

OECD ECONOMIC SURVEYS

AUSTRIA

OECD



OCDE

1993

ERRATUM

Title: OECD Economic Surveys: Austria
Code OCDE: (10 93 11 1)
ISBN: 92-64-13857-9
ISSN: 0376-6438

The following page cancels and replaces page: 30

Table 10. Projections to 1994
 Percentage change from previous year, 1983 prices

	1991	1992 ¹	1993 ¹	1994 ¹
Demand and output				
Private consumption	2.4	2.5	0.7	1.0
Government consumption	2.6	1.5	0.5	1.0
Gross fixed investment	4.9	2.3	-1.9	2.4
Construction	5.7	4.9	0.0	2.3
Machinery and equipment	3.9	-1.0	-4.5	2.6
Final domestic demand	3.1	2.3	0.0	1.4
Stockbuilding ²	0.3	-0.5	0.0	0.1
Total domestic demand	3.3	1.8	0.0	1.5
Exports of goods and services	8.2	4.0	1.5	2.8
Imports of goods and services	8.9	4.0	2.0	3.0
Foreign balance ²	-0.3	-0.0	-0.3	-0.1
GDP	3.0	1.8	-0.2	1.4
<i>Memorandum items:</i>				
Private consumption deflator	3.4	4.0	3.5	2.7
GDP price deflator	3.4	4.5	3.5	3.1
Total employment	1.9	1.6	-0.3	0.2
Unemployment rate ³	3.3	3.4	4.7	5.7
Current balance (\$US billion)	0.1	-0.3	-0.1	-0.3

1. OECD estimate and projections.

2. Changes as a per cent of GDP in the previous year.

3. Microcensus

Sources: OECD, National Accounts, and WIFO-institute.

The main downside risk to this projection lies in the possibility of a further deterioration of the already weak economic situation in Europe in general and, in particular, in Germany. On the other hand, the threat of continued worsening labour-market developments could prompt greater wage moderation than allowed for in the projections, thus leading to better export performance and stronger investment, thereby strengthening real GDP.

OECD
ECONOMIC
SURVEYS
1992-1993

AUSTRIA

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié également en français.

© OECD 1993

Applications for permission to reproduce or translate
all or part of this publication should be made to:
Head of Publications Service, OECD
2, rue André-Pascal, 75775 PARIS CEDEX 16, France

Table of contents

Introduction	9
I. Recent trends and projections to 1994	11
Expectations and outcomes	11
Aggregate demand components	13
Slowing productivity growth	17
Higher employment and unemployment	17
Higher cost-push inflation	21
Broad external balance and capital inflows	24
Subdued economic prospects for 1993 and 1994	27
II. Economic policies	31
Monetary and exchange rate policies	31
Fiscal policy	34
Structural policy update	41
III. International openness and economic performance	45
Foreign sector overview: 1960 to 1992	45
The policies of openness	58
The link between international openness and domestic economic performance	66
Summing-up and looking ahead	82
IV. Conclusions	84
Notes and references	89

Annexes

I. Import penetration by sector	93
II. Chronology of main economic events	94

Tables

Text

1. Projections and outcomes	12
2. Demand developments	14
3. Exports, market growth and competitiveness	16
4. Output, employment and productivity	17
5. Demand and supply in the labour market	18
6. Cost and price developments	23
7. The current account of the balance of payments	25
8. The capital account of the balance of payments	26
9. The external environment and policies	27
10. Projections to 1994	30
11. The Federal budget	35
12. The stance of fiscal policy	38
13. Openness of selected OECD countries	49
14. Commodity composition of merchandise trade	49
15. Geographical distribution of merchandise trade	50
16. Austrian trade with eastern Europe	52
17. Services trade	55
18. Direct investment flows	56
19. International capital flows: banking and securities	57
20. Foreign labour force	58
21. Output and employment multipliers	71
22. Foreign direct investment positions at end 1990	73
23. Characteristics of manufactures trade	75
24. Productivity – an international comparison	77
25. Real GDP per capita – an international comparison	78

Annex

A1. Import penetration by sector	93
----------------------------------	----

Statistical and Structural Annex

A. Gross domestic product	101
B. General government income and expenditure	102
C. Output, employment and productivity in industry	103
D. Retail sales and prices	104
E. Money and banking	105
F. The Federal budget	106
G. Balance of payments	107
H. Merchandise trade by commodity group and area	108
I. Labour-market indicators	109
J. Public sector	110
K. Production structure and performance indicators	111

Diagrams

Text

1. Relative economic performance	13
2. Household savings rate	15
3. Unemployment and vacancies	19
4. Unemployment and capacity utilisation	20
5. Some inflation determinants	22
6. Unemployment and wage growth	24
7. International competitiveness and export performance	29
8. Short- and long-term interest rates	33
9. Federal and general government financial deficits	37
10. General government primary financial balance and indebtedness	39
11. Deficits of the federal government and off-budget institutions	40
12. The current account	46
13. Capital flows	48
14. Volume/price splits in merchandise trade	53

15. Difference between EFTA and the EC average tariffs for manufactures	61
16. Foreign exchange rates	65
17. The income-production cycle with international trade	67
18. The output gap, the export/import relative price and real export/import coverage ratio	69
19. Components of export market share increases	80
20. Competitiveness indicators in manufacturing	81

BASIC STATISTICS OF AUSTRIA

THE LAND

Area (1 000 sq. km)	84	Major cities, 1991 census (thousands of inhabitants)	
Agricultural area (1 000 sq. km) 1990	35	Vienna	1 553
Exploited forest area (1 000 sq. km)	32	Graz	232
		Linz	203
		Salzburg	144
		Innsbruck	115

THE PEOPLE

Population 1-1-90, thousands	7 718	Net migration, 1990, thousands	86.5
Number of inhabitants per sq. km	92	Total employment ¹ , monthly average 1990, thousands	2 928.7
Net natural increase, 1990	7 502	of which:	
Net natural increase per 1 000 inhabitants, 1990	1.0	in industry ²	547.2

PRODUCTION

Gross domestic product in 1991		Industrial origin of GDP at market prices, 1991	
Sch. billion	1 915	(per cent):	
Per head, US \$	20 958	Agriculture	3
Gross fixed capital formation in 1991		Industry	26
Per cent of GDP	25	Construction	7
Per head, US \$	5 355	Other	64

THE GOVERNMENT

Per cent of GDP in 1991		Composition of Federal Parliament (number of seats)	
Public consumption	18	Socialist party	79
General government current revenue	47	Austrian People's party	60
Federal government debt, end 1991	48.9	Liberal party	28
		Greens	10
		Liberal Forum	5
		Independent	1
		Last general election: October 1990	

FOREIGN TRADE

Exports of goods and services, as per cent of GDP, 1991	41	Imports of goods and services, as per cent of GDP, 1991	40
Main exports in 1991 (per cent of total merchandise exports):		Main imports in 1991 (per cent of total merchandise imports):	
Food, beverages, tobacco	3	Food, beverages, tobacco	5
Raw materials and energy	5	Raw materials and energy	10
Chemicals	9	Chemicals	10
Machinery and equipment	38	Machinery and equipment	39
Other finished and semi- manufactured products	44	Other finished and semi- manufactured products	36

THE CURRENCY

Monetary unit: Schilling		Currency units per US \$, average of daily figures:	
		Year 1992	10.99
		January 1993	11.36

1. Wage and salary earners.

2. Including administrative personnel.

Note: An international comparison of certain basic statistics is given in an annex table.

This Survey is based on the Secretariat's study prepared for the annual review of Austria by the Economic and Development Review Committee on 3 February 1993.

•

After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 15 March 1993.

•

The previous Survey of Austria was issued in April 1992.

Introduction

Austria's economic performance in 1992 continued to be better than that of most other OECD Members. Until recently, the Austrian economy exhibited a high degree of resilience to international recessionary tendencies thanks to a rising propensity to consume, a prolonged construction boom and buoyant exports, first to Germany and then to eastern Europe. The short-term outlook is, however, for these special factors to fade in importance: the construction boom has now passed its peak, while industrial output has started to fall, and unemployment is growing. Part I of this report surveys these developments and presents the outlook to 1994.

With monetary policy firmly orientated towards the hard-currency objective and fiscal policy geared towards budget consolidation over the medium term, the OECD's short-term outlook does not embody any policy support to counteract the effects of the projected near-term weakness of the international recovery, apart from the operation of automatic fiscal stabilisers. Thus, real GDP may remain broadly stable in 1993, before giving way to a moderate recovery in 1994, and unemployment seems set to rise further. This cooling-off should bring inflation down but only slowly, given the inertia of wage growth in the more domestically-oriented sectors. Part II discusses economic policy, including structural policies, that will accompany the shift of the economy into lower gear. At the same time, the further strengthening of Austria's trading links with eastern Europe and rapid moves towards full integration with western Europe will act as an important dynamic force on the economy.

Part III looks into Austria's long-run economic performance in the context of its international openness and economic integration. Over the past three decades Austria has been catching up with the OECD average in terms of per capita income, while becoming increasingly integrated into the world economy. Most evidence suggests that these two developments were closely related to each

other. In particular, the increasing openness of the economy exposed it to international competition which forced a rapid growth in efficiency through cost-cutting technological progress, and structural changes needed to take advantage of new opportunities. As a result, Austria made large strides in the improvement of national economic welfare, and was second only to Japan among OECD countries in terms of catching up with high-income countries. This dynamic process is expected to continue strongly as Austria simultaneously opens up to the reforming countries of eastern Europe and moves toward full EC membership. Part IV summarises the main points of the Survey and offers some policy conclusions.

I. Recent trends and projections to 1994

Expectations and outcomes

In 1992 the Austrian economy developed less favourably than expected in last year's Survey: according to preliminary estimates output growth has turned out slower and inflation higher (Table 1). Weaker-than-projected domestic demand mainly reflected a slower pace of gross fixed capital formation in response to falling profits and declining capacity utilisation in the industrial sector. In particular, machinery and equipment investment lost momentum given slackening export growth. With weaker-than-projected stockbuilding, final domestic demand growth fell short of projections by more than a percentage point. This was only to a limited extent offset by a less negative contribution from the real foreign balance as the slowdown of imports was more pronounced than that of exports. Inflation was higher than projected in terms of both the GDP and private consumption deflators. Wages increased more or less in line with expectations, but cost pressures were higher as economy-wide productivity growth was slower. Unemployment rose a little more than predicted and the current external account moved back into a small deficit.

Just as economic growth was lagging the expansion in other OECD countries during the early part of the 1987-1990 upswing, the subsequent deceleration of economic activity also set in later than generally elsewhere: GDP growth peaked at more than 4½ per cent in 1990, *i.e.* one to two years later than in most other Member countries. In 1991, the Austrian economy still expanded close to its potential as exports to Germany remained buoyant and the opening of the eastern European markets started to provide an increasingly important impulse to Austrian exports at a time when demand in most traditional markets slumped. The impact of the recessionary tendencies abroad on aggregate demand and output developments in 1992 has been mitigated by continued strong growth of

Table 1. Projections and outcomes
 Percentage change from previous year, 1983 prices

	1990	1991	1992	
			Outcome ¹	Projection ²
Private consumption	3.8	2.4	2.5	2.7
Public consumption	1.2	2.6	1.5	2.0
Gross fixed investment	5.8	4.9	2.3	4.0
Construction	6.3	5.7	5.0	4.0
Machinery and equipment	5.7	3.9	-1.0	4.0
Final domestic demand	3.7	3.1	2.3	3.0
Stockbuilding	0.8	0.2	-0.5	0.0
Total domestic demand	4.5	3.3	1.8	2.9
Exports	8.1	8.2	4.0	4.1
Imports	7.8	8.9	4.0	4.4
Foreign balance ³	0.1	-0.3	0.0	-0.1
GDP	4.6	3.0	1.8	2.8
Consumption deflator	3.2	3.3	4.0	3.7
GDP deflator	2.9	3.4	4.6	4.1
Total employment	1.9	2.5	1.3	0.8
Unemployment rate ⁴	3.3	3.4	4.0	3.8
Current balance of payments ⁵	1.2	-0.2	-0.2	-0.8

1. Österreichisches Institut für Wirtschaftsforschung (WIFO-institute) estimate as of December 1992.

2. OECD, *Economic Survey of Austria 1991/1992*, April 1992.

3. Changes in per cent of GDP from the previous year.

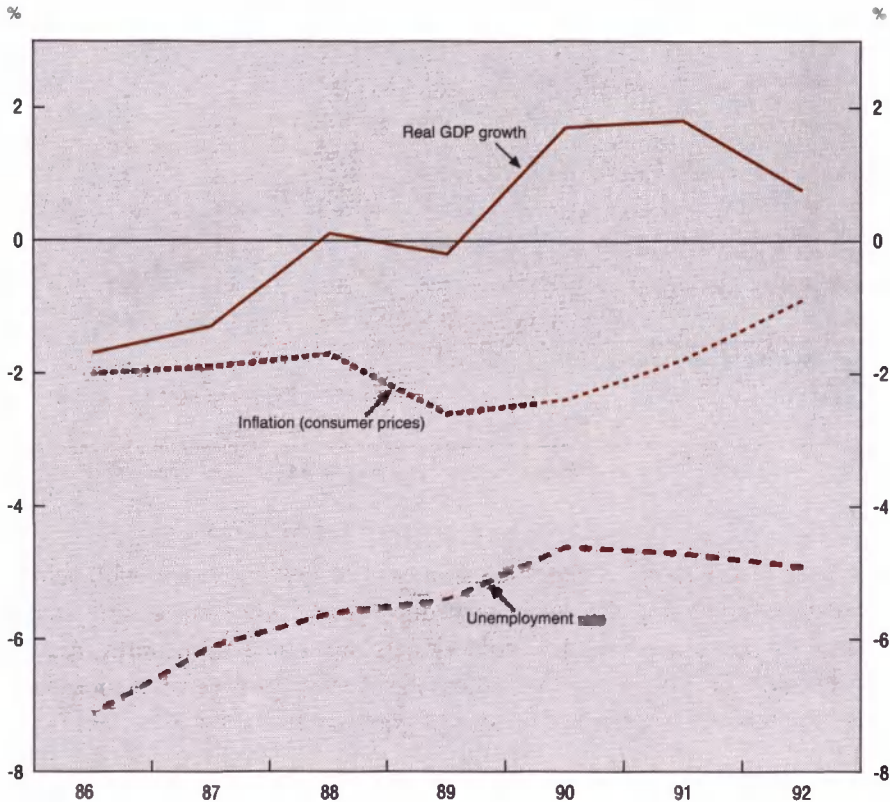
4. Microcensus, per cent.

5. OECD estimate in billion US dollars.

Source: OECD and WIFO-institute.

exports to the east and Germany, the apparent beginning of a downward adjustment of the household savings rate from abnormally high levels, and the late stage of the more than four-year old boom in construction activity. Thanks to this combination of demand and supply supporting factors, Austria has continued to perform rather better than most OECD Member countries, though with the differential narrowing in both output growth and inflation performance (Diagram 1). Unemployment has increased, though significantly less than in most other countries, remaining much below the European average.

Diagram 1 . RELATIVE ECONOMIC PERFORMANCE
Austria minus OECD Europe



Sources: OECD and WIFO-Institute.

Aggregate demand components

Private consumption was the mainstay of aggregate demand growth in 1992, maintaining most of its earlier momentum (Table 2). As already noted, household spending has been supported by a decline of the savings rate from unusually high levels (Diagram 2). In the second half of the 1980s household savings had been boosted by increases in real disposable incomes well above their longer-term average assisted by lower marginal tax rates embedded in the 1989 tax reform.

Table 2. Demand developments
 Percentage change from previous year, constant 1983 prices

	1981-87 ¹	1988	1989	1990	1991	1992 ²
Private consumption	2.2	3.3	2.8	3.8	2.4	2.5
Government consumption	1.5	0.3	0.8	1.2	2.6	1.5
Gross fixed investment	0.8	6.0	5.4	5.8	4.9	2.3
Construction	0.3	6.3	4.4	6.3	5.7	5.0
Machinery and equipment	1.4	5.6	7.2	5.7	3.9	-1.0
Final domestic demand	1.7	3.4	3.1	3.8	3.1	2.5
Stockbuilding ³	0.1	0.8	0.1	0.7	0.2	-0.2
Total domestic demand	1.8	4.2	3.1	4.5	3.3	2.0
Exports of goods and services	3.0	8.9	10.2	8.1	8.2	4.0
Total demand	2.6	5.5	5.4	5.6	4.8	2.5

1. Average annual rate of growth.

2. WIFO-estimate, December 1992.

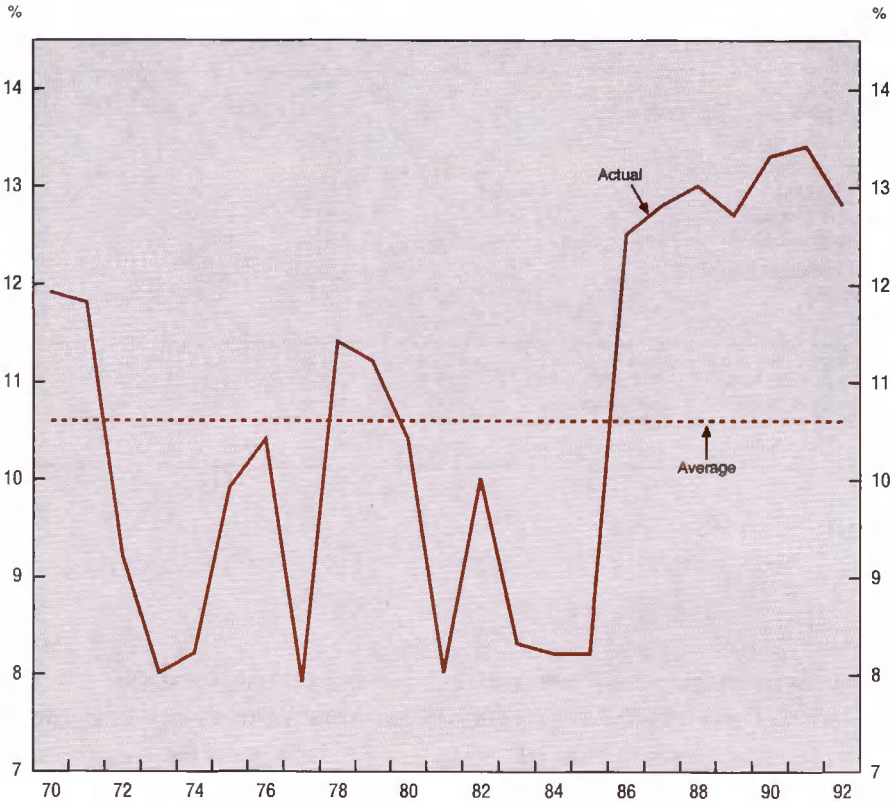
3. Changes as a per cent of GDP in the previous year.

Sources: OECD, *National Accounts*, and WIFO-institute.

By contrast, in 1992, real disposable incomes grew just 2 per cent, well below the 4 per cent average for the three preceding years. After slackening in 1991, purchases of consumer durables, notably cars and home furnishings, recovered rather strongly in 1992 notwithstanding the weaker growth of disposable real income. Public-sector current purchases of goods and services grew less fast than in 1991.

The expansion of gross fixed investment was entirely accounted for by the continued buoyancy of construction investment. Indeed, after having been rather subdued in the 1980s, construction activity has turned up strongly since 1988.¹ Factors which have sustained the construction boom include pent-up demand for housing and office space, a once-and-for-all release of subsidies, the extra housing needs due to high immigration and the large inflow of foreign labour which has helped to ease supply constraints in the construction sector. In contrast, business machinery and equipment investment reacted very quickly to weakening exports and export prospects in many traditional markets, and to a loss of cost competitiveness resulting from the effective exchange-rate appreciation. Indeed, as late as spring 1992, expectations were still rather bullish: according to the WIFO investment survey taken at that time, industrial investment in 1992 was expected to exceed the previous year's high level by some 3 per cent in real

Diagram 2 . HOUSEHOLD SAVINGS RATE



Sources: OECD and WIFO-Institute.

terms. In the event, there appears to have been stagnation. Even so, the overall investment-output ratio – one of the highest in Europe – increased further, thanks to the countervailing strength of construction investment.

Continuing strong increases in deliveries to eastern European countries² helped to cushion the effects of sluggish demand in traditional export markets, which, in 1992, expanded at their slowest rate since 1987. Market-share losses were incurred in OECD Europe (outside Germany) and in a number of non-European countries, the latter reflecting in part the weakness of the US dollar at

Table 3. Exports, market growth and competitiveness

Per cent change from previous year, 1983 prices

	1989	1990	1991	1992 ¹
Total exports of goods and services ²	10.2	7.1	8.2	4.0
Merchandise exports ³				
Volume growth	15.2	10.4	7.5	3.0
Market growth	9.4	8.0	6.1	2.5
Export performance	5.8	2.4	1.3	0.5
Relative unit labour costs ⁴	-3.2	1.3	-1.2	0.3
Effective exchange rate				
Nominal	-0.1	2.5	-0.2	1.8
Real	-1.5	1.2	-1.3	1.9

1. WIFO-institute and OECD estimates.

2. National accounts basis.

3. Customs basis, OECD calculations and estimates.

4. Manufacturing in a common currency.

Sources: OECD, *National Accounts*, and WIFO-institute.

the time. Even so, growth of total merchandise exports was somewhat faster than overall market growth (Table 3). Competition from major European events and recessionary tendencies abroad had a damping influence on the summer tourist season, making in particular for a more subdued growth of overnight stays and real expenditure by foreign tourists than in recent years. Overall, export volumes of goods and services expanded by some 4 per cent in 1992, only half of the rate of increase a year before.

Import volumes expanded less than normal import elasticities would have predicted bringing to a halt the rise of the import penetration ratio observed since 1988.³ While probably influenced by some statistical under-recording, the slowing of import growth was also due to a compositional shift of demand towards components with a typically low import content: building and construction, and domestic services. Indeed, as a result of this shift, overall growth of output held up relatively well in 1992 (1³/₄ per cent compared with 3 per cent in 1991) and was almost entirely accounted for by the expansion of private service sectors and construction activity. Manufacturing production started to fall in autumn 1992, and, taking the year as a whole, may have fallen by 1 per cent.

Table 4. Output, employment and productivity
Percentage change from previous year

	1989	1990	1991	1992 ¹
Whole economy				
Production	3.8	4.4	3.1	1.8
Employment	1.3	1.9	1.7	0.6
Productivity ²	2.4	2.7	1.2	1.1
Industry				
Production	5.8	7.7	2.3	1.0
Employment	0.7	1.5	-1.1	-3.2
Productivity ²	5.0	6.1	3.4	4.2
Non-industrial productivity ²	0.5	-0.5	0.0	-0.4

1. WIFO-institute, December 1992.

2. Output per employed.

Sources: OECD, *National Accounts*, and WIFO-institute.

Slowing productivity growth

The slowdown of economic activity has been accompanied by a decline in labour productivity growth (Table 4). In a large measure this decline corresponds to a normal cyclical pattern, where employment tends to be maintained when demand weakens.⁴ Thus in 1992, average output per employed person grew about 1¼ per cent (as in 1991), less than half the 1989-90 rate. In the current business cycle, productivity growth peaked two years before output growth as a rather ample supply of low-skilled and cheap labour has favoured the expansion of labour-intensive and low-productivity activities. In fact, productivity in the export- and import-competing industrial sector continued to rise at a remarkably fast rate reflecting major labour shedding, while average labour productivity in the domestically-oriented sectors declined.

Higher employment and unemployment

Mirroring productivity developments, employment growth has held up relatively well. Adjusted for the effect of improved maternity leave benefits,⁵ dependent employment increased by 1 per cent or half the rate recorded for 1991 (Table 5). Job creation was sustained at a high rate in tourism (+4 per cent) but

Table 5. **Demand and supply in the labour market**
Change from previous year in '000

	Average Annual Change 1985-88	1989	1990	1991	1992
Demand for labour					
Dependent employment ¹	16.5	51.8	66.4	68.7	58.0
<i>of which:</i>					
Foreigners	3.1	16.5	43.7	45.6	19.1
Self-employment	-7.1	-6.5	-5.0	-2.7	-3.0
Total	9.4	45.3	61.4	66.0	54.0
Supply of labour					
Foreigners	..	17.1	51.2	47.7	19.0
Migration	..	-5.0	-5.2	-3.0	1.9
Domestic	..	23.8	32.0	40.5	40.1
Total	16.4	35.8	78.0	85.2	61.0
Excess supply of labour					
Unemployment (change)	7.0	-9.5	16.6	19.2	7.0
Unemployment (level)	153.6	149.2	165.8	185.0	192.0
Registered unemployment (per cent of total dependent labour force)	5.2	5.0	5.4	5.8	5.9

1. Including dependent employees on maternity leave: + 10 000 in 1991 and + 37 000 in 1992.

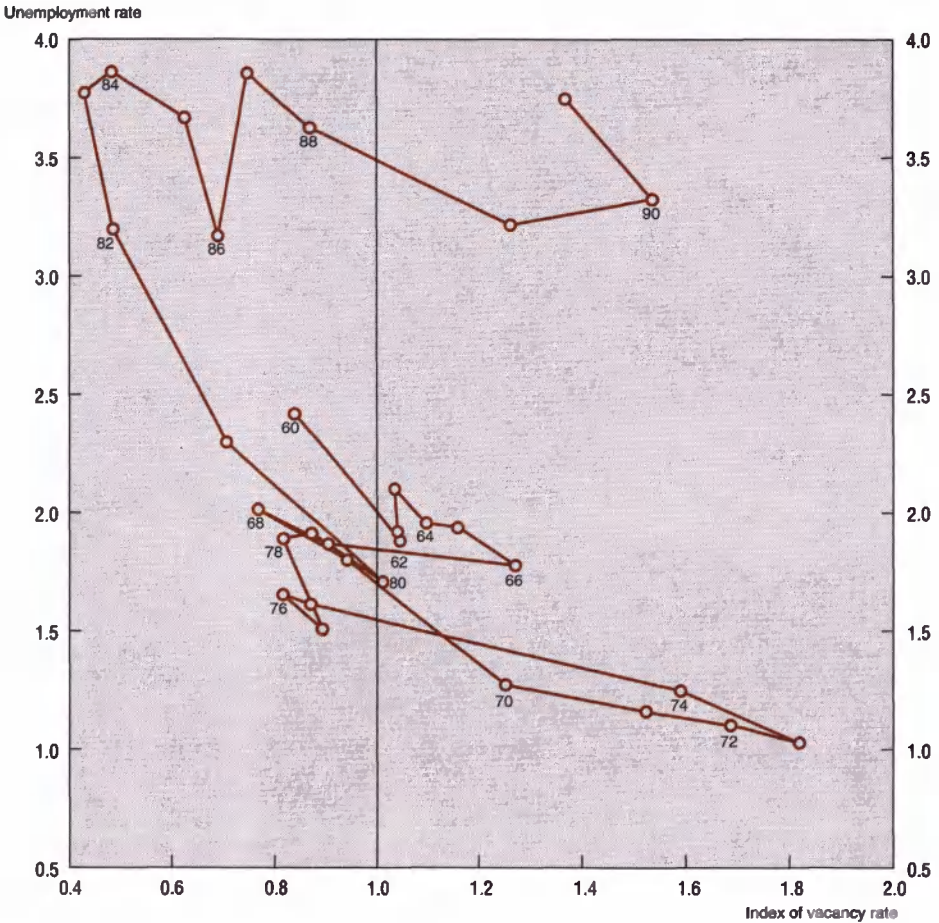
Source: WIFO-institute.

remained strong also in construction (+3½ per cent), private sector services (+2½ per cent) and in the public sector (+1¾ per cent). In the goods-producing sector employment was reduced by 2 per cent, reflecting in particular substantial job losses in industry. With self-employment falling, partly as a consequence of increased bankruptcies, overall employment increased by just ¾ per cent.

Following two years of rapid increases, labour supply growth moderated in 1992. In addition to the normal cyclical decline of participation rates, the administrative ceiling on foreign employment has become progressively more binding, resulting in a smaller (officially-recorded) inflow of foreign labour. Lower labour supply growth helped to keep the rise in registered unemployment at bay, but could not prevent a further worsening of the structure of unemployment. While the share of registered youth unemployment has declined since 1987 and is low by international comparison, the combined share of long-term unemployed (those

out of work for more than twelve months), and of those considered difficult to place in the labour market has now attained 55 per cent against 39 per cent five years ago.⁶ Long-term unemployment now accounts for more than two-thirds of the total time spent in joblessness, against a fifth in the early 1980s.⁷

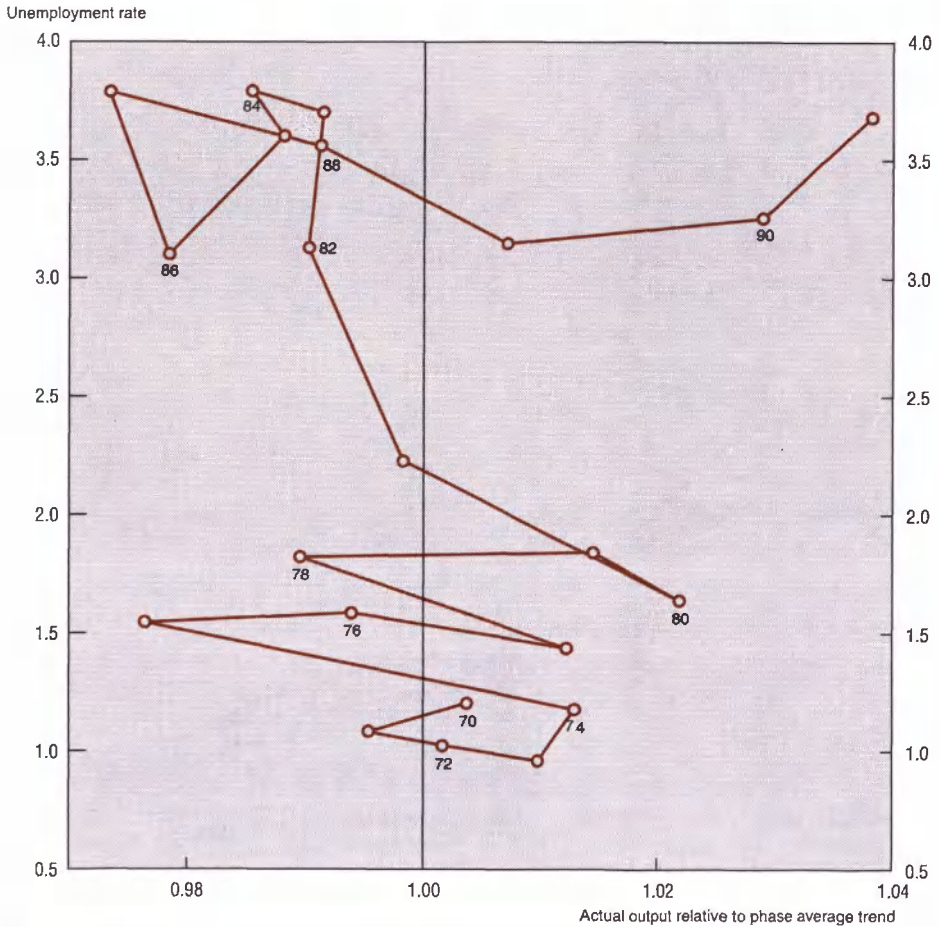
Diagram 3. UNEMPLOYMENT AND VACANCIES



Source: OECD.

Although output has risen twice as fast during the past five years as during the preceding quinquennium ($3\frac{1}{2}$ per cent per annum against $1\frac{3}{4}$ per cent), the rate of unemployment after a slight drop between 1987 and 1989 is now at a higher level than five years ago. This apparent stickiness of unemployment in the face of relatively fast growth and relatively high utilisation rates of plant capacity

Diagram 4 . UNEMPLOYMENT AND CAPACITY UTILISATION



Source: OECD.

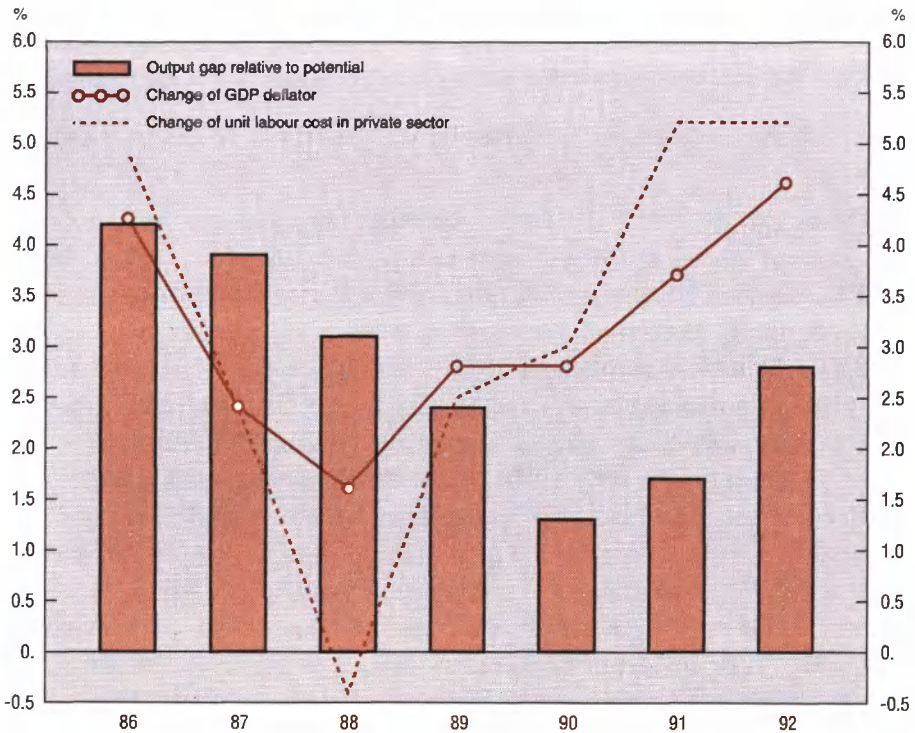
has given rise to concern about a progressive ratchetting-up of the structural component of unemployment. As can be seen from Diagram 3, which combines the developments of vacancy and unemployment rates, there has been a marked outward shift of the “Beveridge curve” in the late 1980s and the slope of the curve has flattened. Both regional and vocational mismatch unemployment appears to have increased, but improvements in the benefit system may also have contributed.

The impression of a trend rise in structural unemployment is corroborated by the upward moves of the non-accelerating wage rate of unemployment (the NAWRU indicator, see below) and the “Okun curve”, which juxtaposes the margins of slack, respectively recorded in labour and product markets (Diagram 4). On both these accounts, it appears that the structural part of unemployment, which is not amenable to expansionary macroeconomic policy, started to rise from very low levels already during the 1970s with particularly sharp increases occurring in the early 1980s. While the elimination of skill and regional mismatch-unemployment calls for greater labour mobility and flexibility in the wage structure, the apparent capital constraint on potential output and the commensurate level of “full-capacity” employment could be eased progressively by sustaining a high rate of gross additions to the capital stock while simultaneously curbing the secular updrift of labour costs relative to user costs of capital.

Higher cost-push inflation

Notwithstanding a widening gap between potential and actual output,⁸ and falling import prices, “home-made inflation” – the rise in the GDP deflator – accelerated in 1992 (Diagram 5). The degree of economic slack may, however, be overstated by the output gap measure. Indeed, a large part of the additional labour force in recent years has been low-skilled and the share of capital replacement in total investment may well, as suggested above, have increased over time. Moreover, with demand twisted towards domestically-oriented sectors, where competition is weaker, cost increases could more easily be passed on to prices, and lower import prices may not have been fully shifted to final users. However, as the scope for raising prices in foreign markets was extremely narrow, modest export-price increases (averaging 1 per cent) limited the rise in the GDP deflator

Diagram 5 . SOME INFLATION DETERMINANTS



Sources: OECD and WIFO-Institute.

to $4\frac{1}{2}$ per cent (compared with 4 per cent in 1991), holding it below the average rise of unit labour costs.

The consumer price index is estimated to have risen by 4 per cent in 1992, of which about $\frac{1}{2}$ percentage point was due to changes in indirect taxation⁹ (Table 6). While prices for domestically-produced goods advanced at much the same pace as in 1991 ($3\frac{1}{4}$ per cent), private service prices increased 5 per cent ($3\frac{3}{4}$ per cent in 1991) and rents rose some $6\frac{3}{4}$ per cent ($4\frac{3}{4}$ per cent in 1991). Import prices, on the other hand, fell by 4 per cent.

Table 6. Cost and price developments

Percentage change from previous year

	1981-87 ¹	1988	1989	1990	1991	1992 ²
Austria						
Private consumption deflator ³	3.5	1.7	2.6	3.2	3.4	4.0
GDP deflator	4.1	1.4	2.7	2.9	3.5	4.6
Productivity	1.2	3.7	2.4	2.7	1.3	1.3
Unit labour costs	3.4	-0.2	2.7	2.9	5.3	5.2
Import prices	0.1	1.8	3.4	0.3	2.0	-4.0
Germany⁴						
Private consumption deflator	2.2	1.4	3.1	2.6	3.8	4.8
GNP deflator	2.9	1.5	2.6	3.4	4.5	5.5
Productivity	1.7	3.2	2.6	1.6	1.3	1.0
Unit labour costs	2.1	0.3	0.7	2.9	4.6	5.0
Import prices	-0.9	1.9	4.8	-0.2	2.5	-4.0
OECD area						
Private consumption deflator	4.7	3.3	4.4	5.3	6.0	5.4
GDP deflator	4.7	3.4	4.3	5.8	5.9	5.3
Import prices	0.0	2.2	4.7	-0.7	0.5	0.2

1. Annual rate of growth.

2. OECD estimate.

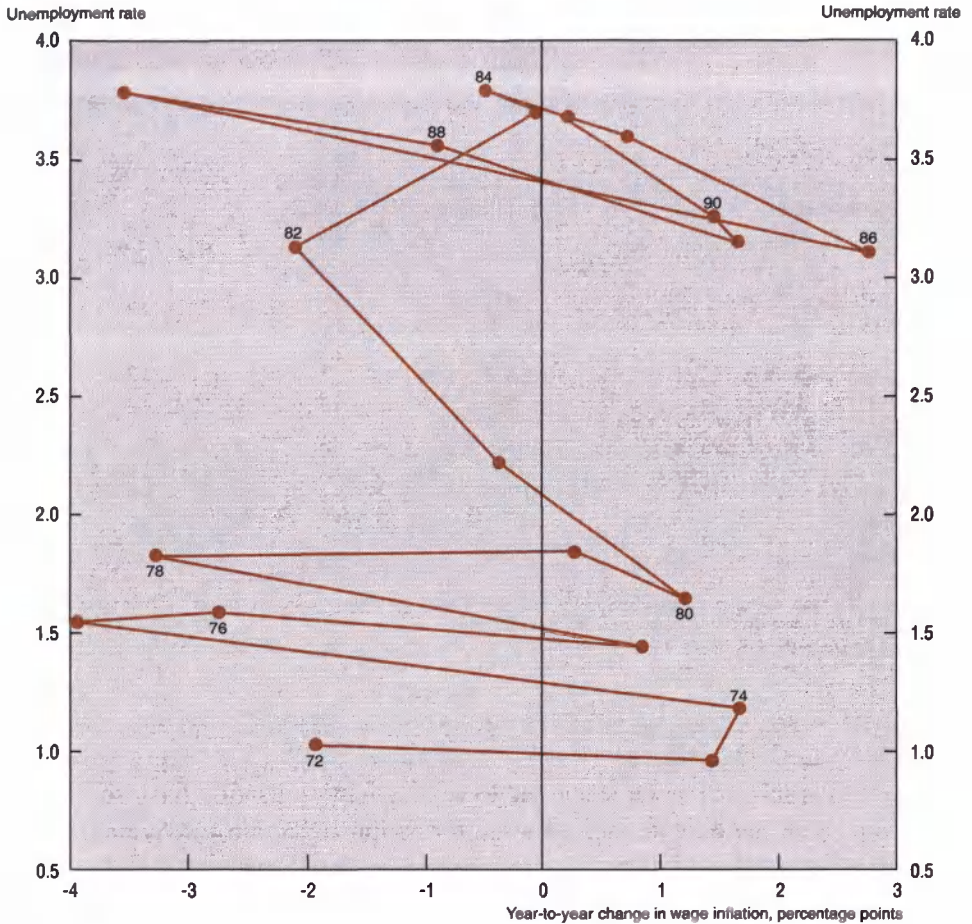
3. Includes the impact of higher indirect taxes estimated to have raised the level of consumer prices by 1/2 per cent.

4. Until 1991 the Federal Republic of Germany before unification.

Source: OECD, *National Accounts* and WIFO-institute.

Growing labour-market slack and lower capacity utilisation have so far had little impact on the overall pace of wage formation (Diagram 6). Average compensation per employee grew 5¾ per cent, down just ½ percentage point from 1991. Relatively strong wage and salary increases occurred in the construction sector and other sheltered industries. The absence of any significant wage moderation may in part reflect the usual time lag with which wages use to react to an easing of labour-market conditions, in particular when the profit situation is still rather comfortable in a number of key sectors. Austrian trade unions have a proven and steadfast record of being sensitive to the risk of pricing their members out of jobs, and there is no hard and fast evidence that “insider-outsider” features have become more pronounced in the Austrian labour market. However, the problem of long-term unemployment is more often seen to be related to inefficient and/or ineffective labour-market measures than to wage formation as such.¹⁰

Diagram 6. **UNEMPLOYMENT AND WAGE GROWTH**



Source: OECD.

Broad external balance and capital inflows

The current external account is estimated to have been in slight deficit in 1992, despite a stabilisation of the real foreign balance as well as terms-of-trade gains. After having reached 6 per cent of GDP in 1991, the trade deficit shrank in 1992 for the first time since 1987 (Table 7). This improvement reflected a

Table 7. **The current account of the balance of payments**

Schilling billion

	1988	1989	1990	1991	1992 Preliminary
Exports	383.2	429.3	466.1	479.0	487.6
Imports	451.4	514.7	556.2	591.9	593.9
Trade balance	-68.2	-85.4	-90.2	-112.9	-106.4
Investment income, net	-11.3	-12.3	-11.0	-17.6	-14.1
Non-factor services, net	84.8	107.0	121.1	137.9	134.8
Current balance	-2.9	3.3	13.6	0.8	-3.6
Current balance, dollar billion	-0.3	0.2	1.2	0.0	-0.3

Sources: WIFO-institute, Österreichische Nationalbank, *Statistische Monatshefte* and OECD.

narrowing of differential demand growth between home and abroad, and, as already noted, an improvement in the terms of trade. As a result, the coverage ratio of exports to imports climbed to 83 per cent after having dropped to just over 80 per cent in 1991.

Merchandise exports grew in the first eight months of 1992 (for which detailed trade statistics are available) by 3 per cent on a year-on-year basis, or about 1 percentage point less than in the same period of 1991. Exports to eastern European countries (accounting now for 11¼ per cent of total exports) were particularly buoyant while exports to EC countries rose no more than 3 per cent (compared with 4½ per cent in 1991). Over the same period, imports in schilling terms were stagnating compared with the same period a year earlier, reflecting lower import prices as well as the already mentioned shift of activity towards domestically-oriented sectors. While imports of machinery and equipment dropped in line with declining investment, there was a rebound in imports of motor vehicles. Eastern European countries are making their presence on the Austrian market increasingly felt although their share in total merchandise imports (7½ per cent in the first eight months of 1992) is still very small compared with that of EC countries (67¾ per cent).

The slightly reduced deficits in the trade and investment income balances were more than offset by broadly stable surpluses on tourism and others services. Notwithstanding important European events (in particular the Olympic games in

Barcelona and the World Exhibition in Seville), which attracted large numbers of international tourists, and recessionary tendencies abroad entailing a fall of overnight stays in Austria during the summer season, earnings from tourism rose by about 1 per cent in 1992. It is difficult to say to what extent these trends are already reflecting positive results of government efforts to promote “high-quality” tourism rather than capacity- and environment-burdening mass tourism.

After a small net capital inflow in 1991, there appears to have been a significant net import of capital in 1992, boosted by increased foreign demand for schilling-denominated securities. High direct investments abroad (probably around 1 per cent of GDP) marked a prolongation of the trend discernible in 1989 towards greater internationalisation of Austrian businesses, notably in the context of the ongoing European integration process (Table 8). Also, the build-up and the strengthening of commercial links with eastern Europe and the attraction of low labour costs have provided important incentives to joint ventures in these countries. Indeed, a third of all direct investments abroad were made in eastern European countries, with Hungary taking the lion’s share followed by the Czech and Slovak Federal Republic. In the early part of 1992, there was a strong net outflow of portfolio capital, as residents diversified their wealth positions to a far

Table 8. The capital account of the balance of payments¹

	Schilling billion		
	1990	1991	1992
Direct investment, net	-11.6	-10.8	-11.7
Inflow	7.3	4.2	9.8
Outflow	18.9	15.0	21.5
Bonds and credits	-12.5	-17.6	23.6
Inflow	25.0	33.9	64.1
Outflow	37.5	51.5	40.5
Other long-term capital	13.9	4.1	-6.1
Total long-term capital	-10.2	-24.4	5.7
Inflow	46.7	49.6	76.7
Outflow	56.9	74.0	71.1
Short-term capital, net	8.9	24.8	16.3

1. A minus indicates a net outflow.

Source: Österreichische Nationalbank, *Statistische Monatshefte*.

greater extent than foreigners bought schilling-denominated assets but this was subsequently reversed during the currency-unrest in the autumn.

Subdued economic prospects for 1993 and 1994

As usual, the OECD projections presented here are based on the technical assumptions of unchanged policies and exchange rates. Short-term market interest rates peaked around mid-1992 and had in early 1993 fallen back to 8 per cent. Over the same period, long-term rates declined by 2½ percentage point to 6¾ per cent. With the schilling pegged to the Deutschemmark, further interest rate declines are built into the projection as Austrian policy controlled interest rates will follow the expected declines in European rates (Table 9). On stated policy objectives, the stance of fiscal policy will remain restrictive over the projection period, measured by changes in the general government structural budget balance. Keeping exchange rates fixed at their mid-March 1993 levels implies an effective appreciation of about 2 per cent in both 1992 and 1993. The price of oil was \$18 per barrel in the second half of 1992 and is assumed to remain constant in real terms.

Table 9. **The external environment and policies**
Percentage change from previous year

	1991	1992	1993	1994
External environment				
World merchandise trade	2.6	4.3	3.9	5.6
Export markets for total goods	6.1	2.5	3.9	6.0
Effective exchange rate	-0.6	1.8	1.5	0.0
Relative unit labour cost, manufacturing, common currency	-5.0	0.4	1.4	0.0
Import prices, goods and services	3.4	-1.6	2.1	3.0
Oil prices (\$ per barrel)	18.3	17.4	18.2	18.6
Policy assumptions				
Short-term interest rate (per cent)	9.1	9.5	7.9	6.6
General government financial balance (per cent of GDP)	-2.2	-1.9	-1.6	-1.4

Source: OECD, *Economic Outlook 52*, December 1992.

The current wage round has been led by an agreement in the metal industry providing for a 4½ per cent increase in effective wages.¹¹ In addition, social security charges are widely expected to be raised. Productivity gains are projected to remain strong but with the effective appreciation of the schilling during 1992, relative unit labour costs in manufacturing, measured in a common currency, are projected to rise somewhat over the 1993-94 period (Diagram 7).

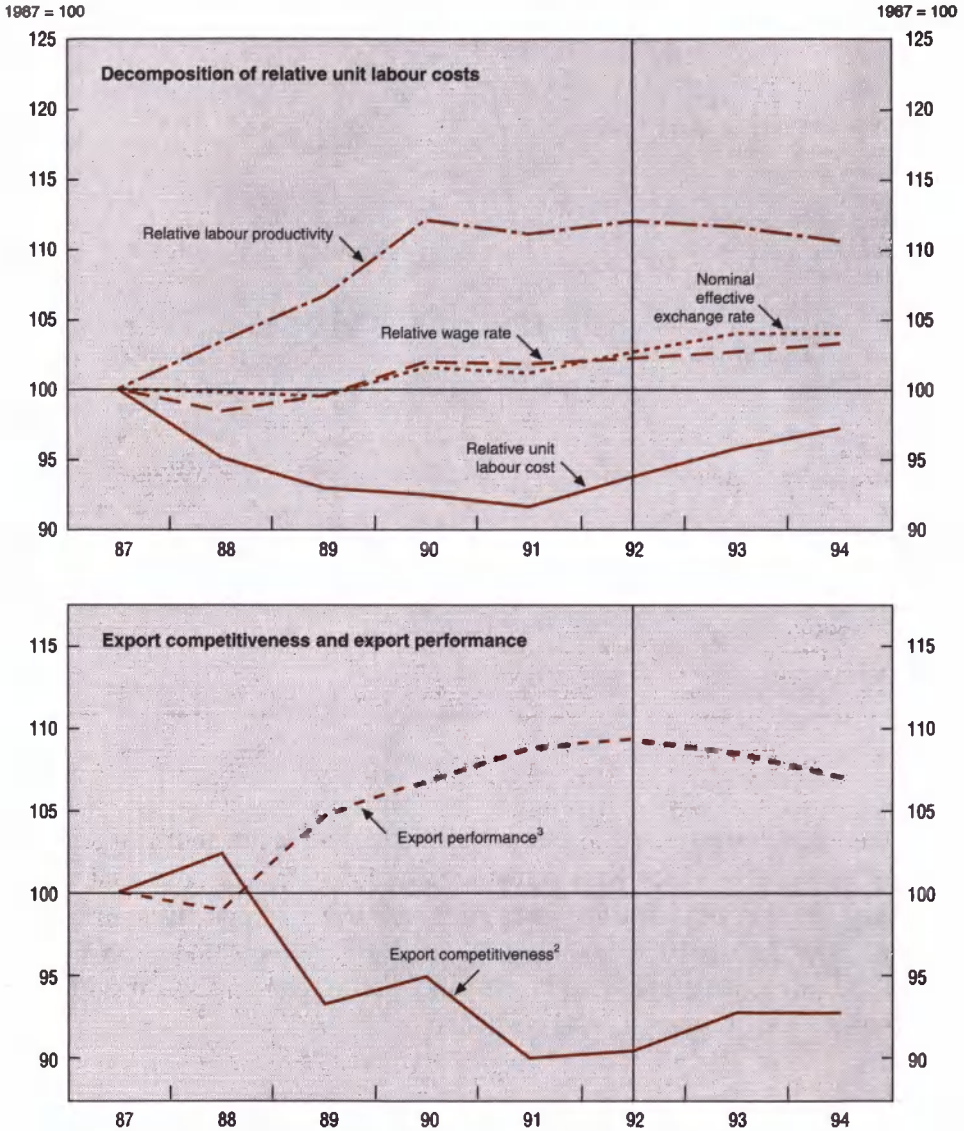
Against this background, stimuli to aggregate demand and output are likely to come primarily from the expected pick-up of world trade growth. After the marked slowdown in 1992, Austrian export markets are projected to grow by 3 per cent and 4 per cent in 1993 and 1994, respectively. Actual exports may expand less fast as the exchange-rate induced worsening of the competitive position in 1992 and 1993 could lead to overall market-share losses.

With weakening economic activity, a decline in employment can be expected. Combined with higher taxation, this will result in rather small advances in real disposable incomes. However, households may reduce their savings rate further thereby supporting growth of consumption. At the same time, reflecting on-going budget consolidation efforts, the slow growth of public consumption is likely to continue, with its share in GDP contracting further.

The business investment spending is projected to decline as the slack in capacity use may not be reduced before the end of the projection period. The dampening of construction activity, observed in the second half of 1992, is likely to extend into 1993, given both strong upward cost pressure and subdued income and employment prospects. In all, final domestic demand show little, if any, rise in 1993. With import elasticities returning to more normal values, the real foreign balance may deteriorate somewhat, leaving real GDP probably unchanged in 1993, before picking up to 1 to 2 per cent in 1994.

Inflation pressure is projected to ease gradually over the projection horizon. Unit labour costs increases should be damped by more moderate settlements and a pick-up of productivity growth. Thus, the rise in the GDP deflator may come down from 4.6 per cent in 1992 to around 3 per cent by 1994, helped by the disappearance of the indirect tax effects. The deceleration in consumer prices, though assisted by relatively stable import prices, could be less pronounced due to persistent strong buoyancy of prices in the more domestically-oriented sectors. The current account is set to stay broadly balanced during the projection period.

Diagram 7. **INTERNATIONAL COMPETITIVENESS AND EXPORT PERFORMANCE¹**



1. The vertical line indicates the end of the historical period and the beginning of the projection period.
 2. Relative export unit values of manufactured goods.
 3. The ratio of export volumes of manufactures to its export markets.
- Source: OECD, *Competitive indicators*.

Table 10. Projections to 1994
 Percentage change from previous year, 1983 prices

	1991	1992 ¹	1993 ¹	1994 ¹
Demand and output				
Private consumption	2.8	2.5	0.7	1.0
Government consumption	2.2	1.5	0.5	1.0
Gross fixed investment	5.8	2.3	-1.9	2.4
Construction	6.0	5.0	0.0	2.3
Machinery and equipment	5.5	-1.0	-4.5	2.6
Final domestic demand	3.4	2.3	0.0	1.4
Stockbuilding ²	0.1	-0.5	0.0	0.1
Total domestic demand	3.5	1.8	0.0	1.5
Exports of goods and services	8.1	4.0	1.3	2.0
Imports of goods and services	8.9	4.0	2.0	3.0
Foreign balance ²	-0.4	-0.0	-0.4	-0.5
GDP	3.1	1.8	-0.4	1.0
<i>Memorandum items:</i>				
Private consumption deflator	3.5	4.0	3.5	2.8
GDP price deflator	3.7	4.6	4.0	3.4
Total employment	1.8	1.3	-0.3	0.2
Unemployment rate ³	3.5	4.0	5.0	5.7
Current balance (\$US billion)	-0.1	-0.3	-0.1	-0.3

1. OECD estimate and projections.

2. Changes as a per cent of GDP in the previous year.

3. Microcensus

Sources: OECD, *National Accounts*, and WIFO-institute.

The main downside risk to this projection lies in the possibility of a further deterioration of the already weak economic situation in Europe in general and, in particular, in Germany. On the other hand, the threat of continued worsening labour-market developments could prompt greater wage moderation than allowed for in the projections, thus leading to better export performance and stronger investment, thereby strengthening real GDP.

II. Economic policies

Austria's economic policies are set in a medium-term framework, aiming to help provide a stable and predictable environment for private decision-makers. The overriding intermediate objective of maintaining the schilling-Deutschemark exchange rate stable leaves macroeconomic policies with limited room for manoeuvre, in particular monetary policy. With fiscal policy constrained by the complementary objective of reducing the federal budget deficit over the medium term, the responsibility for improved outcomes on the real side of the economy is firmly placed with microeconomic policies. In this domain, reform is orientated towards full participation in the European integration process.

Monetary and exchange rate policies

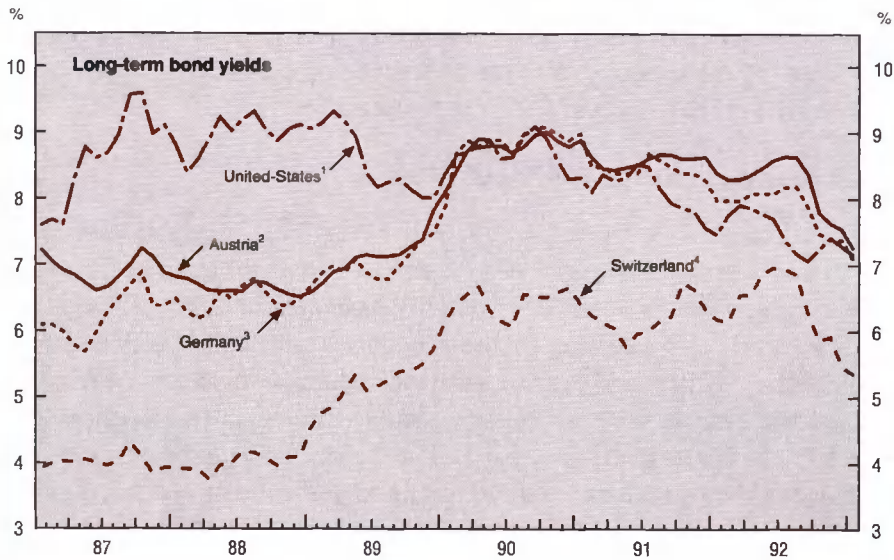
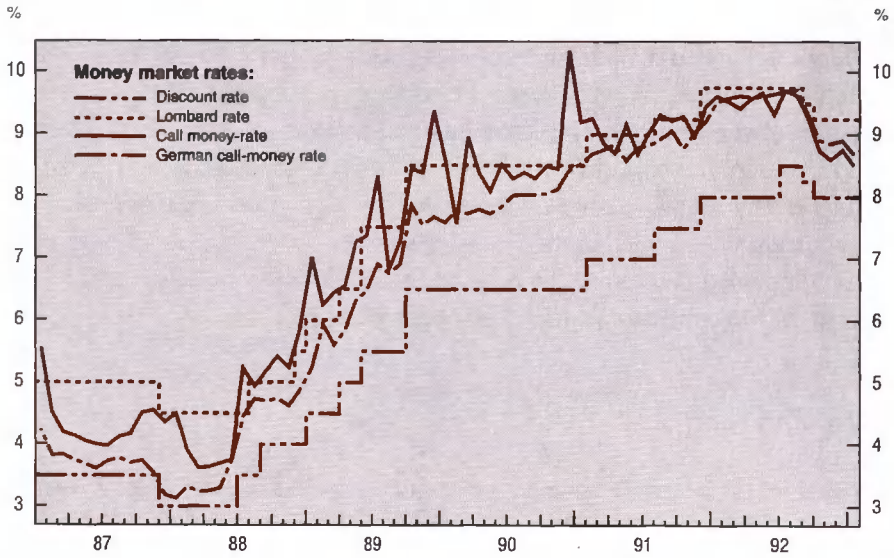
Given the firm government commitment of keeping the schilling closely pegged to the Deutschemark, on the one hand, and the now completed liberalisation of financial markets, on the other hand, policy-controlled interest rates as well as money and capital market rates are bound to follow closely financial developments abroad, particularly those in Germany. Consequently, movements in money and credit aggregates – which are determined by demand – play no role in policy formulation, serving only as indicators of economic developments. Consequently, the key financial variables on which to judge monetary conditions are the real exchange rate and its movements, the slope of the yield curve and real interest rates. Signals from these variables were not always mutually consistent in 1992: the effective schilling appreciation and the inverted yield curve pointed to a restrictive thrust of policy, while – using current inflation as a proxy for unobserved long-run inflation expectations – real long-term interest rates declined as nominal interest rates on Deutschemark bonds edged down and inflation in Austria picked up.

Reflecting the credibility of the hard-currency approach of monetary policy, neither significant interest rate differentials nor interventions were needed to keep the schilling exchange rate *vis-à-vis* the Deutschemark stable. Given the maintenance of comparatively healthy “economic fundamentals”, a small margin of manoeuvre in setting policy-controlled interest rates even opened up in 1991 and 1992. This margin was used in August 1991 and July 1992 when official interest rates were raised less than in Germany; and after policy-controlled rates had been aligned to their German counterparts in September 1992, an “autonomous” $\frac{1}{4}$ percentage point cut in October brought the Lombard and discount rates down to $9\frac{1}{4}$ per cent and 8 per cent, respectively. Liquidity problems of individual banks in meeting reserve requirements and the continuing large gap between monetary capital formation¹² and bank lending were smoothly countered by open-market operations and foreign-exchange swaps with commercial banks.¹³ Money-market rates remained close to German levels within the bands set by the Lombard and discount rates (Diagram 8). Following some decline in early 1992, money-market rates moved up in tandem with those in Germany until September 1992.

The European exchange-market turbulence in autumn 1992 hardly affected Austrian foreign-exchange and financial markets. During the two bouts of speculation against the “weaker” currencies participating in the ERM the schilling/Deutschemark rate moved within a very narrow band of 7.0325 to 7.0385. Official reserves swelled in September due to short-term capital inflows, but offsetting money-market operations kept short-term interest rates closely aligned to their German counterparts. With some softening of German money-market conditions, Austrian short-term interest rates eased again. By the end of 1992 the rate for overnight money had come down to $8\frac{1}{2}$ per cent but was still traded 50 basis points higher than for twelve-month money.

Long-term interest rates “see-sawed” through 1992, with a tendency for the positive differential *vis-à-vis* German secondary market yields to widen in the first half of the year. After peaking around the turn of the year 1991/92, long rates eased until late spring 1992. Rising short-term rates put downward pressure on bond prices until August, when foreign investors moved into schilling-denominated assets and bond yields resumed their gentle downward movement. By the end of 1992, 10-year government bond yields had come down to close to $7\frac{1}{2}$ per cent, some 30 basis points above the corresponding German rate.

Diagram 8. **SHORT- AND LONG-TERM INTEREST RATES**



1. US government bonds (composite over 10 years).
2. Public sector bonds.
3. 7-15 year public sector bonds.
4. Confederation bonds.

Sources: OECD, *Financial Statistics*; Österreichische Nationalbank and Deutsche Bundesbank.

High interest rates through most of 1992 together with weaker growth of economic activity have resulted in a lowering of demand for credit and money. Bank lending, which had risen at annual rates of 8 to 10 per cent over the preceding five years, slowed down to some 6 per cent in 1992. Lending to business has been particularly affected as a consequence of subdued investment demand. As a counterpart, the broad money supply (M3) has also expanded more moderately. The slowdown was accentuated by high transfers from schilling to foreign-currency accounts, as well as by stepped-up purchases of foreign-currency-denominated securities. Thus, after an acceleration to 8 per cent in 1991, growth of M3 dropped to around 5 per cent in 1992.

Fiscal policy

Relative to its medium-term target of reducing the federal government deficit to 2½ per cent of GDP by 1994, fiscal policy has been broadly on track: from a peak of about 5 per cent of GDP in 1986, the federal budget deficit on an administrative basis relative to GDP has been reduced to 3¼ per cent by 1992. But in view of the expected cyclical dampening of economic activity in 1993, only a small further reduction has been budgeted for 1993.

Budget developments in 1992 and 1993

The administrative federal deficit, after having been kept stable in absolute terms and on a gentle downward path in terms of GDP for three years, overshot the 1992 budget plan by some Sch 3 billion (¼ per cent of GDP) (Table 11). The unexpected cyclical weakening of the economy resulted in higher transfers to both the unemployment and pension insurance schemes, the latter due to a higher than expected number of workers taking early retirement. The larger inflow of refugees, over-runs of the teacher pay roll, and a sizable addition to reserves also contributed to the overall growth of expenditure. Reflecting lower bond yields in 1992, the servicing of debt was lower than allowed for. The weakening of demand, being essentially confined to investment and exports, had little effect on indirect tax revenue, which was, boosted by a faster-than-expected growth of nominal consumer outlays and higher petroleum levies. Thus, with stronger-than-projected increases in wage and business taxes, overall revenues increased broadly in line with initial estimates despite a shortfall of privatisation revenues

Table 11. **The Federal budget**
Schillings billion

	1990 Outturn	1991 Outturn	1992		1993 Budget Voted
			Budget	Preliminary outturn	
Administrative basis					
Revenue					
Net taxes and contributions	356.7	385.6	415.5	426.1	449.6
Trading income ¹	81.7	84.8	89.7	89.9	93.2
Asset sales ²	1.9	1.0	6.2	0.0	7.0
Other revenue	61.5	85.8	74.3	75.6	74.5
Total revenue	501.9	557.2	585.7	591.6	624.3
Expenditure					
Wages and salaries	126.9	137.7	144.8	146.5	153.4
Current expenditure on goods	58.2	60.5	60.4	61.7	67.3
Gross investment	26.6	25.4	28.7	26.8	28.2
Total spending on goods and services	211.7	223.6	233.9	235.0	248.9
Transfer payments ²	251.8	278.1	294.9	299.1	317.7
Interest payments	66.6	76.1	84.4	81.4	88.2
Other expenditure	34.6	42.1	35.6	42.6	33.6
Total expenditure	564.7	619.9	648.8	658.0	688.4
Net balance	-62.8	-62.7	-63.1	-66.3	-64.1
(in per cent of GDP)	-3.5	-3.3	-3.1	-3.2	-3.0
Cash basis					
Revenue	472.5	510.6	553.7	559.3	590.0
Expenditure	531.7	585.0	619.6	618.6	658.9
Net balance	-59.2	-74.4	-65.9	-59.3	-68.9
(in per cent of GDP)	-3.3	-3.9	-3.2	-2.9	-3.2

1. Income from federal enterprises.

2. Including pensions to civil servants.

Source: Submission from Ministry of Finance.

(Sch 7 billion or close to 1/2 per cent of GDP). Disregarding reserve movements and other purely financial transactions as well as shifts of accounts between different levels of administration gives an economically more meaningful picture of the federal government financial position. On this basis, the cash deficit has turned out somewhat lower in 1992 than on an administrative basis (2.9 per cent

compared to 3.2 per cent), and, contrary to the latter, lower than in 1991 (3.9 per cent).

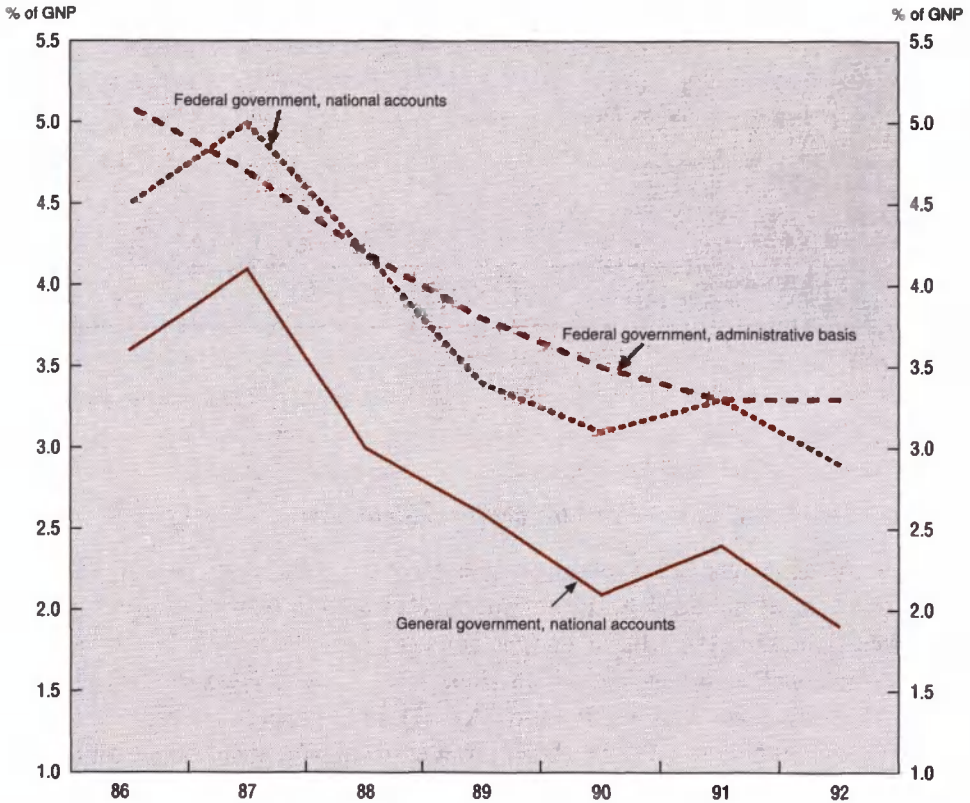
For 1993, the initial federal budget proposal was for a resumption of the consolidation process, with the deficit declining from Sch 64 to 59 billion. However, when the budget was finally voted in mid-December, the deficit was estimated at Sch 64 billion, just over 3 per cent of GDP, reflecting the budgetary consequences of a weaker outlook for economic activity. Expenditures are projected to increase less fast than nominal output,¹⁴ reducing the outlays to GDP ratio from 32.3 per cent to 32.1 per cent in 1993. Slower growth outlays reflect the effects of a number of structural reforms actually implemented or in the process of being so.¹⁵ These have also created room for some modest measures to support demand in 1993, notable through higher government investment, tax incentives to business investment and better export credit conditions. Revenues are expected to be supported by a rise in the capital income tax rate from 10 to 22 per cent¹⁶ and by higher proceeds from privatisation.

The stance of fiscal policy

While the federal budget dominates the political debate, a broader concept of public finance – the general government account on a national accounts basis – covering the federal, state and local governments, and the social security system, provides a better measure of the influence of public sector activity on the economy (Diagram 9). Steady reductions in the general government financial deficit from 1987 to 1990 were followed by a worsening of this financial balance in 1991, reflecting rapid rises in transfers, government consumption and interest costs. Despite weaker economic activity since then, a moderate deficit-reduction is estimated to have taken place in 1992, mainly because of higher indirect taxation. By international comparison, the general government deficit in terms of GDP has become one of the lowest in the OECD area in recent years.

As budgetary outcomes reflect discretionary spending and taxation decisions as well as the effects of changes in economic activity, the underlying stance of fiscal policy is best judged on the basis of budgetary data which exclude the effects of “automatic stabilisers”. One such measure is the cyclically-adjusted balance, where spending and revenues are determined by their long-run elasticities in relation to potential output growth. Judging from movements in this balance, the stance of fiscal policy was broadly neutral between 1987 and 1991,

Diagram 9 . FEDERAL AND GENERAL GOVERNMENT FINANCIAL DEFICITS



Source: Ministry of Finance.

in part due to the fact that the 1989 tax reform “used up” earlier improvements in the underlying of “structural” balance. After a lapse in 1991, fiscal policy was tightened significantly only in 1992 (Table 12). Nevertheless the largest part of the recorded improvement in the actual balance can be attributed to the absorption of economic slack prior to the recent cyclical slowdown.

Table 12. **The stance of fiscal policy**
 Surplus or improvement of balances or vice versa as a percentage of nominal GDP

	1987	1988	1989	1990	1991	1992	1993
General government net lending	-4.3	-3.0	-2.8	-2.0	-2.1	-2.0	-2.2
Change in general government net lending	-0.6	1.2	0.3	0.8	-0.1	0.1	-0.2
<i>of which:</i>							
Due to automatic stabilisers	-0.3	1.0	0.4	0.7	0.1	-0.4	-0.7
Change in structural balance	-0.3	0.2	-0.2	0.1	-0.2	0.6	0.5
<i>Memorandum item:</i>							
Per cent change in GDP-gap ¹	-0.3	-0.8	-0.7	-1.1	0.4	1.2	1.2

1. Estimate by the WIFO-institute.

Sources: OECD, *National Accounts*, and OECD calculations and projections.

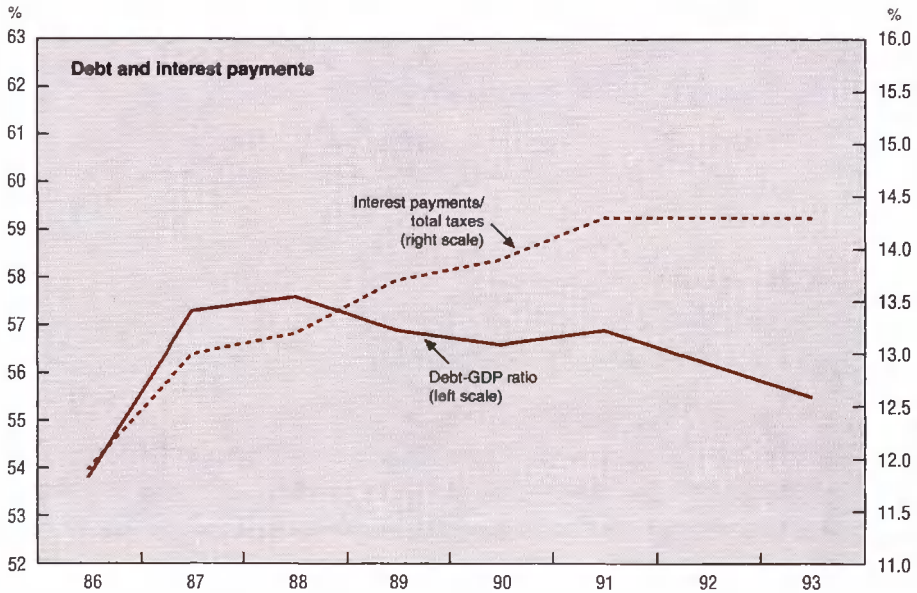
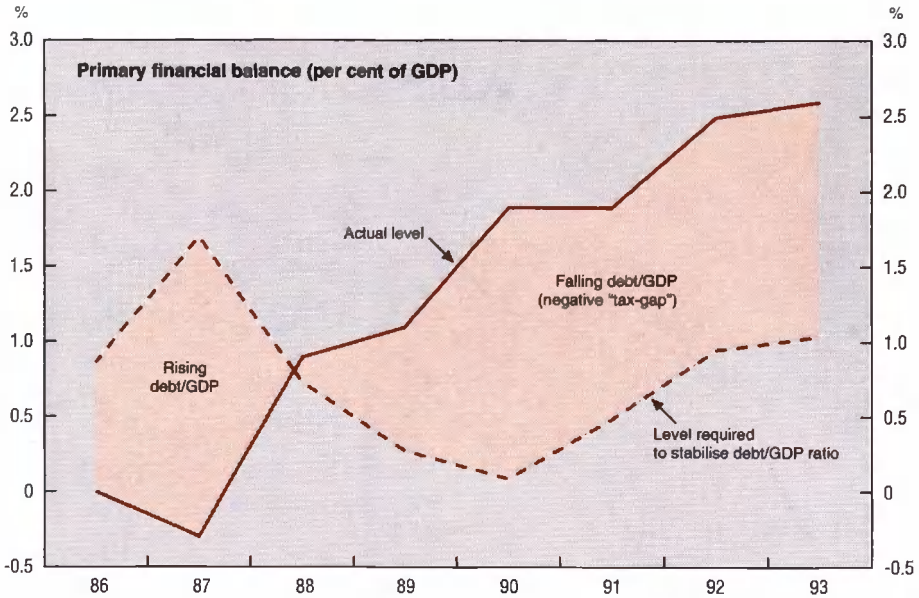
Fiscal consolidation and public sector indebtedness

Heavy government borrowing in the early part of the 1980s had led to a rapid build-up of public debt, prompting a reorientation of medium-term policy priorities (Diagram 10). Initial budget consolidation succeeded in moving the primary balance¹⁷ into surplus, which since 1988 has exceeded the level necessary to stabilise the debt-GDP ratio. As a result, general government gross indebtedness relative to GDP has been brought down to around 55 per cent close to the average of OECD countries.

The relative debt reduction has mainly occurred on junior government levels and, since 1990, has been accompanied by a shift in the nature of consolidation away from spending restraint towards higher taxation. State and local governments have been in small surpluses since 1987, allowing them to cut back their total outstanding debt from some 10 per cent of GDP in 1987 to 7 per cent in 1992. At the federal government level, the primary surplus was insufficient in the early consolidation period to arrest the rise in indebtedness. Between 1987 and 1990 the federal government gross debt-GDP ratio went up from 47 to 48 per cent but stabilised thereafter with a rising share of new indebtedness coming from off-budget institutions¹⁸ (Diagram 11).

As noted above, budget consolidation was initially achieved through spending restraint: federal outlays on a cash basis as a ratio to GDP fell from 33 per

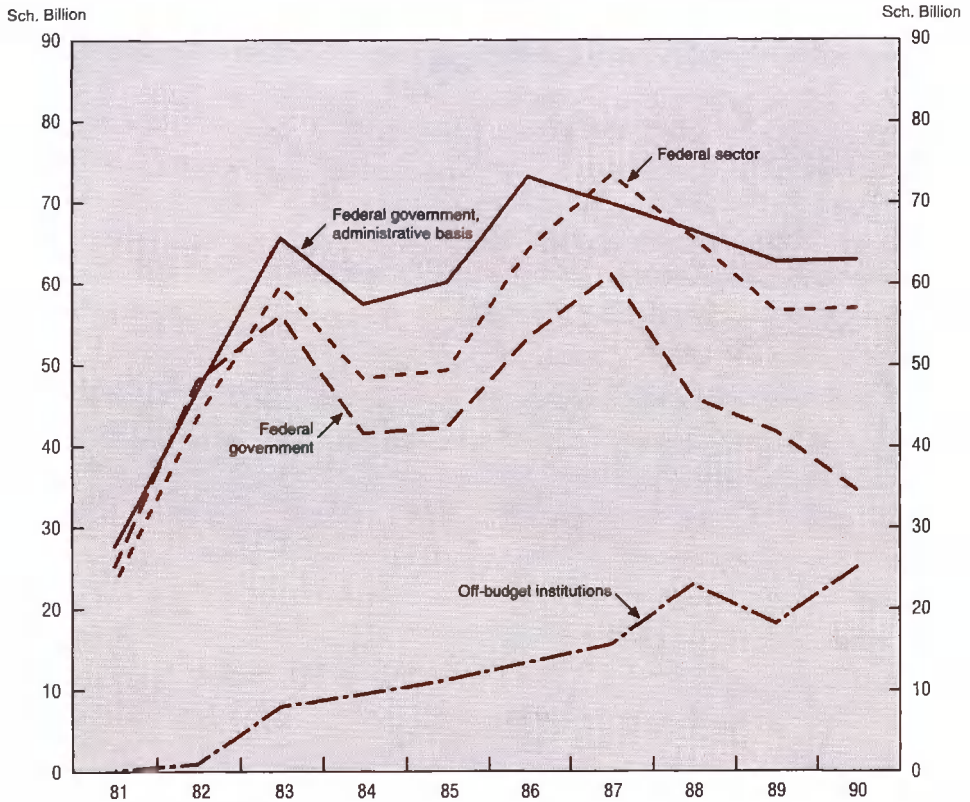
Diagram 10. GENERAL GOVERNMENT
PRIMARY FINANCIAL BALANCE AND INDEBTEDNESS



Sources: OECD and Ministry of Finance.

Diagram 11. DEFICITS OF THE FEDERAL GOVERNMENT AND OFF-BUDGET INSTITUTIONS

National accounts basis



Source: Österreichisches Statistisches Zentralamt.

cent in 1986 to 30 per cent in 1990. Over the same period the revenue ratio came down slightly from 28 per cent to 27 per cent as a result of the 1989 tax reform. However, during the past two years, these trends have been revised with the spending ratio remaining broadly constant and the revenue ratio tending to move up. The latter reflects buoyant business tax revenues and fiscal drag.

The 1992-95 federal government budget projection – based on existing legislation and budgetary commitments – puts in stark relief the need for reinstat-

ing spending restraint as the major instrument in the consolidation strategy. Even under fairly optimistic assumptions about the real economy the deficit is projected to rise to 4 per cent of GDP with the level of outstanding federal debt reaching 55 per cent in terms of GDP.¹⁹ Upward spending momentum is maintained through continued buoyancy of the federal wage bill, social security transfers and interest payments, while subsidies and investment spending are projected to grow less fast than total outlays. On the revenue side, tax receipts constitute the main driving force as other sources of government income and privatisation proceeds are expected to lose relative importance.

Structural policy update

Austria was a latecomer in adopting an explicit strategy of structural policy reform. After seven years of modest output growth and employment creation, the government in 1987 embarked on a comprehensive microeconomic reform programme to improve the efficiency of the Austrian economy and, hence, its international competitiveness. After the successful completion of the 1989 tax reform and the restructuring and partial privatisation of state-owned enterprises renewed impetus to reform has arisen from the prospective participation in the European Economic Area and expected EC membership.

Structural policy measures over the last three years have mainly aimed at improving the functioning of markets:

Labour markets. The continued rise in unemployment despite relatively fast economic growth has prompted the authorities to place a global ceiling on the employment of foreign workers²⁰ and to prohibit employers from substituting foreign for older workers. At the same time, active labour-market policies have also been emphasised: increased appropriations have been made available to strengthen the efficiency of labour placement offices (a monopoly of the Labour Market Administration) and the system of "early warnings" in the case of mass lay-offs has been introduced in 1993. Unemployment benefits have continuously been adjusted to net earnings, maintaining the replacement ratio on a net-of-tax basis at around 60 per cent of previous earnings. The entitlement period has remained unchanged.²¹ Benefits and leave conditions have been improved significantly for new parents

(male as well as female). A special bonus was introduced in 1991 for those workers and employees who do not retire before normal retirement age.

Financial markets. The last foreign exchange regulations were abolished in November 1991 and the capital market modernised with the new Capital Market Law in January 1992. A key objective of the law is to raise the absorptive capacity of the capital market: the issue-authorisation requirement has been abolished, while disclosure requirements and investor protection have been tightened. New issuing procedures have been introduced for government bonds, with fixed quotas being replaced by competitive yield tenders, and a market-maker system established. With the Austrian Futures and Options exchange opening in 1991, these measures have significantly widened the range of instruments available for investors and savers. As a spin-off of the Capital Market Law, minimum reserve requirements were adjusted in February 1992. The Banking Law, the Pension Funds Law and the Insurance Act have all been redrafted in conformity with EC directives.

Taxation. The 1991-1994 tax programme is more modest in financial terms than that for the previous legislative period which saw a major income tax reform lowering both marginal and average taxation. Apart from bringing the tax system in conformity with EC directives, the main priorities for the current legislative period are to achieve greater efficiency and simplification of the tax system, and to reduce tax-avoidance while promoting environmental protection. The top VAT rate (32 per cent on luxury vehicles) has been replaced by a special registration levy and in the 1993 budget, the capital income tax rate was raised from 10 to 22 per cent, as a first step of a broader tax reform planned to become effective in 1994. Company taxation has also been simplified, also with the view to providing incentives for firms to seek to establish more efficient company structures. Moreover the tax was changed from being a withholding tax which would be credited against final income tax liabilities to becoming a final taxation. At the same time the property and inheritance taxes were abolished.

Public spending. After a pause in 1991, the budget consolidation process resumed in 1992. To continue this process several key areas to achieve budget economies have been identified: agricultural subsidies; the administration of public property;²² railways and postal systems; labour-market administration; general administrative reform; social security and financial

revenue sharing. Federal subsidy programmes relating to the non-agricultural activities have been made EC-conforming, and some technological promotion programmes will not be renewed after 1994. The national railways have been separated from the federal government administration in order to enhance efficiency, and will be financially autonomous from 1994. The reform of the administration and the public remuneration system is still under negotiation. The adjustment of pensions will now be based on net rather than gross wage developments.

Agricultural policy. A first step has been made in creating a more market-oriented framework for agricultural policy, moving from a "generalised" price support scheme to greater reliance on direct income support. Measures to this end cover all the important sectors of Austrian agricultural production.²³

Privatisation. Following the sale of the mint to the National Bank in 1989, active privatisation virtually ceased in 1991 and 1992. However, the federal participation in important companies has been allowed to decline below the earlier critical limit of 51 per cent through issuance of additional equity to the private market. Privatisation of parts of Austrian Industries is now envisaged.

Industrial restructuring. The restructuring programme for the nationalised industries has continued with further reductions in personnel. The internationalisation aim has also been rigorously pursued, with a third of all Austrian foreign investment in 1991 being made by Austrian Industries (the state-holding company). The collapse of the world markets for steel, steel products and chemicals, and losses expected for 1992 has raised concerns that the restructuring process has not gone far enough. Restructuring pressure is also arising from the opening up of trade with the east-European countries, with traditional sectors (non-ferrous metals, timber, cement, textiles and clothing, iron and steel) facing severe cost competition. This has already given rise to claims for increased trade protection, despite expectations that Austria should be a net gainer in terms of employment from increased trade with the Eastern European countries.²⁴

Deregulation. Various measures have been taken to enhance competition notably in the retail sector. The reform of the Price Law has lifted adminis-

trative controls on a substantial range of goods, leaving only energy and pharmaceutical goods subject to direct price regulation.²⁵

Housing policy. The responsibility for housing policy has been transferred from the central to the Länder governments, but little has been changed in the basic structure of subsidisation, which is characterised by “object subsidisation” and earmarked sources of revenue. Rent regulation remains pervasive, distorting the housing market and reducing labour-market mobility.²⁶

Environmental policies. In accordance with widely-accepted means of implementing environmental policies, the “polluter pays principle” has been embodied in a number of ordinances. Several voluntary agreements designed to limit environmental damage have been or are in the process of being signed with particular industries. In addition, monitoring capacities and measures of reducing pollution have been strengthened by the obligation of firms applying for production licenses to present analysis of wastes to be expected, and a strategy for their prevention, re-use and treatment. Emissions of Carbon-dioxide are not yet taxed in Austria.

III. International openness and economic performance

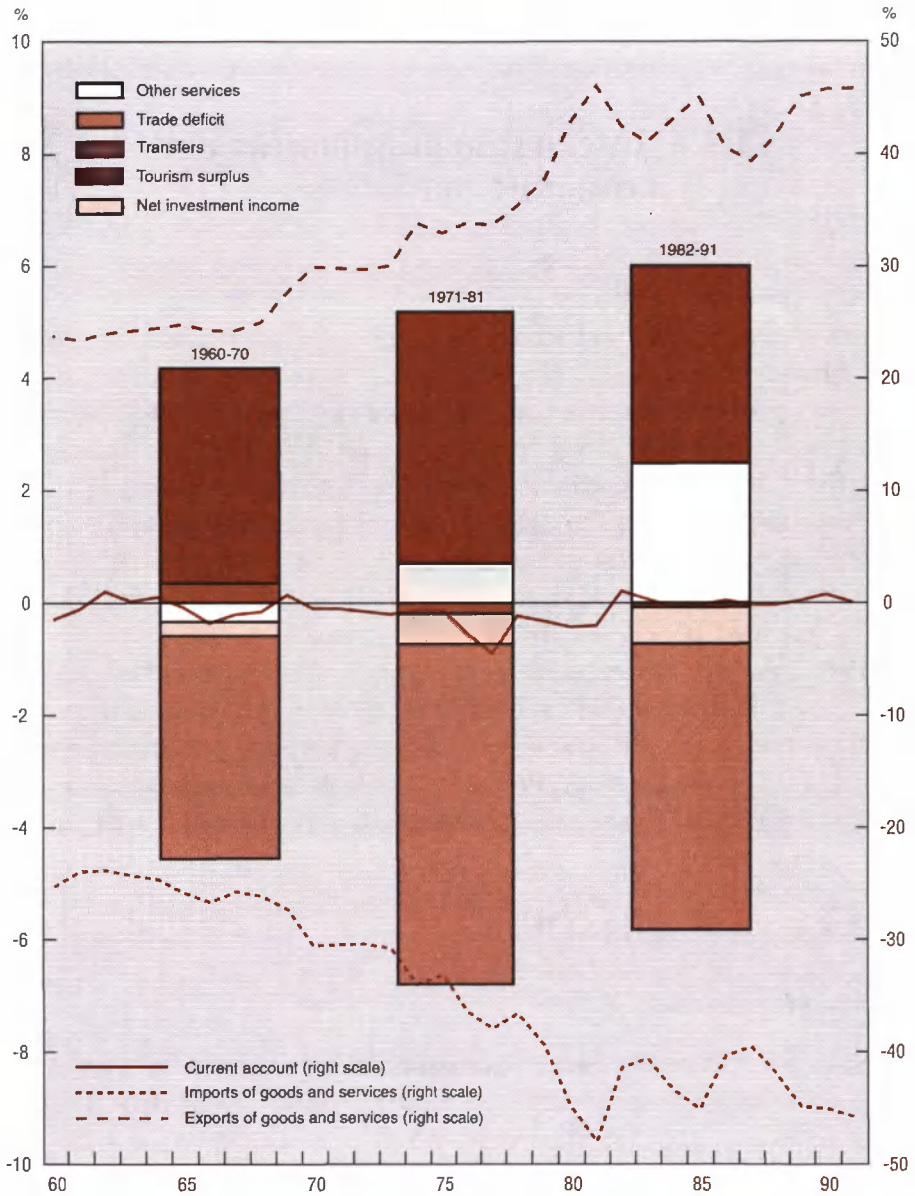
As a small open economy, Austria has greatly benefited from international flows of output, capital, and labour in its drive for growth and development. Since the early 1950s, Austria has followed a trade-oriented growth strategy and progressively liberalised its import and capital flow regimes. The pressures of international competition have favoured a rapid shift of resources into high-productivity lines of production, resulting in a pace of technological progress above the OECD average. The access to foreign markets has allowed economies of scale, degrees of specialisation, and choices for consumers and investors which otherwise would have been impossible to realise in the small domestic market. Not least because of its increasing international integration since the late 1940s, Austria has experienced an historically unprecedented period of strong growth in living standards. It has thus moved from having an income level far below most developed countries in the early post-war period to the middle ranks of OECD countries today. Productivity, which had initially been one of the lowest in the OECD, is now one of the highest in the open industrial sectors.

Foreign sector overview: 1960 to 1992

Balance of payments

Since 1960, Austria's current external account has generally been close to balance, with surpluses and deficits staying within 1 per cent of GDP. Typically, a large trade deficit, of the order of 4 to 5 per cent of GDP, and a deficit on investment income, have been offset by a large surplus on tourism and other services (Diagram 12). This reflected the persistence of a very high domestic savings rate, which allowed Austria to maintain one of the highest investment

Diagram 12. **THE CURRENT ACCOUNT**
As per cent of GDP



Source: OECD.

rates in the OECD without any significant recourse to foreign borrowing. The only important departure from broad external balance occurred in the years 1973-81, when current-account deficits averaged about 2 per cent of GDP. This reflected the financial crisis in the problem-ridden large state industrial sector, the 1973 and 1979 oil price shocks, and the subsequent use of fiscal stimulus to sustain demand and employment. Rationalisation and partial privatisation of the state enterprise sector, structural change, and increased access to markets via free-trade agreements between EFTA and the EC, subsequently helped to rebalance the external accounts. More recently, the Austrian current account benefited greatly from the German unification boom, which helped to offset the effects of general world demand sluggishness in the recent business cycle.

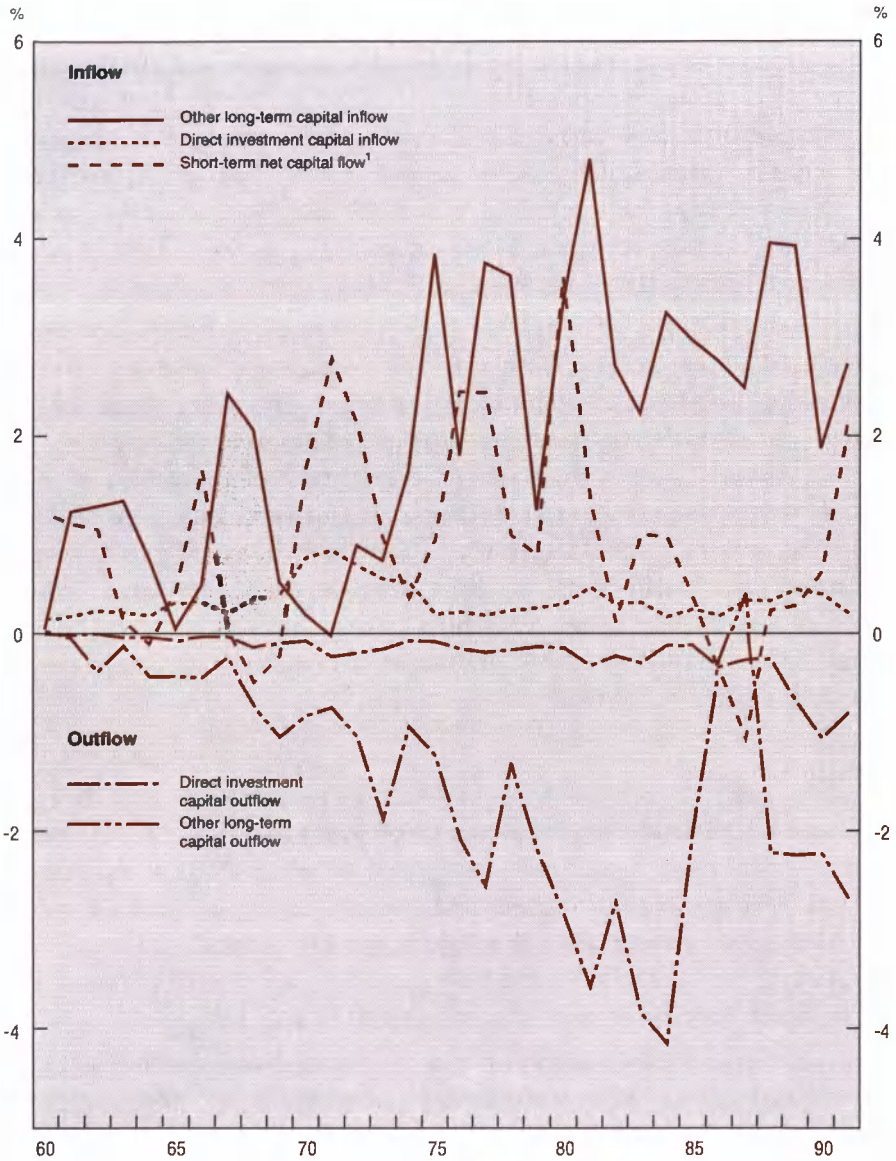
With the current account in approximate balance for most of the time, an accompanying small net capital inflow (including errors and omissions) has permitted a build-up of relatively comfortable foreign-exchange reserves, which during the period of high current-account deficits had been protected by a commensurate rise in net capital imports (Diagram 13). Historically there has been a net direct investment inflow, due mainly to German firms locating in Austria, and a net outflow on portfolio capital. Recently, there has been a shift to net inflow on portfolio capital attracted by relatively high domestic interest rates, and an offsetting shift to net outflow on direct investment associated with integration into Europe and opening up of the East.

Merchandise trade

Between 1960 and 1991, the growth of merchandise trade exceeded the growth of world trade by a small margin and of nominal GDP by somewhat more.²⁷ In 1991, the ratio of merchandise exports and imports to GDP stood at 25 and 30 per cent, respectively. This, together with high ratios also for services, makes Austria, together with Switzerland, the most open of EFTA countries, and (apart from the Benelux countries) of the OECD (Table 13).

The commodity composition of trade has shifted over time from a large proportion of trade in basic raw materials and semi-finished goods to a much higher share of trade in manufactures (Table 14). This development paralleled the global shift from trade determined by relative factor endowments to greater intra-industry trade among countries with similar resource use. The multilateral opening of markets has made it possible to exploit the benefits of both economies of

Diagram 13. **CAPITAL FLOWS**
As per cent of GDP



1. Includes errors and omissions.

Source: OECD.

Table 13. Openness of selected OECD countries

	Goods and services trade as percentage of GDP in 1991				Annual percentage change 1960-91			
	Goods exports	Service exports	Goods imports	Service imports	Goods exports	Service exports	Goods imports	Service imports
Belgium-Luxembourg ¹	55.7	53.6	55.5	50.7	11.6	16.6	11.6	16.7
Netherlands	42.7	20.5	38.4	19.9	11.7	12.9	11.2	14.5
Norway	32.1	16.1	23.9	18.1	12.5	9.5	9.8	11.6
Switzerland	27.3	20.2	28.2	13.8	11.7	13.6	11.5	14.7
Austria	25.0	21.3	29.7	16.7	12.2	16.3	12.2	17.3
Sweden	23.0	10.9	20.5	14.0	10.4	11.9	9.8	13.1
Germany ²	22.2	8.2	20.8	8.7	11.9	13.2	12.4	13.3
Finland	18.1	5.6	16.2	11.9	10.6	13.7	10.2	15.6

1. 1990 data.

2. Includes Eastern Germany from 1991.

Source: OECD, *Balance of payments statistics*.

scale and product differentiation, as well as promoting R&D-based activities. Thus, in the early years of liberalised trade, Austria was relatively strong in exports reflecting its natural endowments, such as forestry products. Over time, it developed a greater advantage in finished processed goods, such as machinery and chemicals. Within manufactures, the share of investment goods has consist-

Table 14. Commodity composition of merchandise trade

Per cent of total

	Exports (fob)			Imports (fob)		
	1960	1973	1991	1960	1973	1991
Food	4.4	4.4	3.1	13.7	7.6	4.6
Raw materials	19.0	9.9	4.3	14.5	8.4	4.3
Energy	2.1	2.2	1.0	9.0	7.5	6.0
Semi-finished goods	28.9	21.6	16.2	18.8	18.1	13.2
Manufactures	45.5	62.0	75.3	44.0	58.3	71.9
<i>of which:</i>						
Consumer goods	-	21.8	26.0	-	19.5	23.2
Investment goods	-	40.2	49.3	-	38.8	48.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: OECD, *Foreign trade by commodities*.

ently been about twice as high as that of consumer goods on both exports and imports, and now account for half of all merchandise trade. Another quarter of total imports represents intermediate-goods inputs into domestic production. With much of these imports of investment and intermediate goods going into the foreign-trade-exposed sectors, import tariffs or quotas represent an implicit tax also on export- and import-competing industries.

Trade is geographically concentrated, with three-quarters currently taking place with other European countries, and almost half with Germany alone (Table 15). This reflects the impact of regional free trade agreements as well as the natural factors of proximity and language. On the export side, such concentration has grown over time. Large inflows of direct investment from Germany since 1970 into production which was oriented largely to exporting back to Germany, together with the progressive opening of the EC-market to Austria in the 1970s, caused a doubling of the export share to Germany between 1960 and 1991. Also, during the 1980s there was a redirection of exports from eastern European to western European markets. On the import side, the large OECD share has been generally stable apart from the post oil-shock years 1975-85, when it fell because of the inflated oil bill.

Trade with countries of eastern Europe and the former Soviet Union has traditionally been larger than for other OECD countries due to strong historical

Table 15. **Geographical distribution of merchandise trade**

Per cent of total

	Exports (fob)			Imports (fob)		
	1960	1973	1991	1960	1973	1991
Germany	28.6	23.1	39.1	41.3	42.5	43.0
Italy	16.6	10.5	9.4	8.0	7.3	8.9
Switzerland	4.9	11.0	6.4	4.3	7.4	4.2
Other OECD Europe	17.6	26.6	20.8	17.9	21.3	19.0
Other OECD countries	6.4	6.6	5.4	9.1	5.5	9.3
Eastern Europe	12.0	10.6	9.0	9.9	7.6	6.0
LDCs ¹	14.0	11.7	10.0	9.5	8.4	9.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

1. Includes OPEC.

Source: OECD, *Foreign Trade Statistics*.

and geographical links. After a decline in exports to these countries in the 1980s reflecting their growing debt problems and foreign-exchange shortages, trade with a number of them is now fast increasing as these countries restructure along market lines (Table 16). Exports have picked up quickly to meet these nations' urgent needs for high-quality products, while imports from these nations have risen in response to their very favourable price competitiveness, notwithstanding administrative controls on many of these goods. Such imports have provoked calls for increased protection by the threatened (mainly labour-intensive) domestic industries.

Trade with other developing countries has been relatively small, with no tendency to grow over the years, apart from the above-mentioned OPEC bulge. In part this reflects the natural barriers of geography and the small size of the Austrian market, implying high fixed costs of entry by distant foreign exporters relative to small expected benefits, as well as the preponderance of small and medium-sized export firms in Austria, which are ill-equipped to operate in distant markets. However, the exclusion of developing countries from free trade agreements and trade barriers that fall most heavily on textile imports have also played a role (see below). There is now an attempt by the government to foster trade with far eastern countries such as Indonesia through export promotion schemes.²⁸

Trade volume and terms-of-trade developments have made different contributions to the evolution of the trade balance in different periods over the past 30 years (Diagram 14). In 1960-73, the real trade balance had tended to deteriorate, making a negative contribution to output growth. This reflected the relatively early stage of industrial restructuring, the existence of a large and undynamic state enterprise sector, and the effects of discrimination on EC markets. There was a modest terms of trade gain, however, mainly on non-manufactures, which helped to keep the trade deficit in nominal terms low.²⁹ The middle period, 1973-80, there was a reversal of these two influences: the real trade balance improved substantially, reflecting complete opening of the EC to Austrian industrial goods as well as manufacturing competitiveness gains due to industrial restructuring in the private sector; however the terms of trade deteriorated sharply as the result of the two oil price hikes, offsetting volume gains and resulting in relatively large trade deficits. The recent period, 1980-91, has seen a weakening of world commodities prices and renewed gains in terms of trade. The

Table 16. Austrian trade with eastern Europe

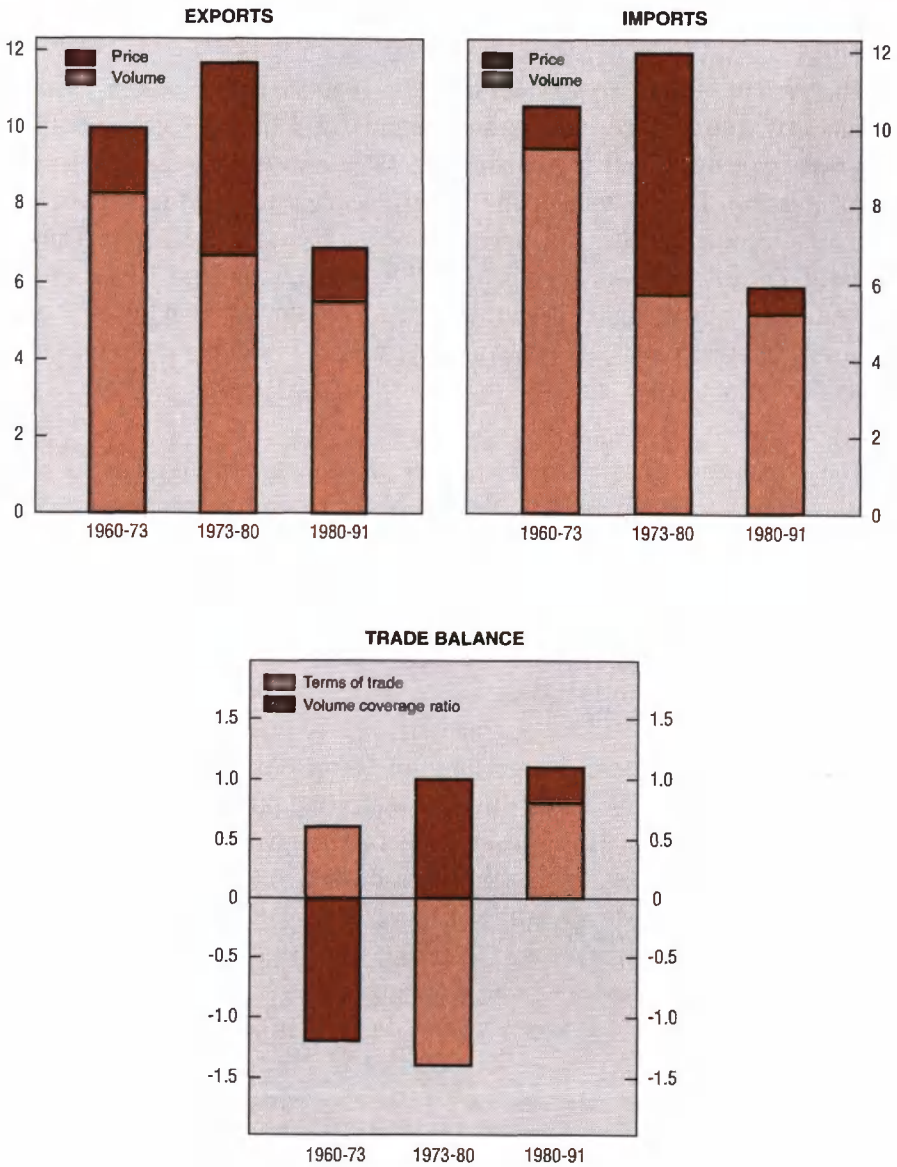
	Exports					Imports (c.i.f.)					Trade balance				
	Per cent of total exports					Per cent of total imports					Billions of schillings				
	1960	1973	1980	1990	1991	1960	1973	1980	1990	1991	1960	1973	1980	1990	1991
Hungary	2.4	2.5	2.2	2.2	3.0	1.9	1.9	1.4	1.6	1.9	0.0	0.0	0.6	1.7	3.0
CSFR	2.6	1.9	1.4	1.9	1.9	1.6	1.6	1.9	1.2	1.3	0.2	-0.2	-2.9	2.2	1.7
Poland	1.8	2.4	2.7	0.9	1.6	2.2	1.2	1.0	0.9	1.0	-0.3	0.8	2.9	-0.6	1.8
Former Yugoslavia	3.5	3.9	3.3	2.7	2.0	2.0	1.0	0.8	1.2	1.0	0.3	2.5	4.8	6.0	3.7
Former USSR	3.5	1.7	2.7	2.2	1.9	2.8	1.9	4.2	1.8	1.6	-0.0	-0.9	-7.1	-0.2	-0.4
Bulgaria	0.7	0.6	0.7	0.3	0.3	0.5	0.3	0.2	0.1	0.1	0.0	0.3	0.9	0.8	0.8
Rumania	0.9	1.2	1.1	0.2	0.2	0.7	0.7	0.4	0.1	0.1	-0.0	0.2	1.2	0.5	0.3
Total	15.4	14.4	14.0	10.4	11.0	11.8	8.7	9.9	6.8	7.0	0.2	2.7	0.6	10.4	11.0

Source: WIFO.

Diagram 14 . VOLUME/PRICE SPLITS IN MERCHANDISE TRADE

Annual % changes

Annual % changes



Source: WIFO.

trade balance continued to improve in volume terms, though less than previously due to weaker real demand growth abroad than at home.

Invisible trade

The growth of trade in services over the 1960-91 period was faster than in merchandise, with service exports and imports in schilling terms growing on average per year by 14 and 15 per cent.³⁰ In 1991, non-factor service exports and imports in terms of GDP stood at 15½ and 10 per cent of GDP, respectively, and investment income credits and debits stood at 6 and 7 per cent. Thus, the contribution of total service exports to GDP is virtually as high as that of goods trade and may be even higher if allowing for related imports. On the import side, the share of aggregate demand being met by services is slightly more than half as high as for merchandise imports, though still a high ratio compared to other OECD countries.

The expansion of non-factor services trade has been dominated by the strength of the tourist sector, reflecting Austria's natural endowments and their development. The tourism industry contributes approximately 8 per cent to GDP (Table 17). Like trade, tourism shows a high level of geographical concentration, with 55 per cent of Austria's tourists coming from Germany. Market shares in tourism have shrunk over the long run. Demand-side disadvantages have included a strong trend in Europe towards visiting Mediterranean countries, the growing importance of overseas destinations, and the effects of the real appreciation of the schilling.³¹ These changes in tourists' preferences have more recently been partly offset by the deterrent effect of increasing pollution and the inconveniences produced by mass tourism in southern European countries, by political uncertainty and warfare in Southeastern Europe, and also by an increased price-competitive edge *vis-à-vis* Switzerland, Austria's main competitor. Moreover, Austria has a natural comparative advantage over Switzerland with respect to tourists from eastern Europe, as well as complementarity effects from overseas tourists coming to visit the newly open countries of eastern Europe. On the supply side, capacity constraints reportedly exist in some areas but environmental concerns militate against relieving them. The Government is thus favouring a shift towards "high-quality" tourism.

Trade in other non-factor services has been relatively small, but it is growing rapidly, reflecting buoyant transportation receipts and the increased profile

Table 17. Services trade

As per cent of GDP

	1960-70 Average	1970-80 Average	1980-91 Average	1989	1990	1991
Tourism, net	3.8	4.5	3.7	3.5	3.6	3.8
<i>of which:</i>						
Credits	5.4	7.7	8.0	8.5	8.5	7.7
Investment income, net	-0.3	-0.5	-0.7	-0.7	-0.6	-1.0
Transportation, net	-0.3	-0.1	0.2	0.1	0.1	0.1
Government services, net	0.1	0.2	0.3	0.2	0.3	0.2
Other services, net	-0.1	0.5	1.5	1.4	1.7	1.4
Services, net	3.2	4.6	4.9	4.6	5.1	4.6
<i>Memorandum items:</i>						
Overnight stays of foreign visitors (thousand)	-	78.34	90.00	94.97	94.79	99.64
Average per-night receipts (annual per cent change)	-	-	1.49	2.08	4.11	-1.61

Sources: OECD, *Balance of Payments Statistics*; Bundeskammer der gewerblichen Wirtschaft, *Tourismus in Zahlen*; and National Bank of Austria.

once again of Austria as a “cross-roads” in East-West trade. Austria historically has had a growing deficit on investment income, reflecting a net debtor position inherited from high borrowing in the early post-war period and the financing of current account deficits of the 1970s, and a net inflow of direct investment capital. Transfers have been generally small, with overseas development aid lower than the OECD average (0.27 per cent of GDP compared with 0.32 per cent for the whole OECD over the last twelve years).

Capital flows

A strong growth in gross capital flows has reflected the financing of trade, increasing globalisation and the growth of multinational enterprises, the liberalisation of capital markets combined with the inherently much higher mobility of capital than of goods, and the natural tendency of maturing economies to deploy productive capacity abroad in response to diminishing returns to capital at home. Increasing trade links have also led to the desire to control production and distribution in foreign markets via direct investments in these markets. Currently, portfolio capital inflow and outflow (widely defined as all capital flows except

direct investment) stand at around 4 and 3 per cent of GDP, respectively, after peaking in the early 1980s at around 10 and 9 per cent. Direct investment inflows have typically been in the neighbourhood of 1/2 to 1 per cent of GDP, while outflows have attained such levels only since 1989.

Austria has attracted considerable direct investment inflows since the early 1970s coming mainly from Germany followed by Switzerland and the Netherlands in distant second and third positions (Table 18). Only recently, Austria has participated more actively in the international redistribution of capital. Direct investment abroad, which had been historically very low, increased strongly in 1989, leading to an overall net outflow. This reflected in part a shift in the balance of investment opportunities to the newly opening countries of eastern Europe, where wages are about one-tenth those in Austria while labour productivity is about one-third as high. Currently Austria is involved in 7 600 joint ventures, mostly in small-scale projects, in these countries. Investments in the EC have also grown as a result of increasing financial integration with this area.

Table 18. **Direct investment flows**
Schilling billion

	1970	1980	1989	1990	1991 Jan.-Oct.
Total inflows		3.1	7.8	7.4	2.6
<i>of which from:</i>					
Germany		1.1	3.0	3.3	2.6
Netherlands		0.4	3.6	-0.2	1.0
Other EC		-0.1	0.5	2.0	3.9
Switzerland		1.2	-0.5	0.1	-2.6
United States		0.3	0.1	0.3	-0.4
Total outflows		1.3	11.4	18.5	10.6
<i>of which to:</i>					
Germany		0.1	3.4	3.2	1.8
Netherlands		0.0	1.5	-0.2	0.6
United Kingdom		0.0	0.7	1.7	2.2
Italy		0.0	1.0	1.9	0.7
Other EC		0.6	0.4	1.2	3.6
Switzerland		0.1	1.1	3.1	-1.6
United States		0.2	1.5	1.4	0.9
Hungary		0.0	0.7	4.0	3.5
Other eastern Europe		0.0	0.1	0.3	1.3

Source: National Bank of Austria.

Table 19. **International capital flows: banking and securities**

Schilling billion

	Banking			Securities		
	Assets	Liabilities	Net	Assets	Liabilities	Net
1970						
1982	-67.0	25.8	-41.2	-0.8	26.3	25.6
1983	-86.5	70.3	-16.2	-9.2	17.1	7.9
1984	-96.0	88.8	-7.2	-15.4	25.0	9.5
1985	-49.6	34.8	-14.8	-20.7	36.0	15.3
1986	-23.5	13.8	-9.7	-7.2	42.8	35.7
1987	-2.5	11.3	8.7	-15.0	18.1	3.1
1988	-29.0	4.7	-24.3	-19.6	47.8	28.3
1989	-24.3	10.0	-14.2	-20.7	55.2	34.5
1990	-24.8	15.9	-8.9	-18.6	37.8	19.2
1991	-22.1	29.9	7.8	-25.9	30.6	4.7
1992 I	-69.1	67.2	-1.9	-31.5	36.1	4.6

Source: National Bank of Austria.

With virtually complete liberalisation of capital flows since late 1991, and a fairly liberal capital control environment prior to formal liberalisation, inflows and outflows of portfolio capital have increased in tandem since the early 1970s. Most of the capital inflow has been in the form of Austrian bank borrowing abroad and foreign purchases of Austrian bonds, as domestic equity markets are as yet undeveloped (Table 19). Outflows have included substantial bank lending to eastern European countries. Currently, outstanding bank claims on the eastern countries stand at Sch 92 billion, of which Sch 43 billion is officially guaranteed; including official direct credits, total outstanding credits stand at Sch 165 billion (US\$15 billion) – or 8½ per cent in terms of GDP.

Labour flows

Austria has traditionally always had a relatively large share of foreign workers in its labour markets. Foreign labour now accounts for 8.6 per cent of the total labour force, compared with 5.5 per cent on average in the 1970s and 6.8 per cent in the 1980s. However, due to the recent tightening of quotas in response to economic slowdown and rising unemployment, the true foreign labour participation rate is in reality higher due to the employment of immigrant

Table 20. **Foreign labour force**

	Foreign employment (in thousands)	As per cent of total employment
1961-69	43.5	1.9
1970-79	179.7	6.8
1980-89	153.8	5.5
1990	211.1	7.2
1991	256.7	8.6

Source: Biff, G., "Auswirkungen des Ausländerzustroms auf den Arbeitsmarkt", *WIFO Monatsberichte* 10/92.

underground labour, currently estimated at about 100 000, or 3 per cent of the official labour force. The presence of a large foreign labour force has boosted income remittances in the transfers account but at the same time it has helped to make Austria more competitive and supply responsive to rising foreign demand.

The policies of openness

Besides the size and geographical location of the country, and technological progress in transportation and communications, the major "exogenous" factor affecting the openness of an economy and its exposure to international competitive forces is the policy and regulatory environment in which economic actors operate.

Import measures

Since 1960, Austria has substantially liberalised its import regime in the context of multilateral GATT trade liberalisation rounds. At the same time, an increasing share of Austria's trade has been conducted under preferential rules established by the EFTA-convention and the bilateral Free Trade Agreements with the EC. These Free Trade Agreements cover mainly manufactured goods. Because of the increasing "regionalisation" of western European trade, the three-quarters of Austrian imports which originate in EC/EFTA sources are preferential, so that only the remaining one-quarter receives most favoured nation (m.f.n.) treatment. Thus, the application of m.f.n. treatment – which is fundamental to the GATT – is the exception rather than the rule.³² Recently concluded Free

Trade Agreements with Turkey, Israel, Poland, the former Czech and Slovak Federal Republic and Romania will in the future even lead to an increase in the share of trade conducted under preferential rules. Though by definition discriminatory, this is not necessarily an anti-liberal stance: Theory and practice show that free trade agreements among countries with high levels of pre-existing trade tend to result in more trade creation than trade diversion, provided that the average external tariff of the countries concerned does not imply higher barriers than before.

Austria's integration into Europe

- In 1959, the Austrian schilling became fully convertible.
 - In 1960, Austria became a founding member of EFTA.
 - By 1967, all industrial tariffs and trade barriers among EFTA countries had been eliminated. However, the high common external tariff of the EC disadvantaged EFTA members severely.
 - In 1972, Austria achieved an "interim" free trade agreement with the EC (EEC and European Steel Community), ahead of other EFTA members.
 - In 1977, all industrial trade between EFTA and the EC became duty-free.
 - In 1982, Austria adopted the "hard-currency policy" with Germany, thereby fixing the schilling to the DM.
 - In 1987, Austria instituted a "New European Policy" and began the process of bringing its legal framework into conformity with the EC.
 - In 1989, Austria made a formal application for membership in the EC; applications by other EFTA members have followed.
 - In 1991, negotiations for a European Economic Area (EEA) between EFTA and the EC were concluded, proposing to liberalise not only trade, but also all service, capital, and labour flows between the two regions on 1 January 1993.
 - In 1992 and early 1993, EFTA concluded Free Trade agreements with the then Czech and Slovak Federal Republic, Poland, and Hungary.
-

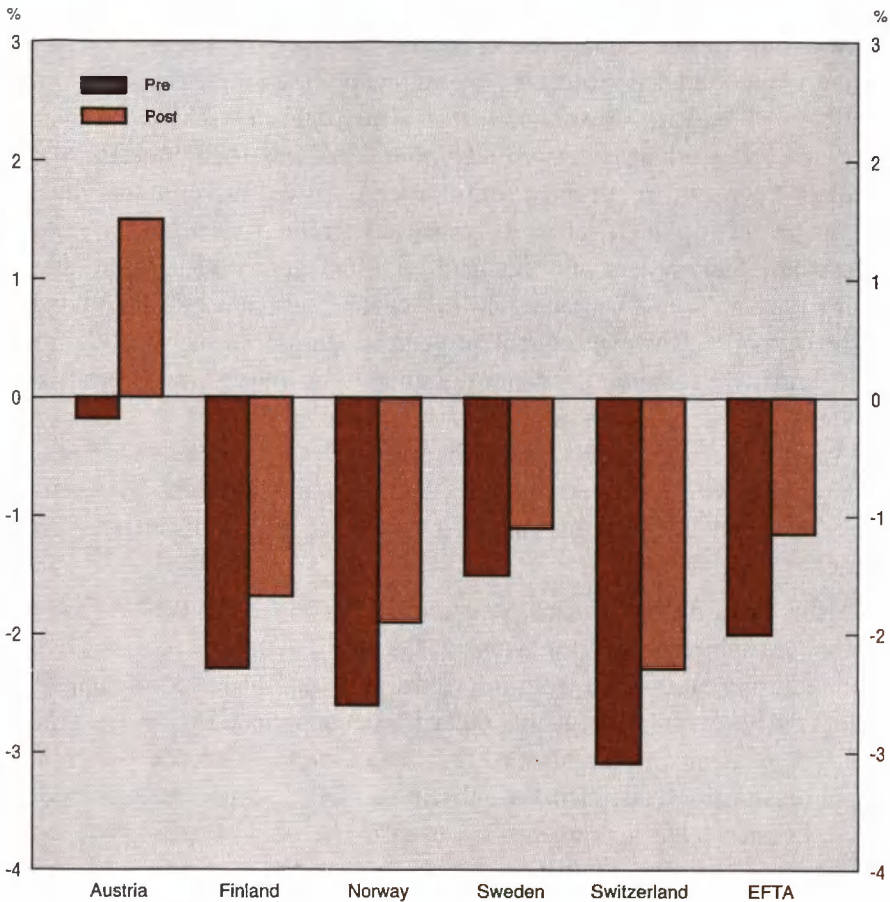
Trade policy has simultaneously become more targeted on specific problem sectors, chiefly agriculture and labour-intensive manufactures, which also tend to be those sectors in which the countries facing discrimination on a geographical basis display a comparative advantage. Increasing geographical and sectoral discrimination is hardly unique to Austria, being a regrettable feature common to most countries of the OECD over the recent past. Austria did, however, eschew another disturbing development in trade policy in many OECD countries, namely the wider use of non-tariff barriers (NTBs), such as quotas and voluntary export restraints, particularly since 1980.³³

Agriculture is by far the most protected sector and international price signals play a minor role for the domestic market. Non-tariff barriers – such as import licensing, import quotas, seasonal restrictions, and minimum import price requirements – are the principal instruments of protection in agriculture, though import tariffs and export subsidies are also used, as well as non-border measures such as production quotas and subsidies. The resulting level of protection is even higher than that hitherto applying under the EC's Common Agricultural Policy.³⁴ Austria also engages in state trading on tobacco, alcohol, and salt, which are public monopolies.

By comparison with agriculture, the trading regime in industry is fairly liberal. Tariffs provide the main form of regulation of industrial imports from non-preferential sources. Overall m.f.n. tariff levels, however, have been high compared with other OECD or EFTA countries. Indeed, Austria was the only EFTA country displaying higher external tariffs than the EC average after the last GATT tariff reduction round (Diagram 15). In 1988, the simple average tariff on m.f.n. imports of industrial products was 10.7 per cent (11.5 per cent in weighted terms).³⁵ Such high tariffs placed non-preferential supplies at a considerable disadvantage relative to imports from the EC/EFTA area. However, in anticipation of the results of the GATT - Uruguay Round, in early 1990, autonomous temporary reductions of about 30 per cent were implemented on a large number of tariff rates for manufactured products. Meanwhile, these measures were prolonged to December 1993. Austria is prepared to negotiate the permanent inclusion of these tariff cuts in the Uruguay Round. Since 1972, developing countries and a number of eastern European countries have received tariff preferences under Austria's Generalised System of Preferences scheme, being granted tariff reductions of up to 50 per cent, with duty-free treatment for the poorest countries. However sensitive products (such as most agricultural items, and some clothing, motor vehicle, and chemical products) are excluded from the GSP programme. A quota system (restraint agreement) for imports of clothing and textiles exists within the context of the Multi-Fiber Agreement, of which Austria is a participant. Austria's agreements are generally less restrictive and more selective than those concluded by other importing countries.³⁶ Austria also maintains quotas on certain goods from Japan.³⁷

The dispersion of tariffs is high compared with other OECD countries.³⁸ Wide tariff dispersions are undesirable insofar as they distort relative prices. Raw

Diagram 15. **DIFFERENCE BETWEEN EFTA AND EC AVERAGE TARIFFS FOR MANUFACTURES**
before and after the Tokyo round¹



1. The Tokyo round was the last GATT tariff-reduction round, held in 1973 to 1979.

Source: Ens, E., "The Role of EFTA in European Economic Integration", EFTA Occasional Paper n° 40, 1992.

materials display narrow tariff ranges, between 0.1 and 5 per cent, with two-thirds of such imports entering duty-free. On the other hand, in finished manufactures there are substantial tariff "peaks", ranging between 30 and 50 per cent, in certain sensitive areas.³⁹ This tariff structure implies substantial tariff escalation,

with progressive protection depending on the degree of processing. The temporary tariff cuts of 1 January 1990, however, reduced the degree of escalation somewhat.

Most imports are either free of import licensing or subject to automatic licensing (simplified procedure).⁴⁰ Non-automatic licensing is applied to only a small share of imports. However, for a restricted list of sensitive products in relation to certain countries, especially central and eastern European countries, simplified licenses are granted only after a prior surveillance procedure (Vidierungssystem) which serves as an early warning system concerning prices and volumes. This system was changed on 1 January, 1993 into an automatic licensing system. The new system will still contain surveillance but no possibility to reject imports. However, quantitative restrictions on such goods are still possible under the safeguard and anti-dumping "fair trade" arrangements available under GATT procedures. In 1992, a quota was introduced on cement applying to central and eastern European countries under the safeguard clause, and a new quota has been instituted for 1993. Anti-dumping petitions have also been recently filed on agricultural machinery from central and eastern European countries.

In the field of government procurement, less than 10 per cent of public purchases are subject to the provisions of the GATT-Code, as provincial governments are at present exempt from the Code. In some Länder, local suppliers are given priority over both foreign and other Länder suppliers. However, in this area the EEA-Agreement and the planned revision of the GATT-Code will result in a greater liberalisation and intensified discipline. Other import restrictions are as follows. Counter-trade agreements are used in the field of military equipment. The so-called "counter purchase system" is a voluntary scheme which offers Austrian importers of cars originating in countries whose exports are not covered by free trade agreements the possibility to pay the reduced import tariff of 6 per cent instead of 20 per cent if a certain amount of automotive products are bought in Austria. Barter trade, which was formerly widespread with the countries of eastern Europe, has declined in recent years.

Export measures

The major support to exports is in the form of favourable export financing, insurance, and guarantee schemes. In the last few years, Austria has had by far

the highest level of outstanding export credits among EFTA countries, amounting to double that of the other EFTA countries combined.⁴¹ Export promotion and marketing assistance programmes are implemented by a world-wide network of about 90 trade delegations. Export licensing is applied to a wide variety of agricultural and manufactured goods, including high-technology goods of strategic importance. At various points in time, export restraint agreements and voluntary measures (*e.g.*, steel and cheese) have been implemented by the export licensing system.

Capital controls

Concerning capital flows, Austria belongs to the group of the most liberal OECD countries. Capital movements have been gradually liberalised since 1962, and as of November 1991, all exchange controls were for all practical purposes abolished. Austria maintains only two reservations under the OECD Capital Movements Code, reflecting restrictions concerning inward direct investment and real estate operations, which however are expected to be relaxed in the context of the European Economic Area. Nevertheless, the dominance of small and medium-sized family-owned enterprises and their heavy reliance on bank financing, as well as the prevalence of insider trading, hinder development of capital markets and therefore the optimal flow of capital internationally.

Trade-distorting domestic measures

In an increasingly interdependent world, apparently domestic measures can distort international trade in much the same way as explicit border measures. In many OECD countries, for example, there has been an increase in public assistance provided to industries experiencing adjustment difficulties, primarily steel, textiles and clothing, automobiles (and shipbuilding, irrelevant for Austria) – that is, to those same industries that have benefited from below average reductions in tariff protection and from non-tariff barriers. There have also been growing subsidies to technology-intensive industries engaged in significant export competition. In Austria, however, the granting of specific subsidies to private firms experiencing adjustment difficulties due to international competition or to gain competitive advantage is not used.⁴² Indeed, the general use of industrial subsidies is low by OECD and international standards. At the same time, promotion of regional, environmental, and R&D objectives has increased as a relative share of

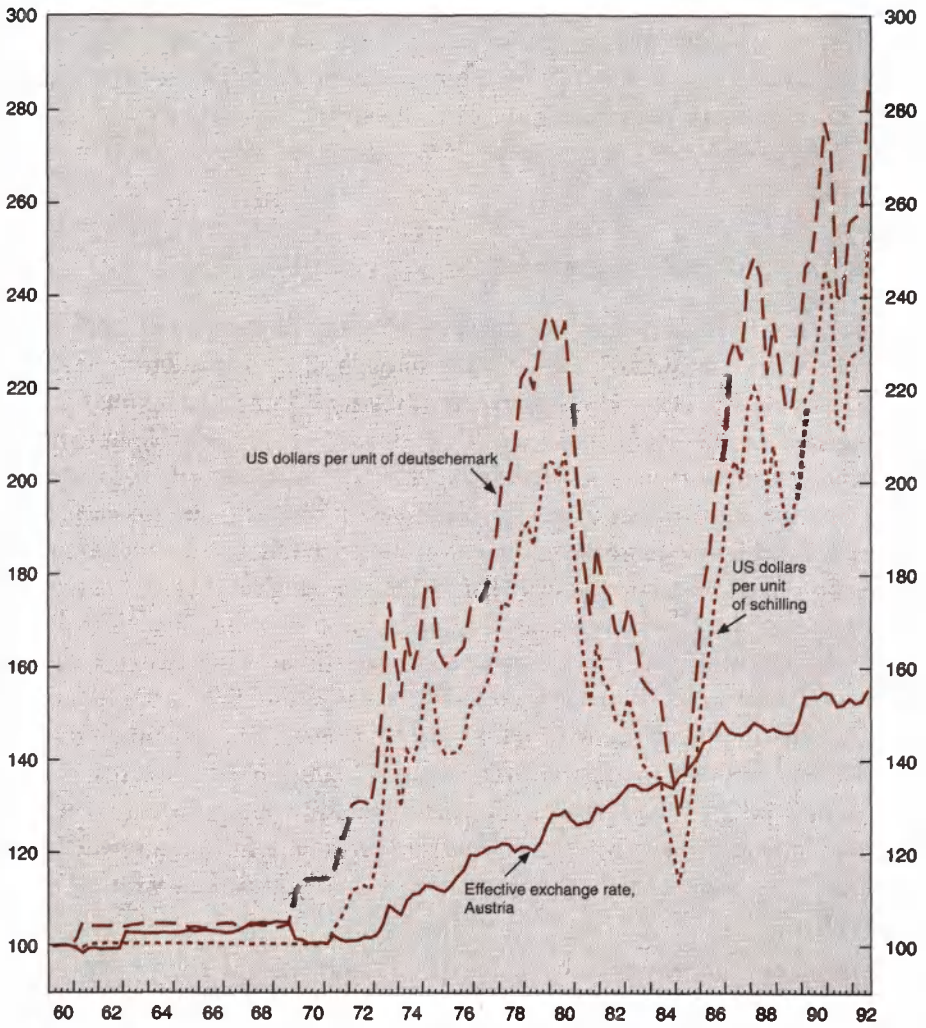
the overall decreasing amount of government aid to industry during the years 1990-92.

Domestic restraints on competition have important repercussions on external openness. Such policies shelter mainly the services sectors from international competition via restrictions to entry applying to foreign and domestic competitors alike.⁴³ In Austria, a detailed system of regulations restricts entry in many business sectors and liberal professions. Public monopolies exist in postal services and telecommunications, and dominating public positions exist in energy and railways. Price competition is restricted by wide-spread exclusions from the Austrian Cartel Law, notably co-operatives, banks, insurance companies, and State monopolies. Collusive agreements are encouraged by the Local Supply Law. The institution of the Social Partnership, though in general contributing to social stability and labour market discipline, at the same time encourages cartelisation of many sectors of the economy. Such policies have given rise to a ‘two-tier economy’: a competitive, open sector existing alongside a less efficient, sheltered sector.

Exchange-rate policy

In the early 1980s, Austria formally adopted the ‘hard-currency option’ of pegging the schilling to the Deutschemmark, thereby strengthening the already close link to the Deutschemmark which had existed ever since the collapse of the Bretton Woods system at the start of the 1970s (Diagram 16). This policy meant that currency depreciation was never used as a tool of maintaining external balance; on the contrary, the schilling experienced a long-run appreciation averaging 4 per cent per annum between 1971 and 1991 in nominal (U.S. dollar) terms and 2 per cent in effective terms. Despite the potential adverse impact on competitiveness, the hard-currency policy has probably benefited trade as it has kept price and cost pressures down and contributed to stability of expectations in trading relationships, particularly as such a high proportion of trade is with Germany. It has also promoted structural change, since international price competitiveness had to be maintained through steady improvements in unit labour costs (in local currency terms) relative to competitor countries.

Diagram 16. FOREIGN EXCHANGE RATES
Index 1960 = 100



Source: OECD.

The link between international openness and domestic economic performance

This section examines the role of international flows of goods, services and factors of production in Austria's long-run economic performance. Performance is viewed in terms of output and its two components: productivity and employment; income and consumer choice; and price/cost stability and financial equilibrium.

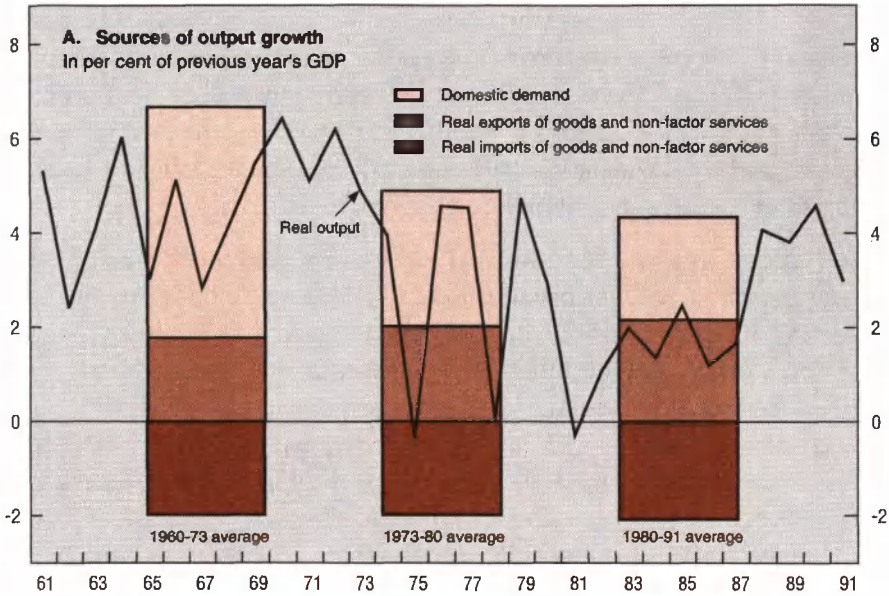
Output, income, and employment

International trade determines the level of output, income, and employment in various ways, statistically most visibly through its contribution to aggregate demand and supply. Diagram 17 shows contributions, in an accounting sense, of total exports and imports to changes of GDP since 1960, and the role of terms-of-trade changes in real income growth. In this context, terms-of-trade gains or losses measure the positive or negative difference between changes in national income deflated by the increase in the consumer price index and national income deflated by the rise of output prices, that is, the changing ratio of real purchasing power to real sales. In the absence of supply-side constraints, increases in real output derive from higher real domestic demand or growing real net exports. Increases in real national income arise from higher employment, productivity advances, and improved terms of trade – hence “per capita” income growth is possible only through productivity or terms-of-trade gains. Since the pace of technological progress and structural change is closely and positively correlated with trade openness, a large part of Austrian per capita income growth can be related to the benefits it has drawn from its economic transactions with the rest of the world.

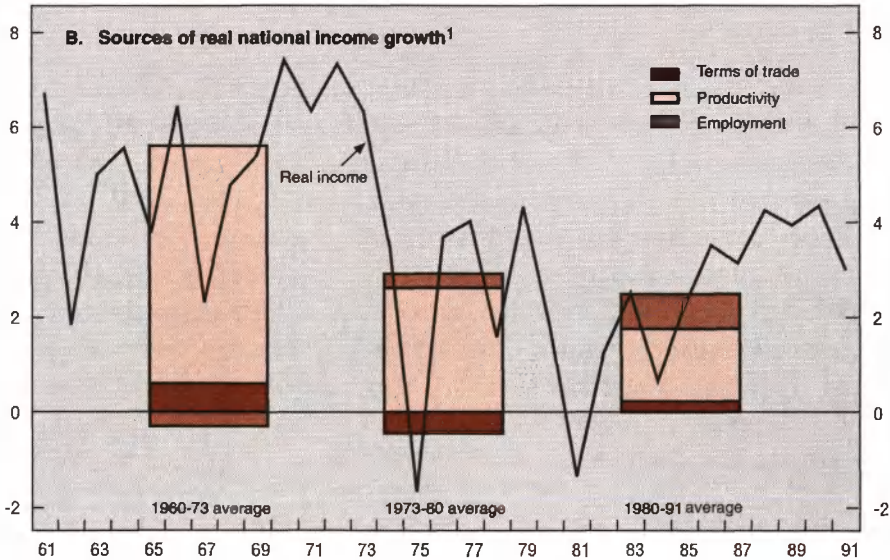
Changes in the terms of trade have contributed positively to real income growth in all periods shown in Diagram 17, except in 1973-80, the period marked by the two oil price shocks. The impact of terms-of-trade gains or losses on output and employment growth is harder to ascertain because of the opposing forces of “income” and “substitution” effects at home and induced demand effects abroad: thus increases in the relative price of imports, as under the two oil price shocks, had initially adverse output and employment effects because it implied losses of real national income and hence a lowering of domestic demand.

Diagram 17. THE INCOME-PRODUCTION CYCLE WITH INTERNATIONAL TRADE

Annual per cent changes



Annual per cent changes



1. Real income defined as GNP at current prices deflated by the private consumption deflator.
Source: OECD.

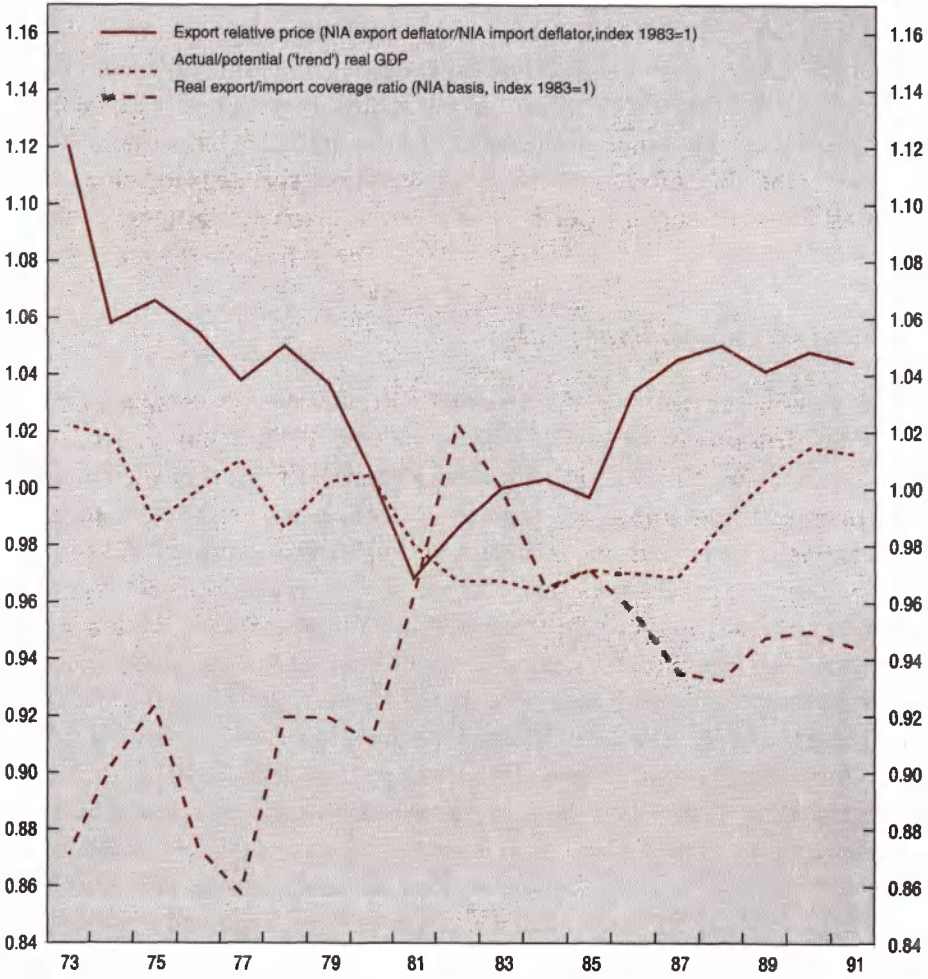
The negative income effect on domestic activity tended, however, over time to be offset by shifts of domestic demand towards cheaper home-produced goods and higher exports to the countries which benefited from the terms-of-trade change in their favour. Conversely, the current opening to the east, by creating an increased availability of cheap imports, reduces employment opportunities in import-competing sectors through the substitution effects, but at the same time raises aggregate income and employment via the income effects from the terms-of-trade gains accruing to consumers and via induced exports to the east.

The direct demand effects of real net exports have been small given the tendency to current account balance. Real export growth, however, has created unequivocal and large gains of output and employment, which in turn have raised income and welfare, leading to further multiplier effects on output and employment. The opening of EC markets to Austrian exports in the 1970s, which caused a marked upward structural shift in export demand, had such an effect. Empirical estimates of the impact of the 1972 free trade agreement between Austria and the EC suggest that it had a positive cumulative effect on real GDP by 1991 of 4.5 percentage points, an average $\frac{1}{4}$ per cent extra growth per annum. The trade balance, as a proportion of GDP, is 3.8 per cent higher than otherwise, and Austria's market share in the EC is 2 percentage points higher today than it would otherwise have been.⁴⁴

Real imports, on the other hand, may have caused some short-term displacement of domestic production and employment. However, insofar as a very high proportion (three-quarters) of imports is serving as goods required as inputs for domestic production (raw materials, semi-finished products, and investment goods), they provide the necessary basis for value-added and employment creation at home, either in export or other sectors.⁴⁵ The remaining portion (a quarter) of imports going into final consumption enhances welfare via increased product variety, superior quality, or lower cost. Although the first two factors are not well captured by national accounts statistics, they represent important gains from trade. Lower prices, usually the most important motivation for imports, provided terms-of-trade gains which, as discussed above, have strengthened aggregate demand. The substitution of less cost-efficient home production by imports has released labour for potentially more productive uses and thus has been an important source of structural change with beneficial economy-wide effects in the long-run.

Another important linkage exists between the “output gap” *i.e.* the deviations of actual from potential GDP, the real foreign balance and the relative price

Diagram 18 . THE OUTPUT GAP, THE EXPORT/IMPORT RELATIVE PRICE AND REAL EXPORT / IMPORT COVERAGE RATIO



Source: OECD.

of exports to imports. When the output gap becomes smaller, there is upward pressure on domestic inflation which raises the relative price of domestic to foreign goods. This causes the real balance to deteriorate in turn easing the pressure on resources (and conversely for a situation of domestic slack). Diagram 18 shows this demand and supply equilibrating mechanism for Austria, displaying after 1973 a clear positive correlation between changes in the output gap, the relative price term and the real foreign balance (proxied by the export coverage ratio). Thus, in an open economy, competitive cost/price pressure from abroad together with demand leakages into imports provide an important anti-inflationary safety valve in periods of excess demand, and in the event of slack, improved competitiveness reduces imports in favour of purchases of domestic goods and stimulates exports. Openness reduces inflation furthermore through accelerating the pace of rationalisation and structural change (see below). Trade moreover stabilises output insofar as domestic and foreign business cycles are “off-phase”.

Results of an input/output analysis

A quantitative feel for the income and employment-creating effects of export production may be obtained from an input-output (IO) analysis of the Austrian economy. Table 21 provides the IO-based estimates of the output and employment-creating effects of export production, separating tourism from non-tourism. For comparison, the income and employment-creating effects of the major components of domestic demand are also provided. In an IO representation, each demand component is “purged” of its import content, both direct and indirect (*i.e.* imported inputs entering into each stage of the production process of the final demand category), leaving only the “pure” demand for domestically-produced goods.⁴⁶ As shown in Table 21, some 23 per cent of total output and about 20 per cent of total employment are dependent – directly and indirectly – on merchandise exports and exports of services other than tourism. Taking manufacturing separately, four out of ten employees are – directly or indirectly – dependent on exports. In 13 out of 36 manufacturing sectors this total export dependency exceeds 50 %. Another 6 to 7 per cent of output and employment is dependent on tourism exports. The associated multipliers convey the amount by which one unit of demand for exports raises domestic GDP and employment both directly and indirectly. Next to public consumption, exports of both non-tourism

Table 21. **Output and employment multipliers**

	Production		Employment	
	Share of GDP induced by spending on: ¹	GDP input-output multiplier for: ²	Share of employment induced by spending on: ¹	Employment input-output by multiplier for: ²
Private consumption	37.7	1.33	33.9	2.61
Public consumption	11.7	1.62	19.8	4.18
Fixed investment	19.1	1.12	19.1	2.77
Change in inventories	1.6	1.27	1.3	2.13
Tourism exports	6.7	1.20	6.0	3.15
Other exports	23.2	1.63	19.9	3.05
Total	100.0	1.36	100.0	2.97

1. Thus, for example, 30 per cent of total production is directly or indirectly accounted for by exports, and one-quarter of total employment depends directly or indirectly on exports.

2. The input-output multipliers differ from the usual expenditure multipliers in that they show the total amount of GDP and employment induced – both directly and indirectly – by spending in each of the final demand categories. These “multipliers” are dependent on the 1976 price level and 1976 labour productivity; hence they are difficult to interpret in absolute terms. What is still relevant are the differences between these multipliers, however.

Source: Richter, J., *Strukturen und Interdependenzen der Österreichischen Wirtschaft*, Federal Economic Chamber, Vienna, 1981.

and tourism have the highest employment multipliers among all demand categories, and non-tourism exports rank first as to the size of output multipliers.

The calculation of import penetration ratios is likewise based on an IO analysis (see Annex Table). These ratios reveal the direct and indirect import content of sectoral output. Imports meeting directly final consumption are not taken into account. The higher the total import ratio in a given sector, the lower its contribution to domestic output and employment for any given amount of gross output or gross value added. The highest import ratios are found in energy, textiles, footwear, chemicals, metals and electronics. Apart from energy, these are among the most highly protected industrial sectors. Services, as expected, have very low import penetration ratios, reflecting their high degree of labour intensity more than their relatively low exposure to international competition.

Analysing the “final destination” of all imports, 44 per cent are needed – directly or indirectly – to meet the demands of private households (private consumption), 5 per cent to meet the needs of public consumption, and 26 per cent to meet the demands of private investment. Furthermore, 19 per cent of all Austrian imports are needed to produce Austria’s exports (other than tourism),

and 4 per cent to produce commodities and services which are consumed by foreign households in Austria (tourism). Given that the “total import content” of exports is only indirect in nature, it is remarkably high and illustrates the high import dependence of Austria’s exporting industries.

Factor flows and GDP determination

Foreign labour and investment flows influence domestic economic developments via the resource allocation process in factor markets. An inflow of foreign labour increases labour supply, and *ceteris paribus*, lowers the real wage needed to clear the labour market, while at the same time it raises potential GDP without matching increases in aggregate demand.⁴⁷ On both counts, therefore, foreign labour has contributed to a lessening of inflationary forces, as well as to a relatively high degree of cyclical responsiveness of the Austrian labour force.⁴⁸ The resulting strengthening of Austrian price competitiveness may also have served to raise net exports, which because of the high multipliers implies greater job creation than that needed to absorb the rise in foreign labour supply alone. Moreover, the average income and skill level of Austrians has been raised, as the share of foreign workers is high in low-paid, unskilled types of jobs. In periods of labour-market slack, as at present, the foreign labour inflow is controlled by a strict quota policy. The restrictions tend to be circumvented by illegal employment of foreign labour, which raises “underground” GDP and lowers (unmeasured) inflation but gives rise to social resentment.

Foreign direct investment has had a beneficial effect on the Austrian economy by adding to the stock of capital and improving its quality. Since the extra supply capacity is mainly created in export and import-competing industries, the current balance of payments is strengthened and the employment and income-creating effects are “blown-up” by relatively high multiplier effects. Also, the inflow of management and technological know-how which typically accompanies direct investment yields economy-wide benefits via the “diffusion” of such know-how to other sectors, leading to higher productivity economy-wide. Though the rate of growth of the direct investment inflow has tapered off lately, the large stock resulting from past investments make it a major force in the economy today, with one-third of industrial firms under foreign control and one-third of industrial sector jobs provided by foreign-controlled firms (Table 22).

Table 22. Foreign direct investment positions at end-1990

Industry	Position in billions of schillings	Percentage of total employment of each sector in foreign-controlled firms
	End-1990	
Metals, road vehicles	12.2	26
Electrical machinery	6.3	57
Petroleum and chemicals	14.0	35
Paper, wood	2.5	16
Textiles, clothing, leather	2.8	25
Food processing	1.5	14
Non-metallic minerals, ceramics and cement	4.0	47
Miscellaneous	17.8	10
Total industry	61.1	30
Energy and services		
Energy and transport	2.9	4
Trade and distribution	19.3	16
Tourism	1.9	5
Small businesses	2.6	2
Banking and financial institutions	7.8	15
Insurance	6.4	
Miscellaneous	3.6	3
Total energy and services	44.4	8
Total	105.5	14

Source: National Bank of Austria, *Berichte und Studien*, Heft 3/1992.

Other types of capital flows have had less visible effects, but may also have helped to improve the allocation of capital in other ways. Direct investment outflows, which assumed importance only after 1988, increase the rate of return to Austrian capital by moving production facilities to lower-wage countries, or to countries where major actual or potential export markets are located (and can be better controlled). Austrian industry currently plans to shift one-third of its total production to the eastern countries. Portfolio capital inflows tend to contribute to the efficiency of domestic financial markets by increasing their depth and width, lowering the cost of financing for investment and raising the return to savings.

Productivity and structural change

A major force behind increasing per-capita income is productivity growth achieved through structural output and employment changes. Openness to trade constitutes one of the most powerful sources of pressure for structural change and innovation.⁴⁹ There are essentially three channels through which trade promotes productivity growth:

- i) efficiency gains economy-wide as firms and branches of industry of “comparative disadvantage” are being squeezed out while jobs are created and new investments are made in areas of “comparative advantage” where by definition productivity is higher than in the declining sectors;
- ii) economies of scale and hence further productivity growth in the highly-productive sectors due to access to larger markets through exporting, including the ability to spread R&D risks over a larger area; and
- iii) greater product variety due to increasing specialisation and innovation allowed by a large number of players worldwide.

The productivity gains from trade typically accrue where economies of scale, product differentiation and imperfect competition are important. This means that they are generally not evenly distributed across all sectors. Trade surpluses will tend to emerge in high-growth sectors and deficits in the others. A classification of trade in manufactured goods according to factor input intensities (see box) may serve to throw some light on the relationship between productivity growth and the changing composition of trade. As shown in Table 23, world trade has increasingly involved products characterised by economies of scale in production, extensive product differentiation, or close links to the science base – *i.e.* in both physical and human capital-intensive products – where rates of growth have been higher than in traditional resource- or labour-intensive products. As a result, the shares of these products in world trade are now much higher than 30 years ago. In Austria’s case, the growth rate of exports of “differentiated” goods and science-based products has in fact significantly exceeded that of world exports, while that in scale-based industries has kept up. However, in level terms, the share of Austrian exports in science-based products is still less than half of the world or OECD averages, while those in resource and labour-intensive

Table 23. Characteristics of manufactures trade

	Annual percentage change, 1961-1991			Per cent of total trade					
				1961			1991		
	Austria	OECD	World	Austria	OECD	World	Austria	OECD	World
Total manufactures exports	12.9	12.2	12.3	100.0	100.0	100.0	100.0	100.0	100.0
<i>of which:</i>									
Resource-intensive industries	10.5	10.2	9.7	32.9	26.0	34.0	16.9	15.0	17.2
Labour-intensive industries	13.1	11.3	12.3	15.3	13.1	12.9	16.0	10.4	13.1
Scale-intensive industries	12.7	12.5	12.8	34.3	30.3	26.4	31.9	33.1	30.4
Differentiated goods	15.1	12.7	13.2	16.1	22.3	19.3	28.4	25.6	24.4
Science-based industries	19.3	14.6	15.0	1.3	8.3	7.3	6.8	15.9	15.0
Total manufactures imports	13.1	12.6	12.3	100	100	100	100	100	100
<i>of which:</i>									
Resource-intensive industries	11.2	9.8	9.9	21.9	43.2	36.0	13.3	20.2	18.8
Labour-intensive industries	13.2	12.9	12.3	17.3	13.3	13.0	17.8	14.3	13.0
Scale-intensive industries	13.3	13.7	12.9	29.6	22.7	25.4	31.8	30.1	29.9
Differentiated goods	12.9	13.9	13.3	26.0	15.2	18.4	25.0	21.1	23.8
Science-based industries	16.3	16.3	15.0	5.2	5.6	7.1	12.0	14.4	14.5

Source: OECD, Foreign Trade Statistics, REV CISIC.

goods are still comparatively high (the shares in scale-intensive and differentiated goods are equivalent). This reflects mainly the fact that Austria's starting point was far behind that of most other OECD countries.

Classifying international trade in manufactures

Grouping	Major factors affecting competitiveness	Examples
i) Resource-intensive	Access to abundant	Aluminium (highly natural resources energy-intensive)
ii) Labour-intensive	Labour costs	Clothing, footwear
iii) Scale-intensive	Length of production runs	Steel
iv) Differentiated	Tailoring product to highly varied demand characteristics	Machine tools
v) Science-based	Rapid application of	Pharmaceuticals, electronics

Source: OECD, *Structural Change and Economic Performance*, Paris 1987.

For the economy as a whole, the long-run growth in productivity has indeed been impressive. Austria has moved from a labour productivity level that was only 60 per cent of the OECD average level in 1950 to slightly above the average in 1991 (Table 24). The performance of real GDP per capita has been similar (Table 25). The fact that Austria is still lagging in the process of developing the human capital-intensive sectors and of running down the traditional resource and labour-intensive sectors may suggest that there is scope for continued above-average productivity improvements through further opening to the rest of the world, notably the east and developing countries. Moreover, the highly sheltered nature of many branches of the services sector suggests that there is further productivity potential to be had from opening up these sectors to greater competition.⁵⁰

Trade competitiveness

The ability to compete internationally depends on the relative success of a country in keeping labour and other input cost developments in the exposed sector of the economy in line with productivity developments, as well as on

Table 24. **Productivity – an international comparison**
 GDP per employee, in purchasing power of 1990; OECD = 100

	1950	1960	1970	1980	1990	1991 ¹
Netherlands	118	118	119	128	123	123
United States	195	178	149	127	119	119
France	82	93	104	113	115	116
Belgium	100	98	101	113	112	114
Germany	76	98	103	109	106	106 ²
Canada	140	133	117	111	105	105
Switzerland	126	124	117	108	104	104
Austria	60	78	89	98	100	101
Italy	60	81	84	95	95	94
Japan	31	81	84	95	95	94
Norway	74	80	78	87	87	90
United Kingdom	109	99	89	87	88	89
Denmark	106	99	90	89	87	88
Finland	62	69	74	80	87	86
Sweden	97	96	97	88	83	83
OECD	100	100	100	100	100	100

1. Partial data.

2. Total Germany = 89.

Source: Kausel, A., *Vier Erfolgsdezennien: der ökonomische Aufstieg Österreichs in OECD-Raum von 1950 bis 1991*, Vienna, 1992.

successful product innovation. Another very important factor for international competitiveness is market size and sophistication, allowing scale economies and the use of cost-reducing capital intensive technologies. Stronger competition through trade itself exerts pressure on profits and increases the need for greater real wage flexibility. In Austria, high productivity growth rather than modest wage growth has served to secure cost competitiveness, with positive implications for the pace of trade-promoting structural change and the country's ability to attract capital and labour in increasingly integrated international markets. By firmly linking the schilling to the Deutschemark, Austria has also refrained from using the exchange rate as a tool to maintain competitiveness. On the contrary, Austria's "hard-currency policy" meant that the schilling has experienced a large effective appreciation exerting both downward pressure on prices and upward pressure on productivity via the need to stay competitive.

The importance of competitiveness is clearly revealed in a "constant market share" analysis of exports, splitting up the changes which have occurred in a

Table 25. **Real GDP per capita – an international comparison**
In purchasing power parities of 1990

	1950	1960	1970	1980	1990	1991 ¹
United States	179	153	136	129	126	124
Switzerland	155	157	148	132	124	122
Canada	121	107	104	115	112	112
Germany	77	110	108	111	108	109 ²
Japan	31	48	81	90	104	108
France	90	95	102	106	102	103
Denmark	110	103	103	99	99	99
Austria	65	84	88	99	98	99
Sweden	112	109	111	104	99	97
Belgium	92	86	92	99	97	97
Norway	83	81	78	94	94	97
Italy	63	77	87	95	94	95
Netherlands	101	102	102	101	93	94
Finland	72	78	83	91	97	92
United Kingdom	116	109	94	90	92	90
OECD	100	100	100	100	100	100

1. Partial data.

2. Total Germany = 94.

Source: Kausel, A., *Vier Erfolgsdezennien: der ökonomische Aufstieg Österreichs in OECD-Raum von 1950 bis 1991*, Vienna, 1992.

country's world market share into a commodity and a geographical "market" effect, and a "market share" effect. According to this analysis, for any given period the following three sources of change in the exporting country's share in world imports can be distinguished, with all data denominated in current prices.⁵¹

- i) Regional market effect: measured as the difference between growth of world trade and world trade weighted by the geographical pattern of a country's exports, indicating the degree to which a country's exports are concentrated in markets that enjoy relatively rapid or are characterised by slow growth.
- ii) Commodity market effect: measured as the difference between the growth of world trade and world trade weighted by the commodity composition of a country's exports, indicating the degree to which a country's exports are concentrated in commodities with growth rates higher or lower than world average.

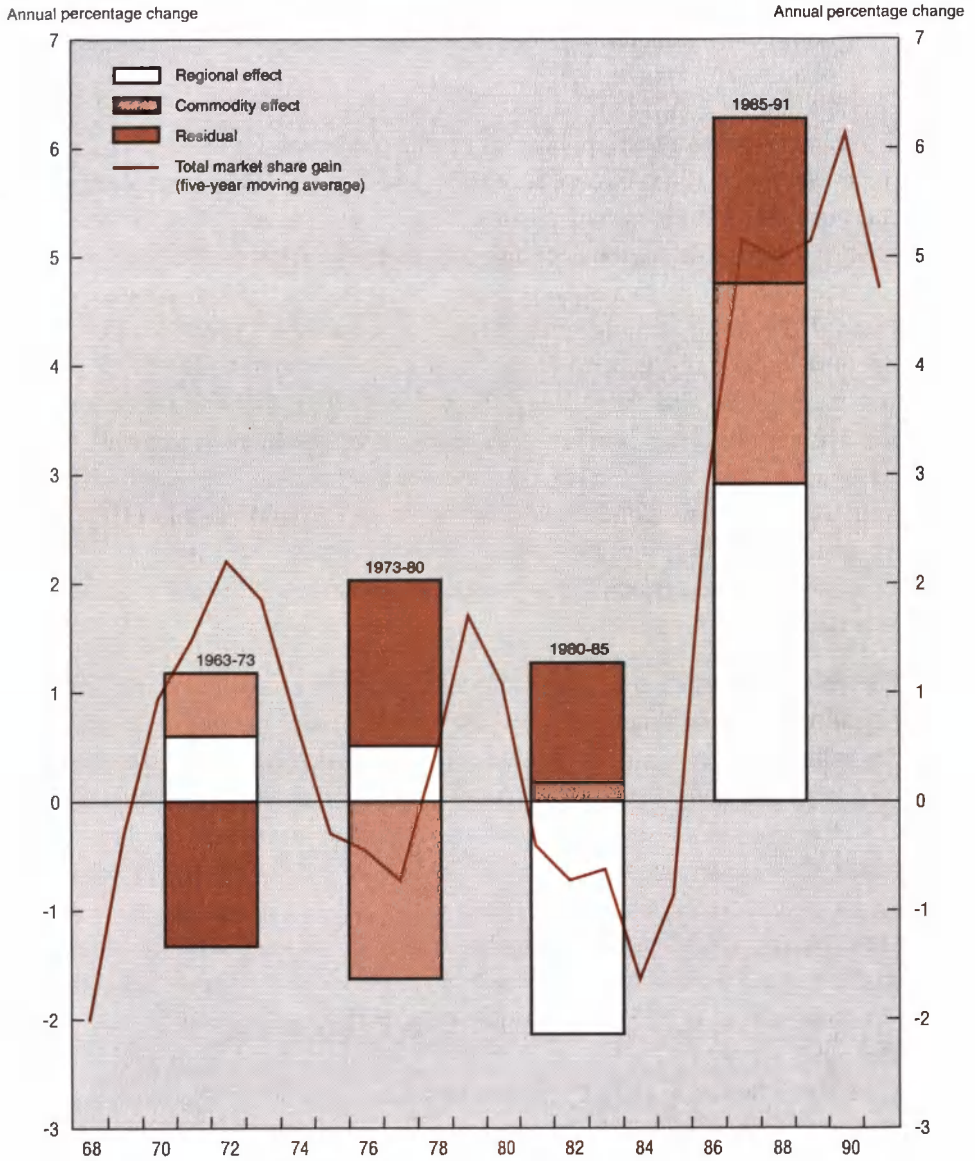
- iii) Residual (market share) effect: calculated as a residual, indicating a country's ability or inability to maintain its market shares by means of competitiveness factors such as quality, price, marketing and distribution, but also including non-market influences such as trade-distorting policies and random shocks.

Diagram 19 provides an application of this methodology to Austrian market share increases since 1963. Except for the first half of the 1980s, when important Austrian customer countries had pursued restrictive policies, Austria has benefited from a favourable regional composition of its exports. The market share gains attributable to this factor were particularly big in the second half of the 1980s and 1991 but given the preceding losses and the special factor of the German post-unification demand boom, it is too early to say whether Austrian exporters have succeeded in getting a firmer footing in high-growth countries. The positive commodity effect since the early 1980s is more suggestive of the benefits of structural change, insofar as Austria has been able to adapt supply to changing world demand conditions. The sharp turnaround of this effect from steadily negative during the 1960s and 1970s to durably positive by the late 1980s seems to reflect a structural switch-over into more rapidly growing and up-to-date product lines.

The residual component comprising all competitive factors such as relative costs, quality, delivery time and after-sales service, has exerted a consistently positive influence on Austria's market share growth except for the 1963-73 period of negative contributions reflecting *inter alia* discrimination on EC markets (an effective tax on exports) and lack of rationalisation in the large State industries. This illustrates the extent to which Austria's ability in capturing market shares reflects the underlying trends in efficiency and quality rather than a specialisation in certain product lines or regional markets. The residual also supports anecdotal evidence that Austrian producers have made a conscientious effort to "stay ahead of the competition" by superior quality control and excellent after-sales service, with low recall rates on durables sales. It may in addition reflect the importance of trade by transnational firms, who produce for partially "captive" markets, particularly in Germany.

Various "real exchange rate" measures of competitiveness in manufactures, the largest and most price-elastic component of trade, are indicative of favourable

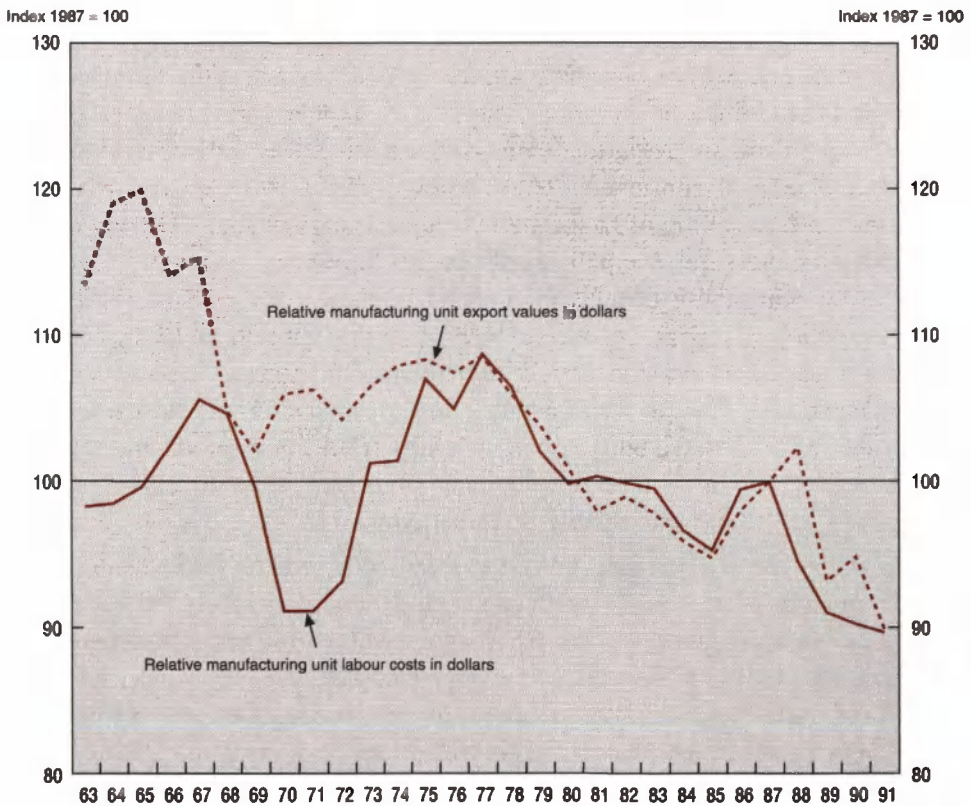
Diagram 19. COMPONENTS OF EXPORT MARKET SHARE INCREASES
 Total goods, in current prices



Source: OECD, *Foreign Trade Statistics*.

developments of Austrian cost competitiveness over the last ten to fifteen years and its positive contribution to market share gains. Export competitiveness may be measured from the supply side by relative unit labour costs and from the demand side by relative export prices, all in a common currency. Relative export prices declined more or less steadily over the long run (Diagram 20). Relative unit labour costs tended to rise however well into the 1970s, pointing to a squeeze of profit margins in response to the competitive pressures of trade.⁵²

Diagram 20 . COMPETITIVENESS INDICATORS IN MANUFACTURING



Source: OECD.

Thereafter, a trend decline in relative unit labour costs reflected the positive impact of technological progress on labour productivity. In fact, in recent years such productivity gains have been sufficient to compensate for both an appreciating exchange rate and a steepening trend of wages.

Summing-up and looking ahead

The foregoing analysis shows that Austria's impressive post-war economic record has importantly been assisted by international trade and factor flows. The benefits have been imparted to the economy through various linkages. First, the export and import-competing sectors have acted as technology leaders. Productivity gains have been spread throughout the economy as resources shifted from declining, low-income activities to high-income growth industries where economies of scale and scope could be realised. Second, imports have provided low cost/high quality investment goods, production inputs and consumer goods, speeding up growth and imparting terms-of-trade benefits as well as opportunities of greater choice to consumers. Third, foreign labour and capital flows have improved the functioning of factor markets, increasing potential GDP and dampening inflation pressure. The policies of opening have been the major exogenous factor in allowing these benefits of trade to be more fully realised. The hard-currency policy has been conducive to productivity growth and employment-preserving wage behaviour. Austria's attractiveness for summer and winter tourism has made for a tourism sector which is in per capita terms the strongest in the world; and the price and quality competitiveness of the goods-producing sector is attested to by the favourable development of Austria's world export market shares both in volume and notably in value terms.

Looking ahead there are four important areas where further substantial benefits in terms of higher average income and productivity levels can be reaped. First, the implementation of the EEA agreement will lead to a progressive liberalisation of trade in services in the course of 1993 and 1994, via liberalisation of the Cartel Law, commercialisation of State monopolies, and the opening up of public procurement practices. This will enhance competitive pressures most importantly in previously "sheltered" services sectors. Secondly, benefits would accrue from greater division of labour as a result of more extensive trade relationships with the eastern European economies. The recent change in geopolitical

situation has shifted Austria from a position at the “edge” of the western world with links to the closed East via extensive barter trade, to a strategic position offering a good chance to benefit from not only direct market-based trade and investment links with the eastern countries, but also from its location as a transit and service centre for increased worldwide linkages with these countries. Thirdly, EC membership would call for substantial reform of the Austrian agricultural policy, permitting greater competition from abroad. Finally, significant efficiency benefits could accrue from expansion of heretofore underdeveloped trade with countries outside Europe, particularly in the developing world. Quantification of the effects of further international economic integration is difficult. However, national orders of magnitude may be obtained from simulation exercises as have been carried out by the WIFO-institute with a large macroeconomic model. The results suggest that benefits from increased external openness would be quite substantial in terms of GDP per capita, employment and lower price levels.⁵³

IV. Conclusions

Though weakening, economic growth in Austria has held up reasonably well during the past two years, when activity in most other Member countries slumped. Austrian exports benefited from the German post-unification boom and subsequently from the opening of eastern European countries. Moreover, with a pent-up demand for housing and the needs arising from the strong inflow of foreigners, activity in the construction sector has remained buoyant. Finally, households provided support to demand growth by lowering their savings rate. Hence the deceleration of output growth was limited, and employment registered small gains in 1992.

The near-term outlook is less satisfactory, however. Modest growth of European markets, in particular German imports, in conjunction with some loss of international cost competitiveness, will dampen export growth and hence business expectations and investment. Consequently, output is likely to stop growing in 1993 and unemployment to rise further, though remaining low by European standards. Major wage settlements concluded in the autumn of 1992 did not point to a moderation of wage growth in response to the slowdown of productivity, but given the sensitivity of trade unions to employment risks, inflationary pressure should begin to ease. Conditions for a pick-up in economic activity should improve in 1994 if the upswing in world trade materialises as projected by the OECD. Growth of real output may however be relatively slow at around 1 to 2 per cent through the year, permitting consumer price inflation to recede further.

In view of the prospective short duration of the conjunctural slowdown and inertia of domestic inflation, there would seem neither need nor scope for an easing of macroeconomic policies. Monetary conditions are, at any rate, determined in the context of the commitment to maintain a fixed parity with the Deutschemark. In recent years Austria has reaped the full benefits from building

credibility as the short-term interest rate differential *vis-à-vis* Germany has disappeared, and it remained unaffected during the recent episodes of unrest on international financial markets. Adhering to the hard-currency policy offers the most assured way of maintaining financial stability and retaining the fruits of credibility in a long-established policy. If German interest rates come down over the next two years, as expected, Austrian interest rates should follow suit, thus giving stimulus to interest-rate-sensitive components of demand.

Given the slowing of tax revenue growth and higher social transfers in a phase of weakening economic activity, the 1993 federal budget deficit may not decline as initially envisaged. While this makes it more difficult to meet the medium-term deficit target of 2½ per cent by 1994, automatic stabilisers can be allowed to operate in full, as the size of the deficit remains moderate at around 3 per cent. Given this departure from the medium-term financial plan, it is regrettable that fiscal consolidation had not been pursued more vigorously in the preceding period of high economic activity. The present challenge for the authorities therefore is to make bigger progress during the prospective recovery in 1994 than was the case during the 1990-91 boom. In this context, a particularly important step forward would be a rapid implementation of an administrative reform which should help dampen the persistent updrift in federal consumption outlays.

In order to be able to respond flexibly to emerging new challenges – the opening of the Eastern European countries, the continuing immigration pressure and the full participation in new regional trading arrangements in Europe, within the EEA and EEC – the Government has initiated action in a number of other areas where federal spending could be curbed or public-sector efficiency be increased. This has already led to some concrete measures – for example, the creation of a public property administration and a new federal debt management agency, and the separation of the railways from the federal administration. These are steps in the right direction, but as noted in earlier Surveys of Austria, any substantial progress in curbing public expenditure growth will have to include progress in curbing the rise of social transfers, and in particular the rising deficit of the pension system.

Unemployment is now higher than in 1987, notwithstanding the fact that Austria has since experienced the highest cumulative GDP growth for any five-year period over the past 20 years. Special factors on the labour-supply side have

played a role in this outcome. The growth of the registered labour force has been unusually fast at 2 per cent per annum since 1990, and the shadow economy has reportedly increased rapidly. Achieving significant inroads in unemployment would therefore not only call for a removal of cyclical joblessness but also for an increase in Austria's employment capacity, which, in turn, first and foremost requires an easing of the inflation constraints on sustainable faster growth. These constraints exist both in goods and factor markets and tend to reinforce each other before levels of full employment are reached.

As to labour cost developments, major responsibility lies with the social partners, which closely control both the level and the structure of wages, giving job-seekers little chance to price themselves into desired jobs. It is therefore all the more important that the collectively-agreed wage structure mirrors as closely as possible differences and changes in relative labour scarcities. A more active labour-market policy of upgrading human skills should at the same time help to provide a better quality match between the profiles of job-offers and job-seekers. Similarly, it is important to prevent inflationary pressure being fuelled via excessive price increases in the domestically-oriented sectors as has been repeatedly the case in the past. The most effective way of containing such price increases would be to allow for greater competition in these sectors. In this respect, redesign of the domestic regulatory framework with the adherence to the EEA and the prospective accession to the EC should prove helpful.

Throughout the post-war period, Austria has pursued a growth strategy based on increasing integration with the rest of the world, in particular Europe. The growth of trade allowed both access to a greater variety of goods and efficiency gains from increased specialisation. A high rate of imports, mainly of investment and intermediate goods, went together with one of the highest investment rates in Europe and fuelled growth. A counterpart rapid growth of exports encouraged the movement of resources into the internationally competitive sectors, more than offsetting the initial loss of jobs in the import-competing sectors and raising the economy's overall level of productivity. The terms of trade benefits of competitively priced imports also contributed importantly to economic well-being. Inflows of foreign direct investment speeded up the process of structural adjustment. In large part as a result of such welfare gains from trade, per capita income growth has exceeded that of most other developed countries, putting Austria today squarely in the middle of OECD countries in terms of

living standards, after having been rather near the bottom in the early post-war period.

Owing to the very high domestic savings rate, this process of rapid growth happened without a build-up of debt or a depreciation of the currency. The lack of a significant debt service and healthy competitive position should enable Austria to move into a phase of capital export. Such capital exports are needed critically in Austria's central and eastern European markets. This process of capital export has already begun with a shift to a large direct investment outflow in the past few years. An ongoing budget consolidation and domestic structural policy reform should provide important support to a continuation of this development.

The process of catching up with high-income countries is, however, far from complete, so that significant room for further improvements in productivity still exists. Given the above-average productivity of Austria's exposed sectors, together with the natural advantages in tourism, there is no reason why Austria could not move further up the rankings of OECD countries. Further opening of the economy is probably the key to resolving two "structural" problems which now hamper further progress. First, many of the services sectors have been heavily regulated and sheltered from international competition, and as a result are either inefficient or enjoy high economic "rents". This drags down economy-wide performance. It is expected that EEA participation will go a long way toward prying open these closed sectors, through enforcement of common rules in such areas as entry, public procurement, and price competition, and after EC entry, also agricultural support. On the other hand, once Austria joins the EC, high external barriers might still exist and would have to be adopted by Austria. A multilateral liberalisation in the context of the Uruguay round would, however, begin the dismantling of most remaining barriers surrounding the EC.

Second, Austria is still relatively highly specialised in resource- and labour-intensive production. With wages no longer low by comparison with most other OECD countries, such an apparently inefficient pattern of international specialisation is in part the result of insufficient international openness. Protection *vis-à-vis* the EFTA/EC area favours these sectors and disadvantaged countries, mainly in eastern Europe and the developing world, who possess a natural comparative advantage in these very areas. Further reducing protection would improve the allocation of resources, allowing greater specialisation in human-capital-intensive

lines of production in which Austria still lags – not to mention providing badly-needed export receipts to countries whose poverty gives rise to European fears of mass migration. The alleviation of such domestic hardships as may be created by this readjustment lies in the domain of Austrian social and labour market policies, not trade policy.

As discussed in Part III, the Government has recently instituted an across-the-board 30 per cent reduction in most favoured nation tariffs and, within the framework of free trade agreements now being concluded with major eastern European trading partners, replaced the previous system of import price surveillance on imports coming from such countries by an automatic licensing scheme. While leaving open the possibility of introducing protectionist measures under safeguard and anti-dumping provisions, these are steps in the right direction. The Government's intention to finance improvement of roads linking Austria to the east, and its highly successful training programmes for bankers and business managers from nations of the former Soviet Union, also serve to build up the infrastructure for stronger trade and investment links, and to extend help and build good-will. However, Austria can certainly go farther and perhaps even faster in opening its markets to the countries of eastern Europe. The recent imposition of an import quota on cement and filing of an anti-dumping petition against agricultural machinery imports from eastern European countries could be seen as an opposite signal.

In sum, Austria is currently living through a period where a short-lived damping of economic activity obscures the favourable medium-term prospects for economic growth and living standards resulting from increased economic integration in Europe. The slowing of output growth can indeed be expected to be of only limited duration if world trade picks up as projected by the OECD. It is therefore important for Austria to press forward as much as possible the necessary structural adjustment in order to be able to participate fully, and draw maximum benefits from, joining the large new "single" European market.

Notes and references

1. After having expanded at an annual rate of about $\frac{1}{4}$ per cent in the period 1981 to 1987, construction investment grew no less than $5\frac{3}{4}$ per cent on average in the subsequent five years.
2. After having grown by 24 and 33 per cent in 1990 and 1991, respectively, exports to Eastern European countries are estimated to have increased by close to 20 per cent in 1992. Deliveries to this region now account for about 11 per cent of total Austrian exports.
3. The import penetration ratio rose from 0.28 in 1987 to 0.33 in 1992.
4. In Austria, by far the largest part of the active labour force is covered by long and stable firm-employee relations, making for a large internal (insider) labour market.
5. Receivers of these benefits are included in statistically-recorded dependent employment, pushing "official" employment growth to around 1.9 per cent in 1992.
6. Within this group the share of older workers has increased markedly.
7. Relative to the labour force, "long-term unemployment" attained over $1\frac{3}{4}$ per cent in 1992.
8. Recent estimates by the WIFO-Institute suggest that at the peak of the business cycle in 1990 the GDP-gap had narrowed to 1.3 per cent and amounted to 2.8 per cent in 1992.
9. Taxes on mineral oil were increased, and the system of alcoholic beverages taxation was changed.
10. See Pichelman K., "Unemployment dynamics, wage flexibility and the NAIRU" in *Empirica*, Vol. 17, No. 2, 1990, pp. 171-186.
11. The agreement entails wage and salary increases of 3.9 per cent, with a one-off payment raising the yearly increase by half a percentage point.
12. Monetary capital formation consists of bank and savings bank deposits with statutory notice up to one year, and banks' own security issues.
13. Currency-swap transactions have been modified with the full liberalisation of money and capital markets. These swaps are now offered on a fixed-term basis, and for open-market deals, a new method – American interest tender – was introduced besides the traditional procedure ("call money until further notice").
14. The final budget proposal was based on the assumption of a $5\frac{1}{4}$ per cent increase in nominal GDP and a further rise of unemployment.
15. See Structural policy update.

16. See Structural policy update.
17. The primary balance is the budget balance net of interest payments on public debt.
18. These are mainly various funds financing infrastructure investment, health care, social benefits and agricultural price support schemes. These institutions are on S.N.A. basis included in the federal and general government accounts.
19. These projections are based on average real GDP growth of $3\frac{1}{4}$ per cent, with employment growing at $1\frac{1}{4}$ per cent per year, leading to a decline in unemployment. Wage incomes are assumed to grow 5 per cent per annum.
20. Set at 10 per cent for 1991 and 1992, the ceiling is intended to be reduced to 9 per cent for 1993.
21. The length of the benefit period depends on the age and the length of the contribution period to the unemployment insurance scheme.
22. A separate administrative unit have been created to achieve a more efficient use of public property. Individual administrative units will have to pay market-conforming rents for the use of office buildings.
23. For a detailed review of Austrian agricultural policy see OECD, *Economic Survey of Austria*, 1991/92, Part IV, Paris 1992.
24. See Part III.
25. For a review of competition policy see OECD, *Economic Survey of Austria*, 1989/90, Part IV, Paris 1990.
26. For a detailed review of housing policies see OECD, *Economic Survey of Austria*, 1990/91, Part IV, Paris 1991.
27. In dollar terms, exports and imports of merchandise goods each increased on average by 12 per cent per annum, against an annual average increase in world trade of $11\frac{1}{2}$ per cent; in schooling terms, nominal exports and imports each grew by $9\frac{1}{2}$ per cent each year on average, compared with 8 per cent in nominal GDP.
28. See Busch, G. and Stankowsky, J., *Indonesia - an Attractive Partner for the Austrian Economy*, WIFO *Monatsberichte* 2/1992, pp. 91-92.
29. Diagram 20 below shows that price competitiveness improved on manufactures over this period, implying a terms of trade loss on manufactures, which however accounted for only about half of trade at this time.
30. In dollar terms, service exports and imports grew by $16\frac{1}{2}$ and $17\frac{1}{2}$ per cent annually, compared with 14 per cent growth in world services trade between 1972 and 1991.
31. See Smeral, E., "Long-term Forecasts for Tourism Industries", *The Services Industry Journal*, January 1992.
32. See GATT Secretariat, *Trade Policy Review Mechanism Austria*, Geneva, 1991, p. ix.
33. It must be noted, however, that changes in the percentage of imports covered by NTB's usually refer to numbers of SITC categories, rather than the changes in actual import volumes concerned. See OECD, *Progress in Structural Reform, an Overview*, Paris, 1992.

34. The policies of protection of the agricultural sector were extensively discussed in OECD, *Economic Survey of Austria 1991/92*, Paris 1992.
35. However, according to the GATT Secretariat, these figures understate the true tariff burden, because tariff lines receiving *non-ad valorem* treatment, i.e. with duties not available in percentage terms, have been excluded from the average calculation. Such tariff lines account for 6 per cent of total imports. See GATT Secretariat, *Trade Policy Review Mechanism, Austria*, Geneva 1991, p. x.
36. The MFA is generally acknowledged as the most damaging instrument of discrimination against the third world, as agreements tend to be not only restrictive but also arbitrary and subject to frequent change, making planning by textile and clothing exporters in the affected countries extremely difficult. See OECD, *Costs and Benefits Protection*, Paris 1985.
37. These include certain leather goods, PVC, binoculars, ball-bearings, and ceramic insulators.
38. In 1988, the last year for which relevant information is available, the standard deviation of tariff levels stood at a relatively high 10.8 per cent.
39. Examples of such tariff peaks are: battery-powered radio-recorders 30 per cent, televisions 27½ per cent, and textiles 30-50 per cent.
40. The GATT has recommended that automatic licensing be abolished, as it leaves open the possibility legally of a reversal of earlier trade liberalisation, and thus contradicts the fundamental GATT principle of binding import legislation. See GATT Secretariat, *Trade Policy Review Mechanism Austria*, Geneva 1991, p.xi.
41. EFTA (1990), "Government Aid in EFTA in 1989", Working Paper.
42. Submission of the Ministry of Finance. However, the United States has recently included Austria in a list of European countries allegedly subsidising their steel industry (mostly nationalised) unfairly.
43. A review of domestic competition policy was provided in OECD, *Economic Survey of Austria, 1989/90*, Paris 1990.
44. See Breuss, F., "Statistische and dynamische Effekte der bisherigen Europa-Integration Österreichs" WIFO Working Papers No. 50, May 1992.
45. Apart from the demand leakage, the employment implications of intermediate goods imports depend upon the labour intensivity of the imported good versus that of the value added activity at home supported by the import.
46. This analysis is based on Richter, J., *Strukturen und Interdependenzen der Österreichischen Wirtschaft*, Federal Economic Chamber, Vienna, 1981. Of course, the analysis is strictly valid only for the year in which the table was constructed, since relative price changes will result in changes in factor and input proportions, on which the IO table is based, through time. The latest such available table for Austria is for 1976 – which, though out of date, is roughly in the mid-point of the present historical analysis and thus is still capable of providing rough orders of magnitude.
47. Foreign workers tend to have high savings rates and labour-intensive jobs.
48. The correlation between the labour force and employment in Austria is 0.91 – nearer to 1 than for any other OECD country.

49. "The single most effective means of securing responsiveness to changing opportunities is through exposure to international trade". OECD, *Structural Adjustment and Economic Performance*, Paris 1987.
50. A direct comparison with Germany highlights the relatively poor productivity performance of the sheltered sectors. In 1991, industrial labour productivity was slightly (1 per cent) higher than that in Germany; total economy productivity was, however, significantly (5 per cent) lower. See Kausel, A., *Vier Erfolgsdezennien, der ökonomische Aufstieg Österreichs im OECD Raum von 1950 bis 1991*, Vienna 1992.
51. The calculations for this decomposition are based on the following formula:

$$\hat{g} - \hat{G} = \sum_i (g_i/g_i) (\hat{G}_i - \hat{G}) + \sum_i (g_i/g) \{ \sum_j (g_{ij}/g_i) (\hat{G}_{ij} - \hat{G}_i) \} = -RES,$$
where g = Austrian exports, G = world trade, g_i = Austrian exports of commodity i , G_i = world trade of commodity i , g_{ij} = Austrian exports of commodity i to country j , and G_{ij} = imports of commodity i by country j and the " $\hat{}$ " indicates growth rates from the previous period. The first term on the right hand side is the commodity composition effect; the second term is the regional distribution effect; and the third term is the residual effect. Leamer, E. E. and R. M. Stern, *Quantitative International Economics*, Boston, 1970.
52. Prior to 1973, such competitive pressures may have been intensified by the effects of discrimination on EC markets. However, given the notoriously bad quality of price data, such disparate movements in costs and prices should not be over-interpreted.
53. In Breuss, F. and F. Schebek (1991), "Österreich im EWR", in WIFO *Monatsberichte* 5/1991, pp. 285-290, EC accession is estimated to raise real GDP by 3½ per cent above the baseline scenario after six years, while the GDP deflator could be some 5½ percentage points lower. In a preliminary study by Kramer, H., Peneder, M. and J. Stankovsky (1991), "Chancen und Gefährdungspotentiale der Ostöffnung: Konsequenzen für die österreichische Wirtschaft", WIFO *Working Paper*, the medium-term effects on Austria from opening to Eastern Europe is estimated to be positive with a gross destruction of about 50 000 jobs being more than offset by the creation of some 65 000 new jobs in industry.

Annex I

Table A1. Import penetration by sector

Sector	Total	Direct	Indirect
Agriculture	0.097	0.036	0.061
Mining	0.117	0.057	0.060
Crude oil and refinery	0.448	0.317	0.131
Non-metallic minerals	0.125	0.057	0.068
Cement	0.127	0.016	0.111
Glass	0.128	0.065	0.063
Meat	0.141	0.053	0.088
Mills	0.103	0.021	0.082
Bakery	0.106	0.035	0.071
Sugar	0.098	0.013	0.085
Dairy products	0.096	0.011	0.085
Other food	0.283	0.222	0.061
Beverages	0.119	0.057	0.062
Tobacco	0.071	0.060	0.011
Textiles	0.340	0.250	0.090
Apparel	0.321	0.270	0.051
Leather products	0.290	0.222	0.068
Chemicals	0.296	0.223	0.073
Iron and steel	0.314	0.211	0.103
Machinery	0.242	0.177	0.065
Ships and locomotives	0.192	0.149	0.043
Foundries	0.120	0.047	0.073
Non-ferrous metals	0.338	0.242	0.096
Metal products	0.236	0.160	0.076
Optical equipment, etc.	0.151	0.085	0.066
Electric motors	0.208	0.096	0.112
Electric wires	0.351	0.269	0.082
Other electrical equipment	0.209	0.159	0.050
Radio and television	0.391	0.307	0.084
Vehicles	0.167	0.104	0.063
Vehicle parts	0.298	0.251	0.047
Sawmills	0.121	0.049	0.072
Veneer and plywood	0.199	0.109	0.090
Wood products	0.169	0.101	0.068
Paper and pulp	0.248	0.157	0.091
Paper products	0.190	0.085	0.105
Printing and publishing	0.141	0.073	0.068
Building construction	0.077	0.028	0.049
Other construction	0.174	0.101	0.073
Electricity	0.065	0.013	0.052
Gas and water	0.388	0.278	0.110
Trade	0.042	0.018	0.024
Transport	0.065	0.021	0.044
Banking and insurance	0.015	0.001	0.014
Tourism	0.081	0.018	0.063
Other services	0.052	0.012	0.040
Housing	0.034	0.001	0.033
Government services	0.0	0.0	0.0

Source: Richter, J., *Strukturen und Interdependenzen der Österreichischen Wirtschaft*, Federal Economic Chamber, Vienna, 1981.

Annex II

Chronology of main economic events

1992

January

The annual ceiling on tax-deductible interest income from deposits in savings and loan institutions is raised from Sch 8 000 to Sch 10 000, within the framework of the 1991 tax reform law.

An amendment to the capital market law comes into effect. It strengthens disclosure requirements for new security issues and deregulates the bond market.

After more than four years of negotiations, the Social Partners agree on the introduction of a 5-day work week in the tourism sector, while allowing for flexibility in working hours during peak tourist seasons.

The participation of VOEST Alpine Stahl in a joint venture with the largest Hungarian cold-rolling steel mill is set at 30 per cent, or Sch 24 million.

March

The Minister of Finance engages a finance-and-guarantee company to prepare a subsidy agreement with General Motors for the further expansion of Wiener Werke. A federal grant of Sch 450 million is foreseen, to which a further Sch 150 million would be added by the City of Vienna.

The Board of Directors of Austrian Industries grants Austria Metal AG a new capital infusion of Sch 1 billion. The purpose of the grant is to improve AMAG's competitiveness in the face of the low world price of aluminium.

Signature of a transport agreement between Austria and the EC is newly endangered by Austria's raising, by one-third, of the "Brenner-mountain" highway toll for trucks which do not possess noise abatement equipment. Germany objects to this measure as contrary to the spirit of the agreement.

June

In the framework of the Family Package, the financial assistance benefit is to be raised as of January 1993, progressively with the number of children, and the single income earner and single parent tax deductions will be raised. As of September 1993,

apprentices will receive free public transport, and family assistance for students will be increased.

An amendment to the Market Regulation law lowers, as of 1 July, the producer price of milk and allows, as of 1993 and 1994, respective deviations of up to 3 and 4 per cent from recommended prices for dairy products. In 1994, new rules regarding agricultural collection and distribution will be established, and grain prices and bread prices will fall, for which farmers will be compensated by markedly higher transfer payments. As of 1 July 1993, all presently existing agricultural funds will be combined into the new Agrarmarkt Austria (AMA).

July

The Austrian National Bank raises the discount rate from 8 to 8.5 per cent. The Lombard rate is unchanged at 9.75 per cent. The interest rate for short-term securities repurchase deals (GOMEX rate) is increased by $\frac{1}{4}$ percentage point to 9.5 per cent.

The ERP-fund raises the upper limit for its East-Subsidy Programme, and raises the programme's underwriting share from 30 to 50 per cent of project costs. The direct displacement of domestic production to eastern countries is, however, prohibited from benefiting from any such subsidy.

The new residency law requires that, from July 1993 on, a yearly immigration quota will be established by law, taking into account the requirements of the economy. Foreigners will have to submit applications for residency permits to the Austrian representatives in their home countries. These permits will be limited in duration but are extendible. Spouses and minor children will receive permits only after the foreigner has resided in Austria for two years, though this waiting period can be shortened if support and accommodation can be permanently assured.

The tax on motor vehicles is redesigned: in place of a stamp fee, the tax will be collected through insurance companies. Cars of up to 24 kilowatts are tax free; above this limit, 5.5 schillings per kilowatt per month must be paid.

The managing director of Austrian Industries states that the rehabilitation of this industrial complex has come to a halt, due chiefly to the changes occurring in the East, which could cost Austrian industry up to 100 000 lost jobs. In September a new plan for rehabilitation of Austrian Industries is to be presented.

It is announced that motor vehicle liability insurance will be as of 1 September raised for cars on average by 3 per cent, by more for trucks, and remain unchanged for motor-cycles.

August

The expiring import quota for cement from the Czech and Slovak Federal Republic is extended to end-year. The quota limits imports to 200 000 tonnes per year.

September

The National Assembly ratifies the European Economic Area (EEA) agreement, which is to come into effect 1 January 1993.

The Austrian National Bank reduces the discount rate from 8.5 to 8.25 per cent and the Lombard rate from 9.75 to 9.5 per cent. The GOMEX rate is reduced from 9 to 8.75 per cent.

The National Assembly passes an amendment to the Catastrophe-Fund law, allowing farmers to be compensated for damages from the summer drought.

October

All text until end is a new addition.

Austrian credit institutions lower their minimum lending rates from $3\frac{3}{4}$ to $3\frac{1}{2}$ per cent. Other deposit and credit rates are also lowered.

The Supervisory board of Austrian Industries decides to dissolve branch holdings and put ÖMV up for sale.

The Austrian National Bank lowers the discount rate from $8\frac{1}{4}$ to 8 per cent, the Lombard rate from $9\frac{1}{2}$ to $9\frac{1}{4}$ per cent, and the interest rate for open market transactions from $8\frac{3}{4}$ to $8\frac{1}{2}$ per cent.

The Metal and Mining Workers union agrees with employers to a 3.9 per cent increase in the minimum-wage and 5.2 per cent in the collectively-agreed wage, together with a lump-sum bonus of 2 000 Schillings.

At a meeting of experts in Dürstein, Land-governor Pröll invites Slovakia to collaborate with Planning Group East (Vienna, Niederösterreich, Burgenland), on airport and fast train connections between the two regions. President Meciar in turn promises to build a connection with the Slovakian railway network.

November

Economics Minister Schüssel, during a working visit to Prague, reaches agreement that Free Trade Agreement with the Czech and Slovak Federal Republic will apply also to its successor states.

The Council of Ministers fixes the recommended rate of increase for ASVG-pensions at 4 per cent. This increase corresponds to the concept of "net-adjustment".

The social partners establish for the first time in their history statutes for their co-operation. They define as their common goal the "ensuring of the competitiveness of the Austrian economy". They also state that tax rates had reached their upper limit. The important "parity commission" is to meet four times per year, to which meetings the Finance Minister will be invited. Committees with equal representation of the four partners will be established for special questions.

The union of civil servants agrees with the government to an increase in civil service salaries of 3.95 per cent, as of 1 January, 1993.

December

The retirement age for women will, starting in 2018, be raised over a ten year period to the retirement age for men. As compensation, a "womens package" will be put into

effect as of 1 January 1993. This includes an extension of the right to child-care-leave to 2 weeks, the right to compensatory damages for gender-specific discrimination or sexual harassment in the workplace, the right to part-time work for women with children between 1 and 4 years of age, gender-neutral job advertisements, and equal pay for equal work.

The new Immigration Law establishes that as of 1993, tourist visas can no longer be prolonged; foreign youths 14 years old and over can be considered for deportation; and illegal foreign workers must return home, where they can make an application for residency. Citizens of EEA countries are entitled to Austrian residency.

The Finance Minister decides to close the windows of Rösser Bank, for the time being until 20 January 1993.

As of January 1, 1993, unemployment insurance contributions will be raised from 4.9 to 5.3 per cent. Various health insurance contributions and fees are also raised. Austrian Railways raises passenger rates by 5.7 per cent and freight rates by 3.7 per cent.

Under the amendment to the trading regulations, admission requirements for the examination for the craftsman's certificate will be simplified.

As of 1 January 1993, the capital gains tax rate on interest from savings deposits, bank balances, and bonds will be raised from 10 to 22 per cent.

BLANK PAGE

STATISTICAL AND STRUCTURAL ANNEX

BLANK PAGE

Table A. **Gross domestic product**
Sch. billion

	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
	Current prices					1983 prices				
Expenditure										
Private consumption	837.8	880.5	935.3	1 000.9	1 059.4	746.1	773.0	799.8	830.1	849.8
Public consumption	280.4	288.4	302.9	319.9	348.1	236.6	237.4	239.2	242.1	248.5
Gross domestic fixed capital formation	342.1	371.2	405.8	442.3	482.3	309.0	327.7	347.7	367.7	385.9
Construction ¹	193.5	211.2	229.1	250.6	277.6	175.3	186.4	195.0	206.5	218.3
Machinery and equipment ¹	148.6	159.9	176.7	191.6	204.7	133.7	141.3	152.8	161.2	167.6
Change of stocks, incl. statistical errors	13.8	17.6	12.8	12.9	7.8	7.4	16.5	10.6	20.3	24.1
Exports of goods and services	527.1	587.5	664.3	724.3	789.7	507.9	553.7	610.6	659.9	714.3
<i>less: Imports of goods and services</i>	519.8	578.6	649.4	702.0	772.5	523.8	572.9	621.8	670.4	729.8
Gross domestic product at market prices	1 481.4	1 566.6	1 671.5	1 798.4	1 914.7	1 283.2	1 335.4	1 386.3	1 449.7	1 492.9
Origin by sector										
Agriculture, forestry and fishing	48.5	49.1	52.3	56.7	53.0	44.7	46.5	46.1	48.1	45.6
Manufacturing and mining	390.1	415.7	437.7	475.9	502.3	349.0	376.2	390.9	412.1	421.9
Construction	99.7	105.3	113.5	125.6	140.3	89.3	92.0	96.0	100.7	105.7
Other	943.1	996.4	1 068.1	1 140.2	1 219.2	800.2	820.7	853.2	888.8	919.7
	Current prices					Current prices, percentage distribution				
Distribution of net national income										
Compensation of employees	792.7	821.9	874.4	940.1	1 019.8	72.9	71.5	71.4	70.9	72.4
Net income from property and entrepreneurship and savings of corporations	314.2	349.9	373.3	416.3	427.6	28.9	30.5	30.5	31.4	30.4
Direct taxes on corporations	26.1	27.4	33.3	35.6	40.3	2.4	2.4	2.7	2.7	2.9
Government income from property and entrepreneurship <i>less: Interest on public debt and consumer debt</i>	29.4	30.7	33.3	38.1	41.2	2.7	2.7	2.7	2.9	2.9
	75.6	81.0	89.1	103.3	120.7	7.0	7.0	7.3	7.8	8.6
Net national income	1 086.8	1 149.0	1 225.2	1 326.7	1 408.2	100.0	100.0	100.0	100.0	100.0

1. Excluding V.A.T.

Sources: Österreichisches Statistisches Zentralamt, and Österreichisches Institut für Wirtschaftsforschung.

Table B. General government income and expenditure

	Sch. billion								
	1983	1984	1985	1986	1987	1988	1989	1990	1991
Operating surplus and property income receivable	22.4	23.1	26.2	25.9	29.4	30.7	33.3	38.1	41.2
Casualty insurance claims receivable	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4
Indirect taxes	197.1	216.1	225.9	234.0	245.2	254.9	271.4	287.9	306.6
Direct taxes	156.6	173.7	193.7	203.8	203.3	214.5	214.4	239.0	266.8
Compulsory fees, fines and penalties	3.7	4.1	3.8	3.9	3.9	4.1	4.4	4.9	5.1
Social security contributions	145.5	155.5	167.8	176.0	183.3	191.8	204.3	220.6	237.2
Unfunded employee welfare contributions imputed	30.9	32.8	35.3	37.6	39.6	41.1	43.4	46.0	49.8
Current transfers n.e.c. received from the rest of the world	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.9
Current receipts	557.0	606.1	653.6	682.2	705.7	738.0	772.2	837.6	908.0
Final consumption expenditure	226.9	237.8	255.0	270.7	280.4	288.4	302.9	319.9	348.1
Property income payable	36.6	43.1	47.8	51.9	58.4	61.8	66.4	73.1	81.9
Net casualty insurance premiums payable	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4
Subsidies	35.4	35.9	39.2	46.0	47.4	45.1	45.1	47.9	55.8
Social security benefits and social assistance grants	121.5	130.8	142.3	151.1	161.5	167.8	176.4	188.7	204.4
Current transfers to private non-profit institutions serving household	69.9	72.3	76.3	80.4	87.	85.2	86.4	94.1	102.1
Unfunded employee welfare benefits	49.2	52.3	56.2	59.9	63.4	66.0	70.1	74.5	80.6
Current transfers n.e.c. paid to the rest of the world	3.2	3.5	3.6	3.8	3.9	4.3	4.7	5.5	6.1
Current disbursements	542.9	575.9	620.6	664.1	702.3	718.9	752.4	804.1	879.4
Saving	14.1	30.2	33.0	18.1	3.4	19.1	19.8	33.5	28.6
Consumption of fixed capital	9.6	10.1	10.7	11.3	11.6	11.8	12.2	12.8	13.5
Capital transfers received net, from:	-24.9	-25.2	-27.1	-27.5	-26.8	-27.3	-23.1	-27.0	-24.3
Other resident sectors	-24.8	-25.2	-27.1	-27.5	-26.8	-27.3	-23.	-26.9	-24.1
The rest of the world	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Finance of gross accumulation	-1.2	15.1	16.6	1.9	-11.8	3.6	8.9	19.3	17.8
Gross capital formation	45.2	46.3	48.0	52.1	50.7	50.7	55.2	57.3	62.0
Purchases of land, net	1.7	1.7	1.8	2.2	0.7	0.6	0.6	0.7	0.9
Net lending	-48.1	-32.9	-33.2	-52.4	-63.2	-47.7	-46.9	-38.7	-45.1

Source: Bundesministerium für Finanzen.

Table C. Output, employment and productivity in industry

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Output in industry, 1985=100 (adjusted for working days)											
Total industry	90.7	90.0	90.9	95.6	100.0	101.1	102.1	106.6	112.9	121.2	123.4
Investment goods	85.1	88.5	86.7	89.0	100.0	103.4	95.5	101.1	107.4	124.6	129.0
Consumer goods	91.7	91.7	92.4	97.4	100.0	100.6	99.0	99.0	105.2	112.6	114.9
Employment, thousands¹	613.9	589.0	565.1	561.4	562.4	558.8	543.6	532.6	536.3	544.8	538.9
Wages and productivity											
Gross hourly earnings for wage earners (sch.)	77.7	82.8	86.8	90.0	95.1	99.3	104.3	107.8	112.6	120.7	127.9
Gross monthly earnings, employees (sch.)	15 768.6	16 868.7	17 739.9	18 625.9	19 755.4	20 713.3	21 504.5	22 338.9	23 389.5	25 143.5	26 592.8
Output per hour (1970=100)	199.1	205.9	204.9	203.5	206.7	213.6	216.3	206.7	206.0	208.2	213.0
Wages and salaries per unit of output (1970=100)	179.0	186.6	198.6	208.2	217.6	225.6	236.2	256.0	271.4	290.6	305.0

1. Including administrative personnel.

Sources: Österreichisches Institut für Wirtschaftsforschung, and Österreichisches Statistisches Zentralamt.

Table D. **Retail sales and prices**

(1985 = 100)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Retail sales	83.3	87.9	94.7	95.5	100	100.7	103.6	108.8	114.0	121.9	131.1
<i>of which: durables</i>	80.0	84.1	97.8	90.5	100	108.0	113.0	125.1	134.5	144.9	156.5
Prices											
Consumer prices											
Total	84.2	88.7	91.7	96.9	100	101.7	103.1	105.1	107.8	111.3	115.0
Food	86.4	90.3	92.6	97.8	100	102.4	103.2	103.9	105.2	108.4	112.8
Rent	74.4	81.2	88.8	95.0	100	103.2	105.6	108.1	111.3	115.9	121.6
Other goods and services	84.8	89.1	91.6	96.7	100	101.0	103.3	105.6	108.7	112.2	115.5
Wholesale prices											
Total	90.5	93.4	94.0	97.5	100	94.8	92.8	92.6	94.3	97.0	97.8
Agricultural goods	94.0	94.4	94.2	98.0	100	90.9	94.5	93.3	93.2	100.1	101.7
Food	84.8	89.3	91.6	96.7	100	100.1	97.4	96.6	96.0	95.2	97.6
Cost of construction (residential)	86.1	91.6	94.9	98.3	100	101.7	105.4	108.8	112.7	117.3	124.3

Sources: Österreichisches Statistisches Zentralamt, and Österreichisches Institut für Wirtschaftsforschung.

Table E. Money and banking ¹

	End of period Sch. billion									
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Interest rates (Per cent)										
Discount rate	4.75	3.75	4.50	4.00	4.00	3.00	4.00	6.50	6.50	8.00
Average bond yield ²	9.83	8.15	7.98	7.74	7.30	6.86	6.58	7.06	8.72	8.69
Money circulation and external reserves										
Notes and coins in circulation	83.9	92.3	93.7	94.5	98.1	102.9	108.4	117.8	124.7	133.4
Sight liabilities of the Central Bank	46.1	46.9	48.8	46.6	53.0	43.6	39.6	51.1	44.3	38.8
Gross external reserves of the Central Bank	118.7	114.2	118.6	110.5	115.0	114.9	123.4	132.8	130.3	140.1
<i>of which: Gold</i>	39.4	39.4	39.4	39.4	39.5	39.5	39.5	38.6	38.1	37.4
Credit institutions										
Credits to domestic non-banks	934.7	1 000.9	1 114.4	1 211.6	1 333.6	1 438.2	1 579.4	1 688.4	1 846.2	1 994.2
Deposits from domestic non-banks	879.2	928.3	989.4	1 058.2	1 170.7	1 259.2	1 312.3	1 404.3	1 503.8	1 613.9
Sight	87.7	97.8	102.7	107.5	113.5	129.1	142.2	146.5	155.9	170.8
Time ³	98.5	109.9	113.9	124.1	162.8	176.3	174.4	198.8	185.8	172.4
Savings	693.0	720.6	772.8	826.6	894.4	953.7	995.7	1 059.0	1 162.1	1 270.7
Holdings of domestic Treasury bills	40.9	45.1	46.2	41.0	41.0	51.2	46.9	44.9	53.7	60.4
Holdings of other domestic securities	200.4	224.2	228.2	233.1	249.9	287.0	319.5	345.7	356.1	365.0
Foreign assets	453.6	542.6	633.5	695.9	737.6	751.7	816.9	842.0	843.9	846.8
Foreign liabilities	478.8	559.5	676.7	724.6	772.4	794.7	883.8	933.0	937.8	961.4

1. Totals may not add due to rounding.

2. Average effective yields on circulating issues.

3. Including funded borrowing of banks.

Sources: Österreichische Nationalbank, and Österreichische Länderbank.

Table F. **The Federal budget**National accounts basis
Sch. billion

	Outturn								
	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Current revenue	278.0	306.1	330.3	343.7	354.8	389.2	404.6	437.5	474.0
Direct taxes of households	79.8	92.0	102.1	107.6	105.1	129.9	124.8	140.1	154.3
Indirect taxes	139.7	151.5	157.9	164.0	173.1	178.8	190.1	201.2	213.2
Corporate taxes	15.8	17.6	20.2	20.4	19.9	21.0	25.1	26.3	29.9
Income from property and entrepreneurship	16.0	16.7	18.9	18.8	22.4	23.1	24.9	27.6	30.1
Current transfers from abroad	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.4
Other	26.4	28.0	30.8	32.6	34.0	36.1	39.5	42.0	46.1
2. Current expenditure	300.1	316.4	340.5	367.5	392.2	403.6	414.7	441.3	486.7
Goods and services	85.1	89.2	95.6	101.2	102.0	104.3	109.0	113.7	122.8
Subsidies	27.4	27.8	30.0	36.4	37.5	34.7	34.1	35.2	42.4
Public debt	27.0	33.8	38.4	42.7	49.4	53.1	58.0	64.3	73.0
Transfers to abroad	0.9	1.0	1.0	1.0	1.0	1.1	1.2	1.6	2.0
Transfers to public authorities	74.7	76.8	82.0	87.6	96.3	105.5	105.5	111.0	120.1
Transfers to private households	54.7	55.7	59.3	62.3	67.6	65.0	64.5	70.5	77.5
Other	30.3	32.1	34.2	36.3	38.4	39.9	42.4	45.0	48.9
3. Net public savings (1-2)	-22.1	-10.3	-10.2	-23.8	-37.4	-14.4	-10.1	-3.8	-12.7
4. Depreciation	2.2	2.3	2.4	2.6	2.6	2.7	2.8	2.9	3.1
5. Gross savings (3+4)	-19.9	-8.0	-7.8	-21.2	-34.8	-11.7	-7.3	-0.9	-9.6
6. Gross asset formation	17.0	18.0	17.8	18.5	15.5	15.2	15.4	16.0	16.8
7. Balance of income-effective transactions (5-6)	-36.9	-26.0	-25.6	-39.7	-50.3	-26.9	-22.7	-16.9	-26.4
8. Capital transfers (net)	22.9	22.6	23.7	24.4	23.2	39.0	34.8	37.8	37.3
9. Financial balance (7-8)	-59.8	-48.6	-49.3	-64.1	-73.5	-65.9	-57.5	-54.7	-63.7

Source: Österreichisches Statistisches Zentralamt.

Table G. **Balance of payments**
Sch. million

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Trade balance¹	-77 130	-62 613	-70 753	-76 784	-67 669	-62 231	-65 697	-70 368	-81 727	-83 944	-107 982
Exports	284 659	267 722	278 181	324 606	366 544	342 659	342 714	375 541	427 511	466 919	478 757
Imports	361 789	330 335	348 934	401 390	434 213	404 890	408 411	445 909	509 238	550 863	586 739
Services, net	41 393	46 158	40 434	48 429	49 085	42 007	40 354	45 062	57 750	66 460	69 449
Foreign travel, net	46 398	49 234	42 334	48 529	48 853	44 884	41 349	46 726	58 881	64 661	72 167
Receipts	90 952	95 031	94 386	101 026	105 186	106 195	112 030	124 617	141 782	152 475	146 514
Expenditure	44 554	45 797	52 052	52 497	56 333	61 311	70 681	77 891	82 901	87 814	74 347
Investment income, net	-7 442	-6 962	-6 696	-7 030	-5 334	-10 104	-10 856	-11 279	-12 324	-10 950	-18 113
Other services, net	2 437	3 886	4 796	6 930	5 566	7 227	9 861	9 615	11 193	12 749	15 395
Unclassified goods and services	15 692	29 878	35 777	25 625	18 045	24 631	23 633	21 833	27 841	30 691	36 222
Transfers, net	-1 363	-1 238	-1 456	-1 206	-1 947	-657	-1 023	-433	-1 681	-43	646
Public	-471	-608	-792	-766	-799	-690	-898	-894	-945	-1 262	-1 256
Private	-892	-630	-664	-440	-1 148	33	-125	461	-736	1 219	1 902
Current balance	-21 408	12 185	4 002	-3 936	-2 486	3 750	-2 733	-3 906	2 183	13 164	-1 665
Long-term capital, net	15 038	-9 864	-24 052	-7 096	-3 650	9 928	23 040	6 068	4 450	-25 363	-29 991
Official ²	12 281	14 176	6 428	1 499	8 612	13 718	12 004	17 883	8 381	2 402	9 386
Private	2 757	-24 040	-30 480	-8 595	-12 262	-3 790	11 036	-11 815	-3 931	-27 765	-39 377
Basic balance	-6 370	2 321	-20 050	-11 032	-6 136	13 678	20 307	2 162	6 633	-12 199	-31 656
Non-monetary institutions' short-term capital	2 004	-6 261	-2 651	-4 198	2 167	-3 069	-7 379	-3 281	-4 457	-2 539	-13 270
Errors and omissions	4 508	10 623	-6 974	-2 080	11 626	-11 944	2 818	-3 161	-232	-4 517	10 740
Balance on non-monetary transactions	142	6 683	-29 675	-17 310	7 657	-1 335	15 746	-4 280	1 944	-19 255	-34 186
Private monetary institutions' short-term capital	7 984	-2 939	21 831	18 938	-8 854	9 788	-11 003	10 363	9 622	18 615	43 689
Balance on official settlements³	8 126	3 744	-7 844	1 628	-1 197	8 453	4 743	6 083	11 566	-640	9 503
<i>Memorandum items:</i>											
Changes in reserves arising from allocation of SDRs, monetization of gold and revaluation of reserve currencies	3 974	803	6 519	4 706	-9 601	-6 960	-4 834	3 266	-2 736	-3 083	826
Allocation of SDRs	597	0	0	0	0	0	0	0	0	0	0
Change in total reserves	12 102	4 546	-1 326	6 334	-10 802	1 491	-92	9 351	8 830	-3 723	10 331
Conversion factor (Sch. per dollar)	15.92	17.06	17.97	20.01	20.69	15.27	12.64	12.34	13.23	11.37	11.67

1. Including non monetary gold and adjustments to trade according to foreign trade statistics.

2. Including Central Bank.

3. Excluding allocation of SDRs, monetization of gold and revaluation of reserve currencies.

Source: Österreichische Nationalbank.

Table H. Merchandise trade by commodity group and area

Sch. billion

	Imports					Exports				
	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
Total	413.1	451.5	514.9	558.1	593.1	343.5	383.5	429.6	467.7	480.0
By commodity group										
Food, drink, tobacco	23.8	24.5	26.8	27.7	29.5	11.6	12.9	15.2	15.2	15.2
Raw materials	21.4	24.6	27.8	25.3	25.4	18.3	20.6	23.4	24.4	21.5
Mineral fuels, energy	29.8	25.4	29.3	35.4	35.5	6.2	4.9	5.5	4.7	4.4
Chemicals	42.5	47.5	52.1	55.3	57.7	30.9	37.2	39.8	39.5	42.8
Machinery and transport equipment	143.7	165.9	191.2	211.6	232.1	115.1	131.0	148.0	175.6	184.0
Other	151.9	163.7	187.6	202.9	212.9	161.5	176.8	197.7	208.3	212.1
By area										
OECD countries	350.2	385.7	437.6	473.6	501.1	283.9	317.2	355.2	383.0	389.4
EC countries	282.2	309.6	351.6	383.0	402.3	223.0	250.3	279.8	304.8	316.2
Germany	184.0	203.0	226.8	245.5	255.1	125.2	139.9	153.9	175.1	187.5
Italy	38.7	40.3	46.2	50.5	52.6	35.5	39.9	45.3	45.8	45.0
France	16.7	17.8	22.7	23.4	25.8	15.3	17.7	20.0	22.2	20.9
United Kingdom	9.9	11.2	12.9	14.4	16.0	15.6	18.1	19.3	18.1	17.4
EFTA countries ¹	32.2	33.2	36.6	39.4	40.8	38.1	41.2	45.6	47.3	44.1
Switzerland	19.4	19.9	21.3	23.8	24.8	25.4	27.6	31.1	32.4	30.6
United States	14.3	15.3	18.6	20.2	23.5	12.2	13.5	15.0	15.0	13.6
Other OECD countries	21.6	27.5	30.7	31.0	34.6	10.6	12.1	14.8	15.9	15.4
Non-OECD countries										
Eastern Europe ²	26.0	26.7	28.9	31.8	35.7	24.9	29.3	33.1	36.5	43.0
Africa ³	9.1	7.6	11.5	13.8	12.9	7.3	7.2	7.5	7.5	7.7
Latin America ³	5.6	5.9	6.5	5.6	6.0	3.2	2.6	2.9	3.1	3.6
OPEC	8.8	7.2	9.4	12.0	12.5	9.9	11.4	11.3	12.8	13.8
Far and Middle East ³	16.8	20.7	23.9	26.5	31.5	15.7	18.4	20.8	24.2	25.8
Index, in real terms (1988=100)	135	100	111	123	124	144	100	113	126	133
Index of average value (1988=100)	113	100	103	100	100	115	100	98	97	94

1. Including Finland.

2. Excluding ex-Yugoslavia.

3. Including countries belonging to OPEC.

Source: Österreichisches Institut für Wirtschaftsforschung.

Table I. Labour-market indicators

	Peak	Trough	1985	1986	1987	1988	1989	1990	1991
A. EVOLUTION									
Unemployment rate (surveys)									
Total	1983=4.1	1973=1.1	3.6	3.1	3.8	3.6	3.1	3.2	3.5
Male	1984=3.9	1973=0.7	3.6	3.2	3.6	3.3	2.8	3.0	3.4
Women	1983=5.1	1973=1.7	3.6	3.1	4.1	4.0	3.6	3.6	3.7
Unemployment rate (registered)									
Total	1987=5.6	1973=1.6	4.8	5.2	5.6	5.4	5.0	5.4	5.8
Male			4.9	5.1	5.5	5.1	4.6	4.9	..
Women			4.7	5.3	5.7	5.6	5.5	6.0	..
Youth			2.7	2.8	2.7	2.8	2.4	2.6	..
Share of long-term unemployment			13.3	12.6	15.0	12.7	16.7	15.8	..
Productivity index, 1987=100			99.1	98.9	100.0	103.7	106.7	109.0	110.5
Monthly hours of work in industry (wage earners) billions of hours			144.9	142.1	139.9	141.0	139.9	139.5	138.2
B. STRUCTURAL OR INSTITUTIONAL CHARACTERISTICS									
Participation rates¹									
Global			65.8	66.3	67.0	66.9	67.1	67.7	68.4
Male			81.2	81.3	81.2	80.3	80.0	80.1	80.5
Women			51.0	51.7	53.0	53.7	54.3	55.4	56.3
Employment/population between 16 and 64 years ¹			63.4	64.2	64.4	64.5	65.0	65.5	66.0
Employment by sector									
Agriculture									
- per cent of total			9.0	8.7	8.7	8.2	7.9	7.9	7.4
- per cent change			-4.4	-2.4	0.4	-5.4	-1.6	1.2	-4.3
Industry									
- per cent of total			38.1	37.8	37.7	37.4	37.0	36.8	36.9
- per cent change			0.0	0.6	0.2	-0.4	-0.2	1.6	2.1
Services									
- per cent of total			52.9	53.6	53.7	54.4	55.1	55.3	55.7
- per cent change			0.8	2.7	0.8	1.7	2.3	2.5	2.4
Of which: Government									
- per cent of total			20.4	20.7	21.2	..	..	..	..
- per cent change			1.5	3.0	3.1	..	..	..	..
Voluntary part-time work			7.3	7.2	8.0	8.2	9.7	9.9	..
Social insurance as a per cent of compensation			18.4	18.2	18.3	18.5	18.5	18.4	18.1

1. Including the self-employed.

Sources: *Statistisches Handbuch*; Österreichisches Institut für Wirtschaftsforschung; OECD estimates; OECD, *Labour Force Statistics*.

Table J. Public sector

	1970	1980	1989	1990	1991
BUDGET INDICATORS: GENERAL GOVERNMENT ACCOUNTS (% GDP)					
Current receipts	39.7	46.4	46.2	46.6	47.4
Non-interest expenditure	37.4	45.6	45.0	44.6	45.5
Primary budget balance	2.3	0.8	1.2	1.9	1.9
Gross interest	1.1	2.5	4.0	4.1	4.3
General government budget balance	1.2	-1.7	-2.8	-2.2	-2.4
<i>Of which:</i>					
Federal government	0.2	-2.6	-3.4	-3.2	-3.6
THE STRUCTURE OF EXPENDITURE (% GDP)					
Government expenditure					
Transfers	4.0	5.9	5.5	5.6	5.7
Subsidies	1.7	3.0	2.7	2.7	2.9
General expenditure	14.7	18.0	18.1	17.8	18.2
Education	2.9	3.9	4.0	4.0	..
Health	3.2	4.4	4.6	4.6	..
Social security and welfare	2.6	3.3	3.3	3.3	..
TAX RATES					
	Prior to Tax Reform of 1989		Under the Tax Reform of 1989		
Personal income tax					
Top rate		62		50	
Lower rate		21		10	
Average tax rate		12.7		11.5	
Social security tax rate ¹					
Blue-collar workers		38.6		38.6	
White-collar workers		34.5		34.5	
Basic VAT rate		20		20	
Corporation tax rate					
Top rate		55		30	
Lower rate		30		30	

1. The sum of employees' and employers' contributions to health, accident, pension and unemployment insurance.

Sources: OECD, *National Accounts*; Ministry of finance.

Table K. Production structure and performance indicators

	1980	1987	1988	1989	1990	1980	1987	1988	1989	1990
	GDP share (Per cent of total)					Employment share (Per cent of total)				
A. Production structure (1985 prices)										
Tradeables										
Agriculture	4.2	4.1	4.0	3.8	3.7	1.7	1.3	1.3	1.3	1.2
Mining and quarrying	0.7	0.6	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.4
Manufacturing	33.5	32.2	33.3	33.6	33.8	40.5	37.5	36.8	36.4	36.0
Non-tradeables										
Electricity	3.7	3.9	3.5	3.5	3.2	1.7	1.8	1.8	1.7	1.7
Construction	10.0	8.2	8.0	8.0	8.0	11.2	9.8	9.9	9.9	10.0
Wholesale and retail trade, restaurants and hotels	19.5	20.0	19.9	20.0	20.3	21.4	23.2	23.6	23.9	24.2
Transport, storage and communication	6.8	7.4	7.3	7.3	7.3	9.6	10.3	10.3	10.2	10.2
Finance, insurance, real estate and business services	17.5	19.1	18.8	18.7	18.5	8.4	9.5	9.7	9.9	10.1
Community, social and personal services	4.2	4.6	4.6	4.6	4.6	5.1	6.2	6.3	6.3	6.3
	Productivity growth (sector GDP/sector employment)					Investment share, current prices (Per cent of total)				
B. Industrial sector performance										
Tradeables										
Agriculture	8.6	3.5	6.2	0.1	3.3	6.4	5.1	4.8	..	..
Mining and quarrying	2.4	30.2	-2.5	7.8	9.1	0.4	0.2	0.3	..	..
Manufacturing	2.1	1.3	9.5	4.5	5.1	20.5	20.8	19.2	..	..
Non-tradeables										
Electricity	5.8	14.8	-6.6	4.5	-1.6	6.9	5.7	5.1	..	..
Construction	0.0	1.6	1.4	1.5	2.4	2.8	2.2	2.4	..	..
Wholesale and retail trade, restaurants and hotels	0.0	0.0	2.5	1.2	3.6	..	..	..	..	..
Transport, storage and communication	4.9	4.1	2.8	3.0	3.5	..	..	..	..	..
Finance, insurance, real estate and business services	3.2	0.1	0.3	0.4	0.1	..	..	..	..	..
Community, social and personal services	1.3	3.3	2.5	2.6	1.8	..	..	..	..	..

Table K. **Production structure and performance indicators** (*cont'd*)

	1971	1980	1988	1989	1990	1971	1980	1988	1989	1990
	Numbers of enterprises (Per cent of total)					Numbers of employees (Per cent of total)				
C. Other indicators										
Enterprises ranged by size of employees										
1 to 4	..	18.3	40.3	40.4	38.4	..	0.3	0.7	0.7	0.7
5 to 49	57.9	49.0	38.0	37.7	38.6	11.2	11.2	12.5	12.4	12.2
50 to 499	38.3	29.6	19.8	20.0	20.9	48.6	46.6	48.6	48.9	49.8
more than 500	3.9	3.1	1.9	2.0	2.1	40.2	41.9	38.1	38.0	37.3
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
R&D as percentage of manufacturing output	3.70	4.13	4.37	4.65	4.74	5.13	5.40	5.44	5.59	5.77

Sources: OECD, *National accounts*; *Österreichisches Statistisches Handbuch*.

*BASIC STATISTICS:
INTERNATIONAL COMPARISONS*

BASIC STATISTICS: INTERNATIONAL COMPARISONS

	Units	Reference period ¹	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan	Luxembourg	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Population																										
Total	Thousands	1990	17 085	7 718	9 967	26 620	5 141	4 986	56 420	63 232	10 140	255	3 503	57 647	123 540	382	14 951	3 379	4 241	9 859	38 959	8 559	6 796	56 473	57 411	251 523
Inhabitants per sq. km	Number	1990	2	92	327	3	119	15	103	254	77	2	50	191	327	147	366	13	13	107	77	19	165	72	235	27
Net average annual increase over previous 10 years	%	1990	1.5	0.2	0.1	1	0	0.4	0.5	0.3	0.5	1.1	0.3	0.2	0.6	0.5	0.6	0.7	0.4	0	0.4	0.3	0.6	2.4	0.2	1
Employment																										
Total civilian employment (TCE) ²	Thousands	1990	7 850	3 412	3 726	12 572	2 638	2 457	21 732	27 946	3 677	126	1 115	21 123	62 500	189	6 268	1 472	1992	4 474	12 578	4 508	3 563	19 209	26 577	117 914
Of which: Agriculture	% of TCE		5.6	7.9	2.7	4.2	5.6	8.4	6.1	3.4	24.5	10.3	15	9	7.2	3.2	4.6	10.6	6.5	17.8	11.8	3.3	5.6	47.8	2.1	2.8
Industry	% of TCE		25.4	36.8	28.3	24.6	27.5	31	29.9	39.8	27.4	30.2	28.6	32.4	34.1	30.7	26.3	24.6	24.8	34.8	33.4	29.1	35	19.9	29	26.2
Services	% of TCE		69	55.3	69	71.2	66.9	60.6	64	56.8	48.2	59.5	56.4	58.6	58.7	66.1	69.1	64.8	68.8	47.4	54.8	67.5	59.5	32.3	68.9	70.9
Gross domestic product (GDP)																										
At current prices and current exchange rates	Bill US \$	1990	294.1	157.4	192.4	570.1	129.3	137.3	1 190.8	1 488.2	66	5.9	42.5	1 090.8	2 940.4	8.7	279.1	44	105.7	59.7	491.2	228.1	224.8	108.4	975.1	5 392.2
Per capita	US \$		17 215	20 391	19 303	21 418	25 150	27 527	21 105	23 536	6 505	22 907	12 131	18 921	23 801	22 895	18 676	13 020	24 924	6 085	12 609	26 652	33 085	1 896	16 985	21 449
At current prices using current PPP's ³	Bill US \$	1990	271.7	127.4	163	510.5	85.2	82.2	980.4	1 151.6	74.3	4.1	37.2	919.7	2 179.9	7.3	234.8	45.8	68	82	457.3	144.6	142.1	189.7	911.8	5 392.2
Per capita	US \$		15 900	16 513	16 351	19 179	16 570	16 487	17 376	18 212	7 323	16 158	10 627	15 953	17 645	19 282	15 708	13 564	16 033	8 364	11 738	16 896	20 911	3 318	15 882	21 449
Average annual volume growth over previous 5 years	%	1990	3.1	3.1	3.2	3	1.5	3.4	2.9	3.1	1.7	2.7	4.4	3	4.6	4.3	2.7	0.4	1.6	4.6	4.5	2.1	2.8	5.9	3.2	3
Gross fixed capital formation (GFCF)																										
Of which: Machinery and equipment	% of GDP	1990	22.9	24.3	20.3	21.4	17.7	26.3	21.2	21.2	19.7	19.4	19.1	20.2	32.2	25.3	21.5	19.8	18.8	26.4	24.6	20.7	27.1	22.7	19.2	16.1
Residential construction	% of GDP	1990	9.7	10.1	10.4	7.2	8.1	10	9.7	9.8	8.7	6.2	9.3	10	13.7	11	10.7	9.9	6.8	13.1	8.1	8.9	9.1	11.7 (87)	8.5	7.8 (89)
Average annual volume growth over previous 5 years	%	1990	4.8	4.6	4.3	6.8	3.7	7.1	5.2	5.6	5	4.4	4.2	5.2	6.1	5	5.1	4.8	2.8	4.5	5	5.5	17.9 ⁹	5.8 (87)	3.4	4.4 (89)
Gross saving ratio⁴																										
	% of GDP	1990	19.7	26	21.8	17.4	18	23.1	21	25.2	13.8	16	23.4	19.3	34.6	60.9	25.4	16.1	24.1	26.6	22.1	17.3	33	22.2	15.6	14.4
General government																										
Current expenditure on goods and services	% of GDP	1990	17.3	18	14.3	19.8	25.2	21.1	18	18.4	21.2	18.8	15.7	17.3	9.1	16.3	14.8	16.7	21	16.7	15.2	27.1	13.3	19.4	19.9	18.1
Current disbursements ⁵	% of GDP	1990	34.9	44.9	53.1	44	56.5	37.5	46.2	42.6	50.9	31.5	49.9 (87)	48.1	26.2	45 (86)	51.7	..	51.6	39.3	35.5 (88)	59.1	30.7	..	38.1	34.6 (89)
Current receipts	% of GDP	1990	35.1	46.7	49.5	41.6	56.1	41.2	46.5	43.4	34.7	34.9	43.7 (87)	42.1	34.6	52.9 (86)	49.5	..	56.2	37.6	36.3 (88)	63.9	34.2	..	40	31.8 (89)
Net official development assistance																										
	Mill US \$	1990	0.34	0.25	0.45	0.44	0.93	0.64	0.79	0.42	0.07	0.03	0.16	0.32	0.31	0.29	0.94	0.22	1.17	0.23	0.16	0.9	0.31	..	0.27	0.21
Indicators of living standards																										
Private consumption per capita using current PPP's ³	US \$	1990	9 441	9 154	10 119	11 323	8 639	8 602	10 482	9 841	5 298	9 824	5 886	9 866	10 122	11 017	9 241	8 475	8 174	5 278	7 326	8 748	11 933	1992	10 051	14 465
Passenger cars per 1 000 inhabitants	Number	1989	570	416	416	613	370	439	494	526	234	488 (85)	278	458	455	546	399	549	459	181	347	462	479	37	449	748
Telephones per 1 000 inhabitants	Number	1989	550 (85)	540	500 (88)	780 (88)	880 (88)	620 (85)	610 (85)	680 (88)	360 (88)	525 (83)	265 (85)	510 (88)	555 (85)	413 (85)	660 (88)	720 (88)	622 (84)	220 (88)	396 (87)	889 (83)	880 (88)	120 (88)	524 (84)	650 (84)
Television sets per 1 000 inhabitants	Number	1988	217	484 (89)	255	586	526	486	399	379	175	306	260	419	589	250	478	296	350	160	380	395	408	172	435	812
Doctors per 1 000 inhabitants	Number	1990	2.3	2.1	3.4	2.2	2.7 (87)	1.9	2.6 (89)	3 (89)	3.3 (89)	2.8 (89)	1.5 (88)	1.3 (89)	1.6 (88)	1.9 (88)	2.5	1.9 (89)	3.1	3.7 (89)	3.1 (89)	2.9 (89)	0.9	1.4 (89)	2.3	
Infant mortality per 1 000 live births	Number	1990	8.2	7.8	7.9	7.2 (89)	7.5 (89)	6.1 (89)	7.2	7.5 (89)	9.1 (89)	5.9	7.6 (89)	8.5	4.6 (89)	9.9	6.9	8.3	7.9 (89)	11	7.8 (89)	5.9	7.3	6.5 (89)	7.9	9.2
Wages and prices (average annual increase over previous 5 years)																										
Wages (earnings or rates according to availability)	%	1990	5.6	5	3	4.3	6	8.2	3.7	4.2	16	..	5.6	6.1	3.7	..	1.7	8.1	8.7	..	8.2	8.2	..	..	8.5	2.6
Consumer prices	%	1990	7.9	2.2	2.1	4.5	3.9	5	3.1	1.4	17.4	20.2	3.3	5.7	1.3	1.7	0.7	9.4	6.2	11.3	6.5	6.2	2.5	53.7	5.9	4
Foreign trade																										
Exports of goods, fob*	Mill US \$	1990	39 813	40 985	118 291 ⁷	127 334	34 988	26 583	216 157	409 620	8 014	1 589	23 796	170 330	287 358	.. ⁸	131 778	9 533	33 905	16 338	55 289	57 422	63 847	12 836	185 710	393 812
As % of GDP	%		13.5	26	61.5	22.3	27.1	19.4	18.2	27.5	12.2	27.1	56	15.6	9.8	..	47.2	21.7	32.1	27.4	11.3	25.2	28.4	11.8	19	7.3
Average annual increase over previous 5 years	%		11.9	19.1	17.1	7.8	15.6	14.3	16.5	17.6	11.8	14.2	18.1	16.6	10.2	..	14	10.6	11.2	23.5	18	13.7	18.4	9.9	12.9	13.1
Imports of goods, cif*	Mill US \$	1990	38 907	48 914	120 330 ⁷	116 561	31 647	26 950	225 260	344 454	19 831	1 648	20 687	181 863	235 407	..	126 215	9 458	27 218	24 874	87 373	54 659	69 811	22 224	225 327	494 842
As % of GDP	%		13.2	31.1	62.5	20.4	24.5	19.6	18.9	23.1	30.1	28.1	48.7	16.7	..	45.2	21.5	25.7	41.7	17.8	24	24	31	20.5	23.1	9.2
Average annual increase over previous 5 years	%		11	18.6	16.5	8.8	11.8	15.3	16.8	16.9	14.1	12.7	15.7	14.8	..	14.1	9.6	11.9	26.5	14	17.8	14	17.8	14.2	15.5	7.4
Total official reserves⁶																										
As ratio of average monthly imports of goods	ratio	1990	11 432	6 591	8 541 ⁷	12 544	7 445	6 779	25 851	47 729	2 398	307	3 672	44 232	55 179	..	12 289	2 902	10 777	10 182	36 008	12 644	20 541	4 252	25 201	50 791
	ratio		3.5	1.6	0.9	1.3	2.8	3	1.4	1.7	1.5	2.2	2.1	2.9	..	1.2	3.7	4.8	4.9	4.9	2.8	3.5	2.3	1.3	1.2	

* At current prices and exchange rates.
 1. Unless otherwise stated.
 2. According to the definitions used in OECD Labour Force Statistics.
 3. PPP's = Purchasing Power Parities.
 4. Gross saving = Gross national disposable income minus Private and Government consumption.
 5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
 6. Gold included in reserves is valued at 35 SDR's per ounce. End of year.
 7. Including Luxembourg.
 8. Included in Belgium.

9. Including non-residential construction.
 10. Federal Government Statistics.
 Sources: Population and Employment: OECD Labour Force Statistics.
 GDP, GFCF, and General Government: OECD National Accounts, Vol. I and OECD Economic Outlook, Historical Statistics.
 Indicators of living standards: Miscellaneous national publications.
 Wages and Prices: OECD Main Economic Indicators.
 Foreign trade: OECD Monthly Foreign Trade Statistics, series A.
 Total official reserves: IMF International Financial Statistics.

EMPLOYMENT OPPORTUNITIES

Economics Department, OECD

The Economics Department of the OECD offers challenging and rewarding opportunities to economists interested in applied policy analysis in an international environment. The Department's concerns extend across the entire field of economic policy analysis, both macro-economic and micro-economic. Its main task is to provide, for discussion by committees of senior officials from Member countries, documents and papers dealing with current policy concerns. Within this programme of work, three major responsibilities are:

- to prepare regular surveys of the economies of individual Member countries;
- to issue full twice-yearly reviews of the economic situation and prospects of the OECD countries in the context of world economic trends;
- to analyse specific policy issues in a medium-term context for the OECD as a whole, and to a lesser extent for the non-OECD countries.

The documents prepared for these purposes, together with much of the Department's other economic work, appear in published form in the *OECD Economic Outlook*, *OECD Economic Surveys*, *OECD Economic Studies* and the Department's *Working Papers* series.

The Department maintains a world econometric model, INTERLINK, which plays an important role in the preparation of the policy analyses and twice-yearly projections. The availability of extensive cross-country data bases and good computer resources facilitates comparative empirical analysis, much of which is incorporated into the model.

The Department is made up of about 75 professional economists from a variety of backgrounds and Member countries. Most projects are carried out by small teams and last from four to eighteen months. Within the Department, ideas and points of view are widely discussed; there is a lively professional interchange, and all professional staff have the opportunity to contribute actively to the programme of work.

Skills the Economics Department is looking for:

- a) Solid competence in using the tools of both micro-economic and macro-economic theory to answer policy questions. Experience indicates that this normally requires the equivalent of a PH.D. in economics or substantial relevant professional experience to compensate for a lower degree.
- b) Solid knowledge of economic statistics and quantitative methods; this includes how to identify data, estimate structural relationships, apply basic techniques of time series analysis, and test hypotheses. It is essential to be able to interpret results sensibly in an economic policy context.

- c) A keen interest in and knowledge of policy issues, economic developments and their political/social contexts.
- d) Interest and experience in analysing questions posed by policy-makers and presenting the results to them effectively and judiciously. Thus, work experience in government agencies or policy research institutions is an advantage.
- e) The ability to write clearly, effectively, and to the point. The OECD is a bilingual organisation with French and English as the official languages. Candidates must have excellent knowledge of one of these languages, and some knowledge of the other. Knowledge of other languages might also be an advantage for certain posts.
- f) For some posts, expertise in a particular area may be important, but a successful candidate is expected to be able to work on a broader range of topics relevant to the work of the Department. Thus, except in rare cases, the Department does not recruit narrow specialists.
- g) The Department works on a tight time schedule and strict deadlines. Moreover, much of the work in the Department is carried out in small groups of economists. Thus, the ability to work with other economists from a variety of cultural and professional backgrounds, to supervise junior staff, and to produce work on time is important.

General Information

The salary for recruits depends on educational and professional background. Positions carry a basic salary from FF 262 512 or FF 323 916 for Administrators (economists) and from FF 375 708 for Principal Administrators (senior economists). This may be supplemented by expatriation and/or family allowances, depending on nationality, residence and family situation. Initial appointments are for a fixed term of two to three years.

Vacancies are open to candidates from OECD Member countries. The Organisation seeks to maintain an appropriate balance between female and male staff and among nationals from Member countries.

For further information on employment opportunities in the Economics Department, contact:

**Administrative Unit
Economics Department
OECD
2, rue André-Pascal
75775 PARIS CEDEX 16
FRANCE**

Applications citing "ECSUR", together with a detailed *curriculum vitae* in English or French, should be sent to the Head of Personnel at the above address.

**MAIN SALES OUTLETS OF OECD PUBLICATIONS
PRINCIPAUX POINTS DE VENTE DES PUBLICATIONS DE L'OCDE**

ARGENTINA - ARGENTINE

Carlos Hirsch S.R.L.
Galería Güemes, Florida 165, 4° Piso
1333 Buenos Aires Tel. (1) 331.1787 y 331.2391
Telefax: (1) 331.1787

AUSTRALIA - AUSTRALIE

D.A. Information Services
648 Whitehorse Road, P.O.B 163
Mitcham, Victoria 3132 Tel. (03) 873.4411
Telefax: (03) 873.5679

AUSTRIA - AUTRICHE

Gerold & Co.
Graben 31
Wien 1 Tel. (0222) 533.50.14

BELGIUM - BELGIQUE

Jean De Lannoy
Avenue du Roi 202
B-1060 Bruxelles Tel. (02) 538.51.69/538.08.41
Telefax: (02) 538.08.41

CANADA

Renouf Publishing Company Ltd.
1294 Algoma Road
Ottawa, ON K1B 3W8 Tel. (613) 741.4333
Telefax: (613) 741.5439

Stores:

61 Sparks Street
Ottawa, ON K1P 5R1 Tel. (613) 238.8985
211 Yonge Street
Toronto, ON M5B 1M4 Tel. (416) 363.3171
Les Éditions La Liberté Inc.
3020 Chemin Sainte-Foy
Sainte-Foy, PQ G1X 3V6 Tel. (418) 658.3763
Telefax: (418) 658.3763

Federal Publications

165 University Avenue
Toronto, ON M5H 3B8 Tel. (416) 581.1552
Telefax: (416) 581.1743

Les Publications Fédérales

1185 Avenue de l'Université
Montréal, PQ H3B 3A7 Tel. (514) 954.1633
Telefax: (514) 954.1633

CHINA - CHINE

China National Publications Import
Export Corporation (CNPIEC)
16 Gongti E. Road, Chaoyang District
P.O. Box 88 or 50
Beijing 100704 PR Tel. (01) 506.6688
Telefax: (01) 506.3101

DENMARK - DANEMARK

Munksgaard Export and Subscription Service
35, Nørre Søgade, P.O. Box 2148
DK-1016 København K Tel. (33) 12.85.70
Telefax: (33) 12.93.87

FINLAND - FINLANDE

Akateeminen Kirjakauppa
Keskuskatu 1, P.O. Box 128
00100 Helsinki Tel. (358 0) 12141
Telefax: (358 0) 121.4441

FRANCE

OECD/OCDE
Mail Orders/Commandes par correspondance:
2, rue André-Pascal
75775 Paris Cedex 16 Tel. (33-1) 45.24.82.00
Telefax: (33-1) 45.24.81.76 or (33-1) 45.24.85.00
Tel.: 640048 OCDE

OECD Bookshop/Librairie de l'OCDE :

33, rue Octave-Feuillet
75016 Paris Tel. (33-1) 45.24.81.67
(33-1) 45.24.81.81

Documentation Française

29, quai Voltaire
75007 Paris Tel. 40.15.70.00

Gibert Jeune (Droit-Économie)
6, place Saint-Michel
75006 Paris Tel. 43.25.91.19

Librairie du Commerce International
10, avenue d'Iéna
75016 Paris Tel. 40.73.34.60

Librairie Dunod
Université Paris-Dauphine
Place du Maréchal de Lattre de Tassigny
75016 Paris Tel. 47.27.18.56

Librairie Lavoisier
11, rue Lavoisier
75008 Paris Tel. 42.65.39.95

Librairie L.G.D.J. - Montchrestien
20, rue Soufflot
75005 Paris Tel. 46.33.89.85

Librairie des Sciences Politiques
30, rue Saint-Guillaume
75007 Paris Tel. 45.48.36.02

P.U.F.
49, boulevard Saint-Michel
75005 Paris Tel. 43.25.83.40

Librairie de l'Université
12a, rue Nazareth
13100 Aix-en-Provence Tel. (16) 42.26.18.08

Documentation Française
165, rue Garibaldi
69003 Lyon Tel. (16) 78.63.32.23

Librairie Decitre
29, place Bellecour
69002 Lyon Tel. (16) 72.40.54.54

GERMANY - ALLEMAGNE

OECD Publications and Information Centre
August-Bebel-Allee 6
D-W 5300 Bonn 2 Tel. (0228) 959.120
Telefax: (0228) 959.12.17

GREECE - GRÈCE

Librairie Kauffmann
Mavrokordatou 9
106 78 Athens Tel. 322.21.60
Telefax: 363.39.67

HONG-KONG

Swindon Book Co. Ltd.
13-15 Lock Road
Kowloon, Hong Kong Tel. 366.80.31
Telefax: 739.49.75

HUNGARY - HONGRIE

Euro Info Service
kázmér u.45
1121 Budapest Tel. (1) 182.00.44
Telefax: (1) 182.00.44

ICELAND - ISLANDE

Mál Mog Menning
Laugavegi 18, Pósthólf 392
121 Reykjavík Tel. 162.35.23

INDIA - INDE

Oxford Book and Stationery Co.
Scindia House
New Delhi 110001 Tel. (11) 331.5896/5308
Telefax: (11) 332.5993
17 Park Street
Calcutta 700016 Tel. 240832

INDONESIA - INDONÉSIE

Pdti-Lipi
P.O. Box 269/JKSMG/88
Jakarta 12790 Tel. 583467
Telex: 62 875

IRELAND - IRLANDE

TDC Publishers - Library Suppliers
12 North Frederick Street
Dublin 1 Tel. 74.48.35/74.96.77
Telefax: 74.84.16

ISRAEL

Electronic Publications only
Publications électroniques seulement
Sophist Systems Ltd.
71 Allenby Street
Tel-Aviv 65134 Tel. 3-29.00.21
Telefax: 3-29.92.39

ITALY - ITALIE

Libreria Commissionaria Sansoni
Via Duca di Calabria 1/1
50125 Firenze Tel. (055) 64.54.15
Telefax: (055) 64.12.57
Via Bartolini 29
20155 Milano Tel. (02) 36.50.83
Editrice e Libreria Herder
Piazza Montecitorio 120
00186 Roma Tel. 679.46.28
Telefax: 678.47.51

Libreria Hoepli

Via Hoepli 5
20121 Milano Tel. (02) 86.54.46
Telefax: (02) 805.28.86

Libreria Scientifica

Dott. Lucio de Biasio 'Aeou'
Via Coronelli, 6
20146 Milano Tel. (02) 48.95.45.52
Telefax: (02) 48.95.45.48

JAPAN - JAPON

OECD Publications and Information Centre
Landic Akasaka Building
2-3-4 Akasaka, Minato-ku
Tokyo 107 Tel. (81.3) 3586.2016
Telefax: (81.3) 3584.7929

KOREA - CORÉE

Kyobo Book Centre Co. Ltd.
P.O. Box 1658, Kwang Hwa Moon
Seoul Tel. 730.78.91
Telefax: 735.00.30

MALAYSIA - MALAISIE

Co-operative Bookshop Ltd.
University of Malaya
P.O. Box 1127, Jalan Pantai Baru
59700 Kuala Lumpur
Malaysia Tel. 756.5000/756.5425
Telefax: 757.3661

MEXICO - MEXIQUE

Revistas y Periodicos Internacionales S.A. de C.V.
Florescia 57 - 1004
Mexico, D.F. 06600 Tel. 207.81.00
Telefax: 208.39.79

NETHERLANDS - PAYS-BAS

SDU Uitgeverij
Christoffel Plantijnstraat 2
Postbus 20014
2500 EA's-Gravenhage Tel. (070 3) 78.99.11
Voor bestellingen: Tel. (070 3) 78.98.80
Telefax: (070 3) 47.63.51

**NEW ZEALAND
NOUVELLE-ZÉLANDE**

Legislation Services
P.O. Box 12418
Thorndon, Wellington Tel. (04) 496.5652
Telefax: (04) 496.5698

NORWAY - NORVÈGE

Narvesen Info Center - NIC
Bertrand Narvesens vei 2
P.O. Box 6125 Etterstad
0602 Oslo 6
Tel. (02) 57.33.00
Telefax: (02) 68.19.01

PAKISTAN

Mirza Book Agency
65 Shahrah Quaid-E-Azam
Lahore 54000
Tel. (42) 353.601
Telefax: (42) 231.730

PHILIPPINE - PHILIPPINES

International Book Center
5th Floor, Filipinas Life Bldg.
Ayala Avenue
Metro Manila
Tel. 81.96.76
Telex 23312 RHP PH

PORTUGAL

Livraria Portugal
Rua do Carmo 70-74
Apart. 2681
1117 Lisboa Codex
Tel.: (01) 347.49.82/3/4/5
Telefax: (01) 347.02.64

SINGAPORE - SINGAPOUR

Information Publications Pte. Ltd.
41, Kallang Pudding, No. 04-03
Singapore 1334
Tel. 741.5166
Telefax: 742.9356

SPAIN - ESPAGNE

Mundi-Prensa Libros S.A.
Castelló 37, Apartado 1223
Madrid 28001
Tel. (91) 431.33.99
Telefax: (91) 575.39.98

Libreria Internacional AEDOS

Consejo de Ciento 391
08009 - Barcelona
Tel. (93) 488.34.92
Telefax: (93) 487.76.59

Llibreria de la Generalitat

Palau Moja
Rambla dels Estudis, 118
08002 - Barcelona
(Subscriptions) Tel. (93) 318.80.12
(Publications) Tel. (93) 302.67.23
Telefax: (93) 412.18.54

SRI LANKA

Centre for Policy Research
c/o Colombo Agencies Ltd.
No. 300-304, Galle Road
Colombo 3
Tel. (1) 574240, 573551-2
Telefax: (1) 575394, 510711

SWEDEN - SUÈDE

Fritzes Fackboksforlaget
Box 16356
Regeringsgatan 12
103 27 Stockholm
Tel. (08) 690.90.90
Telefax: (08) 20.50.21

Subscription Agency-Agence d'abonnements

Wennergren-Williams AB
P.O. Box 1305
171 25 Solna
Tel. (08) 705.97.50
Telefax: (08) 27.00.71

SWITZERLAND - SUISSE

Maditec S.A. (Books and Periodicals - Livres
et périodiques)
Chemin des Palenes 4
Case postale 2066
1020 Renens 1
Tel. (021) 635.08.65
Telefax: (021) 635.07.80

Librairie Payot S.A.

4, place Pépinet
1003 Lausanne
Tel. (021) 341.33.48
Telefax: (021) 341.33.45

Librairie Unilivres

6, rue de Candolle
1205 Genève
Tel. (022) 320.26.23
Telefax: (022) 329.73.18

Subscription Agency - Agence d'abonnement

Dynapresse Marketing S.A.
38 avenue Vibert
1227 Carouge
Tel.: (022) 308.07.89
Telefax: (022) 308.07.99

See also - Voir aussi :

OECD Publications and Information Centre
August-Bebel-Allee 6
D-W 5300 Bonn 2 (Germany) Tel. (0228) 959.12.00
Telefax: (0228) 959.12.17

TAIWAN - FORMOSE

Good Faith Worldwide Int'l. Co. Ltd.
9th Floor, No. 118, Sec. 2
Chung Hsiao E. Road
Taipei
Tel. (02) 391.7396/391.7397
Telefax: (02) 394.9176

THAILAND - THAÏLANDE

Suksit Siam Co. Ltd.
113, 115 Fuang Nakhon Rd.
Opp. Wat Rajbopith
Bangkok 10200
Tel. (662) 251.1630
Telefax: (662) 236.7783

TURKEY - TURQUIE

Kültür Yayınları İst-Türk Ltd. Sti.
Atatürk Bulvarı No. 191/Kat 13
Kavaklıdere/Ankara
Tel. 428.11.40 Ext. 2458
Dolmabahçe Cad. No. 29
Besiktas/Istanbul
Tel. 260.71.88
Telex: 43482B

UNITED KINGDOM - ROYAUME-UNI

HMSO
Gen. enquiries
Postal orders only:
P.O. Box 276, London SW8 5DT
Personal Callers HMSO Bookshop
49 High Holborn, London WC1V 6HB
Tel. (071) 873 0011
Telefax: (071) 873 8200

Branches at: Belfast, Birmingham, Bristol, Edinburgh, Manchester

UNITED STATES - ÉTATS-UNIS

OECD Publications and Information Centre
2001 L Street N.W., Suite 700
Washington, D.C. 20036-4910 Tel. (202) 785.6323
Telefax: (202) 785.0350

VENEZUELA

Libreria del Este
Avda F. Miranda 52, Aptdo. 60337
Edificio Galipán
Caracas 106
Tel. 951.1705/951.2307/951.1297
Telegram: Librestre Caracas

Subscription to OECD periodicals may also be placed through main subscription agencies.

Les abonnements aux publications périodiques de l'OCDE peuvent être souscrits auprès des principales agences d'abonnement.

Orders and inquiries from countries where Distributors have not yet been appointed should be sent to: OECD Publications Service, 2 rue André-Pascal, 75775 Paris Cedex 16, France.

Les commandes provenant de pays où l'OCDE n'a pas encore désigné de distributeur devraient être adressées à: OCDE, Service des Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

02-1993

PRINTED IN FRANCE

OECD PUBLICATIONS
2 rue André-Pascal
75775 PARIS CEDEX 16
No. 46563

(10 93 11 1) ISBN 92-64-13857-9
ISSN 0376-6438

OECD ECONOMIC SURVEYS

Latest Surveys Available:

AUSTRALIA, *APRIL 1992*
AUSTRIA, *APRIL 1993*
BELGIUM-LUXEMBOURG, *JULY 1992*
CANADA, *SEPTEMBER 1992*
DENMARK, *FEBRUARY 1993*
FINLAND, *AUGUST 1992*
FRANCE, *JUNE 1992*
GERMANY, *JULY 1992*
GREECE, *AUGUST 1992*
ICELAND, *JUNE 1992*
IRELAND, *MAY 1991*
ITALY, *DECEMBER 1992*
JAPAN, *NOVEMBER 1992*
NETHERLANDS, *APRIL 1993*
NEW ZEALAND, *JANUARY 1993*
NORWAY, *MARCH 1993*
PORTUGAL, *JANUARY 1992*
SPAIN, *APRIL 1993*
SWEDEN, *JULY 1992*
SWITZERLAND, *OCTOBER 1992*
TURKEY, *APRIL 1993*
UNITED KINGDOM, *JANUARY 1993*
UNITED STATES, *NOVEMBER 1992*

Surveys of "Partners in Transition" Countries

HUNGARY, *JULY 1991*
CZECH AND SLOVAK FEDERAL REPUBLIC, *DECEMBER 1991*
POLAND, *JULY 1992*

Non-member Country

MEXICO, *SEPTEMBER 1992*

(10 93 11 1) ISBN 92-64-13857-9
ISSN 0376-6438

Per issue: FF 80
1993 Subscription: FF 950