Are There Signs of a Credit Crunch in Austria?

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This study examines the existing statistical evidence on corporate loan growth for signs of a credit crunch in Austria. With regard to banks' loan supply, the Austrian results of the bank lending survey show that since the onset of the crisis in summer 2007 lending has been affected by deteriorated refinancing conditions in the interbank market and has become more restrictive. Loan demand, which in the first half of 2008 was still fairly brisk based on expanding investment and a sound earnings situation in the corporate sector, is likely to sag in the near future as a decrease in the willingness to invest is to be expected. The credit standing of firms is expected to deteriorate for cyclical reasons in the near future, too, which would also contribute to a slowdown in lending. As it seems to be relatively likely that loan supply will decline more strongly than loan demand, the emergence of a credit crunch cannot be ruled out in Austria.

JEL classification: E51, G21, G32
Keywords: bank lending, credit crunch, corporate finance

The international financial crisis has significantly impaired the capital and liquidity positions of Austrian banks. Given the resulting high preference for liquidity among banks and the potential refinancing problems this may entail, there is a risk that banks cut down their loan supply to the real economy sectors. Such a decline in bank credit supply that is larger than a contraction caused by a cyclical weakening of credit demand or the deterioration of borrowers' creditworthiness and that is due to refinancing constraints is called a "credit crunch" according to Bernanke and Lown (1991).[2]

This tightening can impact businesses and households. The latter may encounter in particular problems in real estate financing in countries where real estate prices soared in recent years. In Austria, however, there was no real estate bubble and real estate prices rose very moderately (with a few exceptions, such as prices of top locations in Vienna). Therefore, this paper focuses on the effects of the crisis on corporate financing and, within this segment, on the impact on borrowing from banks, which has remained the most important form of corporate financing in spite of the structural shifts observed in recent years.

Specifically, this study examines the existing statistical evidence on corporate loan growth to see whether there are already signs of a credit crunch and in how far the effects of the current financial crisis on economic growth (or the economic downturn already expected before the current aggravation of the crisis) affect loan demand and/or borrowers' creditworthiness (and thus the ability of companies to take out loans).

With regard to the effects of the financial crisis, this paper concentrates on the extent to which they have led or could still lead to quantitative restrictions in bank lending. Supplementing this analysis, the paper by Jobst and Kwapil (2009) in this issue seeks to give

Refereed by:
Markus Knell, OeNB

Cutoff date for data:
December 22, 2008

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[2] *Bernanke and Lown (1991) define a "credit crunch" as a "significant leftward shift in the supply curve for bank loans, holding constant both the safe real interest rate and the quality of potential borrowers."*

an assessment of the further development of loan costs.

At the cutoff date of this issue, data on corporate loan growth were available up until the November 2008 reporting date. These data only incompletely reflect the intensification of the financial crisis in September and October 2008.

As a result, the effects of the crisis can only be indirectly assessed for the time being. One option is to draw provisional conclusions from developments since the onset of the financial market turbulence in summer 2007 and apply them to the intensification of the crisis in fall 2008. The crisis dramatically escalated in September 2008, but all in all the turmoil in global financial markets triggered by the U.S. subprime crisis has now persisted for more than one year. The question is whether these tensions have already resulted in changes in the supply and demand patterns in the credit market and, hence, could have provided a hint on potential patterns emerging during the intensification of the financial crisis in fall 2008.

The Austrian results of the euro area-wide bank lending survey (BLS) play a key role in this study. In this quarterly survey, senior loan officers of leading banks are asked to give their assessment of lending conditions in the previous quarter and an outlook for the current quarter.[3] These questions permit a (qualitative) analysis of the supply and demand situation in the loan market. In addition, the BLS questionnaire has regularly included ad hoc questions since fall 2007 that specifically address the consequences of the turmoil in the global financial markets for bank lending. The most recent round of the BLS was conducted in the first half of October 2008, i.e. when the crisis peaked.[4]

This study is structured as follows: Section 1 presents the structure of corporate financing in Austria. Section 2 examines current macro data for any signs of a slowdown in loan growth. Sections 3, 4 and 5 discuss the potential impact on loan growth of its determining factors – loan supply, loan demand and the creditworthiness of enterprises. Section 6 contains the conclusions.

1 The Structure of Corporate Financing

Data on the structure of corporate financing in Austria are provided by the financial accounts.[5] They show that external financing flows in absolute terms have moved more or less in tandem with overall economic growth since the mid-1990s (left-hand panel of chart 1). Moreover, they highlight that, after a decline in 2002 (essentially caused by a strong decrease in corporate investment), financing by banks remained relatively stable in the following years. While the lion's share of bank financing was provided in the form of loans, banks also acquired bonds and shares of nonfinancial corporations. The financing by the nonfinancial sectors (enterprises, households, public sector), which was dominated by equity financing, was considerably more volatile. Funds raised abroad were rather stable in absolute terms between 2000 and 2006, but more than doubled in 2007. The data available do not permit a breakdown of capital raised abroad by

[3] *In total, around 110 leading banks from all countries of the euro area are surveyed, including five from Austria (Waschiczek, 2003).*

[4] *The completed questionnaires were returned to the Oesterreichische Nationalbank between October 6, and October 14, 2008.*

[5] *Financing stock data have been available since end-1995 and financing flows since 1996.*

economic sectors or financial instruments; therefore is it not possible to specify the extent to which foreign banks funded Austrian enterprises. At any rate, foreign direct investment was a major factor in the strong rise of external funding.

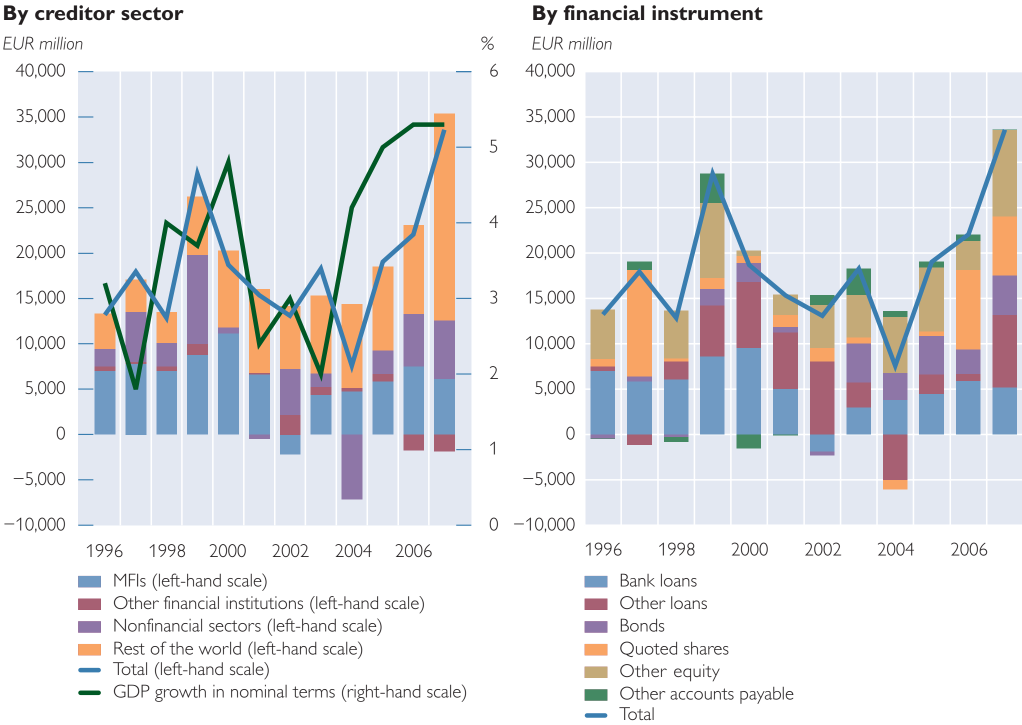
Overall, the composition of financial flows has fluctuated very strongly in recent years.[6] Since 2001, the share of bank loans in total financing flows has been smaller than their share in financing stocks every year, with only one exception, so that the share of bank funding continuously decreased in that period. From a regional perspective, domestic sources have always recorded a smaller share in financing flows than in financing stocks while it has been the other way round for foreign sources since 2001.

Because of these shifts in financing flows, the contribution of (domestic) banks to the external financing stocks of nonfinancial corporations (in the form of loans as well as through bonds and shares held by banks) fell from more than 50% in the mid-1990s to less than one-third at the end of 2007. While the importance of bank funding decreased, the significance of funds raised abroad increased as their contribution rose from one-eighth to more than one-third in the same period.

Broken down by financing instrument, bank loans[7] remain the most im-

Chart 1

External Financing Flows of the Corporate Sector



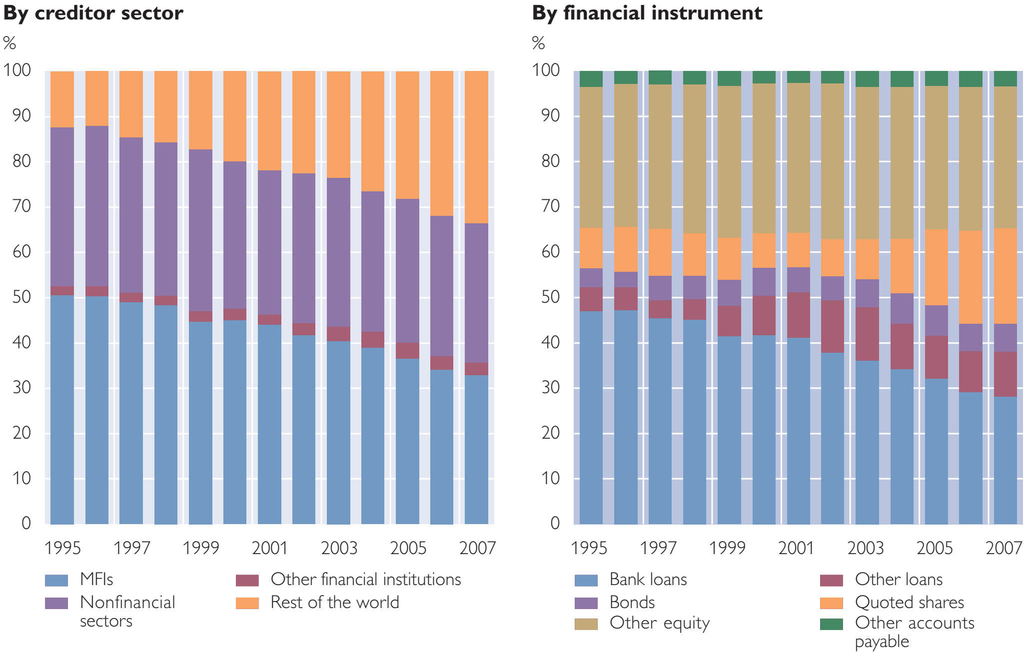
Source: OeNB (financial accounts).

[6] *In the past ten years, for example, the share of bank loans in annual financing flows ranged from 51% (in 2000) to –14% in 2002, when loans declined in absolute terms. The fluctuation reached similar levels for bonds and stocks.*

[7] *Lending by domestic banks.*

Chart 2

External Financing of the Corporate Sector



Source: OeNB (financial accounts).

portant source of external financing for Austrian enterprises even though capital markets noticeably gained significance during the past years. At the end of 2007, around 28% of external financing came from bank loans, clearly surpassing the contribution made by quoted shares (21%) and bonds (around 6%). In 1995, the percentage of bank loans still stood at 47%, whereas the contribution of quoted shares merely amounted to 9%.

In view of this financing structure, an analysis of potential effects of the current financial crisis on corporate financing should essentially concentrate on three aspects: bank loans, funds raised abroad and equity financing. As the majority of equity capital is raised by enterprises abroad (on average more than 60% in the years from 2005 to 2007 and even significantly higher percentages in other years), the focus of a first analysis can be equity financing, in particular funding through the stock markets, which were hit particularly hard by the financial crisis. In addition, loans constitute another key element of corporate financing.

2 Recent Loan Growth Trends

Bank lending to the corporate sector expanded at an annual rate of 6.1% in 2006 and 8.7% in 2007. The turbulence in global financial markets that started in summer 2007 did not dampen loan growth initially. Quite to the contrary, in the first months after the financial turmoil had begun, the annual growth of lending by Austrian banks to the corporate sector even accelerated, reaching its peak at 9.8% in April 2008. Subsequently, loan growth slowed down, but at 8.6% in November 2008 continued to be higher than in mid-2007 before the financial crisis erupted.

The amount of loans outstanding rose by 1.7% on the previous month (adjusted for exchange rate effects and other changes not related to transactions), after contracting by 1.2% in October. Euro-denominated loans to enterprises expanded by 1.7%, and foreign currency loans, which, however, play only a minor part in the corporate sector, advanced by 1.6% after (adjusted for exchange rate effects). All in all, the monthly rates of change varied strongly over the past few years and therefore do not allow inferences about underlying trends.

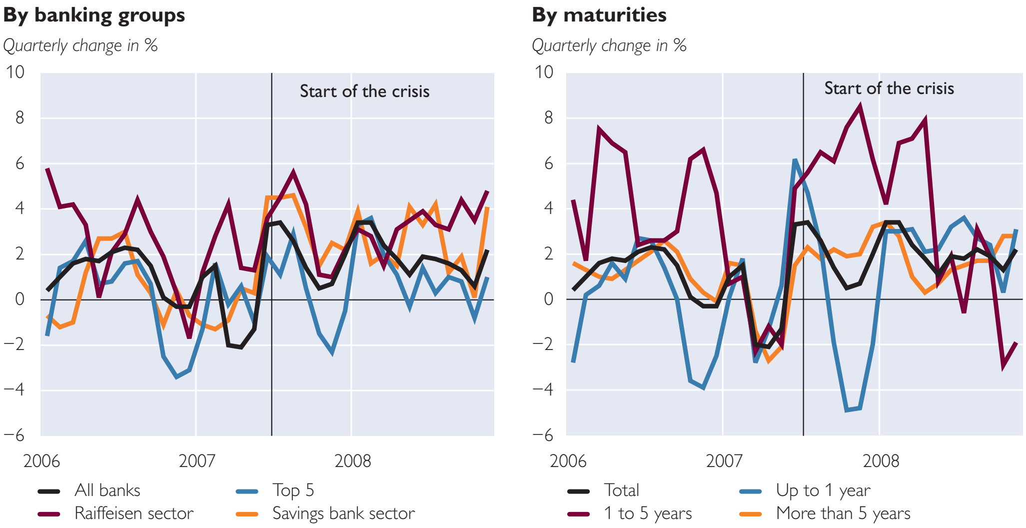
In order to smooth out these strong monthly fluctuations while ensuring that the analysis of annual growth rates also takes into account the developments of the past few months, chart 3 presents the quarterly growth rates of loans to enterprises. It shows that after slowing in September and October 2008, loan growth picked up in November.

The relative growth differentials observed in lending by major banks and the decentralized sectors have persisted until now. The savings bank sector, whose quarterly growth rates had dropped sharply since summer 2008, recorded brisker loan growth in November. In the Raiffeisen sector the growth rate has decreased only slightly up to now. The five largest banks[8] posted lower growth rates than the entire banking sector over most of the period under review; in November, lending by the five major banks expanded by 1.0%.

Another way to early identify potential shortages of credit is to analyze loan growth by maturities. Frequently, banks start to introduce loan restrictions by granting more short-term loans, while acting cautiously when it comes to longer-term loans. The data available until November 2008 do not

Chart 3

Loans to Enterprises



Source: OeNB.

[8] *UniCredit Bank Austria AG, Erste Bank der oesterreichischen Sparkassen AG, BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG, Raiffeisen Zentralbank Österreich AG and Oesterreichische Kontrollbank AG.*

indicate such a trend, however. Short-term loans (up to one year), which had contracted in 2007, in fact posted a higher quarterly growth rate (3.1%) than the other two maturity categories, but the difference between this rate and the growth rate of loans with a maturity of more than five years was fairly small. Only loans with a maturity of one to five years have contracted quarter-on-quarter since October 2008.

The currently available MFI balance sheet statistics data on the growth of loans to enterprises do not yet indicate a credit crunch (but do not rule it out either). In order to better assess corporate lending growth in the period for which data are not yet available and to gain insights into changes in banks' lending behavior, the following sections analyze the results of surveys of lenders and borrowers.

3 The Lending Behavior of Banks

3.1 The Bank Perspective – Credit Standards and Credit Terms and Conditions According to the BLS

According to the regular questionnaire of the BLS, banks have acted more cautiously in their lending business since the beginning of the financial turmoil. In the third quarter of 2008, credit standards[9] were slightly tightened for the fifth time in a row. This more cautious orientation of lending policy had a stronger effect on loans to big companies than on those to small and medium-sized enterprises (SMEs) and affected long-term loans more than short-term ones.[10]

This is essentially in line with the responses to the ad hoc questions on the consequences of the turmoil in the global financial markets, which have been regularly included in the BLS since the third quarter of 2007. These answers show that, according to the assessment of the senior loan officers surveyed, the refinancing conditions of Austrian banks considerably deteriorated because of the financial crisis. Borrowing in the money market and refinancing through debt securities have been particularly impaired.

At first, these adverse effects mainly influenced lending conditions. Up to the second quarter of 2008, the banks stated that changed refinancing conditions had a stronger impact on margins than on the amount of loans granted. In the third quarter of 2008, however, this relation was reversed, i.e. the impact on loan quantity was considered to be significantly stronger than the effects on margins (left-hand panel of chart 4). The senior loan officers surveyed expected this trend to continue in the fourth quarter of 2008. Thus, at least according to the BLS, the financial crisis probably will not only have price effects but also quantitative consequences for loans granted in the near future.

Broken down by firm size, loans to large companies were more strongly affected than finance for SMEs. A differentiation by loan purpose shows that credit standards were tightened above all for mergers and acquisitions (M&As) as well as corporate restructuring, but in the third quarter of 2008, loans for fixed investment were also impacted. From today's perspective, this means that a reduced willingness to lend would predominantly affect financial transactions (such as M&As), but increasingly also real economy projects (fixed investment).

[9] *Credit standards are the internal written and unwritten criteria defining the types of loan a bank considers desirable.*

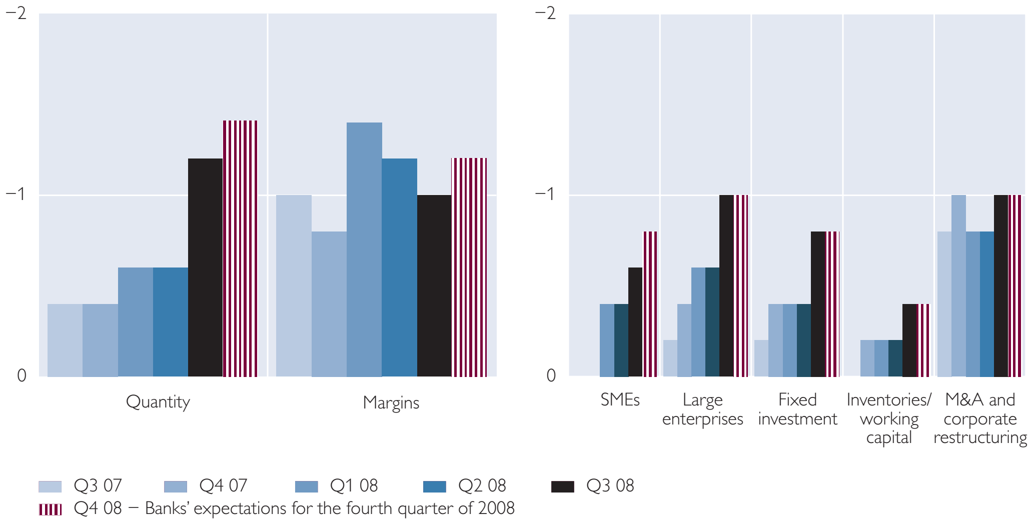
[10] *Waschiczek (2009).*

Chart 4

Effects of the Financial Turmoil on Loans to Enterprises

Effects of banks' changed refinancing conditions on quantity and margins of loans granted / **Impact on credit standards by borrower group and purpose**

0 = basically no impact / –1 = some impact / –2 = considerable impact



Source: OeNB (bank lending survey).

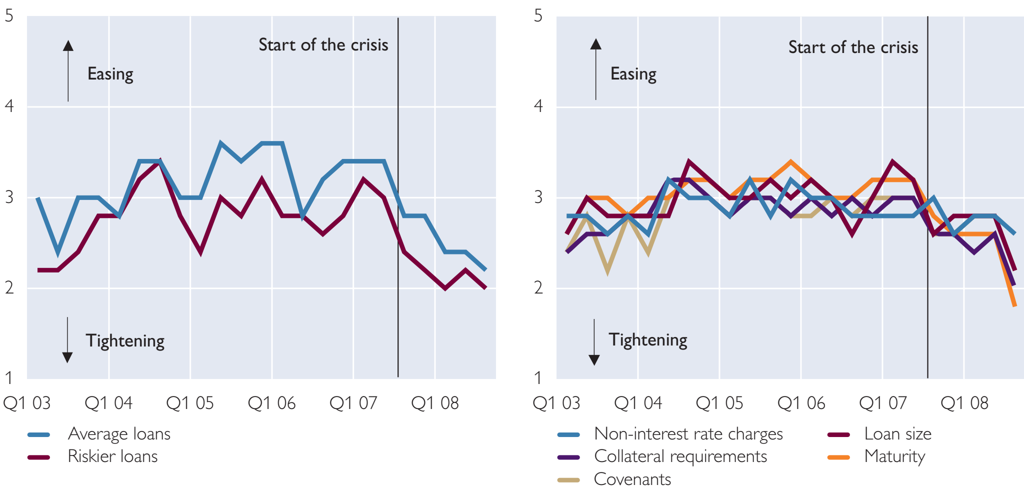
Chart 5

Conditions and Terms for Approving Loans to Enterprises

Changes over the past three months

1 = tightened considerably / 2 = tightened somewhat / 3 = remained basically unchanged / 4 = eased somewhat / 5 = eased considerably

Margins / **Other terms and conditions**



Source: OeNB.

At the same time, banks have continuously tightened their credit conditions and terms[11] since the beginning of the financial market tensions. Interest margins for riskier loans and – somewhat less – for borrowers with average credit ratings were raised for the fifth time in a row in the third quarter of 2008. Likewise, all other conditions and terms for lending to enterprises that are covered by the questionnaire, such as collateral requirements, size and maturity of the loans granted, loan covenants[12] and non-interest rate charges, have been tightened as well in all reporting periods since mid-2007 (with the exception of non-interest rate charges in the third quarter of 2007).

Even though these restrictions are not yet reflected in the data reported (so far, there were hardly any shifts in the maturity of the loans granted, and the interest margin between retail rate and interbank rate changed only slightly), they are very much likely to have effects on lending in the future (chart 5).

3.2 The Corporate Perspective – The Results of Enterprise Surveys

While the BLS offers aggregate and/or systematized bank responses on their lending behavior over time, information on the borrower perspective is not available in a similar form.

Two surveys conducted in fall 2008, however, addressed enterprises' experience in taking out loans. On the one hand, business information service provider Creditreform included several questions on the development of financing conditions for enterprises in its biannual survey on the economic situation of SMEs (Creditreform, 2008).[13] On the other hand, the Austrian Federal Economic Chamber (WKÖ) carried out a survey in October and November 2008 that specifically focused on the changes in borrowing over the past year (Wirtschaftskammer Österreich, 2008). Because of different questions (and different survey dates), the results of the two surveys diverge slightly, but their findings are basically similar.

When interpreting the results of the surveys, one has to bear in mind that the two surveys did not explicitly ask about the effects of the crisis and covered loans taken out over a very long period (the past year in each case). Even though a high number of factors influences borrowing decisions made over a period of one year, the turmoil in global financial markets has significantly affected banks' lending practices since as early as the third quarter of 2007. Therefore, the results of the surveys are probably very heavily influenced by the financial crisis.

In both surveys, the enterprises responding reported that their financing conditions had worsened compared with 2007. In the WKÖ survey, 16% stated that the borrowing situation had become more difficult for their own enterprise, while one-third of respondents did not supply information. According to the Creditreform survey, financing conditions deteriorated or considerably deteriorated against the previous year for almost half (49%) of the enterprises surveyed in fall 2008, while this percentage stood at 30% in spring 2008. In both surveys, the percentage of respondents reporting no changes in borrowing against the previous year stood at almost 50%.

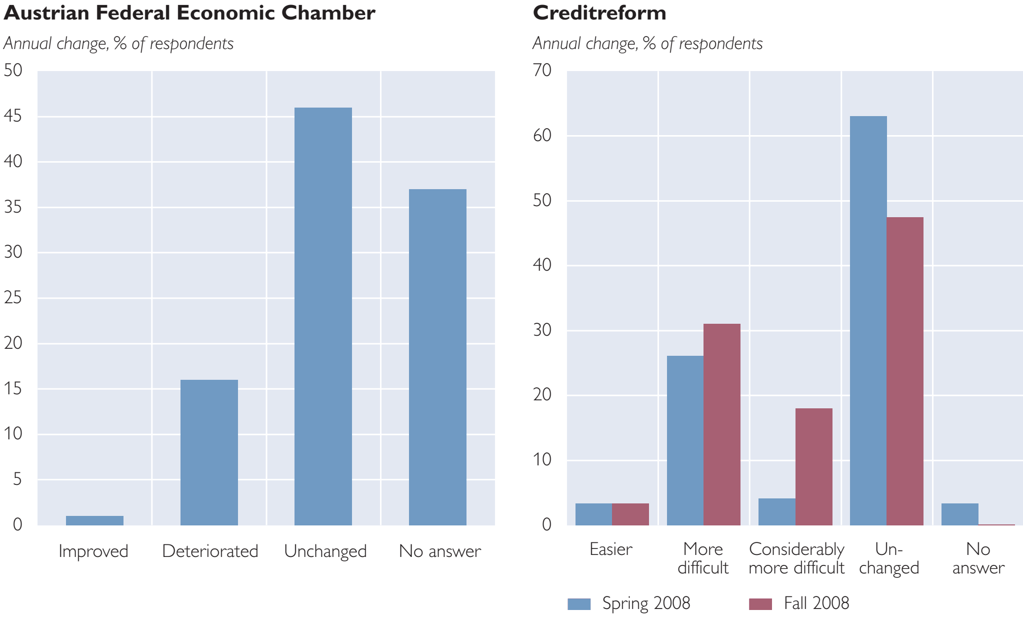
[11] *Credit conditions and terms refer to the specific obligations agreed upon by the lender and the borrower.*

[12] *Covenant: an agreement or stipulation laid down in loan contracts under which the borrower pledges to take certain action or to refrain from taking certain action.*

[13] *These questions were also asked in spring 2008.*

Chart 6

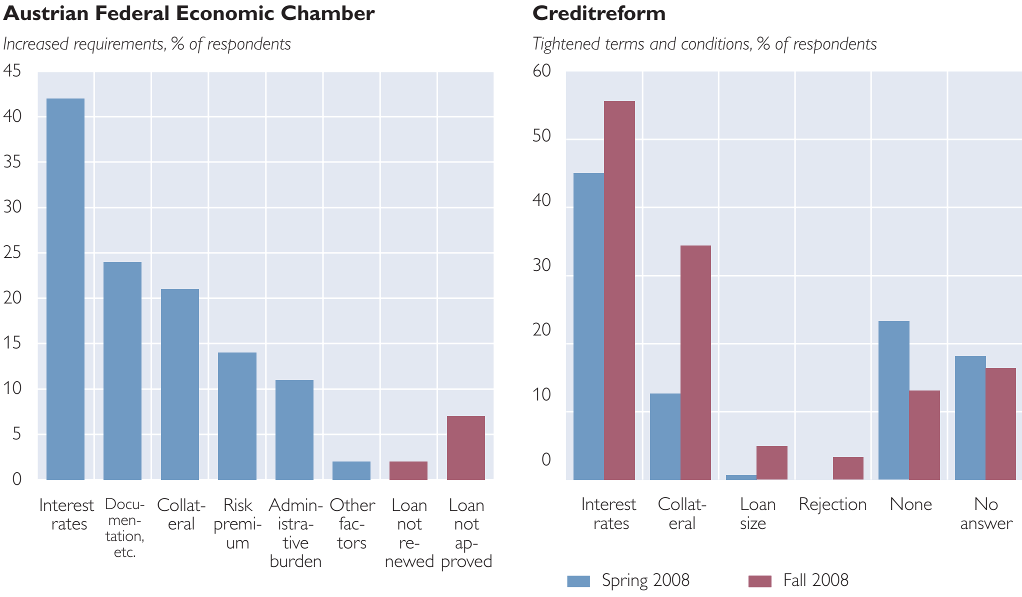
Access to Finance/Credit



Source: Austrian Federal Economic Chamber, Creditreform.

Chart 7

Changes in Credit Terms and Conditions



Source: Austrian Federal Economic Chamber, Creditreform.

Both surveys also contained questions on changes in credit terms and conditions. 42% (plus an additional 14% stating that they paid a higher risk premium) in the WKÖ survey and 56% in the Creditreform survey pointed out that interest rates had risen. In addition, one out of four responding enterprises indicated that banks had raised their risk assessment requirements and 21% reported that banks' collateral requirements had increased. 3% had faced problems in loan renewals. Finally, 7% (WKÖ) and 3% (Creditreform) of respondents answered that they had problems getting any loans at all.

3.3 Summary

Banks have undoubtedly become more restrictive in approving loans since the beginning of the financial crisis in summer 2007. This is indicated both by the answers given by banks in the BLS and the responses provided by enterprises in surveys.

With regard to the effects of the financial crisis on bank lending, too, the results of the enterprise surveys broadly correspond to those of the BLS. So far, the effects of the financial crisis have been reflected primarily in higher interest rates, which essentially stem from higher money market rates. Other credit terms and conditions have been adjusted, too, e.g. collateral requirements have been increased. To date, quantitative restrictions have been reflected rather by smaller loan sizes than by the rejection of loan applications.

It can be expected, however, that the tightening of lending will lead to lower loan growth rates although, given the unique nature of the current crisis situation and the relatively short period covered by the BLS, there are no historical data that indicate how long it takes until more restrictive lending behavior actually translates into slower credit growth. Empirical studies for the U.S.A., where the Federal Reserve System has conducted the Senior Loan Officer Opinion Survey since the 1960s, indicate that the growth of loans to enterprises responds to changes in credit standards with a lag of several quarters in the U.S.A.[14] If these experiences are taken as a yardstick, the tightening of credit standards should result in a slowdown in loan growth in the near future.

4 Corporate Loan Demand

4.1 Corporate Investment

Demand for loans to enterprises was fairly robust in the first half of 2008, mostly thanks to the strong growth in investment until mid-2008. As chart 8 (left-hand panel) shows, gross fixed investment has moved quite in tandem with loan growth since the early 1990s. Even before the current intensification of the financial crisis, forecasts for the rest of 2008 as well as for 2009 predicted that investment demand would weaken. The aggravation of the international financial crisis has further deteriorated the investment outlook.[15] Accordingly, it is to be expected that financing needed for investment will grow less in the next few quarters and, hence, related loan demand will cool down.

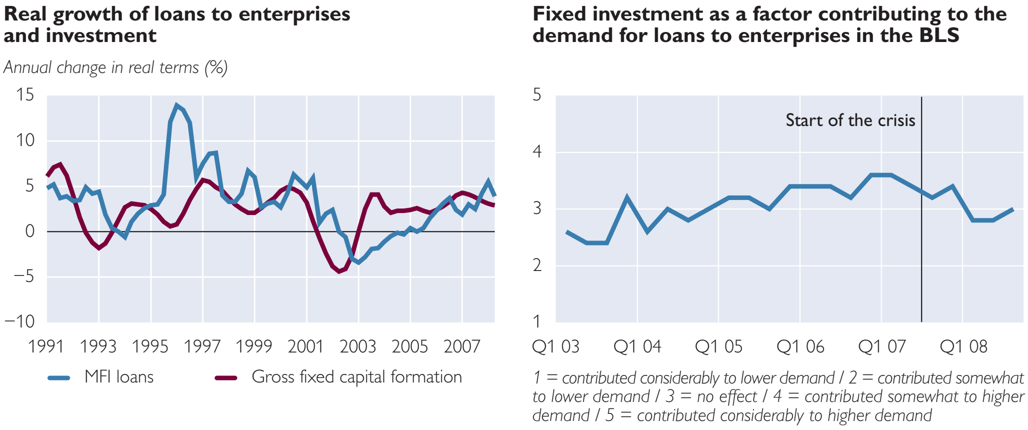
The BLS also confirms this correlation. According to the senior loan offi-

[14] *For the 1990s, Lown, Morgan and Rohatgi (2000) found a high correlation between credit standards and the growth of loans to enterprises that was strongest for a 4-quarter lag (but also significant for shorter lags). Similarly, Lown and Morgan (2006) show in a variance decomposition analysis inter alia that the influence of credit standards on loan changes increases over time and that the correlation is strongest for a 12-quarter lag.*

[15] *Ragacs and Vondra (2009).*

Chart 8

Loans and Investment



Source: OeNB, Eurostat.

cers surveyed, financing of fixed investment played a (in part significant) role in higher demand in 2006 and 2007. In the first two quarters of 2008, however, this factor contributed to a decrease in demand – albeit to a very small extent –, while fixed investment had no net effect in the third quarter (right-hand panel of chart 8).

4.2 Mergers and Acquisitions

Another factor influencing the demand for loans to enterprises was the funding of mergers and acquisitions (M&As) in the period from 2005 to 2007. In recent years, the M&A market expanded rapidly (left-hand panel of chart 9). Figures are not available for 2008 as yet, but the pace of M&A growth in Austria is likely to have weakened as it has done at the international level.[16]

This tendency, too, is reflected by the BLS (right-hand panel of chart 9). For more than three years, the banks surveyed reported that M&As and corporate restructuring had constituted a significant factor driving loan demand. Since the beginning of the crisis, however, the contribution of M&A activity to growth has dwindled and recorded a sudden drop in the third quarter of 2008. Thus, it is not unlikely that the decreasing demand for funding needed to finance M&A deals will very quickly contribute to lower loan growth rates – to an even larger extent than finance for real economy investment projects.

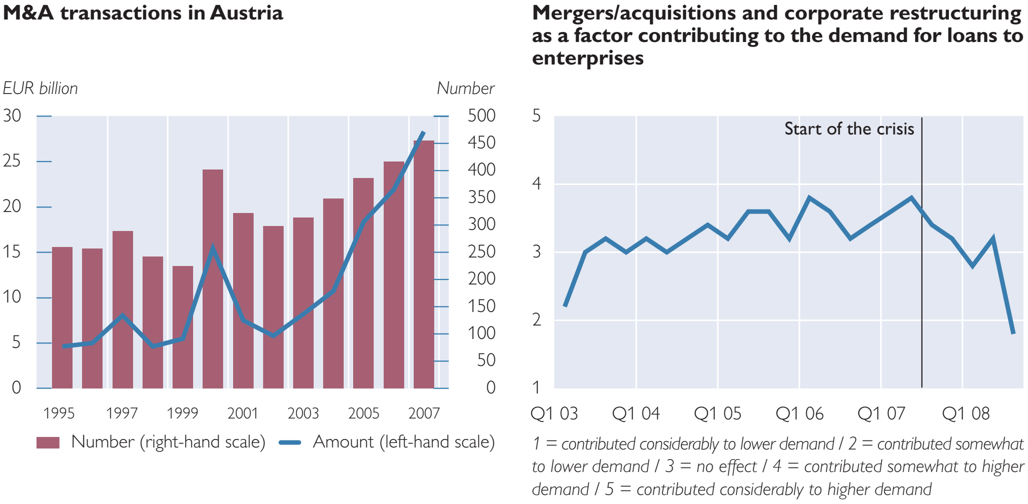
4.3 Substitution of Capital Market Financing

Part of the lively credit expansion recorded until summer 2008 may be explained by the fact that enterprises took out loans to a higher extent given the difficulties in raising funds in the stock market. Since the start of the turmoil in the financial markets in summer 2007, new issuance on the Vienna stock exchange has declined markedly. In the period from January to September 2008, new issues by nonfinancial corporations listed on the Vienna stock

[16] *For information on the euro area, see for example the box "Recent developments in M&A activity by euro area non-financial corporations" in ECB (2008).*

Chart 9

Mergers & Acquisitions and Loans to Enterprises



Source: Moschner, M. (several volumes), Österreichisches Bank-Archiv; OeNB (bank lending survey).

exchange amounted to EUR 0.4 billion, down from EUR 7.0 billion in the corresponding period in 2007. Their contribution to the external financing of the corporate sector fell from 25.9% in the first half of 2007 to 1.7% in the first half of 2008 according to financial account data. Shifts from funding through shares to loans may well push up the growth rate of loans to enterprises. As share issuance is primarily relevant for a relatively small number of mainly large firms, this development also concerns predominantly big enterprises.

The net issuance of corporate bonds has decreased less significantly in the course of the crisis up until now, so that this segment probably was less affected by substitution effects.[17] If tensions persist, however, the bond market's capacity for new issues may go further down so that shifts from the bond market to the loan market could occur to a higher degree. In this case, too, larger companies are primarily affected even though bond issuance (in particular, private placements) requires smaller enterprise sizes than issues in the stock market.

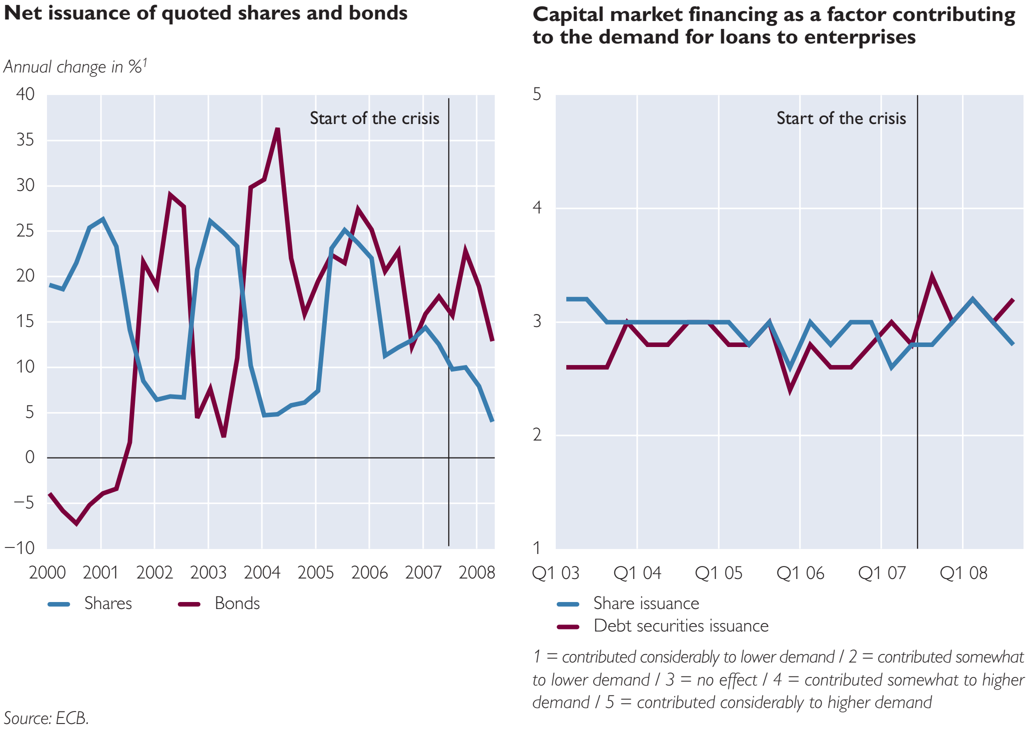
The results of the BLS also reflect developments in capital market financing. While the issuance of shares and debt securities slightly dampened loan demand until mid-2007, it (in particular debt securities) contributed somewhat to increasing demand according to the senior loan officers surveyed (right-hand panel of chart 10).

On the one hand, these substitution effects mean that the current market situation for loans to enterprises may be somewhat overstated by these special factors and that the actual financing amount is already slightly lower than the lending figures would suggest. On the other hand, they clearly show that because of the reduced capacity of the capital market to absorb new issues

[17] *Money market issues (e.g. commercial paper), which would be hit particularly hard by the current crisis, hardly play a role in corporate financing in Austria. In mid-2008, the outstanding volume amounted to EUR 91 million or 0.016% of total liabilities based on financial account data.*

Chart 10

Funds Raised by Enterprises in the Capital Market



Source: ECB.

[1] *Percentage change against the previous year on the basis of changes in transactions, i.e. adjusted for reclassifications, revaluations, exchange rates and other nontransaction changes.*

in recent quarters, the relative significance of bank loans has, overall, increased in the financing mix of enterprises, so that it is all the more important to maintain this financing source.

4.4 Summary

Loan demand had been high until recently, resulting from relatively buoyant investment and possibly from the effects of the substitution of capital market funding until mid-2008. At the latest since the intensification of the financial crisis in fall 2008 and the related economic slowdown, loan demand and, hence, loan growth in the corporate sector has been likely to weaken independently of supply-side restrictions, with loan demand falling in the field in which supply declines as well: primarily M&As, but increasingly also fixed investment.

5 Creditworthiness of Enterprises

5.1 Financial Strength

Another factor contributing to high loan growth until summer 2008 was enterprises' good financial health. The earnings situation of enterprises was good in the first half of 2008, and the insolvency statistics still reflected the economic boom years 2006 and 2007.[18] The balance sheet structure of enterprises developed positively. Although corporate debt had grown slightly faster

[18] *According to Kreditschutzverband von 1870, the number of corporate bankruptcies observed in the first three quarters of 2008 was lower by 1.6% than in the same period of the previous year. In nominal terms, estimated default liabilities remained unchanged against the same period of the previous year.*

than corporate profits[19] on account of the rather rapid expansion of debt financing since the second half of 2007, it was still considerably lower than the values observed during the previous economic downturn at the beginning of the decade as Austrian companies had not followed the euro area-wide trend of sharply increasing debt in the second half of this decade. The debt/equity ratio was also relatively stable.

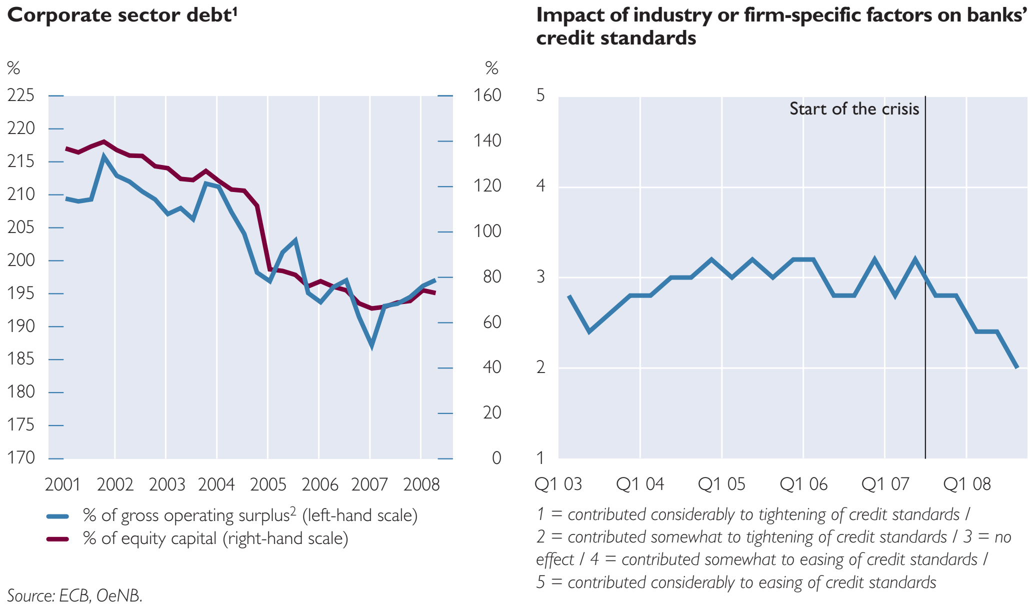
Through its impact on the international economy, however, the financial crisis is also likely to impair the creditworthiness of the corporate sector. The imminent slowdown in growth has deteriorated the sales and profit prospects of enterprises. Moreover, the higher interest rate burden raised costs for enterprises and thus reduced their profits. In this environment, corporate insolvencies – typically a lagging economic indicator – are expected to rise in the near future.

However, falling profits of the corporate sector would not only lead to a corresponding deterioration of credit ratings, but also to a decline in the internal financing potential. Even if less internal financing could be compensated by a stronger reliance on borrowing (loans), the debt ratio would rise so that credit ratings would worsen further.

In the course of 2008, banks started to downgrade enterprises' credit ratings. Since the start of the crisis, the banks covered by the BLS have reported that industry or firm-specific factors prompted them to tighten their credit standards somewhat (right-hand panel of chart 11).

Chart 11

Financial Strength of the Corporate Sector



Source: ECB, OeNB.

[1] Short-term and long-term loans, money market and capital market instruments.
[2] Including mixed income of the self-employed.

[19] *Measured by the gross operating surpluses of companies (including mixed income of the self-employed).*

5.2 Decreasing Value of Collateral

Another transmission mechanism is the impact of the crisis on the value of assets that companies can use as collateral for loans. This affects primarily securities eligible as collateral for lombard loans. Although shares do not constitute the most significant collateral instrument in the loan business, there may be adverse effects on loan growth.

As in the financial sector, the declining values of equity holdings, which in many cases constitute major corporate assets, implied higher write-downs and, as a consequence, income losses also for companies. Austrian nonfinancial corporations held quoted shares valued at EUR 39 billion as at June 2008 according to financial account data. From mid-2007 to the end of September 2008, Austrian companies suffered aggregate valuation losses of around EUR 12 billion from those equities.[20]

5.3 Summary

All in all, the credit standing of enterprises is (still) good. This may be the reason why, overall, the corporate sector experienced only few restrictions in borrowing from banks in the first half of 2008. As the economic downturn develops, however, profits and, hence, the acquisition of internally financed capital assets has to be expected to decline. In parallel, equity investment from outside sources is hampered because of the sluggish stock market. The credit standing of Austrian enterprises, therefore, is likely to deteriorate in the near future, which could make access to loans more difficult.

6 Conclusions

The indicators currently available for banks' loan supply as well as the demand for loans to enterprises and their creditworthiness point to a slowdown in the growth of loans to enterprises, which had remained high until recently.

On the supply side, the financial market turmoil has increasingly affected banks' willingness to lend. At the same time, corporate loan demand is likely to go down for cyclical reasons, with part of this decrease also being caused by the financial crisis through its negative effect on the international economy and thereby on the export outlook for Austrian companies. In other words, part of the slowdown in loan growth would also reflect a decline in demand.

It is difficult to anticipate at present whether loan supply will decrease more than loan demand as both affect primarily the segments M&As and fixed investment. According to the BLS results, however, this seems to be quite probable. In line with the definition given at the outset of this paper, this development would correspond to a credit crunch. It is difficult to estimate from today's perspective how severe it will be and how long it will last. This also depends on how long liquidity will remain tight in the money market and how fast the aid measures taken by the Austrian government and the OeNB will start to show effects.

Not all borrowers seem to be equally affected by banks' tighter lending standards. Large enterprises are likely to be hit harder than small ones. Already up to now, big companies have been affected to a higher extent, since first, it is them who primarily issue shares and second, banks tend to take greater caution in lending to big enterprises. Because of banks' currently tight liquidity positions, it is likely that borrowing will continue to be more difficult the larger the size of the desired

[20] *Price and exchange rate effects.*

loan. Given that a correlation between company size and loan size is not implausible (on average, big enterprises take out higher loans than small businesses), this means that financing constraints would predominantly hit larger companies.

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