



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

Spring 2016

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Survey results – spring 2016

The Riksbank's risk survey¹

- 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. The results reported are based on participants' responses to the survey and do not necessarily reflect the Riksbank's view of risks in the Swedish financial system.
- This report describes the results of the survey where responses were received between 7 and 18 April 2016².

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

- One-third of the participants, above all investors, feel that the overall risk level in the Swedish financial system is currently high. Approximately as many also consider that the risk level has increased over the last six months. However, a majority of the participants still consider that the risk level of the Swedish financial system is low or average.

Divided opinions regarding the functioning of the Swedish financial markets

- One third of the market participants consider that the Swedish financial markets are functioning well. At the same time, one third of the participants consider that the markets do not function well. Furthermore, four out of ten participants consider that the markets are functioning less well than previously, primarily because market liquidity has deteriorated.
- According to the participants, this deterioration is primarily due to the new financial regulations, which they claim have led to there being fewer market makers, with those remaining now being less willing than previously to take risks. The Riksbank's purchases of government bonds are also brought up as a contributory factor in the deterioration in market liquidity when it comes to government bonds.

Continued unease over risks linked to low interest rates

- Most of the participants think that the risks associated with low interest rates are palpable. The participants explain that the low interest rates are leading to a search for yield and that this, in turn, is leading the investors to look for riskier investments and to the mispricing of risk.
- Household indebtedness is also highlighted as a source of unease by the participants. The participants argue that, if household indebtedness continues to rise at its present rate, it may lead to problems when interest rates start to rise again.

¹ The Riksbank commissioned the 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 spring survey was sent out to 69 participants active in the Swedish fixed-income and foreign exchange markets. 33 per cent of those surveyed are the Riksbank's monetary and foreign exchange policy counterparties, while the remaining 67 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 -0.5 per cent and announced government bond purchases of SEK 200 billion. The participants were unaware of the Riksbank's decision on 21 April to buy government bonds for a further SEK 45 billion when they responded to the survey.

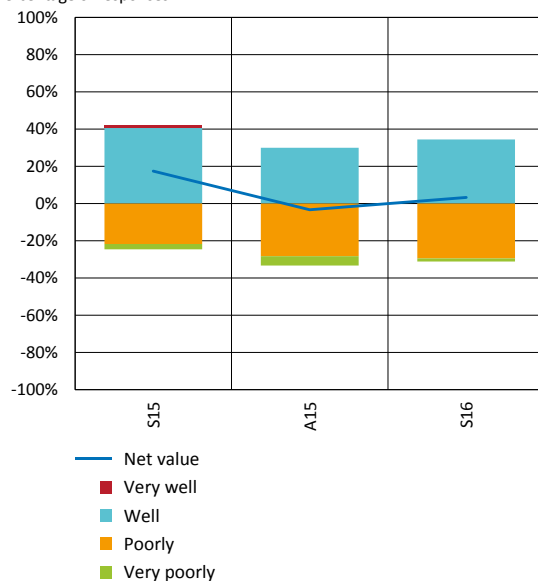
Divided opinions regarding the functioning of the Swedish financial markets

Among the respondents to the Riksbank's risk survey, opinions are divided regarding the functioning of the Swedish financial markets. One-third of the participants respond that the markets are functioning well, one-third say they are functioning poorly and one-third have no firm opinion on the subject (see Chart 1). As with the risk surveys of 2015, it is primarily the participants on the fixed-income market who consider that the financial markets work poorly and several of them specify impaired market liquidity³ as the main cause of this.

Half of the participants consider that the Swedish financial markets work more or less as well as they did six months ago, while just over two-fifths of them consider that the financial markets function slightly less well than they did six months ago (see Chart 2). Here too, the participants emphasise impaired market liquidity as a cause of the deterioration. According to the participants, the deterioration of market liquidity is primarily a consequence of new financial regulations which, in turn, have led to market makers becoming fewer and those remaining becoming less willing to take risks. Some participants also mention the Riksbank's purchases of government bonds as a contributory factor. These explanations correspond with their responses to previous risk surveys.

Chart 1. What is your assessment of how the Swedish financial markets are functioning today?

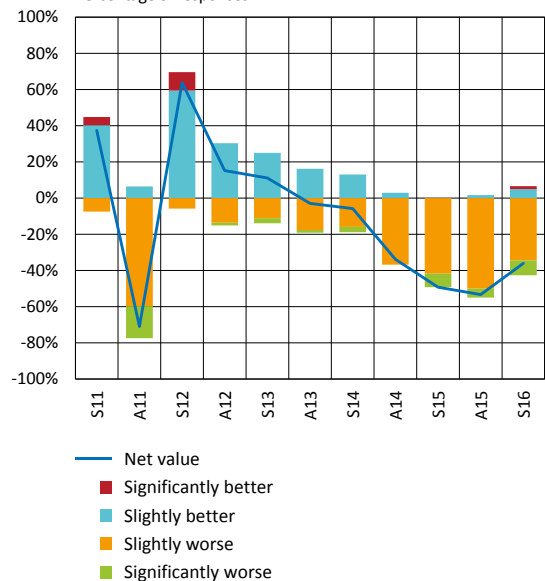
Percentage of responses



Note. The category "Neither well nor poorly" is not shown in this chart. Net value shows the difference between the columns above and below zero.

Chart 2. What is your assessment of how the Swedish financial markets are functioning compared with six months ago?

Percentage of responses



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

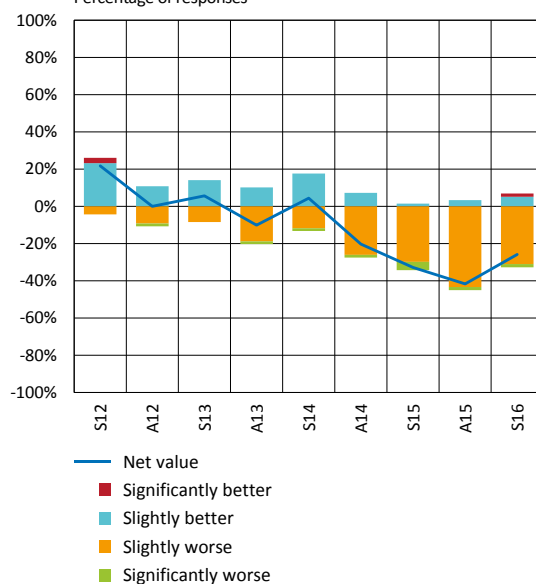
The majority of the respondents believe that the financial markets will function in the same way in six months' time (see Chart 3). But as many as one in three believe in a deterioration within six months. The assessment does not differ substantially between the different types of participant. Those participants who expect a deterioration over the coming six months explain this through their belief that the new financial regulations will impede the market makers' ability to bear risks, which they believe, in turn, will lead to impaired liquidity. Examples of regulations highlighted include the increased capital requirements for the banks,

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

requirements for the banks' liquidity (primarily via the LCR⁴) and, to a certain extent, the resolution fee⁵ for Swedish banks. Some participants also mention the possibility that the United Kingdom, following a referendum in June, may leave the EU (so-called Brexit) as a factor of uncertainty that, at least in the short term, may negatively impact the Swedish financial markets' functioning.

Chart 3. What do you think about the functioning of the Swedish financial markets in the short term (6 months)?

Percentage of responses



Note. The category "Neither better nor worse" is not shown in this chart. Net value 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 factors linked to risks on the basis of the probability that they will be realised and the consequences for the Swedish financial system if they are realised during the coming six to twelve months (see Figure 1).

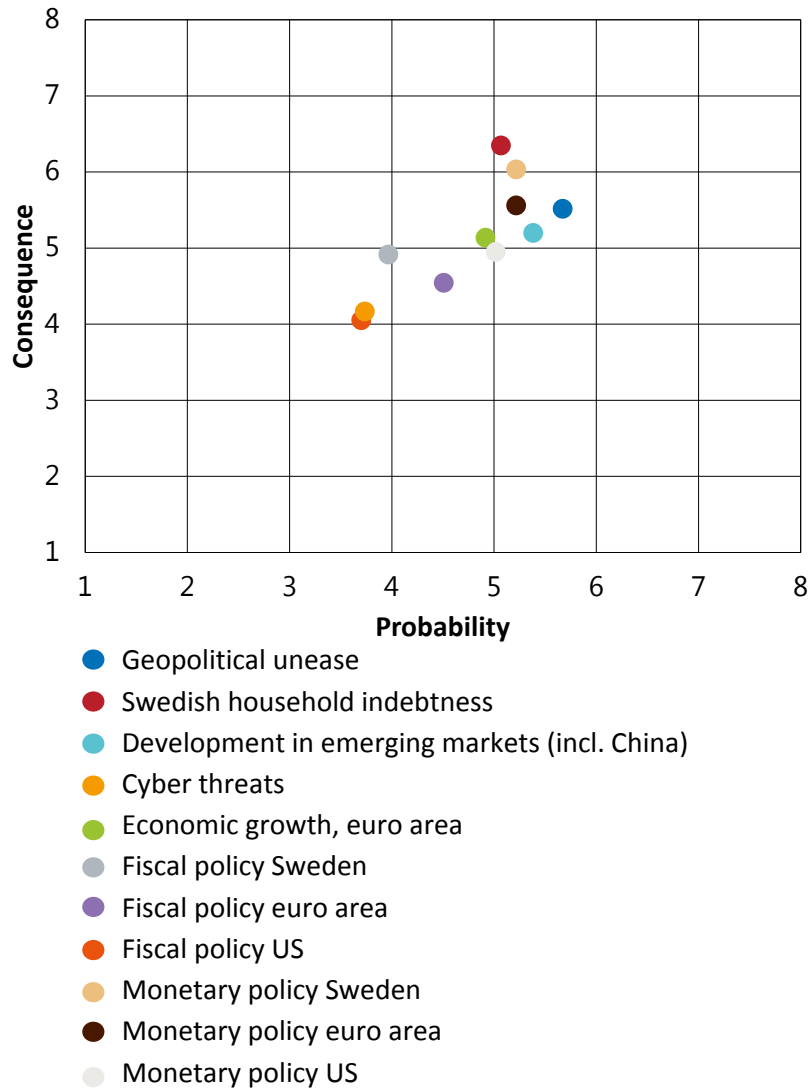
The participants assess risks linked to geopolitical unease and developments in certain emerging market economies as those most likely to be realised over the coming six to twelve months. In particular, they express concern that a deterioration of economic prospects in China could have a negative impact on the Swedish financial system. The participants also emphasise the political risks and uncertainties that could arise for the European Union if the United Kingdom chooses to leave the European Union.

The participants assess that risks linked to Swedish household indebtedness could have the greatest negative consequences for the Swedish financial system. Expansionary monetary policy in Sweden and the euro area is also ranked highly. The participants also say that ever lower, and in some cases negative, market rates due to monetary policy in Sweden and in the euro area are leading investors to seek higher-risk 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.

⁴ The LCR, Liquidity Coverage Ratio or liquidity ratio for short, is a liquidity measurement defined by the Basel Committee that measures a bank's ability to deal with a stressed net outflow of liquidity for 30 days. In simple terms, an LCR of 100 per cent means that a bank's liquidity reserves are adequate to enable the bank to manage an unexpected liquidity outflow for 30 days.

⁵ This fee is paid annually by credit institutions and securities companies and is aimed at building up the resolution fund that forms part of the new crisis management directive introduced into Swedish legislation in 2016. The size of the annual resolution fee is primarily based on the individual institutions' balance sheets at the end of the year.

Figure 1 . Participants' assessment of risks related to selected factors that could affect the Swedish financial system



Note. Participants have assessed risks linked to a selection of predefined factors. They have evaluated the probability and consequences of each factor being triggered and consequently having negative effects for the Swedish financial system within the next 6–12 months. The scale runs from 1–8, with 1 being extremely low/small and 8 being extremely high/large. The numbers on the figure can also be found in Table 1 in Appendix 1. The figures for the four highest-ranked possible responses can be found in Appendix 2.

Higher level of risk and lower resilience in the Swedish financial system

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

One-third of the participants feel that the overall risk level in the Swedish financial system is currently high (see Chart 4). What concerns them, above all, is the fact that household indebtedness is high from a historical perspective at the same time as housing prices are continuing to increase. Some participants also emphasise here that the low interest rates are leading to a search for yield that is leading investors to turn to increasingly high-risk investments. However, more consider that the overall level of risk is low, compared to when the last risk survey was conducted. But, at the same time, one third of the participants consider that the overall risk level has increased over the last six months (see Chart 5).

Chart 4. What is your perception of the overall level of risk in the Swedish financial system today?

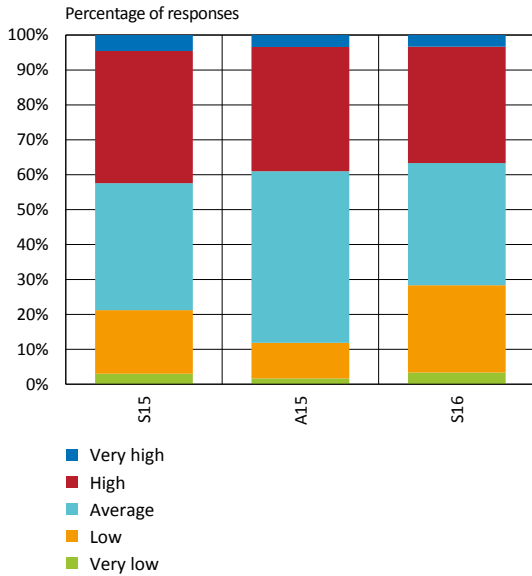
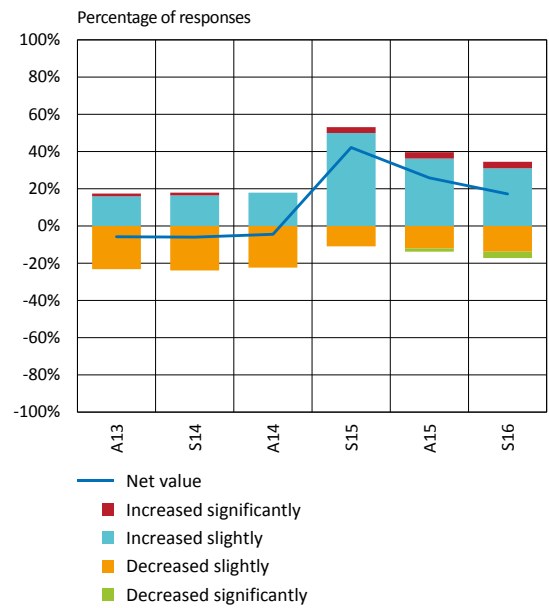


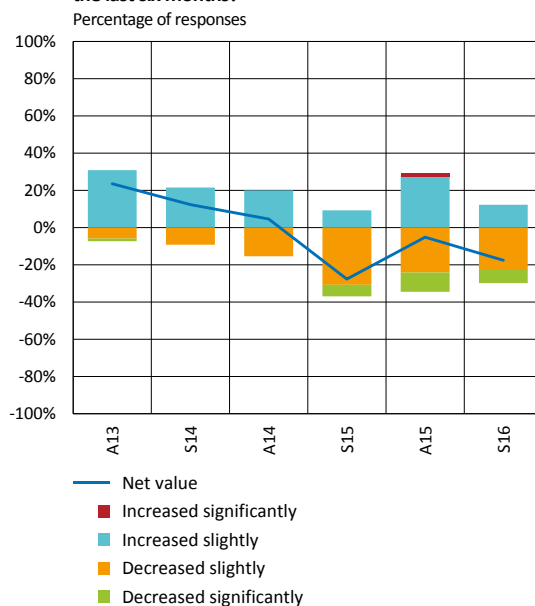
Chart 5. What is your perception of the way the total risk level in the Swedish financial system has developed in the past six months?



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

About two out of three participants consider that the ability of the Swedish financial system to manage significant stress has neither increased nor decreased in the last six months (see Chart 6). At the same time, slightly more than one in four participants consider that this ability has decreased and explain this partly through their perception that the banks have a decreased capacity to absorb risks and partly as being due to the deterioration of market liquidity.

Chart 6. What is your perception of how the Swedish financial system's ability to manage significant stress has developed over the last six months?



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

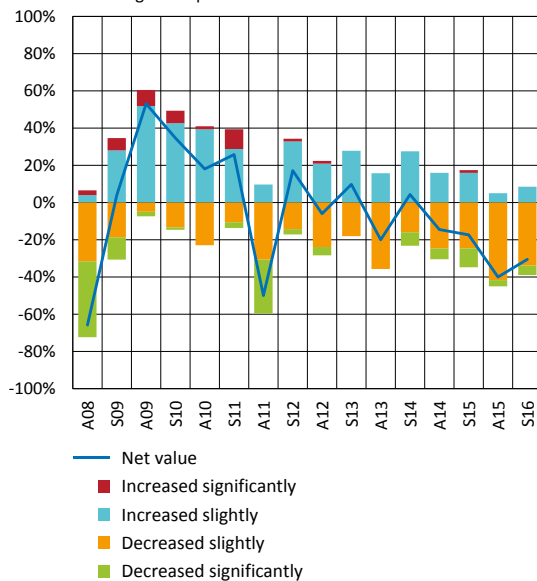
Willingness of participants to take risks has decreased slightly

Almost half of the market participants' state that their risk propensity has decreased over the last six months (see Chart 7). It is mostly fixed-income market investors who state that they have reduced their risk propensity. According to them, this is because there is prevailing greater uncertainty than previously on the financial markets, but also because there is uncertainty over the economic outlook in general. Certain participants also bring up impaired market liquidity as a cause of decreased risk propensity. Difficulties in the valuation of asset classes as a consequence of the central banks' expansionary monetary policy are also mentioned by the participants. Those participants who have increased their risk propensity report that this is primarily due to the low interest rates.

A majority of participants state that they will probably not change their risk propensity over the next six months (see Chart 8) this is because they expect the markets to continue to be volatile due to the uncertain political situation. Among other things, the participants emphasise the political risks and uncertainties that could arise for the European Union in the event that the United Kingdom leaves the EU. Unease over developments in emerging market economies such as China forms another factor mentioned by the participants. One in four market participants believe that they will reduce their risk propensity, referring to their expectation that the markets will continue to be volatile in the period ahead.

Chart 7. How has your willingness to take risks changed over the past six months?

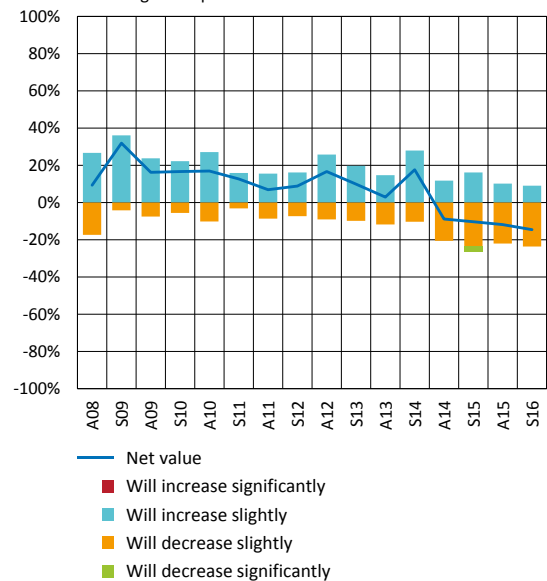
Percentage of responses



Note. The category "Neither increase nor decrease" is not shown in this chart. Net value is the difference between the columns above and below zero.

Chart 8. How do you foresee your willingness to take risks over the coming six months?

Percentage of responses



Note. The category "Neither increase nor decrease" is not shown in this chart. Net value shows the difference between the columns above and below zero.

Market liquidity on the Swedish fixed-income and foreign exchange markets

As mentioned earlier, slightly fewer than half of the participants consider that the Swedish financial markets are functioning less well than previously (see Chart 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.⁶

⁶ 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.

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 Appendix 1, Chart A1– Chart A14). For example, more than half of the participants consider that market liquidity for government bonds and covered bonds is acceptable or better (see Chart 9 and Chart 10). For covered bonds, fewer participants now think that liquidity is below an acceptable level as compared with the previous survey. However, the participants consider market liquidity for corporate bonds to still be low and lower than when the previous risk survey was conducted (see Chart 11).

The participants consider that market liquidity for bonds has deteriorated as a consequence of new regulations

A majority of the market participants respond to one of the open-ended questions (see Appendix 3 for the open-ended questions) that market liquidity for Swedish bonds is worse today than it was two years ago. According to the participants, this deterioration is primarily due to new financial regulations. According to the participants, this has made it more expensive and less profitable for the banks to act as market makers. Consequently, there are now fewer market makers than previously and they are also less willing to take risks, which has had direct consequences for market liquidity. The regulations that the participants primarily cite are Basel III⁷ for banks (primarily new and stricter capital adequacy requirements) and liquidity rules (LCR), the new EU directive for insurance companies Solvency II⁸ and, to a certain extent, the EU regulation for the trading of derivatives, EMIR⁹.

According to the participants, corporate bonds are the asset class with lowest market liquidity (see Chart 11). The participants also express concern over how liquidity in corporate bonds would be affected in a stress scenario, for example under high sales pressure. A number of market participants also express a certain concern for the market for covered bonds in a stress scenario

Chart 9. What is your view of liquidity regarding government bonds over the past six months?

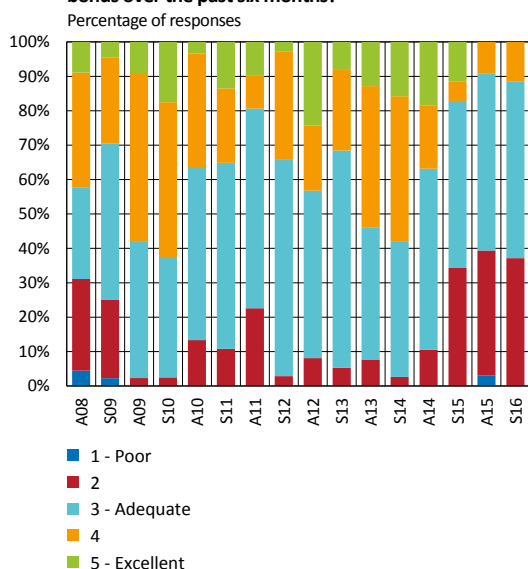
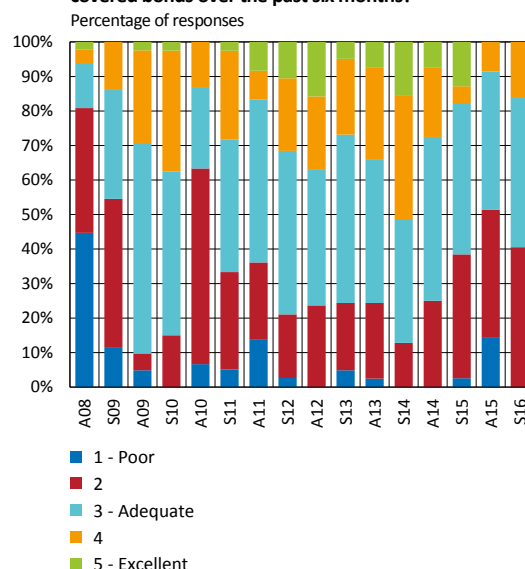


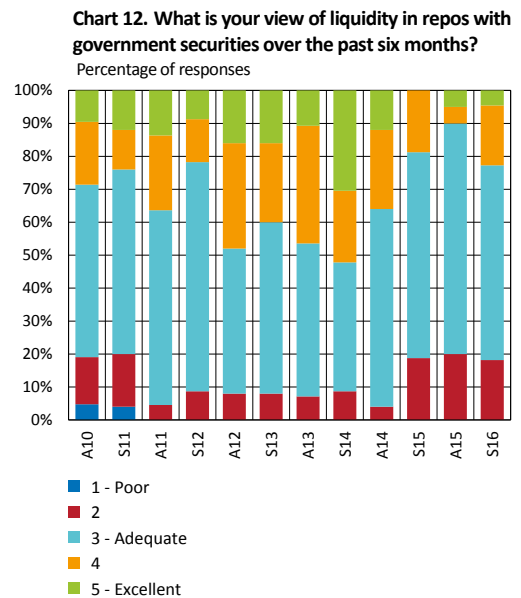
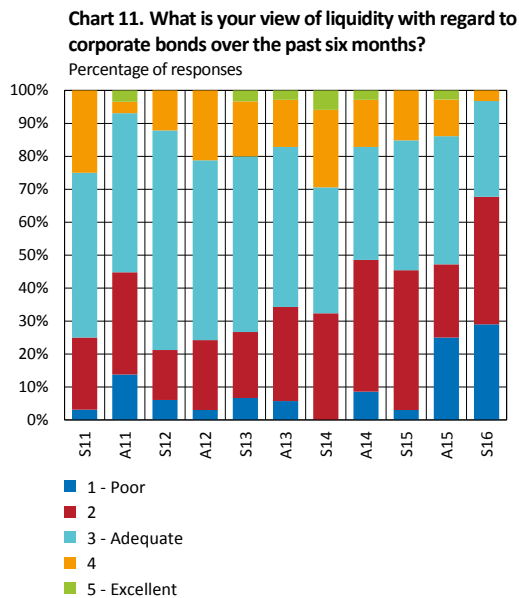
Chart 10. What is your view of liquidity with regard to covered bonds over the past six months?



⁷ Basel III is an international regulatory framework for the banks' capital adequacy and liquidity. Basel III will be progressively phased in by 2019.

⁸ Solvency II harmonises the regulations for insurance companies in the EU. In addition, Solvency II captures the risks to which the companies are exposed better than previous regulations.

⁹ EMIR is an EU regulation that covers the management of counterparty risks in OTC derivatives transactions and requirements for reporting derivatives transactions. It also regulates central counterparties and trade repositories in the EU. See also Eklund, J, Sandström, M and Stenkula von Rosen, J, The derivative market is facing major changes, *Economic Commentary* No. 6 2012, Sveriges Riksbank.



Note. The value of the participants' assessment concerning repo transactions with government bonds has been revised upwards for the autumn of 2015.

Open-ended questions related to the functioning of the fixed-income and foreign exchange markets

In the risk survey, the Riksbank also posed a number of open-ended questions to market participants.¹⁰ 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.

Market participants see risks in the Riksbank's expansionary monetary policy

Many participants express unease for the consequences of the Riksbank's expansionary monetary policy in the form of a negative repo rate and purchases of Swedish government bonds.¹¹ According to the participants, the negative repo rate and consequent lower and, in many cases, negative market rates are leading to a search for yield, which is to say that investors are turning to riskier investments. According to participants, the search for yield may lead to the mispricing of risks and to the accumulation of bubbles in various asset types. Many participants perceive the Riksbank's purchases of government bonds as negative for the market liquidity of this market, as the volume of government bonds that can be traded on the secondary market is declining.

Profitability for financial institutions is under pressure from the prevailing low level of interest rates

Many participants state that an extended period of low interest rates may, in the long run, lead to declining profitability for financial institutions, for example via decreasing earnings for the banks. A few participants also note that this may ultimately lead to a reduction in traditional saving in so-called deposit accounts, which would increase the banks' need for wholesale funding. However, the participants perceive the Swedish financial institutions as profitable, but note that, if profitability decreases, this may ultimately lead to a search for yield.

¹⁰ Appendix 3 contains a compilation of the open-ended questions asked by the Riksbank.

¹¹ The Riksbank had, at this point, cut the repo rate to -0.5 per cent and announced government bond purchases of SEK 200 billion. The participants were unaware of the Riksbank's decision on 21 April to buy government bonds for a further SEK 45 billion when they responded to the survey.

Limited impact on Swedish financial markets of possible United Kingdom decision to leave the European Union (Brexit)

The market participants are fairly unanimous in their assessment of the possible contagion effects to the Swedish financial system if the United Kingdom should leave the European Union. The participants state that the Swedish krona could possibly initially appreciate against sterling and that the Swedish financial markets would probably be affected by reduced risk propensity. However, these effects are expected to be short-lived. The unease instead expressed by the participants concerns the implications that a possible exit by the United Kingdom may have for the European Union in general. Consequently, it is political risks related to the view of the European Union of other member states (including Sweden), rather than contagion risks via the financial markets, that are emphasised by the participants.

Unease over valuations on the commercial property market

Several participants are experiencing unease over the high valuations on the commercial property market. The participants state that many property companies have increasing loan-to-value ratios and are thereby also sensitive to interest rate adjustments. The participants express unease that, if prices for property fall, for example as a consequence of a worsened economic situation, a number of property companies may find it difficult to fund their operations. This may ultimately entail loan losses for the banks, which the participants believe has increased their exposures towards the property sector since the financial crisis.

APPENDIX 1 – Breakdown of responses to other questions

The participants' assessment of liquidity in instruments on the Swedish fixed-income market.^{12,13}

Chart A1. What is your view of liquidity for treasury bills over the past six months?

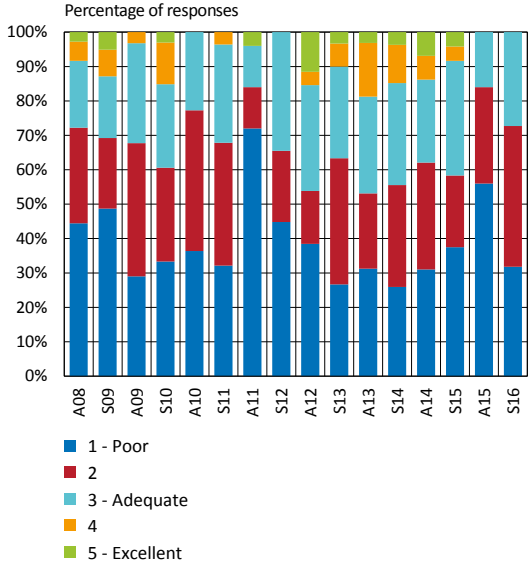


Chart A2. What is your view of liquidity for government bonds over the past six months?

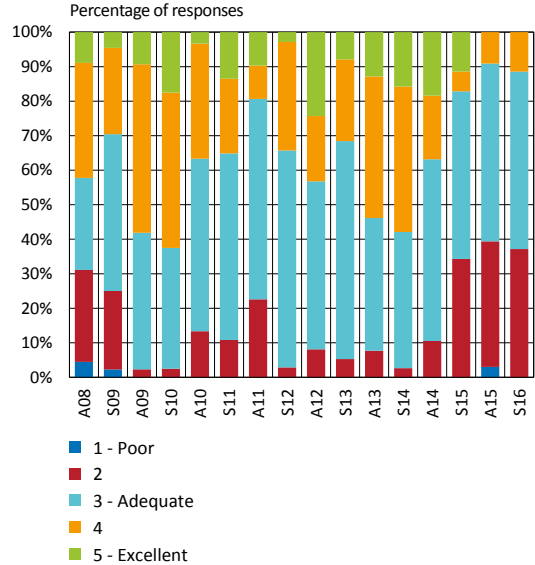


Chart A3. What is your view of liquidity for covered bonds over the past six months?

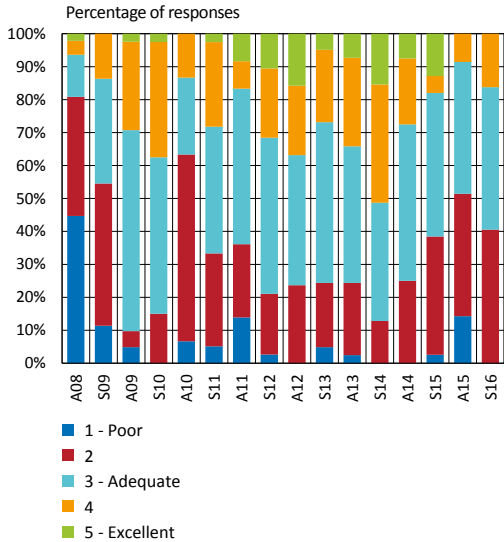
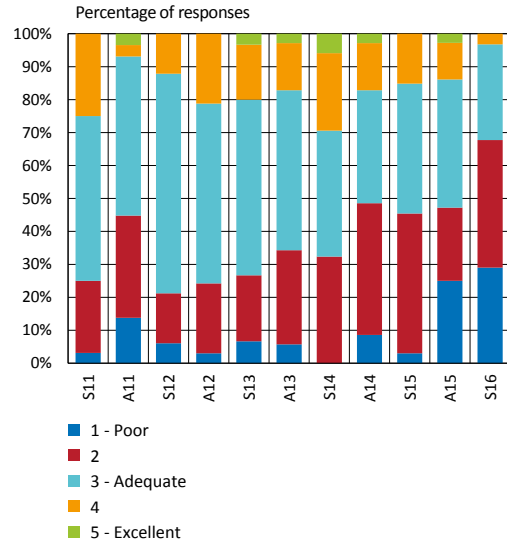


Chart A4. What is your view of liquidity for corporate bonds over the past six months?



¹² When interpreting participants' responses in Charts A1 to A14, 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.

¹³ 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.

Chart A5. What is your view of liquidity for interest-rate swaps (SEK/SEK) over the past six months?¹⁴
Percentage of responses

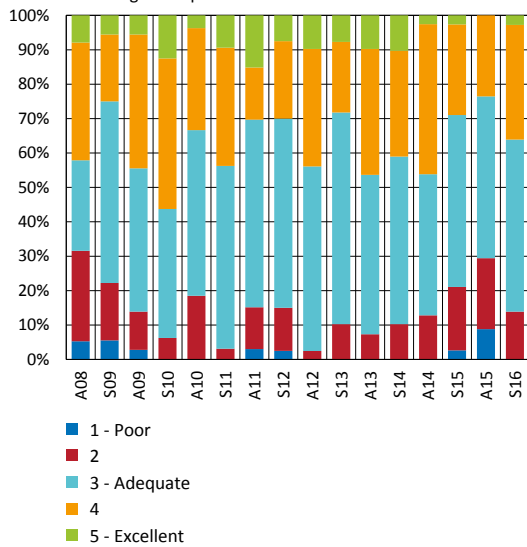


Chart A6. What is your view of liquidity for repos with government securities over the past six months?
Percentage of responses

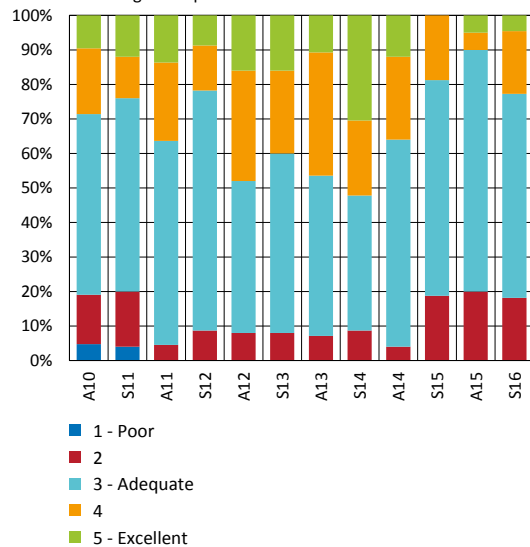


Chart A7. What is your view of liquidity for repos with covered bonds over the past six months?
Percentage of responses

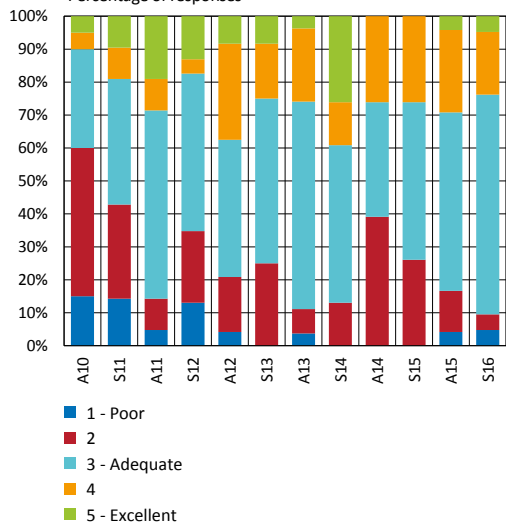
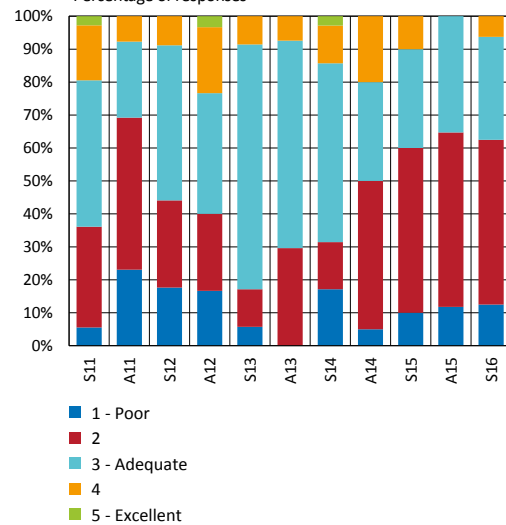


Chart A8. What is your view of liquidity for RIBA futures over the past six months?
Percentage of responses



¹⁴ 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.

Chart A9. What is your view of liquidity for STINA swaps over the past six months?¹⁵
Percentage of responses

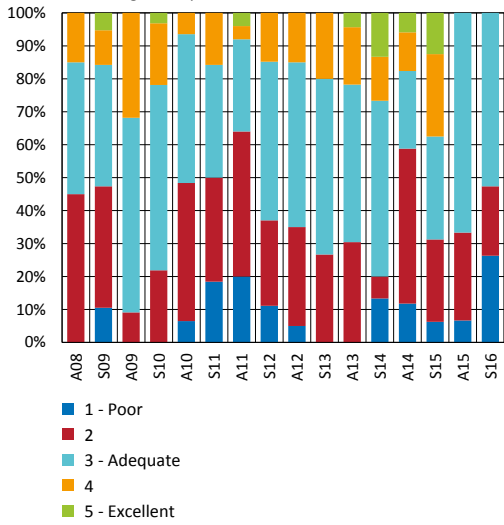
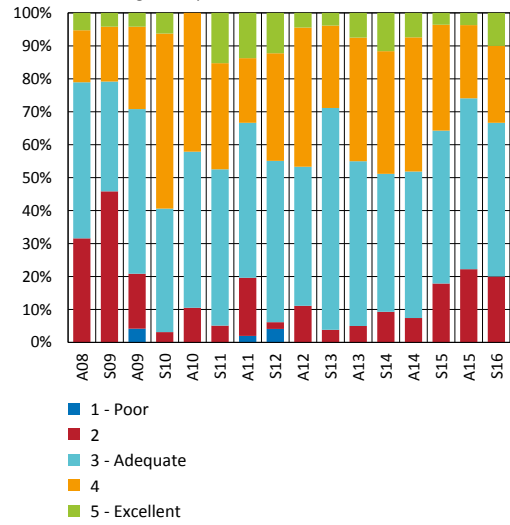


Chart A10. What is your view of liquidity for FRAs over the past six months?
Percentage of responses



The participants' assessment of liquidity in instruments on the Swedish foreign exchange market¹⁶

Chart A11. What is your view of liquidity for Swedish kronor over the past six months?
Percentage of responses

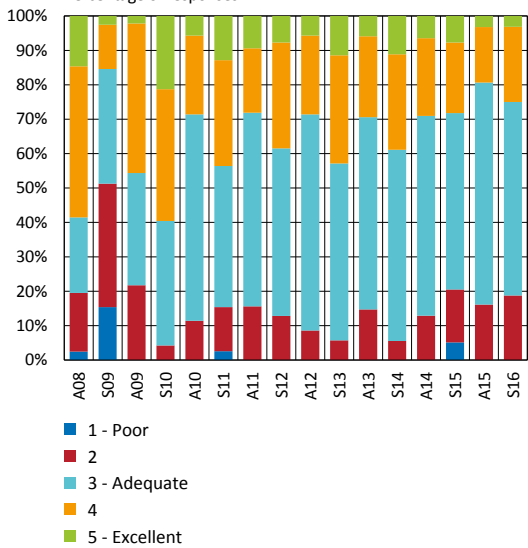
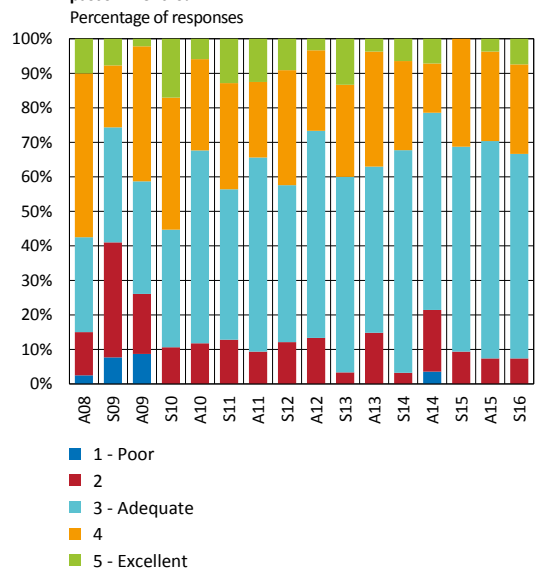


Chart A12. Compared with currencies such as CAD, AUD and NOK, what is your assessment of the functioning of the SEK market over the past six months?
Percentage of responses



¹⁵ STINA stands for STIBOR T/N Average. A STINA contract is an agreement, with a maturity of no more than one year, to pay or receive the difference between an agreed fixed rate of interest and a variable overnight rate (STIBOR T/N).

¹⁶ Only participants active either 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.

Chart A13. What is your view of liquidity for spot transactions over the past six months?
Percentage of responses

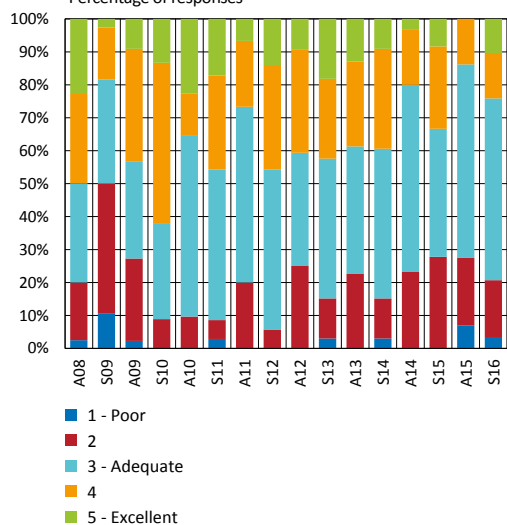


Chart A14. What is your view of liquidity for forwards over the past six months?
Percentage of responses

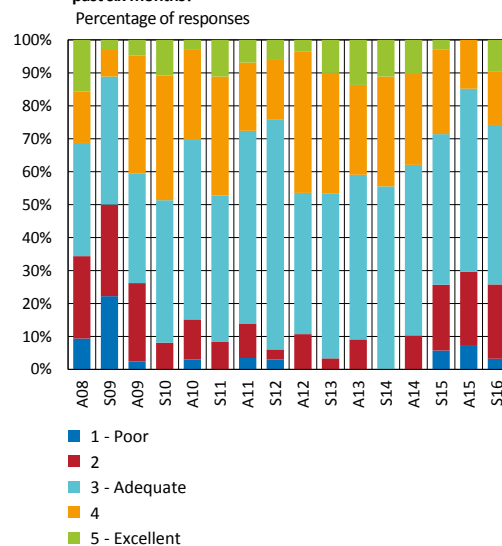


Table 1. The participants' assessment of selected factors that can affect the Swedish financial system, spring 2016, scale 1-8, where 1 is extremely low/small and 8 is extremely high/large

Factor	Probability	Consequence
Risks related to economic developments in the euro area	4.9	5.1
Risks related to fiscal policy in Sweden	4.0	4.9
Risks related to fiscal policy in the euro area	4.5	4.5
Risks related to fiscal policy in the United States	3.7	4.1
Risks related to monetary policy in Sweden	5.2	6.0
Risks related to monetary policy in the euro area	5.2	5.6
Risks related to monetary policy in the United States	5.0	4.9
Risks related to geopolitical unease	5.7	5.5
Risks related to household indebtedness in Sweden	5.1	6.4
Risks related to developments in emerging market economies (including China)	5.4	5.2
Risks related to cyber threats	3.7	4.2

Table 2. The participants' assessment of selected factors that can affect the Swedish financial system, autumn 2015, scale 1-8, where 1 is extremely low/small and 8 is extremely high/large

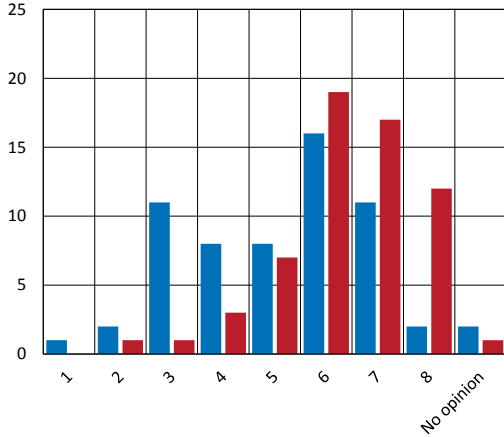
Factor	Probability	Consequence
Risks related to fiscal unease in the euro area	4.4	5.1
Risks related to the development of the real economy in the euro area	4.8	4.9
Risks related to fiscal policy in Sweden	4.2	5.1
Risks related to fiscal policy in the euro area	4.4	4.8
Risks related to fiscal policy in the United States	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 United States	5.4	5.3
Risks related to geopolitical unease	5.8	5.7
Risks related to household indebtedness in Sweden	5.4	6.4
Risks related to developments in emerging market economies (including China)	6.1	5.5

APPENDIX 2- Allocation of assessments of factors

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

Chart A15. Swedish household sector debt

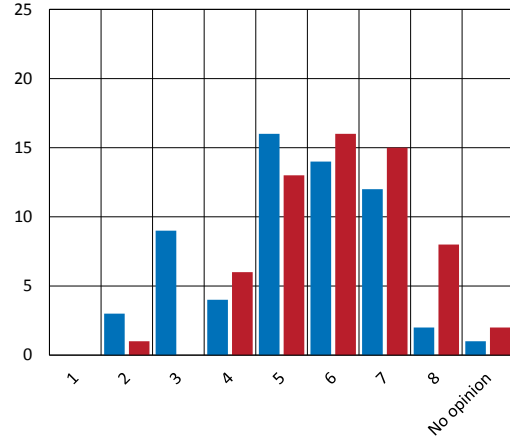
Number of participants



■ Probability
■ Consequence

Chart A16. Monetary policy in Sweden

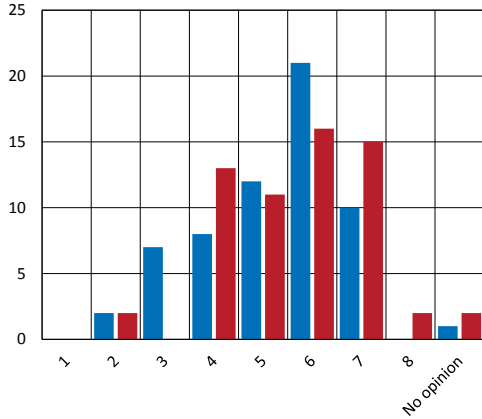
Number of participants



■ Probability
■ Consequence

Chart A17. Monetary policy in the euro area

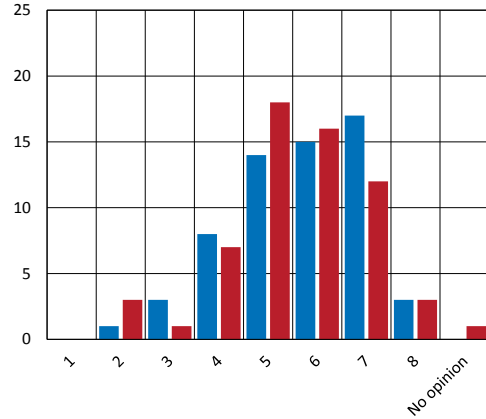
Number of participants



■ Probability
■ Consequence

Chart A18. Geopolitical unease

Number of participants



■ Probability
■ Consequence

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 the 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 think bond-market liquidity has changed over the past two years? How do you think market liquidity would be affected in a stressed scenario, e.g. heavy sales pressure, and what consequences would this in turn lead to? For government bonds? For covered bonds? For corporate bonds? Please explain.
- To stimulate the economy and achieve the inflation target, the Riksbank has implemented unconventional monetary policy measures in the form of a negative repo rate and the purchase of nominal government bonds. Do you think these measures have affected or are affecting the functioning of the financial system, and if so, how? Please specify which of the measures you are referring to.
- What consequences do you think a potentially prolonged period of low interest rates could have for the profitability and business operations of Swedish financial institutions? How can this affect financial stability?
- How do you think the Swedish financial system would be affected by the United Kingdom leaving the European Union (Brexit)? Please explain.
- What risks do you see connected to the Swedish commercial property market? Please explain how realisation of these risks could spread to the Swedish financial system.



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