)



Source: Finansinspektionen.

The dampening of new lending also has an impact on the trend in terms of total debt. The stricter amortisation requirement dampens the annual percentage change in aggregate debt by an average of 0.5 percentage points up to and including 2020 (see Diagram 12). After 2020, this rate slows. At the end of 2026, the level of debt is 3.5 per cent lower under the stricter amortisation requirement. In the scenario involving faster growth in house prices, the dampening is an average of 0.6 percentage points up to and including 2026. At that time, the level of debt is six per cent lower than under the current amortisation requirement.

3.1.4 Other effects

3.1.4.1 Lock-in effects

The current amortisation requirement has involved certain lock-in effects, for example because old loans are not covered by the requirement. Similar transitional rules, that old loans are not covered, are also included in the stricter amortisation requirement. The lock-in effects are due to households with existing mortgages not choosing to move in order to avoid the amortisation requirement. The lock-in effects may entail less mobility in the housing market and thus a cost to the economy as a whole. However, Finansinspektionen believes that this effect is limited at an aggregate level and is primarily due to the current amortisation requirement, since many more mortgagors were affected when this requirement was introduced. The stricter requirement affects only 14 per cent of new mortgagors, altough those who are affected by the stricter requirement are expected to be affected to a greater extent than when the current amortisation requirement was introduced.

The lock-in effect is strongest for households that are planning to move to a more expensive home. It is primarily these households who need to borrow a large amount and are thus at risk of being covered by the requirement. Households that are planning to move to cheaper homes are less likely to be covered by the stricter amortisation requirement. Nevertheless, mortgagors with lower incomes (often older people) may also be affected when they buy cheaper homes.

Households that have bought newly built homes may also have less incentive to move. This is because these households, as with the current amortisation requirement, may be exempted from the stricter amortisation requirement for up to five years if they retain the newly built home. If such a household moves to a home that is not newly built within that five-year period, the household will be covered by the amortisation requirement. In addition, the prices of newly built homes may be higher because the mortgage on them is not covered by the amortisation requirement.[61] In the event of a sale, it may be difficult for the first buyer to obtain an equivalent sale price. This may also reduce mobility in the housing market somewhat. However, the impact of this should be limited because the exemption only applies to the first five years. This condition is also known at the time of purchase.

Amortisation payments increase households' housing expenses but are fundamentally a means of saving. The lock-in effect as a result of the amortisation requirement will therefore probably not be as strong as if the measure had been associated with a cost. The lock-in effects are stronger when they aim to avoid costs, e.g. tax on capital gains.

3.1.4.2 Restrictions on households' opportunities to choose means of saving

An amortisation requirement entails a restriction of the freedom of households to choose their preferred means of saving. This also applies to the stricter amortisation requirement. Some households will amortise more than they would otherwise have done. This may mean that they reduce their consumption or that they save less by other means. For those households that amortise instead of saving by other means, the total future return may be less than it would have been without an amortisation requirement. This is because mortgage rates, after interest rate deductions, are generally lower than the expected return from many other means of saving. At the same time, the risk involved in household saving is reduced because the value of other savings such as shares of investment funds can vary greatly. In addition, these savings often vary in correlation to the value of the household's home. Amortisation is a safe means of saving, while other means of saving provide the opportunity to obtain a higher return but also entail a risk of losses. Taking into account the risk involved in other means of saving, amortisation need not be a worse means of saving than those with a higher risk.

[61] However, the bank is still free to require amortisation, which is why this effect should be smaller in practice.

Means of saving other than amortisation generally have the advantage that the money is more accessible if it should be required – for example in the event of a loss of income or other sudden need for liquid assets. In such a situation, it may be difficult for a mortgagor to take out new loans corresponding to the amortisation payments they have previously made in order to cover such unexpected outgoings temporarily. In such cases, it is much simpler to sell financial assets or withdraw money from a savings account. Increased amortisation that takes place at the expense of other means of saving may thus make it harder for some households to deal with unexpected costs or the loss of income. At the same time, many households will gain increased resilience to shocks because larger amortisation payments reduce the size of their debt. To counteract the negative impact of a portion of households having smaller liquid buffers, mortgage firms have the opportunity to grant exemptions to the amortisation requirement should there be special grounds.

3.2 Consequences for mortgage firms

3.2.1 Firms affected

The same firms covered by the current amortisation regulations are covered by the stricter amortisation requirement, namely credit institutions – banks and credit market companies – operating in Sweden. There are currently 124 authorised credit institutions in Sweden. Of these, 90 are banks (including 47 savings banks and two members' banks) and 34 credit market companies. The stricter amortisation requirement will also encompass foreign firms that, through branches or otherwise, issue mortgages in Sweden. There are 29 such branches, of which Danske Bank has the most extensive mortgage business in Sweden. There are 515 foreign banks conducting some form of business in Sweden without subsidiaries or branches. These are not included in the impact assessment as they have a very small mortgage business in Sweden. Credit market companies are not included in the impact assessment for the same reason.

In Sweden, mortgages are issued primarily by limited liability banking companies with associated mortgage companies and by savings banks. There are a total of 90 firms involved.[62] The eight largest mortgage firms – Danske Bank, Länsförsäkringar Bank, Nordea, SBAB, SEB, Skandiabanken, Svenska Handelsbanken and Swedbank – together account for approximately 95 per cent of the total outstanding mortgage volume in Sweden.[63]

[62] Since the Mortgage Credit Directive was implemented in Swedish law, there are now also mortgage institutions in accordance with the Mortgage Business Act (2016:1024). These firms are not credit institutions and are not covered by the current amortisation requirement or the stricter amortisation requirement.
[63] It is these eight banks that are included in Finansinspektionen's mortgage survey.

Finansinspektionen conducts an annual review of need for supervision. This review is based on how systemically important the firms are, with their size being the most important factor on which to base this assessment.[64] According to the current assessment, the credit institutions consist of four major banks (Nordea, SEB, Svenska Handelsbanken and Swedbank), eight medium-sized credit institutions, around ten small credit institutions and around 70 even smaller credit institutions.

Credit institutions' general business model is to issue loans, and their lending is often financed by deposits. However, many credit institutions have a core business other than issuing mortgages. These credit institutions are also covered by the stricter amortisation requirement, but are not affected directly. The main business of such firms is often to grant consumption loans (e.g. for purchasing cars), facilitating securities trading, only issuing unsecured loans or assisting with the financing of public-sector projects. The 2017 report on the supervision of credit institutions contains a more detailed description of the credit institution market.[65]

3.2.2 General information about the costs

Finansinspektionen's assessment is that the stricter amortisation requirement will entail higher costs for mortgage firms. This involves partly one-off costs and partly higher ongoing costs.

Amortisation payments are something that mortgage firms are already managing, in particular as a result of the current amortisation requirement. At the same time, almost all large mortgage firms have internal loan-to-income rules as part of their credit assessments. The definitions of debt and income are included in these parts. Consequently, the stricter amortisation requirement is not expected to entail any substantial adjustment on the part of the firms. The higher costs that may still be expected as a result of the stricter amortisation requirement are associated with staff training, updating systems, holding slightly longer customer meetings and increasing the amount of information provided to mortgagors because of the expanded information requirement. The costs arise largely as a result of one further definition, loan-to-income ratio, being regulated in detail. This may differ from how mortgage firms currently define the term.

The impact on mortgage firms' business models and balance sheets are only covered qualitatively as these effects are difficult to predict accurately.

3.2.3 One-off costs

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[64] See Finansinspektionen, "*Kategorisering av svenska kreditinstitut 2017*" (Categorisation of Swedish credit institutions 2017), 2017, http://www.fi.se/sv/publicerat/nyheter/2016/kategorisering-av-svenska-kreditinstitut-2017/.
[65] See Finansinspektionen, "Supervision of the banks", 2017, https://www.fi.se/en/published/reports/supervision-reports/2017/supervision-of-the-banks/.

The stricter amortisation requirement involves the addition of new definitions of debt and new calculations having to be made. Some other one-off costs will therefore probably arise, primarily due to adapting procedures and internal systems and training staff.[66] Finansinspektionen's made the assessment that the one-off cost of training staff as a result of the current amortisation requirement would amount to SEK 3–7 million for each of the eight largest mortgage firms. and SEK 1 million for the smaller mortgage firms, resulting in a total one-off cost of SEK 122 million. The cost of training varies depending on the size of the mortgage business, so the figures differ substantially between larger and smaller mortgage firms.

Since the introduction of the current amortisation requirement, a licensing programme for mortgages has been created under the auspices of Swedsec.[67] Finansinspektionen's assessment is that this licensing programme will expand to also contain the stricter requirement and that staff of mortgage firms will be trained thanks to this. One reason for the licensing programme is the increased requirement for expertise and knowledge by staff who work with mortgages as a consequence of the Mortgage Business Act (2016:1024) and Finansinspektionen's regulations and general guidelines (FFFS 2016:29) regarding mortgage lending business. Those who already have a mortgage license through Swedsec will update their knowledge through annual knowledge updates, which would be taking place regardless. In addition to the general training, bank-specific learning initiatives are required in order to teach the staff of each mortgage firm about the stricter requirement. Finansinspektionen's assessment is that the additional one-off administrative costs of training will be lower as a result of the stricter requirement than when the current amortisation requirement was introduced. This is because mortgage firms' staff are now accustomed to dealing with amortisation as a result of the amortisation requirement and internal loan-to-income rules.

The internal systems of mortgage firms need to be updated, which is an administrative cost. Several mortgage firms have created functional systems for compliance with the current amortisation requirement, but these will need to be updated as the loan-to-income ratio is being added. Finansinspektionen's assessment is that these system costs should be somewhat lower than when the current amortisation requirement was introduced. The cost of these is not deemed to differ as much between mortgage firms as the change to systems can be applied to all affected staff in the firm. It may be somewhat more extensive for larger firms because of changes needing to be made in more systems. However, it is conceivable that larger mortgage firms have more internal expertise in terms of updating systems. Smaller firms, on the other hand, may need to buy in such systems or system updates at a higher price. All in all, however, the cost of systems updates should be higher for the larger firms.

[66] Staff training is also an ongoing cost that may be expected to increase somewhat.
[67] Swedsec is a company that provides licensing to employees in the Swedish financial market.

The stricter amortisation requirement involves mortgage firms providing information to mortgagors in writing about the data that form the basis of the loan-to-income ratio calculation. Finansinspektionen does not deem the increased information requirement that this entails to result in costs that are as extensive as when the current regulations were introduced.

The cost of training is expected to be lower than when the current amortisation requirement was introduced. The cost of system updates is also expected to be somewhat lower, but there is a great deal of uncertainty in terms of how far mortgage firms have come in terms of adapting their systems to the current amortisation requirement. This also has an impact on the cost of the stricter requirement. The cost of both system updates and training may thus be expected to be lower when compared with the existing amortisation requirement, but the cost of training can be expected to decrease more in relative terms.

The cost per customer for mortgage firms with less extensive operations may be somewhat larger. If it is assumed that the one-off cost of the stricter requirement is half that of the current amortisation requirement, the one-off cost should be SEK 1.5–3.5 million for the eight largest mortgage firms and SEK 500,000 for the other 82 mortgage firms. The total one-off cost for mortgage firms is therefore 8 × 1.5 or 3.5 + 82 × 500,000 = SEK 53–69 million.

3.2.4 Ongoing costs

In addition to the one-off costs, certain ongoing costs also arise as a result of the measure. This primarily involves some customer meetings potentially taking longer and thus higher staffing costs for mortgage firms. The ongoing costs are dependent on both the mortgage firm's size and its business model and may therefore vary substantially between firms. Finansinspektionen estimated that the total ongoing costs associated with the introduction of the current amortisation requirement would amount to a maximum of approximately SEK 105 million for the entire mortgage sector. This estimate was based on data from the 2015 mortgage survey, when the eight largest mortgage firms conducted around 325,000 customer meetings over the course of the year. According to one estimate based on the 2016 mortgage survey, the number of annual customer meetings may instead be around 500,000.[68]

This estimate is probably at the upper end of the scale as the number of borrowers who want to extend their existing mortgages is deemed to be lower under the stricter requirement. The calculation conducted ahead of the adoption of the current amortisation requirement was that customer meetings would be

[68] 26,210 agreements in Mortgage Survey 2016. Adjusted for seasonal variation, time of the month the survey took place, the fact that not all mortgage firms were included and upward adjustment to cover the entire year, the number of new mortgage agreements each year is estimated at approximately 500,000. These include supplementary loans and borrowers switching banks.

an average of 15 minutes longer. The stricter amortisation requirement means that the amortisation requirement is now also based on loan-to-income ratio. Finansinspektionen estimates that this will add an average of five minutes to each customer meeting. This means that the increase in the cost of customer meetings as a result of the stricter requirement will be one third of the corresponding cost increase due to the current amortisation requirement. The ongoing cost for mortgage firms as a result of longer customer meetings is therefore SEK 54 million per year.[69]

The stricter amortisation requirement means that the information requirement for mortgagors is becoming more extensive. Mortgage firms have to provide the necessary information in writing to the mortgagors in the home valuation and the data used for calculating loan-to-value ratio and loan-to-income ratio. The stricter amortisation requirement means that the loan-to-income ratio is also being used to calculate the amortisation cost. Consequently, additional data needs to be stored in order for mortgage firms to comply with the requirement concerning information exchange, for example in the event a loan is extended or a customer wants to switch banks. This may entail additional administrative costs for firms because they need to adapt their systems. The one-off cost of updating systems for this purpose is included in the calculations in section 3.2.3. In addition, it will take one to two minutes per mortgage to handle this information, which, according to the assumption above about the number of customer meetings, entails a cost to mortgage firms of SEK 11–22 million per year.

In the long-term, the stricter amortisation requirement also means that mortgage firms' outstanding mortgage volume will become lower than would have been the case without the requirement. This probably involves reduced interest income for the firms, but also lower risks in their lending over time. This has both advantages and disadvantages for mortgage firms. Furthermore, mortgage firms may use the additional amortised funds for other purposes and thus keep their balance sheets around the same as prior to the stricter requirement. This is why no estimate is made of this cost.

3.2.5 Total quantitative costs to mortgage firms

Finansinspektionen's assessment is that the total one-off costs of the stricter amortisation requirement will amount to SEK 53–69 million. The ongoing costs are estimated at SEK 65–76 million. However, these estimates are very uncertain and have been made using careful assumptions. The greatest consequences of the stricter requirement on mortgage firms arise as a result of reduced new lending and increased amortisation, rather than administrative and other costs. Nonetheless, these consequences are not to be regarded as a cost, but as an alteration to the conditions in the mortgage market that has both advantages and disadvantages from a profitability and risk perspective.

[69] Adjusted upwards for a greater number of customer meetings than the estimate for the existing amortisation requirement.

3.2.6 Impact on competition

Although the costs may be a greater burden for the smaller mortgage firms in relation to their turnover, Finansinspektionen's assessment is that the measure will not have any major impact on competition in the mortgage market. This is mainly because the costs are small compared to the revenue resulting from mortgage lending. Furthermore, the stricter amortisation requirement is not expected to make it significantly more difficult for new actors to enter the mortgage market because other requirements for obtaining authorisation to issue mortgages are more burdensome and costly.

Lending rates are the most important means by which to compete in the mortgage market. Unlike interest payments, amortisation payments are not a cost for mortgagors, but they do entail an expense that some mortgagors may want to avoid. Amortisation terms may be an important means through which mortgage firms can compete. Accordingly, a regulation that restricts the potential for firms to decide on their own amortisation terms may lead to some deterioration in competition in the mortgage market. Nevertheless, Finansinspektionen believes that it is not desirable for mortgage firms to compete by offering amortisation terms that may create macroeconomic risks.

3.2.7 Impact on reporting

The stricter amortisation requirement is not expected to result in any substantial costs in the form of additional reporting by mortgage firms to authorities. The largest mortgage firms report data to Finansinspektionen in the annual mortgage survey. The results of the survey are used to ensure compliance with the mortgage cap and amortisation requirement and to analyse the risks associated with household debt. Because the banks are already reporting amortisation payments and loan-to-income ratios, the additional burden resulting from the stricter amortisation requirement is not deemed to be of major significance to mortgage firms.

3.3 Impact on Finansinspektionen

Finansinspektionen conducts a surveys of new mortgages each year. This studies factors such as mortgage firms' compliance with the mortgage cap and the current amortisation requirement. In addition, the risks associated with household debt are also studied. As part of future surveys, Finansinspektionen will also be analysing compliance with the stricter amortisation requirement. Even though this will require some additional resources as a result of greater complexity, the stricter amortisation requirement is not expected to have any major impact on Finansinspektionen.

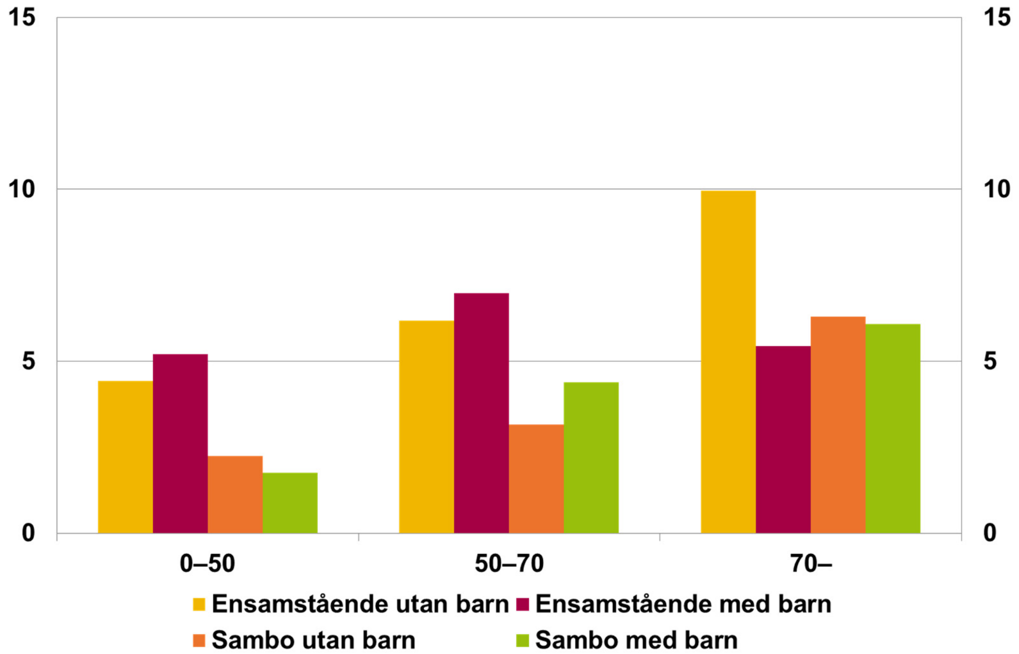
Appendix

This appendix contains a supplementary distributional analysis. The appendix is split into two parts. The first contains Finansinspektionen's analysis of which households are covered and the second contains an analysis of how much those who are covered would need to increase their amortisation payments. The analysis takes into account potential behavioural effects, e.g. households choosing to buy cheaper homes as a result of the stricter amortisation requirement.

Which households are covered?

Diagram B1. Proportion of new mortgagors with debts greater than 4.5 times their gross income, by loan-to-value ratios and size of household

(Per cent)

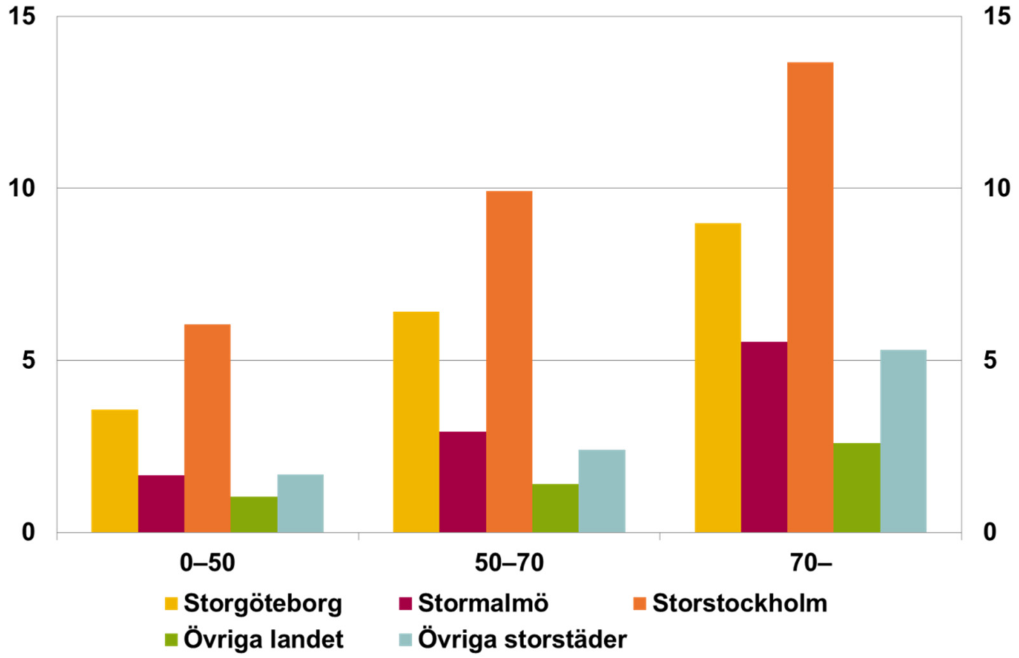


Note: A relatively large proportion (approximately ten per cent) of households with one adult have a loan-to-value ratio of over 70 per cent and a loan-to-income ratio above the threshold (three per cent amortisation). Households with one adult and children are also affected to a large extent, with the proportion affected being more evenly distributed across different loan-to-value ratios.

Source: Finansinspektionen.

Diagram B2. Proportion of new mortgagors in each region with debts greater than 4.5 times their gross income, by loan-to-value ratios

(Per cent)

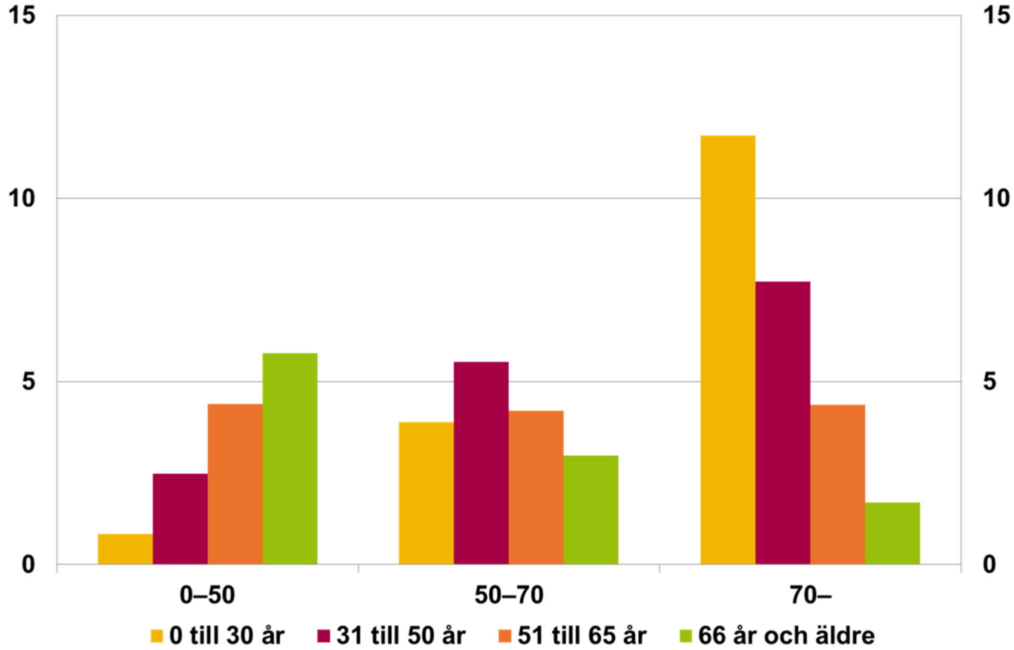


Note: A relatively large proportion (approximately 14 per cent) of households in Stockholm have a loan-to-value ratio of over 70 per cent and debts that are greater than 4.5 times their gross income (three per cent amortisation).

Source: Finansinspektionen.

Diagram B3. Proportion of new mortgagors in each age group with debts greater than 4.5 times their gross income, by loan-to-value ratios

(Per cent)



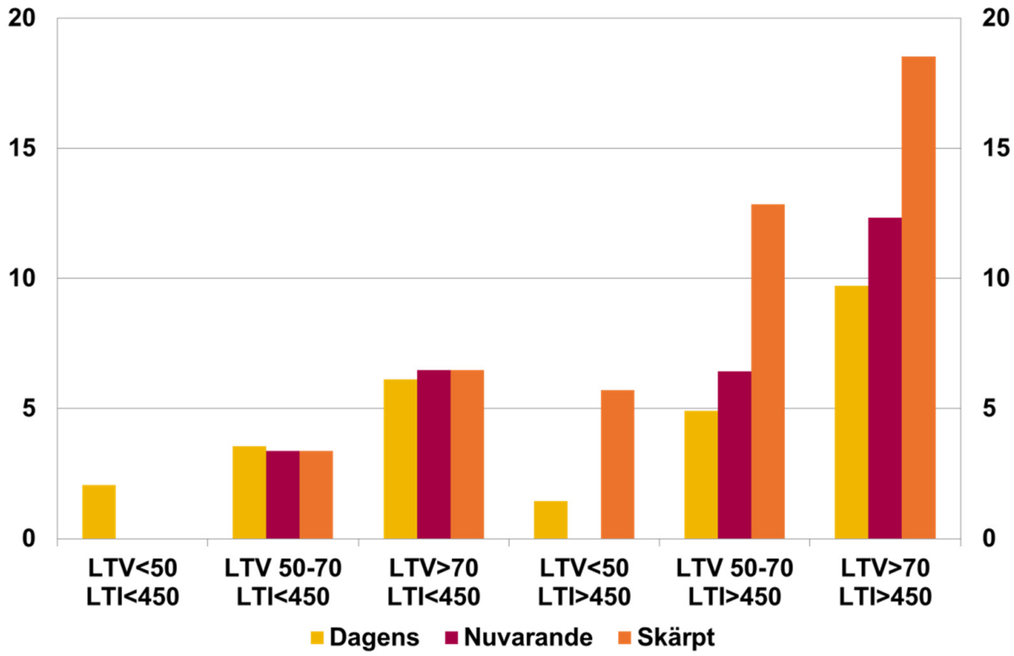
Note: A relatively large proportion (approximately twelve per cent) of younger households (up to 30 years of age) have a loan-to-value ratio of over 70 per cent and a loan-to-income ratio above the threshold (three per cent amortisation).

Source: Finansinspektionen.

By how much are households affected?

Diagram B4. Amortisation payments as a proportion of disposable income, by loan-to-value ratio (LTV) and loan-to-income ratio (LTI)

(Per cent)

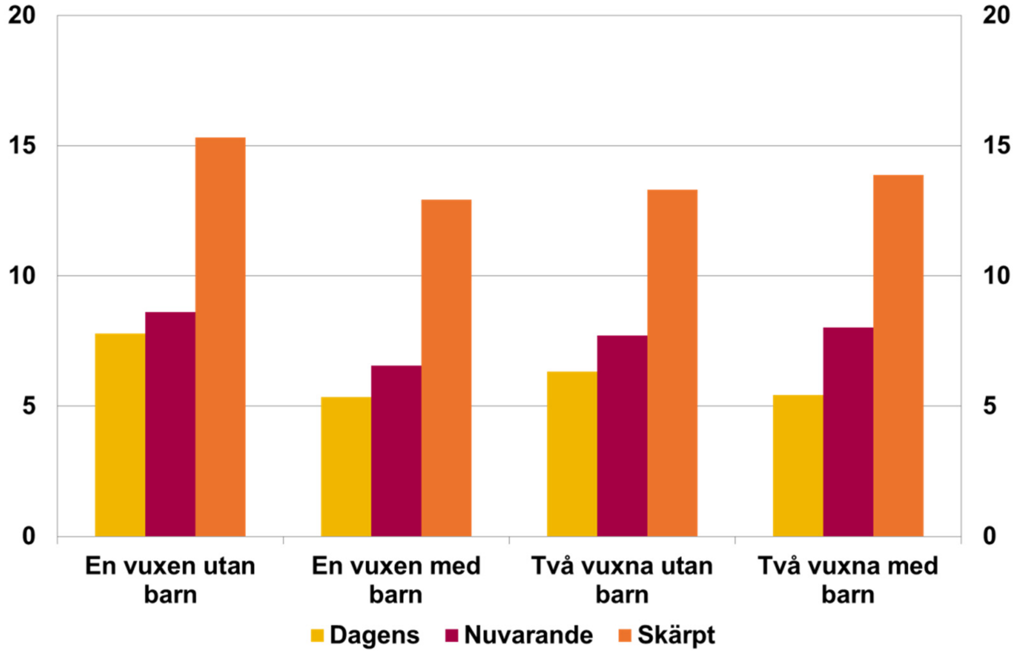


Note: The diagram shows amortisation payments as a proportion of disposable income in different amortisation intervals. “Stricter” shows how much an average mortgagor would need to amortise as a proportion of their disposable income in the event of a stricter amortisation requirement. “Current” shows the amortisation payments under the current amortisation requirement. In some cases, the actual amortisation payments are lower as a result of various exemptions. “Actual” shows the average actual amortisation payments, which are generally lower. For new mortgagors with a low loan-to-value ratio (<50) but a high loan-to-income ratio (>450), the amortisation payments will increase, on average, from 0 per cent of disposable income to 5.7 per cent. For new mortgagors with a loan-to-value ratio of 50–70 per cent and a high loan-to-income ratio (>450), the amortisation payments will increase, on average, from 6.4 per cent of disposable income to 12.8 per cent. For those with a high loan-to-income ratio (>450) and a high loan-to-value ratio (>70) the amortisation payments will increase, on average, from 12.3 per cent of disposable income to almost 18.5 per cent.

Source: Finansinspektionen.

Diagram B5. Average amortisation payments as a proportion of disposable income for mortgagors with debts greater than 4.5 times their gross income, by size of household

(Per cent)

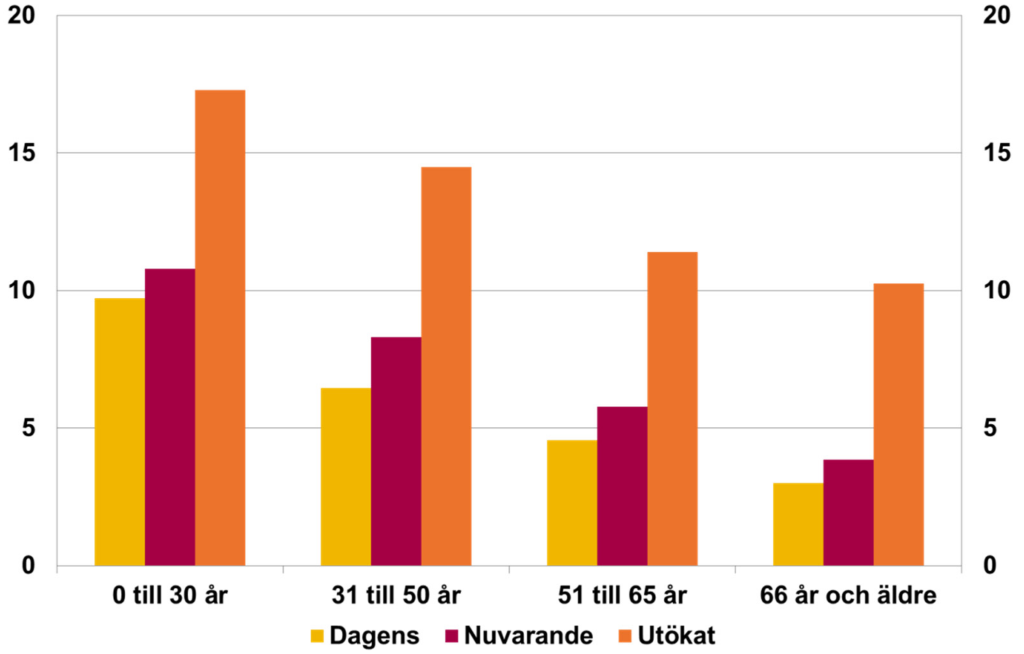


Note: The diagram shows the average amortisation payments for different sizes of household. “Stricter” shows how much an average mortgagor would need to amortise as a proportion of their disposable income in the event of a stricter amortisation requirement. “Current” shows the amortisation payments under the current amortisation requirement. In some cases, the actual amortisation payments are lower as a result of various exemptions. “Actual” shows the average actual amortisation payments, which are generally lower. The increase is greatest for households with one adult and no children (6.4 per cent) and smallest for households with two adults and no children (5.4 per cent).

Source: Finansinspektionen.

Diagram B6. Average amortisation payments as a proportion of disposable income for mortgagors with debts greater than 4.5 times their gross income, by different age groups

(Per cent)

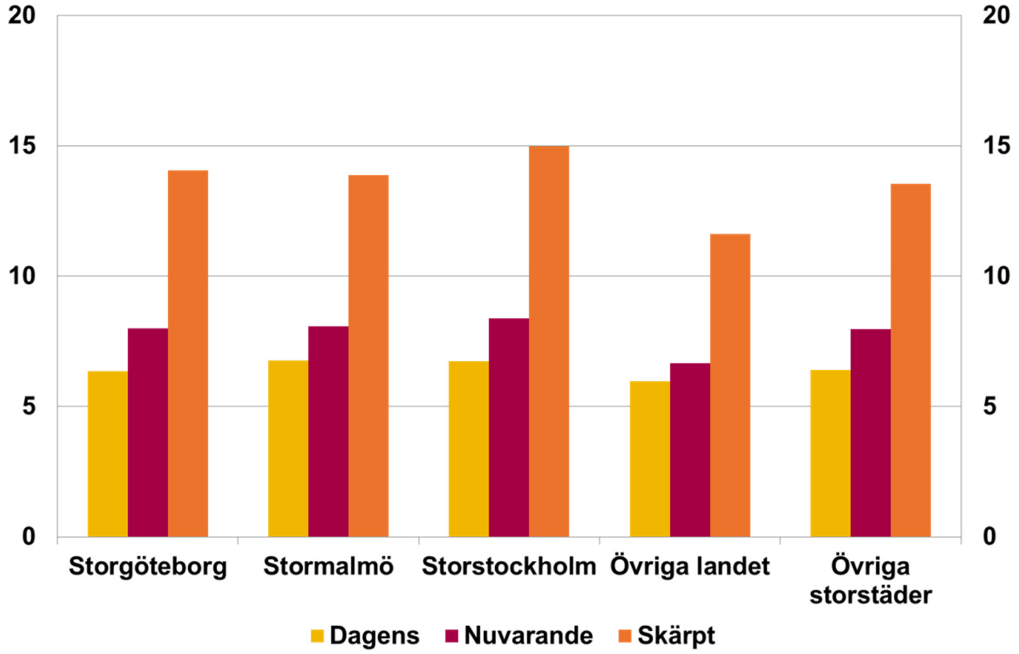


Note: The diagram shows the average amortisation payments for different age groups. "Stricter" shows how much an average mortgagor would need to amortise as a proportion of their disposable income in the event of a stricter amortisation requirement. "Current" shows the amortisation payments under the current amortisation requirement. In some cases, the actual amortisation payments are lower as a result of various exemptions. "Actual" shows the average actual amortisation payments, which are generally lower. The increase is around six per cent of disposable income for all age groups when compared with the current amortisation requirement.

Source: Finansinspektionen.

Diagram B7. Average amortisation payments as a proportion of disposable income for mortgagors with debts greater than 4.5 times their gross income, by different regions

(Per cent)



Note: The diagram shows the average amortisation payments for different regions. "Stricter" shows how much an average mortgagor would need to amortise as a proportion of their disposable income in the event of a stricter amortisation requirement. "Current" shows the amortisation payments under the current amortisation requirement. In some cases, the actual amortisation payments are lower as a result of various exemptions. "Actual" shows the average actual amortisation payments, which are generally lower. The increase is greatest in Greater Stockholm, where average amortisation payments increase by 6.4 per cent of disposable income, while the increase is lowest in the rest of the country (4.6 per cent of disposable income).

Source: Finansinspektionen.