September 2000

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Austria: Selected Issues and Statistical Appendix

This Selected Issues and Statistical Appendix report on Austria was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with this member country. As such, the views expressed in this document are those of the staff team and do not necessarily reflect the views of the Government of Austria or the Executive Board of the IMF.

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AUSTRIA

Selected Issues and Statistical Appendix

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Approved by European I Department

July 21, 2000

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[1] Data in this appendix have a later cutoff date than those used in the text of the staff report and the selected issues paper.

Main Websites for Austrian Data

Data in the Statistical Appendix reflects information received by July 17, 2000. In some cases, more recent data can be obtained directly from internet sources. The main websites in Austria are as follows:

Austrian Institute of Economic Research (WIFO): www.wifo.ac.at
Oesterreichische Nationalbank (OeNB): www.oenb.co.at
Ministry of Finance (BMF): www.bmf.gv.at
Statistics Austria: www.oestat.gv.at

Austria: Basic Data

Total area	83,850 square kilometers
Total population	8.08 million
GDP per capita (1999)	US$ 24,695 1/

	1995	1996	1997	1998	1999 1/	2000 1/	2001 1/
	(Percentage changes at 1983 prices)						
Demand, supply and saving							
Private consumption 2/	2.9	3.2	0.1	1.5	2.7	2.7	2.8
Public consumption	3.1	1.3	-0.4	2.0	1.0	-0.1	0.0
Gross fixed investment	1.2	2.1	0.8	6.8	2.9	4.9	4.9
Construction	0.7	1.5	-1.6	4.1	1.0	1.0	1.5
Machinery and equipment	1.2	2.9	4.6	10.6	5.5	9.0	8.0
Inventory changes 3/	-0.6	-0.4	0.8	-0.7	-1.0	0.8	-0.1
Total domestic demand	1.9	2.0	1.0	2.2	1.6	3.0	2.7
Exports of goods and nonfactor services	6.5	6.0	10.1	8.7	3.5	8.0	7.5
Imports of goods and nonfactor services	7.0	5.9	9.4	6.9	1.9	7.0	7.0
Foreign balance 3/	-0.2	0.0	0.2	0.7	0.6	0.5	0.2
GDP	1.7	2.0	1.2	2.9	2.1	3.5	2.9
Real disposable income	2.6	1.0	-0.3	2.6	1.7	2.6	3.1
Personal saving ratio (in percent of disposable income)	9.8	7.8	7.4	8.3	7.5	7.5	7.8
	(Percent changes; period averages)						
Employment and unemployment							
Labor force 4/	-0.3	-0.2	0.3	0.7	0.9	0.9	0.6
Employment 4/	-0.4	-0.7	0.3	0.6	1.1	1.1	1.0
Unemployment rate (in percent)							
Registered 5/	5.9	6.3	6.4	6.5	6.0	6.1	5.7
Standardized 5/	3.9	4.3	4.4	4.5	3.7	3.5	3.5
Prices and incomes							
GDP deflator	2.3	1.3	1.6	0.6	0.9	1.5	1.7
Consumer price index, harmonized	1.6	1.8	1.2	0.8	0.5	1.9	2.1
Unit labor costs (manufacturing)	-0.6	-1.0	-4.0	-0.7	-0.7	-1.8	-1.4

1/ Staff estimates and projections.
2/ Due to the adoption of EU conventions for national accounts statistics, public consumption increased by 1.5 percent in 1996 (abolition of VAT on health services) and fell about 4.75 percent in 1997 (reclassification of public hospitals).
3/ Change as percent of previous year's GDP.
4/ Dependent labor force (does not include self-employed).
5/ In percent of total labor force (dependent labor force plus self-employed). The standardized rate is survey based according to EU standards.

Austria: Basic Data (concluded)

	1995	1996	1997	1998	1999 1/	2000 1/	2001 1/
			(In percent of GDP)				
Public finances							
General government 2/							
Expenditure	57.3	56.6	54.0	54.1	53.7	53.4	53.1
Revenue	52.2	52.8	52.1	51.6	51.7	51.8	51.6
Overall balance	-5.1	-3.8	-1.9	-2.5	-2.0	-1.7	-1.5
Federal government	-4.7	-4.0	-2.7	-2.9	-2.4	-1.8	-1.6
Other levels of government	-0.4	0.2	0.8	0.5	0.4	0.1	0.1
Gross debt (end of period)							
Federal government	61.1	60.9	59.7	57.7	55.7	53.3	...
General government	68.4	68.3	63.9	63.5	64.9	63.7	62.7
Primary underlying balance 3/	-1.1	-0.2	1.9	1.5	1.9	1.6	1.3
			(In billions of schillings)				
Balance of payments							
Trade balance 4/	-76.8	-89.4	-56.6	-53.5	-55.0	-50.3	-31.7
Current account	-54.8	-50.8	-64.1	-59.7	-74.6	-56.0	-53.0
(In percent of GDP)	-2.3	-2.1	-2.5	-2.3	-2.8	-2.0	-1.8
			(Percent changes, end of period)				
Interest rates and credit							
Domestic credit to nonbanks	6.9	3.6	3.6	3.7	5.2	...	...
Three-month interbank rate (Level, in percent) 5/	4.6	3.4	3.5	3.5	3.0	4.5	...
10-year government bond rate (Level, in percent) 5/	7.1	6.3	5.7	4.7	4.7	5.6	...
			(Levels, period averages)				
Exchange rates							
Schillings per US$	10.08	10.59	12.20	12.38	...	...	...
Euro per US$ 5/	...	...	...	...	0.94	1.05	...
Nominal effective rate (1990=100) 6/	106.9	105.2	102.9	103.1	102.0	100.2	...
Real effective rate (1990=100)							
ULC based 6/	92.4	88.1	83.5	81.9	79.7	77.0	...
CPI based 7/	108.2	106.0	102.3	102.3	100.4	97.7	...

1/ Staff estimates and projections.
2/ On a national accounts basis.
3/ Structural balance adjusted for interest payments, asset sales, and subsidized lending.
4/ IMF (WEO) definition.
5/ For 2000, data refer to July 7, 2000.
6/ For 2000, data refer to June 2000.
7/ For 2000, data refer to April 2000.

I. Challenges of European Financial Integration: The Case of Austria[1]

A. Introduction

1. European banks are at a crossroad. After decades of a high degree of segmentation and limited competition, European banks are increasingly likely to impinge on each other's turf, upsetting the status quo: the introduction of the euro allows euro area banks to take full advantage of possibilities existing in the single market for financial services, uninhibited by exchange rate risk. At the same time, new countries are knocking at the door of the European Union, creating new opportunities but also new challenges for European banks. Large changes are likely to take place in the coming years, posing significant challenges for policymakers.[2]

2. Like other European banks, Austrian banks are likely to be profoundly affected by the changes taking place in European banking. The penetration of foreign banks is low in the Austrian banking sector, possibly reflecting national preferences but probably also other barriers to entry such as the large presence of mutual ownership. Moreover, domestic competition has been limited, at least until the abolition of the interest rate agreements in 1993. There are many signs that competition has become much keener as a result of both foreign penetration and more aggressive market strategies, and it is likely to become keener still. The new European financial landscape is, however, not only presenting challenges but it is also offering significant opportunities for Austrian banks. In particular, the eastern enlargement of the EU is likely to benefit Austrian banks, given the country's geographic position and historical ties to the central and eastern European countries in transition (CEECs).

3. This section describes key features of the Austrian financial system, analyzes current trends in Austrian banking and discusses appropriate regulatory responses to the changing financial environment. It argues that financial supervision will increasingly face the challenge of establishing effective supervision of cross-border banking. For Austrian banks, this relates particularly to the greater exposure to the CEECs through their subsidiaries, but it also relates to the Austrian banks' need to deal more and more with foreign banks (or foreign participation) in Austria itself. Keener competition could heighten the probability of bank failures and financial distress, with the effective resolution of crisis banks becoming crucially important in such an environment.

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[1] Prepared by Ketil Hviding. This study updates and complements a previous study by Drees (1998).

[2] A forthcoming paper on "Euro Area Banking at the Crossroads" discusses changes in the euro area financial landscape and resulting policy challenges (Belaisch et al., forthcoming).

B. Main Structure of the Austrian Financial System

4. As is the case in most of Europe, the Austrian financial system is heavily bank based. Although growing in importance, securities markets (both fixed-income and equity[3]) are relatively small (Table I-1). Banks account for nearly three-fourths of company borrowing and virtually all of household borrowing. In contrast to the banks in neighboring Germany, Austrian banks do not have significant industrial holdings; cross-share holdings between insurance companies, brokerages, and banks are common, however.

Table I-1. Indicators of Financial Sector Structure
(In percent)

	Banks' Market Share 1/	Bank Credit Share 2/	Stock Market Capitalization 3/	Bank Assets 3/
Austria	68 (1998)	80 (1998)	14 (1995)	253 (1998)
Netherlands	57 (1996)	73 (1993)	90 (1995)	114 (1995)
Germany	76 (1996)	89 (1993)	24 (1995)	119 (1995)
United Kingdom	53 (1996)	56 (1993)	127 (1995)	117 (1995)
France	70 (1996)	74 (1993)	34 (1995)	99 (1995)

Sources: Occasional Paper 181, "The Netherlands: Transforming a Market Economy," Box 4.1, pp. 44, using Borio (1995); Huizinga (1998); White (1998); OeNB; and staff calculations.

1/ Assets of banks (not including insurance companies within the same group) as a percentage of assets of all financial institutions.

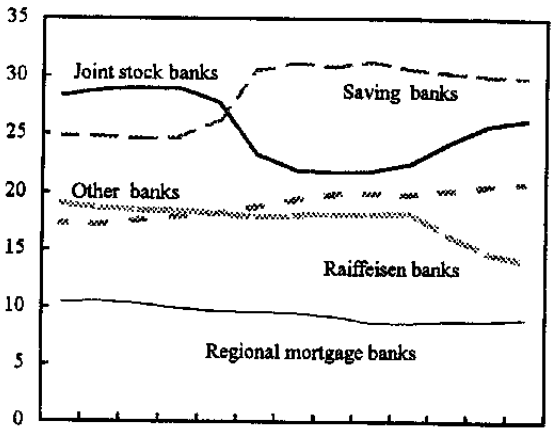
2/ In percent of total credit. Credit refers to credit to firms and households from domestic financial institutions plus any securities outstanding.

3/ In percent of GDP.

[3] A tax-bias against equity finance may have contributed to the small size of the equity market. This bias reflects the combination of full deductibility of interest payments on the corporate level (favors debt finance), the lack of effective taxation of capital gains (favors retained earnings), and "double taxation" of dividends. It has been calculated that the average tax wedge for equity financed investment equals 4.7 percentage points (compared to 0.1 percentage points in the case of debt finance and 1 percentage point in the case of retained earnings) when both corporate and personal taxes are taken into account (see Appendix II).

5. The Austrian banking system is divided into three different groups (Figure I–1):

Figure I-1. Austria: Market Shares of Lending to Non-Banks by Different Banking Groups (In Percent of Total Bank Lendings to Non-Banks)



Sources: Oesterreichische Nationalbank; and staff estimates.

- The **savings banking sector** is the largest sector (market share: 30 percent of total bank lending to non-banks).[4] The savings banks have been called "ownerless" since their founders (municipalities or credit associations) cannot "participate in the equity or profits of [the banks]."[5] In effect, although the "backers" are restricted from injecting or withdrawing capital (through, e.g., dividends) into or from the banks, the savings banks that were founded by municipalities (*Gemeinde* savings banks; more than a third of the savings banks) are in many ways similar to publicly owned institutions and the savings banks founded by credit associations (*Verein* savings banks) are similar to mutual institutions. The savings banking sector is organized in a two-tier system with one central institution (Erste Bank) providing payment and other services to the smaller saving banks. In order to improve the access to capital, a 1993 amendment to the Savings Bank Act allowed the creation of a new type of joint stock saving banks owned by the original "ownerless" bank. This amendment has opened the way for a gradual introduction of outside owners in the saving banking sector.

[4] The two largest Austrian banks are joint stock savings banks: according to Fitch-IBCA, as of December 1999, Bank Austria A.G. was largely controlled by a holding company with close links to the City of Vienna with 23 percent of equity; and Erste Bank was controlled by an "ownerless" holding company with about 44 percent of equity. Floating shares accounted for 55 and 32 percent, respectively. While the assets of Creditanstalt A.G. are still included in the commercial banking sector, Creditanstalt was taken over by Bank Austria in 1997. In late July 2000, agreement was reached at management level for the takeover of the Bank of Austria financial group (including Creditanstalt) by Hypovereinsbank, a German bank.

[5] Federal Law of January 24, 1979 on the Organization of the Saving Bank System.

- The **commercial banking sector** (market share: 26 percent) includes mostly joint stock banks and the publicly owned Postal Savings Bank (*PSK*).

- The **cooperative banking sector** (market share: 26 percent) consists of two groups of banks: the agriculture-based *Raiffeisen* banks and the industrial credit cooperatives (*Volksbanken*). Both groups are organized in a multi-layer system,[6] with *Raiffeisen Zentralbank* (RZB) and *Österreichische Volksbank* acting as central institutions, respectively.

6. The remainder of the banking sector (about 12 percent of bank credit to domestic non-banks) comprises regional mortgage banks, building societies, and special purpose banks. The eight **regional mortgage banks** (responsible for about 5½ percent of bank lending to domestic non-banks) are basically regional banks, providing a wide range of financial services in addition to their core mortgage business. Although several of the banks have been partly privatized and all except one are joint stock companies, they issue provincially guaranteed mortgage bonds (*Pfandbriefe*). **Building societies** (*Bausparkassen*) are used to channel subsidized savings[7] into the provision of mortgages (about 5 percent of non-bank domestic lending). Finally, the **special-purpose banking sector** comprises factoring companies or companies specializing in providing long-term financing.

7. As in other European countries, these groups reflected the economic needs when the banking system was established in the nineteenth century. With technological change and improved efficiency of the financial system, the different banking groups have increasingly entered into each other's traditional markets. In the local markets, for example, the agricultural *Raiffeisen* banks, regional mortgage banks, and the savings banks often compete for the same customers. Although many features of the original separations remain, including in the organization of deposit insurance, there are basically no longer any geographical or functional restrictions on the different banks' activities. The most conspicuous sign of the progressive breakdown of the barriers between the different banking sectors was the acquisition of Creditanstalt A.G., a commercial bank, by Bank Austria A.G., a savings bank, in 1997.[8]

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[6] While the *Raiffeisen* banks are organized in a three-tier system, the industrial credit cooperatives have only two tiers.

[7] The subsidy is offered as a premium (*prämie)* of 3-8 percent of annual savings (with a ceiling of € 1,000 per individual in 1999) supplementing a saving plan. The *prämie* has to be repaid, if funds are withdrawn before the term of the savings plan.

[8] The first cross-sector merger, which created Bank Austria, was completed in 1991 between *Zentralsparkasse*, a savings bank, and *Länderbank*, a joint stock bank.

8. A striking feature of the Austrian banking system is its large share of banks with cooperative or mutual ownership. Although mutually owned institutions are prevalent throughout Europe, the share of mutually owned institutions is particularly high in Austria (Table I-2).[9] The origins of these institutions can be traced back to the early nineteenth century, when their purpose was to provide savings vehicles and credit to low-income groups of society. Mutual and cooperative banks are still subject to separate laws but most of their privileges (and, similarly, restrictions on their activities) have been abolished over the past twenty years.

Table I-2. Ownership Structures in Banking, 1998

(Percent of total assets)

	Public/State (A)	Mutual/Coop. (B)	Total (A+B)	Foreign 1/
Austria 2/	**1(10)**	**39 (30)**	**40**	**3**
France 3/	1	19	20	12
Germany 4/	38	14	52	3
Netherlands	6	16	22	8
Switzerland	13	4	17	8
United Kingdom	0	6	6	52

Sources: National central banks, European Commission; and Fund staff estimates.

1/ 1997; includes branches of foreign banks (source: European Commission).

2/ Bank Austria is included proportionally to the public sector share of the votes. In parentheses: municipal savings banks are considered as public/state owned.

3/ The specialized Caisse des Dépôts et des Consignations is not included (assets of about 3 percent of all banks). The 10 percent public stake in Crédit Lyonnais is included proportionally to the public sector share of the votes.

4/ Landesbanken (owned by the Länder), savings banks (owned by the municipalities), and state-owned mortgage companies (estimated asset share: 2 percent).

9. The presence of state-owned banks has been significantly cut over the last decade. The central government's equity stake in the seven largest Austrian banks has been cut from 23 percent in 1991 to 6 percent by end 1999. The remaining share reflects the stake in *PSK* (the postal bank) and some smaller specialized institutions; *PSK* is scheduled to be fully privatized by the end of 2000. The remaining central government holdings in the banking sector will then represent less than 0.2 percent of total bank assets.

[9] In 1997, with a share of about 45 percent and 44 percent, respectively, the share of mutually-owned institutions was, however, even higher in Norway and Spain.

10. A purely formalistic categorization of Austrian banks runs the risk of overlooking the remaining importance of (general) government control. Although formally "ownerless," the municipal control over the municipal savings banks, which account for about 9 percent of total bank assets, is large: by law, the mayor heads the savings bank supervisory board. The political influence on the municipal savings banks can also be seen in the municipal guarantee of their liabilities ("deficiency guarantee"). However, the importance of informal links with public entities will be significantly reduced following agreement in July 2000 for the takeover of Bank Austria by Hypovereinsbank, a German bank. With the 1999 amendment to the Saving Banks Act, holding companies of joint-savings banks can now convert into foundations (*Privatstiftung*), which in the case of the municipal savings banks implies that no new municipal guarantees will be extended (the guarantee will remain in place for old liabilities). While the removal of the formal links to the municipality will potentially result in more independent decision making, informal links are likely to remain strong after the transformation to a foundation; most of the previous members of the savings bank board will remain on the management board (or supervisory board) of the foundation. Such links can probably be effectively cut only by strengthening the banks' accountability to their shareholders or depositors.

C. The Challenge: European Financial Integration

11. While the single European market in financial services was in theory established in 1992, this market is still far from a reality. Throughout Europe, the national markets have been difficult to penetrate, reflecting partially the "natural" advantage of local branch networks, national brand names, exchange rate risk, and language barriers, but also policies benefiting "national champions." In addition to the more or less open discouragement of foreign takeovers,[10] the prevalence of mutual or cooperative ownership and local government ownership (or control) has also complicated potential cross-border takeovers in many European countries.

12. There are indications, however, that this is about to change. First, the size and importance of cross-border mergers are increasing: the most notable examples are the merger between Fortis of the Netherlands and General Bank of Belgium in 1998—creating the nineteenth largest banking group in Europe—and several large cross-border mergers in the Nordic countries (e.g., MeritaNordbanken). Second, a number of cross-border cooperation agreements have been concluded, often involving small equity participation. Third, the advent of Internet banking has reduced the barriers to entry in the market for both investment services and for retail banking: a dense "brick and mortar" branch network may very well

[10] The political authorities in various EU countries have expressed a preference for "national solutions" and have been involved in brokering domestic alternative mergers to mergers involving foreign partners (see Belaisch et al., forthcoming).

turn out to be a heavy burden for the incumbent banks. Fourth, the introduction of the euro removed in one stroke all remaining restrictions on direct cross-border lending in the euro area.

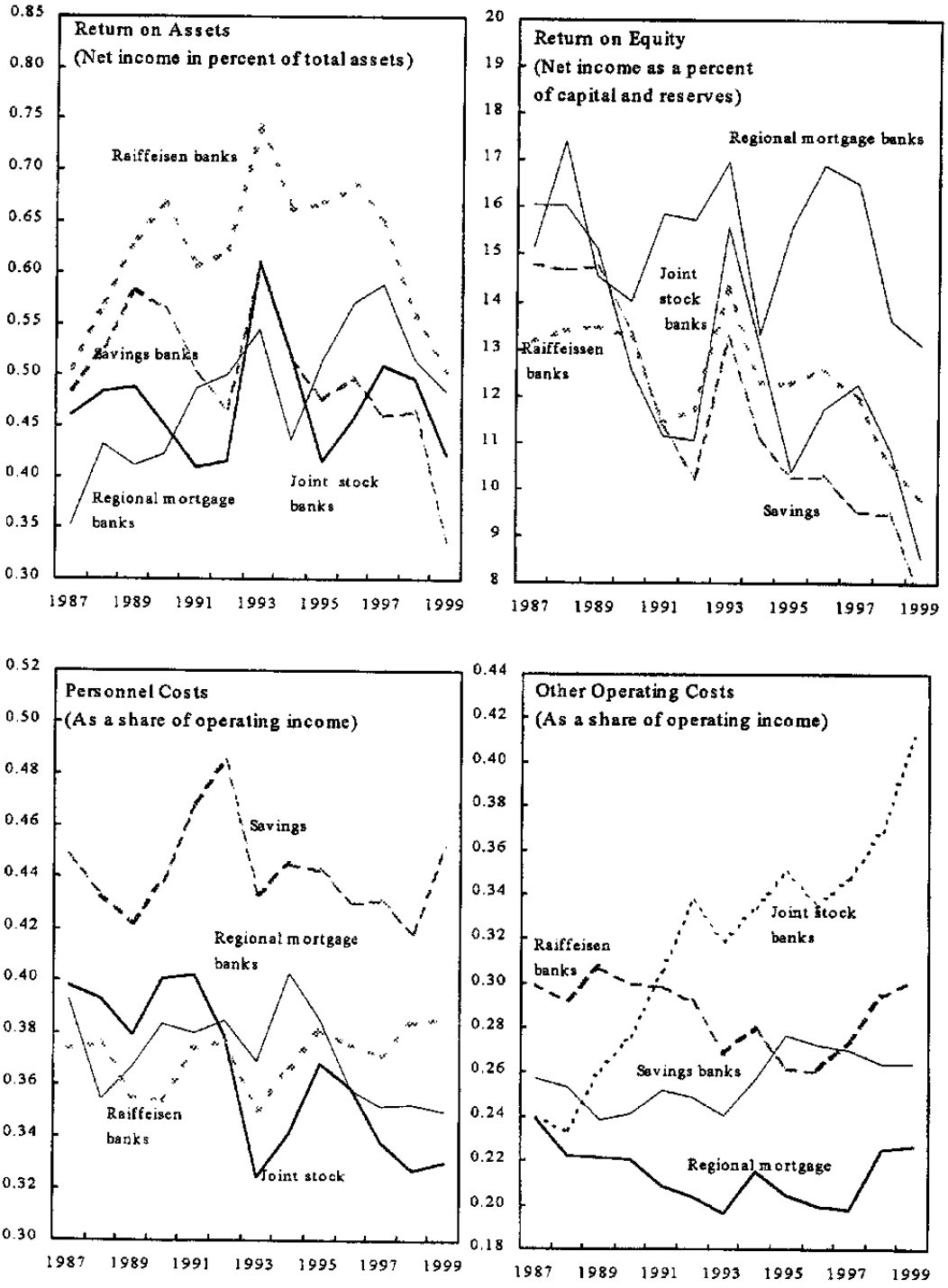
13. For Austria, the competitive challenge is likely to come mainly from German and Swiss banks, reflecting, inter alia, similar language, business culture, and industrial base. The commercial interest of German banks has resulted partly in direct participation in Austrian banks (e.g., the 46 percent participation in *Bank für Arbeit und Wirtschaft (BAWAG)*, a bank representing about 4 percent of total banking assets in Austria) and partly in direct lending by foreign banks to Austrian companies.

14. The sharp drops in interest margins and performance measures (return on equity and return on assets) over the last five years or so bear witness to this increase in competitive pressure (Figure I-2). It is significant that, after an increase in 1997 and 1998, the performance measures followed the interest margin downward. This suggests that the narrowing of the interest margin is not a simple shift from interest to fee income, but reflects a more fundamental change in business conditions. The savings banking and Raiffeisen banking sectors exhibit the sharpest drop in interest margins, suggesting that these banks had benefited from a more protected business environment than other banks.

15. Growing competition does not appear, however, to have been accompanied by a fall in costs. Most noticeably, the cost-to-income ratio (operating costs as a share of total operating revenue) appears to have been stable at best (Figure I-3). However, in the first quarter of 2000, the costs-to-income ratios declined for the biggest banks and for the banking sector as a whole. Only the regional mortgage banks seem to have been able to cut costs over the last decade. In the case of the joint-stock banks there appears to have been a trend increase in the costs-to-income ratio. A similar picture emerges with respect to employment and branches: despite the larger number of ATMs and the introduction of on-line banking, the total number of employees and branches has decreased only marginally. As a result, personnel costs (as a percent of operating income) have been stable for most banks.

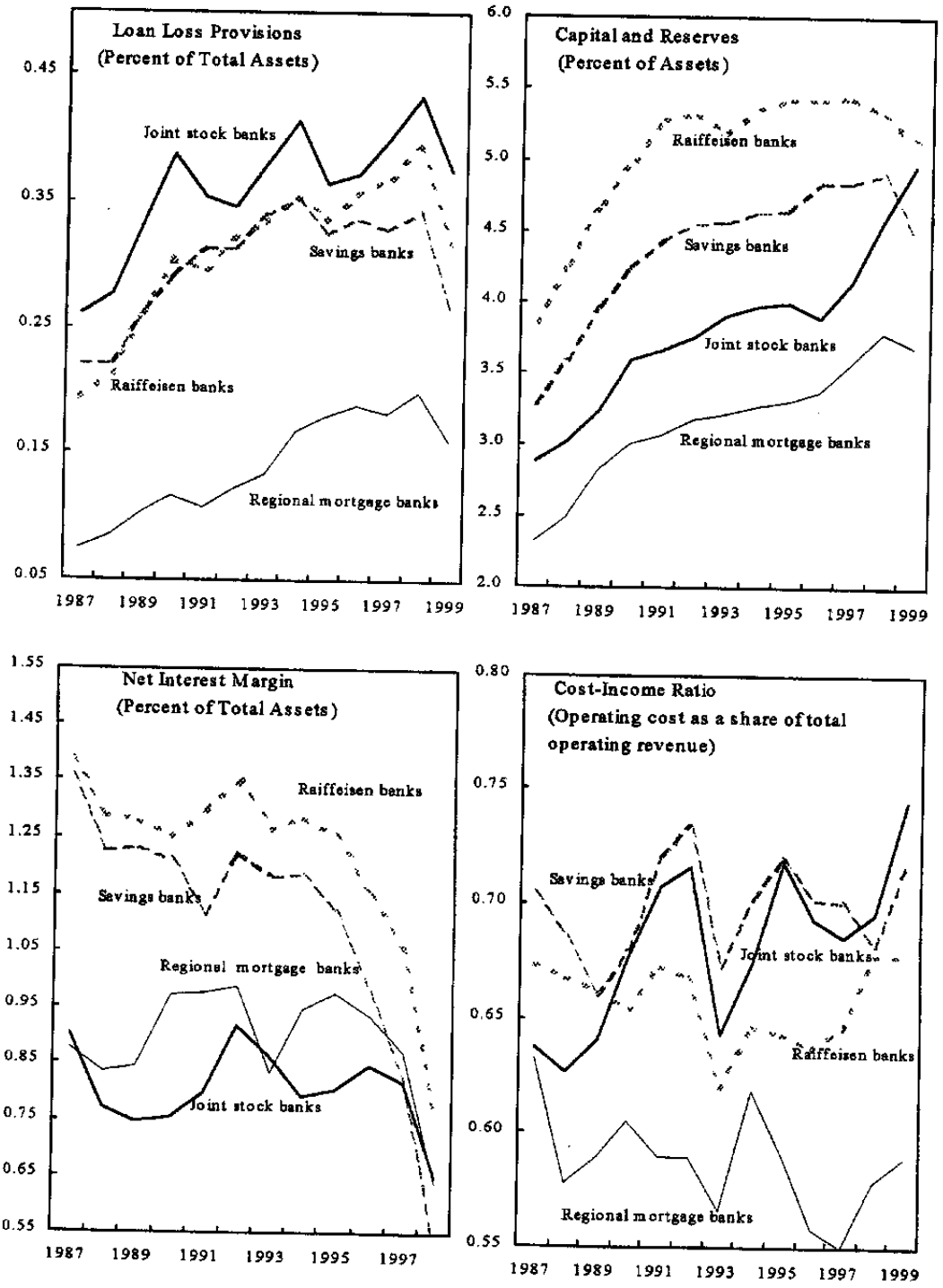
16. Although the inability to cut costs may to some extent reflect the need to invest in new technologies, and 1999 was affected by the need to prepare for Y2K that added to operating costs, this inability also reflects banks' difficulties in cutting the number of branches and reducing personnel (Figure I-3 and Table I-3). Old contracts put a floor on the ability to reduce personnel costs: several banks agreed on employment conditions for bank employees similar to the conditions given to civil servants (e.g., in terms of protection against lay-offs). Moreover, political considerations may also be a factor against cutting costs in the case of the municipal savings banks and other government-owned banks.

Figure I-2. Austria: Profitability and Cost Efficiency, 1987-99



Sources: Oesterreichische Nationalbank; OECD; and staff estimates.

Figure I-3. Austria: Provisions, Capital, Net Interest Margin, and Cost-Income Ratios: 1987-99



Sources: Oesterreichische Nationalbank; OECD; and staff estimates.

Table I-3. Employment in Austrian banks: 1987-99
(In thousands)

	Joint Stock Banks	Savings Banks	Raiffeisen Banks	Other Banks	Total
1987	20.7	19.5	15.9	11.6	67.6
1988	21.7	19.6	16.5	12.4	70.2
1989	22.1	20.0	16.9	12.5	71.5
1990	22.9	20.7	17.7	13.4	74.6
1991	19.4	24.4	18.3	13.9	76.0
1992	19.5	25.1	18.9	13.7	77.1
1993	18.4	24.7	19.0	14.1	76.2
1994	18.3	24.6	19.3	14.4	76.6
1995	18.2	24.0	19.4	14.6	76.3
1996	17.5	23.7	19.7	14.8	75.7
1997	19.1	23.6	19.7	12.9	75.2
1998	18.3	23.8	19.7	13.1	74.8
1999	17.9	23.7	19.9	13.3	74.8

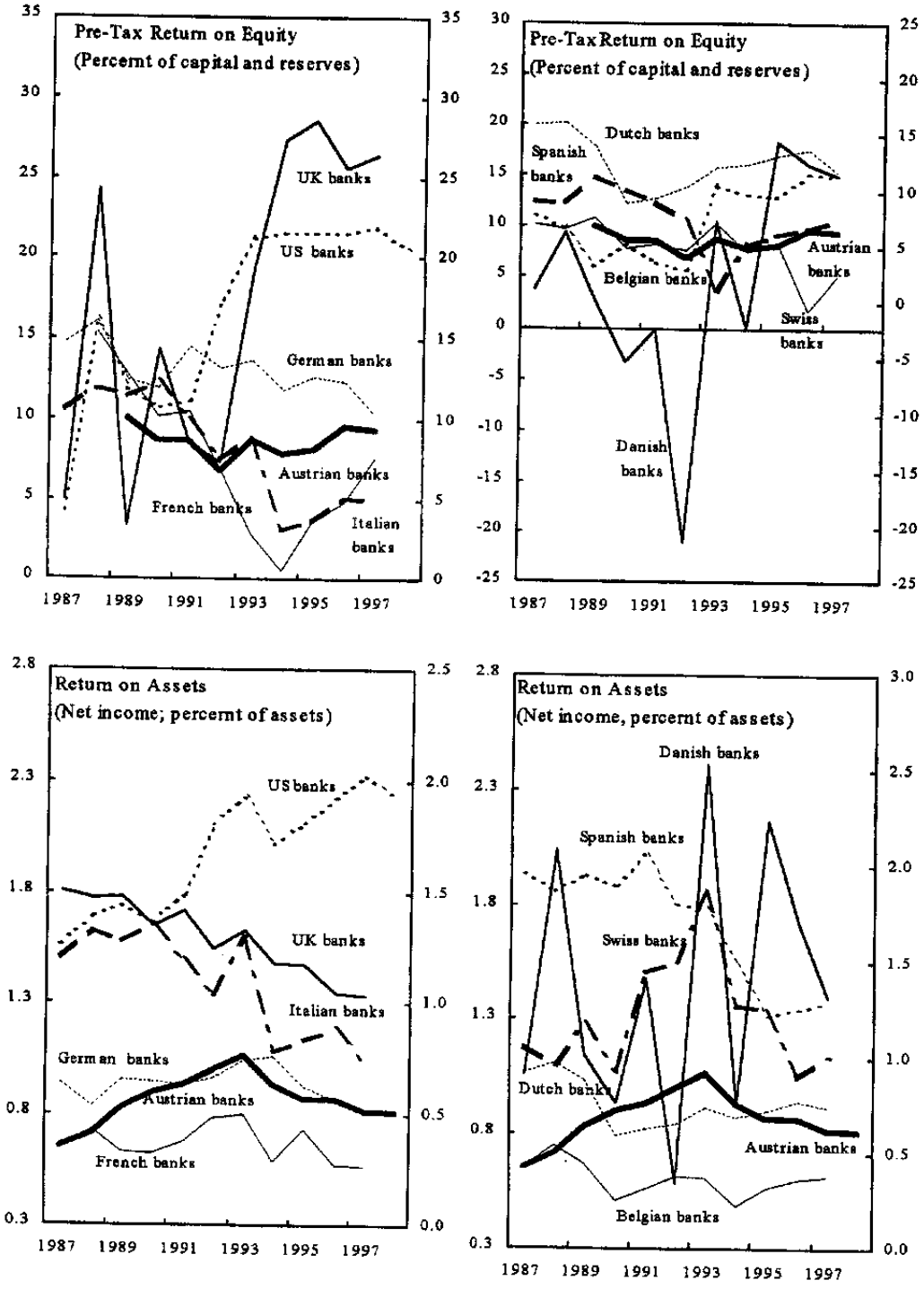
Source: Oesterreichische Nationalbank.

17. How well do Austrian banks fare in an international comparison? Compared to other continental European banks, Austrian banks may only be marginally less profitable, but they are definitely less profitable than U.S. and U.K. banks (Figures I-4 to I-6). Similarly, Austrian banks do not seem out of line with other banks in terms of cost-income ratios, although the branch network is denser than in Germany and Switzerland (Figure I-7). The only area where the Austrian banks seem clearly different from banks in the larger countries is the narrow interest margin; although, even here, Austrian banks are in line with banks in smaller European countries such as Belgium, the Netherlands, and Switzerland.

18. Particular caution should be exercised when interpreting the above figures involving return on assets and equity: the rate of return on equity may have been negatively affected in Austria by the increase in capital and reserves as the two largest banks changed their financial reporting from the national standard to the International Accounting Standard[11] (IAS); similarly, the sharp fall in the return on assets has been affected by structural changes such as the acquisition of Creditanstalt by Bank Austria, which resulted in a sharp increase in

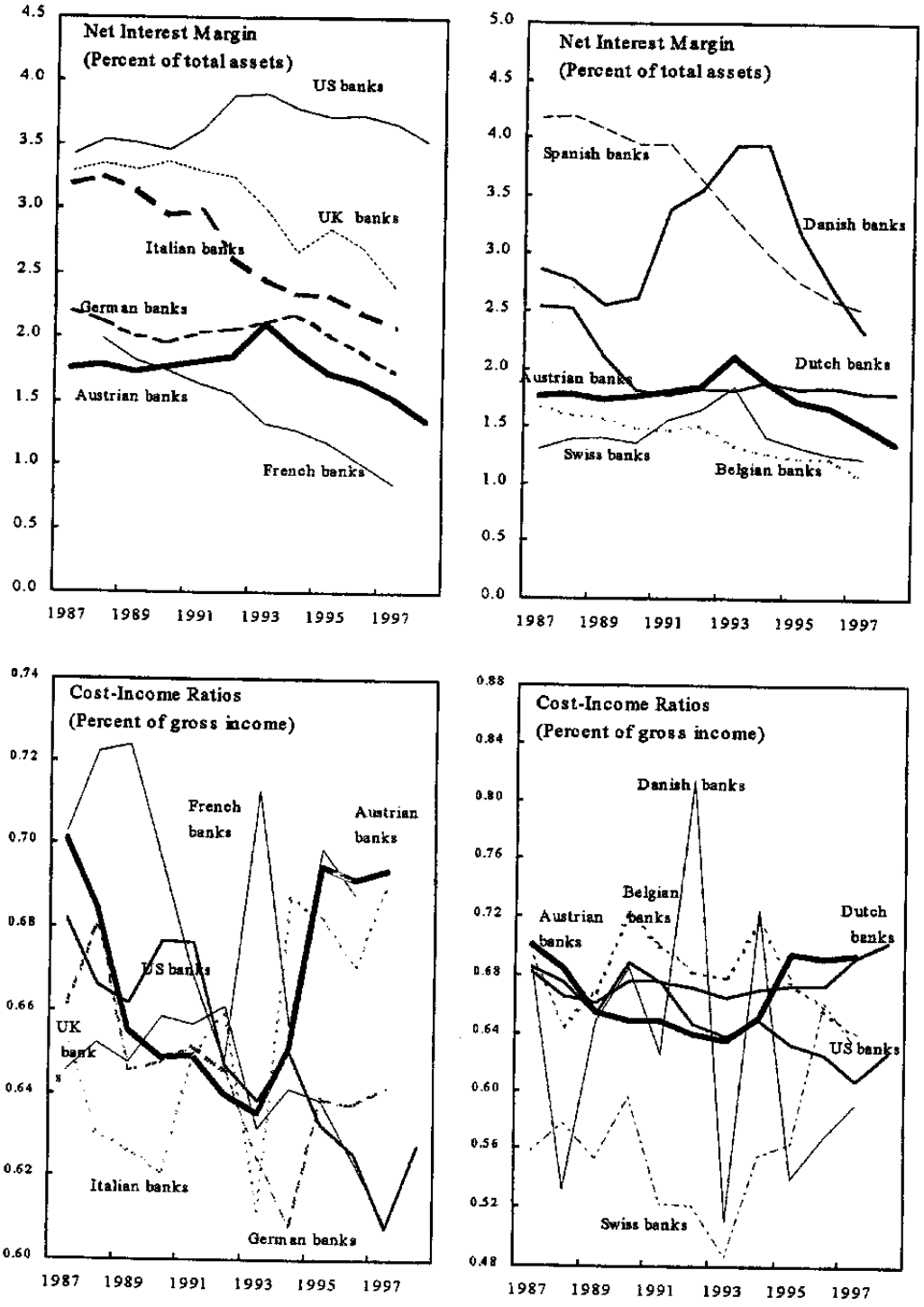
[11] While the national accounting standard allows the maintenance and increase in "hidden reserves," the IAS requires that more market based asset prices be used in the accounts.

Figure I-4. Austria: Comparison of International Profitability, 1987-1999



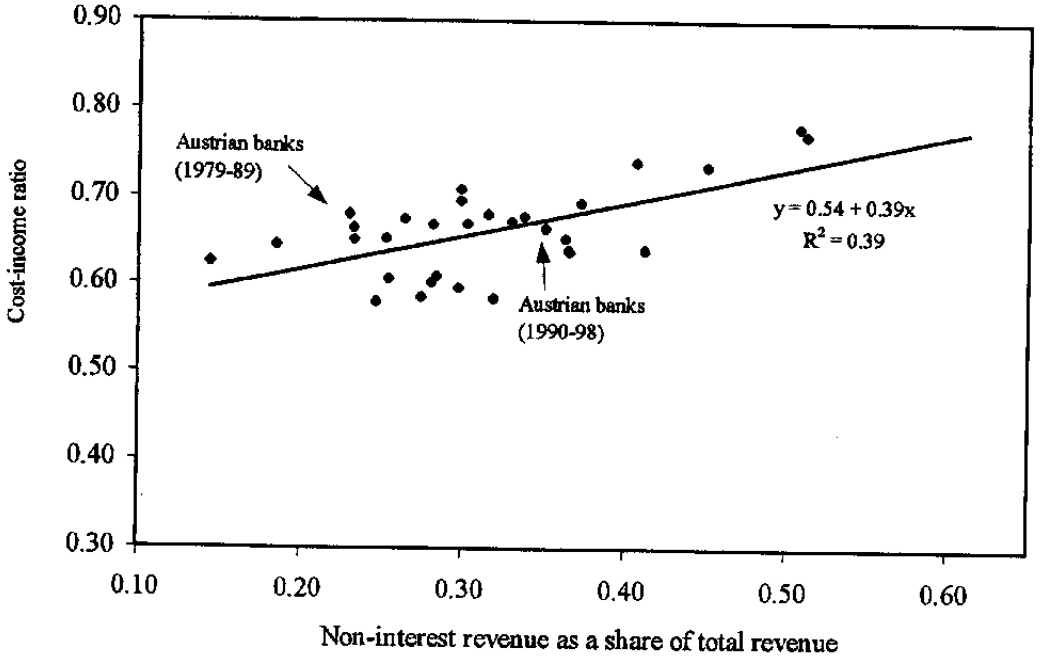
Sources: OECD; and staff estimates.

Figure I-5. Austria: International Comparison of Interest Margins and Cost Efficiency, 1987-1999



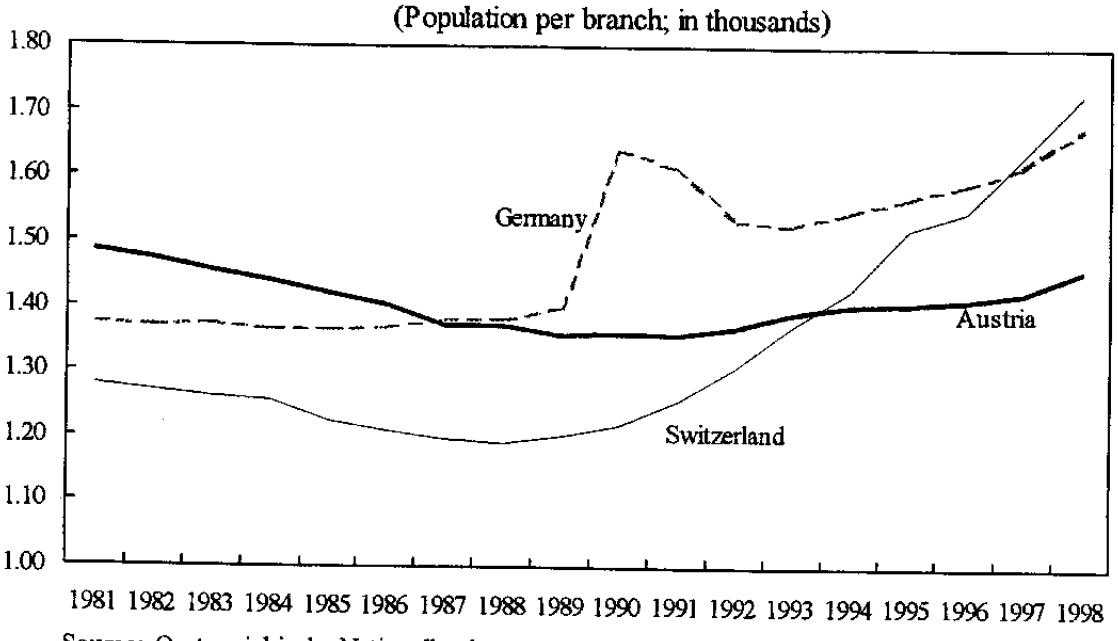
Sources: OECD; and staff estimates.

Figure I-6. Austria: Cost Efficiency and Revenue Structure: 1979-1998



Sources: OECD; and staff estimates.

Figure I-7. Austria: Branch Density in Austria, Germany, and Switzerland
(Population per branch; in thousands)



Source: Oesterreichische Nationalbank.

total banking sector assets, reflecting a similar increase in interbank holdings.[12] Moreover, in the case of the larger banks, the increased competitive pressure has been compensated, or in some cases, even more than compensated by earnings from their foreign operations, in particular in the CEECs. Thus, consolidated banking group data show a significantly more upbeat picture than the one presented above.

D. Opportunities in Eastern Europe

19. Confronted with increased competitive pressures in the domestic market, the larger Austrian banks have been looking for opportunities abroad. Although large Austrian banks have subsidiaries in most continents, the largest foreign venture of Austrian banks is clearly their expansion into the CEECs (Table I-4). The most important reason for this expansion lies with Vienna's remarkable location virtually in the middle of the CEECs (except Poland), just 3-4 hours by car from Budapest and Prague. In addition, extensive family ties and resulting multilingualism of employees are also important assets for the Austrian banks. Harder to quantify are the possible effects of a common history on the administrative and legal culture, but they are also likely to have contributed to the ease with which the Austrian banks were able to build up their presence in the CEECs.

Table I-4. Austrian Banks' Market Shares in the CEECs

(In billions of schillings; first half of 1999)

	Total Bank Assets	Assets Owned by Austrian Banks	Market Share (percent)
Croatia	186.0	9.4	5.1
Poland	1,186.3	14.9	1.3
Russia	358.6	4.1	1.2
Slovak Republic	254.3	25.7	10.1
Slovenia	170.5	7.3	4.3
Czech Republic	959.0	39.2	4.1
Hungary	375.7	35.6	9.5

Source: Österreichische Nationalbank.

[12] Total assets increased since the two banks were still reported separately, but, due to reorganization linked to the acquisition, the cross-holding of liabilities increased, beefing up the balance sheet for both banks.

20. The Austrian banks were early players in Central and Eastern Europe. Benefiting from the numerous industrial joint ventures between Austria and the CEECs even before the demise of communism, Austrian banks already had a significant business franchise in these countries in the early 1990s. In most cases, the Austrian banks did not purchase any larger existing banks, preferring instead to acquire market share by internal growth. In particular, the Bank Austria Group has benefited from such internal growth; by end-1998 it had become the second largest foreign bank in the CEECs by asset size ($4.8 billion of assets, second to the Belgian KBC's $6.2 billion).

21. This eastward expansion has been most marked for Austria's three largest banking groups: Bank Austria, Erste, and RZB. Of these banking groups, the RZB group has the largest relative exposure to the CEECs (the asset share of the CEEC banks was 16.1 percent by end-1998; see Table I-5), with a particularly large presence in Hungary and Slovakia. In terms of its own assets, the Bank Austria Group appears to be less exposed than the other banking groups to the CEECs, but this does not take account of its importance as advisor and in investment banking. Of the three banking groups, Erste Bank Group has been the slowest to expand its business in the CEECs, but recently this has changed quite dramatically: the agreed purchase of a majority stake in the second largest Czech bank will increase the share of CEEC subsidiaries in Erste Group's total assets from 3.1 percent to 15.7 percent.

Table I-5. Profitability of the Three Major Banking Groups

(In percent)

	ROA 1/			ROE 2/			Asset Share
	1997	1998	1999	1997	1998	1999	1998
Bank Austria Group	0.4	0.2	0.4	11.1	4.5	12.3	100.0
Of which							
CEEC subsidiaries	1.1	1.0	2.2	7.5	9.9	...	5.7
Erste Bank Group 3/	0.25	0.25	0.30	9.7	10.5	12.1	100.0
Of which							
CEEC subsidiaries 4/	0.7	-0.8	1.8	8.0	-24.4	...	3.1
RZB Group	0.5	0.1	0.8	10.0	3.0	19.9	100.0
Of which							
CEEC subsidiaries	3.0	2.8	2.7	28.2	19.3	...	16.1

Sources: Fitch IBCA; and Fund staff estimates.

1/ Net income on average assets.

2/ Net income on average equity (book value).

3/ ROE were taken from annual accounts and are not necessarily consistent with other estimates.

4/ A large loss reported for Erste Bank in 1998 reflects the cleanup of the balance sheet of Erste Bank Hungary (previously Mezőbank).

22. The Austrian banking groups' expansion into Eastern Europe has been highly profitable. Although the results in 1997 and 1998 were affected by the emerging market crisis, profitability in the groups' CEEC subsidiaries—whether measured by net income on average assets (ROA) or net income on average equity (ROE)—was most of the time above their overall average profitability. Only in the cases of Erste Bank (in 1998) and Bank Austria (in 1997) was the profitability of the subsidiaries below the groups' overall profitability.[13] During the same two years, the asset-weighted average ROE of the three groups was 12½ percent in the groups' CEEC subsidiaries, or about 4 percentage points above the group average.

23. The risk attached to the banks' operations in the CEECs is, however, also large. Market ratings of the CEEC subsidiaries are significantly below the average EU ratings, but in some cases the ratings are also below their country ceilings. These ratings partly reflect the fact that despite ten years of mostly successful transition from central planning, the financial markets in the CEECs still do not fully match the standard in the EU area. The amount of "bad loans" outstanding in the CEEC's banking sectors is still large (ranging from 27 percent of total loans in the Czech Republic to 6 percent in Hungary at end-1998) and the collection of collateral can be difficult: the EBRD 1999 Transition Report considered, for example, the Czech and Polish insolvency laws to be "barely adequate and with only basic effectiveness."

Prudential and regulatory challenges

24. Since the large banking crisis in 1931 with the spectacular failure of Credit-Anstalt,[14] Austria has been able to maintain a remarkably low level of bank failures. This probably reflects high franchise values and a stable macroeconomic and financial environment. Until recently interest rate cooperation was common practice between the major banks; a practice claimed by the EU commission to have been extended beyond its formal abolition in 1993, allowing interest margins and profitability to stay relatively high. Secondly, the absence of bankruptcies may reflect the preference for other less transparent methods of resolution, such as intrasector mergers or takeovers.

25. In the future this is likely to change. The competitive environment has already become much fiercer and non-Austrian players may be less willing to organize silent closures. Increased competition should reduce the cushion available for the banks to withstand economic shocks and bank failures are likely to be more frequent. A series of incidences, of no sysstemic importance, where smaller banks have called upon emergency

[13] A large loss reported for Erste Bank in 1998 reflects the cleanup of the balance sheet of Erste Bank Hungary (previously *Mezőbank*).

[14] See Schubert (1991).

liquidity assistance and/or public support or had to close down suggest that such a more fragile banking environment is indeed taking shape.[15]

26. This is not necessarily a negative development as it is, to a large extent, a byproduct of increased competition. Tougher competition is undoubtedly a welcome development for the consumer and the economy at large as it should lead to more efficient banks, higher productivity, and lower costs; it may even be argued that a higher level of small bank failures may be a sign of health of the financial sector since it is an effective way to weed out the less successful banks. But the task facing the supervisors and regulators may become harder to fulfill. The prudential issue is then to ensure that the costs of any failures are weighed against the benefits of keener competition and a better "exit mechanism."

27. Some of this increased task can be dealt with by strengthening the quality of supervision, by improving the information received by the supervisors and by strengthening the internal risk models used in the banks. In the case of Austria, the banks' operations in the CEECs warrant particular attention, despite their apparent ability to avoid large losses in these countries. Furthermore, a strengthening of supervisors' operational independence from political authorities, including the ability to pay higher salaries for specialized staff, could usefully improve the effectiveness of the supervisors, in particular in dealing with larger banks with significant political clout.

28. Given that smaller banks may be subject to increased pressures in a more competitive environment, the procedures for dealing with problem banks may need to be overhauled. Lessons from banking troubles in other countries suggest that the supervisors should be given sufficient authority to bring about timely corrective action that enables the supervisors to tailor their response to the nature of the problems detected.[16] The need for the accountability of the supervisors toward the public at large, the bank managers, and the bank creditors and owners should not prevent the supervisors from taking timely action. An introduction of rules for early corrective action, for example, in the case bank capital falls below a certain level, could be helpful in shielding the supervisors from legal action and political pressures and would provide a means to intervene in a transparent and effective manner.

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[15] In the last two years, in total four small banks have either been declared bankrupt or have needed public support: *Rieger* and *Diskont Bank* (bankruptcy in November 1998); *Trigon Bank* (emergency liquidity assistance from the OeNB, in October 1999), and *Bank Burgenland* (support from the provincial government, its main owner, in June 2000). By far the largest of these banks was *Bank Burgenland* with about 0.5 percent of total bank assets. Although increased risk-taking was present in these cases, criminal action was at the origin of troubles in three of these banks.

[16] See IMF (1998).

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II. The Austrian Labor Market: Performance and Challenges[17]

A. Introduction and Summary

29. Austria stands out among industrial countries as having maintained over the past thirty years one of the lowest unemployment rates; low youth and low-skilled unemployment; below average long-term unemployment; and one of the highest employment rates. Moreover, despite massive restructuring, which reduced employment in manufacturing by ¼ since 1980, it has experienced relatively small unemployment increases. On the other hand, job creation has been sluggish. This chapter examines the factors behind Austria's good labor market performance and the lessons that can be drawn for other countries.

30. Several institutional factors have contributed to this commendable performance: (i) The system of **social partnership**, which actively involves special interest groups in the formulation and implementation of macroeconomic, incomes, and social policies, has made it possible to internalize policy externalities and promote the longer-term interest of the country as a whole. The social partners have facilitated wage moderation (necessitated by the peg to the DM since 1981); have allowed (unlike in Germany) some wage differentiation across sectors/enterprises in line with specific productivity and demand conditions (thus preserving competitiveness); and have enabled extensive industrial restructuring in an environment of social peace. (ii) The system of **apprenticeship training**, notwithstanding the need for periodic modernization (as in Germany), smoothes the transition from school to work and obviates pressure from high contractual wages. (iii) While burdening the fiscal position, **early retirement** incentives (as in most other EU countries) and the expansion of **public sector employment** (unlike most other EU countries) have played a major role in mitigating the rise in unemployment until the mid-1990s. Finally, (iv) **active labor market policies (ALMPs)** have risen to prominence since the mid-1990s, with a clear emphasis on employability and entrepreneurship, and innovative programs like job coaching, training, and contestable unemployment placement services.

31. However, the resilience of unemployment (albeit at a relatively low level) and the rapidly changing economic landscape (domestic and external) have revealed weaknesses in this four-pillar model. In particular, the social partnership system with its need for extensive consultations has, at times, delayed reforms that improve productivity and flexibility (e.g., the introduction of nonstandard employment arrangements) and may have hamstrung potential growth by focusing more on preserving jobs rather than creating new employment opportunities. The educational system has been slow to adapt to the demands of new technologies and the need for continuous retraining of the labor force. Finally, early retirement, by excessively burdening the public finances, has reduced the scope to lower taxes and promote enterpreneurship, and has adversely affected labor supply at a time of declining population growth.

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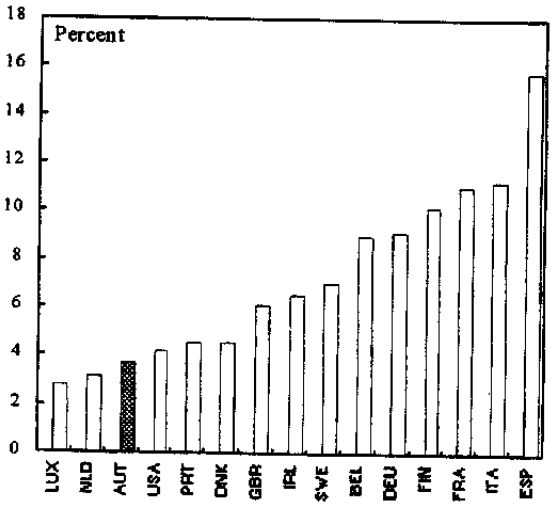
[17] Prepared by Anastassios Gagales.

32. The labor market continues to present policy challenges, stemming from a greater need for labor market flexibility with the advent of the EMU, increasing international competition, and demographic and technological changes. For continued good labor market performance in the medium term, it will be crucial to reform the system of social partnership to enable it to respond better and faster to the needs of the labor market; to address problems related to the graying of the labor force (rising long-term unemployment, skills depletion, pressures on the pension system); and to reform the educational system.

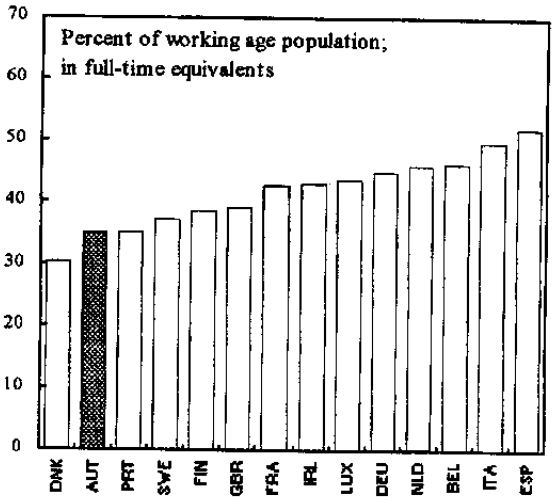
33. The remainder of this chapter is organized as follows: after reviewing the stylized facts and the main trends in the Austrian labor market over the past three decades in a cross-country perspective in section B,[18] section C looks at the anatomy of unemployment to identify unemployment traps and labor market rigidities. Section D evaluates the role of the institutional and policy framework in containing unemployment and its capacity to deliver results in the years ahead, while section E looks at wage flexibility. Section F concludes with policy challenges.

Figure II-1. Standardized Unemployment Rate, 1999



Source: OECD, Analytical Database.

Figure II-2. Non-Employment Rate, 1998



Source: OECD, Analytical Database.

B. Stylized Facts

34. **The unemployment rate in Austria has remained one of the lowest among industrial countries over the past thirty years.** At 3.7 percent in 1999,[19] the standardized

[18] Detailed reviews of the Austrian labor market can be found in Biffl and Pollan (1995), EU (1997), Marterbauer and Walterskirchen (1999), Pichelmann and Hofer (1999), OECD (1997a), and SM/98/126.

[19] Registered unemployment, which is compiled from Labor Market Service statistics and is expressed in percent of dependent employment (i.e., excluding the self-employed), was

(continued...)

unemployment rate (Eurostat definition, labor force survey based) was less than half the EU average and the third lowest in the EU after Luxembourg and the Netherlands (Figure II-1).[20] Non-employment, which is a more reliable indicator of labor market performance than unemployment when the incidence of early retirement, invalidity, full-time education, childcare leave, and part-time employment is high, was also relatively low at 32.6 percent (Figure II-2 and Table II-1). Austria, like most other EU countries, has used early retirement extensively to relieve labor market pressures and, as a result, non-employment among older workers (72 percent) is the second highest in the EU; but this is more than offset by the very low non-employment among prime-age adults and younger workers, thereby keeping overall non-employment low. In the 25-54 cohort, which is not affected by peculiarities of the educational system and early retirement, Austria features the lowest non-employment rate.

35. **Although unemployment has remained relatively low over the past thirty years, it has risen as in all other EU countries:** [21] after hovering around 1 percent in the 1960s, the unemployment rate rose marginally in the wake of the first oil shock, doubled at the time of the second oil shock, remained roughly unchanged during most of the 1980s, and crept up again in the 1990s. Overall, however, both the increase and gyrations of unemployment have been much less pronounced than in the rest of the EU (Figures II-3 and II-4). In the past two years, strong GDP growth and active labor market policies helped reverse the upward trend. However, the reduction in unemployment was more moderate than the EU average and much smaller than the spectacular declines in the Netherlands, the U.K. and Denmark (albeit these happened from much higher levels). Although these countries performed better in recent years when measured by the magnitude of improvement, Austria maintained its unemployment at a significantly lower level in practically all thirty years, and, hence, had better overall labor market performance (i.e., lower unemployment-related welfare losses over the longer run).

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6 percent. As is explained in Biffl (1999), the discrepancy between the two rates practically vanishes when account is taken of differences in coverage and definitions.

[20] International comparisons should be treated with caution due to differences in definitions and measurement. For example, in the Netherlands, people over 57 do not appear in survey-based measures as these persons are not obliged to search actively for a job (a requirement for a person to be classified as unemployed).

[21] Several econometric studies (e.g., Arestis and Mariscal, 2000) conclude that the unemployment rate in Austria (and several other OECD countries) is non-stationary, even after allowing for trend and structural breaks. This reflects the confluence of relatively short samples, statistical tests with low power, and sluggishness in the labor market. The unit root hypothesis is theoretically untenable and unlikely to be validated in sufficiently large samples.

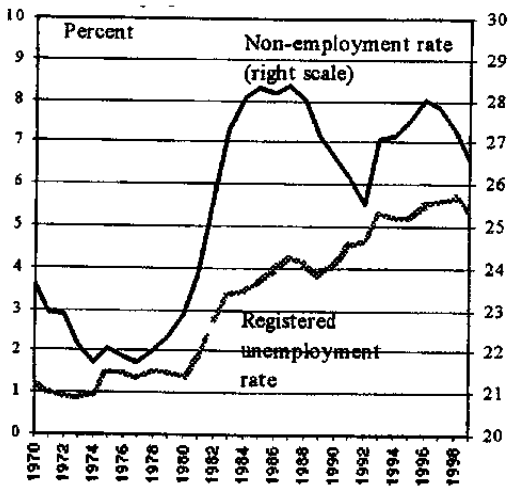
Table II-1. Non-Employment Rates in Industrial Countries, 1998

	Total	By Gender		By Age 1/		
		Men	Women	Youth (15-24)	Adults (25-54)	Older workers (55-64)
Austria	32.6	24.1	41.0	45.8	19.6	72.0
Belgium	42.7	33.0	52.5	74.0	25.6	77.5
Denmark	24.7	19.8	29.8	33.6	16.6	49.6
Finland	35.2	31.8	38.8	61.2	21.1	63.8
France	40.6	33.5	47.7	79.1	23.2	67.0
Germany	35.9	27.5	44.4	55.0	23.0	61.2
Greece	45.1	29.0	60.4	72.4	30.9	61.5
Ireland	40.2	28.6	51.8	57.0	29.1	58.4
Italy	49.2	34.9	63.3	74.6	34.1	73.1
Netherlands	30.2	20.1	40.6	37.5	20.7	66.7
Portugal	33.2	24.2	41.9	57.1	19.7	49.1
Spain	48.8	33.0	64.3	69.4	36.9	65.2
Sweden 2/	28.5	26.5	30.6	58.4	18.7	37.0
United Kingdom 2/	28.8	21.9	35.8	39.0	20.9	51.7
European Union	38.9	29.0	48.7	62.3	25.7	62.9
Switzerland	20.7	12.8	29.0	36.7	15.1	28.7
Canada	31.0	25.3	36.7	47.4	21.7	54.6
Japan	30.5	18.3	42.8	55.4	20.8	36.2
United States 2/	26.2	19.5	32.6	41.0	18.9	42.3

Source: OECD, Employment Outlook, 1999.

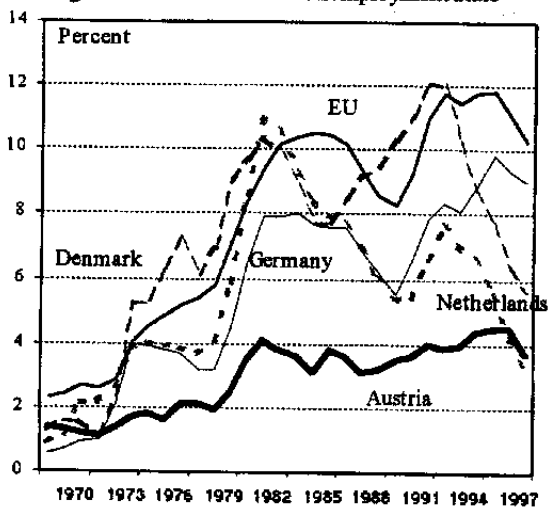
1/ Ratio of employment to working age population of each group.
2/ Age group 15-24 refers to 16-24.

Figure II-3. Unemployment and Non-Employment



Source: OECD, Analytical Database.

Figure II-4. Standardized Unemployment Rate



Source: OECD, Analytical Database.

36. **The upward trend in unemployment can be explained by a range of factors related to demand and supply shocks, and the institutional and policy setup.** The coming of age of baby boomers and substantial immigration raised labor supply in the early 1980s and early 1990s, respectively, while extensive restructuring (mainly in industry), rising non-wage costs (to finance social security), and capital deepening have curtailed labor demand. Although wage moderation and greater flexibility in work arrangements have tempered the effect of adverse shocks on employment, social consensus was achieved at the cost of extensive early retirement and delays in the opening up of the sheltered economic environment.

37. The following decomposition provides a useful framework for identifying the proximate determinants of the unemployment rate, *UNR*:

$$(1 - UNR) = [\, Q / APL \,] \div [\, (L/POPT)\ (POPT/POP)\ POP \,]$$

On the right hand side, the numerator focuses on the proximate determinants of labor demand, namely the level of activity, *Q*, and the average productivity of labor, *APL*. The denominator reflects labor supply determinants, namely the participation rate (share of labor force in working age population, *L/POPT*), the activity rate (share of working age population to total population, *POPT/POP*), and population (*POP*). The remainder of this section examines the evolution of these factors, focusing on their effect on unemployment.

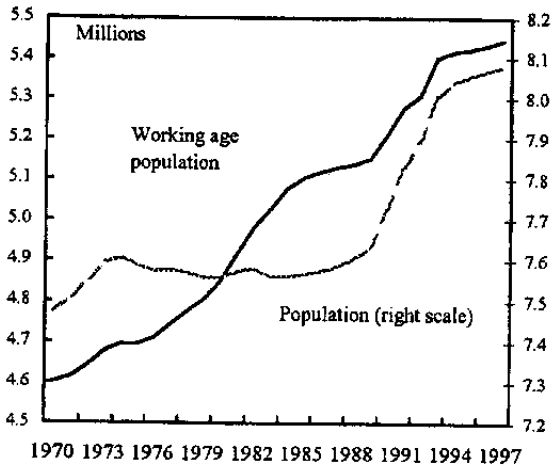
Demographic trends

38. **Working age population increased only moderately in the past 30 years** as low fertility has dampened the rise in the activity rate related to the coming of age of the babyboom generation and immigration inflows.

- **The coming of age of the babyboom generation** increased working age population by almost half a million between 1974 and 1984, notwithstanding a virtually stagnant

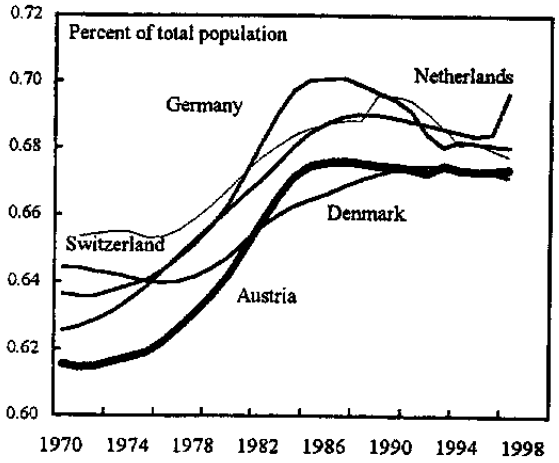
population, and raised the activity rate by 5 percentage points (Figure II-5); the timing and magnitude of this shock is comparable to those in other EU countries (Figure II-6). Correspondingly, the **graying of babyboomers** will generate a shock of similar magnitude (but opposite sign) around 2010, which will strain the financial position on the pension system.

Figure II-5. Population and Working Age Population



Source: OECD, Analytical Database.

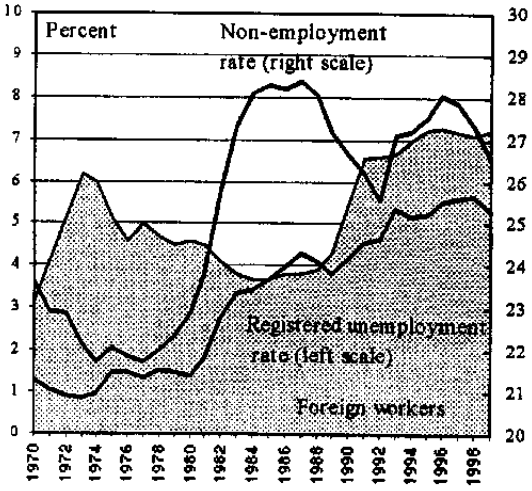
Figure II-6. Activity Rate



Source: OECD, Analytical Database.

- After remaining virtually unchanged in the second half of the 1980s, **working-age population increased further in 1989-91 due to an uptick in foreign employment** which was driven both by demand factors (to relieve labor shortages during brisk economic activity in the wake of German unification) and supply factors (notably the crisis in the former Yugoslavia and, to a lesser degree, the opening up of the CEECs). Overall, the share of foreign workers in total employment rose from 5 percent in the 1980s to over 9 percent in 1998, and is the highest in the EU alongside Germany.[22] As in other EU

Figure II-7. Unemployment and Foreign Workers

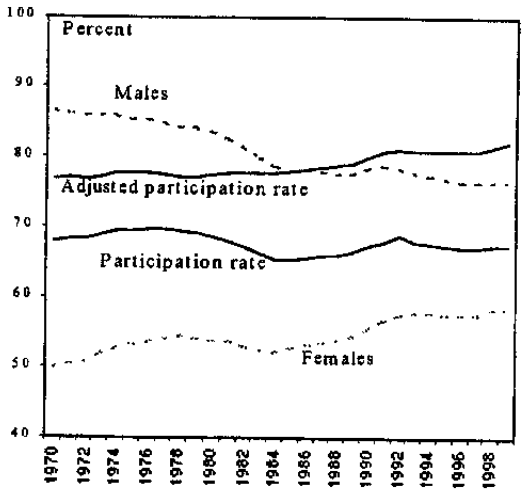


Source: OECD, Analytical Database.

[22] The structure of foreign employment has changed noticeably over the past thirty years: the share of foreign workers employed in manufacturing has declined from ¾ in the early 1970s to just over 40 percent in the mid-nineties as foreign women have shifted from manufacturing to services. Currently, the presence of foreign employment is highest in tourism, agriculture, textiles, and construction (Pichelmann and Hofer, 1999).

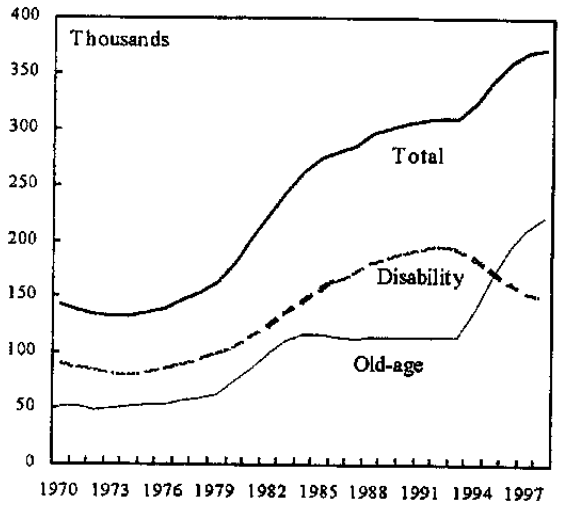
countries, immigration has been used actively as an instrument of employment policy and is correlated with labor market conditions (Figure II-7). After rising rapidly in the 1960s, the share of foreign in total employment declined by 3 percentage points between the mid-1970s and late 1980s as regulation was tightened in an effort to contain unemployment; after the 1989-91 surge, foreign employment stabilized as immigration controls were tightened further with the weakening of economic activity.[23]

Figure II-8. Participation Rate



Sources: WIFO; and OECD, Analytical Database.

Figure II-9. Early Retirement



Source: Hauptverband der Österreichischen Sozialversicherung.

Participation rate

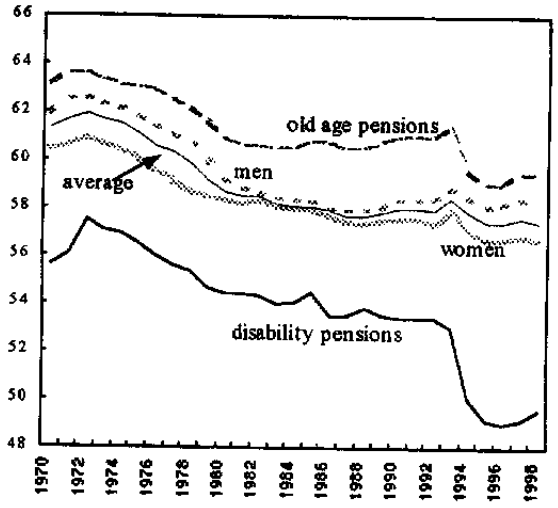
39. **Extensive use of early retirement as an instrument to relieve labor market pressures has reduced the participation rate and moderated labor force growth** (Figure II-8). The rise in early retirement is manifested primarily in *declining* male participation, which has more than offset the *rise* in female participation; the latter stems from better education, lower fertility, and the changing perception of the role of women in society. Early retirement surged in the early eighties and in the second half of the 1990s; currently almost 7 percent of the labor force (¼ of the non-employed) benefit from the scheme.[24] The structure of early retirement has also changed, with disability pensions becoming less prevalent in the past few years (Figure II-9). Corrected for the effect of early retirement, the participation rate exhibits a rising trend (driven by rising female participation, which is still much lower than in most Nordic countries albeit some 6 percentage points higher than the EU average in recent years) and its cyclical swings are less accentuated

[23] Citizens of other EU countries are exempt from restrictions. Their number (some 25,000) has remained small in comparison with labor from non-EU member countries.

[24] This is almost half the level in the Netherlands, as reported in Broersma *et al.* (2000).

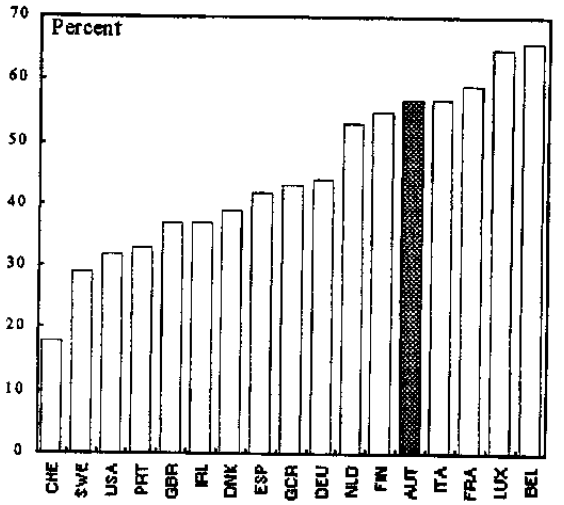
(Figure II-8). The average retirement age has declined by four years since the early seventies[25] and is currently 57½ years. But it is only 49½ years for disability pensions, whereas for old age pensions it is 61 for men and 58 for women,[26] earning Austria a reputation as the country with the oldest students and youngest retirees (Figure II-10). Although well above the EU average, the incidence of early retirement (proxied by non-employment among 55-64-year-old men) is currently lower than in Belgium, Luxembourg and France (Figure II-11) and is also below the peak reached in the Netherlands before the onset of reforms.

Figure II-10. Average Retirement Age



Source: Bundesministerium für Arbeit.

Figure II-11. Non-Employment Ratio for Men 50-64, 1998



Source: OECD, Employment Outlook, 1999.

Labor demand factors

40. **Notwithstanding robust economic growth, job creation has been sluggish.** Although wage increases have been more moderate than in other EU countries and in line with productivity growth (Figures II-12 and II-13), the combination of high labor costs, declining relative cost of equipment, and a tax system favoring capital accumulation,[27] has

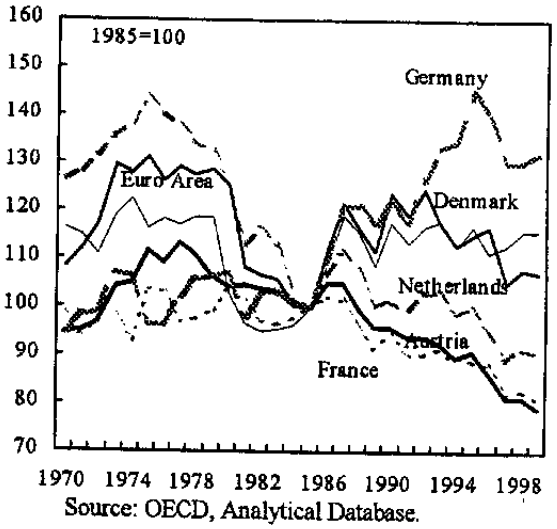
[25] The plummeting of the average retirement age of old-age and invalidity pensions since 1994 (Figure 10) is the result of a two-pronged pension reform that (i) tightened the criteria for disability pensions (about ⅔ of applications were rejected in 1997) and (ii) recognized reduced employability *(geminderte Arbeitsfähigkeit, Erwerbsunfähigkeit)* as a reason for early retirement. In addition, the inclusion of child-bearing periods in the calculation of pension benefits has reduced the average retirement age for women.

[26] In the public sector, the minimum retirement age is 57 for both genders.

[27] Appendix II examines the taxation of labor and capital income in Austria.

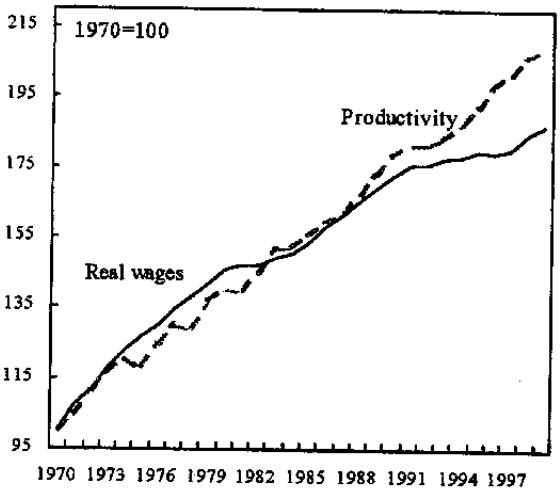
induced rapid capital deepening. This has brought about substantial productivity gains (Box II-1) which have largely offset the employment effect of the robust growth (Figure II-14). Overall, employment increased by 0.4 percent annually since 1970 and accommodated less than half of the increase in working-age population during that period (Figure II-15). Developments have been uneven: increases in employment in the aftermath of the first oil shock (mainly due to expanding public employment and labor hoarding by state-controlled enterprises), during the brisk upswing in 1988-92, and, to a lesser degree, in the upswing of 1996-99 were interspersed with substantial declines related to enterprise restructuring in the first half of the 1980s (oil shock, international competitive pressures in steel and textiles) and the 1990s (increased competition from CEECs, accession to the EU).

Figure II-12. Unit Labor Cost in Manufacturing Sector



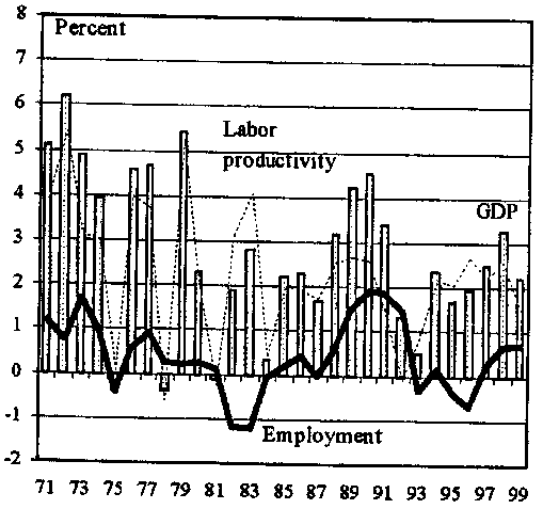
Source: OECD, Analytical Database.

Figure II-13. Real Wages and Productivity in the Business Sector



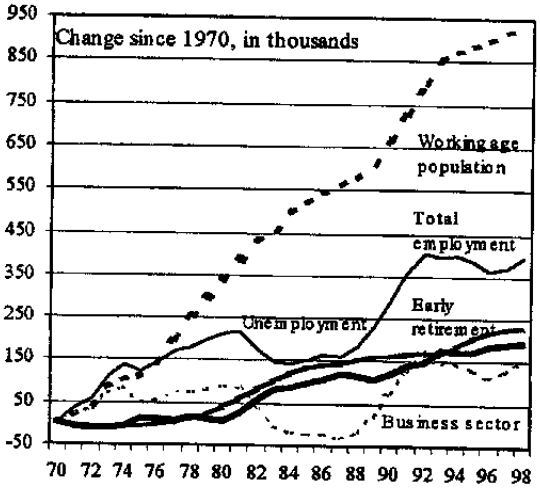
Source: OECD, Analytical Database.

Figure II-14. Employment and Productivity Growth



Source: OECD, Analytical Database.

Figure II-15. Working Age Population and its Components



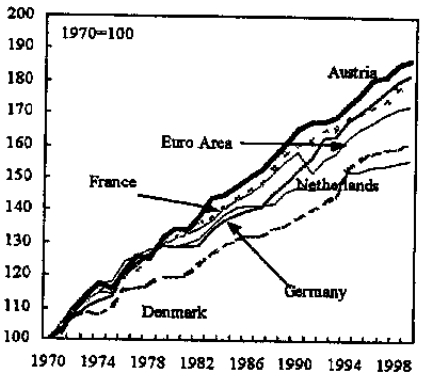
Sources: OECD, Analytical Database; and WIFO.

Box II-1. Productivity Performance in the Business Sector

Notwithstanding some deceleration, labor productivity growth in the business sector in Austria has been brisker than in the EU. It has also been faster than in the United States during 1970-99, except for the 1995-99 sub-period. However, the impact on employment has been very limited as this relatively good productivity performance has been driven by capital deepening, rather than strong total factor productivity growth.

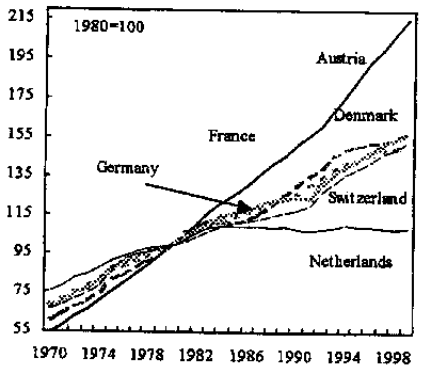
Capital deepening has been faster than in the EU and accounts for ⅔ of productivity growth over the past thirty years. Its rapid pace reflects a combination of high and rising labor costs (including tax burden) relative to the cost of capital, a tax system that favors capital accumulation (see Appendix II), and the effects of labor shedding. International comparisons, however, are also influenced by the larger weight in Austria of capital intensive industries and the lower frequency of part-time employment in Austria, as well as cross-country differences in the pace of outsourcing.

Box Figure II-1. Productivity



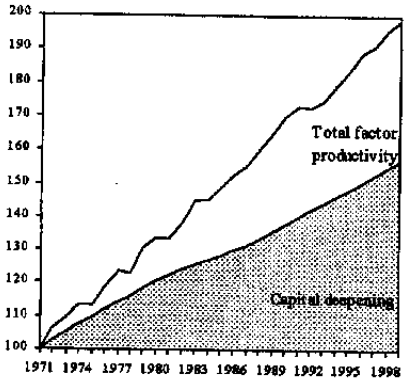
Source: OECD, Analytical Database.

Box Figure II-2. Capital-Labor Ratio



Source: OECD, Analytical Database.

Box Figure II-3. Labor Productivity in the Business Sector



Sources: OECD, Analytical Database; and staff calculations.

The contribution of total factor productivity (as it is influenced by labor hoarding/shedding) has a strong cyclical element that accounts for most of the cyclical fluctuations in productivity. Enterprise adjustment (facilitated by early retirement) in connection with EU accession and greater competition from CEECs underpins the recovery in total factor productivity growth in the second half of the nineties.

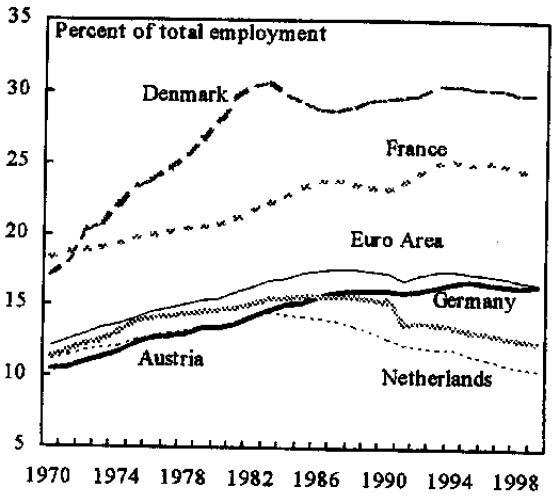
Labor Productivity in the Business Sector
(Annual Percentage Changes)

	1970-99	1970-73	1973-90	1991-98	1995-99
Austria	2.6	4.8	2.6	1.5	2.0
Capital deepening	*1.7*	*2.3*	*1.6*	*1.3*	*1.3*
TotalFactor Productivity	*0.9*	*2.5*	*1.0*	*0.2*	*0.7*
Germany	2.4	3.8	2.3	2.4	1.7
France	2.5	4.8	2.6	1.7	1.5
Netherlands	2.0	4.8	1.9	1.6	0.7
Denmark	2.1	3.7	1.8	3.3	1.2
Euro Area	2.5	4.6	2.4	2.5	1.2
United States	1.3	2.8	0.8	1.4	2.1

Sources: Analytical Database, OECD; and staff calculations.

41. **Reflecting the changing structure of the economy, the structure of employment has changed substantially over the years.** Whereas employment in the business sector has stagnated due to the gradual contraction of the number of self-employed (primarily agriculture) and the slow growth of dependent employment, manufacturing employment dropped by 25 percent since 1980 due to downsizing and outsourcing—partly to the services sector[28]—whereas the (non-government) services sector expanded considerably. Until the 1980s, the public sector accounted for a significant part of the increase in employment (Figure II-16) and, as a result, the share of government employment has risen to 16½ percent of total employment. Meanwhile, part-time and other non-standard forms of employment (fixed-term contracts, leased labor, casual employment, etc.) have grown markedly in line with increasing flexibility in the marketplace. Part-time employment, in particular, has risen from 13 percent in 1985 to 20 percent in 1999 and is particularly frequent among women (75 percent of part-timers); its incidence, however, remains low by international standards.[29]

Figure II-16. Government Employment



Source: OECD, Analytical Database.

42. The picture that emerges by bringing together in Table II-2 the various determinants of unemployment is that **sluggish job creation has been the predominant reason for the rise in unemployment in the past two decades.** Net job creation was virtually nil in the 1980s and corresponded to only ⅔ of the increase in working age population in the 1990s, notwithstanding robust GDP growth. As in other countries, the labor market response to sluggish job creation has been the expansion of part-time employment: in fact, the entire employment increase during the 1996-99 upswing was part-time. Public employment and early retirement have also been instrumental in containing unemployment, but their significance has been declining.

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[28] The outsourcing of functions to the services sector implies that effective job destruction has been smaller than suggested by employment statistics in manufacturing. Outsourcing also tends to overestimate productivity in manufacturing and underestimate productivity in services.

[29] Because of distributional effects, the rise in part-time employment is considered to have contributed to the rise in economic insecurity. The expansion of part-time employment has benefited persons (primarily women) who were earlier excluded from the labor market and has reduced dependence on the welfare system. At the same time, it has adversely affected those whose jobs were converted from full- to part-time.

Austria: Table II-2. Change in the Labor Force

(In thousands)

	1970-79	1980-89	1990-99	1988-91	1996-99
Employment	**211**	**31**	**197**	**174**	**63**
Full-time	145	-85	52	136	5
Part-time	65	116	145	38	58
Business sector	86	-60	161	148	66
Self employed	-216	-71	-49	-13	3
Government	124	91	36	26	-3
Austrians	131	40	75	68	57
Foreigners	79	-9	122	105	6
Unemployment	**1**	**92**	**73**	**26**	**-9**
Austrians	-2	87	56	16	-8
Foreigners	4	6	17	10	0
Inactive labor force	**83**	**194**	**49**	**-46**	**-20**
Early retirement	164	139	68	12	9
Other	-81	55	-19	-58	-29
Working age population	**295**	**317**	**318**	**154**	**35**
Austrians	212	321	179	38	28
Foreigners	83	-3	139	116	6

Sources: WIFO; and OECD, Analytical Database.

C. The Anatomy of Unemployment

43. The distribution of unemployment has been uneven, resulting in pockets of high unemployment for certain demographic groups, types of workers, and regions.

44. **Long-term unemployment** (i.e., unemployment of more than one year) has risen from less than 10 percent of registered unemployment in the 1970s to 16 percent in recent years, although this is an underestimate as those who exhaust their benefit eligibility tend to drop out of the unemployment register (Figure II-17, Table II-3). Indeed, survey-based statistics suggest a higher long-term unemployment of 30 percent, which, nonetheless, is one of the lowest in the EU (Figure II-18, Table II-4). More than half of the long-term unemployed come from the tertiary sector and those branches of industry where restructuring is still ongoing. Long-term unemployment is concentrated mostly among low-skilled workers (½ of registered long-term unemployed), those whose skills have been depleted by technological progress, and older workers (41 percent of registered long-term unemployed).

Table II-3. Austria: Structure of Registered Unemployment, 1990-98

(Annual averages; in percent of total, unless otherwise noted)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Unemployed (in thousands)	165.8	185.0	193.1	222.3	214.9	215.7	230.5	233.3	237.8
By gender									
Male	53.7	53.5	55.5	57.0	56.1	55.6	55.5	55.1	54.4
Female	46.3	46.5	44.5	43.0	43.9	44.4	44.5	44.9	45.6
By duration									
Up to 3 months	55.8	52.6	52.0	50.6	50.1	51.9	51.0	50.3	50.0
3-6 months	19.1	19.1	18.2	19.2	18.0	18.1	19.5	19.2	19.5
6-12 months	12.0	13.1	12.9	13.1	13.4	12.5	13.6	14.3	14.5
One year or more	13.1	15.2	17.0	17.0	18.5	17.5	15.8	16.2	15.9
By age									
15-24	23.0	21.6	19.5	18.7	17.3	16.9	16.9	16.3	15.3
25-39	42.2	42.3	41.5	41.9	43.0	44.6	45.0	43.8	42.9
40-54	28.9	29.9	32.3	33.2	33.7	32.5	32.2	32.6	33.0
55 and older	5.9	6.2	6.6	6.2	6.1	6.1	6.0	7.4	8.8
By educational attainment									
Compulsory schooling	45.3	45.2	44.6	43.7	42.8	41.8	41.4	40.9	40.8
Apprenticeships	35.2	35.6	36.3	37.2	37.7	38.5	38.6	38.5	38.5
BMS	6.0	5.8	5.7	5.7	6.0	6.1	6.3	6.4	6.5
AHS	2.8	2.8	2.8	2.8	2.6	2.6	2.6	2.7	2.7
BHS	3.2	3.3	3.6	3.9	3.9	4.0	4.1	4.3	4.4
University education	2.7	2.5	2.4	2.4	2.6	2.8	2.9	2.9	2.8
Unclassified	0.9	0.9	0.5	0.4	0.3	0.2	0.2	0.2	0.2
By occupation									
Seasonal occupations 1/	27.6	27.0	25.9	25.1	25.1	25.7	25.4	25.1	25.0
Production	30.0	30.5	31.3	32.3	31.2	30.1	30.4	29.4	28.7
Services	42.3	42.5	42.7	42.5	43.6	44.1	44.2	45.5	46.3
Unemployed with physical limitations (in thousands)	45.4	52.1	52.0	57.0	59.1	64.1	70.7	72.3	79.5
Health reasons	40.1	39.3	42.0	44.8	45.0	44.5	45.7	49.3	48.7
Mobility limitations (e.g. spatial)	49.1	50.5	48.1	45.8	46.0	45.7	44.3	41.0	42.3
Other	10.7	10.2	9.9	9.5	9.0	9.8	10.0	9.7	7.9
Unemployment duration (in days)	103	112	114	119	125	124	127	130	127
Male	96	104	105	110	117	116	119	120	119
Female	113	122	127	131	136	136	138	143	138
Long-term unemployed 2/ (in thousands)	21.8	28.2	32.7	37.9	39.7	37.7	36.4	37.8	37.9
Male	53.5	51.4	50.3	53.3	56.0	55.3	54.6	54.6	55.8
Female	46.5	48.6	49.7	46.7	44.0	44.7	45.4	45.4	44.2
18-24	4.6	4.7	4.1	3.4	3.1	2.8	3.3	3.5	3.0
25-50	60.7	58.5	54.7	51.9	52.3	55.1	60.3	59.8	55.6
50 and older	34.5	36.8	41.1	44.5	44.5	42.0	36.3	36.7	41.3

Source: Labor Market Service.

1/ Agriculture, forestry, construction, and tourism.

2/ Unemployed for more than twelve months.

Table II-4. Characteristics of Unemployment in Industrial Countries, 1998

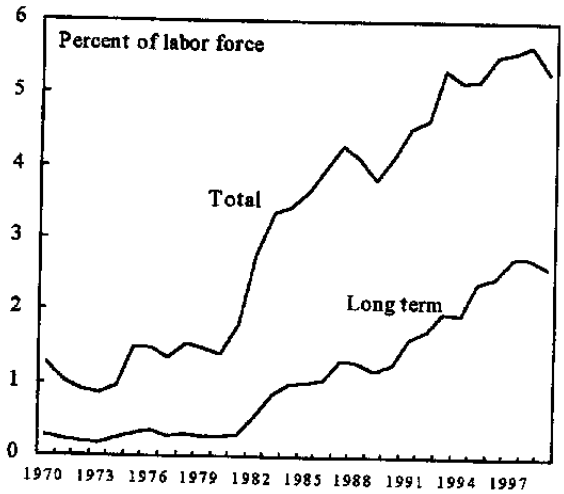
	Standardized Unemployment Rate	Unemployment Rate by Gender			Unemployment Rate by Age			Unemployment by Educational Attainment			Incidence of Long-term Unemployment in Percent of Total Unemployment 1/	
		Both sexes	Men	Women	15- 24	25-54	55-64	Less than upper secondary education	Upper secondary education	Tertiary level education	6 months and over	12 months and over
Austria	4.7	5.5	5.4	5.6	7.5	5.0	6.4	6.0	3.3	2.3	45.3	30.2
Belgium	8.8	9.4	7.6	11.7	20.4	8.4	5.3	13.4	7.4	3.6	77.5	62.6
Denmark	5.1	5.1	3.9	6.4	7.2	4.6	5.1	11.8	7.0	3.9	43.7	28.7
Finland	11.4	11.5	10.9	12.1	22.0	9.5	14.0	21.5	15.2	7.1	42.2	27.5
France	11.7	11.9	10.3	13.9	25.4	10.8	8.7	14.8	9.7	6.7	64.2	44.1
Germany	9.4	8.6	8.5	8.7	9.4	7.7	12.7	14.2	8.9	5.2	69.2	52.2
Greece	...	11.9	8.1	17.8	32.1	9.6	3.7	6.5	9.2	8.0	...	...
Ireland	7.8	7.9	8.2	7.5	11.5	7.3	5.1	16.9	7.4	4.2	...	...
Italy	12.2	12.2	9.5	16.4	32.1	9.6	4.7	9.4	8.2	7.3	81.6	66.7
Netherlands	4.0	4.3	3.5	5.5	8.2	3.6	2.3	7.0	4.5	3.5	83.6	47.9
Portugal	4.9	4.9	4.0	6.0	9.5	4.1	3.4	6.4	5.7	3.2	64.6	44.6
Spain	18.8	18.8	13.7	26.7	34.1	16.5	10.6	20.1	17.4	14.3	70.4	54.1
Sweden 2/	8.2	8.4	8.8	8.0	16.8	7.6	6.6	10.8	9.6	4.8	49.2	33.5
United Kingdom 2	6.3	6.2	6.9	5.3	12.3	5.0	5.3	10.9	7.1	3.5	48.0	33.1
Switzerland	...	3.7	3.2	4.3	5.8	3.3	3.4	6.5	3.1	2.7	48.9	34.8
Canada	8.3	8.4	8.6	8.2	15.2	7.1	6.9	13.4	8.9	6.7	23.1	10.1
Japan	4.1	4.2	4.3	4.2	7.7	3.4	5.0				39.0	20.3
United States 2/	4.5	4.5	4.5	4.7	10.4	3.5	2.6	10.9	5.1	2.4	14.1	8.0

Source: OECD, Employment Outlook, 1999.

1/ Based on labor force surveys.

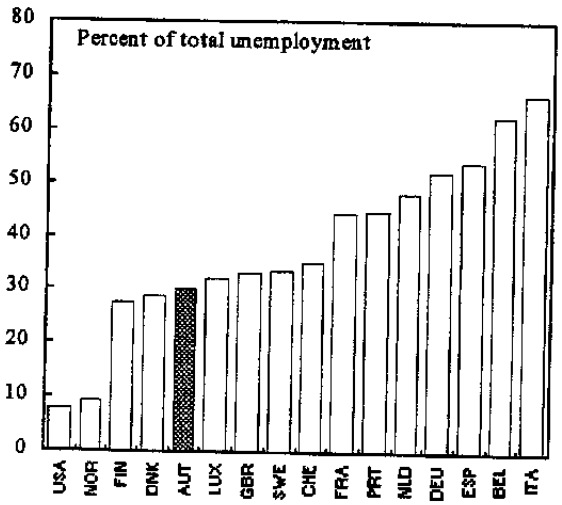
2/ Age group 15-24 refers to 16-24.

Figure II-17. Registered Unemployment



Source: WIFO.

Figure II-18. Long-Term Unemployment, 1998

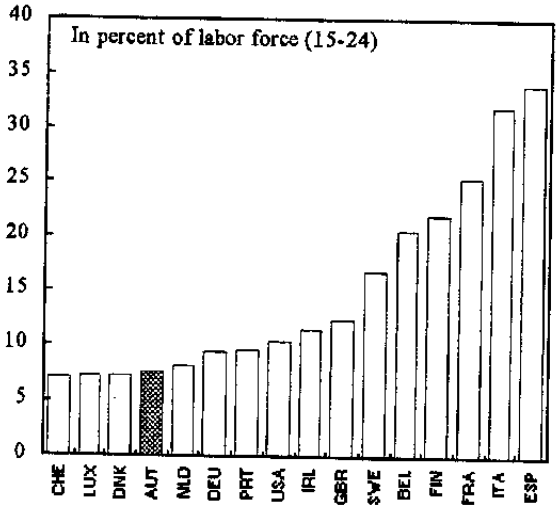


Source: OECD, Employment Outlook, 1999.

45. The incidence of unemployment has been higher among **older workers**: it was 10½ percent of the labor force in the 50-59 cohort in 1998 (but less then 6 percent in the 60+ cohort owing to early retirement). This reflects a combination of skill depletion; institutional rigidities that discourage older workers from accepting wage cuts or part-time employment rather than entering unemployment; and the high costs associated with the activation of older workers.[30] In general, older workers are less likely to lose their job, but those who do lose it face a higher probability of becoming long-term unemployed.

46. **Youth unemployment** has been low by international standards (Figure II-19). This is attributed to the system of apprenticeship training (which provides formalized company-based training and education) and vocational schools (which supplement apprenticeship in the field of higher technical and engineering education) that smooth the transition from school to work and obviate pressure from high contractual wages.

Figure II-19. Youth Unemployment, 1998



Source: OECD, Employment Outlook, 1999.

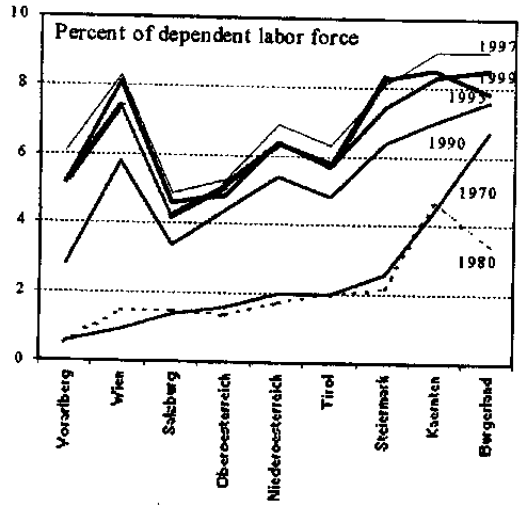
47. **The incidence of unemployment declines with higher levels of education.** The bulk of the unemployed have no education beyond compulsory schooling or apprenticeship training. Pichelmann and

[30] Placement offices (*Arbeitsmarktservice Österreich, AMS*) tend to focus on (re)training the unemployed below 50; and rely on employment subsidies for activating older workers.

Hofer (1999) estimate that the risk of unemployment for low-skilled workers has been on the rise; within this group, the risk of unemployment for persons with compulsory schooling is double that of persons that have completed an apprenticeship.

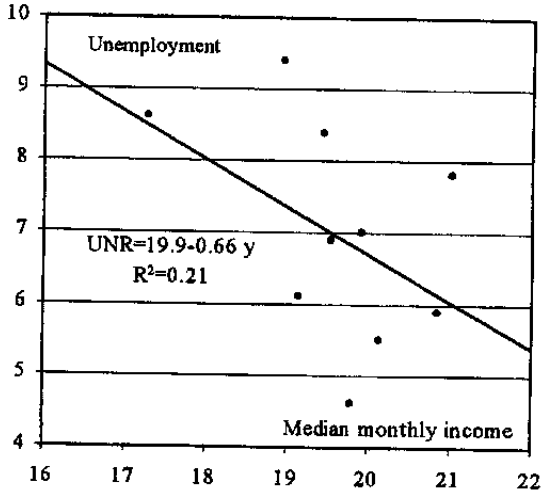
48. **Unemployment displays persistent differences across regions.** Notwithstanding employment, industrial and regional policies, the pattern of regional unemployment has remained practically unchanged—with the exception of the Vienna region, whose relative position has deteriorated markedly—and, in general, regions that have high unemployment tend also to have low wages (Figures II-20 and II-21). These indicate limited labor mobility across regions, which is associated with distortions in the housing market that suppress the market for rental housing. In particular, the majority of rental housing is managed by non-profit building associations and local authorities; privately owned apartments on pre-WWII contracts with inherited rights to tenancy are rented at only a nominal amount; short-term leases are not envisaged in the legislation; and subletting or exchange of apartments managed by building associations is prohibited. Rigidity is exacerbated by a popular arrangement whereby tenants make an initial downpayment in exchange for a lower life-long rent. The market reaction to housing market rigidities has been increasing commuting (circumstantial evidence indicates that two hours of daily commuting is not infrequent).

Figure II-20. Registered Unemployment, 1970-99



Source: Sozialstatistisches Taschenbuch, AK.

Figure II-21. Unemployment Rate



Source: Sozialstatistisches Taschenbuch, AK.

49. **Labor turnover increased rapidly in the 1990s** as a result of the rapid growth of non-standard employment arrangements. Social security statistics indicate that almost 20 percent of dependent employees in non-seasonal jobs, and one in every two employees in seasonal jobs (i.e., agriculture, construction and tourism) entered unemployment in 1998. Meanwhile, survey-based statistics point to a rise in turnover from 15 percent in the late 1980s to 25 percent in 1995. Turnover is lower in human capital intensive sectors requiring firm-specific skills and higher among low-skilled and foreign workers. About 40 percent of the unemployed return to their previous employer.

50. The rise in unemployment has been accompanied by a rise in the **average duration of unemployment spells** (*Verweildauer*) from 56 days in 1981 to 138 days in 1998. Average duration is generally longer for women and increases with age: currently it ranges from 80 days for younger workers to one year for workers 60 years or older

51. **Although unemployment has not been a major social problem, it has been an important focus of economic policy** because of increasing economic insecurity and rapid changes in the economic environment. The increasing probability of unemployment and the longer duration of unemployment spells in conjunction with the deteriorating quality of employment, intensifying competition, and the erosion of institutions (e.g., the welfare state) that have sheltered the population in the past have increased the perception of economic insecurity. In addition, the relatively high concentration of unemployment among older and low-skilled workers indicates the existence of a skills mismatch that is likely to be exacerbated further by the rapid technological progress. In this environment, there are limits on how far robust growth alone can reduce unemployment.

D. Wage Flexibility and Differentiation

52. The responsiveness of wages to macroeconomic shocks (aggregate wage flexibility) and to the conditions in individual sectors/enterprises (wage differentiation) are key determinants of labor market performance insofar as adjustment in prices reduces the need for adjusting quantities.

53. **Aggregate wage flexibility in Austria is high.** An earlier cross-country study by Layard et al. (1991), which covers the period 1956-85 and a more recent one by Roeger and Veld (1997), which covers the period 1973-95 and follows a different methodology, indicate that a one percentage point rise in the unemployment rate reduces real wages by 1½ percent in the short term and by 2¾ percent in the longer term. These semi-elasticities are twice as high as their corresponding averages in the EU and among the highest among industrialized countries (Table II-5).

54. **The main reason for the high aggregate wage flexibility has been the system of social partnership** which, by imposing cooperative behavior on its members, encourages the various special interest groups to take into account the overall macroeconomic conditions; it reflects also the social partners' emphasis on employment and growth, as well as the acceptance of wage moderation in return for job security, as part of the social compromise.[31] Thus, in setting wages the social partners have tended to restrict increases during upswings and be more generous in recessions.[32] The peg of the schilling to the DM since the early

[31] Critical analyses of the Austrian system of social partnership can be found in Farnleitner and Schmidt (1982), Katzenstein (1984), Romanis Braun (1986), Tomandl and Fuerboeck (1986), Biffl and Pollan (1995), and Guger (1998).

[32] Romanis Braun, 1986.

Table II-5. Measures of Aggregate Real Wage Flexibility in Industrial Countries 1/

	Aggregate Time Series Measures 2/				
	Layard et al. (1991)		Roeger and Veld (1997)		OECD (1997)
	Short-term	Long-term	Short-term	Long-term	Short-term
Austria	1.43	3.11	1.60	2.53	0.97
Belgium	0.65	4.06	0.90	1.18	0.67
Denmark	0.66	1.74	0.90	1.11	0.57
Finland	0.48	1.55	0.75	1.28	...
France	2.22	4.31	0.90	1.27	0.57
Germany 3/	0.55	1.01	0.65	0.89	0.71
Greece	...	...	0.55	1.24	0.73
Ireland	0.80	1.82	0.48	0.71	0.27
Italy	2.07	12.94	0.95	1.44	1.34
Netherlands	0.66	2.28	0.95	1.42	0.93
Portugal	...	...	0.64	1.45	2.19
Spain	0.17	1.21	0.88	1.86	0.45
Sweden	2.31	12.16	1.10	1.83	...
United Kingdom	0.98	0.98	0.50	0.74	0.20
Switzerland	1.32	7.33	...	...	...
Canada	0.50	2.38	...	...	0.58
Japan	6.40	14.50	2.50	3.47	...
United States	0.32	0.94	0.50	0.55	0.43

Sources: Layard et al. (1991); Nickel (1997); OECD (1997b); Roeger and Veld (1997).

1/ Percentage increase (reduction) in real wages in response to a 1 percentage point fall (increase) in the unemployment rate.

2/ Measures derived from econometric estimations based on aggregate time series. The precise specifications and the estimation periods are detailed in the studies. The results are not perfectly comparable across countries as the specifications vary somewhat across them.

3/ Based on West Germany.

1980s and intensifying international competition have created further pressure for wage discipline.[33]

55. Aggregate wage behavior can be described by an error correction model in which short-term dynamics are dominated by unemployment and longer-term developments are linked to productivity.[34] The empirical relationship mirrors the particular attention that social partners in Austria have traditionally paid to external competitiveness and their readiness to accept wage moderation in return for greater employment stability. The wage equation in Box II-2 captures several important features of wage setting in Austria:

- The coefficient of labor productivity, which is not significantly different from unity, confirms that real wages rise in line with productivity, which keeps the labor share constant.[35]

- Unanticipated inflation, proxied by the acceleration in inflation, reduces temporarily real wages, whereas improvements in external competitiveness tend to raise real wages.

- Wages seem to respond differently to different types of unemployment. They respond stronger to deviations of unemployment from its trend (proxied by an HP filter) than to changes in trend unemployment. The diagnostics of the equation improve when short-term unemployment (defined as unemployment of up to six months) replaces total unemployment, which is an indication that the long-term unemployed tend to withdraw from active job seeking and thus have a smaller impact on wage determination. Over the long-run, a rise of unemployment by one percentage point leads to a 2.8 percent decline in wages, which is close to the estimates of the earlier studies reported above.

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[33] Since the pegging of the exchange rate, wage agreements have focused on maintaining the competitiveness of the export sector, and in particular in the wage leader, the metal sector.

[34] See Hofer et al. (1999), Pichelmann and Hofer (1999).

[35] There is also some evidence that increasing economic integration in the EU induces more similar wage developments and strengthens international interdependence in wage formation: a recent study by Andersen et al. (2000) finds that in Austria (and in countries in the periphery of the EU) wages in trading partners exert an increasing, albeit still small, influence on domestic wages and that the effect of productivity on wages has been weakening.

Box II-2. Wage Equation

$$W_t - W_{t-1} = \underset{(0.25)}{-0.56}\ DINF - \underset{(1.43)}{0.74}\ (U-UH) + \underset{(0.86)}{2.81}\ DLAY - \underset{(0.08)}{0.37}\ [W_{t-1} - \underset{(0.07)}{1.08}\ PTY_{t-1} + \underset{(1.59)}{2.77}\ UH_{t-1} - \underset{(0.17)}{0.42}\ RPXM_{t-1} + \underset{(1.06)}{8.11}]$$

$R^2 = 0.76$; S.E. of regression = 1.45; D.W. = 1.89; Akaike information criterion = 3.78; standard errors in parenthesis. Annual data for 1967-1999 from the Analytical Database of OECD. All variables are in logarithms.

W	=	Wage rate in manufacturing.
DINF	=	Change in CPI inflation.
U	=	Registered short-term unemployment rate (up to six months).
UH	=	Smoothed unemployment rate (HP filter).
DLAY	=	Dummy variable for 1969-77, as in Layard et al. (1991).
PTY	=	Productivity in the business sector.
RPXM	=	Export prices of manufactures relative to competitors' price.

56. Notwithstanding the high degree of coordination in the wage bargaining process, solidarity is not as overriding a consideration as, for example in the Scandinavian countries. This results in a relatively **high wage dispersion** in Austria manifested in substantial disparities in the remuneration of men and women as well as groups with different qualifications. The dispersion of earnings and inter-industry wages is also high but, to a large extent, reflects differences in the composition of the labor force. Controlling for skill, age, and other characteristics of the labor force, inter-industry wage dispersion in Austria is comparable to the dispersion in Germany and Norway. Microcensus data indicate that in 1981-93 the returns to schooling (higher education in particular) declined somewhat, which, however, seems to be associated with increased supply of university graduates. The age-earnings profile appears to be steep (compared to Germany) and could contribute to the (non)employability of older workers at a time when technological progress is depleting human capital fast (Pichelmann and Hofer, 1999; Hofer, 1999).

57. **Aggregate data indicate that inter-industry wage dispersion has increased since accession to the EU** (Table II-6). This is related to enterprise restructuring and the adoption of more flexible wage arrangements during this period. In recent years, enterprises have been shedding non-core business and outsourcing activities; this results in more homogeneous units that can facilitate greater wage flexibility and differentiation than larger units with hierarchical wage structures.[36] Wage flexibility is enhanced also by the proliferation of temporary employment and leased labor. More germane to wage flexibility, the social partners have accepted distribution clauses (which allow enterprises to pay smaller across-the-board wage increases in exchange for higher performance-based bonuses) and opening clauses (which allow individual enterprises in difficult financial position to grant smaller wage increases than envisaged in sectoral agreements).

[36] Outsourcing has also been taking place in the public sector, leading to a reduction in the share of tenured employees (*Beamte*) and allowing some differentiation in the treatment of sub-groups of public sector employees.

Table II-6. Austria: Variability of Wages and Salaries in Industry

	Coefficient of Variation		Range (in percent of average)	
	Hourly earnings	Salaries	Hourly earnings	Salaries
1990	15.5	15.4	52.3	73.8
1991	15.8	16.1	52.7	74.4
1992	15.5	16.7	51.1	76.6
1993	15.4	16.6	52.0	76.8
1994	15.3	15.6	52.0	75.7
1995	15.7	15.5	54.4	70.9
1996	16.0	15.9	56.2	73.3
1997	16.3	16.7	55.1	74.5
1998	16.5	17.7	56.1	81.2
1999	16.9	17.9	59.5	80.7
1990-95	15.5	16.1	52.0	75.5
1995-99	16.3	16.8	56.3	76.1

Sources: *Lohn- und Gehaltstatistik der Industrie, Wirtschaftskammer;* and staff calculations.

58. In a nutshell, although the high aggregate wage flexibility has been crucial for keeping unemployment low, wage differentiation and, in particular, wage scales appear to have been less flexible, thus contributing to higher unemployment among older workers.

E. Main Challenges

59. Notwithstanding its very good performance, the labor market is likely to continue posing policy challenges in the next few years. Enterprise restructuring and privatization have not been completed; so the long-term unemployment problem is unlikely to be disappearing. Meanwhile, the aging of the labor force, intensifying competition, and the prospects of eastward expansion of the EU are expected to put additional pressure for adjustment. In this environment, the main labor market policy challenges are: adaptation of the social partnership system, coping with the effects of an aging labor force, and educational reform.

60. The system of **social partnership** has been instrumental in keeping unemployment low and facilitating massive enterprise restructuring in an environment of social peace. Its strength lies in its ability to internalize macroeconomic policy externalities and forge broad consensus.[37] However, the system of social partnership has not been without weaknesses.

- On several occasions, wage moderation, job preservation, and social peace have been achieved at the cost of higher fiscal deficits—e.g., via easier access to early

[37] That was true even at times when solutions were not obtainable at the level of political parties (Farnleitner and Schmidt, 1982).

retirement, which puts the burden on future generations (not represented among the social partners)—and delays in enterprise restructuring, liberalization, pension reform etc. Although difficult to quantify, the sentiment is that these costs have not been insignificant. Some of these costs could have been avoided by switching from consensus to a majoritarian approach when dealing with issues like liberalization and pension reform (issues where there is need to lead public opinion) while at the same time exploiting policy complementarities and public dialogue to cultivate broad consensus for the policies.

- There is also the need to adapt to the rapidly evolving economic environment. The system of social partnership was originally designed for an environment of settled production relations, large state enterprises, and relatively homogeneous labor (mostly unionized) where decisions were taken from above; but in the past few years the enterprises and labor relations have been changing rapidly (smaller and more flexible production units; more differentiated and flexible labor force) and important innovations are likely to emerge from below. Although the social partners are embracing innovation, new (and embryonic) professions and enterprises tend to be under-represented, which could hamper innovation and stifle competition.

61. The **aging of the labor force** poses several policy challenges. By weakening the finances of the social security system, it necessitates (in the absence of measures) higher social security contributions (already among the highest in the EU, see Appendix III); but by raising the cost of labor, this would encourage further capital deepening, which hampers job creation. Aging also increases the share of the labor force that is more at risk of becoming long-term unemployed; hence, it raises the need for preventive action in the form of more flexible work and wage arrangements and life-long training. Finally, aging is bound to create scarcities for certain types of labor and put pressure for increasing immigration inflows.

62. The rapidly changing economic and technological environment creates the need for **education** that provides flexibility in subsequent career and for continuing training (probably the most efficient vehicle for preventing long-term unemployment). The apprenticeship system, notwithstanding its success in building a highly skilled and well motivated labor force, needs to be redesigned in these respects as, with increasing specialization, enterprises are unable to provide a broad training experience to their apprentices; small companies and start-ups have limited capabilities of contributing to the scheme (the system is better suited for reproduction rather than innovation); and with increasing labor mobility, the scheme becomes less cost effective for individual enterprises.

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COMPETITIVENESS IN AUSTRIA DURING THE 1990S[38]

A. Introduction and Summary

63. After remaining roughly balanced during the 1980s, Austria's current account deteriorated slightly in the early 1990s and appears to have stabilized at a deficit of around 2 percent of GDP during the second half of the decade (Figure 1). The worsening of the current account is largely attributable to a deteriorating performance in non-factor services trade and, most recently, to the slightly increasing interest burden on net external debt. By contrast, the merchandise trade balance improved in the 1990s.

64. Based on indicators of price competitiveness (presented in Section C), Austria's competitive position did not deteriorate substantially over the last decade. On the contrary, developments in price competitiveness of the Austrian manufacturing sector were more favorable than in other small open European economies (such as Denmark, the Netherlands, and Switzerland), due to the lagged effects of structural adjustment. Trends in the price competitiveness of Austrian services appear to have paralleled developments in Switzerland: relative export prices increased in both countries until the mid-1990s, but the loss in price competitiveness was largely reversed in recent years.

65. Econometric evidence (presented in Section D) indicates that market growth accounted for the bulk of growth in Austria's real manufacturing exports during the 1990s, while changes in price competitiveness played a relatively minor but still positive role. These results are based on an estimated long-run income elasticity of about 1 and price elasticity slightly above 1 (parameter values broadly similar to those found for the three comparator countries), and are consistent with Austria's increasing market share in the manufacturing imports of its partner countries. The larger market share can be attributed to stronger price competitiveness, likely brought about by the successful industrial restructuring of the late 1980s and early 1990s. Tourism, the largest services exporting sector of the Austrian economy, also appears to have adjusted to adverse shifts in demand by a combination of structural adjustment and lower relative prices in the late 1990s. These adjustments are expected to contribute to a larger positive balance of the services sector in the years to come.

66. Based on these observations, Austria's small but persistent current account deficit in the 1990s is not indicative of a weak overall competitive position. However, participation in the European Monetary Union may increase the persistence of small current account deficits, as increasing integration of financial markets is likely to relax financing constraints and lengthen the period for small deficits to dissipate.

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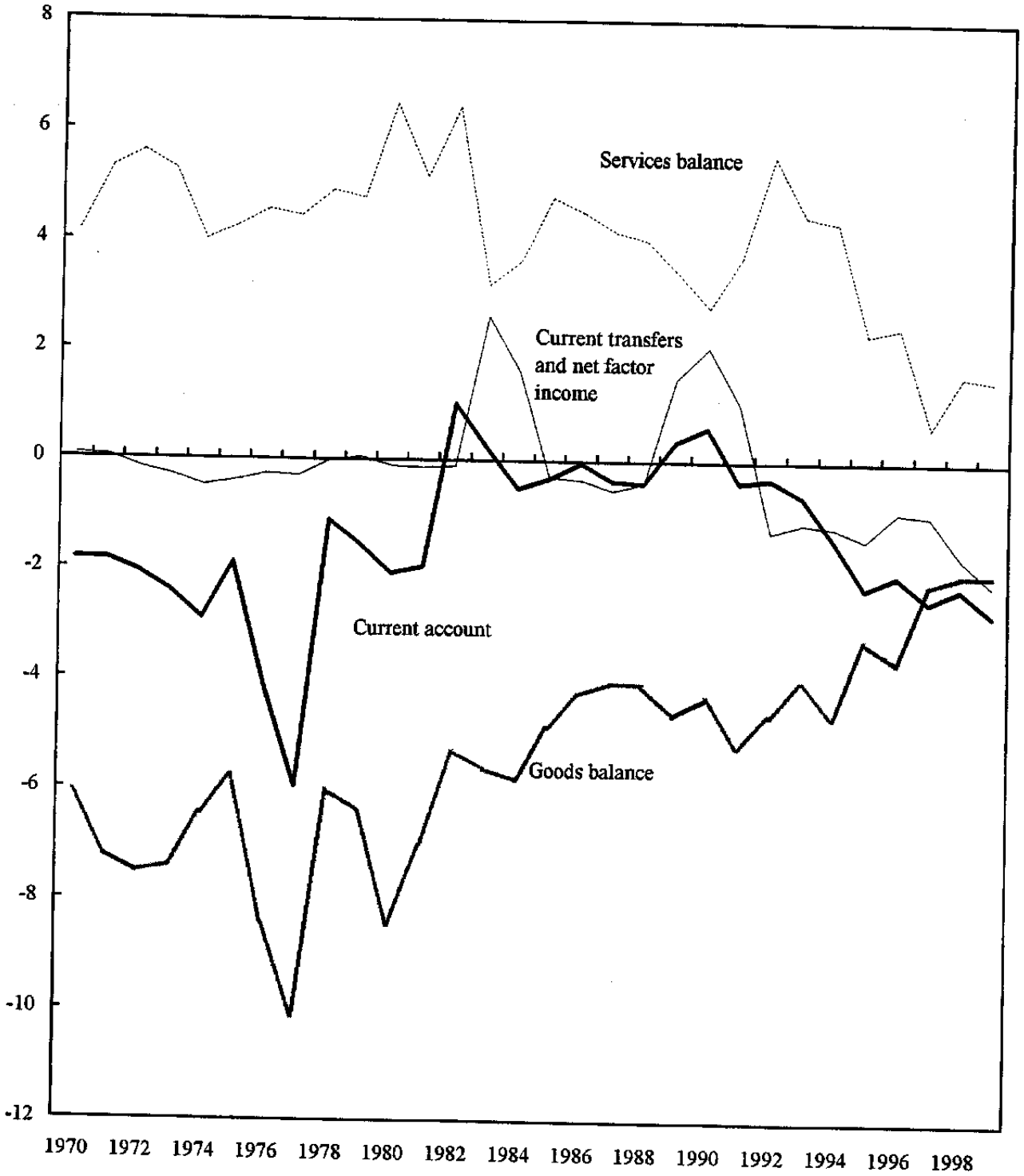
[38] Prepared by Kornélia Krajnyák.

Figure 1. Components of the Current Account



Source: IMF, World Economic Outlook.

B. Background: Recent Trends in the Current Account

67. While the actual current account deficit stood at about 2¾ percent of GDP in 1999, the underlying current account deficit is estimated to have been smaller, at around 1¾ percent of GDP (Table 1).[39] The underlying current account takes into consideration adjustments for relative cyclical positions, exchange rate changes already in the pipeline, and special factors such as oil price changes and other shocks. Because the Austrian business cycle is well aligned with the business cycles of trading partners, the cyclical adjustment amounted to only 0.1 percent of GDP in 1999. The recent weakening of the euro, however, is estimated to improve the current account by more than ½ percent of GDP once the effects of the depreciation have fed through fully into exports and imports.[40] As average oil prices during 1999 were roughly in line with the medium-term baseline[41], the adjustment for this factor is nil. The Asian crisis is taken into account through its impact on the import demand of central and eastern European economies (CEECs), and is (conservatively) estimated to have decreased Austrian exports by about 0.3 percent of GDP.

68. Although the actual current account deteriorated by nearly 3½ percent of GDP during the 1990s, the change in the underlying current account position is estimated to have been smaller, at around 2½ percent of GDP, mostly owing to exchange rate and special effects. While the actual current account deficit worsened slightly in the second half of the decade, the underlying position is estimated to have improved.

69. In recent years, the evolution of the current account balance appears to have paralleled developments in the nonfactor services balance (see Figure 1): the current account balance deteriorated slightly despite a steady improvement in the goods trade balance. In addition, the balance on net factor income and current transfers declined slightly over the 1990s, partly as a result of EU transfer payments after Austria's membership in 1995, and partly reflecting the increasing interest burden on the steadily accumulating net external debt.

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[39] The overall savings-investment norm (based on methodology used in staff real exchange rate assessments) for Austria is estimated to be around +0.5 percent of GDP in 1999 (based on pre-EMU structural characteristics of the economy), and would decline to around zero by 2004 due to a projected deterioration of Austria's relative structural fiscal position. Thus, the underlying current account position does not differ significantly from the savings-investment norm. In the pre-EMU environment this would have suggested that the exchange rate in real effective terms was roughly in line with fundamentals.

[40] These calculations are based on MULTIMOD income and price elasticities and CPI-based real effective exchange rates.

[41] The baseline oil price is calculated as average oil prices over the 1987-2005 period based on WEO assumptions.

Table 1. Actual and Underlying Current Account
(In percent of GDP)

	1990	1995	1999	1990-95 change	1995-99 change
Current account balance	0.62	-2.31	-2.78	-2.92	-0.47
Adjustment	0.10	-0.73	0.94	-0.84	1.68
Domestic output gap	1.30	-0.16	-1.09	-1.45	-0.94
Partners' output gap	-1.21	0.52	1.18	1.73	0.65
Lagged exch. rate changes	-0.28	-1.00	0.62	-0.71	1.61
Oil prices	0.30	-0.10	-0.05	-0.40	0.05
Asian crisis	0.00	0.00	0.30	0.00	0.30
Underlying current account	0.72	-3.04	-1.84	-3.76	1.21

Source: WEO; and staff calculations.

70. Decomposing the trade balance into terms of trade and volume effects indicates that—taking 1995 as the baseline—terms of trade effects were not important during the 1990s. Volume effects dominated developments throughout most of this period (Figure 2).[42] As the decomposition of the goods and services trade balance indicates, the contribution of the terms of trade effect was negative but relatively small for both goods and services in recent years. In 1999, its overall contribution to the total trade balance amounted to about -½ percentage point of GDP.

C. Developments in Price Competitiveness

71. To put developments in Austria's competitiveness into international perspective, three small European economies (Denmark, the Netherlands, and Switzerland) are used as comparators. Although the comparator countries operate under different exchange rate regimes, they display a broadly similar degree of openness and geographical orientation of trade.

72. Of the comparators, the Netherlands, like Austria, belongs to the euro area. Denmark—similarly to Austria—has maintained a fixed exchange rate vis-à-vis the deutsche mark since the early 1980s and vis-à-vis the euro since January 1999. Switzerland's exchange rate is floating but has remained broadly stable in the 1990s against the same currencies.

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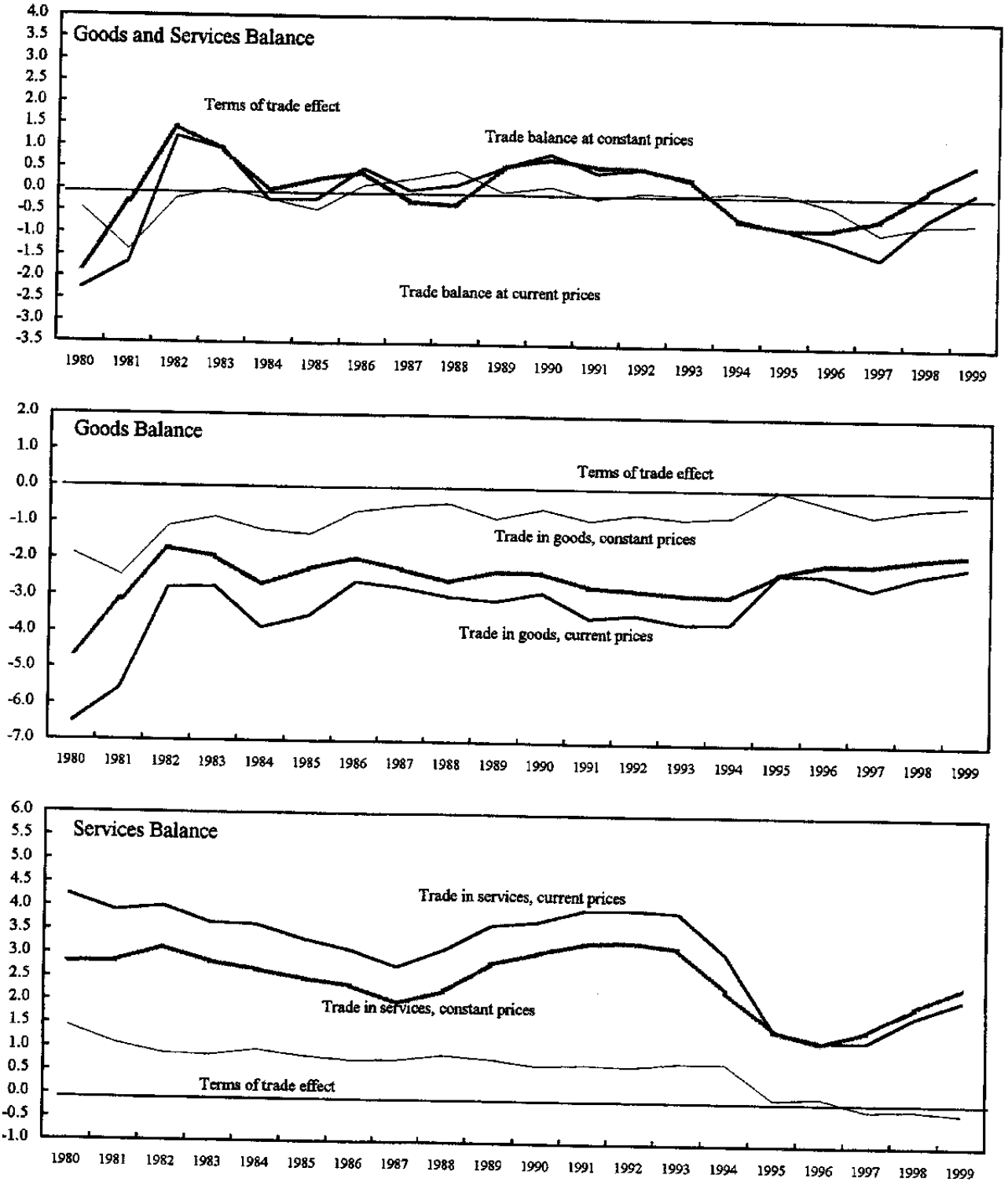
[42] Terms of trade effects are isolated based on the following decomposition of the trade balance: $X-M=(x-m) + [(P_x/P-1)x -(P_m/P-1)m]$, where X (M) is the exports (imports) to GDP ratio at current prices; x (m) is the exports (imports) to GDP ratio at constant 1995 prices; and P_x, P_m and P are the export, import and GDP deflators, respectively.

Figure 2. Decomposition of Goods and Services Balance 1/



Sources: IMF, World Economic Outlook; and staff calculations.
1/ Data up to 1995 are based on ESA 86.

73. Austria's degree of openness, as well as the geographical composition of its trade, is similar to the comparators (Figures 3 and 4). In particular, the European Union accounts for about ⅔ of Austrian exports and imports, as it also does for the other three countries. However, in contrast to the others, its geographical position poises Austria for stronger trade links with the CEECs (Figure 4). In 1999, 13 percent of Austrian merchandise exports was directed to the CEECs, while these countries accounted for 7 percent of Austrian merchandise imports.[43] As the CEECs start catching up and become better integrated with Western European economies, the importance of this region for Austria's trade is likely to increase further.[44]

74. Developments in price competitiveness in Austria, Denmark, the Netherlands, and Switzerland (as reflected in selected indicators) were broadly similar during the 1990s (Figure 5). However, while the evolution of the CPI-based real exchange rate shows a similar pattern in Austria and all the comparators, Austria's price competitiveness in both the manufacturing and the services sector reflects some country specific factors.

75. As measured by the real effective exchange rate, competitiveness eroded in Austria as well as in all of the comparators in the first half of the 1990s, but this deterioration was reversed in the second half of the decade, mostly due to relatively low CPI inflation in all four countries.

76. Based on developments in the price of manufacturing exports relative to competitors, Austria's price competitiveness position in manufacturing improved steadily in the 1990s. This contrasts with trends in price competitiveness of the comparators: deteriorating price competitiveness until 1995, improvement thereafter, which largely mirrors the evolution of their respective real exchange rates. Austria's divergence from the comparators could be attributed to enhanced competitiveness due to the industrial restructuring in the late 1980s and early 1990s.

77. Austrian and Switzerland lost price competitiveness in services exports until the mid-1990s, but largely regained their positions by 1999. In the meantime, price competitiveness of the service sector of the Netherlands and Denmark appears to have improved steadily over the decade. In the case of Austria, the period of worsening price competitiveness coincided with a deteriorating tourism balance as demand declined.[45] Austrian tourism appears to have reacted to the shift in demand partly by restructuring and partly by lower prices. As a result, the tourism balance has improved in the late 1990s.

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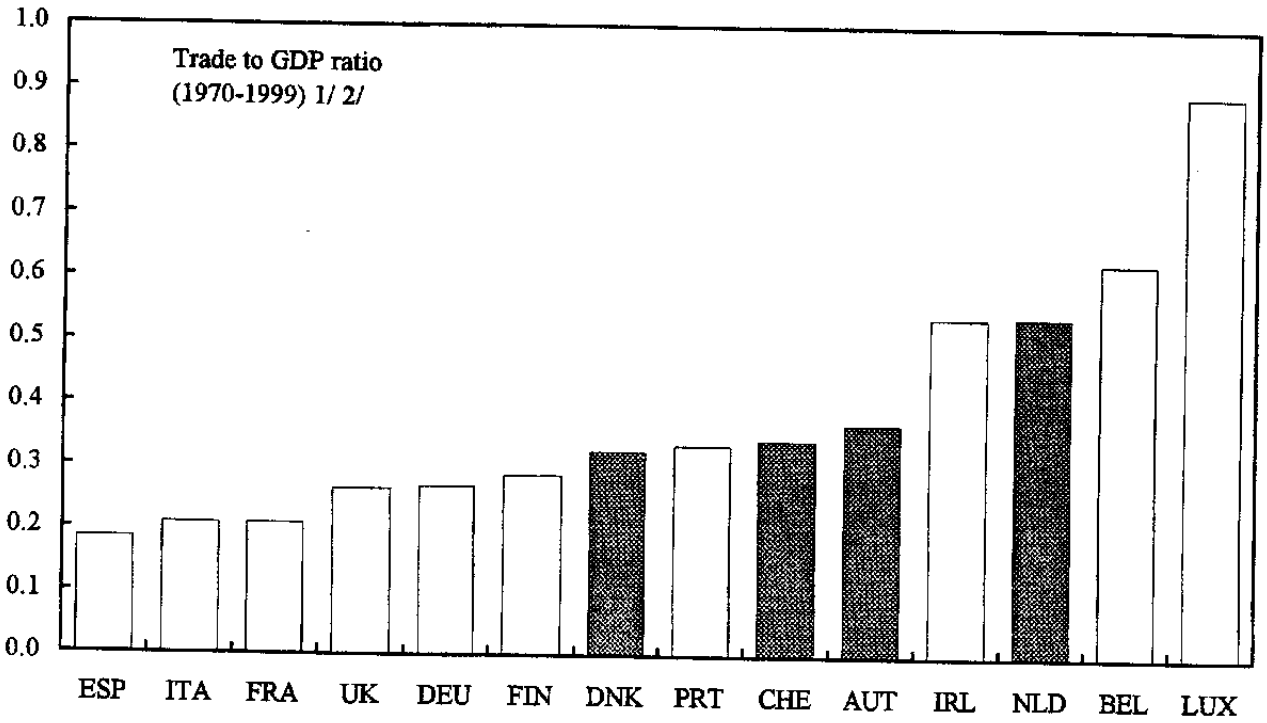
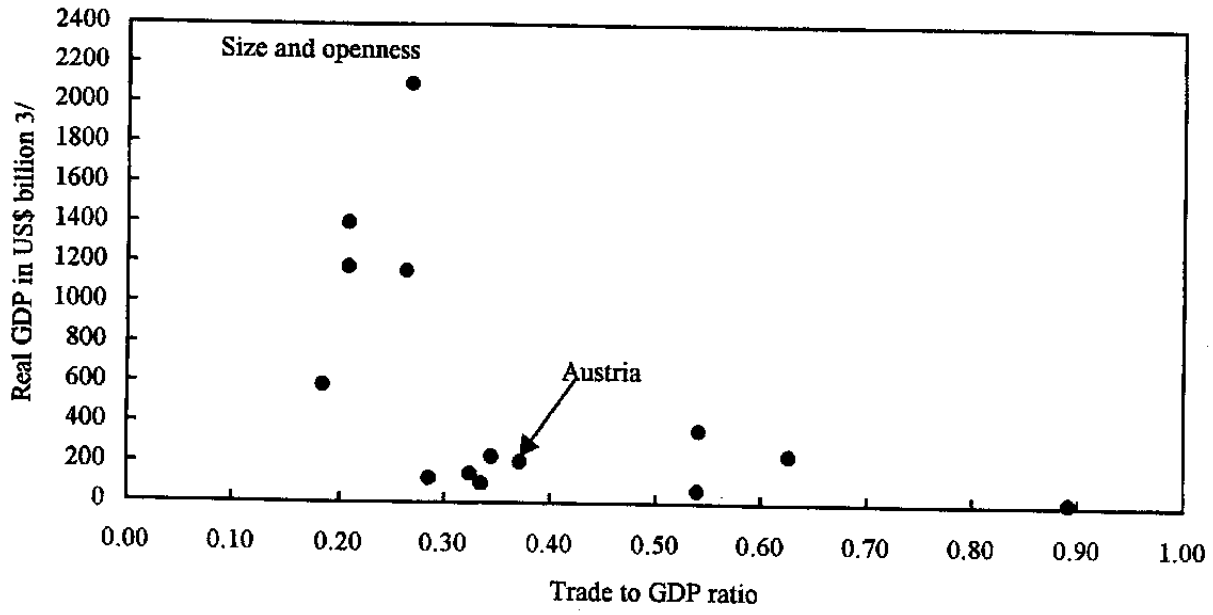
[43] Based on Direction of Trade Statistics data.

[44] For instance, due to strong economic integration, Belgium accounts for about 17 percent of Dutch merchandise exports and about 12 percent of imports, despite Belgium's small size.

[45] A similar phenomenon can be observed in Swiss tourism.

Figure 3. Degree of Openness





Source: IMF, World Economic Outlook.

1/ For Germany, data refers only to 1987-1999.

2/ Average of exports to GDP and imports to GDP ratios.

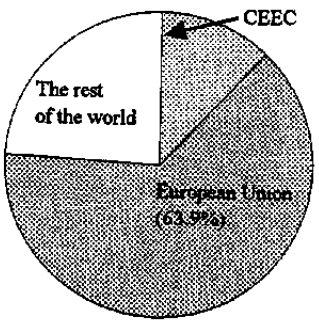
3/ Average real GDP for the 1990s.

Figure 4. Geographical Composition of Trade

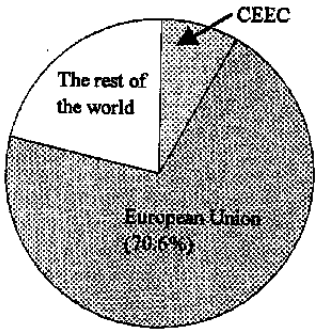
Composition of Exports 1/ 2/

Composition of Imports 1/ 3/

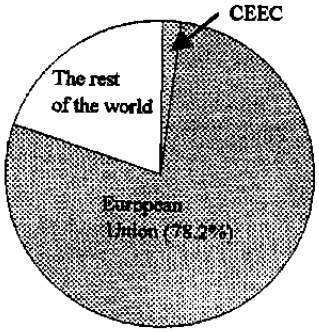
Austria



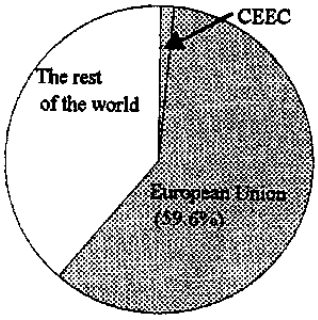
Austria



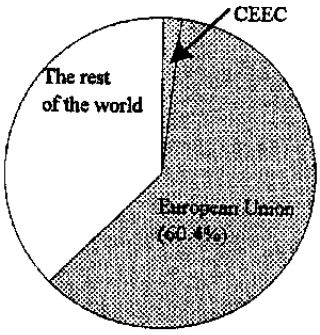
Netherlands



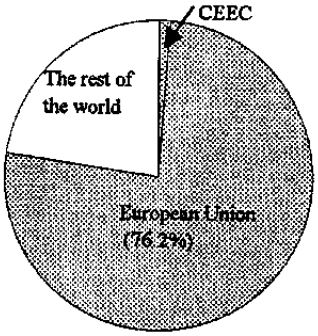
Netherlands



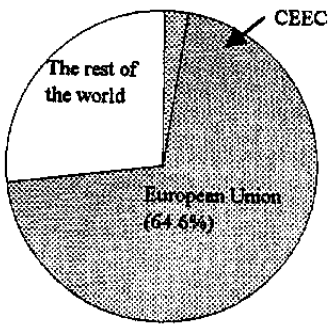
Switzerland



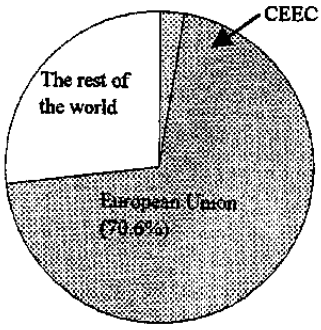
Switzerland



Denmark



Denmark



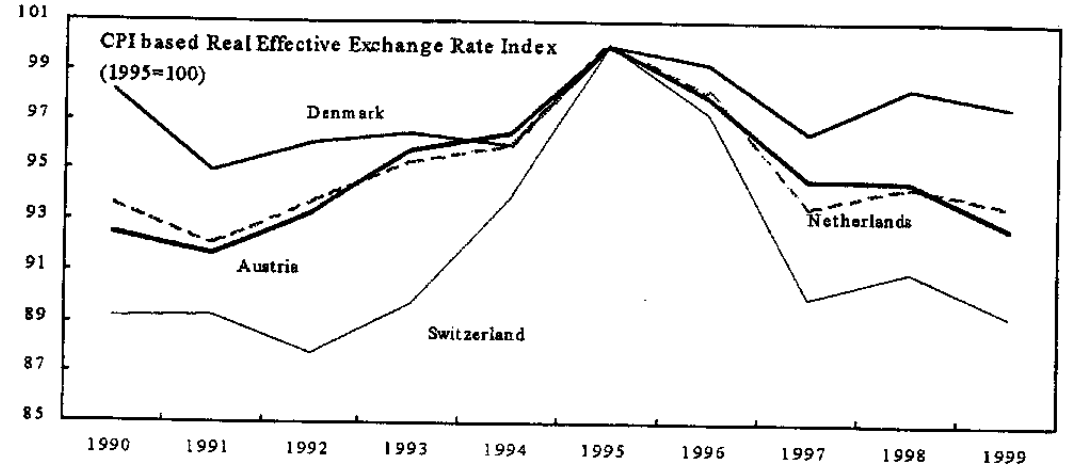
Source: IMF, Direction of Trade Statistics.

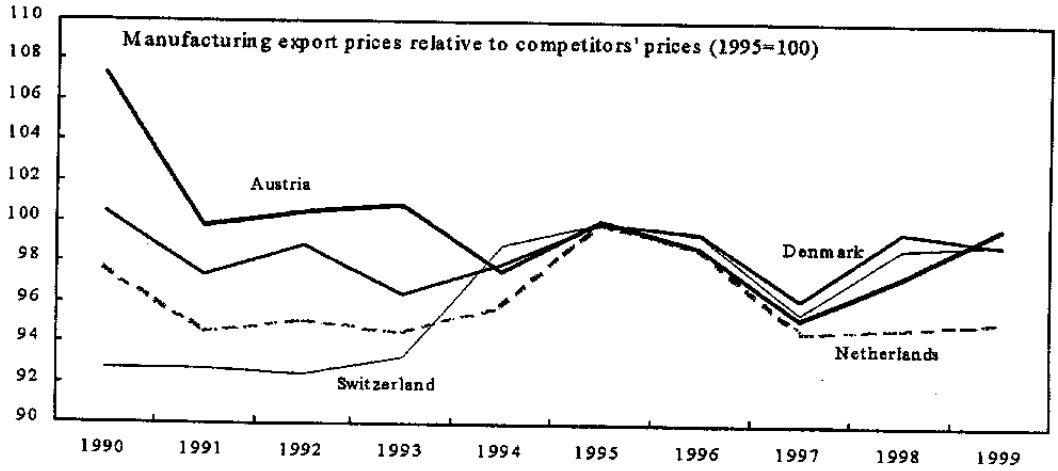
1/ CEEC region defined as the Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia.

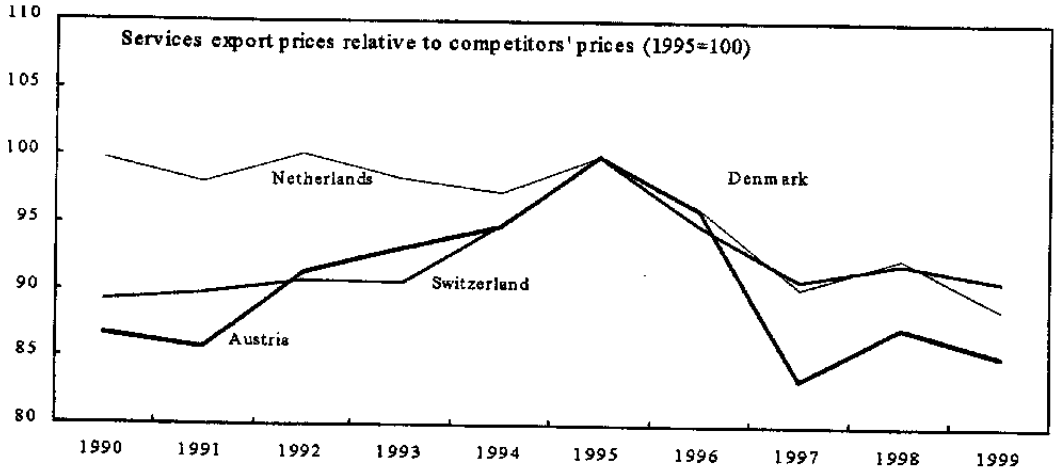
2/ Share of region in merchandise exports, 1995-99 average.

3/ Share of region in merchandise imports, 1995-99 average.

Figure 5. Indicators of Price Competitiveness







Sources: IMF, International Financial Statistics database; and OECD Analytical Database.

D. Austria's Manufacturing Exports in International Comparison

78. To help quantify the relative importance of market growth and price competitiveness factors for developments in manufacturing exports, simple export equations were estimated for Austria and the comparator countries (Denmark, the Netherlands, and Switzerland).

79. As unit root tests (Table 2) indicate that real exports, market size, and competitiveness are all difference stationary, an error correction relationship was specified between these three variables and estimated for the four countries for 1975-99 based on OECD data.

Table 2. Austria and Comparator Countries: Augmented Dickey-Fuller Test Statistics 1/ 2/

	Levels	Differences
Austria		
Real manufacturing exports	-0.34	-4.45
Market size	0.17	-3.41
Competitiveness	-1.38	-3.71
Denmark		
Real manufacturing exports	-0.89	-4.16
Market size	0.59	-3.59
Competitiveness	-1.89	-3.78
Netherlands		
Real manufacturing exports	0.27	-4.08
Market size	0.07	-3.26
Competitiveness	-0.55	-4.46
Switzerland		
Real manufacturing exports	-0.47	-5.16
Market size	0.16	-3.44
Competitiveness	-1.92	-5.53

Source: Staff calculations.
1/ Tests assume an intercept term and no trend in the series.
2/ 5 percent critical value is -2.97.

80. The estimated equation is specified as follows:

$$d\ln x = \beta_1(\ln x_{-1} + \alpha_1 \ln yf_{-1} + \alpha_2 \ln p_{-1} + \alpha_3) + \beta_2 d\ln yf + \beta_3 d\ln p + \varepsilon$$

where x stands for real manufacturing exports; yf captures market size (as weighted average of trading partners' real manufacturing imports); p denotes competitiveness (manufacturing export prices relative to competitors' prices for Austria and Denmark; relative unit labor

costs in manufacturing for the Netherlands and Switzerland);[46] and ε is an error term. The term in parenthesis is the error correction term: the (lagged) deviation of real manufacturing exports from their expected long-run value, while the second and third terms capture the short-run effect of market growth and changes in competitiveness, respectively.[47]

81. Estimation results reported in Table 3 indicate that the statistical relationship linking real manufacturing exports to market size and competitiveness displays some similarities in Austria and the comparator economies.

82. Over the long run, a 1 percent increase in export market size is estimated to translate into a 1 percent increase in real manufacturing exports, indicating that without changes in competitiveness, all four countries would maintain their market shares. However, there is substantial cross-country variation in the estimated importance of competitiveness factors. In particular, while the results for Austria and Denmark indicate that manufacturing exports of these countries are fairly sensitive to competitiveness (over the long run, a 1 percent loss in price competitiveness is estimated to lead to more than a 1 percent decline in real manufacturing exports), the estimated equations for the Netherlands and Switzerland fail to find a similar relationship. A possible explanation for this finding (besides measurement and data quality problems) is the higher importance of factors unrelated to price or cost competitiveness for Swiss exports (such as brand names and a general reputation of quality); and supply side effects emanating from an expansion in the labor supply in the 1990s for the Netherlands.[48]

83. Similarly to long-run elasticities, short-run dynamics also appear largely similar across the four economies. The size of the coefficient on the error correction term indicates relatively fast adjustment of manufacturing exports.

84. Based on the estimated long-run coefficients presented in Table 3, the dynamic growth of real manufacturing exports of Austria during the 1990s is largely attributable to market growth, and the importance of changes in price competitiveness is relatively minor. Actual exports grew by about 6.3 percent per annum; of this, market growth is estimated to

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[46] The choice of variable was constrained by data availability.

[47] Since the economies considered are small, contemporaneous market growth can plausibly be considered exogeneous. Endogeneity problems are also likely to be minor in the case of price or cost competitiveness, as the nominal exchange rates of these countries were stable during the time period considered, and wage growth was likely to be predetermined due to multi-year central wage agreements.

[48] Reestimating the equation for the 1975-90 period for the Netherlands yields larger point estimates for both the long-run and short-run price elasticities, while the income elasticities remain close to unity.

have accounted for about 5.7 percentage points, and changes in price competitiveness for less than 1 percentage point. These results are consistent with Austria's slightly increasing market share in the imports of its partner countries over the 1990s (Figure 6).The gain in manufacturing market share can be attributed to stronger price competitiveness, brought about by the successful industrial restructuring of the late 1980s and early 1990s. Restructuring and the resulting increase in the adaptability of industry are also likely to have facilitated Austria's fast entry into CEEC markets.

Table 3. Austria and Comparator Countries: Estimation Results: Manufacturing Exports 1/ 2/ 3/

	Austria		Denmark 4/		Netherlands		Switzerland	
	Coefficient	*Std. Error*	Coefficient	*Std. Error*	Coefficient	*Std. Error*	Coefficient	*Std. Error*
Long- run coefficients								
Constant	-7.41	*1.10*	-7.24	*1.97*	-2.39	*1.33*	-2.47	*1.10*
Market size 5/	-1.09	*0.04*	-0.99	*0.06*	-0.92	*0.07*	-0.63	*0.12*
Competitiveness 6/	1.19	*0.21*	1.19	*0.41*	0.34	*0.23*	0.15	*0.36*
Short-run coefficients								
Error correction term	-0.68	*0.18*	-0.31	*0.17*	-0.44	*0.16*	-0.55	*0.21*
Change in market size	1.05	*0.14*	0.62	*0.18*	1.04	*0.13*	0.52	*0.27*
Change in competitiveness	-0.64	*0.14*	-0.57	*0.17*	-0.24	*0.13*	-0.14	*0.14*
Adjusted R-squared	0.77		0.45		0.80		0.33	
S.E. of regression	0.03		0.03		0.02		0.04	
Sum squared residual	0.01		0.02		0.01		0.03	
Log likelihood	58.67		56.91		62.27		50.26	
Durbin-Watson statistic	1.91		1.93		2.29		1.49	
F-statistic	16.94		4.25		20.54		3.38	
Sample	1975-1999		1975-1999		1975-1999		1975-1999	

Source: Staff calculations.

1/ Dependent variable: log change in real manufacturing exports.

2/ Specification: d x(t) = a(1)* [x(t-1)+a(2)*c+a(3)y(t-1)+a(4)*p(t-1)] + a(5)*d y(t)+ a(6)*d p(t)

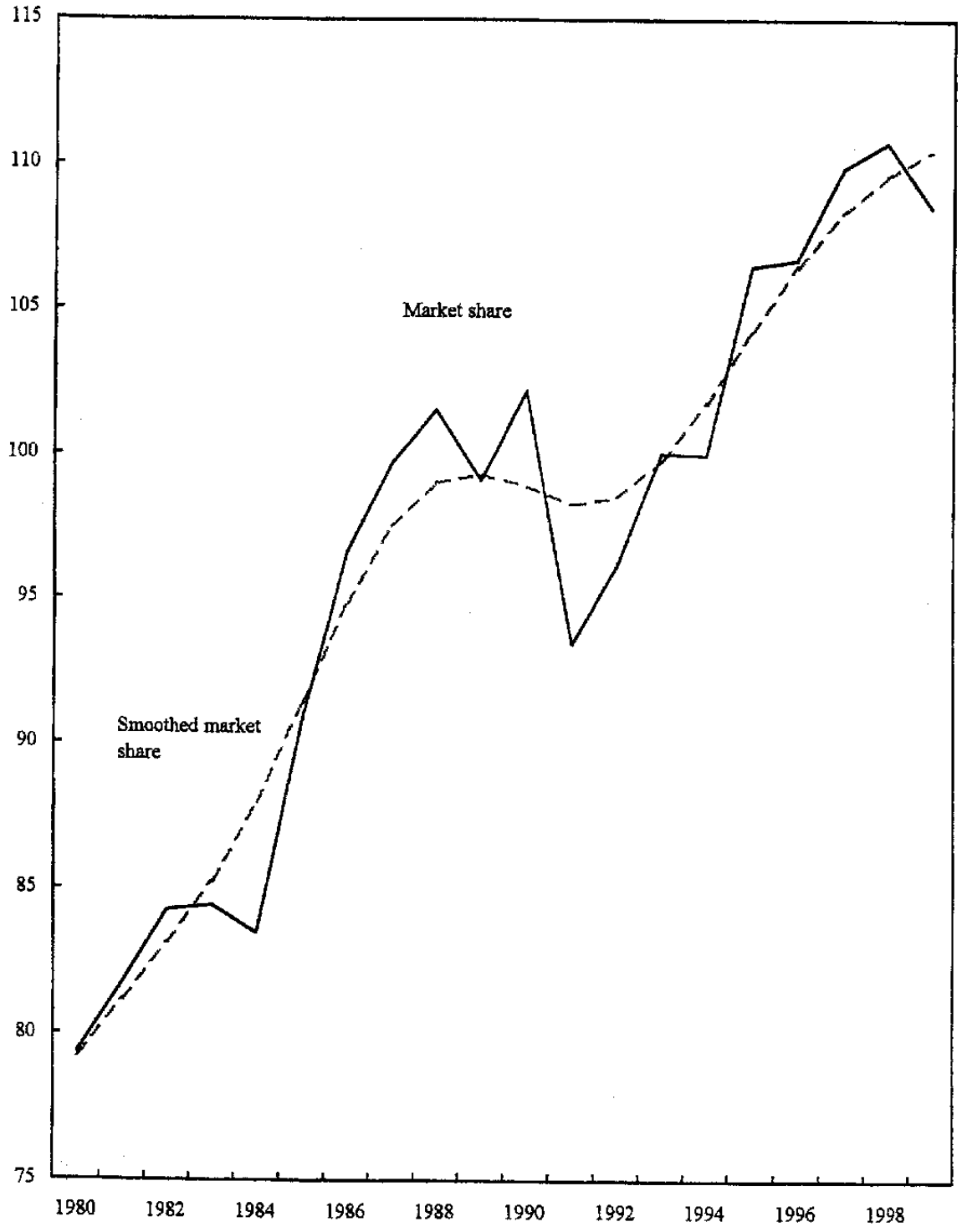
3/ OLS estimates based on annual data.

4/ The specification includes a dummy variable (coefficient not reported) for 1999.

5/ Weighted average of partner countries' real imports of manufactured goods (measured in in logs).

6/ Manufacturing export prices relative to competitors for Austria and Denmark; unit labor costs in manufacturing relative to trading partners for the Netherlands and Switzerland.

Figure 6. Austria's Market Share, 1980-1999 1/



Sources: IMF, World Economic Outlook; DOTS; and staff calculations.
1/ Ratio (in current prices) of Austria's goods exports to a weighted average of partner countries' goods imports, normalized to 1994=100.

LABOR AND CAPITAL INCOME TAXATION IN AUSTRIA[49]

A. Introduction

85. Over the past two decades the tax burden on corporate and capital income in Austria has remained comparatively low, while the growth in the labor tax burden has outpaced that in other EU countries. Taxes and social security contributions in Austria amounted to 44 percent of GDP in 1996, slightly higher than the EU average. This represents a 26.1 percent increase in the tax burden since 1970, somewhat lower than that recorded in other EU member states owing to a slowdown in the rate of increase from the 1980s onwards. The comparatively lower increase in taxation notwithstanding, the shift in the composition of the tax burden towards social security charges has meant that the growth in the labor income tax burden in Austria has been substantially higher than that in other EU countries. Between 1970 and 1996, the increase in social security contributions accounted for 70.3 percent of the growth in the aggregate tax burden in Austria, in contrast to 45 percent in the EU. At the same time, the tax burden on capital and corporate income in Austria has remained comparatively low.

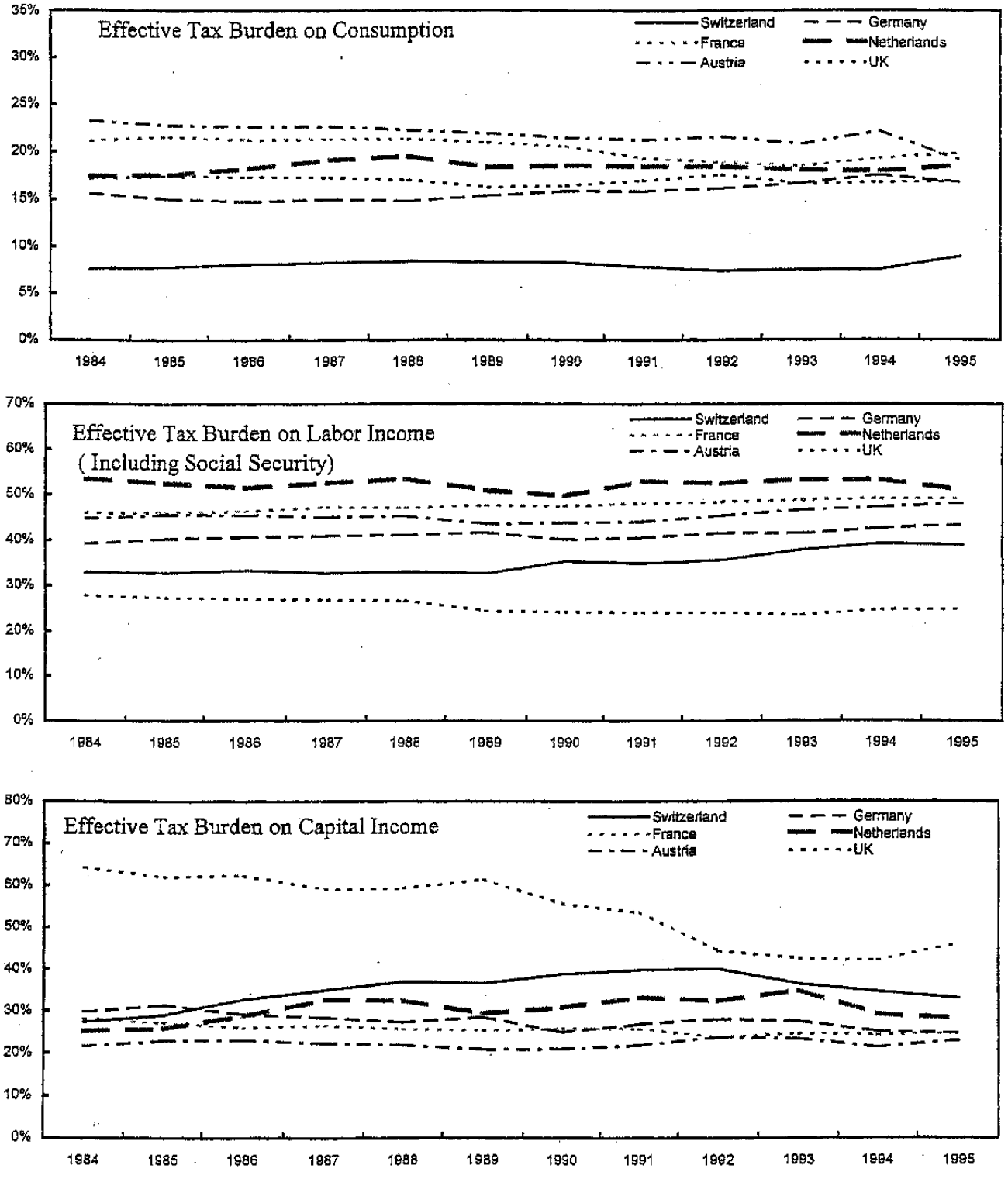
86. The disproportionate increase in the tax burden on labor income and the low capital income tax burden raise efficiency and equity issues. Moreover, while effective tax rates on capital income are low, the differential treatment of different forms of assets and finance under the tax code can impact the direction of investment flows and therefore represent a potential efficiency loss for the economy. However, Austria is not unusual among OECD countries in this respect. Using effective tax rates constructed from national account data as a basis to determine the tax burden by economic function, this appendix examines the tax burden on labor and capital income in Austria. Section A looks at the current labor taxation regime while Section B briefly examines the main factors that contributed to the low capital tax burden. Section C concludes by examining the impact of the capital tax regime on marginal investments and looks at how the personal and capital tax codes interact to affect the efficiency of the tax system.

B. Labor Income Taxation

87. Owing to the high cost associated with the social security system, Austria is ranked as having one of the highest effective tax burdens on labor income (see Figure 1, middle panel). In the late 1990s, social security contributions were a major component of indirect wage costs, accounting for around 45 percent of gross wages and salaries. Both employers and employees made contributions to the social insurance fund. Employers contributed about 22 percent of gross wages for wage earners to the social insurance fund, the housing fund, unemployment insurance, and contributions to the Chamber of Labor. In addition, employers contributed a further 4.5 percent of gross wages to the Family Assistance Fund. Employees

[49] Prepared by Catriona Purfield while working under the Economist Program in the EU1 department.

Figure 1. Austria: Effective Tax Burden on Consumption, Labor Income, and Capital Income, 1984-95



Sources: OECD National Accounts, 1984-95; OECD Revenue Statistics; and staff calculations.

on the other hand contributed around 17 percent of their gross wage or salary for social insurance purposes and made no contribution to the Family Assistance Fund.[50] However, the self-employed contributed much less than employees to the pension fund in the social security system. The redistribution from employees to self-employed in the pension fund may raise equity concerns.

88. Direct wage taxes were levied on individuals according to a progressive five-rate schedule with tax rates ranging from 10 to 50 percent.[51] The highest marginal tax rate was applied to taxable income in excess of S 700,000 per annum (about 2½ times the gross average production wage, APW). The overall marginal tax rate for a single earner receiving the APW was about 39.7 percent (including social security contributions) compared to 35.6 percent in France and 52.6 percent in Germany (OECD, 1998). As is the case in many other countries, employee social security contributions were fully deductible from gross taxable income and there were also several other categories of tax deductions.[52]

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[50] The following example illustrates the various tax-related costs paid by employers and employees on gross wages in Austria:

(A)	Employees gross wages (*Bruttolohn*)	100,000
	24% Employers' social security contributions for wage earners	+24,000
	Wage costs of employment (*Bruttoentgelt*)	124,000
	Wage dependent taxes	
	Family Assistance Fund (4.5% of A)	+ 4,500
	Municipal payroll tax (*Lohnsummensteuer*) (3% of A)	+ 3,000
	Total wage costs (*Lohnkosten*)	131,500
	Gross wages	100,000
	Taxes	-15,000
	Social security contributions	-17,000
	Other taxes (e.g., residential construction fund)	-1,000
	Net wages (*Nettolohn*)	67,000

[51] Income tax was computed on the aggregate net income from all sources (the global income principle) on a progressive scale. 1999 tax rates were: 10 percent on the first S 50,000; 22 percent on the next S 100,000; 32 percent on the next 150,000; 42 percent on the next S 400,000; and 50 percent on income exceeding S 700,000. The income tax scale was modified in the context of the year-2000 tax reform.

[52] 1999 tax credits included a general tax credit of S 8,840; a wage earner's credit of S 1,500; a commuting expense credit of S 4,000;and a sole earner's credit of S 5,000. A tax credit of S 5,000 was also granted to single parents, and retired persons received a tax credit of S 5,500. A tax credit of S 5,700 was granted for the first child, S 7,800 for the second child and S 9,900 for each additional child. Annual standard deductions from income included S 1,800 for expenses connected with employment, and an additional travel expenses deduction of between S 2,280 and S 28,800 if the commuter's journey to work exceeded 20 kilometers. Mortgage interest expenses on a taxpayer's primary residence (apartment) and

(continued...)

89. However, social security and other deductions have led to declining marginal tax rates at high income levels. The full deductibility of social security contributions implies that those in the highest tax bracket received an annual tax relief of half of their social security contributions while individuals in the second bracket received only 22 percent. The OECD (1998) calculated that a single individual earning twice the APW faces a marginal tax rate of 35.7 percent, compared with a marginal rate of 39.7 percent for a similar individual earning the APW. Also, when combined with the upper limit on social security contributions,[53] the full deductibility of social insurance contributions has had a regressive impact on the tax system for some categories of wage earners. For example between 1983 and 1991, social security contributions for the medium-income taxpayers increased by 1¼ percentage points but decreased by 0.8 percentage points for the upper decile (OECD, 1998).

90. The progressiveness of the labor tax regime was further reduced by the special treatment accorded to some income forms, such as bonuses and family allowances. Every year employees receive two months' salary in Christmas and vacation bonuses that is taxed at a flat rate of 6 percent. Overtime and shift-work were also taxed at the special 6 percent flat rate.[54] Children allowances and unemployment benefits are not taxed.

91. The interaction of the labor tax regime and the social benefits system can also impact labor supply and job-seeking incentives. Statutory unemployment benefits in Austria are not high by international standards. The average unemployment benefit replacement rate (before tax) was 31 percent in 1991 (OECD, 1994). However, the non-taxation of unemployment benefits and the full withdrawal of benefits result in the average net replacement ratio (after tax and other benefits) rising to 57 percent for single-earner households with no children (OECD 1997). For low-income earners with families and older workers, the net replacement ratio (including social assistance) was as high as 100 percent after five years of unemployment. This compares to an average net replacement rate (including social assistance) of 80 percent after five years of unemployment for the OECD as a whole (OECD 1997).

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life insurance premiums (up to S 20,000) for taxpayers under the 50 percent tax bracket were deductible.

[53] In 1999, contributions to the health, unemployment, pension, and accident insurance schemes are subject to a monthly ceiling of S 42,600. For these schemes, contributions from Christmas and leave bonus payments were subject to an S 85,200 ceiling. Contributions to the labor chamber and to the fund for the promotion of residential buildings (*Wohnbauförderungsbeitrag*) were only subject to the monthly S 42,600 ceiling.

[54] In aggregate, the first S 8,500 of bonus income was tax free (but if bonus income did not exceed S 23,000 per year, no tax was deducted) and the special flat rate of 6 percent was limited to one-sixth of current income.

C. Capital Income Taxation

92. In contrast to the tax burden on labor income, the tax burden on capital income in Austria was comparatively low. In the 1990s, the effective tax burden on capital income in Austria, 23 ercent, was the lowest amongst a sample of EU members (see Figure 1).

93. The below-average tax burden on capital income reflects the statutory tax rates on corporate profits and capital income and the impact of exemptions and allowances that have eroded the capital tax base. The corporate tax rate, at 34 percent, was close to the EU average, but interest and dividend income was taxed at a rate of 25 percent, which is among the lowest rates in the EU. Also, various allowances and exemptions have eroded the capital income tax base. On top of the standard straight-line depreciation allowances, enterprises received a special 9 percent investment allowance (*Investitionsfreibetrag*). The combination of the two allowances allows enterprises to write off 109 percent of the acquisition price of buildings and machinery. Moreover, personal capital gains on assets held longer than one year,[55] imputed rents on owner-occupied housing, and the capital gains realized by non-charitable foundations from the disposal of a participation in a domestic corporation are exempt from tax under the capital income tax code.

94. The sharp decline in the property tax burden from 1970 also contributed to keeping capital income tax burden relatively low. This decline reflected both the outdated real estate valuations used to calculate the property tax due and the abolition of net wealth tax in 1993 (*Vermögensteuer*).

D. The Impact of the Corporate and Personal Tax Codes on Marginal Investments

95. This section calculates effective tax rates on marginal investments in Austria to demonstrate the size and the direction of the distortions imposed by the corporate tax code. It also evaluates how the corporate tax code interacts with the personal tax code to impact marginal investment decisions.

96. Using the "King and Fullerton" methodology, we assume that without taxation, all assets earn the rate of return that could be achieved by buying a government bond (5 percent).[56] However, taxes on corporate and personal income result in investors receiving less than the gross amount paid to them. Thus, for an investor to be indifferent between an investment in a government bond and another asset, the pre-tax rate of return on other assets must rise by a sufficient amount to ensure that the investor receives an after-tax return of at

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[55] The 1999 tax reform raised the minimum holding period from one to two years, effective from October 2001.

[56] This methodology assumes no differences in the risk and transaction costs of investing in different forms of asset.

least 5 percent. The difference between the pre-corporate tax rate of return earned by companies and the after-tax receipts of an individual investor is a measure of the total tax distortion.

97. Three rates of return are used to calculate the impact of the Austrian tax system on investment decisions: (i) the real interest rate, *r*, which is assumed to be equivalent to the return on a government bond before personal taxes are charged (assumed to be 5 percent); (ii) the real pre-corporate tax rate of return to companies (*p*); and (iii) the real post-personal tax rate of return, *s*, received by the ultimate investor.

98. Taking the parameters of the Austrian tax system, the pre-corporate tax rate of return, *p*, necessary to generate *r* can be found (as can *s*). The overall tax wedge (the difference between *p* and *s)* incorporates the statutory tax rates, the structure of the tax system, and the definition of the corporate and personal tax bases into one measure. In calculating the real rate of return, we also assume the inflation rate to be the actual rate recorded in 1990 and 1998, that is 4.5 percent and 1 percent, respectively.

99. The tax wedge is important for two reasons. First, taxation impacts new investment decisions by raising the pre-tax return necessary to yield a given after-tax rate of return. Second, taxation can influence allocative efficiency by distorting the form of the investment if the tax treatment of different forms of investment is unequal. Comparisons of tax wedges across assets indicate the extent to which the tax system achieves allocative efficiency.

100. Tables 1a. and 1b. summarize the impact of the Austrian tax system on marginal investments in buildings, machinery, and inventories, financed via retained earnings, new equity issues, or by borrowing, in 1998 and 1990, respectively. The average values of the pre-tax rates of return and tax wedges were derived using the following weights for the various asset and financing types: buildings, 28 percent; machinery, 50 percent; and inventories, 22 percent; retained earnings, 55 percent; new equity issues, 10 percent; and borrowing, 35 percent.

101. First setting all personal taxes to zero, Tables 1a. and 1b. show that the average corporate tax wedge was around 0.3 percentage points in 1998. This is significantly below the 1990 corporate tax wedge (0.6 percentage points). The improvement primarily reflects the decline in inflation between 1990 and 1998. In fact, if inflation had remained at its 1990 level, the corporate tax wedge in 1998 would not have changed. This indicates that the various reforms to the corporate tax code between 1990 and 1998 were broadly neutral in their impact on the aggregate corporate tax wedge. The benefits from the abolition of the taxes on trade income (*Gewerbesteuer*) and net wealth (*Vermögensteuer*) were broadly offset by the reduction in the investment allowance (from 20 percent to 9 percent) and by the increase in the federal corporate tax rate from 30 percent to 34 percent.

Table 1a. Austria: The Impact of Tax Provisions on Marginal Investments, 1998 1/

(In percent)

	Average for Each Source of Finance			Average for Each Type of Investment			Overall Average
	Retained earnings	New equity	Debt	Machinery	Buildings	Inventories	
Only corporate taxes							
Pre –tax rate of return	6.25	6.25	3.61	4.38	5.68	7.01	5.32
Tax wedge	1.25	1.25	-1.39	-0.62	0.68	2.01	0.32
Corporate and personal taxes							
Pre-tax rate of return	4.61	8.22	3.61	3.76	4.93	6.18	4.62
Tax wedge	1.11	4.71	0.11	0.26	1.43	2.68	1.12

Source: IMF staff calculations.

1/ Calculated using the1998 Austrian tax code and the 1998 inflation rate of 1 percent. The real interest rate is assumed to be 5 percent.

Table 1b. Austria: The Impact of Tax Provisions on Marginal Investments, 1990 1/

(In percent)

	Average for Each Source of Finance			Average for Each Type of Investment			Overall Average
	Retained earnings	New equity	Debt	Machinery	Buildings	Inventories	
Only corporate taxes							
Pre-tax rate of return	7.39	7.39	2.34	4.25	5.50	8.88	5.62
Tax wedge	2.39	2.39	-2.66	-0.75	0.50	3.88	0.62
Corporate and personal taxes							
Pre-tax rate of return	1.31	3.07	2.34	0.79	1.72	4.39	1.84
Tax wedge	0.96	2.72	1.99	0.44	1.38	4.05	1.50

Source: IMF staff calculations.

1/ Calculated using the 1990 Austrian tax code and the 1990 inflation rate of 4.5 percent. The real interest rate is assumed to be 5 percent.

102. In 1998, the corporate tax system still contained biases towards some types of finance and asset. The negative average tax wedge on debt financed investments (-1.39) indicates that taking taxation into account, the government effectively subsidizes debt financed investments: a project that earns less than 5 percent before tax, earns 5 percent after tax. From Table 1a, debt financed projects earn an average return of around 3⅜ percent before tax, but 5 percent after tax. This finding was mainly driven by the special tax depreciation allowance, (*Investitionsfreibetrag*), which allows enterprises to write-off more than 100 percent of the acquisition price of investments in machinery and building assets. The full deductibility of interest payments also contributed to the negative tax wedge on investments financed by bank borrowing. The tax incentive for debt finance may encourage "thin capitalization". However, many other OECD members have a similar distortion

103. The corporate tax wedges on investments financed by retained earnings and equity are identical (at 1¼ percent) because there is no imputation system for dividends at the corporate level. [57] Thus, equity and working capital are taxed at the same standard corporate rate and the pre-tax rate of return required to yield an after-tax return of 5 percent is 6¼ percent.

104. Although investments in both machinery and buildings benefit from the special investment allowance, both assets have different pre-tax rates of return. This is because depreciation allowances differ from the true economic depreciation rates in an unsystematic way. In the case of Austria, the depreciation rate for buildings (at 4 percent) is relatively less generous than that for machinery (20 percent depending on the life of the item). Inventory investments are not fully insulated from the effects of inflation and inflation generated increases in their value are taxed.

105. Mirroring the development of the corporate tax wedge, the combined corporate and personal tax wedge also declined between 1990 and 1998. Again, this decline reflected the decline in inflation. If the inflation rate had remained at its 1990 level, the total tax wedge would have increased because of the unification and increase in the withholding taxes on interest and dividend payments to 25 percent.

106. The addition of personal taxes increases the tax wedge and the required pre-tax rate of return on marginal investments.[58] Personal tax rates on dividends, capital gains and interest also alter the discount rates which companies apply to investment projects compared to those

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[57] Except for dividends received by companies. For the purposes of estimation, dividends are paid to shareholders outside the firm.

[58] In calculating the impact of the personal tax code on marginal investments the average tax rate of 25 percent was used for equity and debt financed investments. Capital gains are assumed to be taxed at the top personal tax rate (50 percent) and are treated on an accrual basis with a gain of 10 percent being realized and taxed in year one. Thereafter, capital gains are tax exempt.

derived by considering the corporate tax system alone. At the personal level, Austria allows only a partial imputation of corporate taxes through a partial shareholder relief scheme that allows taxpayers to opt for taxation of dividends at half their average tax rate. Nonetheless, the combined personal and corporate tax burden on equity investments is still higher than that on other financing instruments. The capital gains tax is only relevant for investments financed by retained earnings because there is potential to increase the value of the company. However, because capital gains on assets held longer than two years are tax exempt in Austria, the personal tax regime actually reduces the overall tax wedge compared to that imposed by the corporate tax regime alone. Finally, personal taxes somewhat reduce the subsidy to debt financed investments compared to that under the corporate tax code.

E. Conclusion

107. The increase in the tax burden on labor income and the low capital income tax burden raises various efficiency and equity issues in Austria. In addition to reducing the overall tax burden, future tax reforms will inevitably have to focus on ways to rebalance the overall tax burden between labor and capital. Owing to the impact of increasing social security contributions on the overall tax burden on labor, a re-examination of the social security system will have to play an integral role in any reform. The corporate and capital income tax system will also need to become more symmetric to enhance efficiency. Dividends and retained earnings will need to be treated on a more equal basis with debt financed investments. As recommended by the OECD (1998) greater equality in the treatment of dividend and interest could be achieved either by allowing a deduction for dividends paid in corporate profits, or by transforming the corporate and personal tax into dual income taxes. Under the latter proposal, capital income would be treated separately for tax purposes from labor income. A third possibility would be to eliminate the deductibility of interest from the tax.

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Table A1. Austria: Real GDP

	1999	1996	1997	1998	1999
	(In billions of schillings at current prices)	(In percent)			
Private consumption 1/	1,515	3.2	0.1	1.5	2.7
Public consumption	531	1.3	-0.4	2.0	1.0
Gross fixed investment	654	2.1	0.8	6.8	2.9
Construction	387	1.5	-1.6	4.1	1.0
Machinery and equipment	267	2.9	4.6	10.6	5.5
Final domestic demand	2,698	2.4	0.2	2.6	2.8
Inventory accumulation 2/ 3/	-2	-0.4	0.8	-0.7	-1.0
Total domestic demand	2,698	2.0	1.0	2.2	1.6
Exports of goods and non-factor services	1,219	6.0	10.1	8.7	3.5
Imports of goods and non-factor services	1,228	5.9	9.4	6.9	1.9
Net foreign balance 3/	-9	0.0	0.2	0.7	0.6
GDP	2,689	2.0	1.2	2.9	2.1

Source: Austrian Institute of Economic Research (WIFO).

1/ Including non-profit organizations.
2/ Including statistical discrepancy.
3/ Contribution to GDP growth.

Table A2. Austria: Contribution to Real GDP Growth

	1996	1997	1998	1999
Private consumption	1.8	0.1	0.9	1.5
Public consumption	0.3	-0.1	0.4	0.2
Gross fixed investment	0.5	0.2	1.6	0.7
Construction	0.2	-0.2	0.6	0.1
Machinery and equipment	0.3	0.4	1.0	0.6
Final domestic demand	2.4	0.2	2.8	2.2
Inventory accumulation	-0.4	0.8	-0.7	-0.6
Total domestic demand	2.0	1.0	2.2	1.6
Exports of goods and non-factor services	2.3	4.0	3.7	1.6
Imports of goods and non-factor services	2.3	3.8	3.0	0.9
Net foreign balance	0.0	0.2	0.7	0.6
GDP	2.0	1.2	2.9	2.1

Source: Austrian Institute of Economic Research (WIFO).

1/ Change as a percent of real GDP in the previous year.

Table A3. Austria: National Income and its Distribution

	1995	1996	1997	1998	1999	1996	1997	1998	1999
	(In billions of schillings)					(Percentage changes)			
Net national disposable income	2,028	2,106	2,163	2,224	2,259	3.8	2.7	2.8	1.6
Less: Net Current transfers to the rest of the world	-7	-11	-10	-16	-17	61.0	-10.7	54.6	7.2
Net national income at market prices	2,035	2,117	2,173	2,240	2,276	4.0	2.6	3.1	1.6
Plus: Consumption of fixed capital	313	325	335	348	360	3.6	3.2	3.7	3.6
Less: Net factor income from abroad	-27	-12	-14	-23	-52	-57.2	22.8	65.7	123.2
Gross domestic product at market prices	2,375	2,453	2,522	2,611	2,689	3.3	2.8	3.5	3.0
Compensation of employees	1,279	1,291	1,311	1,366	1,420	1.0	1.5	4.2	4.0
Gross operating surplus and mixed income	808	863	883	911	927	6.8	2.3	3.2	1.7
Taxes on production minus subsidies	288	299	329	334	342	3.7	10.0	1.5	2.5

Sources: Statistics Austria (ÖSTAT); Austrian Institute of Economic Research (WIFO).

Table A4. Austria: Real Gross Domestic Product by Sectors

	1999	1996	1997	1998	1999 1/
	In percent of GDP at constant 1995 prices	(Percentage changes)			
Agriculture and forestry	2.4	5.6	-1.7	2.3	3.0
Mining and quarrying	0.3	1.9	-0.5	1.8	-0.2
Manufacturing	18.7	2.0	3.8	3.4	2.3
Energy and water supply	2.7	3.8	6.1	2.1	-0.6
Construction	7.5	3.1	0.0	4.3	1.1
Trade	12.2	1.9	2.1	2.9	3.2
Transport and communication	7.0	5.9	4.8	4.4	4.5
Finance and insurance	6.8	0.0	11.4	7.3	-1.6
Real estate and business services	12.9	1.5	3.7	3.3	3.3
Restaurants, hotels and other accom	3.7	-0.6	0.0	3.2	3.0
Other market services	1.2	0.3	-8.5	1.5	1.7
Government services	6.5	2.1	0.8	0.1	0.7
Less: Imputed bank service charges	0.6	-1.1	16.3	8.4	0.5
Taxes minus subsidies	1.0	0.8	4.3	2.7	1.0
Gross Domestic Product at market prices	100.0	2.0	1.2	2.9	2.1

Source: Austrian Institute of Economic Research (WIFO).

1/ Preliminary estimates.
2/ Change as a percent of real GDP in the previous year.

Table A5. Austria: Labor Market

	1992	1993	1994	1995	1996	1997	1998	1999 1/
	(In thousands, unless otherwise indicated)							
Population	7,914	7,992	8,030	8,047	8,059	8,072	8,078	8,078
Working age population 2/	5,139	5,188	5,210	5,222	5,237	5,255	5,266	5,272
Labor force	3,650	3,668	3,667	3,655	3,646	3,658	3,684	3,718
Dependent employment	3,056	3,055	3,071	3,068	3,047	3,056	3,077	3,108
Self-employment	401	391	381	371	368	369	370	374
Unemployment	193	222	215	216	231	233	238	222
Unemployment rate								
In percent of total labor force	5.3	6.1	5.9	5.9	6.3	6.4	6.5	6.0
In percent of dependent labor force	6.3	7.3	7.0	7.0	7.6	7.6	7.7	7.1
Standardized unemployment rate								
In percent of total labor force 3/	3.4	4.0	3.8	3.9	4.3	4.4	4.5	3.7
Vacancies	44	33	30	25	19	19	23	31
Foreign workers	274	278	291	300	300	299	299	306
Labor force participation rate 4/	71.0	70.7	70.4	70.0	69.6	69.6	70.0	70.5
Employment rate 4/	67.3	66.4	66.3	65.9	65.2	65.2	65.4	66.1
Foreign workers 5/	7.5	7.6	7.9	8.2	8.2	8.2	8.1	8.2

Sources: Austrian Institute of Economic Research (WIFO); and IMF, World Economic Outlook.
1/ Preliminary estimates.
2/ Population of age 16 to 64.
3/ Based on EU labor force survey.
4/ In percent of working age population.
5/ In percent of total labor force.

Table A6. Austria: Prices, Wages and Productivity

	1996	1997	1998	1999
	(Percentage changes)			
GDP deflator	1.3	1.6	0.6	0.9
Private consumption deflator	2.3	1.8	0.7	0.5
Deflator of exports of goods and services	1.2	0.6	0.4	0.5
Deflator of import of goods and services	2.0	1.9	-0.1	1.6
Terms of trade for goods and services	-0.7	-1.3	0.6	0.2
Wholesale price index				
annual average	0.0	0.4	-0.5	-0.8
end-of-period	1.3	0.5	-2.3	1.8
Consumer price index				
annual average	1.9	1.3	0.9	0.6
end-of-period	2.3	1.4	0.7	1.4
Core inflation				
annual average	1.5	0.9	1.2	0.7
EU-harmonized index				
annual average	1.8	1.2	0.8	0.5
end-of-period	2.3	1.0	0.5	1.7
Gross wage income per employee 1/	3.7	1.3	1.1	3.6
Contractual wages	2.4	1.8	2.2	2.5
Average hourly earnings in manufacturing	3.3	2.1	2.5	2.9
Real GDP per employed person	3.9	2.3	2.6	1.3
Unit labor cost				
Total economy	-1.0	2.3	1.3	1.7
Manufacturing	-0.6	-4.0	-0.7	-0.7

Sources: Austrian Institute of Economic Research (WIFO); OeNB; and IMF, World Economic Outlook.

1/ At current prices.

Table A7. Austria: Federal Budget—Administrative Basis

(In billions of schillings)

	1995 Outturn	1996 Outturn	1997 Outturn	1998 Outturn	1999 Budget	1999 Outturn	2000 Budget 1/
Revenue	646.7	665.4	765.6	711.6	697.4	719.4	726.7
Taxes before revenue sharing	521.2	585.7	623.9	670.2	681.1	669.8	682.9
Wage tax	150.2	160.5	183.6	193.7	198.0	203.0	194.0
Taxes on other income and profits	61.0	80.7	86.5	94.3	90.0	84.8	89.1
Value added tax	179.9	204.1	207.2	216.2	233.0	227.0	235.0
Major excise taxes 2/	43.7	48.5	47.9	50.7	50.5	53.0	54.3
Other taxes	86.4	91.9	98.8	115.3	109.6	102.0	110.5
Minus tax sharing transfers	156.6	175.3	179.2	183.8	192.7	191.0	192.2
Minus transfers to EU budget	18.8	26.9	31.6	26.2	31.5	29.1	32.5
Taxes after revenue sharing	345.8	383.5	413.2	460.2	456.9	449.7	458.2
Tax transfers to federal funds	19.7	19.5	19.6	19.6	20.5	19.8	21.3
Tax-like revenue 3/	82.6	84.1	85.7	89.1	90.5	94.1	94.1
Federal enterprises	66.2	25.7	0.7	0.8	0.4	0.5	...
Other revenue	132.3	152.6 4/	246.3	141.9	129.1	155.3	153.1
Expenditure	764.6	754.8	832.8	777.6	767.6	787.6	781.3
Wages and salaries 5/	140.3	137.7	137.0	140.7	142.0	146.7	148.7
Pensions 6/	48.8	42.7	39.1	39.6	43.1	41.0	42.3
Current expenditure on goods 7/	66.5	64.5	62.2	65.2	65.7	64.8	63.1
Gross investment	25.5	20.8	10.3	10.6	10.9	9.6	7.7
Transfer payments	343.2	352.4	361.9	377.0	378.8	382.9	375.2
Family allowances	67.2	65.8	62.6	58.7	60.5	58.5	59.9
Unemployment benefits	32.8	34.6	32.9	33.8	32.8	33.4	33.3
Transfer to the social security system 8/	86.9	92.4	97.3	103.7	103.6	108.0	104.3
Transfers to enterprises 9/	45.3	52.7	55.4	54.7	60.0	55.3	57.6
Other transfers 10/	111.0	106.9	113.7	126.9	121.9	127.7	120.1
Interest 11/	98.4	100.1	100.0	106.8	107.5	113.9	121.9
Other expenditure 12/	41.8	36.6 4/	122.3	37.7	19.5	28.7	22.4
Net balance	-117.9	-89.4	-67.2	-66.0	-70.1	-68.2	-54.6
(In percent of GDP)	(5.0)	(3.6)	(2.7)	(2.5)	(2.6)	(2.5)	(2.0)
Memorandum items:							
Revenue adjusted 13/	621.2	634.9	653.9	687.9	675.2	695.0	701.2
(Percentage change)	(3.1)	(2.2)	(3.0)	(5.2)	(-1.8) 14/	(2.9) 15/	(3.9)
Expenditure adjusted 13/	739.1	724.3	721.1	754.4	745.3	763.2	755.9
(Percentage change)	(4.5)	(-2.0)	(-0.4)	(4.5)	(-1.1) 14/	(2.4) 15/	(1.4)
Gross domestic product	2,375.2	2,453.2	2,522.2	2,610.9 16/	2,735.4 17/	2,685.9 17/	2,782.5
(Percentage change)	(6.1)	(3.3)	(2.8)	(3.5)	(4.8) 14/	(-1.8) 15/	(1.7)
Financing account 18/							
Revenue	322.7	219.6	234.5	408.5	334.2	490.0	550.6
Expenditure	204.8	130.2	167.3	342.5	264.1	421.8	496.0
Surplus	117.9	89.4	67.2	66.0	70.1	68.2	54.6
Gross redemption of debt	118.6	107.6	96.1	151.3	164.9	159.1	167.5
Military expenditure	20.7	20.9	21.4	21.7	21.8	22.3	21.9
Education expenditure	67.5	67.7	68.2	72.0	73.6	75.1	76.2
Primary	33.2	33.2	33.5	35.1	35.4	36.9	37.6
Secondary	25.1	25.1	25.5	26.5	27.1	27.8	28.8

Source: Ministry of Finance.

1/ Draft budget proposal.

2/ Mineral oil and tobacco taxes.

3/ Mainly contributions to unemployment insurance and to the fund for family allowances.

4/ Including S 83.0 billion from accrued revenues from the sale of the user fruct of ASFINAG (the highway construction company) and BIG (the property management company).

5/ Including contribution to salaries of teachers employed by the states.

6/ Pensions of federal civil servants and contribution to pensions of teachers employed by the states.

7/ Including investment expenditure on defense.

8/ Mainly to the general pension system.

9/ Including agriculture.

10/ Including transfers to other levels of government and including reserve operations by federal funds.

11/ Including commissions, management fees, provision for interest on zero coupon bonds, and interest on swap transactions.

12/ Including reserve operations except federal funds.

13/ Adjusted for double counting, excluding swap transactions.

14/ Change over 1998 outturn.

15/ Change over 1999 budget.

16/ GDP for 1999, estimated in March 1998.

17/ GDP estimated by WIFO in December 1999.

18/ Revenue and expenditure in connection with public debt and cash bridging credits.

Table A8. Austria: Federal Budget—Cash Basis Adjusted 1/

(In billions of schillings)

	1995 Outturn	1996 Outturn	1997 Outturn	1998 Outturn	1999 Budget	1999 Outturn	2000 Budget 2/
Revenue 1/	584.3	604.7	630.6	650.6	652.2	651.9	667.3
(Percentage change)	(0.7)	(3.5)	(4.3)	(3.2)	(0.2)	(0.0)	(2.3)
Taxes before revenue sharing	521.2	585.7	623.9	670.2	681.1	669.8	682.9
Wage tax	150.2	160.5	183.6	193.7	198.0	203.0	194.0
Taxes on other income and profits	61.0	80.7	86.5	94.3	90.0	84.8	89.1
Value added tax	179.9	204.1	207.2	216.2	233.0	227.0	235.0
Major excise taxes 3/	43.7	48.5	47.9	50.7	50.5	53.0	54.3
Other taxes	86.4	91.9	98.8	115.3	109.6	102.0	110.5
Minus tax sharing transfers	156.6	175.3	179.2	183.8	192.7	191.0	192.2
Minus transfers to EU budget	18.8	26.9	31.6	26.2	31.5	29.1	32.5
Taxes after revenue sharing	345.8	383.5	413.2	460.2	456.9	449.7	458.2
Tax transfers to federal funds	19.7	19.5	19.6	19.6	20.5	19.8	21.3
Tax-like revenue 4/	82.6	84.1	85.7	89.1	90.5	94.1	94.1
Federal enterprises	65.1	25.7	0.7	0.8	0.4	0.5	...
Other revenue	71.1	91.9	111.3	80.9	83.9	87.8	93.7
Expenditure 1/	710.2	696.9	695.3	705.8	726.9	718.9	729.3
(Percentage change)	(4.5)	(-1.9)	(-0.2)	(1.5) 5/	(3.0) 6/	(-1.1) 6/	(0.3)
Wages and salaries 7/	140.3	137.7	137.0	140.7	142.0	146.7	148.7
Pensions 8/	48.8	42.7	39.1	39.6	43.1	41.0	42.3
Current expenditure on goods 9/	66.5	64.5	62.2	65.2	65.7	64.8	63.1
Gross investment	25.5	20.8	10.3	10.6	10.9	9.6	7.7
Transfer payments	320.7	322.4	336.3	348.0	354.3	354.7	355.4
Family allowances	57.5	56.8	54.3	51.0	54.0	52.4	54.6
Unemployment benefits	32.8	34.6	32.9	33.8	32.8	33.4	33.3
Transfer to the social security system 10/	86.9	92.4	97.3	103.7	103.6	108.0	104.3
Transfers to enterprises 11/	45.3	52.7	55.4	54.7	60.0	55.3	57.6
Other transfers 12/	98.2	86.2	96.3	104.7	103.8	105.6	105.6
Interest 13/	84.1	88.5	88.7	86.1	98.6	91.4	98.6
Other expenditure 14/	24.4	20.3	21.7	15.7	12.3	10.7	13.5
Net balance	-125.9	-92.2	-64.7	-55.2	-74.7	-67.0	-62.0
(In percent of GDP)	(5.4)	(3.8)	(2.6)	(2.1)	(2.7)	(2.5)	(2.2)
Memorandum items:							
Tax to GDP ratio	14.8	15.8	16.4	17.5	16.7	16.7	16.5
Expenditure to GDP ratio	30.0	28.8	27.6	27.0	26.6	26.8	26.2
Gross domestic product (nom.)	2,375.2	2,453.2	2,522.2	2,610.9	2,735.4	2,685.9	2,782.5
(Percentage change)	(6.1)	(3.3)	(2.8)	(3.5) 5/	(4.8) 6/	(-1.8) 6/	(1.7)

Source: Ministry of Finance.

1/ Adjusted for double counting.

2/ Draft budget proposal.

3/ Mineral oil and tobacco taxes.

4/ Mainly contributions to unemployment insurance and to the fund for family allowances.

5/ Change over 1998 budget.

6/ Change over 1999 budget.

7/ Including contribution to salaries of teachers employed by the states.

8/ Pensions of federal civil servants and contribution to pensions of teachers employed by the states.

9/ Including investment expenditure on defense.

10/ Mainly to the general pension system (ASVG; schilling 68.1 billion in the 1996 expected outturn).

11/ Including agriculture.

12/ Including transfers to other levels of government, from 1995 also including transfers to the EU.

13/ Including commissions, management fees, provision for interest on zero coupon bonds, and interest on swap transactions.

14/ Taxes after revenue sharing in percent of nominal GDP.

Table A9. Austria: Financing of the Federal Deficit

(In billions of schillings)

	1995	1996	1997	1998	1999 1/
Net deficit, administrative basis	117.9	89.4	67.2	66.0	68.2
Debt repayment	118.6	107.6	96.1	151.3	159.1
Gross financing	236.5	197.0	163.3	217.3	227.3
Change in cash balances 2/	0.0	-23.8	-8.3	-4.3	
Changes in reserves 3/	8.0	2.0	-2.4	-10.9	-10.1
Other	1.9	11.2	12.3	23.6	
Gross financing requirement	246.4	186.4	164.9	225.7	217.2
Schilling	180.7	152.4	147.4	116.1	206.4
Bonds and notes	115.1	106.4	120.8	129.3	229.3
Bills	23.7	31.2	27.6	-11.5	-15.7
Other long-term loans	42.0	14.8	-0.9	-1.8	-7.3
Credit from central bank	0.0	0.0	0.0	0.0	0.0
Foreign currency	65.6	34.0	17.5	109.6	11.0
Debt repayment	-118.6	-107.6	-96.1	-151.3	-159.1
Net financing requirement	127.8	78.8	68.8	74.4	58.1
Valuation adjustment on foreign currency debt 4/	-5.8	-12.0	9.8	2.8	29.6
Increase in gross debt	122.0	66.8	78.6	77.2	87.7

Source: Ministry of Finance.

1/ Expected outturn.
2/ Decrease: -.
3/ Increase: -.
4/ Profit: -.

Table A10. Austria: Debt and Debt Service of the Federal Government

	Total debt	Domestic debt 1/	Foreign debt 1/	Total debt	Foreign debt	Debt Service			Interest payments 2/ 3/
						Interest 2/	Repayment	Total	
	(In billions of schillings, at end of year)			(In percent of GDP)	(In percent of total debt)	(In billions of schillings)			(In percent of federal tax revenue)
1976	133.8	98.8	35.0	18.5	26.1	9.0	10.7	19.8	8.8
1977	164.6	117.2	47.4	20.7	28.8	10.7	12.4	22.7	9.3
1978	199.2	139.1	60.0	23.6	30.1	13.8	15.8	29.6	11.3
1979	230.9	167.2	63.7	25.1	27.6	15.7	18.0	33.7	11.7
1980	261.2	188.5	72.6	26.3	27.8	17.8	18.2	36.0	12.4
1981	295.3	200.7	94.6	28.0	32.0	20.7	24.2	45.0	13.0
1982	341.6	233.2	108.4	30.1	31.7	25.7	25.2	50.9	15.7
1983	416.2	290.6	125.6	34.6	30.2	27.4	25.5	52.9	15.7
1984	469.8	350.8	119.0	36.7	25.3	33.8	32.8	66.6	17.5
1985	525.6	406.9	118.7	38.9	22.6	38.0	31.7	69.7	18.3
1986	616.9	492.3	124.6	43.4	20.2	41.9	33.6	75.5	18.6
1987	697.5	572.8	124.7	47.1	17.9	48.8	35.1	83.2	21.5
1988	746.7	615.9	130.8	47.7	17.5	51.4	39.3	90.6	20.1 4/
1989	800.2	674.3	125.8	47.8	15.7	54.5	34.7	89.2	20.7
1990	861.6	726.2	135.4	47.5	15.7	60.6	32.9	93.5	21.0
1991	937.7	789.3	148.5	48.2	15.8	68.1	32.7	100.8	21.4
1992	992.0	819.9	172.1	48.2	17.3	73.6	42.2	115.8	21.2
1993	1,109.0	896.2	212.9	52.2	19.2	75.8	54.9	130.7	22.2
1994	1,225.6	964.7	260.9	54.7	21.3	77.5	67.1	144.5	21.0
1995	1,342.4	1,051.3	291.1	57.5	21.7	84.1	118.6	202.6	23.7
1996	1,396.9	1,100.8	296.0	57.7	21.2	88.5	107.6	196.1	22.5
1997	1,475.9	1,171.0	304.9	58.7	20.7	88.7	96.1	184.8	21.3
1998	1,535.7	1,152.2	383.5	58.8	25.0	86.1	151.3	237.4	19.6
1999 5/	1,623.4	1,392.5	230.9	60.4	14.2	91.4	159.1	250.5	20.3
2000 6/	1,679.4	1,461.4	218.0	60.4	13.0	98.6	167.5	266.2	19.8

Source: Ministry of Finance.
1/ Schilling ("domestic debt") and foreign currency ("foreign debt") denominated debt. The value of foreign debt is adjusted for changes in exchange rates.
2/ On a cash basis.
3/ Tax revenues after revenue sharing.
4/ For 1988 and after, this ratio is not comparable with previous years owing to changes in accounting practise.
5/ Expected outturn.
6/ Budget proposal.

Table A11. Austria: Federal Government Assistance to Enterprises and Agriculture

(In billions of schillings)

	1992	1993	1994	1995	1996	1997	1998	1999 1/	Budget Proposal 2000
Assistance to industrial enterprises	8.41	9.58	13.06	9.88	9.97	11.71	12.23	13.47	12.89
Investment	2.28	2.47	2.41	1.59	1.78	2.06	1.55	1.05	
Environmental protection	0.65	0.95	3.46	0.65	0.57	0.49	0.61	0.59	0.69
Research and development	0.75	0.90	0.91	1.54	1.34	1.65	1.80	1.65	1.64
Implementation of labor market programs	4.59	5.20	6.19	6.09	6.27	7.41	7.34	9.12	8.82
Calls on guarantees	0.14	0.06	0.09	...	...	...	...	...	...
Assistance to agriculture	10.49	9.99	11.59	28.14	25.11	22.01	20.88	19.28	18.83
Investment	3.70	4.28	4.21	10.09	12.22	11.28	11.42	10.93	10.55
Price support	6.79	5.71	7.38	18.05	12.89	10.73	9.47	8.36	8.28
Total	18.89	19.56	24.64	38.02	35.08	33.72	33.11	32.75	31.73
(Percent change)	*-5*	*3,5*	*26,0*	*54,3*	*-7,7*	*-3,9*	*-1,8*	*-1,1*	*-3.1*

Source: Ministry of Finance.

1/ Expected outturn.

Table A12. Austria: Derivation of the Deficit of the Central Government on a National Accounts Basis 1/

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Federal deficit, administrative basis	117.9	89.4	67.2	66.0	68.2	54.6
Plus: 4/						
Reserves (net)	8.0	2.0	-2.4	-6.2	-1.0	8.3
Securities (net)	0.0	1.9	0.3	0.0	0.0	0.0
Equities (net)	3.0	1.8	3.5	-1.8	-1.6	-1.2
ÖIAG (industrial holding company)	4.3	1.9	0.0	0.0	0.0	0.0
Loans and guarantees (net)	-10.9	1.3	1.4	-0.2	2.9	-4.0
Temporal adjustments	-12.1	0.1	-6.6	14.1	-7.0	-0.3
OeNB extraordinary dividends	0.0	0.0	2.8	6.6	5.0	4.5
Other	0.0	0.0	0.5	-1.3	-1.6	0.0
Plus:						
Net deficit (-) or borrowing (+) of federal funds and ASFINAG 5/	0.2	0.4	1.0	-0.2	-0.2	0.1
Net deficit of the central government on a national accounts basis	110.6	98.9	67.8	77.0	64.7	62.0

Sources: Austrian Central Statistical Office; and Ministry of Finance.

1/ European System of Accounts, 1995 version.

2/ Expected outturn.

3/ According to budget.

4/ +: Expenditure greater than receipts.

5/ ASFINAG is a special fund that finances investment in transportation infrastructure. It was taken off budget in 1997.

Table A13. Austria: General Government Assets and Liabilties

(In billions of schillings, end of period)

	1994	1995	1996	1997	1998	1999 1/
Financial assets						
Federal government	129.1	128.0	121.8	81.3	68.2	...
States (without Vienna)	233.1	244.1	272.9	273.6	286.9	...
Municipalities (including Vienna)	70.9	71.6	69.6	70.8	69.7	...
Total financial assets	433.1	443.8	464.3	425.7	424.7	...
Bank deposits	70.1	70.1	54.1	47.8	48.9	...
Securities	38.6	32.1	66.1	40.3	35.9	...
Loans	324.5	341.6	344.1	337.7	340.0	...
Liabilities						
Federal government 2/	1,329.1	1,449.6	1,496.7	1,471.7	1,520.2	1,608.1
States (without Vienna)	49.6	64.2	64.4	60.9	59.3	57.5
Municipalities (including Vienna)	95.7	110.2	115.2	79.0	77.4	77.0
Total liabilities	1,474.4	1,624.0	1,676.3	1,611.6	1,656.9	1,742.6
(In percent of GDP)	*65.9*	*68.4*	*68.3*	*63.9*	*63.5*	*64.9*
Total net financial debt 3/	1,041.3	1,180.2	1,212.0	1,185.9	1,232.2	...
(In percent of GDP)	*46.5*	*49.7*	*49.4*	*47.0*	*47.2*	...
Federal government	1,200.0	1,321.6	1,374.9	1,390.4	1,452.0	...
States (without Vienna)	-183.5	-179.9	-208.5	-212.7	-227.6	...
Municipalities (including Vienna)	24.9	38.6	45.6	8.2	7.7	...
Memorandum items:						
Federal government guarantees 4/	661.6	682.3	704.9	721.1	742.1	778.1
Extrabudgetary debt 5/		219.4	235.3	249.9	255.3	264.4

Source: Ministry of Finance.

1/ Preliminary.
2/ Data for federal government include ASFINAG (until 1997) and federal funds.
3/ Total financial liabilities less total financial assets.
4/ Of wich S618.0 billion in export guarantees, in 1999.
5/ Debt of state-owned companies.

Table A14. Austria: General Government Finances—National Accounts Basis 1/
Consolidated

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Revenue	1,239.8	1,294.5	1,313.2	1,348.5	1,389.0	1,420.6
Market output and output for own final use 4/	112.0	115.4	80.6	84.3	87.2	87.0
Taxes on production and imports	337.7	355.2	376.6	391.4	408.1	419.9
Property income	45.5	33.5	30.3	22.9	21.9	22.0
Current taxes on income, wealth, etc.	284.3	321.2	339.5	358.2	363.4	367.9
Social contributions	413.1	427.6	435.9	449.5	462.6	477.2
Other current transfers	44.9	38.9	45.0	40.1	43.8	44.4
Capital transfers	2.4	2.7	5.3	2.1	2.1	2.1
Expenditure	1,360.6	1,387.6	1,361.2	1,412.8	1,443.4	1,466.6
Intermediate consumption	235.8	245.9	260.7	276.2	289.7	294.5
Compensation of employees	299.4	302.5	288.1	294.6	306.1	314.3
Other taxes on production	6.5	6.6	6.8	7.1	6.9	7.0
Subsidies, payable	68.9	64.6	64.6	71.4	71.2	71.2
Interest on public debt	102.7	103.8	97.4	98.5	97.0	99.3
Social benefits	462.3	475.5	475.4	479.8	493.7	511.7
Other current transfers	67.2	70.3	71.3	76.7	76.7	74.7
Capital transfers	49.7	49.0	49.5	59.7	54.5	52.3
Gross capital formation	72.4	69.4	49.0	48.5	47.8	46.0
Acquisition of non-financial non-prod. assets (net)	-4.3	0.1	-1.6	0.3	0.0	-4.2
Financial balance	-120.7	-93.1	-48.0	-64.3	-54.4	-46.0
(In percent of GDP)	*-5.1*	*-3.8*	*-1.9*	*-2.5*	*-2.0*	*-1.7*

Sources: Statistics Austria; and Ministry of Finance.

1/ Based on the European system of national and regional accounts in the Community (ESA 95).

2/ Preliminary.

3/ Official projections as of early March 2000.

4/ Includes health services produced by government-owned hospitals and imputed rent on owner-occupied real estate.

Table A15. Austria: Central Government Finances—National Accounts Basis 1/
Not Consolidated

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Revenue	656.5	675.1	683.1	702.4	725.3	734.1
Market output and output for own final use 4/	7.4	8.5	4.1	4.0	3.6	3.4
Taxes on production and imports	236.2	245.1	269.3	281.5	293.8	301.6
Property income	34.5	23.3	18.2	10.8	10.6	9.0
Current taxes on income, wealth, etc.	191.7	220.7	237.5	251.0	256.6	258.1
Social contributions	82.9	86.7	88.7	91.6	94.3	95.5
Other current transfers	91.7	85.8	59.3	60.7	64.0	64.0
Capital transfers	12.1	5.1	5.9	2.7	2.5	2.5
Expenditure	767.1	774.0	750.8	779.4	790.0	796.1
Intermediate consumption	49.4	51.5	49.7	54.5	55.7	53.4
Compensation of employees	118.4	119.5	120.6	123.1	127.9	131.2
Other taxes on production	2.4	2.3	2.2	2.4	2.2	2.3
Subsidies, payable	46.5	41.3	38.5	42.6	41.4	40.7
Interest on public debt	91.9	92.8	89.5	90.8	89.4	91.6
Social benefits	157.4	158.2	154.6	148.5	148.9	154.2
Other current transfers	227.9	243.2	243.7	258.6	270.1	273.1
Capital transfers	55.2	49.5	40.0	46.4	43.4	44.0
Gross capital formation	18.1	16.3	12.5	12.7	11.9	9.6
Acquisition of non-financial non-prod. assets (net)	-0.1	-0.6	-0.5	-0.1	-0.9	-4.0
Financial balance	-110.6	-98.9	-67.7	-77.0	-64.7	-62.0
(In percent of GDP)	*-4.7*	*-4.0*	*-2.7*	*-2.9*	*-2.4*	*-2.2*

Sources: Austrian Central Statistical Office; and Ministry of Finance.

1/ Based on the European system of national and regional accounts in the Community (ESA 95).

2/ Preliminary.

3/ Official projections as of early March 2000.

4/ Includes health services produced by government owned hospitals and imputed rent on owner-occupied real estate.

Table A16. Austria: Local Government and Social Security Funds Finances—
National Accounts Basis 1/
Not Consolidated

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Revenue	869.7	913.0	952.8	988.1	1,020.7	1,053.9
Market output and output for own final use 4/	104.6	106.9	76.5	80.3	83.6	83.6
Taxes on production and imports	101.5	110.2	107.3	109.9	114.4	118.3
Property income	11.0	10.2	12.1	12.0	11.3	13.0
Current taxes on income, wealth, etc.	92.6	100.5	102.0	107.2	106.8	109.8
Social contributions	330.1	340.9	347.2	357.9	368.3	381.7
Other current transfers	203.8	216.3	283.2	295.4	309.8	321.5
Capital transfers	26.0	28.0	24.6	25.5	26.6	26.1
Expenditure	879.8	907.2	933.1	975.5	1,010.4	1,038.0
Intermediate consumption	186.4	194.4	211.0	221.7	234.0	241.1
Compensation of employees	181.0	182.9	167.5	171.5	178.2	183.1
Other taxes on production	4.0	4.3	4.6	4.8	4.7	4.7
Subsidies, payable	22.4	23.4	26.1	28.8	29.8	30.5
Interest on public debt	10.8	11.0	7.9	7.8	7.6	7.7
Social benefits	304.9	317.2	320.8	331.3	344.8	357.5
Other current transfers	89.9	90.3	125.1	134.0	136.5	138.4
Capital transfers	30.3	29.8	34.7	39.3	38.1	38.6
Gross capital formation	54.3	53.1	36.5	35.8	36.0	36.4
Acquisition of non-financial non-prod. assets (net)	-4.2	0.7	-1.1	0.4	0.9	-0.1
Financial balance	-10.2	-5.8	-19.7	-12.7	-10.3	-15.9
(In percent of GDP)	*-0.4*	*-0.2*	*-0.8*	*-0.5*	*-0.4*	*-0.6*

Sources: Austrian Central Statistical Office; and Ministry of Finance.

1/ Based on the European system of national and regional accounts in the Community (ESA 95).

2/ Preliminary.

3/ Official projections as of early March 2000.

4/ Includes health services produced by government owned hospitals and imputed rent on owner-occupied real estate.

Table A17. Austria: Provincial Government Finances (excluding Vienna)—
National Accounts Basis 1/
Not Consolidated

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Revenue	220.0	232.2	269.7	280.5	287.9	294.5
Market output and output for own final use 4/	25.2	25.8	21.2	22.2	23.3	23.3
Taxes on production and imports	30.6	34.2	30.9	31.9	33.3	34.4
Property income	5.5	5.1	7.3	7.1	6.7	7.4
Current taxes on income, wealth, etc.	46.4	50.3	49.1	52.1	52.4	53.7
Social contributions	19.2	19.7	19.2	19.5	19.8	20.1
Other current transfers	78.9	82.0	127.4	132.3	136.6	140.0
Capital transfers	14.2	15.1	14.6	15.3	15.9	15.6
Expenditure	217.2	225.0	256.0	269.5	277.1	282.6
Intermediate consumption	26.0	27.0	61.3	63.4	65.0	66.1
Compensation of employees	91.1	91.5	79.0	81.1	84.3	86.7
Other taxes on production	1.4	1.7	1.8	1.8	1.7	1.7
Subsidies, payable	8.4	9.7	12.4	14.2	15.0	15.3
Interest on public debt	3.6	3.6	3.2	3.2	3.0	3.1
Social benefits	21.6	22.3	23.0	23.5	23.8	24.1
Other current transfers	42.8	43.7	49.1	53.2	54.8	56.4
Capital transfers	15.2	15.9	20.3	22.2	22.4	22.5
Gross capital formation	10.1	9.7	6.5	6.4	6.5	6.6
Acquisition of non-financial non-prod. assets (net)	-3.0	0.0	-0.7	0.6	0.6	0.0
Financial balance	2.9	7.2	13.7	10.9	10.8	12.0
(In percent of GDP)	*0.1*	*0.3*	*0.5*	*0.4*	*0.4*	*0.4*

Sources: Austrian Central Statistical Office; and Ministry of Finance.

1/ Based on the European system of national and regional accounts in the Community (ESA 95).

2/ Preliminary.

3/ Official projections as of early March 2000.

4/ Includes health services produced by government owned hospitals and imputed rent on owner-occupied real estate.

Table A18. Austria: Municipal Government Finances (including Vienna)—
National Accounts Basis 1/
Not Consolidated

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Revenue	243.0	257.5	245.1	252.4	258.2	264.3
Market output and output for own final use 4/	70.2	71.7	45.9	48.4	50.2	50.2
Taxes on production and imports	70.9	76.0	76.4	78.0	81.1	83.8
Property income	3.2	3.0	2.7	2.9	2.6	3.3
Current taxes on income, wealth, etc.	46.2	50.2	52.9	55.0	54.4	56.1
Social contributions	13.7	14.2	13.4	13.8	13.7	13.9
Other current transfers	27.0	29.4	44.0	44.1	45.5	46.5
Capital transfers	11.8	12.9	10.0	10.2	10.7	10.5
Expenditure	254.6	260.9	239.8	251.1	257.2	261.3
Intermediate consumption	62.4	66.6	62.9	65.6	68.1	69.3
Compensation of employees	74.0	75.2	72.0	73.7	76.7	78.8
Other taxes on production	1.9	1.9	2.1	2.3	2.2	2.2
Subsidies, payable	6.6	6.7	6.5	7.3	7.3	7.5
Interest on public debt	6.3	6.8	4.0	3.9	3.8	3.8
Social benefits	18.6	19.0	18.8	19.3	19.8	20.1
Other current transfers	28.2	28.2	31.6	34.9	34.9	35.0
Capital transfers	15.1	14.0	14.5	17.2	15.7	16.0
Gross capital formation	42.8	42.0	27.9	27.2	28.5	28.7
Acquisition of non-financial non-prod. assets (net)	-1.1	0.6	-0.4	-0.2	0.3	0.0
Financial balance	-11.6	-3.4	5.3	1.2	1.0	3.0
(In percent of GDP)	*-0.5*	*-0.1*	*0.2*	*0.0*	*0.0*	*0.1*

Sources: Austrian Central Statistical Office; and Ministry of Finance.

1/ Based on the European system of national and regional accounts in the Community (ESA 95).

2/ Preliminary.

3/ Official projections as of early March 2000.

4/ Includes health services produced by government owned hospitals and imputed rent on owner-occupied real estate.

Table A19. Austria: Social Security Fund Finances—National Accounts Basis 1/
Not Consolidated

(In billions of schillings)

	1995	1996	1997	1998	1999 2/	2000 3/
Revenue	406.6	423.2	437.9	455.3	474.6	495.1
Market output and output for own final use 4/	9.2	9.4	9.4	9.7	10.1	10.1
Taxes on production and imports	0.0	0.0	0.0	0.0	0.0	0.0
Property income	2.3	2.1	2.1	2.0	2.0	2.3
Current taxes on income, wealth, etc.	0.0	0.0	0.0	0.0	0.0	0.0
Social contributions	297.2	306.9	314.7	324.7	334.8	347.7
Other current transfers	97.9	104.9	111.8	118.9	127.7	135.0
Capital transfers	0.0	0.0	0.0	0.0	0.0	0.0
Expenditure	408.0	421.3	437.2	454.8	476.1	494.0
Intermediate consumption	98.0	100.8	86.8	92.7	100.9	105.7
Compensation of employees	15.9	16.3	16.4	16.7	17.2	17.7
Other taxes on production	0.7	0.7	0.7	0.7	0.8	0.8
Subsidies, payable	7.4	7.0	7.2	7.3	7.5	7.7
Interest on public debt	0.9	0.7	0.7	0.7	0.8	0.8
Social benefits	264.7	275.9	278.9	288.5	301.2	313.3
Other current transfers	18.9	18.4	44.4	46.0	46.8	47.0
Capital transfers	0.0	0.0	0.0	0.0	0.0	0.0
Gross capital formation	1.5	1.4	2.1	2.1	1.0	1.1
Acquisition of non-financial non-prod. assets (net)	0.0	0.1	0.0	0.1	0.0	-0.1
Financial balance	-1.4	1.9	0.7	0.5	-1.5	1.0
(In percent of GDP)	*-0.1*	*0.1*	*0.0*	*0.0*	*-0.1*	*0.0*

Sources: Austrian Central Statistical Office; and Ministry of Finance.

1/ Based on the European system of national and regional accounts in the Community (ESA 95).

2/ Preliminary.

3/ Official projections as of early March 2000.

4/ Includes health services produced by government owned hospitals and imputed rent on owner-occupied real estate.

Table A20. Austria: Monetary Aggregates and Lending to Domestic Nonbanks 1/

(Percentage change year on year)

	Monetary Aggregates			Lending to Domestic Nonbanks		
	Monetary base 2/	M1 3/	M3 3/	Total	Public	Private
1989	5.5	3.4	6.9	12.8	...	...
1990	5.9	5.4	7.3	13.8	...	...
1991	6.1	8.2	7.7	11.7	...	...
1992	4.6	6.2	4	8.3	...	...
1993	4.8	10.9	3.9	6.6	...	...
1994	5.1	6.3	5.4	7.1	12.7	5.1
1995	5.4	15.1	4.8	6.2	5.3	6.6
1996	5.3	5.4	1.8	3.4	-1.1	5.8
1997	2.5	4.9	1.2	4.1	-4.9	7.2
1998	-0.7	9.6	6.4	5.2	-6.4	7.3
1999	...	8.9	4.7	4.9	-1.7	5.2
2000						
January	...	11.4	4.5	4.4	-0.4	4.2
February	...	9.3	3.3	4.4	-1.6	4.6
March	...	9.1	3.4	5.8	1.6	5.4
April	...	11.5	5.6	6.4	1.7	5.9
May	...	5.0	6.1	6.2	2.9	5.8

Sources: Österreichische Nationalbank; and IMF, International Financial Statistics.

1/ From January 1999, euro harmonized data were used.

2/ Period average.

3/ End of period, excluding foreign exchange deposits.

Table A21. Austria: Interest Rates

(Percentage change year on year)

	European Central Bank 1/ Refinancing Operations (Repo rate)	Call Money Rates 2/			3-Month Money Rates 2/ 3/			Government Bond Yields 2/			Stock Market Index 1/ January 1992=100	
		Austria	Germany	Differential	Austria	Germany	Differential	Austria	Germany	Differential	Austria (ATX)	Germany (DAX)
1992	...	9.3	8.9	0.30	9.3	9.4	-0.1	8.2	7.9	0.3	88	97
1993	...	7.1	6.8	0.35	7.0	7.2	-0.2	6.8	6.4	0.3	90	108
1994	...	5.0	6.1	-1.09	5.1	5.3	-0.2	7.0	7.0	0.0	109	125
1995	...	4.3	5.0	-0.68	4.6	4.5	0.1	7.2	7.0	0.2	99	126
1996	...	3.2	5.0	-1.82	3.4	3.3	0.1	6.3	6.3	0.1	107	154
1997	...	3.3	4.4	-1.13	3.5	3.3	0.2	5.7	5.6	0.1	129	222
1998	...	3.4	4.5	-1.13	3.5	3.5	0.0	4.7	4.6	0.1	133	300
1999	2.71				3.0	2.9	0.0	4.6	4.5	0.1	117	320
1999												
January	3.00	3.1	3.1	-0.04	3.1	3.1	0.0	3.9	3.7	0.22	107	306
February	3.00	3.1	3.1	0.01	3.1	3.1	0.0	4.0	3.8	0.15	117	291
March	3.00	2.9	2.9	-0.03	3.1	3.1	0.0	4.3	4.0	0.27	119	289
April	2.50	2.7	2.7	0.02	2.7	2.7	0.0	4.3	3.8	0.51	129	320
May	2.50	2.6	2.5	0.05	2.6	2.6	0.0	4.0	3.9	0.10	117	300
June	2.50	2.6	2.6	0.03	2.6	2.6	0.0	4.3	4.6	-0.02	123	319
July	2.50	2.5	2.5	-0.01	2.7	2.7	0.0	4.7	4.7	-0.04	118	302
August	2.50	2.4	2.4	-0.03	2.7	2.7	0.0	5.1	5.6	0.10	120	312
September	2.50	2.4	2.4	-0.02	2.7	2.7	0.0	5.3	5.2	0.12	111	305
October	2.50	2.5	2.5	0.01	3.4	3.4	0.0	5.5	5.4	0.08	113	327
November	3.00	2.5	2.9	-0.42	3.5	3.5	0.0	5.2	5.2	0.08	113	349
December	3.00	3.0	3.0	-0.03	3.5	3.5	0.0	5.3	5.2	0.10	120	412
2000												
January	3.00	3.0	3.0	-0.03	3.3	3.3	0.0	5.7	5.6	0.12	112	405
February	3.25	3.3	3.3	0.03	3.5	3.5	0.0	5.8	5.6	0.16	109	453
March	3.50	3.5	3.5	0.00	3.8	3.8	0.0	5.6	5.4	0.17	113	450
April	3.75	3.7	3.7	0.03	3.9	3.9	0.0	5.5	5.3	0.18	113	439
May	3.75	3.9	3.9	0.00	4.4	4.4	0.0	5.7	5.5	0.18	113	421
June	4.25	4.3	4.3	0.02	4.5	4.5	0.0	5.5	5.3	0.24	113	409

Sources: Österreichische Nationalbank; Statistisches Monatsheft (various issues); Deutsche Bundesbank, Monatsbericht (various issues); European Central Bank; IMF, IFS; and Bloomberg.

1/ End of period except annual data.

2/ Period average.

3/ Figures for 1999 and 2000 refer to EURIBOR.

Table A22. Austria: Exchange Rate Developments

	Schilling/ SDR	Schilling/ U.S. dollar	Effective Exchange Rate Indices 1/		Schilling/ SDR 4/	Schilling/ U.S. dollar 4/	Effective Exchange Rate Indices 1/	
			Nominal 2/	Real 3/			Nominal 2/	Real 3/
	(Period average)				(Percentage change from previous period)			
1992	15.5	11.0	101.3	97.1	3.2	6.2	1.7	0.5
1993	16.2	11.6	104.0	97.8	-4.8	-5.5	2.6	0.7
1994	16.3	11.4	103.9	95.7	-0.5	1.8	0.0	-2.1
1995	15.3	10.1	106.9	92.4	6.9	13.3	2.9	-3.5
1996	15.4	10.6	105.2	88.1	-0.5	-4.8	-1.6	-4.6
1997	16.8	12.2	102.9	83.5	-8.4	-13.3	-2.2	-5.3
1998	16.8	12.4	103.1	81.9	0.0	-1.4	0.2	-2.0
1999	17.7	12.9	102.0	79.7	-5.0	-4.2	-1.1	-2.6
1995								
I	15.54	10.4	106.5	93.3	2.6	4.5	1.8	-3.0
II	15.38	9.8	107.6	93.8	1.1	6.1	1.1	0.5
III	15.27	10.1	106.8	92.0	0.7	-2.5	-0.8	-1.9
IV	14.95	10.0	106.9	90.4	2.1	0.5	0.1	-1.8
1996								
I	15.13	10.3	106.2	89.0	-1.2	-2.9	-0.7	-1.5
II	15.48	10.7	105.0	88.3	-2.3	-3.6	-1.1	-0.8
III	15.31	10.5	105.2	88.1	1.2	1.6	0.1	-0.2
IV	15.55	10.8	104.5	87.1	-1.6	-2.1	-0.6	-1.2
1997								
I	16.23	11.7	103.8	84.6	-4.2	-7.8	-0.7	-2.8
II	16.68	12.1	103.2	83.8	-2.7	-3.2	-0.6	-1.0
III	17.33	12.7	102.0	82.8	-3.8	-5.2	-1.1	-1.1
IV	16.89	12.4	102.6	82.7	2.7	3.0	0.5	-0.1
1998								
I	17.22	12.8	102.3	82.3	-1.9	-3.5	-0.2	-0.5
II	16.92	12.6	103.0	81.7	1.8	1.4	0.6	-0.7
III	16.63	12.4	103.5	81.9	1.8	1.8	0.5	0.3
IV	16.38	11.7	103.7	81.5	1.5	6.1	0.2	-0.5
1999								
I	16.95 5/	12.3 5/	102.9	80.6	-3.4	-4.6	-0.8	-1.1
II	17.55	13.0	102.2	79.7	-3.4	-5.9	-0.7	-1.2
III	17.85	13.1	101.8	79.8	-1.7	-0.8	-0.4	0.1
IV	18.30	13.3	101.2	78.8	-2.4	-1.0	-0.6	-1.2
2000								
I	18.87	13.9	100.6	77.9	-3.0	-4.9	-0.5	-1.1
II	19.57	14.7	99.9	76.9	-3.6	-5.5	-0.8	-1.3

Source: IMF, International Financial Statistics.

1/ 1990=100

2/ Trade weighted 17 countries.

3/ Relative normalized unit labor costs in manufacturing, adjusted for exchange rate changes.

4/ Percent changes for bilateral rates, based on average exchange rates, and in terms of schilling per unit of foreign currency.

5/ Since 1999, bilateral exchange rates are derived as the product of euro exchange rates and the conversion factor 13.7603.

Table A23. Austria: Balance of Payments Summary

(In billions of schillings)

	1992	1993	1994	1995	1996	1997	1998	1999
Current account balance	-8.0	-11.7	-33.1	-54.0	-50.8	-64.2	-59.7	-74.6
(Percent of GDP)	-0.4	-0.5	-1.4	-2.2	-2.0	-2.5	-2.2	-2.6
Goods and services balance 1/	18.7	12.5	-6.2	-20.6	-28.9	-39.9	-16.1	-14.1
(Percent of GDP)	0.9	0.5	-0.3	-0.8	-1.1	-1.5	-0.6	-0.5
Merchandise trade balance 2/	-84.1	-75.3	-90.2	-67.1	-77.0	-52.0	-45.3	-45.6
Exports	488.8	468.4	513.8	581.4	613.9	716.1	776.3	823.0
Imports	572.9	543.7	604.0	648.5	690.9	768.0	821.5	868.5
Non-factor services balance	102.8	87.8	84.0	46.5	48.2	12.0	29.2	31.5
Of which: Tourism	64.3	58.1	39.5	26.5	18.6	10.8	20.7	24.0
Receipts	299.5	311.1	319.8	325.3	358.9	361.4	365.0	399.6
Of which: Tourism	151.0	148.5	139.9	136.0	135.3	134.1	138.4	142.0
Payments	196.6	223.4	235.8	278.8	310.8	349.4	335.8	368.1
Of which: Tourism	86.7	90.4	100.4	109.5	116.7	123.2	117.7	118.0
Net factor income	-15.6	-12.5	-14.6	-16.2	-3.1	-3.5	-19.8	-34.9
Net unrequited transfers	-11.1	-11.7	-12.3	-17.3	-18.8	-20.7	-23.9	-25.6
Net capital transfers	-0.5	-5.2	-1.0	-0.6	0.8	0.3	-2.5	-1.8
Financial account 2/	-2.1	20.3	36.8	59.5	43.8	56.9	69.0	91.8
Net foreign direct investment	-2.90	-0.63	9.66	7.80	26.38	8.13	24.19	3.21
Abroad	-18.7	-13.8	-14.4	-11.4	-20.5	-24.2	-36.5	-34.9
Into Austria	15.7	13.2	24.0	19.2	46.9	32.4	60.7	38.1
Portfolio investment	70.3	70.6	-1.9	95.4	-28.9	11.7	80.7	-16.9
Abroad	-29.9	-22.0	-51.5	-28.5	-88.0	-122.3	-139.7	-355.5
Into Austria	100.2	92.6	49.6	123.9	59.1	134.1	220.4	338.6
Other net claims	-41.8	-22.9	40.6	-28.6	55.3	0.6	10.2	80.8
Monetary authorities	0.0	0.0	-0.2	-1.3	1.5	0.0	-1.9	32.5
Public sector	5.5	-5.1	15.7	2.7	-4.0	-12.1	-0.2	4.8
Banks	-43.9	-24.2	34.8	-49.5	79.1	20.0	34.5	72.4
Other sectors	-1.9	4.8	-12.7	18.9	-31.1	-15.2	-27.4	-26.7
Trade credits	-1.5	1.6	3.0	0.6	9.8	7.8	5.2	-2.3
Financial derivatives	0.2	-0.2	-1.0	-1.3	2.2	0.5	-6.0	-2.3
Change in official reserves	-27.8	-26.5	-10.6	-13.8	-11.1	35.9	-40.1	27.0

Source: Österreichische Nationalbank.

1/ For 1995, 1996, and 1997, based on payments data.

2/ Includes transit trade and services closely linked to merchandise trade.

Table A24. Austria: Capital Account Overview

(In billions of schillings)

	1992	1993	1994	1995	1996	1997	1998	1999
Direct investment	-2.9	-0.6	9.7	7.8	26.4	8.1	24.2	3.2
Credits	-18.7	-13.8	-14.4	-11.4	-20.5	-24.2	-36.5	-34.9
Debits	15.7	13.2	24.0	19.2	46.9	32.4	60.7	38.1
Portfolio investment	70.3	70.6	-1.9	95.4	-28.9	11.7	80.7	-16.9
Credits	-29.9	-22.0	-51.5	-28.5	-88.0	-122.3	-139.7	-355.5
Shares	-2.0	-7.1	-10.0	-5.5	-12.2	-29.2	-64.8	-70.0
Fixed interest	-27.7	-14.0	-39.0	-24.5	-69.1	-97.4	-79.5	-284.1
Other	-0.2	-0.9	-2.5	1.5	-6.7	4.3	4.6	-1.4
Debits	100.2	92.6	49.6	123.9	59.1	134.1	220.4	338.6
Shares	1.7	13.8	15.0	12.5	28.2	32.0	12.5	32.6
Fixed interest	65.3	106.0	35.2	119.2	43.2	86.5	203.7	257.4
Other	33.1	-27.3	-0.5	-7.8	-12.3	15.5	4.2	48.7
Other investment	-41.8	-22.9	40.6	-28.6	55.3	0.6	10.2	80.7
Credits	-80.3	-59.1	-31.8	-102.0	8.9	-62.3	-11.3	-155.7
Debits	38.5	36.2	72.4	73.4	46.3	62.9	21.5	236.5
Loans	-19.3	-9.7	3.8	-5.6	-36.0	-57.1	-52.0	-133.7
Credits	-36.9	-8.3	-10.1	-22.0	-37.6	-51.9	-52.8	-159.3
Official sector	-0.5	1.9	-1.5	1.9	0.1	0.1	0.8	-12.7
Banks	-28.2	-4.5	3.0	-24.0	-24.2	-41.3	-33.8	-109.7
Other	-8.2	-5.6	-11.6	0.1	-13.5	-10.7	-19.8	-36.8
Debits	17.6	-1.4	13.9	16.4	1.6	-5.3	0.8	25.6
Official sector	4.1	-4.5	18.6	6.7	-2.1	-1.8	4.6	6.8
Banks	-2.3	-3.4	1.9	1.4	2.9	1.1	2.4	10.5
Other	15.8	6.5	-6.6	8.3	0.8	-4.5	-6.2	8.3
Sight and term deposits	-24.5	-12.8	29.9	-24.6	82.2	79.4	53.3	228.8
Credits	-46.7	-49.9	-17.1	-80.9	28.9	13.3	33.1	24.4
Official sector	1.5	-0.1	0.2	-2.7	7.7	-5.3	-6.1	-11.6
Banks	-38.0	-54.5	-20.1	-84.9	35.2	14.6	40.6	34.2
Other	-10.2	4.7	2.8	6.8	-14.0	4.0	-1.4	1.7
Debits	22.2	37.1	47.0	56.2	53.2	66.2	20.2	204.4
Short-term by banks	17.9	48.8	42.8	44.7	58.1	49.7	25.1	118.1
Trade credit	-1.5	1.6	3.0	0.6	9.8	7.8	5.2	-2.3
Credits	1.0	2.0	-4.0	3.6	10.8	2.9	8.8	-3.6
Debits	-2.5	-0.4	7.0	-3.0	-1.0	4.9	-3.7	1.3
Other								
Credits	2.3	-2.9	-0.6	-2.7	6.8	-26.6	-0.4	-17.2
Official sector	2.0	-0.8	-1.0	-2.9	-2.9	-3.0	-3.2	-17.2
Banks	0.6	-0.9	-0.9	-2.3	14.5	-19.4	2.6	2.0
Other	-0.3	-1.2	1.3	2.5	-4.7	-4.2	0.1	-2.0
Debits	1.2	0.9	4.4	3.8	-7.5	-2.9	4.2	5.1
Official sector	-1.6	-1.6	-0.8	-1.6	-5.3	-2.1	1.9	0.6
Banks	1.8	2.1	3.8	4.2	-2.5	-1.0	2.5	2.4
Other	1.0	0.5	1.4	1.3	0.3	0.2	-0.2	2.1
Financial derivatives	0.2	-0.2	-1.0	-1.3	2.2	0.5	-6.0	-2.3
Credits	0.2	-0.2	-1.0	-1.3	2.2	-2.3	-4.9	-3.6
Debits	0.0	0.0	0.0	0.0	0.0	2.8	-1.1	1.3
Capital account balance	-2.1	20.3	36.8	59.5	43.8	56.9	69.0	91.8
Credits	-128.9	-94.9	-97.7	-141.9	-99.5	-208.9	-187.5	-546.1
Debits	154.4	142.0	146.0	216.5	152.3	229.3	302.7	613.2

Source: Österreichische Nationalbank.

Table A25. Austria: International Investment Position

(In billions of schillings; end of period)

	1993	1994	1995	1996	1997	1998
Assets	1,483.4	1,513.6	1,618.2	1,786.1	2,099.8	2,318.6
Direct investment abroad	99.1	103.2	118.3	143.1	191.3	224.3
Portfolio investment	209.2	250.4	278.0	367.4	555.9	689.4
Shares	46.8	55.0	60.5	72.9	145.9	202.3
Bonds	159.6	188.5	209.2	283.5	405.9	480.2
Others	2.8	6.9	8.3	11.0	5.5	8.3
Other investment	912.3	899.9	959.1	982.5	1,071.9	1,084.3
Trade credit	70.2	67.4	64.7	55.0	57.8	49.5
Loans	385.3	355.0	353.6	397.7	451.3	503.6
Public sector 1/	23.4	1.4	1.4	1.4	1.4	0.0
Credit institutions	344.0	334.4	348.1	377.0	421.1	448.6
Of which: Long term	304.1	286.2	335.8	346.8	319.2	353.6
Other sectors	19.3	17.9	2.8	20.6	28.9	55.0
Sight- and term deposits	425.2	444.5	496.7	483.0	483.0	447.2
Public sector 1/	1.4	1.4	0.0	0.0	5.5	11.0
Credit institutions	415.6	434.8	487.1	473.4	467.9	427.9
Of which: Short term	385.3	408.7	434.8	423.8	434.8	397.7
Other sectors	8.3	8.3	9.6	9.6	8.3	6.9
Other	31.6	33.0	45.4	45.4	79.8	82.6
Foreign exchange reserves	264.2	261.4	262.8	293.1	278.0	311.0
Liabilities	1,622.3	1,706.3	1,914.1	2,090.2	2,512.6	2,823.6
Direct investment in Austria	139.0	145.9	177.5	217.4	249.1	322.0
Portfolio investment	751.3	763.7	904.1	961.8	1,226.0	1,429.7
Shares	44.0	60.5	71.6	100.5	198.1	183.0
Bonds	648.1	650.9	784.3	824.2	988.0	1,195.8
Others	60.5	52.3	48.2	37.2	39.9	49.5
Other investment	732.0	796.7	833.9	910.9	1,037.5	1,071.9
Trade credit	42.7	46.8	44.0	42.7	46.8	42.7
Loans	67.4	97.7	106.0	114.2	110.1	117.0
Public sector 1/	11.0	27.5	35.8	31.6	30.3	34.4
Credit institutions	16.5	20.6	19.3	30.3	26.1	27.5
Of which: Long term	11.0	11.0	9.6	17.9	19.3	17.9
Other sectors	39.9	49.5	50.9	50.9	53.7	53.7
Sight- and term deposits	583.4	611.0	634.3	715.5	839.4	868.3
Public sector 1/	0.0	0.0	0.0	0.0	0.0	0.0
Credit institutions	583.4	611.0	634.3	715.5	839.4	868.3
Of which: Short term	565.5	588.9	595.8	685.3	791.2	828.4
Other sectors	0.0	0.0	0.0	0.0	0.0	0.0
Other	38.5	41.3	50.9	41.3	41.3	44.0
Net investment position	-139.0	-192.6	-297.2	-304.1	-412.8	-506.4
(In percent of GDP)	-6.4	-8.4	-12.5	-12.4	-16.4	-19.4

Source: Österreichische Nationalbank, *Monthly Report*, June 2000.

1/ Including monetary authorities.

Table A26. Austria: Official Development Assistance

(In millions of schillings, unless otherwise noted)

	1994	1995	1996	1997	1998	1999	2000 1/
Bilateral ODA	6,117.0	5,643.0	4,360.0	3,735.0	3,608.0	3,725.0	3,318.0
(As a percent of total)	81.8	73.0	74.0	58.1	64.0	55.3	56.0
Grants 2/	4,044.0	3,800.0	3,733.0	3,086.0	3,389.0	3,505.0	3,098.0
Loans	2,073.0	1,843.0	627.0	649.0	219.0	220.0	220.0
Multilateral ODA	1,365.0	2,087.0	1,533.0	2,695.0	2,032.0	3,012.0	2,607.0
(As a percent of total)	18.2	27.0	26.0	41.9	36.0	44.7	44.0
European Union	...	849.0	995.0	1,181.0	994.0	1,532.0	1,127.0
International financial institutions	963	816.0	133	1,141.0	656.0	1,080.0	1,080.0
United Nations and others	402.0	422.0	405.0	373.0	381.0	400.0	400.0
Total	7,482.0	7,730.0	5,893.0	6,430.0	5,640.0	6,737.0	5,925.0
(Percent change)	18.3	3.3	-23.8	9.1	-12.3	19.5	-12.1
(As a percent of GNP)	0.33	0.33	0.24	0.26	0.22	0.25	0.21

Source: Ministry of Finance.

1/ Provisional.
2/ Includes humanitarian and technical assistance.