

DNR 2012-412-AFS



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

RISK SURVEY SPRING 2012

## ■ Market participants' views on risks and the functioning of the Swedish fixed income and foreign exchange markets<sup>1</sup>

*The Swedish financial markets are functioning better than last autumn, according to the market participants who responded to the Riksbank's risk survey in March and April 2012. The participants assess that liquidity has improved in most instruments on the Swedish fixed income and foreign exchange markets. The European Central Bank's (ECB) extensive lending and the fiscal reforms in the highly-indebted euro area countries are generally considered to have led to increased liquidity and greater risk propensity on the markets. At the same time, several participants believe that the effects of the ECB's lending may be temporary and that the long-term problems in the highly-indebted euro area countries will persist. The majority of the participants therefore believe that their risk propensity will remain unchanged in the coming period.*

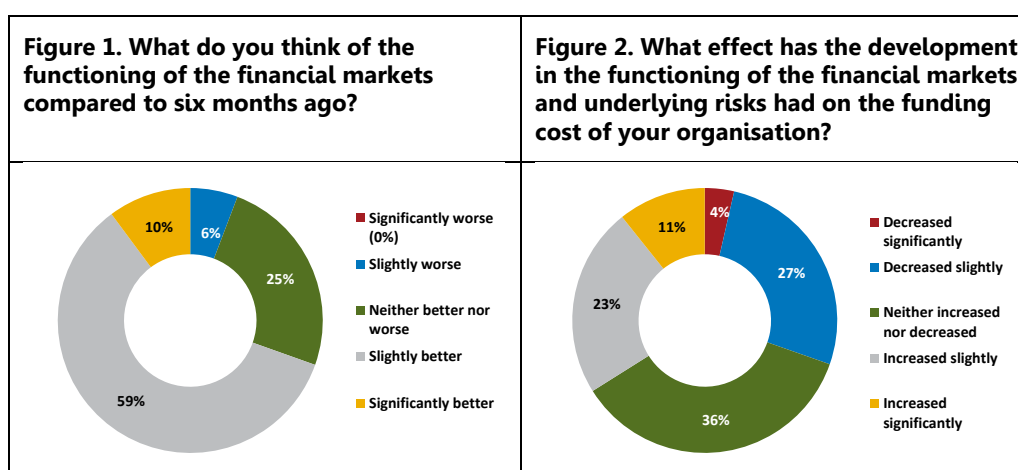
### SWEDISH FINANCIAL MARKETS ARE FUNCTIONING BETTER BUT LONG-TERM PROBLEMS IN THE EURO AREA PERSIST

A majority of the market participants consider that the Swedish financial markets are functioning better now than they did six months ago (Figure 1).<sup>2</sup> One of the main reasons for this is considered to be the ECB's three-year loans to the European banking system. These are said to have reduced uncertainty on the European markets, which has also spread to the Swedish markets. The fiscal reforms in the highly-indebted euro area countries' public finances are also thought to have contributed to the positive outcome. However, the developments in the functioning of the markets are considered to have had different effects on the participants' funding costs (Figure 2).

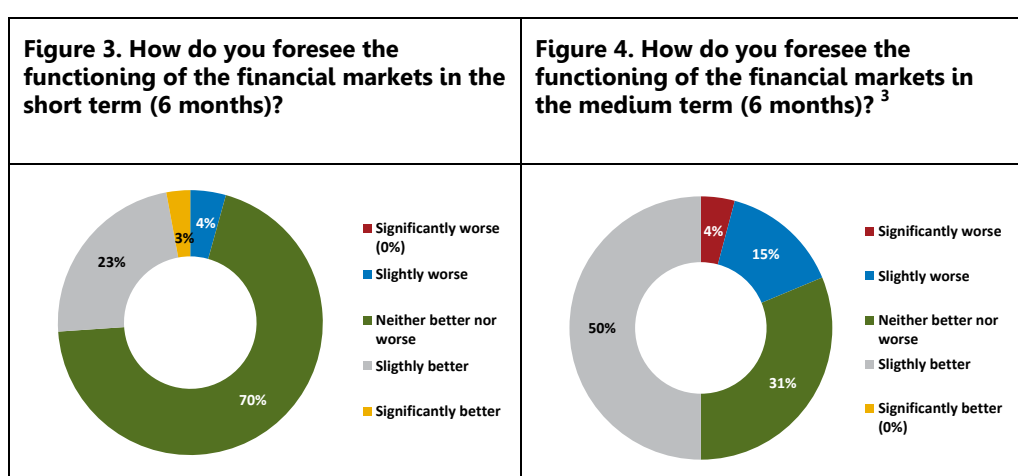
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<sup>1</sup> As of spring 2008 the Riksbank has sent out a risk questionnaire twice a year to participants in the Swedish fixed income and foreign exchange markets. The purpose of the survey is to obtain an overall picture of the view of risk in the Swedish financial market and to gain an idea of the views on the functioning of the 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 23 March and 23 April 2012. 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 with market participants. The spring survey was sent out to 79 participants active in the Swedish fixed income and foreign exchange markets. The groups surveyed are the Riksbank's monetary and foreign exchange policy counterparties (market makers) and active participants in these markets, both investors and borrowers. The response rate was 89 per cent.

<sup>2</sup> The references to the past six months here refer to the period October 2011 to March-April 2012.



At the same time, many participants believe that the improvements may be temporary as the long-term problems among the highly-indebted euro area countries persist. They argue that considerable work remains to be done to improve public finances in many of these countries. Many participants also envisage weaker prospects for growth in Europe in the near future. As developments in the euro area are considered to spread to Sweden, the majority of the participants say that they do not expect the functioning of the Swedish financial markets to be better or worse over the coming six months (Figure 3). However, some participants have a more optimistic outlook with regard to the euro area countries' public finances and assess that the functioning of the financial markets will improve. In the longer run, a large percentage believe the stabilisation process will continue with credible fiscal reforms being taken in the euro area and improved functioning of the financial markets (Figure 4).



## THE GREATEST RISK IS THAT DEVELOPMENTS ABROAD WILL HAVE NEGATIVE CONSEQUENCES FOR THE SWEDISH FINANCIAL SYSTEM

The participants have assessed a number of risks that could have negative consequences for the Swedish financial system within the coming six months if they are realised. Overall, the market participants consider that the risks that can be related to developments abroad have declined since the previous risk survey.<sup>4,5</sup> This applies to risks related to economic

<sup>3</sup> The responses to this question do not include market makers, as they were not asked this question.

<sup>4</sup> References to the previous, most recent or last autumn risk survey all refer to the risk survey carried out in October 2011, which covered the period May to October 2011.

policy conducted abroad, macro risks related to economic growth, sovereign debt risks and macro risks related to large surpluses or deficits in current accounts. The probability of the economic developments in the Baltic countries having a negative impact on the Swedish financial system is also assessed as having declined (Table 1).

Colour-coding for the scale of 1 to 8:



**Table 1. The participants' assessment of selected risks that can affect the Swedish financial System**

Risk factor	Probability	Consequence
Risks related to economic policy conducted abroad	5,1	4,7
Growth-related macro risks	4,8	4,8
Sovereign debt risks	4,8	5,0
Macro risks related to large surpluses or deficits on current accounts	4,8	4,5
Credit risk among Swedish households	3,3	5,7
Risks related to economic developments in the Baltic countries	3,0	4,0
Risks related to economic policy in Sweden	2,9	4,7

The probability of economic policy in Sweden having negative consequences for the Swedish financial system is assessed as low. However, the potential consequences are assessed to be as large as the potential consequences of economic policy abroad.

A scenario where Swedish households are unable to repay their loans would have the greatest consequences for the Swedish financial system, according to the survey respondents. However, the probability of this type of scenario is considered to be relatively low. This probability was assessed as slightly higher in the previous risk survey, while the consequences were assessed as lower. Some participants point out that Swedish households have a high level of debt but that Sweden is in good condition to manage a financial crisis. Some participant points out in particular that the mortgage cap introduced by Finansinspektionen in 2010 has reduced credit risk among households.<sup>6</sup>

<sup>5</sup> The question has been reformulated to some extent in the spring risk survey. The risks that are included in Table 1 have a somewhat broader formulation and include one or more of the risks from the corresponding question in the previous risk survey. For example, credit risks among Swedish households include three risks from the previous risk survey. The responses are therefore not entirely comparable.

<sup>6</sup> The mortgage cap means that new mortgages may not exceed 85 per cent of the market value of the property. These regulations came into force on 1 October 2010.

## UNCERTAINTY REGARDING THE EFFECTS OF FUTURE REGULATION OF THE FINANCIAL SECTOR

The Riksbank asked the participants how they expect future regulation to affect their business operations and the functioning of the financial markets. This question was asked in the light of the coming regulations, including Basel III, Solvency 2 and central counterparty clearing.<sup>7,8,9</sup>

The increased capital requirements in the coming capital adequacy regulations in Basel III are expected to lead to higher funding costs for the banks, according to several respondents. The respondents believe that this will make it more expensive for individuals and companies to borrow money from the banks. Several respondents therefore expect that non-financial companies will need to obtain funding by issuing bonds to a greater extent rather than borrowing from the banks. The companies will thus become more dependent on access to capital market funding.

The new regulations for insurance companies, known as Solvency 2, are expected to reduce the insurance companies' ability to take risks, according to several respondents. This is because the regulation requires that insurance companies hold more capital in relation to their risk taking. Several respondents also believe that the insurance companies will require a higher return on their investment in order to invest in bonds.

## DIFFERENT OPINIONS ON CENTRAL COUNTERPARTY CLEARING IN DERIVATIVES TRADING

Some respondents expressed concern over the coming requirements for mandatory central counterparty clearing. With regard to derivatives trading, this would entail increased requirements for financial market participants to pledge collateral, which many believe would entail increased costs for traders. To become a clearing member also entails a cost in itself. One respondent states that high costs are the reason why some market participants are currently unwilling to use central counterparties and instead regard them as a reserve facility that can be used when the market is not functioning smoothly.

Another opinion is that central counterparty clearing can lead to trading of derivatives being concentrated into a small number of standardised contract types. This type of development can have positive effects, as increased concentration could lead to better liquidity in these contracts and more adequate pricing. On the other hand, some respondents say that an increased concentration to a small number of instruments could limit the opportunity to tailor contracts to specific needs.

Some respondents also mention the European Commission's proposal for a tax on financial transactions as a regulation that will affect the functioning of the financial markets. They consider that this type of tax could lead to higher transaction costs and poorer liquidity on the financial markets.

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<sup>7</sup> Basel III is an international regulatory framework for financial institutions that mainly regulates banks' capital adequacy, i.e. how much capital a bank must hold in relation to the risk it takes, and the way they manage liquidity. Basel III will be progressively phased in by 2019.

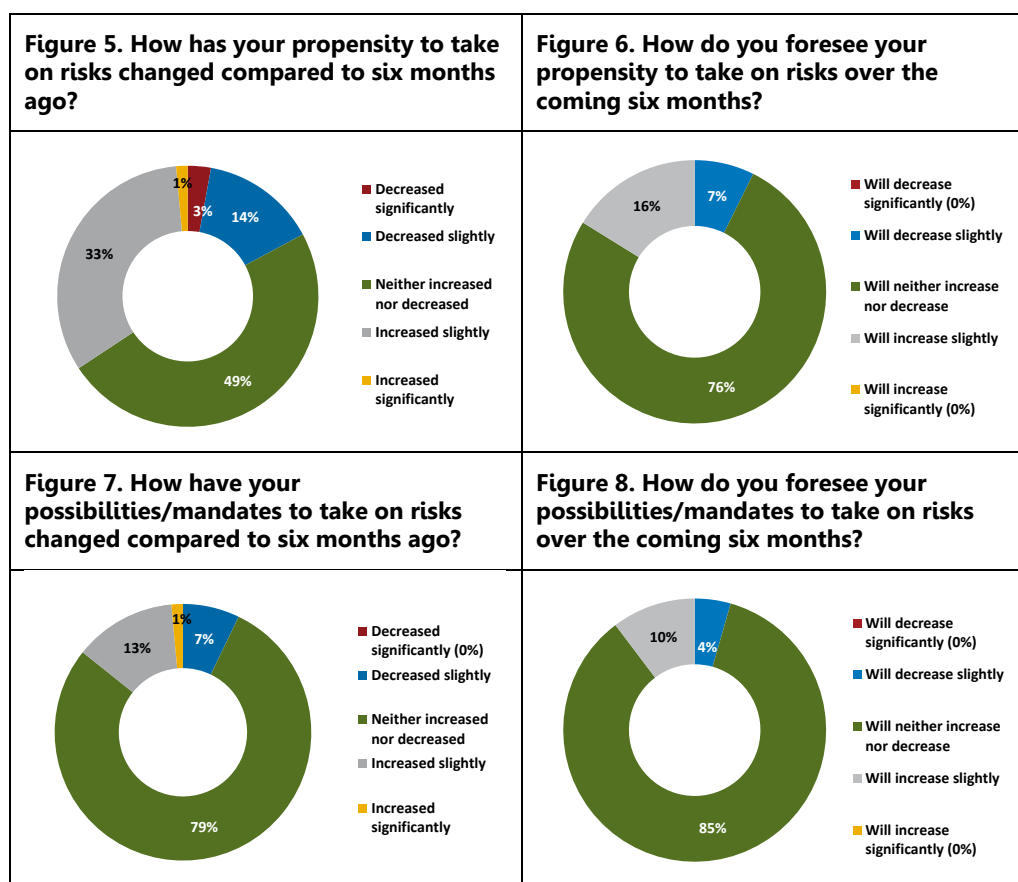
<sup>8</sup> Solvency 2 is a EU-directive for insurance companies with a risk-adjusted capital adequacy calculation. Its main purpose is to improve consumer protection and increase competitiveness among the insurance companies.

<sup>9</sup> Central counterparty clearing (CCP clearing) means that there is a central counterparty in derivatives trading; a clearing organisation that acts as counterparty to both buyers and sellers. This means that both buyers and sellers have a counterparty risk in relation to the central counterparty instead of one another. Mandatory central counterparty clearing is included in the new EU regulation EMIR.

## UNCHANGED RISK PROPENSITY FOR A MAJORITY OF THE RESPONDENTS

Although the respondents consider that the functioning of the financial markets has improved, almost half of them assess that their risk propensity has remained unchanged during the past six months (Figure 5). The majority also say that their mandate for taking risks remains unchanged (Figure 7). The reason stated for this is mainly the uncertainty on the financial markets resulting from the sovereign debt crisis in the euro area. Given the uncertainty, the majority of the respondents do not believe that their propensity or capacity to take risks will change during the coming six months (Figures 6 and 8).

A third of the respondents say that their risk propensity has increased, due to positive effects of the ECB's extensive lending, fiscal reforms within the euro area and improved economic prospects in the United States as causes. In the previous risk survey, 60 per cent of respondents considered that their risk propensity had declined.



## CREDIT RISK IS THE MOST DIFFICULT FOR MARKET PARTICIPANTS TO MANAGE

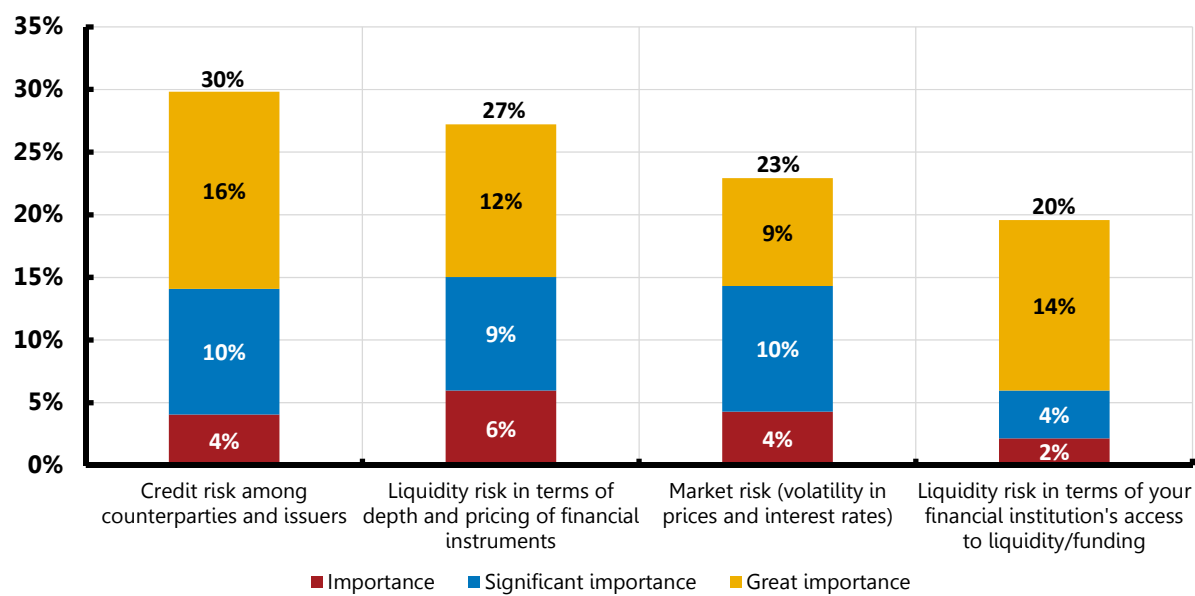
Credit risk among counterparties and issuers is the risk that most respondents, around one third, state as difficult for their own organisation to manage (Figure 9). It is also the risk that most participants consider would have the most serious consequences if it were realised.

Given the order depth and pricing for various financial instruments, liquidity risk is the risk that is mentioned by the second largest number of participants as being difficult to manage. The order depth reflects how many buyers and sellers there are on the market. The pricing is in turn connected to the spread between the buying and selling prices on the market. Together these affect the possibility for market participants to quickly buy and sell financial instruments on the market. The respondents perceive it as a problem if they are unable to quickly buy and sell financial instruments on the market.

Another type of liquidity risk arises if the organisation’s access to market liquidity and funding declines. Around one-fifth of the survey respondents consider this risk to be the most difficult to manage. It is also this risk, after credit risk among counterparties and issuers, that most respondents consider to be most important for their institution.

The market makers’ responses differ slightly from the other respondents’ responses to the questions regarding risk. Market makers consider the two liquidity risks to be the most difficult to manage. This is probably because the market makers are particularly exposed to liquidity risk in their business operations. It is particularly worth mentioning that almost one quarter of the market makers considers the liquidity risk linked to their own organisation's access to liquidity and funding to be very important.

**Figure 9. The participants’ assessment of selected risks that would be difficult for their organisations to manage, percentage share of the weighted responses<sup>10</sup>**



<sup>10</sup> The respondents were asked to state up to three risks that would be difficult for their organisation to manage. They were asked to rate these risks from one to three, where one meant that the risk would have great significance and three meant that it would have less significance for their organisation. When a risk has been rated as having great significance, it has been allocated greater weight than if it has been rated as having less significance.

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

The Riksbank posed a number of open-ended questions to the market participants. These questions were of a temporary nature and concerned subjects of particular interest.

### **SEVERAL RESPONDENTS CONSIDER THERE ARE PROBLEMS WITH STIBOR**

The Riksbank asked market participants for their views on the pricing of the Swedish reference rate, Stibor.<sup>11,12</sup> Some respondents state that there are no problems with the reference rate. However, several respondents perceive that there are problems. One problem is considered to be the incentive for the banks to set Stibor at correct levels. Moreover, some respondents say that there are too few banks involved in determining the reference rate. Some respondents also feel that there is a lack of transparency regarding Stibor. Overall, they indicate that complete information on Stibor should be available to all.

### **REDUCED SUPPLY OF GOVERNMENT SECURITIES COULD PROVIDE OPENINGS FOR OTHER MARKETS**

In response to the question of potential consequences of a reduced supply of government securities, some respondents claim that it is not a problem.<sup>13</sup> However, several respondents say that the liquidity on the secondary market for government securities will deteriorate. The reduced supply is also expected to imply decreased yields on government securities, partly because many investors and asset managers are required to hold certain amounts of government securities.

Several respondents believe that this would lead to insurance companies and other investors seeking other, more risky investment alternatives, such as covered bonds, corporate bonds or other countries government securities. Some respondents say that this could lead to better liquidity on the markets for Swedish covered bonds and corporate bonds. However, the decreased supply could also lead to foreign investors choosing not to invest in Swedish government securities.

### **DIVIDED OPINIONS OVER MARKET MAKERS' RISK PROPENSITY**

The Riksbank asked whether market participants perceive that the Swedish market makers' risk propensity has changed over the past six months and whether this has affected the functioning of the financial markets. Some respondents perceive that market makers have begun to take less risk, both on the fixed income and foreign exchange markets. This assessment was made by both market makers and other market participants. They consider that this can affect the functioning of the financial markets by leading to less liquidity. The market participants mention the reduced uncertainty on the market and future regulations as reasons for market makers reduced risk propensity.

### **STRONG SWEDISH ECONOMY CREATES DEMAND FOR THE SWEDISH KRONA**

The Riksbank asked participants active in the foreign exchange market for Swedish krona what the most important changes or trends have been over the past six months. Some

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<sup>11</sup> STIBOR (Stockholm Interbank Offered Rate) is a daily reference rate based on the interest rates for unsecured loans that banks offer to one another. STIBOR is used as a reference for rate setting or pricing of derivative and bond contracts.

<sup>12</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 question.

<sup>13</sup> See the previous footnote.

respondents felt that Sweden is now often regarded as a safe economy to invest in and that the krona should therefore be regarded as a "safe-haven".<sup>14</sup> This is considered to be due to the relatively strong Swedish economy, which is considered to increase demand for assets denominated in Swedish krona.

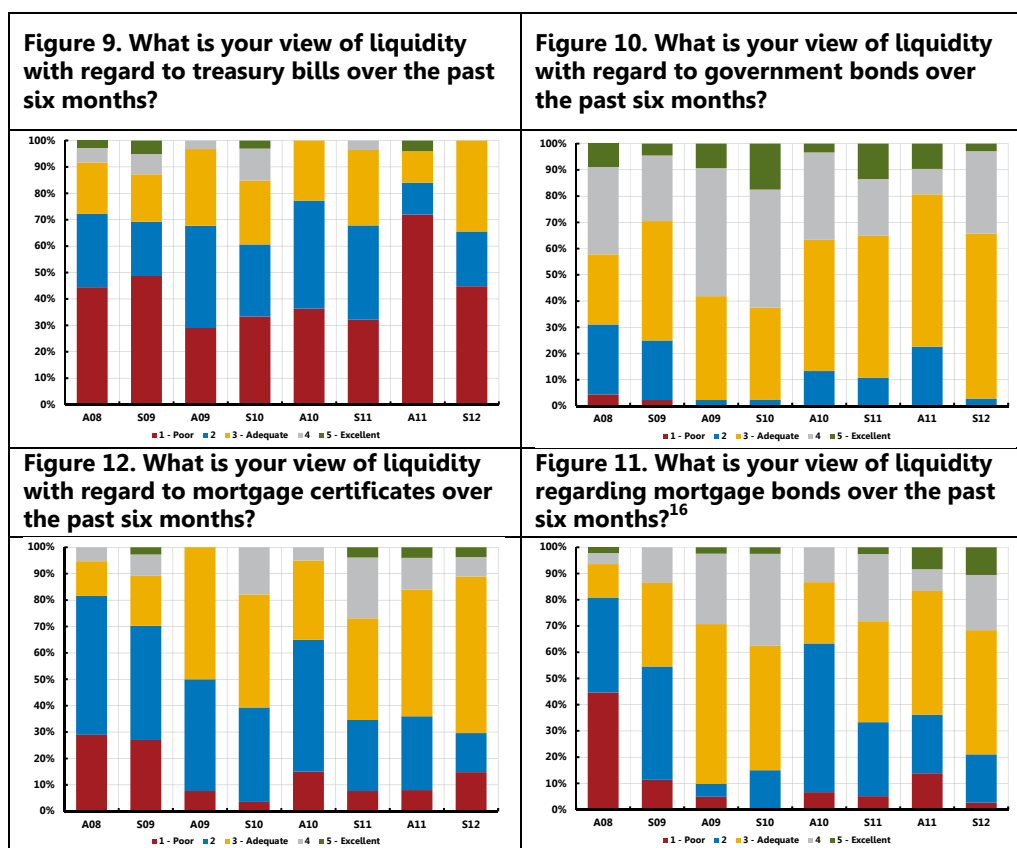
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<sup>14</sup> A "safe-haven" currency is a currency which is linked to an economy in which investors choose to invest their money in times of financial stress. An increased willingness to invest in that economy means that demand for its currency increases.

## ***The functioning of the Swedish fixed income and foreign exchange markets***

The participants assess that the liquidity in several of the instruments on the Swedish fixed income and foreign exchange markets has improved over the past six months. When interpreting market participants' responses in Figures 9 to 28, it is important to remember that the instruments and the markets 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 rather than comparing different instruments.

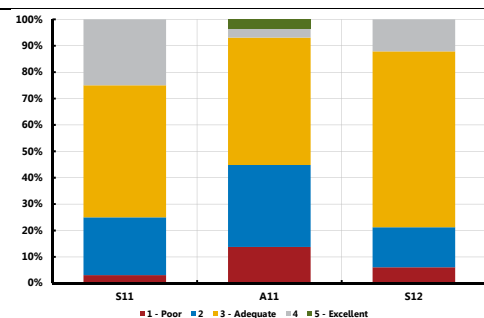
### **MARKET PARTICIPANTS' ASSESSMENT OF THE LIQUIDITY IN INSTRUMENTS ON THE SWEDISH FIXED INCOME MARKET<sup>15</sup>**



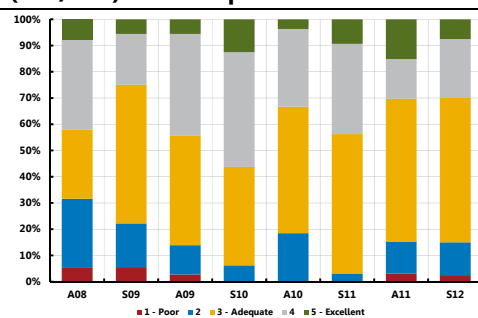
<sup>15</sup> Only participants active either in the Swedish fixed income market or active in both the fixed income market and the foreign exchange market have responded to this part of the survey. The figures include only those who responded that they have been active in the specific segment.

<sup>16</sup> The market makers are not as positive with regard to the liquidity of mortgage bonds as they all assess the liquidity to be adequate or less than adequate. See also footnote 17.

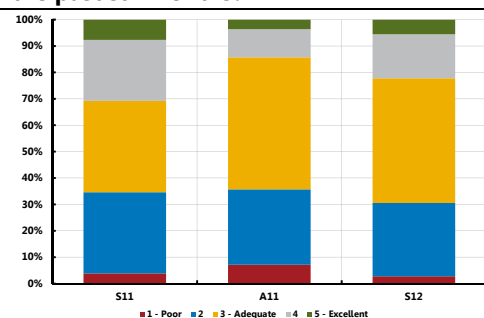
**Figure 13. What is your view of liquidity regarding corporate bonds over the past six months?<sup>17</sup>**



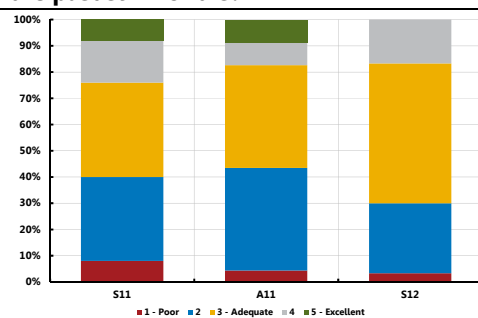
**Figure 14. What is your view of liquidity with regard to interest rate swaps (SEK/SEK) over the past six months?<sup>18</sup>**



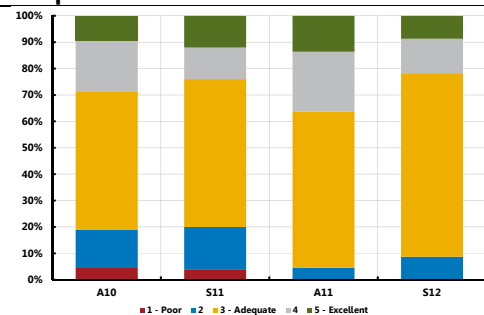
**Figure 15. What is your view of liquidity in cross-currency swaps (EUR/SEK) over the past six months?<sup>19</sup>**



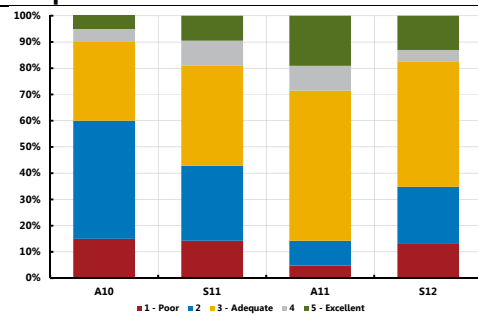
**Figure 16. What is your view of liquidity in cross-currency swaps (USD/SEK) over the past six months?**



**Figure 17. What is your view of liquidity in repos with government securities over the past six months?**



**Figure 18. What is your view of liquidity in repos with mortgage securities over the past six months?**

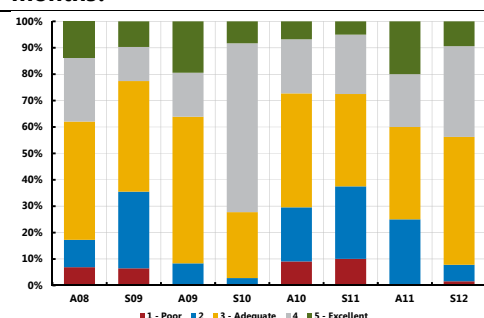


<sup>17</sup> However, the market makers assess the liquidity of corporate bonds to be relatively weak. All of the market makers consider liquidity to have been adequate or less than adequate. The market makers probably have different views on the liquidity of mortgage and corporate bonds than other respondents because of their role on the market, that is guaranteeing that customers can buy or sell these bonds. During times of financial stress, when investors want to sell their bond holdings, the market makers risk being forced to buy these and sell them on at a loss.

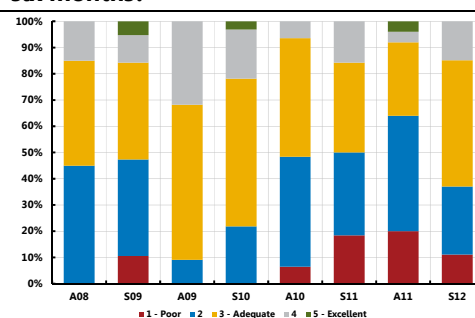
<sup>18</sup> A bilateral agreement to exchange a specific interest rate in return for another interest rate for a predetermined period according to specific conditions.

<sup>19</sup> A cross-currency swap is a derivative with which a market participant can convert an asset or a liability to another currency than it was originally denominated.

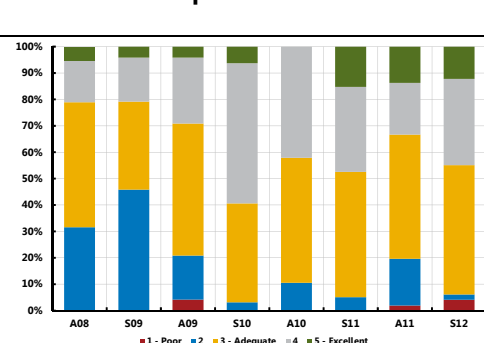
**Figure 19. What is your view of liquidity regarding O/N and T/N over the past six months?**<sup>20,21</sup>



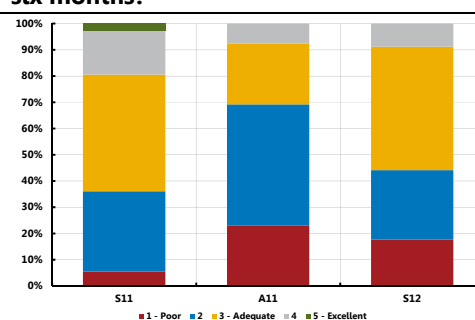
**Figure 20. What is your view of liquidity with regard to STINA swaps over the past six months?**<sup>22,23</sup>



**Figure 21. What is your view of liquidity in FRA over the past six months?**<sup>24,25</sup>



**Figure 22. What is your view of liquidity with regard to RIBA futures over the past six months?**<sup>26,27</sup>



<sup>20</sup> It should be noted that in the previous survey this question only contained responses from market makers to this question.

<sup>21</sup> The response includes the market participants' view of liquidity in swaps and unsecured loans between banks at maturities from today until tomorrow, and from tomorrow until the day after tomorrow. The type of instrument to which this question has referred to has varied somewhat over time.

<sup>22</sup> This includes only responses from market makers active on both the fixed income and foreign exchange markets.

<sup>23</sup> 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).

<sup>24</sup> This includes only responses from market participants active on both the fixed income and foreign exchange markets.

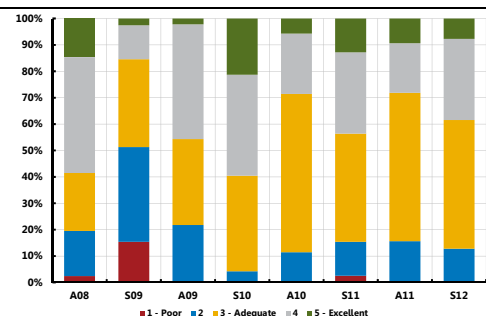
<sup>25</sup> FRA stands for Forward Rate Agreement. An FRA contract is an agreement to pay or receive the difference, on a predetermined date in the future, between a predetermined interest rate and the interest rate actually applying at the date in the future.

<sup>26</sup> This includes only responses from market participants active on both the fixed income and foreign exchange markets.

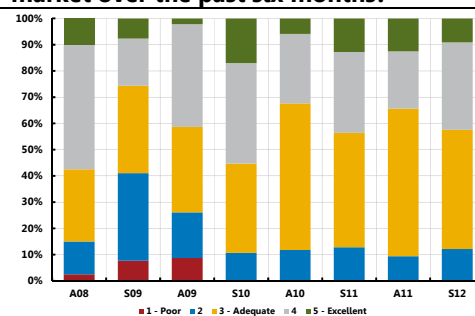
<sup>27</sup> RIBA futures are a standardised forward that is based on the outcome of the Riksbank's repo rate. The parties undertake to buy or sell an asset on a specified future date at a predetermined price. The contract basis is a fictitious loan, i.e. the underlying loan sums are not transferred. 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.

## MARKET PARTICIPANTS' ASSESSMENT OF THE LIQUIDITY OF THE INSTRUMENTS ON THE SWEDISH FOREIGN EXCHANGE MARKET<sup>28</sup>

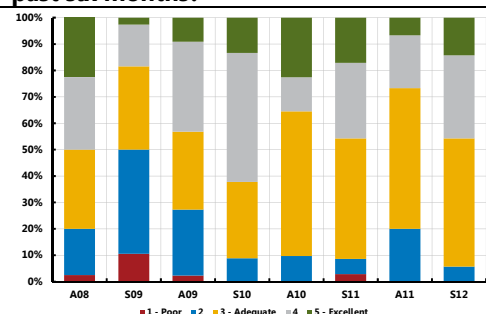
**Figure 23. What is your assessment of the functioning of the SEK market over the past six months?**



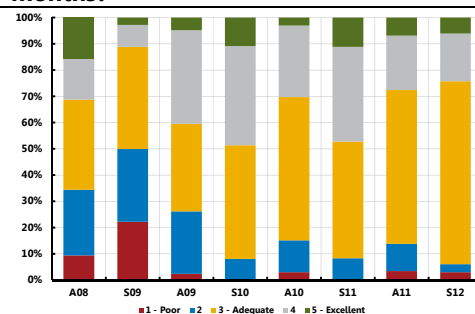
**Figure 24. Compared with currencies such as the CAD, AUD and NOK, what is your assessment of the functioning of the SEK market over the past six months?**



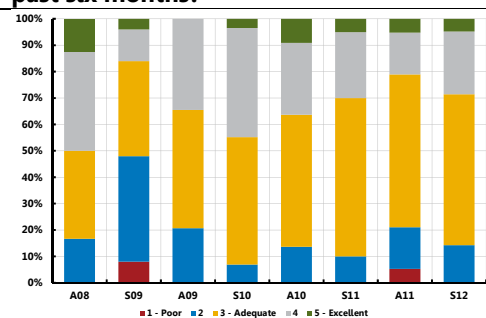
**Figure 25. What is your view of liquidity with regard to the spot market over the past six months?**




**Figure 26. What is your view of liquidity with regard to futures over the past six months?**



**Figure 27. What is your view of liquidity with regard to currency options over the past six months?**



<sup>28</sup> Participants active in the Swedish foreign exchange market and participants active in both the fixed income market and the foreign exchange market responded to this part of the survey. The figures include only those who responded that they have been active in the specific segment.



Financial Stability Department  
Sveriges riksbank, 2012