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Editor in chief:

Wolfdietrich Grau

Secretariat of the Governing Board and Public Relations

In collaboration with:

Michael Andreasch, Kai Christoffel, Manfred Fluch, Georg Hubmer, Martin Spitzer,

Walter Waschiczek, Isabel Winkler

Edited by:

Beatrix Kossinowsky, Christiana Weinzetel

Economic Analysis Division

Translated by:

Thomas Bartsch, Johannes Chudoba, Ingrid Haussteiner, Irene Mühldorf, Ingeborg Schuch Foreign Research Division

Layout, design, set, print and production:

Printing Office

Inquiries:

Oesterreichische Nationalbank

Secretariat of the Governing Board and Public Relations

Otto-Wagner-Platz 3, A-1090 Vienna, Austria

Postal address: P. O. Box 61, A-1011 Vienna, Austria

Telephone: (1) 404 20, ext. 6666

Fax: (1) 404 20 6696

Orders:

Oesterreichische Nationalbank

Mail Distribution, Files and Documentation Schwarzspanierstraße 5, A-1090 Vienna, Austria Postal address: P. O. Box 61, A-1011 Vienna, Austria

Telephone: (1) 404 20, ext. 2345

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Following the launch of the euro, the type and scope of the risk exposure of Austrian banks has changed. This study analyzes significant developments in the banking business that have been induced by the introduction of the euro and identifies potential areas of risk or threats to the profit potential of Austrian banks. Basically, the analysis suggests that, also for Austrian banks, reducing excess capacity will become an even more pressing order, and that it will take structural adjustments — such as reducing the density of branch networks and cutting costs — to enhance banks' efficiency and profitability. Amid increasing competition, strategic positioning coupled with adequate flexibility will be a key ingredient for success. Given the comparatively low degree of concentration in the Austrian banking sector, the future is bound to bring more mergers. How banks fare in the face of specific risks will depend above all on their ability to adapt both to new markets and to changing framework conditions in existing markets.

The Austrian Banks at the Beginning of Monetary Union — The Effects of Monetary Union on the Austrian Banking System from a Macroeconomic Perspective

The aim of this study is to explore the potential impact of Monetary Union on the role that Austrian banks play in the transfer of funds between borrowers and lenders. Disintermediation tendencies in recent decades have reduced the relative importance of the banks' core function, which within the scope of this study is understood as the transformation of savings into investments at the banks' own risk. Credit institutions have responded to those trends by expanding into alternative markets and/or business segments: by developing into universal banks or financial supermarkets, by stepping up cross-border and financial market activities, and by diversifying more strongly into those areas that have disappeared from bank balance sheets as a consequence of disintermediation. With the disappearance of currency barriers, banks across the euro area have obtained access to primary liquidity in the single currency, which they may lend on to any borrower seeking euro financing. At the same time, however, the cost of borrowing on capital markets has been going down as national bond markets integrate into a single market. Therefore, Austrian banks are bound to face increased competition not only from foreign credit institutions but also from other financial intermediaries and alternative financing vehicles available in the capital market. From among the myriad of consequences of those developments, this study analyzes above all the impact on banks' loan and deposit business.

The Possibilities and Limitations of Monetary Policy – Results of the OeNB's 27th Economics Conference

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Safeguarding price stability is indisputably a central task of monetary policy. Stable prices, in the long run, are most conducive to economic growth and sustainable employment. A study conducted by the Federal Reserve System, in which the negative correlation between inflation and productivity was proven empirically, corroborates this view.

The leverage of monetary policy in alleviating the unemployment problem in Europe, on the other hand, is limited. Monetary policy can only influence the cyclical component of unemployment and it must never turn against the primary task of safeguarding stability. Experience in several countries has shown that the high levels of unemployment in Europe need to be tackled through structural and supply-side policy measures. Undoubtedly, wage and income policies rank particularly high among the policy instrument used in EMU, in which real wage flexibility assumes special importance. Therefore, wage bargaining structures need to take the broader economic development into account. Experts agree that social partnership bodies on a European level and an institutionalized dialogue between political decisionmakers are pivotal prerequisites for such structures. Central banks have an increasingly important contribution to make, as financial markets are undergoing a process of integration. The central banks secure a stable monetary environment, they intervene as lenders of last resort in emergencies, they perform vital tasks in controlling and supervising financial market institutions and they can take measures to counter speculation in the markets. Central banks' performance in fulfilling these tasks is substantially enhanced by close cooperation with international financial institutions such as the IMF.

The opinions expressed in the section "Studies" are those of the individual authors and may differ from the views of the Oesterreichische Nationalbank.

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Supplements

Financial Account in Accordance with ESA 95 – Financial Assets and Liabilities of the Sectors of the Austrian Economy; First Release of Data for the Years 1995 to 1997 Official Announcement DL 3/99

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Calendar of Monetary and Economic Highlights

European Union

January 1999

- Within the framework of its first main refinancing operation, the *Eurosystem* allocates liquidity amounting to a total of EUR 75 billion in a fixed-rate tender conducted at an interest rate of 3%.
- At the meeting of the *ECB* Governing Council, ECB Governor Willem F. Duisenberg points out that from the ECB's point of view there is no significant upward or downward pressure on prices in the euro area. Moreover, the Governing Council expresses its satisfaction with the changeover to one integrated euro area money market.
 - The Bank of England lowers its repo rate by 0.25 percentage point to 6%.
- The *ECB* announces its first longer-term refinancing operation to be conducted by means of variable rate tenders, using the single rate (i.e. Dutch) auction procedure. The total amount that the ECB intends to allot is EUR 45 billion.
 - At the first meeting of the *Economic and Financial Committee*, which replaces the Monetary Committee of the EU, Jean Lemierre (France) is appointed chairman of this body. The participation of two ECB representatives is to strengthen the cooperation between the European Central Bank and the economic policy bodies of the Community (among others, ECOFIN Council, Euro-11, European Commission).
- The *Greek* central bank lowers its deposit facility rate by 0.1 percentage point to 11.5%, its lombard rate by 2.0 percentage points to 13.50% and its fixed tender rate for 14-day deposits by 0.25 percentage point to 12.0%.
- The *ECOFIN Council meeting* addresses the work programs of the German presidency and the Commission, the Agenda 2000, the Irish and Austrian stability programs and the statistical requirements for the implementation of Stage Three of EMU.
- As previously planned, the *ECB* decides to revert to the interest rates on the Eurosystem's two standing facilities set at the start of Stage Three (marginal lending rate: 4.5%; deposit rate: 2%), discontinuing the application of the narrow interest rate corridor established as a temporary measure for the period from January 4 to 21.
- Before the European Parliament's Committee on Economic and Monetary Affairs, *Italian* finance minister Ciampi discusses Italian fiscal policy and in particular the Italian stability program to be dealt with on February 8 in the ECOFIN Council.
 - The Italian stability program provides for a reduction of the budget deficit from 2.6% in 1998 to 1.0% in 2001. This is based on rather optimistic assumptions with regard to real economic growth (1998: 1.8%; 1999: 2.5%; 2000: 2.8%; 2001: 2.9%).

February 1999

- The *Bank of England* trims its repo rate by 0.5 percentage point to 5.5%.
 - Danmarks Nationalbank lowers its repo rate by 0.25 percentage point to 3.50%, and the discount rate by 0.25 percentage point to 3.25%.
- The *ECB* appoints Robert Raymond (France) as its permanent representative in Washington D.C. with observer status at the IMF. Raymond will participate in all IMF Executive Board meetings related to European monetary policy, international capital markets and the global economy.
 - The *ECOFIN Council* adopts the stability programs of Italy and Portugal and the convergence programs of Sweden and the United Kingdom. The Italian stability program is seen as too optimistic, whereas the convergence programs of Sweden and the United Kingdom meet with an extremely favorable response. Moreover, the results of the "High Level Group Framework for Action" are presented, which underlines the need for intensified action in the areas of financial market integration, financial sector stability and consumer protection. As regards the Agenda 2000, most Member States are in favor of stabilizing the financial framework.
- The *European Parliament* expresses its support for the Commission's proposal to establish a harmonized EU withholding tax rate of 20%.
- Sveriges Riksbank cuts its repo rate by 0.25 percentage point to 3.15%.
- The *ECB's* assessment of the euro's performance in the first month after its introduction is as follows: significantly falling interest rates in the euro area since the beginning of 1999 going hand in hand with stable growth of money supply and sustained price stability.
- The *EU Council* discusses the Agenda 2000, the main items being Member States' financing shares in the EU funding system and the reform of the agricultural sector.

March 1999

- The European Commission begins the bilateral screening of the "acquis communautaire" with the Central and Eastern European applicant countries with which membership negotiations have not yet started (Bulgaria, Latvia, Lithuania, Romania and Slovak Republic).
- 24 Romano Prodi (Italy) is the new President designate of the *European Commission*.
- The Agenda 2000 compromise reached at the Berlin European Council meeting provides for a reduction of Austria's and other net contributors' financing shares, as the financing of the UK abatement will be modified. With EU expenditure totaling more than EUR 600 billion, the Agenda establishes a financial framework for the period until 2006.
- The European Commission releases its Spring 1999 Economic Forecasts. According to its assessment, the current cyclical

slowdown is only temporary, to be overcome as soon as in the second half of 1999 when economic activity is expected to pick up. The Commission projects real economic growth in the euro area to reach 2.2% in 1999 (Austria: 2.3%), with an acceleration to 2.7% predicted for the year 2000 (same rate for Austria).

The European Commission presents the Broad Economic Policy Guidelines for 1999, to be adopted by the ECOFIN Council and subsequently by the Cologne European Council. The Guidelines differ only slightly from those formulated for 1998; they comprise country-specific recommendations and emphasize the need for economic reform.

Recommendations focus on the continuation and/or intensification of the fiscal consolidation process and of anti-inflationary wage policies, which will provide adequate leeway for monetary policy. Moreover, the Commission calls for a comprehensive implementation of single market and competition legislation. The National Action Plans — one of the pillars of the EU employment strategy — are to promote both labor supply and demand for labor.

April 1999

- The *ECB* decides that, in view of the Year 2000 changeover, the TARGET system will be closed on December 31, 1999.
- 8 The *Governing Council of the ECB* takes the following monetary policy decisions:
 - 1. The interest rate on the main refinancing operations will be reduced by 0.5 percentage point to 2.5%, starting with the operation to be settled on April 14, 1999.
 - 2. The interest rate on the marginal lending facility will be cut by 1 percentage point to 3.5%, effective April 9, 1999.
 - 3. The interest rate on the deposit facility will be lowered by 0.5 percentage point to 1.5%, effective April 9, 1999.

The *Bank of England* cuts the money market rate by 0.25 percentage point to 5.5%.

The reference rate is lowered by 1 percentage point to 3.75% and the base rate by 0.5 percentage point to 2%, triggered by the decision of the *Governing Council of the ECB* taken at its meeting on April 8, 1999, to lower the interest rate for the marginal lending facility by 1 percentage point to 3.5% and the rate for the deposit facility by 0.5 percentage point to 1.5% with effect from April 9, 1999. The reduction of the reference and base rates is in line with the regulations of the First Euro-Related Amendment to Civil Legislation.

Danmarks Nationalbank cuts the discount rate by 0.5 percentage point to 2.75%, and the repo rate by 0.5 percentage point to 2.9%.

The *ECOFIN Council* discusses the conclusion of a European Employment Pact aimed at improving economic policy dialogue and the exchange of information among economic agents in the EU. A separate conference at the sidelines of the ECOFIN Council

- meeting is to set the institutional framework for establishing the Pact, which is to be adopted at the EU Council meeting in Cologne.
- The *EU* and other public donors decide to give *Bulgaria* EUR 260 million in terms of macroeconomic assistance in 1999.
- The *EU* decides to grant *Albania* macroeconomic support on the order of EUR 20 million.

May 1999

- The *Treaty of Amsterdam*, which lays the foundations for the Europe to be built in the 21st century, enters into force. The Treaty was formally signed on October 2, 1997, and endorsed by the European Parliament on November 19, 1997.
- Against the background of the Kosovo conflict, the *European Commission* and the *World Bank* organize a donor conference for *Macedonia*. Donors pledge humanitarian and financial support amounting to approximately USD 250 million.
- The European Parliament adopts the Agenda 2000. Minor alterations of the version endorsed by the Heads of State or Government in Berlin at the end of March 1999 had been agreed among representatives of the Member States beforehand.
- Concluding almost three years of reform efforts, the *EU* agriculture ministers endorse the ten Common Agricultural Policy sections of the Agenda 2000 package, i.e. the financing reform proposed for the years up to 2006 on which the EU has embarked.
- The *EU* finance and social ministers meet in Brussels to discuss the draft European Employment Pact. They agree that the Pact will not spell out any specific targets for cuts in unemployment. The key element of the Pact is the proposed dialogue between governments, social partners and the ECB. The Pact is to be adopted by the Cologne European Council of Heads of State or Government on June 3 and 4, 1999.

June 1999

- The Governing Council of the ECB decides to leave the interest rates for the main refinancing operations as well as for the marginal lending and the deposit facilities unchanged at 2.5, 3.5 and 1.5%, respectively.
- 2–4 Notwithstanding the fact that diplomatic efforts to stop fighting in Kosovo are at the forefront of the *Cologne European Council*, progress can be achieved in a number of important topics as envisaged. The European Council adopts the European Employment Pact, economic policy guidelines and the timetable for the necessary reform of the EU's institutional framework and decision-making mechanisms. Moreover, it designates Javier Solana for the new post of Secretary-General of the Council and High Representative for the Common Foreign and Security Policy. The performance of the euro is not commented on, except in more general terms, namely that

- "a stable euro will strengthen Europe's ability to boost growth and employment."
- The *Bank of England* lowers the base rate by 25 basis points to 5.0%. This is the fourth reduction in the year to date.
- Norges Bank eases Norway's monetary policy for the fourth time this year. It lowers the deposit rate from 6.5 to 6.0%, and the overnight lending rate from 8.5 to 8.0%.
- Danmarks Nationalbank cuts its key interest rate, the repo rate, by 0.05 percentage point to 2.85%.
- 19 The bilateral Year 2000 compliance tests of *ESCB-wide systems* have been successfully completed.
- The foreign ministers of the *EU* adopt an association agreement with *Egypt* with a view to eliminating trade barriers.
- 30 Finland, which is to assume the rotating EU presidency on July 21, 1999, publishes the program for its presidency.

July 1999

- Following the recent elections to the *European Parliament* (EP), the newly constituted plenary assembly selects the MPs to chair and to sit on the different parliamentary committees. The newly established *Committee of Economic and Monetary Affairs*, which takes over the mandate of the former Committee of Economic and Monetary Affairs and Industrial Policy, is empowered to also evaluate proposals for new EU legislation in the field of financial services and capital market law. The German MP Christa Randzio-Plath (Social Democrat) is to chair the committee to which, among others, the Austrian MP Othmar Karas has been appointed.
- The ECB Governing Council leaves the key interest rates for the euro area unchanged. The rate for main refinancing operations continues to be 2.5%, while the rate for the deposit facility and the rate for the marginal lending facility remain flat at 1.5 and 3.5%, respectively.
 - The European Commission (EC) publishes a memorandum on the introduction of euro notes and coins, addressed to the informal ECOFIN Council, which is to meet in Turku on September 11, 1999. Basically, the European Commission makes three points:
 - Concerning the state of preparations for the introduction of euro notes and coins, the EC criticizes the rather sluggish rate at which businesses are preparing themselves for the changeover.
 SMEs are lagging behind or have not even tackled changeover projects yet.
 - Regarding the duration of the period of dual circulation of national and euro notes and coins, the EC notes that most Member States lean towards shortening the period from the maximum of 6 months originally envisaged to a period of 1 to 3 months, and that preparations are under way to this effect.
 - Concerning the advance distribution of euro cash to certain economic operators prior to January 1, 2002, the EC has

identified a number of logistical and legal problems. In particular, the EC fears that such frontloading will pose a danger to the euro "trademark" and facilitate counterfeiting and fraud.

The EC's memorandum is to serve as a discussion paper for the EU finance ministers and NCB governors at their informal ECOFIN Council meeting in Turku on September 11, 1999.

August 1999

- The European Commission sends Austria a "reasoned opinion" for having failed to transpose the Directive 97/9/EC on investor-compensation schemes into national law. This directive is geared to "investment firms" as defined in Directive 92/22/EC, i.e. to a broader scope of institutions than credit institutions.
- The chairperson of the Committee of Economic and Monetary Affairs of the *European Parliament*, Christa Randzio-Plath, calls for the appointment of a group of experts with a remit to closely monitor the European economy and produce forecasts.
- The Governing Council of the ECB decides to leave the interest rates for the main refinancing operations as well as for the marginal lending and the deposit facilities unchanged at 2.5, 3.5 and 1.5%, respectively.
- 31 Hans Tietmeyer resigns from the post of President of the *Deutsche Bundesbank*. Ernst Welteke, President of the Land Central Bank of Hessen since April 7, 1995, is appointed as his successor with effect from September 1, 1999, for a term of office of 8 years.

September 1999

- The *EU* decides to lift its oil and air traffic embargos on the Yugoslav constituent Republic of Montenegro and the Province of Kosovo in the Republic of Serbia, but not on the other parts of Serbia.
- The *Bank of England* raises the base rate by 25 basis points to 5.25%. Following a series of interest rate cuts, this is the first rate rise since June 1998.
- The Governing Council of the ECB decides to leave the interest rates for the main refinancing operations as well as for the marginal lending and the deposit facilities unchanged at 2.5, 3.5 and 1.5%, respectively.
- The *national central banks* and the *ECB* agree on a new fee structure for the Correspondent Central Banking Model (CCBM). The current fee of EUR 5 per CCBM transaction will be replaced by a multiple fee composed of a transaction fee of EUR 30 per transaction and a combined custody and administration fee of 0.0069% per annum. The combined custody and administration fee will be based on the amount of collateral which has been delivered via the CCBM. The new fees are to come into force on October 1, 1999.

- The *European Parliament* confirms the new team of the European Commission with Romano Prodi at its head.
- Taking action on alleged fee collusion among Austrian banks, the *European Commission* submits a "statement of objection" to eight Austrian banks, on accusations of an infringement of antitrust rules.
- Against the background of continued high price stability, the *Governing Council of the ECB* leaves the key interest rates for the euro area unchanged.
- The *European Parliament* newly elected in June holds the first of its quarterly dialogues with ECB.

October 1999

- The *EU* lifts its oil and air traffic embargos on the Yugoslav constitutent Republic of Montenegro and the Province of Kosovo in the Republic of Serbia.
- At the *ECOFIN Council* meeting in Luxembourg, EU economic and finance ministers discuss the work program that the new Commission has presented. The Council moreover endorses the Commission's proposal to support reconstruction in the regions devastated by the recent earthquakes in Turkey with ATS 600 million.
- 13 The *European Commission* submits its 1999 Report on Progress towards Accession by each of the candidate countries. The gist of the report and the main recommendations are as follows:
 - Accession negotiations should be extended to also include the second wave of the Central and Eastern European candidate countries (but the opening of negotiations with Romania and Bulgaria should be conditional on the fulfillment of certain criteria).
 - 2. Negotiations should follow a differential approach and should be carried out at an entirely flexible pace.
 - 3. To prepare the ground for EU enlargement, substantial institutional reform must be in force by 2002.
 - 4. Turkey should now be considered a candidate country, but the opening of accession negotiations should be made conditional on fulfillment of the economic and, above all, the political preconditions for EU entry. The proposals will be discussed and decisions will be taken by the Helsinki European Council meeting in December 1999.
- The Governing Council of the ECB decides to leave the interest rates for the main refinancing operations as well as for the marginal lending and the deposit facilities unchanged at 2.5, 3.5 and 1.5%, respectively.
- The European Parliament rejects a suggestion that the ECB henceforth disclose its voting records on interest rate decisions. But it calls upon the ECB to publish its economic projections and forecast models.

Austria

April 1999

- A new equity market segmentation is introduced on the *Wiener Börse*. The Austrian A Market contains such Austrian stocks that have been admitted to the Official Market and are included in the blue chip ATX index. For a stock to be traded in this segment, at least one specialist and two market makers must have committed themselves to permanently place firm buy and sell prices (quotes). Listing on the Austrian B Market requires admission to listing on the Official Market and the commitment of at least one market participant to assume specialist obligations. The Austrian C Market (no specialists nor market makers required) is the market for the less liquid stocks and participation certificates admitted to the Official Market or the Semi-Official Market.
- 27 The federal law amending the Austrian Banking Act, the Securities Supervision Act, the Deposits Act and the Capital Market Act is promulgated. Among other things, this amendment transposes the EU Directive on investor-compensation schemes (97/9/EC) into national law. Said directive requires all investment business to be covered by compensation arrangements similar to deposit-guarantee schemes. Under the new law, investors are eligible for compensation of up to EUR 20,000 when a credit institution (investment firm) is unable to meet its obligations to its investor clients for reasons related to unlawful management of the assets entrusted to it. The law specifies the conditions governing compensation and regulates the financing of the compensation schemes. In addition, the new law permits credit institutions to hold minimum reserves and liquidity with an intermediary, i.e. with a second-tier or the top-tier institution of the sector to which they belong.

June 1999

10/11 The *Oesterreichische Nationalbank* hosts its 27th Economics Conference. This year's conference topic is "Possibilities and limitations of monetary policy." Discussion centers on policy coordination within EMU, the question whether monetary policy affects the real economy and the issue of the macroeconomic policy mix. Other topics include the implications of job market reform for employment and the experiences of a number of countries in this field as well as the particulars of wage formation within a monetary union.

July 1999

The federal law establishing the Cross-Border Credit Transfers Act and the Settlement Finality Act and amending the Bankruptcy Act, the Reorganization Bankruptcy Act, the 1989 Stock Exchange Act, the Securities Supervision Act and the Banking Act is promulgated. The new law transposes the Directive 97/5/EC of the European Parliament and of the Council of 27 January 1997 on cross-border credit

transfers and the Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems into national law. The federal law establishing regulations for dual pricing and other pricing/quotation is promulgated (Euro-Related Pricing Act).

August 1999

19 The federal law amending the Stock Corporation Act, the Austrian Commercial Code and the Own Stock Repurchase Act is promulgated. The amendment is designed to facilitate and bring in line with international practice share buybacks by stock companies quoted on the stock exchange.

September 1999

- The General Council of the OeNB puts the cash handling company *Geldservice Austria GmbH (GSA)*, a joint subsidiary of the OeNB and Austrian commercial banks, on track for taking up Austria-wide operations by the year 2001. The goal is to consolidate cash processing, which is currently handled by approximately 100 cash divisions, at seven cash centers. The OeNB tackles this project with a view to fulfilling its statutory obligation to guarantee a smooth exchange of currency and to safeguarding efficient cash circulation beyond the year 2002.
- 17 The supervisory board of the *Wiener Börse AG* decides to extend trading hours at the Vienna stock exchange from 3:00 p.m. to 5:30 p.m. from November 5, 1999.

October 1999

After having established representative offices earlier in New York, Brussels and Paris, the *OeNB* opens its fourth office abroad: in *London*, the financial hub of Europe. Thanks to the London office, the OeNB will have its finger more closely on the pulse of market developments.

Economic Background

Overview

Compared with the beginning of 1999, growth prospects have brightened noticeably. The aftershocks of the recent international financial crises appear to have calmed, so that the economic recovery is set to continue after having stalled at the start of the year.

Growth has been fueled to a large extent by private consumption, which rose 1.9% in real terms in the first quarter of 1999 year on year. Consumer confidence in the economic situation has improved markedly, whereas businesses are slowly getting less pessimistic in their outlook, as is evident from the buoyancy of private spending and the rise in investments placed by businesses. Upward revisions in corporate spending plans for the current year point to continued solid growth. The positive outlook, meanwhile, failed to boost first-quarter output significantly. Real GDP growth came to just 1.1% in the January to March period, with output growth sapped mainly by lackluster exports.

Lively domestic demand and sputtering exports caused the deficit on merchandise trade to widen. While in January goods exports (as reported by the Austrian Central Statistical Office, ÖSTAT) had fallen short of the corresponding year-earlier figures, growth rates turned positive again in the months of February, March and April.

Robust domestic demand and lagged output growth have relieved unemployment. The national measure of the jobless rate dropped to 7.1% in the January to July 1999 period, down from 7.4% in the like period of 1998. Dependent employment, meanwhile, rose 1.2% above the first-half 1998 figure. The new jobs can be traced mainly to the rapid expansion of business-related and partly public (health, education, other personal and public) services. Moreover, the Austrian Labor Office's extensive training schemes for jobless people helped clamp down on unemployment.

Price stability has been maintained. Consumer prices measured in terms of the HICP rose by a mere 0.3% in July compared with a year ago. In the months ahead, a moderate uptick in prices is to be expected since the rally in fuel prices will also feed through to consumer prices.

Strong Domestic Demand and a More Optimistic Business Outlook

After a pessimistic string culminating in the bleakest readings at the end of 1998, Austrian consumers regained confidence in the economy in the first half of 1999, with confidence levels at their highest so far in July. Austrian consumers, thus, assess the state of the economy more favorably than consumers in the rest of Europe, whose confidence sagged until March but has since shown signs of trending upward. In Austria, the positive consumer sentiment has, meanwhile, translated into vigorous domestic demand.

The EU's business survey for Austria indicates that business expectations turned more buoyant in June, and continued to pick up in July, evolving from a long phase marked by pessimism about economic prospects. The results of the business survey published by the Austrian Institute for Economic Research, WIFO, for July 1999 likewise signal the beginning of a more optimistic phase. It shows a number of investment projects that had

been put off in the second half of 1998 because of the economic downturn to have meanwhile been realized in 1999. Capital goods output exceeded the 1998 figures by 11.2% in the first quarter and by 13.0% in April. Businesses have, moreover, revised upward their current spending plans. The WIFO survey expects the investment rate of Austrian industrial companies to come in at 7.1% for 1999, which means a marked jump from 5.7% in 1998.

In line with yet restrained consumer confidence in the economy in the first quarter of 1999, the reading of the production index for durable consumer goods was negative by comparison with 1998 results, while the production index for fuel and capital goods registered growth rates. New car registrations jumped 11.3% in May 1999, and turnover in the automobile trade even shot up 20.6% compared with May 1998. When measured in real terms, retail sales have been back on a growth path (compared with corresponding year-earlier figures) since March 1999.

Moderate Pickup in Foreign Trade

The deceleration of export growth rates, which surfaced in the second half of 1998, continued into the first quarter of 1999. The January 1999 growth rate lagged 3.7% behind the January 1998 growth rate. February through May, growth accelerated modestly, with the additions hovering between 0.2% in April and 5.7% in March. In May exports lay 1.7% above the corresponding 1998 figure. Cumulatively, this translates into 1.3% growth in the first five months over the like 1998 period. The European economic recovery appears to have had little influence on foreign trade flows.

While throughout 1998 import growth lagged export growth, the first months of 1999 saw the tables turned. At annual growth rates of 7.8% for April and 11.9% for May, imports accelerated at a much faster pace than exports. Cumulatively, this caused the merchandise trade deficit for January to April to widen by 55.3% to ATS 46.8 billion year on year.

The performance of exports was lackluster at the beginning of the year for a number of reasons. For one thing, CIS and CEEC countries continued to import on a much smaller scale than in 1997. For another thing, late fallout from the Asian crisis continued to hamper economic recovery in a number of EU countries, Germany in particular, which in turn depressed demand from those countries.

The latest developments, which have been moderately positive, can be attributed to two factors. First, the effects of the depreciation of the euro are beginning to lift Austrian exports. In April 1999, the reading of the price competiveness indicator was 1.0% below the year-earlier figure (real effective exchange rate of the Austrian schilling until December 1998), and 1.1% lower in May 1999. Second, the European economies appear to have recovered from their dip into recession at the end of 1998/beginning of 1999. However, still weak private demand from Germany and Italy in the first quarter continued to act as a drag on Austrian exports.

Compared with the same period a year ago, the current account deficit narrowed by 37% from ATS 20.7 billion to ATS 15.1 billion from January to June 1999 (according to the preliminary balance of payments data,

compiled on a cash basis). The cash balance shows the services item to have expanded by a solid 26%. The narrowing of the merchandise deficit by 9% year on year appears to clash with the reading of the foreign trade statistics.

Unemployment Goes Down

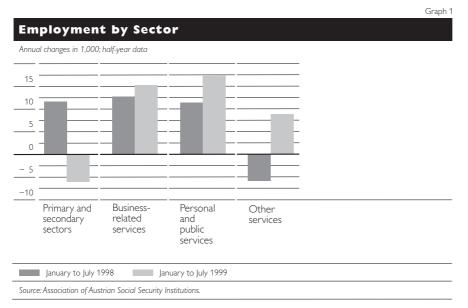
From January to July 1999, the dominant theme on the Austrian labor market was a robust increase in the number of jobs. The service sector (business-related services, health, tourism, telecommunications) accounted for the biggest share of the jobs newly created in the first half, namely 41,760 posts (+2.0%) more than in the first half of 1998. Given weak export demand, the number of jobs in the primary and secondary sectors dropped by 6,057 employees (-0.6%). Overall, the number of dependently employed persons rose by 35,702 (+1.2%) in the first half of 1999 year on year. In July 1999, 50,255 more people were on the payrolls than in July 1998, and the number of vacancies was up 8,260.

Dependent employment					Jobless rate		
January to July 1998		January to July 1999			Change	January to July	January to July 1999
number	%	number	%			1775	.,,,
2,979,842 942,075 2,037.766	97.4 30.8 66.6	3,015,544 936,018 2,079,526		97.6 30.3 67.3	+1.2 -0.6 +2.0	7.4 9.5 6.4	7.0 9.3 5.9
	January to July 19 number 2,979,842 942,075	January to July 1998 number % 2,979,842 97.4 942,075 30.8	January to July 1998 January to July 1 number % number 2,979,842 97.4 3,015,544 942,075 30.8 936,018	January to July 1998 January to July 1999 number % number % 2,979,842 97.4 3,015,544 942,075 30.8 936,018	January to July 1998 January to July 1999 number % number % 2,979,842 97.4 3,015,544 97.6 942,075 30.8 936,018 30.3	January to July 1998 January to July 1999 Change number % number % 2,979,842 97.4 3,015,544 97.6 +1.2 942,075 30.8 936,018 30.3 -0.6	January to July 1998 January to July 1999 Change 1998 January to July 1999 number % number % 2,979,842 97.4 3,015,544 97.6 +1.2 7.4 942,075 30.8 936,018 30.3 -0.6 9.5

Source: Austrian Eapor Office.

1) Excluding persons doing compulsory military service and persons on paid parental leave. When they are factored in, the unemployment rate is 7.1%.

A sectoral breakdown of net employment growth shows that business-related services expanded most rapidly (January to July 1999: +14,959 or +4.5% compared with the corresponding 1998 period). In absolute terms, partly public services (health and education, other public services, administration) took on the most new employees (+17,775 or +2.1%).

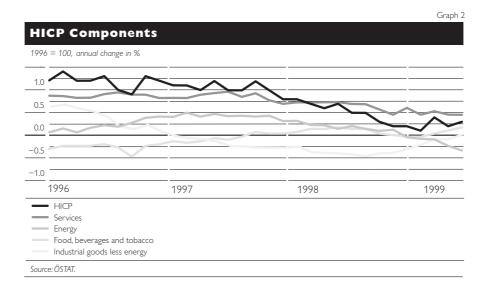


Private service sector companies excluding business-related services (trade, tourism, telecommunications) added 9,025 people (\pm 1.1%) to their payrolls, while the manufacturing and construction industries laid off employees (-3,170 or -0.5%, and -2,079 or -0.8%, respectively, in net terms). The sectoral breakdown indicates that employment growth has been significantly fueled by part-time jobs, which display a strong growth tendency. Evidently the legislative changes of the past few years have led to shifts in labor demand and supply.

By comparison with the first half of 1998, registered unemployment dropped by 10,020 people in the January to July 1999 period, while the jobless rate according to the national definition dropped to 7.1% from 7.4%. In July 1999, the number of people without a job was 18,097 below the corresponding figure for 1998; in other words, nearing the unemployment mark of July 1995. Unemployment was, among other things, relieved by the fact that the pool of labor expanded at a slower pace: While from January through July 1998 the labor pool grew by 35,800 people (+1.1%) year on year, it augmented by a mere 25,682 (+0.8%) in the first half of 1999. A good third of the drop can be ascribed to an increase in the number of job seekers that have joined a training program and are therefore not included in the jobless count. This number stood 23,800 above the corresponding 1998 figure in July 1999.

A High Degree of Price Stability is Maintained

The first half of 1999 saw no change in the trend of highly stable prices. In July, the inflation rate according to the national CPI rose 0.4% year on year, and the rate according to the HICP a mere 0.3%. A moderate wage policy, weak world market nonenergy commodity prices and sunken energy prices compared with a year earlier set the stage for a low-inflation environment. In July, this moreover coincided with a 5.5% year-on-year drop in the index component for unprocessed food. Internationally, prices are still falling, which also reflects on wholesale prices. In July the wholesale price index



dropped 0.5% compared with the previous month, and 1.4% compared with July 1998.

For the time ahead, a slight uptick of prices is expected, mainly on account of an oil price rally. Crude oil prices shot up 81% in the first seven months of 1999. The July 1999 reading of the commodity price index compiled by the HWWA-Institut für Wirtschaftsforschung, Hamburg, was 15.7% higher than the July 1998 reading. With a certain time lag, his development is bound to feed through to consumer prices.

·	1997	1998	1999 ¹)	2000 ¹)	last recently available period		
	A	,			1998	1999	
Economic output Real GDP at 1983 prices Gross fixed investment Private consumption	Annual change in % + 2.5 + 2.8 + 0.7	+ 3.3 + 4.7 + 1.7	+ 2.2 + 3.8 + 2.0	+ 2.6 + 3.6 + 2.4	1st quarter 1998 + 4.2 +10.9 + 0.9	1st quarter 1999 + 1.1 + 1.9 + 1.9	
Productivity GDP per employee	+ 2.4	+ 2.3	+ 1.3	+ 1.8	January to May	×	
Industrial output incl. construction Productivity per hour	+ 6.5 + 6.6	+ 9.9 + 4.1	× + 3.5	× + 4.5	+10.0 ×	+ 3.0 ×	
Labor market Dependent employment Registered unemployment	+ 0.3 + 1.2	+ 0.7 + 1.9	+ 0.8 - 4.2	+ 0.8 - 2.7	January to July + 0.7 + 2.4	+ 0.9 - 4.4	
Unemployment rate EU concept National concept	4.4 7.1 Annual change in %	4.7 7.2	4.4 6.8	4.2 6.6	4.5 7.4	4.4 7.1	
Prices National CPI HCPI Wholesale price index	+ 1.3 + 1.2 + 0.4	+ 0.9 + 0.8 - 0.5	+ 0.6 × ×	+ 1.0 × ×	+ 1.0 + 1.0 + 0.2	+ 0.4 + 0.2 - 1.7	
Wages Negotiated standard wage rate index	+ 1.8	+ 2.2	+ 2.5 ²)	+ 2.5 ²)	+ 2.2	+ 2.5	
Unit labor cost General Manufacturing industry	- 1.3 - 5.0	+ 0.3 - 1.7	+ 1.2 - 0.5	+ 0.7 - 1.5	×	×	
Relative unit labor cost³) Vis-à-vis major trading partners Vis-à-vis Germany	- 4.9 - 0.6	- 0.8 + 0.5	- 1.0 - 0.5	- 1.0 - 0.5	×	× ×	
Foreign trade (ÖSTAT) Imports, in nominal terms Exports, in nominal terms	+10.9 +16.8	+ 6.6 + 8.4	+ 5.0 + 4.5	+ 7.7 + 8.0	January to May +10.1 +12.9	+ 6.0 + 1.3	
Balance of payments⁴) Current account balance Goods balance Service balance Travel balance ⁵)	ATS billion -61.4 -52.0 12.7 10.8	-54.5 -50.8 33.5 21.2	-60.0 × × 35.7	-60.1 × × 40.4	1st half year -20.7 -35.1 28.5 16.2	-15.1 -31.9 35.9 21.8	
Interest rates Eonia	% ×	×	×	×	August ×	2.44	
Secondary market yield (government bonds) ⁶)	5.68 Annual change in %	4.71	4.10	4.40	4.62	5.10	
Effective exchange rate of the euro Nominal Real	- 8.0 - 8.5	+ 2.1 + 1.5	×××	×	June X	× ×	
Indicator of Austria's price competitiveness ⁷)	— 3.3 in % des BIP	- 0.2	_ 1.5	- 0.1	- 0.4	- 1.6	
Budget Net central government debt Net general government debt	2.6 ⁸)	2.5 ⁸)	2.5 ⁸)	2.9 ⁹) 2.5 ¹⁰)	×××	×	

Source: OeNB, ÖSTAT, WIFO, AMS, Association of Austrian Social Security Institutions.

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- Source: OeNB, ÖSTAT, WIFO, AMS, Association of Austrian Social Security Institutions.

 1) WIFO forecast of June 1999.

 2) Change in gross earnings per employee.

 3) Manufacturing industry.

 4) Annual figures are based on transactions, January to March figures on cash balances.

 5) Forecast based on the old balance-of-payments scheme (including international passenger transport).

 6) Ten-year federal government bonds (benchmark).

 7) Until December 1998: real effective exchange rate of the Austrian schilling.

 8) Budget notification of March 1999.

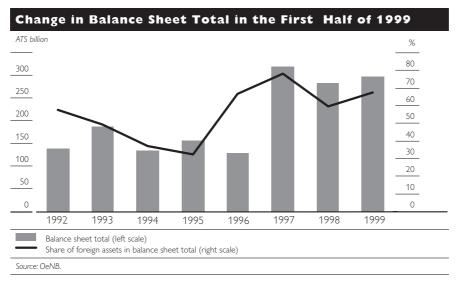
 9) According to the Austrian Stability Program (baseline scenario): 2.2%.

Focus on Austria 3/1999

Money and Credit in the First Half of 1999

Moderate Balance-Sheet Growth

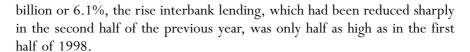
Austrian banks' balance sheet total expanded by EUR 21.7 billion or 4.5% to EUR 502.5 billion, much as in the comparable period of 1998 (EUR 20.5 billion or 4.7%). Capital formation by domestic nonbanks, above all own issues, grew at a very lively pace. With domestic credit business sluggish, banks tended to invest more in securitized financing, above all in mutual funds shares. Deposits, too, augmented faster than in the year-earlier period, above all short-term deposits. Austrian banks also boosted their investment abroad, while they had cut back sharply on foreign investment in the second half of 1998. Interbank items grew less than in the 1998 period, when internal restructuring within banking groups had led to unusually large shifts of interbank funds. Banks' holdings with the OeNB dropped by EUR 1.1 billion, which is likely to be a consequence of lower minimum reserve requirements.

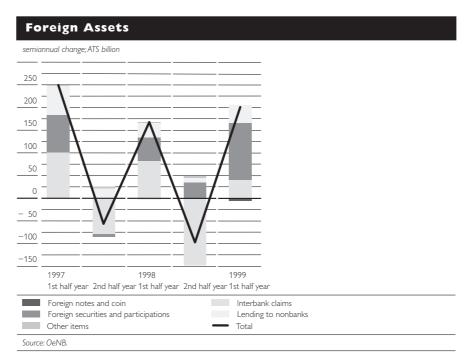


The number of banking offices picked up by 7 to a total of 5,554 in the first half of 1999. On balance, one main office was closed, bringing the total of main offices to 970, and 8 branches were added to the 4,576 offices already established. Due to the transition to the euro, the development of banks' foreign currency positions in the first half of 1999 cannot be compared with the year-earlier changes.

Foreign Business Continues to Boom

After slow business in the second half of 1998, Austrian banks' foreign investment picked up in the first half of 1999. Assets abroad went up by EUR 14.6 or 13.2%, accounting for roughly two thirds of balance sheet growth. This item's share in the balance sheet total rose by 1.9 percentage points to 24.9%, which, however, was still down 0.9 percentage points from mid-1998. Most of the growth in foreign investment was in foreign securities and equities, which had been enlarged in 1998, too. Foreign investment swelled by EUR 9.0 billion or 32.8% in the first half of 1999. At EUR 2.9 billion or 8.9%, lending to foreign nonbanks recovered, expanding both faster and more than in the 1998 period. Conversely, at EUR 3.1



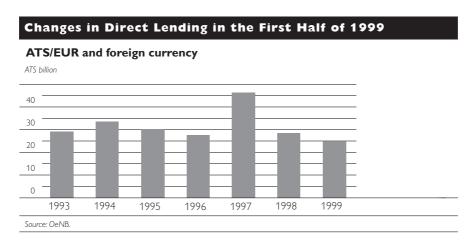


Moving to the liabilities side of Austrian banks' aggregate balance sheet, foreign interbank items contributed far more to the expansion of liabilities than to the rise in assets. Thus interbank items accounted for some 87% of the rise in foreign liabilities, climbing by EUR 10.0 billion or 15.4% in the review period. Deposits by nonresident customers went up EUR 1.2 billion or 5.0%. Banks' own issues launched on international capital markets stagnated in the first half of 1999 (+0.1%). Overall, foreign liabilities enlarged by EUR 11.5 billion or 9.1% from the end of 1998, or by roughly EUR 3 billion less than foreign assets, reducing Austrian banks' net foreign liabilities to EUR 13.1 billion.

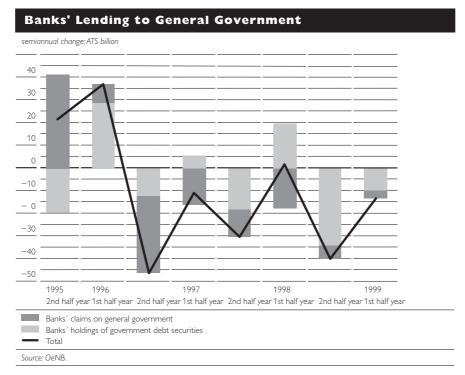
Foreign Currency Lending Continues Animated Rise

In the first six months of this year, direct credits expanded by EUR 1.8 billion or 0.9%, much as in the year-earlier period (EUR 2.1 billion or 1.1% growth). Much of this increase, however, stemmed from interest charges of EUR 1.5 billion (first half of 1998: EUR 1.8 billion). Exclusive of interest charges, foreign direct lending crept up by EUR 0.3 billion or 0.1%. Direct and securitized¹) lending together accounted for a rise in Austrian banks² claims on domestic nonbanks by EUR 2.3 billion or 1.1% to EUR 203.3 billion.

- 1 Debt securities not admitted to listing on the stock exchange.
- 2 Claims on customers denote all types of claims on resident and nonresident customers regardless of category. Claims include securitized claims, with the underlying security being a debt security not admitted to listing on the stock exchange (OeNB, Reporting Guidelines on Monthly Reports pursuant to § 74 paras 1 and 4, Austrian Banking Act, Vienna 1999, p. 22).



The public sector continued to scale back its liabilities to banks, though at a far slower rate than in the first six months of 1998. Banks' claims on general government sank by EUR 0.2 billion or 0.8% (–1.4% in the first half of 1998). At the same time, public sector debt securities in Austrian banks' portfolios dipped EUR 0.5 billion or 36.7%. Overall, public-sector borrowing from banks diminished by EUR 0.7 billion or 2.3% in the first half of 1999. Within the past three years, banks' lending to the public sector decreased by EUR 10 billion or 16%. Banks' claims more, by 18%, than did their holdings of public-sector debt instruments, which fell 13%.



In the first half of 1999 companies rolled back debts to banks by EUR 0.2 billion compared to a rise by between EUR 3.2 and EUR 3.6 billion in each of the four preceding half years. After a period of slowing growth and a hesitant propensity to invest during the second half of 1998 and in the first

quarter of 1999, a new and more optimistic phase in corporate investment seems to have begun, according to the most recent business confidence survey of the Austrian Institute of Economic Research.¹) With exports stagnating, the outlook for sales and revenue was cloudy, which acted as a damper on investment, and in turn on enterprises' need for funds. However, companies' self-financing capacity improved further in 1998²), providing them with more own resources for investment projects.

Banks purchased rising amounts of debt securities from domestic firms, although banks' holdings of companies' securities still ran to less than 1% of banks' lending to businesses at the end of June 1999.

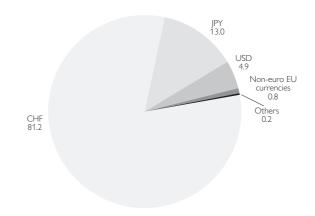
Banks claims on private households, however, shot up by EUR 1.5 billion or 3.1%, fueled by this category's ongoing appetite for consumer durables. The slow residential market, however, put a damper on the demand for housing and refurbishing loans.

Foreign currency-denominated lending kept expanding throughout the first half of 1999. Lending in Swiss francs skyrocketed by EUR 4.4 billion or 35.6% to EUR 21.7 billion; loans taken out in Japanese yen doubled to EUR 3.5 billion. Total foreign currency direct lending came to EUR 25.4 billion at the end of the review period, with 81% denominated in Swiss francs and 13% in Japanese yen. An analysis of the development of foreign currency credit in the various borrower categories from the end of 1998 cannot be provided because of the changeover to the euro. Foreign currency lending to households jumped by 41% between the end of January and June 1999, and to companies by 23%. Lending in euro was on the decline in absolute terms, so that 15.6% of the claims on companies and nearly 14% of all lending to private households were denominated in foreign currency. The public sector's foreign currency-denominated liabilities, which had diminished in the past years, expanded again in the period under review.

Foreign Currency Loans

to Domestic Nonbanks as of June 30, 1999

share in %

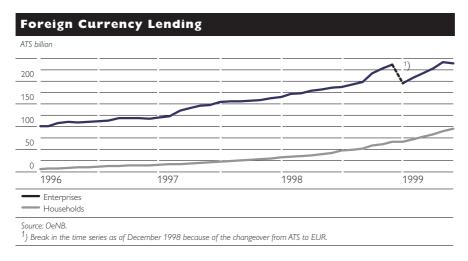


Source: OeNB

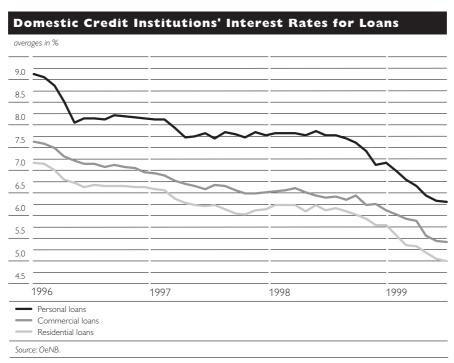
Czerny, M., K. Kratena and M. Pfaffermayr. Umfangreiche Investitionspläne für 1999. In: WIFO-Monatsberichte 7/1999, p. 471–488.

² Pender, M. and M. Pfaffermayr. Selbstfinanzierung und Kapitalausstattung im internationalen Vergleich. In: WIFO-Monatsberichte 3/1999, p. 177–186.

Within the euro area, foreign currency borrowing is especially high in Austria. At the end of March, Austria accounted for 36% of all Swiss franc credits and roughly 15% of all borrowing in Japanese yen within the euro area; Austrian banks took out 48.5% of the additional Swiss franc credits and 29.1% of the additional Japanese yen-denominated loans in the first quarter of 1999. By way of comparison, Austria's share of total credit in the euro area came to a mere 3%.



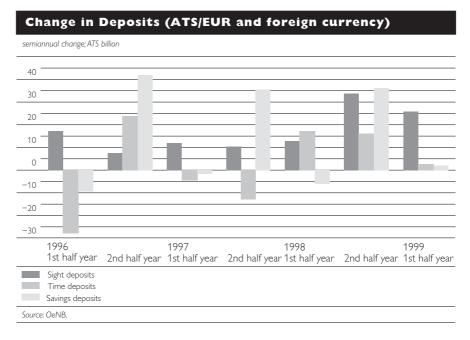
Interest rates on loans continued to decline in the first six months of 1999. The average rate for commercial credits slipped from 6.12 to 5.41%; interest on lending to private individuals tumbled from 7.16 to 6.29%. Within the past four years 3 percentage points were cut from interest on commercial loans, and $3\frac{1}{2}$ percentage points from interest on personal loans.



Austrian banks' security portfolios expanded quite strongly in the first half of 1999, mainly because of the rise in purchases of mutual fund shares by EUR 4.2 billion or 57.3%. Debt security holdings rose by EUR 0.2 billion or 1.9%, and the increase in domestic bank bonds was offset by net sales of public sector securities. Austrian banks' net acquisitions of domestic shares stocked up portfolios by EUR 57 million or 10.2%.

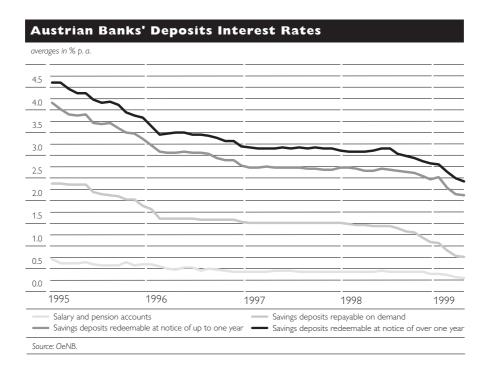
Short-term Deposits Skyrocket

Domestic nonbanks' deposits at Austrian banks widened by EUR 2.2 billion or 1.3% in the first half of 1999, somewhat more than in the previous year. The structure of deposits continued to shift toward more liquid categories. Sight deposits and savings deposits repayable on demand expanded by 8.2%, whereas deposits for which periods of notice or terms have been agreed grew marginally or, in the case of deposits with terms of one to five years, in fact diminished. The share of deposits repayable on demand in total deposits edged up 1.4 percentage points to 23.7% in the first half, which constitutes a 5.5 percentage point expansion since the end of 1995.



Sight deposits augmented most, with customers adding EUR 1.8 billion or 6.7% to schilling/euro and foreign currency sight deposits. Obviously, with savings interest sagging, bank customers opted for more liquid forms of investment. The gap between savings and sight deposit interest shrank considerably from the end of 1998 to the end of the review period, by 39 basis points in the case of the difference between savings repayable on demand and sight deposits, and by 34 to 36 basis points in the case of the difference between savings repayable on demand and fixed-term savings deposits.

Time deposits went up by EUR 0.2 billion or 1.1%, less than the year-earlier result (EUR 1.3 billion or 6.6%). Savings deposits inched up by



EUR 0.1 billion or 0.1% in the first half of 1999 compared to a contraction by EUR 0.4 billion or 0.4% in the same period of 1998.

At EUR 4.3 billion, sales of own domestic issues were nearly twice as high as the rise in deposits. Most of the additional securities sold were variable rate bonds, whereas holdings of pfandbriefe, i.e. bonds collateralized by public-sector or mortgage loans, municipal bonds and fixed-rate medium-term notes were reduced in the survey period. As by far most of the issues were purchased by Austrian banks, the volume of own domestic issues in circulation exclusive of the share of issues acquired by other banks increased by EUR 1.3 billion or 3.1% to EUR 44.4 billion.

Equity Ratio Strengthens to 14.19%

Austrian banks' own funds expanded by EUR 3.2 billion or 10.1% to EUR 34.6 billion in the first six months of 1999. The equity ratio as stipulated by § 23 Austrian Banking Act 1993 improved from 13.50 to 14.19%. Most of the equity consisted of tier III capital, which was boosted by EUR 2.3 billion from the end of 1998. Core, or tier I, capital rose by EUR 0.6 billion or 3.5%, and supplementary capital (tier II capital) advanced by EUR 0.4 billion or 4.2%.

Balance of Payments in the First Quarter of 1999¹)

I Current Account

In the first quarter of 1999, Austria's current account calculated on the basis of transactions (see table 1) was in deficit by approximately EUR 530 million. This outcome was in marked contrast with that of the first quarter of 1998, when the current account had practically been in equilibrium. Important factors contributing to this result were foreign trade and the income subaccount: The shortfall of the trade balance widened by EUR 830 million to EUR 2,070 million, while the income deficit surged by EUR 480 million to EUR 630 million. By contrast, the surplus on services augmented by EUR 680 million to EUR 2,650 million.

A more detailed analysis of the subaccounts of the Austrian balance of payments can be found below.

1.1 Goods

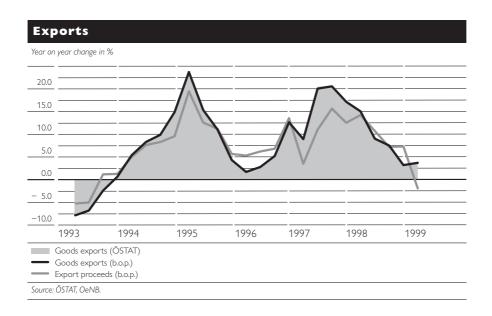
In 1998, foreign trade growth rates trended downwards or stagnated with regard to both imports and exports. This was evidenced not only by the merchandise statistics as compiled by the Austrian Central Statistical Office (ÖSTAT), but also by goods imports and exports as well as merchandise payments as presented in the balance of payments. In the first quarter of 1999, the developments as reflected in the merchandise flows according to ÖSTAT and the merchandise payments according to the OeNB's balance of payments differed somewhat. On the basis of ÖSTAT's merchandise data, exports went up by some 3½%, while imports jumped by approximately 8½%. The corresponding merchandise payment statistics according to the balance of payments were marked by a moderate decline by almost 2% and slightly more than 1%, respectively.

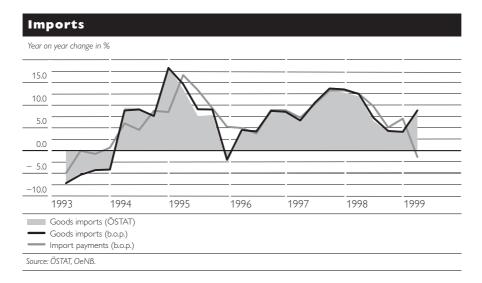
The following facts should be taken into account in assessing these developments:

- According to the June 1999 forecasts of WIFO and IHS, nominal exports will expand by 4½ and 2%, respectively, in 1999. Imports are projected to rise by 5% and roughly 3½%, respectively in the same period. At least on the import side, the forecast for the year falls noticeably short of the value calculated for the first quarter of 1999.
- In both cases, results are provisional. In previous periods, revisions of each data source led to improved consistency. The introduction of the euro, e.g., may have been the cause of a stronger impact of leads and lags.

The difference between the goods flows based on the ÖSTAT foreign trade data and the corresponding payments is indicated in the subitem unclassified transactions of the services subaccount. Services had the strongest positive effect on the current account, as is reflected by the fact that, according to the information currently available, the current account as

Based on transactions. As of the beginning of 1999, the Austrian balance of payments figures published in "Focus on Austria" are based on the currency unit euro, using the irrevocable conversion rate of EUR 1 = ATS 13.7603 (differences due to rounding may be possible). In the OeNB's statistical monthly ("Statistisches Monatsheft", by contrast, the data are given both in euros and in schillings.





compiled by the OeNB shows a less pronounced deterioration of the trade deficit than the ÖSTAT data.

The analysis of foreign trade by geographic area and commodity category has to rely on ÖSTAT merchandise statistics. According to these figures, the worsening of the balance on goods transactions in the first quarter was primarily due to larger imports from the euro area, in particular Germany, which drove the shortfall with the euro area up by some EUR 600 million (see table 2). Exports to the Central and Eastern European countries — markets in which Austria has traditionally scored surpluses — stagnated or decreased, with the positive balance shrinking by EUR 220 million.

The merchandise balance according to foreign trade statistics deteriorated across the board in all *major commodity groups*. Imports of consumer and capital goods soared, as did exports in these categories (see table 3).

1.2 Services

The surplus on the services subaccount widened by EUR 680 million to EUR 2,650 million in the first quarter of 1999.

1.2.1 Travel

The recovery of the travel industry, which had started in the winter season of 1997/98, continued unabated into the first quarter of 1999. The number of arrivals (overnight stays) by foreign tourists rose by 9.4% (see table 5), with the figure showing a slight upward distortion as Easter fell early. Gains in overnight stays were recorded with most countries of origin, the only major exceptions being France, the CIS and South East Asia. Foreign exchange receipts from nonresident vacationers mounted at a far less rapid clip, edging up by only ½% to EUR 3,190 million (see table 4). The receipts from international passenger transport, which previously formed part of the travel account, advanced by 3.4% to EUR 350 million.

The slowdown in the growth of *travel receipts* can be traced to several factors. First, the 0.4% increase in tourism "export" prices did not provide any impetus. Tourists' cautious spending behavior may also have had a dampening effect. This is corroborated by the fact that — by contrast to the previous years — three-star hotels and vacation homes posted the strongest gains in the number of overnight stays, rather than four- and five-star hotels. The highly profitable city breaks registered clearly below-average results (Vienna: +2.4% overnight stays by foreign tourists) and fared even worse in the second quarter, due to the Kosovo conflict. It should also be taken into account that changes in payment behavior (smaller volume of foreign currency changed back into schilling) and the technical processing of payment transactions (netting) in the wake of the introduction of the euro may have led to underestimates of gross flows. Should underestimates actually have occurred under the current compilation system, appropriate corrections may be made in the annual revision process.

This assumption is supported by the fact that *Austrians' travel expenses* were also characterized by relatively low volumes, sinking by 4.8% to close to EUR 1,600 million. Expenses in passenger transport also dropped sharply (–17% or –EUR 140 million). Apart from the aforementioned compilation factors, this is traceable to Austrians' new preference for vacationing in Austria (+4.7% overnight stays) and the decline of expenditure on shopping abroad, which is likely to continue.

On balance, the travel account improved by EUR 95 million to EUR 1,595 million.

1.2.2 Other Services Items

The surplus on other services augmented by a total of EUR 590 million to some EUR 1,055 million in the first quarter of 1999. As already pointed out above, the key factor behind the increase was the subitem *unclassified transactions* (basically the difference between goods transactions and merchandise payments), which improved by EUR 670 million. Furthermore, the *financial services* balance (including bank and deposit account fees, issuance fees, etc.) improved by EUR 145 million. The balance on other

business services (including, for instance, merchanting and technical consulting) deteriorated by EUR 285 million, however. The surplus of all *other service items* not explicitly named here widened by a total of EUR 55 million to approximately EUR 270 million.

1.3 Income

In the first quarter 1999, the income subaccount was in deficit by EUR 630 million, up by EUR 480 million on the first quarter of 1998. This quarterly result is higher than any of the quarterly figures of 1998, adding up to approximately 58% of the total 1998 value. The deterioration reflects largely the heightened foreign sales of domestic securities in 1998.

Austria posted a positive net balance on the *compensation for employees* item of some EUR 120 million in the first quarter of 1999, virtually unchanged from the analogous 1998 period. Substantial changes were recorded for the investment income item, however (see table 6).

The significance of *investment income* is underlined by the fact that at about 10%, the share held by gross investment income in the total current account is more or less on a par with that of travel. While Austrian investors managed to lift their income on investment by only about EUR 50 million between the first quarter of 1998 and the analogous 1999 period, foreigners boosted their income on investments in Austria by EUR 520 million in the like period. On balance, this brought about a deterioration of close to EUR 470 million, some EUR 20 million of which were accounted for by net direct investment income, approximately EUR 290 million by net portfolio investment income and around EUR 160 million by income on other investment.

Direct investment income showed an upward tendency both on the assets and the liabilities side. But since the liabilities side still outweighs the assets side in income terms, both sides trending towards growth portends a further worsening of net direct investment income.

Net income on portfolio investment shrank, which is mainly traceable to the drop in income on debt securities (—EUR 185 million) and financial derivatives based on interest-rate contracts (—EUR 90 million). In the first quarter of 1999, Austrian debtors forked out EUR 1,200 million worth of income to foreign investors, while interest payments on foreign securities held by Austrians ran to EUR 680 million. Both on the assets and the liabilities side, debt securities had a tremendous impact on the development of portfolio investment income. Income on equity securities stood at about EUR 30 million on the assets side and at slightly less than EUR 35 million on the liabilities side.

The deterioration of cross-border income on other investment is primarily attributable to the monetary authorities item, which reflects the change in the OeNB's role within the framework of the European System of Central Banks. For capital imports in connection with TARGET, e.g., interest must be paid, which ceteris paribus affects the cross-border income balance.

1.4 Current Transfers

Forming part of the current account, current transfers comprise those transfers that have an impact on the income and consumption of the economies concerned.

The current transfer deficit amounted to EUR 485 million in the first quarter of 1999, down from about EUR 570 million in the analogous 1998 period.

At EUR 420 million, net public current transfers remained virtually unchanged from the corresponding period one year previously, mainly on account of more or less equivalent transactions with the EU. Austria's contribution to the EU budget came to almost EUR 440 million in the reporting period, while its receipts (excluding EU subsidies to infrastructure projects) totaled EUR 770 million.

The shortfall on private transfers, by contrast, dropped from around EUR 155 million to EUR 65 million, which was largely attributable to increased tax receipts.

2 Capital account

The capital account closed with a deficit of nearly EUR 60 million in the first quarter of 1999, having been in balance a year before. *Capital transfers in cash* are negligible in the Austrian balance-of-payments statistics. *Capital transfers in kind* showed diverging sectoral developments.

The *general government's* capital transfers in kind encompass in particular those receipts from the EU that are earmarked for infrastructure programs and consequently do not fall under the heading current transfers. They came to EUR 35 million in the first quarter of 1999, compared with approximately EUR 20 million one year previously.

The *private sector's* capital transfers in kind closed with a shortfall of EUR 90 million by comparison to EUR 20 million in the corresponding 1998 period, mainly on account of debt forgiveness.

3 Financial Account

Explanatory notes on the structural changes in the financial account

(see table 7) triggered by the introduction of the euro

From the first quarter of 1999 onwards, Austrian cross-border capital movements must be seen against a different economic background. As Austria embarked on Stage Three of EMU, a number of changes ensued, which have far-reaching effects on the structure of the financial account.

Most important is the fact that the introduction of the euro rendered terms such as "foreign," "external," "abroad" and "outward" inaccurate with respect to cross-border transactions. Consequently, these terms will be used in the balance of payments to denote the national aspect of cross-border transactions. Transactions between Austria and other EMU member countries (including the ECB) fall into the category "transactions with residents" or "transactions within the euro area," while all other transactions are effected with "the rest of the world" or "nonresidents."

A second major change to the structure of the financial account resulted from the new definition of "reserve assets." From the first quarter of 1999 on, claims are considered reserve assets if denominated in a currency other than euro and if existing vis-à-vis nonresidents. Reserve assets also comprise monetary gold, SDRs and the IMF reserve position. Since transactions in euro or vis-à-vis residents can be found in the areas portfolio investment and other investment, the monetary authorities item has a more significant role to play in these categories than was the case before 1999.

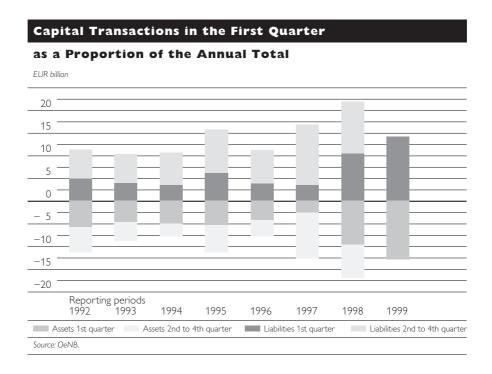
Austrian cross-border capital flows on the assets side, based on transactions, led to an increase in total external assets as measured by the international investment position (IIP) by approximately EUR 12,900 million in the first quarter of 1999, which was an 8% expansion compared with December 31, 1998. At the same time, Austria's transaction-based total external liabilities progressed by around EUR 14,000 million, which was tantamount to a rise of somewhat less than 7%. Even if the relatively high capital movements as a result of the cyclical seasonal pattern in the first quarter of the calendar year are taken into consideration, the growth of cross-border transactions accelerated. In the first quarter of 1999, capital movements reached 75% of the total 1998 volume on the assets side and 65% on the liabilities side.

The above net capital flows including the unclassifiable transactions (capital exports posted under errors and omissions amounting to EUR 500 million) thus resulted in the compensation of the *financial deficit of approximately EUR 600 million*. Measured in terms of total liabilities, the financial deficit came to only 4%.

Of the total transaction-induced assets in the first quarter of 1999, 85% can be traced to interest-bearing investment, with short-term financing instruments accounting for half of this share. On Austria's liabilities side, the proportion of interest-bearing investment is 90%. The share of short-term instruments came to slightly more than 50%.

The breakdown by maturity also illustrates that the growing foreign indebtedness is predominantly due to short-term investment.

In the first quarter of 1999, just as in the analogous 1998 period, general government was a net importer of capital, whereas the financial sector (including the OeNB, banks and other financial institutions) exported



capital on balance. The results of a detailed analysis are as follows: *General government* imported capital to the amount of EUR 6,650 million net. In terms of the expansion of general government foreign debt in 1998, capital imports in the first quarter of 1999 came to 62%. By comparison to the end of 1998, foreign debt grew by 14% based on transactions. The *OeNB* imported EUR 6,200 million on balance, of which the major part was traceable to the category other investment, whereas *banks* exported net capital to the tune of EUR 7,370 million. A consolidated analysis of these two sectors shows net assets of some EUR 1,180 million, which compares with EUR 2,180 million in total 1998.

The consolidated outcome of the Austrian banking sector confirms this trend.

The same applies to the *other sectors*, which, on balance, invested EUR 4,370 million abroad, thus exceeding the 1998 result by some EUR 700 million. In the first quarter of 1999, cross-border portfolio investment of other financial institutions (in particular mutual funds) accounted for the lion's share of this amount.

A regional breakdown of the financial account provides the following information: EUR 9,560 million (75%) of the increase in assets derived from investment in the euro area. Since liabilities totaling EUR 1,140 million were incurred at the same time, the result was a net capital export of EUR 8,420 million, which was in contrast with net imports of capital vis-à-vis nonresidents amounting to EUR 9,520 million.

Exports of capital to the euro area stemming from portfolio investment resulted in a financial deficit of EUR 1,430 million, while capital imports vis-à-vis the rest of the world led to a financial surplus of EUR 840 million.

Financial Account by Sectors			
	1998 ¹)	4th quarter 1998 ¹)	1st quarter 1999 ²)
	EUR million, net	,	,
Financial account			
Assets, total	-17,055	-2,997	-12,863
Liabilities, total Net	21,790 + 4,735	<u>2,494</u> – 503	13,961 + 1,098
Sectoral breakdown			
OeNB			
Assets Liabilities	- 3,461	-3,401	67
Net	- 3,461	-3,401	6,124 + 6,191
General government			
Assets	- 633	459	489
Liabilities Net	11,291 +10,658	2,833 +3,292	6,163 + 6,652
Banks			
Assets	- 3,638	2,018	- 7,829
Liabilities Net	4,848 + 1,210	-3,399 -1,380	<u>456</u> - 7,373
Other sectors			
Assets	- 9,323	-2,072	- 5,588
Liabilities Net	5,651 - 3,672	3,059 + 986	1,218 - 4,370
Memorandum item:			
OeNB and Banks	7.404	4 202	77/2
Assets Liabilities	- 7,101 4925	-1,383 -3,399	- 7,762 6,580
Net	<u>4,925</u> – 2,176	-4,781	- 1,182
Unclassified transactions			
(Errors and omissions) Net	- 421	+1,523	- 504
Financial deficit/surplus	- 4,314	-1,020	- 594
Source: OeNB.	<u> </u>	•	

¹) Revised data.

3.1 Direct Investment

Both outward and inward direct investment in the first quarter of 1999 was about 10% higher than in the corresponding 1998 period. Net outward direct investment reached almost EUR 700 million, while inward direct investment led to net capital imports to the amount of more than EUR 1,000 million, which made Austria a net importer with regard to direct investment, as in the previous year. Apart from Austria, Ireland and Denmark are the only other EU countries to report net inflows of direct investment.

Outward direct investment is made up of acquisitions of equity holdings to the amount of EUR 500 million and reinvested earnings to the tune of EUR 190 million, while loans among affiliated enterprises remained virtually unchanged. The net investments in equity holdings ensued from outward investment of approximately EUR 625 million (EUR 45 million thereof for property) and outward disinvestment of EUR 125 million. As regards the sectoral breakdown, asset-side direct investment was recorded for a broad

Preliminary data

range of industries, in particular the sectors trade, chemicals, building materials, engineering and banking. Direct investments in the euro area accounted for EUR 150 million of the Austrian investment total.

As far as *inward direct investment* is concerned, net acquisitions by foreign companies of Austrian equity capital came to EUR 345 million, which ensued from inward acquisitions of roughly EUR 470 million (EUR 95 million of which for property) and inward disinvestment of EUR 125 million. As in the case of asset-side direct investment, loans played an insignificant role. Investment activity continued to be carried by the telecommunications sector, which accounted for the two biggest investments of the first quarter. EUR 490 million of the total inward investment volume of EUR 1,010 million can be traced to euro area residents.

3.2 Portfolio Investment

Capital transactions in securities were performed against the following background: 1)

- In the first quarter of 1999, the U.S. dollar appreciated by around 9% against the euro, picking up further in the following months.
- After a three-year downward slide, long-term government bond yields recorded a trend reversal in January 1999 and continued to climb subsequently. The spread between the yields of the 11 monetary-union member countries and those of the U.S.A. widened from an average of 70 basis points in December 1998 to 105 basis points in March 1999 (+52%). Austrian bond yields hovered an average of 20 basis points above their German counterparts.
- The successful resolution of the financial crisis in Brazil and the introduction of the euro pushed issues on international capital markets to new highs. The main reason for the extremely hefty increase in euro issues may have been individual governments' efforts to establish their bonds as benchmark issues, on the one hand, and the rising volume of corporate bonds in the euro area on the other hand. Induced by historic low yields, higher liquidity of new issues due to the launching of jumbo bonds or the topping-up of existing bonds, and, last but not least, by the greater variety of securities on offer, banks took advantage of the euro area as investors, while institutional investors became active in their role as financial intermediaries for the private sector. Apart from euro issues, the volume of USD-denominated issues also expanded substantially.
- The major stock indices progressed by roughly 5% in the first quarter of 1999, as did the ATX, thus making up for part of the losses of the previous year. The DAX was an exception, dropping by 6% compared with December 1998.
- A new stock exchange rule introduced in Germany in 1999, which enables listed companies to buy back their own shares, influenced crossborder transactions in German listed stocks.

¹ Source: OeNB, Focus on Statistics; ECB, Monthly Bulletins; BIS, Quarterly Review; national sources.

In the first quarter of 1999, Austrian investors' portfolio investment reached a transaction value (including interest accrued) of EUR 7,620 million, which corresponds to a share of almost 60% of total assets from transactions in the financial account. Compared with the transaction figures from the previous year, the values for the first quarter of 1999 add up to a proportion of 74%. This hefty rise is tantamount to an expansion of 14% compared with Austria's external assets from portfolio investment as of December 31, 1998.

Austrian investors showed a preference for debt securities, which accounted for a share of 80% (EUR 6,110 million). A comparison with the previous year should be treated with caution, as massive shifts from debt securities to equity securities had been recorded then, with the latter reaching atypical proportions.

92% of the investment activity can be traced to the financial sector (OeNB, banks and other financial institutions), with 77% of the issues picked coming from the euro area (first quarter 1998: 55%). This extremely high share can be explained with investment in euro-denominated debt securities (EUR 5,500 million), whereas euro area securities denominated in foreign currencies were sold off. At a mere 6%, Austrian investors' acquisitions of USD issues were extremely moderate, although the U.S. dollar had previously been the second most important investment currency of domestic investors. *Bonds and notes* reached a transaction volume of EUR 5,870 million, which corresponds to a share of 77% in total portfolio investment abroad in the first quarter and which at the same time falls only marginally short of the 1998 total. Purchases of foreign securities on the primary market were significantly higher than in previous periods, coming to approximately 40% of total transactions in the first quarter of 1999.

Domestic investors bought EUR 1,500 million worth of *foreign equity* securities. A comparison with the 1998 quarterly figures demonstrates that this result was surpassed only by the fourth quarter of that year.

The transaction-induced increases of *foreign shares* ran to about EUR 1,100 million in the first quarter of 1999 and thus accounted for 70% of total transactions in foreign equity securities. Austrians mostly went for listed shares of the sectors finance, manufacturing and technology. A sectoral analysis shows that this securities category attracted primarily banks and other financial institutions as buyers.

Austrian investors put some EUR 400 million into shares of *foreign mutual funds*, mainly equity funds and balanced funds. In the review period, residents thus acquired about 23% of the total 1998 volume. Some 80% of these investments can be traced to the other subgroups of this category, again primarily the financial institutions.

A comparison with other member countries of the euro area demonstrates that the diversification strategy of Austrian investors, who prefer debt securities to equity securities and focus on investment in euro area issues, is more or less in keeping with the trend noticeable in the EU 11 countries.

On the liabilities side, *Austrian securities* to the net amount of EUR 6,540 million were sold abroad. This means that almost half of the transactions on the financial account's liabilities side can be ascribed to securities sales abroad, with the liabilities position going up 6% as against December 31, 1998.

Domestic equity securities worth approximately EUR 370 million net changed into nonresidents' hands. Austrian shares, above all listed utilities and industrials, sold to nonresidents on the order of about EUR 80 million. This put an end to the development of the past three quarters, when foreign investors had pulled out of Austrian shares. The reason for this trend reversal may have been the upward movement of the ATX, which gained 5% in the first quarter of 1999.

For the most part, however, nonresidents invested into shares of *Austrian mutual funds* (in particular balanced funds and fixed income funds), spending around EUR 290 million. This quarterly result is higher than any of the quarterly figures of 1998, adding up to approximately 30% of the total 1998 value.

The lion's share of nonresidents' investment in Austrian securities went into debt securities (94%), EUR 5,790 million thereof into long-term issues (bonds and notes). This put the balance of net purchases of foreign bonds and notes and net sales of domestic securities of the same category to nonresidents into equilibrium. By contrast to the assets side, sales derive almost exclusively from Austrian public sector issues, more specifically the Republic of Austria. The federal government sold issues to the amount of EUR 11,410 million to nonresidents on the primary market (average maturity: 14.4 years; average yield: 4.6%), while at the same time cross-border transactions arising from redemptions amounted to EUR 6,480 million (average maturity: 6.6 years; average yield: 6.6%). As opposed to 1998, secondary market transactions to the tune of EUR 1,300 million led to net sales abroad.

The decisive factor for the net sales position of Austrian government securities was the floating or topping up of bonds in the first quarter of 1999, which were issued either by means of tender procedure or as syndicated loans. The transaction volume of these securities accounted for 77% of nonresidents' total investment in domestic securities and can be broken down as follows:

Tender and Syndicated Loans in the First Quarter of 1999)					
	ISIN				
	EUF	Rmillion			
Federal government bond 1998–2005/3 Federal government bond 1999–2014/1 Federal government bond 1997–2027/6 Federal government bond 1999–2009/2 Total	AT0000384524 AT0000384748 AT0000383864 AT0000384821	1,344 593 1,044 2,048 5,029			
Source: OeNB. 1) Transaction values: + = sale abroad.					

With a transaction value of a mere EUR 200 million, the volume of long-term bank bonds launched abroad was insignificant, a marked contrast

to the situation of public sector issuers analyzed above. In the years 1997 and 1998, by comparison, long-term bank bonds had figured prominently (1997: EUR 3,400 million; 1998: EUR 3,490 million). Consequently, the so-called cash-or-share convertible bonds — a new financial instrument on the Austrian capital market — were very likely sought after by residents in particular.

3.3 Other Investment

The capital transactions in cash, deposits, loans and financial instruments that cannot be subsumed under any other category added up to more than EUR 6,000 million on both the assets and the liabilities side, which made for a practically balanced other investment account in the first quarter (net capital imports: EUR 180 million).

A breakdown of this outcome by sector and region shows the following developments:

The *OeNB* increased its claims from the entry offsetting the transfer of part of the NCBs' reserve assets to the ECB, amounting to EUR 1,180 million in accordance with the EU Treaty, which went hand in hand with a reduction of reserve assets. At the same time, the OeNB augmented its net liabilities from the item nonresidents' deposits at the OeNB by EUR 6,120 million in the first quarter of 1999, mainly on account of the fact that the OeNB assumed a new role in the operation of the payment system TARGET.

Domestic banks raised their short-term deposits abroad, while nonresident investors withdrew funds from Austrian banks. On balance, these transactions resulted in a net capital export of EUR 5,920 million.

An aggregate analysis of both sectors shows net capital exports on the order of EUR 1,160 million.

In the reporting period, capital transactions on both sides of the other investment account with the euro area resulted in net capital exports of EUR 6,700 million, which compares with net capital imports to the amount of EUR 6,880 million with nonresidents.

3.4 Reserve Assets

Capital transactions led to a decrease in reserve assets by EUR 1,800 million in the first quarter of 1999. The crucial factor was the reduction of the gold and USD holdings as a result of the transfer of part of the NCBs' reserve assets to the ECB, amounting to EUR 1,180 million in accordance with the EU Treaty.

Balance of Payments Summary			
	1st quarter		Annual change
	1998¹)	1999 ²)	-
	EUR million		
Current account	+ 7	- 531	- 538
Goods, services and income	+ 580	- 47	- 627
Goods and services	+ 730	+ 583	_ 147
Goods	-1,240	-2,068	- 828
Services	+1,970	+2,651	+ 681
thereof:			
Travel	+1,498	+1,593	+ 95
Construction services	+ 75	+ 48	- 27
Financial services	- 19	+ 127	+ 146
Royalties and license fees	- 197	- 160	+ 37
Other business services	+ 382	+ 98	- 284
Government services, n.i.e.	+ 106	+ 78	- 28
Unclassified transactions	- 108	+ 560	+ 668
Income	- 150	- 630	- 480
Compensation of employees	+ 125	+ 117	- 8
Investment income	- 275	- 747	- 472
Current transfers	- 573	- 485	+ 88
General government	- 416	- 421	- 5
Private sector	- 157	- 64	+ 93
Capital and financial account	+ 660	+1,035	+ 375
Capital account	- 6	- 63	- 57
thereof:			
General government	+ 17	+ 29	+ 12
Private sectorr	- 23	- 90	- 67
Acquisition/disposal of nonproduced,			
nonfinancial assets	+ 0	- 1	_ 1
Financial account	+ 667	+1,098	+ 431
Direct investment	+ 291	+ 320	+ 29
Portfolio investment	+ 595	-1,081	-1,676
Other investment	+ 122	+ 179	+ 57
Financial derivatives	+ 114	- 124	- 238
Reserve assets ³)	- 456	+1,805	+2,261
Errors and omissions	- 668	- 504	+ 164

Source: OeNB.

1) Revised data.

²) Provisional data.

 $^{^{3}}$) OeNB: Gold and foreign exchange, reserve position in the Fund. SDRs, etc.: increase: -/decrease: +.

Merchandise Exports and Imports as Recorded

in the Foreign Trade Statistics

Goods by geographic area

1st quarter 1999

	Exports		Imports		Balance		
	Annual change %	Share of total exports	Annual change	Share of total imports	ATS million	Annual change	
OECD EU EMU thereof:	5.6 7.4 7.6	89.0 67.7 61.1	10.4 12.3 12.4	89.8 71.4 65.9	-2.308 -2.254 -2.284	-734 -635 -595	
Germany Italy France	9.5 2.7 12.0	38.6 9.3 4.8	14.2 13.6 8.1	42.8 8.4 5.2	-1.645 - 79 - 191	-409 -131 + 7	
CEECs ¹) U.S.A. Japan	-11.2 8.1 30.7	13.6 4.2 1.0	- 1.3 14.0 2.9	10.2 5.3 2.3	+ 225 - 293 - 245	-221 - 64 + 22	
Total	3.7	100.0	8.7	100.0	-2.436	−821 I	

Source: ÖSTAT.

Table 3

Merchandise Exports and Imports as Recorded

in the Foreign Trade Statistics

Goods by commodity category

	Exports			Imports			Balance		
	1st quarter 1999	Annual change		1st quarter 1999	Annual change		1st quarter 1999	Annual change	
	EUR million		%	EUR million		in	EUR million		
Foodstuffs Raw materials thereof: energy (SITC 3) Semimanufactured goods Manufactured goods Capital goods Consumer goods Miscellanous manufactured articles Total	650 629 102 2,208 10,593 3,563 7,030 32 14,113	+156 + 52 - 20 +100 +830 +222 +608 ×	+31.6 + 9.0 -16.5 + 4.7 + 8.5 + 6.7 + 9.5 × + 3.7	947 1,187 549 2,166 12,217 3,970 8,246 33	+ 197 - 71 - 135 + 111 +2,041 + 827 +1,214 × +1,322	+26.3 - 5.6 -19.7 + 5.4 +20.1 +26.3 +17.3 × + 8.7	- 297 - 558 - 448 + 43 -1,623 - 407 -1,216 - 0 -2,436	- 41 + 123 + 115 - 12 -1,211 - 605 - 606 × - 821	

Source: ÖSTAT.

¹) Central and Eastern European countries: Albania, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Slovenia, Ukraine, Yugoslavia...

	1st quarter		Annual change
	1998 ¹)	1999 ²)	•
	EUR million		%
Travel			
Receipts	3,176	3,191	+ 15 + 0.5
Expenses	1,678	1,598	- 80 - 4.8
Balance	1,498	1,593	+ 96 + 6.4
International passenger transport			
Receipts	339	350	+ 11 + 3.4
Expenses	168	140	- 29 -17.0
Balance	171	211	+ 40 +23.4
	in 1,000		%
Foreign tourist bednights	25,395	27,784	+2,389 + 9.4

Source: ÖSTAT, OeNB.

1) Revised data.
2) Provisional data.

Table 5

Foreign Tourist Bednights	by Count	ry of Ori	gin			
	1st quarter 1999					
	Overnight stays	Annual change		Share		
	in 1,000		%			
Germany Netherlands United Kingdom Belgium, Luxembourg Switzerland, Liechtenstein Sweden France Italy Spain Finland U.S.A. Japan Hungary Slovakia Czech Republic Poland Commonwealth of Independent States Slovenia Croatia Other countries	17,597 3,453 958 819 785 273 392 443 63 62 250 90 313 57 316 466 130 119 148 1,051	+1,521 + 355 + 104 + 75 - 8 + 9 - 28 + 42 + 15 + 6 + 35 + 9 + 72 + 6 + 54 + 88 - 15 + 6 + 54 + 54 + 54 + 6 + 35 + 9	+ 9.5 +11.5 +12.2 +10.1 - 0.9 + 3.5 - 6.6 +10.4 +31.5 +11.2 +16.5 +10.7 +30.0 +12.8 +20.6 +23.4 -10.4 + 5.7 + 3.6 + 3.6	63.3 12.4 3.4 2.9 2.8 1.0 1.4 1.6 0.2 0.2 0.9 0.3 1.1 0.2 1.1 1.7 0.5 0.4 0.5 3.8		
Total	27,784	+2,389	+ 9.4	100.0		
Memorandum item: Austrian tourists	7,775	+ 346	+ 4.7	×		
Source: ÖSTAT.						

Investment Income						
	1st quarter		Annual			
	1998 ¹)	1999 ²)	· change			
	EUR million					
Investment income receipts Investment income payments Net investment income ³)	2,113 2,388 – 275	2,160 2,906 - 747	+ 47 +518 -471			
Net direct investment income ³) Income on direct investment abroad Income on direct investment in Austria	<u> </u>	- 325 239 564	- 17 + 30 + 47			
Net portfolio investment income ³) Income on foreign equity securities Income on domestic equity securities Income on foreign debt securities Income on domestic debt securities Income on foreign money market instruments Income on domestic money market instruments Financial derivatives on interest rate contracts, net	- 207 25 17 506 838 3 26 + 141	- 499 30 36 680 1,196 14 41 + 51	-292 + 6 + 19 +173 +358 + 11 + 15 - 89			
Net other investment income ³) Income on other investment, assets ⁴) Income on other investment, liabilities	+ 239 1,229 989	+ 77 1,146 1,069	-162 - 83 + 80			

Source: OeNB.

¹) Revised data.

²) Provisional data.

³) Income on outward foreign investment less income on inward foreign investment.

⁴) Income on deposits, credits and reserve assets.

Financial Account			
(including change in reserve assets)	1998 ¹) EUR million, net	4th quarter 1998 ²)	1st quarter 1999 ²)
Financial account	+ 4,735	- 503	+ 1,098
Assets	-17,056	-2,996	-12,862
Liabilities	+21,791	+2,493	+13,961
Direct investment Direct investment abroad Equity capital Reinvested earnings Other capital Direct investment in Austria Equity capital Reinvested earnings Other capital	+ 2,866	+1,852	+ 320
	- 2,457	- 872	- 691
	- 1,903	- 780	- 500
	- 547	- 84	- 191
	- 7	- 8	- 0
	+ 5,323	+2,724	+ 1,011
	+ 3,844	+2,429	+ 344
	+ 1,300	+ 294	+ 669
	+ 180	+ 0	- 1
Portfolio investment Portfolio investment in foreign securities Equity securities Bonds and notes Money market instruments Portfolio investment in domestic securities Equity securities Bonds and notes Money market instruments	+ 4,583	+2,635	- 1,081
	-10,339	-1,069	- 7,618
	- 4,633	-1,796	- 1,508
	- 6,033	+ 446	- 5,872
	+ 327	+ 281	- 238
	+14,921	+3,704	+ 6,537
	+ 908	+ 169	+ 373
	+13,806	+3,225	+ 5,787
	+ 208	+ 310	+ 377
Other investment Assets Trade credits Loans Currency and deposits Other assets Liabilities Trade credits Loans Currency and deposits Other liabilities	+ 640	-1,580	+ 179
	- 989	+2,247	- 6,194
	+ 641	+ 94	+ 36
	- 4,808	-1,682	- 824
	+ 3,211	+3,755	- 4,359
	- 33	+ 80	- 1,047
	+ 1,629	-3,827	+ 6,372
	- 266	- 10	+ 116
	+ 60	- 243	+ 364
	+ 1,526	-3,675	+ 6,000
	+ 308	+ 102	- 108
Financial derivatives Assets Liabilities	- 439 - 356 - 83	<u> </u>	- 124 - 165 + 41
Reserve assets ³)	- 2,914	-3,150	+ 1,805

Source: OeNB.

1) Revised data.

⁾ Provisional data.

³) OeNB: Gold and foreign exchange, reserve position in the Fund, SDRs, etc.; increase: -/ decrease +.

Austria's International Investment Position in 1998¹)

I Cross-border Financial Investment - Key Facts

As at December 31, 1998, external assets amounted to ATS 2,318 billion (EUR 168.5 billion), having progressed by about 10% year on year. With an internationalization degree of 88% measured in terms of GDP, Austria's foreign investment activity is remarkably high by international standards. Other financial institutions, which have been expanding their foreign securities holdings, are increasingly becoming the most important domestic players in addition to banks. Their role as intermediaries for private and corporate investments abroad was strengthened steadily. Following the cue of globalization, Austria continued to step up direct investment abroad.

At the same reference date, Austria's external liabilities, having advanced by ATS 311 billion (approximately 12%) year on year, stood at ATS 2,824 billion (EUR 205.2 billion). These figures reflect a restructuring in the international investment position (IIP): The share of direct investment on the liabilities side augmented due to large-volume investments; non-residents' portfolio investments mounted as well, which contrasts with a reduction in the liabilities item covering deposits and loans. This shift is primarily attributable to sales to nonresidents of bonds and notes by the government. On December 31, 1998, roughly two fifths of government-issued securities outstanding were in the possession of nonresidents.

Around 65% of both the external assets and the external liabilities were accounted for by long-term investments. 65% of interest-bearing external assets were denominated in euro-area currencies; of the interest-bearing external liabilities some 50% fell into this currency group.

2 External Assets and Liabilities

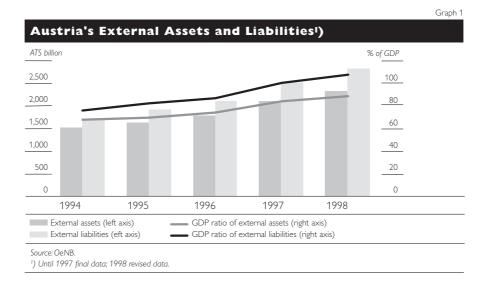
2.1 Global Data

As at the reference date of December 31, 1998, Austria's financial claims on the rest of the world (external assets) ran to about ATS 2,318 billion (EUR 168.5 billion) as valued at market prices. This figure corresponds to roughly 88% of GDP. In other words, residents boosted their investments abroad by around ATS 218 billion, or slightly more than 10%, in the year 1998. Since 1994 Austria's external assets rose by an average of over 13% per annum, while economic growth in nominal terms posted an annual increase of 4.5% on average. The 1998 expansion is attributable to residents having stepped up their acquisitions of foreign securities. Austrian investors thus augmented not only their holdings of debt securities, but also of foreign stocks and mutual funds shares. This development was favored by historically low deposit interest rates and — in the runup to the euro — greater diversification possibilities. Last, but not least, globalization left its mark on Austria's direct investments.

On the other hand, Austria's economy and financial market remained attractive to foreigners, not least thanks to the deregulation of some industries. In particular, inward direct investment and foreign-held domestic debt securities posted gains, driving up *external liabilities* by a total of

All euro figures given in this report are based on the irrevocable conversion rate determined on December 31, 1998 (EUR 1 = ATS 13.7603).

ATS 311 billion in 1998 to reach ATS 2,824 billion (EUR 205.2 billion) at the reference date. The growth of nonresidents' investments in Austria outpaced real-economic values, echoing the development on the assets side. While foreigners' assets in Austria measured 76% of GDP in 1994, four years later external liabilities for the first time – at 107% – surpassed GDP. In line with this development, cross-border assets and liabilities accelerated more quickly than exports and imports of goods and services. The share of the transaction-induced increase in external liabilities necessary for covering net lending/net borrowing shrank to 18% in 1998, which may be regarded as a decisive factor in the brisk advancement of financial investments. In light of the data available for the first quarter of 1999, a further acceleration of these cross-border financial assets and liabilities is in the offing.

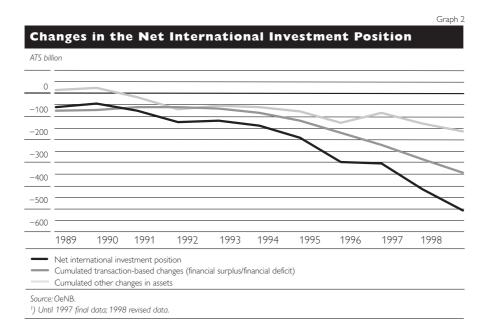


As both the level and the growth rate of Austria's external assets trailed the corresponding values pertaining to external liabilities, the deficit for Austria widened in terms of the level and the rate of change. The *deficit of the IIP* in the order of ATS 506 billion (EUR 36.8 billion) may be traced to two developments:

Taking into account transactions, coverage of the net lending/net borrowing item caused the external assets and liabilities to trend towards a deficit. The cumulated value necessary for coverage over the past ten years ran to roughly —ATS 344 billion (68%).

The changes in assets and liablities that were not brought about by transactions were derived either from revaluations or from changes in stock with no counterparts (examples for changes in this category: reclassification of institutional units or of assets and liabilities and changes in assets (normally losses) due to unilateral cancellation of debt). At the reference date of December 31, 1998, the value of changes not linked to transactions cumulated over the past ten years posted –ATS 162 billion.

Given the sizeable gross stocks of cross-border assets and liabilities, revaluations are subject to great sensitivity. Around 65% of residents' interest-bearing investment stocks abroad and 50% of Austria's foreign debt



were denominated in non-euro-area currencies at the reference date. Even though, at 20%, the U.S. dollar played a dominant role, exchange rate fluctuations canceled each other out, as the volumes of U.S. dollar stocks in both external assets and external liabilities were close to balance. The picture is totally different when it comes to claims and liabilities denominated in Swiss francs and Japanese yen. Their shares in cross-border assets were more or less negligible. On the liabilities side, however, these two currencies had greater significance, with their shares registering an average of 15% and close to 10%, respectively, over the past ten years. During that period the Swiss franc appreciated against the schilling by altogether 10%, and the Japanese yen even gained 20%. In addition to the exchange rates and amid rising stock prices and expanding gross values, remarkable price effects amplified the impact particularly on the liabilities side.

The analysis of 1998 developments produced the following results (see table 3):

The change in net external assets and liabilities was primarily (70%) due to transactions (ATS 65 billion). Cross-border transactions continued to advance both on the assets side (ATS 235 billion) and on the liabilities side (ATS 300 billion) on the corresponding 1997 figures. While other changes in assets slowed down the growth of foreign assets (especially from exchange rate adjustments and waivers of claims outstanding), Austria's external assets progressed not only through transactions, but also due to price effects, which primarily drove other adjustments. Changes not due to transactions, thus, ran to net ATS 27.5 billion.

2.2 Financial Interlinkage with the Euro Area

Austria's close-knit economic relations with the European Union and starting with stage Three of Economic and Monetary Union (EMU) — with the euro area are clearly reflected by data tracking cross-border financial investments. An analysis was made possible on the basis of the results (dated

December 31, 1997) on cross-border portfolio stocks the IMF had collected for the Coordinated Portfolio Investment Survey. These data lend themselves to a regional allocation of external liabilities from securities.

As at the reference date of December 31, 1997, Austrians held external assets (excluding reserve assets) vis-à-vis euro-area residents to the amount of some ATS 702 billion (see table 4), which, to put it differently, accounted for about 40% of the regionally allocated claims on foreigners. On the liabilities side, the liabilities regionally allocated to the euro area amounted to ATS 941 billion, which is tantamount to approximately 45% of all such liabilities. Real-economic cross-border deficits vis-à-vis the euro area, having led to a financial deficit vis-à-vis foreign countries, were probably financed from the euro area, as calculations showed that the bulk of the IIP deficit was attributable to the euro area. A similar result is to be expected for the December 31, 1998 cut-off date.

2.3 Term Structure of Cross-border Assets

In light of the rapid increase in cross-border assets on both the assets and liabilities side – from the Austrian point of view –, the "investment period" of such assets becomes ever more important as well (see table 5). In this respect, the share of short-term investment stocks in overall interest-bearing investments, which figure prominently in the investment positions as a whole, is a key indicator. As at December 31, 1998, the share of short-term foreign assets in Austria's total external assets amounted to 43%, when taking into account original maturities. The cut-off on the liabilities side posted a similarly high percentage as at the reference date. While it is true that the share of short-term investments has been trending downwards (1994: 53%), this trend still leaves room for a substantial reinvestment potential for 1999 to the tune of ATS 822 billion. When gauged by term to maturity, residents' external liabilities with a maturity of up to 12 months stood at ATS 1,098 billion (47%), driven primarily by the sizeable stocks outstanding recorded for short-term cross-border deposits of banks.

2.4 Sectoral Structure in Cross-border Assets and Liabilities

The following data shed light on the sectoral structure of external assets and liabilities (see table 6):

The *financial sector* inclusive of the OeNB, banks as well as other financial institutions (especially investment funds, insurance companies), with its strong foothold in international intermediary financial business, at close to 80%, accounted for the lion's share on the assets side (ATS 1,820 billion), of which slightly less than 50 percentage points were attributable to banks. Besides, the other financial institutions strengthened their position as foreign investors, mainly catering to households and corporates. Their component in net international investments stood at 15% on December 31, 1998.

Of the *OeNB's* external claims (ATS 325 billion) approximately ATS 311 billion were accounted for by reserve assets on December 31, 1998. As at that reference date, *banks* held external assets in the order of ATS 1,141 billion, the majority of which was traceable to deposits with nonresidents

(ATS 428 billion) and credit extended to foreigners (ATS 448 billion). Apart from direct investment, banks' portfolios comprised foreign securities which, marked-to-market, amounted to ATS 193 billion. The largest component is made up of bonds and notes (ATS 176 billion), of which 55% are denominated in euro area currencies. Altogether, about half of the banks' foreign investments was short-term in nature, with ATS 393 billion accounted for by overnight deposits and short-term investments at foreign banks.

Investment funds and insurance companies, key agents in the "other financial institutions" group, steadily acquired foreign securities over the past years to cover the issuance of mutual funds shares and insurance policies, which were predominantly purchased by domestic nonbanks. At the reference date of December 31, 1998, the securities portfolio of resident institutional investors amounted to ATS 334 billion, which is just slightly less than 50% of the entire investment stock of foreign-issued securities held by all Austrians. ATS 228 billion were held in bonds and notes. As with banks, the euro area currencies figured most prominently, with their share running to 60%. In light of the data available for the first quarter of 1999 and the spurt in investment in connection with the new tax provisions on private pension funds to take effect in 2000, the impact of which should, however, already be felt in 1999, the securities portfolio of the other financial institutions is expected to expand markedly. In addition to their securities stocks, insurance companies held foreign assets from direct investment (ATS 12 billion) and loans (ATS 10 billion).

The nonbank private sector (businesses and households) held foreign assets to the tune of some ATS 460 billion at the December 31, 1998 cut-off date. These cross-border assets were essentially composed of resident enterprises' direct investment (preliminary value of ATS 182 billion), of loans including trade credits in the order of ATS 100 billion as well as households' direct investments in foreign securities (valued at ATS 108 billion at market prices).

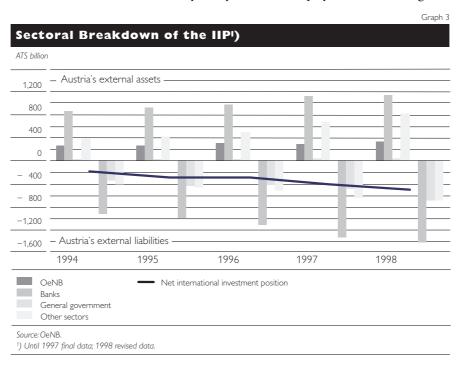
About 50% of Austria's external liabilities were accounted for by the domestic banking sector (ATS 1,430 billion), with ATS 910 billion stemming from short-term deposits and loans (of which ATS 646 billion from interbank deposits) and from money market paper held by nonresidents. Domestic banks registered the largest share in long-term investment by nonresidents from nonresidents' holdings of debt securities, with a market value of ATS 442 billion. The maturity of these securities comes to 8½ years on average, while their residual maturity averages 5 years, and slightly more than 40% of them are denominated in euro area currencies. Within 1999 about 12% of these securities come due, as they have a residual maturity of less than one year starting from the reporting date of December 31, 1998.

General government is typically a macroeconomic obligor. With its assets abroad running to ATS 36 billion, while its external liabilities were slightly more than ATS 692 billion, general government is, thus, the Austrian agent with the by far largest net foreign debt. The ATS 190 billion year-on-year gain may be ascribed to robust sales of bonds and notes to nonresident

buyers. The bulk of the total foreign debt incurred by general government is accounted for by debt securities, whose value at market prices stood at ATS 648 billion. ATS 611 billion were attributable to issues by the central government. Thus, around 42% of the outstanding volume in nominal terms is held by nonresidents.

Table Selected Benchmark Bonds Held by Nonresidents							
as at De	ecember 31, 19	99					
Maturity	ISIN	Name	Volume outstanding (principal)	Yield	Price	Duration	Held by nonresidents ¹) (principal)
/ears			ATS billion			years	ATS billion
30 10 5	AT0000383864 AT0000384227 AT0000384359	6.25% Anleihe 1997–2027/6 5% Anleihe 1998–2008/1 4.3% Anleihe 1998–2003/2	24.3 71.5 49.6	4.9764 4.0448 3.4940	119.2 107.1 103.3	14.774 7.210 4.135	1.2 25.0 11.7

Debt securities issued by the general government that were in the possession of nonresidents amounted to ATS 631 billion at market prices, with their average maturity just slightly above 10 years. The papers' residual maturity came to an average 6.2 years at the cut-off date. About 8.5% of the foreign-held securities outstanding as at December 31, 1998, mature in 1999. By nominal currency, 60% of foreign-held securities were issued in euro area currencies. Due to the rise in its liabilities, the general government's market share in Austria's external liabilities, which had amounted to 20% in 1997, reached over 24% in 1998. If general government continues to be Austria's largest net importer of capital, a role it assumed in 1998 and will very likely continue to play based on the figures



for the first quarter 1999, it would, even to a greater extent in the future, serve as a source for refinancing for other macroeconomic sectors. As a consequence, the financial sector could increasingly turn into a net exporter of capital.

Next to general government, the external liabilities traceable to other *financial institutions and nonfinancial corporations* totaled marginally more than ATS 700 billion. Foreigners held about ATS 90 billion worth of domestic mutual funds shares as valued at market prices, with a clear overweighting in pension funds. The lion's share was, however, attributable to direct investment on the liabilities side (preliminary 1998 figure: some ATS 270 billion), debt securities (in particular bonds and notes and quoted shares) with a market value of ATS 162 billion as well as liabilities derived from loans and trade credits of the corporate sector (in excess of ATS 100 billion). The latter's deficit as at December 31, 1998, ran to some ATS 210 billion. Foreign debt incurred by households is negligible.

2.5 Functional Categories in the IIP

At the close of 1998, Austrian investors' direct investments (equity inclusive of reinvested earnings plus foreign property and credits between affiliated enterprises) came to roughly ATS 224 billion, up approximately ATS 33 billion on the 1997 year-end figure. Inward direct investments stood at ATS 322 billion, which reinforced Austria's position as net direct investment importer (1997: ATS 57 billion; 1998: ATS 98 billion). Here, Telecom Italia's sizeable investment in Telekom Austria was a major factor.

On December 31, 1998, portfolio investment accounted for roughly 30% of Austrian holdings abroad (ATS 690 billion) and for a good 50% of the country's external liabilities (ATS 1,430 billion), thus leaving its mark on the structure of cross-border stocks (see table 6a). Compared with historical figures, the share of portfolio investments registered a continuous augmentation. Austrian investors held – with their interest growing – only 30% of equity securities (stocks: ATS 158 billion; mutual funds shares: ATS 44 billion), which was below the EU and euro area average. On the liabilities side, the sales of debt securities likewise played a dominant role, as the market value of external liabilities in this category came to no less than ATS 1,196 billion (87%) at the December 31, 1998 cut-off. This bears witness to domestic issuers' clear preference for debt securities, while in an international comparison the share of venture capital, i.e. stocks, is usually higher. Besides, the central government played a pivotal role in tapping the market, while the number of corporate bonds floated and snapped up by foreigners was hardly noteworthy.

Deposits, loans and other financial assets and liabilities subsumed under the other investment account are in excess of the ATS 1,000 billion mark both on the assets and on the liabilities side, even though their shares in cross-border assets and liabilities have been on a steady decline, as the rates of growth in this area trail those of portfolio investment. The banking sector clearly predominates other investment activity.

As at December 31, 1998, the investment stocks computed from financial derivatives were stripped out from portfolio investment, which is in

line with international requirements (IMF, ECB), and presented as a category of its own. The assets position amounted to ATS 8.7 billion, the liabilities figure stood at ATS 0.1 billion.

Reserve assets mounted to ATS 311 billion (+12%) in 1998, with foreign securities holdings (ATS 188 billion) figuring as the investment stock category with the greatest weight. The reporting year 1998 marks the end of the applicability of the national scheme, since the launch of Stage Three of Economic and Monetary Union ushered in conceptual changes¹).

As a result, Austrians' interest-bearing investment stocks abroad produced a creditor position on the order of ATS 1,880 billion, which contrasts with Austria's external liabilities in like instruments of ATS 2,330 billion. Net external liabilities, thus, advanced to ATS 450 billion (+ATS 125 billion), which is tantamount to slightly less than 40% of exports of goods and services as at December 31, 1998.

As of the reporting date of January 1, 1999, reserve assets comprise monetary gold, SDRs, the reserve position in the Fund as well as claims on non-euro area residents denominated in any currency other than euro. The table reflecting the transition from the national scheme to the new concept will be part of the presentation of the annual international investment position for the 1999 reporting period.

Annex

Table 1a

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End-of-period stocks	Assets		Liabilities		Net	
	1997 ¹) ATS billion	1998 ²)	1997 ¹)	1998²)	1997 ¹)	1998²)
Direct investment	•					
Equity capital and reinvested earnings	169.1	202.0	237.7	308.7	- 68.6	-106.7
Other capital	22.4	22.3	11.1	13.5	+ 11.3	+ 8.8
Total	191.5	224.3	248.8	322.2	- 57.3	- 97.9
Portfolio investment						
Equity securities	145.3	202.3	197.9	183.5	- 52.6	+ 18.8
Bonds and notes	406.3	480.1	988.5	1,195.7	-582.2	−715.e
Money market instruments	4.9	7.6	40.2	50.1	35.3	- 42.5
Total ´	556.5	690.0	1,226.6	1,429.3	-670.1	−739.3
Other investment						
Trade credits	58.4	49.6	46.7	43.0	+ 11.7	+ 6.6
Loans	451.4	504.0	110.2	116.9	+341.2	+387.
Monetary authorities	0.1	0.6	0.0	0.0	+ 0.1	+ 0.
General government	1.3	0.5	30.0	34.5	- 28.7	- 34.
Banks	421.4	448.2	26.1	28.1	+395.3	+420.
thereof long-term	319.5	354.1	19.2	18.5	300.3	+335.
Other sectors	28.7	54.7	54.1	54.3	- 25.4	+ 0.
Currency and deposits	482.6	447.6	838.7	868.5	356.1	−420 .
Monetary authorities	0.1	0.6	0.0	0.0	+ 0.1	+ 0.
General government	5.3	11.1	×	X	+ 5.3	+ 11.
Banks	468.5	428.5	838.7	868.5	-370.2	-440.
hereof short-term	434.9	397.8	790.8	827.8	-355.9	-430
Other sectors	8.7	7.4	X	X	+ 8.7	+ 7.
Other claims, other liabilities	79.5	82.7	41.9	44.0	+ 37.6	+ 38.
Monetary authorities	× 19.2	1.6	× 7.3	0.0 9.2	+ 0.0 + 11.8	+ 1. + 11.
General government Banks	19.2 40.5	20.7 40.9	7.3 2.7	9.2 5.0	+ 11.8 + 37.8	+ 11. 35.
Other sectors	19.8	19.5	31.8	29.8	+ 37.6 - 12.0	– 10.
Other sectors Total	1,071.9	1,083.9	1,037.4	1,072.4	+ 34.5	+ 11.
Financial derivatives	2.5	8.7	0.1	0.1	+ 2.4	+ 8.
Reserve assets						
Monetary gold ³)	29.2	46.9	×	×	+ 29.2	+ 46.
Special drawing rights	27.2	1.8	×	X	+ 27.2 + 2.1	+ 46. + 1.
Reserve position in the Fund	13.2	16.9	×	×	+ 13.2	+ 16.
Currency and deposits	117.9	58.0	×	×	+117.9	+ 58.
Reserve position in the EMI	39.3	0.0	×	×	+ 39.3	+ 0.
Other institutions	78.6	58.0	×	X	+ 78.6	+ 58.
Securities	114.9	187.8	×	×	+114.9	+187.
Other claims	0.0	0.0	×	×	+ 0.0	+ 0.
Total	277.4	311.4	0.0	0.0	+277.4	+311.
	2.099.8	2,318.3	2,512.9	2.824.0	-413.1	-505.7
External assets and liabilities	2,077.0	2,510.5	2,512.7	2,02 1.0	113.1	505.

Source: OeNB.

1) Final data.

2) Revised data.

3) Valued at market prices.

Table 1b

Direct investment Equity capital and reinvested earnings Other capital Total Portfolio investment Equity securities	1997 ¹) EUR million ³) 12,289 1,628 13,917	1998 ²) 14,680 1,621 16,301	1997 ¹) 17,274 807 18,081	1998 ²) 22,434 981	1997 ¹)	1998 ²)
Equity capital and reinvested earnings Other capital Total Portfolio investment Equity securities	12,289 1,628 13,917	1,621	807	,	1005	
Equity capital and reinvested earnings Other capital Total Portfolio investment Equity securities	1,628 13,917	1,621	807	,	1005	
Other capital Total Portfolio investment Equity securities	1,628 13,917	1,621	807	,	1005	
Total Portfolio investment Equity securities	13,917			921	- 4,985	- 7,754
Portfolio investment Equity securities		10,501	ואטאו	23,415	+ 821 - 4,164	+ 640 - 7,115
Equity securities			10,001	23,113	1,101	7,113
1 /	10 5 5 0	14.702	14.379	13.335	- 3.819	. 13//
Bonds and notes	10,559 29,527	34,890	71,837	86,895	- 3,819 -42,310	+ 1,366 -52,005
Bonds and notes Money market instruments	356	552	2,921	3,641	- 42,310 - 2,566	- 32,003 - 3,089
Total	40,442	50,144	89,137	103,871	-48,695	-53,727
Other investment						
Trade credits	4,242	3,605	3,391	3,125	+ 852	+ 480
Loans	32,807	36,627	8,009	8,495	+24,798	+28,132
Monetary authorities	6	44	0	0	+ 6	+ 44
General government	91	36	2,180	2,507	- 2,089	- 2,471
Banks	30,624	32,572	1,897	2,042	+28,728	+30,530
thereof long-term	23,219	25,733	1,395	1,344	+21,824	+24,389
Other sectors	2,086	3,975	3,932	3,946	- 1,846	+ 29
Currency and deposits	35,073	32,528	60,951	63,116	<u>-25,878</u>	-30,588
Monetary authorities	6	44	0	0	+ 6	+ 44
General government	388	807	X	X	+ 388	+ 807
Banks	34,047	31,140	60,951	63,116	-26,903	-31,976
thereof short-term	31,605	28,909	57,467	60,159	- 25,862	-31,249
Other sectors	632 5.779	538	3,043	x 3,198	+ 632 + 2,736	+ 538
Other claims, other liabilities Monetary authorities	3,779 ×	6,010 116	X	3,170	+ 2,736 + 0	+ 2,812 + 116
General government	1,393	1,504	533	669	+ 860	+ 836
Banks	2.946	2,972	196	363	+ 2,750	+ 2,609
Other sectors	1.441	1,417	2.314	2.166	- 874	- 749
Total	77,901	78,770	75,393	77,934	+ 2,508	+ 836
Financial derivatives	185	632	11	7	+ 174	+ 625
Reserve assets						
Monetary gold ⁴)	2,122	3,408	X	X	+ 2,122	+ 3,408
Special drawing rights	155	131	X	X	+ 155	+ 131
Reserve position in the Fund	961	1,228	X	X	+ 961	+ 1,228
Currency and deposits	8,568	4,215	X	X	+ 8,568	+ 4,215
Reserve position in the EMI	2,856	1245	×	×	+ 2,856	+ 0
Other institutions	5,712	4,215	X	X	+ 5,712	+ 4,215
Securities Other deines	8,350	13,648	×	×	+ 8,350	+13,648
Other claims Total	20,156	0 22,630	×	×	+ 0 +20,156	+ 0 +22,630
External assets and liabilities	152,601	168,477	182,622	205,228	-30,021	-36,751
Nonequity assets and liabilities	127,307	136,734	150,963	169,451	-23,656	-32,717

Final data.
 Revised data.

 ³) Irrevocable euro conversion rate: EUR 1 = ATS 13,7603.
 ⁴) Valued at market prices.

Table 2

Austria's Internationa	l Invest <u>m</u> e	nt Positi	on – Key P	ositions		
	End-of-period sto	cks				
	ATS billion	EUR million ¹)	% of GDP	% of exports of goods and services	% of external liabilities	% of nonequity liabilities
External assets 1994 ²) 1995 ²) 1996 ²) 1997 ²) 1998 ³)	1,513.9 1,617.6 1,786.1 2,099.8 2,318.3	110,019 117,553 129,801 152,601 168,477	67.6 69.5 74.0 83.5 88.2	180.5 179.5 184.6 197.2 202.5	88.7 84.5 85.5 83.6 82.1	× × × ×
External liabilities 1994 ²) 1995 ²) 1996 ²) 1997 ²) 1998 ³)	1,706.1 1,914.7 2,090.0 2,512.9 2,824.0	123,986 139,144 151,884 182,622 205,228	76.2 82.2 86.6 99.9 107.5	203.4 212.5 216.0 236.0 246.7	× × × ×	× × × ×
Nonequity assets 1994 ²) 1995 ²) 1996 ²) 1997 ²) 1998 ³)	1,362.9 1,446.2 1,574.8 1,751.8 1,881.5	99,042 105,100 114,448 127,307 136,734	60.9 62.1 65.2 69.7 71.6	162.5 160.5 162.7 164.5 164.4	× × × ×	89.5 85.8 88.0 84.3 80.7
Nonequity liabilities 1994 ²) 1995 ²) 1996 ²) 1997 ²) 1998 ³)	1,522.6 1,685.6 1,789.1 2,077.3 2,331.7	110,651 122,499 130,017 150,963 169,451	68.0 72.4 74.1 82.6 88.7	181.5 187.1 184.9 195.1 203.7	89.2 88.0 85.6 82.7 82.6	× × × ×
Net international investment position 1994 ²) 1995 ²) 1996 ²) 1997 ²) 1998 ³)	- 192.2 - 297.1 - 303.9 - 413.1 - 505.7	- 13,967 - 21,591 - 22,083 - 30,021 - 36,751	8.6 12.8 12.6 16.4 19.2	22.9 33.0 31.4 38.8 44.2	11.3 15.5 14.5 16.4 17.9	× × × ×
Net external debt 1994 ²) 1995 ²) 1996 ²) 1997 ²) 1998 ³)	- 159.7 - 239.4 - 214.2 - 325.5 - 450.2	- 11,609 - 17,399 - 15,570 - 23,656 - 32,717	7.1 10.3 8.9 12.9 17.1	19.0 26.6 22.1 30.6 39.3	× × × ×	10.5 14.2 12.0 15.7 19.3

³) Revised data.

Austria's IIP - Change in the Position							
	1997	1998 annual ch	1998				
	end-of-period stocks ¹)	total	transactions ³)	other changes in	n assets		end-of-period stocks ²)
				total	price and exchange rate changes	other adjustments	
	ATS billion	_					
Direct investment Portfolio investment Other investment Financial derivatives Reserve assets	- 57.3 -670.1 + 34.5 + 2.4 +277.4	-40.6 -69.2 -23.0 + 6.2 +34.1	-39.4 -63.1 - 8.8 + 6.0 +40.1	- 1.2 - 6.2 -14.2 + 0.1 - 6.1	-8.2 +1.1 +0.0	+ 2.0 -15.3 + 0.1	- 97.9 -739.3 + 11.5 + 8.6 +311.4
Net international investment position	-413.1	-92.6	-65.2 ⁴)	-27.5	×	×	-505.7

Source: OeNB.

Table 4

Austria's IIP - Regional Breakdown						
	1997 end-of-period stocks ¹)					
	total	vis-à-vis EU-15	vis-à-vis the euro area	vis-à-vis non-euro area residents	unclassified	
	ATS billion					
Direct investment	191.5	72.6	57.4	134.1	0.0	
Portfolio investment	556.5	339.8	280.2	276.3	0.0	
Other investment	1,071.9	496.7	363.9	708.0	0.0	
Financial derivatives	2.5	2.7	0.2	2.4	0.0	
Reserve assets	277.4	0.0	0.0	0.0	277.4	
External assets	2,099.8	911.8	701.7	1,120.8	277.4	
Direkt investment	248.8	171.4	163.7	85.1	0.0	
Portfolio investment ²)	1,226.6	375.7	302.0	454.3	470.2	
Other investment	1,037.4	614.3	474.8	562.6	0.0	
Financial derivatives	0.1	0.0	0.0	0.0	0.1	
External liabilities	2,512.9	1,161.4	940.5	1,102.1	470.4	
Net international investment position	- 413.1	- 249.6	-238.8	+ 18.7	- 193.0	

	1998 end-of-perio	od stock3)			
	total	vis-à-vis EU-15	vis-à-vis the euro area	vis-à-vis non-euro area residents	unclassified
	ATS billion				
Direct investment	224.3	88.6	61.8	162.5	0.0
Portfolio investment	690.0	437.2	366.8	323.2	0.0
Other investment	1,083.9	503.3	404.1	679.8	0.0
Financial derivatives	8.7	8.2	2.4	6.3	0.0
Reserve assets	311.4	0.0	0.0	0.0	311.4
External assets	2,318.3	1,037.2	835.0	1,171.9	311.4
Direkt investment	322.2	231.4	221.7	100.5	0.0
Portfolio investment	1,429.3	×	×	×	1,429.3
Other investment	1,072.4	637.0	472.3	600.1	0.0
Financial derivatives	0.1	0.0	0.0	0.0	0.1
External liabilities	2,824.0	X	X	X	1,429.4
Net international investment position	- 505.7	×	×	×	×
5 O A I D					

¹) Final data.

Revised data.
 Revised data.
 Revised transaction data are consistent with the balance of payments statistic. Sign convention: minus = decrease in assets/increase in liabilities.
 Errors and omissions on the order of ATS 5.8 billion account for the difference to the financial surplus/financial deficit.

³) Final data.
²) Based on the outcome of the IMF's Coordinated Portfolio Investment Surveys (CPIS) as at the reporting date of December 31, 1997, it is possible to analyze the regional breakdown of external liabilities (domestic securities held by nonresidents). The data of the individual creditor countries do not exactly add up to the liabilities total, with the "unclassified" item covering the difference.

3) Revised data.

Table 5

Austria's IIP - Maturity Bre	akdown (Or	iginal Ma	turities)					
	1997 ¹)	1997 ¹)			1998 ²)			
	total	short-term	long-term	total	short-term	long-term		
	End-of-period st	ocks in ATS billion						
Direct investment	191.5	0.0	191.5	224.3	0.0	224.3		
Portfolio investment	556.5	4.9	551.6	690.0	7.6	682.4		
Other investment	1,071.9	731.0	340.9	1,083.9	695.7	388.2		
Financial derivatives	2.5	2.5	0.0	8.7	8.7	0.0		
Reserve assets	277.4	142.5	134.9	311.4	109.7	201.7		
External assets	2,099.8	881.0	1,218.9	2,318.3	821.8	1,496.5		
Direct investment	248.8	0.0	248.8	322.2	0.0	322.2		
Portfolio investment	1.226.6	40.2	1.186.4	1.429.3	50.1	1,379.2		
Other investment	1.037.4	901.4	136.0	1.072.4	934.2	138.2		
Financial derivatives	0.1	0.1	0.0	0.1	0.1	0.0		
External liabilities	2,512.9	941.7	1,571.2	2,824.0	984.4	1,839.6		
Net international investment position	- 413.1	- 60.8	- 352.3	- 505.7	-162.6	- 343.1		
	Maturity bands i	in % of total						
Direct investment	100.0	0.0	100.0	100.0	0.0	100.0		
Portfolio investment	100.0	0.9	99.1	100.0	1.1	98.9		
Other investment	100.0	68.2	31.8	100.0	64.2	35.8		
Financial derivatives	100.0	100.0	0.0	100.0	100.0	0.0		
Reserve assets	100.0	51.4	48.6	100.0	35.2	64.8		
External assets	100.0	42.0	58.0	100.0	35.4	64.6		
Direct investment	100.0	0.0	100.0	100.0	0.0	100.0		
Portfolio investment	100.0	3.3	96.7	100.0	3.5	96.5		
Other investment	100.0	86.9	13.1	100.0	87.1	12.9		
Financial derivatives	100.0	100.0	0.0	100.0	100.0	0.0		
External liabilities	100.0	37.5	62.5	100.0	34.9	65.1		
Net international investment position	100.0	14.7	85.3	100.0	32.2	67.8		

Source: OeNB.

¹) Final data.

²) Revised data.

Austria's IIP - Sectoral Breakdown					
	1994 ¹)	1995 ¹)	1996 ¹)	1997 ¹)	1998 ²)
	End-of-period stock	s in ATS billion			
External assets and liabilities OeNB General government Banks Other sectors	261.2 15.1 857.8 379.8	262.5 14.9 928.5 411.6	293.2 18.0 980.9 494.0	286.1 30.9 1,117.1 665.7	325.4 36.1 1,140.9 815.9
Other sectors Other financial institutions Nonfinancial corporations Households External assets	× × × × 1,513.9	× × × × 1,617.6	× × × 1,786.1	254.0 305.9 105.8 2,099.8	355.4 345.2 115.3 2,318.3
OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporatiions Households External liabilities	0.2 351.7 941.6 412.7 × × × 1,706.1	0.2 442.8 1,000.2 471.5 × × × 1,914.7	0.1 436.6 1,125.4 527.9 × × × 2,090.0	0.0 502.6 1,352.2 658.2 133.7 516.7 7.8 2,512.9	0.0 692.6 1,430.9 700.5 139.8 559.1 1.6 2,824.0
OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporations Households Net international investment position	+ 261.0 - 336.6 - 83.8 - 32.9 × × × - 192.2	+ 262.3 - 427.8 - 71.7 - 59.8 × × - 297.1	+ 293.2 - 418.6 - 144.5 - 33.9 × × - 303.9	+ 286.1 - 471.7 - 235.0 + 7.5 + 120.4 - 210.9 + 98.0 - 413.1	+ 325.4 - 656.5 - 290.0 + 115.4 + 215.6 - 213.9 + 113.7 - 505.7
Nonequity assets and liabilities OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporations Households Nonequity assets	255.4 8.1 842.6 256.8 × × 1,362.9	255.6 5.0 911.7 273.9 × × × 1,446.2	284.4 5.2 961.6 323.6 × × 1,574.8	265.2 14.7 1,083.1 392.6 178.0 159.2 55.4 1,751.8	296.0 21.7 1,102.5 461.2 239.2 169.1 52.9 1,881.5
OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporations Households Nonequity liabilities	0.2 351.7 930.0 240.7 × × × 1,522.6	0.2 442.8 987.6 255.1 × × × 1,685.6	0.1 436.6 1,103.9 248.5 × × × 1,789.1	0.0 520.3 1,305.7 260.2 8.1 244.3 7.8 2,077.3	0.0 692.6 1,372.0 267.1 9.0 257.1 0.9 2,331.7
OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporatiions Households Net external debt	+ 255.2 - 343.6 - 87.4 + 16.1 × × × - 159.7	+ 255.4 - 437.7 - 75.9 + 18.8 × × - 239.4	+ 284.3 - 431.4 - 142.3 + 75.1 × × × - 214.2	+ 265.2 - 505.6 - 222.6 + 132.4 + 170.0 - 85.2 + 47.6 - 325.5	+ 296.0 - 670.8 - 269.5 + 194.2 + 230.1 - 88.0 + 52.0 - 450.2

Source: OeNB.

1) Final data.

²) Revised data.

Table 7

Portfolio Investmen	t in 1998 ¹) -	Sectoral	Breakdow	n		
	Total	Equity securities			Bonds and notes	Money market instruments
		total	shares	mutual funds shares		insu uments
	End-of-period stoo	ks in ATS billion				
OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporations Households Portfolio investment, assets	11.9 3.5 193.5 481.3 333.9 40.0 107.4 690.1	18.1	0.0 0.0 10.3 147.4 99.0 14.4 33.9 157.7	11.9 0.1 1.9 30.7 5.4 3.6 21.7 44.7	0.0 3.3 176.2 300.7 228.0 21.4 51.3 480.1	0.0 0.0 5.1 2.5 1.5 0.5 0.5 7.6
OeNB General government Banks Other sectors Other financial institutions Nonfinancial corporations Households Portfolio investment, liabilities	0.0 648.3 507.3 273.7 107.4 166.4 0.0 1,429.3	147.8 102.0 45.8 0.0	0.0 0.0 35.7 57.0 11.2 45.8 0.0	0.0 0.0 0.0 90.8 90.8 0.0 0.0	0.0 632.0 442.5 121.1 5.3 115.8 0.0 1,195.7	0.0 16.3 29.0 4.8 0.0 4.8 0.0 50.1

Source: OeNB.

1) Revised data.

Bridging Table to the Results of the 1997 Direct Investment Survey

	1997 ¹)
	End-of-period stocks in ATS billion
Assets Inward direct investment (IIP) less: other capitall (corresponds to the net creditor position according to the Survey table 1/outward direct investment ²)) Equity capital (IIP) less: Property abroad Reinvested profit in 1997	191.5 22.4 169.1 14.7 8.6
Equity capital according to the Survey table 1/outward direct investment ²)	145.8
Liabilities Outward direct investment (IIP) Less: other capital	248.8
(corresponds to the net creditor position according to the Survey table 1/inward direct investment ³)) Equity capital (IIP) less:	<u>11.1</u> 237.7
Property in Austria Reinvested profit in 1997	2.9 24.4
Equity capital according to the Survey table 1/inward direct investment ³)	210.4

¹⁾ Final data.
2) See Direct Investment Survey, supplementary to the German-language OeNB statistical monthly "Statistisches Monatsheft" 6/1999, table 1/outward direct investment – Austrian direct investment by capital structure and employees.

³⁾ See Direct Investment Survey, supplementary to the German-language OeNB statistical monthly "Statistisches Monatsheft" 6/1999, table 1/inward direct investment – foreign direct investment by capital structure and employees.

Results in Line with the Portfolio Position in 19981) (old concept) Portfolio position $\mathsf{IIP}\:\mathsf{figures}^2)$ Less interest payments figures³) due in line with the accruals principle End-of-period stocks in ATS billion **Assets** 469.5 480.1 10.6 Bonds and notes Banks including the OeNB 176.2 304.0 2.7 8.0 173.5 296.0 Nonbanks Money market instruments 5.1 2.6 5.0 2.4 Banks including the OeNB 0.1 Nonbanks Liabilities Bonds and notes 1,195.7 1,170.2 442.5 Banks 6.1 436.4 632.0 18.7 613.3 General government Private issuers (other sectors) 121.1 0.6 120.5 0.1 50.0 Money market instruments 29.0 0.0 29.0 General government 16.3 0.0 16.3 Private issuers (other sectors) 4.8 0.1 4.7

Source: OeNB.

¹⁾ Revised data.

In line with table 7.1.0 of the German-language OeNB statistical monthly "Statistisches Monatsheft"; see also table 7 in this annex.
 Old concept in line with table 7.1.1 of the German-language OeNB statistical monthly "Statistisches Monatsheft."

$S \quad T \quad u \quad D \quad I \quad E \quad S$

Effects of the Euro on the Stability of Austrian Banks

Georg Hubmer

I Introduction

The sweeping changes evolving in the banking landscape are manifestations of a number of trends, with forces such as globalization, internationalization, financial liberalization and technological change at work. These developments have not bypassed the Austrian financial markets, and the changes have in fact gained added momentum through European Monetary Union (EMU). EMU is, of course, not the underlying force of change. Much rather, the changeover to the euro is a catalyst for change that has accelerated – reinforced – existing trends. Not least because the protective barriers that the euro's constituent currencies had built around the various national markets have been dismantled, the euro has had a significant impact on financial markets. But the single currency is not going to trigger any new developments; it merely strenghtens already prevailing trends. ¹)

Now that the euro has been introduced technically without having caused major disruptions, its effects on the relevant euro markets are slowly becoming apparent:

- Development of an integrated liquid euro money market: In Stage Three of EMU, integration of the national money markets into a deeper and more liquid euro money market will proceed quickly. Money market rates will converge completely, since monetary policy transactions carry uniform interest rates within the boundaries of the euro area, namely those imposed by the ECB. New reference rates apply for the euro market, instead of the interbank rates used previously. The forces of liquidity supply and demand no longer play out within the various national banking systems, but on the highly liquid euro money market. Competition seems set to increase, with the effect that a few big credit institutions will come to dominate money market activities. Austrian banks, having lost their former trading monopoly for the schilling, thus no longer enjoy the competitive advantages they used to have as a specialist on the domestic market. Conversely, a broad range of euro money market instruments has become available to them, which will further increase efficiency.
- Development of a liquid bond market in euros: The euro-area capital market will be more liquid than the EU's biggest national bond markets, given the larger number of investors and issuers operating in the same currency, and it will have the critical mass that it takes for a market to gain in depth.²) It will be less fragmented, but some fragmentation is likely to remain. While currency-specific influence factors disappear, country-specific factors, i.e. issuer-related criteria, will play a bigger role than in the past. The liquid euro-denominated bond market will open up additional channels of investment and thus new diversification avenues for banks and at the same time make other financial markets more easily accessible. The single currency will facilitate the issuance of

Given the range of factors influencing financial intermediation, such as single market effects, globalization trends and technological innovations, and given the dynamic interaction between the forces for change, it is difficult to isolate the euro-related effects.

² See e.g. Eberstadt (1999) among the newer literature.

Austrian securities through foreign institutions; Austrian banks will, by contrast, tend to launch fewer securities. A number of major banks can be expected to dominate the bond issuance business. The market for corporate bonds and the securitization of credit will grow.

Those developments change the framework conditions under which financial market participants operate. As banks are crucial intermediaries, they are particularly challenged to adequately respond to those developments and to reconsider their strategies accordingly.

This study 1) gives an overview of significant developments in the banking business that have been induced by the introduction of the euro, offering comparisons with other EU countries, and moves on to identify potential areas of risk or threats to the profit potential of Austrian banks. Since some financial market participants or business areas have been impacted more strongly than others by the euro changeover, the study singles out the areas with the highest exposure to the euro and the biggest significance for the systemic stability of the Austrian financial markets. The paper is structured as follows. Section 2 highlights basic implications of the introduction of the euro for the risk profile of Austrian banks. Section 3 describes effects of EMU on the banking structure, Section 4 the strategic responses of banks. With a view to keeping the assessment of the euro impact and of the developments of the various risk categories close to the pulse of the market, the study is partly based on interviews with representatives of Austrian banks.

2 Effects of the Euro on the Risk Profile of Austrian Banks

Following the introduction of the euro, the type and intensity of the risk exposure of Austrian credit institutions and other financial market participants has changed. How strong the effects of the various risks are and in how far they can change the *risk profile of banks* depends, among other things, on the following factors:

- The developments on the markets themselves: If a zone of stable macroeconomic conditions with low inflation and low interest rates can be established owing to the merits of EMU, this will have a stabilizing effect on the development of the European financial markets.
- The ability of banks to develop new business orientations in response to newly emerging markets and changes on existing markets: The cards have been reshuffled with the advent of the euro, prompting new structural and strategic considerations, also for Austrian banks. For instance, shareholders' pressure on banks to deliver better shareholder value might compell banks to shift their business towards more profitable, albeit riskier business.
- The findings of this study are derived from an unpublished OeNB study entitled "Analysis of financial market stability with a view to the implications of the euro for Austria" (October 1998). See also ECB (1999), Hubmer (1997) and the paper "The Austrian Banks at the Beginning of Monetary Union" in this issue of Focus on Austria.

The assessment of the potential risk situation may be qualified as follows: The direct effects of the euro on the risk profile of banks (e.g. a decline in revenues, in particular in trading revenues from foreign exchange transactions, bond trading revenues and payment business receipts) can be pinned down more easily than indirect effects triggered by strategic measures taken by banks in response to the euro. Generally it may be assumed that banks tend to expose themselves to new risks as they enter new business fields. Expanding existing business areas, opening up new business fields and creating innovative products will in any case be strategies for adaptation banks may choose with a view to surviving under the fiercer competition in the euro area.

3 Effects of the Euro on Banking Structure

3.1 Increasing Disintermediation

Disintermediation¹) is a major trend shaping the banking and financial system of the EU and is likely to intensify in the future given the greater depth and liquidity of securities markets in EMU. The move of numerous major corporations to set up full-fledged inhouse treasury departments which also assume banking functions (industrial clearing)²) reinforces disintermediation, as does the shift in customer preferences away from traditional bank deposits to investment funds.

Owing to demographic changes (aging population), social changes (more wealthy private clients) and tax breaks for some of their products, institutional investors are expected to continue to grow, which will continue to tilt the balance away from ordinary bank deposits to other forms of saving. The migration of funds deposited with domestic credit institutions towards higher-yield financial instruments, in particular the marked increase of mutual fund shares over the past few years, points to a growing inclination of banks' retail customers to seek higher returns through alternative forms of investment.

With regard to the *relative importance of financial intermediaries*, banks continue to have by far the largest share of total intermediated claims in the EU Member States (measured as a percentage of GDP). In Austria, bank-intermediated credit corresponds to 238% of GDP (1998: 252%), which is close to the EU average of 244%. The relative importance of credit institutions has, however, decreased slightly as other financial institutions — in particular institutional investors — have become more serious competitors. Investment funds' assets under management as a percentage of GDP rose from 2% of GDP in 1985 to 23% of GDP in 1997 (1998: 28%). Over the same period the assets of life insurance companies and pension funds rose from 12 to 26% of GDP (see table 1).

¹ Banking disintermediation is understood as the movement of services or functions from the banking business towards other financial or nonfinancial intermediaries, economic agents or markets.

² The increasing substitution of bank services by inhouse banking activities in production companies (above all cash management) causes longer-term liabilities vis-à-vis banks to shrink (as big companies increasingly retreat from borrowing from banks and tap financial markets directly).

Table 1

Relative Importance of Financial Intermediaries

in the EU Countries 1997

	Assets		
	credit institutions	investment funds	insurance and pension funds
	% of GDP		
1. Luxembourg 2. United Kingdom 3. Ireland 4. Belgium 5. Germany 6. France 7. Austria 8. Netherlands 9. Denmark 10. Portugal 11. Sweden 12. Spain 13. Italy 14. Finland 15. Greece	3,696 328 299 294 256 245 238 227 220 220 213 183 155 113	2,771 70 32 25 23 19 8 26 21 35 19 3 3	 31 37 45 26 146 69 31 104 22 19 42
Source: ECB, 1999.			

European banks have responded to those developments with the creation of separate financial services groups, either through seeking equity participation in nonbank intermediaries (financial conglomerates, bank-assurance) or by entering into cooperation agreements. The importance of financial conglomerates and the trend to accommodate "one stop shopping" by offering a virtually complete range of products seem poised to intensify owing to the euro. The question arises, however, what role banks will play in the long term in those conglomerates.

While delivering bundles of services will continue to be a domain of banks, specific services might in the future be produced more efficiently by specialized financial institutions. Such a development would put an end to the widespread practice of cross-subsidization between individual banking activities

Disintermediation is under way also in Austria, but to date it has been less pronounced here than in other EU countries, since the Austrian universal banking concept allows credit institutions to set up their own investment fund subsidiaries and to exploit bigger synergies through cooperating with insurance companies, to diversify risks more, and to adapt more easily to shifts in demand. What is more, direct finance in capital markets is rather insignificant, since bank-intermediated debt continues to be the preferred instrument of corporate finance. Commercial papers and corporate bonds are, however, going to become more serious competitors for bank loans, and the euro will additionally boost this market segment.

1 See e.g. Viermetz (1998).

Number of credit institutions		Branches per 100,000 inhabitant	S	Bank employees per 100,00	0 inhabitan
1. Germany	3,578	1. Spain	97	1. Luxembourg	4,575
2. France	1,299	2. Luxembourg	75	2. Austria	943
3. Austria	995	3. Belgium	72	3. Germany	916
4. Italy	935	4. Austria	58	4. United Kingdom	907
5. United Kingdom	551	5. Germany	57	5. Denmark	810
6. Spain	416	6. France	44	6. Belgium	757
7. Finland	371	7. Italy	44	7. Netherlands	719
8. Sweden	242	8. Netherlands	44	8. France	689
9. Portugal	235	9. Denmark	42	9. Ireland	629
10. Luxembourg	215	10. Portugal	41	10. Spain	629
11. Belgium	134	11. Finland	32	11. Italy	600
12. Denmark	100	12. Ireland	32	12. Portugal	597
13. Netherlands	90	13. United Kingdom	32	13. Greece	525
14. Ireland	70	14. Sweden	29	14. Finland	521
15. Greece	54	15. Greece	24	15. Sweden	493

3.2 Structural Adaptation through Reduction of Excess Capacity

In terms of banking capacity Austria ranks third within the EU, behind Germany and France, boasting more than ten times as many *standalone credit institutions* as the Netherlands. Of the 9,285 credit institutions established in the EU in 1997, thus, nearly 11% were Austrian institutions, which documents the comparatively high ratio of standalone banks in Austria. Also with regard to branch networks and staffing levels, Austrian banks rank quite high among EU credit institutions. In terms of branches per 100,000 inhabitants, only Spain, Luxembourg and Belgium top Austria. Given the high degree of intermediation and the dense network of branches, the number of bank employees per 100,000 inhabitants is, consequently, higher in Austria than in all other EU countries except Luxembourg (see table 2).

An overall reduction in the number of credit institutions is to be observed at the EU level in the period between 1985 and 1997. The decrease of Austrian credit institutions over that time (from 1,241 to 995 banks; –20%) somewhat trails the average EU-wide drop of –24% (from 12,256 to 9,285 banks)¹), except in the most recent years when the national decrease was in lockstep with the EU downtrend. With regard to the density of branches, an 8% increase in Austria contrasts with a 6% drop in the EU on average in the years from 1985 to 1997. With a slight fall in the number of branches both in Austria and in the EU average, developments were, again, in sync in 1996 and 1997.

The comparatively large number of standalone credit institutions in Austria (and also in Germany) can be ascribed to the sectoral organization of the banking system. Of the 971 credit institutions established in Austria at the end of 1998, more than 80% belonged to one of the three multi-tier sectors of the domestic banking industry (credit cooperatives affiliated with

In the Scandinavian countries, the banking crises have triggered major structural changes. For instance, in Finland the number of credit institutions shrank from 500 to 300, and the number of branches fell from 2,800 to 1,700 between 1990 and 1996. Concomitantly, the number of bank employees almost halved—from 50,000 to 28,000.

the Raiffeisen sector or the Volksbank sector; savings banks sector). Cooperation among the multi-tier sector banks is very close (e.g. in IT, payment services, internal auditing, training, marketing), which results in synergies¹) that otherwise only major banks with a large network of subsidiaries can exploit. Considering that in many areas of operations the string of banks affiliated with the three multi-tier systems de facto act like a few big banks, the number of banks that operate independently and compete for business is actually below 200.

The downtrend in the number of bank outlets is an indicator for *excess capacity* in the banking sector in most EU countries. The disappearance of currency risk and the concomitant crumbling of (partly no more than psychological) barriers to the entry into foreign markets point to a further heating up of competition. Since markets are no longer divided by currencies, certain obstacles to competition have disappeared (e.g. crossborder transaction costs, currency matching provisions). Those developments will make the restructuring of the national banking systems and the reduction of excess capacity an even more pressing order.

The pressure on Austrian banks to downsize the network of branches is, thus, poised to grow. While overall the number of credit institutions and bank outlets has been shrinking slowly, it is still high in absolute terms by EU standards. This means that Austrian banks will have to intensify their consolidation efforts.

3.3 Changes in Delivering Bank Services

The tight network of subsidiaries of Austrian banks and the high loyalty of customers to their bank fostered by personal contacts and high-quality counseling are one of the reasons why the deposit and loan business is so firmly rooted at Austrian banks. The impact of the euro on the myriad of small Austrian institutions is likely to be rather limited, since owing to the regional orientation of their business and the traditional reliance on relationship banking, the local retail business should remain comparatively well protected in the medium term. However, competition by other financial service companies and nonbanks is likely to increase and thus put pressure on the "classic" subsidiary structure.

Above all technological developments will foster change. New delivery channels for financial products, such as direct banking or Internet banking, are poised to play a bigger role. Electronic distribution channels also enable nondomestic institutions to gain market presence more quickly and more efficiently. The single currency acts as a catalyst in this respect, helping remote banking gain ground thanks to the freedom of services, which will also benefit smaller local banks. The increasing use of electronic media (the Internet in particular) enhances price transparency, as the euro does, which makes it easier for bank customers to compare the offers of credit institutions across Europe. Better access to information about terms and pricing will heat up competition and reinforce pressures on performance.

The sectoral affiliation and the intra-sectoral support mechanisms are, incidentally, major pillars of the systemic stability of the banking system.

In the longer term, the *traditional structuring of the banking network* will become less important as relationship banking continues to lose ground, and information trading will be decoupled more and more from the actual provision of services (e.g. maintenance of a current account). The latter will be offered as a simple service in automated service outlets, while the subsidiaries will score through complex counseling, as centers offering competent professional services.

The growing significance of information technology, which may i.a. necessitate high investments into technical equipment and confronts banks with possible security hazards (in particular regarding Internet banking), will increase the operational risk of banks, just like the increased use of electronic payment means.

3.4 Growing Demand for Shareholder Value

The euro enhances market transparency and thus makes it easier to compare different financial services. For banks this means that they will need to disclose more information and that pressure on pricing and on the quality of service rises. Unique selling propositions and specific product advantages are thus becoming more important than ever. As product innovations become ever more complex, it must be ensured that costs are adequately covered, i.a. by standardizing modular products as much as possible. Against the background of shrinking prices and rising profit requirements, Austrian banks will have to keep cutting costs.

Just like other industries, credit institutions are also faced with the demands of owners and markets to increase the return on capital. How much pressure is brought to bear with a view to enhancing shareholder value very much depends on the ownership structure. Institutional investors, private major shareholders and foreign investors tend to demand an improvement of profitability more vehemently than the shareholders of publicly or mutually owned corporations.

The past few years have seen a shift in the *ownership structure* of Austrian banks towards owners that put a stronger emphasis on profitability (privatization, participation of foreign investors, going public of savings banks). Conversely, direct state ownership, which has traditionally been high, has been cut back markedly. Since the end of 1992, the government's stake in the major Austrian banks has fallen from 23 to 7%. In turn, the free float has more than doubled from 11 to 26% of the biggest banks' total capital, as has the amount of shares held by nonresidents (now standing at 7%).

The increasing profit awareness of shareholders is going to shape the Austrian banking business in the future. As a case in point, there are plans to put the remaining government stakes in the Postal Savings Bank up for privatization. Likewise, the sale of the states' shares in the mortgage banks and of stakes of the local authorities in savings banks will further reduce public bank ownership.

When the bank managers are put under obligation by their owners to maximize shareholder value, chances are that revenue losses due to price competition for financial services will not cut into profit but instead translate into cost cutting measures. Furthermore, the future of banks' substantial industrial and commercial holdings will depend a lot on what they contribute to the bottom line.

3.5 Increasing Pressure on Profitability

The *risk-taking capacity* of banks depends above all on their equity ratio and their profitability¹). At 14%, the equity ratio of Austrian banks is currently considerably higher than the 8% required by the EU. Especially with a view to the new challenges and the fiercer competition within the euro area, the safety margin that sufficient amounts of capital set aside against loans provide gives Austrian banks somewhat of a competitive edge.

By contrast, the high intensity of competition in the Austrian market and the high branch density weigh down on Austrian banks and are among the reasons why domestic credit institutions are not among the most profitable in the EU; the profitability margins of Austrian banks — in particular those of the major banks — are in fact below the EU average.²) The share of the top ten Austrian banks of the total annual surplus, which was 47% at the end of 1998, is markedly below their 60% share of total assets.

Against the background of the introduction of the euro, Austrian banks have incurred *considerable changeover costs* and *revenue losses* in several profitable business areas, above all in foreign exchange trading. Given the disappearance of trade in schilling and other euro area currencies and of the corresponding derivative operations, banks must expect to post markedly lower revenues from foreign exchange trading. Austrian banks stand to lose roughly ATS 6 billion in this field of business, which corresponds to approximately 4% of operating profit.³) Banks involved more actively in this trading segment will feel the pinch more strongly than banks which already in the past focused more strongly on trade with non-euro area currencies. Banks established in border regions next to other EU countries and in tourist areas will be hardest hit by the disappearance of foreign exchange business

Austrian banks will try to make up for lower commission income from foreign exchange trading as much as possible i.a. through stepping up their involvement in non-EMU markets. Thus, the volume of foreign exchange transactions in new currencies is expected to rise. Since those currencies are likely to be more volatile, this may offset the reduction in banks' risk

- 1 See e.g. the analysis on the development of productivity and efficiency in Kirmße and Grimmer (1999).
- The analysis of banking profitability in the EU is based on the data published in the ECB report "Possible effects of EMU on the EU banking system in the medium to long term" (February 1999) as well as on the OECD's most recent bank profitability data for 1996 or 1997 (as available). Because of the different computing methods and the divergent samples the data do not allow direct comparisons with the OeNB's quarterly data.
- 3 Approximately 70% of all foreign exchange transactions are with euro area currencies (bureaux de change). In the FX trading business, almost 20% of the FX turnover are derived from trading in schilling/euro area currencies. Banks will probably continue to lose revenues from trading with third currencies, but those revenue losses are hard to estimate given the lack of data. Approximately 90% of all derivative transactions are interest rate and exchange rate contracts, a considerable amount of which are set to disappear. In this respect also see the global BIS Survey of Foreign Exchange and Derivatives Market Activity conducted in 1995 and 1998.

exposure which was one of the benefits of EMU (disappearance of foreign exchange risk within the euro area).

The net interest income (expressed as a percentage of total assets) earned by Austrian banks is comparatively low by EU standards, which can above all be ascribed to the low gross interest income. In all EU Member States interest income is by far the single most important earnings component; its share of the total operating profit is tending to shrink, however. By contrast, the share of noninterest-related business in the income total rose from almost 26% in 1990 to above 34% in 1997 (EU average). The comparatively high significance of noninterest-related business in Austria is also evident from a comparison of EU results: In 1997 the share of noninterest-related income of total income was 41.0% (see table 3).

In Austrian banking, above all services such as securities investment and asset management boomed in the past few years, which more than offset the lower interest income. The introduction of the euro seems poised to reinforce this tendency.

ab	able

Relative Importance of Noninterest-Related Business for 1997						
Noninterest income in % of t	otal income					
1. Greece ¹) 2. France 3. Sweden 4. Finland 5. Luxembourg	55.5 53.2 48.6 45.6 44.1	 6. Austria 7. United Kingdom 8. Belgium 9. Netherlands¹) 10. Ireland 	41.0 38.8 37.1 35.9 33.8	13. Spain	33.4 31.8 29.2 29.0 21.0	
Source: ECB, 1999. ¹) 1996.						

On an EU average, operating expenditure amounts to roughly 65% of operating income. As shown in table 4, the cost-income ratio is somewhat more favorable in Luxembourg, Portugal, Ireland and Denmark with values below 60%. At Austrian banks, by contrast, operating expenses siphon off almost 69% of operating income, which puts Austria in the top end of the scale (1998: 68%).

Table

Operating expenditure in % of	operating inc	ome			
1. Luxembourg	43.3	6. Spain	61.4	11. Greece	68.1
2. Portugal	57.7	7. Germany ¹)	63.8	12. France	68.7
3. Ireland	58.3	8. Belgium	63.9	13. Italy	69.0
4. Denmark	59.2	9. Sweden	64.0	14. Austria	69.1
5. United Kingdom	60.9	10. Netherlands ¹)	67.3	15. Finland	73.4

An important indicator for assessing the profitability of banks is the return on equity (annual surplus as a percentage of equity), which is highly divergent for EU Member States, with Italy (3.4%) and France (7.7%) at the lower end, and Luxembourg (23.0%) and the United Kingdom (26.4%) at the upper end of the spectrum. At 9.6%, Austria is somewhat below the average of 12.1%. In terms of return on assets (annual surplus as a

				 Table
Profitability i	n the	EU ¹)		
Return on equity		Return on assets		
Annual surplus in % of equity		Annual surplus in % of assets		
1. United Kingdom	26.4	1. United Kingdom	1.1	
2. Luxembourg	23.0	2. Ireland	1.0	
3. Ireland	18.4	3. Denmark	1.0	
4. Netherlands	17.6	4. Spain	0.9	
5. Greece	16.7	5. Portugal	0.8	
6. Belgium	15.3	6. Finland	0.8	
7. Finland	15.2	7. Sweden	0.7	
8. Denmark	15.1		0.7	
9. Portugal	13.1	9. Greece	0.7	
10. Sweden	13.0	10. Luxembourg	0.5	
11. Germany	12.3	11. Germany	0.5	
12. Spain	10.6	12. Austria	0.4	
13. Austria	9.6	13. Belgium	0.4	
14. France	7.7	14. Italy	0.3	
15. Italy	3.4	15. France	0.3	
By comparison:				
Ú.S.A.	22.0	U.S.A.	1.8	
Switzerland	1.7	Switzerland	0.1	
Japan	0.2	Japan	0.01	

Source: ECB, 1999.

percentage of assets), the rates are above 1% for the United Kingdom, Ireland and Denmark, whereas Austria ranks in the lower third (0.4%; see table 5).

The profit margins of Austrian banks, which are relatively low by EU standards, might narrow further as competition heats up, since the pressure on margins and costs is likely to grow. Ways to enhance profitability will be to take streamlining measures, i.e. measures that will improve the efficiency of providing services by cutting the cost of providing those services (revenue losses in the wake of the introduction of the euro are, incidentally, hardly likely to have direct cost-cutting effects), or to move into new lines of business and thus tap new sources of revenue.

3.6 New Payment Systems Structures

With the introduction of the euro, the current currency boundaries have been dismantled, and new systems will come to dominate cross-border euro payment and securities settlement processing, among others, the TARGET system (Trans European Automated Realtime Gross Settlement Express Transfer), i.e. the ESCB's payment system, and the Euro Clearing System of the Euro Banking Association (EBA), a multilateral netting system established by private banks, and the German EAF 2 system. The development of efficient and secure payment systems such as TARGET will contribute to lowering the settlment risk even as the transaction volume increases.

At present, almost 50 different local payment systems operate in the EU. In an integrated European market, the clearing function will be redefined, and increased cooperation or concentration of payment flows and fiercer competition for payment orders and customers are to be expected. Big companies are likely to consolidate their treasury activities within the

This table is based on the OECD's bank profitability data for 1997 (partly for 1996). Because of divergent definitions and bank samples, the comparability of data is limited.

euro zone, which will in turn cause the correspondent banking business to shrink.¹) The network of European correspondent banks is, therefore, going to get markedly smaller, and the total of nostro accounts held within Europe is likewise going to shrink. The consolidation of accounts — a trend which has been observed for a number of years and which tends to affect above all small banks — has accelerated since the beginning of the year.

The boundaries between domestic and international payments will blur. The pressure on prices — above all for cross-border payments — will continue to mount, since customer expectations of price cuts are very high in the field of foreign payments systems. This will feed through to the bottom line, i.e. it will put increased pressure on banks' profits.

The *structural changes* in payment systems, combined with stiffening competition and increasing pressure on terms, will require further measures to enhance the efficiency of processing and standardizing services on the part of Austrian banks.

4 Effects of the Euro on Banks' Strategies

4.1 Increased Internationalization

The internationalization of the Austrian banking system has increased over the past few years: The share of external business in banks' balance sheets has mounted, and the number of branches and subsidiaries abroad has risen markedly, as has the scope of equity participations abroad. In 1997, domestic credit institutions had 81 branches and subsidiaries abroad (see table 6).

٦	ab	le	6

Number of branches and sub of domestic institutions in foreign countries	sidiaries	Number of branches and sub of foreign institutions	osidiaries	Market share of foreign brand and subsidiaries as a percenta of total domestic assets		
1. France	475	1. United Kingdom	387	1. Luxembourg	99.9	
2. Germany	296	2. France	305	2. Ireland	53.6	
3. Ireland	195	3. Luxembourg	211	United Kingdom	52.1	
4. Spain	180	4. Germany	153	4. Belgium	36.3	
5. Italy	158	5. Spain	80	5. Greece	21.9	
6. Portugal	91	6. Belgium	71	6. Spain	11.7	
7. Belgium	84	7. Italy	61	7. Portugal	10.5	
8. Austria	81	8. Ireland	49	8. France ¹)	9.8	
9. Sweden	32	9. Netherlands	49	9. Netherlands	7.7	
10. Denmark	30	10. Austria	39	10. Finland	7.1	
11. Luxembourg	28	11. Greece	29	11. Italy	6.8	
12. Greece	17	12. Portugal	22	12. Germany	4.3	
13. Finland	14	13. Sweden	18	13. Austria	3.3	
14. United Kingdom		14. Denmark	14	14. Sweden	1.6	
15. Netherlands		15. Finland	9	15. Denmark		

By contrast, the number of establishments of foreign banks in Austria has hardly risen since Austria's accession to the European Economic Area and to the European Union. The market share of branches and subsidiaries

¹ Within the network of a correspondent banking system, cross-border credit transfers are settled through a correspondent bank in the latter's currency. To this effect, banks keep accounts (of differing sizes, depending on the scope of their business) with other banks all over the world in the respective local currency.

of foreign institutions in Austria (as a percentage of total domestic assets) is in fact rather low at 3.3% by comparison with other EU Member States (see table 6). Among other things, this can be ascribed to the comparatively low interest rate margins, which mar the attractiveness of the Austrian market for foreign banks (except in niches such as asset management). In the future, competition through foreign banks that work the Austrian market either from abroad or establish a physical presence Austria is, however, likely to rise.

4.2 Increasing Concentration through Cooperation and Mergers

The degree to which total bank assets are concentrated within the Austrian banking system has risen not least through the numerous mergers that took place over past few years (merger of Erste Bank and GiroCredit; merger of Bank Austria and Creditanstalt-Bankverein; integration of Raiffeisenbank Wien into the regional central bank Raiffeisenlandesbank Niederösterreich-Wien). Moreover, numerous equity participations (e.g. Erste Bank cooperating more closely with the savings bank sector) and cooperations with banks in other countries have been observed.

The high number of standalone banks is one reason for the *low degree of concentration* of the Austrian banking sector. The share of the five biggest banks in total assets has risen markedly just over the past few years to reach 48% (1998: 50%), thus only slightly falling short of the EU average of 53%. However, the concentration ratio remains notably higher in other EU Member States of a comparable size (e.g. Sweden, Netherlands, Finland, Portugal, Denmark or Greece) with shares of 70 to 90% (see table 7).

Table 7

Concentration on an EU Average for 1997 Assets of the five biggest credit institutions as a percentage of total assets 1. Sweden Netherlands 78 3. Finland 4. Portugal 76 73 71 5. Denmark 6. Greece 57 7. Belgium 48 8. Austria 44 9. Spain 41 40 10. Ireland 11. France 28 12. United Kingdom 25 13. Italy 14. Luxembourg 22 15. Germany 17 EU average 53 Source: ECB, 1999

In the EU as a whole, competition is not constrained by too high a degree of concentration. Since the level of concentration in the European banking business¹) is considerably lower than in other industries, there appears to be room for further consolidation.

1 The currently biggest bank in the EU, Deutsche Bank, has a market share of a mere 3% in Europe (Deutsche Bank Research, 1999).

Through merging, banks react to new dimensions of competition, in which it takes a larger "criticial mass" to hold one's own. With the introduction of the euro, the relevant markets have become bigger, since the national playing fields have become European playing fields; this, in turn, has raised the critical mass necessary to survive as on European player. The argument that only the big European banks can achieve economies of scale implies that there is a "desirable" size for operating in the euro market. The literature is not clear on the merits of economies of scale 1), but the size of a bank may tend to become ever more important, since within a bigger unit synergies can be exploited more easily (cross-selling potential) and overcapacities can be mopped up more easily by other areas. The use of capital-intensive new technologies requires ever bigger investments that only larger institutions will be able to afford as a rule. A tight network of subsidiaries securing a physical presence gives banks a headstart in retail banking.

A consolidation of the banking sector is already in full swing in many European countries, be it through strategic mergers aimed at repositioning or through mergers aimed at mopping up excess capacities (e.g. reduction of national branch networks). A further reduction of excess capacities or further mergers within national boundaries will follow. The political, cultural and legal differences that divide European countries and ensuing differences in corporate culture have so far kept a lid on takeover competition, with the effect that it has not been completely free. The future should, however, also see more cross-border mergers and acquisitions. Competitive pressures in Europe might also be exacerbated by the major U.S. banks. In any case the increasing globalization of the banking business is bound to pose bigger and bigger challenges to bank managers, since size alone can no longer be deemed to be a guarantee for success. It also takes adequate strategic concepts to succeed.

The European banking landscape looks set to become divided into three different categories, major European banks, regional banks and small local institutions. Further bank takeovers are likely, since physical market presence is getting ever more important. The increasing "position struggles" among the big European banks to gain market share might prompt medium-sized European banks to make further acquisitions, since they have come under relatively big pressure through the euro (and euro-related processes); this development might also be relevant for the big Austrian banks. The latest mergers of Austrian banks have shown that the expected cost and efficiency improvements do not materialize right away. Mergers, strategic alliances and cooperative agreements are likely to gain in importance for Austrian banks, since operating through bigger units is the only way to strengthen the market position in the euro area.

See e.g. Schmid (1995) or calculations that show that there is no clear correlation between profitability (return on equity) and the size of banks in, for instance, Germany, Denmark and Austria, whereas in the United Kingdom, Belgium and the Netherlands the bigger banks are also the more profitable ones.

² According to a ranking presented by The Banker (July 1999) Citigroup is among the world's biggest financial service providers, with assets of more than ATS 9,000 billion. By comparison, the assets of all Austrian banks taken together just barely exceed ATS 6,600 billion.

4.3 Reviewing Strategic Positioning

The dismantling of competitive barriers that goes hand in hand with the introduction of the euro¹) and the ensuing increased market transparency has led financial market participants to focus more strongly on the various competition factors and the remaining differences in the framework conditions:

- On the one hand, the price and quality of financial services yield, risk, liquidity, efficiency, settlement cost, etc. are receiving more attention.
 The influence of market forces on capital allocation and efforts to diversify risk and maximize profit are going to become more important.
- On the other hand the remaining national differences between the frameworks of taxation, legislation and regulation will play a bigger role in competition. When the national boundaries blur in an increasingly integrated market, remaining differences in interest taxation become more important and may invite arbitrage. In the medium term, however, taking into consideration regulatory or tax differences between various locations is expected to become less important, because the euro will increase the pressure to continue to harmonize the legislation relevant for banks.

For the Austrian banks it will be important to grasp the opportunities provided by EMU and to maintain or improve competitiveness and profitability by reconsidering their strategies accordingly. This might encompass, among other things, the following *measures*:

- Further mergers to achieve economies of scale and of scope and to create institutions with a transnational standing;
- Adapting the organizational structures to the new challenges, e.g. bundling of activities;
- Reducing the number of branches to cut costs;
- Eliminating cross-subsidization (adapting the price structure in order to prevent cherry picking).

The geographical positioning of the big Austrian banks hinges on a solid domestic business base and strategic outposts in selected neighboring countries and regions. Particularly in Central and Eastern European countries, many big Austrian banks have built up a significant presence and an important revenue potential. Austrian banks have the advantage of having had a headstart, being able to benefit from their close vicinity, proven competence and local know-how. Austrian banks might also come to find the pursuit of niche strategies in the euro area increasingly interesting, such as project finance or export guarantees for domestic industries expanding into other euro area countries. The long-standing relationships that banks typically have with companies allow them to assess the credit risk involved better than the foreign competitors.

Strategic positioning coupled with an adequate flexibility to react swiftly to changes are key factors for the successful performance of a bank. In this respect, time plays an increasingly important role, i.e. the pace at which

¹ As restrictions are dismantled, "regulation rents" are lost. All business areas that had previously been more or less protected will be exposed to fiercer competition.

banks may adapt their internal workflow, customer services and product ranges to changed framework conditions.

Since lessons from the past are less and less of a help for decision-making, the danger mounts for banks to position themselves unfavorably (strategic risk). Bank managers are bound to face growing challenges. Every involvement needs to be thoroughly analyzed for risks and opportunities. If many market participants choose the same strategy, originally profit-beckoning business areas may quickly come under major competitive pressures through other institutions joining the bandwagon. In any case, the strategic risk will increase, for over the medium-term the negative repercussions of the process of structural adaptation in the EU banking systems might hit those banks strongest that are unfavorably positioned and cannot adequately cope with the risks inherent in the process of adaptation. 1)

5 Summary and Conclusion

The environment in which banks operate is changing ever more quickly. The introduction of the euro has reinforced trends already prevailing in the banking sector. The major implications of the euro for Austrian banks may be summed up as follows:

- Changeover costs (in particular spending on information technology and relating to customer information and counseling);
- Revenue losses in the foreign exchange business and hedging business because the number of currencies in which banks trade has shrunk markedly;
- Competition-induced loss of business volume in the money market, since the Austrian banks have lost their role as a specialist in the schilling market (but this is a loss they share with all other euro area banks);
- Increased competition also in the investment, derivative, deposit-taking and lending business (above all in the wholesale business) given the disappearance of foreign exchange risk and the increased comparability of prices;
- The chance to put the proven competence as all-purpose providers of financial services to use for new products for which the schilling market was too small;
- New possibilities to gain a more significant presence in other European countries and strategically use the know-how on Central and Eastern European countries.

It is becoming increasingly important for banks to spot and analyze changes induced by the euro in order to take adequate measures to improve competitiveness and to pay more attention to the risk potentials of customers and markets in the future. A sufficient risk-taking capacity will play a decisive role, since only an adequate equity ratio and a good profit situation enable banks to contain emerging risks as necessary.

Concerning the various *risk categories* global statements can be made that are true for the whole banking sector and which may serve as a general

1 See ECB (1999), p.1.

orientation, but which cannot replace the individual review of the risk position of each bank:

With the disappearance of currency risk, *credit risk* is bound to increase, and with it in-depth credit risk analysis and consequently hedging activities within the framework of banks' internal risk management. Credit risk within the EU may decrease if banks manage to better assess the risk potential of transactions by analyzing high-quality data with adequate risk evaluation methods. How banks fare will depend above all on their ability to effectively control the risks they incur and to avoid risk concentrations. The euro-induced changes in business policy and the fiercer competition could, however, lead to higher credit risks, and also to market risks in new lines of business or markets.

Following the launch of the euro, the financial markets will gain in depth and liquidity; therefore *market risk*¹) should shrink and become easier to handle within the euro area. Moreover it can be expected that the improved liquidity situation in the euro area will mitigate the liquidity risk both within the system as a whole and for the individual credit institutions.

The farreaching harmonization of market conventions²) triggered by the introduction of the euro also has implications for the stability of the integrated European financial market, since it increases market transparency and eliminates errors that may arise through the application of different calculation conventions.

Given the challenges that banks need to face up to in the context of EMU, *operational risk* is hardly likely to shrink in the near future. But operational risk is here to stay also in the longer term, on account of the changes and transformations of information technologies through the growing number of mergers and the more intensive use of new technologies and electronic media.

The developments described imply that the launch of the euro, while impacting the individual risk categories more or less strongly, will even raise the already high significance of an *all-encompassing risk management* at banks. Whether risks are managed effectively will depend above all on the ability of the banks to effectively control the risks they incur. Growing concentration will let especially the large institutions play an ever bigger role in the smooth functioning of the banking system. The major banks, therefore, shoulder increasing parts of the responsibility for the stability of the overall financial market.

The stability of the national financial markets is being watched closely by the central banks, and the OeNB, as Austria's central bank, has a big interest in a sound and competitive Austrian financial market. The OeNB's work is aimed, among other things, at stabilizing and fostering the financial markets, but it can do so only if it has competent evaluations of potential

- 1 Market risk of securities is basically the exposure to changes in market value (interest rate, stock price, exchange rate) which is not linked to issuer-specific criteria and on account of which owners may incur losses depending on the size of their exposure to the market.
- On the money market the day count convention actual/360 is applied. On the euro bond market, by contrast, only the actual/actual method is used to calculate the accrued interest, and prices are decimalized and not quoted as whole figures plus fractions.

developments at its hand. This is why the close monitoring of the stability of the national banking system will continue to be an important task for both credit institutions and the OeNB.

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ONB

The Austrian Banks at the Beginning of Monetary Union

The Effects of Monetary Union on the Austrian Banking System from a Macroeconomic Perspektive

Starting Point and Objective of the Analysis

Walter Waschiczek¹)

The aim of this study is to explore the potential impact of Monetary Union on the role that banks play in the transfer of funds between borrowers and lenders. The main focus is on the perspectives for the banks' "core competence," namely the acceptance of deposits and their transformation into loans, which has traditionally been the defining element of the banking business compared with other forms of financial intermediation.²) The analysis is to show, above all, how EMU may alter the distinctive characteristics of the banks' assets and liabilities. Banking activities other than deposit-taking or lending are covered only in so far as they are consequences of current trends in those traditional functions. With a view to the financing surplus or deficit of the sectors of the economy — with households being net lenders and businesses net borrowers —, banks' lending business is discussed in terms of corporate financing, and banks' deposit-taking business with a view to households' acquisition of financial assets.

In the rapidly changing environment in which banks are operating, the effects of a single factor — be it as significant as the introduction of a single currency in 11 European countries — can hardly be seen in isolation from other developments. In most instances, the factor "Monetary Union" is not at work all by itself, but in interaction with other tendencies. Monetary Union reinforces or speeds up these developments. Nevertheless, an attempt is undertaken here to understand the effects of the euro separately from other trends with long-term influences on the banking system.

The starting point is an analysis of the changes which over the past years and decades have led to a fundamental transformation of the financial markets. The present study argues that the process of disintermediation evolving over the past decades has played a crucial role in this transformation. The banks have responded to this development by expanding into new markets and/or business segments. The effects of these strategies will be analyzed in terms of volume and their impact on earnings.

This will be followed by a study of the consequences for the structure of the banking industry. The analysis focuses on the dynamic effects of the euro, i.e. on the longer-term consequences triggered by changes in the supply and demand behavior of banks and their competitors and/or their customers in response to Monetary Union. The direct effects of the changeover to the euro, such as the change in institutional framework conditions and the immediate disappearance of certain products (which one might call static effects) will not be dealt with here in any detail. The concluding outlook aims at evaluating the Austrian banking industry's perspectives with regard to the effects of Monetary Union.

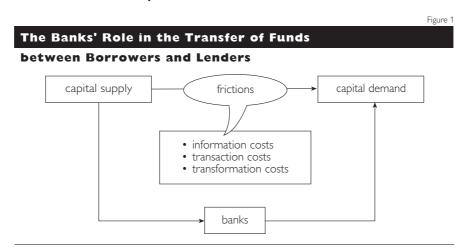
¹ The author thanks Ernest Gnan, Peter Mooslechner, Helene Schuberth and Irmgard Wenko for valuable contributions and comments.

This is not to imply that other tasks performed by a credit institution and/or defined as "core competence" in its strategic orientation are not central components of its activities. On the contrary — as is indeed to be highlighted by the study — an expansion of banks' activities beyond deposit-taking and lending is one of the key consequences of the changes brought about by Monetary Union.

The Banks' Role in the Transfer of Funds between Borrowers and Lenders

Banks not only match demand and supply by bringing individual borrowers and lenders together but also actively raise and manage, at their own risk, capital seeking investment. Of course, they also provide a number of additional services that are more or less related to those activities. The present study, however, understands the go-between function as the banks' core activity. Within the wider framework of the financial markets' general task of allocating capital to high-productivity intertemporal investments, the banks' specific function lies in overcoming underlying market frictions that prevent direct economic exchange — in a world of perfect information and zero transaction costs, there would be no role for banks. Frictions may take the form of: ¹)

- information costs: no or inadequate access to information about the creditworthiness of prospective borrowers and the performance of current borrowers; cost of procuring such information, e.g. cost of seeking suitable financing or investment opportunities and evaluating investment risks;
- transaction costs;
- the cost of maturity, volume and risk transformation.



The greater these frictions, the higher is the significance of the banks' functions. Frictions in turn correlate inversely with the width and depth of the financial market, i.e. with the volume of operations and the value of loanable or investable funds, the number of market participants and their ability to bear the cost of market imperfections themselves. In a wider market fungibility grows, as the number of potential partners is substantially larger. Moreover, economies of scale may be achieved: liquidity as well as the chances of closing a large number of transactions increase with the size of the financial market (Vander Vennet, 1997).

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¹ This representation of possible market frictions is by no means complete. For a more detailed analysis see Bhattacharya and Thakor (1993), Levine (1997), or Becsi and Wang (1997).

With expanding volumes, the financial markets become more transparent, which tends to reduce the relevance of the banks' function as providers of information. In spreading their risks, large investors rely less than small savers on risk transformation by banks. With new financial instruments, maturity transformation is now easier to achieve than a few decades ago. Investors and borrowers are hence less dependent on the banks' intermediary services and more and more often able to do business directly (disintermediation). Other things being equal, growing financial market volume therefore diminishes the relative importance of bank intermediation in the transfer of funds between borrowers and lenders. The evolution of banks specializing in the transformation of (retail level) savings into loans was, ultimately, a result of the imperfections of the capital markets. As the latter are have become higher developed, the former are losing market potential. ¹)

Apart from the expansion of financial market volumes as a result of economic growth, ²) frictions in the financial markets were further reduced by other factors: over the past decades, technological progress has resulted in a substantial reduction of transaction costs and paved the way for a wide array of financial innovations (see White, 1998). Similarly, the process of liberalization and deregulation seen over the past decades has also leveled out a number of market frictions. As competition between banks and other financial intermediaries stiffened, the high regulation density in the financial sector increasingly proved to be a handicap. Therefore, pressure to lift these restrictions on business opportunities has mounted.

Well into the seventies, the financial sector in all industrialized countries was subject to comprehensive price and quantity controls, which often prevented business deals at market-clearing prices, and fettered by substantial institutional restrictions and market entry barriers.³) These restraints have meanwhile been removed to a large extent, both at the national level and in cross-border activities, which has in turn increased pressure for even further deregulation at the national level.

- Because of differences in the size, liquidity and structure of different financial markets, the strength of the banks' positions in each financial market may also vary: in some, particularly Anglo-American countries, direct financing through the capital markets is much more common than in continental Europe, where the banks' role as intermediaries is more important. This is closely related with the organizational structure of the financial intermediaries operating in the financial markets. Basically, a distinction is made between universal banking systems and systems in which different types of banks provide different services. In bank-dominated systems, banks perform all types of financial transactions, acting therefore as universal banks. In a capital market-oriented system, banks focus on those functions that are required for overcoming the market imperfections described above, while the capital markets are the preserve of the investment banks. Another significant factor is the way pension insurance systems are structured. In countries operating funded pension systems, much more funds are available for investment in the capital markets than in countries with pay-as-you-go schemes.
- An overview of the relationship between economic growth and the development of financial markets is provided by Pagano (1993). While a number of studies, including the one by King and Levine (1992), have demonstrated a positive correlation between productivity and growth and certain indicators of financial development, the causes underlying this relationship are not yet fully understood.
- 3 See Edey and Hviding (1995) as well as Borio and Filosa (1994).

The reduction in market frictions brought about by deregulation reduced the segmentation of individual submarkets in the financial sector and, thereby, encouraged disintermediation by cutting transaction costs and facilitating transformation through mechanisms that bypass banks. Disintermediation and deregulation have therefore been mutually reinforcing each other in a process that has eroded, step by step, the banks' core function of transforming savings into credit.

As a growing proportion of the banks' clients no longer requires typically bank-intermediated services, other financial intermediaries are able to compete successfully as providers of more specialized financial services. Investment companies, for example, operate with much lower information costs (as they invest only in securities) and much lower transaction costs and have "leaner" organizations. Unlike banks, they do not assume any default risk but only arrange for a diversification of risks. As investors' needs become more specific, there is less demand for the banks' intermediary function. The banks' share of intermediation is therefore declining. Relative to the total assets of all financial intermediaries, it went down from 91% in 1988 to 82% in 1998 (see table 1) in Austria. Nevertheless, in 1995, the banks' share of total assets held by financial intermediaries was, at 86%, higher in Austria than in any other EU country (OECD, Bank Profitability).

The Banks' Reaction to the Erosion of their Core Function

The banks have responded in two ways to intensified competition and the increasing erosion of their business base by disintermediation: on the one hand, they have accessed new business segments or markets by either developing and expanding their own operations or by acquiring existing businesses. On the other hand, they have tried to strengthen and develop their competitiveness in a changed environment through measures designed to improve efficiency. In many cases, mergers were entered for this purpose. ¹)

"Going universal" boosts competition

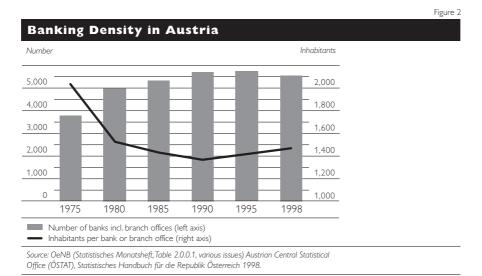
In a first step, Austrian banks tried to approach other institutions' clients.²) This led to a gradual reduction of the differences between individual institutions and groups of institutions, starting with the 1979 amendment to the Credit System Act. With the exception of building societies and specialized banks,³) all banks (or sectors) now offer a broad range of financial services. In pursuit of this strategy, the banks have massively

¹ Tichy (1991), in a similar approach, defined five different phases in the banks' efforts to overcome the structural crisis: growth, foreign transactions and implementation of financial innovations, "Allfinanz" (an extension and bundling of banking, investment and insurance services), raising fees, and mergers.

Tichy (1991) attributed this development to the end of natural expansion after all groups of the population had become users of banks' services.

³ Building societies and specialized banks – like investment companies, leasing and factoring institutions, home loan banks, etc. – are usually owned by other Austrian banks, for which they perform special tasks, thereby contributing to a comprehensive range of financial services.

expanded their branch networks in Austria (see figure 2), making Austria one of the countries with the highest bank density in Europe.

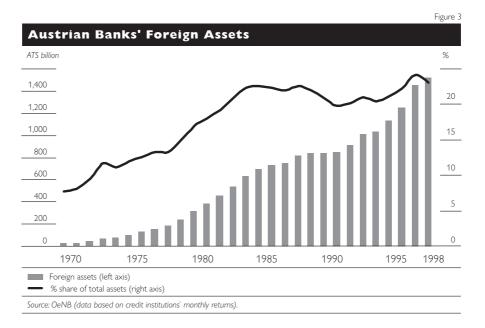


The high bank density in Austria prompted intense competition for market shares within the Austrian banking industry. A comparison of lending rates in Austria and Germany may serve as a rough indicator of competition intensity (see table 2). Under the monetary policy course steered by Austria, money market interest rates and bond yields showed very much the same development in Austria as in Germany, being generally somewhat higher in Austria than in Germany. As business structure (size, creditworthiness) and financial market structure (degree of intermediation, banks' share of intermediation) are very similar in these two countries, one might expect the same pattern to have emerged for interest rates on loans to comparable clients. While interest rates reported in banks' returns Austria and Germany are not directly comparable on account of different interest statistics, there is, however, no indication that lending rates have been higher in Austria than in Germany.

Another indicator of the intensity of competition in the Austrian banking sector might be the fact that payment services are offered at lower charges than in other countries. A study by McKinsey (1995) revealed that, in 1994, the costs incurred by banks in providing payment services exceeded revenues by ATS 4.5 billion, with a loss of ATS 785 made on each account. This means that only 62% of the costs were actually recovered, compared with 95% in Germany and 103% in Italy. Since then, the share of (net) fee income from payments services relative to total fee-based income has declined further and, in 1998, was down to one quarter of fee-based income. While actual costs cannot be determined from the data available, it is reckoned that payment services tend to be a loss-maker for the Austrian banks and have to be cross-subsidized by other business segments. Frequently, this service is not even regarded as a "profit center" but as a tool for winning other business.

Diversification into new markets and business segments

Once all banks or groups of banks had become universal banks with networks of branch offices across the entire country, new markets were to be found only in new business segments or in cross-border activities. Over the past decades, the Austrian banking industry has greatly stepped up its international operations: since 1970, foreign assets have increased at more than three times the rate of total assets (see figure 3). The contribution of international business to earnings was, however, much lower than its contribution to the business volume. In 1998, net interest income from business abroad accounted for 0.69% of the respective business volume, while in domestic business, the corresponding share was 1.51% (see table 3). This was due primarily to the different composition of domestic and international business: abroad, for example, the share of less profitable interbank business is much higher than at home.

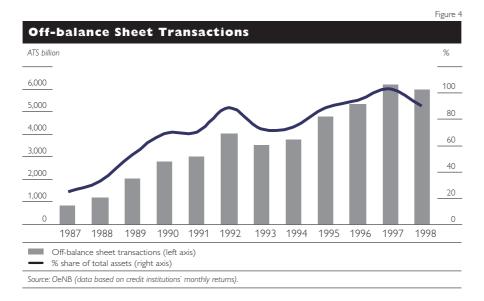


Another option, at least for the larger banks, was an intensification of activities in foreign exchange trading or in derivative products, as intermediaries for corporate clients or for their own portfolios. Special off-balance sheet transactions rose by more than 500% between 1987 and 1997. As a percentage of total assets, they increased from 33% in 1988 to 90% in 1998 (figure 4). From an international perspective, the volumes traded by Austrian banks are, however, still relatively minor. Between 1994

¹ Mooslechner (1989) had already found a negative correlation between international business and earnings. Since then, however, the framework conditions for the Austrian banks' foreign operations seem to have changed quite significantly. While in the eighties, Austrian institutions had to compete in the international markets against already well-established providers of bank services, they were in place from the very start when the new markets in Eastern Europe opened up.

² The full contribution of international business to net interest earnings appears, however, to be slightly underestimated as earnings of foreign subsidiaries for which data are not available have not been taken into account.

and 1998, the net result from financial transactions¹) rose by about 40%, its contribution to operating income by about 1 percentage point to approximately $5\frac{1}{2}$ %.



Specifically, banks in Austria (as in a number of other countries in continental Europe) have "diversified into disintermediation": today, they perform important functions in the capital markets and at the stock exchange, and own a substantial portion of the total of financial intermediaries such as investment funds and pension funds. Alliances between banks and insurance companies are also on the rise. Almost all of the Austrian banks meanwhile have found "strategic partners" in the insurance industry, which has enabled them to substitute at least part of the "traditional" banking income: between 1994 and 1997, income from participations and shares in associated companies increased by 40%. ²)

Mergers

The development of new business segments and of markets not serviced in the past, as well as the achievement of a certain "critical mass"³) (supposedly) required for certain activities, have been the key motives driving the increase in bank mergers and takeovers in recent years. Mergers were, however, also formed for the purpose of improving efficiency. While empirical studies to test the existence of economies of scale and of scope in banking and how they can be achieved through mergers do not provide any

- 1 As per quarterly returns. The net result from financial transactions includes revenues and expenditures from transactions in trading book securities not carried as financial assets (without interest income or expenses from securities), exchange gains/losses from foreign exchange trading as well as revenues and expenses from special off-balance sheet financial transactions (OeNB, Ausweisungsrichtlinien zum Quartalsbericht, 1997).
- 2 The figure for 1998 reflects the increasing formation of banking groups in Austria.
- Investment banking, in particular, requires a certain minimum business size, which again presupposes a certain market volume. On the other hand, there are a number of very small (commercial) banks, which are usually (or were at least, originally) organized in some "co-operative" form and have been successful in mobilizing even very small-volume capital resources.

conclusive evidence, benefits of this kind may have been reaped in Europe to a slightly larger extent than in the U.S.A. (Vander Vennet, 1997). Moreover, technological progress and regulatory changes may have caused the optimum size for European banks to be larger now than it was in the eighties.

Overall, however, the efficiency gains to be expected are not very big and will materialize only in certain circumstances. The use of capital-intensive new technologies calls for substantial financial resources, which tend to be more readily available to larger banks. Economies of scale may also be achieved in retail business, including payment services and securities custody. Other things being equal, larger business volumes allow better risk diversification and thus steadier profit growth, which is of great significance in banking, where customer confidence is a major asset. Mergers are also undertaken to dampen the intensity of competition in regional and national markets by strengthening market position.

Even though the number of independent credit institutions in Austria fell by 279 or 22% between 1988 and 1998, the rate of contraction was still slower than on the euro area average. 1) The decline took place exclusively in the decentralized sectors (see table 4). Most of the large Austrian credit institutions have undergone fundamental changes in ownership structure, including mergers, in recent years. The banks that were the three largest in 1988 have since changed ownership completely (see table 5). While these restructuring processes have led to a higher concentration in the Austrian banking market — with the share of total assets held by the five largest banks rising between 1990 and 1997 from 35 to 48% — it is still below the levels of comparable countries. 2) That the number of independent banks is still relatively high by international standards is due, last but not least, to the sectoral structure of Austrian banking, with almost 85% of banks belonging to one of the three multi-tier sectors. 3)

Development of Earnings and Profitability

For the banks, disintermediation obviously means a shift from interest income to non-interest income. As banks lose spread-related business, they will increasingly offer fee-based financial services, which moreover carry less balance sheet exposure, to supplement interest income. Fees and charges, however, are "normally" lower than interest margins, because they — theoretically — include a smaller portion of "intermediation components" (such as maturity, volume and risk transformation).

Operating income relative to total assets has been declining continuously since 1993, due primarily to a fall in net interest earnings. As a percentage of total assets it has dropped by 0.4 percentage point to 1.32%

¹ According to European Central Bank data (1999), Table 4.1, the number of independent credit institutions in Austria declined by 18% between 1990 and 1997, EMU-wide by 25%.

² For a comparison of 1997 net interest earnings and total assets of euro area countries see European Central Bank (1999). Table 3.1

Switzerland has 892 legally independent Raiffeisen banks which are, however, classified as a single bank in Swiss bank statistics (Schweizerische Nationalbank, Die Banken in der Schweiz, Zurich 1998, p. 21). If this number were added to the total number of Swiss banks, the grand total would be greater than in Austria.

since 1993 (see table 6); between 1996 and 1998 it went down even in absolute terms. This reflects, on the one hand, shrinking returns on nonbank business, where over the past three years¹) the interest margin has narrowed by almost half a percentage point to 1.88 percentage points. In the deposit and lending business, the banks' core function, it contracted by as much as ¾ of a percentage point (see table 7).²) During this period, the average rate of interest charged on claims on customers decreased by 0.75 percentage points while the interest rate paid on liabilities fell by only 0.24 percentage point. Nevertheless, the margin on the deposit and lending business was, in 1998, still about five times as high as that on securitized claims and liabilities. At the same time, the direct lending volume rose less strongly between 1993 and 1998 (+25%) than the domestic securities portfolio (+36%). The increasing share of (less profitable) international business in total assets has further contributed to the decline of operating income relative to total assets.

Compared with other European countries, interest margins are relatively small in Austria (European Central Bank 1999, Table 9.4), even though in 1995 the Austrian banks' business structure, at least on the asset side, was still slightly more profitable than that of their European competitors (see table 8). Compared to the (unweighted) average of countries participating in Monetary Union, a larger portion of the total assets of Austrian banks was funded by the (relatively low-profit) interbank business. At the same time, however, loans accounted for a much higher share of banks' assets. On the liability side, own issues were significantly, deposits only slightly above the average.

Non-interest income relative to business volume was, by comparison, much higher in Austria than on the euro area average and, in 1995, at 1.12% of total assets, the fourth-highest among the euro-11 countries (see table 9). This might be attributable to the strong predominance of the universal banking system in Austria. In view of the still relatively high degree of bank intermediation and the fact that a large portion of disintermediation is being handled by the banks themselves, with bank branch offices serving as outlets for other financial products, non-interest income in Austria should be slightly higher than in other countries.

Fee income from banking services has surged over the past few years: between 1995 and 1998, non-interest-based revenues grew by ATS 21 billion or 37% while their share of operating income augmented during this period from 38.8 to 47.3%. While a not insignificant portion of this relative increase is explained by the decline in net interest earnings, this development reflects nevertheless the banks' strategic reactions to the erosion of their bread-and-butter business base. Between 1994 and 1998, commissions from the securities business rose by more than 60% while the net result from financial transactions has gone up by 40% since 1994 (see table 10). Income from participations and shares in associated companies has

- 1 Data on earlier years are not available.
- 2 Significant factors have of course been the slide in interest rates and the change in interest rate structure.
- 3 Due in part to the deposits held as a result of the sectoral structure.

moved up significantly (though the relevant figures defy meaningful interpretation owing to the formation of banking groups).

Not all components of fee income from banking services have been expanded at the same rate, however. Commission income from lending operations, for example, has shown little change over recent years, as has income from payment services, owing to the more limited enforceability of such fees. Income from international payments has also come under pressure more recently, owing to certain product innovations. Another reason might be the fact that a not significant portion of non-interest income is generated by or even directly linked to lending and deposit business (e.g. commissions on loans). Full substitution of interest income by non-interest income appears practically impossible as these two types of earnings are, at least partially, linked to one another.

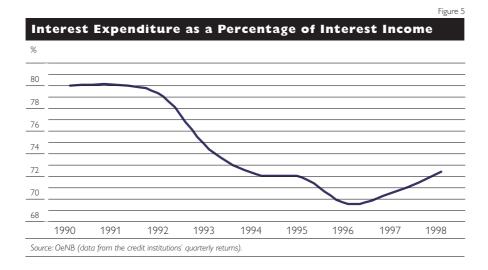
As earnings in the Austrian banking sector have come under increasing pressure, operating expenses have also flattened in recent years. The ratio of operating expenses to operating income has been going down continuously and, in 1998, at 68.1%, was 2.5 percentage points lower than in 1989. The fact that in the nineties — with the exception of the years 1993 and 1994 — the banks' operating expenses developed parallel to operating income (as a percentage of total assets) would, however, indicate that existing productivity reserves have not yet been completely exploited.

The ratio of personnel expenses to gross income has fallen from 41.3% in 1987 down to 36.6%. 1) Throughout the nineties, staffing levels in the Austrian banking sector went up only slightly and, over the past three years, have even been slightly declining. Nevertheless, the number of bank employees per capita was higher in Austria in 1997 than in any of the other EU countries, except Luxembourg (European Central Bank 1999, Table 4.4), and the ratio of personnel expenditure to operating income still below the European average. Where bank branch density is concerned, Austria has remained at the top, despite a slight downward trend in the more recent past. 2)

Apart from production efficiency, the ratio between interest expenditure and interest income also reflects the efficiency of bank intermediation. This indicator shows the proportion of interest income earned on funds allocated that has to be spent to pay interest on the funds raised (Mooslechner 1995, p. 17 et seq.). In 1998, the Austrian banks used 72% of their interest income to pay for interest expenditure; in 1990 that figure had still been 80%. Even though the change in interest rate structure has probably been a factor that should not be neglected, this improvement might be attributable to enhanced intermediation efficiency.

¹ Even though increasingly complex financial products have required a larger portion of better trained — and therefore better paid — staff (it may be assumed that in the eighties Austria still had some catching up to do).

In view of the still relatively high degree of bank intermediation and the fact that a large portion of disintermediation is handled through the banks, with bank branches serving as outlets for other financial products, bank branch offices in Austria apparently provide a broader range of services than in countries where banks and other providers of financial services are strictly segregated.



The Impact of the Euro on the Bank's Core Function Monetary Union provides additional momentum for deregulation

For the European banks, Monetary Union is a landmark event of similar quality as accession to the EU was for the real economy. The single currency brought down one of the last remaining barriers to cross-border banking in Europe by rendering all regulations tied to national currencies ineffective and, in a wider sense, by abolishing currency as a quasi "nontariff" barrier to trade in the financial sector. Monetary Union is thus another major step towards deregulation of the financial industry. Liberalization in the financial sector gains further momentum as all regulations that are tied to national currencies or ceilings on the use of foreign currencies are lifted for business done within the euro area.

All euro area banks now have access to primary liquidity in the single currency. Previously, it had been all but impossible for foreign banks to lend to Austrian customers as the lack of a branch network made access to primary liquidity in domestic currency difficult, forcing them to resort to the money market for schilling refinancing. As the interest margin was obviously too small, foreign bank were hardly playing any role in domestic schilling lending. With Monetary Union, this obstacle has been removed as all EMU banks now have euro-denominated primary liquidity at their disposal in their respective home markets.

Currently, the market share held by foreign banks is still relatively low in Austria compared with other European countries.¹) Recent years have seen but little increase and, at year-end 1997, it was still only at 3% (see figure 6). Foreign institutions are (for the time being) concentrating on

¹ Apart from market conditions, a heavier involvement by foreign parties is prevented primarily by the sectoral structure of the Austrian banking industry, which hardly allows "non-sector entities" to acquire (shares in) institutions that are part of multi-tier sectors (savings banks, Raiffeisen and Volksbank cooperatives).

special market segments and getting involved primarily in large-volume business. 1) With Monetary Union, all banks in the euro area will, however, be able to invest their primary euro liquidity in loans across the entire currency area and thus to compete with domestic banks in providing finance to businesses and public authorities.



Lending

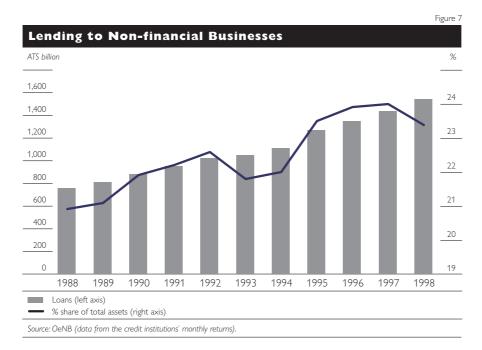
In Austria, lending to domestic nonbanks is still a relatively important part of the business compared with other countries (see table 11). Direct lending to domestic businesses accounts for almost one quarter of total assets and has expanded noticeably in recent years. 10 years ago, direct loans represented only about one fifth of total assets (see figure 7). More than half of interest income – with a slightly falling tendency more recently – comes from claims on domestic clients.²)

For business undertakings, bank borrowing has lost in importance in the past few years relative to other sources of finance. The share of bank loans in the private nonbank sector's³) external financing has decreased from 71% in the 1988 to 1990 period down to 59% for the years 1994 to 1996 (see table 12). As corporate debt has increased, bonds — including especially private placements — and foreign sources of finance have become more

¹ Over the past few years, however, foreign investors have increasingly acquired strategic participations in Austrian institutions, which is expected to lead to growing influence in other business segments as well. See Mooslechner (1996).

² This includes all types of claims on customers, whether securitized or not; the latter, however, only if they are fixed-income instruments and not listed for stock exchange trading (OeNB, Ausweisungsrichtlinien zu Monatsausweis pursuant to § 74 para 1 and 4 Banking Act, Vienna 1999, 22). A breakdown between businesses and households is not available.

³ A breakdown between businesses and households is not possible for lack of data.



attractive. The surge in direct foreign investment 1) may also have been a factor that changed companies' financial needs. In view of growing transaction and debt volumes, it is becoming more profitable 2) for companies to engage in systematic financial and risk management and, as it were, to do their own banking (industrial clearing). Particularly top-rated companies have been able to place more and more of their – growing – financing volumes directly in more liquid financial markets. In the process, the banks' information and transaction functions as well as, increasingly, their risk and maturity transformation functions, have lost their importance, particularly for large businesses.

The elimination of currency barriers is expected to intensify competition in the Austrian credit market. The level of internationalization, which in commercial lending has been relatively low to date, is expected to increase in the medium term, when all banks in the Member States will be able to reinvest their domestic currency primary liquidity in direct loans to all borrowers seeking euro financing and thus to compete, on equal terms, with domestic institutions in providing finance to corporate clients and public authorities.

Basically, foreign banks enter the Austrian market for two reasons: either because lending in Austria (at least in certain market segments) is profitable enough to generate earnings, or because a bank has sufficient comparative advantages (business size, specific expertise). As interest rates on loans seem to be relatively low in Austria (see table 2), the former

Between 1989 and 1996, the nominal capital of direct foreign investments by Austrian companies increased from ATS 16.8 billion to ATS 83.2 billion (OeNB, Austrian Outward and Inward Direct Investment in 1996: Stocks at Year-End, Focus on Austria 3/1998, 27–35).

² Larger business sizes, due mainly to mergers in the manufacturing industry, also contributed to the growth in companies' transaction and debt volumes.

reason appears unlikely, provided that Austrian interest rates fully reflect borrowers' financial standing. If this is not entirely the case, the return on lending to top-rated clients would not be lower than elsewhere. Foreign competitors therefore might indeed try to win this customer segment.

Regarding the second reason, it is not to be expected that all groups of borrowers would be equally attractive to foreign banks. Foreign institutions planning to expand their lending activities into Austria would be faced with the need to set up and maintain a comprehensive risk management function, which requires knowledge of the Austrian market, of accounting rules, etc. Another obstacle to intensive market penetration by new banks is the — partly substantial — cost of lending (procurement of information about borrowers' creditworthiness, cost of acquiring business, etc.). All types of financing where physical presence is a must or at least a major advantage will therefore be spared such competition for the time being. 1) Small and medium-sized companies will probably not be among the preferred targets of competitors from other countries.

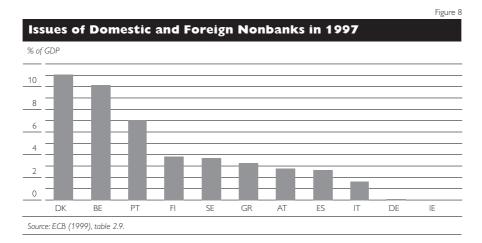
A substantial part of loan facilities are made available by a banking syndicate, or through institutions to which such business has been syndicated on after the close of contract. With Monetary Union, the number of potentially interested parties will be much larger, while at the same time the number of potential local partners will be reduced by mergers. It is expected that foreign institutions will seek participations in syndicated financing to diversify their loan portfolios without actively soliciting loans in Austria. They may also be approached increasingly by domestic institutions seeking to diversify their risks. Conversely, Austrian institutions may be able to gain access to financing business abroad through this channel. Here again, potential borrowers will primarily be large enterprises.

Comparable to the effects of deregulation measures taken in the past, Monetary Union will also promote disintermediation. As national bond markets integrate into one single market, the cost of borrowing will go down, making direct lending to businesses relatively more expensive. Apart from rising competition by foreign banks, Austrian banks (like all institutions in the euro area) expect increased competition from alternative financing vehicles available in the capital market. The securitization of credit will grow at the expense of nonsecuritized instruments. Near-money-market types of funding such as cash advances, etc. will increasingly be replaced by (fungible) securities. Products that were not available or less common in Austria in the past such as certificates of deposit, commercial paper and other short-term securities, will be offered (and sought) more frequently.

Here, again, it will primarily be the larger borrowers that will increasingly turn to the capital market for financing. In the past, asset-backed corporate financing has not been widespread in the countries of

Given the changes in communication technology, the significance of "physical presence" is of course undergoing change. This is similar to the effects that technological changes in passenger traffic have had on retail trading in the past.

continental Europe and of only minor significance in Austria (see figure 8). At year-end 1998, security issues by domestic nonbanks were equivalent to only 3.3% of banks' claims on domestic nonfinancial enterprises. With Monetary Union, competition by foreign institutions in providing finance to Austrian businesses through the capital market is moreover expected to intensify. With the universal banking system, securities underwriting is frequently a service offered under the "relationship banking" concept. Any loss of lending business may therefore also result in underwriting mandates being awarded to the competition (and vice versa). 1)



In the past, investment incentives and promotion of business activity were heavily biased in favor of debt (including a more favorable tax treatment of outside capital than of equity capital), with subsidies making bank loans, as a rule, cheaper relative to funds raised in the capital market (see table 13). Often, access to a subsidy was tied to borrowing from a domestic bank. Changes in this respect (termination of the practice, access also for foreign banks) might help to loosen the ties to the traditional local banks.

By contrast, banks' lending to small and medium-sized enterprises is expected to remain relatively unaffected, at least in the short term, thanks to the information advantage that local banks enjoy due to their physical presence. Small and medium-sized companies continue to rely heavily on bank loans. At year-end 1997, bank liabilities accounted for 32% of the total assets of small manufacturing companies (23% in the case of larger enterprises; see table 14). Particularly for small enterprises bank borrowing plays a bigger role in Austria than in other countries.

In the medium term, lower growth is therefore expected, overall, in this business segment which is of such key importance to Austrian banks. Particularly lending to larger enterprises will come under mounting competitive pressure: both from competitors from the same "industry", i.e.

In investment banking, market penetration by foreign institutions is even now very high: in the years from 1987 to 1996, the market share of foreign banks in the guaranteed volume of privatizations in Austria, for example, was 38% (Walter Springer, Kapitalmarkt Österreich, Wien 1998, p. 153).

banks based in other countries (especially in the euro area) and from "outsiders", i.e. nonbank financial intermediaries operating from Austria or other Member States, as national boundaries are quickly becoming obsolete, particularly in the capital markets. At the same time, lending margins, which even now are comparatively low in Austria, will certainly not be improving as new providers enter the market.

Deposit business and asset management

Changes in investor behavior have already feed through more strongly to banks' balance sheets than changes in borrowing behavior. Even now, the net acquistion of households' financial assets largely bypasses bank channels and hence bank balances sheets. While over the past years deposits held with Austrian credit institutions grew but moderately, 1) purchases of shares of mutual funds have risen dramatically (see table 15). The volume of assets managed by investment companies rose from 7.6% of GDP in 1988 to 29.2% in 1998, assets managed by life insurance companies and pension funds from 14.5 to 27.8% of GDP (see table 1). As the stock of wealth grows, the demand for financial instruments becomes more diverse, and more and more investors find it possible to bypass the banks' maturity transformation services. The more the spectrum of financial services is expanded and developed, the more consumers are shifting from traditional bank deposits. Where larger volumes are involved, alternative forms of investment become available, beyond the deposit accounts that accept even very small amounts. In other words, the volume transformation service of banks is less in demand.

For the time being, a large portion of the funds withdrawn from deposit accounts remains within the banks' sphere of influence, earning them commissions instead of interest income; this is the case if the money is invested in shares of mutal funds. Foreign investor funds are, however, becoming increasingly popular with Austrian investors. Foreign providers are also offering products that are novel to the Austrian market in areas such as insurance and, last but not least, asset management.

Austria's banks have already taken steps to develop asset management functions, and the large banks have all set up separate departments. The latter compete with the banks' deposit-taking and investment funds business, though, which gives rise to a conflict of interest. Beyond that, it is doubtful whether asset management focused exclusively on the Austrian market will be a profitable business, considering the high level of fixed costs. What is more, there is a growing presence in Austria of foreign providers of asset management services with substantial expertise in this line of business.

It is expected that, as a result of EMU, the acquisition of financial assets through bank channels — in other words, the funding of banks' assets through such deposits — will be declining in importance.

Net of capitalized interest, savings deposits declined in real terms between 1995 and 1998 (OeNB, Money and Credit in 1998; Focus on Austria 1/1999, p. 18).

The Banks' Opportunities and Risks with Monetary Union

The creation of more efficient capital markets is one of the declared aims of Monetary Union. The emergence of a euro area capital market in the first few months of its existence is an indicator that progress is being made, even if its complete realization will still take some time. Those business segments of banks that had developed because of the narrowness of national financial markets and the need to use different currencies have disappeared. The banks' central role in the transfer of funds between borrowers and lenders will thus undergo further erosion. The removal of the "different currencies" trade barrier between the 11 countries reduces the specific requirements that have to be met to achieve maximum allocative efficiency in the financial markets. This refers less to trading in different currencies, even though the banks are sure to suffer permanent revenue losses in this area, but more to the maturity and risk transformation functions required in imperfect markets for transforming savings into investments. With Monetary Union, this function will be more often performed directly through the (capital) market. At the same time, it is expected that securitized assets will gain more weight in the banks' balance sheets as such instruments are used increasingly to replace direct lending to businesses.

Competition among European banks is also anticipated to intensify, particularly in areas that in the past had been protected against competition from abroad by currency barriers. As the example of the U.S.A. shows, lending (particularly to large enterprises) is possible even without a physical presence in the market. This might result in decreasing reliance on domestic banks on the part of companies operating in Austria and in any case in a further deceleration of the banks' asset growth rates. Not all banks, however, will be equally affected: banks lending heavily to large enterprises will be hit harder than institutions extending loans primarily to small businesses; banks with more mobile, yield-oriented investors will suffer more than those with more "loyal" clients.

Austrian enterprises will in any case no longer need to maintain an account with an Austrian bank to ensure liquidity in the domestic currency, as any EMU bank can provide such liquidity. Even now, Vienna-based companies keep an average of one account with a foreign bank established in Austria (and every second company keeps a bank account abroad; see table 16). While other reasons, including geographical vicinity, continue to exist, they tend to become less relevant with the introduction of electronic banking, etc. Companies with international operations can route all of their European payment transactions through just one single euro account. Moreover, with the currency barriers having disappeared, they will find it a lot easier to remove the cash management function from their Austrian subsidiaries and consolidate it at the corporate headquarters or at banks in the country where they are headquartered. Last but not least, within EMU

Subsidiaries of foreign enterprises play a major role in Austria: in 1995, nonresident investors employed 207,700 persons in their Austrian direct investment enterprises. This means that, excluding the public sector, every tenth person employed in Austria was on the payroll of a direct investment enterprise. In the industrial sector of the economy, this share was even 25% (OeNB, Austrian Direct Investment Stock in 1995, Focus on Austria 3/1997, p. 40).

the payments function might lose its significance as the first point of contact (and last lifeline) in customer relations. 1)

In Austria, the effects of Monetary Union described above might be experienced very acutely: as the market share held by foreign banks is currently relatively low compared with other European countries, the potential for additional competition from foreign institutions is higher than in other euro area countries. At the same time, banks hold a relatively large share of the total assets of all financial intermediaries, and the ratio of loans to total assets is relatively high by international standards. If Austria undergoes the same developments that are already farther advanced in other countries, it will be affected disproportionately by increased competition from other financial intermediaries and direct financing through the capital market.

However, even though the extent of bank intermediation is expected to go down, overall financing needs will continue to expand. Even if the importance of bank lending and bank deposits declines, banks will still continue to play a central role in the transfer of funds between borrowers and lenders, as they possess a number of comparative advantages over other financial intermediaries and the capital market. They have at their disposal a well developed distribution network, efficient settlement and communication systems and, most importantly, considerable expertise in financing (Rajan, 1996, p. 29). Long-term financing relationships between enterprises and banks reduce the lenders' information costs substantially and are frequently the only way of getting access to such information.2) The relationship developing between a bank and a borrower also facilitates the arrangement of services that cannot be agreed in advance by contract.³) This enables banks to build a reputation in the course of time (Sharpe, 1990) that makes their financing offers more competitive with the capital market.

A flexible design of product sizes, terms and procedures will keep bank borrowing attractive in many cases. Given the minimum volumes required for capital market financing, bank loans will surely remain the prime source of outside funds for small and medium-sized enterprises. And it is these small and medium-sized enterprises that represent a large portion of Austria's business community.

What will the strategic reactions to the challenges of Monetary Union be — based on previous experience with increasing disintermediation and rising competition? In the past, banks used any freed-up resources mainly to generate additional business volume in other markets or business segments. More recently, however, as their role in the borrowing and lending of

¹ Foreign competitors might, however, be deterred by the fees earned on payment transactions, which are low by international standards.

² Banks as "delegated monitors", as described by Diamond (1984), may reduce information asymmetries between enterprises and financiers through long-term financing relationships.

³ Regarding the problem of incomplete contracts see Mayer (1998).

⁴ This does not rule out, however, that banks may securitize such loans. With mortgage bonds and municipal bonds Austria has already some experience with asset-related paper. Regarding the advantages and drawbacks of asset-backed securities in general see Thonabauer (1995).

economic agents (i.e. the core function described here) has been become less significant, they have adjusted the allocation of resources accordingly.

The larger EMU-wide financial market should in principle provide opportunities for increased specialization (Tichy 1996, p. 699), with a focus on special delivery channels, client groups, products or markets where comparative advantages exist. In addition, however, it might also mean specialization within a bank's organization, including outsourcing of functions to separate entities. Increasing cooperation between banks might also be seen from this angle. Decialization would also be the appropriate response to increased differentiation of client demands over recent years (see above) and might contribute to an increased realization of returns to scale.

It is obvious that individual banks' reactions will be varying greatly, depending on their comparative advantages, expertise, geographical situation, client structure, etc. What is given below, is only an outline of possible general development trends.

One possible consequence might be the geographical expansion of the core function to other markets. Since the opening of the markets of central and eastern Europe, Austrian banks have been stepping up their crossborder activities and, today, are quite well positioned in these markets, particularly in Austria's neighboring countries (see table 17). The single currency facilitates cross-border lending in the euro area. Monetary Union has removed the limitations of the narrow schilling market; loans denominated in the constituent currencies of the euro can now be refinanced with primary liquidity raised in the domestic market. Given the relatively low level of interest rates, Austria might even attract commercial borrowers from beyond the borders, including small and medium-sized enterprises in neighboring regions where a number of Austrian institutions are already doing business. Conversely, Austrian banks have lost their previous role in international business as specialists for the Austrian schilling. The special features and practices associated with each currency will increasingly disappear, giving way to euro area market practices. It is, moreover not just the Austrian banks that are looking for new business segments and client groups but all institutions in the euro area - some of which have at their disposal a multiple of the Austrian banks' resources. 2) An expansion of Austrian institutions into other euro area markets is – as explained before in respect of foreign banks' efforts to enter the Austrian market - associated with substantial fixed costs (risk management, credit risk expertise, cost of customer acquisition, etc.), which might put constraints on any major expansion of the lending business.

Further internationalization may be a viable proposition in the long run if banks (without having to incur excessive risks) succeed in doing business

One approach in this regard is pursued by the decentralized sectors in Austria, which are already operating common facilities in a number of areas (marketing, liquidity management, data processing, training, etc.). This also sheds a different light on the question regarding the size of Austrian banks (frequently described as inadequate), which, from this perspective, is primarily an issue of business management, not of banking strategy.

² The total assets of the biggest bank in the euro area are higher than those of all Austrian banks taken together.

profitably, not only in the inter-bank sector, but also in the international deposit and lending business. To date, international business has not contributed to earnings in the same way as it has done to business volume.

Another perspective is continued and intensified "diversification into disintermediation". More strongly than in the past, banks will (also) perform "holding company functions" within the context (and perhaps even as part) of financial services groups. 1) Fee-based income from banking services will continue to gain in importance but — as mentioned above — will never be a full substitute for interest-based income.

Overall, Austrian banks have undergone substantial structural change during the past years. Growth in total assets which in the eighties, supported primarily by interbank business, had been strong and contributed greatly to bank development, has slowed down considerably in the nineties. Since the opening of the eastern markets, international business has changed in character; the range of "nontraditional" financial products has been expanded further. Thanks to consolidation efforts in recent years, Austrian banking should by now have become more efficient and robust. The most recent mergers of Austrian banks have not resulted in noticeably higher efficiency to date²), but should produce results in coming years. The creation of larger units should facilitate the development of new business segments. Beyond this, Monetary Union - like earlier deregulation measures - might increase optimum bank size and thus free up additional earnings potentials in the merged banks. In view of the declining importance of the banks' core function, consolidation may, however, not yet be regarded as completed. Various studies (e.g. Davis and Salo, 1998; ECB, 1999) demonstrate the continued existence of excess banking capacity in the euro area. It may therefore be expected that banks will continue the efforts started in recent years and keep adjusting to the challenges of a more competitive environment.³)

This is to be expected particularly in view of the pressure that Monetary Union will put on credit institutions' profitability. Apart from the loss of income from foreign exchange trading, ⁴) lower growth rates are anticipated in the lending and deposit business, depressing earnings in this segment as well. Beyond this, increasing disintermediation is expected to reduce the

- Disintermediation and increasing competition are expected to lead to further liberalization measures in the banking sector. The scope of activities that banks are allowed to engage in under national laws currently varies considerably among EU member states (see Barth, Nolle and Rice, 1996). The single banking license therefore means different things depending on where it is issued. In Austria, this license is already very comprehensive, allowing domestic banks to pursue a wide range of activities.
- In looking at banks' cost-earnings ratios during the past years, one-off effects from the euro changeover and year 2000 adjustments have to be taken into account, which may have had a not insignificant impact on expenditures. Mergers are moreover usually associated with substantial (one-off) costs, which have also had an impact on the expenditure side in recent years.
- 3 Efficiency improvements are obtained not only by more cost cutting but also through more profitable inputoutput ratios and may encompass the adjustment of organizational structures as well as the elimination of cross-subsidizing (of payment transactions, for example).
- 4 Which, however, is compensated to some extent by interest earned on previously non-interest bearing minimum reserves.

credit institutions' profitability from a structural perspective as the banks earn more on their "lending" and "deposit" activities than on that portion of the business which, in the widest sense, may be regarded as disintermediation. Even if the banks are able to maintain their volumes despite the anticipated trends towards more disintermediation, further pressure on earnings must be expected. At the same time, lending margins, which even now are quite low in Austria, will hardly improve as new competitors enter the market.

On the other hand, measures initiated in recent years to boost efficiency — especially after absorption of the one-time effects caused by the changeover to the euro, the year 2000, and merger costs — should take some pressure off expenditures and improve productivity in the Austrian banking system. The enhancement of intermediation efficiency observed in the nineties should also help to raise profitability. Beyond this, the banks may be expected to offset any losses in earnings at least to some extent through diversification into new markets and business segments.

Summary

Disintermediation tendencies in recent decades have reduced the relative importance of the banks' core function, which within the scope of this study is understood as the transformation of savings into investments at the banks' own risk. The banks have responded to these trends by expanding their activities into alternative markets and/or business segments, which led to the development of universal banks or financial supermarkets, intensified financial market activities and increased diversification into those areas that have disappeared from the banks' balance sheets as a consequence of disintermediation.

As currency barriers have come down with Monetary Union, all banks have at their disposal primary liquidity in the single currency which they can invest in loans to borrowers seeking euro financing. With the euro, banking services can be offered and used across the entire euro area. Monetary Union will result in greatly intensified competition for Austrian banks, both on the asset and on the liability side, even — and particularly — in areas that were previously shielded from foreign competition by currency barriers.

As national bond markets integrate into one single market, the cost of borrowing in capital markets is reduced. In addition to increased competition from foreign banks, Monetary Union will result in even more competition from other financial intermediaries and alternative sources of financing in the capital market.

This may depress if not outright reduce, in absolute terms, the level of resources raised through deposits and their allocation to direct credits. It will further slow down business volume growth, which has been very restrained even in recent years. Despite all this, however, banks will continue to perform a crucial role in the transfer of funds between borrowers and lenders the economy.

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Annex

Table 1

Financial N	1arket	Volume	and In	termed	iation	in Aust	ria				
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	ATS million	. ———			1	1	1		. ———	, ———	, ——
Banks	3,617,329	3,830,858	4,040,476	4,276,192	4,540,454	4,826,676	5,078,727	5,382,997	5,650,976	5,999,832	6,616,768
Insurance companies Investment funds Pension funds Total	226,388 119,713 	250,704 150,648 <u>×</u> 4,232,210	285,691 152,829 <u>×</u> 4,478,996	318,461 161,380 8,985 4,765,018	365,372 171,341 11,025 5,088,192	417,488 222,112 13,821 5,480,097	458,979 255,732 16,313 5,809,751	519,013 332,827 22,670 6,257,507	573,650 431,600 29,832 6,686,058	619,469 567,441 <u>43,655</u> 7,230,397	662,231 ¹) 766,040 64,411 8,109,450
	% share										
Banks	91.3	90.5	90.2	89.7	89.2	88.1	87.4	86.0	84.5	83.0	81.6
Insurance companies Investment funds Pension funds Total	5.7 3.0 × 100.0	5.9 3.6 × 100.0	6.4 3.4 × 100.0	6.7 3.4 0.2 100.0	7.2 3.4 0.2 100.0	7.6 4.1 0.3 100.0	7.9 4.4 0.3 100.0	8.3 5.3 0.4 100.0	8.6 6.5 0.4 100.0	8.6 7.8 0.6 100.0	8.2 9.4 0.8 100.0
	% of GDP										
Banks	231.0	228.5	222.8	219.8	220.7	227.1	226.8	230.6	233.4	238.4	252.3
Insurance companies Investment funds Pension funds Total	14.5 7.6 × 253.1	15.0 9.0 × 252.4	15.8 8.4 <u>×</u> 247.0	16.4 8.3 0.5 244.9	17.8 8.3 0.5 247.3	19.6 10.5 0.7 257.8	20.5 11.4 0.7 259.4	22.2 14.3 1.0 268.1	23.7 17.8 1.2 276.1	24.6 22.5 1.7 287.3	25.3 29.2 2.5 309.2
	ATS million										
Stocks at Wiener Börse Bonds	110,498 763,469	263,017 823,685	281,016 881,465	259,126 944,453	230,105 1,009,501	330,003 1,152,734	321,341 1,277,086	314,389 1,401,007	357,491 1,494,881	451,948 1,623,810	399,672 1,720,616
	% of GDP										
Stocks at Wiener Börse Bonds	7.1 48.8	15.7 49.1	15.5 48.6	13.3 48.5	11.2 49.1	15.5 54.2	14.3 57.0	13.5 60.0	14.8 61.7	18.0 64.5	15.2 65.6

Source: OeNB (data from the credit institutions' monthly returns, insurance statistics, pension fund statistics, investment fund statistics, securities underwriting statistics).

1) Estimate.

Comparison of Lending Rates in Germany and Austria

1997 Annual average % **Germany**Long-term fixed-rate loans to businesses and self-employed up to DEM 1 million 6.68 6.27 up to DEM 10 million Current account credits 6.43 6.01 up to DEM 200,000 10.01 10.00 DEM 200,000 up to 1 million DEM 1 up to 5 million 9.13 9.02 7.74 7.64 Austria 6.41 6.65 Commercial loans

Source: OeNB (interest rate statistics); Deutsche Bundesbank, monthly reports, table VI.6, various issues.

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Domestic and Foreign Assets and Liabilities in 1998 Foreign Domestic Share in % 0.56 Cash 0.37 0.61 29.05 Interbank assets 45.36 24.17 24.85 12.83 15.6 Securities and participations 28.36 54.12 8.28 48.18 Direct loans to nonbanks 1.06 6.61 Other 100.00 100.00 100.00 Total assets 32.75 39.7 18.57 Interbank liabilities 51.19 26.14 Deposits from nonbanks 19.07 47.1 28.65 14.96 Own issues 8.97 Other 1.09 11.8 Total liabilities 100.00 100.00 100.00 % share of total assets 0.57 Net interest income 1.84 1.49

Source: OeNB (data from the credit institutions' monthly returns).

Table 4

Number of Head Offices

	.,00,,0
	Change
Commercial and private banks Savings banks Mortgage banks Raiffeisen cooperatives Volksbanken cooperatives Building societies Specialized banks Total	+ 8 - 57 - 1 -206 - 34 + 1 + 10 -279

Source: OeNB, Statistisches Monatsheft, table 2.0.0.2, various issues.

Table 5

Change in Owernship Structure of Austria's 1988

1988/98

Top Ten Banks

Bank Austria acquires majority shareholding Merger with ÖCl to form GiroCredit Acquired by Erste österreichische Spar-Casse and merged to form Erste Bank Merged with Zentralsparkasse to form Bank Austria Merged with Länderbank to form Bank Austria
Acquired by Erste österreichische Spar-Casse and merged to form Erste Bank Merged with Zentralsparkasse to form Bank Austria
Merged with Länderbank to form Bank Austria
Change of legal form into AG (stock corporation),
49% interest to be offered to strategic partner
Bayrische Landesbank acquires participation
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Merger with GiroCredit to form Erste Bank
ank acquires participation
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Focus on Austria 3/1999

Earnings Situation of A	ustrian Bai	ıks							
	1990	1991	1992	1993	1994	1995	1996	1997	1998
	% of total ass	ets						_	
Total net interest earnings	1.58	1.58	1.60	1.72	1.68	1.68	1.63	1.49	1.32
Commercial banks	1.23	1.26	1.31	1.43	1.32	1.26	1.28	1.35	1.34
Decentralized sectors	2.08	1.94	1.93	2.08	1.97	1.97	1.88	1.69	1.40
Other	0.96	1.00	1.02	1.05	1.34	1.42	1.38	1.05	1.33
Total non-interest earnings	1.14	1.01	1.09	1.14	1.10	1.06	1.12	1.13	1.19
Commercial banks	1.02	1.06	1.11	1.28	1.17	1.10	1.10	1.21	1.42
Decentralized sectors	0.90	0.94	1.05	1.00	0.93	0.90	0.97	1.01	1.06
Other	2.09	1.13	1.22	1.34	1.55	1.55	1.68	1.38	0.86
Total operating income	2.72	2.58	2.69	2.86	2.78	2.74	2.75	2.62	2.50
Commercial banks	2.25	2.32	2.42	2.71	2.49	2.37	2.38	2.56	2.76
Decentralized sectors	2.97	2.88	2.98	3.09	2.90	2.87	2.85	2.70	2.46
Other	3.05	2.14	2.24	2.40	2.88	2.97	3.06	2.43	2.19
Total operating expenses	1.90	1.81	1.86	1.83	1.90	1.90	1.89	1.81	1.71
Commercial banks	1.55	1.64	1.69	1.71	1.70	1.66	1.65	1.77	1.96
Decentralized sectors	2.01	2.03	2.04	1.97	1.96	1.95	1.92	1.84	1.62
Other	2.37	1.45	1.54	1.55	2.05	2.13	2.21	1.74	1.80
Total operating result	0.82	0.77	0.84	1.04	0.88	0.84	0.86	0.81	0.80
Commercial banks	0.70	0.68	0.73	1.00	0.79	0.71	0.73	0.79	0.80
Decentralized sectors	0.96	0.85	0.94	1.12	0.94	0.91	0.93	0.86	0.83
Other	0.68	0.69	0.69	0.84	0.84	0.84	0.85	0.69	0.39
	% of operatin	g income							
Total non-interest income	41.92	38.99	40.68	39.83	39.49	38.79	40.79	43.04	47.33
Commercial banks	45.43	45.55	45.99	47.24	46.94	46.64	46.05	47.4	51.5
Decentralized sectors	30.13	32.65	35.2	32.53	31.96	31.37	34.15	37.33	42.99
Other	68.48	53.05	54.42	56.04	53.64	52.08	54.86	56.8	39.14

Source: OeNB (data from the credit institutions' quarterly returns).

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Table 7

Focus on Austria 3/1999

Interest Income and Interest Expenditure in Nonbank Business 1995 1996 1997 1998 ATS billion Claims on customers Income 198.40 187.20 184.50 184.00 Average level 2,698.60 2,887.40 3,081.60 3,209.70 % interest p. a. 7.35 6.48 5.99 5.73 Liabilities to customers Expenditure 93.60 82.30 80.90 82.10 Average level 2,292.10 2,379.90 2,473.20 2,550.70 % interest p. a. 4.08 3.46 3.27 3.22 Margin in percentage points 3.27 3.02 2.72 2.51 Fixed-income securities 39.30 39.10 41.40 44.70 Income 678.70 Average level 578.00 605.70 768.70 % interest p. a. Securitised liabilities 5.81 6.79 6.46 6.10 57.30 62.70 57.20 57.80 Expenditure 925.70 994.30 1,070.50 1,188.40 Average level 5.75 % interest p. a. 6.19 5.40 5.28 0.71 0.70 0.53 0.60 Margin in percentage points 2.35 2.12 2.10 1.88 Total margin in percentage points Source: OeNB (data from the credit institutions' quarterly returns).

Balance Sheet Structure in Austria and in the EU in 1995 Austria EU-10¹) Difference share in % in percentage points 1.4 Cash and balances with the central bank 1.3 +0.230.3 26.7 +3.6 +8.7 Interbank claims Direct lendings 50.9 42.2 Securities 14.3 20.5 $-6.2 \\ -6.2$ Other assets 3.1 9.4 -0.8 -1.1 Equity capital and reserves 4.6 5.4 0.0 1.2 Liabilities to the central bank 27.4 29.3 +1.9 Interbank liabilities 44.0 43.3 +0.6Deposits from nonbanks 17.4 Own issues 11.1 +6.3Other liabilities 4.7 11.6 -6.9

Source: OECD, Bank Profitability.

Table 9

Non-interest Income as a Percentage of 1997

Operating Income

	% share	
Austria Belgium Finland France Germany (1996) Ireland Italy Luxembourg	43.0 37.1 45.6 53.2 21.0 33.8 29.0 44.1	
Netherlands (1996) Portugal Spain	35.9 33.4 29.2	
Denmark Greece (1996) Sweden United Kingdom	31.8 55.5 48.6 38.8	
Switzerland (1996) U.S.A. (1996)	59.6 35.0	

Source: European Central Bank (1999), table 9.

¹⁾ EMU Member Countries excluding Finland (no data available for Finland); unweighted average.

Table 10

Austrian Banks' Non-interest Income					
	1994	1995	1996	1997	1998
	ATS million	_			
Income from securities and participations	8,734	8,927	10,296	12,970	19,059
Stocks and shares	3,372	3,359	4,259	5,500	6,014
Participations, shares of associated companies	5,362	5,568	6,036	7,469	13,046
Net income from commissions	25,374	24,915	27,761	29,577	32,962
Lending	3,324	3,417	3,489	3,118	3,375
Securities	6,467	5,372	6,948	8,592	10,610
Payments	10,728	7,739	8,062	8,254	9,121
Foreign exchange, precious metals	×	3,518	3,672	3,807	3,897
Services	4,855	4,869	5,590	5,806	5,959
Financial transactions	6,487	7,424	7,958	8,508	9,095
Securities not carried as financial assets	3,429	2,155	2,715	2,487	2,992
Foreign exchange, precious metals	3,058	4,247	4,000	4,291	4,680
Other	×	1,022	1,243	1,730	1,423
Other operating income	15,185	15,982	17,433	16,537	17,323
Total non-interest income	55,780	57,248	63,448	67,592	78,439

Source: OeNB (data from the credit institutions' quarterly returns).

Table 11

	1985	1990	1995
	% of balance		
Netherlands	54.3	61.1	63.4
Germany	58.5	54.5	54.6
Austria		50.7	50.9
Spain	41.9	44.9	43.6
Sweden	48.4	53.5	43.6
Denmark	35.2	44.2	43.4
Italy	36.8	45.6	42.4
France		40.2	38.5
Portugal	53.6	40.5	33.3
Belgium	33.5	34.1	32.7
Luxembourg	32.1	24.0	18.9

Table 12

Private Nonbanks' Outside Financing

Annual averages

1988 to 1990 1991 to 1993 1994 to 1996

	% share		
Bank loans	70.6	63.5	58.9
Public sector loans incl. ERP	6.0	9.6	10.7
Loans from insurance companies	- 0.1	1.4	- 0.2
Bonds	1.3	5.8	7.5
Participation and participation-type capital	13.7	12.9	10.1
Abroad	8.4	6.8	13.1
Total	100.0	100.0	100.0

Source: Staatschuldenausschuss (1998), Bericht über die Finanzschuld des Bundes 1997, Wien; OeNB.

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Subsidized Loans				
	1995	1996	1997	1998
	ATS million			
Subsidized home loans Home loans % share of subsidized home loans	189,481 394,130 <i>48.1</i>	210,333 431,455 48.7	218,110 458,296 47.6	208,803 484,196 43.1
Other subsidized loans Direct lending to domestic nonbanks excluding home loans	137,728 2,288,010	136,902 2,355,688	163,151 2,440,074	169,311 2,547,263
% share of other subsidized loans	6.0	5.8	6.7	6.6
Total subsidized loans Total direct lending % share of subsidized loans	327,209 2,477,491 13.2	347,235 2,566,021 13.5	381,261 2,658,184 14.3	378,114 2,756,066 13.7

Source: OeNB (data from credit institutions' monthly returns).

Table 14

Bank Liabilities of Manufacturing Enterprises in 1997			
	Small ¹) enterprises	Medium ²) enterprises	Large ³) enterprises
	% of total assets		
Austria	32.55	26.86	22.68
Germany (1996)	29.23	21.38	4.75
Netherlands		16.21	7.69
France	12.74	12.68	5.86
Italy	24.65	24.81	19.13
Spain	20.52	19.18	9.18
Portugal (1996)	16.89	20.30	17.30

Source: OeNB, ECCB/DG-2.

Table 15

Financial Assets of Domestic Nonbanks

Annual average

1988 to 1990 1991 to 1993 1994 to 1996

% share

Cash	3.36	4.06	3:78
Schilling assets held with banks Thereof savings deposits Foreign currency assets held with banks Other Financial assets held with banks	48'17	56.68	49.58
	35.01	44.91	25.39
	7'16	11.06	4.19
	2'76	1.50	- 2.75
	56'71	68.49	52.40
Savings with life insurance companies	11.13	12:32	17'80
Mutual fund shares	8.64	3:84	23'55
Other domestic securities	14.02	4:34	0'47
Investment abroad	6.14	6:96	2'01
Financial assets held outside banks	39.93	27:46	43'83
Total financial assets	100.00	100:00	100'00

Source: Staatsschuldenausschuss (1988), Bericht über die Finanzschuld des Bundes 1997, Wien.

¹) Sales up to EUR 7 million.

²) Sales EUR 7 to 40 million.

³) Sales over EUR 40 million.

Table 16

Bank Accounts Maintained by Businesses Located in Vienna

by Bank Headquarters

	Number
Austrian bank in Vienna	6.3
Foreign bank in Vienna Bank in another Austrian state	1.0 1.6
Bank abroad	0.6
Total	9.6

Source: Mooslechner (1993).

Table 17

Austrian Banks' Market Positions

in Lending to Central and Eastern Europe relative to Lending by Banks of all BIS Reporting Countries

	1997	1998	1997	1998
	Market share		Ranking	
Slovenia	28.8	30.5	1	1
Croatia	20.7	22.7	2	2
Slovak Republic	20.6	16.7	2	2
Czech Republic	12.3	13.5	2	2
Bulgaria	8.3	13.4	3	2
Hungary	14.6	12.7	2	2
Poland	11.8	11.3	3	4
Russia	4.6	6.8	5	4
Romania	5.0	6.1	5	4
Total Central and Eastern Europe	8.3	9.4	4	2

Source: BIS Quarterly Review, International Banking and Financial Market Developments, table 9 B, various issues.

The Possibilities and Limitations of Monetary Policy

Results of the OeNB's 27th Economics Conference¹)

I The Role of Monetary Policy in Economic Policy

Manfred Fluch²)

As of January 1, 1999, the responsibility for monetary policy in the euro area was transferred to the Eurosystem, which consists of the European Central Bank (ECB) and the national central banks of the 11 countries comprising the euro area. Although European monetary policy is generally judged to have performed well, the transfer of monetary policy sovereignty to the Eurosystem and its impact on economic policy have triggered discussions and have drawn critical comments. The ongoing debate was an important factor in the decision to choose "Possibilities and Limitations of Monetary Policy" as the title for the OeNB's 27th Economics Conference. Feeble economic growth and high unemployment rates in Europe had given rise to the question of how economic policy could contribute to meliorating the situation. U.S. successes in terms of growth, employment and price stability highlighted the issue of what role monetary policy had to play in the process. The extent and timing of monetary policy's impact on the real economy is particularly important in this context.

The main topics of the conference included both macroeconomics (monetary policy and price stability, the real effects of monetary policy, economic policy coordination, monetary policy challenges arising from the integration of financial markets) and microeconomic aspects of the labor market (labor market reforms, the wage-setting process).

2 The Tasks and Limitations of Monetary Policy

Price stability first - moderate contribution to growth and employment

The supreme task of monetary policy is to safeguard price stability. The leverage of monetary policy in reducing unemployment is limited; Europe's high levels of unemployment call primarily for the adjustment of structural policy. Attention will have to focus on building a dialogue between all decisionmakers involved in the definition and implementation of economic and monetary policy measures, to foster mutual understanding. The Eurosystem should take part in this dialogue to promote its monetary policy with both employers and employees. Whether unemployment can be successfully combated ultimately depends on whether unions are ready to go along with the ECB's orientation towards stability in the wage-setting process. *Christian Noyer*, above all, referred to existing forms of cooperation between monetary, fiscal and wage policies in the euro area.

Price stability is the most valuable contribution to sustainable growth and employment

Klaus Liebscher presented five theses on the tasks and limitations of monetary policy; he underscored the importance of price stability as monetary policy's prime objective, arguing that in the long term, monetary policy

¹ The conference took place in Vienna on June 10 and 11, 1999. This paper presents a summary of the conference's most important results; the speakers' original contributions were published in the conference proceedings in October 1999.

² The author wishes to thank Ernest Gnan, Walpurga Köhler-Tögelhofer, Peter Mooslechner, Helene Schuberth, Martin Schürz and Walter Waschiczek for their valuable comments.

could further growth and employment best by safeguarding price stability. However, monetary policy does have effects (at least in the short term) on the real economy and can play a part (at least to some extent) in cushioning real economic shocks. Liebscher pointed out that in a world of liberalized global markets and instantly available information, the success of economic policy depended fundamentally on credibility, consistency, sustainability and broad public acceptance. This is especially true of monetary policy. In the OeNB governor's opinion, the flexibility and effectiveness of monetary policy hinged upon the readiness of other actors in the economic policy arena to espouse the Eurosystem's monetary policy objectives. In a period of low inflation and high unemployment, monetary policy faces serious challenges. In this context Liebscher pointed out that so far the EU's economic policy had not found an adequate response to unemployment, whereas the goal of low inflation had been achieved, at least for the time being. If the population should one day no longer be aware of the macroeconomic costs of inflation, a stability-oriented monetary and economic policy would run the risk of becoming less and less accepted among the voting public. Central banks must therefore address this issue by designing monetary policy with utmost care and by unfalteringly providing clear and comprehensive information. To preclude a loss of public acceptance, monetary policy needs to be highly transparent and comprehensible.

Monetary policy must not be expected to have a significant impact on unemployment

Like Liebscher, Christian Noyer argued that safeguarding price stability is the ECB's top priority. He stated that while a high level of employment was no doubt worth striving for, monetary policy could only have a limited impact on the reduction of unemployment, which was mainly caused by structural deficiencies. Exaggerated expectations could do very little to help the credibility of monetary policy, above all if they concerned an economic policy issue which lies outside the ECB's area of competence. The Eurosystem could best support general welfare by fulfilling its mandate as laid down in the EU Treaty and the ESCB statute, i.e. by securing price stability. In an environment of stable prices, costs arising from unnecessary doubts over whether or not an investment project will succeed are eliminated, and favorable conditions for growth and employment can be created. Another objective of the Eurosystem – besides combating inflation - is to prevent deflation. This is reflected in the definition of the monetary policy goal of an above-zero rate of inflation below 2%. Nover very clearly spoke out against orienting the Eurosystem on an exchange rate target. Such a target would imply that price stability could not be maintained for the currency of one of the world's two major economic areas. However, this was not to mean that the trend of the euro's external value was to be neglected in monetary policy decisions.

The ECB's monetary policy strategy must be highly transparent

Wolfgang Ruttenstorfer reminded the audience that the Eurosystem's monetary policy was embedded in an economic policy context and could therefore not be seen in isolation. By lowering the headline interest rates in April 1999, the Eurosystem demonstrated that it is aware of its share of the responsibility for the development of the economy. To strengthen the mutual awareness of their shared responsibility for the progress of the economy, decisionmakers in monetary, fiscal, wage and structural policy areas need to maintain a constant dialogue. This form of coordination has produced excellent results in Austria.

Giovanni Ravasio called, among other things, for a highly transparent monetary policy strategy. Transparence makes monetary policy more effective by developing the awareness of all those involved in and affected by economic policy as well as strengthening trust in the reliability and credibility of the central bank. At this very early stage in the history of the new monetary policy regime, the Eurosystem still has room for improvement, above all in the areas of trust and credibility.

3 The Impact of Monetary Policy on the Real Economy Monetary policy affects economic growth and employment via several channels

None of the speakers questioned the fact that monetary policy influences the development of growth and employment through a variety of channels. There were, however, diverging opinions on how monetary policy impulses are transmitted to the real economy. A number of recent theoretical studies, whose results were confirmed in empirical analyses, proved that a central bank's interest rate policy has an impact on growth and employment; however, the effects were primarily short-lived. Thus the existence of real effects of monetary policy can not be interpreted to imply that monetary policy can contribute to a reduction of unemployment on a sustainable basis. Monetary policy can, however, mitigate cyclical effects on unemployment. The experts stressed the fact that the Eurosystem contributed significantly to the recovery of the economy by cutting interest rates on April 9, 1999. Monetary policy cannot, however, alter an economy's growth potential and the corresponding level of structural unemployment. Several speakers reiterated that unemployment in the euro area was above all caused by structural shortcomings, and the battle against unemployment consequently would have to be fought in other areas of economic policy.

There was a lively debate on the optimal rate of inflation as well as on how to define price stability and which indicators should be used to evaluate the level of price stability attained, especially considering the potential bias in price measurements.

Monetary policy challenges in an environment of stable prices

Karen H. Johnson discussed a number of recently emerged theoretical approaches which merit particular attention in today's environment of low inflation; issues such as how to measure prices and a variety of key variables, such as wage setting, need to be considered.

At the time of the depression in the 1930s in the U.S.A. and recently in Japan, price stability was accompanied by very low nominal interest rates and declining economic growth. By contrast, price stability in the United States today, as in the 1950s, is characterized by above-zero nominal interest rates and a booming economy. This means that price stability is compatible with a prospering economy. Nevertheless the trend of nominal interest rates towards zero has proven to be damaging to stabilization policies.

In defining their inflation targets in a context of very low inflation, the relevant institutions need to take a number of factors into account, whose empirical significance varies from country to country. As the official price indices contain sizable statistical errors, a targeted moderate level of inflation, at least in the U.S.A. is tantamount to price stability. On the whole, low expected inflation is conducive to sensible wage adjustment and thus dampens stability risks.

Empirical studies in the U.S.A. indicate that price stability reinforces productivity growth. They also show, however, that interest rates close to zero can cause recessions to last longer on average and can result in higher risks of a deflationary spiral. Although there are some monetary policy instruments which can be applied even in an environment of very low interest rates (direct intervention in the bond market, writing options on interest rates, foreign exchange market intervention, purchases of private sector securities, discount window lending to nonbanks), in the end only fiscal policy measures can rescue the economy from a potential deflationary spiral. Examples in history show that a sound banking sector is also crucial to avoid problems in periods of low nominal levels of interest.

The role of policy rules in the Federal Reserve System's analysis of monetary policy

Policy rules provide a useful framework for analyzing monetary policy. The focus of monetary policy in the U.S.A. has progressively shifted from controlling the volume of money towards monetary policy reaction functions, e.g. by relating short-term interest rates directly to changes in inflation and output. Between 1980 and 1996, the Fed reacted to accelerating inflation and excessive demand (current GDP exceeds potential GDP) by raising interest rates. There was also evidence that these interest rate decisions evened out the levels of real interest rates and that the Fed reacted both to output growth and the level of output. The results of the reaction functions also underscore the short-term impact of monetary policy measures on the economy. Although the processes triggered by interest rate decisions are far more complex than the results of simple reaction functions would have us believe, these results can provide valuable insights for monetary policy decisions. The choice of policy rule of course depends on a multitude of factors, such as the declared goals of monetary policy and the structural characteristics of the respective economy. By and large, U.S. monetary policy over the past two decades can be summarized by an estimated equation relating interest rate changes to changes in inflation and the output gap.

A medium-term focus in monetary policy does not preclude short-term reactions to macroeconomic turbulence

The empirical evidence presented by José Viñals showed that inflation in the medium-term is a monetary phenomenon with significant cost to the economy. The best contribution monetary policy can make is to safeguard price stability. In addition, monetary policy also influences the economy in the short term, regardless of whether the policy measures are systematic reactions to an economy's cyclical situation or to exogenous shocks. While this general assessment is largely unchallenged, it is far from easy to determine a time horizon and the extent of monetary policy measures' impact on growth and price developments in the short-term. An orientation of monetary policy towards a medium-term goal, i.e. price stability, does not preclude a flexible reaction to macroeconomic turbulence, as long as the primary goal of price stability is not put at risk. Potential monetary policy uncertainties arising in an environment of low inflation and low interest rates, which is currently prevalent in Europe, do, however, imply that an easing of monetary policy can hardly help economic activity, even if such a monetary policy move does not threaten price stability. This leads to the conclusion that monetary policy, under the given circumstances, should not be burdened with the responsibility of solving problems which should rather be addressed in other policy areas. In an environment of price stability, which in the eyes of the public has become a matter of course, the high value of monetary stability and the economic costs of inflation constantly need to be underscored.

20% of the budgetary consolidation achieved in Europe can be attributed to the lower interest burden

In his comment, *Ewald Nowotny* noted that besides the short- and medium-term effects the theory on endogenous growth also included models on the long-term effects of monetary policy. Like *Michael Artis*, Nowotny agreed that monetary policy decisions have effects on the real economy both in the short and the medium term. This is reflected in the success of the Fed's strategy, and Europe could benefit if the Eurosystem followed the Fed's example. Here Nowotny referred his listeners to the effects of a central bank's interest rate decisions, which can range from an influence on borrowing costs and enterprises' readiness to invest (with subsequent effects on employment) to the levels of public deficit. The low level of interest rates contributed substantially to the consolidation of state budgets in Europe. On an EU-wide level, 20% of the consolidation achieved is traceable to lower interest dues. In Greece and Italy this percentage is said to be as high as 50%.

4 Policy Coordination in EMU

EMU requires closer coordination of economic policies – views on the institutional framework diverge

In the eyes of Johnny Åkerholm, transition to the third stage of EMU and the formulation of an effective policy mix posed a challenge to the decision-

makers in all fields of economic policy. The stakes were raised by the fact that the responsibility for the euro area's single monetary policy, encompassing 11 countries, rests with the Eurosystem, while other economic policy areas, such as budget policies, which have a profound impact on the development of the euro area, still lie within the competence of each Member State. The Maastricht Treaty provides for a set of rules and procedures for both active and passive coordination, based on benchmark targets. It also includes specific regulations on monetary policy. Overall, however, there is no contractual agreement on coordination between the two main centers of gravity in economic policy, the European Council and the ECB. The main body for coordination in practice is the Economic and Financial Committee, which brings together all the main actors and which prepares the meetings of the ECOFIN Council. Even though a host of coordinating mechanisms have already been established throughout all the areas of economic policy, much remains to be done. Two particular cases in point are employment and budget policies.

Against the backdrop of Europe's far weaker performance in the labor market as compared to the U.S.A., *Georg Fischer* outlined the needs for the coordination of economic and employment policies on a European level, citing above all the extraordinary European Summit in Luxembourg, the Employment Pact and the National Action Plans. The European Commission has assumed several responsibilities as a coordinator of employment policies. The Commission periodically conducts analyses for the Council and serves as a mediator, promoting the exchange of experience and best practices to allow Member States to learn from each other. This is particularly important as the labor markets differ enormously from country to country. The impetus to coordinate employment policies more closely came above all from the Member States with a poor labor market performance and a shared will to ease the disparities.

Jürgen von Hagen emphasized that an enhanced coordination of economic policies in EMU is indispensable, above all between monetary policy on a supranational and fiscal policies on a national level. He stated that at present he saw no institution with a clear legal mandate to safeguard such close coordination. Rather than holding a multitude of informal meetings of bureaucrats, an Economic Policy Council (EPC) for EMU should be set up and equipped with sufficient power to coordinate economic policies. Von Hagen described in detail which competences and institutional aspects would need to be covered. The euro area countries' ministers of finance or economics would publish macroeconomic assessments for the euro area and issue recommendations for the EMU participants' fiscal policy. Such a coordinating body should be endowed with the necessary institutional framework, e.g. a longer period of presidency and regular meetings, to provide for the continuity which is lacking in current coordinating bodies, such as the Euro-11. Thus the interaction between the Eurosystem's monetary policy course and national governments' fiscal policies could be more efficiently negotiated and better balanced. Provided the necessary level of transparence could be attained in this process of coordination, the Economic Policy Council could highlight

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the responsibility of the respective policy branch and thereby strengthen the performance of and trust in EMU's monetary policy.

Implicit versus explicit coordination in EMU

In his contribution, Hermann Remsperger pointed out the vital importance of the coordination of monetary, wage and fiscal policies in the process of safeguarding a currency's stability. He drew a clear distinction between explicit coordination, in which a common decision-making process is required for a set of different policies and implicit coordination, which is limited to the assignment of specific tasks to selected policy areas. EMU's policy mix is built predominantly on a form of implicit coordination. This harbors the risk, however, that a onesided focus on a certain policy area could lead to a threat of destabilization rather than to stabilization. At the same time, a policy of all-encompassing ex-ante coordination could not be effective, as ultimately none of the economic policy areas concerned would receive sufficient attention. Consequently a clear division of tasks between monetary, fiscal and wage policies is absolutely necessary to allow implicit coordination to succeed. One of the main prerequisites in the field of monetary policy is the consolidation of government budgets, with a main focus on expenditure. Putting off the corresponding measures is not an option, as the markets would penalize any delay.

5 Labor Market Reforms, Employment and Wage SettingAn optimum policy mix also requires that monetary policy take into account the situation of the labor market

In her statement, Gertrude Tumpel-Gugerell made it clear that central banks also had to deal with the causes of high unemployment in their analytic research. Decisionmakers in fiscal, incomes and monetary policy should meet regularly to discuss their views on issues regarding the labor market and the economic environment. Only with such coordination could an optimal policy mix be found. The Employment Pact, which was adopted at the summit in Cologne, is an important step in this direction, as it institutionalizes an exchange of views on economic policy.

Approaches to improving European labor markets

Allan Larsson presented five measures through which structural unemployment could be tackled in Europe:

- The 15 national labor markets, some of which are encrusted with rigid structures, need to be replaced with a single market. This would make competition fairer and would reward companies which achieve higher productivity. The rigidities of national labor markets need to be dissolved.
- 2. Europe's industrial sector is vibrant, but the services sector is not sufficiently developed, despite the fact that 90% of the final demand is domestic. Stronger incentives for creativity and flexibility in the services sector could lead to higher levels of growth and employment.
- 3. Gender-based inequalities need to be abolished.

- 4. The issues number 2 and 3 are particularly pressing in Germany, France, Italy and Spain the EU's big four. If conditions are to be improved there, the EU will benefit in its entirety.
- 5. The trend to eliminate employees from the labor market before their time is a crass abuse of social security systems. A shift of labor market policies from passive to active measures is urgently required.

The EU's contribution to creating employment rests on a four-pillar employment strategy. The concept focuses on improving jobseekers' employability, promoting entrepreneurship, enhancing employers' and employees' adaptability, as well as securing equal opportunities. All Member States are now engaged in implementing these four pillars by introducing concrete measures in their National Action Plans for the years 1999 to 2002. The United States have demonstrated how employment can be boosted, and in several EU countries labor markets have performed well without pushing up inflation. Why should this not be possible for the EU as a whole, if adequate efforts are undertaken?

Different factors have led to the successful performance of labor markets in the Netherlands, Ireland, the United Kingdom and Austria

Jelle Visser outlined the Dutch model of part-time employment, with the help of which 1.2 million jobs were created between 1984 and 1996. The Netherlands currently claim the highest ratio of part-time employment worldwide and have surpassed the traditionally high ratios of women working part-time recorded in Scandinavia. The "part-time revolution" doubled part-time employment between 1981 and 1996, catapulting the share of part-time jobs in total employment from 18 to 37%. Three main policy changes introduced in the aftermath of the severe recession between 1981 and 1983 paved the way for the "Dutch miracle":

- stronger pressure for moderate wage policies boosted business profitability,
- the social security system was reformed, primarily by streamlining disability insurance and early retirement, and
- an active labor market policy increasingly replaced passive labor market measures.

As it spread, part-time employment became more accepted; special rights were defined and marginalization came to an end. As more part-time contracts were drawn up, requests and demands voiced by employees were more readily taken into account; above all married women and women with children increasingly wanted to work part-time. Consequently Visser concludes that the part-time revolution in the Netherlands was not planned, but happened, partly as a heritage of a past in which it had been the norm for married women and mothers to stay at home. As women redefined their role in society, they forced employers, unions and politicians to implement policy changes in the labor market.

According to *Brendan Walsh*, the decisive factor in Ireland's impressive labor market performance in the 1990s was the buoyant growth of the Irish economy, which at 4% per annum far exceeded the EU average. In addition,

structural policy measures had a particularly important impact: Direct investment was successfully stimulated, e.g. through low corporate taxes, the educational system provided an ample supply of highly skilled young people, the return to centralized wage bargaining delivered moderate wage increases, and last but not least, Ireland made optimal use of EU programs to shape up its infrastructure. Several indicators in the OECD comparison show that Ireland's labor market has become relatively flexible. Ireland outperforms the OECD average in the employment protection and union coverage indices as well as the categories benefit duration, active labor market policies and union density.

While a combination of macroeconomic and structural policy improvements led to the turnaround in Ireland's labor market, *Richard Jackman* attributes the progress achieved in the United Kingdom's labor market above all to macroeconomic policy factors. After dropping out of the European Exchange Rate Mechanism, the United Kingdom experienced robust noninflationary growth, with output at almost full potential and unemployment back down at its equilibrium rate, which it had previously exceeded by far. Jackman sees a prominent role of monetary policy in the recovery; in the case of the United Kingdom, the revival of the economy was made possible only by the abandonment of the fixed exchange rate system.

In his comment on the Austrian experience, Peter Rosner concentrated his arguments on four aspects: He underscored the close cooperation of the social partners in the formulation of monetary policy, in which inflation has always been viewed as a threat to international competitiveness. As a consequence, real wages have reacted strongly to changes in unemployment. In some aspects, Austria's labor market today is highly flexible and can compete with U.S. standards, but regarding the range of wage structures, Austria still lags behind. In the U.S.A., wage differences are much higher and mobility between jobs often entails a decline in wages, which is not the case in Austria. The gap between net wages and labor costs – resulting from high and rising nonwage labor costs – is excessive and causes problems in the labor market. Labor market policies are increasingly geared towards active rather than passive measures; it is too soon, however, to speak of resulting employment effects and as the current mix of labor market measures is rather eclectic, it is doubtful whether a definite judgement will ever be possible.

At an after-dinner lecture, *Viktor Klima* stressed the pivotal function of the social partners, key partners of government policymakers in dealing with the worries of the labor market. Klima stated that he was confident the European Union would make progress in intensifying and broadening cooperation and integration, backed by the new common currency.

Views on the labor-market effects of the euro differ

Richard Jackman highlighted the importance of wage and income policies in absorbing shocks in a monetary union. Two approaches can be employed in wage bargaining: The first is to define guidelines for settlements which will achieve the necessary adjustment in wage levels; the second is to make

wages more responsive to market signals and imbalances. A combination of macroeconomic and structural policies could prove to be highly effective. The single currency is neither the root of rampant unemployment, nor does it prevent the adoption of structural policies, necessary to achieve a permanent and sustainable reduction in unemployment rates. The change-over to the single monetary policy and the concurrent pressure to harness inflation did, however, fuel unemployment in the short term. In the medium term, structural imbalances can be expected to grow as a result of the single monetary policy, as more of the adjustment process will need to be accommodated by changes in nominal wages.

Structural policies to reduce unemployment should in principle be accompanied by demand-side policies to increase the number of jobs. *Jackman* expressed his doubts, however, that the most effective policy of this type, namely a reduction in real wages, could be achieved easily in conditions of low inflation and downward rigidity of nominal wage rates. In his view, monetary union is not the cause of high unemployment, but it does impede structural changes necessary to address the problem.

This was a point Karl Pichelmann called into question. He regards the single monetary policy as a stimulus for structural policy measures. EMU, in his opinion, will allow governments to implement structural labor market reforms on a coordinated euro area-wide basis. Pichelmann cited the multitude of initiatives and supply-side EU measures implemented in the National Action Plans for Employment. Regarding wage settlement in EMU, particular attention should be paid to bargaining structures and the flexibility of wages as the two main shock absorption mechanisms. Here, the Eurosystem's reaction function and its effect on the wage bargaining curve and the natural rate of unemployment deserve to be observed with close scrutiny. The changes for countries hitherto oriented on the Deutsche mark are likely to be minor, while former inflation-prone countries are likely to achieve stability gains. Pichelmann sees potential risks for Germany, as German wage bargainers were accustomed to the Bundesbank's reaction function, but do not yet know how to judge the Eurosystem. In principle, wage policies should be oriented on productivity developments to stabilize unit labor costs. However, wage developments as well as productivity and profitability gains are subject to a variety of influences, which have to be viewed on the basis of their interdependence.

Integrated Financial Markets A Challenge for Monetary Policy

Effective financial market supervision will be of crucial importance

Inflation has been quelled in Europe, and thus a secure environment has been created for investment and saving. However, the closer monetary policy moves to achieving its primary objective of price stability, the harder it gets to interpret the signals of economic developments correctly. Ever more closely knit international networks, the effects of expectations and preferences in financial markets as well as the transmission of crises via contagion effects to a number of economic areas are making national economies and markets increasingly interdependent. This renders the

measures adopted by the IMF and the European Council for the strengthening of the international financial system all the more relevant. In this context, effective supervision of financial markets is of key importance.

Controllable capital flows, labor market and structural reforms as milestones on the road to stabilization in the global economy

In the eyes of Flemming Larsen, globalization has amplified four economic trends: First, economic linkages across countries and regions have changed quite significantly. Whereas economic disturbances used to be transmitted mainly through trade flows and commodity prices, private capital flows in the 1990s have led to a desynchronization of business cycles. This can mainly be attributed to Larsen's second main factor: crossborder capital flows to emerging markets, which have been buttressed by financial market liberalization, the abolishment of capital controls, the search for high yields and the desire for portfolio diversification. His third main observation is that exchange rates have become far more sensitive to cyclical developments. He ascribes his fourth point – the fact that inflation has been reduced worldwide – to central banks' increasing orientation on price stability, but also to tighter competition, deregulation, lower transport costs and the IT revolution. Larsen concluded that essential parts of making the world economy less unstable will be to bring potentially destabilizing capital flows under control and to tackle Europe's labor market problems as well as Japan's structural deficiencies.

Do strong capital flows unavoidably entail crises in financial markets?

In the period between the first and second world wars, Hayek and Keynes concluded that cyclical turbulence was mainly caused by imbalances in financial markets; according to *Erich Streissler*, this still holds true today. After the financial crises in Asia, Russia and Latin America, Streissler warns of a crisis looming in the U.S.A. As the world's most heavily indebted nation, the United States records a savings ratio of close to zero and a balanced budget, which means that private investment is financed entirely from abroad. Much of the capital inflow stems from the euro area. If stock market prices on Wall Street slip, large quantities of foreign capital could be withdrawn and a strong appreciation of the euro could ensue. Streissler postulated that all large international capital movements entail financial crises; consequently the budget austerity prescribed by the Maastricht Treaty, which triggered massive capital movements, contributed to financial crises.

The level of prices currently assessed on the basis of goods and services reflects only a fraction of actual financial market transactions. The question therefore arises whether asset, real estate and common stock prices should not also be taken into account. However, a central bank has no means to stabilize these prices, as they are far more volatile than prices for goods.

In Streissler's view, national central banks still have important tasks to fulfill in the euro area. They act as lenders of last resort for the credit institutions in their countries, and correspondingly they need both a sound reputation and a well-stacked strongbox, i.e. reserves. In his words, speculation in international financial markets is much too serious a business to be left to private investors alone. Furthermore, national central banks are in a unique position to control and supervise financial institutions, as their expertise in the markets makes them more efficient and better suited to the task than any other supervisory body.

Age Bakker did not share the opinion that European financial policies in general and the Maastricht process in particular induced financial crises. He argued that the measures preventing excessive deficits had, on the contrary, contributed to alleviating debt burdens and bringing deficit ratios to a sustainable level. Declining long-term interest rates evidence the markets' recognition of these achievements. Counterbalancing Streissler's conclusions on savings and investment in the U.S.A, Bakker also pointed out that while the savings ratio of households is close to zero, the national savings ratio including the business sector is amply positive and provides some finance for investment. Moreover, savings and investments in a globalized world are increasingly decoupled. Bakker found it difficult to see disequilibria in financial markets as the main causes of cyclical disturbances. As financial markets can be considered as a meeting point of shocks of various causes, restrictions on financial markets should be limited. Experience, he claimed, has shown that the benefits of liberalized markets outweigh the risks, especially if deregulation is accompanied by sustained nominal stability. Over the past twenty years, Austria and the Netherlands have shown that liberalized markets and a fixed exchange rate commitment can go hand in hand. According to Age Bakker, existing risks can be moderated by putting more emphasis on pursuing stability-oriented macroeconomic policies and by implementing transparent and sound financial market supervision practices.

International restructuring in the banking sector leads to better financial services at better prices

In his statement on the impact of the Eurosystem and the euro on the financial markets as well as banking sector restructuring in Europe, Tom de Swaan concluded that both in Europe and in the United States, supply- and demand-related factors will lead to some kind of dynamic equilibrium. In such an equilibrium, both universal banks and institutions specialized in specific areas will have a key part to play. EMU-wide players will enter the scene in all areas of banking. The current wave of mergers will continue; economies of scale and synergies in a number of important lines of business are compelling arguments in favor of further consolidation. The dominance of U.S. investment banks and the challenge by the new U.S. banking giants will increase the pressure for restructuring in Europe. However, anti-trust authorities should ensure that banking concentration does not go beyond a certain point. In cases where national authorities fail to do so and thus permit financial institutions to merge into large national groups, European bodies will interfere. Nonetheless, it is just a question of time when the first crossborder merger between two large European banks will take place. Banking clients will no doubt benefit from the restructuring of the banking sector, as it will produce better financial services at a lower price.

7 Tasks and Limitations of Monetary Policy – A Tentative Synthesis

Maintaining price stability has indisputably been established as monetary policy's primary objective. In the long term, price stability is the best prerequisite for economic growth and sustainable employment. A study conducted by the Fed underscores this view, as it shows empirically that inflation and productivity are negatively correlated. Although, or perhaps precisely because the public has come to regard low inflation as a matter of course, the risks of budding price pressures need to be highlighted consistently. Simultaneously, central banks are called upon to strengthen their credibility by conducting a prudent and transparent monetary policy. Implementing monetary policy in a low-inflation environment, however, is not as easy as it may seem.

By contrast, the contribution monetary policy can make toward alleviating structural unemployment in Europe is limited. Monetary policy can only be brought to bear on cyclical components of unemployment, and any measures must by no means infringe on the stability objective. Europe's high levels of unemployment need to be tackled through supply-side structural policy measures. Overall, experience in a number of countries has supported this conclusion, even if cyclical elements were also involved alongside structural factors in pushing unemployment to its high present levels. In accordance with this line of argument, a flexible monetary policy can serve to counter negative demand shocks and thus prevent a further rise in unemployment. In the case of supply-side shocks, the responsibility for dampening the effects on employment and growth rests above all with wage negotiators. As a result, there can be no doubt about the significance of wage and income policies in Monetary Union. Consequently, wage bargaining structures need to take the economic framework conditions into account. A European social partnership and an institutionalized dialogue between political decisionmakers, including the ECB, is viewed as an important element of such a structure.

In a world of integrated financial markets and growing interdependence between economic areas and regions, the functions performed by central banks gain ever more importance. Central banks secure a stable monetary environment, act as a lender of last resort in emergencies, have important duties to fulfill in controlling and supervising financial institutions and can counter speculation in financial markets. Central banks' performance in fulfilling these tasks is substantially enhanced by close cooperation with international financial institutions such as the IMF.

Contributions at the OeNB's 27th Economics Conference

listed by groups of topics

The Tasks and Limitations of Monetary Policy

Klaus Liebscher Governor: OeNB Fünf Thesen zu den Aufgaben und Grenzen der Geldpolitik

Christian Noyer Vice-President of the FCB The Tasks and Limitations of Monetary Policy

Giovanni Ravasio Director General for Economic The Role of Monetary Policy in EMU – The Commission's View

and Financial Affairs, DG II, European Commission

Wolfgang Ruttenstorfer State Secretary, Austrian Federal Statement zu: Aufgaben und Grenzen der Geldpolitik

Ministry of Finance

The Impact of Monetary Policy on the Real Economy

Michael J. Artis Professor of Economics, On the Real Effects of Monetary Policy

Karen H. Johnson Director of the Division Monetary Policy and Price Stability

European University Institute, Florence

of International Finance, Board of Governors

of the Federal Reserve System

Professor, Vienna University **Ewald Nowotny** On the Real Effects of Monetary Policy

of Economics

Head of Economic Studies, José Viñals On the Real Effects of Monetary Policy

Banco de España

Policy Coordination in EMU

Johnny Åkerholm Under-Secretary of State Policy Co-ordination in EMU

> for Economic Affairs, Finnish Ministry of Finance

Head of Employment Policy Unit, DG V, Georg Fischer Employment Policy Co-ordination and Economic Policies

European Commission Member of the Directorate Hermann Remsperger

of the Deutsche Bundesbank

Professor and Director of the

Jürgen von Hagen Policy Co-ordination in EMU

Center for European Integration Studies, University of Bonn

Labor Market Reforms, Employment and Wage Setting

Professor, London School of Economics Richard Jackman Labor Market Reform and Employment:

The Experience of the United Kingdom

Richard Jackman Professor, London School of Economics Wage-Setting Behaviour in a Monetary Union -

A Role for the European Social Partnership?

Monetary Policy and the Real Economy

The Role of Monetary Policy in the Macro Policy Mix

Viktor Klima Federal Chancellor, Republic of Austria Aktuelle Fragen der Wirtschaftspolitik

Allan Larsson Director Generale, DG V, Europe's Labor Markets -

European Commission The Achilles' Heel of the EMU Process?

Karl Pichelmann Senior Advisor, DG II, Wage-Setting Behaviour in a Monetary Union -European Commission A Role for the European Social Partnership?

Peter Rosner Professor, University of Vienna Labor Market Reform and Employment:

The Austrian Experience

Gertrude Tumpel-Gugerell Vice Governor, OeNB

Erich W. Streissler

Labor Market Reform and Employment: Jelle Visser Professor, University of Amsterdam

The Dutch Experience with Part-Time Employment

Brendan M. Walsh Professor, University College of Dublin Labor Market Reform and Employment: The Irish Experience

Integrated Financial Markets - A Challenge for Monetary Policy

Age F. P. Bakker Monetary Policy and Price Stability and Monetary Policy Deputy Executive Director,

De Nederlandsche Bank in an Integrated World

Tom de Swaan Member of the Managing Board, The Single Financial Market and the Restructuring of European

ABN AMRO Bank N.V.

Banks Deputy Director of Research, Flemming Larsen

Global Economic and Financial Developments International Monetary Fund in the 1990s and Implications for Monetary Policy Professor, University of Vienna Monetary Policy in an Integrated Financial World

I 2 2 ONBFocus on Austria 3/1999

Abbreviations

WWU	Wirtschafts- und Währungsunion	GDP	Gross Domestic Product
AMS	Arbeitsmarktservice Österreich	HICP	Harmonized Index of Consumer Prices
	(Austrian Public Employment Office)	IHS	Institut für Höhere Studien
ARTIS	Austrian Real Time Interbank Settlement		(Institute for Advanced Studies)
BWA	Bundes-Wertpapieraufsicht	IIP	International Investment Position
	(Federal Securities Supervisory	IMF	International Monetary Fund
	Authority)	NACE	Nomenclature générale des Activités
BWG	Bankwesengesetz		économiques dans les
	(amendments to the Banking Act)		Communautés Européennes (Statistical
CAD	Capital Adequacy Directive		Classification of Economic Activities)
CEECs	Central and Eastern European Countries	ÖCPA	Austrian version of the Classification
COICOP	Classification Of Individual Consumption		of Products by Activities
	by Purpose	OECD	Organisation for Economic Co-operation
CPI	Consumer Price Index		and Development
EC	European Community	OeKB	Oesterreichische Kontrollbank
ECB	European Central Bank	OeNB	Oesterreichische Nationalbank
EEA	European Economic Area	ÖNACE	Austrian version of the Statistical
EEC	European Economic Community		Classification of Economic Activities
EGVG	Einführungsgesetz der	ÖSTAT	Österreichisches Statistisches Zentralamt
	Verwaltungsverfahrensgesetze		(Austrian Central Statistical Office)
	(Introductory Act to the Administrative	RTGS	Real Time Gross Settlement System
	Procedure Acts)	SDR	Special Drawing Right
EMU	Economic and Monetary Union	SNA	System of National Accounts
EQOS	Electronic Quote and Order Driven	TARGET	Trans European Automated Real Time
	System		Gross Settlement Express Transfer
ERM	Exchange Rate Mechanism		System
ERP	European Recovery Program	TEU	Treaty on European Union
ESCB	European System of Central Banks	WIFO	Österreichisches Institut für
ESNA	European System of National Accounts		Wirtschaftsforschung
EU	European Union		(Austrian Institute of Economic Research)
EUROSTAT	Statistical Office of the European		
	Communities		

Legend

- = The numerical value is zero
- \dots = Data not available at the reporting date
- \times = For technical reasons no data can be indicated
- $0\ =\ A\ quantity\ which is\ smaller\ than\ half\ of\ the\ unit\ indicated$
- $_{-}$ = New series

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

Official Announcements of the Oesterreichische Nationalbank

Authentic German text published in the Official Gazette (Amtsblatt zur Wiener Zeitung) Translation published in "Reports and Summaries" and "Focus on Austria"

Official Announcements Regarding the Foreign Exchange Law

DL 1/91 Promulgation of the new Official Announcements regarding the Foreign Exchange Law; Sept. 24, 1991 4/1991 general provisions 1. Issuance of new Official Announcements 2. Definitions 3. Fees Sept. 24, 1991 4/1991 DL 2/91 Granting of general licenses 1. General license 2. Waiver of obligation to declare; release 3. Nonbanks 4. Banks not engaged in foreign business 5. Foreign exchange dealers 6. Exchange bureaus 7. Special banks and financial institutions 8. Provisions applying to both banks and financial institutions DL 3/91 Reporting requirements Sept. 24, 1991 4/1991 1. General provisions 2. Exemptions from the reporting obligation 3. General reports 4. Reports by banks 5. Reports by nonbanks and financial institutions 6. Special reports DL 4/91 Assets of nonresidents with residence Oct. 29, 1991 (domicile) in Iraq 4/1991 DL 2/93 Modification of the Official Announcement DL 3/91 May 5, 1993 2/1993 DL 1/95 Repeal of the Official Announcement DL 1/93; SC Resolution 1022 (1995) Concerning the suspension of the sanctions of the United Nations against the Dec. 21, 1995 Federal Republic of Yugoslavia 4/1995 DL 1/96 Modification of Official Announcement DL 3/91 Sept. 3, 1996 3/1996 DL 1/99 Modification of Official Announcements DL 2/91 and DL 3/91 to the Foreign Exchange Act Dec. 21, 1998 4/1998 DL 2/99 Abrogation of Official Announcement DL 3/93 Sanctions of the United Nations April 30, 1999 1/1999 against Libya DL 3/99 Modification of Official Announcement With respect to the Foreign Exchange Act Dec. 16, 1999 3/1999

Please see the Germanlanguage publication "Berichte und Studien" for a list of all Official Announcements in German.

Council Regulations of the European Communities

Published in the Official Journal of the European Communities

Minimum Reserve Regulations

No 2531/98	Council Regulation (EC)	
	concerning the application of minimum	
	reserves by the European Central Bank	Nov. 23, 1998
No 2532/98	Council Regulation (EC)	
	concerning the powers of the	
	European Central Bank	
	to impose sanctions	Nov. 23, 1998
No 2818/98	Regulation (EC) of the European Central Bank	
	on the application of minimum reserves	Dec. 1, 1998

List of Reports, Summaries, and Studies¹)

Published in "Focus on Austria"

Oesterreichische Nationalbank and Selected Monetary Aggregates

Official Announcements Regarding the Foreign Exchange Law		Please see the German-
and Minimum Reserve Requirements – see preceding page	1/1998	language publication "Berichte und Studien"
Calendar of Monetary Highlights	2/1998	for a list of all German-
EMU-Decisions on the Changeover to the Euro	2/1998	
Calendar of Monetary Highlights	3/1998	language reports, studies
Calendar of Monetary Highlights		and special publications
Calendar of Monetary Highlights	4/1998	of the OeNB.
The OeNB's Tasks and Duties in the ESCB	4/1998	
Calendar of Monetary Highlights	1/1999	
Calendar of Monetary Highlights	2/1999	
Calendar of Monetary and Economic Highlights	3/1999	
The Possibilities and Limitations of Monetary Policy –	2 / 4 0 0 0	
Results of the OeNB's 27th Economics Conference	3/1999	
Austrian Financial Institutions		
	1/1998	
Money and Credit in 1997		
Austria's Major Loans Register in 1997 Manay and Cradit in the First Operator of 1998	1/1998	
Money and Credit in the First Quarter of 1998	2/1998	
Money and Credit in the First Half of 1998	3/1998	
Austrian Bank Holidays in 1999	4/1998	
Money and Credit in the First Three Quarters of 1998	4/1998	
Credit Risk Models and Credit Derivatives	4/1998	
A Comparison of Value at Risk Approaches		
and Their Implications for Regulators	4/1998	
Money and Credit in 1998	1/1999	
Money and Credit in the First Quarter of 1999	2/1999	
Austria's Major Loans Register in 1998	2/1999	
Money and Credit in the First Half of 1999	3/1999	
Interest Rates		
The Information Content of the Term Structure –		
The Austrian Case	1/1998	
An International Comparison of Term Structures –	2, 1220	
Estimations Using the OeNB Model	1/1999	
	-, -, -, -,	
Austrian Capital Market		
The Bond Market in 1997	2/1998	

Austrian Public Finance

¹ For a comprehensive list of reports, summaries and studies hitherto published please refer to issue no. 1/1999 of "Focus on Austria."

Published in "Focus on Austria"

Austrian Real Economy	
Economic Background	1/1998
Economic Background	2/1998
Economic Background	3/1998
Economic Outlook for Austria from 1998 to the Year 2000	4/1998
Economic Background	4/1998
Economic Background	1/1999
Financial Assets and Liabilities of Enterprises and Households	
in the Year 1995 to 1997	1/1999
Economic Outlook for Austria from 1999 to 2001	2/1999
Economic Background	2/1999
Economic Background	3/1999
Financial Accounts in Accordance with ESA 95 -	
Financial Assets and Liabilities of the Sectors	
of the Austrian Economy; First Release of Data	
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External Sector	
Austria's Balance of Portfolio Investment 1997	2/1998
Balance of Payments in 1997	2/1998
Conceptual Changes in the Austrian Balance of Payments	2/1998
Balance of Payments in the First Quarter of 1998	3/1998
Austrian Outward and Inward Direct Investment	
at the End of 1996	3/1998
Balance of Payments in the First Half of 1998	4/1998
Balance of Payments in the First Three Quarters of 1998	1/1999
Austria's International Investment Position in 1997	1/1999
Special Survey on the Regional Allocation of Nonresident	
Securities Held by Residents as of December 31, 1997	1/1999
Balance of Payments for the Year 1998	2/1999
New Concept of the Austrian Balance of Portfolio Investment	2/1999
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Disinflation and Fiscal Indicators – A Comparative Analysis	2 /1000
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Core Inflation in Selected European Union Countries	3/1998
Harmonized Indices of Consumer Prices –	2 /1000
Progress and Unresolved Problems in Measuring Inflation	2/1999
Economic Policy Co-operation in EMU:	2 /4000
European Economic Policy Challenges	2/1999
Effects of the Euro on the Stability of Austrian Banks	3/1999
The Austrian Banks at the Beginning of Monetary Union –	
The Effects of Monetary Union on the Austrian Banking	2 /1000
System from a Macroeconomic Perspective	3/1999

Publications of the Oesterreichische Nationalbank

Periodical Publications	Published
Statistisches Monatsheft	monthly
Statistische Daten der inländischen Kreditinstitute	•
(advance excerpts from "Statistisches Monatsheft")	monthly
Leistungsbilanz Österreichs, revidierte Jahresdaten	
gegliedert nach Regionen und Währungen	annually
Berichte und Studien	quarterly
Focus on Austria (selected chapters from	
"Berichte und Studien")	quarterly
Focus on Transition	semiannually
Geschäftsbericht	annually
Annual Report (English translation of "Geschäftsbericht")	annually
Volkswirtschaftliche Tagung	
(for a list of the topics discussed at the conferences,	
see below)	annually
The Austrian Financial Markets –	
A Survey of Austria's Capital Markets – Facts and Figures	annually
Other Publications	
New Developments in Banking and Finance in East and West	
(Kranichberg 1989)	1990
Erfahrungen Österreichs beim Übergang von administrativer	
Regulierung zur Marktwirtschaft (Moscow 1990)	1990
Challenges for European Bank Managers in the 1990s	
(Badgastein 1990)	1991
From Control to Market - Austria's Experiences	
in the Post-War Period (Warsaw 1990)	1991
The Economic Opening of Eastern Europe	1.
(Bergsten Conference Vienna 1991)	1991¹)
Erneuerung durch Integration –	
175 Jahre Oesterreichische Nationalbank	1991
Striking a Balance – 175 Years of Austrian National Bank	1991
Transparente Dispositionen – Liberalisierter Devisenverkehr	1001
unter Beachtung internationaler Publizitätsverpflichtungen	1991
Ausgeglichene Position – Die neue Präsentation	1000
der österreichischen Zahlungsbilanz	1992
Aktive Bilanz – Ein Jahr vollständig liberalisierter	1000
Devisenverkehr in Österreich	1992
Economic Consequences of Soviet Disintegration	
(Bergsten Conference Vienna 1992)	1993
Neuorientierung – Internationale Vermögensposition	40021
und Außenwirtschaftliche Investitionsbilanz Österreichs	1993 ¹)
Bankwesengesetz 1993	1994 ¹)

Other Publications (cont.)	Published
Internationale Vermögensposition 1992 –	
Die grenzüberschreitenden Forderungen	
und Verpflichtungen Österreichs	1994 ¹)
International Investment Position for 1992 –	
Austria's cross-border assets and liabilities	1994
Western Europe in Transition:	
The Impact of the Opening up of Eastern Europe	
and the former Soviet Union	1995
Die Oesterreichische Nationalbank als Unternehmen	1996
Monetary Policy in Central and Eastern Europe:	
Challenges of EU Integration 1996	1996 ¹)
Monetary Policy in Transition in East and West	1997
Die Auswirkungen des Euro auf den Finanzmarkt Österreich	1997 ¹)
Die Bank der Banken	1997
Die Zukunft des Geldes: Auf dem Weg zum Euro	
Grundlagen – Strukturen – Termine	1997
Geld und Währung	1997
Kompendium von Texten zur Wirtschafts- und Währungsunion	1997
Nationalbankgesetz 1984 (as of January 1999)	1999
Information literature on banknote security recurrently	
Working Papers (for a list of the topics discussed	
in the papers, see below)	recurrently
Videos	
Wie Mozart entsteht (banknote security)	1990
The Evolution of W. A. Mozart	
(English version of "Wie Mozart entsteht")	1995
Bank der Banken (tasks and functions of the OeNB)	1991
The Banks' Bank (English version of "Bank der Banken")	1991

List of the Topics Discussed at the Economics Conferences (Volkswirtschaftliche Tagungen)

1975	Die ökonomischen, politischen und sozialen Konsequenzen der Wachstumsverlangsamung
1976	Störungsanfällige Bereiche in unserem ökonomischen
	und sozialen System
1977	Fiskalismus kontra Monetarismus
1978	Wirtschaftsprognose und Wirtschaftspolitik
1979	Technik-, Wirtschaftswachstums-, Wissenschaftsverdrossenheit:
	Die neue Romantik – Analyse einer Zeitströmung
1980	Probleme der Leistungsbilanz in den achtziger Jahren
1981	Systemkrisen in Ost und West
1982	Forschung und Wirtschaftswachstum
1983	Ausweg aus der Krise –
	Wege der Wirtschaftstheorie und Wirtschaftspolitik
1984	Der Weg zur Welthandelsnation
1985	Weltanschauung und Wirtschaft
1986	Vollbeschäftigung, ein erreichbares Ziel?
1987	Vollendung des Binnenmarktes in der Europäischen Gemeinschaft –
	Folgen und Folgerungen für Österreich
1988	Sand im Getriebe – Ursachen und Auswirkungen
	der Wachstumsverlangsamung in Österreich
1989	Banken und Finanzmärkte –
	Herausforderung der neunziger Jahre
1990	Wettbewerb und Kooperation im Finanzbereich
1991	Wirtschaftliche und politische Neugestaltung Europas –
	Rückblick und Perspektiven
1992	Zukunft regionaler Finanzmärkte in einem integrierten Europa
1993	Europäische Währungspolitik und internationaler Konjunkturverlauf
1994	Neue internationale Arbeitsteilung – Die Rolle der Währungspolitik
1995 ¹)	Die Zukunft des Geldes – das Geld der Zukunft
1996 ¹)	Auf dem Weg zur Wirtschafts- und Währungsunion –
	Bedingungen für Stabilität und Systemsicherheit
1997	Die Bedeutung der Unabhängigkeit der Notenbank
	für die Glaubwürdigkeit der europäischen Geldpolitik
1998	Wirtschaftspolitik 2000 – Die Rolle der Wirtschaftspolitik
	und nationaler Notenbanken in der WWU
1999	Möglichkeiten und Grenzen der Geldpolitik

	the Topics	Published
4	sed in the Working Papers	
No. 1 ¹)	Hat Böhm-Bawerk recht gehabt?	
	Zum Zusammenhang zwischen Handelsbilanzpassivum und	
1	Budgetdefizit in den USA ²)	1990
No. 2 ¹)	Ost- und Mitteleuropa auf dem Weg zur Marktwirtschaft –	
	Anpassungskrise 1990	1991
No. 3 ¹)	Die Wirtschaft Österreichs im Vergleich zu den EG-Staaten -	_
	eine makroökonomische Analyse für die achtziger Jahre	1991
No. 4 ¹)	The Soviet Banking Reform	1991
No. 5 ¹)	Die Auswirkungen der Finanzmarkt- und Kapitalverkehrs-	
	liberalisierung auf die Wirtschaftsentwicklung und Wirt-	
	schaftspolitik in Norwegen, Schweden, Finnland und	
	Großbritannien – mögliche Konsequenzen	
	für Österreich ²)	1991
No. 6 ¹)	Zwei Jahre G-24-Prozeß: Bestandsaufnahme und Perspektiver	n
,	unter besonderer Berücksichtigung makroökonomischer	
	Unterstützungsleistungen ²)	1991
No. 7 ¹)	Die Finanzoperationen der öffentlichen Haushalte	
,	der Reformländer ČSFR, Polen und Ungarn:	
	Eine erste quantitative Analyse	1991
No. 8 ¹)	Erfüllung der Konvergenzkriterien durch die EG-Staaten	
,	und die EG-Mitgliedswerber Schweden und Österreich ²)	1992
No. 9 ¹)	Alternative Strategies For Overcoming	.,,_
110. >)	the Current Output Decline of Economies in Transition	1992
No. 10 ¹)	Signaling a Hard Currency Strategy: The Case of Austria	1992
No. 11 ¹)	The Impact of the Opening-up of the East	1772
110. 11)	on the Austrian Economy – A First Quantitative Assessment	1993
No. 12 ¹)	· · · · · · · · · · · · · · · · · · ·	1993
No. 13 ¹)	The Scope for Regional Autonomy in Russia	1993
NO. 15)	EMU and the International Monetary System:	1002
No. 14 ¹)	A Transatlantic Perspective	1993
.′	Austria's Role as a Bridgehead Between East and West	1993
No. 15 ¹)	Prospects for Growth in Eastern Europe –	
	Some questions raised in the course of a macroeconomic	1004
NT 46	forecasting exercise	1994
No. 16	A Survey of the Austrian Capital Market	1994
No. 17	Trade and Employment:	
	Can We Afford Better Market Access for Eastern Europe?	1994
No. 18	Interdependence of Politics and Economic Development:	
1	Financial Stabilization in Russia	1994
No. 19 ¹)	Austrian Exchange Rate Policy	
1	and European Monetary Integration	1995
No. 20 ¹)	Monetary Spill-over Effects in the ERM: The Case of Austria	,
	A Former Shadow Member	1995
No. 21	Investing in Insider-dominated Firms:	
	A Study of Voucher Privatization Funds in Russia	1995
No. 22	Pessimism Confounded?	
	Economic Recovery in Eastern Europe	1996
No. 23	Will Asymmetric Shocks Pose a Serious Problem in EMU?	1996
No. 24	Exchange Rates and Monetary Policy in Central Europe –	
	a Survey of Some Issues	1997

1 Out of print.

List of	the Topics	Published
Discuss	sed in the Working Papers	
No. 25	Sources of Currency Crises: An Empirical Analysis	1998
No. 26	Structural Budget Deficits and Sustainability	
	of Fiscal Positions in the European Union	1998
No. 27 ¹)	Trends in European Productivity:	
	Implications for Real Exchange Rates, Real Interest Rates	
	and Inflation Differentials	1998
No. 28	What Do We Really Know About Real Exchange Rates?	1998
No. 29	Goods Arbitrage and Real Exchange Rate Stationarity	1998
No. 30	The Great Appreciation, the Great Depreciation,	
	and the Purchasing Power Parity Hypothesis	1998
No. 31	The Usual Suspects? Productivity and Demand Shocks	
	and Asian Pacific Real Exchange Rates	1998
No. 32	Price Level Convergence Among United States Cities:	
	Lessons for the European Central Bank	1998
No. 33	Core Inflation in selected European Union Countries	1998
No. 34	The impact of EMU on European unemployment	1998
No. 35	Room for Manoeuvre of Economic Policy	
	in the EU Countries – Are there Costs of Joining EMU?	1998
No. 36	Heterogeneities within Industries	
	and Structure-Performance Models	1998
No. 37	Estimation of the Term Structure of Interest Rates	
	A Parametric Approach	1999
No. 38	On the Real Effects of Monetary Policy:	
	Central Banker's View	1999

Addresses of the Oesterreichische Nationalbank

	Postal address	Telephone	Telex
Head Office	DO D (4	(1) 101 20 +	(1) 111((0)+ -
Vienna 9, Otto-Wagner-Platz 3	P.O.Box 61 A-1011 Vienna	(1) 404 20, ext. Fax: (1) 404 20 2399	(1) 114669 natbk (1) 114778 natbk
Internet: http://www.oenb.at	A-TOTT VIETINA	Tax. (1) 101 20 23//	(1) 11 1770 Hatok
·			
Branch Offices	D O Pay 340	(FE 74) 40 (4 a) t	
Bregenz Anton-Schneider-Straße 12	P. O. Box 340 A-6901 Bregenz	(55 74) 49 61, ext. Fax: (55 74) 49 61 99	
7 (Ittori-serificide) - Straise 12	Austria	1 ax. (33 / 1) 17 01 //	
Eisenstadt	P. O. Box 60	(26 82) 627 18, ext.	
Esterhazyplatz 2	A-7001 Eisenstadt	Fax: (26 82) 627 18 99	
	Austria		
Graz	P. O. Box 451	(31 6) 81 81 81, ext.	
Joanneumring 7	8011 Graz Austria	Fax: (31 6) 81 81 81 99	
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Adamgasse 2	A-6021 Innsbruck	Fax: (51 2) 594 73 99	
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10Oktober-Straße 13	A-9010 Klagenfurt	Fax: (46 3) 576 88 99	
	Austria		
Linz	P. O. Box 346	(73 2) 65 26 11, ext.	
Coulinstraße 28	A-4021 Linz Austria	Fax: (73 2) 65 26 11 99	
Salzburg	P. O. Box 18	(66 2) 87 12 01, ext.	
Franz-Josef-Straße 18	A-5027 Salzburg Austria	Fax: (66 2) 87 12 01 99	
St. Pölten	P. O. Box 5	(27 42) 313 483, ext.	
Julius-Raab-Promenade 1	A-3100 St. Pölten Austria	Fax: (27 42) 313 483 99	
Representative O	ffices		
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London Representative Office	e	Fax: (44) 20/7623 6447	
3 Lombard Court			
London EC3V 9LB, Unit	ed Kingdom		
Oesterreichische Nationalbar	nk	(212) 888 2334	(212) 422509 natb ny
New York Representative Of	ffice	(212) 88 2335	, , , , , ,
General Motors Building 5th		Fax: (212) 888 2515	
767 Fifth Avenue			
New York, N. Y. 10153, I	U.S.A.		
Permanent Mission of Austria	a to the EU	(322) 285 48 41, 42, 43	
Avenue de Cortenbergh 30		Fax: (322) 285 48 48	
B-1040 Bruxelles, Belgiu	m		
Permanent Mission to the O	FCD	(331) 53 92 23 39	
3, rue Albéric-Magnard		(331) 53 92 23 44	
F-75116 Paris, France		Fax: (331) 45 24 42 49	
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