

Austrian Financial Intermediaries Develop Dynamically Despite Turbulent Environment

Banks' Total Assets and Profits Grow Again Owing to Investments in Central, Eastern and Southeastern Europe

Total Asset Growth Picks Up Considerably Again

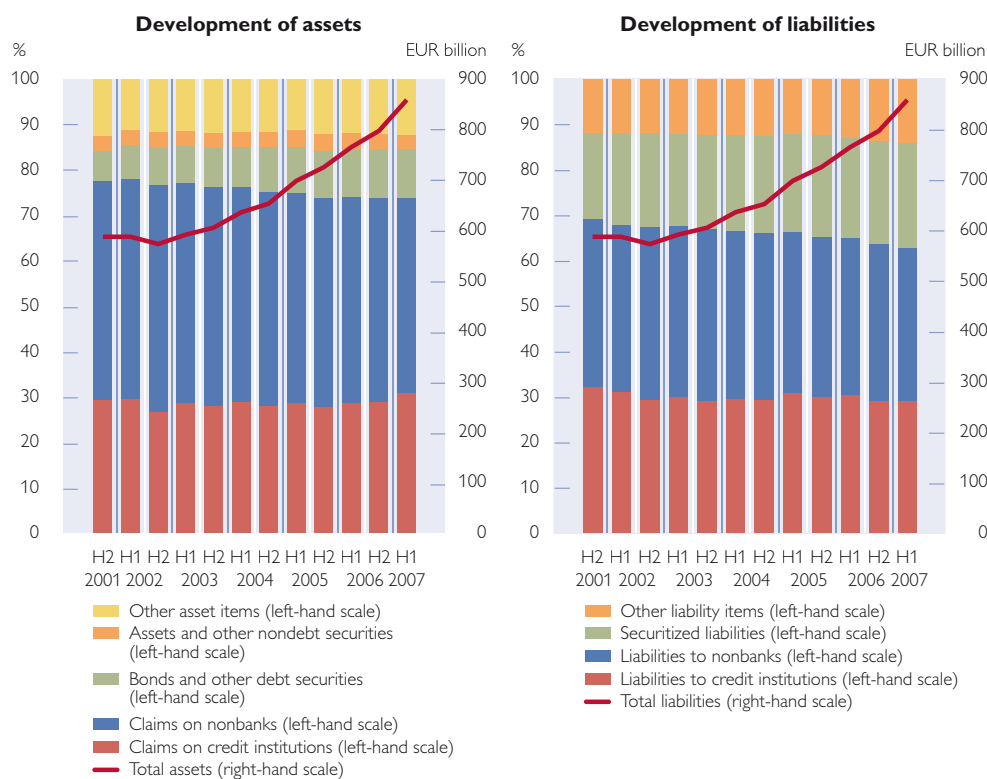
Based on unconsolidated total assets, the Austrian banking sector experienced very strong growth in the first six months of 2007. As in the past, this expansion was fueled by dynamic external business and came to +12.3% (year on year) as at end-June 2007 – the largest rise recorded since 1985.

As a result, unconsolidated total assets amounted to EUR 859 billion, with Austria's five largest banks¹ accounting for around 44% of this sum. Consolidated total assets that notably also cover banks CESEE subsidiaries exceeded the EUR 1,000 billion mark at end-March 2007 and reached around EUR 1,037 billion at end-June 2007, corresponding to year-on-year growth of 18.7%.²

In June 2007, external assets rose by 25.6% (year on year) to EUR 340 billion, i.e. 39.6% of total assets, while external liabilities accounted

Chart 15

Balance Sheet Structure of the Austrian Banking Sector (Unconsolidated)



Source: OeNB.

¹ Bank Austria Creditanstalt AG (BA-CA), Erste Bank der oesterreichischen Sparkassen AG (Erste Bank), Raiffeisen Zentralbank Österreich AG (RZB), Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG (BAWAG P.S.K.) and Österreichische Volksbanken AG (ÖVAG).

² The consolidated data may be slightly distorted because of the application of different accounting standards.

for 32.1% of total liabilities. On the asset side, claims on foreign nonbanks climbed by 18.8% against the previous year, whereas claims on foreign banks saw above-average growth of 32.8%. On the liability side, the increase was lower, but also in this case, for example, liabilities to foreign banks and nonbanks rose by 4.7% and 27.0%, respectively.

In contrast, domestic business growth continued to weaken. Thus, claims on domestic nonbanks only augmented by 2.4% against the previous year, while they had still mounted by 6.8% in June 2006. On the liabilities side, liabilities to domestic banks rose by 10.6%. Deposits by domestic nonbanks grew 6.6%. Domestic issues recorded a significant increase of +35.3% against the previous year that was mainly spurred by bond issues.

Special off-balance sheet transactions (derivatives business) rose by 10.8% to around EUR 1,840 billion in the first half of 2007.³ Their volume remained roughly twice that of unconsolidated total assets.

After a longer period of consolidation in the Austrian banking network, the number of bank outlets did not change in the first half of 2007.⁴ In parallel, the number of bank employees started to rise again in Austria in mid-2006 and reached 66,702 at end-June 2007, 1.3% higher than in mid-2006.

Dynamic International Business Boosts Profits Substantially

Austrian banks' heavy investment in CESEE results in high growth rates of consolidated operating profits.⁵ In the first six months of 2007, they amounted to EUR 5.7 billion, which corresponds to an annual increase of 28.0%. It is remarkable that, in spite of the high increase in total assets, consolidated operating profit margins⁶ continued to rise to 1.12% – as compared with 1.04% in the first half of 2006. In the same period, the consolidated cost-to-income ratio significantly decreased by 2.9 percentage points to 58.8% within the past 12 months, because consolidated operating income (+18.9%) grew more than consolidated operating cost (+13.3%).

Against the backdrop of fast credit expansion, the key income driver was again interest income with its high margins in CESEE. It increased by slightly less than EUR 1.5 billion (+21.0%) year on year and, therefore, accounted for more than two-thirds of total growth. Fee income augmented almost as strongly: it rose by almost 18.7% and contributed around 28.6% to total growth. In contrast, trading income and other income “only” went up by 9.4% and 6.1%, respectively.

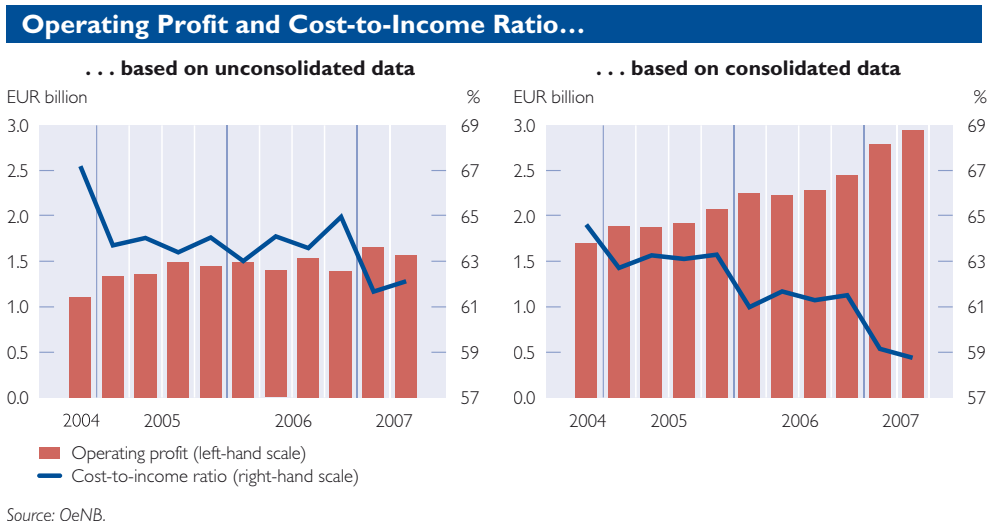
³ As the reported data is based on nominal values, it is not possible to make a clear statement about the riskiness of the derivatives business.

⁴ The decrease in the number of branch offices was offset by the establishment of new head offices.

⁵ The use of different accounting standards may marginally distort the consolidated data.

⁶ Operating profit relative to total assets (consolidated).

Chart 16



On the expenditure side, staff costs climbed by 15.0% against the previous year outpacing administrative expense growth (+11.8%). Announced measures to improve efficiency abroad, however, could result in cost savings in the future. Around 28.8% of operating profit went to credit risk provisions, which were higher than in the previous year. After one-time effects caused by restructuring within the UniCredit group in previous periods – in particular, proceeds from the sale of individual subsidiaries – consolidated profit increased by 10.1% year on year. In June 2007, the consolidated return on assets (ROA) and consolidated return on equity (ROE) came to 0.72% and 14.6%, respectively.

Domestic Business Generates Higher Profits

Unconsolidated profits, which may serve as a rough indicator of domestic business, climbed noticeably in the first half of 2007 after a weaker performance in the previous year. At end-June 2007, for example, unconsolidated operating profit increased by around 11.6%, close to the growth

rates recorded in 2005. Moreover, domestic banks were able to improve their efficiency slightly in the first half of 2007. This was reflected by a reduction in the cost-to-income ratio to 62.1% at end-June 2007 from 64.1% in the previous year. The improvement resulted from a stronger rise of operating income (+5.8%) over operating expenses (+2.5%) in a comparison of the first half of 2007 with the first half of 2006.

A closer look reveals that net interest income enlarged by 0.2%, almost the same as in the previous year. This result is attributable to a further narrowing of the interest margin to below the 1% mark for the first time, bringing the margin to 0.95% in the first half of 2007, which certainly is indicative of the strong competition in this field. The growth rates of interest expenses and interest income remained high because interest rates in the euro area were on the rise. The share of net interest income in total income continued to decline to slightly below 42%. Unconsolidated net fee income again developed dynamically. In a year-on-year comparison, it grew by almost 13.1% to

nearly EUR 2.5 billion. As a result, the share of fee income in total income progressed to 28.8%. Year on year, income from securities and participating interests increased by 15.7% and, after slowing in the previous year, returned to the growth rates of 2005. Financial operations decreased, which was mainly caused by a reduction in trading in foreign exchange, currency and precious metals as well as in other financial operations.

Staff costs only augmented by 1.1% after an 8.5% rise in the previous year. Administrative expenses saw an above-average increase (+5.5%).

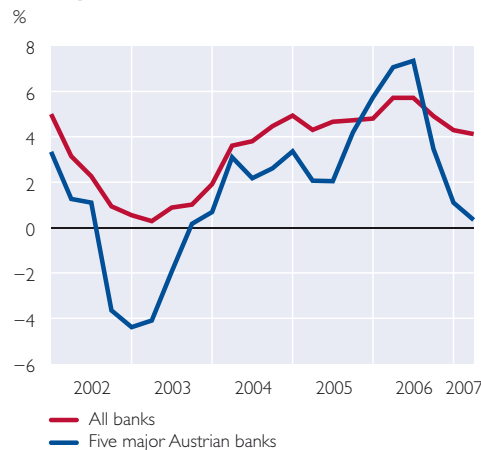
In spite of the high profitability of their international business, banks should not overlook the need to further strengthen the profitability of their domestic business and, in particular, the contribution of interest income to profits. The further narrowing of the interest margin is evidence of increasing competition in the domestic market and intensified activities of direct banks.

Declining Growth in Household Lending

Since the third quarter of 2006, growth in lending to domestic households and corporations has slowed down. Thus, lending of all Austrian banks reached an annual growth rate of 4.1% at the end of June 2007, which was less than the 5.7% rate recorded at the end of June 2006. This deceleration is mainly attributable to households and may also be related to the rise in interest rates and expected further increases in the future. Credit growth sank particularly strongly at the five largest banks; however, these banks generally follow a more volatile growth path.

Chart 17

Growth in Claims on Domestic Households and Nonfinancial Corporations



Source: OeNB.

An analysis of lending developments by banking sector shows a strong 14.6% growth of lending by state mortgage banks in the second quarter of 2007. By contrast, lending by joint stock banks and savings banks developed very slowly and, with annual growth rates of 1.6% and 2.0%, respectively, they recorded the lowest increase of all sectors with the exception of special purpose banks. Building and loan associations stepped up lending growth from 2.0% at end-June 2006 to 5.0% at end-June 2007, benefiting both from the decline in foreign currency loans and from the implicit interest rate cap that appears attractive in times of rising interest rates.

Share of Foreign Currency Loans Declines Further

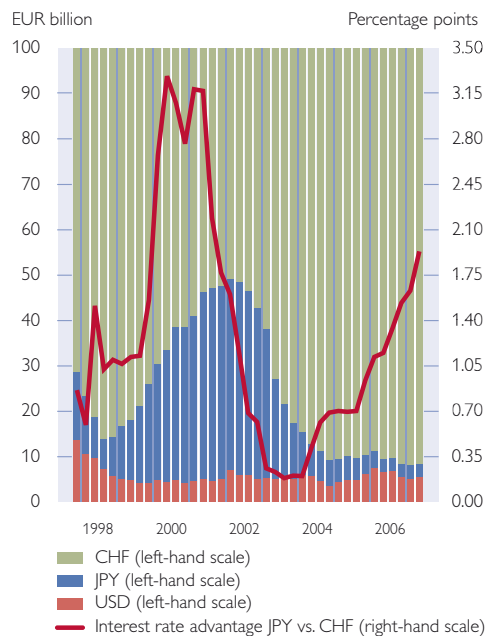
The share of foreign currency loans continued its steady downward trend also in the first half of 2007. While 19.7% of all loans to domestic non-banks were denominated in foreign currencies in mid-2006, this percentage stood at around 17.3% at end-

June 2007. The volume decreased from EUR 54.1 billion to EUR 48.5 billion. For the first time since 1996, the share of foreign currency loans in lending to nonfinancial corporations dropped below 10% (8.9% as at end-June 2007), whereas the reduction of the share of foreign currency loans to households – roughly 29% – is less dynamic.

The Swiss franc accounted for an almost unchanged share of around 90% of all foreign currency loans. Despite the growing interest rate disadvantage of the Swiss franc in comparison with the Japanese yen in recent quarters, yen-denominated loans did not rise. Only some 3% of foreign currency loans were denominated in Japanese yen, 5.4% in U.S. dollars. A significant increase, however, was recorded for Czech crown loans. Although they only account for 1% of all foreign currency loans and reached a volume of around EUR 0.5 billion at end-June 2007, enormous growth rates were achieved, in particular by lending to households, in the past few months. This was certainly caused by the low interest rate level in comparison with euro rates (from mid-2006 to mid-2007, the Czech key interest rate ranged from 2.50% to 2.75%). Nevertheless, these loans involve a considerable exchange rate risk. Moreover, the Czech key interest rate has increased to 3.25% by now.

At end-June 2007, around 78% of all foreign currency loans to households and nonfinancial corporations were bullet loans. Out of these, 76.3% were backed by repayment vehicles. In comparison thereto, 27.2% of euro-denominated borrowing of

Chart 18
Foreign Currency Lending by Austrian Banks – Shares of Currencies



Source: OeNB; three-month interbank interest rates according to Bloomberg.

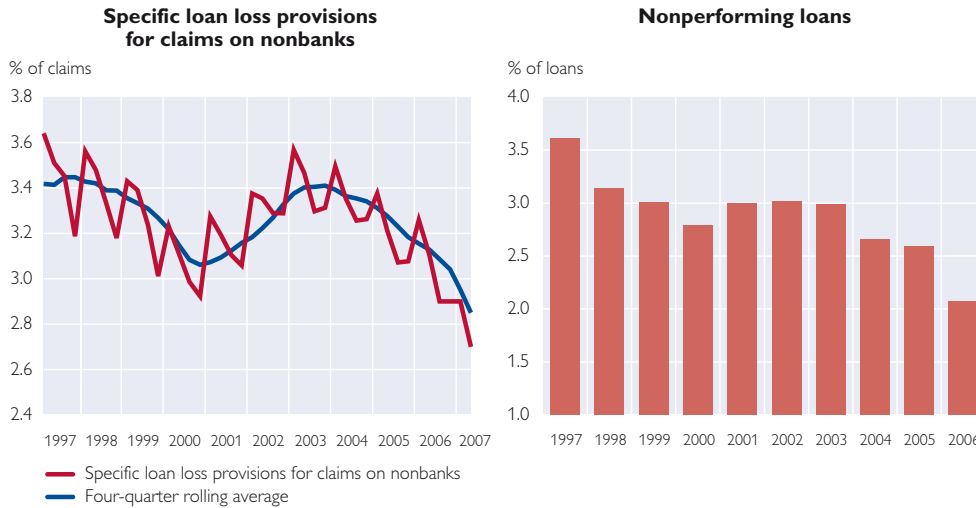
households and nonfinancial corporations were bullet loans, 10% of which were backed by repayment vehicles. The share of foreign currency bullet loans taken out by households (84.6%) was significantly higher than the one for corporations (57.3%). For the use of repayment vehicles, the difference was even bigger. While the use of repayment vehicles applied to 85.5% of foreign currency bullet loans to households, it only applied to 33.7% of such loans to corporations. In particular, the majority of foreign currency loans to households is affected by an additional risk caused by fluctuations in the return of the repayment vehicle.⁷

As the share of foreign currency lending to households is still high by international standards, the OeNB

⁷ Since the beginning of 2007, the OeNB has been collecting new statistical data that include information on loans to be fully repaid at maturity and on the use of repayment vehicles.

Chart 19

Credit Quality



Source: OeNB.

and the Financial Market Authority (FMA) jointly updated the information folder on risks involved in foreign currency loans that is available from Austrian banks in order to further raise awareness of the risks of this financing instrument.

Credit Quality Hits Historical Peak

Since 2003, credit quality has considerably improved according to the assessments made by external auditors within the framework of prudential reports. Data on nonperforming loans available from annual prudential reports show that the share of (at least partly) provisioned nonperforming loans in total lending decreased sharply – from 3.0% in 2003 to 2.1% in 2006 – for the aggregated unconsolidated Austrian banking system.

The development of specific loan loss provisions also shows that credit quality has improved in the past four years. At the end of June 2007, for example, specific loan loss provisions

of the entire Austrian banking sector amounted to 2.7% of claims on nonbanks, i.e. 0.8 percentage points less than in mid-2003. In line with the trend in the euro area,⁸ specific loan loss provisions also indicated an improvement of credit quality in 2007.

According to the most recent data available, both the share of nonperforming loans in total lending and the share of specific loan loss provisions in claims on nonbanks reached the lowest level since 1997, while the seasonal increase in specific loan loss provisions that was observed in previous years did not occur in the first quarter of 2007. The strong rise in credit quality may be traced to sound economic growth on the one hand and to the first effects of Basel II, i.e. better risk management, on the other hand. At any rate, the continuous increase of the key interest rate from 2005 to date has not affected the positive development of credit quality so far.

⁸ European Central Bank Financial Stability Review, p. 118, June 2007.

The U.S. Subprime Crisis: Causes and Effects

In an environment of rising real estate prices, mortgage loans were increasingly also granted to subprime borrowers in the U.S.A. in recent years. This subprime market probably accounts for roughly 15% to 25% of the entire U.S. mortgage lending market. In this market segment, the interest rates were usually fixed at a very low level in the first two to three years (teaser rates), but subsequently were adjusted to current market rates. Because of this adjustment and the rising interest rate level in the U.S.A., interest payments soared. In many cases, repayment of the principal also started at that time – after a few “interest-only” years. Moreover, the development of real estate prices that had stagnated for more than one year and recently even went down¹ made refinancing more difficult.

The problems of subprime borrowers in the U.S.A. disrupted global financial markets because of the securitization of these loans. U.S. subprime mortgage loans are repackaged and sold to investors in the form of asset-backed securities. The respective investors receive payment flows related to the securitized loans (interest and principal payments) in line with the credit rating of the individual security tranches. These securities are mainly bought by investment companies, insurance companies, pension funds and banks worldwide. In addition, special-purpose vehicles, such as conduits or structured investment vehicles, are set up; these use asset-backed commercial papers for short-term refinancing and buy securities with long maturities that, inter alia, are backed by U.S. subprime mortgage loans. To reduce the refinancing risk of these entities, banks issue guarantees to ensure their liquidity if the demand for asset-backed commercial papers should be insufficient.

At the end of February and in early March 2007, the news that bad debts rose significantly in this loan segment triggered short-term turbulence in international financial markets. When the rating agencies partly massively downgraded their risk assessments for many of these tranches in spring, uncertainty increased strongly in this market. In the summer months of 2007, crisis events at individual European banks, the liquidation of several hedge funds and the suspended redemption of shares in some funds related to the money market resulted in a crisis of confidence in the financial markets, especially in the interbank market. This crisis was fueled by uncertainty about the distribution and concentration of credit risks as well as about still unrealized losses and hidden accounting losses for these financial instruments. Difficulties also emerged in the valuation of these financial instruments. Moreover, there was general uncertainty about the extent of banks' financing obligations to special purpose vehicles.

The intensified search for yields in the past years resulted in the lowering of usual market standards especially for high-risk investments and in insufficient attention being paid to the relationship between risk and returns. The reassessment of risks and the related adjustment of risk premiums was linked with elevated uncertainty and a rise in price volatility in the financial markets. The risk appetite of market participants dwindled perceptibly, as reflected in particular by the very low demand for commercial paper backed by mortgage loans and for securitized leveraged buyout loans.

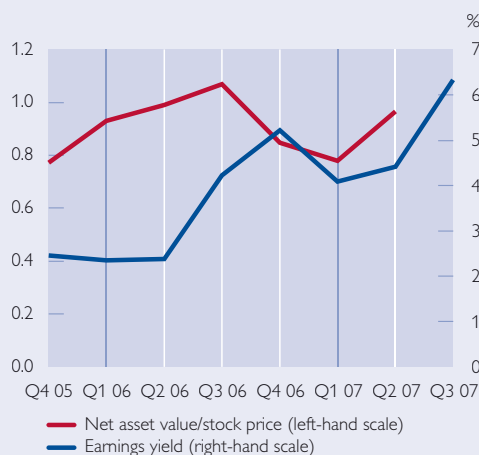
With regard to the impact of the U.S. subprime crisis on the Austrian banking sector, a survey among major banks carried out by the OeNB showed that these banks' exposure is relatively low and predominately falls into the highest rating classes. The OeNB expects that banks can cover potential losses by excess own funds. Major Austrian banks are probably also exposed only little to the U.S. mortgage market because they primarily pursue a strategy of expansion in Central, Eastern and Southeastern Europe.

¹ The National Association of Home Builders (NAHB's) composite housing market index recently hit the lowest level since 1991.

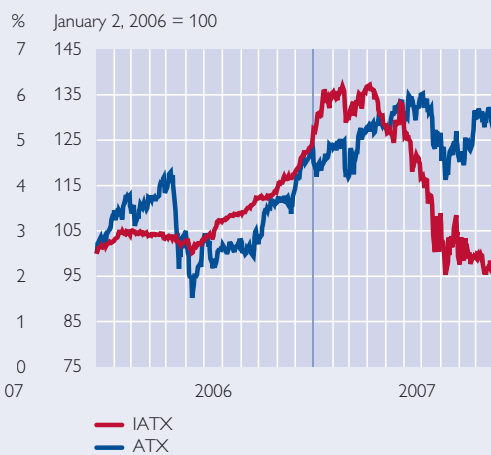
In the second half of 2006, the IATX (Austrian real estate securities index) outperformed the overall market. In the wake of the turbulence in international financial markets triggered by the U.S. subprime crisis, the Austrian real estate securities market also witnessed price losses. Positive impulses had come from the favorable economic development and the resulting demand for real estate especially in Eastern Europe. The stock prices of several real estate corporations included in the IATX² even peaked in spring 2007. However, prices have dropped considerably since April 2007; in mid-November 2007, the IATX fell to the level observed in the summer of 2003. Several factors contributed to this decrease. After a few – in part massive – capital increases, the stock prices of some real estate corporations were above their net asset value.³ This situation was compounded by the international mortgage crisis. Even though Austrian real estate corporations invest mainly in Europe (in particular in Austria and CESEE) and hardly in the U.S. real estate market, stock prices nevertheless plummeted by up to 40% until the fall of 2007. Moreover, the domestic real estate securities market was affected by turbulence at a single real estate company. Issues related to the transparency of trading and regulations in the Viennese stock market were discussed in this context. At the editorial close, the net asset value of some real estate corporations was higher than their market value. The price slump of domestic real estate stocks after end-June 2007 was probably caused, for the most part, by lower investor confidence in the market for real estate stocks. The volatility of future price developments will depend considerably on the extent to which the CESEE real estate markets will be influenced by the uncertainty in the U.S. real estate market.

Development of the Austrian Market for Real Estate Stocks

Indicators on the market for real estate stocks



IATX and ATX



Source: OeNB calculations based on the quarterly, semiannual and annual reports of the real estate corporations included in the IATX real estate index, Wiener Börse.

Overall, the most recent events may essentially be considered a necessary and ongoing process to reassess risk. The increased uncertainty in the financial markets associated with this process calls for strong vigilance of market participants, central banks and supervisory authorities and greater transparency of financial market transactions.

² Composition of the IATX (shares as at November 20, 2007): CA Immo International AG (5.0%), CA Immobilien Anlagen AG (19.8%), Conwert Immobilien Invest AG (18.4%), Eco Business-Immobilien AG (5.0%), Immoeast AG (20.1%), Immofinanz AG (18.0%), Sparkassen Immobilien AG (11.1%), Warimpex Finanz- und Beteiligungs-AG (2.7%). Market capitalization of domestic real estate stocks totaled EUR 15.3 billion in October 2007 (EUR 16.4 billion in August 2007). This brings the share of real estate stocks in the total capitalization of the Vienna stock exchange to 10.5%.

³ The net asset value (NAV) per share, i.e. its inherent value, is an indicator of the value of the real estate held by a corporation. It is calculated using the market value of real estate (including undisclosed reserves) plus other assets minus interest-bearing and non-interest-bearing liabilities.

Further Decrease in Interest Rate Risk in the Banking Book

Market risk joins credit risk as a key risk category for banks. Market risk results from fluctuations in risk factors, such as interest rates, stock prices or exchange rates, that may reduce the value of on- and off-balance sheet items. Therefore, specific capital requirements apply to the securities trading book that is particularly exposed to market risks. Further market risks arise for banks in the form of interest rate risk in the banking book and foreign currency risk from open foreign exchange positions.

In mid-2007, 28 banks operating in Austria were subject to the regulatory capital requirements related to running a large securities trading book. The first half of 2007 was characterized by a partly considerable increase in capital requirements for covering the risk inherent in interest rate and equity positions. These capital requirements increased from EUR 737 million at the beginning of the year to EUR 980 million in mid-2007 for interest rate instruments and from EUR 101 million to EUR 212 million for equity positions. Part of the rise is, however, attributable to the transition to the new reporting requirements within the framework of Basel II because mutual fund shares now also have to be assigned to the underlying risk categories. In relation to credit risk, at any rate, the market

risk inherent in trading book positions still accounts for a low share of the total risk borne by Austrian banks.

The refinancing of assets by means of liabilities with different maturities results in a maturity transformation that may enable banks to generate structural profit contributions, but also involves an additional interest rate risk. Since mid-2004, the euro area has seen a continuous flattening of the yield curve that reduced the structural profit potential resulting from a positive maturity transformation. In this environment, the banks operating in Austria also reduced the interest rate risk in the banking book in the first half of 2007.⁹ Thus, the asset-weighted average of the Basel ratio for interest rate risk¹⁰ of all banks further decreased from its historical low of 5.6% at the beginning of 2007 to 5.2% in mid-2007 (three years earlier, this indicator had still stood at 7.5%). This development is driven by major banks: the five largest banks recorded a decline in their asset-weighted average of the Basel ratio for interest rate risk from 4.3% to 3.2% in the first six months of 2007.

The foreign currency risk arising from open foreign exchange positions moderately increased in the first half of 2007. The related regulatory capital requirement rose from EUR 75 million at the beginning of the year to EUR 89 million in mid-2007.

⁹ This analysis is based on supervisory data from the interest rate risk statistics that takes account of all interest rate-sensitive on- and off-balance sheet positions as well as non-interest-rate-sensitive on-balance sheet positions whose performance is assessed on the basis of market interest rates.

¹⁰ This ratio is calculated separately for each bank. It indicates the loss potential resulting from an interest rate shock relative to the bank's eligible capital. The interest rate shock is defined as a parallel 200 basis point shift in the yield curves of all currencies.

OeNB and FMA Guidelines on Managing Interest Rate Risk in the Banking Book

The Oesterreichische Nationalbank (OeNB) and the Financial Market Authority (FMA) are working on adding guidelines on managing interest rate risk in the banking book to their guidelines series on Basel II.

The selective acceptance and transformation of interest rate risks forms an essential element of the earnings and risk situation of banks. Given the changed framework, the introduction of effective systems for containing and controlling interest rate risk is a business necessity for all banks. The guidelines on managing interest rate risk in the banking book are to assist banks in designing the strategies and procedures required to identify, control and monitor interest rate risks. By way of introduction, the guidelines provide a detailed outline of the supervisory background (integration of interest rate risk in the banking book into the new regulations according to Basel II). The new supervisory framework reflects the growing importance given to the interest rate risk in the banking book in the context of bankwide risk management. For the first time, this source of risk is explicitly listed among the general duties of diligence in Article 39 para 2b no 8 of the Austrian Banking Act (Bankwesengesetz). Pursuant to Article 69 para 3 of the Banking Act, the supervisory review and evaluation process also has to cover the interest rate risk in the banking book. The supervisory approach to outlier banks, i.e. banks with an elevated interest rate risk, is discussed in a separate chapter.

To be effective, risk control requires that risks be correctly identified and quantified as accurately as possible. Therefore, one chapter critically appraises the procedures applied in practice to control interest rate risk. Although methods based on earnings and economic values yield identical results for the entire period studied, they may result in different management stimuli in individual subperiods. Therefore, it is all the more important to adopt an integral approach taking account of performance indicators based on both economic values and earnings. The second part of the guidelines focuses on presenting and explaining the individual process steps of integral interest rate book management (definition of the risk strategy, cash flow modeling for transactions with unreliable payment flows, risk/return analysis, management measures and ex-post analysis). In parallel, it explains in detail the qualitative and quantitative requirements for interest rate risk management (asset/liability management).

Sound Liquidity Situation of Austrian Banks

In early August 2007 the euro money market was marked by great uncertainty. There was a significant rise not only in the short-term money market interest rate of the euro area (EONIA) and the corresponding bid-ask spread, but also in the interest rate differential between the secured (EUREPO) and unsecured (EURIBOR) three-month money market (chart 20). The ECB responded to the changed market situation by conducting several quick tenders that supplied the market with additional central bank money in the short

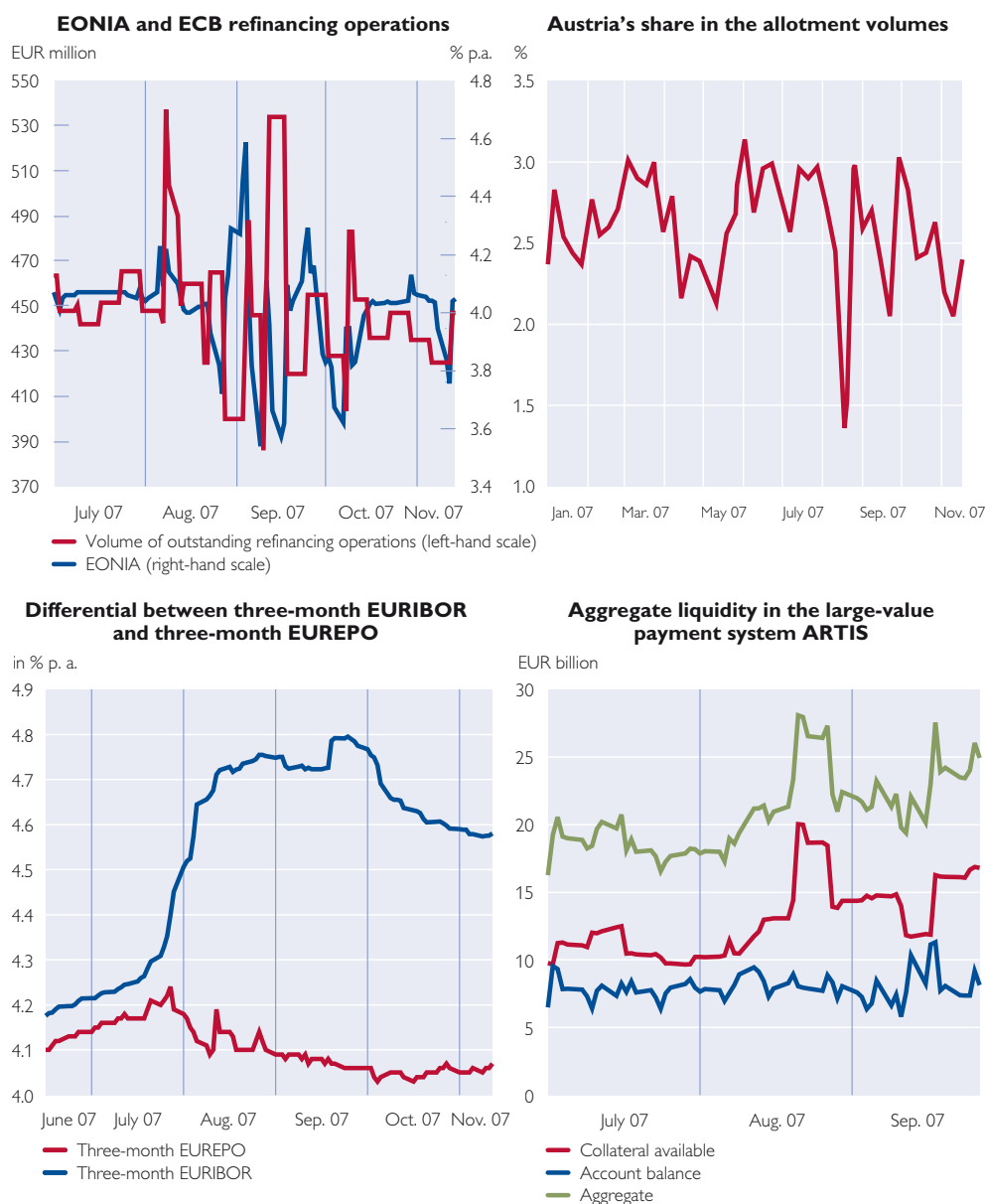
term. On August 9, 2007, it allotted around EUR 94 million (overnight maturity, i.e. from one banking day to the next) to bidding banks, bringing the volume of outstanding refinancing operations to around EUR 537 billion. On the following days, the ECB executed three further quick tenders (overnight maturity) with decreasing amounts. The ECB largely withdrew this additional liquidity again until August 15, 2007, so that the volume of outstanding refinancing operations decreased to EUR 460 billion. In addition, it provided liquidity through three long-term refinancing transactions. As a result,

the situation on the short-term money market calmed down slightly. On the three-month money market, however, the widening spread between the secured and unsecured interbank segment reflected ongoing uncertainty. When, in early September 2007, the short-term money market interest rate again rose sharply, the ECB injected around EUR 42 billion

into the market on September 6, 2007, and withdrew EUR 60 billion from the market on September 11, 2007. On September 19, the volume of outstanding refinancing operations reached a level that was below the average from July 1 to August 8, 2007. Nevertheless, in the second half of September 2007, the short-term money market interest rate and

Chart 20

Development of the Liquidity Situation During the U.S. Subprime Crisis



Source: OeNB, Bloomberg.

the corresponding bid-ask spread were marked by higher volatility than before the subprime crisis. Likewise, the high interest rate differential between the secured and the unsecured segments of the money market persisted. The Austrian share in the Eurosystem's outstanding main refinancing operations decreased slightly on average and strongly in some periods in the course of the subprime crisis. Moreover, the volumes allotted in the quick tenders (the volume-weighted average of the Austrian share in the allotments only amounted to around 1%) were significantly below the average Austrian share in the main refinancing operations (2.6%) recorded since the beginning of 2007. The participating Austrian banks also showed reserved bidding behavior, which confirms the assessment that their liquidity situation is sound. Aggregate liquidity in the Austrian

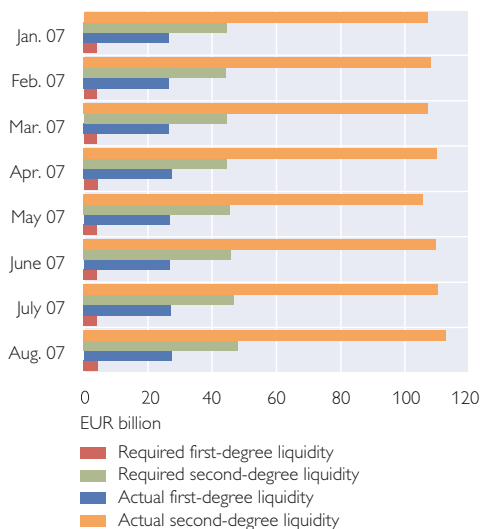
large-value payment system ARTIS even rose in August and subsequently remained at a higher level. This implies that the aggregate liquidity situation of Austrian banks was very robust even during the period of elevated uncertainty on the euro money market.

Article 25 of the Austrian Banking Act lays down the supervisory liquidity requirements for Austrian banks.¹¹ From January to August 2007, the average target value for aggregated liquid resources of the first degree was approximately EUR 4.1 billion, while the actual value reached some EUR 26.9 billion (chart 21). The average target value of aggregated liquid resources of the second degree amounted to EUR 45.5 billion during that period. The relevant liquidity reported by the banks averaged EUR 108.8 billion.

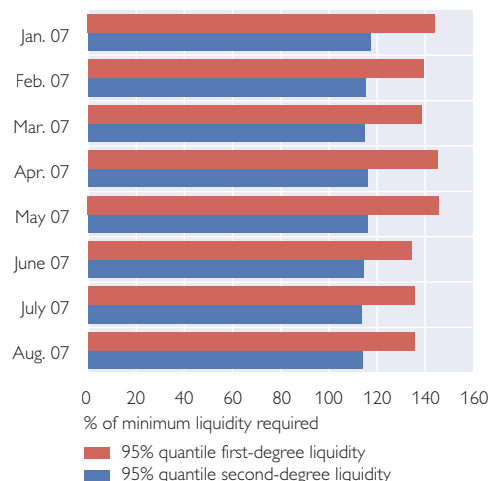
Chart 21

Liquidity Situation of Austrian Credit Institutions

Aggregated actual liquidity relative to aggregated target liquidity



95% quantiles of liquidity held



Source: OeNB.

¹¹ The liquidity ratio relates liquid euro assets to the corresponding euro liabilities. Article 25 of the Austrian Banking Act and the Fourth Liquidity Regulation of the Austrian Federal Minister of Finance (4. Liquiditätsverordnung des BMF, Federal Law Gazette II No. 14/1999) define a minimum ratio of 2.5% for liquid resources of the first degree (cash ratio) and 20% for liquid resources of the second degree (quick ratio).

The Single Euro Payments Area to Be Implemented Shortly

After the introduction of euro notes and coins in 2002, cashless payments are now to be harmonized gradually in the Single Euro Payments Area (SEPA) project. This self-regulation initiative of the European Payments Council (EPC)¹² was initiated and is strongly supported by the European Commission and the Eurosystem. By 2010, all technical, economic and legal barriers to cashless euro payments are to be dismantled. Consumers, enterprises and public agencies will then be able to make cashless euro payments within the SEPA area¹³ as efficiently and safely as they can at the domestic level today and, if they wish to do so, by means of a single account and a single payment card. In this context, new framework conditions are being developed for the three SEPA payment instruments – credit transfers, direct debits and cards. While the legal basis for SEPA was already created by the adoption of the Payment Services Directive (PSD) at the European level, the EPC is now making intensive efforts to implement common technical standards for the three SEPA payment instruments. In a first step, SEPA credit transfers are to be introduced in January 2008; by 2010, the “critical mass” of electronic payments is to be processed in line with SEPA.

The Austrian payments sector is currently preparing intensively for SEPA, as well. Its continued dynamic growth is reflected not only by transaction volumes, but also in particular by the steady expansion of the product range in the field of card payments. In addition, the first half of 2007 saw significant rises both in the volume and value of transactions processed by the OeNB-operated large-value payment system ARTIS/TARGET¹⁴ (around +6.6% and +8.9%, respectively) and the international payment systems used by Austrian banks (around +9.2% and +13.3%, respectively). In a semi-annual comparison, however, the highest rises were recorded by securities settlement systems with an increase of about +42.7% in volume and of around +81.8% in value.

In the first half of 2007, a total of seven system disturbances¹⁵ was reported for the payment and securities settlement systems overseen by the OeNB, which is considerably less than in the second half of 2006 (37 system disturbances). Access to TARGET was interrupted three times, and temporary disruptions occurred in one card payment system, one electronic money system and in the access of an Austrian bank to an international payment system. None of these disturbances had a negative impact on the Austrian financial system.

¹² The EPC is the umbrella organization of the European banking industry. Its membership currently extends to around 67 banks and banking associations from 27 countries.

¹³ The SEPA area includes all EU and EEA countries.

¹⁴ ARTIS: Austrian Real-Time Interbank Settlement; TARGET: Trans-European Automated Real-time Gross settlement Express Transfer.

¹⁵ A system disturbance is defined as the unavailability of the payment system for more than 30 minutes during business hours or within the last 30 minutes before settlement cut-off.

Security in E-Banking

E-banking offers several benefits for banks and their customers, such as more efficient and thus more cost-effective transaction processing. In addition to these advantages, however, they also involve potential risks both for customers (in particular the risk of financial loss) and banks (e.g. reputational and operational risks). The e-banking systems offered by banks today almost exclusively use the Internet as a communication medium.¹ This can be seen as the main source of risks in e-banking.

E-banking systems that require a user code and password for login as well as simple, payment data-independent transaction numbers (TANs) to authorize money transfers are still widespread. These systems are also called one-factor authentication methods, as they are based on the single factor "a shared secret between a computer and a person." However, hackers can easily find out this shared secret by relatively simple means, such as the well-known phishing e-mails or keyloggers, and can be used without time limit.

To improve security in e-banking, banks frequently also support two-factor authentication methods. They require that the end user have a device and additionally know secret information to successfully authorize a transaction. In such a system, a briefly valid authorization parameter for confirming transactions is typically either transmitted by the bank through a separate channel (e.g. as an SMS) or generated by an additional device (TAN generator) that is independent of the end-user's PC and therefore cannot be compromised by hackers. If such methods are used, attacks need to be much more complex and have to be performed in real time so that the stolen authentication parameters can be used.

Two-factor authentication processes that link the authentication data and the related transaction data on the end-user side provide the most security. Examples are electronic signatures and TAN generators that use transaction data. To safeguard the sustained trust of the population in these systems and electronic payment media in general, banks must continuously adapt the security procedures applied in their e-banking systems to the state of the art and, in parallel, customers also have to increasingly use these enhanced processes in their transactions.

¹ This primarily applies to solutions in retail banking. In the corporate customer segment, however, it is to be expected, too, that banks will sooner or later abandon dial-in solutions (i.e. transaction data are not transferred to the bank over the Internet, but through direct modem connections).

Exposure of Austrian Banks to Central, Eastern and Southeastern Europe Rises Further

CESEE countries continued to gain importance for the Austrian banking sector in the first half of 2007. The development was dominated by further acquisitions and the restructuring of BA-CA, which was reflected for the first time in the reporting

data.¹⁶ According to the business segment reports of the six Austrian banks most active in the region,¹⁷ this market already accounted for 24.5% of consolidated total assets (18.6% in 2006) and even 41.7% (34.5% in 2006) of the consolidated pretax profit of all Austrian banks at end-June 2007.

¹⁶ Bank BPH (PL) was sold, whereas Bulbank (BG), Živnostenská banka (CZ), Zagrebačka banka (HR), UniCredit (LV), UniCredit (RO), IMB (RU) and UniCredit (SK) were acquired.

¹⁷ Bank Austria Creditanstalt AG, Erste Bank der oesterreichischen Sparkassen AG, Raiffeisen Zentralbank Österreich AG, Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG, Österreichische Volksbanken AG and Hypo Alpe-Adria International.

A total of 12 Austrian banks (+1 compared to the previous year) with 69 fully consolidated subsidiaries (+7) operated in 16 countries of this market at the end of June 2007. The number of acquisitions, however, was higher than the net increase in subsidiary banks, as the restructuring of the CESEE business of the UniCredit Group included both sales and mergers in some countries.

Out of these 69 fully consolidated subsidiaries, 31 are situated in the EU Member States that joined in 2004¹⁸ and seven in the EU Member States that joined in 2007. Significant changes resulted, on the one hand, from the transfer of the Polish Bank BPH from BA-CA to the new parent company UniCredit and, on the other hand, from the addition of two major banks in Bulgaria and Romania because of the takeover of the Romanian BCR by Erste Bank and the Bulgarian UniCredit subsidiary by BA-CA, which was also mirrored in the development of aggregated total assets and profits.

Outside the EU, Austrian banks own 23 subsidiary banks in South-eastern European countries and 8 in the Commonwealth of Independent States.¹⁸ Especially in the latter region, the transfer of the Russian International Moscow Bank to BA-CA, part of UniCredit's restructuring, and two takeovers by Erste Bank and ÖVAG in Ukraine, led to major changes. The aggregated data for Southeastern Europe also reflect the

takeover of the Croatian Zagrebačka banka by BA-CA.

Disregarding their direct cross-border loans to the relevant countries, the 12 Austrian banks together held around 13.0% of the total CESEE banking market and, excluding Russia and Turkey, even about 23.3% as at June 30, 2007. Based on unconsolidated data, the Czech Republic is the most important local market (9 subsidiary banks of 6 Austrian parent companies) with aggregated total assets of EUR 46.2 billion corresponding to a 37.4% market share, followed by Croatia (8 subsidiaries of 7 parents) with aggregated total assets of EUR 28.1 billion (64.7% market share), Romania (5 subsidiaries of 5 parents) with aggregated total assets of slightly more than EUR 25 billion as well as Slovakia (6 subsidiaries of 6 parents) and Hungary (8 subsidiaries of 6 parents) with aggregated total assets of just less than EUR 25 billion (chart 22).

Because of the acquisitions mentioned above, a detailed analysis of total assets and operating profits only makes sense to a limited extent for the reference period from the end of June 2006 to the end of June 2007 as organic growth is masked by acquisitions more than in the past. However, it can be stated that the aggregated total assets of all CESEE subsidiaries jumped from EUR 143.0 billion to EUR 201.4 billion and that the share of subsidiaries in the EU Member States from 2004 fell from more than

¹⁸ For the purposes of this analysis, the regions only take account of those countries where Austrian banks hold fully consolidated subsidiaries:

EU Member States from 2004 (NMS-2004) covered in this report: Latvia (LV), Poland (PL), Slovakia (SK), Slovenia (SI), Czech Republic (CZ) and Hungary (HU).

EU Member States from 2007 (NMS-2007): Bulgaria (BG) and Romania (RO).

Other Southeastern European countries (SEE): Albania (AL), Bosnia and Herzegovina (BA), Croatia (HR), Montenegro (ME) and Serbia (RS).

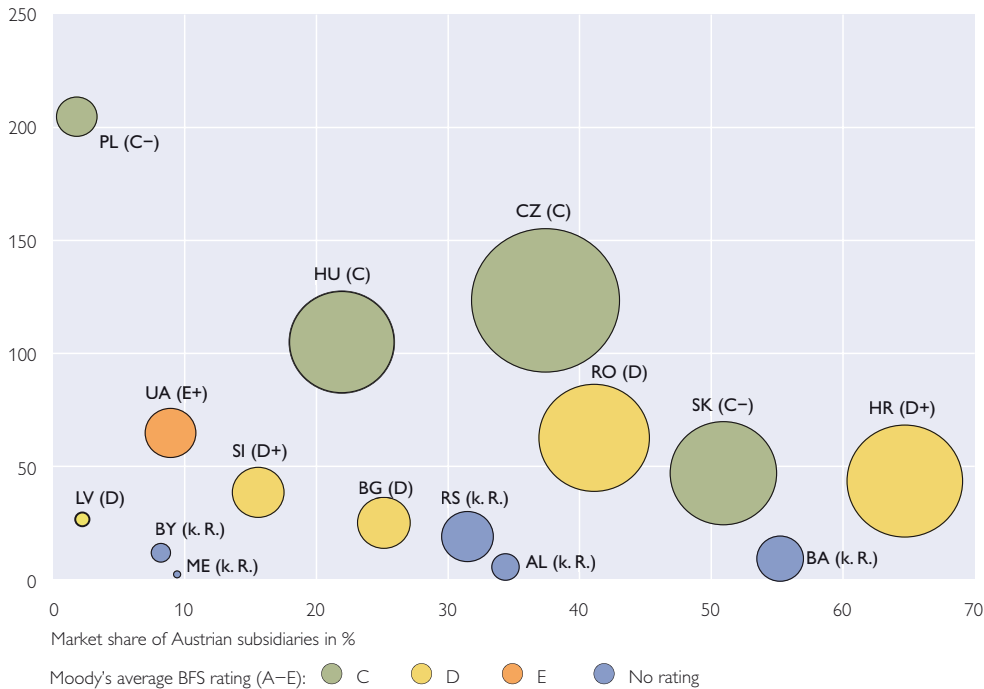
Countries of the Commonwealth of Independent States (CIS): Russia (RU), Ukraine (UA) and Belarus (BY).

Chart 22

Market Share of Austrian Subsidiaries in Central, Eastern and Southeastern European Countries

As at June 30, 2007

Aggregated national total assets of banks in EUR billion



Source: OeNB, NCBs, Moody's.

Note: The chart shows the individual countries according to the Austrian subsidiaries' market share (x-axis) and the aggregated total assets of the national banking industry (y-axis). The size of the circle corresponds to the total exposure of Austrian banks to the respective country. The country color code corresponds to Moody's average bank financial strength (BFS) rating. Because the Russian banking sector is so large (around EUR 496 billion as at end-June 2007), the chart does not show Russia, where Austrian subsidiaries held a market share of around 3.6% at the end of the second quarter of 2007.

two-thirds to slightly more than 50%. On the other hand, the share of Bulgaria and Romania, which joined the EU during the observation period, doubled to more than 15% in the reference period. Hence, aggregating the total assets of the subsidiaries in the two regions shows that around two-thirds of the Austrian CESEE subsidiaries are still located in the EU (chart 23).

The shift in the importance of individual regions becomes even more obvious when we look at operating profits. They also soared from EUR 1.56 billion to EUR 2.21 billion and, while the share of the subsidiaries in the EU Member States from 2004 fell

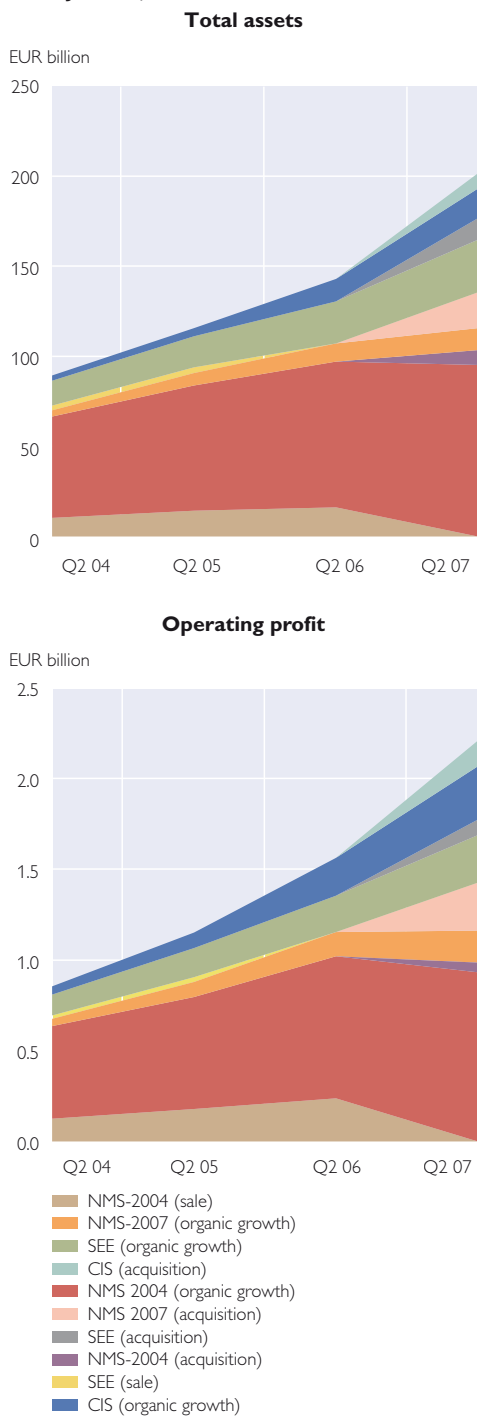
to around 45%, the share of the subsidiaries banks in both Bulgaria and Romania and in the CIS climbed to about 20% in the reference period (chart 23).

From end-June 2006 to end-June 2007, the development of indirect (i.e. via subsidiary banks) credit exposure of Austrian banks to CESEE nonbanks shows a similar picture. Indirect lending increased by a total of 51.1% to EUR 120 billion during the period, and the share of the EU Member States from 2004 decreased from almost two-thirds to slightly less than 50%, whereas the share of Bulgaria and Romania almost tripled to more than 15%. This threefold increase

Chart 23

Austrian Subsidiaries in Central, Eastern and Southeastern Europe

As at June 30, 2007



Source: OeNB.

even applies to credit volumes. Moreover, indirect loans given out by subsidiaries in CIS countries doubled (chart 24).

Direct credits developed quite differently: they only rose by 16.3% to about EUR 45 billion in 2006 and were less influenced by acquisitions and restructuring efforts (chart 24). Bulgaria and Romania represented the only exception with a growth rate of 62.1% – this did not come unexpectedly, given these countries' low initial levels and their accession to the EU. Local acquisitions might provide another explanation, as more than 25% of direct lending goes to affiliated companies in all regions with the exception of the CIS.

Stress tests are carried out to assess the capacity of the Austrian banks to bear the credit risk resulting from their CESEE activities.¹⁹ The analyses show improved capital adequacy levels. The (consolidated) capital adequacy ratio of Austrian banks amounted to 12.6% in the second quarter of 2007 and decreased by 1.1 percentage points to 11.5% in the calculated crisis scenario. Looking at the six largest Austrian banks at the aggregate level, the stress tests shows a 1.3 percentage point reduction of their capital adequacy ratio from 11.6%. The resulting capital adequacy ratio of 10.3% is, however, considerably higher than the regulatory minimum requirement of 8%. Nevertheless, banks with a particularly high exposure to Central, Eastern and Southeastern Europe need to take due account of the growth of their total assets in maintaining adequate capital levels in the medium and long term.

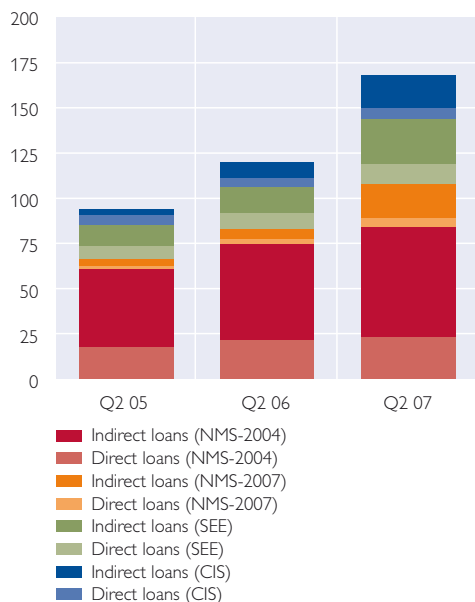
¹⁹ For details on the methodology and scenarios used, see Boss, M., G. Krenn, C. Pühr and M. Schwaiger. 2007. *Stress Testing the Exposure of Austrian Banks in Central and Eastern Europe*. In: OeNB. *Financial Stability Report 13*. 115–134.

Chart 24

Credit Exposure to Central, Eastern and Southeastern European Countries

As at June 30, 2007

EUR billion



Source: OeNB.

Note: Direct loans are loans granted by banks in Austria to borrowers in other countries, while indirect loans are loans granted by Austrian subsidiaries abroad.

In summary, despite their lively investment activities in the east and southeast of Europe, Austrian banks still hold well above two-thirds of their subsidiaries' aggregated total assets within the EU thanks to the latest enlargement round, so that especially institutional and legal risks are limited. However, both the macroeconomic and political risks of the region have to be monitored closely also in the future, not least with a view to the most recent acquisitions of Austrian banks.²⁰ In most countries, the risk management of banks faces the considerable challenge of preventing a buildup of hidden credit risks, for example because of rising and, in some cases, already rather high external imbalances as well as sustained rapid growth of lending, including in particular foreign currency loans.

Banking Sectors in Central, Eastern and Southeastern Europe: Strong Credit Growth and Largely Stable Performance

In mid-2007, year-on-year growth of domestic credits to private nonbanks in percent of GDP¹ remained unchanged at 13% to 19% in Slovenia and Croatia and, for the first time since early 2005, was again very high in Bulgaria; in the remaining countries, it ranged from 5% (Hungary) to 9% (Romania). Against the end of 2006, it rose especially in Slovenia and Bulgaria. In addition, in euro terms, the increase in domestic lending in relation to GDP reached double-digit rates also in Slovakia, Poland, Romania and Hungary (11% to 13%) in mid-2007. In most countries, households and corporations made roughly equal contributions to domestic credit growth, with a slightly higher share of households in Poland and a markedly higher share of enterprises in Slovenia and Bulgaria. In parallel, cross-border loans to private nonbanks (excluding intracompany loans and trade credits) also increased year on year; at 9% and 8% of GDP (in euro terms), this rise remained particularly high in Bulgaria and Croatia, respectively, followed by Hungary, where growth accelerated to about 4%. Short-term loans accounted for almost half the increase in Bulgaria and for one-third in Hungary. Overall credit growth (domestic and cross-border) in

¹ Measured as the share of the nominal change in outstanding loans compared with the same quarter of the previous year in percent of GDP of the respective four quarters.

²⁰ The takeover of two Ukrainian banks – Bank Prestige (by Erste Bank) and Elektron Bank (by ÖVAG) – are already reflected in the data reported, while BA-CA's purchases of ATF Bank in Kazakhstan and Ukrsofsbank in Ukraine that were announced in mid-2007 are not included yet.

percent of GDP was strongest by far in Bulgaria and Croatia at 28% and 20%, respectively, followed by Hungary (and probably Romania). Especially in Bulgaria and Romania, the surge in lending is likely to be linked to the current account imbalance. In the case of Bulgaria, the most recent strong rise in domestic credit suggests that the (administrative) borrowing constraints that ended at the beginning of 2007 had a dampening effect over a longer period of time even if transactions designed to evade these constraints are considered, particularly since the parallel most recent high growth of cross-border loans seems to indicate that the volume of such evading transactions was not particularly high in the past.

With the exception of Slovakia, the annual increase of domestic loans to private non-banks exceeded the rise in deposits by private nonbanks in all eight countries, in particular in Slovenia, in mid-2007. In parallel, banks' net external asset position deteriorated in Bulgaria, Poland and Romania (reflecting borrowing for funding domestic credit growth). In mid-2007, banks in Bulgaria and Poland nevertheless had a relatively balanced net external asset position, while it stood at -8% to -14% of GDP in the other countries except the Czech Republic (net external claims amounting to 11% of GDP).

In mid-2007, the share of foreign currency loans in outstanding lending to businesses and households came to 65% (including loans indexed to foreign currencies) in Croatia, around 50% in Bulgaria, Romania and Hungary, 20% to 25% in Slovakia and Poland, and 5% to 10% in the Czech Republic and (after the introduction of the euro) in Slovenia. Against the end of 2006, this share again decreased markedly in Croatia (-7 percentage points) and went down moderately also in Poland (-2 percentage points), whereas it rose by 1.5 to 3.5 percentage points in Hungary and – after a decline in 2006 – also in Slovakia as well as in Bulgaria. Data adjusted for price and exchange rate changes show a very similar picture, except in Romania, where adjusted data also show a rise in the share of foreign currency loans. In Hungary and Romania, the increase in this share is almost exclusively attributable to the growth of foreign currency loans to households. The share of foreign currency loans in outstanding lending to households amounted to 73% in Croatia, 43% to 48% in Romania and Hungary, 30% in Poland and 20% in Bulgaria in mid-2007. Thus, this share was considerably lower for loans to households than for loans to enterprises, especially in Bulgaria, but also in Slovakia and the Czech Republic. In Croatia and Poland, the strong decline in the share of foreign currency loans may have been underpinned in particular by measures taken by their respective central banks, e.g. the assignment of higher risk weights for foreign currency loans to unhedged borrowers and the introduction of more comprehensive reporting requirements. The main cause of the rising share of foreign currency loans recorded in Hungary and Romania was probably the relatively large interest differential compared with loans denominated in the national currencies. Some borrowers might also have been motivated by the appreciation of the forint and the leu in the first half of 2007. A high share of foreign currency lending constitutes a risk to financial stability, as unfavorably developing exchange rates together with increasing foreign interest rates could have a negative effect on borrowers' solvency, particularly since households and small and medium-sized enterprises (SMEs) might not be appropriately hedged against such risks. However, even if households and SMEs are able to service their foreign currency-denominated debt properly, they may cut back spending in other areas, thus contributing to a slowdown in economic growth and, subsequently, a growing volume of nonperforming loans. The potentially negative impacts of the share of foreign currency loans could be further aggravated if currencies other than the euro account for a significant share of total domestic foreign currency loans to enterprises and households, as for example in Poland (69%) and Hungary (62%) or even Croatia (27%).

In the first half of 2007, the profitability of CESEE banks in terms of return on equity (ROE) after tax amounted to almost 28% in Poland and around 20% in Hungary, the Czech Republic and Bulgaria, while it stood at about 12% in Romania and Croatia and even significantly decreased against the first half of 2006. In terms of profit after tax as

a percentage of total assets (return on assets – ROA), Poland again achieved the highest profitability (2.1%), while Bulgaria ranked last (1.1%). For this ratio, the only major change – a decline by 0.3 percentage points – occurred in Romania, where the rise in noninterest income was offset by increasing operating costs and a higher need for loan loss provisioning. Declining earnings were compensated by lower net loan loss provisions in Hungary (despite a marked reduction in economic growth), while in Bulgaria, decreased earnings and higher net loan loss provisions were counteracted by reduced expenditure. In mid-2007, the capital adequacy ratio ranged from 11.6% in Hungary to 15.0% in Romania; against end-2006, it only declined in Poland (–0.8 percentage points) and in Romania (–3.1 percentage points). Especially in Romania, this reflects the high growth rate of loans to businesses and households. In mid-2007, the share of nonperforming loans in total loans ranged from 2% to 3.5% in most countries and was clearly higher only in Poland (6.3%) and in Romania (7.9%). Against end-2006, this share diminished especially in the Czech Republic (–0.6 percentage points) and in Poland (–1 percentage point). It is interesting to note that the share of nonperforming loans did not rise in Hungary despite slower economic growth. In countries with fast credit growth, however, there is a general risk that these shares depict too positive a picture of portfolio quality.

Nominal Return on Equity (after Tax)

%						
	2003	2004	2005	2006	H1 06	H1 07
Bulgaria	14.8	16.6	18.0	19.7	18.1	20.6
Croatia	14.5	16.1	15.6	12.4	14.7	12.0
Poland	5.5	17.4	24.0	27.2	28.0	27.6
Romania	17.7	17.7	15.1	11.6	14.2	12.5
Slovakia	10.5	12.3	13.4	17.6	16.4	16.6
Slovenia	11.9	12.5	12.7	15.1
Czech Republic	17.8	18.1	18.4	17.1	19.2	18.7
Hungary	17.2	22.5	21.7	21.4	23.1	21.3

Net Interest Income

% of average bank assets						
	2003	2004	2005	2006	H1 06	H1 07
Bulgaria	4.7	4.9	4.6	4.2	4.3	4.3
Croatia	3.3	3.0	2.9	2.7	2.8	2.6
Poland	3.1	3.2	3.1	3.2	3.2	3.3
Romania	4.7	4.8	3.5	3.3	3.2	3.1
Slovakia	2.9	2.9	2.2	2.4	2.2	2.5
Slovenia	3.1	2.6	2.4	2.2
Czech Republic	2.2	2.3	2.2	2.3	2.2	2.3
Hungary	3.9	4.0	3.9	3.6	3.7	3.3

Operating Costs

% of average bank assets

	2003	2004	2005	2006	H1 06	H1 07
Bulgaria	4.5	4.2	3.7	3.4	3.5	2.9
Croatia	2.6	2.3	2.2	2.1	2.1	2.0
Poland	3.9	3.7	3.7	3.3	3.3	3.1
Romania	6.9	6.1	5.4	5.0	5.0	7.0
Slovakia	2.6	2.4	2.1	2.1	2.0	2.1
Slovenia	2.8	2.6	2.2	2.2
Czech Republic	2.2	2.2	2.1	2.1	1.9	1.9
Hungary	3.4	3.0	2.9	2.7	2.6	2.6

Net Change in Loan Loss Provisions

% of average bank assets

	2003	2004	2005	2006	H1 06	H1 07
Bulgaria	0.3	0.7	0.8	0.4	0.4	0.7
Croatia	0.3	0.3	0.2	0.2	0.2	0.3
Poland	0.9	0.4	0.2	0.3	0.2	0.2
Romania	0.6	0.7	0.5	0.6	0.3	0.5
Slovakia	-0.5	0.2	-0.1	0.2	0.1	0.1
Slovenia	0.7	0.6	0.5	0.4
Czech Republic	-1.0	-0.1	0.0	0.1	0.0	0.1
Hungary	0.7	0.6	0.5	0.8	0.7	0.5

Source: NCBs.

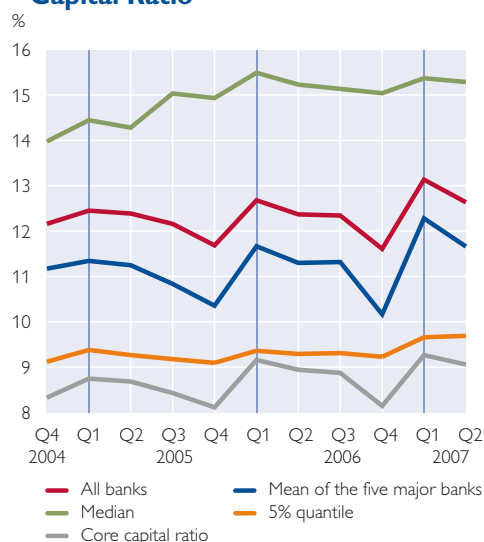
Note: Data are not comparable between countries. Intra-year data are annualized linearly.

Improved Capital Ratio Resulting from High Profits in 2006

The capital ratio that relates the capital of a bank to its risk-weighted assets – the assessment base²¹ – is a key indicator for evaluating the risk-bearing capacity of banks. After the (consolidated) capital ratio for all Austrian banks showed a slight downward trend in the course of 2006 and came to 11.5% in the fourth quarter of 2006, it rose markedly to 13.1% in the first quarter of 2007 and amounted to 12.6% in mid-2007 (chart 25).

Chart 25

Austrian Banks' Consolidated Capital Ratio



Source: OeNB.

²¹ As new legal regulations on capital requirements became effective at the beginning of 2007, banks now directly report the regulatory capital requirement for credit risk pursuant to Articles 22a to 22h of the Austrian Banking Act instead of providing information on risk-weighted assets. Based on the regulatory minimum capital ratio of 8%, the risk-weighted assets and the assessment base can be obtained by multiplying the capital requirement for credit risk by the factor 12.5.

The marked rise of the total capital ratio recorded at the beginning of 2007 is primarily attributable to the high retained earnings of the large banks for 2006. Retained earnings of one year are always recorded in capital in the first quarter of the following year, which explains the seasonal fluctuation of the capital ratio visible in chart 25. Thus, the aggregated capital ratio of the five major Austrian banks rose from 10.2% in the fourth quarter of 2006 to 12.3% in the first quarter of 2007. Although it slightly decreased to 11.7% in the second quarter, it still was 0.4 percentage points higher than in the same period of the previous year. In contrast, the median capital ratio of all Austrian banks rose – though from a significantly higher level – by a mere 0.4 percentage points in the first and 0.3 percentage points in the second quarter of 2007 to 15.4% and 15.3%, respectively. The improved capital adequacy of Austrian banks is also reflected by the core capital ratio, which relates core capital to the assessment base: it increased from 8.1% in the fourth quarter of 2006 to 9.1% in the second quarter of 2007.

To sum up, the capital ratio of Austrian banks in general and of the major banks in particular clearly improved in the first half of 2007 against the previous year and at any rate can be considered to be sound.

Austrian Banking Sector's Resilience to Shocks Remains Good

As in several previous issues of the OeNB's Financial Stability Report, the results of the stress tests calculated on the basis of the Systemic Risk Monitor (SRM) are presented in aggregated form for the entire Austrian banking system.²² Because of the new reporting regulations that became effective in the beginning of 2007, it was possible for the first time to take full account of both equity price risk and interest rate risk.²³ Table 5 shows the results of a baseline scenario without a crisis and four crisis scenarios on the basis of the risk exposure of Austrian banks in the second quarter of 2007. The table displays the mean value adjusted for credit risk provisioning and the related 95% quantile of the loss distribution for the risk categories studied in the SRM.²⁴ For credit risk, contagion risk in the interbank market and total risk, a negative value means that existing corresponding loan loss provisions exceed the mean value or the 95% quantile of the related loss distribution. In the case of market risk, no risk provisions were taken into consideration, so that a negative value indicates an expected profit as a percentage of eligible capital in the mean or in the 95% quantile.

²² For details on the methodology underlying the SRM, see Boss, M., G. Krenn, C. Pühr and M. Summer. 2006. *Systemic Risk Monitor: A Model for Systemic Risk Analysis and Stress Testing of Banking Systems*. In: OeNB. *Financial Stability Report 11*. 83–95.

²³ While the equity price risk could only be considered for the asset side in the past, banks now report net positions with regard to the most important stock indices. For interest rate risk, banks with a large trading book, too, now report interest rate-sensitive positions in their trading books within the framework of the interest rate risk statistics used by the SRM.

²⁴ See notes to table 5.

Table 5

Results of Selected SRM Stress Tests Based on Monte Carlo Simulations for June 2007

	Total risk		Credit risk		Market risk		Contagion risk	
	Mean	95% quantile	Mean	95% quantile	Mean	95% quantile	Mean	95% quantile
Simulation without crisis scenario	-1.4	2.1	-1.3	1.4	-0.2	1.7	0.2	1.4
Doubling of domestic borrowers' default probability	-0.5	2.7	-0.5	2.0	-0.2	1.7	0.2	1.4
Rise in euro area interest rates by 120 basis points	0.7	3.8	-1.3	1.4	1.8	3.0	0.2	1.4
Decline in domestic stock prices by 30%	-1.2	2.6	-1.4	1.3	0.0	2.7	0.2	1.4
Decline in foreign stock prices by 35%	0.5	4.4	-1.3	1.4	1.6	4.3	0.2	1.4

Source: OeNB.

Note: Values denote the mean and the 95% quantile of the loss distribution in the relevant risk category relative to eligible capital for the third quarter of 2007. Loss from credit risk was adjusted for provisions related to claims on domestic and foreign nonbanks as well as on foreign banks; loss from contagion risk in the Austrian interbank market – which corresponds to the credit risk vis-à-vis domestic banks – was adjusted for provisions related to claims on domestic banks. Correspondingly, total risk was adjusted for total loss provisions.

In the baseline scenario, the mean values of the loss distribution for all risk categories excluding contagion risk in the interbank market are adequately covered by existing risk provisions and, in the case of market risk, a profit can be expected. Even if domestic borrowers' default probability should double, existing loan loss provisions surpass the expected mean total loss. In contrast, a stronger impact results from an increase in euro area interest rates by 120 basis points and from a 35% decline of foreign stock prices. The average total loss exceeds loss provisions by 0.7% and 0.5%, respectively, of eligible capital due to the expected losses caused by market risk. A decrease in domestic stock prices by 30%, however, shows only minor effects. At any rate, credit risk is adequately covered by existing risk provisions in all scenarios. None of the crisis scenarios shows any consequences for the contagion risk in the interbank market. The results based on the data of June 2007 slightly deteriorated in comparison with the previous half-year, but this is probably

mainly caused by the full consideration of the interest rate and equity price risk rather than an actual increase in the risk exposure of Austrian banks.

The stress test for indirect credit risk of foreign currency loans yields a reduction of the (consolidated) capital ratio by 0.17 percentage points for the Swiss franc and 0.02 percentage points for the Japanese yen.

Overall, the results obtained on the basis of the data for mid-2007 again indicate that the shock resilience of the Austrian banking system is satisfactory.

Market Indicators Reflect Higher Uncertainty

Market indicators, including both the development of stock prices and ratings, can be used to complement supervisory reporting. In addition to long-term deposit ratings, particularly Moody's bank financial strength ratings (BFSR) is drawn upon.

Since the introduction of the Joint Default Analysis methodology by Moody's in early 2007 that led to

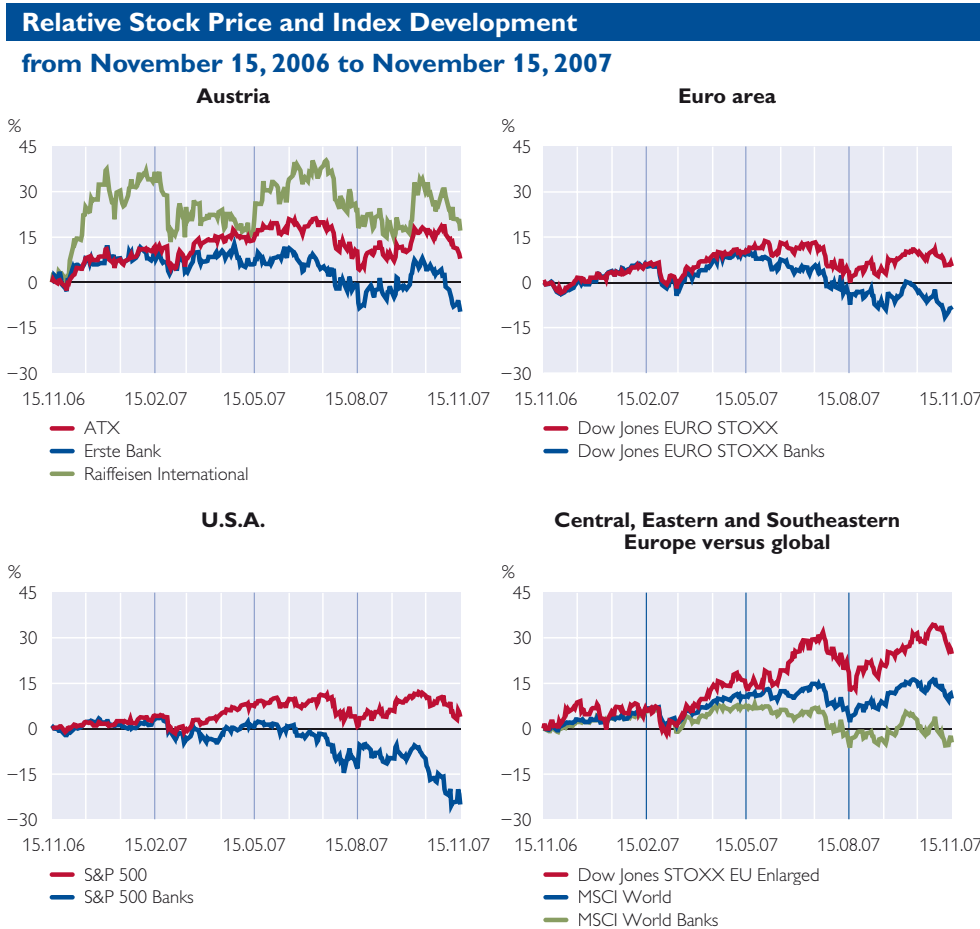
changes in ratings for almost all Austrian banks,²⁵ there has been merely one rating change. After the completion of the takeover of BAWAG P.S.K. by the U.S. investment fund Cerberus, the bank's rating for long-term liabilities was lowered one notch from A3 to Baa1, reflecting the phasing out of the state guarantee. However, the bank's BFSR was upgraded two notches from E+ to D. The reasons given by Moody's were the emerging improvements both in risk culture and corporate governance. Moreover, the rating outlook of Hypo Alpe-Adria-Bank was changed from

stable to positive in May 2007 on news about plans for a takeover by Bayerische Landesbank.

Financial Stock Prices under Pressure Both Worldwide and in Austria

BA-CA changed from the prime segment to the standard market auction segment and, therefore, is no longer included in the ATX Prime. As a result, the share of banks in the total market capitalization of the ATX Prime decreased from more than one-third at the end of March 2007 to around one-quarter at the end

Chart 26



Source: Bloomberg.

²⁵ See *Financial Stability Report 13 of June 2007*.

of September 2007. This segment change took place on April 2, 2007 in response to UniCredit's decision to repurchase BA-CA's remaining free float of stock under a squeeze-out.

In absolute terms, the market capitalization of the two listed banks (Erste Bank and Raiffeisen International) declined by EUR 1.9 billion to EUR 31.5 billion from end-March to end-September 2007. The entire ATX Prime hardly fared better in the period under review. This development reflects the higher uncertainty in the wake of the U.S. subprime crisis.²⁶

First signs of the crisis already surfaced in the international stock markets in the form of a strong decline in stock prices in February 2007. In this environment of elevated uncertainty – also caused by banks' exposure in the structured credit market – bank and financial stocks came under stronger pressure than the overall market. In an international comparison, Austrian bank stocks hardly performed better than the entire sector, which is surprising, not least because of the relatively moderate reaction in Central, Eastern and Southeastern Europe (chart 26).

**Nonbank Financial
Intermediaries Less Dynamic
Insurance Sector Performs
Favorably – Financial Market
Turmoil Leads to Increased
Uncertainty**

**Austrian Insurance Companies'
Business Situation and Profitability
Improve**

Against the backdrop of a favorable real economic and financial environment, European insurance companies

continued on their positive course in the first half of 2007. Overall profitability went up despite the fact that in some parts of Europe winter storms and floods drove up insurance payments. Profitability has become somewhat less dependent on investment results, as insurers increasingly use more risk-adequate pricing strategies and focus on underwriting new business that generates higher profits. The issuing of hybrid and subordinated capital combined with higher profitability has increased the overall risk-bearing capacity of the European insurance sector. In light of this development and thanks to improved risk management systems, the prospects for European insurance companies remain altogether positive, even though uncertainties about financial risks (as observed in July and August 2007) have augmented. The outlook for the reinsurance and credit insurance sectors, in particular, is characterized by a high degree of uncertainty given the U.S. subprime crisis.

On the whole, the Austrian insurance sector also performed well in the first half of 2007. Booming unit-linked life insurance plans and subsidized personal pension schemes played a substantial role in sustaining demand in the life insurance sector. With insurance policies of this kind, the insured person bears the investment risk; if the insured parties are not sufficiently informed on the related risks, however, the insurer faces a higher reputational risk. In reaction to the higher interest level in the first half of 2007 and to favorable investment results, some insurance companies raised their bonus payments for conventional life insurance contracts.

²⁶ See box "The U.S. Subprime Crisis: Causes and Effects" in this section.

Winter storms early in the year and floods in early summer have impacted insurance companies' claim payments in 2007 so far. Some insurance companies continued to profit from their expansion to CESEE countries.

In the first half of 2007, Austrian insurance companies' total assets²⁷ expanded by EUR 3.1 billion to EUR 85.6 billion; in June 2007, the annual growth rate stood at 6.6% and was thus clearly below the comparable figure for 2006 (9.4%). The trend toward investing in foreign assets, equity securities and other securities continued – a development that can be deemed positive from the point of view of diversification. Asset-backed securities accounted for 2.6% of the overall portfolio, which came to EUR 78.7 billion; some 99% of these asset-backed securities have an investment grade rating. The Financial Market Authority (FMA) carried out a survey on the exposure of Austrian insurance companies and pension funds to the U.S. subprime market and concluded in its press release of August 29, 2007, that the U.S. subprime crisis has hardly had direct effects on the Austrian insurance sector.

The market indicators of both the European and the Austrian insurance sector reflect increased uncertainties about the sector's future performance. These uncertainties may in part be attributable to fears that insurance companies might have hidden liabilities with respect to their exposure vis-à-vis the U.S. subprime market that are not clearly deducible from their balance sheets. In the same vein,

fears of future financial crises may come into play. Although the rating outlook for the large Austrian insurance companies remained unchanged at the end of October 2007, insurance companies' shares listed in the prime market segment at Wiener Börse posted price losses over the period from May to end-October 2007. Compared with the MSCI Europe Insurance Index, Austrian insurers' stock prices developed less favorably in the period under review; the markup bonus was thus slightly reduced. These developments might also be attributable to the overall rise in risk aversion observed with investors.

Aside from shocks in the financial markets and the higher frequency of major claims events, inadequate risk pricing in the face of tough competition, continued lower long-term interest rates and the underestimation of longevity risk pose threats to the profitability and stability of the life insurance sector.

Risk of Contagion Remains Low

Year on year, the total exposure of insurance companies to domestic banks went down by 5.4% to EUR 11.0 billion (12.9% of total assets) in June 2007. Insurance companies' investments with domestic credit institutions thus decreased to 1.1% of Austrian banks' consolidated total assets. Owing to the positive business and profit performance and the moderate level of exposure, the risk of contagion between the banking and insurance sectors is still low.

²⁷ Excluding reinsurance business; based on quarterly reports (OeNB insurance statistics).

Weak Demand for Austrian Mutual Fund Shares

Given the altogether favorable capital market environment, the European mutual funds market continued its positive performance in the first half of 2007. The assets under management²⁸ of European mutual funds went up by 9.1% to EUR 8,236 billion in the first half of the reporting year, mainly on the back of price gains. Net inflows of funds, which came to EUR 190 billion, declined by some EUR 50 billion year on year. Investors' reduced risk appetite led to comparatively high inflows in the segment of money market funds, while inflows in the equity funds segment were rather low.

In the face of the U.S. subprime crisis, customer confidence in the international financial markets deteriorated at a surprisingly swift pace in July and August 2007. Higher volatility and the reduction of liquidity – amid great valuation uncertainty – observed in many segments of the structured credit market also had effects on mutual funds. In particular near money market funds, which generally are not very volatile, recorded substantial price losses (by their standards) and in some cases even had to temporarily suspend the repurchase of shares. Only few mutual funds operated by Austrian investment companies have invested directly or indirectly in structured financial instruments. However, fixed income funds focused on structured financial instruments recorded a sudden and dramatic fall in net asset values, follow-

ing years of gradual price increases. Of the about 7,600 (domestic and foreign) mutual funds registered for operation in Austria, four have been temporarily suspended. One of these four funds had been set up by an Austrian investment company.

According to the OeNB's mutual fund statistics, the assets held by Austrian mutual funds (including fund-of-fund investments) grew by 3.2% to EUR 174.3 billion in the first half of 2007 – again at a rate that is clearly below the European average. This rise is exclusively attributable to price gains, as outflows from distributions were higher than new investment. Aside from rising interest rates, which had a negative impact in particular on fixed income funds – the most important category of funds in the Austrian mutual funds market – the increasing popularity of structured products as well as higher uncertainty among investors might have contributed to this weak performance. According to figures published by the Austrian Association of Investment Fund Management Companies (VÖIG), even the volume of the Austrian mutual funds market decreased in July and August 2007. The capital-weighted average total performance of all Austrian mutual funds stood at 2.4% in the first half of 2007. With losses coming to 0.2%, fixed income funds registered the weakest performance; equity funds, by contrast, recorded price gains of 7.8%. Gaining 2.4%, real estate funds performed averagely in the first half of 2007.

²⁸ Here, mutual funds comprise undertakings for collective investment in transferable securities (UCITS) and non-UCITS.

Performance Varies for Pension Funds

In the second quarter of 2007, 6 multi-employer occupational pension funds and 13 single-employer occupational pension funds were operating in Austria. At end-2006, multi-employer occupational pension funds employed 282 persons (single-employer occupational pension funds: 8). The aggregated total assets of investment and risk-sharing groups came to EUR 12.7 billion at end-2006 and climbed to EUR 13 billion in the second quarter of 2007. At the end of 2006, multi-employer occupational pension funds accounted for around 77% of investment and risk-sharing groups' aggregated total assets. In this context, investment was mostly outsourced. About 92.7% of assets, for instance, were held in the form of mutual fund shares. The share of foreign currency investment came to 4.6%, up from a rather low level of below 3% registered in the second quarter of 2006. The number of prospective beneficiaries climbed to 470,936 at the end of 2006, while that of pensioners reached 54,014. 82.6% of all beneficiaries (prospective beneficiaries and pensioners) were assigned to a defined contribution system, while the remaining 17.4% were assigned to a defined

benefits system.²⁹ Around 28% of aggregate premium reserves are backed by a minimum return guarantee.³⁰ For 22 percentage points of the remaining 72% of premium reserves, employers are obliged to make unlimited supplementary contributions. Altogether, therefore, prospective beneficiaries and pensioners exclusively bear the investment risk for around 50% of premium reserves. The market for pension funds in Austria is highly concentrated. In 2006, the three largest providers in the market had a market share of 60% of contributions, 66% of all beneficiaries, 69% of investment and risk-sharing groups' assets and 84% of contracts with enterprises.

The remuneration for covering operating expenses, which is borne by the beneficiaries, came to around EUR 64.4 million in 2006³¹ and thus corresponded to around 9.9% of investment and risk-sharing groups' investment performance (EUR 652.7 million), to 7.2% of contributions (EUR 895.1 million) or to 0.5% of investment and risk-sharing groups' total assets (EUR 12.7 billion). Operating profits came to EUR 28.2 million (i.e. around 43.8% of the remuneration for covering operating expenses).³² On the basis of operating profits, return on equity was

²⁹ Source: *Fachverband der Pensionskassen (Austrian occupational pension fund association)*. The Austrian occupational pension fund association has made a wider range of data available on its website at www.pensionskassen.at and has thus helped increase market transparency.

³⁰ Source: *Aggregated balance sheet of Austrian pension funds (according to FMA data)*.

³¹ Source: *Aggregated balance sheet of Austrian pension funds (according to FMA data)*.

³² As of the business year 2007, those investment and risk-sharing groups that have opted out of the minimum return guarantee no longer allocate funds to building up a minimum yield reserve. Their accounts shall be credited with the amount retained as allocation to the minimum yield reserve for 2006. Given these adjustments, the ratio of adjusted operating profits to the remuneration for covering operating expenses is about 26%.

16.9%.³³ For multi-employer occupational pension funds, return on equity was slightly higher at 18.2%. In the second quarter of 2007, euro-denominated bonds (including cash and long-term loans) accounted for 55% of pension funds' investments, euro area stocks for around 25% and non-euro area stocks for approximately 16.7%. Non-euro area bonds made up 1.3% of pension funds' investments and real estate investments just below 2%. In the first three quarters of 2007, pension funds achieved an average return on investment of 3% (in nominal terms).³⁴ During the three years from the third quarter of 2004 to the third quarter of 2007, multi-employer occupational pension funds earned a return on investment of 7.3% per annum (in nominal terms), while the comparable figure for single-employer occupational pension funds was 9.1% per annum. At 3.5%, the volatility measure of multi-employer occupational pension funds was lower than that of the single-em-

ployer pension funds (4.4%). Single-employer occupational pension funds invested more funds in stocks than multi-employer ones (around 48% compared with around 38%). Since the beginning of 1998, single-employer occupational pension funds have been outperforming multi-employer occupational pension plans by more than 20 percentage points. In this period, the former achieved a yield of 6.1% per annum, while the latter recorded a yield of 4.7% per annum (both in nominal terms). The difference between the highest (27.7%) and the lowest (21.1%) nominal return on investment posted by multi-employer occupational pension funds from 2004 to 2006 is 6.6 percentage points.³⁵ The differing returns on investment are not solely attributable to the quality of asset management, but may also result from variations in the risk preferences of investment and risk-sharing groups and from the decision to opt out of the minimum return guarantee.

³³ Equity is defined as in the Federal Act on the Establishment, Administration and Supervision of Pensionskassen, Annex 1, Form A, liabilities, item A. The minimum yield reserve as well as the funds retained from the assets of investment and risk-sharing groups as transfers to the minimum yield reserve increase both the denominator and the numerator of return on equity. If this share of the allocation for the minimum return guarantee (inclusive of taxes) were to be subtracted from operating profits and the result were to be put in relation to equity (less the respective share in the minimum yield reserve), the resulting return on equity would be 11.8% (12.4% for multi-employer occupational pension funds).

³⁴ Source: Oesterreichische Kontrollbank (OeKB).

³⁵ Source: Austrian occupational pension fund association (compounded annual performance based on OeKB performance data).