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The Swedish market for corporate bonds is growing and both the outstanding volume and the number of issuers are increasing. At the same time the share of bonds with lower or no credit rating being issued is also increasing. The increased supply from companies has been met by increased demand from different types of investors. The strong interest from investors seems to have contributed to decreased risk premiums on the market. At the same time, a series of initiatives has been taken by market participants with the aim to develop the market further. There are strong indications that the market will continue to grow in the period ahead. At the same time, as it does this and its structure changes, it will become increasingly important to consider the part it plays in the financial system and for financial stability.

The development of the Swedish market for corporate bonds

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Structural changes are taking place on the Swedish market for corporate bonds in many ways. The market is growing and both the outstanding volumes[2] and number of issuers is increasing. At the same time, the share of bonds with lower or no credit rating being issued is also increasing. The increased supply from companies has been met by increased demand from different types of investors, above all from funds. One explanation of the increased demand from investors is the low interest rate environment that has led them to seek out higher-risk investments such as corporate bonds to try to achieve higher yields (Joyce et al. 2014). The strong interest from investors seems to have led to reduced risk premiums on the market. Turnover on the Swedish secondary market has also increased somewhat in tandem with this development. This development is in line with that taking place on corresponding markets in several areas around the world, among others in Europe.[3]

An important part of the Riksbank's work with financial stability is collecting, compiling and distributing information on the financial system in Sweden (Sveriges Riksbank 2013b). In 2011, the Riksbank surveyed the Swedish market for corporate bonds by way of Gunnarsdottir and Lindh (2011). One conclusion of this was that the market was underdeveloped with insufficient transparency and statistics. As the market has changed and grown since 2011, the aim of this Economic Commentary is to describe the development that has taken place since then. However, the analysis has been extended in a number or areas and therefore also focuses on the period before 2011.

The commentary first presents a description of the development of the primary and secondary markets as well as the initiatives taken to develop the market. This is followed by a discussion on financial regulations that may be significant for the development of the market. Finally, how the market may develop in the future is discussed.

The Swedish market is defined here as the market for corporate bonds issued in Swedish kronor by non-financial companies.

The development of the Swedish primary and secondary market for corporate bonds

The Swedish market for corporate bonds can be divided into a primary market and a secondary market. Companies issue bonds on the primary market. They do this by engaging a representative, usually a bank, to assist in the issuance. After this, the bonds can change owner by being bought and sold again by various types of investor on the secondary market. Below follows a description of how these markets have developed and the role played by the banks on them.

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2. Throughout this commentary, outstanding volume refers to the total nominal value of the bonds currently outstanding on the market.

3. This is shown by statistics on issued volumes and risk premiums from Dealogic and Barclays Research.

Development of the primary market

Corporate bonds account for an increasing share of Swedish companies' funding

Swedish companies are traditionally bound to the banks for the main part of their funding (see Figure 1). This makes their funding sensitive to shocks in the banking sector. For example, after the most recent financial crisis, many companies have reported difficulties in obtaining the necessary funding via bank loans (Sveriges Riksbank 2012). The market for corporate bonds provides an alternative for companies wishing to reduce their dependence on bank loans and to diversify their funding.

Since 2011, companies have increasingly replaced bank loans with corporate bonds (see Figure 2). Corporate bonds and commercial papers[4] therefore make up an increasing share of their loan-based funding[5] (see Figure 1). This funding has increased from just over 15 per cent of the loan-based funding at the end of 2011 to over 20 per cent at the end of the second quarter of 2014. Almost half of these, 9 per cent, consist of issues on the Swedish market which is the main focus of this commentary. As companies have increased their issues on the Swedish market, the outstanding volume has also increased and now amounts to SEK 370 billion. This represents just over 10 per cent of Sweden's GDP. As a comparison, the markets for government and mortgage bonds in Swedish kronor have outstanding volumes of just over SEK 770 billion and SEK 1,160 billion[6] respectively and are thus significantly larger than the market for corporate bonds, even if the gap has narrowed.

Increased issue volumes and more issuers on the primary market

Issues[7] on the Swedish primary market have increased by 26 per cent since 2011, from a value of SEK 65 billion to SEK 82 billion in 2013 (see Figure 3). Issues have increased further so far in 2014, which is evident from the average volume issued per month which has increased from 5.5 billion in 2011 to 6.9 billion in 2013 and over 8 billion so far in 2014 (see Figure 4). The number of companies issuing on the primary market has also increased. In 2011, 34 different companies issued bonds and so far in 2014, 56 different companies have issued (see Figure 5). More than 130 different companies have issued on the Swedish market sometime between 2001 and in 2014. Major Swedish companies with higher credit ratings[8] are continuing to account for the main part of the issued volumes but more companies issuing smaller volumes have also emerged. The ten largest issuers in 2013 were responsible for almost 53 per cent of the total issue volumes and the ten smallest for about 3 per cent. In 2011, the corresponding distribution was 70 per cent for the largest issuers and 6 per cent for the smallest. The largest issuers include Vasakronan, Volvo Treasury and Sandvik. The smallest include BillerudKorsnäs, Magnolia Bostad and Sagax. Foreign companies are responsible for just over 25 per cent of the issues on the Swedish market and their share has been relatively unchanged since 2011. The main issuers are companies in Denmark, Finland, Norway and Germany.

Companies within more sectors than before are represented among the issuers now that previously (see Figure 6). In 2011 companies within 13 different sectors issued bonds on the Swedish market. This was an increase compared to the period between 2001 and 2010, when barely seven sectors were represented on average. In 2014, companies within all 19 sectors included in the statistics from Dealogic are present among the issuers. Companies within a few sectors, however, still account for a large part of the issues. In 2011, companies within the automotive industry accounted for the bulk of the volumes, above 40 per cent. Since then, the automotive industry's share has declined slightly and today companies within the property and construction sector instead account for the majority of the issues, more than 42 percent.

4. Companies can use both bonds and commercial papers in their wholesale funding. Commercial papers correspond to slightly less than 3 per cent of corporate funding. Due to this and the limited access to statistics, this Economic Commentary focuses on bonds.
5. Loan-based funding here refers to borrowing from Swedish and international credit institutions, group loans and borrowing via issues of corporate bonds and commercial paper.
6. This according to Statistics Swedens securities statistics. In the statistics on mortgage bonds, issues by SEB are not included as these are not made through a mortgage institution.
7. Throughout this commentary, issues or issue volumes refer to the nominal value of the bonds at time of issue.
8. Investment grade refers to bonds with a credit rating higher than BB+ (S&P and Fitch), Ba1 (Moody's) or with an equivalent credit assessment from the banks.

Increased issues of high-yield bonds or bonds with no credit rating

The proportion of high-yield bonds issued has more than doubled since 2011. They formed 9 per cent of issues in 2011 but have increased to 19 per cent so far in 2014 (see Figure 1).[9] The proportion of bonds issued with no official[10] credit rating at all has also increased (see Figure 7). In conjunction with the financial crisis of 2008-2009, it became more difficult for companies to issue bonds of this type, as investors were demanding safer investments. However, in recent years, investors have started to demand higher-risk investments again, which has made it easier for companies to issue bonds without official credit ratings. In 2011, these bonds accounted for 21 per cent of issue volumes. This share has increased to 53 per cent so far in 2014. About two-thirds of these are bonds deemed by the banks to be of investment grade.

The share of bonds issued with variable coupon rates has increased

Companies can issue bonds with either fixed or variable coupon rates. For bonds with variable coupon rates, coupon payments change in line with a reference rate, usually the interbank rate. For bonds with fixed coupon rates, coupon payments are not normally changed. The share of bonds issued with variable coupon rates has increased from 61 per cent in 2011 to 74 per cent so far in 2014 (see Figure 8). The increase in issues with variable coupon rates is primarily due to demand from investors. This is because market risk[11], or interest rate risk, is lower for them as the price of bonds with variable coupon rates is not affected by changes in market rates in the same way as with fixed coupon rates. The average maturity of the bonds issued is about 4 years and it remained largely unchanged in the period 2012-2014, compared with 2001-2011 (see Figure 9).

Increased supply due to lower costs and companies' desire to diversify their funding

One explanation for companies choosing to issue bonds is that this allows them to diversify their funding. This makes them less dependent on other forms of funding and improves the conditions for them to obtain funding, for example when the banks are less inclined to lend money. But whether or not the companies choose to diversify their funding is affected by how much it costs to do so.

To get a view of how much it costs for companies to issue corporate bonds, both the absolute cost and the alternative cost, which is to say how much it costs compared with other funding alternatives, must be examined. The price of outstanding corporate bonds is a good indicator of what the issuers pay to issue. The absolute cost of issuing seems to have fallen since 2011, based on indicative prices (see Figure 10 and the section *Rising indicative prices on the secondary market*). Many major companies actually obtain funding more cheaply on the market than the Swedish banks do (Landeman and Bergin 2014). The cost of obtaining funding via corporate bonds may also be lower for companies obtaining funding for the same or a slightly higher cost than the banks, as the banks ad margins on their lending in addition to their funding cost. When it comes to the alternative cost, it is more difficult to obtain a clear and fair view. If the rate on outstanding corporate bonds on the secondary market is compared with the banks' lending rate to companies, the relative cost of corporate bonds seems to have decreased since 2011 (see Figure 10).[12] This suggests that it has also become relatively more attractive for companies to issue corporate bonds.

Funds are increasing among investors

Due to a lack of statistics, the information in this paragraph refers to investments on both the primary and secondary markets in Swedish corporate bonds, regardless of whether these have been issued on the Swedish market or abroad. Issues on the Swedish market make up almost half of these bonds. According to the statistics, foreign investors account for 61 per cent of investments in corporate bonds issued

9. High yield refers to bonds with a credit rating lower than BBB- (S&P and Fitch), Baa3 (Moody's) or with an equivalent credit assessment from the banks.
10. Official credit rating refers to ratings from S&P, Moody's or Fitch. Banks can still conduct internal credit ratings on these issues.
11. Here, market risk refers to the risk that a bond will lose value due to changes in market rates.
12. This result should be interpreted with some caution, partly because the selection of companies in the statistics, the maturities and the size of the loans differs, and partly because companies do not necessarily issue bonds at the same price as on the secondary market.

by Swedish companies (see Figure 11). This share is largely unchanged since 2011. According to statistics from the IMF[13], investors in Luxembourg, the United States and Germany account for the largest share of foreign ownership. Insurance companies, other financial institutions, which mainly consists of funds, and other monetary credit market companies account for a significant part of investments by Swedish investors. Other financial institutions form the category of investors that has increased most, from 3 per cent in 2011 to 7 per cent at present. Swedish private investors, such as households, account for a small part of direct investments in corporate bonds. The trading units in corporate bonds are often too large to let them invest in them, usually SEK 1 million. It is therefore more common for households to invest in corporate bonds through funds.

The number of corporate bond funds with the Swedish market for corporate bonds as main investment strategy has increased markedly in recent years. In 2004, there were 3 such funds. By 2011, the number had increased to 14 and, by the end of 2013, there were 28. The total value of these funds has also increased, from SEK 1.3 billion in 2004 and SEK 28 billion in 2011 to SEK 76 billion 2013 (see Figure 12). Other types of Swedish bond funds investing in corporate bonds to some extent have also increased in scope.

The funds are affected by the investors' investments and withdrawals from the fund, which can vary from year to year. This is shown by the funds' net flows, which have varied significantly over time (see Figure 12). The funds experienced net outflows in conjunction with the financial crisis of 2008. They subsequently had inflows in 2009-2010. When the financial crisis then entered a new phase in 2011, the funds had outflows again. In contrast, in 2012 and 2013, they had a net inflow totalling SEK 40 billion. These varying flows mean that the funds buy and sell parts of their holdings on the secondary market.

Strong demand is primarily a result of investors' search for yield

Naturally, one factor affecting investors' demand for corporate bonds is the yield. The expansive monetary policies of several central banks in recent years have led to historically low interest rates. Investors' expected yield on safer assets, such as government bonds, has thereby decreased. In tandem with this, many investors have turned to higher-risk assets such as corporate bonds to obtain a higher yield (Joyce et al. 2014). According to the market participants responding to the Riksbank's risk survey in the spring of 2014, this is the main explanation for the increased demand for corporate bonds in recent years (Sveriges Riksbank 2014c).

However, demand is also affected by the risks associated with the bonds. One explanation for the strong demand could be the decrease in market risk, liquidity risk[14] and credit risk (Fabozzi 2010) since 2011. This is because these three factors are deemed to have the greatest impact on the pricing of corporate bonds on the Swedish market. As regards credit risk, it is difficult to assess how this has changed for the market as a whole. The expected default rate among the largest issuers has decreased, from 0.16 per cent in 2011 to 0.06 per cent at present.[15] At the same time, the share of high-yield bonds issued on the secondary market has increased. Liquidity risk on the secondary market may have decreased slightly since the turnover has increased in relation to the outstanding volume. However, the lack of information on prices and turnover in individual bonds makes it difficult to assess the overall change in risk. It is also difficult to make an assessment of how market risk or interest-rate risk has changed due to the lack of information. Of course, the value of bonds with variable coupon rates does not change much with market rates. As issues of these bonds have increased, it is possible that the overall market risk has decreased slightly. For bonds with fixed coupon rates, longer maturities and lower coupon rates generally entail greater market risk. The average maturity of these bonds remains largely unchanged but, on the other hand, the average coupon rate has decreased, which could indicate that market risk has increased slightly.

13. The IMF's CPIS (Coordinated Portfolio Investment Survey) statistics on investments in Swedish issuers' debt securities include non-financial companies, central governments and monetary financial institutions (MFI).
14. Market liquidity risk refers to the risk of being unable to sell a holding of bonds immediately or without it losing a significant amount of value.
15. This is in accordance with statistics on 54 issuers from Moody's Analytics. However, these statistics consist almost exclusively of companies with higher credit ratings, which could provide an explanation for the low expected default frequency.

Development of the secondary market

A lack of transparency is impeding the analysis of secondary market trading

It is difficult to make a detailed analysis of the development of the secondary market. Almost all trading still takes place over-the-counter (OTC), in which participants agree on the terms of the deal by telephone or via electronic trading systems such as Bloomberg or Thomson Reuters. There is no public information of bonds traded during the business day, their prices or volumes, and this means that the degree of transparency is low and that developments on the market are harder to monitor. However, Finansinspektionen (the Swedish Financial Supervisory Authority) has proposed amended regulations to improve transparency (see the section *Increased transparency could improve the functionality of the market*).

Rising indicative prices on the secondary market

The banks, on a daily basis, quote indicative prices for part of the outstanding volume on the Swedish market and these are available in various trading systems. The indicative prices give a rough idea of the price at which the banks may be willing to purchase or sell bonds. Nasdaq has started to compile statistics on such prices on an aggregate level. This data is used by some fund managers as a comparative index for their corporate bond funds. These statistics indicate that the yield on the outstanding bonds on the secondary market has decreased since 2011 and that the risk premium has simultaneously decreased (see Figure 10). The decreasing risk premium can partly be explained by changes in the credit ratings and maturities of the bonds included in the statistics. However, the risk premium in Sweden follows risk premiums with constant credit ratings and maturities in Europe relatively well. Instead, the decreasing risk premiums in Sweden and Europe seem to be due to investors search for yield.

Turnover is increasing on the secondary market

Turnover on the secondary market has increased slightly since 2011 (see Figure 13). This is shown by the turnover statistics for corporate bonds (SELMA) gathered by the Riksbank on the aggregate level since 2011. Turnover has also increased in relation to the outstanding volume on the market. In 2011, turnover was just less than 4 per cent of the outstanding volume, while it has been about 6 per cent so far in 2014. This can probably be explained by increasing numbers of more active investors such as funds entering the secondary market. Statistics also show that almost 95 per cent of trading on the secondary market is between banks and their customers. Of these, just over 80 per cent are Swedish customers, with the remainder being foreign. Trading between banks thus makes up a small part of turnover.

Finansinspektionen (2014) also keeps statistics on turnover on the secondary market that indicate that turnover has increased since 2011. Examining the number of transactions reveals that the majority of trading is in smaller volumes and that three-quarters of transactions in 2013 had a value of less than SEK 5 million. If volumes are examined instead, transactions of less than SEK 5 million only made up 8 per cent of the total volume of turnover on the market, with most trading instead being made up of larger transactions. For example, transactions of over SEK 500 million formed 20 per cent of turnover by volume in 2013.

Even if turnover has increased, the market is still characterised to a large extent by larger investors holding the bonds until maturity. This is one explanation for the comparatively low turnover on the secondary market. So far in 2014, there has been a turnover of about 6 per cent of the outstanding volume per month. Turnover is considerably higher on the markets for government and mortgage bonds, even if the gap has narrowed. Their monthly turnover in 2014 has been 200 per cent and 100 per cent of the outstanding volumes respectively.

The banks' role on the market

The banks are continuing to play a central role on the primary and secondary market

The banks represent the companies on the primary market by helping them both to issue and to broker bonds to investors. Handelsbanken, Nordea, SEB, Swedbank and Danske Bank are the main representatives of the issuers on the Swedish market. Together, they cover 83 per cent of the total volumes issued so far in 2014 (see Table 1). According to statistics from Dealogic, the situation is slightly different for high-yield bonds. Here, it is Pareto that is instead the greatest representative, followed by the major Swedish banks and Danske Bank. The Riksbank's turnover statistics show that, in conjunction with the issues, the banks to a certain extent also purchase bonds. For example, they may have undertaken to do this for an issuer if an issue is not fully subscribed to by other investors.

On the secondary market, the banks contribute to market turnover by matching sellers and buyers. They also contribute to turnover by trading themselves. They do this partly as a service for smaller investors that are not assigned any bonds in conjunction with the issues, and partly as a service to those companies that they have assisted to issue and which have an interest in the liquidity of their bonds on the secondary market.

Market initiatives taken by various market participants

Since 2011, a number of initiatives have been taken by various market participants with the aim of developing the Swedish market. The need for several of these was mentioned in Gunnarsdottir and Lindh (2011).

Statistics have been improved

Two examples of how statistics have been improved have already been mentioned: Nasdaq's statistics on indicative prices on the secondary market and the Riksbank's turnover statistics for volumes. A series of initiatives have also been taken to make it possible to monitor issues on the primary market in a better way. Statistics Sweden, on behalf of the Riksbank, has started to collect and publish information on outstanding volumes and issues made by Swedish non-financial companies. They are divided up by currency and other criteria. Both Corp Nordic and Swedish Trustee also publish statistics of the primary market on their websites.

Trustees strengthen the investors' position

Two trustees have been established on the Swedish market - CorpNordic and Swedish Trustee. The trustees represent the investors by arguing their case with the issuer and ensuring that the issuer fulfils its commitments towards the investors, for example by paying the coupon rate. Above all, this strengthens smaller investors' position on the market. But the trustees also involve the issuer only having contact with the agent, instead of having contact with each individual bond holder, for example in the renegotiation of the terms of a bond. CorpNordic started to offer trustee services in 2009, and Swedish Trustee started offering the same in 2012. Prior to this, trustees already existed on more developed markets for corporate bonds, such as the one in the United States.

Marketplaces and a standardised agreement is making the market more accessible for smaller issuers

Initiatives have also been taken to make the market more accessible for smaller issuers in particular. Two new marketplaces aimed at small and medium-sized companies have been established. Nasdaq launched the marketplace First North Bond Market in 2012 and AktieTorget launched RänteTorget in 2013.[16] A trustee must be linked to a bond before it can be registered on Nasdaq's marketplace. This requirement does not exist for RänteTorget, even though it is recommended.

16. Three bonds have been registered at First North Bond Market and one at RänteTorget.

In 2013, the Swedish Securities Dealers Association published a standardised issue agreement for corporate bonds. This can be used by all issuers, but is primarily aimed at high-yield bonds. It is hoped that the agreement will make it possible for smaller companies to issue bonds without needing to draw up a new issue agreement.

Financial regulations and their impact on the development of the market

The Swedish financial system is affected in various ways by new financial regulations which have been implemented or are about to be implemented after the last financial crisis. This also involves the Swedish market for corporate bonds. The banks are affected via their funding, their lending and their risk-taking. Investors such as pension and insurance companies are affected via their investment opportunities. These effects on banks and investors affect companies. In this commentary, the focus lies upon the regulations deemed to have the greatest significance for the development of the market at present and which were addressed by Gunnarsdottir and Lindh (2011) to a certain extent. In addition to the regulations mentioned here, there are also other financial regulations that could influence the market in the future.[17] However, it could take some time for the effects of these regulations to become noticeable. In addition, in several cases, the final versions of the regulations have not been adopted yet, making it difficult to assess their final effect on the market.

Increased transparency could improve the functioning of the market

In June 2014, Finansinspektionen (2014) put forth a proposal to increase the transparency of the Swedish secondary market for corporate bonds. There are already regulations in Sweden requiring information on the trading of bonds to be published no later than 09.00 on the following day.[18] This takes place in the markets for government and mortgage bonds on Nasdaq's website. So far, Finansinspektionen has chosen to exempt corporate bonds from this requirement but, as the market is growing and smaller participants have appeared, Finansinspektionen now proposes that trading in corporate bonds is to be reported in the same way. It will still be possible for market participants to be exempted from the requirement if Finansinspektionen considers this as justified in terms of the efficiency of the market. However, this will only apply to transactions exceeding SEK 50 million and only for up to two weeks.

International regulations to make the financial markets more transparent are also on the way. In Europe, work is underway to complete the MiFIR regulatory framework, which will come into force in 2016. The aim of the regulation is to promote competition on the financial markets and strengthen investor protection. This regulation will provide market participants with information on the transactions carried out, for example with corporate bonds, subject to a certain delay. It has not yet been determined how the requirements for reporting will be formulated, but they will probably be more stringent than those Finansinspektionen proposes for Sweden.

In the United States, there has been a reporting requirement for trading in corporate bonds since 2001. A number of studies have been carried out to investigate the effect the introduction of this requirement have had on the market (CESR 2008). Several studies show that market liquidity has improved overall, that the gap between bid and ask prices has narrowed, and that transaction costs have decreased.[19] This can largely be explained by increased competition on the market. The effects are deemed to have been greatest for smaller investors and for smaller transaction volumes.

At present, different participants on the Swedish market have access to different amounts of information. Large participants generally have an information advantage over smaller ones. Greater transparency would even out the access to information

17. Examples of such regulations include the European Commission's proposed regulation on structural measures improving the resilience of credit institutions.
18. See the Securities Market Act (2007:528) and Finansinspektionen's regulations governing operations on trading venues (FFFS 2007:17). This information is to include details of the highest and lowest price for which individual bonds have been traded during the day, a weighted average price and total turnover volume.
19. See Besseminder et al. (2006) and Edwards et al. (2007).

between them. Access to traded prices and volumes would make it possible to verify prices, price risks and value holdings. More efficient pricing on the secondary market could also benefit pricing on the primary market by allowing companies planning to issue to examine market prices for comparable outstanding bonds. All in all, it could contribute towards improving confidence in pricing among both issuers and investors and improve the functioning of the market.

But the effects of increased transparency are not necessarily only positive. A point often made in discussions of increased transparency is that it can cause the banks to reduce their presence as counterparty and that they trade to a decreased extent.[20] Instead, the banks choose to act as agent by matching buyers and sellers, leading to longer transaction times. The reason behind this changed behaviour is that other participants may start to offer less favourable prices to the banks if they are aware of the holdings they have. Statistics from the Federal Reserve show that US banks' holdings of corporate bonds increased after the transparency requirement was introduced, from USD 23 billion in 2001 to USD 215 billion in 2008.[21] Turnover on the market increased in parallel with this (Besseminder and Maxwell 2008). But the trend was reversed after the financial crisis of 2008. The banks' holdings and turnover in relation to the outstanding volume has now decreased.

It is important to bear in mind that the US and Swedish markets are different. The US market is and was significantly larger and more developed than the Swedish market when transparency was increased. Consequently, the effects on the Swedish market need not be the same. A certain degree of transparency can have positive effects, but it is important to ensure that increased transparency does not lead to negative consequences for the market.

Basel III may affect the banks' willingness to lend

The Basel III regulations include liquidity requirements and a risk-weighted capital requirement for the banks. There are also plans to introduce a non-risk-weighted capital requirement. The risk-weighted capital requirement currently applicable entered into force in the EU on 1 January 2014 through the CRD IV package. According to this the banks' funding is to include a certain amount of equity to cover any losses. The short-term liquidity requirement, the Liquidity Coverage Ratio (LCR), regulates the banks' reserves of liquid assets in relation to potential outflows. It will enter into force in the EU in 2015, but Sweden has chosen to implement them in advance, starting in 2013. The longer-term liquidity requirement, Net Stable Funding Ratio (NSFR), instead regulates the banks' maturity matching so that their assets with longer maturities are also covered by funding with longer maturities. This requirement will enter into force in 2018.

The new regulations mean that the banks must maintain reserves of liquid assets, extend the maturity of their funding and include a greater share of equity in their funding. This entails increased costs for the banks (Sveriges Riksbank 2010). If they choose to pass these costs over to their customers, one of the effects will be that corporate loans will become more expensive. Swedish market participants have expected this to happen (Sveriges Riksbank 2013a). In turn, more expensive loans may lead to other sources of funding, such as corporate bonds, becoming more attractive to companies. At the same time, the banks may choose other measures, such as charging more for other services. The regulations thus need not entail increased loan costs for companies.[22] It is also possible that the banks will look, to a greater extent than previously, for services that generate income in the form of fees but that are not charged to the balance sheet in the same way as loans. For example, they could choose, to a greater extent, to help companies issue corporate bonds for a fee instead of lending to them.

20. See CESR (2008).
21. This is according to statistics from the Federal Reserve Bank of New York.
22. Studies show that the effects of the banks' lending rates should be restricted. See Finansinspektionen (2013) and Almega (2013).

It is difficult to assess the consequences of Solvency II, which is not yet complete

Insurance companies are an important participant on the Swedish market for corporate bonds, accounting for about 9 percent of the holdings. Solvency II is a new regulatory framework for insurance companies in the EU, which comes into force in 2016 with the aim to ensure that insurance companies have sufficient capital to cover the risks of their assets and liabilities so that they can fulfil their obligations to policyholders. The effects on the Swedish market of Solvency II depends mainly on the capital requirements and yields (interest rates) on corporate bonds because the capital requirement for different assets must be put in relation to the return that the companies receive on them. How large the capital requirements will be for corporate bonds is not yet determined. It is therefore difficult to draw conclusions about the effects of these rules.

There are strong indications that the Swedish market will continue to grow in the period ahead

We can observe that the Swedish market for corporate bonds has grown since 2011 and that structural changes have taken place on the market. There are strong indications that the market will continue to grow over the next couple of years. One explanation for this is provided by the continuing low interest rate environment, which is making investors demand higher-risk assets to obtain higher yields. This is also contributing towards low risk premiums, meaning that companies can continue to diversify their funding at comparatively low costs. Another reason that the market can be assumed to continue to grow is that its structure will become stronger as various initiatives are taken to develop it.

However, the need for increased transparency on the secondary market has increased as the market grows, the share of high-yield bonds or bonds with no credit ratings increases, and the percentage of investors dependent on being able to sell their holdings on the secondary market increases. Transparency to some extent can have positive effects, but it is important to ensure that increased transparency does not lead to negative consequences for the market. Increased transparency will be significant for the future development of the market. New financial regulations that have been or are about to be implemented, such as Basel III and Solvency II, will also affect the development of the market. However, at present, it is difficult to say what impact these may have.

Increased transparency will improve market participants' ability to assess risks on the market. Investors' assessment of risks on, for example, markets for corporate bonds around the world has been addressed recently, among others by the Bank of England (2014) and the IMF (2014). For example, in Europe, the market for corporate bonds has grown since 2011, particularly for high-yield bonds. Meanwhile, according to ESMA (2014) liquidity on the market has decreased somewhat as banks, which normally contribute to liquidity, have decreased their presence on the market. It is thus possible that liquidity will not be as good as investors assume in a situation where they have to sell part of their holdings. If liquidity is low, such sales could create large price declines for these bonds. These price declines may in turn create financial stress and spread to other financial markets or lead to significant losses for systemically important participants.

Just as in Europe, the Swedish market has grown while the share of high-yield bonds has increased. At the same time, turnover on the secondary market is low in relation to outstanding volumes. As the Swedish market for corporate bonds, as it looks today, has not been exposed to great sales pressure, it is difficult to assess what liquidity will be like in such a situation and what this ultimately would mean for the market. It is also difficult to assess how decreased demand from investors would affect companies' possibilities of refinancing outstanding bonds falling due. Consequently, as the market for corporate bonds grows and its structure changes, it will become increasingly important to consider the part it plays in the financial system and the risks this may entail for financial stability.

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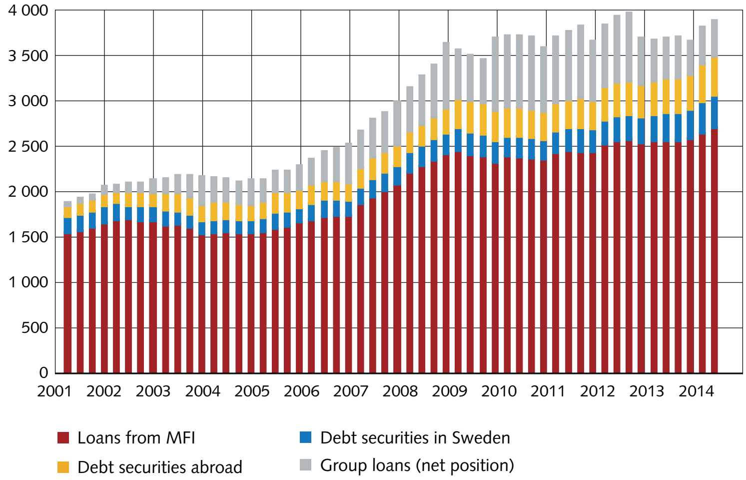
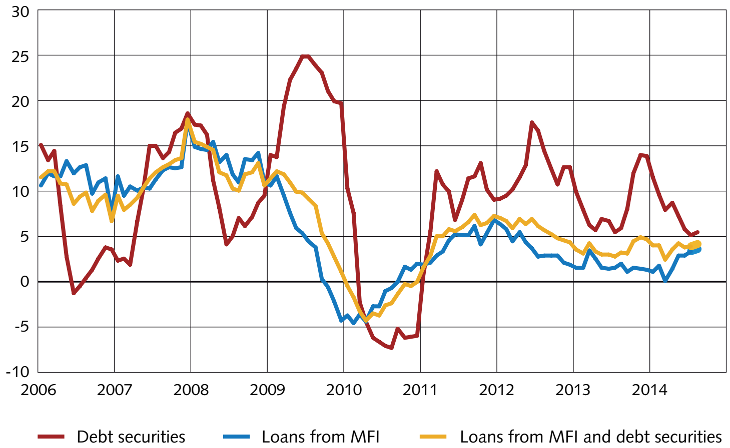
Appendix

Figure 1. Swedish companies' loan-based funding
SEK billion



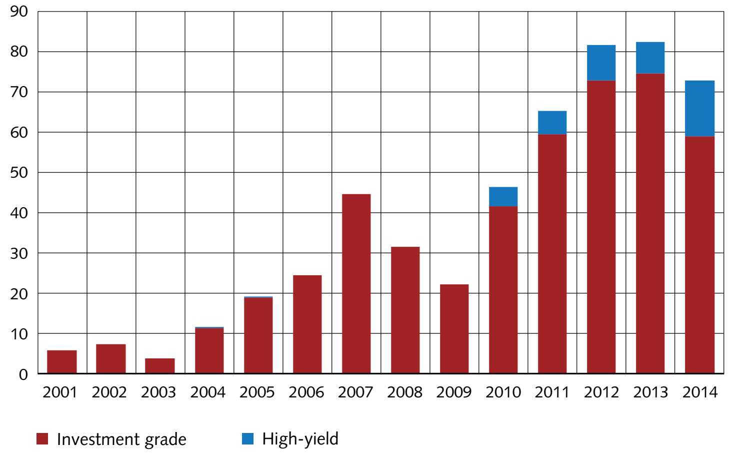
Source: Statistics Sweden

Figure 2. Annual growth in Swedish companies' loan-based funding
Per cent



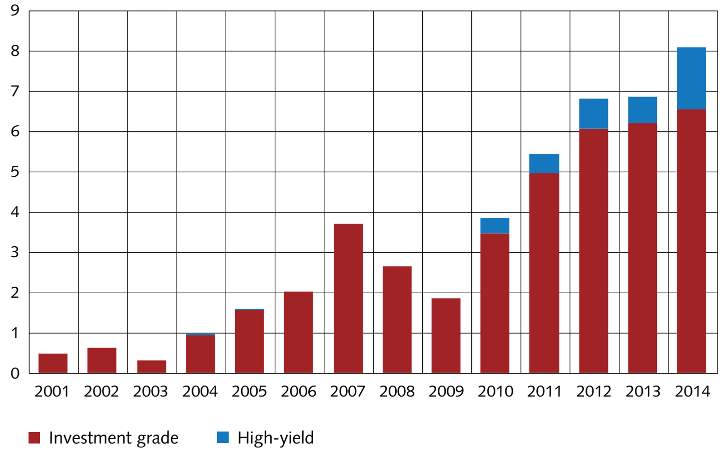
Sources: Statistics Sweden and the Riksbank

Figure 3. Issue volumes on the Swedish market for corporate bonds
SEK billion



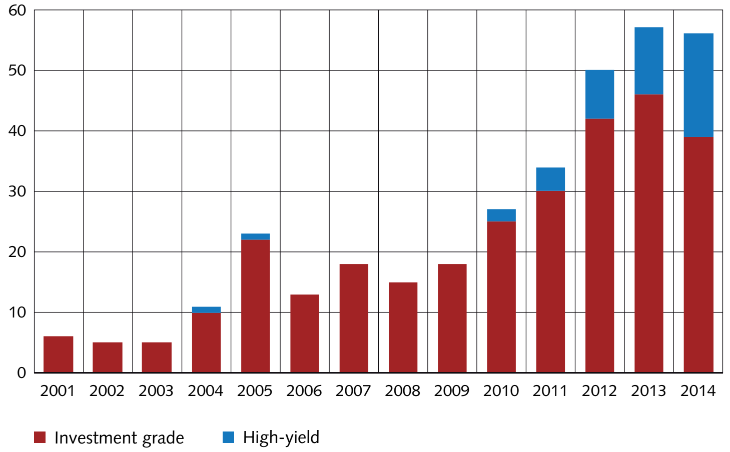
Note. Issue volumes from Dealogic include data until 18 September 2014 throughout this commentary. The statistics does not necessarily cover all the issues on the market, since the statistics are based on information that market participants report voluntarily. For those bonds without a credit rating, the allocation into investment grade or high yield is based on the banks' credit assessments of the companies.
Source: Dealogic

Figure 4. Average issue volumes per month in the Swedish market for corporate bonds
SEK Billion



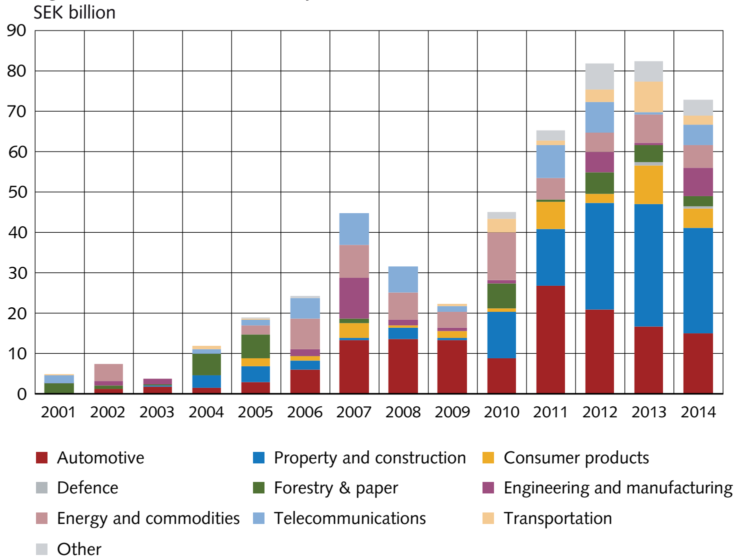
Source: Dealogic

Figure 5. Issuers on the Swedish market
Number



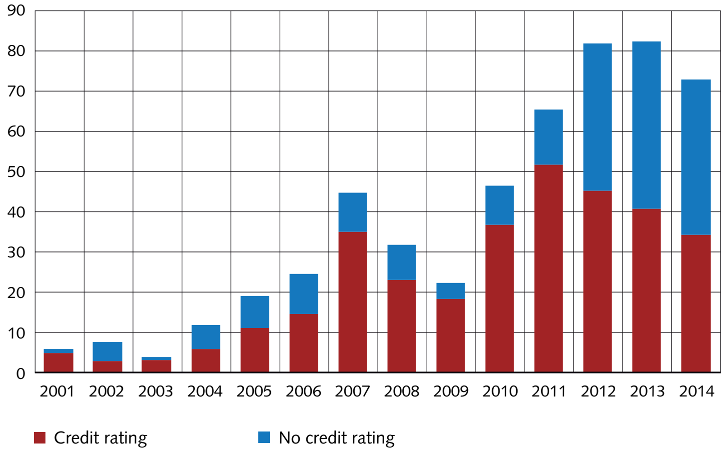
Note. The figures refer to unique issuers in each year. Individual issuers may thus be represented in more than one year and the figures say nothing about the number of issues in each year.
Source: Dealogic

Figure 6. Distribution of issuers by sector
SEK billion



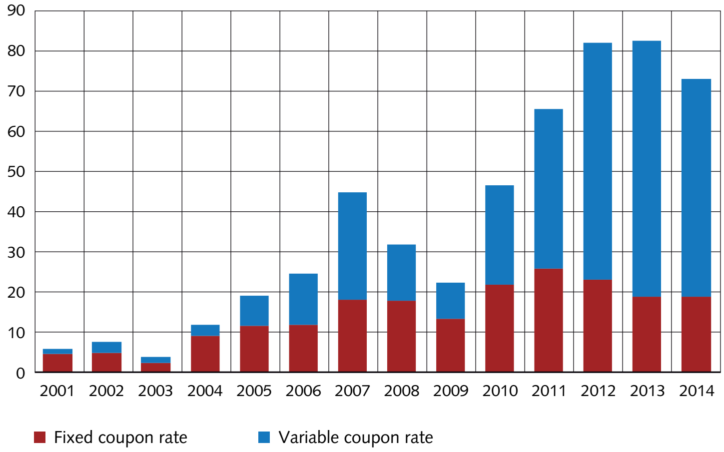
Note. The figure is based on statistics that are divided into 19 different sectors. To make the graph easier to read, the 19 sectors have instead been grouped into 10 sectors.
Sources: Dealogic and the Riksbank

Figure 7. Issue volumes with and without credit ratings
SEK billion



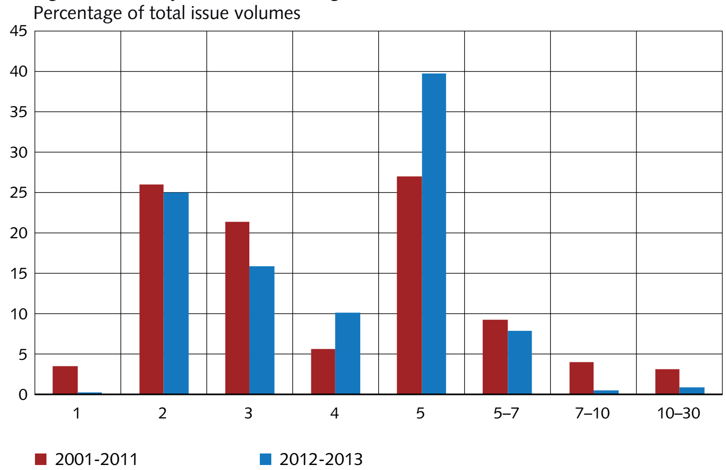
Sources: Dealogic and the Riksbank

Figure 8. Issues with fixed and variable coupon rates
SEK billion



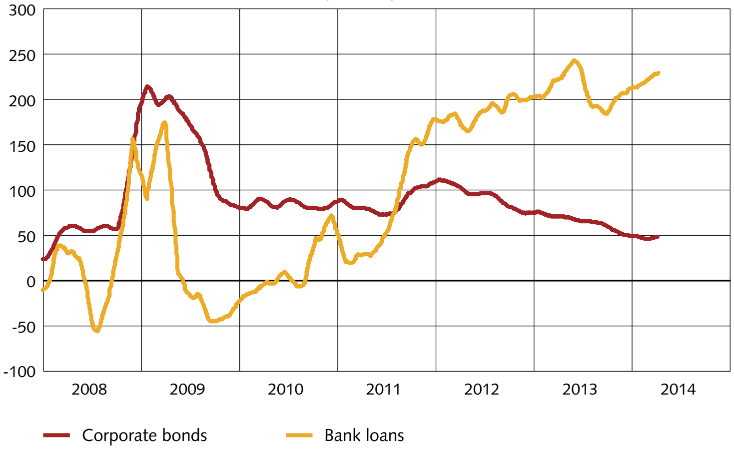
Source: Dealogic

Figure 9. Maturity on the outstanding volumes
Percentage of total issue volumes



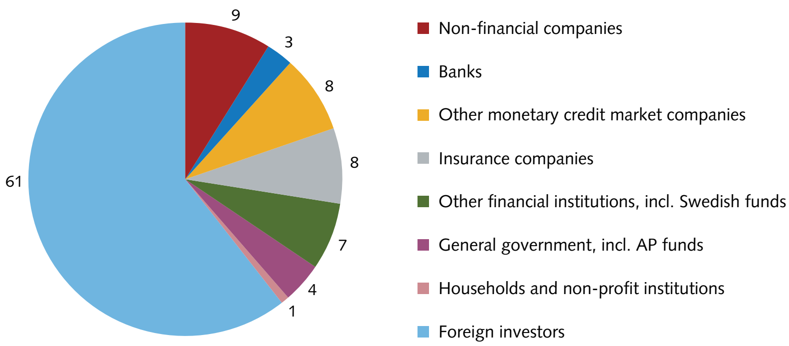
Source: Dealogic

Figure 10. Risk premium on the Swedish secondary market and the banks' lending rate
Difference against interest-rate swap, basis points



Note. The comparison should be interpreted with caution. The sample of companies in statistics, maturities and size of loans varies. Neither do companies necessarily issue bonds at the same price as the price on the secondary market. For corporate bonds, the interest-rate swap with a maturity corresponding to the maturity in the index at the respective date is used. Bank loans have a maturity of 1-5 years and, for them, a four-year interest-rate swap is used.
Sources: Nasdaq OMX, Statistics Sweden, Bloomberg and the Riksbank

Figure 11. Investors in Swedish companies' issues
Per cent



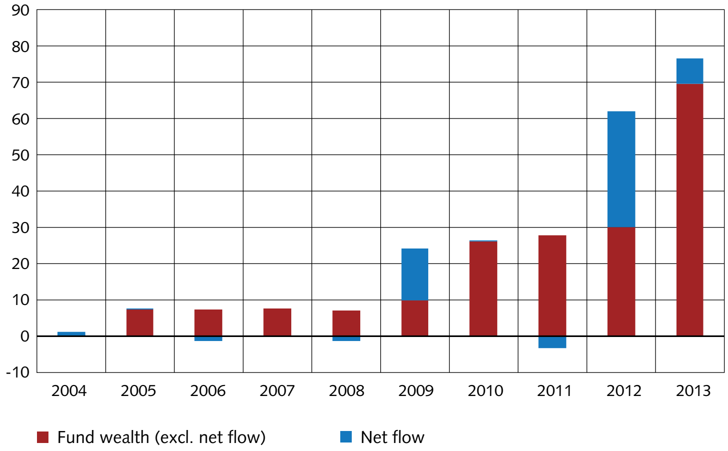
Note. Swedish companies' overseas subsidiaries are registered in the statistics as foreign investors. Investors not falling under any of the other categories are placed in the category non-financial companies.
Sources: Statistics Sweden and the Riksbank

Table 1. Representatives in issues on the Swedish primary market 2014

NAME	VOLUME (SEK MILLION)	SHARE (%)
SEB Merchant Banking	17,973	22
Nordea	16,209	20
Swedbank	11,980	15
Handelsbanken	11,754	14
Danske Bank Markets	9,899	12
Pareto	5,835	7
DNB	2,862	3
ABG Sundal Collier	1,740	2
J.P. Morgan	1,600	2
Deutsche Bank	617	1
Goldman Sachs	617	1
Nordic Fixed Income	600	1
Mangold Fondkommission AB	30	0
Aqurat Fondkommission	1	0
Remium Nordic AB	1	0

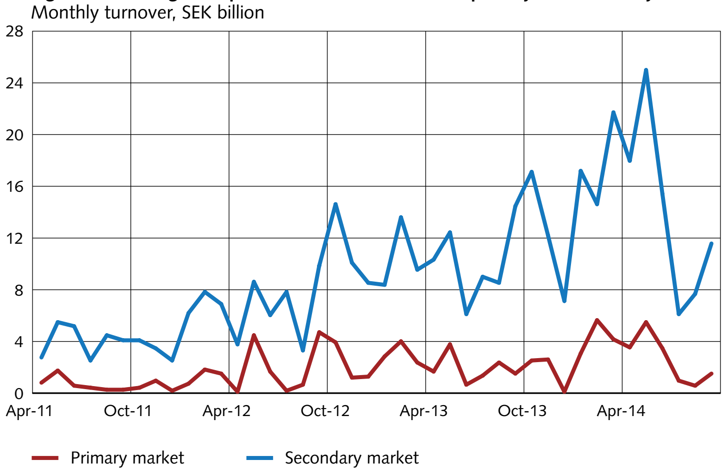
Source: Stamdata

Figure 12. Fund wealth and net flows in Swedish corporate bond funds
SEK billion



Note. The statistics refer to funds registered in Sweden and abroad with corporate bonds in Swedish kronor as main exposure. The total fund wealth consists of the fund wealth (excluding net flow) plus net flow.
Sources: Morningstar and the Riksbank

Figure 13. Trading in corporate bonds on the Swedish primary and secondary market
Monthly turnover, SEK billion



Source: The Riksbank