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REPORTS

Austrian Financial System in Good Shape

Oil Price Heightens Business Cycle Risks – Yield Developments Pose an Additional Risk Factor

Many industrialized countries and emerging market economies (EMEs) saw a robust upswing in the past quarters, whereas GDP growth in the euro area remained more subdued. Austria was no exception to the euro area trend. Exports and domestic demand have been on the decline since the beginning of 2005. Although economic prospects for the upcoming quarters remain positive, the high price of oil persists as one of the main sources of risk to economic growth. Oil price developments are also key for the future trend of inflation. While inflation in most industrialized countries already reflects the impact of more expensive oil, the appreciation of the currencies of some new Member States of the European Union (EU) has partly offset the risen price of oil.

Apart from the price of oil, developments of international short- and long-term interest rates and investors' risk tolerance represent a potential threat to the growth and financial stability of the emerging market economies of Central and Eastern Europe (CEE), as some of these countries' currencies have become quite strong and as risk premia on the (domestic and foreign currency-denominated) bonds of the EMEs are generally already quite low.

Corporate Financing Conditions Remain Favorable

On the back of ongoing high profits and favorable financing conditions on both the capital and credit markets, the domestic corporate sector's financial position has improved. Capital market instruments again played quite an important role for new corporate sector borrowing. The issuance of stocks and bonds posted a robust rise compared to a marginal increase in lending; this further ameliorated corporate balance sheets. Apart from the above-mentioned cyclical risks, a possible deterioration of financing conditions represents the main source of risk for the corporate sector.

Risk to Households' Financial Positions Intensifies

Although, once again, real incomes merely edged up, Austrian households managed to enlarge their financial assets considerably. Valuation gains were partly responsible, as was households' recent preference for securities, mutual fund shares and insurance products for investment. The development of households' financial assets is clear evidence of the growing importance of private investment in pension schemes. At the same time, liabilities also continued to expand, albeit less substantially; the boom in foreign currency borrowing was unbroken. Both the number of bankrupt households and the volume of liabilities outstanding of bankrupt companies were on the rise again recently. Overall, these developments subject the household sector to increased risk. On the asset side, the sector is more heavily exposed to price risks, and on the liability side, it has to face growing currency risk because of foreign currency borrowing as well as increasing interest rate risk because the share of variable rate loans is high and rising in Austria.

Austrian Banking Activity Posts Dynamic Growth

On the back of the favorable market developments for the corporate sector, Austrian banks performed well, with

total assets expanding at a high rate. Banks' domestic business benefited from the above-mentioned intensified capital market orientation of the corporate sector and households' investment activity, which boosted fee-based income. This enabled Austrian banks to more than offset moderate credit demand. Austrian banks' cost/income ratio is better than it was in the entire period from 1995, and profit margins have regained their excellent levels of 2000 and 2001. However, high competition kept the domestic interest margin low. Austrian banks' business in CEE, which is characterized by strong credit growth and continued high profit margins, helped raise profitability most. Given these healthy profits and enduring high capital ratios as well as the noticeable drop in the ratio of specific loan loss provisions to claims on nonbanks, Austrian credit institutions' risk exposure improved further. Moreover, stress tests in the major risk categories testify to the reduction of the interest rate risk.

Austrian banks' success in CEE has resulted in their growing dependence on the profitability of these markets for some time now. This makes it imperative for banks to put greater effort into their domestic business. In addition, this dependence renders it all the more important for banks to ensure that the quality of their rapidly growing loan portfolios in these markets remains sustainable and sound in the long term. As the experience of previous credit cycles shows, a moderate rise in credit risk costs is to be expected, now that credit growth has been recovering since 2003 following a period in which domestic lending was on the decline. Also, households' aforementioned greater risk exposure could affect the quality of domestic customers' portfolios. Additionally, banks' hedge fund investment risk must be carefully monitored in view of the higher risk inherent in this type of investment.

Like Austrian banks, Austrian insurance companies are doing well, also drawing on their CEE business success. Austrian pension funds' asset growth and their investment performance remained on track in 2005.

International Environment Fraught with Increased Downside Risks

Oil Price Dampens Economic Growth and Speeds up Inflation in Many Industrialized Economies

OECD economic growth came to 3.4% in 2004, a fairly robust rate compared to the long-term average. Since mid-2004, growth has slowed to a more moderate pace. The prime cause of the slowdown is the rise in the price of crude oil and crude oil products, whereas continued favorable financing conditions and relatively high budget deficits supported growth. The price of oil has roughly doubled since the beginning of 2004, repeatedly surpassing experts' forecasts. Most up-to-date forecasts see the oil price remaining high in the upcoming years; Consensus Forecasts predict a range of USD 45 to USD 75 at the end of 2006. On account of the elevated price of oil, inflation has risen in many countries; core inflation, though, has remained moderate so far. Obviously, various factors – such as more intense international competition on the labor and goods markets, existing excess capacity and high profit margins – have partly buffered the price pressure emanating from oil so far. In its most recent World Economic Outlook for 2005 and 2006, the International Monetary Fund (IMF) is optimistic about the world economic development, envisaging growth rates close to the long-term average and moderate inflation. According to the IMF, the global financial system will be quite resilient to shocks in the near future given the recent high profitability of financial intermediaries and of the corporate sector.

However, the continued positive outlook for growth is fraught mainly with downside risks, whereas the risks to inflation are mainly upside considering possible second-round effects of the high oil price. Apart from the effects of expensive oil, downside risks were caused by the disorderly adjustment of the U.S. current account deficit, which is generally regarded as too high, and a sharp, rapid rise in the maturity and inflation risk premia inherent in long-term bond yields; the latter could have a negative impact on real estate prices, which have spiraled upward in many countries.

Table 1 provides an overview of the changes in the economic outlook for the U.S.A., the euro area and Japan.

Table 1

IMF World Economic Outlook of April and September 2005

%

	GDP growth				Inflation rate			
	Apr. 2005	Sep. 2005	Apr. 2005	Sep. 2005	Apr. 2005	Sep. 2005	Apr. 2005	Sep. 2005
	2005		2006		2005		2006	
U.S.A.	3.6	3.5	3.6	3.3	2.7	3.1	2.4	2.8
EU-12	1.6	1.2	2.3	1.8	1.9	2.1	1.7	1.8
Japan	0.8	2.0	1.9	2.0	–0.2	–0.4	. .	–0.1

Source: World Economic Outlook, IMF.

Stable Bond Markets, Gains in European and Japanese Stock Prices, Robust U.S. Dollar

In the *money markets*, the U.S. Federal Open Market Committee lifted policy rates three times by a total of 75 basis points to 3.75% from May 2005, whereas comparable euro area rates remained unchanged at 2% and Japanese key interest rates were left at 0%. The U.S. Federal Reserve held out the prospect of further moderate rate increases given the need to preserve price stability and the continued supportive nature of the monetary policy stance. An increasingly debated topic on Japanese markets was the possibility that monetary policy would be tightened in view of a higher probability of a permanent return to positive core inflation figures. In the period from May through October 2005, the Governing Council of the ECB emphasized the need for strong vigilance with regard to the upside risks to price stability in the euro area. In the U.S.A., the 12-month money market rate continued to rise in tandem with policy rates; temporary reductions followed the natural disasters in the U.S. South. With euro area markets expecting policymakers to postpone key interest rate hikes or even to cut rates again, money market rates in the region declined until June 2005. From June to October 2005, money market rates augmented by some 20 basis points. In Japan, 12-month money market rates began to rise in June 2005, possibly reflecting the expectation that key interest rates would be raised in the future. The implied volatilities of options on euro- and U.S. dollar-denominated money market futures decreased further from May through June 2005 and stabilized at a low level from then on, signaling that markets were fairly confident about the development of key interest rates. Fairly precise market expectations about future short-term interest rates tend to contribute to lower long-term interest rates.

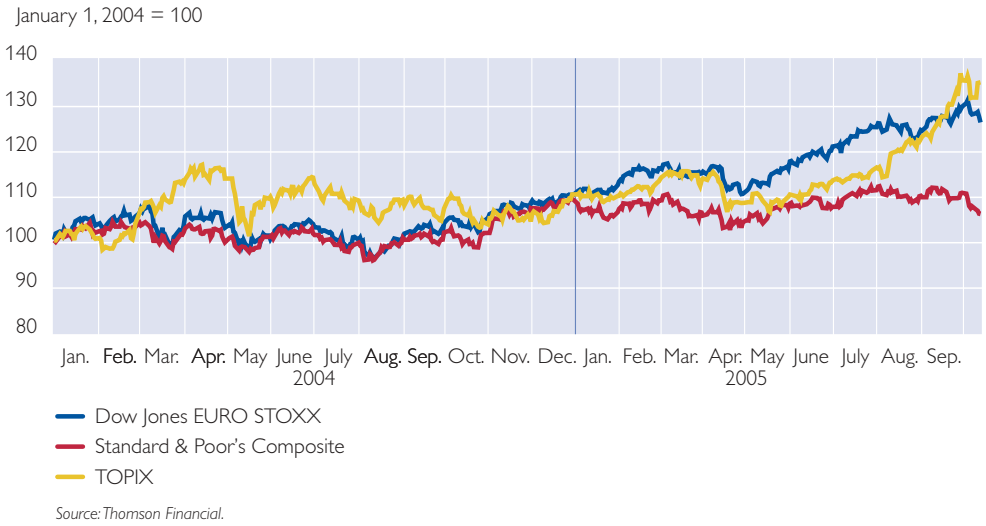
The yield curve in U.S. *government bond markets* flattened further from May through October 2005 in the U.S.A. because of the more pronounced rise in short-term interest rates. In the euro area, the yield curve shifted slightly with short-term rates going up and long-term rates falling, but continued to exhibit a slightly rising profile. Long-term interest rates in both regions remain low in a historical comparison. In particular in the euro area, these developments are partly based on the downward revision of market expectations about long-term growth. In Japan, yields on medium- and long-term maturity bonds rose, which resulted in a steeper yield curve and the elimination of its negative convexity. This development is likely to be linked to greater expectations that the Bank of Japan would end its policy of quantitative easing. Inflation risk premia derived from ten-year inflation-indexed bonds have climbed somewhat since July 2005 in the U.S.A. and in the euro area, apparently on account of the further rise in the price of oil, which has at least a temporary effect on inflation rates. Overall, it looks like inflation expectations on U.S. and euro area bond markets are firmly anchored at levels consistent with price stability. Long-term real interest rates, which are measured in terms of the yields on these bonds, have declined further in the euro area, whereas they have edged up in the U.S.A. Risk premia on corporate bonds sank marginally after having increased powerfully from March through May 2005 and are currently low compared to their long-run aver-

ages. Companies' good profit performance along with their lower propensity to invest and thus improved debt ratios are probably at the heart of this development. An increased willingness to assume credit risk to reach high rates of return in the hunt for yields may also have played a role.

In the *stock markets,* investors in European and Japanese equities saw powerful price gains of about 12% and 20%, respectively, from May through mid-October 2005; U.S. stock prices went up by only about 3%. Oil and gas sector stocks posted above-average gains. The positive development of Japanese stock price indices is attributable, among other things, to the improved economic outlook and perhaps also to the outcome of the elections to Parliament. Conversely, in the euro area, stock price gains were triggered more by good profitability figures and prospects. U.S. stock markets are likely to have suffered from the natural disasters affecting the South and from surging oil prices and prices for processed petroleum products, which weighed on investor sentiment and hence on prices.

Chart 1

Stock Indices in the U.S.A., the Euro Area and Japan



Source: Thomson Financial.

In the *foreign exchange markets,* the euro slipped against the U.S. currency and the Japanese yen from May to June, whereas it stayed fairly stable against the Swiss franc. The euro recovered fully against the yen, but only temporarily against the U.S. dollar. It then lost ground again vis-á-vis the U.S. currency and stabilized at a bit over 1.20 USD/EUR in mid-October. A key reason for the dollar's growing strength since May 2005 is probably the edge that U.S. dollar-denominated securities have over lower-yield financial instruments. The rejection of the EU constitutional treaty by referendum in France and in the Netherlands seems to have caused a temporary dip in the euro. The partial liberalization of the Chinese currency regime in July 2005 had no noticeable impact on the currency relations among the euro, the U.S. dollar, the Japanese yen and the Swiss franc.

Net Capital Inflows to the Emerging Markets in 2005 Decline Substantially

Economic Growth to Stay Robust though Weaker in 2005 and 2006

Economic growth in the *emerging market economies (EMEs)* is expected to average 6½ % in 2005, falling short of the record rate of 7.3% in 2004. However, the largely unchanged aggregated growth forecast for the region masks considerable changes in regional and individual forecasts that reflect the change in the price of oil and other commodities, the risks involved in manufacturing and trade globalization and country-specific factors. The cyclical outlook for the EMEs remains upbeat for 2006; the IMF has adjusted its forecast for real GDP growth upward slightly to 6.1% at a perceptibly higher rate of inflation. The key risks to economic developments in the EMEs lie in a high and volatile oil price, a rapid and marked rise in historically low interest rates in the industrialized countries and these countries' growing protectionism in the face of e.g. textile imports from China. The IMF called on the EMEs to roll back their debt ratios of currently 60% of GDP and to improve their debt structure. *Asia's* economies kept up their fast pace of growth in the first half of 2005, remaining the global engines of economic growth alongside the U.S.A. Exports have recently maintained a steady growth rate, and domestic demand has continued to show fairly strong growth momentum in most major economies in the region. At the same time, inflationary pressures remain moderate, as some of these countries had already started to tighten monetary policy in 2004. In China and in India, the authorities had chosen to do this by lifting interest rates and minimum reserve requirements for banks. Most recently, inflationary pressures intensified in some countries in the wake of the reduction in fuel subsidies. China's economic growth rate is expected to be only a bit lower in 2005 than in 2004 (9.5%) in spite of efforts to dampen growth (revaluation, expenditure limits) but should ease gradually in 2006 as exports and investment lose momentum. China's latest annual inflation figure came to just 1.3% (August 2005). Growth prospects remain bright in *India* as well. With domestic demand – in particular consumer spending – on the rise, the economic outlook for the region remains favorable, although high oil prices represent a considerable risk. Most countries incur great expenses to sterilize strong inflows from abroad – the IMF predicts that reserves will augment by almost USD 300 billion to nearly USD 1,200 billion in 2005 on account of continued strong current account surpluses and speculative capital inflows, covering more than four-fifths of annual imports – and are additionally threatened by the specter of capital losses in the event that the dollar slides further against the national currencies. In *Latin America,* powerful growth is set to continue, albeit at a more moderate pace, with exports and domestic demand as the main engines of growth. Because its external debt is comparatively high, the above-mentioned risk of a rise in long-term interest rates in industrialized countries applies particularly. In the *Middle East,* rising oil production and oil prices alongside substantial improvements in current accounts and budgets have bolstered economic growth. The development of infrastructure to support sectors other than oil manufacturing is making progress, but prudent fiscal and structural policies are required to efficiently absorb higher oil revenue. In the *CIS*

(Community of Independent States) real GDP growth has been slowing so far in 2005. While Russia's economy has benefited from the high price of oil, the investment climate deteriorated in conjunction with increased interventions by the authorities (one example is the Yukos affair) and because taxes in the oil sector were raised sharply, so that real GDP growth is expected to lose further momentum in 2006. Growth in the EMEs in *Europe* has remained robust, but has slowed down since mid-2004. Whereas economic growth in *Turkey* is set to ease to a more sustainable rate (5% in both 2005 and 2006) in parallel to ongoing disinflation, the current account deficit will expand further to over 5½ % of GDP. The IMF is supporting the country with massive financial aid to promote structural reform, above all of the banking and the social security systems. The opening of EU accession negotiations on October 3, 2005, may be considered a further stability anchor. According to the IMF, institutions and governance are being strengthened in several countries in *Africa*. Nevertheless, cautions the IMF, the international community must lend its support, above all by reducing subsidies in agricultural trade, and by providing additional financial aid. Risks specific to the region are the drop in cotton prices and the weak competitive position.

Table 2

Private Capital Flows into Emerging Markets and Developing Countries according to the IMF[1])

USD billion

	2002	2003	2004	2005[2])	2006[2])
Net capital flows according to the IMF	68.2	158.2	232.0	132.9	53.8
By instruments					
Direct investment	142.7	153.4	189.1	209.2	206.1
Portfolio investment	–87.6	–7.3	64.0	–28.6	–19.0
Other flows	13.0	12.1	–21.1	–47.7	–133.3
By regions (countries)					
Latin America (31)	0.4	18.5	9.9	15.2	8.5
Europe (13)	55.8	48.1	58.0	72.3	58.6
CIS (12)	–9.5	16.5	9.4	–10.3	0.4
Middle East (14)	–2.8	2.4	7.5	–51.7	–66.2
Africa (46)	3.4	10.7	14.2	22.7	18.3
Asia (15)	21.0	62.0	132.9	84.6	34.1
Memorandum item					
Current account balance	143.8	229.9	319.4	490.2	570.9
Reserve assets[3])	–185.7	–364.6	–517.4	–510.5	–506.8
of which China	–75.7	–117.2	–206.3	–210.0	–160.0

Source: World Economic Outlook, IMF.

[1]) This table shows aggregated balance-of-payments data sets of 131 nonindustrialized countries, including the major 44 EMEs. Given repeated revisions of the national balances of payments, which also affect the data sets of previous years, the capital flows may differ substantially afterwards.

[2]) Forecast.

[3]) – = increase.

Whereas according to the IMF dynamic worldwide growth fostered *net capital inflows of the private sector* to the EMEs in 2004, these inflows are likely to decelerate sharply overall in 2005. Among these capital inflows, *net inflows of FDI* (foreign direct investment) have risen in nearly all regions,

Table 3

Claims of BIS Reporting Banks on Central and Eastern Europe and on Turkey [1])

% of GDP of the recipient country

	Austria	Germany	Italy	France	Nether-lands	Sweden	Belgium	United King-dom	Europe [2])	U.S.A.	Japan
CEE plus Turkey	2.1	9.8	3.9	2.8	2.4	1.6	1.9	1.3	29.7	1.9	0.5
Central European EU Member States											
Poland	1.6	13.8	7.1	1.3	5.0	0.8	3.7	0.4	40.5	3.3	0.9
Slovakia	7.6	12.6	21.3	1.4	7.7	0.1	8.3	0.2	60.7	2.5	0.2
Slovenia	5.5	13.4	2.2	5.7	0.4	0.0	4.5	0.2	32.8	0.1	0.5
Czech Republic	4.5	11.6	1.9	18.4	3.4	0.0	2.8	..	45.3	2.4	0.3
Hungary	5.6	27.3	8.4	2.8	2.7	0.1	9.3	0.7	59.1	2.5	0.8
Other CEECs											
Bulgaria	2.0	10.6	6.4	2.3	2.0	0.1	0.3	0.5	33.6	1.6	0.2
Croatia	10.2	20.5	45.1	0.7	0.6	0.0	0.6	0.8	79.7	0.8	1.0
Romania	1.4	5.3	1.9	4.3	4.4	0.3	0.1	0.3	22.4	1.3	0.1
Russia	0.4	4.0	0.2	0.8	0.9	0.1	0.1	..	8.5	1.0	0.3
Turkey	0.1	4.6	..	1.5	1.3	0.1	0.5	..	12.4	1.9	0.6

Source: BIS, IMF and OeNB calculations.

Note: The claims shown here correspond to the "Consolidated international claims of BIS reporting banks" released by the BIS (BIS Quarterly Review September 2005, Table 9B). The BIS statistics cover direct cross-border claims, i.e. they do not include guarantees that parent banks have assumed for their subsidiaries abroad.

[1]) As at end-March 2005.

[2]) The column "Europe" comprises the countries of origin listed here as well as Denmark, Greece, Ireland, Portugal, Finland, Spain, Switzerland and Norway.

not least because economic agents see good profitability in EME mergers and acquisitions and in holdings of privatized enterprises. FDI inflows concentrated on the oil and gas sector, telecommunications and the banking sector. The increase in net FDI inflows conceals the fact that FDI outflows – in particular from Asia – are also growing rapidly; these investments are targeted at the development of new markets and are supposed to ensure the supply of intermediate goods. According to the IMF, considerable outflows are on the horizon for the volatile item *portfolio investment* and *other flows,* such as *bank loans, trade credits and derivatives,* which will reduce overall net private inflows. These outflows stem from the fact that some regions increasingly resort to local capital markets to close financing gaps. The investment of high revenues by oil-exporting countries, stepped-up investment in external markets by Asian countries (above all China) and the accelerated repayment of debt by Russia and Poland within a Paris Club rescheduling agreement reinforce the rise in outflows. Despite markedly lower inflows, *Asia* remains the region which receives the main share of net capital inflows to EMEs. In addition to the *Middle East, CIS* countries range among the net exporters of capital in the wake of higher income from oil and gas exports and in connection with Russia's accelerated repayment of debt. Capital inflows into the other regions have risen.

Claims of Austrian Banks on Central and Eastern Europe Exceed the International Average

At the end of March 2005, 58% of the Austrian banking sector's total claims on EMEs and developing countries were on the ten new Member States, four-fifths on the new EU Member States, the Central and Eastern European Countries (CEECs) and the CIS.

At the end of March 2005, Austrian banks ranked fifth among international banks with claims on the CEECs and Turkey as based on the Bank for International Settlements' (BIS) most recent data,[1] which do not include Austrian banks' subsidiaries claims and the guarantees Austrian parent banks have assumed for their subsidiaries in these countries.

Spreads between Eurobonds and Benchmark Bonds Narrow Further

Buoyed by investors' ongoing low risk aversion vis-á-vis EMEs and the continued hunt for higher yields in view of low long-term interest rates in the U.S.A. and Europe, the mood in international eurobond markets remained very bullish in the first nine months of 2005. Other positive factors were improved fundamentals and debt profiles (declining interest burdens, extensions of maturities and the early refinancing of debts due in the future) of issuer countries, which resulted in rating upgrades and in turn in a broadening of the investor base. Strategic reallocation by institutional investors such as mutual and pension funds following changes in legal provisions and in view of the above-average profitability of eurobonds in recent years also had a positive impact.

According to the IMF's forecast, the overall volume of net portfolio investment in the EMEs will shrink in 2005. This decrease, however, is attributable to the reinvestment of oil revenue by the oil-exporting countries (including Russia); holdings of eurobond issues of EMEs continue to expand. The average yield differential between *U.S. dollar-denominated government bonds* issued by EMEs and U.S. benchmark bonds (measured by J.P. Morgan's EMBI Global Index) narrowed from roughly 350 basis points at the beginning of the year to 235 basis points at the end of September 2005. This contraction occurred mainly in the wake of developments since mid-2005 following market turbulences between the beginning of March and early June 2005. Spreads declined most for bonds of Latin American issuers, a consequence of the sharp reduction of differentials on the bonds of Argentina and the Dominican Republic after successful conclusion of rescheduling efforts. Moreover, the spreads on CEE issuers' bonds sank considerably from their already low level at the beginning of 2005. Russian and Ukrainian government bonds topped the list, with spreads falling by 121 basis points and 98 basis points to 90 basis points and 157 basis points, respectively, from the end of 2004 to end-September 2005. A notable occurrence was the issue of U.S. dollar-denominated bonds by Serbia and Montenegro in April 2005 (as part of the conversion of the country's "old debt" to the London Club of commercial creditors into eurobonds). These bonds featured a yield spread of 230 basis points at end-September 2005, much like that of Turkish bonds. The narrowing of spreads helped boost the profitability of U.S. dollar-denominated eurobonds. The overall index shot up by 8.7% (not annualized) in the first nine months of 2005 following a surge by 11.7% in 2004. Total returns were highest for CEE issuers' bonds at 10.4% (2004: 10.6%) followed by Latin American bonds at 8.7%. Russia was first

[1] *The consolidated BIS statistics on international banking transactions are the most comprehensive source of aggregated data on banks' cross-border claims and provide internationally comparable measures of the country risk assumed by individual countries' banking sectors. Recent improvements of these statistics include the provision of more detailed information about risk transfers.*

Tabelle 4

Eurobonds: Spreads to Reference Bonds and Development of Returns by Regions

	EMBI Global (in USD)						Euro EMBI Global (in EUR)					
	Share of total index in %	Yield differential in basis points		Total return in %	Rating	Duration	Share of total index in %	Yield differential in basis points		Total return in %	Rating	Duration
	Sep. 30, 2005	Sep. 30, 2005	Change since the beginning of the year	Since the beginning of the year	Sep. 30, 2005	Sep. 30, 2005	Sep. 30, 2005	Sep. 30, 2005	Change since the beginning of the year	Since the beginning of the year	Sep. 30, 2005	Sep. 30, 2005
Overall index	100.0	235	–112	8.7	BB+	6.62	100.0	70	–34	7.3	BBB–	5.54
Africa	3.7	247	–38	5.5	BBB	3.94	2.9	64	–22	6.4	BBB+	5.06
Asia	12.1	253	–13	6.9	BBB–	6.07	4.9	42	–84	6.8	BBB	4.22
Europe	24.3	136	–81	10.4	BB+	6.81	63.3	38	–14	7.0	BBB	5.90
Latin America	58.4	267	–148	8.7	BB	6.90	28.9	92	–148	8.3	BB+	5.02
Middle East	1.6	304	–30	5.1	B–	3.50	0.0	×	×	×	×	×

Source: Bloomberg, J.P. Morgan, OeNB calculations.

Note: Spread and return levels and developments, as well as other index features differ between the EMBI Global und Euro EMBI Global indices because they cover different currencies, instruments, countries, maturities, etc. and are based on different investor structures. The rating is calculated as the average of Moody's, Standard & Poor's and Fitch's ratings for long-term government foreign currency liabilities and are given in the rating categories Standard & Poor's uses.

among CEE issuers, with total returns on its bonds at 14.1%. Ukrainian and Turkish eurobonds posted total returns of 7.8% and 6.6%, respectively.

Positive investor sentiment on the eurobond market is also reflected in *euro-denominated government bonds* (measured by J.P. Morgan's Euro EMBI Global index). However, spread and return levels and developments differ between the two indices because the indices cover different currencies, instruments, countries and maturities and are based on different investor structures. For example, the average spread of the Euro EMBI Global index decreased from 104 basis points from end-2004 to 70 basis points at end-September 2005, much less than in the case of the EMBI Global index, largely because it started from a far lower level. Nevertheless, the dynamics of both indices' developments were similar during the first nine months of 2005, as the contraction of spreads for euro-denominated bonds also occurred mainly from mid-2005 onward after a temporary expansion in the second quarter. Latin American bonds experienced the strongest narrowing of spreads (–148 basis points) followed by Asian eurobonds (–84 basis points). A closer look reveals that among Latin American bonds, Brazilian bonds exhibited the most pronounced spread reduction; among Asian bonds, it was Philippine bonds. The yield spreads of CEE issuers' bonds, which represent the core of the Euro EMBI Global index, fell least, dropping by just 14 basis points to 38 basis points at the end of September 2005. Spread reductions of Turkish (–46 basis points), Croatian (–25 basis points) and Romanian (–22 basis points) bonds surpassed the CEE average. Nevertheless, with returns of +7.0% (not annualized) in the first nine months of 2005 (2004: +10.8%), CEE eurobonds posted a performance that was only marginally below the Euro EMBI Global index average of +7.3% (2004: +11.8%). By comparison to their Asian counterparts, CEE eurobonds achieved higher returns despite the significantly smaller decline in spreads, as they had

higher durations. Only Latin American eurobonds posted above-average returns.

In the upcoming months, the development of bond yields in the U.S.A. and in the euro area represents the greatest source of uncertainty for the eurobond market. A rise in long-term interest rates could act as a damper on the quest for higher-yield, higher-risk investment options. Apart from rising long-term interest rates, a (further) sharp increase in short-term interest rates could prompt investors to square eurobond positions financed with credits, as they did to a limited extent in the second quarter of 2005. The currently historically low spreads would also support a downward price correction. However, improved fundamentals and market structures along with the experience of the recent past would seem to suggest that the risk of a chaotic price correction is fairly limited.

Appreciation Pressure in Central and Eastern Europe Eases

Development of Exchange Rates Mixed across CEE

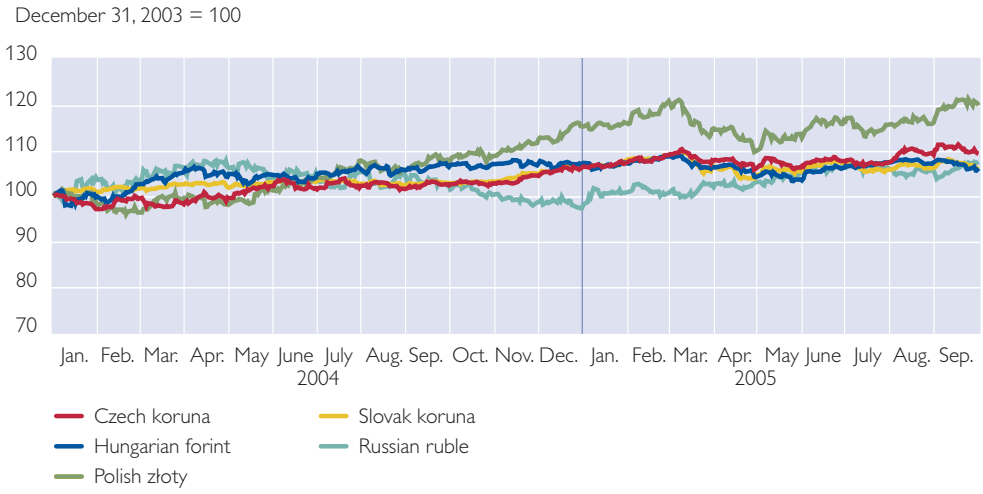
After the Czech koruna, the Hungarian forint, the Polish złoty and the Slovak koruna had appreciated quite substantially against the euro in 2004, the exchange rate movements of these currencies were far smaller from the end of 2004 until end-September 2005. The *Polish złoty,* which had climbed by 15.2% against the euro in 2004,[2] advanced by 4.0% in the nine-month period. The *Czech koruna,* which had risen by 6.6% against the euro in 2004, strengthened by a further 2.7%. The *Hungarian forint* and the *Slovak koruna,* which had gone up by 7.2% and 6.3%, respectively, against the euro in 2004, experienced a slight turnaround, with the forint weakening by 1.8% and the koruna by 0.4% against the euro in the first nine months of 2005. Still, all four currencies followed roughly the same pattern: a relatively powerful appreciation between the end of 2004 and the beginning of March 2005 was followed by weakness as long-term U.S. dollar-denominated government bond yields temporarily peaked; this languid phase lasted until the end of April 2005 for the Czech koruna, the Slovak koruna and the Polish złoty and until the end of May 2005 for the Hungarian forint. All four currencies recovered during the summer months of 2005. Since the beginning of September 2005, the Czech, Slovak and Hungarian currencies lost some ground, whereas the Polish złoty stabilized at a relatively high level. The appreciation of the *Romanian leu,* which had commenced at the beginning of November 2004, continued until the beginning of March 2005. Interest rate cuts and numerous central bank interventions provided a phase of stability until the currency resumed its fast-paced appreciation between mid-July and mid-August 2005. The central bank moved in to contain the rise, but the resulting correction did not fully break the appreciation trend and the leu's re-newed appreciation thereafter implied a saw-tooth pattern. The *Croatian kuna* also gained 2.8% on the euro from end-2004 to end-September 2005. The uptrend lasted until about mid-May 2005 and was followed by a broadly stable exchange rate during the summer and a slight weakening from the beginning of August and the end of September 2005. The *Russian rubel* firmed markedly against the euro between end-

[2] *Exchange rate developments are stated in euro per local currency unit.*

2004 and end-September 2005 (+9.6%). With the exception of corrections during July and August 2005, this trend was more or less continuous. The rubel's movement against the U.S. dollar was a mirror image of its development against the euro, albeit less pronounced overall, as the rubel's decline against the U.S. currency only came to around 2.7%. The reason for this mirroring of trends is that the Russian central bank has oriented its exchange rate policy on a currency basket containing the U.S. dollar and the euro since the beginning of February 2005. The euro's weight in this currency basket was raised in several steps from 10% originally to 35% most recently. Since the beginning of February 2005, the rubel has remained broadly stable against the currency basket. The *Slovenian tolar* has remained largely stable against the euro ever since Slovenia entered exchange rate mechanism II (ERM II) in June 2004. The slight but continuous upward trend which had emerged at the beginning of October 2004 lasted until the end of June 2005. Since then, the currency has stabilized at about 0.05% to 0.10% from the central rate in the strong part of the fluctuation band of ±15%. There were no changes to the peg of the *Bulgarian lev* to the euro within the framework of a Currency Board Arrangement during the period under review.

Chart 2

Exchange Rate: Euro per Unit of National Currency



Source: Bloomberg.

The development of the *combined current and capital account balance* relative to GDP supported the exchange rate of the Czech, Hungarian, Polish and Slovenian currencies. During the first half of 2005, deficits on the combined account decreased in all four countries, in some cases markedly, primarily because net goods and services improved despite the rise in import prices fueled by the high price of oil. Only in Poland did the income and transfer balances also improve noticeably. As a result, the need for external financing was close to zero in all these countries except Hungary in the first half of 2005; Slovenia even posted a marginal surplus on its combined current and capital account. However, Hungary's deficit on the combined ac-

count remained very high at 7.1% of GDP and continues to feed into a rise in external debt, as FDI inflows are not high enough to offset the deficit. In Slovakia, the combined current account and capital account balance deteriorated perceptibly in the first half of 2005; the resulting net deficit ratio to GDP augmented from 2.5% in the first half of 2004 to 6.9% in the first half of 2005. Roughly half of this worsening can be pinpointed to the goods and services balances, the other half to the income and transfers balances. At least part of the deterioration of the income balance is attributable to a change in the compilation method that allows for an improved representation of reinvested profits as an outflow in the income balance and an inflow under direct investment. Foreign direct investment covered approximately two-thirds of financing requirements in the first half of 2005. The external balances of Bulgaria, Romania and Croatia also deteriorated compared to the first-half result for 2004; the half-yearly deficits in Bulgaria and Croatia are traditionally especially high due to seasonal influences. In parallel to the deterioration of the current account, the inflow of FDI to Bulgaria and Romania also weakened.

Given the decline in interest rates in recent years, the interest rate differential puts less and less appreciation pressure on most CEECs' currencies, but has remained a factor in currency appreciation. In Romania, where the high spread has entailed higher capital inflows and a sharp currency appreciation since October 2004, key interest rates were cut several times in 2005. As a result, the interest rate differential to the three-month euro area interest rate dropped from some 15.0% at the beginning of the year to 4.5% at end-September 2005. In tandem with the central bank's intervention in the foreign exchange market, this decline helped alleviate the appreciation pressure on the leu, an appreciation being undesirable in view of Romania's external imbalances. But the central bank is not likely to want the currency to lose too much strength, either, as this would make it harder to reach the inflation target of 5% for the end of 2006. The shrinking interest rate differentials, which were reinforced in some countries by central banks' operations to dampen credit demand, may also explain the moderation of foreign currency lending to domestic companies and households in recent months. Though the pace of lending has remained robust in several countries, the conversion of foreign currency loans into local currency is likely to cause less and less appreciation pressure.

Overall, the improvement of the external position in several countries and the slight correction of the appreciation which took place in 2004 in some countries should markedly reduce the probability of most CEE currencies to depreciate massively. Currently low international interest rates foster capital inflows into the EMEs despite the narrowing of interest rate differentials. However, it cannot be ruled out that a gain in U.S. and euro area (long-term) interest rates dampens capital flows to the region, causing a shift in the equilibrium between the interest rate spread and the exchange rate level, much as had already been the case temporarily in the second quarter of 2005. Above all the currencies of countries which depend on net inflows of portfolio investment or other investment to cover high current account deficits that are only insufficiently offset by FDI inflows could be affected if the present favorable capital

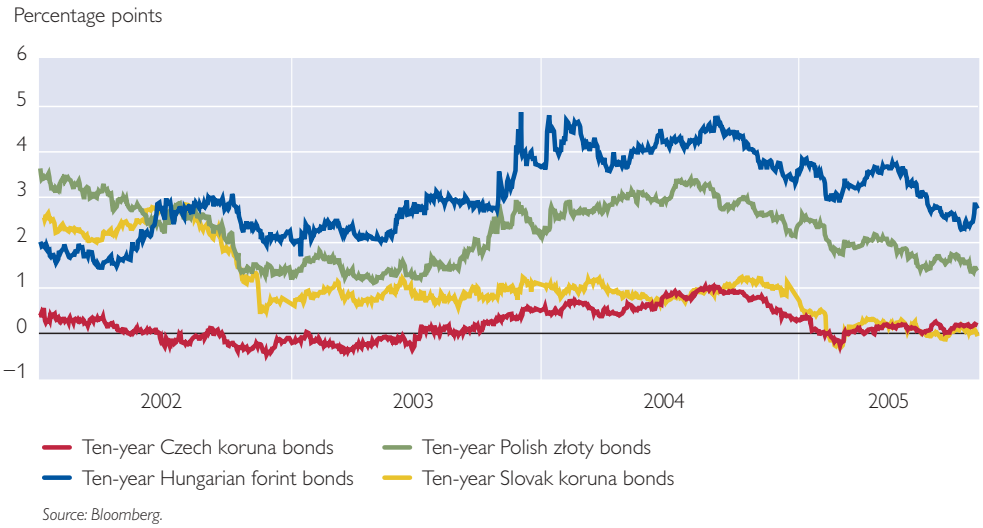
market environment deteriorates. For this reason, the reduction of external debt to a sustainable path remains a key economic policy concern in individual countries. For the new EU Member States, exchange rate stability is a fundamentally important issue, also in view of their eventual adoption of the euro in the future. Three new EU Member States (Estonia, Lithuania, and Slovenia) joined ERM II in mid-2004, three other countries (Latvia, Malta, Cyprus) have been participating in ERM II since May 2005.

Yield Differentials of Government Bonds Denominated in National Currencies Fall Further against Euro Area Benchmark Bonds

The spreads of ten-year local currency-denominated government bonds against euro area benchmark bonds were lower at the end of September 2005 than at the beginning of the year in the *Czech Republic, Hungary, Poland* and *Slovakia,* although all four markets experienced a temporary rise from March through May 2005 largely in parallel with the weakening of their currencies and turbulence on the euro-bond markets in the wake of the interim increase in long-term U.S. government bond yields. The yield gap contracted in the first weeks of 2005 in the Czech Republic and in Slovakia: the yield differential to the euro area as measured by the harmonized long-term interest rate statistics for convergence assessment purposes plunged from about 25 basis points and 70 basis points, respectively, at the beginning of the year, even turning negative mid-March 2005. After the slight upward correction which followed, Czech and Slovak ten-year bond yields moved roughly on a par with those of the euro area. The yield differential on Polish government bonds fell by and large continuously from around 230 basis points at the beginning of 2005 to roughly 140 basis points at end-September 2005. The yield spread of Hungarian government bonds sank by a total of some 90 basis points, but at 270 basis points at end-September 2005 it was far higher than its Polish counterpart. During the last days of this period, the spread had widened by about 50 basis points.

Chart 3

Yield Spreads against Euro Area Benchmark Bonds



Source: Bloomberg.

The reduction of the yield differentials to the euro area and the stabilization of Czech and Slovak yields at the euro area level were fostered by the drop in *inflation* in all four countries. In contrast to earlier fears, after inflation had quickened in the first half of 2004, there were no inflationary second-round effects of the oil price rise and of the increases in indirect taxes linked to EU membership. On account of the reduction of real wage growth and the resulting weakening of consumer demand in all these countries except Slovakia as well as favorable base effects as a consequence of EU entry in 2004, the decrease in inflation which started in the second half of 2004 continued in 2005. In August, the Czech Republic, Poland and Slovakia posted lower inflation figures than the euro area. Only in Hungary did the 3.5% rate of inflation exceed the euro area average by 1.3 percentage points. But the persistent rise in energy prices was reflected in these countries' inflation rates in September 2005, especially as energy represents a noticeably higher share of the consumer price basket there than in the euro area. The inflation risk is upward, above all because inflation has already reached quite a low level. First, the lastingly high oil price levels and especially the further rise in prices of oil and processed petroleum products in the third quarter may well have an impact on the general price level and on inflation expectations. Second, in the second quarter of 2005, consumer spending began to recover in the Czech Republic and in Hungary, and it may accelerate further despite the dampening effect of high energy prices not least because of fiscal stimuli in the forefront of the parliamentary elections in 2006. Moreover, investment shot up in Hungary, partly on account of animated public investment growth. In Slovakia, growth was already powered by domestic demand, and especially by fixed capital formation, in the second quarter of 2005. The dynamic growth of lending to the private sector reinforces the assumption that domestic demand will accelerate in the Czech Republic and Slovakia and to a smaller degree also in Hungary. Third, annual wage growth in industry in Slovakia was fairly high at almost 9% in the first half of 2005, above all considering that labor productivity in industry did not increase year on year. On the other hand, however, industrial unit labor costs in the Czech Republic, Hungary and Poland have been stagnating or sinking. In all four countries, favorable inflation developments have created room for a reduction of key interest rates. In response to inflation and exchange rate developments, Česká národní banka cut its key interest rate by 25 basis points each at the end of January, at the beginning of April and at the end of April, bringing it to 1.75%. At the end of October 2005, however, the central bank raised the rate to 2%, the same level as in the euro area. In Slovakia, the key policy rate has stood at 3.0% since March 2005. Since the beginning of 2005, the Polish central bank has successively lowered the official rate by a total of 200 basis points to 4.5% most recently, whereas Magyar Nemzeti Bank cut the key rate by a total of 350 basis points to 6.0% until the end of October 2005.

In the Czech Republic, Poland and Slovakia, *budget developments* during the period to end-September 2005 had a neutral to positive effect on the bond market. Deficit data for 2004 were partly revised downward (between the fiscal notifications of March and September 2005), and some deficit forecasts for 2005 were also re-

vised downward slightly. In the Czech Republic, though, the expansion of the budget deficit from 3.0% of GDP in 2004 to 4.8% of GDP in 2005 is still being expected; this expansion is in line with the updated Czech Convergence Programme of November 2004. All three countries envisage reducing their debt in 2006, but the deficits in the Czech Republic are likely to remain above the 3% mark and only slightly below in Slovakia despite robust economic growth. In Poland, the new government's steps after the parliamentary elections of end-September 2005 will be decisive in determining the budget balance targeted for 2006. Unlike in the three other countries, budget prospects for Hungary worsened continuously in the course of 2005. Not only was the deficit for 2004 revised upward sharply from 4.5% in the March 2005 fiscal notification to 5.4% in the September 2005 notification (exclusive of the cost of the pension reform of 0.9% of GDP before revision and 1.1% of GDP after revision). Moreover, the forecast for 2005 was heavily adjusted from 3.6% of GDP to 6.1% of GDP (exclusive of 1.3% of GDP attributable to the cost of the pension reform) due to the inclusion of expenditure items following Eurostat's decision of mid-September 2005 and due to revenue shortfalls and expenditure overruns. For 2006, a deficit reduction to 4.7% of GDP (excluding 1.4% for pension reform costs) is targeted. Hungary's Convergence Programme of December 2004 had scheduled a gradual deficit reduction of 0.7 percentage point each in 2005 and 2006 to 3.1% of GDP,[3] but the figures currently available show a deficit rise of 0.7 percentage point in 2005. Even if Hungary succeeds in bringing the deficit down by 1.4 percentage points as planned in the election year 2006, the deficit would still be 1.6 percentage points higher than the originally envisaged target. The budget developments prompted the Hungarian government to question the date for the adoption of the euro – 2010 – at the end of September 2005. A decision is to be taken by the end of 2005; the market is speculating on a delay to 2012 or 2013. The bad news about the budget and the prospect of a delay in the adoption of the euro weighed more and more on the Hungarian currency and bonds in the second half of September 2005. Conversely, Czech bonds remained unaffected by the government's announcement of the beginning of September 2005 to envisage euro adoption not in 2009 to 2010, as originally scheduled, but in 2010. Slovakia has stuck by its plan to introduce the euro in 2009, whereas in Poland, the new government has yet to decide this issue.

[3] *In spring 2005 the deficit target for 2005 was lowered from 3.8% to 3.6% of GDP, that for 2006 from 3.1% to 2.9% of GDP.*

Increasing Capital Market Orientation of the Real Economy Sectors

Financial Position of Nonfinancial Corporations Improved

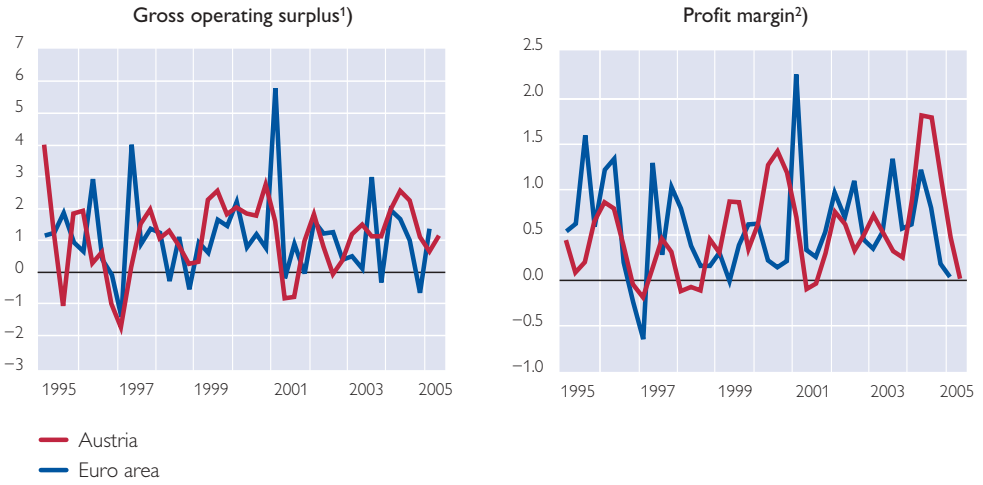
Reduced Investment in Plant and Equipment

Around the turn of the year 2004/05, the Austrian economy lost momentum, as both exports and domestic demand slowed down. Despite a favorable profitability performance, the corporate sector's investment declined in real terms, which was attributable – at least in part – to the expiration of the investment growth subsidy as at end-2004 (a fact that is likely to have induced in particular the manufacturing sector to frontload investment). Moreover, uncertainties about business cycle developments and sales prospects may also have contributed to dampening investment, and the rather low degree of capacity utilization in the Austrian industrial sector did not provide any incentives to step up investment in real capital, either.

Chart 4

Indicators of Profitability Performance in the Corporate Sector

Quarter-on-quarter change in % (seasonally adjusted)



Source: Eurostat.
[1]) Including mixed income of the self-employed.
[2]) GDP deflator less unit labor costs.

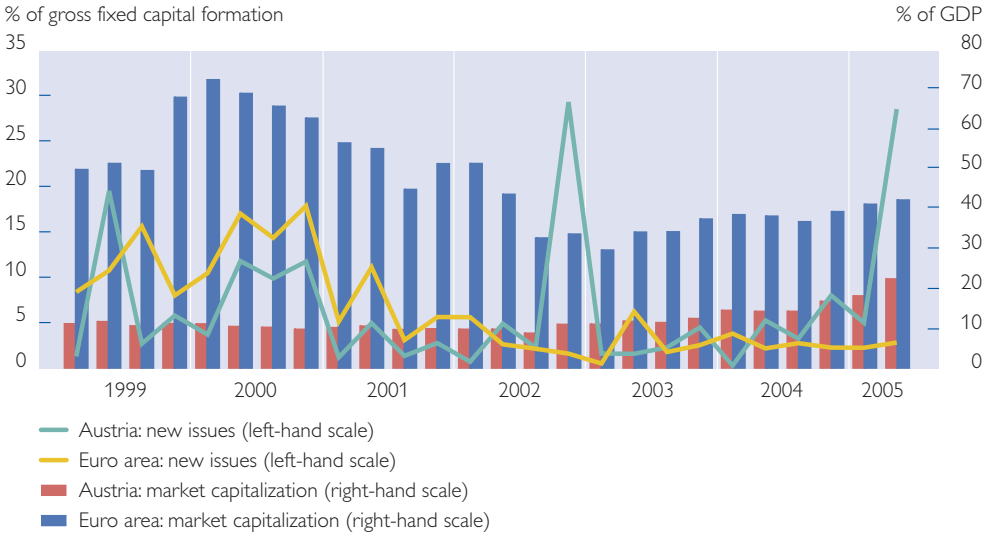
Nonfinancial corporations, by contrast, considerably expanded their financial assets in recent months. In the first half of 2005, financial investment came to just below EUR 9 billion, more than twice the comparable figure of the previous year. This figure includes a number of strategic equity investments both in Austria and abroad.

Internal Financing Potential Remains High

In the course of 2005 so far, Austrian enterprises have mostly been able to use income to finance investment spending. Following strong increases in the previous year, profits continued to develop well, even if rising commodity prices drove up production costs and thus reduced income dynamics. As in the previous year, labor costs trended downward in real terms; moreover, the low level of nominal interest rates helped keep down financing costs and thus relieved the financial burden on enterprises.

Chart 5

New Issues[1]) and Market Capitalization of Quoted Shares of Nonfinancial Corporations



Source: OeNB, ECB.

[1]) Capital increases and new listings. Adjusted for the issue of around EUR 5.5 billion by Raiffeisen International Bank-Holding AG, which – like all financial holding companies – is classified by Statistics Austria as a nonfinancial corporation.

The development of the profit margin[4] and of the gross operating surplus[5] appear to indicate a continuing positive profit situation of nonfinancial corporations, which have, since the beginning of 2005, recorded further rises in profit, albeit at a clearly weaker rate.

External Financing Strongly Driven by Equity

External financing of the Austrian corporate sector went up by more than 50% to close to EUR 9 billion in the 12 months up to mid-2005. The growth of bank loans remained subdued, while corporate borrowing on the capital market expanded at a very dynamic pace.

Almost half of the rise was attributable to equity instruments, and around half of these, in turn, consisted of stocks issued at Wiener Börse AG. Even if Austrian nonfinancial corporations launched only few new issues in 2005, the number of capital increases was considerable. Around EUR 4 billion were raised this way according to the OeNB's securities issues statistics, which means that equity issuance at Wiener Börse AG contributed considerably to corporate sector financing. In the first half of 2005, the robust issuance activity as well as continued strong price increases drove up the total market capitalization of nonfinancial corporations listed on Wiener Börse AG from EUR 39 billion to EUR 59 billion, which corresponds to around 24% of GDP[6] and already constitutes more than half of the corre-

[4] *The profit margin is the ratio of the GDP deflator to unit labor costs.*

[5] *The gross operating surplus is the surplus created by corporate operations after the remuneration of the production factor labor. It can be determined by deducting the compensation of employees and taxes on production (less subsidies) from GDP, and is the national accounts' equivalent of gross operating income. The gross operating surplus is an approximation variable for measuring absolute profits.*

[6] *The market capitalization of all stocks listed on Wiener Börse AG (including financial corporations) came to just under 38% of GDP in mid-2005.*

sponding euro area average (see chart 5).

The lively development of foreign direct investment in Austrian enterprises contributed substantially to the inflow of funds in the form of shares. All in all (i.e. including portfolio investment) more than two-thirds of new equity over this period stemmed from cross-border transactions.

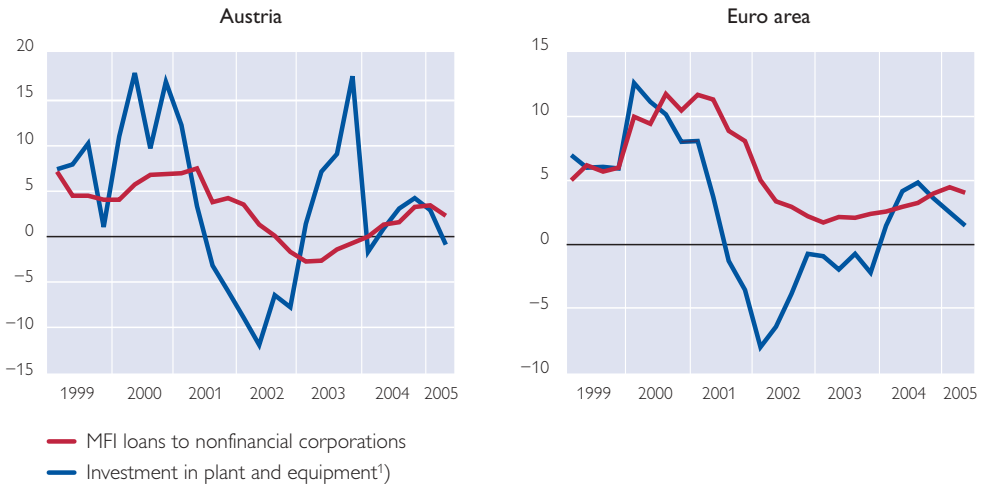
Amongst the debt components, bond-based financing played a more important role in the first half of 2005. According to the OeNB's securities issues statistics, the outstanding volume of bonds issued by nonfinancial corporations went up by 20.8% against the previous year. Given the very low (nominal) yield level and the flattening of the yield curve, a number of enterprises appear to have made provisions to profit from the low interest rates in the long run. Moreover, some issues served to fund mergers and acquisitions.

After bank lending to the corporate sector had trended downward in 2003 and in the first quarter of 2004, it went up by 2.1% in the second quarter of 2005 compared to the previous year[7]. This means that while credit expansion in Austria still remained below that of the euro area as a whole, for the first time in two years it surpassed the growth rate of investment in plant and equipment as investment was weak in the first half of 2005.

Chart 6

MFI Loans to Companies and Corporate Investment

Annual change in %



Source: OeNB, Eurostat, WIFO.
1) Whole economy. The quarterly national accounts do not contain any data on individual economic sectors.

In the first half of 2005, the term structure of loans continued to shift toward longer maturities, prompting liquidity risk to trend downward; as short-term assets went up at the same time, corporate liquidity on the whole increased markedly. At clearly more than 90%, the share of variable and short-term fixed interest-bearing loans in new business remained very

[7] *MFI Balance sheet report data. Analyzing loans to enterprises and households has become more complicated owing to a change in the balance sheet report that requires the reporting of gross instead of net risk provisions as of June 2005. Since then, Austrian MFIs have reported their entire risk exposure inclusive of risk provisions. The figures quoted here are based on an estimation using the monthly balance sheet report.*

high, also when compared with that in the euro area. The share of foreign currency in lending to enterprises declined in the first half of 2005.

Financing Conditions Remain Favorable

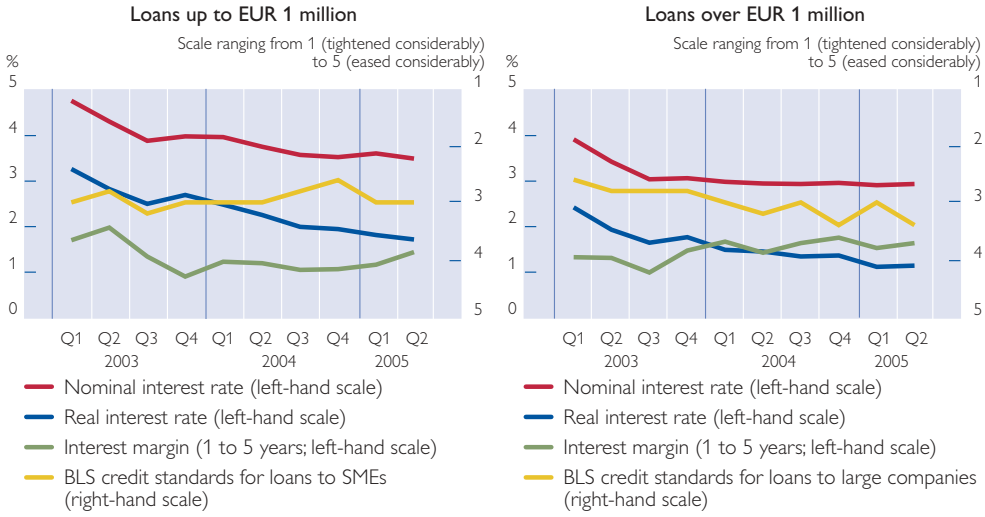
The conditions for external financing have stayed favorable for Austrian companies, both for borrowing funds and for issuing equity capital.

The interest rate charged on loans to enterprises edged down further in the first half of 2005 and was very low both historically and when compared with the euro area. In real terms, lending rates sank perceptibly in the first half of 2005, as inflation rates were expected to go up. A comparison of banks' retail interest rates and interest rates for largely risk-free financial assets provides an indicator of the risk premium contained in banks' interest rates. It shows that interest margins (interest rate charged for loans to enterprises less swap rate) have hardly changed throughout 2005.

This result matches the findings of the Bank Lending Survey (BLS), according to which banks eased lending conditions in corporate banking in the second and third quarters of 2005. Above all, banks have reduced the interest margins for lending to borrowers of average creditworthiness, while they tightened a number of other conditions applicable to the approval of corporate loans, in particular loan fees.

Chart 7

Conditions for Corporate Loans



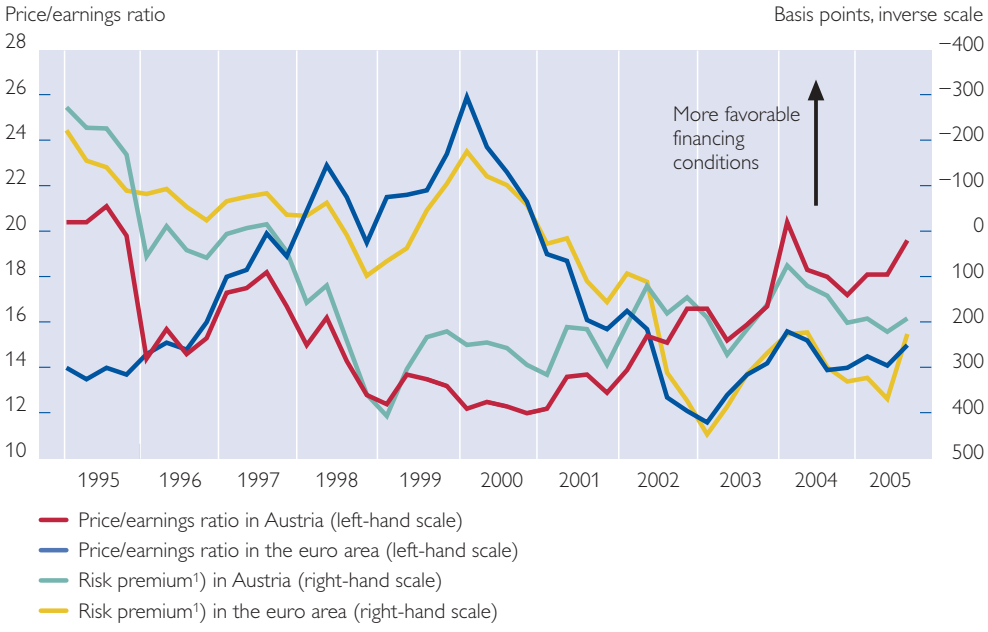
Source: OeNB, Statistik Austria, Consensus Economics.
Note: Real interest rate: Nominal interest rate less the Consensus Economics consumer price index forecast for the year following the forecast date. Interest margin: Interest rate charged for loans with a maturity from one to five years less three-year swap rate. BLS credit standards: Changes in the credit standards for loans to enterprises over the last three months.

Financing conditions on the stock exchange remained favorable as well. In the first three quarters of 2005, ATX performance went up by 41% and thus continued to exceed that of major international stock indices. This means that the price/earnings ratio went up slightly despite the positive profitability performance of enterprises listed at Wiener Börse AG, which implies that equity financing at Wiener Börse AG has become slightly cheaper. The price/earnings ratio at Wiener Börse AG surpassed the comparable ratio for the euro area as a whole.

A similar picture emerges from the spread between the earnings yield[8] and the government bond yield, whose development over time can be interpreted as an indicator of the stock market risk premium. The yield spread went up only slightly in 2005, as the conditions for equity financing developed slightly less favorably than the general interest rate level.

Chart 8

Financing Conditions on the Stock Market



Source: OeNB, Thomson Financial.
1) Earnings yield (inverse of the price/earnings ratio) less government bond yield.

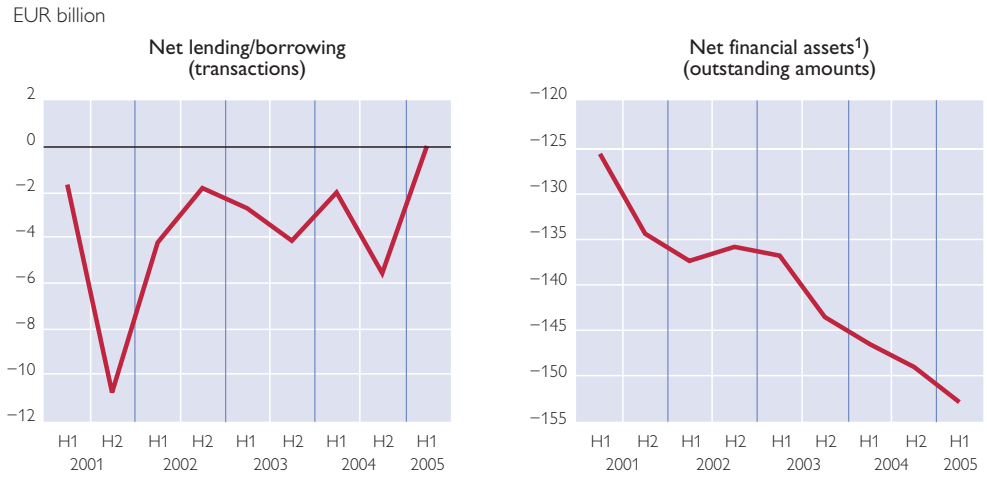
Debt-Servicing Capacity Improved

Given the relatively low degree of borrowing, corporate sector debt relative to GDP and to corporate earnings hardly increased, while financial investments went up considerably at the same time (see above). This is why in the first half of 2005, net borrowing of the corporate sector was zero for the first time.[9]

[8] *The earnings yield is the inverse of the price/earnings ratio.*
[9] *The increase of net financial liabilities is essentially attributable to the fact that stock price developments caused equity capital levels to rise.*

Chart 9

Net Borrowing and Net Financial Assets of the Corporate Sector



Source: OeNB.
[1]) Balance of financial assets over financial liabilities.

In the first three quarters of 2005, default liabilities went down by 6% against the comparable period of the previous year. In the 12 months up to September 2005, default liabilities accounted for 0.76% of corporate sector liabilities and thus remained largely unchanged vis-á-vis previous periods (see chart 10). The default frequency, by contrast, has been on the rise over the last two years. In the first three quarters of 2005, the number of insolvency proceedings went up by 7.5% against the comparable period of 2004, while the number of no asset cases increased by 28% over the same period. Altogether, the insolvency rate in relation to the total number of enterprises came to 2.8% (annualized) in the third quarter of 2005. The higher number of insolvencies may in part be linked to the increase in the number of startups over the past few years: According to the Kreditschutzverband von 1870 (KSV), more than half of the insolvent enterprises had been in operation for less than ten years at the time they went bankrupt.

Austrian Enterprises Highly Resilient to Crises

In the first half of 2005, financing conditions in the financial markets continued to be favorable for Austrian enterprises. The ongoing favorable profit situation strengthened the potential for internal financing; moreover, enterprises had a broad range of (external) financing instruments at their disposal. Thus, the weak investment activity of the corporate sector cannot be attributed to financial restrictions.

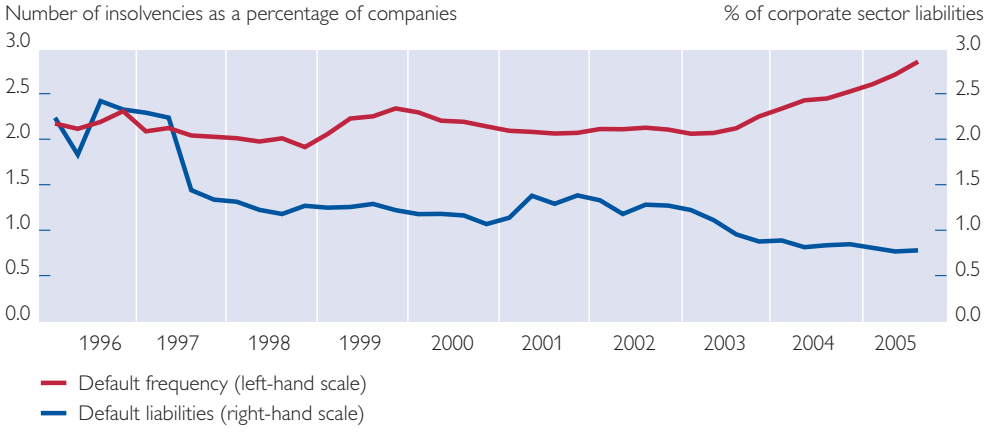
At the same time, high profits and increases in equity capital improved both the financial position and crisis resilience of Austrian enterprises. However, to the same extent by which rising profits and the low level of (nominal) interest rates have boosted the financial position, a reversion of this development could reduce companies' currently high crisis resilience.

Thus, the further development of enterprises' internal financing potential, which has recently been very high given the currently favorable profit situation, is subject to uncertainty, as perspectives for cyclical developments

Chart 10

Corporate Defaults

Four-quarter moving averages, annualized



Source: KSV, OeNB.

are subdued. Another risk factor in this context is the price of crude oil. A continued high level, or a further rise, of prices would not only weigh on the cost side of enterprises, but – in the longer term – also on the demand side. So far, the currently low level of lending rates has benefited companies; should interest rates go up again, this trend might be at least partly reversed, even if many enterprises have recently reduced their dependence on interest rate changes by raising funds via issuing bonds and equities. The majority of bank loans – also those with longer maturities – has a floating rate, however.

Finally, the increased use of capital market instruments has spread entrepreneurial risk (and the interest rate risk for typically fixed-rate corporate bonds) more broadly across financial markets.

Households' Financial Investment on the Rise

In the first half of 2005, the high inflation rate noticeably eroded households' purchasing power. Hence, consumer spending did not gain momentum despite tax reliefs provided by the second stage of the latest tax reform. Households' real consumption expenditures grew by 0.2% in the first quarter of 2005 and by 0.1% in the second quarter of 2005 (quarter on quarter, seasonally adjusted). Considering the high oil prices and low consumer confidence, the short-term outlook for consumer spending is not very bright.

Households' financial investment rose by EUR 11.5 billion in the first half of 2005, thus displaying significantly stronger growth than in the same period of 2004 (EUR 9.7 billion).

The household sector's debt ratio increased, as well, with new debt coming to EUR 3.9 billion in the first half of 2005, slightly up from EUR 3.8 billion in the same period of 2004.

By mid-2005, Austrian households' net financial assets totaled EUR 221.8 billion or 154% of disposable income.[10]

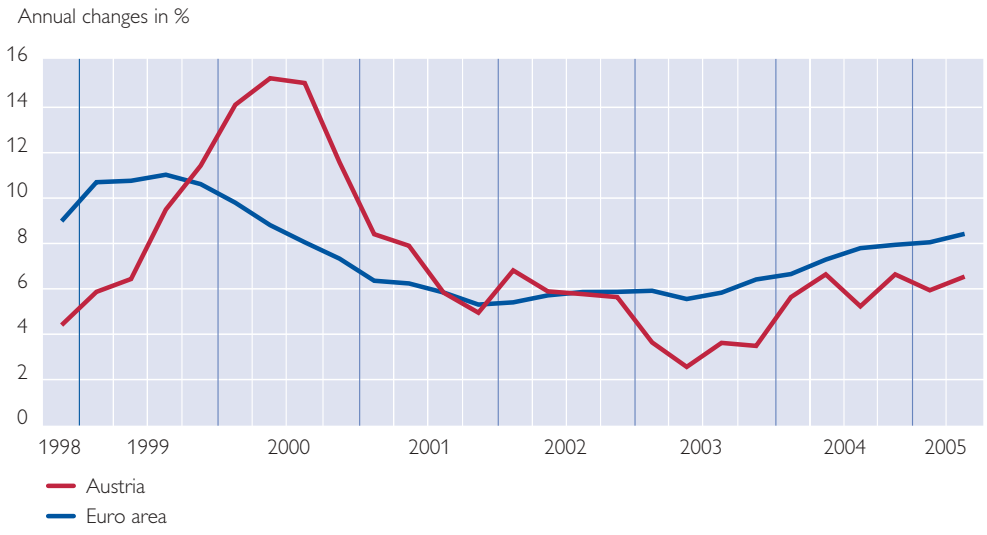
[10] *This relation refers to Austrian households' disposable income in nominal terms in the full year 2004, as it is only computed on an annual basis.*

Households' Debt Increased

Austrian households' debt amounted to 50.7% of GDP in 2004. Despite increasing by 2.3 percentage points against 2003, household debt in Austria is still well below the figures observed in other euro area countries. In the Netherlands, for instance, household debt came to more than 100% of GDP in 2004. In the first two quarters of 2005, household debt in Austria continued to grow. According to the financial accounts, new debt came to EUR 3.9 billion in the first half of 2005, slightly up from EUR 3.8 billion in the same period of 2004.

Chart 11

MFI Loans to Households



Source: ECB, OeNB.
Note: Loans to Austrian households less freelance professionals and nonprofit organizations serving households.

New Debt Incurred Primarily for Housing Investments

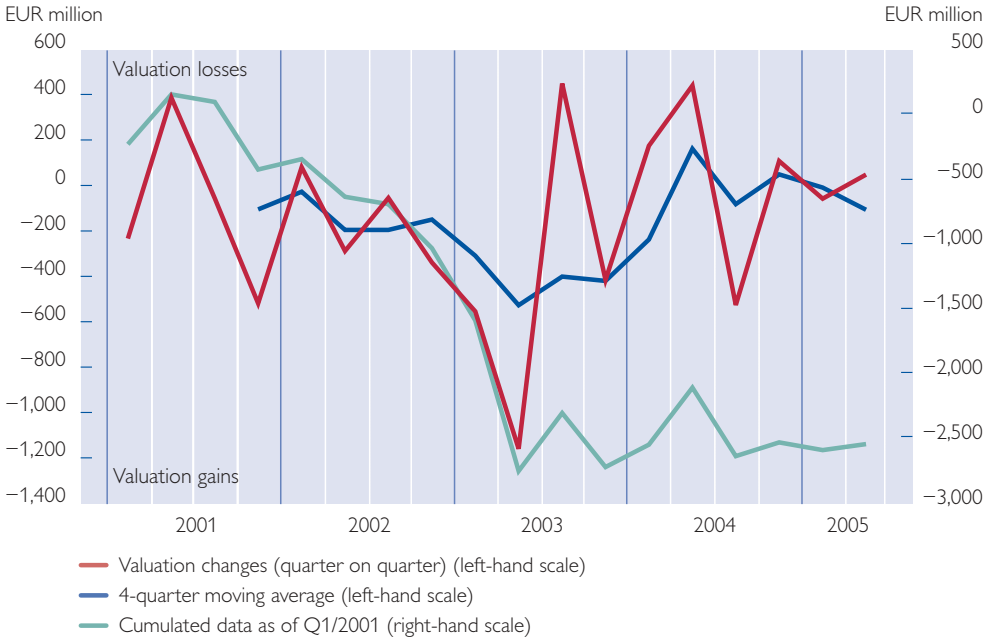
Home loans declined from EUR 2.3 billion in the first half of 2004 to EUR 2.0 billion in the first half of 2005, but they still accounted for the largest share of households' new debt in this period according to the financial accounts. By comparison, consumer loans posted particularly strong growth. While coming to merely around EUR 0.5 billion in the first half of 2004, consumer loans increased to EUR 1.3 billion in the first half of 2005 (of which EUR 1.0 billion were taken out in the second quarter of 2005).

According to the ECB's monetary statistics, the annual growth rate of lending by monetary financial institutions (MFIs) to households amounted to 6.5% in the second quarter of 2005, which is still well below the long-term average (see chart 11) and also moderate compared with other euro area countries.

According to the ECB's monetary statistics, the annual growth rate of lending by monetary financial institutions (MFIs) to households amounted

Chart 12

Exchange Rate Effects of Households' Foreign Currency Loans



Source: OeNB.

to 6.5%[11] in the second quarter of 2005, which is still well below the long-term average (see chart 11) and also moderate compared with other euro area countries.

In the first half of 2005, new foreign currency loans totaled EUR 2.0 billion according to the financial accounts, with loans denominated in Swiss francs accounting for the largest share. In the first two quarters of 2005, the valuation changes of foreign currency loans resulting from exchange rate effects were only small. Since the beginning of 2001, however, households have profited from considerable cumulated (mainly unrealized) valuation gains of foreign currency loans (see chart 12).

The large volume of foreign currency loans to households naturally also entails the risk of unfavorable exchange rate developments.

With regard to maturity structure, a trend toward short-term liabilities can be observed. Short-term loans grew by EUR 1.2 billion in the first half of 2005, which is well above the average of the past years and, according to the national accounts, also above the combined growth of short-term loans over the past four years.

Financing Conditions for Households Remained Favorable

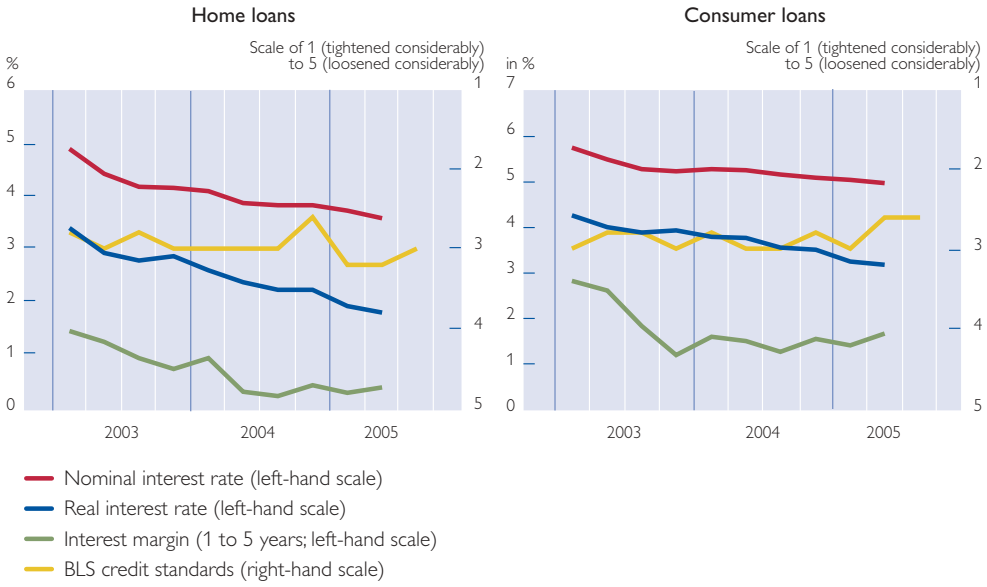
Real interest rates for home loans and consumer loans declined considerably in 2004 (see chart 13). (Ex ante) real interest rates continued to decline in early 2005.[12] The Bank Lending Survey indicates that the terms and conditions of consumer loans and home loans

[11] *Owing to a change in the balance sheet report – which requires reporting gross instead of net risk provisions as of June 2005 – this figure is only preliminary.*

[12] *The ex ante real interest rate (nominal interest rate less CPI forecast) was calculated on the basis of Consensus Forecast CPI data for Austria. Consensus Forecasts are arithmetic averages of several forecasting institutions' projections.*

Chart 13

Conditions for Loans to Households



Source: OeNB, ECB, Statistics Austria, Consensus Economics.
Note: Real interest rate: nominal interest rate less the Consensus Forecasts' Consumer Price Index forecast for the year following the forecast date. Interest margin: Interest rate for loans with a maturity of 1 to 5 years less 3-year swap rate. BLS credit standards: changes in the standards applicable to the approval of loans over the last three months.

were slightly tightened in the second and third quarter of 2005. In the first two quarters of 2005, banks' interest margins[13] for medium-term home loans and consumer loans remained relatively stable, which suggests that banks' risk perception has not increased. All in all, and especially from a long-term perspective, households' financing conditions may be considered favorable.

Number of Private Bankruptcies Continued to Rise

Around 4,800 private bankruptcy filings were submitted in the first three quarters of 2005. The rising number of private bankruptcies caused default liabilities to increase to EUR 564 million (see chart 14).

The tendency to finance consumption through debt is one of the main reasons for overindebtedness; this view is also substantiated by the dynamic development of consumer loans in the first half of 2005. In the first three quarters of 2005, the number of no asset cases also increased against the same period of 2004.

Real Estate Price Developments Remained Subdued

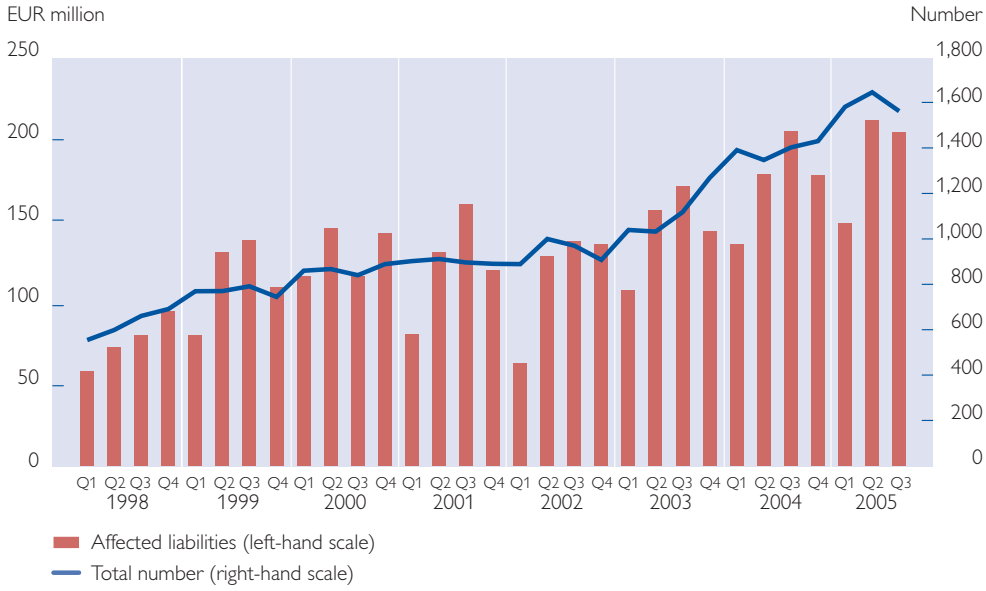
The development of the real estate price index has been very moderate in recent years. Between the beginning of 2000 and mid-2005, prices for new apartments in Austria grew by 8.3%,[14] which is below the euro area average.[15]

The ratio of real estate prices to rent prices is another indicator for "ad-

[13] *In order to make interest margins comparable it is necessary to use a market reference rate for instruments with similar maturities. Like the ECB, we chose the three-year euro interest rate swap rate for data reasons.*
[14] *In fall 2005, the index of price developments in the Austrian real estate market was for the first time calculated on a quarterly basis. The data have been calculated backward to 2000; therefore, it is currently not possible to compare older data.*
[15] *See, for instance, ECB. 2005. Financing Condition in the Euro Area. ECB Occasional Paper Series 37. October.*

Chart 14

Development of Debt Regulation Proceedings



Source: KSV.

equate" real estate price developments – when real estate prices rise significantly faster than rent prices over a prolonged period, we may conclude that they deviate from their fundamental value. As this ratio remained broadly unchanged between 2000 and mid-2005,[16] real estate prices are currently not being overvalued.

Insurance Products Posted Above-Average Growth

Households' financial investment rose by EUR 11.5 billion in the first half of 2005. The demand for insurance products was particularly pronounced. According to the national accounts, the private sector's claims on insurance companies and pension funds increased by a total of EUR 4.1 billion in the first half of 2005, against EUR 2.7 billion in the first half of 2004; of this, claims arising from life insurances accounted for EUR 3.0 billion, against EUR 1.9 billion in the first half of 2004 (see chart 15).

Households' investment in quoted shares and mutual fund shares came to EUR 3.2 billion in the first half of 2005 (with quoted shares accounting for around one-half in terms of value). This is significantly above the level observed in the first half of 2004 (EUR 2.3 billion). Investment in long-term securities was somewhat less attractive in the first half of 2005: It came to EUR 884 million in the first half of 2005, down from EUR 2.0 billion in the same period of 2004.

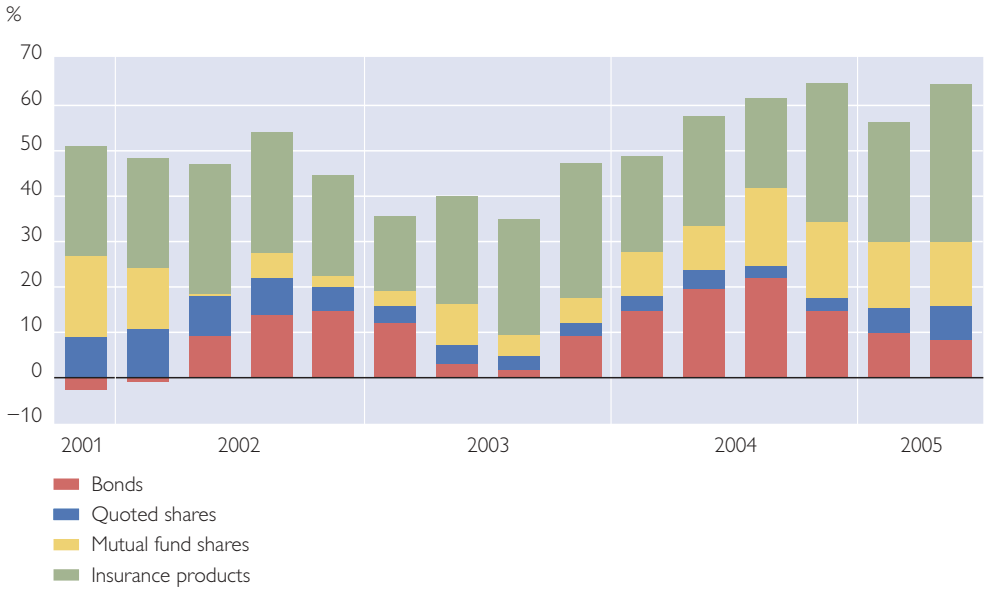
While households' bank assets (deposits and currency) increased by EUR 3.4 billion in the first half of 2005, i.e. more strongly than in the same period of 2004, they grew clearly less vigorously than capital market instruments.

[16] *Longer-term comparisons are currently not possible owing to non-comparable data before 2000.*

Chart 15

Share of Capital Market Instruments in Households' Financial Investments

Transactions; 4-quarter moving averages



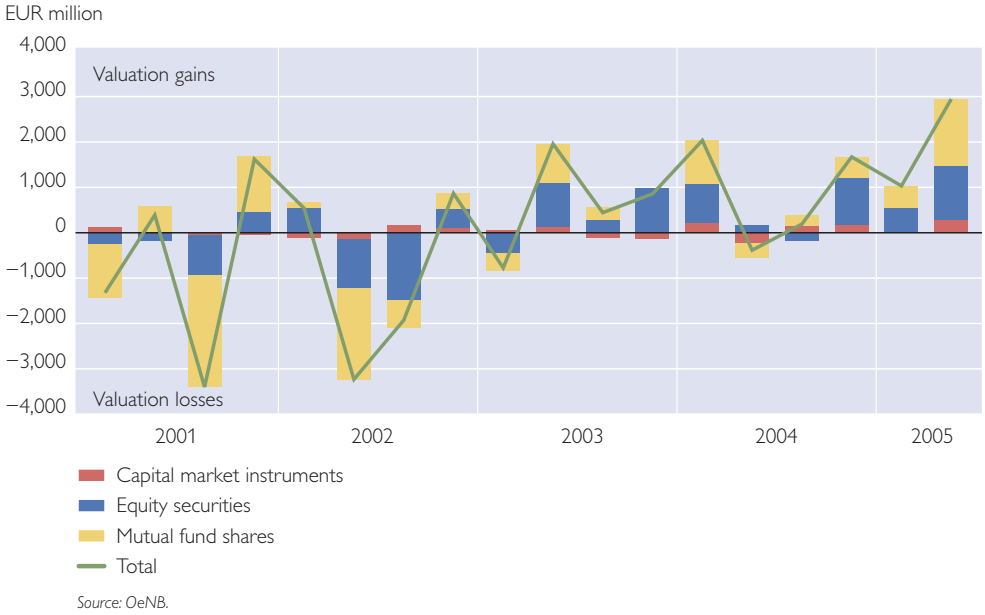
Source: OeNB.

Valuation Gains of Households' Financial Assets on the Rise

In the first half of 2005, the valuation gains of households' financial assets increased to EUR 4 billion (see chart 16), thus already topping the gains of the full year 2004 (EUR 3.5 billion). At EUR 3 billion, the valuation gains were especially pronounced in the second quarter of 2005. As the performance of the stock and bond markets has further improved since then, we may expect this trend to continue also in the third quarter of 2005. Equity securities and mutual fund shares accounted for the bulk of the valuation gains. While the valuation gains of mutual fund shares amounted to EUR 2 billion in the first half of 2005, those of quoted shares came to EUR 1.8 billion. Households' valuation gains over the past two years offset the unfavorable developments observed in 2001 and 2002.

Chart 16

Valuation Gains and Losses in Households' Financial Assets



Source: OeNB.

In the first half of 2005, the share of deposits and currency in households' total financial assets declined whereas that of capital market instruments (quoted shares, bonds, mutual fund shares) and insurance products increased owing to valuation gains of, and increased investment in, capital market instruments.

Pension Provisioning as a Saving Motive – OeNB Survey Results for Vienna

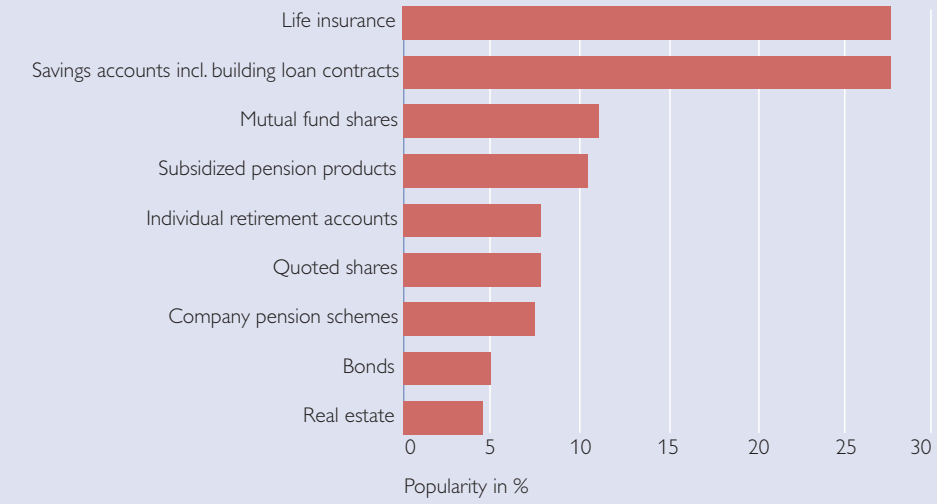
As a consequence of recent pension system reforms, Austrian households need to accumulate more financial assets to be able to maintain their normal standard of living also in old age. Such private pension provisions not only expand the volume of households' total investments but may also change their asset allocation. After all, at least 40% of contributions to subsidized pension provision products under the Austrian Tax Reform Act of 2002 ("prämienbegünstigte Zukunftsvorsorge") must be invested in quoted shares from EEA countries with a stock market capitalization of 30% of GDP or below. This may significantly alter the risk profile of household assets. Thus, pension system reforms may also impact on financial stability.

In order to supplement the data which banks report to the OeNB, the OeNB commissioned a survey among 1,026 households in Vienna and 1,530 households in other Austrian provinces in 2004. In addition to data on income and financial assets as well as demographic information, respondents were asked to specify their financial attitude and behavior and to detail the measures they had taken to provide for old age.[1] Understanding households' decisions in this field has become an important factor in monetary policy decisions and also helps explain private consumption developments.

[1] *The publication of detailed survey results is scheduled for end-2005.*

Preliminary results for Vienna indicate that about half of the survey respondents have invested in private pension provisions.[2] Life insurances and savings accounts (including building loan contracts) are the most common types of investment; about 10% of the Viennese population have opted for subsidized pension products (e.g. "prämienbegünstigte Zukunftsvorsorge"). For details, see the chart below on investments in private pension provisions made by the Viennese population. The decision to make pension provisions and the choice of specific investment vehicles are clearly influenced by socioeconomic factors. As a rule, persons living in high income and wealth household deciles are more likely to make provisions for old age. Furthermore, their portfolios usually contain a larger fraction of quoted shares, bonds and mutual fund shares than that of other population groups, i.e. comparably risky investment vehicles are primarily held by households that can afford losing money when stock prices fall. The evaluation of the survey results will provide a comprehensive economic analysis of households' asset allocation decisions and of their investment decisions in the context of private pension provisioning, taking account of households' socioeconomic standing.

Investments in Private Pension Provisions by the Viennese Population



Source: OeNB (own calculations based on a study by the opinion research institute Fessel-GFK).

[2] *Respondents were asked to include all measures they had taken to top up their (future) state pension benefits. This is why private pension provisions include various types of investment in this context.*

Investment in Capital Market Instruments Posted High Growth Rates

Households' financial investment rose by EUR 11.4 billion in the first half of 2005, thus displaying significantly stronger growth than in the same period of 2004 (EUR 9.7 billion). The household sector's debt increased, as well, but it was only slightly higher at EUR 3.9 billion than in the first half of 2004 (EUR 3.8 billion).

The strong growth of financial investment was mainly attributable to investment in capital market instruments and insurance products. The valuation gains of households' financial assets amounted to EUR 4 billion in the first half of 2005, with equity securities and mutual fund shares accounting for the bulk of valuation gains. In the first half of 2005, increased investment in capital market instruments and insurance products as well as the high valuation gains altered the structure of households' financial assets. While the share of currency and deposits in households' total financial assets decreased from 53.5% at end-2004 to 52.0% at

end-June 2005, the share of capital market instruments and insurance products increased from 43.0% at end-2004 to 44.6% at end-June 2005. This shift in Austrian households' asset allocation is largely ascribable to higher investment in pension schemes. The household sector's increased investment in capital market instruments and insurance products led to significant valuation gains in the first two quarters of 2005, but it also increased potential risks.

Turning to households' financial liabilities, foreign currency loans (especially loans denominated in Swiss francs) continued to post vigorous growth in the first half of 2005. Foreign currency loans to the tune of EUR 2.0 billion accounted for more than 50% of new loans. This strong demand for foreign currency loans entails a considerable risk potential. Furthermore, the maturity structure of households' liabilities changed considerably in the first half of 2005, with short-term loans picking up markedly. This and the fact that the majority of new loans are variable rate loans are additional potential risk factors.

All in all, the indicators suggest that the Austrian households' financial position has become slightly more risky in the first half of 2005.

Austria's Financial Intermediaries Develop Dynamically

Banks' Profitability and Shock Resilience on the Rise

Total Assets of Banks Continue to Grow Strongly

The strong growth of Austrian banks' unconsolidated total assets continued in the past months, reaching a new peak of EUR 697.7 billion in June 2005. This equals a year-on-year growth rate of 9.7% – the highest since end-2000. Once more, external business was important for this growth trend, both on the assets side (+20% year on year) and the liabilities side (+12.7%). Domestic interbank liabilities also increased considerably (+10.2%), as did Austrian banks' domestic issues (+18.1%), whereas domestic nonbank deposits only rose by 5.3% year on year.

In June 2005, the consolidated total assets of Austrian banks (including both subsidiaries in Austria and in particular in Central and Eastern Europe) were almost 13% higher than the unconsolidated result,[17] with Austria's five major banks[18] accounting for approximately 60% of total assets.[19]

The total number of banking offices, which, since its peak in 1992, has gone down steadily owing to increased consolidation of the Austrian banking sector, continued to decline in recent months. In June 2005, the number of banking offices in Austria came to 5,224 (–9.5% as compared to the 1992 peak), breaking down into 886 head offices and 4,338 branch offices. Taking into account newly opened banking offices, the number of head offices dropped by 9 year on year, that of branch offices by 21. The strongest reductions were recorded in Tyrol (–11 banking offices), Burgenland (–10) and Lower Austria (–7). A year-on-year increase could particularly be observed in Salzburg (+4). Despite the overall downtrend, bank density in Austria is still high by international comparison, with one banking office serving 1,570 inhabitants.

Banks' staff capacity came to 65,573[20] in June 2005, marking a year-on-year decrease of 2.5%. Unconsolidated total assets per full-time equivalent (FTE) employee rose from EUR 9.9 million at end-2004 to EUR 10.7 million[21], which points to a more efficient utilization of human resources. This increase means that Austrian banks are approaching the EU average, which was EUR 11.1 million at end-2004.[22] In this respect, however, pronounced differences exist between the various banking sectors in Austria. While special purpose banks recorded total assets per FTE employee of approximately EUR 18.7 million in June 2005 and state mortgage banks and the branch offices of foreign banks posted EUR 15.8 million and EUR 15.4 mil-

[17] *As banks use different accounting systems, aggregated data may provide a slightly distorted picture.*

[18] *Bank Austria Creditanstalt AG (BA-CA), Erste Bank der oesterreichischen Sparkassen AG (Erste Bank), Raiffeisen Zentralbank Österreich AG (RZB), BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG (BAWAG P.S.K.) and Österreichische Volksbanken AG (ÖVAG).*

[19] *In a Europe-wide comparison, Erste Bank, the largest Austrian credit institution in terms of consolidated total assets (end-2004), was ranked as the 43rd-largest bank; RZB ranked 66th, BAWAG P.S.K. 74th and ÖVAG 111th (Source: The Banker: September 2005, Top 300 European Banks). Bayerische Hypo- und Vereinsbank AG, the owner of BA-CA at that time, ranked 18th in this comparison.*

[20] *Part-time employees are included on a pro rata basis.*

[21] *It should be noted, however, that off-balance sheet instruments are not included in this figure, which somewhat limits the informative value of this indicator.*

[22] *See European Central Bank. 2005. EU Banking Structures (p. 10). This publication cites figures for Austria which slightly diverge from those quoted above owing to a different definition of credit institutions.*

lion, respectively, the corresponding figures for Raiffeisen and Volksbank credit cooperatives only came to EUR 8.1 million and EUR 7.1 million, respectively. Joint stock banks (EUR 12.3 million), savings banks (EUR 10.1 million) and building and loan associations (EUR 11.9 million) produced mid-range results.

The nominal value of Austrian banks' special off-balance sheet operations (derivatives transactions), which has a history of pronounced fluctuations, dropped by 29.4% year on year, reaching EUR 1,527.9 billion (unconsolidated) in June 2005. This means that the nominal value of special off-balance sheet transactions was only 2.2 times as high as unconsolidated total assets.[23] Interest rate contracts once more accounted for the major share of special off-balance sheet operations (82.9%), followed by foreign exchange derivatives and gold contracts (16.1%).

Banks' Profits Continue Their Uptrend

In line with the positive trend of the previous two years, Austrian banks' profit growth continued to accelerate in 2005. In the first half of 2005, operating profits grew by 12% against the first half of 2004; in 2003 and 2004 operating profits had risen by 4.5% and 7.6%, respectively. At 0.82%, the operating profit margin[24] again reached the level recorded in 2000 and 2001 (see chart 17), but still fell short of the high level of the mid-1990s (around 0.90%).

Chart 17

Operating Profit Margin

Source: OeNB.
Note: The 2005 operating profit margin is based on the annualized result of the first six months of 2005.

The favorable trend in Austrian banks' operating business was also mirrored by the positive development of the cost/income ratio, which reached its lowest level since 1995 in the first two quarters of 2005 (64%). Per June 30, 2005, banks expected risk provision expenses to go up in the full year 2005 compared to 2004, when securities risk had boosted profits due to a one-off effect from releasing hidden reserves for participating interests. Per June 30, 2005, credit risk (which also features in risk provision expenses), by contrast, was expected to decline in 2005 for the fourth year in a row; based on banks' estimates, it was to decrease by 10% year on year. Even if the altogether slightly higher risk provision expenses are taken into account, the risk-adjusted cost/income ratio[25] for 2005 will reach a level clearly below the values of the past ten years (for a five-year comparison see chart 18).

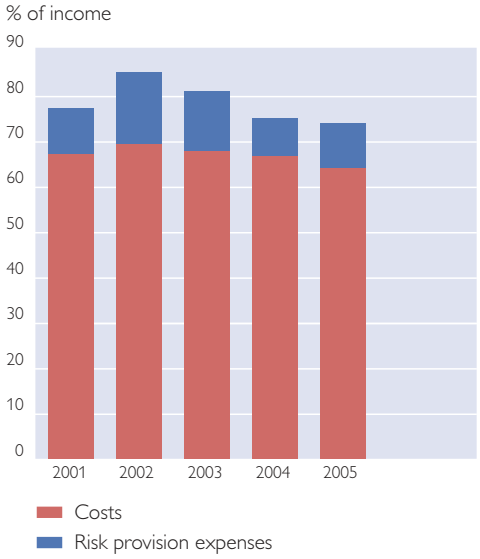
[23] *This considerable decline is, above all, attributable to the reduced business activity of one single major bank. If the results of this bank are not taken into account, the nominal volume of special off-balance-sheet operations only went down by 0.8%.*

[24] *Operating profit relative to average total assets (annualized).*

[25] *Sum of operational costs and risk provision expenses relative to income.*

Chart 18

Risk-Adjusted Cost/Income Ratio



Source: OeNB.
Note: The cost and income figures for 2005 are based on the annualized result of the first six months of 2005; risk provision expenses for 2005 are expected annual values.

Banks expect unconsolidated return on assets (ROA) for 2005 to be slightly lower (0.42%) than in 2004 due to the above-mentioned valuation effect on expenses for securities risk provisioning. This effect had an impact on unconsolidated return on equity (ROE) as well, which is expected to fall from 9.1% in 2004 to 8.6% in 2005 according to preliminary estimates. A breakdown of the change in ROE into three components – risk-adjusted ROA, risk profile and regulatory leverage[26] – shows that the major part (91%) of the reduction in ROE is attributable to the decline in risk-adjusted ROA. The latter, in turn, was affected by the slight (expected) decrease in annual profits (–1.1%) and the simultaneous increase in risk-weighted assets (+4.6%). Given the fast growth of total assets and the constantly high capital ratio, neither risk profile nor regulatory leverage are going to have a significant impact on ROE. The major factors driving the deterioration of ROE thus are the decrease of reported profits after risk provision expenses (owing to the valuation effect in 2004) on the one hand and the high increase in total assets on the other.

Ever since 2002, which was a bad year for Austria's banks, income growth rates have been markedly higher than those of costs. In the first half of 2005, however, the acceleration of income growth (6.2%) was accompanied by an increase in costs which was somewhat more pronounced than in the previous years (3.2%). On the earnings side, fee-based income and income from participating interests remained the main driving forces; on the cost side, the growth of staff costs was subdued (+1.5%), while administrative expenses increased markedly (+7.5%).

While in the first half of 2005 fee-based income, income from participating interests and trading income increased by 13.9%, 13.6% and 7.8%, respectively, interest income, which has remained more or less constant since 2002, grew by a mere 0.5%, with the continuously declining interest margin being offset by moderate credit growth. In particular, the interest margin for euro transactions has contracted strongly; the interest margin for foreign exchange transactions has been approaching the level of the interest margin for euro transactions from a lower starting point, but still remains somewhat narrower. Moreover, the share of securitized liabilities in overall interest liabilities, which has slightly increased in recent years, came to

[26] *Risk-adjusted ROA depicts annual profits relative to risk-weighted assets; risk profile captures risk-weighted assets relative to total assets; regulatory leverage denotes total assets relative to equity.*

24% in the first half of 2005. Refinancing via securitization is much costlier than via customer deposits and interbank liabilities. Based on the development of interest rates on new business, it is likely that the interest margin will further decline: While interest on customer deposits remained broadly stable between June 2004 and June 2005, the interest rates on loans – particularly on consumer credit and home loans – have gone down considerably.

An analysis of fee-based income reveals that three-quarters of the recorded 13.9% growth are accounted for by securities transactions, which had strongly dropped in the two-and-a-half years following 2000 but which, since mid-2003 have experienced accelerating growth: In the first half of 2005, fee-based income from securities transactions shot up by 30.5%, a growth rate which was previously only achieved in 2000. Income from participating interests also picked up considerably (+13.6%); 80% of this increase stemmed from domestic sources. Trading income, whose significance is relatively limited for Austrian banks, rose by 7.8% in the first half of 2005, following a rather weak performance in 2004 (–1.7%). In this area, banks benefited from price gains on the stock and bond markets, while income from foreign exchange trading and off-balance sheet financial transactions decreased. The negative correlation between trading income on securities transactions and income on off-balance sheet financial transactions seems to indicate that trading activities are, at least in part, being hedged. Fee income margin and participating interest margin[27] have only slightly improved year on year owing to the strong growth in total assets; the trading margin, by contrast, has remained unchanged.

Consolidated Profits Much Higher than Unconsolidated Results

Consolidated profits developed similarly to unconsolidated results, but margins were much higher on a consolidated basis given the higher margins of banking business in Central and Eastern Europe: At 63% the consolidated cost/income ratio was only slightly below the unconsolidated ratio, while the consolidated profit margin[28] at 0.96% clearly surpassed the unconsolidated value. The result for the consolidated total banking sector after risk provisioning and taxes (ROA: 0.65%) clearly illustrates the relatively low profitability of domestic business (expected unconsolidated ROA for 2005: 0.42%).

As in previous periods, the rise in costs (+11%) and income (+12%) was much more pronounced on a consolidated basis, which is attributable to Austrian banks' expansive business activities in Central and Eastern Europe. Interest earnings continue to account for the major share of Austrian banks' operating income. In the first half of 2005, interest income – on a consolidated basis, including income from securities and participating interests – increased by 12% year on year, which meant that it accounted for around 63% of total operating income. Fee-based income grew by 15% year on year, while trading income remained unchanged. On the cost side, staff costs went up by 8%, administrative costs by 13% and write-downs by 14%.

[27] *These margins represent fee-based income, income from participating interests and trading income, respectively, relative to average total assets (annualized).*

[28] *End-of-period profits relative to total assets.*

Business in Central and Eastern Europe[29] is thus much more profitable than domestic business, which, however, has also clearly picked up. In the period under review, the cost/income ratio reached its lowest level since 1995, and the profitability of domestic operating business returned to the high level of 2000. Due to fierce competition in the banking sector, however, it seems unlikely that Austrian banks are going to reach the even higher profit margins of the mid-1990s in the near future. Consequently, the profitability of the Austrian banking sector – even when including consolidated external business results – remains low compared to banking sector profitability in other European countries.

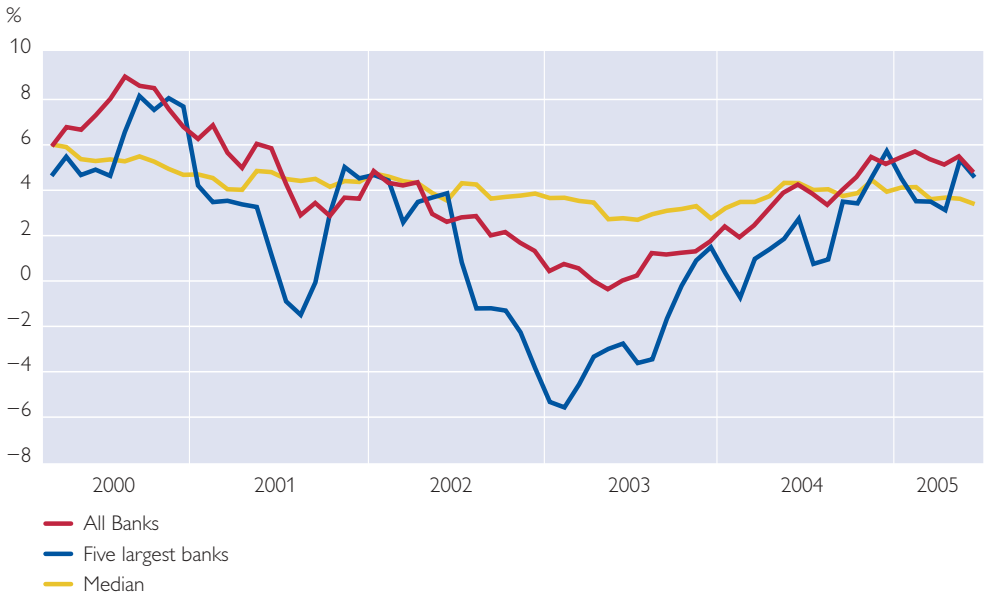
Loans Expand as Loan Loss Provisions Continue To Decline

Steady Growth in Bank Lending

Following steady growth in bank lending in 2004, loans in Austria continued to grow at a constant pace of around 5% on average against the backdrop of a favorable interest rate trend in the first half of 2005. In June 2005, the annual loan growth of all Austrian banks was 4.7% (see chart 19).

Chart 19

Annual Loan Growth of Austrian Banks



Source: OeNB.

After the first six months of 2005, the annual loan growth of the five largest banks was 4.5%. The loan growth posted by these banks in recent months can be traced back to a single major Austrian bank, in particular. However, this sample contains a large spread of values and also includes major banks whose financing performance developed extremely poorly compared with the previous year.

The median value of loan growth is less influenced by the performance of a single bank and has been largely stable

[29] *For details on Austrian banks' business activities in Central and Eastern Europe see the corresponding section below (p. 48–51).*

in the past. In mid-2005, the median value for the change in lending was 3.3% year on year.

An analysis of loan growth by individual banking sectors also reveals a similar picture. Loan growth, which started to accelerate in 2004, is visible in almost all banking sectors. The building and loan association sector has performed very favorably in recent months. Whereas this sector registered a drop in lending of 2.05% in mid-2004, its financing performance continued to advance strongly in the first half of 2005, posting an annual growth of 2.6%. If this sector's past sluggish lending was attributable, inter alia, to the appeal of foreign currency loans (which building and loan associations are only permitted to grant to a limited extent for statutory reasons), in the last few months it seems to have succeeded in attracting new customers. In addition, educational and private nursing loans recently provided for under the Act on Building and Loan Associations are also likely to have an impact in the future.

An analysis of loan growth by economic sectors shows that nonbank financial intermediaries such as insurance companies and investment funds have strong borrowing requirements (+11.9% in the first half of 2005) visá-vis banks. Lending to enterprises and households, by contrast, remained unchanged. At mid-2005, the annual growth of loans to enterprises stood at 2.2%. The annual growth rate of loans to households[30] was 6.8%, with foreign currency loans continuing to advance at a well above-average pace. Loans to general government grew only slightly, posting an annual growth rate of 2.5% in June 2005.

Continued Boom in Foreign Currency Loans for Households

Coming to slightly more than EUR 50 billion in July 2005, total foreign currency loans to domestic nonbanks have remained persistently high. This figure is equivalent to a 19.5% share in all loans issued to Austrian nonbanks.[31] Once again, households are responsible for this scenario. Whereas the share of foreign currency loans to nonfinancial corporations recently declined slightly to 14.2%, the trend in foreign currency loans to households has continued unbroken, posting an annual growth of 11.9% since July 2004. Almost every third loan to households is denominated in a foreign currency (30.4% as at July 2005).

The exposure to foreign currency loans stagnated at particularly high levels in Western Austria. In Vorarlberg, for instance, more than 60% of all loans to households were foreign currency loans. By contrast, even in those Austrian provinces with a traditionally lower share of foreign currency loans to households (e.g. Carinthia, Lower Austria, Styria and Vienna), a steady catch-up process has been observed in recent years (see chart 20).

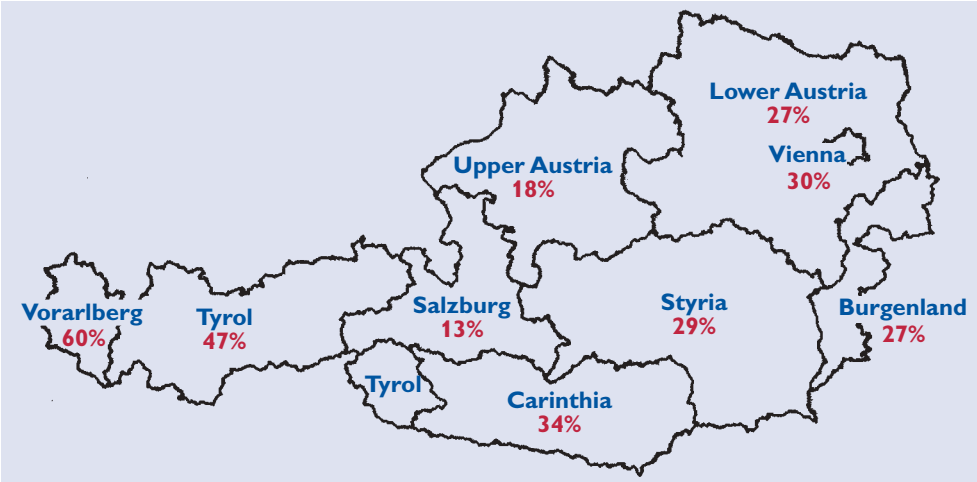
[30] *Data on household loans are inclusive of foreign currency loans. Since data on the repayment vehicles saved to repay these loans are not available, these figures accordingly represent upper limits. However, it should be borne in mind that, whereas an existing repayment vehicle reduces some of a foreign currency loan's credit risk, the foreign currency risk – and thus the resulting indirect credit risk – is reduced only if the repayment vehicle matches the currency in which the loan is denominated.*

[31] *On the problem of repayment vehicles, see footnote 30.*

Chart 20

Share of Foreign Currency Loans in Overall Loans to Households

July 2005



Source: OeNB.

With a share of 89.8% in all foreign currency loans issued to nonbanks as at July 2005, the Swiss franc maintained its position as the dominant currency. The Japanese yen's importance is currently stagnating at a low level, on a par with that of the U.S. dollar.

In view of this altogether very high share of foreign currency loans, the question arises as to whether Austrian households are sufficiently aware of currency risks. It is particularly striking that the popularity of the Swiss franc and Japanese yen – both traditional foreign currency loan currencies – depends less on their exchange rate movements than on their realizable interest rate advantages vis-á-vis the euro. Thus, the boom in yen-denominated loans that took place in the period from 1999 to 2002 was clearly determined by the interest rate developments of yen-denominated loans compared with those denominated in euro. Although it appears quite rational to accept the higher volatility of e.g. the Japanese yen only with correspondingly higher interest rate advantages, the latter should not be the sole decision-making criterion. Instead, currency risk should also be taken into account. In view of the continuing uptrend in loans issued to households, it seems appropriate that lending banks further promote customers' risk awareness in this field.

Growing Risk Awareness at Major Banks

An analysis of the assets side of Austrian banks' balance sheets shows that credit risk is the most important risk for most Austrian credit institutions. The OeNB's Financial Stability Report assesses credit risk in two different ways: first, by means of the external auditor's annual prudential report and, second, by assessing specific loan loss provisions on an intrayear basis.

The prudential report prepared for 2004 is now available for examination (see table 5). In assessing the credit quality of loans granted by Austrian banks, the report draws a distinction between *nonaccrual and nonearning claims, nonperforming loans* and *irrecoverable loans.* [32]

Table 5

Credit Quality According to the External Auditor's Annual Prudential Report

As a percentage of total lending

	1997	1998	1999	2000	2001	2002	2003	2004
Nonaccrual and nonearning claims on nonbanks								
50% quantile (median)	0.11	0.19	0.16	0.12	0.10	0.11	0.14	0.11
Mean of five largest banks	1.15	1.08	0.98	0.77	0.46	0.65	0.70	0.61
95% quantile	3.89	3.82	3.93	3.37	3.54	3.08	2.88	2.36
Nonperforming Loans								
50% quantile (median)	2.28	2.43	2.30	2.44	2.34	2.30	2.22	2.23
Mean of five largest banks	2.81	2.01	1.99	1.51	1.55	1.89	1.79	1.44
95% quantile	8.67	8.64	8.87	9.07	9.25	8.22	8.05	7.69
Irrecoverable Loans								
50% quantile (median)	0.53	0.55	0.57	0.55	0.49	0.57	0.57	1.00
Mean of five largest banks	0.33	0.38	0.44	0.37	0.36	0.61	0.66	0.65
95% quantile	4.17	4.15	4.11	4.01	4.04	3.83	3.91	4.28

Source: OeNB.

In general, the report states that the credit quality of loans issued by Austrian banks can be considered satisfactory and that, from a systemic point of view, worrying developments are not looming on the horizon. However, irrecoverable claims, in particular, have increased. The median value for irrecoverable claims as a percentage of the total claims of Austrian banks rose from 0.57% in 2003 to 1% in 2004. As a result, irrecoverable claims have reached a record high compared with previous years. Likewise, irrecoverable claims rose for the 95% quantile, also posting a long-term record high. This development points to the fact that many Austrian banks now classify previously nonperforming loans as irrecoverable loans and have adjusted their credit portfolio accordingly.

The credit quality of major banks appears to have improved across all loan categories as defined by the prudential report. In 2004, the five largest Austrian banks (in terms of total assets) posted a year-on-year decline in the share of problem loans as a percentage of total loans in all of the above categories. This improvement in credit quality and the reduced requirement for loan loss provisions (see below) indicate that up to and including 2004 major banks showed greater risk awareness in their credit risk management.

Finally, the share of irrecoverable loans as a percentage of total lending has increased. Since, however, this suggests portfolio adjustments and as the share of nonaccrual claims has fallen at the same time, i.e. no additional

[32] *Nonaccrual and nonearning claims on nonbanks are defined as claims for which payments are not anticipated in the near future. Nonperforming loans are loans that are expected to default. Irrecoverable loans are loans that have already defaulted at the time of data compilation.*

new problem loans arose, the overall development of banks' credit quality was positive from the perspective of financial stability in 2004.

Slight Decline in Loan Loss Provisions

Specific loan loss provisions form the basis for assessing the credit quality of the loan portfolio of the Austrian banking sector on an intrayear basis. In June 2005, the ratio of specific loan loss provisions to Austrian banks' claims on nonbanks[33] amounted to 3.2% on an unconsolidated basis. This signifies a slight decline in required loan loss provisions compared with the previous year, when 3.4% of claims on nonbanks required provisioning.

This trend toward lower specific loan loss provisions is visible at the major banks, in particular. In June 2005, the average ratio of specific loan loss provisions to claims on nonbanks of the five largest banks was 2.9%, thus remaining below the Austrian average. This means that after having set a record high in February 2004, the five largest Austrian banks succeeded in reducing their requirement for loan loss provisions by 12%. This decline in loan loss provisions reflects the current EU-wide trend of historically low levels of loan loss provisions.

The median value for loan loss provisions generally exceeds both that of the major banks and the average of all Austrian banks. At 4.6%, it also surpassed these two values in mid-2005.

A sectoral breakdown of the ratio of loan loss provisions to claims on nonbanks reveals that the sector of Volksbank and Raiffeisen credit cooperatives requires the most provisions. Comparatively many smaller Raiffeisen banks, which from a risk policy perspective do not particularly influence the overall situation of the Austrian financial market, rank among the banks with a higher-than-average requirement for loan loss provisions (more than 15%). Compared with the previous year, the loan loss provisions of the Volksbank and Raiffeisen sectors have declined. State mortgage banks posted a sharp decline in the ratio of specific loan loss provisions to claims on nonbanks (June 2005 ratio: 1.8%). The other sectors do not indicate much change in the development of specific loan loss provisions.

As experience from previous credit cycles shows, loan growth, which has been improving in Austria since the end of 2003, could in future trigger a modest rise in credit risk costs following a period of decline. Several factors such as the growing risk exposure of households and, inter alia, oil price-induced economic risks can be put forward for this scenario.

[33] *As experience shows that provisions for interbank loans are rather low, these are not taken into account in the following analysis.*

Completion of the OeNB/FMA Series of Guidelines on Basel II

The publication of the guidelines on operational risk management and on overall bank risk management for the time being completes the OeNB/FMA series of guidelines on Basel II.
The guideline on operational risk management opens with an introduction to the subject areas of this risk category by examining the evolution of the related risk concept as well as the characteristics and significance of operational risk in banks and investment firms and illustrating these issues with case studies. Next, the guide presents operational risk management methods in exemplary fashion and examines in detail the specific situations of smaller credit institutions and of investment firms. Measures of operational risk management are the subject of a separate chapter, which examines key areas of risk and risk reduction measures, presenting in turn the four causes of operational risk (people, systems, i.e. infrastructure and IT, internal processes and external events). This chapter also includes a section devoted solely to legal risk. For each cause, general and specific risks as well as measures taken to reduce them are dealt with individually. The last chapter of the guideline finally describes the various approaches for calculating regulatory capital requirements and their related application requirements: the Basic Indicator Approach, Standardized Approach or Alternative Standardized Approach, and the Advanced Measurement Approaches (AMAs) are all critically assessed and presented with their qualitative and quantitative requirements.
The guideline on overall bank risk management deals in detail with the subject of internal capital allocation. In international forums of debate, the relevant methods are described as Internal Capital Adequacy Assessment Process (ICAAP). By way of introducing the subject, the guide to ICAAP offers a detailed list and explanation of the basic requirements for an adequate capital allocation process as well as a presentation of the regulatory framework (integration of ICAAP into the New Basel Capital Accord (Basel II)). A separate section looks at the idea of proportionality – risk management methods that are adapted to the individual bank's degree of complexity, inherent risk, scope of transactions and size. The main subject of the guideline is the detailed presentation and explanation of all the key components of an ICAAP. It provides an in-depth explanation of how to assess all major types of risks, beginning with the implementation of an appropriate risk strategy. Next, the different types of capital and their suitability for risk cover are examined in greater detail. A separate section then takes a closer look at both the significance of a limit system that is adjusted to the risk scenario and the need to have efficient internal control mechanisms in place. The guideline ends with a chapter on the practical implementation of an internal capital allocation method; this chapter explains the prerequisites for successfully and efficiently implementing ICAAP and presents the key factors for success.

Market Risk Indicates Varying Trends

The decrease in interest rate risk in the banking book is confirmed in the first half of the year. By contrast, a greater willingness to take risks was visible in equity trading and in open foreign exchange positions – albeit starting from a low level.

The reduction in interest rate risk in the banking book, which occurred in the Austrian banking system in 2004, is likely to be of a longer-term nature. In the first half of 2005, indicators only suggest a comparatively small increase in this risk. During 2004, the average Basel ratio for interest rate risk[34] of all Austrian banks – determined by weighting by total assets – shrank from 7.8% to 6.1% (6.4% in mid-2005). This development is probably attributable, inter alia, to the fact that demand for variable rate loans has been growing in relation to fixed interest loans, thereby reducing the scope for maturity transformation and, consequently, the related risks as well. However, the thus reduced interest rate risk is contrasted by higher credit risk, as borrowers may get into

[34] *Basel ratio for interest rate risk: Decline in economic value as a result of a parallel yield curve shift in all currencies by 200 basis points relative to a bank's eligible own funds.*

payment difficulties in the event of rising variable loan rates.

Unlike in the banking book, interest rate risk in the trading book – as measured by the capital requirements for position risk of interest rate instruments – rose markedly from EUR 610 million to EUR 810 million in the first half of 2005. However, this increase, which is attributable to individual major banks, was not sustained later on. At end-August 2005, this figure fell just short of EUR 600 million.

Equity trading operations expanded in the first half of 2005. The corresponding capital requirements climbed from EUR 43 million at the beginning of the year to EUR 71 million – a fact that is attributable to the involvement of certain major market participants. However, exposure to equity price risk did not increase significantly for the Austrian banking system. The corresponding stress test, which is not restricted to trading book positions but covers all quoted shares in both the trading and the banking book, reveals only a minimal increase in equity price risk.

Direct foreign currency risks, to which banks are exposed on account of their open foreign exchange positions, increased in the first half of 2005. Related capital requirements rose from EUR 53 million to EUR 97 million, a level last attained four years ago.

Payment and Securities Trading, Clearing and Settlement Systems Remain Stable

In the first half of 2005, around 206 million transactions worth a total of EUR 5,812.6 billion were processed through the payment and securities trading, clearing and settlement systems that are subject to the OeNB's payment systems oversight. The highest number of transactions (around 101.1 million) was processed through payment systems with a direct debit function (dominated by Maestro POS). In terms of transaction value, however, the highest-valued transactions (approximately EUR 5,078 billion) were processed through the ARTIS/TARGET[35] payment system operated by the OeNB. For securities trading, clearing and settlement systems, over-the-counter business, in particular, posted an impressive year-on-year growth of some 89.5% and 76% in terms of volume and value, respectively.

In the first half of 2005, Central Counterparty Austria (CCP.A), a subsidiary jointly owned by Wiener Börse AG and the Oesterreichische Kontrollbank AG (OeKB), commenced operations as a central counterparty for both Wiener Börse AG's cash and derivatives markets and thus replaced the two previous systems, the settlement and clearing system for options and futures trading and the clearing and settlement system for the cash market of Wiener Börse AG. The establishment of a central counterparty is in line with the European trend and will help further improve the stability of the Austrian financial market.

With a total transaction value of some EUR 485 billion, the large-value payment system EURO1 remained the most important international payment system for Austrian banks in terms of transaction value. As measured by the number of transactions, however, the retail payment system STEP2 led the

[35] *ARTIS: Austrian Real Time Interbank Settlement; TARGET: Trans-European Automated Real-time Gross settlement Express Transfer.*

field with some 4.4 million payment orders.

In the first half of 2005, altogether 17 system disturbances[36] were reported for the supervised payment and securities trading, clearing and settlement systems. None of these disturbances had an impact on Austria's financial system, as most of them (12 system disturbances) concerned four retail payment systems that process only about 0.3% of all retail payments incurring in Austria (both measured in numbers of transactions and transaction value). The remaining system disturbances concerned the participation of one Austrian bank in an international payment system and were not critical, either, as the bank in question was able to switch to other payment systems. It is important to point out that these system disturbances have neither affected ARTIS/TARGET, nor the securities trading, clearing and settlement systems, nor the infrastructure facilities of Austrian Payment Systems Services (APSS) GmbH, which are of importance for many retail payment systems.

Table 6

Transactions and System Disturbances in the Period from January to June 2005

	Transactions		System disturbances
	Number in million	Value in EUR billion	Number
ARTIS/TARGET	1.9	5,077.8	0
Securities trading, clearing and settlement systems	0.8	157.3	0
Retail payment systems	197.4	15.5	12
Participation in international payment systems	5.9	562.0	5

Source: OeNB.

Austrian Banks' Business Activities in Central and Eastern Europe Continue to Expand – Dynamics Vary at the Local Level[37]

The business activities of Austrian banks' subsidiaries in Central and Eastern Europe continue to post stable growth in terms of both total assets and profitability. In total, 11 Austrian banks with 54 fully consolidated subsidiaries operate in this market. Of these, 26 are active in EU Member States of the previous enlargement round[38] and 14 each in countries with EU accession status[39] and other CEECs[40].

As at end-June 2005, the aggregated total assets of all fully consolidated foreign subsidiaries operating in these markets were approximately EUR 115.5 billion, which is equivalent to an increase of 29% year on year. This equals a year-on-year acceleration of

[36] *System disturbance is defined as an interruption of the system during running times that lasts more than 30 minutes and is induced by the payment system, or as any interruption of the system that is induced by failure and occurs within the 30-minute period before the end of accounting.*

[37] *According to data from the reports of condition and income Austrian banks have published on a quarterly basis since early 2002. This publication contains selected items from the consolidated annual reports of parent banks and their fully consolidated subsidiaries abroad.*

[38] *EU Member States: Poland (PL), Slovakia (SK), Slovenia (SI), Czech Republic (CZ) and Hungary (HU).*

[39] *EU accession status: Bulgaria (BG), Croatia (HR), Romania (RO) and Turkey (TR).*

[40] *Other CEECs: Albania (AL), Bosnia and Herzegovina (BA), Russia (RU), Serbia and Montenegro (CS), Ukraine (UA) and Belarus (BY).*

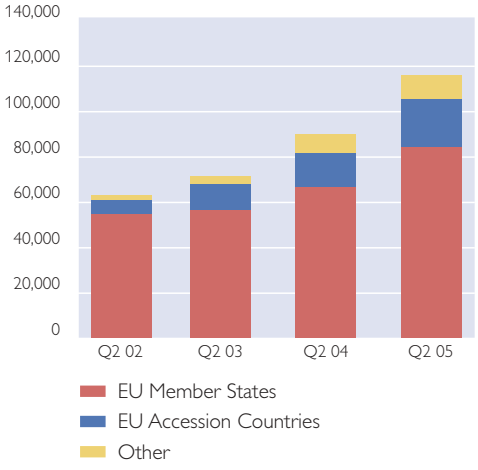
the growth rate by four percentage points. Subsidiaries in countries with EU accession status and in other CEECs indicate more dynamic growth (+38% and +40%, respectively) than those located in EU Member States (+26%), although starting from lower levels (see chart 21).

Chart 21

Total Assets of Austrian Banks' Subsidiaries in Central and Eastern Europe

As at June 30, 2005

EUR million



Source: OeNB.

The aggregated operating profit of CEE subsidiary banks reveals the same picture. From end-June 2004 to end-June 2005, aggregated operating profit grew by 35% to some EUR 1,152 million, which is equivalent to growth accelerating by 2 percentage points. Also in the area of aggregated operating profits, the growth rates of subsidiaries in countries with EU accession status (+56%) and in other CEE countries (+71%) appear to be more dynamic than those of EU Member States (+25%) (see chart 22).

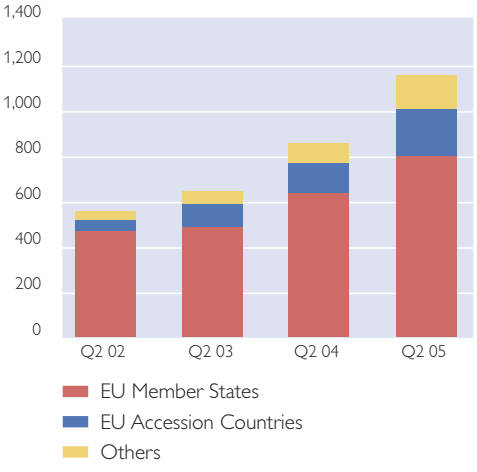
The cost/income ratio[41] of fully consolidated subsidiary banks in the CEECs improved from 58.9% in June 2004 to 56.4% in June 2005; this rise is attributable to a sharper increase in operating income (+27%) than in operating expenses (+22%) (see chart 23). The importance of Austrian banks' business activities in CEE in terms of their profitability is reflected in the ratio of the share of subsidiary banks in the aggregated total assets of their 11 parent banks (around 23%) to their share of aggregated operating profit (around 42%).[42]

Chart 22

Operating Profit of Austrian Banks' Subsidiaries in Central and Eastern Europe

As at June 30, 2005

EUR million



Source: OeNB.

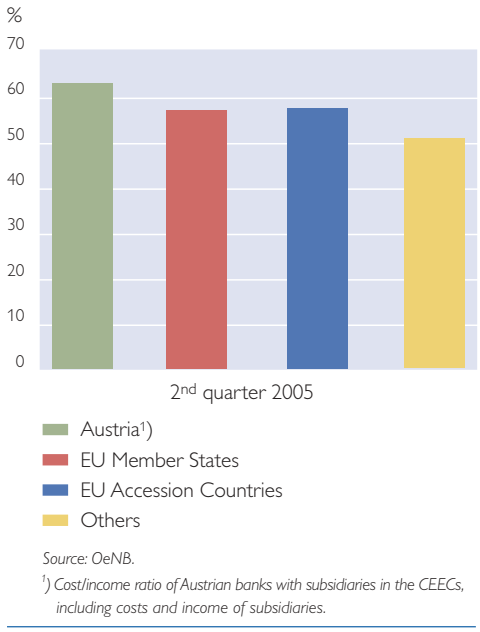
[41] *Ratio of administrative costs to operating income before deduction of net risk provisioning in the lending business.*

[42] *These shares refer to unweighted aggregated total assets/unweighted aggregated operating profits of fully consolidated subsidiaries in CEE.*

Chart 23

Cost/Income Ratio of Austrian Banks' Subsidiaries in Central and Eastern Europe

As at June 30, 2005



Source: OeNB.

1) Cost/income ratio of Austrian banks with subsidiaries in the CEECs, including costs and income of subsidiaries.

The exposure of the Austrian banking system to credit risk in CEE comprises two components: First, loans that are issued to this region (direct cross-border loans) by banks based in Austria, and second, loans that are issued by Austrian banks' subsidiaries operating in the region (indirect loans). Taken together, these two components represent a foreign lending exposure of EUR 122.3 billion (+4% since the start of the year), with the CEECs accounting for EUR 74.2 billion (+11%) of this figure. The new EU Member States, in turn, make up two-thirds of the CEECs' share (see table 7).

This figure confirms the key role the CEECs play for the Austrian banking system. By focusing their business activities on the new Member States, Austrian banks have succeeded in keeping within limits, in particular, risks arising from the institutional, legal and economic framework of these markets.[43] An important factor in this context, however, is that business activity is by far more dynamic in those countries that have not (yet) joined the EU.

[43] *In this context, let us point to the new method of assessing systemic banking risk that was introduced by the rating agency Fitch Ratings Ltd. in late July 2005. In its first assessment, Austria was awarded a merely average rating. One of the reasons for this evaluation is probably an undifferentiated analysis of the risk concentration in the CEECs.*

Table 7

Credit Exposure to Central and Eastern European Countries

As at June 30, 2005
EUR billion

	Abroad															
		Central and Eastern Europe														
			EU Member States						EU Accession Countries				Other Countries[3])			
				CZ	HU	PL	SI	SK		BG	HR	RO		BA	RU	UA
Direct loans[1])	68.5	24.6	14.3	4.5	2.3	3.2	2.8	1.5	5.5	0.4	3.8	1.4	4.7	0.3	3.5	0.1
Share in foreign loans (%)		35.9	20.9	6.5	3.4	4.7	4.0	2.3	8.1	0.5	5.5	2.1	6.9	0.5	5.1	0.2
Indirect loans[2])	53.9	49.6	35.0	13.1	8.3	6.7	1.9	4.9	10.1	1.4	6.9	1.8	4.6	1.5	1.5	0.4
Share in foreign loans (%)		92.1	65.0	24.3	15.4	12.5	3.6	9.2	18.7	2.5	12.8	3.4	8.4	2.7	2.8	0.8
Total	122.3	74.2	49.3	17.6	10.6	9.9	4.7	6.5	15.6	1.7	10.7	3.2	9.3	1.8	5.0	0.6
Share in foreign loans (%)		60.7	40.3	14.4	8.7	8.1	3.8	5.3	12.8	1.4	8.7	2.6	7.6	1.5	4.1	0.5

Source: OeNB.

[1]) Nonsecuritized loans granted by Austrian banks to foreign nonbanks.

[2]) Nonsecuritized loans granted to nonbanks by subsidiaries of Austrian banks.

[3]) In addition to Bosnia and Herzegovina (BA), Russia (RU) and Ukraine (UA), the item "Other Countries" also includes Albania (AL), Serbia and Montenegro (CS) and Belarus (BY).

Banks in Central and Eastern Europe Remain Highly Profitable[1]

In some of the countries examined in this section (Czech Republic, Bulgaria), GDP growth accelerated in the first half of 2005 on a year-on-year basis. In others (Slovakia, Romania), it remained at a relatively high level. In Hungary, Slovenia and Croatia, annual growth rates returned to considerably higher levels in the second quarter of 2005. Although they were somewhat stronger in Poland in this period, growth rates remained at a relatively low level. GDP growth was fueled by net exports in the Czech Republic, Hungary, Poland and Slovenia. By contrast, domestic demand as a whole shrank and, in some cases, stagnated. In Slovakia, Bulgaria, Romania and Croatia, growth was primarily driven by domestic demand. In this economic climate, growth in loans granted to enterprises and households remained the most dynamic in Bulgaria and Romania, while accelerating in Slovakia and Croatia and also – despite sluggish domestic demand – in the Czech Republic and in Slovenia. In the Czech Republic and in Slovakia, this development (starting from hitherto very low growth rates) was based on more buoyant growth in corporate loans, which did not, however, match the continued robust growth of household loans. In the other countries under review, loans to households also grew at a faster pace than loans to enterprises. Despite the acceleration of growth in corporate and household loans, the momentum recently seen in these four countries (15% to 25% year on year) remained well below that registered in Bulgaria and Romania (35% to 40%). However, growth dynamics in these two countries were considerably weaker than in mid-2004. This downtrend is likely to reflect – at least, in part – central bank measures taken to contain the growth in lending. In addition, credit growth in Hungary continued to gradually slow down in the first eight months of 2005 (to some 15% year on year). In Bulgaria and Romania, where a very high share of domestic loans is issued to enterprises and households in foreign currency, slowing credit momentum between end-2004 and July 2005 was accompanied by a slight decline in the share of foreign currency loans in total loans

[1] This section examines the performance of the entire banking sector in the Czech Republic, Hungary, Poland, Slovakia, Slovenia, Bulgaria, Croatia and Romania and does not focus only the performance of the Austrian banks' subsidiaries in these countries.

outstanding. However, the risk that attempts to check domestic loan growth causes enterprises and – to a lesser extent – households to accumulate more debt abroad cannot be dismissed. In fact, gross foreign corporate debt in Bulgaria increased more strongly in the first half of 2005 than in the comparable period of 2004. By contrast, in Hungary, a country with a similarly high share of foreign currency loans, declining loan demand impacted primarily on loans denominated in domestic currency. As a result, the share of foreign currency loans continued to climb above the 40% mark in the first seven months of 2005. At the same time, the share of the Swiss franc in foreign currency loans continued to climb at a dynamic pace, reaching 40% already by mid-2005, while the share of the euro went down to 51%. In almost all countries under revision, bank profitability improved, or largely held steady at high levels, except for a slight decline in Croatia.

Net interest income (as a percentage of assets) declined in several countries; however, banks were able to offset this decline by enhanced cost efficiency and/or improved noninterest income. Given the favorable development of the share of nonperforming loans,[2] the reduction in loan loss provision charges also made a positive contribution to banks' performance in most countries. However, this trend could change in the future as loan portfolios mature.

[2] *Nonperforming loans are defined as substandard, doubtful and irrecoverable loans. In view of differences in both national classification rules and the range of loans included in this classification, a cross-country comparison is difficult.*

Nominal Return on Equity

%

	2001	2002	2003	2004	H1 04	H1 05
Bulgaria	18.9	14.6	14.8	16.6	18.5	18.6
Croatia	6.6	13.7	14.5	16.1	17.9	14.5
Poland	12.8	5.3	5.5	17.4	17.7	21.2
Romania	26.3	21.0	17.7	18.0	20.5	19.7
Slovakia	7.9	11.5	10.5	12.3	13.8	14.6
Slovenia	0.6	8.5	8.2	8.7	..	..
Czech Republic	16.4	27.1	23.4	23.1	22.4	29.3
Hungary	16.0	16.1	18.7	23.8	25.8	27.1

Note: Based on profits after tax. Intrayear data are annualized linearly.

Net Interest Income

% of annual average bank assets

	2001	2002	2003	2004	H1 04	H1 05
Bulgaria	4.2	3.9	4.7	4.9	4.9	4.4
Croatia	3.6	3.3	3.3	3.0	3.1	3.0
Poland	3.7	3.4	3.1	3.2	3.2	3.2
Romania	2.6	3.4	4.7	4.8	5.4	3.7
Slovakia	2.5	2.7	2.9	2.8	2.9	2.2
Slovenia	3.6	3.7	3.2	2.8	2.9	2.7
Czech Republic	2.5	2.4	2.1	2.3	2.2	2.3
Hungary	4.2	4.3	4.0	4.3	4.0	3.9

Note: Data not comparable between countries. Intrayear data are annualized linearly.

Operating Costs

% of current operating income

	2001	2002	2003	2004	H1 04	H1 05
Bulgaria	64.1	63.5	63.0	58.3	55.4	51.6
Croatia	65.6	59.3	56.9	54.3	55.5	56.4
Poland	62.4	63.5	68.7	65.3	64.8	60.8
Romania	57.8	62.0	65.1	61.6	58.4	64.0
Slovakia	65.7	57.9	64.6	56.2	56.6	56.3
Slovenia	65.2	59.7	62.5	60.8	57.8	53.7
Czech Republic	53.4	51.4	52.6	47.2	49.0	45.7
Hungary	66.7	64.7	60.1	53.0	49.8	49.4

Net Change in Loan Loss Provisions

% of current operating income

	2001	2002	2003	2004	H1 04	H1 05
Bulgaria	−8.7	1.3	3.7	9.4	6.2	12.9
Croatia	13.7	6.6	7.7	6.6	4.5	4.9
Poland	18.9	22.9	15.2	7.9	7.0	4.4
Romania	4.7	2.0	5.5	7.3	6.3	3.0
Slovak Republic	−33.4	−9.8	−12.5	−9.2	−14.2	−3.3
Slovenia	25.9	19.8	16.6	16.0	17.1	18.5
Czech Republic	22.8	9.3	0.8	9.9	11.1	8.6
Hungary	4.3	4.7	5.5	7.5	8.7	2.4

Nonperforming Loans

% of all loans

	2001	2002	2003	2004	H1 04	H1 05
Bulgaria	4.5	3.6	4.2	3.6	2.4	2.8
Croatia	7.3	5.9	5.1	4.6	5.1	4.3
Poland	18.4	21.6	22.1	15.1	17.9	14.0
Romania	3.3	2.3	8.3	8.1	8.5	8.2
Slovak Republic	21.0	11.0	9.1	7.0	7.8	6.9
Slovenia	7.0	7.0	6.5	5.5	6.0	9.6
Czech Republic	14.1	8.5	5.0	4.1	4.6	4.3
Hungary	3.6	3.7	3.0	2.9	3.4	2.8

Source: National central banks, OeNB calculations.

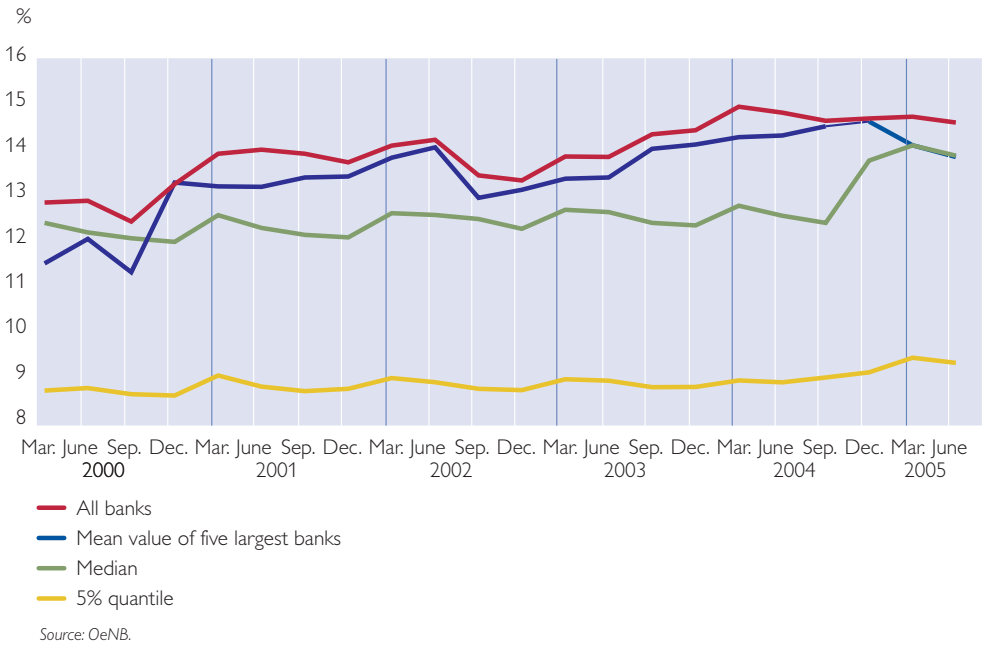
Austrian Banks' Risk-Bearing Capacity Continues to Strengthen

Capital Ratio Remains High

The capital ratio is a key indicator used to assess banks' risk-bearing capacity. In recent years, the unconsolidated capital ratio, which relates banks' own funds to their risk-weighted assets, has been high for all Austrian banks compared with the rest of Europe. Although it eased slightly against its 15.0% record of March 2004, in June 2005 it still stood at 14.6% (see chart 24). In mid-2005, the consolidated capital ratio was 12.4%. This means Austrian banks' capital ratios continue to exceed the required minimum capital ratio of at least 8% by a wide margin.

Chart 24

Unconsolidated Capital Ratio of Austrian Banks



Source: OeNB.

In early 2005, major banks' average capital ratios approached the median value for the Austrian banking sector (excluding special purpose banks). Whereas the capital adequacy of the five largest banks (as measured by total assets) mostly exceeded the median value in the past, in June 2005 both values showed almost identical levels of 13.9% after the median had gone up sharply a few months earlier. Major Austrian banks also exceed the capital ratio of major EU banks, which is 11.3% (see ECB, Financial Stability Report, June 2005). Owing to the current level of excess capital of BAWAG P.S.K. the granting of a large-scale loan to REFCO does not pose any threat to financial market stability.

A good capital cushion is also indicated by the value for the 5% quantile, which represents banks with relatively weak capital ratios. In early 2005, the value for the 5% quantile went up to 9.4% from 8.8% in January 2004 and fell back slightly to 9.3% by mid-year.

As for the core capital ratio, which relates tier 1 capital (core capital) to the assessment base, the unconsolidated total of all Austrian banks was high compared to the level of previous years. In June 2005, the core capital ratio of Austrian banks was 10.2%. Since the core capital ratio plays a crucial role in the assessment of banks by rating agencies, it is useful to look at the tier 1 ratios of rated Austrian banks. In June 2005, the average core capital ratio of these banks (excluding special purpose banks) was 8.2%. This ratio is largely in line with the European average of major banks, even though these banks are not entirely comparable owing to size differences. At end-2004, the ECB stipulated a core capital ratio of 8.3% for the major banks within the euro area.

In short, Austrian banks' risk-bearing capacity is currently following a satisfactory trend. In addition, their capital adequacy is on par with the euro area average and, at times, slightly above trend.

Deposit Guarantee

Directive 94/19/EC of the European Parliament and the Council of 30 May 1994 on deposit-guarantee schemes (Deposit-Guarantee Directive) stipulates that all EU Member States are required to set up deposit guarantee schemes which guarantee that, in the event of a bank failure in an EU Member State, bank customers are reimbursed their deposits to a level of up to EUR 20,000.00 (maximum retention: 10%). This guarantee scheme takes consumer protection considerations into account and promotes financial stability by avoiding potential panic bank runs. However, there are considerable differences between the individual national deposit guarantee schemes, both in terms of coverage level and the volume of deposits insured and from the perspective of structure and financing.

Given this heterogeneity of deposit guarantee schemes on the one hand and the growing integration of the EU banking sector on the other, the Deposit-Guarantee Directive is currently undergoing a comprehensive review by the European Commission. The review is to examine whether the Directive has achieved its original objectives in full and improved the functioning of the internal market by guaranteeing a minimum coverage level throughout the EU. In particular, the review explores the question of whether and to what extent there is a need for further harmonization of national deposit guarantee schemes (e.g. in terms of coverage level and the volume of deposits insured), and to what extent current arrangements for cross-border regimes are still appropriate.

Against this background, the OeNB organized an international workshop on June 1, 2005. This workshop served to present the deposit guarantee schemes of selected EU Member States, to discuss the pros and cons of specific forms of structure and financing from both national and cross-border perspectives and to evaluate the potential for further harmonization. In this context, observations made on several occasions about a possible EU-wide harmonization based on the ex ante funding model were considered to be particularly sensitive. A survey carried out in 2004 shows the funding mechanism of deposit guarantee schemes to be as follows: 14 are ex ante, 5 are ex post and a further 6 are a mixture of ex ante and ex post schemes. A general commitment to establish an ex ante financed guarantee scheme would have far-reaching consequences for the countries concerned, such as Austria, and in any case could only be envisaged if appropriate transition periods were set for the changeover. In addition to the fact that the question of the optimal funding model is clearly associated to a considerable degree with the structure of the relevant national banking sector, the debate also made clear that the advantages of ex ante funded schemes (e.g. immediate availability of financial funds) – at least, in their current form – are also offset by significant disadvantages (above all, possible high administrative costs and a sizeable commitment of funds). Finally, risk-based premiums were considered to be of major importance.

Stress Tests Prove Banking System's Good Resilience to Shocks

In 2003, stress tests were developed in the course of the IMF's Financial Sector Assessment Program to evaluate the risk-bearing capacity of the Austrian banking system. Ever since, the OeNB has regularly published the results of these tests in its Financial Stability Report[44]. Table 8 shows the development of results for credit and market risk over time. To establish comparability of results that are measured at different points in time, the capital ratios resulting from individual stress scenarios are not indicated. Instead, the table shows the gap between these capital ratios and the relevant current ratio. In mid-2005, for instance, the unconsolidated capital ratio was 14.62%; this figure went down by 0.96 percentage point to 13.66% in the "domestic credit risk" stress scenario.

[44] *The related methodology is described in the OeNB's Financial Stability Report 7. Let us point out that, to economize on space, we present only the results that relate to the aggregate Austrian banking system, i.e. the relevant positions held by individual banks have been combined into aggregate positions.*

Table 8

Stress Test Results for the Aggregated Austrian Banking System over Time

	End-2003	End-2004	Mid-2005
	%		
Current capital ratio	14.45	14.71	14.62
	Gap between current and stressed capital ratio (in percentage points)		
Credit risk			
Domestic credit exposure			
30% increase in the ratio of loan loss provisions to loans outstanding	0.87	0.92	0.96
Credit exposure in Central and Eastern Europe			
40% increase in the ratio of loan loss provisions to loans outstanding	0.28	0.27	0.26
Foreign currency loans			
10% appreciation of the Swiss franc against the euro	0.28	0.30	0.30
20% appreciation of the Japanese yen against the euro	0.16	0.07	0.07
Accumulated credit risk			
Simultaneous analysis of all three credit risk components[1])	1.38	1.39	1.41
Market risk			
Interest rate risk			
Euro: Upward parallel shift of the yield curve by 130 basis points	0.61	0.35	0.29
U.S. dollar: Upward parallel shift of the yield curve by 110 basis points	0.04	0.06	0.06
Swiss franc: Upward parallel shift of the yield curve by 150 basis points	0.04	0.01	0.02
Japanese yen: Downward shift of the yield curve[2])	0.06	0.03	0.00
Equity price risk			
Domestic stock market crash, 30% decline in ATX	0.16	0.16	0.16
International stock market crash, 35% decline in international stock indices	0.22	0.21	0.23
Exchange rate risk			
Worst case estimate[3]) for 10% appreciation/depreciation of the euro	0.10	0.09	0.11

Source: OeNB calculations based on data reported to the OeNB.

[1]) Increase in the ratio of loan loss provisions to total outstanding loans by 30% for loans to domestic nonbanks denominated in euro, by 40% for direct and indirect loans to nonbanks in the CEECs, and appreciation of the Swiss franc by 10% and the Japanese yen by 20%.

[2]) In the case of the Japanese yen, there was no parallel downward shift of the yield curve so as to avoid a negative interest rate scenario. The scenario consists of a cut by 20 basis points in short-term interest rates, by 40 basis points in mid-term interest rates and by 130 basis points in long-term interest rates.

[3]) Reduction in absolute values of all banks' open foreign exchange positions in 12 major currencies (excluding CEE currencies).

The stress test results show a relatively constant development over time in most risk categories. An exception to this is the interest rate risk, which mainly exists in the euro area and which has noticeably decreased since end-2003. This aggregate analysis of interest rate risk is in line with findings on market risk saying that the average interest rate risk is also decreasing at the level of the individual banks. However, it cannot be ruled out that this reduction in risk – triggered by higher demand for variable rate loans, together with potential payment difficulties on the part of borrowers in the case of a rise in variable loan rates – will be offset by increased credit risk. In the credit risk scenario, this additional risk component has still not been taken into account: The scenario for domestic credit risk assumes a uniform increase in loan loss provisions of 30% for the different points in time. Nonetheless, credit risk vis-á-vis domestic debtors has gone up slightly. Whereas the stressed capital ratio of the aggregate banking system was 0.87 percentage point below the current ratio at end-2003, in mid-2005 it was just 0.96 percentage point short.

The stress tests for the additional credit risk of foreign currency loans that arises from possible appreciations in the loan currency have shown a marginal increase in the risk profile for the Swiss franc and a reduction for the Japanese yen since end-2003. This increase corresponds to shifts in foreign currency loans out of Japanese yen

and into Swiss franc that were continued at end-2003. Whereas the combined scenario for Swiss franc- and Japanese yen-denominated loans led to a decline in the capital ratio by 0.44 percentage point at end-2003, in mid-2005 this decline was a mere 0.37 percentage point.

The stress test shows that the loss potential for the Austrian banking system arising from the credit risk vis-á-vis the CEECs is decreasing slightly despite ever growing business activity in this region. The gap between the actual capital ratio and the stressed capital ratio narrowed from 0.28 percentage point at end-2003 to 0.26 percentage point in mid-2005. This trend can largely be explained by the fact that the going public of Raiffeisen International Bankenholding AG (Raiffeisen International) has resulted in a marked diversification in shareholder structures[45] and has accordingly had a reducing effect on the stress test result.

Compared with the significance of business in the CEECs for the profitability of the Austrian banking system, the credit risk potential implied by the stress test looks relatively modest. This should be seen as a consequence of the fact that, in a consolidated analysis, the profits generated in the region will be disproportionately large compared with the total assets employed. Relating the losses arising from the scenario of a 40% increase in loan loss provisions for claims on nonbanks to the aggregate operating profits of the 11 Austrian parent banks operating in the region reveals that a shock of this kind would hit the profitability of these banking groups far more grievously. At mid-2005, this loss would represent 18% of operating profits before risk provisioning for 2004, or 40% of the 2004 annual profits after tax.

In short, the stress tests carried out in the past year and a half do not suggest a significant increase in risk potential for the Austrian banking industry. Since the capital ratio at the level of the banking system as a whole declined only marginally in the first half of 2005, the Austrian banking system can be expected to have satisfactory levels of resilience to shocks.

Ratings of Major Austrian Banks Basically Remain Unchanged

To evaluate financial stability, banking sector analyses make use of the supervisory reporting system. They are complemented by publicly available information and indicators of international rating agencies such as Moody's or Standard & Poor's. These indicators include long-term ratings that cover savings deposits, demand deposits and time deposits as well as interbank business, not to mention subordinated debt and the Bank Financial Strength Rating (BFSR).

[45] *In calculating the shock, loans granted by foreign subsidiaries are weighted with the stake held by the Austrian parent bank, as only these stakes ultimately affect operating income.*

Table 9

Ratings of Selected Major Austrian Banks

As at October 31, 2005

	Long-Term Bank Deposit Rating		Bank Financial Strength Rating	
		Outlook		Outlook
BA-CA	A2	under review	B–	under review
Erste Bank	A1	stable	B–	stable
RZB	A1	stable	C+	stable
BAWAG P.S.K.	A2	under review	C+	under review
ÖVAG	A2	stable	C	stable
RLB Upper Austria	A1	stable	B–	negative
Hypo Alpe-Adria-Bank	Aa2	stable	C+	stable

Source: Moody's Investors Service.

Stock Prices of Major Austrian Banks Continue to Rise

As at September 30, 2005, the four banks listed on the ATX Prime Market (BA-CA, Erste Bank, Raiffeisen International, Investkredit) reported a combined market capitalization of EUR 33.3 billion, almost twice the value recorded in the comparable month of 2004 (+EUR 16.3 billion)[46]. As at end-September 2005, these four banks reported a share of more than one-third of domestic securities traded at the Wiener Börse. On balance total market capitalization climbed by EUR 46.7 billion [47] to EUR 94.9 billion year on year.

Investkredit will be delisted at the end of the year, as it was taken over by ÖVAG. Approximately 2% of shares are currently in free float but were hived off to a settlement company under a squeeze-out in September 2005. According to UniCredit, for the time being there are no plans of delisting for BA-CA, even if a squeeze-out were feasible under Austrian law.

Insurance Companies and Pension Funds Recover Further

Business Activities in Central and Eastern Europe Make Significant Profit Contributions

Healthy operating performance and higher investment results have had a positive effect on the stability of European insurance companies.

The Austrian insurance industry continued to improve its business and earnings performance. First, the life assurance segment – also favorably influenced by subsidized personal pension schemes – posted a benign performance. Mortality tables still applicable in 2005 and the guaranteed maximum interest rate of 2.75% could have provided an additional incentive for high demand. Austria's Financial Market Authority (FMA) has lowered the guaranteed maximum interest rate for life insurance contracts to 2.25% owing to low yield levels, which applies to all contracts with a guaranteed minimum yield concluded from January 1, 2006, onward. Second, the insurance industry's improved results are also attributable, in particular, to

[46] *This figure includes EUR 1.11 billion of Raiffeisen International's IPO in April 2005.*

[47] *This figure includes the new listing and relisting of Immoeast, Intercell, KTM, Raiffeisen International, Skyeurope, voestalpine and Wiener Städtische.*

the growing involvement of Austrian insurance companies in Central and Eastern Europe. The Austrian insurance industry operates some seventy insurance companies in this region and, in certain countries, commands a market share of as much as 35%. The expansion of the insurance industry's market presence in the CEECs is of particular interest on account of the industry's minimal market penetration, which demonstrates the region's growth potential. Higher (anticipated) growth rates and more stringent cost management are also mirrored in the stock price development of Austrian insurers, which is considerably more favorable than that of the European benchmark indices.

The switch to new mortality tables and the lowering of the guaranteed maximum interest rate will support financial stability in the insurance industry, as the calculatory bases will be adjusted to demographic developments and market conditions. However, it should be pointed out that the insurance industry as generally closely observes adverse shocks to the financial markets as well as increasingly occurring major loss events as a potential source of risk.

Foreign Assets Becoming Increasingly Important also for Insurance Companies

In the first half of 2005, the total assets of the insurance industry[48] (excluding reinsurance business) grew by EUR 5.2 billion to EUR 73.4 billion. Over the same period, Austrian equities and other domestic securities as well as foreign fixed income securities once more outperformed other assets items on the balance sheet (+EUR 1.9 billion and +EUR 1.4 billion, respectively). Thanks to higher-than-average contributions to growth, both items are jointly responsible for a net growth in assets of 63.5% and together represent almost 50% of assets. Since the introduction of the OeNB's insurance statistics in 1996, foreign equities and other foreign securities have grown from a very low level by more than tenfold to EUR 3.7 billion. In the first half of 2005 alone, growth amounted to EUR 861 million. For both fixed income and equity securities, it is obvious that of the international market for insurance assets is becoming more and more important. The first half of 2005 saw a considerable decline in both loans to the government and domestic government debt securities, which means that the insurance sector's exposure to the government amounted to EUR 5.8 billion, or has gone down by 65.4% since 1996. By contrast, domestic debt securities of Austrian credit institutions have gone up by EUR 471 million to EUR 7.5 billion. Although the exposure of insurance companies vis-á-vis domestic banks has augmented by a total of EUR 486 million to EUR 10.2 billion, its share in the total assets of insurance companies and in the consolidated total assets of Austrian banks has decreased slightly since end-2004. Owing to the banking and insurance sector's business performance and modest share in exposure, the risk of contagion between the banking and insurance sectors is still low.

In the first half of 2005, technical provisions in life assurance dominated actuarial provisions in terms of both amount (EUR 47.1 billion) and contributions to growth (+EUR 2.7 billion).

[48] *Based on quarterly reports (OeNB insurance statistics).*

Continued Growth of occupational Pension Funds

As at December 31, 2004, 13 single-employer occupational pension funds and 7 multi-employer occupational pension funds were operating in Austria. In 2004, the aggregate assets of all investment and risk sharing groups rose from EUR 9.12 billion to EUR 10.13 billion (+11.1%). Household claims against occupational pension funds accounted for about 3% of households' financial assets in 2004. At end-2004, occupational pension fund contracts existed with approximately 10,600 companies, involving some 369,000 prospective pensioners and around 44,000 pensioners.

In 2005, the Federal Act on the Establishment, Administration and Supervision of Pensionskassen (Pensionskassengesetz – PKG) was amended (Federal Law Gazette Part I No. 8/2005). This amendment primarily served to implement Directive 2003/41/EC on the activities and supervision of institutions for occupational retirement provision. In the future, two measures stipulated by the amendment could also boost the intensity of competition in the market for occupational retirement provision. First, the Directive provides for the reciprocal recognition of institutions for occupational retirement provision in all Member States. Regulatory control is subject to the home country control principle. Second, the Insurance Supervision Act approves of a new occupational pension product: occupational group insurance („betriebliche Kollektivversicherung" – BKV). In terms of tax and employment law, it is on an equal footing with occupational pension funds. Although BKVs follow a more conservative investment strategy than occupational pension funds, they offer a higher fixed interest rate and guarantee the nonforfeiture of claims upon conclusion of contract. However, BKVs are less transparent, and pensioners (including prospective pensioners) have less influence on their transactions than with occupational pension funds. From a regulatory perspective, this amendment continues with the growing liberalization of investment rules by means of the "prudent person rule," which will make investment strategies of occupational pension funds more flexible. As a result, the monitoring costs for beneficiaries will increase. In addition, the upper limit of 1% will be waived for asset management fees. Instead, these are to be fair and in line with the general market. This additional flexibility could lead to increases in asset management fees. The 2005 amendment to the PKG created the option for beneficiaries to waive the minimum return guarantee, which had in any case been significantly watered down by the 2003 amendment. Waiving the minimum yield guarantee should substantially reduce the asset management fees for beneficiaries. According to the Austrian occupational pension fund association, almost half of all persons entitled to a pension and almost all those who have recently taken out new pension contracts have exercised their waiver to the minimum yield guarantee.

Very Long-Term Index-Linked Government Bonds Could Support Occupational Pension Fund Risk Management

In 2004, many EU Member States (e.g. France, U.K.), saw an increase in (partly index-linked) government bonds issued with maturities of more than 30 years, which were in great demand by the market. Owing to their long-term liabilities and inflation risk, these types of investments could make

an important contribution to risk management of occupational pension funds, to which they are bound under the 2005 amendment to the PKG. Above all, in the euro area macroeconomic risks (e.g. inflation and demographic developments) are diversifiable only to a very limited extent. The future role of very long-term index-linked government bonds in managing macroeconomic risks in Austria depends on the federal government's debt management objectives and on market demand.

Special Topics

Payment Institutions –
Potential Implications of the New Category of Payment Service Providers for the Austrian Financial Market

Ulrike Elsenhuber,
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Unlike in other areas of the financial market, progress toward the integration of payments markets has not yet been satisfactory. While the introduction of the euro was an important step in this direction, a single European payment area for cashless payments still does not exist. Current initiatives thus aim to lay the groundwork for integrated cross-border payment transactions, in particular by harmonizing the applicable legal framework.

The European Commission's "New Legal Framework for Payments in the Internal Market" initiative is of special importance here. It proposes, inter alia, the introduction of a new category of payment service providers ("payment institutions") in addition to credit and e-money institutions that would perform payment services under comparatively less stringent licensing and supervision regulations. Against this background, the Oesterreichische Nationalbank conducted an empirical survey among Austrian market participants (banks and nonbanks) in the summer of 2005 to assess possible competition and risk-related implications of the introduction of payment institutions on the Austrian financial market.

The survey showed that most of the Austrian market participants questioned were critical of the current draft Directive and that respondents shared the European Commission's primary expectations – for example, that it will create a level playing field – only partly or not at all. On the contrary, they fear distortions of competition, increased risks and, over the long term, a loss of confidence in the stability of the payments market among end users. There is unanimous agreement among respondents that both payment and credit institutions should be subject to the same capital and supervision requirements in order to head off these risks. Furthermore, the survey shows that none of the Austrian market participants questioned is currently considering transformation into a payment institution.

1 Baseline Situation in the European Union

The market for cashless payments in the European Union is still largely fragmented, due primarily to legal and technical obstacles. The existing legal framework, for instance, is based to a great extent on national regulations, which makes it difficult to establish EU-wide payment infrastructures and creates considerable obstacles for the EU-wide activity of payment service providers. While specific legal provisions (regarding licensing and supervision) for card providers do exist in some EU Member States, such provisions are lacking entirely in others. The same is true for money remitters,[1] for whom legal licensing requirements within the EU range from credit institution licensing to mere registration.[2] From a technical perspective, efficient payment systems that ensure quick, secure and cost-effective payment transactions – e.g. through largely automated Straight-Through Processing (STP) – exist primarily at the national level. This is why various initiatives in the recent past have aimed at promoting the harmonization of the legal framework for payment transactions and the integration of cross-border payments.[3]

The European Commission's New Legal Framework for Payments in the Internal Market (NLF) initiative[4] is of particular importance in this context. With this initiative, the European

Refereed by
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[1] *Money remitters are service providers that carry out cash transfers within a global network.*

[2] *Until now, the right to provide services throughout the European Union on the basis of supervision in the country of origin only has been reserved exclusively for credit and e-money institutions under the so-called "European passport."*

[3] *Among the most important applicable legal acts are European Commission Recommendation 97/489/EC of 30 July 1997 concerning transactions by electronic payment instruments, Directive 97/5/EC of 27 January 1997 on cross-border credit transfers, Directive 98/26/EC of 19 May 1998 on settlement finality in payment and securities settlement systems and Regulation (EC) No. 2560/2001 of 19 December 2001 on cross-border payments in euro.*

[4] *See consultation paper COM(2003) 718 final.*

Commission hopes to consolidate the fragmented body of community law on payment services, eliminate legal obstacles to cross-border activities and support efforts within the payment services industry to establish an efficient and secure market.[5] The European Commission's proposal plays an important role in the implementation of the Lisbon Agenda,[6] which aims to make Europe the most competitive and dynamic economic area by 2010. It was included and given special priority in the Financial Services Action Plan (FSAP)[7] and is to be submitted as an official Directive proposal in the fall of 2005.[8]

In parallel to these activities, the industry is stepping up efforts to eliminate differences between domestic and cross-border payments within the internal market on a self-regulating basis. Particularly noteworthy in this context are the initiatives of the European Payments Council (EPC),[9] which was established by the European credit sector associations. These initiatives aim at consolidating the infrastructures for retail payment systems and creating pan-European payment instruments.[10]

The Eurosystem,[11] whose fundamental tasks under Article 3.1 of the Statute of the European System of Central Banks and of the European Central Bank (ECB)[12] also comprise promoting the smooth operation of payment systems, supports the efforts of the European Commission and the banking industry. As an integral part of the Eurosystem, the Oesterreichische Nationalbank (OeNB) focuses on maintaining a well-balanced combination of legislation and self-regulation.[13]

2 Key Provisions of the "New Legal Framework for Payments in the Internal Market"

2.1 General Objectives and Regulatory Focus

With its draft Directive,[14] the European Commission aims to establish a single European legal framework for cashless payments that creates the same competitive conditions for all current and future market participants.[15]

Thus, a significant portion of the proposed provisions aims at increasing transparency and the rule of law. For example, the draft contains provisions

[5] *See also Tumpel-Gugerell (2005, p. 18).*
[6] *Conclusions of the Presidency, European Council, Lisbon, March 23 and 24, 2000.*
[7] *See the European Commission's Sixth Progress Report on the Financial Services Action Plan (FSAP) at: http://europa.eu.int/comm/internal_market/finances/actionplan/index_en.htm.*
[8] *See Dieckmann (2005, p. 8).*
[9] *See http://www.europeanpaymentscouncil.org.*
[10] *Austrian Federal Economic Chamber (2005, p. 10–11).*
[11] *The Eurosystem comprises the European Central Bank and the national central banks of the Member States that have adopted the euro in Stage Three of Economic and Monetary Union.*
[12] *See Official Journal of the European Communities C 191 of 29 July 1992, p. 69.*
[13] *See ECB (2004).*
[14] *The following discussion focuses on the European Commission's key technical considerations, which are contained in the unpublished fifth draft Directive of November 26, 2004.*
[15] *It should be noted here that this is to happen in the form of a directive, not a regulation, which could result in a heterogeneous implementation at the national level. In addition, a waiver option gives Member States even more liberties.*

regarding standardized disclosure requirements,[16] transaction times[17] and liability for proper execution of payment transactions.[18]

The second regulatory focus is on opening the payments market by introducing a third category of payment service providers in addition to credit institutions[19] and e-money institutions:[20] the so-called "payment institutions," whose regulatory regime would be formed in accordance with the "same activity, same risks, same rules" principle.[21] As one reason for opening the market, the European Commission cites the fact that different legal frameworks currently govern the provision of payment services at the national level – a situation that results in distortions of competition within the internal market and can only be overcome by harmonizing the rules governing market access and by establishing an appropriate legal framework for any new players on the payments market.

2.2 Payment Institutions

2.2.1 Scope of Activity

The European Commission defines "payment institutions" as payment service providers that – apart from credit institutions, e-money institutions and certain other public entities (post offices, central banks and government authorities) – render post-paid payment services[22] and that shall not be involved in deposit-taking or e-money transactions. In particular, payment institutions shall be able to issue debit and credit cards, offer acquiring services[23] and carry out payment transactions.[24] Payment institutions shall also be permitted to grant loans, although it is explicitly prohibited to use customer money to fund these loans. The European Commission is of the opinion that the ability to grant loans is an important precondition particularly for the execution of money transfer services, since one can assume that customers will not always be able to furnish the funds required for a money transfer.

[16] *Disclosure requirements include, inter alia, the payment service provider's obligation, prior to entering into a contract for a payment service, to inform the payment service user in writing of the type and scope of services offered, fees, transaction times, etc.*

[17] *The stipulation for transaction times, for example, says that euro payment transactions must be credited to the recipient's account no later than on the third banking day after the day on which the payment order is taken.*

[18] *Under the liability provisions, the payment service provider is liable for the proper execution of the payment transaction as of the moment the payment order is taken.*

[19] *As defined in Directive 2000/12/EC of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions.*

[20] *As defined in Directive 2000/46/EC of 18 September 2000 on the taking up, pursuit of and supervision of the business of electronic money institutions.*

[21] *See European Commission (2003, p. 22–23).*

[22] *The following activities are examples of payment services as defined in the draft Directive: the execution of payment transactions in which the funds are held with the payment service provider as a deposit as defined in Directive 2000/12/EC (Banking Directive); the execution of payment transactions in which the funds provided by the payment service user serve to render a payment service through the payment service provider; the execution of payment transactions in which the transfer of money is made in exchange for the granting of a line of credit for the payment service user; the issuing of payment cards; the execution of acquiring services and the issuing of guarantees for payment transactions.*

[23] *An acquirer maintains accounts for card acceptance agencies (acceptors) and obtains transaction-related data from them. The acquirer is responsible for collecting transaction data and settling the transactions with the acceptance agencies (recipient banks).*

[24] *See also Article 1 para 1 item 23 of the Austrian Banking Act (BWG).*

Apart from the activities mentioned, payment institutions would also be entitled to perform all operational and ancillary services necessary for the performance of payment services. These activities would include issuing of guarantees, foreign exchange services and safekeeping transactions, storing and processing data on behalf of undertakings or public institutions, and providing access to and operating payment systems for the purpose of transfer, clearing and settlement of funds. This means that, by explicitly not limiting the activities of payment institutions to payment services, the European Commission is departing from the specialization principle that is customary in the field of financial services.

2.2.2 Licensing Requirements and Supervision

According to the European Commission, payment institutions should be subject to more lenient licensing and supervisory provisions than credit institutions on the grounds that the requirements that apply to credit institutions would be unreasonably stringent for "pure payment services providers," given the lower risk associated with their activities.

According to the draft Directive, in order to take up business a payment institution would have to obtain a license from the competent authorities – which are not defined more precisely – of the Member State in which the payment institution is headquartered (if it is a legal person) or from which the payment services are to be performed (if it is a natural person). Among other documents, an activity plan,[25] business plans for the first three business years, an outline of the envisaged organizational structure and a document defining the institution's legal status would have to be attached to the license application. Another key provision of the draft Directive is that licenses would be valid across the EU. By virtue of the "European passport" (single license) provided for in the draft Directive, payment institutions that have obtained a license to take up business in one EU Member State would be able to perform their activities in every other Member State – through a branch or via cross-border services – without obtaining another license from the local authorities.[26]

Adherence to the regulations applicable to payment institutions shall be overseen by the competent supervisory authorities within the scope of an audit that "shall be proportionate, adequate and respond to the risks to which the institution is exposed." Acceptable audit activities will include requesting submission of relevant documents or conducting on-site inspections. However, the draft Directive does not include any requirements to furnish continuous reports on business activities. To demand fulfillment of the provisions applicable to payment institutions, the supervisory authority shall be able to make recommendations whenever justified. If a payment institution fails to comply with the relevant provisions, the supervisory authority shall be able to issue warnings or impose sanctions. Continued noncompliance shall result in the suspension or withdrawal of the license.

[25] *The activity plan must include the types of payment services that the payment institution intends to provide.*
[26] *This provision corresponds to the home country principle, according to which service providers are subject only to the legal requirements of their home country – that is, the country of establishment – when rendering services across borders.*

In addition, Member States shall be able to exercise a "waiver option" within the scope of the national implementation of the draft Directive. Under this option, the competent supervisory authority shall be able to waive application of certain provisions for payment institutions that do not exceed certain turnover limits and do not play a vital economic role.[27] Payment institutions that are granted such a waiver would no longer benefit from the "European passport" provision. The European Commission would have to be informed if the waiver option was exercised, and payment institutions with a waiver would still have to register with the competent supervisory authorities.[28]

2.2.3 Legal Form and Capital Requirements

The draft Directive does not stipulate restrictions on legal form or minimum capital requirements for payment institutions. The selected legal form would simply have to be indicated during the licensing process. Any changes in legal form would also merely have to be reported to the supervisory authority.

3 Assessment of Potential Implications of the Introduction of Payment Institutions on the Austrian Financial Market

3.1 Baseline Situation in the Austrian Payments Market

The Austrian financial market has already widely adjusted to legal and technical developments at the European level. The applicable legal framework is largely in line with EU standards, and Austria has a very well-developed financial services infrastructure and continuously invests in new technologies and automation. The scope of banking activities listed under Article 1 Austrian Banking Act is relatively broad compared with those of other European countries.[29] At present, 892 credit institutions[30] are licensed to operate on the Austrian financial market and still play an important role as correspondent banks in the field of retail payments, particularly for credit transfers and direct debit payments. At the moment, 15 payment systems on the Austrian market are operating in the area of card payments, e-payments and m-payments, and many providers – above all in the latter segment – are nonbanks.

At first sight, the introduction of payment institutions can be expected to add more dynamics to the Austrian payments market in any case. Against this background, the OeNB conducted a survey among 22 representative

[27] *A comparable waiver option is e.g. provided for in Article 8 of Directive 2000/46/EC (E-money Directive).*
[28] *However, given the liberal provisions of the draft Directive, we presume that only a very limited number of potential payment institutions would apply for a waiver, particularly because losing a Europe-wide license would result in a competitive disadvantage vis-á-vis payment institutions that are permitted to operate across borders.*
[29] *For example, Directive 2000/12/EC aims to achieve a minimum level of harmonization that permits Member States to sometimes define broader scopes of banking activities.*
[30] *See http://www.fma.gv.at/de/pdf/ki-liste.pdf (July 1, 2005).*

Austrian market participants[31] in the period from May to June 2005 with the aim of making an initial, practical assessment of potential competition and risk management implications that might be connected to the introduction of payment institutions in the Austrian financial market. The survey comprised 17 open questions. The response rate was a solid 40%, and respondents offered extensive comments. The key results of the survey are the subject of this section.

3.2 Competition Policy Implications

3.2.1 Market Potential

The European Commission expects competition on the payments market to increase when payment institutions are given market access.

3.2.1.1 Market Potential in Austria for New Austrian Providers

Austrian market participants definitely expect new providers to enter the market, although their expectations for the possible number of new providers differ. While the majority of respondents expect no more than ten payment institutions to emerge, some see potential for a much larger number of payment institutions in the Austrian market. These respondents base their expectations primarily on spinoffs and restructuring processes in the payment services area of credit institutions (albeit not necessarily their own companies). Whether credit institutions consider transformation will largely depend on the savings potential created by the less strict prudential provisions for payment institutions.

Respondents also anticipate the emergence of providers from outside the industry (e.g. tax consultants, internet providers or technical service providers[32]). Moreover, respondents presume that large retailers will opt to become payment service providers themselves to be able, as payment institutions, to process their own payments.

3.2.1.2 Market Potential in Austria for European Providers

Respondents almost unanimously expect the "European passport" envisaged for payment institutions to increase competition from foreign payment institutions operating across borders, particularly with respect to the execution of acquiring services and the issuing of payment cards. Some respondents could also imagine that foreign banks will initially establish their branches in Austria as payment institutions as a means to gain a foothold on the Austrian market more easily and cost-effectively. On the whole, respondents expect stronger competition particularly in financial transfer services, an area in which they fear that the economies of scale of foreign providers could result in competitive disadvantages for Austrian providers. In addition, foreign banks and payment institutions are expected to cooperate in the future, which could have negative implications for international payment system cooperations in which Austrian market participants are currently involved.

[31] *Credit institutions, payment system operators and some Austrian companies that may be potential payment institutions. The pool of respondents also included one payment system operator in which a telecommunications company holds a considerable stake.*

[32] *For example, payment service providers that perform the technical processing of payments for small online merchants.*

3.2.1.3 Market Potential in the EU for Austrian Providers

Austrian providers' expectations with respect to the market potential that may arise for them in the EU as a result of the European Commission's initiative are subdued. Thus, only a few of the survey's respondents expect to glean any advantages in other EU markets, primarily through potential savings and a broader diversification of business areas as a result of international activity.

3.2.2 Level Playing Field

The European Commission is of the opinion that payment institutions should be able to perform a variety of (payment) services and that the "same activity, same risks, same rules" principle would justify a licensing and supervision regime that is more liberal than the one that applies to credit institutions.

The Austrian market participants surveyed do not share the European Commission's view. All respondents criticized the proposed licensing and supervisory provisions as insufficient and expect them to entail unfair competitive advantages for payment institutions, arguing primarily that credit institutions would incur disproportionately higher costs as they have to meet more stringent supervisory requirements. As a result, smaller credit institutions specializing in payment transactions might be forced to transform into payment institutions. It is remarkable that respondents that do not currently hold a banking license also share this expectation.

3.2.3 Potential for Price Reductions

The European Commission presumes that the participation of new players on the payments market will ultimately help reduce the prices of payment services.

The majority of survey respondents deem this expectation unrealistic, pointing out that, for many credit institutions, payments have not been a profitable activity so far and that they often have to cross-subsidize payments via other business areas.[33] Thus, it would not be possible to pass on any potential savings in this area to end customers in the form of price reductions. Moreover, the majority of respondents anticipate only little potential for savings as the market volume in Austria is rather limited.

3.2.4 Microeconomic Effects for Respondents' Own Companies

In order for companies to decide to transform (or restructure existing) business areas into payment institutions in the short or medium term, the potential cost savings (to be expected from less comprehensive prudential provisions and lacking capital requirements) would, in any case, have to exceed the costs of transformation or restructuring. The overwhelming majority of the market participants surveyed does not expect this to be the case for their companies, at least in the foreseeable future. Therefore, they do not consider any such steps. However, given the competitive pressures that arise as foreign payment institutions operate across borders and, in particular, the lack of restrictions on the legal form of payment institutions, in the long run the choice of legal form is likely to be influenced by future tax developments.

[33] *See Haber et al. (2004, p. 63–64).*

3.3 Risk Policy Implications

The European Commission estimates that the activities of payment institutions will entail far less risk than those of credit or e-money institutions.

3.3.1 Risk Situation in the Austrian Payments Market

The Austrian market participants surveyed do not share the European Commission's view on this topic. Rather, they believe that the expected increased appearance of nonindustry newcomers on the payments market combined with the more liberal prudential provisions envisaged would drive up the risk on the Austrian payments market, particularly credit risk and reputational risk. The survey results show that the overwhelming majority of respondents fear that payment institutions will be more susceptible to insolvency due to lacking capital requirements and less stringent prudential provisions. Finally, as they gain access to other fields of activity, payment institutions might become subject to "nonindustry" risks, i.e. operational risks that are not directly connected to payment services.

3.3.2 Confidence in the Austrian Payments System

All of the market participants surveyed are convinced that the introduction of payment institutions will have a negative effect on the Austrian public's trust in payment systems and instruments. Respondents base their expectations on open access (insufficient licensing requirements) to performing payment services and on the fact that the insolvency risk is higher for payment institutions than for credit institutions. They are concerned, for example, that spectacular, highly publicized insolvencies of inexperienced newcomers might harm the reputation of the entire payment services industry. To prevent such developments, respondents believe that payment institutions should at least be made subject to adequate minimum capital requirements that correspond to the rules applicable to credit institutions as well as to comparable prudential provisions.

4 Assessment and Conclusions

4.1 Assessment of Competition Policy Implications Expected in Austria

It can be assumed that the European Commission will achieve its goal of opening up, and attracting new participants to, payments markets by way of the provisions set forth in its draft Directive. Contrary to the view held by the majority of the Austrian market participants surveyed, this move might – at least in the initial phase – even result in price reductions since (foreign) payment institutions are likely to use aggressive pricing policies in an effort to position themselves on the Austrian market. What will be most important for end customers – apart from having confidence in payment institutions at large – will be any possible price reductions for payment services.

Some market participants expect potential savings to arise from less stringent prudential provisions – a view the authors cannot share without reservation. It may be possible, for instance, that the above-mentioned spin-offs and restructuring measures within the payment services areas of existing credit institutions will not yield any such advantages since payment institutions will in general also qualify as financial institutions within the meaning of Directive 2000/12/EC of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions. As a consequence, spun-off payment institutions, as financial institu-

tions, would have to be included in the consolidated (strict) supervision of the parent company and thus would reap little or no potential savings.

4.2 Assessment of Risk Policy Implications Expected in Austria

In light of the proposed provisions, the concern expressed by the majority of respondents that the insolvency risk will go up in the absence of minimum capital requirements – which will have negative implications for financial stability – and that, as a consequence, public confidence in payment system security and stability at the macroeconomic level will suffer certainly seems realistic. It should be noted in this context that the draft Directive contains no stipulations regarding the diversification of payment institutions' credit portfolios, so that a concentration of loans with certain customers cannot be ruled out. Although payment institutions are not supposed to use customer money to grant loans, any potential payment problems could impair the fulfillment of guarantees or bill of exchange operations, which would be equivalent to a shift in credit risk. In addition, as payment institutions would gain access to other fields of activity, they could become subject to "nonindustry" risks, i.e. operational risks that are not directly connected to payment services,[34] the present draft Directive includes no precautions to mitigate these risks. Moreover, the draft Directive does not even touch upon other critical questions, such as the conception of the settlement processes for payment institutions and their possible access to central bank money.

Given the scope of activity envisaged for payment institutions, the draft Directive indeed shows regulatory deficiencies. Adequate mitigation of the risks associated with the envisaged activities (particularly credit and insolvency risks) should be ensured for payment institutions that wish to qualify for the European passport. Such mitigation could be achieved either by restricting activities exclusively to the provision of payment services (financial transfer services or acquiring services) while maintaining the proposed regulatory standards or by tightening the licensing and supervisory provisions to correspond to the regulations that apply to credit institutions while maintaining the proposed scope of activity.

4.3 Conclusions and Outlook

The survey has shown that the majority of Austrian market participants questioned shares a broadly critical attitude toward the current draft Directive. What is striking is that the respondents share the European Commission's key expectations (in particular the expectation that the new framework will establish a level playing field) only conditionally or not at all. On the contrary, the survey respondents fear distortions of competition, higher risks and, in the long run, damage to end customers' confidence in the stability of the payments market. A key result of the survey is the unanimous call for equal treatment of payment institutions and credit institutions with respect to capital requirements and supervision. Moreover, the survey clearly shows that none of the respondents is currently considering transformation into a payment institution.

The results discussed in this paper are intended to help shape opinions and guide the debate as the legislative process continues at the European

[34] *See Schlögel et al. (2005, p. 376).*

level. The European Commission's final proposal for the Directive, which is expected to match the fifth draft discussed here in all key areas, was scheduled for publication at the end of October 2005. Following publication of the final proposal, further consultations of the Member States will take place during the U.K.'s Council Presidency in the second half of 2005 at the level of council working groups. Austria will be able to bring the current survey results into these consultations, which could be concluded during the Austrian Presidency in the first half of 2006. The earliest date for national implementation of the New Legal Framework for Payments in the Internal Market Directive is probably late 2008 or early 2009.

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The Exposure of Austrian Banks to Hedge Funds: Survey Results and Regulatory Aspects

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Due to the expansive growth of the hedge fund industry and the accompanying political discussions about creating a legal framework for this practically nonregulated asset class, the Banking Supervision Committee of the European System of Central Banks decided to conduct an EU-wide survey on banks' hedge fund exposure. This paper presents the survey results for Austria and takes a critical look at possible measures for regulating the hedge fund industry.

Introduction

As a result of strong growth in recent years, hedge funds[1] have established themselves as significant players on the international financial market.[2] At present, an estimated 8,000 hedge funds with total assets under management exceeding USD 1,000 billion[3] exist worldwide, with assets in the EU accounting for approximately one quarter of this figure. This means that total assets under management in hedge funds have doubled since 2001. However, as these funds are generally subject to few or no regulatory requirements and the public information available from databases and from the funds' own disclosures is incomplete, it is possible to trace their development only to a limited extent.

One of the reasons why the hedge fund industry has grown so rapidly is the expansion of its investor base to include new groups of institutional as well as retail customers. This environment has sparked increasing discussion at both the national and international levels about whether hedge funds pose a threat to financial stability in addition to their positive effects on international financial markets, and whether regulation is necessary for this alternative form of investment.

This paper is divided into two parts: The first part investigates the quantitative relationships between hedge funds and banks in Austria on the basis of a survey conducted among selected Austrian credit institutions in the spring of 2005. Qualitative aspects of the risk management systems operated by these banks are described in relation to their business activities with hedge funds. In a bank-dominated financial system, the systemic risk arising from hedge funds is primarily transmitted via the banking system, which means that our investigation makes a direct contribution to the debate on the possible regulation of hedge funds. The second part of the paper discusses possible regulatory measures which may help ensure systemic stability on the one hand and improve investor protection on the other.

Data Basis

As a result of strong growth in the hedge fund industry as well as increasing public interest, the Banking Supervision Committee (BSC) of the European System of Central Banks (ESCB)

Refereed by
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OeNB.

[1] *There is currently no uniform definition of the term "hedge fund." Hedge funds are best described as loosely regulated or nonregulated investment alternatives which rely on a wide variety of strategies, use incentive fee structures, and are not subject to any investment restrictions (e.g. leverage limits).*

[2] *See for example ECB (2004).*

[3] *See Counterparty Risk Management Policy Group (2005).*

launched an EU-wide survey in the spring of 2005 which examined qualitative and quantitative aspects of the relationships between banks and hedge funds.[4] This survey, among other things, made it possible to assess more effectively the potential impact of these relationships on financial stability, as the research generated information on the banks' risk management practices as well as their exposures to hedge funds. The results of the EU-wide survey were published separately by the ECB.[5]

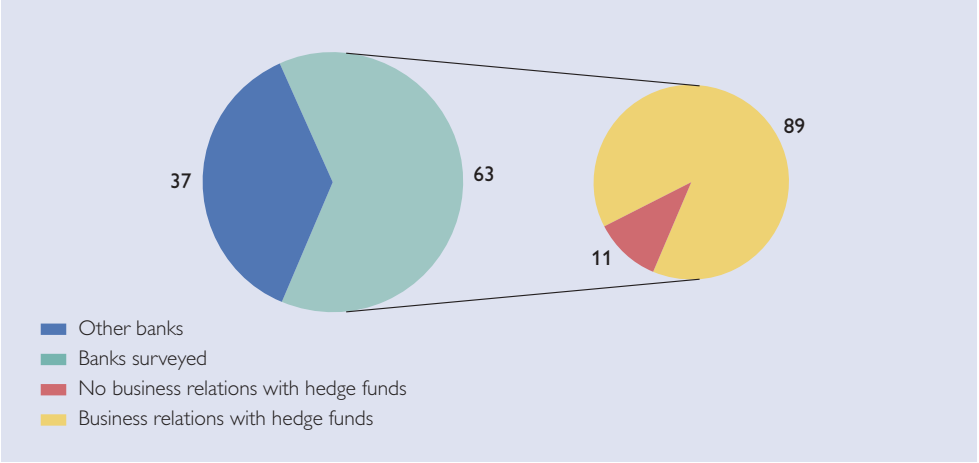
In Austria, the Oesterreichische Nationalbank (OeNB) carried out the voluntary survey in May 2005 and selected Austria's 22 largest banks (in terms of unconsolidated total assets) as participants. These banks accounted for more than 63% of the total assets in the overall banking system in Austria at the end of 2004 (see chart 1). Seven banks indicated that they did not have any business relationships with hedge funds at the time. Measured in terms of total assets, this means that 11% of the selected group had no business relations with hedge funds (see also chart 1).

Chart 1

Overview of Data

(Shares as Measured in Terms of Unconsolidated Total Assets)

%



Source: OeNB.

[4] *The survey was based on two questionnaires: The qualitative questionnaire contained open-ended questions covering motives for investment in hedge funds; the respondents' definitions of hedge funds; the focus of hedge fund activities: financing, equity investment, trading, performance management; and general risk management practices (due diligence, limit management, collateralization, monitoring, etc.). The quantitative questionnaire addressed issues such as the extent of the surveyed banks' business activities with hedge funds, the extent and type of collateralization, the investment strategies pursued, and the frequency of certain risk management reviews, among other things.*

[5] *See ECB (2005).*

Results of the Bank Survey

Definitions of Hedge Funds and Motives for Business Relationships

The banks in the survey defined and classified hedge funds differently but assessed their essential characteristics in a similar manner. Hedge funds are categorized as unregulated or only loosely regulated investment alternatives which are generally domiciled offshore, offer a broad range of investment styles, use incentive fee structures, and are not subject to investment restrictions. Derivatives, short selling and leverage are used in order to optimize the above-average absolute returns.

A majority of the banks surveyed were relatively late in establishing business relationships with hedge funds. Only two of the banks conducted business with hedge funds prior to 1999. As their main motives for investing in these instruments, the banks cited opportunities to diversify their portfolios and to outsource proprietary trading by using hedge funds, as well as the increased demand for these products by various bank customers.

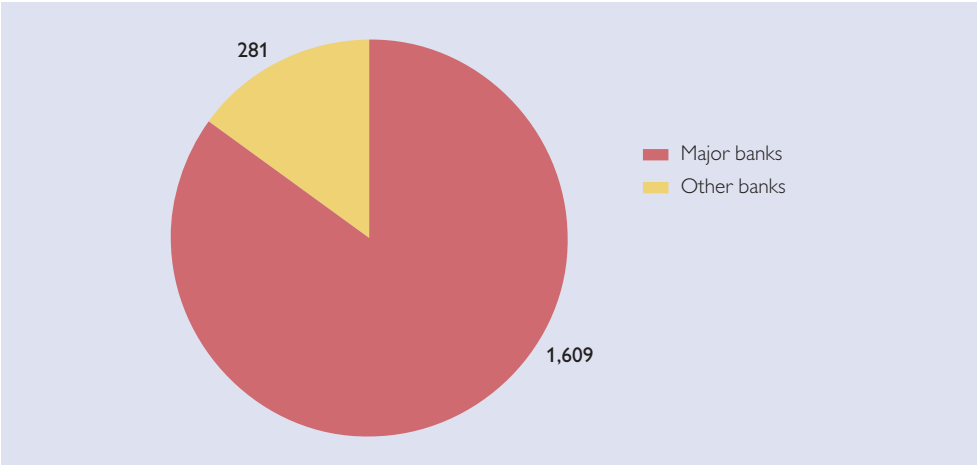
Volumes of Hedge Fund Exposures

At the end of 2004, the banks surveyed had a total hedge fund exposure (loans and investments)[6] of EUR 1.89 billion, thus showing an increase of 19% compared to the previous year. A vast majority (85%) of this exposure can be attributed to Austria's five major banks[7] (see chart 2). The volumes accounted for 0.37% of the surveyed banks' consolidated total assets in 2004, with this share ranging from 0.03% to 0.95% among the banks selected for the survey. Measured in terms of consolidated eligible own funds, the banks' average hedge fund exposure amounted to 6.78% in 2004, with figures ranging from 0.33% to 16.92%.

Chart 2

Share of Austria's Five Major Banks in Overall Hedge Fund Exposure

EUR million



Source: OeNB.

[6] *This includes shares and other investments in hedge funds.*

[7] *Bank Austria Creditanstalt AG (BA-CA), BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG (BAWAG P.S.K.), Erste Bank der oesterreichischen Sparkassen AG (Erste Bank), Raiffeisen Zentralbank Österreich AG (RZB), and Österreichische Volksbanken AG (OeVAG).*

Along with the fact that seven of the banks in the survey did not have any business relations with hedge funds at all, the wide range of results certainly indicates very different business strategies in this area. Based on these voluntarily reported data, hedge fund investments do not seem to pose a threat to the overall banking system in Austria, even though the potential losses arising from these investments could easily have a considerable effect on the annual results of individual banks and thus also on their capital ratio.

For the most part, Austrian banks' hedge fund exposure consists of their direct investments in hedge funds. Loans to hedge funds account for approximately 4% (EUR 76.5 million in 2004) of the overall exposure and therefore play only a secondary role compared to investment volumes. However, the increase in loan exposure by 18% compared to the previous year points to a development similar to that of the banks' overall exposure.

If we compare the exposure of Austrian banks with the results of the BSC's EU-wide survey, it shows that the value of loans granted in Austria is negligible by comparison, while the investment exposure of Austrian banks, in some cases, is markedly higher than the EU average.[8]

The significance of Austrian banks' hedge fund activities for their overall performance is, however, currently low, as the share of annual profits derived from hedge funds is below one percentage point (2004).

A majority of the banks surveyed intend to increase their investment exposure to hedge funds in the future; at the same time, however, most of the banks do not plan to increase their activities in lending to hedge funds or in the prime brokerage[9] segment. Moreover, the banks also expect to see themselves and other credit institutions increasingly setting up their own hedge funds or using strategies similar to those of hedge funds in their own trading activities in the future.

Risks and Risk Management

The surveyed banks in particular cited operational risks related to hedge fund management and technical systems as specific direct risks in their (investment) exposures to hedge funds. Moreover, they stated that they regarded liquidity, legal, market and model risks as relevant, and noted the low level of transparency in the hedge fund industry. Another risk for investors arises from the ability of some hedge funds to refuse redemption under certain circumstances.[10]

The banks assessed the indirect risks of hedge funds in different ways. For example, only few banks saw a problem in the potential counterparty risk arising from credit institutions which maintain high exposures to hedge funds (e.g. a number of prime brokers). The effects of similar trading strategies ("crowded trades") among various hedge funds as well as the potential shock to the financial market if a larger hedge fund collapses were also identified as indirect risks by several institutions.

[8] *The BSC's results are based on reports from 16 major banks from 6 EU Member States; the data are, however, not directly comparable to the Austrian results due to considerable size differences and in some cases different business models (prime brokerage) of the surveyed banks.*

[9] *Prime brokerage refers to various financing, trading and settlement services for hedge funds.*

[10] *However, this should keep the funds from having to maintain very high liquidity reserves and thus increase returns (see Chordia, 1996, and Schwaiger, 2003, pp. 62ff.).*

Suitable risk management is considered especially important, not least due to the above-mentioned reasons and the fact that many institutions plan to increase their hedge fund investments further. This will, above all, require a minimum level of diversification as well as careful selection (due diligence) and monitoring of exposures to hedge funds. Overall, the survey shows that the scope of banks' risk management activities increases along with their exposure to hedge funds, but also that risk management practices show room for improvement in several cases. However, the survey results alone allow only an incomplete assessment of the actual quality of risk management.[11]

In addition to quantitative and qualitative analysis of the funds, the due diligence process also involves management interviews and in some cases on-site visits. In this context, the banks surveyed attach great importance to the quality of hedge fund managers as well as the frequency and completeness of information provided by the funds. Due diligence reports from external organizations are also used for the purpose of evaluating hedge funds.

For the purpose of monitoring hedge fund positions, the banks generally receive monthly reports on performance and other positions (e.g. leverage) from the funds. Many of the banks also receive risk reports, which are usually provided by a third party (the administrator)[12]. In some cases, the hedge funds themselves also send weekly reports and ad-hoc reports in the case of extraordinary events. In this context, however, it is necessary to question whether administrators' independence from the respective hedge funds is actually ensured, as the hedge funds themselves generally provide the underlying figures and as the remuneration structure for hedge fund managers can create incentives in information provision which are unfavorable to the investor.

In some cases, the banks' monitoring of hedge fund positions is aggregated according to the various fund strategies. In this process, the banks track statistics such as the concentration of exposures in certain markets, asset classes and currencies, as well as certain risk indicators, the utilization of limits and the performance of funds. Furthermore, a number of banks subject their investment exposures to stress tests which are also differentiated according to the funds' investment strategies. However, based on the overall findings of the survey, there seems to be room for improvement in the monitoring of hedge fund exposures in the case of several banks.

On the whole, however, both hedge funds and banks (especially prime brokers) have improved their risk management practices substantially in recent years.[13] The institutions surveyed also emphasized the fact that leverage in hedge funds is probably lower compared to the situation surrounding the Long-Term Capital Management (LTCM) crisis in 1998, although no uniform measure is used to determine leverage due to the methodological complexity of such calculations. Moreover, several banks noted that lock-up periods (during which investors cannot sell their fund shares

[11] *The actual quality can be more accurately determined by means of on-site inspections.*

[12] *The administrator handles administration activities for the hedge fund.*

[13] *This was inter alia demanded by the Financial Stability Forum as a crucial measure to prevent systemic crises triggered by hedge funds. See Financial Stability Forum (2000).*

without high penalties) have been extended to as long as three years.

Regulatory Aspects

Status Quo and Objectives

The current debate on the need for regulation of the fast-growing hedge fund industry is based on the potential threat to financial stability on the one hand and investor protection considerations on the other, as hedge funds are increasingly targeting new – and in some cases less professional – classes of investors.[14] In this context, the regulatory approaches chosen in individual countries to date differ specifically in the possibility of establishing domestic hedge funds, in the requirements regarding hedge fund management and administration, and in the regulations governing the sale of hedge fund shares.[15] On the whole, analyses of hedge fund databases such as the TASS or CISDM database[16] show that more than half of the hedge funds worldwide are domiciled in offshore financial centers due to their less stringent regulatory regimes, while more than three-quarters of the managers reside in the EU or the U.S. Far fewer funds and managers are domiciled in the EU compared to the U.S.

Identifying the extent to which hedge funds enhance or endanger financial stability calls for a differentiated perspective. On the one hand, hedge funds increase liquidity in several market segments and can therefore contribute to more efficient risk-sharing among financial market participants. Moreover, hedge funds broaden the available investment opportunities and thus offer diversification advantages compared to traditional stock or bond portfolios. On the other hand, the use of leverage may also create liquidity risk for the funds themselves and, in turn, this risk can place considerable strain on market segments in which hedge funds have an especially strong presence. Due to spillover effects, these problems can also afflict other financial intermediaries.[17]

The regulation of hedge funds therefore has to be discussed in light of the potential threats to financial stability and the protection of less professional investors. In this context, the self-regulation of the hedge fund industry, which relies on standards for e.g. information provision or risk management practices, is especially important. Supervisory authorities, however, also need to discuss both direct and indirect regulatory measures.

Regulatory Options for Investor Protection

Regulatory measures for the purpose of investor protection might include restrictions regarding qualified investors and minimum investment amounts for hedge funds. However, regardless of any limitations imposed on sales, better information on hedge funds will be required in order to enable investors to make well-founded decisions. In addition to voluntary information

[14] *See OeNB (2005) and European Commission (2005a, 2005b).*

[15] *In Austria, for example, the law does not permit the establishment of domestic single hedge funds, whereas in Germany this is possible. Under Article 20a of the latest amendment to the Austrian Mutual Fund Act, however, Austrian investment companies can set up funds of hedge funds (FOHFs).*

[16] *TASS (Trading Advisors Selection System) Tremont and CISDM (Center for International Securities and Derivatives Markets) are two of the three large providers of hedge fund data.*

[17] *Detailed discussions of financial stability considerations in connection with hedge funds can be found in ECB (2004), SEC (2003), Baghai-Wadji et al. (2005) or Brealey and Kaplanis (2001).*

provision by the funds themselves, (securities) investment advisors also play a central role in this context. Their role is related in particular to information and disclosure requirements regarding the potential risks associated with investing in hedge funds. In addition, it would also seem appropriate to improve general investor education with regard to fundamental market processes.[18]

Regulatory Options for Ensuring Financial Stability

Among the available possibilities for supervisory regulation, a general distinction can be drawn between direct measures (i.e. those which apply to the hedge funds themselves) and indirect measures (i.e. those which apply to other parties involved).

Direct regulatory measures for the purpose of ensuring financial stability could comprise a general obligation to register hedge funds,[19] reporting requirements and/or supervisory audits of hedge funds. An internationally coordinated procedure is necessary in order to ensure the efficacy of such measures and to avoid further concentration in offshore financial centers. It would also be possible to restrict hedge funds' activities with regard to certain trading strategies, but this would reduce the flexibility of these funds substantially. Such a restriction would eradicate a substantial part of the positive contribution which hedge funds can make toward financial stability.

Indirect regulatory measures might include national registration obligations for hedge fund managers,[20] stricter disclosure requirements, improved risk management practices among the hedge funds' counterparties and investors (e.g. banks, prime brokers) as well as *ex ante* defined crisis management measures.

Compulsory registration for hedge fund managers appears to be easier to implement than registering the funds themselves, because far more managers than funds are currently based "on shore." If the obligation to register were coupled with more comprehensive reports to supervisory authorities, supervisors would no longer have to rely on information from external sources and could gain deeper insight into the managers' activities. In general, however, reports to the supervisory authority may not necessarily be conclusive due to the time lag between the underlying activities and the reports themselves, the difficulty of aggregating inhomogeneous data and the complexity of aggregating risk.[21] In any case, requiring hedge fund managers to register could help to reduce the number of hedge fund managers who appear unfit for the position, thus decreasing the incidence of fraud.

Improved and targeted risk management practices among the hedge funds' counterparties and investors, especially prime brokers, banks, insurance companies and pension funds,

[18] *See also Donaldson (2003).*

[19] *Germany, for example, requires registration for hedge funds.*

[20] *For example, the U.S.A. and the United Kingdom currently require registration for hedge fund managers.*

[21] *While it can be considered useful if supervisory authorities collect parameters such as fund performance, capital, fee structures, strategies pursued, etc., the collection of aggregate risk measures such as value at risk (VaR) has to be seen as more problematic because this measure is of only limited usefulness given the complex, inhomogeneous and rapidly changing portfolios of hedge funds. Furthermore, unexpected events which are highly unlikely and can trigger a systemic crisis ("long-tail events") cannot be reliably depicted (see also Danielsson et al., 2004).*

should also contribute to ensuring systemic stability. Related regulatory measures could come in the form of specific risk management requirements or an increase in direct supervisory activities. More intensive monitoring and harmonized EU-wide reporting requirements for these market participants with regard to their hedge fund exposures would not only raise the supervisors' level of information on hedge funds but also enhance market discipline. As numerous counterparties and investors are already subject to regulation, this approach would probably also be relatively easy to implement.

Danielsson et al. (2004) additionally suggest the *ex ante* definition of processes for crisis management (e.g. the involvement of the supervisory authority as a "moderator," as was the case in the near-collapse of LTCM) in order to alleviate systemic crises triggered by hedge funds.[22] However, this approach leaves many questions unanswered, for example which parties can activate the crisis management plan if necessary or how potential losses are to be distributed among the parties involved.

Finally, due to the positive effects that hedge funds can have on international financial markets, evaluations of possible regulatory measures should always carefully weigh the costs of regulation to the hedge fund industry against the benefits in terms of securing financial stability and investor protection. Furthermore, the creation of "pseudo- regulation" should be avoided, as this could give investors a (false) sense of relative security based on the involvement of the supervisory authorities.

Conclusions

Against the backdrop of continuing rapid growth in the hedge fund industry, a discussion is underway at the international level about whether hedge funds pose a threat to financial stability in addition to their positive effects on international financial markets, and whether stricter regulation is necessary for this alternative investment form.

The results of a survey of Austrian credit institutions show that these have relatively low hedge fund exposures compared to their total assets at end-2004, although substantial differences can be observed among the banks surveyed. Furthermore, several banks have particularly high exposures in relation to their own funds. Based on the survey's results, the accompanying risk management measures currently appear to be sufficient in most cases; there is, however, room for improvement in the case of some banks.

As for the question of stricter regulations for the hedge fund industry, the costs and benefits of potential regulatory measures should always be weighed carefully. Regulatory measures should also be coordinated internationally in order to prevent hedge funds from simply changing their domicile to less regulated financial centers, thus ensuring that these measures are actually effective. From today's perspective, as a minimum, greater transparency in the entire hedge fund

[22] *In such a scenario, it would be necessary to ensure that public funds are not made available for the purpose of resolving the crisis. However, this demand is limited by the fact that public funds can indeed be used in the case of banking crises.*

industry – along with enhanced financial education for investors and careful management of counterparties' and investors' exposures to hedge funds on the basis of sound information – is necessary.

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Capital Market-Oriented Financing Prospects for Austrian SMEs

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The performance and growth of the Austrian economy largely depend on small and medium-sized enterprises (SMEs). Despite their diminutive size, SMEs offer attractive investment opportunities that are, however, financed primarily by debt for a variety of reasons. The financing concept presented in this study adopts an innovative approach to provide access to quasi-equity forms of financing to Austrian SMEs, which have successfully and responsibly generated business in recent years and which currently enjoy attractive growth potential. At the same time, it aims to strengthen the Austrian capital market by increasing the investment opportunities of the broad mass of both private and institutional investors.

Introduction[2]

The performance and growth of the Austrian economy largely depends on small and medium-sized enterprises (SMEs). Austria currently has approximately 250,000 SMEs, of which more than 80% are of the smallest size with only 1 to 9 employees. Despite their diminutive size, SMEs offer attractive investment opportunities. The average investment ratio – across all sizes of enterprises – is about 5% to 8% of sales. To finance these investments, however, SMEs rely primarily on debt financing. An analysis of data from 2001, for instance, reveals capital ratios of –25% for the smallest enterprises and +20% for the largest (see table 1).

Table 1

Capital Ratios of Austrian SMEs in 2001 by Sales

%	Up to EUR 0.5 million	EUR 0.5–1 million	EUR 1–2 million	EUR 2–4 million	EUR 4–7.5 million	EUR 7.5–100 million
Selected NACE groups	–24.8	–10.6	1.6	5.7	13.2	19.8
Manufacturing industry	–19.4	–3.6	4.9	11.4	18.6	35.0

Source: KMU FORSCHUNG AUSTRIA.

Possible reasons for the low capital ratios of Austrian enterprises are, among others, institutional determinants such as Austria's current tax system, its bankruptcy law and the traditionally close, long-term relationships between enterprises and their banks (see Dirschmid and Waschiczek, 2005). It should be noted, though, that the generally low level of capital ratios is much more than a mere "blemish" from a financial perspective: The extremely high debt levels of many enterprises suggest that financing restrictions prevent them from fully exploiting their investment opportunities. A number of reasons may be responsible for this limited access to capital; they are summarized in the following paragraphs.

First, there are demand-side explanations for why owners of highly indebted SMEs may abstain from raising fresh capital for investment. This effect, which is described as "under-investment effect" in financial literature, reflects the fact that owners of a highly indebted enterprise expect that the bulk of any additional income from investment would accrue to the firm's existing creditors. Its impact on SMEs' investment activity is underpinned by empirical evidence. The paper by Stomper and Zulehner (2005), for

[1] *The project team of the University of Vienna would like to thank the representatives and experts of the Board for the Austrian Capital Market – in particular, Michael Eberhartinger, Edith Franc, Erich Kühnelt and Siegfried Neumüller – for many valuable contributions and stimulating discussions.*

[2] *Translation from German.*

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instance, shows that highly levered SMEs in the Austrian hotel sector tend to under-invest in market share.

However, there are also supply-side reasons why highly levered SMEs have limited access to financing for new investment. These are primarily the effects that are described as credit rationing in the financial literature. They occur when highly indebted enterprises cannot raise additional debt capital without raising equity at the same time but cannot obtain equity financing. The imminent introduction of Basel II will probably further exacerbate such problems, at least for large SMEs. Although the findings of the Basel Committee's Third Quantitative Impact Study (QIS 3) do not suggest that lending standards will be immediately tightened in the aftermath of Basel II (see Tscherteu, 2003; Altman and Sabato, 2005), it cannot be ruled out that for certain corporate segments, bank loans will be more expensive or harder to obtain than before the introduction of Basel II. This will tend to apply more to SMEs that either seek to finance bigger investment projects or already have a high debt-to-equity ratio (see Heimer and Köhler, 2004).

In conclusion, the high debt-to-equity ratio of Austrian SMEs is likely to be costly for the national economy, as these enterprises refrain from carrying out profitable investment projects and the probability of bankruptcy as well as bankruptcy costs increase correspondingly. Furthermore, given the liquidity function of equity in periods of economic downturn (see Dirschmid and Waschiczek, 2005), sound capital adequacy ratios of the corporate sector are highly significant for financial stability. The financing concept presented in this study is designed to help reduce SMEs' debt-to-equity ratios and, thus, to help avoid these costs. Our concept is targeted at Austrian SMEs that have successfully and responsibly generated business in recent years and enjoy attractive (but not necessarily spectacular) growth potential. We aim at providing these SMEs with access to equity or quasi-equity forms of financing and at reducing their debt-to-equity ratio, thus facilitating additional investment. At the same time, the implementation of our proposal should strengthen the Austrian capital market by expanding the investment opportunities of private and institutional investors on a large scale. This is desirable because Austrian enterprises typically consider going public only when they have reached a certain size or a very advanced stage of their life cycle. From an investor's perspective, therefore, the opportunities to invest in Austrian corporate equity are currently very limited, even though we think that many SMEs are actually in need of equity capital. Linking our financing concept to Austria's capital market will also give SMEs an edge, e.g. by expanding the range of available financing options and creating positive marketing effects. This paper shows how intermediated financing can improve the capital ratio of Austrian SMEs and ultimately expand the general public's range of investment opportunities in the Austrian capital market.

Theoretical Background

The issue of equity financing is addressed in many scientific papers. There are basically two different forms of financing: the first is via the public capital market, and the second is intermediated financing, e.g. venture capital financing. Although quite distinct in terms of their institutional structure, these forms of financing have certain features in common that impact on the capital costs. The high

degree of information sensitivity of the value of equity is probably the most important common feature. The following paragraphs discuss how this feature of equity financing tends to increase the cost of such financing in the presence of information asymmetries between issuers and investors.

Information Asymmetries in the Primary Market

Information Asymmetries Between Issuers and Investors

Information asymmetries between issuers and investors drive up equity capital costs. This effect has been frequently analyzed in the financial literature, for instance in the pioneering paper by Myers and Majluf (1984), who argue that investors are only willing to provide equity capital if they receive the equity at a discounted price. They are, after all, well aware of the fact that issuers will issue equity only when they know that the profitability of an enterprise's previous investments will be below the investors' expectations. In fact, the issuers would be acting against the best interest of existing equity investors if they shared future profits with the buyers of newly issued equity.

If, in addition, enterprises can choose between issuing equity and raising debt, the more profitable ones will – again in the interest of existing equity investors – tend to raise debt for two reasons: first, debt financing will allow these investors to continue to fully benefit from the enterprise's upside potential, and second, it will not dilute the investors' participating interests. Moreover, debt financing reduces (or altogether eliminates) costs from price discounts incurred in equity issues. Thus, an enterprise which still issues equity will simply have to offer a discount, as investors will assume that it does not rank among the more profitable enterprises which issue debt rather than equity.

This theory helps explain the "equity gap" problem. It postulates that enterprises follow a "pecking order" in raising funds: While the most profitable enterprises use retained profits to finance investment, less profitable companies raise debt and even less profitable ones issue equity. According to this theory, enterprises should seldom resort to issuing equity; the discount at which such issues are offered in the primary market is significant.

Information Asymmetries Between Investors

Enterprises may also be required to sell equity stakes at a discount in the primary market owing to information asymmetries between different investor groups. This theory is supported by Rock (1986). He postulates that better informed investors use their informational advantage to practice "cherry picking," i.e. to invest primarily in the equity of exceptionally profitable enterprises. Accordingly, it is the poorly informed investors who hold the equity of less profitable enterprises. Knowing this, however, these investors will be prepared to buy the equity of an enterprise only if they are offered a sufficiently high discount.

However, it is not only less profitable enterprises that have to offer discounts due to information asymmetries between investors. If a profitable enterprise issues more equity than the better informed investors are willing to acquire, the enterprise will either have to raise less equity or persuade more poorly informed investors to purchase equity stakes, too. Both these options entail high costs: While

they are incurred by insufficient equity being raised in the first instance, they arise in the form of high equity costs out of the need to sell equity to poorly informed investors in the second.

These theoretical findings are supported by empirical evidence: According to Loughran et al. (1994) who compared the returns on initial public offerings (IPOs) in several different countries, these returns amount to as much as 80% on average in some countries. During the last wave of issues, returns on IPOs in the German market amounted to more than 40% according to Aussenegg et. al. (2005). From the issuer's perspective, such high returns tend to make equity issues unprofitable.

Investment Asymmetries in the Secondary Market

The equity costs of an enterprise also depend on what information about its performance is available to investors *after* the equity has been raised, as well as what opportunities investors have to respond to unsatisfactory results. Many recent studies in the area of financial research are devoted to this issue. Johnsen et al. (2000), for instance, coined the term "tunneling" to denote the transfer of corporate profits via transactions between an enterprise and its controlling stockholder with the aim of withholding profits from the enterprise's minority stockholders. Empirical findings on the volume of such transactions can be consulted, for instance, in the study by Bertrand et al. (2002), while the impact on the financing of enterprises by these and similar problems is analyzed by Townsend (1979). Once again, the cost of equity capital increases because it is not possible to contractually determine the relative profit shares of controlling and minority stockholders to the satisfaction of both parties. Since minority stockholders anticipate that profits could be withheld from them, they are prepared to invest only if equity is offered to them on reasonably favorable terms. By contrast, debt financing has an advantage as a form of financing owing to the effective contractual guarantee of an enterprise's promise to pay its creditors.

Cost of Issuing Equity and Enterprise Size

The typically small equity issuance volumes of SMEs directly incur extra costs for these enterprises in addition to the above mentioned reasons for the high equity cost. First and foremost, these are fixed costs for the procurement of information incurred by both investors and underwriters, which cannot be covered by corresponding economies of scale for small issuance volumes. In addition, smaller enterprises will typically wait for a longer period of time before they carry out a possible secondary offering and thus benefit a second time from having invested in the fixed costs of a primary issue.

In addition to the problem of covering the fixed costs of small equity issues, the typically low liquidity of such issues increases the issuance costs. Investors are prepared to invest in relatively nonliquid stocks only if they receive a discount that covers the costs of a possible future liquidation of positions entered into. Furthermore, as investors will hardly be prepared to acquire larger stakes of such issues, the enterprise will have to convince a disproportionately large number of investors to buy such issues, which again increases the costs.

The "Equity Gap" Problem and Possible Solutions

The reasonings given above lead to an obvious conclusion: Equity financing is frequently subject to considerable market frictions, which makes this form of financing more expensive than debt financing. There are three reasons why this especially applies to SMEs: First, information asymmetries between outside investors and management are particularly pronounced. Second, shares of SMEs do not have much, if any, liquidity in the secondary market, and third, the fixed cost charged for raising external equity is particularly high for SMEs. Therefore, SMEs frequently dispense altogether with all equity financing by outside investors. From a macroeconomic perspective, this gives rise to the "equity gap" problem: Equity issues seem to be worth carrying out only from a specific issuance volume upwards, as smaller volumes do not justify the higher issuance costs.

In the following, we will present possible solutions as derived from financial literature. The highly noted contributions by Townsend (1979), Diamond (1984), as well as by Gale and Hellwig (1985), for instance, indicate that – in case there are significant information asymmetries between an enterprise's investors and its management about the enterprise's performance – it is always advantageous to use forms of financing that guarantee clearly defined cash flow claims to investors. These advantages, however, are partly offset by higher anticipated bankruptcy costs and by the suboptimal investment behavior of highly indebted enterprises.

Considering preferred stock can help eliminate or at least reduce this suboptimal investment behavior according to Heinkel and Zechner (1990). The advantages of preferred stock as a financing instrument are also underlined by DeMarzo and Duffie (1999). They emphasize that preferred stock financing offers many of the benefits that accompany debt financing without increasing the risk of bankruptcy. Like debt, preferred stock usually also involves a relatively firm promise of payment, i.e. the preferred dividend, the non-payment of which results in the common stockholders losing their control rights. As with debt financing, this provides outside investors with a limited right to intervene in the enterprise's management, but the common stockholders do not stand the risk of losing complete control as a result of bankruptcy. If, in addition, the preferred stock is correctly structured, it is highly probable that the preferred dividend will be paid. Thus, the outside investors' situation is similar to that of lenders: They need less information to correctly value preferred stock than they need for common stock and are therefore prepared to invest on terms that are relatively favorable for issuers.

Apart from preferred stock financing, it can also be advantageous to raise mezzanine capital. A hybrid form of equity and debt financing, mezzanine financing is very flexible and ideal for granting outside investors the same promise of payment and similar control rights as preferred stock. Unlike preferred stock financing, however, mezzanine financing may lead to an increase in the financed enterprise's debt.

DeMarzo (2005) analyzes a financing model via asset pools, which can be considered as groups of SMEs in the present context. His study shows that it can be advantageous to finance several SMEs via a common fund that carries out securities issues and distrib-

utes the issuance income to the SMEs. This finding is based primarily on two arguments that form the core of DeMarzo's analysis. First, if SMEs jointly issue preferred stock, they can use the profits generated by several SMEs (instead of only one) to pay the preferred dividend. This minimizes the risk of common stockholders losing control to outside investors and maximizes the probability that the promised preferred dividend will be paid to the preferred stockholders. Second, the structure of asset pools makes it possible to avoid the cherry-picking cited above. If SMEs issue securities separately, more poorly informed investors – reckoning that they will subscribe primarily to less profitable issues – will therefore be ready to do this only if they receive an appropriate discount. Pooling issues prevents better informed investors from investing exclusively in more profitable SMEs.

Small enterprises, in particular, enjoy an additional advantage above and beyond the aforementioned general benefits derived from the pooling of equity issues. Pooling allows the high fixed costs of equity issues to be distributed among a group of issuers. In addition, pooling can concentrate the market liquidity available, thereby avoiding or, at the very least, reducing discounts induced by illiquidity.

The SME Financing Concept

In this section, we present our SME financing concept, through which Austrian SMEs could gain direct access to external equity financing and indirect access to the capital market. This concept is a synthesis of theoretical considerations and empirical insights obtained in the course of numerous discussions with practitioners.

In this concept, a company referred to as Mittelstandsbeteiligungsgesellschaft (MBG) in German acquires equity stakes in several SMEs. These investments have all important characteristics of equity but yield contractually specified returns (as current forms of mezzanine capital do) that are passed through to the MBG's investors. Two groups of investors provide the capital to an MBG: common stockholders and preferred stockholders. However, preferred stocks are issued only when the MBG already has a portfolio of SME investments. The issuance income is used to repay the debt that was raised to prefinance these investments.

The institutional details of an MBG must take into account the needs and requirements of all parties involved, which poses a major challenge for its design. On the one hand, it aims at helping SMEs with bright, but not necessarily spectacular, profit prospects raise equity capital without their common stockholders having to cede too many control rights. On the other hand, it has to provide the MBGs' investors with sufficient guarantees and rights of co-determination to make them want to invest in the SMEs.

MBGs are basically set up in two stages. In stage 1, they are provided with advance financing via equity (approx. 25% to 35%) and debt (approx. 65% to 75%). This capital is invested in different SMEs which are selected by the lenders of equity (or, alternatively, by a management company instructed to do so by the lenders of equity). The specific characteristics of the MBGs' SME investments are described in detail in the sub-sections below.

In stage 2, the MBGs issue preferred stock via the stock exchange and use the proceeds generated by these issues to repay the debt incurred in stage 1. Investors can use an MBG's ex-

isting SME portfolio to evaluate its investment policy and so correctly value its preferred stock. The features of this preferred stock and the role of preferred stockholders are described in detail in the sub-sections below.

Contractual Structure of MBG Investments in SMEs

A key objective of this SME financing concept is to increase the equity ratio of SMEs. Hence, MBG investments in SMEs must constitute equity under Austrian commercial law. Furthermore, they should also constitute equity for banks' rating systems so that they lead to an improved rating and correspondingly reduce the SMEs' debt financing costs.

However, it must be ensured that SMEs are permitted under Austrian tax law to deduce dividend payments to MBGs from the profits that are liable to corporate income tax. This ensures that the financing costs of such investments remain attractive for SME owners relative to debt financing costs.

In addition to creating a favorable legal environment for such investments in SMEs, it is particularly important to prevent the cost of equity from increasing owing to asymmetric information problems between the SME owners and the MBG. This is feasible only if the SMEs' dividend payments to the MBG are relatively calculable, as they are e.g. for preferred stock or mezzanine capital. The use of such forms of financing has a further advantage, which is frequently of major importance in practice: Unlike pure equity financing, mezzanine financing leaves the original SME owners with most of their decision-making powers; MBGs are, however, provided with strong control and intervention rights that become applicable only if an SME performs badly.

In short, the SME financing concept via MBGs has the following characteristics:

Calculable dividend payments: The SMEs and the MBGs agree on calculable minimum dividend payments that are stipulated either by the right to a fixed minimum return or by being pegged to a variable interbank interest rate (e.g. LIBOR). This prevents a possible information lead of SME owners over an MBG from taking effect in the form of increased capital costs. These dividend payments reduce the corporate tax base of SMEs.

Indefinite maturity: Investments in SMEs held by MBGs have a long or even indefinite maturity. This feature ensures that investments comply with the definition of equity as stipulated under Austrian commercial law. The original owners of SMEs, in which an MBG has a stake, should, however, be given the chance to repurchase the latter's investments against payment of an appropriate premium subject to a certain period of non-negotiability.

Temporal flexibility of dividend payments: Contractually stipulated minimum dividend payments by SMEs to an MBG can be deferred. In this case, the MBG's claims accumulate, bearing interest. Failure to pay a dividend will not necessarily lead to the SME's bankruptcy.

Conditional control rights: If an SME fails to make the contractually specified minimum dividend payments to the MBG in part or in full over a certain period of time, the MBG will be given appropriate control rights as well as wide-ranging rights to intervene in the SME's management. If the SME makes all dividend payments as stipulated, the MBG will only be entitled to information rights and to limited control rights, not to rights of direct intervention.

Subordination to debt: In the event of liquidation, an investment held by an MBG is subordinated to the SME's debt.

Loss sharing: An MBG's investment in SMEs includes loss sharing. This means that the nominal value of an MBG's investment in an enterprise is reduced if the enterprise's equity is exhausted. In the event of the SME going bankrupt, not only is the MBG's investment subordinate to the SME's debt, but the formal claims of the MBG are also reduced. This feature of the MBG's investment also underlines its equity nature.

The MBG Concept – Investor and SME Perspective

From the perspective of common stockholders, investments in MBGs offer considerable leverage effects thanks to the latters' capital structure. An MBG with a ratio of e.g. 1:3 of equity to debt or preferred stock generates attractive returns for the common stockholders even if it invests exclusively in SMEs enjoying modest growth and low risk. Investments in an MBG's capital stock can also be structured to include attractive exit opportunities for common stockholders, e.g. via an IPO after a specific period of time (e.g. ten years). In the course of this IPO, the MBG either repurchases preferred stock via a cash payment or via a stock swap. As the MBG's preferred stock has been traded for a long time, the general public may be expected to have sufficient information about its performance so that the common stockholders can exit on reasonably good terms.

From the perspective of preferred stockholders, MBGs represent an opportunity to invest in the equity of Austrian enterprises without incurring especially high risks. Our concept's approach reduces the risk of such investments in two ways. First, the MBG's structure – a pool of investments in the equity of several SMEs – generates considerable diversification effects. Second, the dividend payments by SMEs to the MBG are broken down into two separate tranches. One of them is an agreed dividend that is paid out to the preferred stockholders (preferred dividend) before the common stockholders receive a possible dividend. This means that it is actually the common stockholders who bear an MBG's risk, whereas the preferred stockholders receive calculable dividends and thus bear a far smaller risk.

The concept of MBG preferred stocks should appeal above all to institutional investors and particularly to providers of subsidized personal pension schemes (SPPS), given that providers of SPPS products must invest at least 40% of their assets in equity and that MBGs' preferred stocks meet all the relevant requirements for such investment. This 40% restriction can be quite a significant obstacle to diversification for SPPS portfolios (see Halling et al., 2004). It is therefore of particular importance to create additional investment opportunities that enable SPPS providers to generate attractive risk-adjusted returns.

The aforementioned arguments clearly show that our SME financing concept offers investors a considerably expanded range of investment opportunities in the Austrian capital market. Furthermore, the concept offers Austrian SMEs an expanded range of financing opportunities. The reasons why an MBG's investment will appeal to SME owners can be summed up as follows:

Equity under Austrian commercial law, tax deductibility of investment returns: MBGs provides SMEs with capital that constitutes equity under Austrian commercial law, thereby improving the SMEs' capital structure and reducing their remaining debt costs. Additionally, dividend payments to MBGs reduce the SMEs' tax base.

Flexible contractual ties: MBGs provide SMEs with investment capital without this capital having to be repaid at the end of a specified maturity. The SME owners are, however, permitted to repurchase an MBG's investment against payment of a premium after a certain period of non-negotiability. Until then, they are obliged to make certain dividend payments, as they would otherwise have to cede considerable control rights. The failure to make dividend payments will, however, not necessarily lead to the SME's bankruptcy.

Conditional control rights: Unlike other types of equity investment, an MBG's investment in an SME does not lead to a significant loss of control for the SME's original owners. The MBG's control rights are in fact very limited provided the SME makes the specified dividend payments.

Link to the capital market: MBGs' investments in SMEs indirectly link the latter to the capital market. From the perspective of SMEs, this can have several advantages. First, numerous studies show that enterprises with a stock-exchange listing profit from a significant marketing edge in the product market (see Stoughton et al., 2001). In addition, such enterprises achieve a direct PR effect owing to the mandatory presentation of all enterprises in the MBG's portfolio when its securities are sold via the stock exchange. Furthermore, a stock-exchange listing is a positive signal for many customers: As a rule, customer confidence and also the relations with other stakeholders (such as employees and suppliers) may be expected to improve simply because the enterprise was selected by the MBG's management and because it will be subject to monitoring and to specific disclosure requirements (see Pagano et al., 2002).

Second, empirical evidence shows that an enterprise's bargaining position with banks and other lenders improves after a stock-exchange listing. Pagano et al. (1998), for instance, consider this to be one of the reasons to go public. Even though our SME financing concept does not provide for an SME's direct stock-exchange listing, it is nonetheless likely to produce similar effects which would also further reduce the SME's debt financing costs.

Moreover, as the MBG investment allows SMEs gather experience in dealing with the Austrian capital market, the probability of subsequent direct stock market flotations via IPOs or bond issues increases.

Comparison with Small Business Investment Companies

The SME financing concept presented in this study reveals similarities with the Small Business Investment Company (SBIC) program in the U.S.A. This program, which was introduced in 1958, is a success story in the domain of financing support for SMEs. Before turning to a comparison of the SBIC program with our MBG concept, we will briefly summarize other existing SME financing models. It should be highlighted in this context that several initiatives to improve the capital structure of European SMEs are currently being launched within the EU both at national and EU levels (see European

Commission, 2003, for an overview of these initiatives). For instance, policymakers in the United Kingdom are considering the launch of a quasi-SBIC program – so-called Enterprise Capital Funds (ECFs) – to support British SMEs (see Small Business Service, 2003)[3]. In Germany, we are aware of initiatives undertaken by the State Development Bank of North Rhine-Westphalia and by private banks, which are also designed to strengthen the capital structure of established SMEs using mezzanine financing products.[4]

In Austria, an attempt was made as early as the 1980s to implement capital market-oriented equity financing of Austrian SMEs in the form of a dividend-right certificate model. Apart from similar objectives, this model and our MBG concept have very little in common. The key difference briefly considered here is the different risk-sharing approach. Unlike the MBG concept, the dividend-right certificate model lacked common stockholders who took the risks and were responsible for the portfolio composition. Instead, a venture fund company, which bore hardly any risk itself, was responsible for the selection of investments.

In the following, we will focus on the key common features and differences of the U.S. SBIC program and our MBG model. We refrained from including a detailed description of the SBIC program; please refer to Brewer et al. (1995) and Bannock Consulting (2001) for details.

To begin with, both the SBIC program and the MBG concept address established SMEs and not high-tech start-ups. Generating attractive returns for the lenders of equity to SBICs and MBGs – who are investing in relatively low-risk SMEs – is therefore of key importance. Both programs achieve this objective by means of leverage gearing. Whereas SBICs in the U.S.A. issue pure debt, the MBG concept in Austria uses preferred stock that is listed on the stock exchange. Therefore, the Austrian variant would allow for profit in excess of the preferred dividends to be shared. Still, the leverage gearing of the return on the common stock is similar.

Even though MBGs and SBICs differ in their mode of financing, they nonetheless share key common features – most notably the fact that dividend payments to investors can be deferred. This feature was only included in the SBIC model's 1994 reform. Prior to this, SBICs that failed to make coupon payments to lenders of debt in time went bankrupt, which led to numerous bankruptcies in the period before 1994. Generally speaking, the MBG concept provides for a flexible solution and also includes the explicit option for SMEs to defer dividend payments.

Another difference lies in the investment structure. SBICs focus on traditional equity investments or traditional loan financing, whereas MBGs would specialize in subordinated forms of investment of an equity nature.

A further key difference lies in the role of the government. Whereas the U.S. government is closely involved

[3] *On May 5, 2005, the British program was officially approved by the European Commission on the basis of the community rules on state aid. From June 2005 onward, this decision is to be followed by the so-called pathfinder initiative, a kind of test run with approx. three to four ECFs, in order to gauge how the market reacts to this specific product and how British SMEs react to the additional funding offer.*

[4] *In 2004, the volume of preferred pooled shares transactions (so-called preps) carried out by HVB and the Swiss Capital Efficiency group, for instance, came to EUR 850 million. However, it should be borne in mind that only 15% of this capital flowed to enterprises that comply with the European Commission's SME definition.*

as guarantor in the SBIC program via the Small Business Agency (SBA) in both a monitoring and regulating capacity, the Austrian government is not accorded such an influential role in our MBG concept. Its role would be limited to granting tax relief to MBGs and their investors.

Summary

The MBG concept presented in this study is an innovative approach designed to provide Austrian SMEs with access to equity or quasi-equity forms of financing and to broaden the range of investment opportunities in the Austrian capital market.

The advantages of the MBG concept for the different parties involved can be summed up as follows:

Common stockholders of MBGs: They profit from attractive returns that can be generated via the leverage gearing effect and, possibly, by the provision of tax relief for MBGs. In the start-up phase, the MBGs' common stockholders are provided with guaranteed debt. In the event of conditional control rights being invoked, the MBGs' common stockholders can be granted a greater say in the SME's management than they would have with traditional minority interests in the SME's common stock or with investments via dividend-right certificates.

Preferred stockholders of SME investment companies: Preferred stockholders receive calculable returns at a level of risk that is low compared with common stock.

SMEs: The investments held by MBGs in SMEs are characterized by calculable dividend payments, indefinite maturity, temporal flexibility of dividend payments, subordination to debt and loss sharing. They thus represent investments of an equity nature that also benefit from tax deductibility of returns paid on investments. The failure to make specified payments does not directly result in the SME's bankruptcy. Unpaid dividends accumulate and accordingly bear interest. Furthermore, SME owners have to cede considerable control rights if – and only if – the specified dividends are not distributed. In addition, the indirect link to the capital market can generate positive marketing effects and strengthen the SMEs' bargaining positions vis-á-vis other lenders. Finally, SMEs garner experience in dealing with the capital market, which may be useful for a stock-exchange listing at a later date.

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Annex of Tables

Annex of Tables

Cutoff date for data: November 4, 2005.

Conventions used in the tables:
× = For technical reasons no data can be indicated.
. . = Data not available at the reporting date.

Revisions of data published in earlier volumes are not indicated.
Discrepancies may arise from rounding.

International Environment

Table A1

Exchange Rates

Period average (per EUR 1)

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
U.S. dollar	0.8955	0.9452	1.1312	1.2437	0.8976	1.1046	1.2277	1.2852
Japanese yen	108.7500	118.0700	130.9600	134.4000	116.2500	131.1100	133.0700	136.2300
Pound sterling	0.6217	0.6287	0.6919	0.6786	0.6214	0.6853	0.6735	0.6861
Swiss franc	1.5103	1.4670	1.5210	1.5439	1.4691	1.4917	1.5532	1.5463
Czech koruna	34.0470	30.8030	31.8500	31.8960	31.0680	31.5510	32.4440	30.0660
Hungarian forint	256.6200	242.9200	253.5100	251.6800	243.5200	247.1100	256.0500	247.4200
Polish zloty	3.6672	3.8560	4.3998	4.5268	3.6671	4.2716	4.7294	4.0784
Slovak koruna	43.2950	42.6740	41.4850	40.0240	42.5930	41.5040	40.3150	38.5960
Slovenian tolar	217.9530	225.9600	233.8420	239.0730	223.4974	232.1367	238.2346	239.6240

Source: Thomson Financial.

Table A2

Key Interest Rates

End of period, %

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Euro area	3.25	3.25	2.75	2.00	2.00	2.00	2.00	2.00
U.S.A.	1.75	1.75	1.25	1.00	1.00	1.25	2.25	3.25
Japan	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
United Kingdom	4.00	4.00	4.00	3.75	3.75	4.50	4.75	4.75
Switzerland[1])	1.25–2.25	0.75–1.75	0.25–1.25	0.00–0.75	0.00–0.75	0.00–1.00	0.25–1.25	0.25–1.25
Czech Republic	4.75	3.75	2.75	2.25	2.00	2.25	2.50	1.75
Hungary	9.75	9.00	8.50	9.50	12.50	11.50	9.50	7.00
Poland	11.50	8.50	6.75	5.25	5.25	5.25	6.50	5.00
Slovak Republic	8.80	8.25	6.50	6.50	6.00	4.50	4.00	3.00
Slovenia[2])	8.00	8.75	8.25	6.50	6.00	4.00	4.00	4.00

Source: Eurostat, Thomson Financial, national sources.

[1]) SNB target range for three-month LIBOR.

[2]) Until January 2003: official interest rate; since February 2003: interest rate for 60-day tolar bills issued by Banka Slovenije.

Table A3

Short-Term Interest Rates

Three-month rates, period average, %

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro area	4.26	3.32	2.33	2.11	3.40	2.52	2.07	2.13
U.S.A.	3.78	1.80	1.22	1.62	1.91	1.28	1.21	3.06
Japan	0.16	0.09	0.09	0.09	0.10	0.09	0.08	0.09
United Kingdom	4.97	4.01	3.69	4.59	4.07	3.67	4.32	4.85
Switzerland	2.94	1.17	0.33	0.47	1.54	0.41	0.28	0.75

Source: Thomson Financial.

Table A4

Long-Term Interest Rates

Ten-year rates, period average, %

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro area	5.03	4.91	4.14	4.12	5.20	4.06	4.24	3.70
U.S.A.	5.01	4.60	4.00	4.26	5.07	5.01	4.90	4.67
Japan	1.34	1.27	0.99	1.50	1.42	1.40	1.36	1.31
United Kingdom	5.01	4.91	4.58	4.93	5.21	4.35	4.98	4.59
Switzerland	3.38	3.20	2.66	2.74	3.52	3.47	3.40	3.25

Source: Eurostat, national sources.

Table A5

Corporate Bond Spreads

Period average, percentage points

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro corporate bond spreads against euro benchmark	1.17	1.20	0.35	–0.14	1.17	0.95	0.27	0.48
U.S. dollar corporate bond spreads against U.S. dollar benchmark	5.48	5.50	4.57	2.91	4.71	5.39	2.89	2.95

Source: Thomson Financial.

Table A6

Stock Indices[1])

Period average

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro area: EURO STOXX	336.29	259.97	231.29	251.14	300.56	198.90	250.68	278.15
U.S.A.: S&P 500	1,193.78	995.34	964.85	1,131.10	1,101.28	899.27	1,128.14	1,186.95
Japan: Nikkei 225	12,114.46	10,119.31	9,312.89	11,180.89	10,978.07	8,361.43	11,273.45	11,438.25
Austria: ATX	1,157.18	1,183.87	1,305.11	1,979.58	1,252.45	1,208.86	1,833.47	2,662.12
Czech Republic: PX50	411.17	437.62	558.24	828.23	434.00	504.85	770.53	1,149.16
Hungary: BUX	6,901.30	7,760.46	8,400.74	11,752.23	8,112.32	7,770.02	10,655.11	16,870.85
Poland: WIG	14,375.73	14,431.27	17,103.10	24,108.88	15,268.16	14,482.05	23,365.28	26,810.35
Slovak Republic: SAX12	102.34	116.60	164.08	213.42	114.78	156.65	183.10	421.58
Slovenia: SBI	1,890.08	2,846.78	3,377.57	4,561.36	2,509.62	3,220.78	4,341.09	4,821.68

Source: Thomson Financial.

[1]) EURO STOXX: December 31, 1986 = 100, S&P 500: December 30, 1964 = 100, Nikkei 225: March 31, 1950 = 100, ATX: January 2, 1991 = 1,000, PX50: April 6, 1994 = 100, BUX: January 2, 1991 = 100, WIG: April 16, 1991 = 100, SAX12: September 14, 1993 = 100, SBI: January 3, 1994 = 100.

Table A7

Gross Domestic Product

Annual change in %, period average

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro area	1.7	0.9	0.7	2.1	0.7	0.7	1.9	1.2
U.S.A.	0.8	1.6	2.7	4.2	1.3	1.8	4.7	3.6
Japan	0.2	−0.3	1.4	2.7	−1.6	1.2	3.6	1.3
Austria	0.8	1.0	1.4	2.4	1.1	0.6	1.7	2.1
Czech Republic	2.6	1.5	3.7	4.0	1.8	2.8	4.3	4.9
Hungary	3.8	3.5	3.0	4.0	3.1	2.6	4.5	3.5
Poland	1.0	1.4	3.8	5.3	1.2	3.6	7.0	2.4
Slovak Republic	3.8	4.6	4.5	5.5	4.2	4.1	5.4	5.1
Slovenia	2.7	3.3	2.5	4.6	3.1	2.3	4.5	3.9

Source: Eurostat, national sources.

Table A8

Current Account

% of GDP, cumulative

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro area	0.4	1.0	0.5	0.6	2.0	0.8	1.4	1.7
U.S.A.	−3.8	−4.5	−4.8	−5.7	−4.1	−4.4	−5.0	−6.4
Japan	2.1	2.8	3.2	3.7	3.2	3.0	3.9	. .
Austria	−0.4	2.5	1.5	2.1	1.4	0.9	1.9	1.8
Czech Republic	−5.4	−5.7	−6.3	−5.2	−3.9	−3.6	−3.8	−0.9
Hungary	−6.2	−7.1	−8.8	−8.8	−6.6	−9.5	−9.4	−7.9
Poland	−2.9	−2.7	−2.2	−4.3	−3.5	−3.1	−5.8	−1.4
Slovak Republic	−8.4	−8.0	−0.8	−3.5	−7.7	−1.3	−2.6	−6.9
Slovenia	0.2	1.4	−0.4	−2.1	1.1	−0.7	−2.0	−0.5

Source: Eurostat, European Commission, Thomson Financial, national sources.

Note: Due to seasonal fluctuations, the comparability of half-year figures with yearly figures is limited. The half-year figures for the U.S.A. are based on seasonally adjusted nominal GDP data.

Table A9

Inflation

Annual change in %, period average

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
Euro area	2.3	2.3	2.1	2.1	2.3	2.1	2.0	2.1
U.S.A.	2.8	1.6	2.3	2.7	1.3	2.5	2.3	3.0
Japan	−0.7	−0.9	−0.3	0.0	−1.2	−0.2	−0.2	0.2
Austria	2.3	1.7	1.3	2.0	1.7	1.4	1.2	2.2
Czech Republic	4.5	1.4	−0.1	2.6	2.7	−0.4	2.2	1.3
Hungary	9.1	5.2	4.7	6.8	5.8	4.3	7.1	3.6
Poland	5.3	1.9	0.7	3.6	2.7	0.4	2.6	2.9
Slovak Republic	7.2	3.5	8.4	7.5	4.0	7.7	8.2	2.7
Slovenia	8.6	7.5	5.7	3.6	7.8	6.1	3.7	2.5

Source: Eurostat.

The Real Economy in Austria

Table A10

Financial Investment of Households

Transactions, EUR million

	2001	2002	2003	2004[3])	2002	2003	2004	2005[3])
	Year				1st half			
Currency and deposits[1])	4,314	7,602	8,166	5,910	3,085	4,476	2,612	3,402
Securities (other than shares)[2])	−327	1,607	1,449	2,484	1,371	7	1,972	856
Shares (other than mutual fund shares)	1,143	705	894	1,100	280	636	538	1,568
Mutual fund shares	2,894	483	1,119	2,886	−120	871	1,886	1,588
Insurance technical reserves	3,398	2,949	3,300	4,786	1,440	2,355	2,720	4,078
Total financial investment	11,422	13,346	14,928	17,166	6,056	8,346	9,728	11,493

Source: OeNB.

[1]) Including loans and other assets.

[2]) Including financial derivatives.

[3]) Preliminary data.

Table A11

Household Income, Savings and Credit Demand

Year-end, EUR billion

	2001	2002	2003	2004
	Year			
Net disposable income	132.3	134.5	139.7	144.2
Savings	9.9	10.3	12.0	13.1
Saving ratio[1]) in %	7.5	7.7	8.6	9.0
MFI loans to households	79.87	86.65	89.75	98.32

Source: Statistics Austria (national accounts broken down by sectors), OeNB (financial accounts).

[1]) Saving ratio = savings / (disposable income + increase in accrued occupational pension benefits).

Table A12

Financing of Nonfinancial Corporations

Transactions, EUR million

	2001	2002	2003	2004[1])	2002	2003	2004	2005[1])
	Year				1st half			
Securities (other than shares)	600	−410	4,296	2,938	−22	260	926	1,372
Loans	11,338	6,457	4,998	4,863	2,922	3,169	503	2,136
Shares and other equity	4,881	7,850	5,015	4,660	6,611	5,491	4,180	3,902
Other accounts payable	40	1,215	1,982	624	441	−123	196	1,490
Total debt	16,860	15,112	16,291	13,085	9,952	8,797	5,805	8,900

Source: OeNB.

[1]) Preliminary data.

Table A13

Insolvency Indicators

	2001	2002	2003	2004	2002	2003	2004	2005
	Year				1st half			
	EUR million							
Default liabilities	3,503	3,422	2,440	2,540	1,652	1,258	1,169	990
	Number							
Defaults	2,939	2,864	2,957	2,972	1,423	1,415	1,469	1,544

Source: Kreditschutzverband von 1870.

Table A14

Selected Financial Ratios of the Manufacturing Sector

Median, %

	2001	2002	2003	2004
Self-financing and investment ratios				
Cash flow, as a percentage of turnover	7.35	7.47	6.95	..
Cash flow, as a percentage of investment	181.18	194.62	183.87	..
Reinvestment ratio[1])	69.23	70.28	77.78	..
Financial structure ratios				
Equity ratio	11.03	13.90	17.94	..
Risk-weighted capital ratio	16.46	19.45	24.11	..
Bank liability ratio	46.47	42.94	38.76	..
Government debt ratio	9.78	9.49	8.86	..

Source: OeNB.

[1]) Investment x 100 / credit write-offs.

Financial Intermediaries in Austria

Table A15

Total Assets and Off-Balance-Sheet Operations

End of period, EUR million

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Total assets	587,741	587,611	573,349	591,867	605,107	636,035	652,759	697,694
of which: total domestic assets	431,415	426,245	418,141	419,571	430,888	441,250	452,307	464,014
total foreign assets	156,326	161,366	155,208	172,296	174,219	194,785	200,452	233,680
Interest rate contracts	946,631	1,022,741	1,144,431	2,204,721	1,853,494	1,891,262	1,241,189	1,266,288
Foreign exchange derivatives	157,512	202,939	240,542	298,475	305,447	255,755	216,284	245,677
Other derivatives	5,737	7,554	3,814	4,304	15,173	17,374	8,490	15,917
Derivatives total	1,109,880	1,233,235	1,388,787	2,507,501	2,174,114	2,164,391	1,465,963	1,527,882

Source: OeNB.

Note: Data on off-balance-sheet operations refer to nominal values.

Table A16

Profitability

End of period, EUR million

	2002	2003	2004	2005	2001	2002	2003	2004
	1st half				Year			
Net interest income	3,518	3,497	3,530	3,548	7,089	7,081	7,058	7,132
Income from securities and participating interests	828	812	990	1,125	1,959	1,771	1,719	2,076
Net fee-based income	1,514	1,553	1,671	1,904	3,062	3,012	3,188	3,387
Net profit/loss on financial operations	197	384	310	334	521	570	618	608
Other operating income	629	591	590	621	1,423	1,284	1,292	1,269
Operating income	6,685	6,837	7,091	7,531	14,054	13,718	13,875	14,471
Staff costs	2,380	2,368	2,382	2,418	4,681	4,781	4,740	4,860
Other administrative expenses	1,524	1,508	1,511	1,628	3,151	3,139	3,108	3,107
Other operating expenses	781	768	780	776	1,645	1,582	1,620	1,762
Total operating expenses	4,686	4,645	4,673	4,822	9,476	9,502	9,468	9,729
Operating profit/loss	2,000	2,192	2,418	2,708	4,577	4,216	4,407	4,742

Source: OeNB.

Table A17

Annual Profit/Loss

year-end value, EUR million

	1998	1999	2000	2001	2002	2003	2004	2005
	Year							
Net risk provisions from credit business	2,243	1,814	2,048	2,317	2,164	1,850	1,787	1,608
Net risk provisions from securities business	−531	−257	−442	−925	−10	−46	−554	−101
Annual surplus	1,593	1,915	2,278	2,655	1,400	2,069	2,942	2,910

Source: OeNB.

Note: Data on 2005 are expected year-end values.

Table A18

Claims on Domestic Nonbanks

End of period, EUR million

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Nonfinancial corporations	114,648	113,843	111,588	111,178	110,840	108,979	109,924	111,334
of which: foreign currency-denominated claims	20,221	20,364	19,532	18,177	17,791	17,343	16,094	16,109
Households	79,751	81,507	84,618	84,723	87,358	93,984	97,130	100,375
of which: foreign currency-denominated claims	19,502	20,594	22,066	21,810	23,691	27,077	28,461	30,401
General government	28,275	28,724	28,333	27,501	29,945	29,679	31,238	30,192
of which: foreign currency-denominated claims	1,362	1,682	1,395	1,567	1,132	1,588	1,688	2,074
Other financial intermediaries	11,893	12,309	12,771	12,908	13,392	13,505	14,510	15,131
of which: foreign currency-denominated claims	1,336	1,342	1,466	1,394	1,412	1,594	1,667	2,030
Total	234,566	236,383	237,310	236,309	241,534	246,147	252,802	257,032
of which: foreign currency-denominated claims	42,420	43,983	44,459	42,948	44,125	47,602	47,910	50,614

Source: OeNB.

Note: Due to changes in the reporting system as of the reporting month of June 2004, the time series for nonfinanial corporations and households had to be adjusted. Freelance professionals and self-employed persons are now classified under households. Any remaining breaks in the time series have been adjusted for the growth rates indicated in this report.

Table A19

Foreign Currency-Denominated Claims on Domestic Non-MFIs

End of period, % of total foreign currency-denominated euro area non-MFIs[1])

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Swiss franc	52.1	51.4	56.8	72.4	81.6	86.0	90.1	89.3
Japanese yen	42.3	42.2	37.7	21.6	12.2	7.1	5.6	5.2
U.S. dollar	5.2	6.0	5.0	5.2	5.0	5.6	3.6	4.8
Other foreign currencies	0.4	0.3	0.4	0.7	1.2	1.3	0.7	0.7

Source: OeNB, ECB.

[1]) The indicated figures refer to claims of monetary financial institutions (MFIs, ESA definition) on domestic non-MFIs. Given the differences in the definition of credit institutions according to the Austrian Banking Act and of MFIs according to ESA and differences in the number of borrowers, comparability to "Claims on Domestic Nonbanks" is limited. Figures do not add up to 100.0% for every year due to rounding errors.

Table A20

Specific Loan Loss Provisions for Claims on Nonbanks

End of period, % of claims

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Specific loan loss provisions	3.1	3.4	3.3	3.5	3.3	3.4	3.3	3.2

Source: OeNB.

Table A21

Market Risk[1])

End of period, EUR million and % resp.

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Interest rate risk								
Basel ratio for interest rate risk[2])	×	×	8.8	7.8	7.8	7.5	6.1	6.4
Capital requirement for the position risk of interest rate instruments in the trading book	394.1	427.2	415.3	420.6	470.2	514.8	609.8	810.3
Exchange rate risk								
Capital requirement for open foreign exchange positions	64.0	70.3	80.4	81.8	54.9	66.1	52.9	97.3
Equity price risk								
Capital requirement for the position risk of equities in the trading book	28.5	33.6	20.5	25.4	28.4	52.4	43.4	71.1

Source: OeNB.

[1]) The calculation of capital requirements for market risk combines the standardized approach and internal value-at-risk (VaR) calculations. The latter use previous day's values without taking account of the multiplier. Capital requirements for interest rate instruments and equities are computed by adding up both general and specific position risks.

[2]) Average of the Basel ratio for interest rate risk (loss of present value following a parallel yield curve shift of all currencies by 200 basis points in relation to regulatory capital) weighted by total assets of all Austrian credit institutions excluding banks that operate branches in Austria under freedom of establishment. For banks with a large securities trading book, interest rate instruments of the trading book are not included in the calculation.

Table A22

Liquidity Risk

End of period, %

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Liquid resources of the first degree: 5% quantile of liquidity ratio[1])	5.9	11.5	6.1	7.1	4.5	4.3	4.3	4.3
Liquid resources of the second degree: 5% quantile of liquidity ratio	27.3	27.3	26.1	28.2	25.2	25.7	24.4	24.1

Source: OeNB.

[1]) The liquidity ratio relates liquid assets to the corresponding liabilities. Article 25 of the Austrian Banking Act defines a minimum ratio of 2.5 % for liquid resources of the first degree (cash ratio) and of 20% for liquid resources of the second degree (quick ratio). The 5% quantile indicates the liquidity level surpassed by 95% of banks on the respective reporting date and is thus an indicator of poor liquidity.

Table A23

Solvency

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
	End of period, EUR million							
Total tier 1 capital (core capital)	27,440	28,368	26,861	28,181	29,704	31,564	32,101	33,822
Total tier 2 capital (supplementary capital)	13,492	14,159	13,485	14,170	14,941	16,059	16,742	17,656
Tier 3 capital	2,413	2,197	2,324	771	803	764	674	730
	End of period, eligible capital as a percentage of risk-weighted assets							
Capital adequacy ratio[1])	13.7	14.2	13.3	13.9	14.9	14.8	14.7	14.6
Core Capital Ratio	9.5	9.9	9.1	9.5	9.9	10.1	10.0	10.1

Source: OeNB.

[1]) The capital adequacy ratio refers to the capital eligible as credit risk cover under the Austrian Banking Act (i.e. tier 1 capital plus tier 2 capital minus deduction items) as a percentage of the assessment base. As tier 3 capital is subordinated capital that may only be allocated against market risk, it was not included here so as to produce a conservative capital adequacy assessment.

Table A24

Assets Held by Austrian Insurance Companies[1])

End of period, EUR million

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Cash, overnight and other deposits at domestic banks	2,182	1,442	1,628	3,617	2,106	1,744	2,516	2,472
Domestic debt securities	7,712	7,600	7,736	8,488	9,101	9,175	8,909	9,238
of which: domestic banks	4,949	5,031	5,350	6,264	6,824	6,938	7,068	7,519
Equity securities and other domestic securities	13,127	14,616	15,043	14,648	15,204	15,987	17,360	19,387
Loans	8,769	8,517	8,055	7,441	7,303	6,733	6,504	5,933
of which: domestic banks	62	126	78	137	146	148	161	206
Domestic equity interests	2,510	2,784	3,308	3,550	3,588	3,682	3,906	3,928
Real estate	3,494	3,804	3,553	3,526	3,573	3,438	3,361	3,340
Foreign assets	14,397	14,959	15,709	15,597	17,261	19,209	20,691	22,964
of which: debt securities	10,615	11,132	11,548	11,776	12,755	14,979	15,648	17,002
Custody account claims on deposits on reinsurers	1,854	..	2,042	..	2,148	..	2,260	..
Other assets	3,426	3,310	3,329	3,734	3,549	4,068	3,594	4,361
Total assets	57,471	58,620	60,403	62,320	63,833	65,927	69,101	73,433

Source: OeNB.

[1]) Semiannual data exclusive of reinsurance transactions, based on quarterly returns.

Table A25

Assets in Austrian Mutual Funds

End of period, EUR million

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30
Domestic securities	36,068	36,471	35,952	34,653	34,309	35,405	37,341	43,052
of which: debt securities	23,262	23,003	22,547	20,743	19,436	19,058	19,025	20,545
equity securities	12,806	13,468	13,405	13,910	14,873	16,347	18,316	22,507
Foreign securities	57,324	60,701	60,712	66,706	69,435	75,708	80,505	91,472
of which: debt securities	34,717	40,498	43,200	48,531	48,952	53,022	56,821	64,635
equity securities	22,607	20,203	17,513	18,175	20,482	22,686	23,684	26,837
Other assets	5,341	5,018	6,047	5,774	7,274	7,529	7,441	7,985
Total assets	98,733	102,190	102,712	107,133	111,018	118,642	125,286	142,509
of which: foreign currency	24,346	24,157	22,455	22,376	22,178	24,328	24,591	28,085

Source: OeNB.

Table A26

Assets Held by Austrian Pension Funds

End of period, EUR million

	2001	2002		2003		2004		2005
	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June30
Domestic securities	7,245	7,128	7,200	7,744	8,267	8,770	9,179	9,744
of which: federal treasury bills and notes	0	0	0	0	0	0	0	0
debt securities	63	67	57	56	45	121	108	96
mutual fund shares	7,163	7,032	7,125	7,641	8,159	8,607	9,019	9,579
other securities	19	30	18	47	63	42	52	69
Foreign securities	534	401	353	425	405	460	525	728
of which: debt securities	49	44	44	47	44	15	27	70
mutual fund shares	451	315	279	350	330	417	469	645
other securities	34	43	30	29	31	28	29	13
Deposits	164	118	171	164	221	72	125	95
Loans	39	32	42	67	42	59	83	94
Other assets	67	121	110	161	143	147	170	196
Total assets	8,049	7,800	7,876	8,562	9,078	9,508	10,082	10,857
of which: foreign currency	303	188	195	233	212	236	249	272

Source: OeNB.

Table A27

Assets Held by Austrian Severance Funds

End of period, EUR million

	2003[1])	2004		2005
	Dec. 31	June 30	Dec. 31	June 30
Total direct investment	38.53	64.94	92.25	129.39
of which: euro-denominated	38.16	63.99	89.23	122.45
foreign currency-denominated	0.00	0.00	×	×
accrued income claims from direct investment	0.37	0.95	×	2.03
Total indirect investment	59.46	123.53	269.59	382.34
of which: total of euro-denominated investment in mutual fund shares	59.19	122.85	266.59	370.40
total of foreign currency-denominated investment in mutual fund shares	0.00	×	3.25	11.94
Total assets assigned to investment groups	146.47	188.46	362.10	511.73
of which: foreign currency-denominated	0.00	×	4.93	16.85

Source: OeNB.

[1]) Due to special balance sheet operations total assets assigned to investment groups deviate from the sum of total indirect investments.

Notes

Abbreviations

ACH	automated clearing house
APSS	Austrian Payment System Services GmbH
ARTIS	Austrian Real Time Interbank Settlement (the Austrian RTGS system)
A-SIT	Secure Information Technology Center – Austria
ASVG	Allgemeines Sozialversicherungsgesetz – General Social Security Act
A-Trust	A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH
ATM	automated teller machine
ATX	Austrian Traded Index
BCBS	Basel Committee on Banking Supervision (BIS)
BIC	Bank Identifier Code
BIS	Bank for International Settlements
BOP	balance of payments
BSC	Banking Supervision Committee (ESCB)
CACs	collective action clauses
CEBS	Committee of European Banking Supervisors (EU)
CEE	Central and Eastern Europe
CEECs	Central and Eastern European countries
CESR	Committee of European Securities Regulators
CIS	Commonwealth of Independent States
CPI	consumer price index
EBA	Euro Banking Association
EBRD	European Bank for Reconstruction and Development
EC	European Community
ECB	European Central Bank
Ecofin	Council of Economic and Finance Ministers (EU)
EEA	European Economic Area
EFC	Economic and Financial Committee (EU)
EIB	European Investment Bank
EMS	European Monetary System
EMU	Economic and Monetary Union
EONIA	Euro OverNight Index Average
ERM II	Exchange Rate Mechanism II (EU)
ERP	European Recovery Program
ESA	European System of Accounts
ESAF	Enhanced Structural Adjustment Facility (IMF)
ESCB	European System of Central Banks
ESRI	Economic and Social Research Institute
EU	European Union
EURIBOR	Euro Interbank Offered Rate
Eurostat	Statistical Office of the European Communities
FATF	Financial Action Task Force on Money Laundering
Fed	Federal Reserve System
FFF	Forschungsförderungsfonds für die Gewerbliche Wirtschaft – Austrian Industrial Research Promotion Fund
FMA	Financial Market Authority (for Austria)
FOMC	Federal Open Market Committee (U.S.A.)
FSAP	Financial Sector Assessment Program (IMF)
FWF	Fonds zur Förderung der wirtschaftlichen Forschung – Austrian Science Fund
GAB	General Arrangements to Borrow
GATS	General Agreement on Trade in Services
GDP	gross domestic product
GNP	gross national product
GSA	GELDSERVICE AUSTRIA Logistik für Wertgestionierung und Transportkoordination GmbH (Austrian cash services company)
HICP	Harmonized Index of Consumer Prices
IBAN	International Bank Account Number
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
IFES	Institut für empirische Sozialforschung GesmbH (Institute for Empirical Social Research, Vienna)
ifo	ifo Institute for Economic Research, Munich
IGC	Intergovernmental Conference (EU)
IHS	Institut für Höhere Studien und Wissenschaftliche Forschung – Institute for Advanced Studies, Vienna
IIF	Institute of International Finance
IIP	international investment position
IMF	International Monetary Fund
IRB	internal ratings-based
ISO	International Organization for Standardization
IWI	Industriewissenschaftliches Institut – Austrian Institute for Industrial Research
IT	information technology
JVI	Joint Vienna Institute
LIBOR	London Interbank Offered Rate
M3	broad monetary aggregate M3
MFI	monetary financial institution
MRO	main refinancing operation
MÖAG	Münze Österreich AG – Austrian Mint
MoU	memorandum of understanding
NCB	national central bank
ÖBB	Österreichische Bundesbahnen – Austrian Federal Railways
OeBS	Oesterreichische Banknoten- und Sicherheitsdruck GmbH – Austrian Banknote and Security Printing Works
OECD	Organisation for Economic Co-operation and Development
OeKB	Oesterreichische Kontrollbank (Austria's main financial and information service provider for the export industry and the capital market)
OeNB	Oesterreichische Nationalbank (Austria's central bank)
OPEC	Organization of the Petroleum Exporting Countries
ORF	Österreichischer Rundfunk – Austrian Broadcasting Corporation
ÖBFA	Austrian Federal Financing Agency
ÖNACE	Austrian Statistical Classification of Economic Activities
PE-ACH	pan-European automated clearing house
PISA	Programme for International Student Assessment (OECD)
POS	point of sale
PRGF	Poverty Reduction and Growth Facility (IMF)
RTGS	Real-Time Gross Settlement
SDR	Special Drawing Right (IMF)
SDRM	Sovereign Debt Restructuring Mechanism (IMF)
SEPA	Single Euro Payments Area

SPF	Survey of Professional Forecasters
STEP2	Straight-Through Euro Processing system offered by the Euro Banking Association
STP	straight-through processing
STUZZA	Studiengesellschaft für Zusammenarbeit im Zahlungsverkehr G.m.b.H. – Austrian Research Association for Payment Cooperation
S.W.I.F.T.	Society for Worldwide Interbank Financial Telecommunication
TARGET	Trans-European Automated Real-time Gross settlement Express Transfer
Treaty	refers to the Treaty establishing the European Community
UNCTAD	United Nations Conference on Trade and Development
UNO	United Nations Organization
VaR	Value at Risk
WBI	Wiener Börse Index
WEF	World Economic Forum
WIFO	Österreichisches Institut für Wirtschaftsforschung – Austrian Institute of Economic Research
WIIW	Wiener Institut für internationale Wirtschaftsvergleiche – The Vienna Institute for International Economic Studies
WKO	Wirtschaftskammer Österreich – Austrian Federal Economic Chamber
WTO	World Trade Organization

Legend

– = The numerical value is zero or smaller than half of the unit indicated
. . = Data not available at the reporting date
× = For technical reasons no data can be indicated

Note: Apparent arithmetical discrepancies in the tables are due to rounding.

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