

DNR 2015-332



Market participants' views on risks and the functioning of the Swedish fixed-income and foreign exchange markets

Autumn 2015



■ Market participants' views on risks and the functioning of the Swedish fixed-income and foreign exchange markets¹

Survey results – autumn 2015

The Riksbank's risk survey

- Since the spring of 2008, the Riksbank has sent out a risk survey twice a year to participants in the Swedish fixed-income and foreign exchange markets. The purpose of the survey is to gain an overall picture of the market participants' view of risk and the functioning of the Swedish financial markets. The survey only refers to the Swedish financial system.
- This report describes the results of the Riksbank's risk survey where responses were received between 5 and 14 October 2015².

The overall risk level in the Swedish financial system is still considered to be average

- The majority of participants feel that the overall risk level in the Swedish financial system is at an average or high level.
- Every third participant also thinks that the risk level has increased slightly over the last six months and many refer to the continued low interest rates leading to a search for yield among investors. This is reflected in the high valuations of various asset types.

Lower market liquidity leading to poorer functioning

- Opinions among participants are divided as regards how well the markets are functioning. Every third participant feels that the markets are functioning well, a third say they are functioning poorly and the remainder have no firm opinion on the subject.
- However, every second participant says that the markets are not functioning as well as they were six months ago and many feel this is because market liquidity is lower than previously.

Participants mostly concerned over risks linked to low interest rates

- The majority of participants consider that the risks linked to the low interest rates in Sweden are tangible and mention, for instance, concern over price bubbles building up for various types of asset. Participants also feel that the negative repo rate and the Riksbank's purchases of government bonds are creating risks in the Swedish financial system.

¹ The results are based on participants' responses to the survey and do not necessarily reflect the Riksbank's view of risks in the Swedish financial system. The Riksbank commissioned survey company Markör Marknad och Kommunikation AB to send out the survey on its behalf. The survey supplements the annual discussions the Riksbank has with its monetary and foreign exchange policy counterparties on developments in the financial markets, and the regular contacts the Riksbank has with market participants. The autumn survey was sent out to 74 participants active in the Swedish fixed-income and foreign exchange markets. 28 per cent of those surveyed are the Riksbank's monetary and foreign exchange policy counterparties (market makers), while the remaining 72 per cent are other participants on these markets, both investors and borrowers. The response rate was 89 per cent.

² The Riksbank had at this point cut the repo rate to -0.35 per cent and announced government bond purchases of SEK 135 billion. The participants were unaware of the Riksbank's decision on 28 October to buy government bonds for a further SEK 65 billion when they responded to the survey.

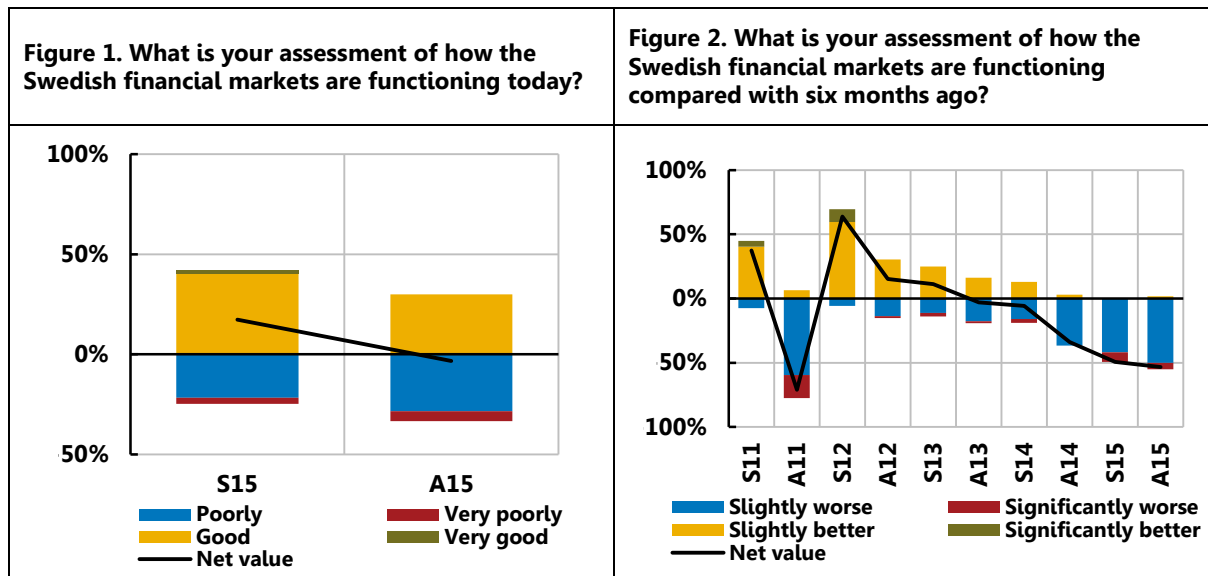


- Household indebtedness is also highlighted as a cause for concern. Participants feel that if household indebtedness continues to rise at its present rate, it may lead to problems when interest rates start to normalise.

FUNCTIONING OF FINANCIAL MARKETS DETERIORATING

Among the participants responding to the Riksbank's autumn 2015 risk survey, opinions are divided regarding how the financial markets are functioning. Just over a third of participants responding to the autumn survey feel that the Swedish financial markets are functioning neither well nor poorly, a third think they are functioning well and a third feel that are functioning poorly. The share of participants who consider that the financial markets are functioning poorly has grown since the last survey (see Figure 1). In addition, every second participant thinks that the financial markets are functioning slightly less well than they were six months ago (see Figure 2). In line with the results of the spring survey, it is primarily fixed income market participants who feel that there has been a deterioration. The most important reason for the markets functioning less well is, according to them, that market liquidity³ is lower than previously.

According to participants, the deterioration in market liquidity has several explanations. Firstly, there are now fewer market makers and they are less willing to take on risk than previously. Secondly, various financial regulations have made securities trading more expensive for both market makers and other participants. These opinions have also been present in previous surveys. Many participants also mention the Riksbank's purchase of government bonds as a reason for the deterioration of market liquidity on the Swedish fixed-income market.



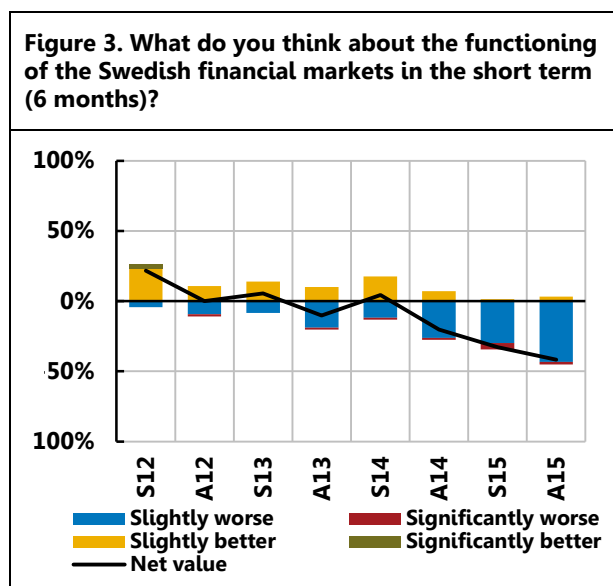
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Participants are also sceptical about the way the markets will function in the future as half of them think the function will be worse in six months' time (see Figure 3). The trend of participants

³ Market liquidity refers to the possibility of selling a financial instrument immediately or without any significant movements in the market price.

who consider that the functioning of the Swedish financial markets is deteriorating is therefore continuing. It is mainly Swedish fixed-income market participants who are sceptical, with two-thirds of them believing that the functioning will deteriorate in the short term. On the foreign exchange market, however, only one in ten believe that the functioning will deteriorate in the immediate future. Nine out of ten participants on the foreign exchange market do not believe in any change over the next six months.



Note. The category "Neither better nor worse" is not shown in this figure. Net figure shows the difference between the columns above and below zero.

RISKS THAT MAY AFFECT THE SWEDISH FINANCIAL SYSTEM

The participants have assessed a number of pre-defined risks that could have negative consequences for the Swedish financial system if realised during the coming six to twelve months (see Figure 4).

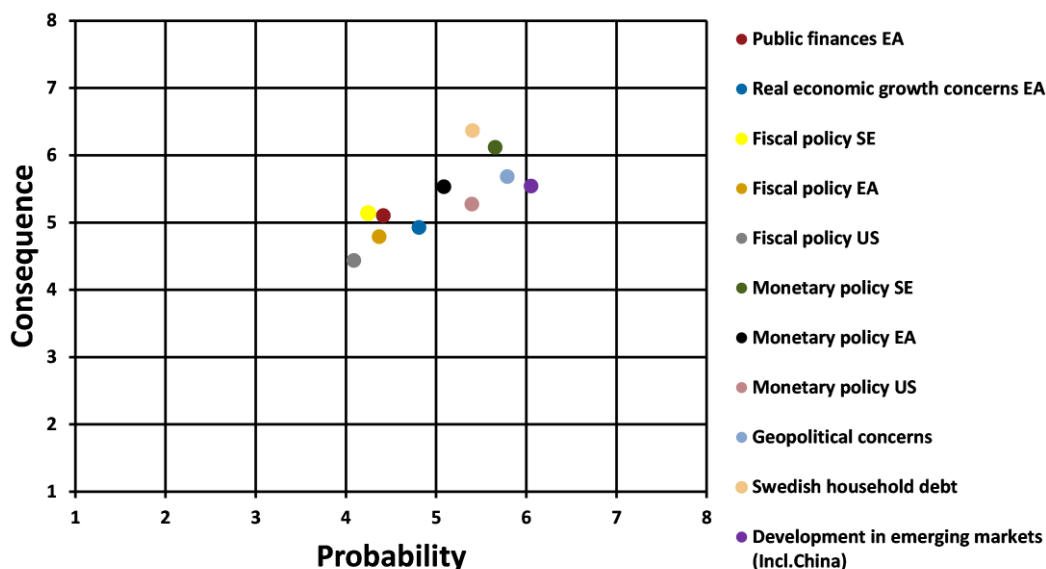
In line with earlier risk surveys, participants are still concerned about the risks linked to Sweden's expansionary monetary policy. Many, for example, feel that the low interest rates heighten the risk of asset bubbles building up on various markets and several express concern over what might happen when monetary policy returns to normal. See page 9 for a more detailed discussion on how participants view the risks linked to expansionary monetary policy.

Participants are also worried about risks linked to the rising indebtedness among Swedish households. It is furthermore considered, with relatively high probability, that the realisation of these risks will result in negative consequences for the Swedish financial system. Since the last survey, the assessments of participants regarding both the probability and consequences of risks linked to high household indebtedness have increased.

Participants are also concerned over risks linked to geopolitical concerns, developments in emerging market economies and monetary policies in both the euro area and the United States. Regarding the United States, participants seem mainly worried about being taken unawares when the American Federal Reserve starts to raise the policy rate sometime in the future.



Figure 4. Participants' assessment of risks related to selected risk factors that can affect the Swedish financial system



Note. Participants have assessed risks related to a selection of predefined risk factors. They evaluated the probability of each risk factor arising over the next 6–12 months and the consequences for the Swedish financial system if each respective risk factor were to arise. The scale runs from 1–8, with 1 being extremely low/small and 8 being extremely high/large. SE = Sweden, EA = Euro area, US = United States. The numbers in the figure can also be found in Table B1 in Appendix 1. The distribution of answers for the six highest ranked risk factors can be found in Appendix 2.

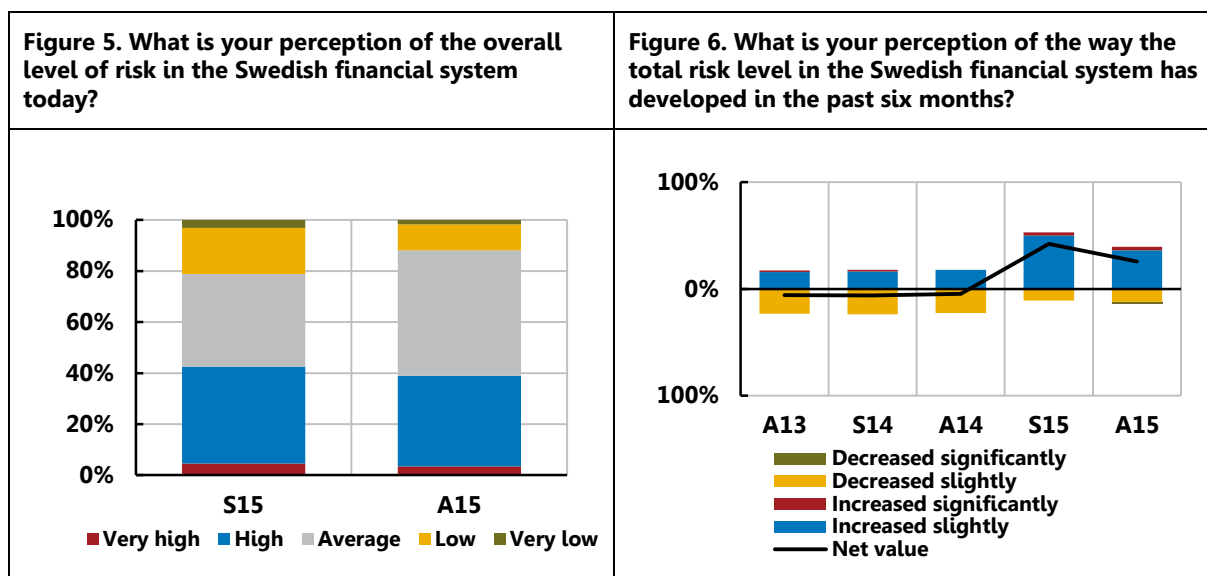
AVERAGE LEVEL OF RISK AND DECLINING RESILIENCE IN THE SWEDISH FINANCIAL SYSTEM

In addition to assessing individual risks, participants have also given their views on the overall risk level in the Swedish financial system and on its resilience, that is, ability to manage unexpected, significant stress.

Two out of five participants feel that the overall risk level in the Swedish financial system is currently high (see Figure 5). The majority deem the risk level to be average, and this share has increased since the spring survey as fewer market participants consider the overall risk level to be low. Two out of four participants also feel that the overall risk level has increased slightly over the last six months (see Figure 6), which is slightly fewer participants than in the previous survey.

In contrast to the spring survey, in which investors in particular perceived the risk level in the Swedish financial system to be high, it is now mainly borrowers who feel the risk level is high. There is no noteworthy difference in the perceived risk levels among participants who are active on the foreign exchange or fixed-income market.

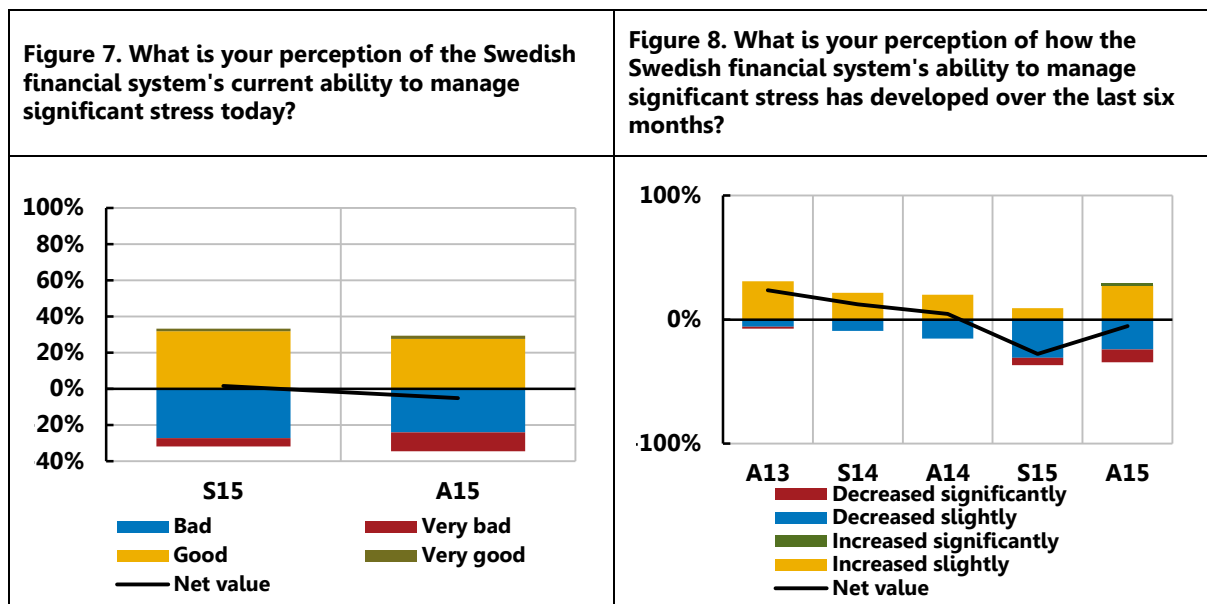
Half of those who are active on the fixed-income market do feel that the overall risk level has increased, while just one in ten on the foreign exchange market perceive an increase. According to participants, this is due to lower market liquidity on the fixed-income market due to fewer market makers in combination with market makers less willingness to take on risk, but also due to financial regulations. Many participants also mention the Riksbank's purchase of government bonds as a reason.



Note. The category "Neither increased nor decreased" is not shown in this chart. Net figure shows the difference between the columns above and below zero.

The participants' perception of the current ability of the Swedish financial system to manage significant stress is divided, as roughly an equal amount of participants consider this ability to be poor, good or in between (see Figure 7). Neither do participants agree on how they view the financial system's ability to manage significant stress has developed over the past six months. About every third participant feels that the ability has increased slightly, decreased slightly or is unchanged (see Figure 8).

Participants who consider the resilience of the system to be low, explain this by saying that the market's deteriorating ability to supply market liquidity, may entail a high level of volatility in a stressful situation. For example, several participants believe that it will become more difficult to sell securities without considerable fluctuations in market prices. One of the reasons for this deterioration is, according to participants active on the fixed-income market, that the market makers are less willing than previously to take risks as a result of new regulatory frameworks.



Note. The category "Neither good nor bad" is not shown in this chart. Net figure shows the difference between the columns above and below zero.

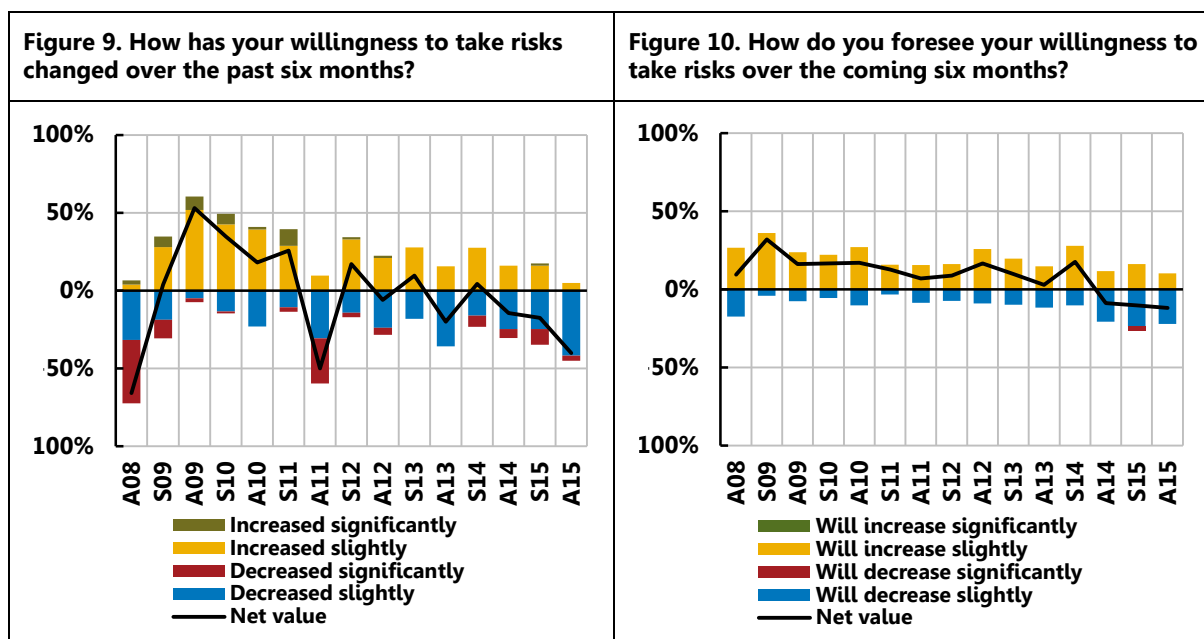
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WILLINGNESS OF PARTICIPANTS TO TAKE RISKS HAS DECREASED SLIGHTLY

One in two participants consider that their willingness to take risks is unchanged compared to six months ago. More participants than previously stated that their own willingness to take risks has decreased over the past six months (see Figure 9). Participants who have reduced their willingness to take risks explain this by saying that uncertainty has increased regarding the monetary policies of various central banks, that volatility has risen on the financial markets and that market liquidity has deteriorated. It is mostly fixed-income market investors who say that they have reduced their willingness to take risks.

Two out of three participants believe that their willingness to take risks will remain unchanged over the coming six months (see Figure 10). The net value, which measures the difference between those who believe they will increase their risk-taking and those who believe that they will reduce it, is relatively unchanged compared to the most recent surveys.

Every fifth participant believes that their willingness to take risks will decline going forward since they believe that volatility on the financial markets will increase. Every tenth believes that their own willingness to take risks will increase. Several explain this by saying they believe that interest rates will remain low in the period ahead and that their demand for higher yield, and thus riskier assets, will continue to increase. Even here there are differences between foreign exchange and fixed-income market participants. One in five foreign exchange market participant believes that their willingness to take risks will increase over the next six months, which can be compared with one per cent of fixed-income market participants.



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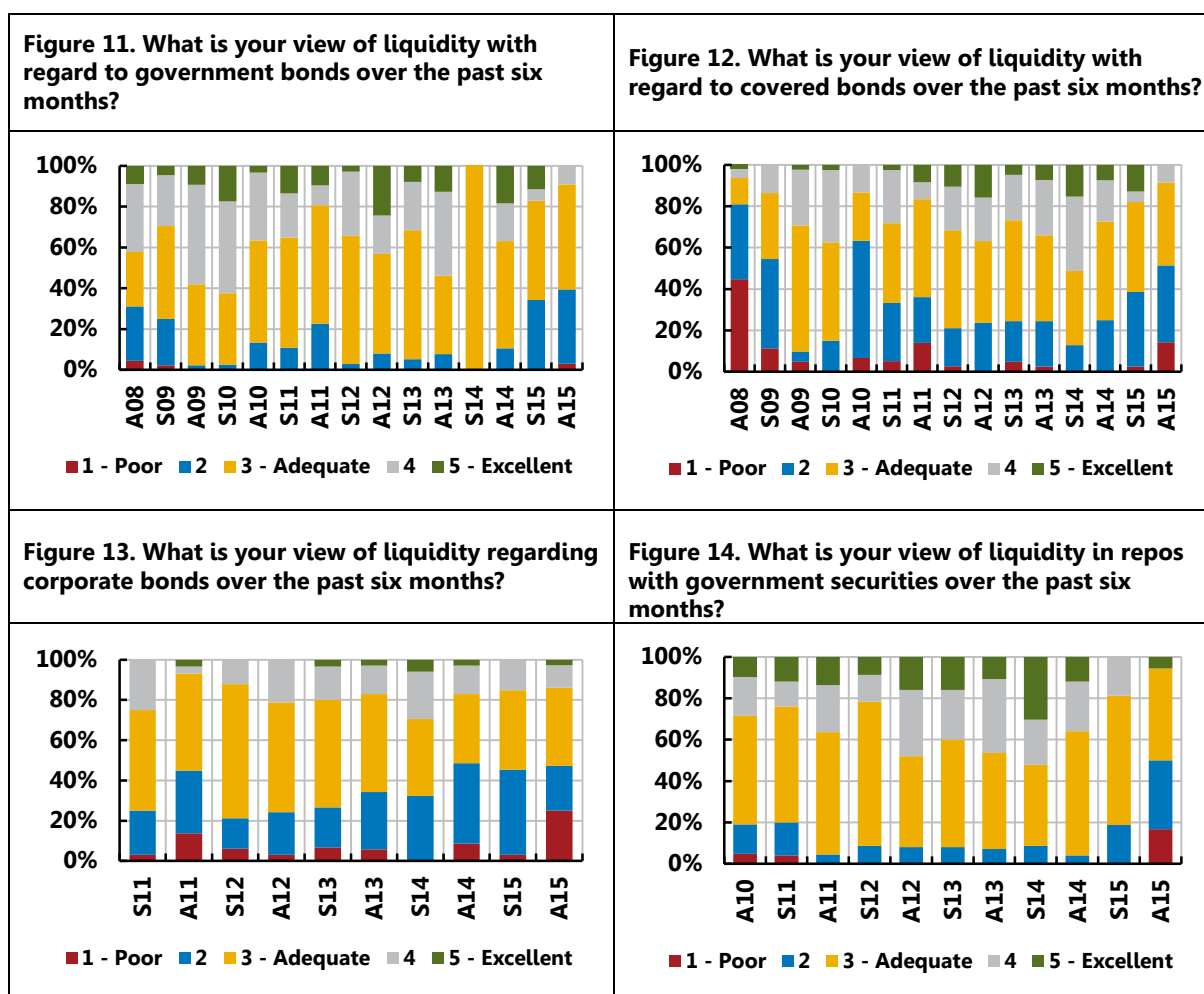
MARKET LIQUIDITY ON THE SWEDISH FIXED-INCOME AND FOREIGN EXCHANGE MARKETS

As mentioned earlier, an increasing number of participants state that the Swedish financial markets are functioning less well than previously (see Figure 2) and many report that this is due to lower market liquidity. To obtain an idea of how the various sub-markets have functioned over the past six months, the risk survey contains a number of questions about liquidity for specific instruments.⁴

As in the previous risk survey, market liquidity in the various instruments on the Swedish foreign-exchange market is generally considered to be acceptable by participants (see Charts B1-B14). However, participants' view of market liquidity on the fixed-income market is somewhat more negative and they also perceive that it has deteriorated slightly for most of the instruments. For example, every third participant feels that market liquidity for government bonds is below an acceptable level and every second participant thinks that market liquidity for loans with government securities as collateral (known as repo transactions) is poor (see Figures 11 and 14). Every second participant also feels that market liquidity for covered bonds is now below an acceptable level (see Figure 12). The participants consider market liquidity for corporate bonds is still low and lower than when the previous risk survey was conducted (see Figure 13).⁵

⁴ Participants were asked to assess market how liquidity has been for the specific instrument on the basis of how easy it has been to sell large volumes and how large the difference between buying and selling prices has been. They were asked to rate on a scale of 1 to 5, where 1 is poor and 5 is excellent.

⁵ Appendix 1 contains a report of the participants' assessment of liquidity in several instruments on the Swedish financial markets.



OPEN-ENDED QUESTIONS RELATED TO THE FUNCTIONING OF THE FIXED-INCOME AND FOREIGN EXCHANGE MARKETS

The Riksbank also posed a number of open-ended questions to market participants.⁶ The questions cover subjects that have been topical during the period covered by the risk survey and that may have particular significance for the functioning of the Swedish financial markets.

Participants see risks linked to an extended period of low interest rates

Around one in two participants mentions concern over risks linked to the Riksbank's expansionary monetary policy with negative interest rates and purchases of Swedish government bonds. Participants say that ever lower, and in some cases negative, market rates lead to investors seeking riskier investments. According to participants, the search for yield risks leading to the mispricing of risk and to the accumulation of bubbles in various asset types. In the risk survey, participants were asked whether they consider any financial assets to be overvalued. Several of

⁶ Appendix 3 contains a compilation of the open-ended questions asked by the Riksbank.



them mention corporate bonds as an example of assets they feel are overvalued. Many participants also mention housing and property as examples, and express concern over the accumulation of ever higher debt among Swedish households. Participants mention that the most important reason for the increase in the prices of various assets is the long period of low interest rates and express concern over what may happen once interest rates have returned to normal.

Participants feel that new financial regulations have reduced market liquidity

Many participants already perceive a decreasing propensity to take risk among market makers. The participants perceive that the market makers in the fixed-income market do not wish to hold such large stocks of assets as before, which they believe is due to both introduced and upcoming capital adequacy requirements. A number of participants also say that the forthcoming European regulatory framework for insurance companies, Solvency 2, is already having or will have a negative effect on them.

In line with the previous risk survey, several participants are still concerned over market makers' ability to uphold market liquidity on certain markets in a stressful scenario. For example, in a situation in which the number of sellers exceeds the number of buyers, participants consider that the market makers' ability would vary for different bond types. Maintaining liquidity on the market for government bonds is not considered a problem, but it would, however, be more difficult on the market for covered bonds. As regards the market for corporate bonds, most participants perceive the market makers' ability to maintain market liquidity, for example under increased sales pressure, to be low. Compared with the previous risk survey, participants feel that market liquidity for government bonds, covered bonds and corporate bonds has deteriorated (see Figures 11-13).

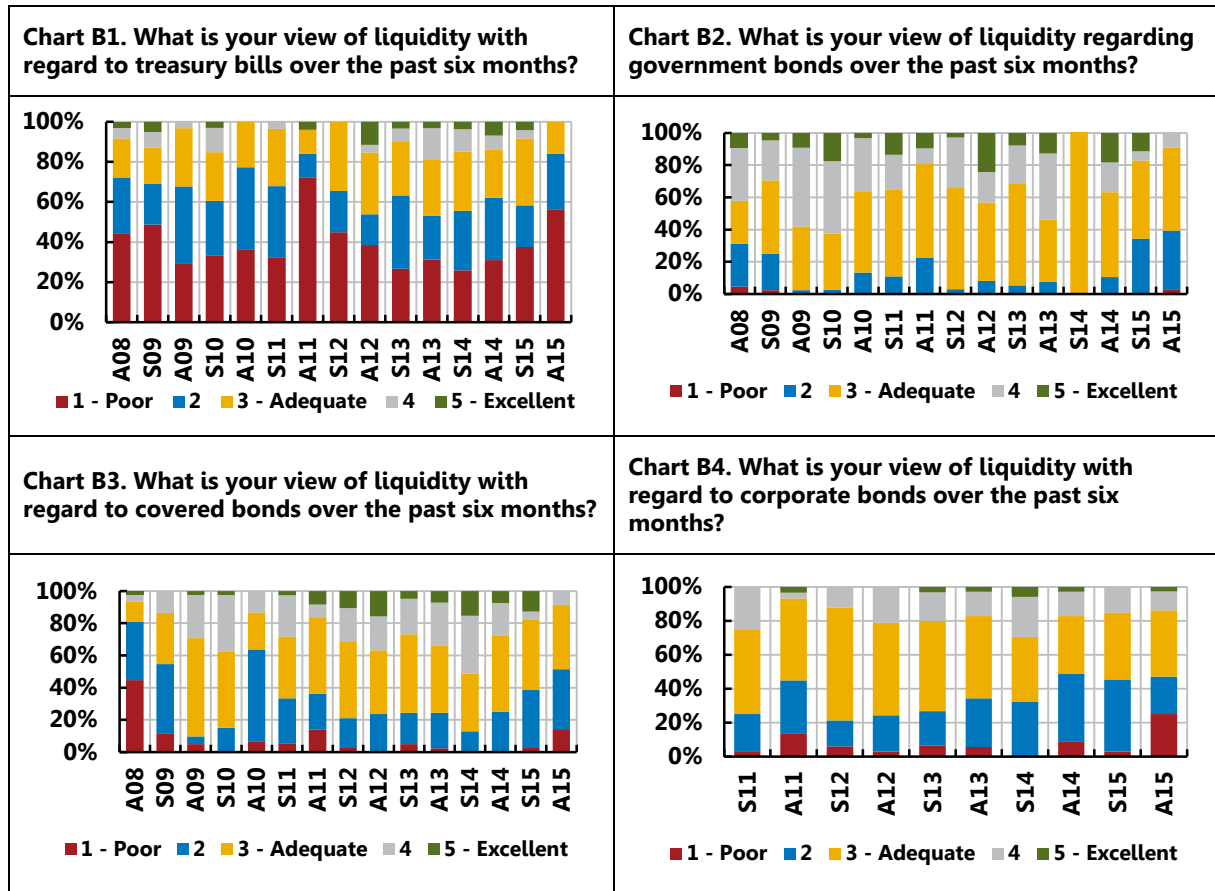
Only an indirect impact from developments in China

The survey asks participants to give their opinion on whether developments in China can spread to the Swedish financial system. Participants are in agreement and feel that developments in China do not represent any noteworthy, direct threat to the Swedish financial system. Instead, they express concern over the possible indirect effects of the Chinese slowdown. For example, participants say that the slowdown can lead to a decline in global growth, which may have an indirect effect on Sweden. Participants therefore feel that the impact of China on the Swedish financial system would be cyclical rather than financial.



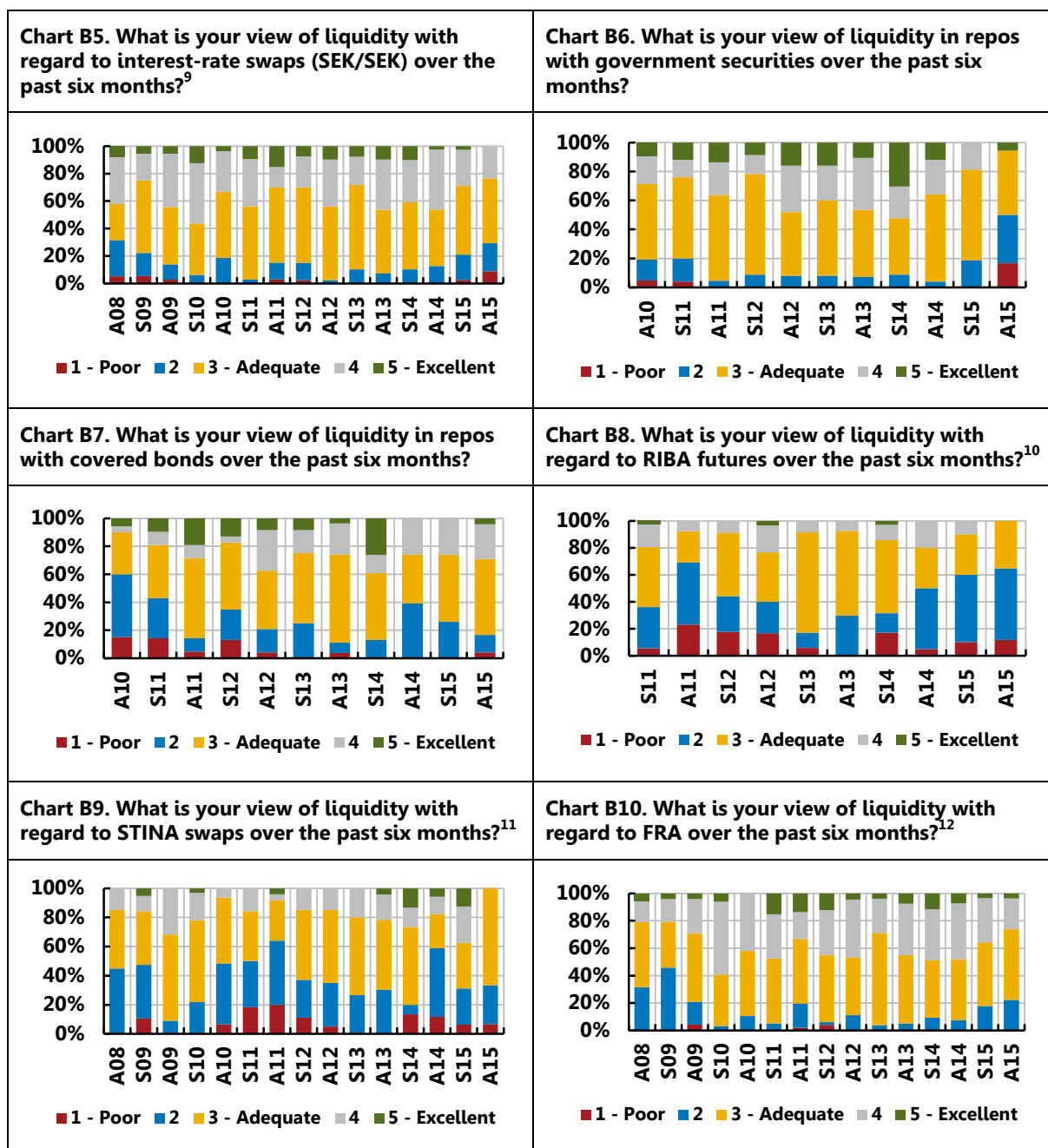
Appendix 1 – Breakdown of responses to other questions

The participants' assessment of liquidity in instruments on the Swedish fixed-income market^{7,8}



⁷ When interpreting participants' responses in Figures B1 to B14, it is important to remember that the markets and the instruments are not necessarily comparable. This is because they often have structural differences. It is therefore more appropriate to analyse changes over time for individual instruments than to compare different instruments.

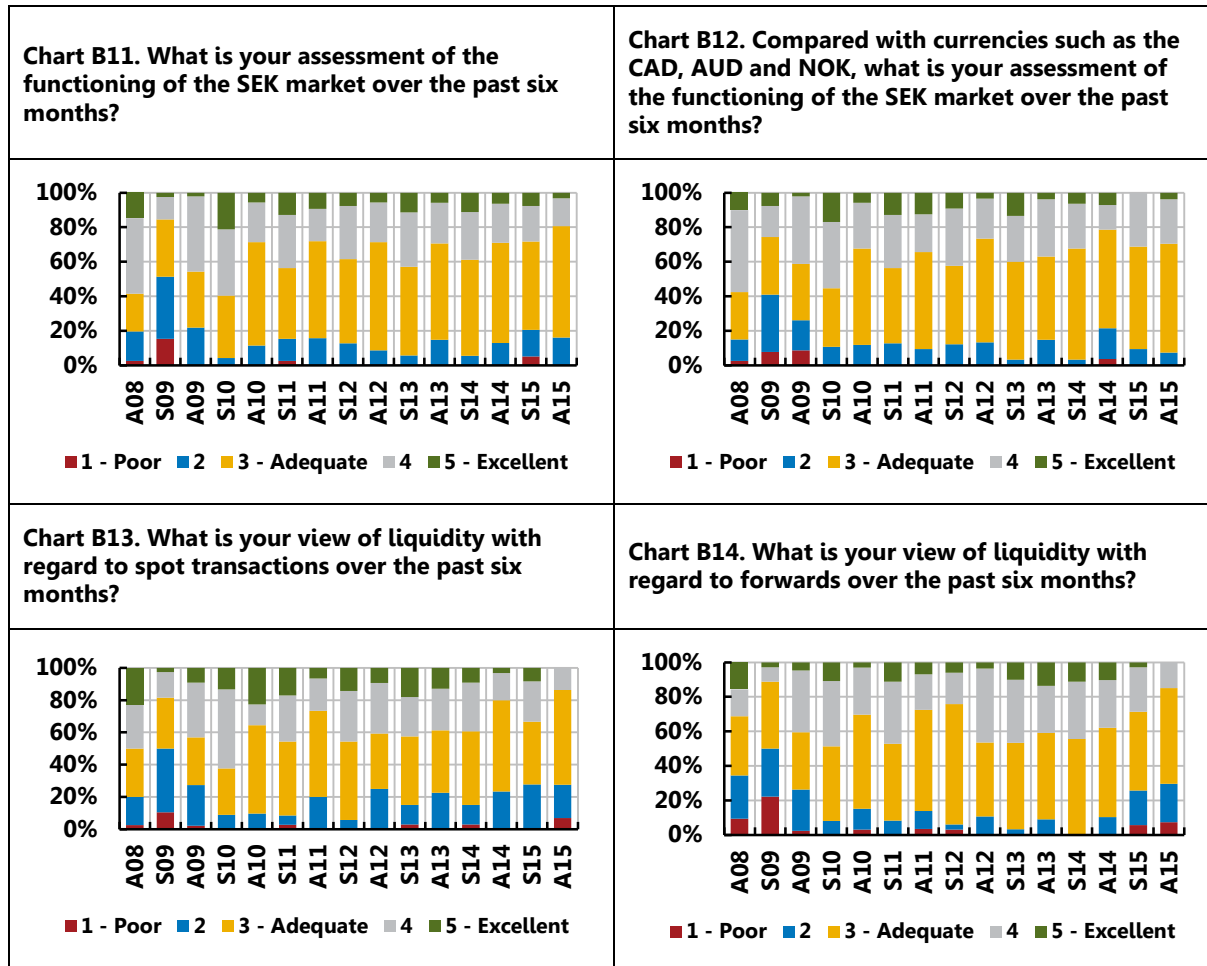
⁸ Only participants active either in the Swedish fixed-income market or active in both the fixed-income market and the foreign exchange market have responded to this part of the survey. The figures include only those who have been active in the specific segment.



⁹ An interest-rate swap is a bilateral agreement to exchange a specific interest rate in return for another interest rate for a predetermined period according to specific conditions.
¹⁰ RIBA futures are a standardised forward that is based on the outcome of the Riksbank's repo rate. The contract basis is a fictitious loan, i.e. the underlying loan sums are not transferred. The maturity corresponds to the period between two IMM dates and the contract undergoes final settlement against the average repo rate for the period in question.
¹¹ STINA stands for STIBOR T/N Average. A STINA contract is an agreement lasting up to a maximum of one year to pay or receive the difference between an agreed fixed rate of interest and a variable overnight rate (STIBOR T/N).
¹² FRA stands for Forward Rate Agreement. An FRA contract is an agreement to pay or receive the difference, on a predetermined date in the future, between a predetermined interest rate and the interest rate actually applying at the date in the future.



The participants' assessment of liquidity in instruments on the Swedish foreign exchange market¹³



¹³ Only participants active either only in the Swedish foreign exchange market or active in both the fixed-income market and the foreign exchange market have responded to this part of the survey. The figures include only those who have been active in the specific segment.

Table B1. The participants' assessment of selected risks that can affect the Swedish financial system, autumn 2015, scale 1-8, where 1 is extremely low/small and 8 is extremely high/large

Risk factor	Probability	Consequence
Risks related to concerns about public finances in the euro area	4.4	5.1
Risks related to real economic growth in the euro area	4.8	4.9
Risks related to fiscal policy in Sweden	4.2	5.1
Risks related to fiscal policy in the euro area	4.4	4.8
Risks related to fiscal policy in the US	4.1	4.4
Risks related to monetary policy in Sweden	5.7	6.1
Risks related to monetary policy in the euro area	5.1	5.5
Risks related to monetary policy in the US	5.4	5.3
Risks related to geopolitical concerns	5.8	5.7
Risks related to Swedish household debts	5.4	6.4
Risks related to development in emerging markets (incl. China)	6.1	5.5

Table B2. The participants' assessment of selected risks that can affect the Swedish financial system, spring 2015, scale 1-8, where 1 is extremely low/small and 8 is extremely high/large

Risk factor	Probability	Consequence
Worsening sovereign risk concerns and/or real economic growth in the euro area	4.9	5.1
Risks related to fiscal policy in Sweden	3.8	4.7
Risks related to fiscal policy in the euro area	4.6	4.7
Risks related to fiscal policy in the US	3.4	4.0
Risks related to monetary policy in Sweden	5.8	5.9
Risks related to monetary policy in the euro area	5.4	5.5
Risks related to monetary policy in the US	4.6	4.7
Risks related to geopolitical concerns	5.4	5.5
Risks related to Swedish household debt	4.6	5.6
Risks related to cyber threats	3.8	4.9



Appendix 2 – Distribution of risk factor assessments

Participants have assessed risks related to a selection of predefined risk factors. They evaluated the probability of each risk factor arising over the next 6–12 months and the consequences for the Swedish financial system if each respective risk factor were to arise. The scale runs from 1–8, with 1 being extremely low/small and 8 being extremely high/large.

<p>Chart B15. Development in emerging markets (incl. China) Number of participants</p>	<p>Chart B16. Monetary policy in Sweden Number of participants</p>																																				
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Appendix 3 - Open-ended questions related to the functioning of the fixed-income and foreign exchange markets

Below follow a number of open-ended questions the Riksbank has put to participants. The questions cover subjects that have been topical during the period since the previous risk survey and may have particular significance for the way the Swedish financial markets function.

- How do you assess the market makers' possibilities to maintain a liquid market in a stress scenario, for example under great sales pressure? For government bonds? For covered bonds? For corporate bonds?
- To stimulate the economy and push up inflation, the Riksbank introduced a negative repo rate and started buying government bonds this spring. The repo rate is now at -0.35 per cent and the Riksbank has decided to buy government bonds for a total nominal sum of SEK 135 billion. These purchases are still ongoing. Have these measures led to any problems on the Swedish financial markets? Do you think the measures threaten financial stability, and if so, how? Please explain.
- Do you see any spillover effects in the Swedish financial system from recent developments in China? There is, for example, a concern over a slowdown in Chinese economic growth as well as over potential problems in the Chinese financial system. Please explain.
- Since the financial crisis, the interest rates on the financial markets have been historically very low. There is concern that they will remain so in the period ahead. What consequences do you think a long-term low interest rate can have for the various financial markets and financial institutions? Please explain.
- There are those who think that various financial assets are overvalued. Are there any specific Swedish financial assets that you think are overvalued? If so, do you feel that these over-valuations can have negative consequences for the Swedish financial system? Please explain.