



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

Autumn 2016



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## Survey results – autumn 2016

### **The Riksbank's risk survey<sup>1</sup>**

- 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 neither the risks in the Swedish financial system nor its functioning.
- This report describes the results of the survey where responses were received between 3 and 12 October 2016.

### **The Swedish financial markets are functioning slightly worse than before**

- Half of the respondents consider that the markets are functioning slightly worse than six months ago. Nearly four out of ten respondents consider that market functioning is poor. Just as many consider that the market functioning is neither well nor poor while two out of ten consider them to be working well. It is particularly among those respondents active on the fixed-income market who consider market functioning to be poor and slightly worse than before.

### **Perceived decrease in market liquidity leading to slightly worse market functioning**

- The respondents perceive that market liquidity has deteriorated and this is their main explanation for the poorer functioning of the Swedish financial markets. There are several explanations for the deterioration in liquidity in the fixed income markets, according to the respondents. The most common explanation among the participants is that market makers are less active than previously in their roles as counterparts in buying and selling securities. This is partly a result of various financial regulations which has made trading with securities more costly for market makers. The Riksbank's purchases of government bonds are also mentioned as a contributory factor in the deterioration in market liquidity for government bonds.

### **Continued concern over risks linked to low interest rates and household indebtedness**

- Most of the respondents think that there are risks associated with low interest rates and the search for yield that may lead to. The respondents explain that the low interest rates are leading to a search for riskier investments and many respondents explain that this in turn could lead to a mispricing of risk. At the same time, many respondents say that their own risk-taking has declined over the past six months.
- Household indebtedness is also highlighted as a source of concern. The respondents explain that, if household indebtedness continues to rise at its present rate, it may lead to problems when interest rates start to rise again.

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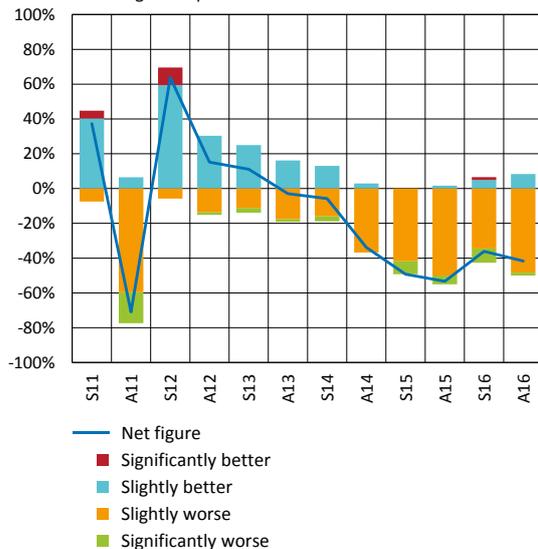
<sup>1</sup> The Riksbank commissioned survey company Markör Marknad och Kommunikation AB to send out the survey on its behalf. The survey supplements the annual discussions the Riksbank has with its monetary and foreign exchange policy counterparties on developments in the financial markets, and the regular contacts the Riksbank has with market participants. The autumn survey was sent out to 71 participants active in the Swedish fixed-income and foreign exchange markets. 27 per cent of those surveyed are the Riksbank's monetary and foreign exchange policy counterparties, while the remaining 73 per cent are other participants on these markets, both investors and borrowers. The response rate was 86 per cent.

## The financial markets are assessed as functioning slightly worse than before

Half of the respondents consider that the Swedish financial markets function slightly worse now than they did six months ago (see Chart 1). The main reason given by the participants is an experience of impaired market liquidity<sup>2</sup>. Also, there are more participants who consider that the Swedish financial markets are currently functioning poorly than consider they are functioning well (see Chart 2). Almost two fifths respond that the markets are functioning poorly. At the same time, around the same number of participants consider that the markets are functioning neither poorly nor well. As with the previous risk survey, it is primarily the participants on the fixed-income market who consider that the financial markets work poorly as of today and also slightly worse than six months ago with the main motivation being that of impaired market liquidity.

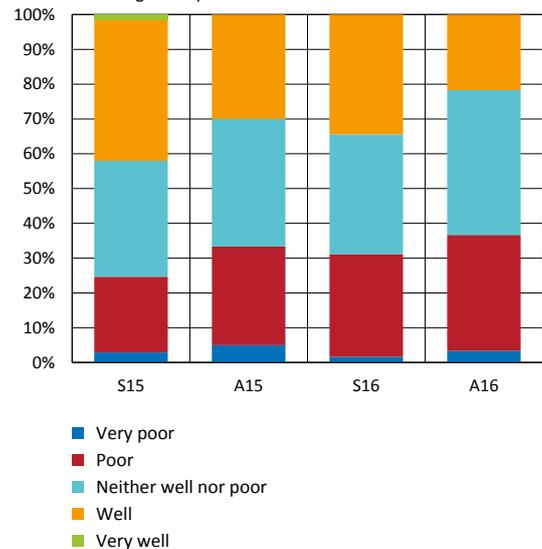
There are in turn several explanations for the impaired market liquidity, according to the participants. For one thing, market makers have become less active over the years and less willing to act as intermediaries on the fixed-income markets, that is, to be counterparties in purchases and sales of securities. This is partly because various financial regulations have made securities trading more expensive for market makers. Many participants also mention the Riksbank's purchases of government bonds as a reason for the deterioration of market liquidity in these bonds.

**Chart 1. What is your assessment of how the Swedish financial markets are functioning compared with six months ago?**  
Percentage of responses



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.

**Chart 2. What is your assessment of how the Swedish financial markets are functioning today?**  
Percentage of responses



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.

Half of the respondents assess that the financial markets will function in the same way in six months' time (see Chart 3). Two out of five believe there will be a deterioration in the coming six months, however. It is primarily respondents active on the fixed-income market who has this view, and in addition to the reasons mentioned above, some respondents mention, for instance, the uncertainty regarding the use of shadow ratings<sup>3</sup> for Swedish corporate bonds.

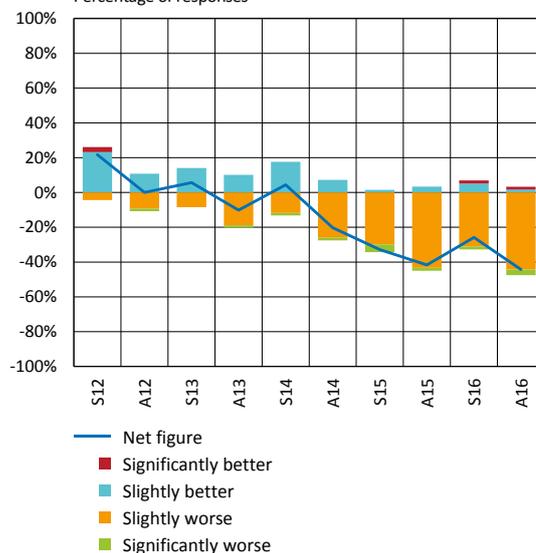
<sup>2</sup> Market liquidity refers to the ability to rapidly buy or sell significant volumes of a financial instrument at a low transaction cost and with limited market price impact. See also Market liquidity on the Swedish bond market and its importance for financial stability. Article in *Financial Stability Report 2016:1*. Sveriges Riksbank.

<sup>3</sup> The European Securities and Markets Authority, ESMA, has told Swedish banks that the credit ratings they give Swedish companies, the so called shadow ratings, may be in breach of the regulations for credit rating agencies. The use of these shadow ratings has long been established on the Swedish market for corporate bonds and the ratings are mainly issued by the major Swedish banks. All of the banks except one have stopped allocating ratings to investors following ESMA's announcement.

They are also concerned over how the Swedish financial markets will function over the coming year-end given that the banks are less willing to do business over the year-end as they could then be faced with, for instance, higher costs for resolution fees.<sup>4</sup>

**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 figure. Net figure shows the difference between the columns above and below zero.

## Risks that may affect the Swedish financial system

Participants have assessed risks linked to a selection of predefined factors. The assessment is made on the basis of the probability of the risks being materialized during the coming six to twelve months and what consequences this would have for the Swedish financial system (see Figur 1).

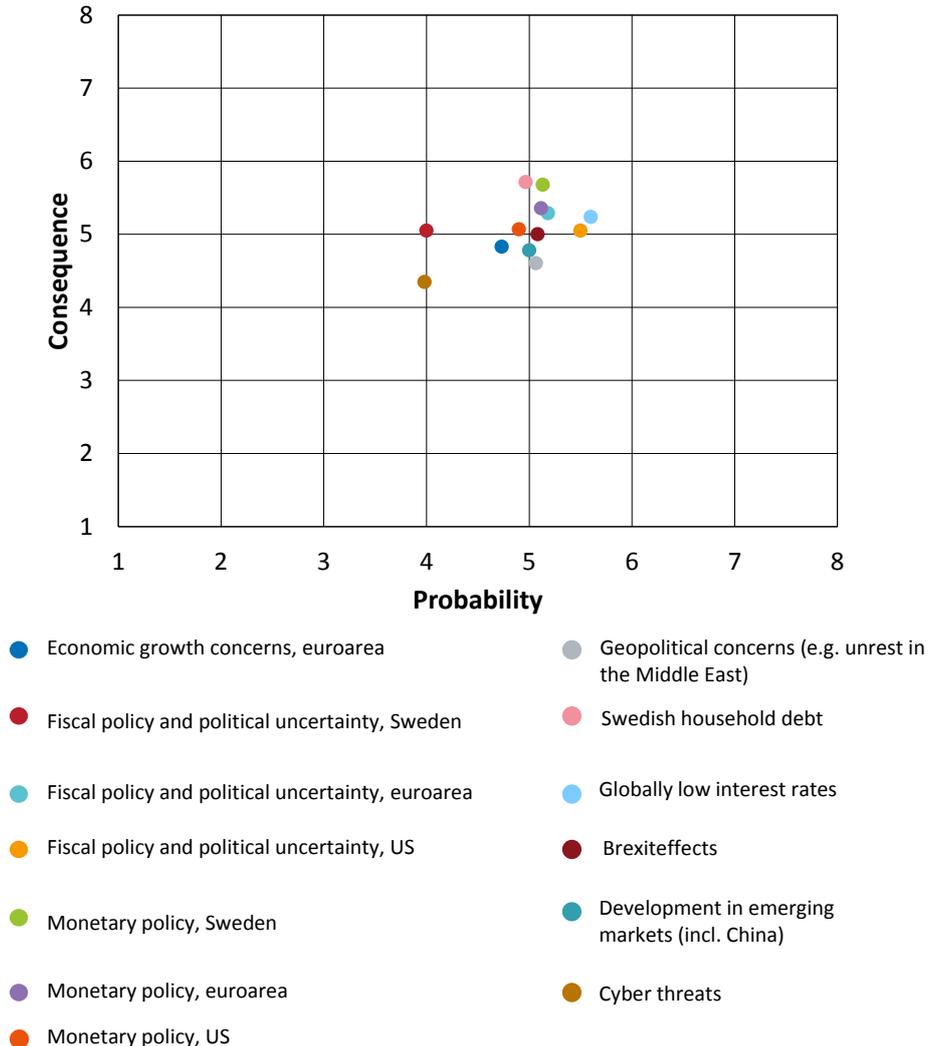
The participants assess risks linked to the global low interest rate situation and risks linked to fiscal policy and political uncertainty in the United States as those most likely to be materialized during the coming six to twelve months. In addition to the predefined factors, they highlight the coming elections in various countries as potential risks, for example in Germany.

In line with the previous risk survey, the assessment is that risks linked to Swedish household indebtedness and the expansionary monetary policy conducted in Sweden could ultimately have the largest negative consequences for the financial system in Sweden. The respondents say that household indebtedness is increasing as a consequence of the low interest rates and that it is also uncertain how households will manage future interest-rate increases. Risks linked to the expansionary monetary policy in the euro area are also ranked relatively highly.

Figur 1 should however be interpreted with caution for at least two reasons. Firstly, the difference between the rankingscores of the factors are in many cases quite small. The mean value for all the factors, for instance, are all in the interval of 4-6. Secondly, the participants responses are widely distributed, see Appendix 2. This makes it difficult to ensure whether or not there truly is a difference among the factors.

<sup>4</sup> 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.

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



Note 1. Participants have assessed risks linked to a selection of predefined factors. They have evaluated the probability and consequences of the risks related to each factor being materialized 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.

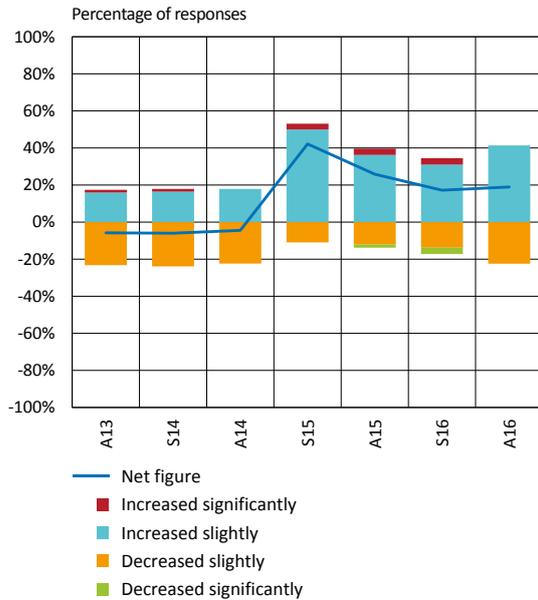
## Divided opinions on the risk level in the Swedish financial system

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.

There are divided opinions among market participants regarding the overall risk level in the Swedish financial system. Two out of five say that the overall risk level in the Swedish financial system has increased over the past six months. Meanwhile, just as many say that the overall risk level has neither increased nor decreased (see Chart 4) and one out of five say that the total risk level has instead declined. The participants who consider risks to have decreased motivate this by pointing to greater global uncertainty having meant that a number of participants have reduced their risk taking, which has in turn led to the overall risk level to decrease. The main concern of the respondents who have said that the risk level has increased are generally low interest rates and household indebtedness. They say that household indebtedness is increasing as a result of the low interest rates and that it is not clear how the various financial markets and asset types will react when interest rates begin to

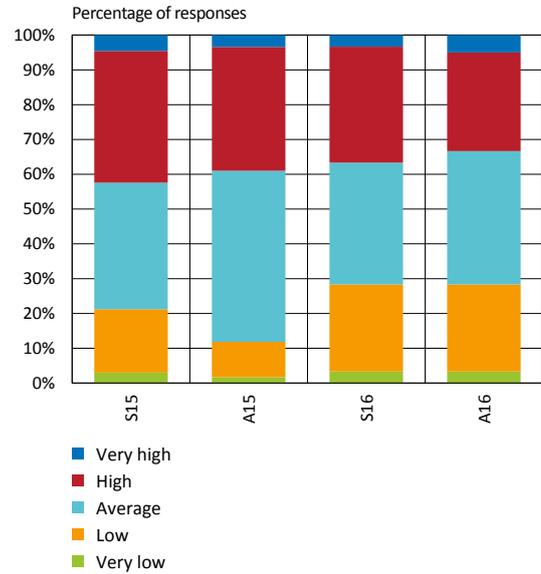
rise. The same explanations are given by the third of the respondents that say that the risk level is high at present, while around as many think the level is low and the same amount that it is unchanged (see Chart 5). Those respondents who consider the risk level to be low at present state that the Swedish financial system now has greater resilience, partly due to the financial regulations that have been introduced and through an increase in risk awareness.

**Chart 4. What is your perception of the way the total risk level in the Swedish financial system has developed in the past six months?**



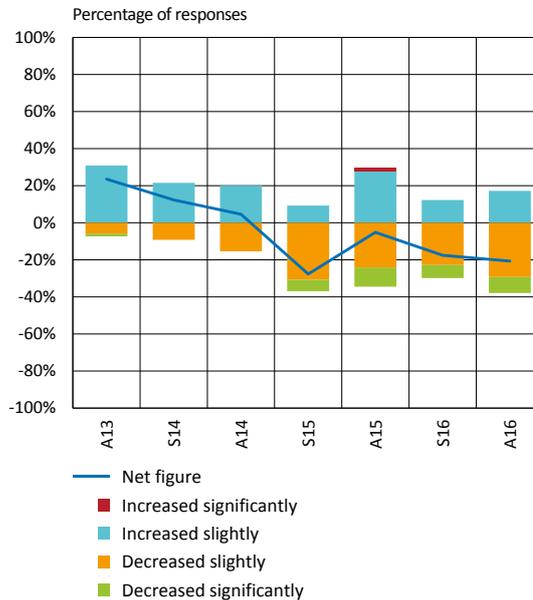
Note. The category "Neither better nor worse" is not shown in this chart. Net figure shows the difference between the columns above and below zero.

**Chart 5. What is your perception of the overall level of risk in the Swedish financial system today?**



Almost two out of five respondents consider the Swedish financial system’s capacity to manage significant stress has declined somewhat over the past six months (see Chart 6) and their main explanation for this is that they perceive that the market makers’ ability to act as counterpart in periods when many participants want to sell their fixed-income assets is poorer than before. However, almost half of the respondents consider that the ability of the Swedish financial system to manage significant stress has neither increased nor decreased in the last six months.

**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?**



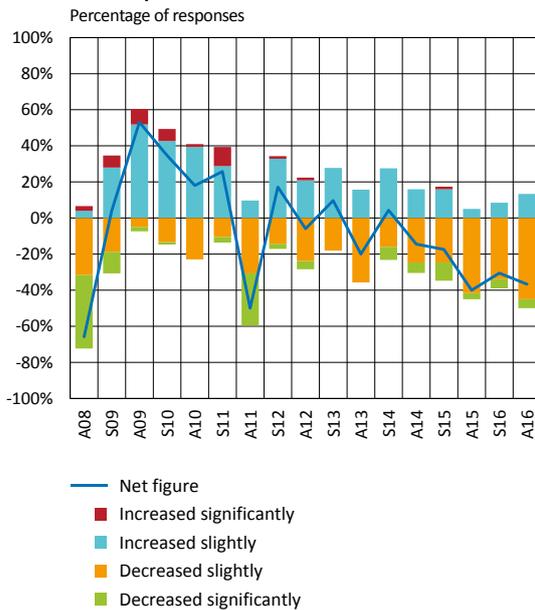
Note. The category "Neither better nor worse" is not shown in this chart. Net figure shows the difference between the columns above and below zero.

## The respondents' risk taking has declined somewhat

In the survey, the respondents are asked to state how they perceive their risk-taking to have changed over the past six months and how they believe their risk-taking will be over the coming six months. Almost half of the market participants state that their risk propensity has decreased somewhat over the last six months (see Chart 7). It is mostly fixed-income market investors who state that they have reduced their risk taking. They explain this by saying that increased risktaking to attain higher yield is not as rewarding as before. Further explanations given are the increased political uncertainty, greater unease abroad and poorer market liquidity.

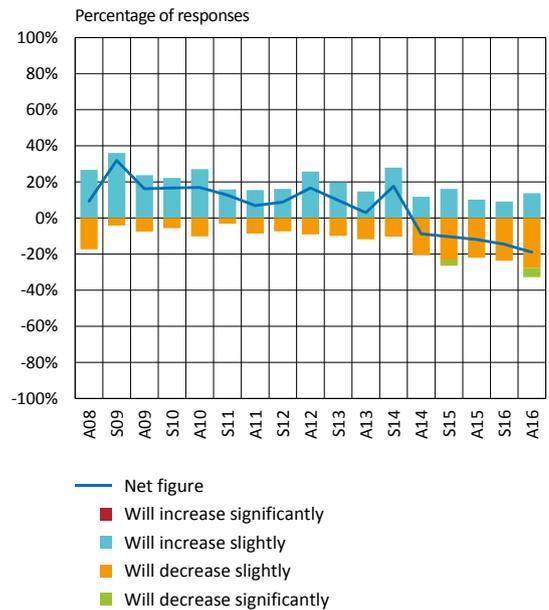
Almost half of the respondents state that they will probably not change their risk taking over the coming six months (see Chart 8). They say that this is because they do not believe that the current situation on the financial markets will change so much over the coming six months. Other participants state that they are long-term investors and will thus not change their risk profile during this period.

**Chart 7. How do you consider that your risk-taking has changed over the past six months?**



Note 1. The category "Neither better nor worse" is not shown in this chart. Net figure shows the difference between the columns above and below zero.  
 Note 2. This question was previously formulated as: "How has your willingness to take risks changed over the past six months?"

**Chart 8. How do you foresee your risk-taking over the coming six months?**



Note 1. The category "Neither better nor worse" is not shown in this chart. Net figure shows the difference between the columns above and below zero.  
 Note 2. This question was previously formulated as: "How do you foresee your willingness to take risks over the coming six months?"

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

As mentioned earlier, half of the respondents consider that the Swedish financial markets are functioning slightly worse than previously (see Chart 1) and many report that this is due to a perceived lower market liquidity.

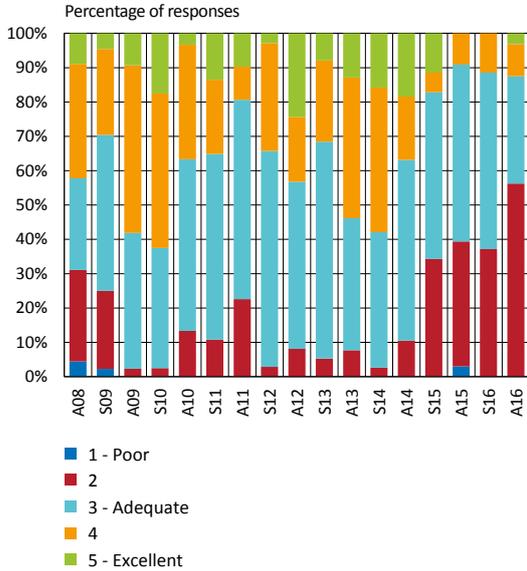
Fixed-income market participants are asked in one of the open-ended questions to state which driving forces they consider to be foremost for market liquidity in government bonds, covered bonds and corporate bonds (see Appendix 3 for the open-ended questions). According to them the deterioration in market liquidity for these instruments is partly due, as mentioned earlier, to the new financial regulations implemented in recent years. The regulations mentioned include Basel III<sup>5</sup> for banks, which contains many new and stricter capital adequacy requirements and liquidity regulations (LCR). According to the participants, the regulations have made it more expensive and less profitable for the banks to act as market makers. The market makers have therefore over the years become less active in the role as counterpart in buying and selling securities, which the respondents say has had direct consequences for market liquidity.

Many participants in the government bond market also perceive the Riksbank's purchases of government bonds as negative for market liquidity in this market, as the volume of government bonds that can be traded on the secondary market is declining. For example, less than half of the participants consider that market liquidity for government bonds is acceptable or better (see Chart 9). With regard to repos with government securities, the majority of the respondents consider market liquidity to be adequate or better (see Chart 10). For covered bonds, three out of five respondents consider that market liquidity is adequate or better, which is line with the results in the previous survey (see Chart 11). The respondents consider market liquidity for corporate bonds to still be low, but better than when the

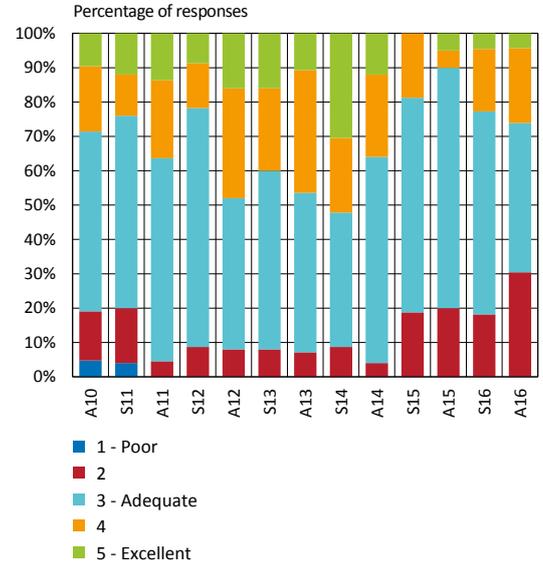
<sup>5</sup> Basel III is an international regulatory framework for the banks' capital adequacy and liquidity. Basel III will be progressively phased in by 2019.

previous risk survey was conducted (see Chart 12).<sup>6</sup> It is important to remember that markets and instruments are not necessarily comparable when interpreting Chart 9-12, since they often have structural differences. It is therefore more appropriate to analyse changes over time for individual instruments rather than comparing different instruments with each other.

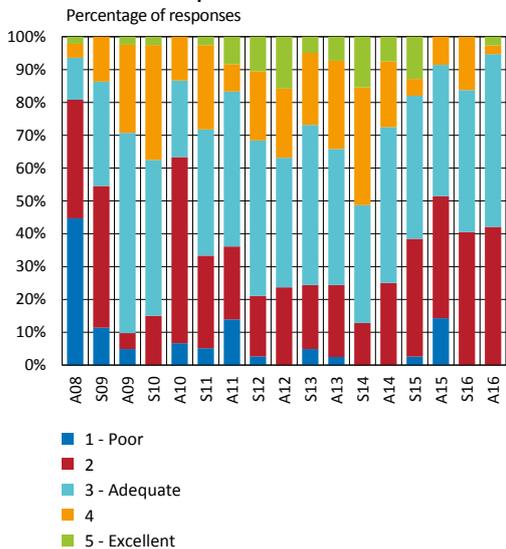
**Chart 9. What is your view of liquidity regarding government bonds over the past six months?**



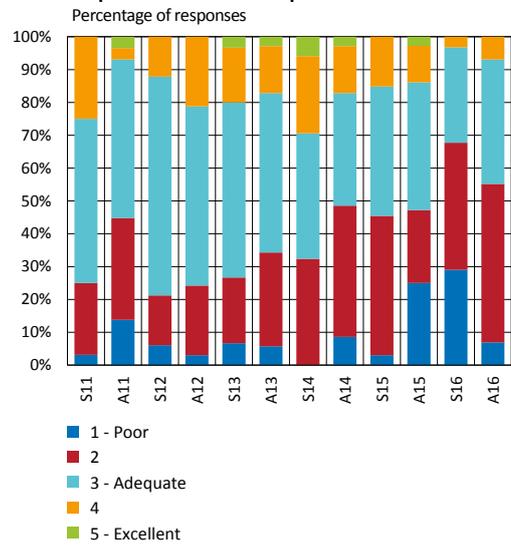
**Chart 10. What is your view of liquidity in repos with government securities over the past six months?**



**Chart 11. What is your view of liquidity with regard to covered bonds over the past six months?**



**Chart 12. What is your view of liquidity with regard to corporate bonds over the past six months?**



A significant majority of respondents on the foreign exchange market consider that market liquidity for Swedish krona (SEK) is adequate or better (see Chart A11 in Appendix 1). Market participants active in the foreign exchange market who consider market liquidity to be below adequate however think that the main reason for the poorer market liquidity for SEK has been that fewer foreign investors are active on the market. Few say that international interest in SEK has now declined as a result of monetary policy as they consider this has contributed to weakening of the SEK. Other respondents say that developments on the market for the SEK are largely due to developments in the euro area, which they say have had

<sup>6</sup> Appendix 1 contains a report of the participants' assessment of liquidity in several instruments on the Swedish financial markets.

a negative effect on the market liquidity for SEK. The weakening of the SEK over the past six months has not affected the respondents' activities to any great extent.

## General increase in risk-taking due to low interest rates

Many respondents claim that they consider risk-taking in the Swedish financial system to have increased as a result of the low interest rates. The respondents explain that the low interest rates, and in some cases also negative interest rates, lead to an increased demand for high risk assets in an attempt to attain higher yield.<sup>7</sup> One example stated by respondents is that investors are choosing to buy bonds with longer maturities to a greater extent than before. Other examples are that investors are choosing less liquid assets, that is, assets that are not as easily sold if necessary. A further clarifying example is that of the commercial property market, where the respondents explain that the search for yield has increased the valuations. Several respondents are concerned regarding the high valuations on the commercial property market and go on to explain that there is a risk for price fall on these assets if, for instance, interest rates were to rapidly rise. This is due to the commercial property firms, according to the respondents, have a higher loan-to-value ratio now than before and are thus more sensitive to changes in interest rates. The respondents assess that it is likely that credit losses for banks will increase if the prices on the commercial property market should fall.

A number of respondents also express concern for household indebtedness and say that indebtedness can largely be explained by the low interest rates.

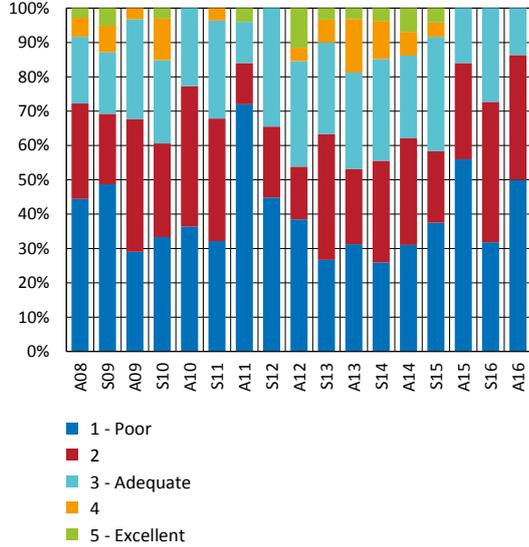
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<sup>7</sup> Here, however, the respondents' views of risk-taking in the financial system in general differ from the views of their own risk-taking (see Chart 7).

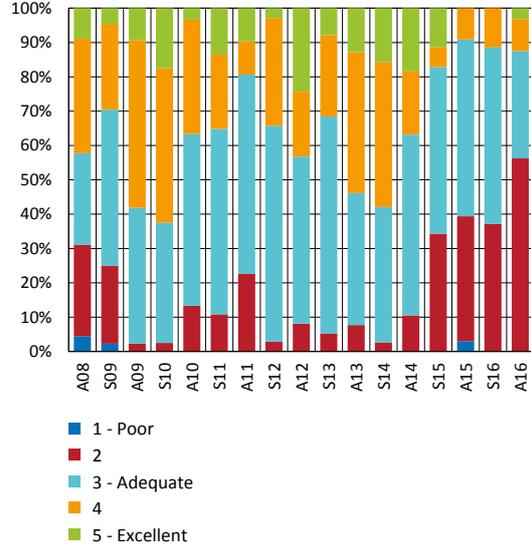
# APPENDIX 1– Breakdown of responses to other questions

## The participants' assessment of liquidity in instruments on the Swedish fixed-income market<sup>8,9</sup>

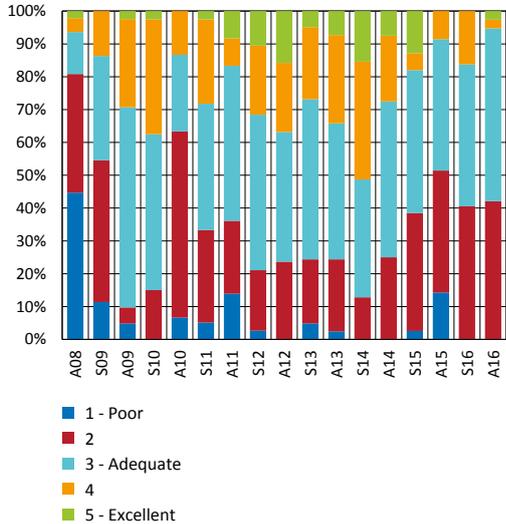
**Chart A1. What is your view of liquidity for treasury bills over the past six months?**  
Percentage of responses



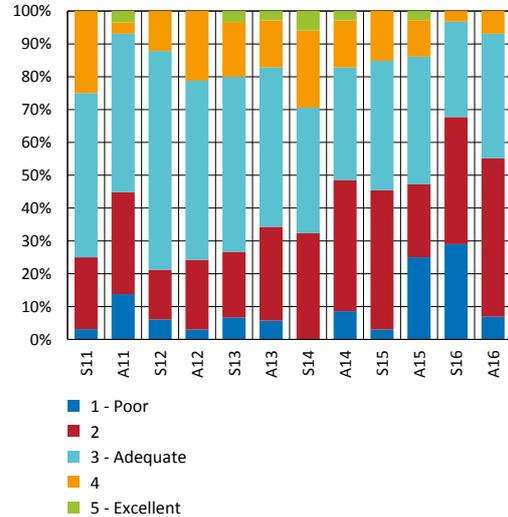
**Chart A2. What is your view of liquidity for government bonds over the past six months?**  
Percentage of responses



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



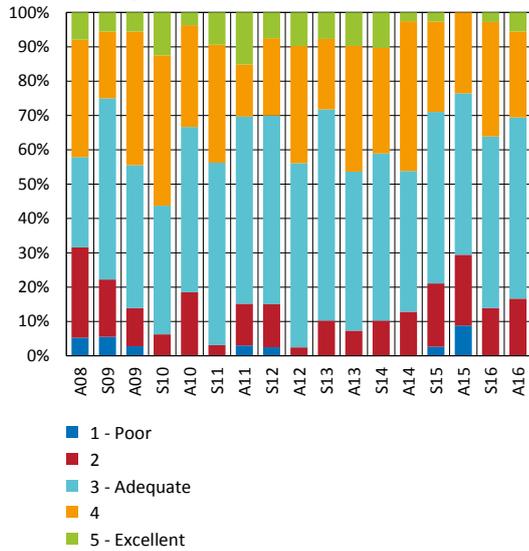
**Chart A4. What is your view of liquidity for corporate bonds over the past six months?**  
Percentage of responses



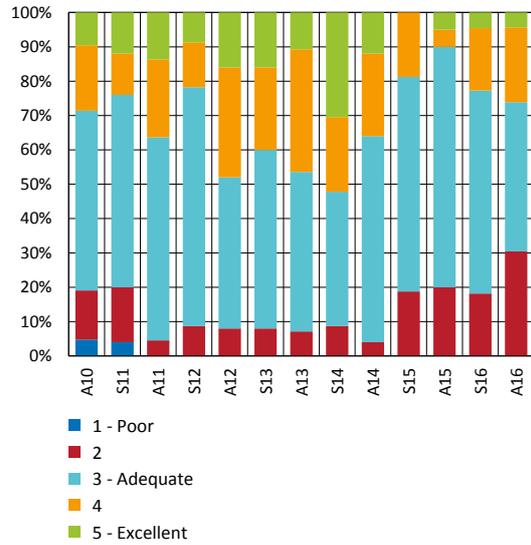
<sup>8</sup> When interpreting participants' responses in Figures A1 to A14, it is important to remember that the markets and the instruments are not necessarily comparable. This is because they often have structural differences. It is therefore more appropriate to analyse changes over time for individual instruments than to compare different instruments.

<sup>9</sup> 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.

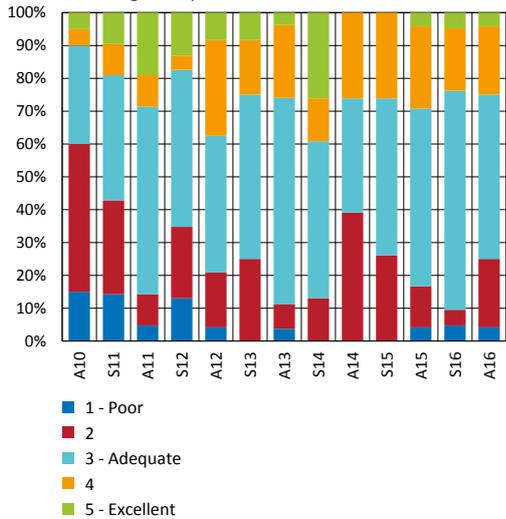
**Chart A5. What is your view of liquidity for interest-rate swaps (SEK/SEK) over the past six months?<sup>10</sup>**  
Percentage of responses



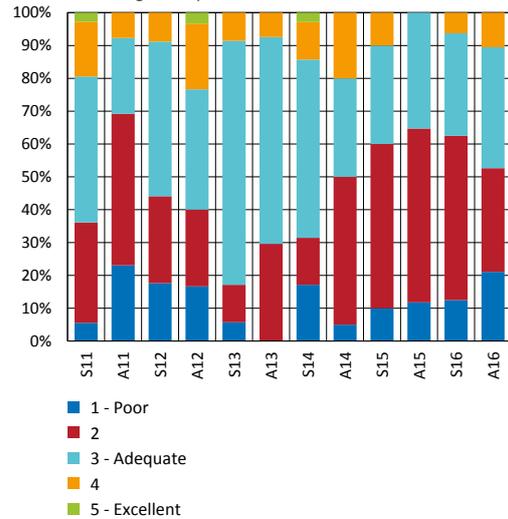
**Chart A6. What is your view of liquidity for repos with government securities over the past six months?**  
Percentage of responses



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

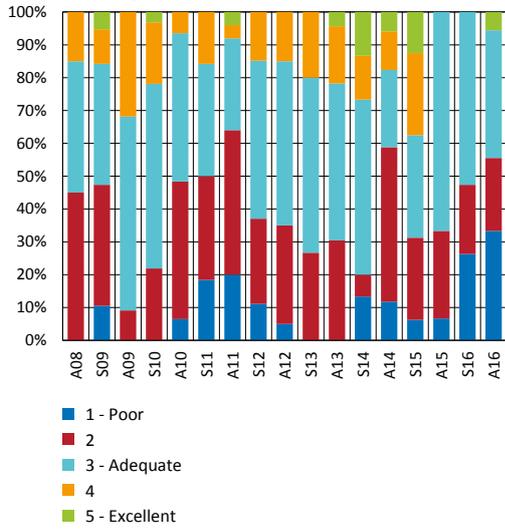


**Chart A8. What is your view of liquidity for RIBA futures over the past six months?**  
Percentage of responses

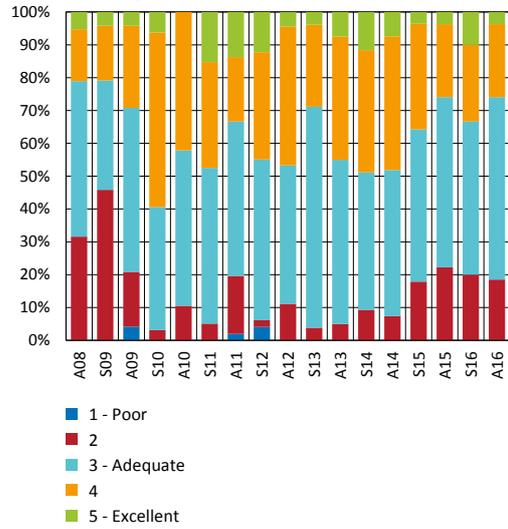


<sup>10</sup> An interest-rate swap is a bilateral agreement to exchange a specific interest rate in return for another interest rate for a predetermined period according to specific conditions.

**Chart A9. What is your view of liquidity for STINA swaps over the past six months?**<sup>11</sup>  
Percentage of responses

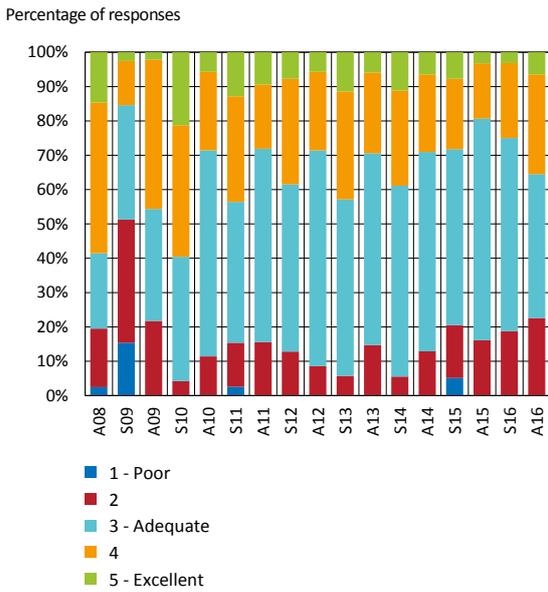


**Chart A10. What is your view of liquidity for FRAs over the past six months?**<sup>12</sup>  
Percentage of responses

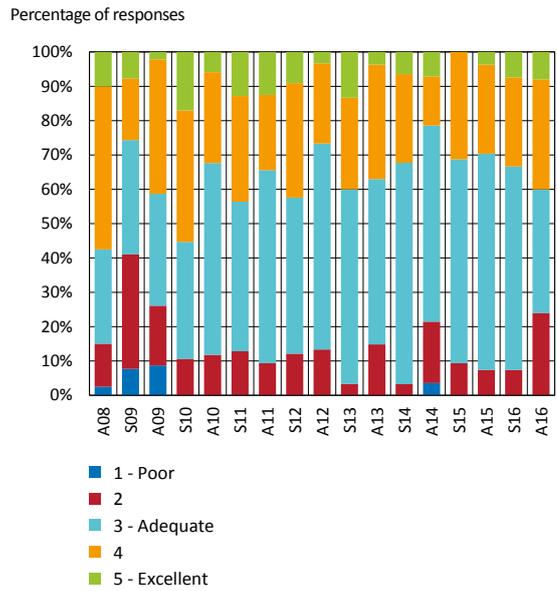


**The participants' assessment of liquidity in instruments on the Swedish foreign exchange market<sup>13</sup>**

**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



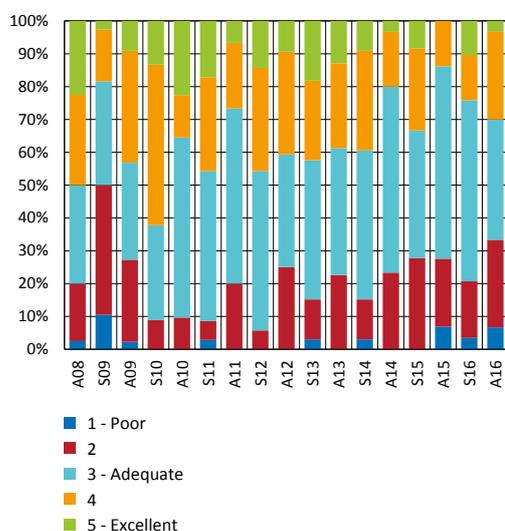
<sup>11</sup> STINA stands for STIBOR T/N Average. A STINA contract is an agreement, with a maturity of no more than one year, to pay or receive the difference between an agreed fixed rate of interest and a variable overnight rate (STIBOR T/N).

<sup>12</sup> 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.

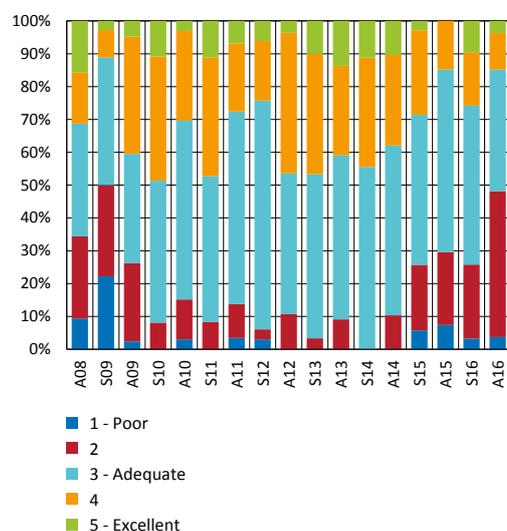
<sup>13</sup> Only participants active either only in the Swedish foreign exchange market or active in both the fixed-income market and the foreign exchange market have responded to this part of the survey. The figures include only those who have been active in the specific segment.

**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, autumn 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	4.7	4.8
Risks related to fiscal policy and political uncertainty in Sweden	4.0	5.1
Risks related to fiscal policy and political uncertainty in the euro area	5.2	5.3
Risks related to fiscal policy and political uncertainty in the USA	5.5	5.1
Risks associated with Brexit (in addition to political uncertainty)	5.0	5.0
Risks related to low interest rates globally	5.6	5.2
Risks related to monetary policy in Sweden	5.1	5.7
Risks related to monetary policy in the euro area	5.1	5.4
Risks related to monetary policy in the United States	4.9	5.1
Risks related to geopolitical unrest (e.g. conflicts in the Middle East)	5.1	4.6
Risks related to household indebtedness in Sweden	5.0	5.7
Risks related to developments in emerging market economies (including China)	5.0	4.8
Risks related to cyber threats	4.0	4.3

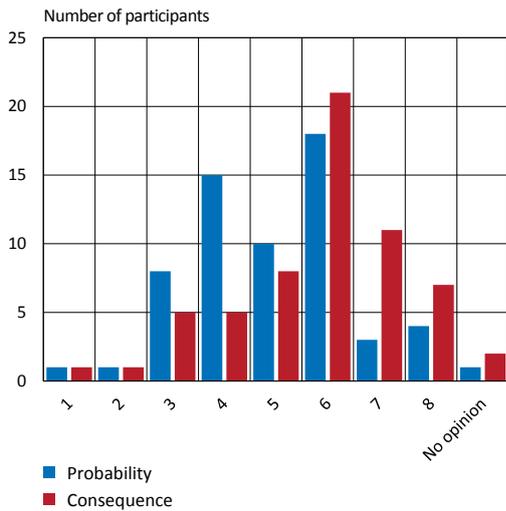
**Table 2. The participants' assessment of selected factors that can affect the Swedish financial system, spring 2016, scale 1-8, where 1 is extremely low/small and 8 is extremely high/large**

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

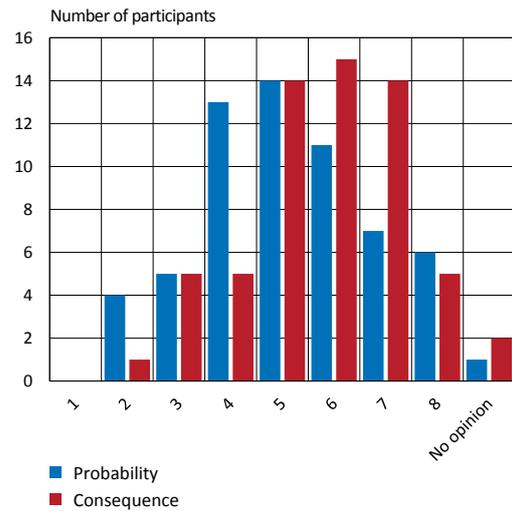
## APPENDIX 2- Distribution of assessments of factors

Respondents have assessed risks linked 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.

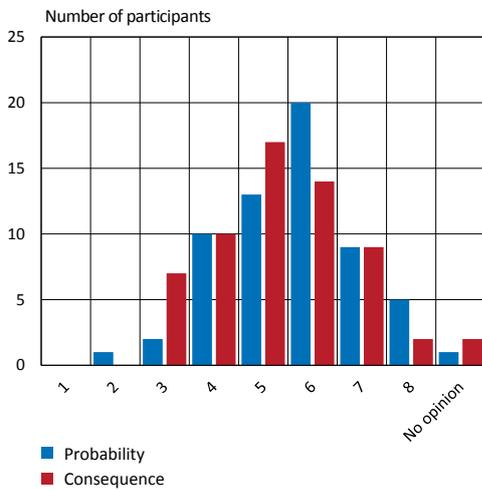
**Chart A15. Swedish household sector debt**



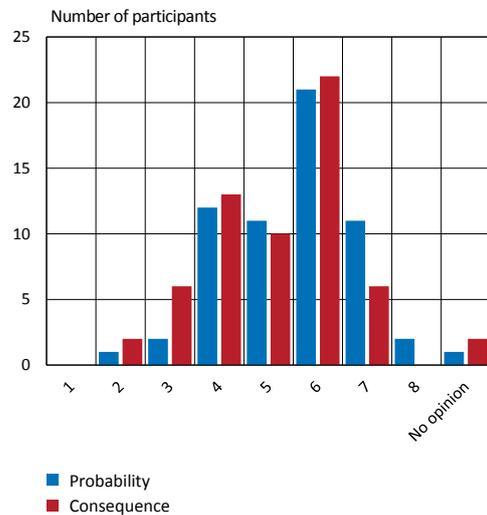
**Chart A16. Monetary policy in Sweden**



**Chart A17. Lowe interest rates globally**



**Chart A18. Fiscal policy and political uncertainty in the USA**



## **APPENDIX 3- Open-ended questions related to the functioning of the fixed-income and foreign exchange markets**

Below follow the 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.

- Which driving forces do you think have been the most important for market liquidity on the Swedish bond market and the repo market over the past six months? Please explain how these driving forces have affected market liquidity and to which bonds or which underlying securities in repo transactions you are referring.
- To stimulate the economy and achieve the inflation target, the Riksbank has implemented expansionary monetary policy measures in the form of a negative repo rate and the purchase of nominal and real government bonds. Do you think these measures have affected the functioning of the financial system over the past six months, and if so, how? Please specify which of the measures you are referring to.
- How have low, and in some cases negative, interest rates affected Swedish financial market participants' operations and behaviour? What consequences do you think this may have for the Swedish financial system? Please specify what type of market participant you are referring to.
- What risks do you see connected to the Swedish commercial property market?
- Which driving forces do you think have been the most important for the market for Swedish krona over the past six months? Please explain how these driving forces have affected liquidity in SEK.
- How has the recent SEK depreciation affected your operations? Over the past six months, have you changed anything in your behaviour on the market for Swedish krona and if so, what?





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