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One consequence of the coronavirus pandemic was that companies experienced difficulties in obtaining funding. However, the Government, various public authorities and the Riksbank have all implemented measures to improve access to funding.

In this Economic Commentary, we highlight companies' funding situations in recent months. Among other things, we show that the aggregate statistics hide several interesting patterns. Even though total lending from banks, credit institutions and other lenders, known as Monetary Financial Institutions (MFIs), has risen, lending to larger companies in particular has risen. Lending to smaller companies has increased markedly less. There are also signs that specific companies that have often obtained funding by issuing bonds or certificates instead chose to borrow from MFIs when the market for corporate securities was functioning less well in March

This Economic Commentary clearly shows how important it is to follow both aggregate and more detailed statistics. To evaluate the extraordinary measures adopted under the ongoing pandemic, the Riksbank will therefore continue to monitor carefully the MFIs' lending to companies as well as developments in the markets for corporate securities.

Economic Commentaries



Two-tier credit developments during the coronavirus pandemic

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During the coronavirus pandemic, many Swedish companies have seen a sharp decline in their revenues and several are therefore having difficulty meeting their costs. In addition, the crisis has resulted in the financial markets abroad and in Sweden occasionally functioning poorly. The combination of decreased revenues and turbulence in the financial markets has had a detrimental effect on financing conditions for Swedish companies.² Above all in March and April, many companies described a situation with more expensive bank loans, harder credit assessments and a occasionally strained corporate securities market.³

To maintain the credit supply and restrain the negative consequences of the coronavirus pandemic on the economy, the Government, various public authorities and the Riksbank have implemented a number of extraordinary measures. ⁴ However, it is too early to assess the effects of these.

In this Economic Commentary, we highlight how companies' interest-bearing funding, via bank loans and securities, has developed in recent months. We also show how differences in access and terms have to some extent created a two-tier credit market that is not evident from the aggregate statistics.

We start by studying developments according to survey responses from the Economic Tendency Survey of the National Institute of Economic Research (NIER), before then reviewing the companies' financing structures with special focus on the development of volumes and interest rates on loans from banks, credit institutions and other lenders, known as Monetary Financial Institutions (MFIs), on the aggregate level. After this, we dig deeper into the statistics and investigate the development of loans and interest rates, divided into small and large companies. We also discuss companies' wholesale funding over the period, which is to say their borrowing via the corporate securities market, and conclude with a couple of reflections.

¹ We are grateful for comments from Mikael Apel, Christina Cella, Peter Gustafsson, Jesper Hansson, Olivia Hauet, Mia Holmfeldt, Jyry Hokkanen, Jens Iversen, Stefan Laséen, Amanda Nordström, Åsa Olli Segendorf, Martin Regnér, Olof Sandstedt, Johanna Stenkula von Rosen, Marianne Sterner and Annika Svensson. We would also like to thank Calum McDonald for help with translation to English. The views expressed in this Economic Commentary are the authors' personal opinions and are not to be regarded as the Riksbank's view in these issues.

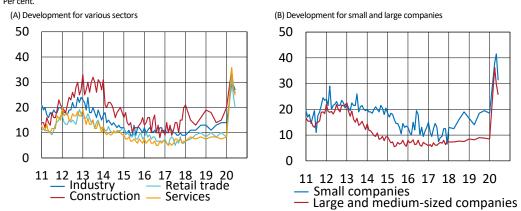
Note that, hereafter, the term company will be used to refer to non-financial corporations and individual enterprises.
 See, for instance, Sveriges Riksbank (2020a).

⁴ See the article "The Riksbank's measures during the coronavirus pandemic" in Sveriges Riksbank (2020b) for an overview of the Riksbank's measures. A complete description of the Government's crisis measures can be found on the Government's website https://www.regeringen.se/regeringens-politik/regeringens-arbete-med-anledning-av-nya-coronaviruset/

Major deterioration of companies' access to funding

Every quarter, the NIER has asked company representatives how they view the possibility to fund their operations. However, since May 2020, the question has been asked every month. The April survey, which was the first since the outbreak of the coronavirus pandemic, indicated a serious deterioration compared to the earlier survey in January. The proportion of companies considering that it was *more difficult* or *much more difficult* to fund operations increased heavily then, and was still on a relatively high level at the start of June; see Diagram 1A. For service or retail companies, the proportion in April was the highest since the question was introduced and it was the most marked deterioration between two surveys for all sectors. The deterioration was considerable among companies of all size classes in April, but as in previous years, a somewhat greater proportion of small companies considered it more difficult or much more difficult than normal to fund operations; see Diagram 1B. The situation improved slightly for companies in all sectors and for large and medium-sized companies in May and June, while it deteriorated further slightly for smaller companies in May and recovered somewhat in June.

Diagram 1. More difficult or much more difficult than normal to fund operations



Note: Small companies is a mean value for companies with fewer than 50 employees. Large and medium-sized companies is a mean value for companies with 50 or more employees. Monthly data from November 2008 until January 2018, then quarterly data until April 2020. Until May 2020, the question was again asked every month.

Source: National Institute of Economic Research.

Swedish companies use several sources of funding

To fund their operations, companies can use both equity and various types of loans and liabilities. For example, this may involve bank loans from MFIs, liabilities with various types of investors who have purchased the company's bonds or certificates (known as corporate securities), trade creditors, or loans from other companies in the group in question (intragroup loans). These loans can then be divided into short-term and long-term, as well as into interest-bearing or non-interest-bearing.

⁵ The question is "Funding your company's operations is currently (compared with the normal situation): Much more difficult than normal, more or less as normal, easier than normal, much easier than normal".

⁶ Since November 2008, the NIER has asked about companies' financing terms in the Economic Tendency Survey and, since 2018, the Riksbank, together with Finansinspektionen (the Swedish financial supervisory authority) has paid the NIER to ask these questions. From November 2008 to January 2018, this question was asked on a monthly basis. After this, it was asked on a quarterly basis, until May 2020, when it again started to be asked every month. The survey focuses on around 5,500 companies of various sizes in the manufacturing, construction, trade and service sectors. Responses are collected using an online survey circulated every month. The response rate is 70 per cent for the manufacturing sector and construction and civil engineering, around 60 per cent for the trade and service sectors.

Going forward, we will focus on interest-bearing funding, which means, that we will not be analysing new issues of shares, other enlargements of equity, or trade creditors. We will also exclude companies' intra-group loans, as these loans, for example, are usually raised under other terms than bank loans. Loans can be raised within the group due to for example tax regulations and therefore do not necessarily reflect any increased need for credit. We also exclude loans from foreign banks and credit institutions, as they stand for a smaller part of lending and because updated information is not available for the most recent months. In total, companies' total external interest-bearing funding in all currencies, excluding intragroup loans and loans from foreign MFIs, amounts to just over SEK 4,000 billion; see Diagram 2.

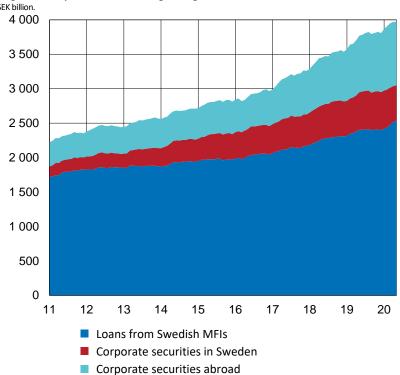


Diagram 2. Companies' interest-bearing funding

Note: The diagram excludes intra-group loans and loans from foreign MFIs, which are only available until the fourth quarter of 2019. Borrowing in all currencies, with securities borrowing allocated to Sweden or abroad on the basis of the nation owning the central securities depository through which the issue was conducted. Last outcome is May 2020.

Sources: Statistics Sweden (Financial Market Statistics, Swedish securities database) and the Riksbank.

Corporate borrowing from MFIs has increased

As is illustrated in Diagram 2, loans from Swedish MFIs stand for the overwhelming part of companies' interest-bearing funding. This fact may exacerbate the problems when a crisis occurs and the profitability of many companies deteriorates simultaneously. In addition, when uncertainty about the future is unusually large, lending to these companies will be perceived as riskier, meaning that companies will generally face higher lending rates if they are granted a loan. As well as this, many companies may choose not to apply for new loans in a situation where economic uncertainty is high. Based on this one might expect that lending to companies may decrease when a crisis occurs. Surveys conducted during the coronavirus pandemic also give the view that it has become more difficult for companies to fund their operations (see, for example, Diagram 1). However, the Government, various public

⁷ See Blomberg et al. (2012).

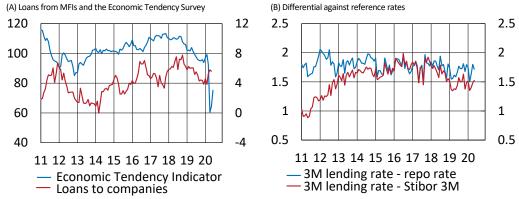
authorities and the Riksbank have implemented several extraordinary measures to improve access to credit, which may counteract this and, instead, stimulate lending.

In March and April 2020, the growth rate of MFIs' loans to companies increased, while the growth rate slowed marginally in May; see Diagram 3A. Growth in lending thus increased in March and April even though the economic situation had deteriorated heavily over the same period (illustrated here using the NIER's Economic Tendency Indicator). However, it is not unusual for there to be a delay before credit growth reflects the economic situation or companies' experience of the conditions. The covariation between the NIER's Economic Tendency Indicator and credit growth among companies is highest with a time lag of up to about one year. There may be several reasons for this, but one is that lines of credit/lending conditions for companies often remain in place for a period, and all loans are therefore not renegotiated simultaneously when the economic situation changes. An agreed line of credit can also provide companies with the possibility of borrowing more if they need to obtain short-term funding. This is because the conditions were decided before the crisis and may thereby be more favourable than the conditions that apply for new loans with the same MFI (where the risk premium has increased due to the prevailing situation) or for loans on the corporate securities market.

Companies' borrowing rates from MFIs increased in March and April, albeit from an unusually low level in February, and fell back somewhat in May, and interest rates are broadly normal compared with reference rates viewed over a slightly longer period; see Diagram 3B. ⁹ The interest rate differential against the repo rate has been in the interval of 1.5–2.0 since 2011 and, against the three-month Stibor (the reference rate for loans between different MFIs), the interest rate differential has been around 1.5 percentage points since mid-2019.

Diagram 3. Companies' loans and interest rates from MFIs

(A) Left scale: index. Right scale: annual percentage change. (B) Percentage points.



Note: Figure 3B shows the interest rate differential, that is to say the difference between a three-month lending rate for new and renegotiated loans and the repo rate or three-month Stibor.

Sources: National Institute of Economic Research, Statistics Sweden (financial market statistics) and the Riksbank.

Overall, the aggregate statistics show that lending to companies has increased, at the same time as interest rates have risen slightly for the companies raising loans. However, aggregate statistics for lending to companies can conceal interesting patterns and there may be large differences between different types of borrower, as well as within different groups of companies. For example, total lending from MFIs is driven by a small number of major companies that occasionally take very large loans. An increase in loan volumes on the aggregate level may thus be due to a small number of large companies raising large loans, at

⁸ Between December 2002 and April 2020 (not visible in the diagram), the correlation coefficient peaks at 0.69 when the Economic Tendency Survey is delayed by 13 months.

⁹ The lending rate to companies from MFIs was 1.66 per cent in April and 1.60 in May, that is up from 1.43 in February. This can mainly be explained by interest rates for short maturities (less than one year) having risen.

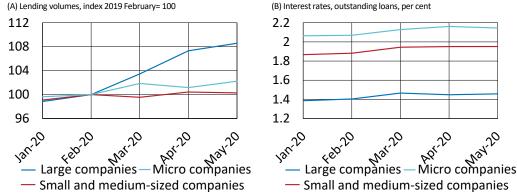
the same time as a number of smaller companies are not borrowing at all or only raising small loans. We therefore divide up corporate borrowing and interest rates from MFIs on the basis of various characteristics of the borrowers in the following.

Increased borrowing for large companies from MFIs

The Riksbank has developed a new credit database (KRITA) together with Statistics Sweden. This makes it possible to break down the aggregate lending statistics from MFIs and carry out cross-referencing against other sources. With this new, updated data, we can divide up lending by size of borrower or by whether or not the company is a housing cooperative. ¹⁰ In terms of lending volume, one-fifth of loans to companies are raised by housing cooperatives. Classification by size can be made in several different ways but the classification used here complies with the European Commission's recommendation, which is based on a combination of number of employees, turnover and total assets. ¹¹

Between February and May, total lending to companies increased by 4.2 per cent, mainly to large companies (8.6 per cent since February). The reason for this may be that large companies' demand for bank loans increased when it became more expensive and more difficult to borrow on the markets for corporate securities, which we will return to later. At the same time, lending to micro-enterprises and small and medium-sized enterprises, excluding housing cooperatives, increased by 2.2 and 0.3 per cent respectively between February and May; see Diagram 4A.

Diagram 4. Loans and interest rates for large and smaller companies



Note: Loans and interest rates on loans to housing cooperatives are excluded from Figure 4. Sources: Statistics Sweden (KRITA) and the Riksbank.

The continued good access among large companies to loans from MFIs also corresponds well with the results of the Riksbank's company interviews, where it is mainly large manufacturing companies and commercial real estate companies with high credit ratings that report that they are getting the loans they need. However, these companies express concern that other companies with lower credit ratings and smaller companies are not getting access to enough funding. ¹²

Lending rates are generally significantly higher for smaller companies than for larger ones; see Diagram 4B. In itself, it is not particularly remarkable that lending rates differ between small and large companies. Overall, it is riskier to lend to smaller companies than larger ones, among other things because the risk of bankruptcy and default is higher. MFIs therefore

¹⁰ The classification of non-financial corporations follows the European System of National and Regional Accounts, in Sweden Statistics Sweden's INSEKT 2014. Non-financial corporations include both private and public corporations that are market producers. Housing cooperatives are also counted as non-financial corporations.

¹¹ The European Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003/361/EC).

¹² Sveriges Riksbank (2020ca).

often demand higher interest rates to lend to smaller companies. In March, lending rates rose for both small companies and larger companies, compared with in February, but they have been more or less unchanged for all sizes in April and May.¹³

Lending to small companies could increase only modestly for several different reasons. Companies' demand for credit can decrease, which is to say that they do not wish to raise more loans. Depending on how companies see their chances of survival, their willingness to cover losses of income with loans may vary greatly. In some sectors, loans are something that companies can manage and want to use to get them through the crisis, while, for others, loans can be seen as an unnecessary burden to be taken on if bankruptcy seems close anyway. Credit conditions among MFIs may also have become tighter and more companies have declined loans because the conditions are too tough. Another reason could be that, as the number of loan applications has increased due to the pandemic, the banks are prioritising loans to large companies and existing customers, as can be seen in the Riksbank's business surveys. Alternatively, the loan application may have been rejected by the MFI.

Bank managers believe that credit conditions of companies have become tighter

It is difficult to know with certainty whether changes in loan volumes are due to changing demand or supply. One way of investigating this is to study the survey of managers at local bank branches conducted by ALMI Företagspartner four times a year. Respondents to the survey confirm that it has become more difficult for companies to borrow. The proportion who answered that it has become *more difficult* or *significantly more difficult* for companies to get a loan increased to 43 percent in June, up from 15 percent in March. In addition, a higher proportion of bank managers (20 percent in June, up from 13 percent in March), believe that the share of rejected credit applications has increased. ¹⁴ Companies in the Riksbank's Business Survey continue to report that conditions for bank loans and market financing have deteriorated since the crisis broke out. ¹⁵

Market funding increasingly important for companies in recent years

In addition to loans from MFIs, several larger companies use the securities market to issue different types of promissory note, primarily bonds (longer maturities) and certificates (shorter maturities). ¹⁶ This kind of wholesale funding has become increasingly important for companies in recent years and bonds and certificates now stand for almost one-third of companies' interest-bearing funding.

Large and well-known companies generally receive better loan conditions via the securities market than smaller companies, as the credit risk is deemed to be lower for large

¹³ The differences in interest rates are 0.6 percentage points between micro-enterprises and large companies, 0.2 percentage points between micro-enterprises and small and medium-sized enterprises and 0.4 percentage points between small and medium-sized enterprises and large companies. Here, it is important to point out that there is also a large spread in different interest rates between companies in all size classes.

¹⁴ ALMI (2020).

¹⁵ Sveriges Riksbank (2020d).

¹⁶ A band is a promissory note. A party lending money to a company becomes owner of one (or more) promissory notes and, apart from repayment of this debt, receives payment in the form of an agreed yield in many cases. When a bond is issued, it is decided in advance how long this money is to be lent – the investors purchase a bond with a certain *maturity*. A promissory note with a shorter maturity than one year is usually a *certificate*. As a rule, at time of issue, a bond thus has a maturity of more than one year and a certificate has a maturity of less than one year. Another difference is that commercial paper usually does not have any coupon payments, while corporate bonds often do. Corporate bonds and commercial paper often go under the generic term of corporate securities. Among other things, the agreed interest rate for these corporate securities depends on how great a risk the purchaser of the promissory note feels it is taking in the purchase, which is to say the risk that the investor will not get the invested money back again. The interest rate also reflects various market conditions, such as, for example, how easy it will be to sell the promissory note on the secondary market. In addition, the agreed interest rate is affected by the general level of interest rates in the economy.

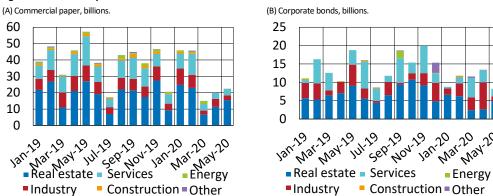
companies than it is for small ones, just like loans from MFIs. ¹⁷ This makes wholesale funding more attractive for these companies. This also means that wholesale funding only becomes an interesting funding alternative once sufficiently high amounts are reached, which seldom happens for small companies.

More securities borrowing means more diversified funding for companies

The increased interest among Swedish companies in borrowing on the securities markets over the last decade may be due to a willingness to broaden the investor base and obtain more diversified funding. The low level of interest rates in recent years has increased interest among investors for higher-risk securities, such as corporate securities, and has thus pushed interest rates down.

Commericial real estate companies are responsible for a large part of securities borrowing among companies, more specifically just over 40 per cent of outstanding nominal amounts. ¹⁸ The manufacturing industry also has a large degree of borrowing via the securities market. Both commercial real estate companies and the manufacturing sector have continued to issue during the crisis, as illustrated in Diagram 5A and Diagram 5B. On the commercial paper market, which is to say the market for corporate securities with a maturity of up to one year, it is clear that, since the pandemic, these sectors have issued relatively low volumes compared to the same period in 2019. During March and April, for corporate securities with maturities longer than one year, issuance from commercial real estate companies has fallen, at the same time as the manufacturing sector managed to hold their issued volumes steady, see Diagram 5B.

Diagram 5. Gross issues per sector



Note: Total issue volume in SEK in respective period. Swedish companies' issues in foreign currency are therefore not included. Sources: Statistics Sweden (Swedish securities database) and the Riksbank.

The increasing importance of securities borrowing means that increasing numbers of actors are sharing the risk as regards corporate funding, but it may also affect how sensitive companies become to shocks on the market. A larger proportion of securities borrowing may provide better resilience to financial stress if traditional credit channels such as bank loans are functioning less efficiently. However, this assumes that the market for corporate securities continues to function satisfactorily. If many purchasers completely abandon the primary market in a stressed situation, the situation may become more problematic for those companies needing to be refinanced by issuing new corporate securities. Companies can thus become vulnerable if they make themselves highly dependent on wholesale funding and

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¹⁷ When a company issues securities, discussions are usually held with existing investors to gain a view of the yield at which they would be willing to purchase the promissory note. Once a bond or certificate has been purchased on the primary market, which is to say directly upon issue date, it may then be sold onwards in the secondary market, where banks and other brokers can act as intermediaries. Transactions can also be made bilaterally, between buyer and seller. Trade on the secondary market does not directly affect the companies' financing options (as the conditions for the issued security remain unchanged), but may be important when the companies need to refinance securities that are maturing by issuing new securities.

¹⁸ Sveriges Riksbank (2020b)

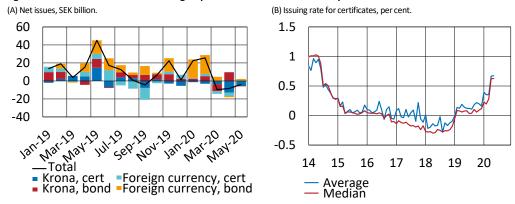
there then arises a situation in which the corporate security market is put under pressure, as happened in March, for example.

Issuances of corporate securities have fallen in recent months

The development of total corporate securities issuance, as is illustrated by net issuances (issuances exceeding those needed to refinance maturities with a deduction for possible repurchases), was negative in March to May; see Diagram 6A.

From having been at a comparatively high level at the start of the year, total net issuances of corporate securities have thus decreased significantly in conjunction with the outbreak of the coronavirus pandemic. This indicates that companies have found it more difficult to obtain funding on both the Swedish and international markets, at least at what they regard as a reasonable cost. However, in March, some companies could still issue in foreign currency. The companies obtaining funding in foreign currency are primarily large companies and companies with high credit ratings, as they consider they can get good conditions from foreign investors. It was primarily these companies that continued to issue during the uncertainty that was prevailing on the markets. For these companies, with high credit ratings from one of the largest credit rating companies, the possibility of obtaining funding from foreign investors was an important reason for them to get credit ratings in the first place. In addition to this, lending from foreign investors is also characterised by longer maturities than those that normally apply for bonds in SEK, which traditionally have shorter maturities than bonds, for example on the euro market and dollar market.

Diagram 6. Net issuances of interest-bearing corporate securities and issuance expenses



Note: Cert is an abbreviation for certificate. For a number of certificates, there is no price information, and consequently only certificates with a stated issue price that differs from the nominal value have been included in (B), which could lead to some over- and underestimation if the issue price corresponds exactly to the nominal value.

Sources: Statistics Sweden (Swedish securities database) and the Riksbank.

During the most stressed period in March 2020, there was a much higher sales pressure than normal for corporate securities on the secondary market, ¹⁹ but few prospective buyers. Above all, this was a matter of investment funds who needed to obtain liquidity to be able to meet large outflows from their shareholders. ²⁰ This meant that the prices for corporate securities were pushed down and, consequently, that interest rates increased. As the situation on the secondary market was under pressure and credit risk was deemed to have increased strongly, companies' ability to issue new bonds on the primary market was also affected. The companies that needed to issue were able to do so for higher costs (yields) than had been the case a few months earlier; see Diagram 6B. ²¹

¹⁹ For Swedish corporate securities, it has been relatively common for investors purchasing securities at time of issue to hold them until maturity.

²⁰ Sveriges Riksbank (2020b).

²¹ The Riksbank raised its repo rate from the beginning of 2020, which could have put pressure upward on companies issuance cost.

Companies with the opportunity partly replaced securities funding with loans from MFIs

The detailed statistics from the KRITA database that covers loans from MFIs can also be combined with statistics for issued corporate securities. Such an analysis shows that some companies have partly replaced securities funding with bank loans in recent months. About 350 Swedish companies use securities funding, both with and without credit ratings, and these stand for approximately 10 per cent of the Swedish banks' lending to companies. From February to May 2020, these companies increased their bank loans by 33 per cent in comparison with the end of February, while companies not using securities funding increased their bank loans by around 2 per cent; see Diagram 7.

This suggests that those companies that had the opportunity partly replaced securities funding with bank loans when the market was under pressure.

130
120
110
100
100
Jan-20 Feb-20 Mar-20 Apr-20 May-20
— Companies with access to securities funding
Other companies

Diagram 7. Lending to companies from MFIs

Note: Companies with wholesale funding are those that have issued corporate securities since December 2019. Other companies are companies that have not issued corporate securities since December 2019.

Sources: Statistics Sweden (KRITA and Swedish securities database) and the Riksbank.

Once the worst unease had subsided and purchasers had slowly returned to the corporate securities markets, credit risk still continued to be considered high, which could be seen in yield differentials (risk premiums) for corporate securites deemed risker, such as e.g. securities issued by companies with no credit rating or a low credit rating, against safer corporate securities or other types of safer securities. This affected both which corporate securities could find interested purchasers and the conditions offered. As the cost of obtaining funding via corporate securities has increased and access to demanded volumes is not considered secure, some companies have turned to banks instead, as confirmed by the aggregate statistics.

In addition, it is likely that the Riksbank's measures, together with the Government's support measures and guarantee programmes, have restrained the negative development on the corporate security market, in that credit granting largely resumed after the support measures were announced. This can be seen in the Riksbank's Business Surveys and elsewhere.²²

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²² Sveriges Riksbank (2020c).

Important to follow both aggregate and detailed statistics

It may seem strange that companies' loans from MFIs have increased over a period when several company representatives describe how it has become more difficult to obtain funding. However, as we have shown in this Economic Commentary, the aggregate statistics conceal several interesting patterns. Among other things, larger companies increased their borrowing from MFIs in March, April and May, while smaller companies increased their lending much less. There are also signs that credit worthy, large companies, which also have access to securities borrowing increased their borrowing from MFIs when the securities markets were functioning less efficiently. Interest rates are higher overall for small companies but differences in interest rates have not increased significantly in recent months.

That companies experience deteriorating access to financing may be due to MFIs having become more restrictive when it comes to issuing loans to this type of borrower, due to falling profitability in the companies. Another aspect may be that the banks have received a great many credit applications over this period and, because of this, have prioritised lending to larger companies and existing customers. The responses in ALMI's survey suggest that it has become harder for companies to receive financing and that the share of loan applications that are denied has increased. That credit conditions have become tighter and that the markets for securities issuance has worsened compared to before the crisis is also the picture painted in the Riksbank Business Survey.

This Economic Commentary shows that following aggregate statistics is not enough to assess companies' credit situations. To gain a broad and deep view of the situation, it must be complemented with more detailed information.²³ To evaluate the extraordinary measures adopted under the ongoing pandemic, the Riksbank will therefore continue to carefully monitor MFIs' lending to companies as well as developments in the markets for corporate securities.

²³ The statistics can be complemented by following real-time indicators. See, for example, Ewertzh et al (2020).

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