Financial Crisis Affects Real Economy Sectors

Financial Crisis Impairs Financing Conditions in Corporate Sector

Austria's Economy Stagnates

So far, Austria's underlying economic conditions have been characterized by exceptionally high levels of uncertainty in 2008. As a result of the turmoil on international financial markets, the global economic outlook has deteriorated substantially. The events of September and October 2008 markedly increased the uncertainties involved in forecasting the development of both the economy and financing conditions. Given the unique nature of the current crisis situation, however, there are no historical patterns on which to base estimates of its future effects.

As a result of slackening global economic activity, Austrian economic growth slowed down noticeably in the first half of 2008. The economic expansion observed in the previous three years came to an end in the second

quarter of 2008. At the same time, the composition of Austrian economic growth changed in comparison to previous years, with exports no longer serving as the driving force of growth. The weakening of Austrian exports has mainly had a negative impact on value added in manufacturing. Investment growth also slowed, but in relative terms it remained fairly robust. Consumer spending continued to show a very moderate development due to high inflation.

Although the economy was clearly cooling off, businesses in Austria (as in the euro area as a whole) still recorded increasing profits in the first half of 2008 after pronounced growth in the previous years — despite the appreciation of the euro and climbing crude oil prices during the first six months of the reporting year.

The development of corporate insolvencies – typically a lagging eco-

Profit Margin²

Chart 2

Indicators of Profitability Performance in the Corporate Sector

Gross Operating Surplus¹ Quarter-on-quarter change in %, seasonally adjusted 6.0 5.0 4.0 3.0 2.0 1.0 -1.0 -2.0 1996 1998 2000 2002 2004 2006 2008 Euro area Austria

Quarter-on-quarter change in %, seasonally adjusted 2.5 2.0 1.5 1.0 0.5 0.0 -0.5

2000

2002

Source: Eurostat.

- ¹ Including fixed income of the self-employed.
- ² GDP deflator less unit labor costs

nomic indicator – still reflects the economic boom of the previous two years, decreasing by 2.1% year on year in the first three quarters of 2008. In nominal terms, estimated default liabilities increased by 3.6% against the first three quarters of 2007. In relation to the corporate sector's total liabilities (based on national financial accounts data), default liabilities dropped from 0.59% to 0.51% in the first three quarters of 2008.

Capital Market-Based Financing Hit Hard by Crisis

Corporate finance in the form of equity issues has been hit especially hard by the global financial crisis, as the Viennese stock exchange's capacity for new issues decreased substantially due to the uncertainty triggered by plummeting stock prices. Since mid-2007, new issues on the Austrian stock market have decreased drastically, and a number of previously announced issues were canceled. In the period from January to September 2008, new issues (including capital increases and new listings) by nonfinancial corporations listed at Wiener Börse AG amounted to EUR 0.4 billion, down from EUR 7.0 billion in the corresponding period in 2007.

Despite its high volatility, financing through quoted shares had made a substantial contribution to corporate financing in the last two years: This instrument accounted for approximately 40% of the inflow of funds in 2006, and its contribution still amounted to 20% in 2007. In the first half of 2008, by contrast, this figure dropped to a mere 1.7%. In this way, the crisis has had quite measurable effects on corporate finance. However, equity issues are only relevant to a fairly small number of predominantly large companies.

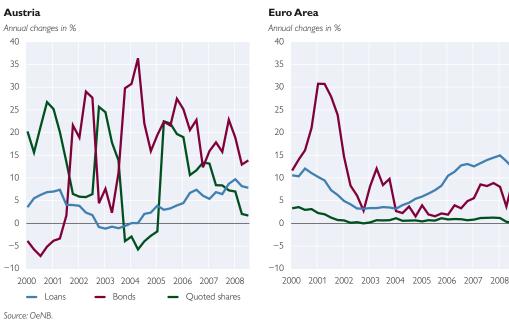
As prices on Wiener Börse AG trended downward in the wake of the financial market turbulence, the market capitalization of nonfinancial corporations listed on Wiener Börse AG also decreased in the first nine months of 2008, dropping by some EUR 37 billion to EUR 64 billion, or approximately 23% of GDP. At the end of September 2008, the market capitalization of all issues listed on Wiener Börse AG (including financial corporations) came to 29% of Austria's GDP.

In the first half of 2008, nonfinancial corporations raised approximately one fourth of their external financing in the form of equity (including overthe-counter equities). As the rules applicable to national financial accounts require equity raised on the stock exchange is valued at current market prices in line with national financial accounting rules, declining stock prices drove down the share of equity in the corporate sector's overall liabilities by 2 percentage points (to 51%) between mid-2007 and mid-2008.

Bond financing continued to show relatively robust growth in the first nine months of 2008. According to the OeNB's securities issues statistics, the annual growth rate of corporate bond issues came to 13.9% at the end of September 2008. This growth rate has remained markedly higher than the overall euro area average. Fixed-rate bonds accounted for more than three quarters of the volume issued during that period. Nearly three-quarters of the bond volume issued were denominated in euro, while the rest was issued in Swiss francs.

Although capital markets have begun to play a more significant role in corporate financing in recent years, bank loans are still by far the most important source of external financing for Austrian companies. According to





national financial accounts data, bank loans accounted for 28.6% of external financing in the corporate sector at the end of the second quarter of 2008; this share is considerably larger than the contribution of quoted shares (20.7%) and bonds (7.6%).

The available data do not yet indicate a decrease in lending to companies. In September 2008, the annual growth rate of MFI loans to nonfinancial corporations in Austria came to 7.8%. In the first few months after the onset of the financial turmoil, credit growth even accelerated (from 6.9% in the second quarter of 2007 to 9.7% in the first quarter of 2008).

In part, this growth — which has remained quite dynamic — might be attributed to substitution effects; as conditions for raising capital through the stock market are tightening, companies have increasingly turned to bank loans. Moreover, sound earnings have enhanced the credit standing of many companies. However, the continued

strength of internal financing suppressed demand for loans in the first three quarters of 2008, as shown by the Austrian results of the Eurosystem bank lending survey. In addition, companies have shown increasing uncertainty about their future investment projects. Subsequently, the financing of fixed investments, which had been among the key drivers of loan demand in the two previous years, contributed slightly to the decline in loan demand in the first three quarters of 2008.

These data do not yet reflect the events of September and October 2008, which clearly had an adverse effect on bank lending to the corporate sector. However, it is reasonable to assume that a financial crisis of this magnitude will slow growth in lending to the corporate sector as banks' lending practices change and companies' credit standing is reduced.

As for bank lending, the Eurosystem bank lending survey – which, since the beginning of the crisis, has also reg-

ularly included ad-hoc questions on the effects of the financial market turmoil on banks' refinancing and credit standards — indicates that refinancing conditions have deteriorated markedly due to the persistent turmoil on global financial markets. These less favorable refinancing conditions have had an impact on banks' margins, and recently their effect on the volume of bank lending has also increased. This development has had a stronger effect on lending to large companies than on SME financing.

Another transmission mechanism is the impact of the crisis on the value of assets which companies can use as collateral for loans. The current upheavals on the financial markets have primarily affected securities, which can be used as collateral for lombard loans. Like in the financial sector, the declining values of equity holdings, which in many cases constitute major corporate assets, may lead to income losses also for companies, as loan loss requirements increase. Austrian nonfinancial corporations held quoted shares valued at EUR 39 billion as at June 2008 according to national financial accounts data. From the third quarter of 2007 to the end of the second quarter of 2008, Austrian companies suffered an aggregate revaluation loss of EUR 4 billion from those equities.

Finally, the cyclical effects of the financial crisis and the accompanying uncertainties are likely to lower companies' sales expectations which, in turn, will decrease their willingness to invest and thus also their demand for loans.

Corporate Debt Rising Faster

As enterprises increasingly rely on debt financing, the growth rate of corporate debt has accelerated noticeably since the second quarter of 2007. In the sec-



² Including fixed income of the self-employed.

¹ Short-term and long-term loans, money market instruments and capital market securities.

ond quarter of 2008, the annual growth rate of corporate debt came to 8.5% (compared to 5.3% in the same period of 2007). In relation to earnings (gross operating surplus), corporate debt also trended upward but still remained clearly below the values observed during the last financial market turmoil at the beginning of the decade (see chart 4). In the second half of this decade, Austrian companies did not follow the euro area-wide trend of sharply increasing debt, and as a result corporate debt in Austria – relative to gross operating surplus and GDP – is now lower than the euro area average.

Financing Conditions Tightening due to Turbulence on Financial Markets

The interational financial turmoil has already had a clear impact on the financing conditions for Austrian companies — in equity and debt financing alike.

Corporate Financing Conditions

Stock prices on Wiener Börse AG have declined substantially since the onset of the global financial turbulence. Between the end of 2007 and November 13, 2008 (the cut-off date for this report), the Austrian Traded Index (ATX) fell by approximately 60%. However, as the profits of enterprises listed on Wiener Börse AG have continued to show a positive development, the earnings yield has increased markedly since the turbulence began in mid-2007. This implies that the cost of raising capital on the stock market is going up. The earnings yield has also risen noticeably in relation to the development of government bond yields, which points to higher risk premiums on the stock market.

The yields of corporate bonds on the euro bond market rose by approximately 2 ½ percentage points in the first ten months of 2008.² The long-term yields of government bonds have

2005

2007

Chart 5



Loans (interest rate for new euro loans of more than EUR 1 million)

Bonds (yields on BBB-rated corporate bonds in the euro area)
 Shares (earnings yield on the Austrian stock market)

Source: OeNB, Thomson Financial, Wiener Bö 5frse AG

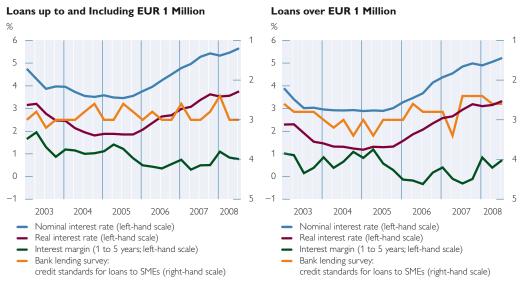
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¹ The earnings yield is the inverse of the price/earnings ratio.

This figure is based on the development of BBB-rated bonds in the euro area. Separate data series for Austria are not available.

Chart 6

Conditions for Corporate Loans



Source: OeNB. ECB.

Note: Right-hand scale ranging from 1 (tightened considerably) to 5 (eased considerably).

Real interest rate: nominal interest rate less the OeNB's HICP forecast for the year following the forecast date.

Interest margin: interest charged for loans with a maturity of 1 to 5 years less 3-year swap rate.

Bank lending survey credit standards: changes in the credit standards for loans to enterprises over the last three months.

declined slightly since the beginning of the year, but at the same time — due to the increasing uncertainty arising from the financial market turmoil — the risk premiums on corporate bonds have risen sharply in relation to government bonds of similar maturity.

The conditions for taking out bank loans have also deteriorated as a result of the ongoing financial crisis. From the end of 2005 onward, interest rates on corporate loans already followed an upward trend prompted by the ECB's interest rate hikes. Due to the crisis of confidence on international financial markets, the gap between money market rates and policy rates has widened since mid-2007. As money market rates serve as the primary benchmark for variable rate loans, the interest rates on bank loans have increased accordingly.

In contrast, the interest margins on corporate loans changed only slightly in the first three quarters of 2008; this is clearly visible in the development of the spread between interest rates on corporate loans and the swap rate for the same maturity.

According to the Austrian results of the Eurosystem bank lending survey, Austrian banks have increased their margins for loans to the corporate sector since the third quarter of 2007. These increases have been far more pronounced for higher-risk borrowings than for borrowers of average credit standing. At the same time, the credit standards for corporate loans (i.e., loans to large corporations and SMEs) have been tightened. In this context, credit standards have been raised far more for long-term loans than for shortterm loans. The global financial turmoil and its effects on financing conditions in the money and bond markets were a major factor behind these changes in credit standards.

Interest Expense on the Rise

Interest expense in the corporate sector has risen rapidly since the beginning of 2006. This development can be attributed primarily to increasing interest rates but also to robust credit growth, which in the first two quarters of 2008 even accounted for a larger share in the widening of interest expense (chart 7).³ In the third quarter, interest expense was approximately 80% above its five-year low. These increased rates can place a noticeable additional burden on heavily indebted companies with high interest expenses.

Corporate Sector Enjoyed Sound Risk Position at Start of Crisis

In recent years, the corporate sector has substantially reduced its exposure to a number of financial risks. On the liabilities side, the sector's exposure to interest rate risks decreased markedly until the middle of 2007, mainly due to the increasing importance of equity in corporate financing structures. Subsequently, the increasingly dynamic growth in loans brought about a slight increase in the share of interest-bearing liabilities in the total liabilities of the corporate sector.

Chart 7

Interest Expense on Corporate Loans

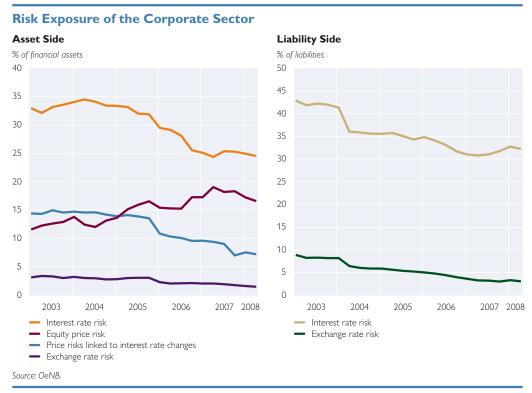
Development over Time Change on Previous Change EUR million EUR millior 2.000 120 100 1.800 80 1.600 60 1.400 40 1.200 20 0 800 -20 -40 400 -60 200 -80 -100 2007 2008 2003 2005 2006 2007 2008 2003 2004 2005 2006 2004 Foreign-currency loans (left-hand scale) Interest rate effect Euro loans (left-hand scale) Volume effect Change % of gross operating surplus (right-hand scale)

Source: OeNB, Eurostat.

Note: Interest expense on euro loans: loans to nonfinancial corporations according to MFI balance sheet statistics multiplied by the corresponding interest rates on outstanding amounts according to MFI interest rate statistics. Interest expense on foreign currency loans: loans to nonfinancial corporations according to MFI balance sheet statistics multiplied by the corresponding interest rates on loans on U.S. dollar, Japanese yen and Swiss franc loans to households and nonfinancial corporations according to MFI interest rate statistics.

³ The interest rates for new business (for both nonfinancial corporations and households) were used to calculate interest on foreign currency loans, as OeNB interest rate statistics do not provide any data on the outstanding volume of those loans. As a vast majority of foreign currency loans are based on periodically adjusted variable rates, this approximation should still be fairly accurate. Please note that these calculations only include interest payments proper (no noninterest rate charges).

Chart 8



In recent years, the corporate sector has also substantially reduced its exposure to exchange-rate risk in corporate financing. On the whole, the sector continued to decrease its exposure to foreign currency loans, which only accounted for 8.4% of loans to companies as of mid-2008 (down from 8.9% in 2007). The share of corporate bonds issued in foreign currencies dropped by approximately 3 percentage points to about 15% between mid-2007 and mid-2008. In the second quarter of 2008, foreign currency-denominated liabilities accounted for only 3.1% of the corporate sector's total liabilities, down from 3.3% in 2007.

On the assets side, companies have decreased their exposure to interest rate risks substantially. In contrast, the risks arising from stock price fluctuations in companies' financial assets played a far more significant role until the second quarter of 2007, after which

those risks began to decline. This development not only reflects the transactions conducted by companies, but mainly stems from fluctuations in stock prices, which had a noticeable effect on the market value of equities held by the corporate sector.

Overall, in mid-2008 — approximately one year after the onset of the international financial turbulence — the Austrian corporate sector was in quite a favorable risk position.

Conclusion: Financial Crisis Also Affects Corporate Finance

The financial crisis has clearly had a negative impact on the corporate sector's ability to obtain external financing. Up to now, this has mainly affected enterprises' ability to raise funds through the capital market, whereas loans remained a stable form of financing for the corporate sector at least until the summer of 2008. Up to that

point, therefore, it seemed advantageous that Austria's corporate sector still relied more heavily on bank loans than on capital market-based financing – despite the rising significance of the latter in recent years.

However, in the third quarter of 2008, an increasing number of signs indicated that credit standards might worsen for the corporate sector as well. The uncertainties on global financial markets have increasingly reduced banks' willingness and ability to lend. This is likely to become more and more visible in lending developments if companies cannot resort to alternative forms of financing (especially internal financing) as much as they have in the past and if their credit standing deteriorates at the same time. Given the sharper differentiation of risk which has characterized bank lending for several quarters (especially in the case of largevolume, high-risk lending), this tendency could increasingly spread to other borrower groups.

Moreover, the financial market turbulence has affected corporate finance by way of driving up financing costs, which very quickly translated into higher interest expense in the corporate sector due to the large share of variable rate loans as well as continuously high credit growth.

Unlike in 2006 and 2007, the development of economic activity will no longer provide a cushion for the corporate sector's financial position. In the course of 2008, the Austrian economy has seen a significant slowdown, which indicates that 2009 will be a very difficult year in economic terms. This economic environment will also have a dampening effect on the corporate sector's earnings outlook.

In terms of business size, the tensions on the financial markets have affected larger companies more than smaller ones, as equity issues are primarily used by larger companies and banks' more cautious lending policies have also had a stronger effect on large companies than on SMEs.

However, the corporate sector as a whole is still in a strong position despite the deterioration in financing conditions. By mid-2008, corporate debt had only risen slightly in relation to earnings development, and at the same time companies' sound performance has enhanced their ability to service debt as well as their internal financing potential. Despite some deterioration in recent quarters, the corporate sector's exposure to financial risks has also decreased (with the exception of equity price risk) compared to the beginning of the decade.

Household Sector Takes Large Revaluation Losses on Capital Market-Linked Financial Assets⁴

Spending Weak, Savings Rate Climbing

High GDP growth substantially improved the situation on Austria's labor market, and as a result the rate of unemployment (Eurostat definition) dropped to 3.4% in 2008. However, consumer spending showed very moderate development in the first half of 2008, with real growth amounting to only 1.0%. On the one hand, this can be attributed to increased pressure on household income due to high inflation; inflation, in turn, clearly had an adverse effect on real disposable income, which only rose by 1.4% compared to the previous year. On the other hand, this development also reveals a strong

⁴ This sector also includes nonprofit institutions serving households (e.g. trade unions, churches, foundations) and self-employed persons.

trend toward savings, which points to increasing uncertainty. The savings rate rose from 11.3% in 2007 to 12.8% in 2008.

Financial Market Turbulence Leads to Portfolio Shifts

On the whole, the international financial crisis has only had a slight effect on the level of financial investment. In the four quarters following the onset of the financial turmoil (i.e. from the third quarter of 2007 to the second quarter of 2008), financial investment amounted to EUR 20.7 billion, up from EUR 20.4 billion in the four preceding quarters.

However, considerable shifts can be identified in the structure of these investments. Austrian households have shifted new investments away from equities and into deposits. This substantial increase in new deposits, which had already begun in the first half of 2007 and probably resulted from higher interest rates and increased stock market volatility, continued – and even intensified – in the first half of 2008. Accord-

ing to national financial accounts data, new deposit business between the third quarter of 2007 and the second quarter of 2008 was 18.6% higher than in the previous four quarters. According to OeNB banking statistics, new time deposits showed above-average growth from the start of the financial crisis in the third quarter of 2007 until June 2008; at the same time, savings deposits saw only below-average growth, and demand deposits even decreased in net terms. During the same period, financial investments in capital market instruments (stocks, bonds and mutual fund shares) dropped by 17.6%. The household sector reduced its investments in mutual fund shares by about EUR 2.7 billion (chart 9).

Investments in life insurance policies and pension funds have dropped fairly sharply. In the four quarters after the start of the financial crisis, new life insurance policies decreased by 36%, and new pension fund investments by a full 45% compared to the four quarters preceding the crisis.

Chart 9



Thus, in the second quarter of 2008 the structure of financial investment was as follows: Deposits accounted for the largest share of financial investment at 59.3%, followed by capital market instruments (stocks, bonds and mutual fund shares) at 25.7% and life insurance policies at 6.7%. Pension fund investments accounted for 3.9% of financial investment.

Large Revaluation Losses in Financial Assets

Whereas the revaluation gains on households' financial assets exceeded revaluation losses by a substantial margin prior to the financial crisis, the situation has changed since the third quarter of 2007. From the onset of the financial market turmoil in the summer of 2007 until the second quarter of 2008, households' securities portfolios (stocks, bonds and mutual fund shares)

suffered price losses amounting to EUR 23.7 billion, or 19.5% of the amount which had been invested in those instruments by mid-2007. These losses were especially severe in the case of directly held quoted shares, where revaluation losses came to 47.8%.5 The prices of real estate stocks in particular plummeted between 2007 and 2008. Whereas real estate stocks accounted for nearly 30% of the equity portfolio of Austria's private investors at the end of March 2007, this proportion had dropped to approximately 20% (about EUR 3.3 billion) by the end of January 2008.6

In the case of mutual fund shares, revaluation losses came to 12.2%. The bond portfolio held by households has also seen minor price losses since mid-2007 (–3.2%), which essentially reflect the increased risk premiums on corporate bonds.⁷

Chart 10

Revaluation Gains and Losses in Households' Financial Assets



⁵ These investments accounted for 3.64% of the overall assets held by households.

⁶ See Sedlacek, G. 2008. Die Entwicklung von Immobilienaktien im Aktienportefeuille österreichischer privater Haushalte von 1999 bis 2007. In: Statistiken Q2/08. OeNB. 48–52.

Based on households' total assets, revaluation losses came to 1.41% for mutual fund shares and 0.26% for bonds.

Exposure to Price Risks Declines Slightly

In the years leading up to the financial crisis, the share of capital market instruments in households' overall financial assets grew substantially. In the second quarter of 2008, nearly onefourth of these financial assets were exposed to price risks, compared to approximately 20% five years earlier. One of the main drivers behind the rise in capital market exposure in the Austrian household sector was the increased significance of funded pension schemes in Austria. As at mid-2008, 3.5% of households' financial assets were invested in pension funds. Severance funds and state-subsidized retirement savings plans only accounted for a small share of households' financial assets in 2007 (0.4% and 0.6%, respectively).

From mid-2007 to mid-2008, however, the share of capital market instruments in households' financial assets dropped by 3 percentage points – a development which can be attributed to portfolio shifts as well as price losses. At the end of the first half of 2008, 19.9% of households' financial assets were exposed to valuation risks due to interest rate fluctuations, while 8.8% were exposed to these risks due to fluctuations in stock prices. This development was mirrored in the decreasing share of interest rate risk in household investments. By mid-2008, some 40% of households' financial assets were exposed to short-term interest rate risk (initial rate fixation period of up to one year) and 25% were subject to longterm interest rate risk. Compared to mid-2007, this constitutes an increase of 2.7 percentage points in the share of financial assets exposed to short-term and long-term interest rate risk.

Negative Performance of Funded Pension Savings

The plummeting stock market prices clearly had an adverse effect on funded pension instruments. According to the Oesterreichische Kontrollbank, the overall performance of pension funds came to -9.33% between the start of the financial crisis in the third quarter of 2007 and September 2008. For retirees already drawing supplementary pensions from such funds (58,471 retirees in 2007), this led to a reduction of current pension payments. These developments have not had immediate efon prospective beneficiaries (484,359 persons in 2007), but effects on the future amount of their pensions are fairly probable depending on the time remaining until retirement.

The performance of severance funds (2.7 million prospective beneficiaries in 2007) is also expected to decline. In 2007, the performance of those funds was already very low, with values ranging from 0.2% to 3.1%. In this case, a legal capital guarantee ensures that at least the capital paid in remains secured

The financial crisis is likely to have particularly strong effects on subsidized personal pension schemes (for which some 1.2 million contracts had been concluded by June 2008), as their share of equities is especially large and also concentrated in small capital markets which have been hit especially hard by the crisis. At least 40% of the assets in these pension plans must be invested in stocks quoted on stock exchanges in the European Economic Area (EEA) with a maximum market capitalization of 40%. However, a legal capital guarantee applies to these investments as well.

Life insurance policies and mutual funds are also used for the purpose of private pension provision. Life insurance policies provide for a guaranteed interest rate, which is currently 2.25%. However, shares in profits beyond that level have probably been reduced substantially by the decline in stock prices.

Lending Rates Go Up

According to the Eurosystem bank lending survey, banks' credit standards for housing loans and consumer loans to households have tightened somewhat this year. The interest margins on loans to households — both for house purchase and consumption — were raised in the first three quarters of 2008 for average-risk and higher-risk loans alike.

In the first half of the year, nominal interest rates rose to 5.34% for housing loans (up 0.50 percentage points from September 2007) and to 7.09% for consumer loans (up 0.67 percentage points from September 2007). These increases can largely be attributed to the rise in interbank lending rates due to the shortage of liquidity on the money market.

Real Estate Prices Continue to Climb

After a long period of stagnation, house prices in Austria began to rise approximately three years ago. This development was especially pronounced in Vienna, where the prices of single-family houses and building lots in particular saw substantial growth. In total, the real estate price index for Vienna rose by approximately 23% in nominal terms from the beginning of 2005 to the second quarter of 2008. Adjusted for inflation, the increase over that period came to about 14%. In relation to disposable income, real estate prices have risen back up to the level attained in 2000 (chart 11, left-hand panel). In real terms, real estate prices have changed only little over the last three years.

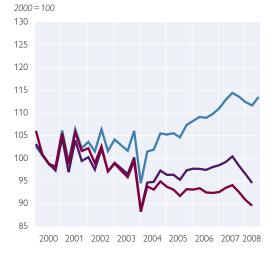
The development of real estate prices has a strong influence on consumer and investment decisions as well as on household debt, as real estate properties are often held as assets and as collateral for loans.

Chart 11

Real Estate Price Index

Vienna 2000 = 100 130 125 120 115 110 105 100 95 90 85 2000 2001 2002 2003 2004 2005 2006 2007 2008 — Nominal — Real — Relative to disposable income

Austria (excluding Vienna)



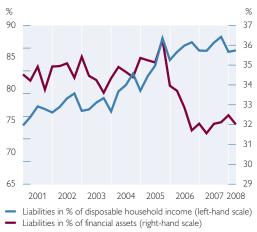
Source: OeNB, Statistics Austria, Vienna University of Technology.

MFI Loans to Households

Year-on-year Change



Liabilities Relative to Financial Assets and Disposable Household Income



Source: OeNB

New Borrowing on the Decline

The growth of new loans to households has declined steadily since 2005, falling to 3,8% in September 2008. This means that credit growth has been below average, slower than the level of GDP, long-term interest rates and inflation would allow in a state of economic equilibrium.⁸ This decline has been observed in housing loans as well as consumer loans. However, these data do not yet reflect the deterioration of banks' refinancing conditions of October 2008, which has also had a decidedly negative effect on bank lending.

According to Austria's national financial accounts, the overall liabilities of households (mainly borrowed funds) came to 32% of their financial assets, or 86% of their disposable income, in mid-2008. In relation to financial assets as well as disposable income, debt has remained stable since the second half of 2007. At 53.4% of GDP, Austrian household debt was also rather low by international comparison at the end

of 2007, as the corresponding figure for the euro area as a whole came to 59.1%.

Interest Expense Rising Further

The share of variable rate euro-denominated loans in total new lending to households dropped to 54% in the second half of 2008 (compared to 62% in the fourth quarter of 2007), but this percentage is still relatively high. Foreign currency loans usually have floating interest rates. In light of the large share of variable rate loans, changes in market rates pass through to retail rates relatively quickly.

After briefly coming to a standstill in the first half of 2008, the rise in interest expense on personal loans observed since the start of 2004 resumed in the third quarter of 2008. At the end of that quarter, interest expense on personal loans came to 3.9% of disposable household income, up 0.2 percentage points from the previous quarter. This rise can be attributed to the sharp increase in lending rates.

⁸ For more information, please refer to the contribution by Friedrich Fritzer and Lukas Reiss, "An Analysis of Credit to the Household Sector in Austria" in this publication.

Interest Expense on Household Loans

Interest Expenditure on Household Loans

1.700 4.0 3.8 1,600 3.6 1500 3.4 1,400 3.2 1,300 3.0 1.200 1,100 2.6 1,000 2.4 900 2.2 2.0 800 2005 2006 2007 2008 2004 FUR million (left-hand scale) % of disposable income (right-hand scale)

Change in Interest Expenditure



Source: OeNB

Higher interest expenses were also offset by increases in households' interest income, which went up by 24% year on year in the third quarter of 2008. Approximately 84% of this increase can be attributed to a rise in interest rates, while the remaining 16% can be put down to the deposit growth. These figures do not include interest income from fixed-income securities (held directly as well as indirectly via mutual fund shares, life insurance policies, etc.). On balance, the household sector will probably continue to see positive net interest income thanks to its position as a net creditor.

Foreign Currency Loans Hit Hard by Crisis

The ongoing financial crisis has also had a massive impact on foreign currency loans to households. In the third quarter of 2008, the share of foreign currency loans in domestic loans to households came to about 30%, up 2.5 percentage points compared to the end of 2007. This increase was essentially

driven by exchange rate movements. The Swiss franc accounted for approximately 95% of the volume of foreign currency loans to households, while the Japanese yen accounted for 4%.

The financial market turbulence affected the risks associated with foreign currency loans in two ways. First, the exchange rate risk associated with these loans materialized this year: The appreciation of the Swiss franc brought about (unrealized) revaluation losses totaling more than 5.6% of the volume of foreign currency loans in the first quarter of 2008. In the second quarter, households did see revaluation gains of about 2.8%, but these were followed by further revaluation losses of approximately 1.6% in the third quarter of 2008.

Second, the crisis has affected the funds invested in repayment vehicles used to redeem foreign currency loans. Depending on the share of equities involved, the life insurance policies and mutual fund shares used as repayment vehicles showed negative performance due to the decline in stock prices. An-

other determinant is the annual rate of appreciation assumed for the repayment vehicle upon conclusion of the foreign currency loan contract. The higher this factor is, the higher the probability is that the earnings achieved over the last few years will no suffice to offset recent losses.

By mid-2008, some two-thirds of foreign currency loans (in terms of loan volume) were backed with repayment vehicles. Even though most foreign currency loans involve long maturities (by mid-2008, 80% of foreign currency loans linked to repayment vehicles had a residual term of 10 years or more, and approximately one-third had even more than 20 years time to maturity), this development also had immediate effects because in many cases the shortfall in coverage due to price losses often required supplementary payments, higher monthly payments or an extension of maturities.

Box 1

Eurosystem Survey on Household Finance and Consumption (HFCS)¹

In the coming years, the Eurosystem plans to carry out a broad-based survey on the finances and expenditure of households at regular intervals (at least every three years). The project is to be carried out decentrally, and partly in cooperation with national statistical institutes.

This type of data has not been available in the past, meaning that economic researchers have had to rely on macroeconomic data (national financial accounts) and/or national surveys with limited focus areas (EU-SILC,² consumer surveys).

Along with the U.S. Survey of Consumer Finance, the HFCS will be one of the few surveys worldwide to offer information on household income, expenditure, assets and debt from a single source. This will make it possible to answer a large number of important research questions. The results will be important from the central banks' perspective on financial stability in particular. Examples of questions where the survey will prove useful:

- What risks are associated with the sharp rise in household debt? Countries in the euro area exhibit vast differences in this respect. Harmonized data will enable an international comparison which will reveal the determinants and consequences of debt as well as the influence of relevant institutions in this area.
- How do wealth effects influence consumption? In any case, households react more strongly to capital losses than to capital gains. The wealth effects of real estate are even stronger than those of financial assets. However, wealth effects also vary considerably across household categories, which implies that there are different transmission channels.

The OeNB plans to conduct the Austrian part of the survey in the fall of 2009 in close cooperation with the Deutsche Bundesbank. An overview of the challenges involved in wealth research in the euro area by Pirmin Fessler, Peter Mooslechner and Martin Schürz will be published in the OeNB's Statistiken Q4/08.

- ¹ HFCS: Household Finance and Consumption Survey.
- ² SILC: Statistics on Income and Living Conditions.

Conclusion: Households' Risk Position Has Worsened in 2008

As a result of the financial crisis, the position of households has deteriorated markedly since mid-2007. On the assets side, declining stock prices have generated large revaluation losses in

households' financial assets, which has also had a negative impact on funded pension schemes and on the repayment vehicles used to repay (mainly foreign currency-denominated) bullet loans. Households have responded by shifting their portfolios from capital market instruments to deposits. However, shortterm shifts are more difficult in the case of retirement savings and repayment vehicles for foreign currency loans.

On the liabilities side, the financial market turmoil has led to a slight tightening of credit standards. Even if new household debt is fairly low by international comparison, it still exhibits several risk characteristics, including a large share of variable rate loans, which can quickly translate into higher interest expense, and a high level of foreign exchange risk (aside from the risks associated with repayment vehicles used to redeem foreign currency loans).

Finally, the economic slowdown will probably weaken households' income growth, and the savings rate will continue to rise as a result of higher uncertainty.