

Country Employment Policy Reviews: Austria

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Introduction¹

The current economic outlook in Europe appears quite favourable. Growth in 1997 was around 2 ¾ % and the forecasts for the EU for 1998 and 1999 are around 3 %. Inflation in Europe is low, and the budget consolidation process was successful without negative repercussions on the European business cycle. Against this background EU employment rose by 0.4 % in 1997, and job growth is set to accelerate in 1998/99. However, unemployment is still one of the most important problems in Europe. Labour market institutions and employment issues have become a central topic in European policy debates. In 1997, on average almost 18 million people were unemployed; the unemployment rate amounted to 10.7 %. Unemployment, however, is not evenly distributed across Europe. The unemployment rates are in the interval from 3.7 % in Luxembourg to 20.8 % in Spain. Austria, Denmark, Ireland and the Netherlands can be identified as countries, which either have managed to maintain comparatively low unemployment or have recently succeeded in bringing unemployment levels down.

This report discusses the development and the institutions of the Austrian labour market. The Austrian labour market has shown a very favourable performance in international comparison, although some gradual deterioration has occurred over the past 15 years. The only other EU country with such low unemployment is Luxembourg. The youth unemployment rate is very low and the share of long-term unemployed is only half as high as the EU average.

This success is not due primarily to the systematic reduction of labour supply through early retirements as is commonly believed. Austria is also a top performer in terms of the employment rate (i.e. the share of employed persons in the 15 to 64-year-old population). Measured in full-time equivalents, Austria had the highest rate of employment in the European Union in 1995. However, the employment rate among older workers is significantly below the EU average and the unemployment rate is above the average in the age group before early retirement age.

The Austrian labour market is quite dynamic (this applies in any case to the private sector segment). This dynamic of movement is manifest in job turnover rates, the mobility of workers and the flows into and out of unemployment. According to the scarce data available, reallocation processes on the labour market have accelerated in the past few years due to far-reaching structural changes taking place and the globalisation of economic activity, and have occurred primarily at the expense of low skilled workers.

The main objective of this report is to analyse reasons for the relatively favourable situation on the Austrian labour market. We will argue that the relatively positive labour market development in Austria can be attributed to a series of factors. Apart from the macroeconomic orientation of economic policies on the stability goal, the most significant factor appears to be wage and incomes policy. In international comparison Austria belongs to the group of countries with the highest macroeconomic real wage flexibility, i.e. the wage determination process follows more or less the medium-run price and productivity trends and also takes account of the employment situation. The wage setting process is highly co-ordinated and can be understood only by recognising the sophisticated and long-standing system of social partnership.

¹ This report draws heavily on a recent study on the Austrian labour market, commissioned by the Federal Ministry of Labour, Health and Social Affairs (Pichelmann, Hofer, Rosner 1998).

Among the further "success factors" is a unique mix of supply-side and demand-side oriented elements. These are listed below without ranking them by importance (or claims of being complete).

- The dual system of apprenticeship training for youths (despite its weak spots) contributes significantly to a smooth transition from school to work while at the same time avoiding the problem of too high minimum wages.
- In view of the high turnover on the Austrian labour market, the employment protection regulations appear to be flexible enough in most areas of economic activity so as to avoid burdening the required reallocation process with prohibitively high costs.
- The system of unemployment benefits is not particularly generous (with the exception of the problem of cross-subsidies granted to the seasonal industries).
- The labour supply responsiveness to cyclical employment fluctuations is very high, a factor that smoothes unemployment over the business cycle.
- The public sector has absorbed the greater share of net employment gains in the last decade.

There can be little doubt, however, that the continuation of the Austrian success story requires to address and master the new challenges ahead for economic policy. Some of the above-mentioned instruments are not applicable on a permanent basis or need to be fundamentally reformed, and in those sectors that had been sheltered up until the recent past, some painful adjustment processes are yet to be overcome. Economic policy will have to deal with the problem of unemployment not only in the short term, but also in the medium term. The prospect that the problem will solve itself without policy intervention is very improbable, because according to current estimates roughly three-fourths of unemployment in Austria is due to non-cyclical factors. Stronger growth by itself will not suffice to master the problems on the labour market. Nor do the trends in the labour supply based on existing estimates promise relief in the medium-term: The working age population will increase by approximately 100,000 persons by the year 2002; the greater share being in the age group of 55 to 64-year-olds.

Section 1 of this report reviews salient features of the Austrian labour market, like the trends in labour supply and demand, the development of wages and productivity, the structure and evolution of unemployment and the flow dynamics in the labour market. Section 2 deals with macroeconomic aspects of the Austrian labour market. The stability orientation of the Austrian economic policy is discussed. Cyclical properties and co-movements of output, employment, labour force and unemployment are investigated. The wage setting process and evidence for hysteresis phenomena, which lead to an increase in structural unemployment are analysed. Section 3 deals with key employment policy issues, like wage bargaining and the role of the social partners. Further issues are the repercussions of the tax and the social security system on the labour market, the business environment and the education system. Trends in the direction of a more active labour market policy are reviewed and the national action plan for employment is shortly summarised.

1. Salient Features of the Austrian Labour Market

1.1 Labour Supply

The population in Austria was 8,068,000 at the end of 1996. The number of inhabitants thus increased by 474,000 over the past ten years, the eight million threshold was surpassed at the end of 1993. The number of persons of working age rose sharply following the massive inflow of immigrants to Austria during the period 1989 to 1993. The number of persons of working age was 5,066,000 or 62.9 % of the total population in 1996.

According to the Austrian labour force survey carried out in 1996, the number of persons that made up the working population was 3,827,900, of which 2,192,200 were men and 1,635,700 women. In total, 73.2 % of the working age population² were available for employment. The labour force participation rate varies by age and gender. Men have a higher labour force participation rate in all age groups. The rate is particularly high for prime age men at 93 %, which is very high even in international comparison; on the other hand only 3 out of 4 women are available for the labour market. In the age group of 15 to 24-year-olds, the activity rate is lower due to school education. In the age group of persons over 50 years old, the policy measures to reduce the number of persons available for work in this age group should be taken into account (see below).

Overall, the activity rate in Austria is above the EU-average (72.9 % to 67.7 %). However, the activity rate in Denmark is significantly higher (81.1 %), whereas labour force participation in the Netherlands is slightly lower (69.9 %). While the male activity rate is quite similar across the EU, female participation rates vary considerably across countries. Austria's activity rate is above the EU average for both men (81.8 % over 78 %) and women (64 % over 57.4 %). Denmark is the top-ranked across the EU countries with respect to male participation (87.1 %) and has, after Sweden, the highest female rate (74.9 %).

Table 1.1: Activity rate by age

Age	Total	Men	Women
15-24	59,9%	63,7%	55,9%
25-49	84,8%	93,2%	76,1%
50-60(65)	53,0%	60,5%	42,9%

Source: own calculations from microcensus March 1996.

In general, the labour force³ has risen since the 1960s, which is due mainly to the increase in the participation rates of prime-age women. This trend can be attributed to the higher degree of education, the lower fertility rates and the changed role perception of women in society (see Kubin and Rosner 1997). On the other hand, the activity rate of young men has declined due to longer periods of education as well as that of men over 55 years of age.

² The definition of the working age population according to the microcensus is: men = 15 to 64 years old; women = 15 to 59 years old; EUROSTAT does not differentiate by gender, i.e., 15 to 64 years old.

³ With respect to the development of the labour force and the participation rate we use the OECD ECO database, because in the microcensus data several breaks occur due to changes in definitions.

Figure 1.1

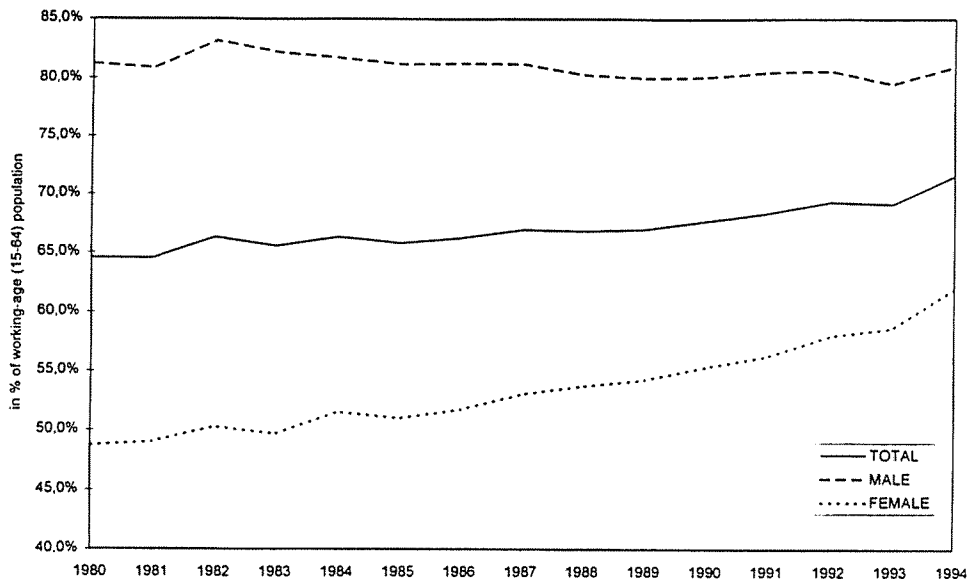


Source: OECD ECO.

Three phases can be distinguished in the period 1981 - 1996 for the growth of the labour force (see figure 1.1). Between 1981 and 1989 the labour force grew at a more or less constant rate, however, slower than the working-age population. The second phase between 1989 and 1993 is marked by a sharp inflow of foreign workers (see below). In this period the participation rates increased considerably, caused by the high activity rates of migrants but also because of the high cyclical elasticity of labour force with respect to employment opportunities. The growth of the labour force stopped in 1994. The main reasons for this development were the tightening of immigration laws and the economic downturn starting in 1992/93. As can be seen from figure 1.2, the participation of males declined slightly because of a trend to higher education at the lower end of the age spectrum and mainly because of early retirement of the older workers. For women the overall trend was dominated by the increased working propensity of middle aged women.

Figure 1.2

Participation rate in Austria



Source: OECD LFS.

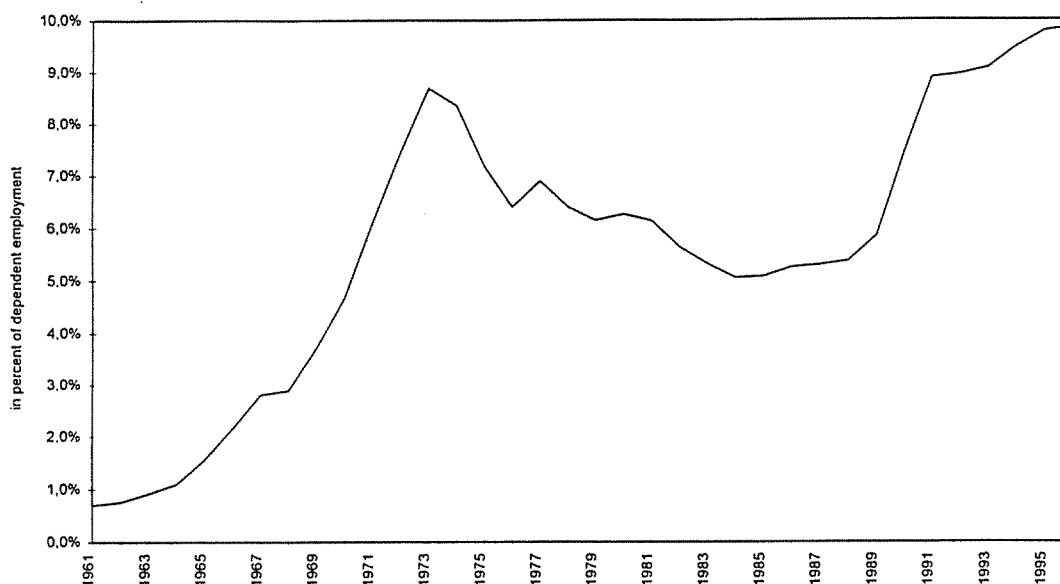
As the development of foreign labour and the working propensity of older workers are crucial for labour supply on the Austrian labour market these two aspects are discussed in more detail.

Foreign Labour

The development of foreign labour in Austria can be divided into three phases. The first phase ended in the early 1970s and was characterised by a constant rise in the employment of foreign labour. The economic slump in the mid-1970s ushered in the second phase of foreign labour employment, this one marked by heavy regulation of the labour supply. Foreign labour was strategically employed as a tool to stabilise the labour market situation, and, thus, had to respond flexibly to economic and seasonal fluctuations in the demand for labour. In the recessions suffered 1974-76 and 1981-84, for example, foreign labour was reduced by 55,000 and 30,000, respectively. Foreign labour hit its lowest point in 1985, when its share in dependent employment sank to 5.1% and remained stagnant until 1989. Between 1989 and 1991 came another sharp, swift rise in foreign employment, increasing the number of foreign workers by some 115,000. This growth can be traced to both demand-pull factors (the economic pull of German Reunification) and supply-push factors (the political crisis in former Yugoslavia). Contrary to widely held opinions, most of the migrant workers came from the traditional migration countries of (former) Yugoslavia and Turkey and only one-fourth of the new wave of workers came from Central and Eastern Europe.

Figure 1.3

Foreign labour in Austria



Source: WIFO, own calculations.

The rise in employment of foreign labour was not without repercussions for the job opportunities of those already employed. Despite the favourable economic climate, unemployment rose by around one percentage point parallel to a marked rise in employment. Various methods were used to examine the economic impact of the labour supply shock that migration unleashed on the Austrian labour market (see inter alia Brandel et al. 1994a, Winter-Ebmer and Zweimüller 1996, Biffi et al. 1997). There are strong indications of a partial replacement process particularly affecting both established foreign workers and domestic workers in the low-wage segment (especially men and older workers) with poor job prospects. Although the effects are difficult to quantify, the studies available suggest that around 25 % of the additional employment of foreign labour in 1989-91 was associated with a substitution process that was at least temporary. Thus, efforts should be made to keep the development of the foreign labour supply on an even keel in the medium-term in order to minimise painful adjustment reactions in the short term.

Over two-thirds of the foreign employees in Austria come from the traditional migration countries of Yugoslavia and Turkey. In 1996, every second foreign employee came from former Yugoslavia. Only 8 % of the foreigners came from the EU, while 13.5 % came from the former East Block (Poland, Hungary, Romania, Czechoslovakia and Slovakia). Foreigners are employed primarily in the lower segment of the qualification hierarchy and are consequently in the lower income segment as well: About one out of five labourer in Austria is from abroad, whereas only 3 out of every 100 white-collar workers is not an Austrian citizen. The median income of foreign employees was only 85 % of that received by Austrians. Men earned about 20 % less than Austrians and women earned about 13 % less. In viewing these comparisons, it should be kept in mind that these figures are not controlled for employment status or working hours. Taking the median income of male blue-collar workers as our indicator of the income situation, the income earned by a foreigner is 86.5 % that of the average Austrian.

The degree of concentration of foreigners in certain industries declined in the course of time. In the early 1970s, about three-fourths of foreign workers were still employed in the secondary sector of the economy, while this figure had dropped to only 43 % by the mid-

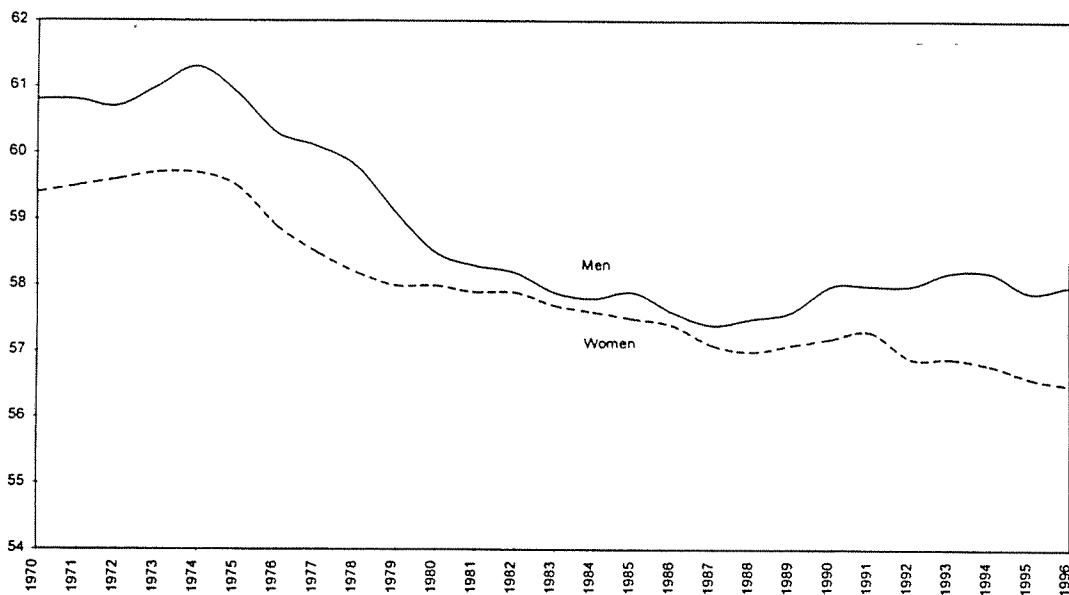
1990s. This development was triggered by the shift in employment of foreign women to the service sector, while men continued to be concentrated in the secondary sector. Industries with higher percentages of foreigners are more heavily exposed to increased competition from east and west (see Biffl et al. 1997). Foreign employment is currently concentrated in the construction, tourism, wholesale and retail trade, business-related services and metal and electronics industries. Relatively speaking, the highest shares of foreign employees are employed in tourism, agriculture and forestry, textiles, construction and business-related services.

Older Workers

The activity rate of older workers is much lower in Austria than in most other countries of the European Union. The employment rate among 55 to 64-year-olds in Austria is almost 6 percentage points lower than the total figure for the EU. The activity rate in the 55 to 64 age group in Austria, however, is at slightly over 30 % almost 10 percentage points below the EU average. Only Belgium, Italy, Luxembourg and the Netherlands had even lower figures than Austria. Consequently, the rate of unemployment in Austria in this age group was even less than half as high as the EU average, although at the cost of a much lower activity rate. Related to this observations is the fact that the average retirement age in Austria is relatively low in international comparison. The average retirement age among wage and salary earners (excluding public servants) was 58 on average for men and 56.5 on average for women in 1996. The average retirement age has thus declined since the mid-1970s by roughly three years.

Figure 1.4

Average retirement age

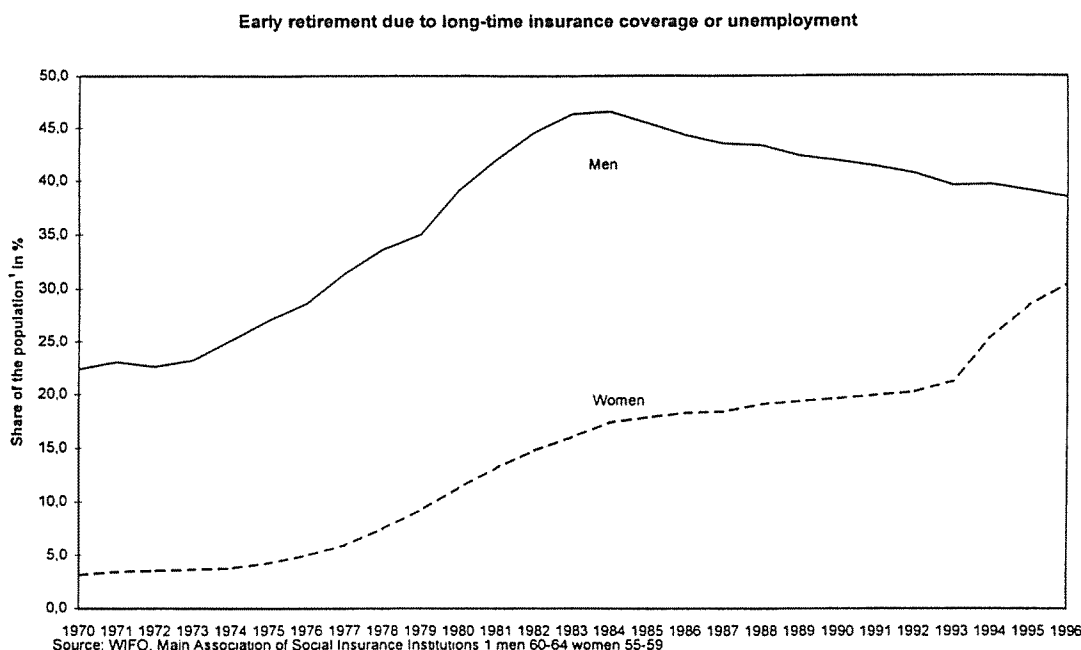


Source: Main Association of Social Insurance Institutions.

Over the past few years, the average retirement age of men has stabilised. The trend towards early retirement due to long-time insurance coverage or unemployment has shown a slightly downward tendency for men in the relevant age groups since the mid-1980s. In the case of women, on the other hand, the inclusion of child-rearing periods for the calculation of pension benefits has resulted in a marked increase in this rate and has lowered their retirement age even further. As a consequence of the increased number of persons in the

relevant age groups, the absolute number of early retirements has climbed for both men and women (Lutz 1997).

Figure 1.5



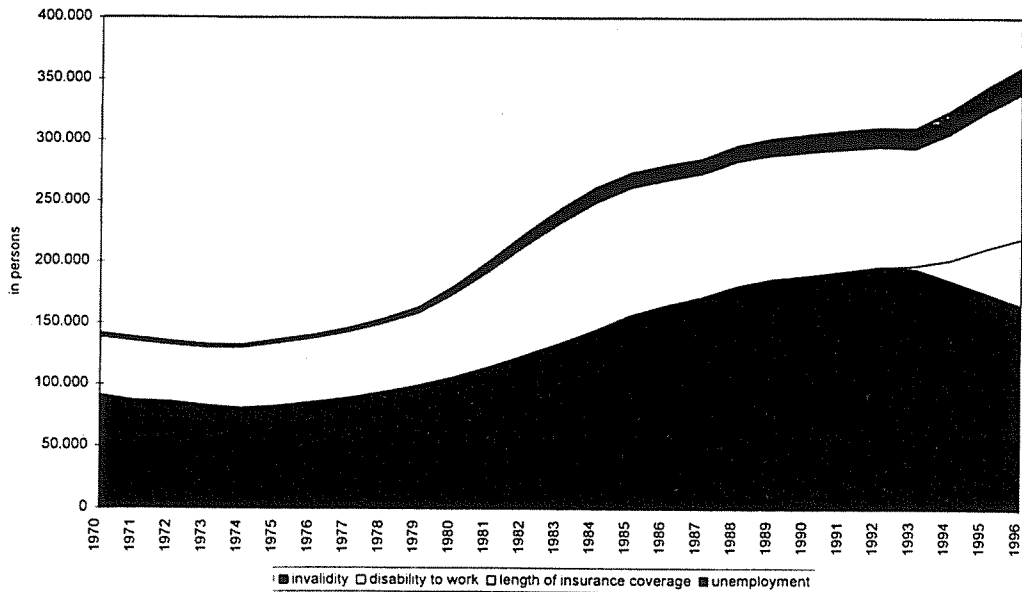
Workers move into early retirement from rather heterogeneous labour market states. According to statistics compiled by the Ministry of Labour, Health and Social Affairs, the transition into retirement (excluding public servants) took place directly from jobs in two-fifths of cases in the period between 1994 and 1996 and only in the case of salaried male employees did the majority of retirements occur directly from jobs. In general, however, most retirements were a transition from the status of recipient of unemployment benefits or unemployment assistance (Notstandshilfe), special unemployment benefits for older unemployed persons, sick pay or some other type of unemployed status.

Thus, the number of retirements is up to a certain extent merely a reflection of the situation on the labour market for older workers and plays quite a significant role in relieving the pressure on the market. If the reduction in the labour force due to early retirement were mechanically translated on a one-to-one basis into an increase in unemployment, then unemployment would, indeed, have been almost 50 % higher than it actually was in 1996⁴. This mechanical approach should be viewed with caution, however, because it does not take labour market adjustment processes into consideration, for example, regarding the effects on wages and wage patterns, the difference in the qualification and mobility patterns of younger and older workers, etc., nor does it account for indirect effects such as increases in social security contributions in order to finance pension schemes, thus strongly overestimating the amelioration effect of early retirement in the medium and long term (Pichelmann et al. 1996).

⁴ Applying the concept of "broad unemployment", developed by the OECD, where inactive peoples of working age receiving social security benefits and subsidised employment are considered as unemployed, results in a broad unemployment rate of 13 % for Austria in 1996. However, note that the broad unemployment rate in the Netherlands was 27.1 % in 1994 (OECD 1996a:41), compared to the standardised rate of 6.8 %.

Figure 1.6

Early retirement by type of retirement



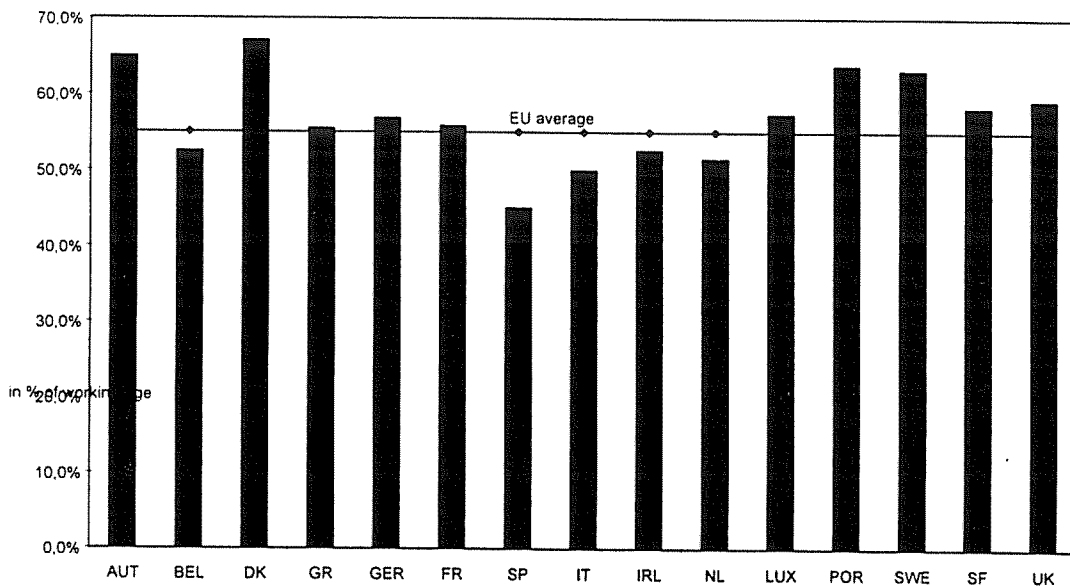
Source: WIFO, Main Association of Social Insurance Institutions.

1.2 Employment trends in Austria

In an EU comparison Austria's employment rate holds an excellent position, coming in third after Denmark and Sweden. Austria's situation is even better if the comparison figures are adjusted for part-time employment by using full-time equivalent employment rates (see figure 1.7). Denmark continues to have the highest employment figures, followed by Austria. Also significantly above the EU average according to this indicator are Portugal and Sweden. The employment situation can also be differentiated by sex. While Austria has the highest rate of employment among men, the ranking regarding women is Denmark, Sweden and Finland, followed by Portugal and Austria.

Figure 1.7

Employment rates (in full-time equivalents) 1996

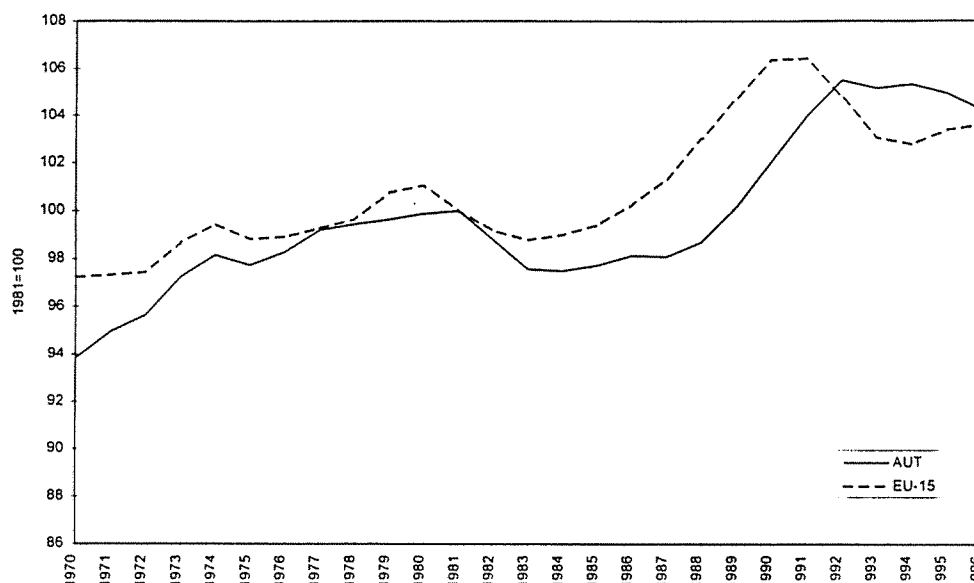


Source: EU Report on Employment 1997.

Although the Austrian labour market situation is very favourable by international standards, some gradual deterioration has occurred since the 1970's. After the first oil crisis the dynamic employment growth of the early 1970's had been lost. Employment growth in the period 1975 to 1981 was slow and more or less in line with the growth of employment in the whole EU area. The weaker demand on the labour market did not translate into rising unemployment, however, due to the reduction of foreign labour and to the decline in employment among older workers.

Figure 1.8

Growth in total employment in Austria and EU-15



Source: OECD ECO.

The adjustment problems caused by the second oil price shock and the change to the hard currency policy lead to an unfavourable development on the Austrian labour market. In the early 1980's employment dropped significantly for the first time, hitting men the hardest. Employment among women registered a smaller decline and rose slightly until 1988. The number of registered unemployed had tripled, with men showing a stronger increase than women. The drop in employment was especially sharp in manufacturing. Employment growth in Austria was lagging behind the EU average (see figure 1.8).

The poor global economic trends in the 1980s brought various problems to the fore, first and foremost the accumulated state debts, the related interest load and the aggravated structural problems (see Rothschild 1989). The increasing internationalisation of the Austrian economy and the problematic fiscal stance prevented the Austrian government from an expansionary fiscal policy to promote employment. The major crisis of state-owned industry also came in this period. This mainly involved enterprises in the basic goods and heavy industries. The policy of keeping existing jobs in the state-owned industry impeded the necessary structural change. Although attempts were made to restructure these industries and develop new markets for them, such efforts met with little success. When futures transactions posted major losses in the mid-1980s, the incumbent government resolved to radically reform state-owned industry. The reforms also introduced the possibility of privatisation and the state's ownership in these enterprises was reduced sharply. Most of the large companies that operated on many markets and had numerous business locations were broken down into smaller units in accordance with international practices. State enterprises were soon turned into businesses that were more than capable of surviving on the market.

However, employment in the former state-owned enterprises is considerably lower as it was in the 1970s.

The period between 1988 and 1992 is characterised by a strong economic upturn and a new phase of dynamic employment growth. Austria could profit above average from the opening up of the Central and Eastern European economies and from the German Reunification. In these years employment grew with an annual rate of 1 $\frac{3}{4}$ %. The share of foreign workers in total wage and salary earners increased from 5.2 % to 9.0 %. Despite considerable growth in employment, the number of unemployed hardly declined. Although unemployment remained low compared to the EU average, unemployment nevertheless became a central problem for economic policy. After 1992 the employment level more or less stagnated, however, at a high level. Adjustment problems caused by Austria's joining the EU, the economic situation in Germany and the fiscal consolidation dampened labour demand.

Table 1.2: Growth of Total Employment, 1980 - 1996

	Total Employment 80-96			
	Index 1980=100	Changes in thousands	Private sector* in thousands	Public sector in thousands
Austria	104,4	143	-65	208
Denmark	108,9	211	120	91
Ireland	111,5	136	107	29
United Kingdom	105,2	1312	3012	-1700
France	102,0	441	-663	1104
Netherlands	119,3	999	997	2
Sweden	93,6	-270	-235	-35

* self-employed are included.

Source: own calculations. OECD Economic Outlook.

All in all, total employment in Austria rose by 143.000 persons since 1980.⁵ The growth rate of employment was smaller than in other comparable EU countries (see table 1.2). The best employment performance of the selected countries in this time period was shown by the Netherlands with 1 Million new jobs, all were created in the private sector of the economy. Employment growth was also stronger in Ireland and Denmark as in Austria.

A number of diverging trends were behind the development of total employment in Austria. Only 50.000 new jobs for wage and salary earners had been created by the private sector. The employment growth was dominated by the government sector, which created 208.000 Jobs. This contrasts with developments in other European countries where employment in the government sector has lost relative weight (see EC 1998). The number of self-employed persons declined considerably. Responsible for this trend is the strong out-migration from the agricultural sector; self-employment declined by 124.000. This huge loss could by no means be compensated by the small increase of self-employment in the industry and service sector of 9.000 persons. The following figure shows the end result of these trends. The share of government employment increased by 5 percentage points since 1980. Accordingly relative employment in the private sector and especially the share of self employment in agriculture has been shrinking.

⁵ According to employment data from EUROSTAT total employment in Austria rose from 3,070 to 3,710 thousand persons in this time period. However, this data is derived from the Austrian microcensus. Due to changes in definitions and data compilations there are considerable problems in interpreting the employment trends over time.

Figure 1.9

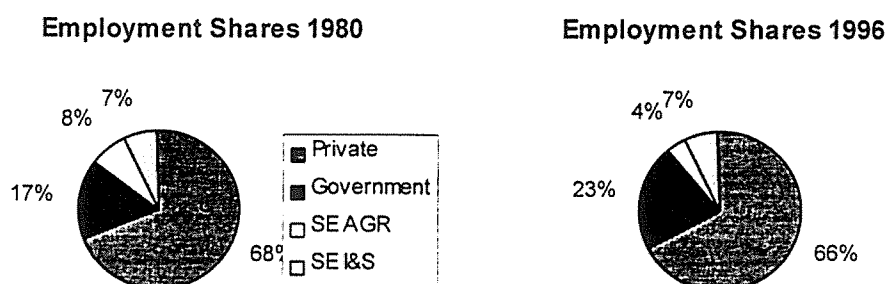


Table 1.3: Employment intensity of growth

	accumulative output growth	accumulative employment growth	(2) : (1)
1970-1996			
USA	103.9%	61.1%	0.588
Japan	154.3%	27.4%	0.177
EU-15	87.1%	6.6%	0.076
Austria	100.9%	11.1%	0.110
1980-96			
Austria	40.8%	4.4%	0.107
Denmark	38.5%	8.9%	0.230
Ireland	106.1%	11.5%	0.108
Netherlands	42.2%	19.3%	0.456
EU-15	38.7%	2.5%	0.066

Source: OECD Economic Outlook, own calculations.

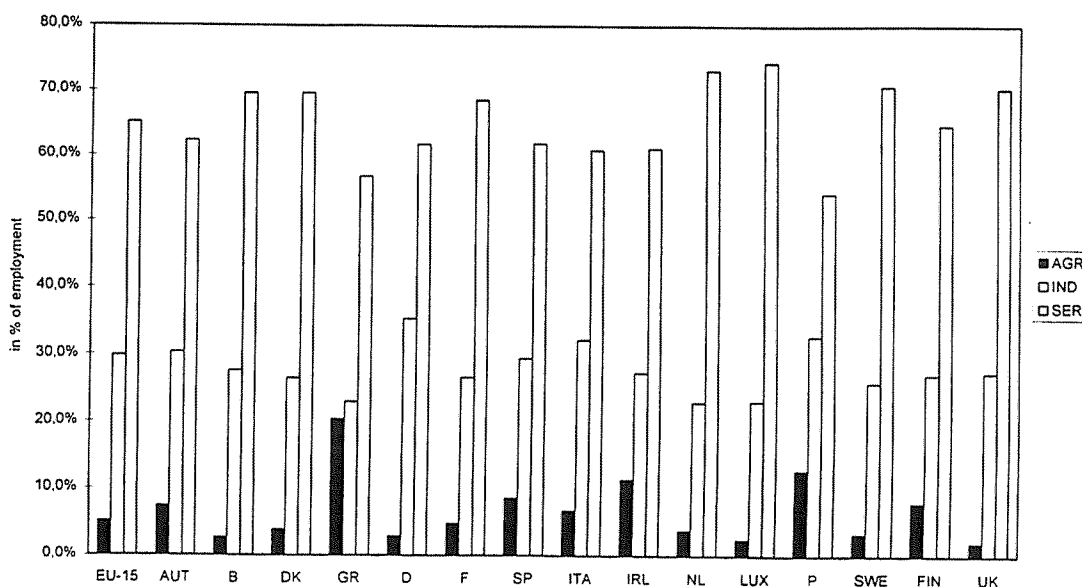
From 1970 to 1996, the US economy grew at a faster pace than the European Union. Austria's growth was well above the EU average and was actually more on a par with American growth. Comparing these figures to the employment trends provides revealing information on the employment intensity of growth. Even given the output growth, the USA exhibits by far the greatest increase in employment. Employment rose on average by 0.6 percentage points for every one percentage point increase in output. Austria's employment intensity is significantly lower⁶, but still above the EU average. The hypothesis that the employment intensity of economic growth is declining as a result of technological progress certainly does not apply to Austria in light of the data provided. In comparison to the 1970s and particularly to the 1980s, the employment intensity of growth even increased between 1990 and 1996.

In the period 1980 to 1996 the employment intensity of growth differs considerably across the Netherlands, Denmark, Ireland and Austria. The employment intensity in the Netherlands is almost four times as high as in Austria or in Ireland, and two times stronger than in Denmark. These results seem to indicate that the impressive employment growth process in Ireland is probably mainly the result of catching up with the rest economically,

⁶ The employment data from EUROSTAT show a different picture, as the employment intensity in Austria is considerably higher. However, as already mentioned, statistical breaks cause considerable problems in interpreting the employment trends over time.

Figure 1.11

Employment by sector 1996



Source: EU Report on Employment 1997.

Table 1.4 allows a closer look at the sectoral decomposition of wage and salary earners in Austria. The Austrian share of employees in the industry sector is well above Denmark or especially the Netherlands. Furthermore, the construction sector in Austria is large in comparison to the other European countries. Conversely, the Austrian share of wage and salary earners in the service sector is below average. In this respect one has to consider the importance of the tourism sector for the Austrian economy. Therefore, the more traditional service industries such as trade, hotels and restaurants account for a relatively high share. However, employment in the more dynamic service industries like business services is still very low in Austria.

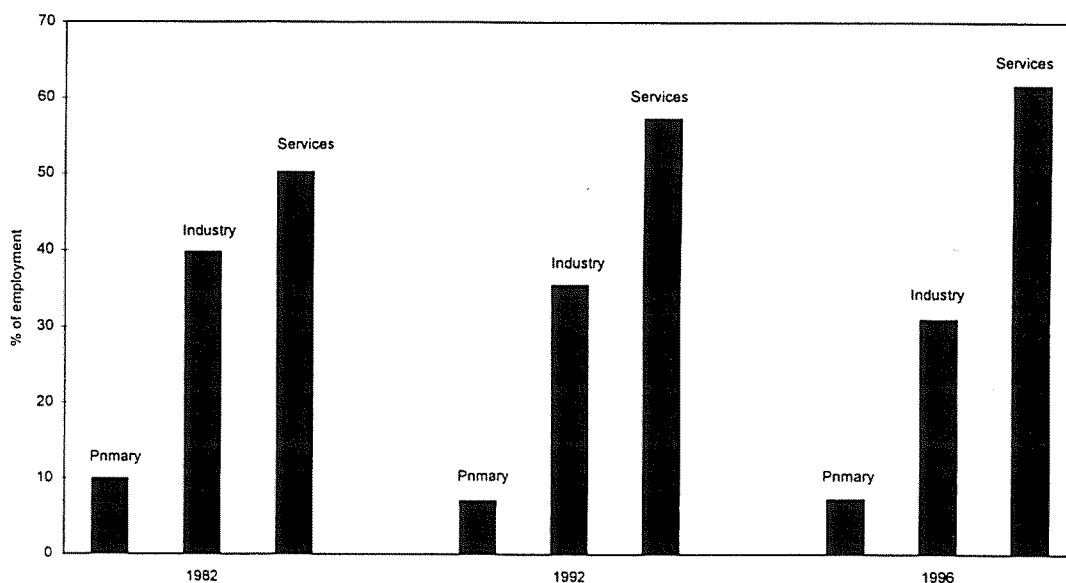
According to data from the EU labour market survey roughly 14.5 % of total employment in Austria are self-employed (including family members that help out in the family business). The structure in Austria corresponds to the EU average. The highest rate of self-employment is to be found in Mediterranean countries such as Greece, Italy, Spain and Portugal. At the other end of the scale are Denmark, Luxembourg and Sweden. An important factor influencing the share of self-employed persons is the sectoral structure of production in a country. Countries with a relatively large share of agriculture also have higher rates of self-employed persons.

whereas the rise in employment in the Netherlands resulted in part from expanding part-time employment⁷.

Figure 1.10 displays the structural change in employment between 1982 and 1996 in Austria. The share of agriculture declined by 2 ¾ percentage points and relative employment in the manufacturing sector has shrunk by 8 ¾ percentage points, whereas employment in the service sector has considerably gone up. This sectoral employment pattern is in line with other OECD countries.

Figure 1.10

Sectoral breakdown of employment in Austria



Source: OECD, LFS.

In comparison to the EU average, Austria has a relatively traditional economic structure. The below-average share of employees in the service sector is compensated by the higher share employed in agriculture (see figure 1.11). This impression is reinforced if the comparison is made with the Netherlands, Denmark, Sweden, France or the UK. Austria's share of persons employed in agriculture and forestry is much higher. In contrast, comparatively few jobs have been created in the service sector in Austria. The relative employment rates are 5 to 10 percentage points behind the other countries in spite of the significance of the tourism industry in Austria.

⁷ In the period from 1970 to 1994, the number of employed persons in the Netherlands increased by about 897,000, calculated in full-time equivalents employment growth is only 480,000 (OECD 1996a:41).

Table 1.4: Wage and salary earners by sector in 1996 (in % of total)

	A	DK	NL	EU 15
Agriculture/Fishing	1.2	2.1	1.6	1.9
Mining/Quarrying	0.3	0.2	0.1	0.5
Manufacturing	23.5	19.8	16.6	22.8
Electricity, Gas, Water	1.1	0.8	0.7	1.0
Construction	8.5	6.3	5.8	7.2
Total Industry	33.4	27.1	23.3	31.5
Trade	16.3	12.8	15.6	13.4
Hotels, Restaurants	4.7	2.6	2.8	3.4
Transport, Communication	7.4	7.1	6.4	6.3
Financial Services	3.9	3.5	3.6	3.9
Other Business Services	6.2	6.3	8.9	6.7
Public administration	7.6	6.9	8.3	9.2
Other Services	19.4	31.4	24.4	23.5
Total Services	65.5	70.6	70.1	66.4
Total	100.0	100.0	100.0	100.0

Source: EC 1998.

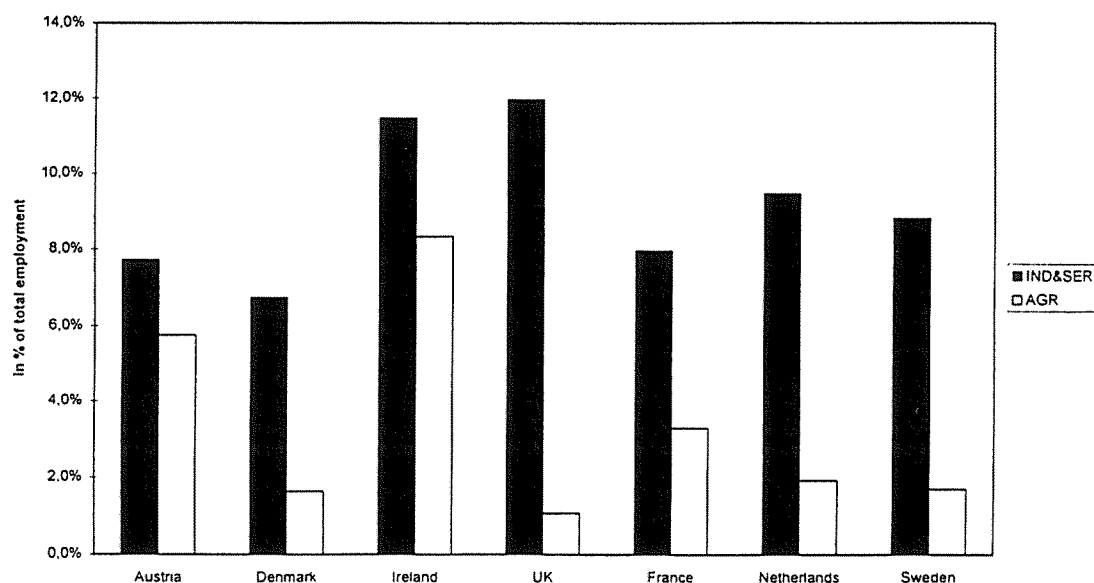
For this reason the figure below differentiates between self-employed persons in agriculture and forestry, and in other industries. The resulting picture is quite different. While Austria holds second place after Ireland regarding self-employed persons in agriculture, only Denmark ranks lower than Austria in the non-agricultural industries. Ireland and the UK exceed Austria's level by good measure, while France and Sweden have more or less the same share of self-employment in non-agricultural industries as Austria. However, the comparison with Ireland and the Netherlands indicates some potential for business start-ups.

Part-time work is gaining ground within the EU. Since 1985, the share of part-time jobs rose from 10.8 % to 16.4 %. A similar development can be observed in Austria (see table 1.5). Between 1983 and 1994 the share of part-time employment in total employment increased by one third. Part-time employment is dominated by women. Over time the part-time employment of women increased slowly but steadily. Whereas in 1974 only 4.6 % of all working women⁸ have been working between 14 to 36 hours, the share of women working 12-35 hours increased to 23.6 % in 1996 (Mühlberger 1998:104). However, part-time employment of male is still on a low level.

⁸ In 1974 total employment includes only persons working at least 14 hours. See Mühlberger 1998 for a discussion of the influences of different data sources and survey methods on the importance of part-time employment.

Figure 1.12

Self-employment by sector 1996



Source: EU Report on Employment 1997, OECD, own calculations.

According to the Austrian labour market survey 15 % of all employed persons worked part-time in 1996.⁹ In absolute numbers 538,000 persons worked less than 35 hours a week. In international comparison Austria was in the middle range showing a part time share of 28 % among women, which is much higher than the share of men at 4 %. The share in Austria corresponds roughly to EU averages (total of part-time jobs 16.5 %; men 5.5 %; women 31.5 %). There are clear regional disparities within the EU. While the percentages in the Mediterranean countries of Greece, Italy, Spain and Portugal as well as Luxembourg are below 10 %, in the Netherlands 38 % of employed persons do not hold full-time jobs. Part-time employment rates in the UK, Sweden and Denmark are between 20 % and 25 %.

Table 1.5: Development of part-time employment in Austria

	1973	1983	1994
Part-time employees*	171.200	196.600	320.000
Men*	15.800	15.500	44.400
Women*	155.300	181.100	275.600
As percentage of total employment	6.4%	8.4%	12.1%
Men	1.4%	1.5%	3.0%
Women	15.6%	20.0%	25.2%

*1974 instead of 1973.

Source: Bastelaer et al. 1997, Mühlberger 1998.

⁹ Part-time work is defined as employment with regular weekly working hours of up to 35 hours. It should be mentioned that a reduction of the limit to 30 hours a week would change the distribution of part-time jobs considerably. This has been suggested by Bastelaer et al. (1997) in order to improve comparability with the OECD region.

Roughly 10 % of part-time employees in Austria hold jobs that may be considered almost full-time jobs (31 to 35 hours a week), 37 % work between 21 and 30 hours a week and the majority of part-time employees, i.e., 42 %, work between 11 and 20 hours a week. Only 11 % were employed for less than 10 hours. Employment for less than 10 hours a week is much more common in Denmark, the Netherlands (28 %) and the UK (25 %) than in Austria. The average number of weekly working hours for part-time employees in Austria is 22 hours, which is 2 hours more than the EU average.

The labour market survey carried out in 1995 explains the reasons for part-time work (Bartunek 1997). Of the 510,000 part-time employees in Austria, 37,000 (29,000 women) did not work part-time voluntarily, but were not able to find full-time jobs. Some 90,000 (77,000 women) did not want full-time jobs and 36,000 persons were only able to take on part-time employment because of their low level of education and/or vocational qualification. The majority, 335,000 (297,000 women) persons, claimed "other" reasons, which in many cases refer to the family situation, such as childcare or care of other family members (see Bartunek 1997).

A closer look at the part-time jobs offered shows quite clearly that most are low-quality jobs: most jobs offered are for cleaning personnel and restaurant helpers, the most jobs sought are in office and clerical work. Women who are not able to work full-time for personal or family reasons are often forced to change workplace or must accept less qualified work. In 1992 60 % of the females working part-time are semi-skilled or unskilled workers or white collar-workers performing unskilled work (Mühlberger 1998).

A rising tendency is shown for the number of employed persons working for pay below the level of significant employment (ATS 3,830), who up until 1997 were not covered by the obligatory insurance scheme. However, more than half on the these workers are covered by additional insurance schemes. Between 1994 and 1997 marginal employment increased from 117.209 to 164.445 persons, 72 % of which were jobs held by women. Roughly two-thirds of all such workers were employed in the sectors of wholesale and retail trade, business services, accommodations, manufacturing and health and social work. Since the flexibilisation of shopping hours marginal work in retail trade has surged. Furthermore, there exist some empirical hints that students are the main part of the male marginalised workers; with respect to women re-entry after inactivity dominates (see Mühlberger 1998).

Another type of contingent employment in Austria is hiring-out of labour ("Leiharbeit"). The number of temporary workers grew from 7.955 in 1989 to 17.980 in 1997, with increasing pace since 1994. However, the share of temporary workers in total wage and salary earners is still very low (0.9 %). 87 % of temporary workers are male and more than half are employed in manufacturing (see Mühlberger 1998).

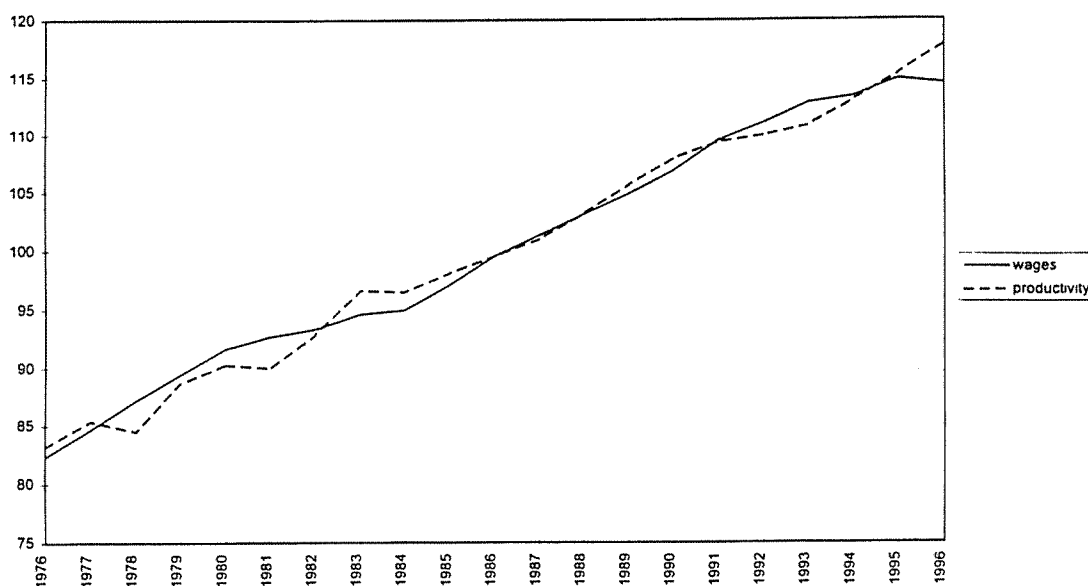
1.3 Wages and productivity, competitiveness of the Austrian economy

The following graph illustrates the trend in real wages per active employee¹⁰ (at producer prices) and labour productivity for Austria. It clearly shows that wage policy tends to take its lead in the medium-term from price and productivity trends. Over the business cycle, wages and productivity do repeatedly, but only briefly, diverge from one another, but in the medium term the real wage gaps that occurred were always closed again. In interpreting this data, however, one should naturally bear in mind that both labour productivity and real wages are endogenous variables in the economy and are mutually dependent on one another.

¹⁰ Persons in dependent employment excluding those on either maternity or military service leave

Figure 1.13

Real wages and labour productivity
(Φ 1976 - 1996 = 100)



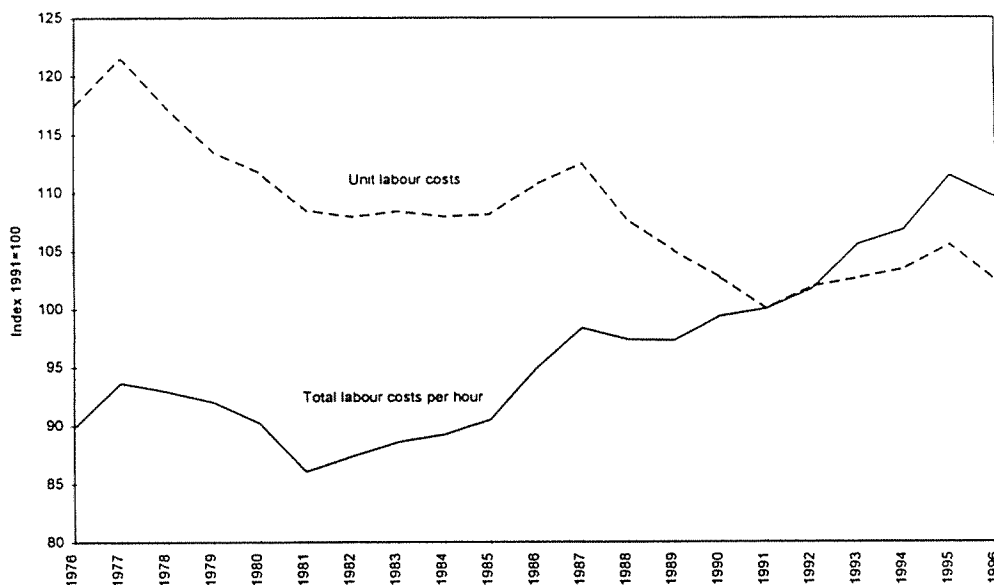
* real wages per active employee and GDP per active employee.

Source: IHS.

Changes in labour costs and productivity differentials have a strong influence on a country's competitiveness. In 1996 a man hour in Austrian industry cost ATS 270.10, placing Austria among the countries with the highest labour costs. The only two other countries that currently have distinctly higher labour costs are western Germany and Switzerland; labour costs in Belgium, Denmark and Norway are only slightly higher than in Austria. In the long run, Austria's cost position has deteriorated significantly. Data from Cologne's Institut der deutschen Wirtschaft shows that 12 countries had higher labour costs than Austria in 1980.

Figure 1.14

Total labour costs and unit labour costs
Austria versus average of trade partners



Source: WIFO.

Real wages in industry grew by 30 % in Austria in the period from 1980 to 1996; Japan, western Germany and the UK recorded similar trends in real wages. In Denmark real wages rose at only half the rate and the Netherlands, Sweden and Switzerland only achieved one-third of Austria's real wage growth. But it was only thanks to the above-average increase in labour productivity that Austria was able to raise its real wages to this extent. Among the OECD countries used in comparison, Ireland was the only one to achieve stronger productivity gains in the 1980s. In the first half of the 1990s, the improvement in Austria's productivity even accelerated and only Finland and Ireland posted higher efficiency gains (Guger 1997). The rapid rise in productivity in the 1990s was, however, combined with a marked drop in employment: In the first half of the 1990s the level of employment in industry dropped by about 3 %.

But in order to evaluate an economy's competitiveness, it is not labour costs per se that are the relevant factor, but rather unit wage costs, which are calculated as the ratio of costs per man hour to the hourly rate of productivity. In the 1980s Austrian industry considerably improved its competitive position relative to its Western trade partners. Although the growth in productivity of Austrian industry even sped up in the first half of the 1990s, unit wage costs deteriorated relative to those of its trade partners due to the appreciation of the schilling and the marked slowdown in unit wage cost increases in competitor countries (Guger 1997). Due to the continuous increases in domestic productivity and appreciation of the currencies of some of Austria's most important trade partners, Austria has considerably improved its relative unit wage cost position since 1996, so much so that it has now returned to the unit wage cost position it held over its trade partners in 1990.

Table 1.6: International comparison of labour costs, hourly productivity and unit wage costs in manufacturing

	Hourly labour costs		Hourly productivity	Unit labour costs
	1996		F 1986/96	
	in ATS	Average annual percentage change		
Germany	332,6	+ 4,4	+ 3,3	+ 1,0
Switzerland	307,4	+ 3,4	+ 1,7	+ 1,6
Belgium	275,0	+ 3,2	+ 2,2	+ 0,9
Denmark	272,8	+ 4,0	+ 1,8	+ 2,1
Norway	272,3	+ 2,8	+ 2,0	+ 0,8
Austria	270,1	+ 5,1	+ 5,4	- 0,3
Finland	257,8	+ 4,7	+ 6,5	- 1,8
Sweden	255,9	+ 2,9	+ 3,2	- 0,3
Netherlands	250,9	+ 2,7	+ 2,2	+ 0,5
Japan	221,9	+ 4,7	+ 4,8	- 0,1
France	214,4	+ 2,8	+ 2,6	+ 0,2
Italy	206,1	+ 2,0	+ 3,0	- 1,0
United States	188,4	- 0,7	+ 3,0	- 3,6
Canada	176,0	+ 0,5	+ 1,5	- 1,0
United Kingdom	160,5	+ 3,2	+ 2,8	+ 0,4
Ireland	157,7	+ 2,8	+ 6,8	- 3,7
Spain	153,0	+ 4,2	+ 2,9	+ 1,2
Greece	99,3	+ 4,8	+ 2,1	+ 2,6
Portugal	58,3	+ 6,2	+ 1,3	+ 4,9
Trade partners (1)	216,5	+ 3,6	+ 3,1	+ 0,5
EU 14 (1)	233,1	+ 3,8	+ 3,1	+ 0,6

(1) The average of Austria's trade partners is weighted pursuant to the WIFO exchange rate index and labour costs are weighted according to the number employed in industry.

Source: Guger 1997.

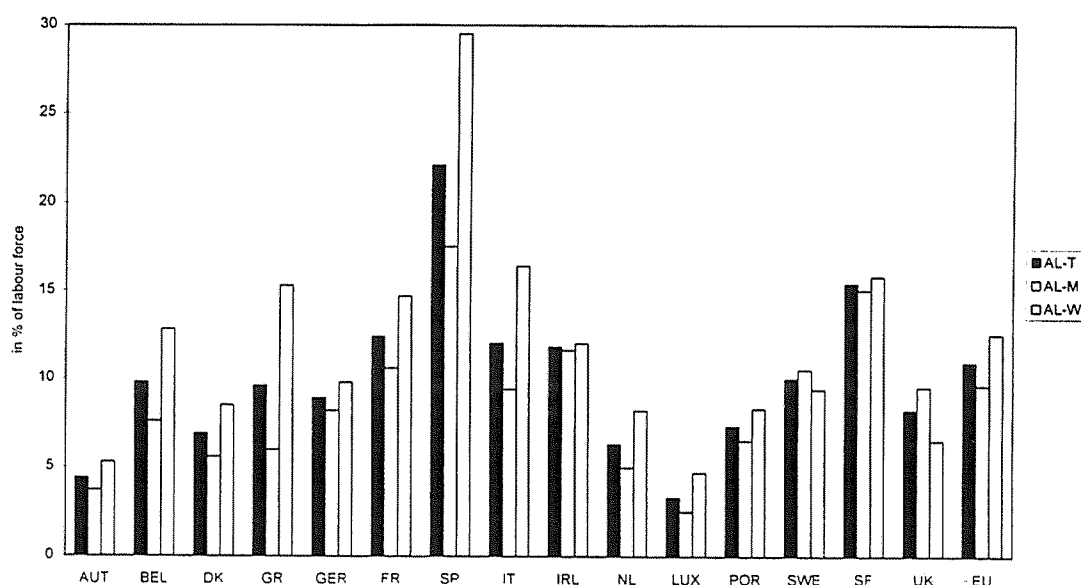
Political stability, EU membership, proximity to the expanding markets of Eastern Europe, a pro-business tax system, favourable environmental standards and in particular the social stability and the high quality of the work force are the main merits of the business location Austria. However, there are also important challenges. Austria has proven itself to be especially competitive in products with medium value-added intensity and on nearby markets. The productivity gains came primarily in the industrial sector of the economy. However, there are clear indications that the cost and productivity ratios in heretofore protected areas of the economy are substantially less favourable (Kramer 1997). Austria's exports focus on medium-range technologies in resource and labour-intensive segments. However, they are lacking in modern technologies. This may be attributed in part to the below-average research and development activities. Only 1.5 % of GDP were spent for R&D in 1996. Although Austria's share of technology and research has, indeed, improved in the long term, it does not rank among the industrial elite (Kramer 1997). Other weak points, aside from giving high-tech short shrift, are its concentration on neighbouring markets instead of global markets and the lack of innovative business clusters. Furthermore, Aiginger and Peneder (1997) argue that it is necessary to modernise the regulation system for entrepreneurial activities in various aspects, e.g. rules for working time, efficiency of public administration, access to entrepreneurial activities.

1.4 Unemployment and its structure

Unemployment in Austria has remained significantly below the levels of other EU countries over the last two decades. Using the harmonised definition of the European Statistical Office, which is based on the labour force concept and uses data from the labour force survey, yields an unemployment rate of around 4.4 %.¹¹ With the exception of Luxembourg (3.7 %) Austria has the lowest rate within the European Union. In accordance with the majority of the other EU countries, unemployment is slightly higher for women (5.3 %) than for men (3.6 %).

Figure 1.15

Unemployment rates in the European Union



Source: EU Report on Employment 1997.

A major problem in Europe is youth unemployment. Roughly every fifth European citizen between the ages of 15 and 24 was unemployed in 1996. Exorbitant levels of youth unemployment were posted in Spain, Finland and Italy, and above average rates in France, Belgium and Sweden. However, with 6.0 %, Austria's rate of unemployment among 15 to 24-year-old youths is by far the lowest in the European Union. Only Luxembourg, Greece and Germany have single-digit figures to show. One of the reasons for the good performance of Germany and Austria is the apprenticeship system, which facilitates school to work transition considerably. While youth unemployment is low in Austria, the situation for the group of older workers may be considered relatively more problematic. Of course, the unemployment rate of the 55 to 64-year-olds is 4.6 % and much lower than the EU average of 10.6 % (OECD 1997a). A country comparison places Austria at the bottom of the lower third of all EU countries, with only small differences between the countries in this group.

Almost every second unemployed person in the EU is out of work for over a year. In contrast, in Austria only every fourth is long-term unemployed. Together with the Scandinavian countries of Sweden and Denmark, Austria shows the best performance regarding long-term unemployment. What is less comforting, however, is the direction that

¹¹ For a discussion of measurement of unemployment in Austria see Bartunek 1996 or Biffel 1997. There are some doubts about the statistical reliability of the labour force data and it has been argued that the "true" unemployment is underestimated. However rough calculations indicate, that the bias is at most ½ to 1 percentage point.

this indicator is taking: concurrently with the other EU countries, a clear upward tendency in long-term unemployment has to be recorded.

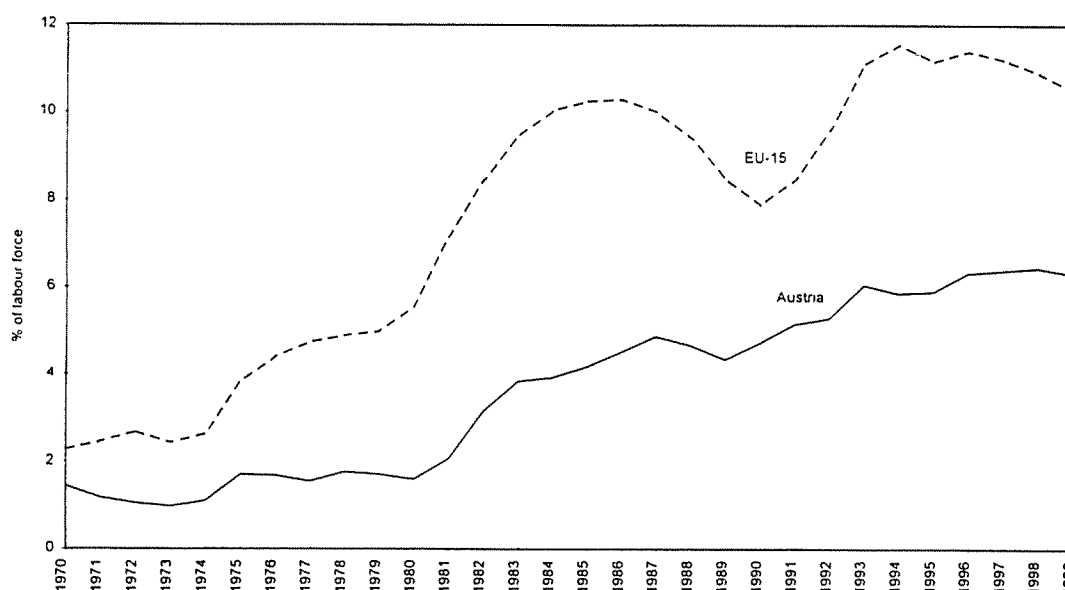
Despite the low unemployment by international standards, unemployment has risen considerably since 1980 (see figure 1.16 and the discussion of employment dynamics).¹² International comparisons reveal that in Austria unemployment rises in business downturns have not been very sharp. Therefore, Austria's favourable position is not the result of considerable declines in times of strong business activities.

Despite the current business upturn in Austria, there is no tendency for a noticeable decline in the unemployment rate. This contrast sharply with developments in Denmark or the Netherlands in the recent past. The stickiness of unemployment can be explained at least partly by the strong cyclical elasticity of the labour force in Austria. Furthermore, some changes in institutional factors, e.g. the shortening of maternity leave from 2 to 1 ½ years, the reduced possibilities for early retirement and closely connected the abolishment of the "Sonderunterstützung", tend to increase "measured" unemployment. However, there are also segmentation processes in the unemployment pool to observe. For example, the number of unemployed, which are hard-to-place, mainly women, has further increased (37 % of total unemployment in June 1998).

The national data, compiled by the Main Association of Social Insurance Institutions and the Public Employment Service (AMS), allows a more detailed analysis of registered unemployment. Due to the availability of detailed data we concentrate on 1996.¹³ On average in 1996, 230,000 persons were registered as unemployed with AMS. The registered rate of unemployment was 7.0 % (men 6.9 % and women 7.3 %) of the dependent labour force .

Figure 1.16

Unemployment in Austria and EU



Source: OECD ECO, IHS; the definition of the unemployment rate shown here follows the commonly used definition concept used by the OECD.

The dynamic of the Austrian labour market is illustrated by the fact that roughly 700,000 persons were affected by unemployment in 1996. In a five-year period every fourth

¹² The unemployment rate defined according to national criteria as well as the EUROSTAT standardised rate show almost the same trends over time.

¹³ This should be no problem as the unemployment situation in 1997 is almost unchanged.

worker received unemployment benefits or unemployment assistance; in a 20-year time period even every third worker (Synthesis 1997). The considerable turnover in the Austrian labour market is also reflected in the dynamics of the movement in and out of unemployment. In 1996, roughly 700,000 of both inflows and outflows were recorded for unemployment (approx. 20 % of the dependently employed labour force). Remarkable is the parallel development of inflows and outflows over the business cycles. While anticyclical movements of inflows into unemployment correspond to a priori expectations, it may seem a bit surprising that the outflow rate also rises in business cycle downturns. This means that higher unemployment in periods of slumps goes hand-in-hand with a higher rate of replacements within the system of employment. This mechanism thus intensifies the trend toward a pattern in total unemployment, in which the share of persons with relatively low re-employment probabilities is on the rise.

The risk of becoming unemployed and level of education clearly correlate negatively. The majority of persons affected by unemployment do not have education beyond the compulsory school level or apprenticeship training. The share of workers belonging to these two categories among the unemployed was 85 %. Roughly 11.5 % of workers with only compulsory education are unemployed. The figure is 6 % for those who have completed apprenticeship training. For more highly qualified workers the rate of unemployment is only half as high. Every third unemployed adult is hard-to-place. In 45 % of cases, (of which 90 % are women) the reasons given for the difficulty in job placement are limited mobility regarding working hours and place of work.

The distribution of unemployment by age group shows markedly below-average rates for the groups at the tails of the age distribution (15 to 18-year-olds, 60 years and older), slightly above/below average rates for 19 to 29-year-olds and 30 to 49-year-olds, respectively, and unemployment rates far above average for the age group of 50 to 59-year-olds. While the probability of becoming unemployed decreases with age, the average duration of unemployment spells rises with age. 22 % of unemployed youths accounted for 17 % of the volume of total unemployment. In the case of older workers the ratio is the other way around: 13 % of those affected were 50 and older, which makes up approximately 17 % of the total burden.

The average duration of an unemployment spell was 121 day in 1996: for women 131 day or 16 days more than for men. Approximately half of the unemployed were registered for a period up to 3 months, every fifth between 3 and 6 months. This view of averages, however, should not obscure the fact that the total duration of unemployment is very unevenly distributed among the persons affected. The upper 20 % of the unemployed with the largest duration (9th and 10th deciles) account for almost half of the burden of unemployment. Their share in the volume of total unemployment was 47.6 %, while the lowest quintile held a share of 3 %, which is hardly noticeable (AMS 1997). Furthermore, it should be noted that only (completed) unemployment spells have been discussed so far. But since persons also experience several spells of unemployment within a year (20 % of unemployment leavers had 2; 2.5 % had 3 or more), the cumulated duration of unemployment was 139 days for men and 167 days for women.

Table 1.7: Registered unemployment in Austria, 1996

	Stocks	Incidence
Unemployed	230,507	708,753
Male	55,5%	59,0%
Female	44,5%	41,0%
15-24	16,9%	22,3%
25-39	45,0%	46,2%
40-54	32,2%	26,9%
55 and older	6,0%	4,6%
Compulsory schooling	44,3%	42,3%
Apprenticeship	39,6%	41,9%
BMS	6,3%	6,0%
AHS	2,6%	2,3%
BHS	4,1%	4,4%
University	2,9%	2,8%
Unknown	0,2%	0,3%
Seasonal occupations ¹	25,4%	30,9%
Production occupations	30,4%	28,3%
Service occupations	44,2%	40,7%
Unemployed with placement limitations	70,744	
Men	38,0%	
Women	62,0%	
Physical and psychological barriers	48,1%	
Mobility barriers (working hours/workplace)	44,3%	
Other reasons	7,5%	
Unemployment duration until reference date		
up to 3 months	51,0%	
3 - 6 months	19,5%	
6 -12 months	13,6%	
1 year and longer	15,8%	
Average length of completed unemployment spells (in days)	121	
Men	115	
Women	131	
Long-term unemployed ²	67,882	180,736
thereof at least 1 year	53,7%	40,3%
Men	52,1%	50,6%
Women	47,9%	49,4%
18-24	6,8%	11,0%
25-50	63,8%	66,0%
50 and older	29,4%	23,0%

¹ Agriculture and forestry, construction and tourism² Unemployed persons with episodes lasting at least 180 days.

Source: AMS.

The problem of long-term unemployment has also become significantly worse in Austria since the mid 1980s. In 1980 every twelfth unemployed adult was unemployed for longer than six months, by 1996 every fourth. When the common international duration definition of one year is applied, the number of people affected by long-term unemployment in 1996 was 72,786. These cases are strongly concentrated in the retail and metalworking sectors (a total of 38 %), and in construction and tourism (19 %). With rising age, the share of persons affected by long-term unemployment goes up markedly from 1.0 % (15 to 18-year-olds) to 10.1 % (30 to 39-year-olds) reaching 24.8 % and 29.2 % respectively for the age groups of the 50 to 54-year-olds and 55 to 59-year-olds (AMS 1997).

Table 1.8: Unemployment by skill 1987, 1990, 1996

	1987		1990		1996	
	persons	UR*	persons	UR*	persons	UR*
Compulsory schooling	81,469	8,9%	79,993	9,2%	102,105	12,7%
Apprenticeship	60,852	4,9%	59,941	4,5%	91,280	6,6%
BMS ¹	9,523	3,0%	9,914	3,0%	14,452	4,0%
AHS/BHS ²	8,523	2,8%	9,989	2,8%	15,483	3,3%
University	3,676	2,1%	4,446	2,2%	6,698	2,6%
Unknown	0,427		1,513		0,490	
Total	164,470	5,6%	165,796	5,4%	230,508	7,0%

* in percent of dependent labour force; dependent employees are distributed by education according skill distribution of microcensus: 1 Secondary technical and vocational schools (3-years course) 2 Secondary general education school / secondary commercial school (5-years course).

Source: own calculations.

Table 1.8 presents evidence on trends in unemployment for unskilled relative to skilled workers; education is used as indicator for skills. Unemployment rates have increased for all skill groups over the period 1987-1996. Total unemployment rose by 65.000 persons, of which $\frac{3}{4}$ are low-educated (compulsory schooling or apprenticeship) workers. Unemployment rates of high-skilled workers has been going up as well, but remaining at a relatively low level. The difference between the unemployment rates of low- versus high-educated workers increased considerably. The relative risk of becoming unemployed for a worker with compulsory schooling is almost five times as high than for a worker with a university degree. In sum, the labour market changes of low-skilled workers deteriorated over time. The relative risk of unemployment for low-skilled workers has gone up in Austria. Note, however, that the unemployment risk for workers with compulsory schooling is still two times higher than for people with completed apprenticeship.

Austria is a country with one of the highest rates of seasonal unemployment in Europe. In a rough estimate, about one-third of all unemployment spells per year and almost one-fourth of total unemployment is due to seasonal fluctuations in employment. Unemployment insurance is a form of a implicit subsidy for those industries that use wage compensation payments paid during unemployment to finance periodic and predictable seasonal fluctuations. Seasonal unemployment produces substantial monetary costs. Estimates for 1993 calculate that direct costs (unemployment benefits and unemployment assistance) amounted to 3.5 billion ATS. If the indirect costs (social security contributions not paid and payroll taxes) are also taken into account, this adds another ATS 4 billion (Brandel et al. 1994b).

Closely connected and in part identical with seasonal unemployment is the problem of so-called "temporary layoffs" (Pichelmann and Riedel 1992), i.e. unemployment spells terminated by reemployment with the former employer. In 1985 approximately one-third of

all unemployed persons were affected by this type of unemployment (Fischer and Pichelmann 1991). New studies indicate that this percentage has probably risen again. In Styria, for example, almost every second person leaving unemployment into employment went back to the former employer in the years between 1994 and 1995 (Zilian 1998). A similar picture exists in other Länder as well¹⁴. Zilian expands the concept of seasonal unemployment and has coined the term "flexibility unemployment". Re-employment with the former employer includes traditional seasonal workers, workers in those industries that have started developing seasonal structures in order to be able to counteract the costs of capacity utilisation fluctuations, and last of all, those unemployed persons who were dismissed and then rehired for the purpose of avoiding personnel expenses caused by idle labour capacity.

1.5 Flow dynamics in the Austrian Labour Market

The rate of job reallocation that occurs between existing enterprises in Austria is considerably. For example, at the beginning of the 1990s, roughly 5 % of existing jobs disappeared¹⁵, but this loss was more than made up for by jobs created in other enterprises. While in the period from 1991 through 1992, employment gains were achieved, the job destruction rate accelerated during the 1992-93 slump by approximately 1.5 percentage points and gross job losses were around 7 % of existing jobs. In the course of the economic recovery in 1994 the job creation rate rose again to 6 %, while the job destruction rate remained at its high level and even rose slightly.

Table 1.9: Job turnover in continuing firms (in % of total employment)

	Job Creation	Job Destruction	Job Turnover	Net Job Change
Austria*				
1989/90	7,6%	5,1%	12,7%	2,4%
1990/91	6,3%	6,1%	12,4%	0,3%
1991/92	6,2%	5,6%	11,8%	0,6%
1992/93	5,0%	6,9%	11,9%	-1,9%
1993/94	6,0%	7,4%	13,4%	-1,4%

* Periods between 1989-91 and 1991-94 are comparable only up to a limited degree due to the use of different samples International comparison (annual averages)

Austria 1989-1994	6,2%	6,2%	12,4%	0,0%
France 1984-1991	6,6%	6,3%	12,9%	0,3%
Germany 1983-1990	6,5%	5,6%	12,1%	0,9%
Finland 1986-1991	6,5%	8,7%	15,2%	-2,2%
Sweden 1985-1992	8,0%	9,6%	17,6%	-1,6%
Italy 1987-1992	7,3%	6,2%	13,5%	1,1%
Denmark 1983-1989	9,9%	8,8%	18,7%	1,1%

Source: OECD Employment Outlook 1996, for Austria IHS.

¹⁴ According to data provided by the BMAGS in 1996 29.8 % of all unemployed went back to the former employer (Styria 31.1 %, Carinthia 38.1 %, Tyrol 40.5 %)

¹⁵ The following results are based on two samples of continuing Austrian firms in the market sector of the economy.

The rate of job reallocation in Austria corresponds roughly to the rates in comparable European countries. The present data somewhat underestimates the job turnover rate, because newly founded enterprises or closures have not been taken into account.

Table 1.10: Job turnover by industry and enterprise size in 1990-91

	Job Creation	Job Destruction	Job Turnover	Net Job Change
Industries				
Primary sector	1,7%	2,4%	4,2%	-0,7%
Manufacturing	5,0%	4,6%	9,6%	0,5%
Construction	8,2%	7,2%	15,4%	1,0%
Wholesale and retail trade	8,0%	8,3%	8,5%	-0,3%
Tourism	11,6%	9,3%	20,9%	2,4%
Public administration	3,3%	1,4%	4,7%	1,9%
Other services	8,1%	9,6%	17,7%	-1,5%
Size of enterprise				
1 - 5 employees	14,3%	12,2%	26,5%	2,1%
6 - 20 employees	8,0%	8,0%	16,0%	0,0%
20 - 50 employees	5,8%	8,0%	13,8%	-2,2%
50 - 100 employees	4,9%	5,9%	10,8%	-0,9%
over 100 employees	3,7%	2,3%	6,0%	1,4%

Source: IHS.

According to the above data, job turnover has a high degree of significance in relation to the changes in net employment. At a constant overall level of employment, an estimated 100,000 jobs are lost in Austria every year in enterprises that reduce in size or close down. The reallocation of jobs has concentrated on movements within the individual industries, while sectoral shifts in employment patterns only account for roughly one third of the annual job turnover rate.

Table 1.11: Distribution of job creation/job destruction by firms, 1990-91

% of enterprises	Job Creation	Job Destruction
	% of Jobs	
10	3,49%	3,54%
20	6,98%	7,09%
30	10,46%	10,63%
40	13,95%	14,17%
50	17,44%	17,72%
60	22,04%	21,58%
70	29,01%	28,67%
80	36,83%	37,02%
90	49,41%	49,75%
100	100,00%	100,00%

Source: IHS.

Considerable shifts between shrinking and expanding businesses are also taking place within the individual industries. Tourism has the highest turnover rate: the job turnover rate is 20 percent per year. In addition, the construction industry and the wholesale and retail sector have high turnover rates; the same applies to the remaining service industries with the exception of local public bodies. Manufacturing shows a job creation rate well below average, which also pushes the job turnover rate down. Furthermore, there is also a clear link between the size of an enterprise and the job turnover rate. The larger the enterprise, the lower the job turnover rate in percentage of persons employed. However, the conclusion cannot be drawn that primarily smaller enterprises are responsible for the largest net job gains, because not only the job creation rates but also the job destruction rates are far above average in this case. In addition, roughly 15 % of jobs created were in the group of enterprises with more than 100 employees in spite of the low job creation rate of 3 to 4 percent. However, during the recession of 1992-93 almost one-fifth of jobs in these enterprises disappeared.

An interesting empirical aspect is the fact that the creation of new jobs and the elimination of jobs tends to concentrate on a few enterprises. Roughly half of new jobs are created in 10 % of the expanding enterprises, while only 10 % of shrinking enterprises are the cause for more than 50 % of jobs eliminated. It should also be noted that these statistics do not take account of start-ups or closures.

Much higher than the job turnover rate is, of course, the rate of turnover in employment as persons move between existing jobs. Taking account of reported hiring and firing on short notice, seasonal fluctuations, summer jobs, etc., the number of employment contracts commenced or terminated per year in Austria is around 1 million. Every third employment contract is a new one established in the course of a year (Synthesis 1997). Within the past 20 years, over 6 million persons were employed at least once, of which only 38 % held jobs for at least 10 years. On average, every employed person has held 3.3 jobs lasting on average roughly 2.5 years (Synthesis 1997).¹⁶ Rising dynamics has been observed over the past years in this context. While the average number of newly commenced employment contracts per year was roughly 830,000 between 1976 and 1990, the number climbed to one million in the following years (Synthesis 1997).

¹⁶ Only those jobs were taken into account that lasted at least 28 days.

Table 1.12: Job tenure on enterprise level by sex
(duration in years until cut-off day in May 1994)

	Total	Men	Women
2 nd decile	0.4	0.3	0.5
4 th decile	1.4	1.3	1.6
Median	2.2	2.2	2.2
6 th decile	3.1	3.1	2.9
8 th decile	6.4	6.4	6.4

	Job Tenure since 1983*					
	Total	Men	Women	Total	Men	Women
		uninterrupted			aggregated	
2 nd decile	0.5	0.4	0.7	1.1	1.1	1.1
4 th decile	2.0	1.9	2.2	3.0	3.1	2.7
Median	3.0	2.9	3.1	4.4	4.6	3.9
6 th decile	4.4	4.4	4.4	6.1	6.3	5.6
8 th decile	9.1	9.0	9.2	10.4	10.7	10.1

* Only persons over the age of 25 have been included.

Source: IHS.

Table 1.12 presents further evidence on the (incomplete) duration of employment spells and a few other indicators on stability and duration of employment in Austria. In May 1994, the median duration of employment per employee (referring to employment until cut-off day in May 1994) under contract was slightly longer than two years; the lowest fifth of employees had been under contract for less than five months, the upper fifth of employees for longer than 6.4 years.

The probability of having been employed for longer periods of time obviously rises with age. But even among those employees over 40 years of age, more than 20 % had held jobs lasting less than one year. The variation in the length of employment contracts for men and women has been negligible to date, at least in the aggregates. However, the impact of industry structures and age remains to be investigated.

Table 1.13: Job tenure by status, age group and industry
(median values: duration in years until May 1994)

	Total	Men	Women
White-collar-worker	2.7	3.0	2.4
Blue-collar-worker	1.6	1.4	1.9
Age:			
up to 25	0.6	0.5	0.7
25 - 40	1.7	1.7	1.9
40 - 55	3.2	3.2	3.2
above 55	5.9	5.4	7.4
Industry:			
Production sector	3.0	3.1	2.8
Construction	0.5	0.4	2.7
Tourism	0.6	0.5	0.7
Business services	2.2	2.2	2.0
Other services	2.7	2.9	2.5

Source: IHS.

What is remarkable is that almost half of the employees surveyed had had more than one employer within the past five years and more than half of the employees had experienced two or more different job episodes. According to this indicator, the stability of the employment status tends to rise with age, but, for example, even among the 40 to 55-year-olds only 57 % had held only one job within the past five years.

Table 1.14: Stability of employment status in the period 1989-94
(Sum of lines = 100)

Job episodes	1	2	3	4	5 and >	Total
Number of employers						
1	82.4%	7.1%	4.0%	2.5%	4.0%	54.2%
2		71.6%	11.4%	6.2%	10.8%	19.6%
3			65.9%	12.8%	21.3%	10.6%
4				60.4%	39.6%	6.3%
5 and over					100.0%	9.3%
Total	44.7%	17.9%	11.4%	7.7%	18.3%	100.0%

Source: IHS.

According to the ranking produced by the OECD, job protection legislation appears to be rather restrictive in Austria (see OECD 1997c). However, in view of the high turnover on the labour market, this regulation seems to be flexible enough in most areas of economic activity so as to avoid burdening the required reallocation process with prohibitively high costs.

2. The Macroeconomics of the Austrian Labour Market

2.1 Stability Features of the Fundamental Economic Policy Settings

One of the key characteristics of Austrian macroeconomic developments over the past three decades appears to be quite stable growth, in particular exhibiting smaller fluctuations around its medium-term trend than in many other EU countries. Indeed, various measures of the output gap as provided for example by the IMF seem to indicate that the output gap in Austria has been less volatile than in most other EU countries. Both the troughs of recessions appear to have been significantly less deep in Austria than elsewhere in Europe, and, conversely, phases of overheating were less pronounced. In terms of the key labour market indicators, employment and, in particular, the unemployment rate, have been more stable than in practically all other EU countries.

It may well be argued that the lower amplitude of the Austrian business cycle reflects the result of the fundamental stability orientation of the macroeconomic policy setting in Austria, which, in turn, may also contribute to superior growth and labour market outcomes over the medium to longer term. Indeed, when unemployment depends, at least partly, on its own history, as the discussion about persistence effects in unemployment suggests, there are high returns to preventing the initial increase in unemployment. Obviously, this calls in the first place for sustainable and credible macroeconomic policies in order to avoid policy induced negative shocks to the economy. But there is also a strong rationale for sensible stabilisation policies to cushion the initial impact of unavoidable shocks, for example by redesigning and strengthening built-in stabilisers in the economy. When the long lasting effects of persistent unemployment are taken into account, these policies may prove far less costly than conventionally assumed.

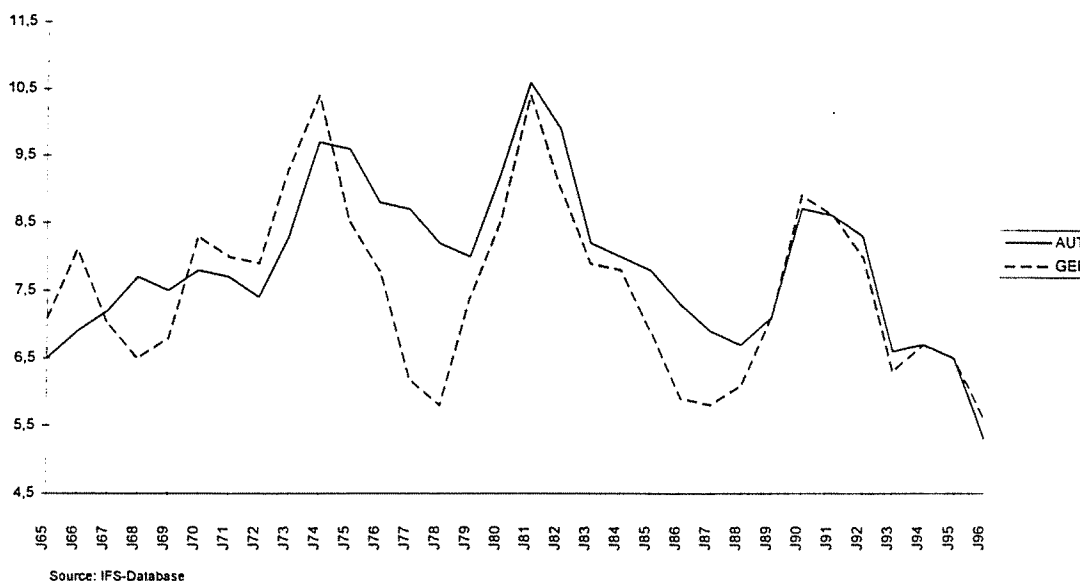
In the Austrian context, the following constituent elements of a fairly broadly defined notion of stability orientation of the macroeconomic policy setting may be identified: the hard currency policy, the employment promoting wage and income policy, the countercyclical fiscal policy and last but not least the preservation of consumer confidence.

Hard Currency Policy

One of the main characteristics of Austrian economic policy for the last two decades has been the fixed pegging of the schilling to the deutschemark. Although pegging the Austrian currency to the deutschemark meant no longer being able to use the exchange rate as an economic policy instrument for asymmetric shocks, it brought the advantages of low transaction costs in the Deutschemark Block, importing relative stability of German price trends, stabilising expectations and avoiding exchange rate fluctuations and the associated currency crises. Obviously, consistent with the fixed exchange rate objective, monetary policy has had to maintain the stable link between policy controlled interest rates in Austria and Germany.

Figure 2.1

Long-term interest rates in Austria and Germany



Wages and Incomes Policy

Sustainability of the hard currency option has required the support by a wage and incomes policy that ensures the international competitiveness of the economy. These incomes policies have not been imposed by government, but are based on a consensus between the unions and the employers' associations. The relatively highly centralised wage negotiations under the social partnership system have not only avoided excessive wage increases damaging international competitiveness in the medium term, but have also delivered an impressive degree of aggregate real wage flexibility contributing significantly to the capacity of the economy to absorb shocks.

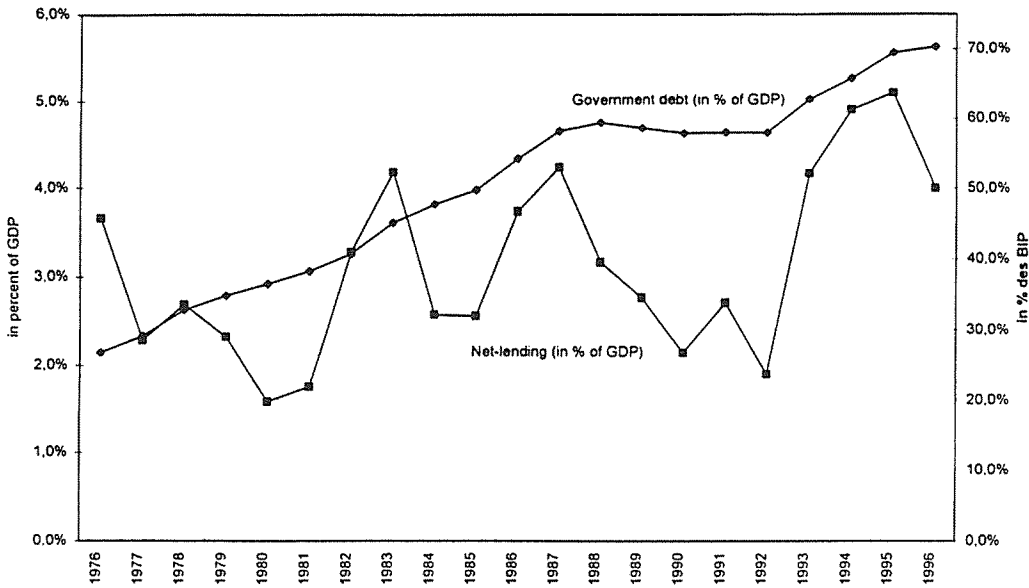
Countercyclical Fiscal Policies

In addition to supply-side economic measures (mainly in form of various instruments to stimulate investment), a significant role for countercyclical fiscal policy, in particular for compensating public demand during periods of recession, has been part of common understanding between the main policy actors. Various governments have in the past knowingly accepted an increase in budget deficits incurred by the lower tax revenues resulting from a decline in economic growth and increases in expenditure. However, government debt rose significantly over the medium term burdening the budgets more and more with high interest payments; additionally, the structural component of the deficit increased considerably in the first half of the Nineties. As a result, both the effectiveness¹⁷ and the room for fiscal manoeuvre appear to have declined and the recent consolidation efforts have not yet fully reversed the adverse trends in these years.

¹⁷ See e.g. Munduch 1993 for empirical evidence.

Figure 2.2

Deficit and Debt of General Government



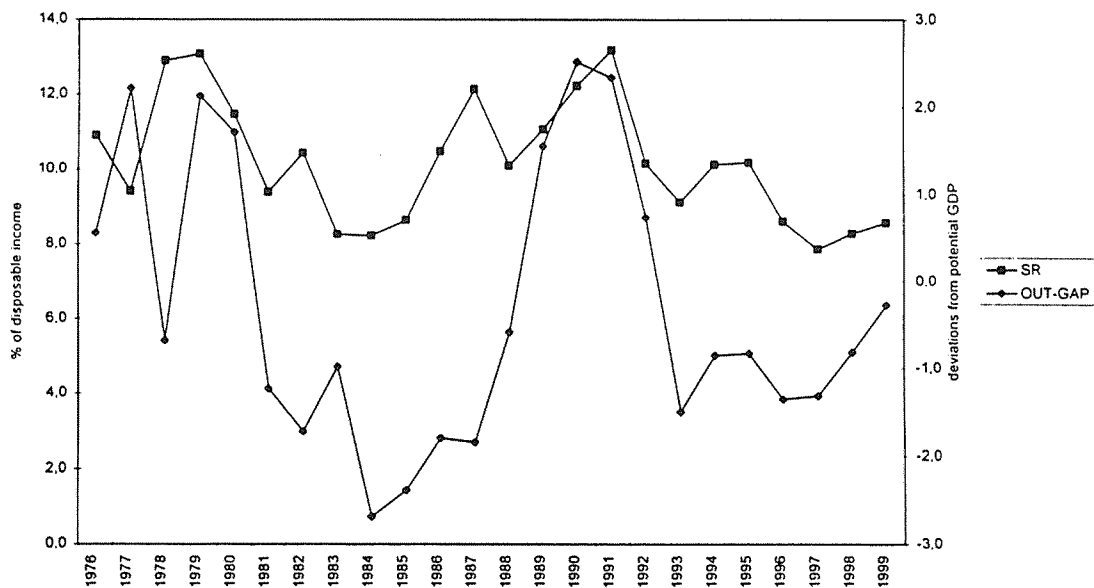
Source: IHS.

Preservation of consumer confidence

From a more general point of view, the stabilisation of expectations, in particular the maintenance of consumer confidence has been of crucial importance for supporting consumption during downturns in economic activity via a reduction in private savings. Austrian households indeed exhibit a very pronounced consumption-smoothing behaviour over the business cycle, a fact which may be interrelated with the preservation of economic and social stability in a more general context.

Figure 2.3

Household saving ratio and output gap in Austria



Source: OECD, IHS.

2.2 The Cyclical Volatility of Output, Employment, Labour Supply and Unemployment

Several factors influence the extent of variation in the unemployment rate over the business cycle. Changes in the unemployment rate are ultimately the end result of the dynamic interaction of the inflow and outflow of employment, unemployment and non-participation in the labour market. From a purely mechanistic standpoint, the extent of cyclical fluctuation in production, the reaction of employment demand to fluctuations in output and the cyclical variability of the labour supply operate simultaneously. After all, the cyclical sensitivity of real wages also curbs fluctuations in production and employment.

The intensity of cyclical fluctuations in output and unemployment varies greatly among the OECD countries (Elmeskov and Pichelmann 1994). This is important because countries with less cyclical variation in unemployment also tend to have a lower level of unemployment. Theoretically, this type of connection, which supports the intuition that countries with less pronounced business cycles exhibit lower unemployment, can be derived, inter alia, from a non-linear short-term Phillips curve. Taking the standard deviation in the change in annual unemployment rates as our yardstick for the cyclical volatility of unemployment puts Austria behind all other countries surveyed (see Table 2.1). Ireland shows the sharpest cyclical fluctuations in unemployment, where as Denmark and the Netherlands are placed in the midrange of the countries surveyed.

The cyclical fluctuations in production in the course of the business cycle are the most pronounced in Ireland and United Kingdom. Whereas Austria falls in the midrange of the countries surveyed, France and the Netherlands show the least fluctuation in output. The extent of the impact of production fluctuations on labour demand also varies from one country to the next. According to the indicator calculated in Table 2.1, the covariation between fluctuations in production and employment is most pronounced in Sweden, followed by Denmark and the UK. Along with France, Austria has the weakest employment reaction to fluctuations in cyclical output.

Table 2.1: The Cyclical Volatility of Output, Employment and Unemployment

	Variability of Output(1) 1970-96	Employment responsiveness(2) 1970-96	Responsiveness of labour force to employment(3) 1970-96	Variability of unemployment rate(1) 1970-96
Austria	1,79	0,47	0,83	0,35
Denmark	1,92	0,62	0,26	1,10
Finland	3,24	0,64	0,19	1,78
France	1,59	0,45	0,13	0,57
Ireland	2,49	0,55	0,21	1,41
Netherlands	1,55	0,52	0,12	1,02
Sweden	1,73	0,77	0,51	0,84
Switzerland	2,57	0,67	0,85	0,47
United Kingdom	2,32	0,65	0,29	1,23

(1) Standard deviation of first difference (in log and multiplied by 100, for output).

(2) The estimated coefficient b in the regression $\langle \text{employment deviation from trend} \rangle = a + b * \langle \text{output deviation from trend} \rangle$, where the trends have been established using the Hodrick-Prescott filter, imposing identical smoothing factors for employment and output in each country.

(3) The estimated coefficient b in the regression $\langle \text{labour force deviation from trend} \rangle = a + b * \langle \text{employment deviation from trend} \rangle$, where the trends have been established using the Hodrick-Prescott filter, imposing identical smoothing factors for labour force and employment in each country.

Source: Hofer, Pichelmann and Schuh 1998.

Output fluctuations are not fully reflected by employment, but rather are mitigated by pro-cyclical changes in labour productivity. In Austria, this observation cannot be fully explained by the phenomenon of labour hoarding in an economic downturn, short-time work or other working time reactions; the less cyclically sensitive employment expansion in private and public services, and to a large extent the relatively high flexibility of real wages have also contributed greatly to cyclical stabilisation.

Since the mid-1980s, the sensitivity of employment to cyclical fluctuations in output has increased significantly in all of the countries surveyed except for Ireland; in Austria, as well, the employment responsiveness to output fluctuations was twice as strong in the mid-1980s as in the period from 1970 to 1983. Furthermore, in all of the countries surveyed employment in the private sector of the economy shows a noticeably stronger reaction to cyclical fluctuations in output than employment as a whole.

The labour market situation and particularly the number of unemployed ultimately depends on the sensitivity of labour supply to the business cycle. The supply reaction calculated in table 2.1 estimates to what extent cyclical fluctuations in employment are reflected in pro-cyclical fluctuations in labour supply rather than resulting in unemployment. In Austria, the responsiveness of labour supply is by far the strongest, i.e. changes in employment are largely offset by pro-cyclical changes in the labour supply. In the Netherlands and in Denmark the labour supply response to cyclical changes in employment is very weak. According to the measure presented in table 2.1, Austrian labour force movements cushion almost completely the effects of cyclical employment fluctuations. The high degree of responsiveness of the labour force to deviations of employment from trends in Austria can be attributed, on the one hand, to cyclical migration flows of foreign labour and, on the other hand, to a relatively high elasticity of participation rates of women and younger and older workers with respect to labour market conditions.

2.3 Real Wage Flexibility, Insider-Outsider Behaviour

The flexibility with which real wage trends react to external and internal supply shocks constitutes an essential determinant of an economy's macroeconomic performance. Many observers, for example the OECD or the IMF, have pointed to the high aggregate real wage flexibility in Austria as a major reason for her favourable labour market performance. Both the extent of the immediate impact of unemployment on wages and the long-term elasticity of real wages can be used as an indicator. Table 2.2 presents an international comparison of values for these parameters, which stem from the EU Commission's QUEST II Model and actually place Austria number one in the ranking.

Table 2.2: The influence of unemployment on wage determination

Country	Contemporaneous effect	Long Run Real Wage Elasticity
Belgium	-0.90	1.18
Denmark	-0.90	1.11
Germany	-0.65	0.89
Greece	-0.55	1.24
Spain	-0.88	1.86
France	-0.90	1.27
Ireland	-0.48	0.71
Italy	-0.95	1.44
Netherlands	-0.95	1.42
Austria	-1.60	2.53
Portugal	-0.64	1.45
United Kingdom	-0.50	0.74
Finland	-0.75	1.28
Sweden	-1.10	1.83
USA	-0.50	0.55
Japan	-2.50	3.47

Source: Roeger and Jan in't Veld 1997.

Based on the estimation of a fully formulated price and wage system, the characteristics of the wage determination process can be summarised as follows (see Hofer and Pichelmann 1996). The development of producer wages essentially follows an error correction model, whereby the share of national income claimed by wages serves as the error correction term; this implies that the labour share remains constant in long-term equilibrium. In terms of dynamics, this corresponds to the well-known relationship of real wage growth (based on producer prices) being equal to the increase in productivity. Inflation shocks triggered by real import price increases or indirect tax increases were fully absorbed in the process of setting wages to the extent that such price shocks apparently did not exert any significant influence on real producer wages.

Although unemployment does clearly dampen wage increases, the effect is not linear, which means that there was also a relation between higher unemployment and the growing number of unemployed with less labour market effectiveness (expressed, for instance, in the increasing percentage of long-term unemployed). Therefore, all other factors equal, the wage-curbing effect of unemployment declined. Moreover, the increase in the direct tax burden on labour over the past few years (primarily in the form of higher social security contributions) seems to have exerted significant pressure on real product wages at least in the short to medium term. Empirical analysis shows¹⁸ that these forward shifting processes for taxes, imposed on the employer, are more heavily accentuated than those imposed on the employee. This result is not very well supported by statistics, however.

In a more recent paper, Hofer et al. (1998) applied the Johansen cointegration procedure to identify the long run properties of the Austrian wage setting process. The data set contained data for the period 1964-95 for five variables, namely gross product wages per worker, product prices, labour productivity, the unemployment rate and the share of long term unemployment. Product prices were used in order to account for effects from the

¹⁸ See e.g. Pichelmann 1993.

external side of the economy. The share of long term unemployed was intended to capture persistence effects arising from human capital depreciation during extended unemployment spells.

The Johansen VAR exercise yields clear evidence for at least one cointegrating vector. The cointegrating vector for wages has the theoretically appealing property that labour productivity enters the wage cost equation with unitary long run elasticity. This cointegrating vector points to a rather high long run elasticity of wages with respect to unemployment. The positive impact of the share of long term unemployed on wage costs indicates that persistence effects seem to be at work at the Austrian labour market which diminish the downward pressure from unemployment on wages. These persistence effects stemming from the share of long term unemployment plausibly may reflect human capital effects on reemployment possibilities for persons being unemployed for extend time periods. The share of long term unemployment in total unemployment is, however, closely related to the level of the unemployment rate itself. A simple regression for the share of long term unemployed reveals that any increase in unemployment tends to reduce the share of long term unemployment in the short run as the composition of unemployment with respect to duration is driven by the increase of the inflow into unemployment. After some time, however, sorting and selection mechanisms in the labour market lead to an long run increase in the share of long term unemployment induced by an initial rise in total unemployment.

Table 2.3: A Johansen VAR model for the wage setting process

List of Variables:						
W		Gross Product Wages per Hour				
P		Product Prices (GDP Deflator)				
PR		Productivity per man hour				
UR		Unemployment Rate				
SLU		Share of Long Term Unemployed				
Effective Sample:		1967-1995				
Lags in VAR model:		3				
No. of observations:		29				
Obs.-no. of variables:		13				
Eigenvalue	L-max	Trace	H0	p-r	L-max90	Trace90
0.9307	77.42	155.79	r=0	5	20.90	64.74
0.7487	40.05	78.37	r=1	4	17.14	43.84
0.5418	22.63	38.32	r=2	3	13.39	26.70
0.4120	15.40	15.69	r=3	2	10.60	13.31
0.0099	0.29	0.29	r=4	1	2.71	2.71
The cointegrating vector for logW						
Variable	Coefficient					
log P	1.036					
log PR	0.976					
log UR	-0.154					
SLU	0.003					

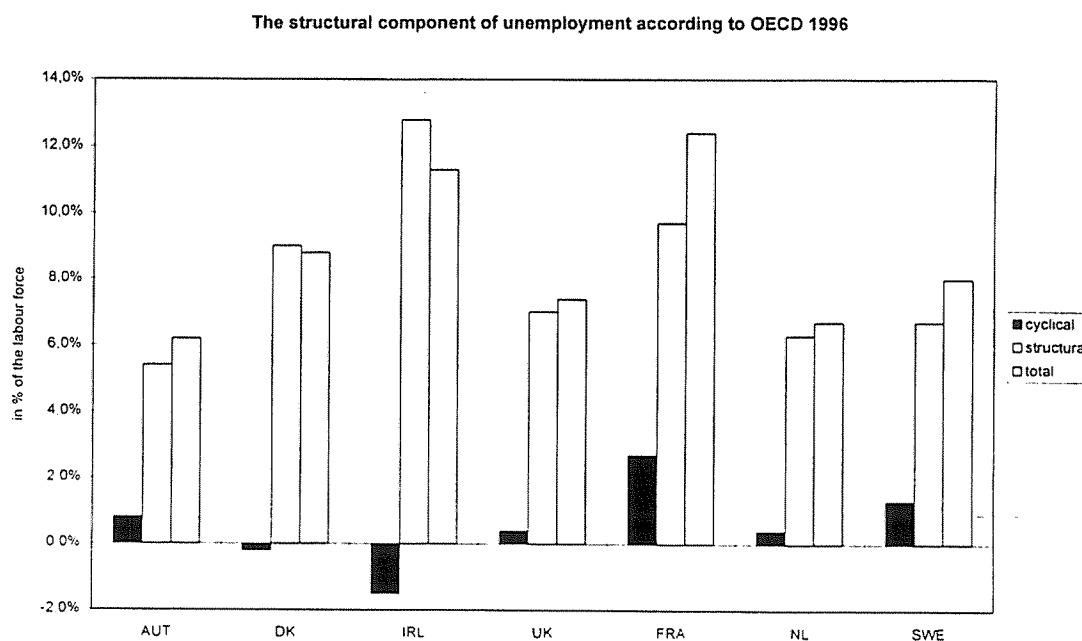
Source: Hofer, Pichelmann and Schuh 1998.

Estimates of a dynamic wage equation give some insights into the short run dynamics of Austrian wage formation. The estimated long run parameters of a dynamic wage equation on the basis of the cointegrating vector underline the clear relationship between wages, prices and productivity with unit coefficients. Changes in product prices have a clear impact on wage setting in the short run, whereas changes in unemployment and productivity seem to feed through into wages only over the medium to long run.

2.4 Trend increases in structural unemployment

The following illustration shows a comparison of unemployment in 1996 in selected EU countries. Actual unemployment was split up into the categories of non-cyclical ("structural") unemployment and cyclical unemployment. The cyclical component represents a synthetic view of the impact of short-run demand shocks, while the trend component depicts the impact of structural equilibrium factors and/or hysteresis effects. The empirical method for estimating the non-cyclical trend component of unemployment applied by the OECD, is the so-called NAWRU concept (non-accelerating wage rate of unemployment, OECD 1997b). NAWRU is the rate of unemployment at which wage inflation stabilises. Based on this concept and after smoothing the annual observations a time series can be extrapolated for trends in structural unemployment.

Figure 2.4



Source: OECD 1997b.

As shown in Figure 2.4, the labour market situation in the mid 1990s is characterised in almost all of the countries represented by the circumstance that wage inflation already starts to accelerate at unemployment levels that were relatively close to the current values. Although the relationship between wage inflation and unemployment is blurred in the short run by factors such as changes in terms of trade, changes in the tax wedge or temporary scarcity phenomena in individual sectors, the upward trend of the NAWRU cannot be negated. However, the experiences vary widely across the individual countries. While some countries have been confronted over the last decade by a more or less continuous upward movement of the NAWRU, in others the NAWRU remained more or less stable, such as in Belgium and Denmark, or it even declined, as in the Netherlands, the UK and Ireland.

If the difference between the actual rate of unemployment and its structural trend component is used as an indicator for measuring the extent of cyclical unemployment, business cycle factors seem to be of only limited importance for explaining the unemployment levels reached in the mid-1990s in most countries. The conclusion drawn from this line of thought is that the traditional instruments of expansive economic policy would soon have reached the limits of their efficacy.

Empirical findings are also pointing to a strong relationship between the cyclical variability of unemployment and the upward movement of the trend component over the past

two decades (Elmeskov and Pichelmann 1994). With a few exceptions, countries with strong cyclical unemployment also experience a relatively strong rise in the trend component of unemployment. This leads to the conclusion that immediate action to counteract cyclical unemployment, which prevents possible hysteresis mechanisms, results in higher returns and lower costs in the medium term as is generally assumed. But obviously, this holds only if the economic policy instruments applied ultimately also increase the potential supply of real capital and/or human capital.

In Austria structural unemployment, measured by the so-called NAIRU concept (non-accelerating inflation rate of unemployment), moved up considerably since the 1970's (see Figure 2.4). In the boom period in the 1970's actual unemployment falls below the NAIRU. In the second half of the seventies, however, the NAIRU started to increase, and, in fact, exceeded actual unemployment for several years. One major factor for this rise of the NAIRU was the increase in employer's contributions to social security. Actual unemployment, however, was around 2 %. This disequilibrium situation showed up in current account deficits but not in inflation. In the deep recession at the beginning of the 1980's actual unemployment quickly rose, pushing the unemployment rate above the NAIRU. The NAIRU itself, however, exhibited a tendency to follow actual unemployment, thus running up to a level of about 4 ½ %. This rise was mainly due to the rising proportion of long-term unemployed in the unemployment pool and the further increases in social security contributions amplified this trend.

Figure 2.5

Development of Unemployment and NAIRU in Austria



Source: Pichelmann and Schuh 1997; the values for 1995 and 1996 have been updated according to the development of the NAWRU indicator as used by the OECD.

The strong economic upturn in the end of the 80's led to a reduction in the unemployment rate; in 1989 the NAIRU is almost as high as actual unemployment. However, actual unemployment started to rise again, mainly due to the strong increase in labour supply, especially foreign labour. The difference between actual unemployment and NAIRU became larger again. Since the business cycle downturn in 1993 actual unemployment is slightly below the 7 % mark. From 1992 to 1996 the NAIRU rose by another one percentage point, which can be attributed in particular to duration composition effects of

unemployment. Using the NAIRU as indicator for structural unemployment implies that only about one fifth of current unemployment can be attributed to short-term cyclical factors.

As an alternative measure of the extent of cyclical unemployment in Austria, an estimate of the Okun relation can be used (see Hofer et al. 1998). The Okun relation describes the relation between the cyclical component of unemployment and the output gap. For given values of actual unemployment and the output gap (estimated from a Hodrick-Prescott filtering procedure), the structural component of unemployment has been estimated as a time-varying constant. The results more or less confirm that only about one fifth of current unemployment can be attributed to short-term cyclical factors; the estimation results further suggest that with a coefficient of -0.15 any positive or negative output gap translates only very weakly into deviations of actual unemployment from its structural component.

3. Key Issues in Employment Policies

3.1 Wage bargaining, wage flexibility and differentiation

In Austria wage policy is closely oriented on macroeconomic parameters and can only be understood if its firmly established position within the system of concertation among the social partners (see below) is taken into account. As has been demonstrated the high aggregate real wage flexibility in Austria is a major reason for the favourable labour market performance. The Austrian wage and income policy lead to a close link between wage increases and long-term trends in productivity with the effect that real wages develop the same as labour productivity. The high degree of de facto centralisation and co-ordination, coupled with an almost universal coverage of collective agreements is an important feature of the bargaining process in Austria. Labour unions have a strong incentive to espouse macroeconomic policy goals, like high growth and employment, when formulating their wage demands. Moreover, the two-tier system structure provides leeway for a differentiation of wages in accordance with sectoral and firm-specific productivity differentials and demand conditions. In the following the institutional setting of wage bargaining is discussed (see e.g. Biffl and Pollan 1995).

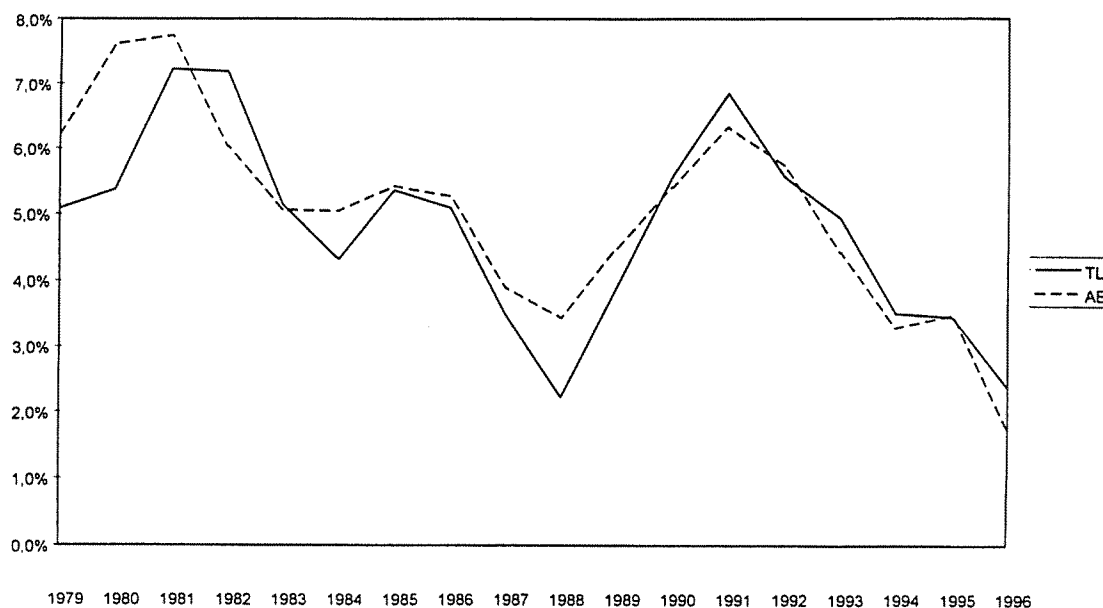
In Austria wages are normally negotiated at industry level between the trade unions on behalf of employees and the chambers of commerce and industry on the side of employers. Bargaining proceeds in annual intervals, the two wage rounds are in fall and spring. Wage bargaining is organised both a centralised level and at the enterprise level. The individual unions bargain their own settlements, however, the ÖGB formulated wage guidelines before major wage settlements. Furthermore, the ÖGB controls the funds of the single unions and determines the timing of wage negotiations. Traditionally, the most important standards for wage settlements have been the growth in aggregate labour productivity and aggregate inflation, with some account being taken of conditions in the labour market, the balance of payment and the international competitiveness. Despite the large number of wage contracts, wage bargaining in Austria is quite co-ordinated. The roughly parallel movement in contractual wages and salaries can be attributed mainly to the informal ways of co-ordinating wage bargaining at the peak level and the wage leadership of mainly the metal worker union.

Three of the largest negotiations cover about one-half of the dependent labour force and 98 per cent of the employers are covered by collective agreements. The government does not directly interfere and no statutory minimum wages exist in Austria. However, the collectively agreed wages are legally binding for all employers and cover union members as well as non union members. The negotiated wages and salaries (Kollektivvertragslöhne or Tariflöhne) are minimum rates which set a floor for wage and salary rates that are actually paid (effective wages and salaries).

Both the minimum wages (collective bargaining wages) and the annual wage increases for those workers whose wages are higher than the collective bargaining minimum wages (actual wage clause) are set out in the collective bargaining contracts (see figure 3.1 for the development of the negotiated wages and salaries (TL) increases and the actual effective wage increases (AE) over time). Whereas minimum wages are also set out in the collective bargaining contracts of some other countries, the actual wage clause is a peculiarity of the Austrian system. This ensures strong influence for the unions over the development of all wages. In most cases, the increase in minimum wages negotiated in collective bargaining is somewhat higher than the increase in actual wages.

Figure 3.1

Wage developments in Austria (changes to previous years)



A second round of negotiations takes place at the enterprise level, between management and the work council. As the latter are firmly rooted in the trade unions, a certain co-ordination of wage policy is also ensured at firm level. In general firm specific negotiations can only improve the outcome of collective agreement. However, in some exceptional cases, collective agreement included an "opening clause" allowing a wage reduction at firm level in exchange for job guarantees. This possibility was very rarely used in the past. Except in very special cases, wage agreements have never resulted in a reduction of nominal wages. Take-home pay for employers might, however, decrease through the reduction of overtime hours or a cut in firm-specific bonus payments.

In contrast to Scandinavian countries, solidarity has not been the driving force behind wage policy in Austria. Considerable income disparities exist between men and women, as well as between the different groups by level of qualification and by age groups. In brief, men earn more than women, more highly qualified employees earn more than those with fewer skills and persons belonging to wage groups with higher rates of unemployment are paid lower wages (Kubin and Rosner 1997). High disparities at the level of individual earnings are revealed compared to Denmark or the Netherlands. The ratio of the upper limit of the ninth decile and the upper limit of the first decile of the distribution of earnings is 3.66 in Austria, 2.59 in the Netherlands and 2.17 in Denmark (OECD 1996b). Especially inequality is high at the lower end of the earnings distribution in Austria. Moreover, in European comparison, Austria exhibits the greatest inter-industry wage differentials (see Guger 1993). However, these disparities reflect to a large extent the steep income curves that rise with age and the gender-specific income differentiation. If adjusted for individual characteristics, the inter-industry wage dispersion in Austria corresponds to Germany or Norway (see Hofer and Pichelmann 1996).

Gusenleitner et al. (1996) monitored trends in wage distribution among dependent employees in Austria during the period between 1972 and 1991. From 1972 to 1977, a narrowing wage inequality was observed, as measured by the Gini coefficient. As of this point in time, however, the gap in the distribution of income has grown steadily. By the end of the period of observation, the level of wage inequality had again reached the level it had at the beginning of the 1970s. An interesting point to mention is that throughout the entire

period of observation, both the lowest decile and the highest decile made gains at the expense of the middle classes. The authors also disaggregate by labour force status (wage earner/salaried employee) and sex (male/female). This investigation shows that income inequality is due primarily to the steep wage dispersion within the group of male salaried employees.

Despite the considerable macroeconomic real wage flexibility in Austria, relative wages appear to be more rigid (see Hofer et al. 1998). For the period 1981 to 1993 returns to schooling and the shapes of the age/earnings profiles were investigated using micro data. The estimates of educational yields confirm the expected results on average. The higher the level of education, the higher the income.¹⁹ Over time, however, the return on schooling seems to have declined. If one compares the return by type of school education (compulsory school was standardised to 100), it turns out that secondary school education has lost relative to compulsory school education. The high returns for an university degrees have also fallen. In contrast to the evidence gathered in the United States, there is no relative deterioration in the income situation of less skilled workers. This trend is compatible with the increased supply of more highly qualified labour.²⁰

Table 3.1: Income index by level of education completed

	1981	1983	1985	1987	1989	1991	1993
Compulsory school	100	100	100	100	100	100	100
Apprenticeship	110	109	111	111	111	112	111
BMS ¹	121	117	120	121	124	119	122
AHS ²	139	134	136	138	139	134	130
HAK ³	154	144	148	145	148	148	141
University	196	189	183	184	184	182	184
Rate of return	8,69	7,87	7,63	7,44	7,60	7,37	7,22

Estimations based on microcensus data: the tables show the difference in net monthly income for male employees according to work experience, labour force status and industry affiliation in the private sector. The rate of return shows the percentage yield of an additional year of schooling.

¹ Secondary technical and vocational schools (3-years course)

² Secondary general education school (5-years course)

³ Secondary commercial school (5-years course).

Source: Hofer et al. 1998.

Concurrent with international data, estimates for stylised experience-earnings profiles result in the expected concave shape. Experience-earnings profiles differ markedly between wage earners and salaried employees. The latter attain much more pronounced considerable wage increases in the course of their careers. Over time, a trend toward flatter wage profiles is discernible, but not very strong. In comparison to Germany, wage profiles are much steeper in Austria. What carries a lot of weight in Austria is the seniority component in earnings. This implies that an employee endowed with human capital specific to that enterprise is initially paid below his or her marginal product, and later on, above it. This type of wage system may be beneficial for employers as well, but may cause problems when human capital is devalued due to technological progress. Furthermore, the problems of older

¹⁹ This pattern also occurs in the case of female employees, although the extent of the wage differential due to school education is much smaller in comparison (see Boss et al. 1997).

²⁰ According to the population census, between 1981 and 1991, the share of employment without secondary school education or completed apprenticeship declined by 11.2 percentage points.

workers on the labour market are aggravated by the steep income profiles. Although the probability of being dismissed is below average in the case of older jobholders, once a job is lost the chances of finding a new one are relatively scant. Flatter age-earnings profiles could contribute to ameliorating the situation of older workers.

There are some efforts in Austria to make the pay structure more flexible. In 1997 the grading system for white-collar workers' salaries in industrial establishments has been changed, redistributing lifetime income from later to earlier years, partly in an attempt to protect the employment chances of employees over 40. This was decided in the form of a collective agreement between the Federal Section Industry of WKÖ and the Industry and Crafts Section of the Union of Salaried Employees. Furthermore, metal workers collective agreement in 1997 included a "distribution option", allowing for some of the agreed increases to be allocated at company level. The parties agreed to raise minimum wages by 2.7 % and actual wages by 2.1 %. Work agreements could limit the across-the-board rise in actual wages to 1.9 %, if the company agreed to raise to total wage bill by an additional 0.5 %, which could be distributed to groups designated in the works agreement, but principally in line with the criteria of low income and high performance. This option was also included in the agreements for industrial enterprises in the chemical and glass sectors.

Although the amount of labour income that can be raised in the market is the single most important factor shaping the distribution of personal income in Austria, income from capital and re-distributions from transfer payments must also taken into account. The risk of falling below the poverty line is determined strongly by a person's labour force status; further determinants are the number of children and level of education. According to statistics compiled by ÖSTAT, currently 11 % of Austrian households face poverty. Households with incomes at the threshold of poverty are defined as all households with a per capita income level which is lower than half of the average household income. According to data from EUROSTAT the poverty rate in the countries of EU-12 is between 6 % and 26 % (BMAGS 1997). The smallest poverty rate has Denmark with 6 %, followed by Germany with 11 %; in the Netherlands the poverty rate is slightly higher than in Austria (13 %), where in Ireland the poverty rate is almost two times as high as in Austria (21 %).

3.2 Industrial Relations in Austria

Austria represents a corporatist model of interest intermediation. One of its main characteristics is the participation of interest groups representing both labour and capital in policy formulations in areas as economic, incomes, and social policy. Social partnership is a system providing centralised representation of producers' interests and, as a consequence of centralisation, it is able to internalise negative external effects and thereby to serve the long-term interests of the entire economy concerning social stability and economic growth.

The social partners are, on the one hand, the Federal Economic Chamber (Wirtschaftskammer Österreich, WKÖ), which is the official interest group representing businesses, together with the Association of Austrian Industrial Enterprises (Vereinigung Österreichischer Industrieller, VÖI) and, on the other hand, the Federation of Austrian Trade Unions (Österreichischer Gewerkschaftsbund, ÖGB), which is the umbrella organisation of all trade unions, together with the statutory interest group organisation representing dependent employees, the Austrian Federal Chamber of Labour (Bundesarbeitskammer, BAK). Another member of the social partnership is the umbrella organisation of chambers of agriculture set up at the provincial level, the Conference of Presidents of Chambers of Agriculture (Präsidentenkonferenz der Landwirtschaftskammern).

This interest group structure was originally considered to be the institutional result of the distribution conflict between labour and management, whereby management was identified with the owners of capital. This interpretation coincided with Austria's given

political structures, i.e. a socialist camp that was closely linked with the trade unions in terms of both the ideology itself and the people representing it, and a conservative camp that mobilises the self-employed, entrepreneurs and the farming community.

For the economic interest groups, this co-operation meant that the trade unions had accepted the necessity of profits and businesses had accepted that workers should share in the increasing wealth. The existence of trade unions as both an economic association for the dependently employed and a support for worker's councils within enterprises was no longer disputed. The notion of a fundamental distribution conflict between labour and capital continued to have a formative influence on the philosophy of the economic and political camps, but the improvement of living standards of its own members via economic growth took priority over the conflicts over income distribution.

Accepting the existing income distribution was a political decision that had to be implemented by applying a specific distribution policy. This policy was implemented by the interest groups themselves. Wages are primarily fixed centrally in collective bargaining contracts between the trade unions and the competent sections of the Federal Economic Chamber (see above) without the government having to try to implement an income policy. Income policy was not only pursued by determining wages, but also via pricing policy, which was of great importance to workers. It may seem unusual nowadays, but regulating prices as a way of conducting economic policy was quite common in many market economies in earlier decades. Austria had laws regulating the prices of such goods as food, energy and medication. The legal provisions foresaw that the social partners had their say in setting prices.

In addition to government price regulation, the social partners' associations also conducted price regulation by themselves. The institutional framework for the social partners' price regulation was the Parity Commission (Paritätische Kommission), which was established in 1959. The seats on the commission are equally divided among representatives of the Federation of Austrian Trade Unions, the Austrian Federal Chamber of Labour, the Federal Economic Chamber and the Conference of Presidents of Chambers of Agriculture. Until 1966 the government, with an equal number of votes for each of the two governing coalition parties (the Social Democrat Party (SPÖ) and the Austrian People's Party (ÖVP)), was also represented on the commission. When the first period of the great coalition came to an end in 1966, the government representatives dropped out of the commission.

Even though the Parity Commission never had any legal foundation, it was nonetheless the institutional core of the social partnership for over 20 years. Aside from the general economic policy discussions with the government, there was direct intervention in determining incomes. In the Wage Subcommittee, it was decided whether wage negotiations should be allowed to start, which then were jointly conducted by the appropriate trade union and professional and trade association of the Federal Economic Chamber. Although wages were not actually negotiated in the Parity Commission, no collective bargaining could take place before the Parity Commission had given its consent. As the umbrella organisation, the Federation of Austrian Trade Unions thus guaranteed itself a certain degree of control over the wage demands of the individual trade unions. In the Pricing Subcommittee, on the other hand, prices were negotiated directly.

In addition to income policy, the social partners were increasingly incorporated in the economic and social policy decision-making process. It was not only accepted, but often explicitly requested that decisions be taken by the social partners and then passed along to the responsible state bodies — parliament and government — for the corresponding resolutions to be passed with minor changes. This particularly applies to social policy. As changes in social policy, like determining incomes, were primarily seen as a conflict between labour and management, it was perfectly natural to consent to a consensus of these groups at

the state level. This applies to both employment regulations and statutory social insurance arrangements.

The major interest groups were also included in other areas of economic policy, although here they represented the specific interests of their members in dealing with the state agencies without committing the state agency to an agreement in advance. The social partners were also integrated in monetary policy. Fifty percent of the central bank (OeNB) is owned by institutions that are close to the major interest groups. The social partners also hold seats and voting rights in the General Council of the OeNB and are consequently included in the ongoing debate on monetary policy.

For a long time, the Advisory Council for Economic and Social Affairs (Beirat für Wirtschafts- und Sozialfragen) was particularly important for the Parity Commission. It did not have to take any decisions, but rather was responsible for drawing up studies on economic policy issues. To accomplish this, the board called upon specialists from research institutes and universities. The board's aim was to arrive at a consensus on the perception of economic and social issues. Both sides accepted the findings of the studies as correct data resulting in a binding interpretation. The economic policy debate was greatly facilitated as a consequence.

The institutional prerequisite for interest groups to commit themselves to long-term objectives for the economy as a whole is their strong centralisation. It is understood that each interest group represents its own members. But as this is a very large group and does not belong to one single sector of the economy, each association has to carefully weigh the various interests held by its members. The Federation of Austrian Trade Unions and the Austrian Federal Chamber of Labour, on the one hand, and the Federal Economic Chamber and the Association of Austrian Industrial Enterprises, on the other, are in a better position to safeguard overall economic interests than the individual trade unions or a single association of businesses. Specific preferential treatment for a group of workers, such as protection against foreign competition, would also be at the expense of other workers, who would then have to pay higher prices. The situation is similar for enterprises. As a result of focusing on overall economic interests, the social partners were very committed to Austria's efforts to join the EU, both in the negotiations and the conflicts that arose in the course of the referendum vote.

The Federation of Austrian Trade Unions is more than just an umbrella organisation like Germany's DGB or England's TUC. It is the main body representing workers, even though it does not itself conduct wage negotiations. It was founded before the individual trade unions back when Austria regained its independence and extensively retains power of the purse and personnel over the trade unions to this day. Although it is not actually forbidden to found a trade union outside of the Federation of Austrian Trade Unions, no serious attempts have been made to do so until 1996. It is politically non-aligned, but accepts political fractions in the trade unions and the Federation of Austrian Trade Unions. Social Democrat trade unionists dominate in all but the civil service trade unions.

The labourers' trade unions (there are currently 9 of them) are organised according to the branch of industry, i.e. all workers in an enterprise belong to a trade union irrespective of their qualifications. The largest workers' trade union is the Metal Workers Union. All salaried employees in non-state sectors of the economy belong to another trade union (Gewerkschaft der Privatangestellten, Union of Salaried Private Sector Employees). As a consequence of the structural changes among the dependently employed, this has since become the largest single trade union. There is one trade union each for the railways and the postal service, one trade union organises municipal servants and another organises the federal and provincial government employees. Currently, about 45 % of all workers are

organised in trade unions. Thus far, the Federation of Austrian Trade Unions has never been contested as the body capable of speaking on behalf of workers.

The Austrian Federal Chamber of Labour is an statutory interest group organisation with compulsory membership. All those employed in the private sector are members, as are all public employees in the transport sector. Requiring membership by law was confirmed by an overwhelming majority in a vote of all members several years ago. The Austrian Federal Chamber of Labour carries little political weight over the trade unions and functions primarily as their intelligence staff unit. It employs a large number of specialists capable of playing a decisive role in the economic and social policy discussion.

The Federal Economic Chamber is based on mandatory membership. Here again, this requirement was confirmed in a vote of all members by the broad majority of its members. Due to the structure of Austrian enterprises, small and medium-size businesses dominate the Federal Economic Chamber. Industrial enterprises are brought together in the Association of Austrian Industrial Enterprises, although membership in this group is voluntary. In order to do justice to the often divergent interests held by trade and industry, a representative of the Association of Austrian Industrial Enterprises is always included on the employer's negotiating team in all social partnership negotiations.

In the last few years, the social partnership has altered its image for political and economic reasons. Today's alternatives to social partnership are no longer major distribution conflicts and state-controlled income policy, but rather allowing incomes to be determined on competitive markets. The manoeuvring room for regulation of any sort has actually been reduced by integrating the Austrian economy in the international division of labour. Competition has increased greatly on the goods markets and consequently on factor markets as well. And price regulation has become practically meaningless, which is why the Parity Commission hardly regulates prices anymore. Moreover, much of the regulation is not done in Austria, but rather is taken care of in international agreements in a broader context. This primarily concerns the European Union. Consequently, the social partnership is often entrusted with representing general Austrian interests in international commissions.

Aside from the employment promoting wage and income policies, the positive influence of the social partnership is also reflected in the way industrial disputes are solved. From 1991 to 1995 an average of only 3 strike minutes was recorded per worker in Austria. By way of comparison, 11 strike minutes were recorded in the United Kingdom, 12 in Denmark, 16 in the Netherlands, 25 in Sweden and 53 in Ireland.

Table 3.2: Working hours and flexible working hours, 1995

	F weekly regular working hours ¹	F required annual working time ²
Austria	37,5	1697
Belgium	35,7	1729
Denmark	34,5	1672
Germany (West)	36,4	1602
Finland	36,9	1716
France	37,0	1755
Greece	39,8	1832
United Kingdom	37,5	1762
Ireland	37,4	1794
Italy	37,6	1720
Netherlands	31,7	1717
Portugal	40,4	1882
Sweden	35,3	1808
Spain	39,0	1772
Flexible working hours		
share of total employment ³	Austria	EU-15
Regularly shift work	13,4	10,3
Sometimes shift work	3,1	1,8
Regularly work during evening	12,8	13,0
Sometimes work during evening	15,2	19,7
Regularly night work	7,8	5,5
Sometimes night work	8,8	9,5
Regularly work on Saturdays	25,2	28,3
Sometimes work on Saturdays	21,2	21,9
Regularly work on Sundays	13,8	11,7
Sometimes work on Sundays	13,0	15,5

¹ Wage and salary earners according to the labour force survey.

² Working hours accorded in collective bargaining agreements for industrial workers.

³ Regularly, sometimes and never do not always add up to 100 % due to missing answers.

Source: Federal Economic Chamber, Bartunek 1997.

The social partners are heavily involved in the negotiations about working time flexibility. Flexible working time is seen by the Austrian industrial employers as a very important location factor with increasing significance in the future (Aiginger and Peneder 1997). Weekly working hours of wage and salary earners in Austria hardly deviate from the average in the EU. Yearly working hours show a different picture. Only West Germany and Denmark have shorter yearly working hours than Austria. Shorter individual working hours are not necessarily a competitive disadvantage for business if the effect can be ameliorated by the flexible deployment of labour. If one takes a look at Austria's position regarding flexibility in working hours by adding the shares of employees affected by shift work, night

work, work during evenings or on Saturdays and/or Sundays, then nothing in the results points to Austria being a country with a relatively rigid structure of working hours.²¹

In 1976 Austria introduced the 40-hour workweek. Between 1985 and 1990 some industries reduced weekly working hours to between 36 and 38.5 in collective bargaining agreements, affecting roughly one-third of employed persons (European Commission 1996). The regular working hours agreed in collective bargaining agreements, together with the timeframes fixed for adding up total working hours, determine the extent to which a fixed number of employees can be deployed variably on the basis of the actual number of hours worked.

The Metal Workers' Trade Union recently reached an agreement with employers on a flexible working hours model designed to protect the competitive position of the industry. This model has a bandwidth of weekly working hours of between 32 and 45 hours. As of the 41st hour, the employee is paid 25 % overtime pay or 15 minutes free time. Daily working hours have been extended to nine hours, and even to 10 hours in the case of four-day workweeks. Time credits collected must be balanced within a period of 52 weeks to the regular workweek of 38.5 hours.

3.3 The tax and contribution system and the role of labour taxes

With serious labour market problems setting the scene, features of the wage determination process commanded increasing attention in Europe. Labour costs as the price of the production factor labour are a crucial element in determining an economy's competitiveness. Particularly in small, open economies with fixed exchange rates, wage costs must guarantee international competitiveness. Furthermore, economic theory indicates that factor input relations are determined — at least in the long run — by relative factor input prices. The increases in the cost of labour relative to other production factors induce a substitution process which, *ceteris paribus*, lowers the labour intensity of production.

Table 3.3: Non-wage labour costs as a proportion of total labour costs (in %)¹

	1985	1990	1995
Austria	18,4	18,3	18,9
Belgium	23.1	25.9	26.3
Canada	10.7	11.1	13.7
Finland	18.4	20.4	22.4
France	27.9	27.9	28.2
Germany (West)	18.8	18.8	19.6
Italy	26.8	28.7	29.9
Japan	13.0	14.6	14.2
Norway	16.4	16.9	16.2
Sweden	26.5	27.2	26.4
Switzerland	13.1	13.1	14.1
United Kingdom	13.5	11.9	12.6
USA	17.7	17.8	18.7

¹ Wage costs refer to all wage and salary payment and non-wage labour costs refer to employer social security contributions.

Source: OECD 1997a.

²¹ See Walther 1995 and OECD 1997c for a different conclusion. These studies, however, are based on data sources that are difficult to compare internationally.

Labour costs comprise more than the direct gross wage payments to employees; they also include the employer's contributions to social security and payroll taxes. According to data provided in the OECD Employment Outlook for 1997, Austria falls in the midrange in terms of the share of non-wage labour costs in total labour costs and the share itself has remained more or less constant.²²

According to EUROSTAT data taxes and social security contributions amounted to 45.7 % of GDP in 1996, which is above average for the OECD area and also slightly above the EU average (42.4 %). The Austrian tax structure can be described as follows: the tax burden on labour continues to be heavy, even after the tax reform of 1994. Social security contributions are significantly higher in Austria than the OECD average, the overall tax burden is in the upper middle field, while taxes on consumption are on an international level and direct taxes are considerably lower. The tax burden increased rapidly in the period up to 1980. Behind this trend has been a marked shift in the composition of revenues towards social security charges, which increased to just over a third of all revenues. The share of consumption taxes, however, fluctuated around 30 per cent.

Grouping taxes according to the tax base, Austria ranks as having one of the highest effective tax burden on wages, social security contributions and income taxes amounting to around 45 % of gross wages. Summing all taxes paid in the first instance by economic function and dividing by the relevant tax base as measured in the national accounts yields a measure of effective tax rates. According to this indicator the effective tax on labour is high at 43 % (see Koman and Wörgötter 1995), however, but not greatly out of line with neighbouring European Countries, like Germany 38 %, France 45 %, Belgium 40 %, Denmark 45 %, or the Netherlands 46 % (see OECD 1998:60). On the other hand, the effective tax rate on capital income and self-employment income, on a national account basis is around 20 %.

The personal tax system in Austria is based on the individual rather than the family to avoid the disincentive effects to labour force participation of households. There are five tax brackets with a top marginal rate of 50 %. This rate applies to taxable income of 2 ½ times the gross income of an average production worker. However, employee social security contributions are a standard deduction so that tax payers in the highest bracket receive an annual tax relief on half of their social security contributions. With respect to work incentives the tax system needs to be considered in conjunction with the social benefit system. Therefore this issue is discussed below.

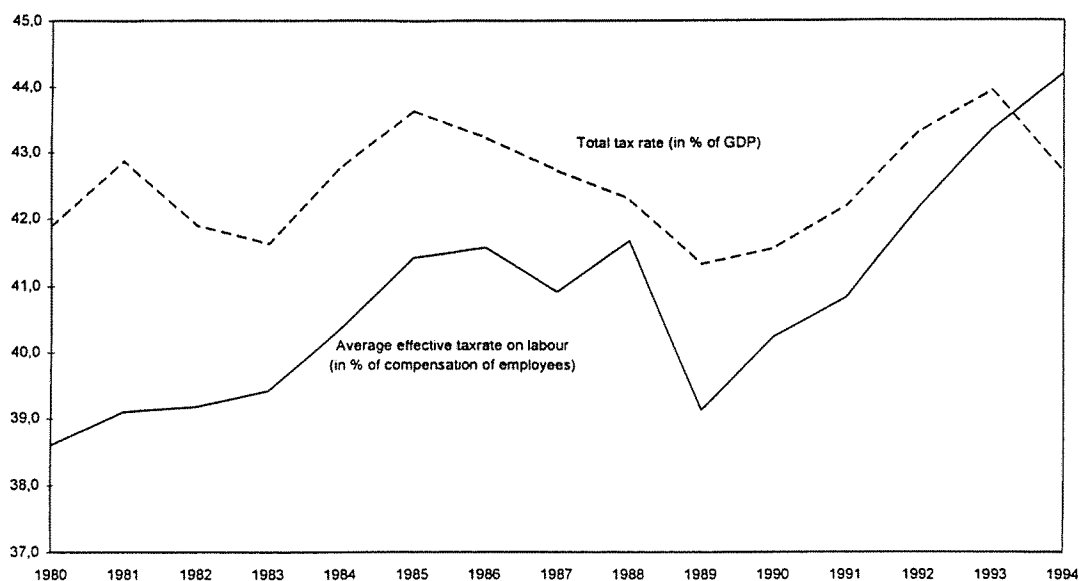
As already mentioned, Austria has experienced a marked increase in the effective tax burden on labour since the 1980s and only the tax reform in 1989 could interrupt this trend temporarily. As graph 3.2 illustrates, the increase in the effective tax burden becomes even more apparent when compared to the trend in the total overall tax ratio. Whereas the increase in the overall tax ratio was just under 1 percentage point between 1980 and 1994, the effective tax burden on labour climbed by 5.5 percentage points.

The effects of the heavier tax burden on labour depend on the effective incidence. Theory identifies the incomplete backshifting of cost factors, which drive a wedge between real producer wages and real consumer wages, as a cause of increased pressure on real wages. The empirical evidence available indicates that a greater tax burden on labour (primarily in the form of higher social security contributions) will most likely not be borne solely by employees (see OECD 1994).

²² The breakdown into wage and non-wage labour costs must not be confused with the breakdown into direct wages and ancillary wage costs. The second approach applies the business' cost accounting standard and allocates to ancillary wage costs, aside from the direct wages, all other costs (e.g. the so-called 13th and 14th month of pay received by employees in Austria).

Figure 3.2

Overall tax rate and implicit tax rate on labour



Source: Koman and Wörgötter 1995, IHS.

Based on the estimate of macroeconomic wage and price equations for Austria, it appears that the increase in the direct tax burden on labour (predominately in the form of higher social security contributions) has been shifted forward to some extent into real product wages. Pichelmann's estimation results (1993) suggest a forward shifting coefficient of 60-70 %. In the updated estimate for 1968-1994 using revised national accounting data, the results did not have as much statistical support and imply a forward shifting of taxes of about 30-40 % into higher real labour costs (Hofer and Pichelmann 1996). Furthermore, the empirical analysis indicates that this process of shifting taxes forward is much more heavily accentuated for charges officially levied upon employers than for those paid by the employees. This result, however, also lacks adequate statistical support and therefore the hypothesis of "invariance of effective incidence" cannot be rejected. These findings urge caution with respect to further increases in wage-related taxes. And although theoretical considerations suggest that those taxes are completely borne by labour in the long run, this does not rule out negative effects impacting both labour supply and the demand for labour in the short and medium-term.

3.4 Social security system in general and unemployment benefit system in particular

Austria is characterised by a well-developed system of social security, social expenditures in 1995 amounted to 29.5 % of GDP (see Guger and Steiner 1997). This makes Austria fairly average for the EU and the social expenditure ratio is equivalent to that of European countries with a similar social and economic structure. Only Scandinavian countries and the Netherlands show significantly higher figures. The Austrian welfare state is heavily employment and family-oriented, thus making it essentially tantamount to the model of the corporative welfare state. This model is designed to secure the social status of persons in cases of illness, unemployment, invalidity, old age or death of the income earner of a household. Major portions of this system are generally based on the insurance principle, whereby the employed are relatively well protected and the vertical redistribution benefits are only moderate. Around half of social spending in 1995 went to old-age (38 %) and survivor's pensions (11 %), while one-fourth went to health benefits, one-tenth to family benefits and a little less than that to invalidity and unemployment benefits. There are marked

differences in the composition of social spending between Austria and the EU of 12. More is spent in Austria, for example, on old-age pensions and family benefits, whereas the percentage spent on health/invalidity and unemployment is noticeably lower than the EU average. Of course, in the latter case the low rate of unemployment in Austria plays a major role.

Unemployment insurance is compulsory for all except the self-employed and civil servants. The unemployment benefit system comprises unemployment benefits and, after these benefits are exhausted, unemployment assistance. The general requirements to become eligible for unemployment benefits — aside from being unemployed, able, available and willing to work — are to have been dependently employed and have paid contributions to the unemployment insurance scheme for a certain period of time before applying for benefits. The recipients of benefits are also covered by the health and pension insurance schemes. The health insurance also covers dependent family members. The duration of the benefits is included as an equivalent contribution period when calculating pension benefits. In order to receive unemployment benefits (*Arbeitslosengeld*), a person has to have been employed and insured under the unemployment insurance scheme for at least 52 weeks (if applying for the first time) within a period of 104 weeks before the application is filed. In the case of repeated application for unemployment and for youths (younger than 25) the required period of employment is reduced to 26 weeks within one year. The amount of the unemployment benefits is determined by the social security contributions for the preceding calendar year and the year before. The net income replacement ratio is about 55 %, which is relatively low in international comparison. In addition to this base amount, persons with dependants are eligible for family allowances. The annual average for average daily rates paid out to unemployed persons (incl. any family allowances) was up to ATS 299 in 1996. The gender-specific income differential is also manifest in the amount of unemployment benefits paid. The average daily rate for men is ATS 330, which is roughly one-third higher than for women. The upper ceiling for unemployment benefits depends on the upper earnings limit for social security contributions. Depending on the duration of former periods of employment, unemployment benefits are paid for a period of 20 or 30 weeks. This length of time increases to 39 weeks if the person is over 40 years old and has worked at least 312 weeks within the last 10 years. If a person has reached the age of 50 and had been employed for at least 468 weeks, the length of unemployment benefits is extended to 52 weeks. The annual average of unemployed persons receiving unemployment benefits in 1996 was 127,021 persons, which is roughly 55 % of the total number of the registered unemployed. The level of flows is of course much higher: a total of 600,000 applications for unemployment benefits were authorised in 1996.

After unemployment benefits or parental leave payments are used up, an application for unemployment assistance (*Notstandshilfe*) may be filed. In addition to meeting the requirements of being unemployed, able and willing to work, unemployment assistance is means tested. The amount of unemployment assistance depends on the previous amount of unemployment benefits received and is limited to 92 % of the previous unemployment benefits (or 95 % in the case of unemployment benefits below a certain level). The means test includes an examination of the economic situation of the applicant and the income of a partner living in the same household. Unemployment assistance is reduced by the part of the spouse's income which exceeds certain "free amounts". Unemployment assistance is granted for the period of one year and can be prolonged indefinitely as long as the requirements are met. However, the criteria for job placement are much stricter than for recipients of unemployment benefits. Eligibility criteria are also very strict for non-EU citizens. Only foreign workers with at least 5 years of legal employment in Austria are eligible for

unemployment assistance for a period of 52 weeks.²³ The average amount of unemployment assistance benefits paid in 1996 was ATS 236 per day (ATS 268 for men and ATS 204 for women). The number of recipients of unemployment assistance was 82,148 in 1996, which is roughly 36 % of the total registered unemployed. In terms of flows, the number of cases in which unemployment assistance was granted was approximately 178,000 in 1996.

The work incentives of the Austrian tax/benefit system appear not to be unfavourable in international comparison. Austria ranks in the middle of the European countries with respect to marginal tax rates. However, one should note the relative high rates in the lower income segment. In this range only Belgium and Denmark have significantly higher rates; in France, Italy, UK, Norway, Spain and Sweden the marginal tax rate is at least 10 % lower than in Austria. In the higher income ranges marginal taxation in Austria is lower than average. This can be explained with the possibility to deduct social insurance contributions and the low taxation of the so called "13/14 month payments".

Table 3.4: Marginal tax rates by income level (single earners) 1995*

	66%	100%	133%
	of the wage of the average production worker		
Germany	47.0	52.6	51.1
France	35.0	35.6	37.0
Italy	34.3	34.3	40.5
UK	35.0	35.0	35.0
Austria	47.5	39.7	39.7
Belgium	54.8	54.8	59.4
Denmark	51.7	54.5	66.3
Finland	48.6	53.1	58.7
Netherlands	48.4	55.9	55.9
Norway	35.8	45.3	49.5
Spain	30.3	32.5	30.3
Sweden	37.2	37.2	56.5

* Covers income taxes and social insurance contributions less transfers. Employers' contribution to social security are not taken in consideration.

Source: OECD;

Statutory unemployment benefit replacement rates are not particularly high by international standards. However, there are some features of the Austrian tax/benefit system which created some poverty and unemployment traps. Earned income exceeding 3.600 ATS per month destroyed all entitlements to unemployment benefits. Because of this feature low-income households faced marginal tax rates being above 100 % (see OECD 1997c). However, since 1998 unemployment benefits and unemployment assistance are paid with a reduced rate, if the unemployed person accepts a job lasting at least 17 day per month. Therefore, the incentives for accepting a limited part-time job will considerably increase. The unemployment trap in Austria has been notably reduced. However, there is still the problem of cross-subsidies granted to seasonal industries. In mid-1996 a collective agreement was signed in the construction industry with the aim to reduce the industry's reliance on the national unemployment insurance system through workers being laid off during winter. Because of lack of data it is difficult to access the agreement, however, crude

²³ Recently, a number of adaptations regarding unemployment insurance regulations have become effective. For example, the formal discrimination of non-EU citizens has been abolished.

estimates seem to indicate that the savings from these new model are likely not to exceed 5% of the net losses due to subsidising the construction industry.

Table 3.5: Replacement rates for single-earner households, 1994 (2/3 of the average production workers level of earnings)

	Net replacement rate (after taxes and other benefits)		
	first month of unemployment		60 th moth of UE
	Couple, no children	Couple, 2 children	Couple, 2 children, housing benefits
Germany	60	70	80
France	79	81	83
Italy	36	45	14
UK	52	67	90
Austria	58	74	100
Belgium	75	76	91
Denmark	92	93	95
Finland	67	83	100
Netherlands	79	78	95
Norway	66	75	100
Spain	74	78	66
Sweden	82	85	121

Source: OECD Country Report Austria 1997.

As already discussed labour force participation of older workers is among the lowest in any OECD countries, due to the extensive use of early retirement. Until 1996 there was a special pre-retirement benefit (Sonderunterstützung), which was higher than the normal unemployment benefit available from the age of 54 for women and 59 for men, four years earlier in some industries. Recently, a series of policy measures has been implemented in Austria with the aim of raising the actual age of retirement. It has been made more difficult for public and private sector employees to retire before statutory retirement age. However, these measures are being counteracted by the effect of including child-rearing periods in the calculation of pension benefits for women. Nonetheless, it is the generally accepted goal to move the actual age of retirement closer to the statutory retirement age. In this context, special attention should be devoted to the job opportunities for older workers. Already in the five-year phase before early retirement age, the rate of unemployment among both men and women was 1.5 percentage points higher than the Austrian average. Based on the fact that the reemployment probabilities are much lower for older persons, the attempt has been made to prevent unemployment by improving protection against dismissal for older workers. A credit/debit system has been introduced with the aim of creating a disincentive for employers to dismiss older workers and to make their employment more attractive. In addition, wage subsidies are becoming more and more important as an instrument of active labour market policy. Meanwhile, it is no longer only a matter of staving off the trend towards early retirement, but rather it has become indispensable to find ways to integrate an growing number of older workers, since due to demographic trends in the resident population of Austria, the number of 50 to 64-year-olds will increase by some 100,000 persons by the year 2002.

3.5 Active labour market policy in Austria

The setting of labour market policy in Austria is characterised by the close interaction between governmental and non-governmental institutions. Labour market policy is mostly carried out by the Public Employment Service (Arbeitsmarktservice, AMS). The social partners are an integral part of numerous bodies involved in working out and implementing legislation and policy measures. A feature of the recent past is the move to partially decentralise the decision-making powers. A result of these efforts was the separation of the Public Employment Service from the direct governmental jurisdiction within the Ministry of Labour, Health, and Social Affairs in 1994.

Table 3.6: Public expenditures on active labour market policy measures, 1996

	Active LMP in % of GDP	in % of GDP per percentage point of unemployment
Belgium ¹	1.41	0.14
Denmark	2.26	0.38
Finland	1.73	0.11
France ¹	1.30	0.11
Germany	1.43	0.16
Greece ¹	0.32	0.04
Ireland	1.75	0.14
Italy ²	0.93	0.10
Luxembourg	0.27	0.08
Netherlands	1.37	0.21
Austria	0.38	0.09
Portugal	1.04	0.14
Spain	0.67	0.03
Sweden	2.25	0.23
United Kingdom	0.46	0.06

¹ 1995.

² 1992.

Source: OECD Employment Outlook 1997, own calculations.

Public expenditure for labour market policy programmes was ATS 43 billion in 1996 (according to the OECD definition),²⁴ which corresponds to 1.8 % of GDP; roughly four fifths of these expenditures were for the "passive measures" of income compensation payments. The amounts allocated to active labour market policies in Austria are small in international comparison.²⁵ As is illustrated in table 3.6, this applies not only to spending in percentage of GDP, but also if the different unemployment rates are taken into consideration. Active labour market policy has not played a big role in comparison to the income compensation scheme. In the past few years this has already started to change and active labour market policy has gained significance. This shift in emphasis will continue in future. The changes taking place in the labour market and in working conditions, as well as those expected in future and often desired, will make active labour market policy more necessary than ever.

²⁴ In addition to expenditures of the Public Employment Services, it also includes, for example, expenditures of the Federal Offices for Social Affairs and Disabled.

²⁵ It should be taken into account that the youth unemployment rate and the share of long-term unemployed are relatively low in Austria and in addition there are statistical inaccuracies in the data gathered.

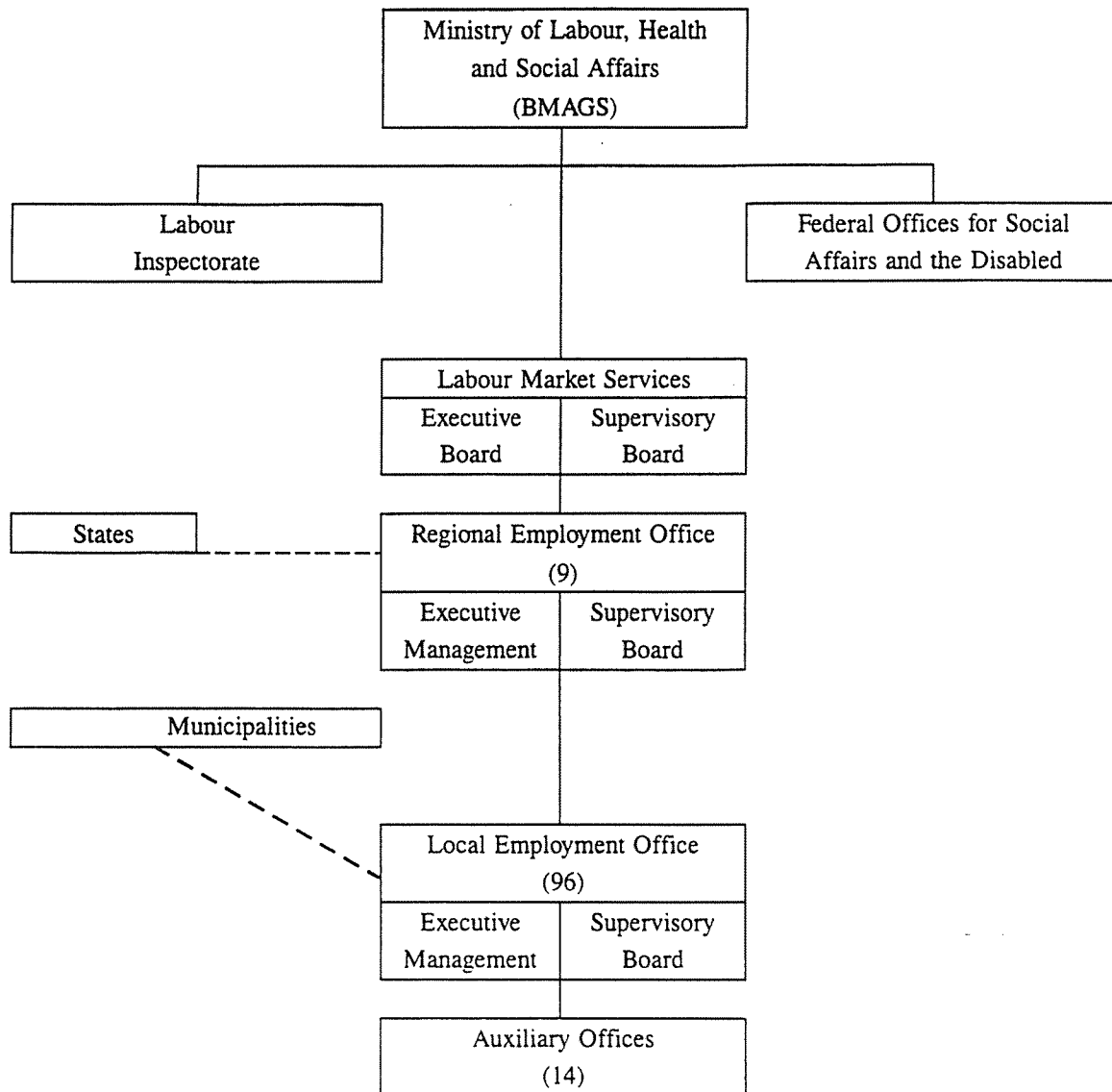
As in other European Union countries, active labour market policy in Austria consists of a wide range of instruments, measures and programmes in the core areas counselling and job placement, training, job creation measures and assistance to special target groups.

In light of the great dynamic of turnover rates in the Austrian labour market, job placement is, of course, one of AMS's main tasks. The services offered by AMS are basically available to all persons seeking advice and to enterprises. Enterprises are not obliged to report vacancies to AMS. In 1996, the total number of vacancies available through AMS was roughly 230,000. Almost three-fourths of open positions were filled within one month. The "market share" of AMS (despite the difficulties in ascertaining this²⁶) is therefore roughly that of (West) Germany, but smaller than that of Sweden (OECD 1996c). In addition to functioning as intermediary in the stricter sense of the term, AMS also provides a wide range of information and counselling services, such as within the scope of Occupation Information Centres. Information is also increasingly being provided through use of self-service computer-assisted information systems.

Labour market education and training programmes are one of the most important strategic instruments used to find solutions to labour market problems. In 1996 roughly 70 % of the budget for subsidies were spent on such measures. The number of entrants into training programmes was almost 58,000; the average annual number of persons in training programmes was roughly 18,000. In addition to assistance to individuals, AMS also subsidises training facilities in general and training activities on the enterprise level. An area that is rapidly gaining significance is the assistance granted for apprenticeship training and occupational preparation of youths.

²⁶ Note, e.g., the obligation to notify vacancies to the public employment office in Sweden.

Labour market agencies and actors in Austria



Source: OECD (1996c).

Various employment programmes such as assistance for re-employment, assistance for re-employment in non-profit organisations and for socially-oriented businesses and the allowance for employing handicapped persons (Minderertragsbeihilfe) are further labour market policy measures. Measures in the assistance to special target groups are flexible and cover special problem areas. They have concentrated up to now on women with special problems in finding jobs, older workers, long-term unemployed and handicapped persons. The "Aktion Aktiv" is an example of a programme to reintegrate long-term recipients of unemployment assistance into the labour market.

Innovations in the past few years and the current discussion on future labour market policy trends tend to focus on two goals; to activate unemployed persons and passive labour market policy measures, and to prevent unemployment. A successful instrument — also recognised as a best practice technique — that has been in use for the past 10 years is the creation of so-called Job Foundations (Arbeitsstiftungen). Job foundations are created by an agreement between the workers' council and management representatives of one or more enterprises within the scope of so-called "social plans" (contractual agreements), which take effect in the event of large-scale redundancies. The workers dismissed which express their desire to remain in the foundation will receive special job foundation unemployment

assistance (Stiftungsarbeitslosengeld) for the duration of their participation in the foundation from AMS and will start with an occupational re-orientation either at the enterprise or a location nearby. This first phase is completed after an individual career plan has been worked out that contains career goals and the steps required to achieve those goals. The big advantage of Job Foundations is that a bundle of labour market policy measures are applied, and that each individual is able to co-ordinate his/her declared job goals with the actual situation on the labour market. One of the options open after completing the occupational orientation seminar is to actively start to search for work that corresponds to the labour market situation and is commensurate with the person's qualifications. The participant receives assistance in looking for a job. If it is necessary for finding a job to complete re-training or another education programme, then the Foundation offers support for attending training or further education programmes at enterprises, schools or universities. In principle, it is possible to select any option that is appropriate for the individual and for the labour market situation. Potential new business founders are also offered start-up assistance by the Foundation in the form of infrastructure, consulting and training. The time spent in a Job Foundation can be used to work out a business plan and take the first steps required for becoming self-employed.

In the ten years since the first foundation, the Steelworkers Job Foundation, many new forms and variations have been created: In addition to enterprise job foundations, there is a rising number of insolvency job foundations, regional job foundations and industry foundations. Currently there are about 70 foundations that take care of roughly 6000 persons. Although the rate of reintegration of 90 % at the beginning of the 1980s has dropped, the current average of 70 % reintegration is still good and proves that job foundations are very effective instruments of labour market policy.

Apart from job foundations, the funds under the heading of passive labour market policy services have increasingly being used for active measures since 1996. These measures include support for active job search, career orientation and re-employment assistance after parental leave as well as the Special Integration Assistance, which was created by law in 1997 with the aim of helping the long-term unemployed and the recipients of unemployment assistance to re-enter the labour market. If an individual belonging to one of these target groups obtains a job that pays wages entitling the jobholder to full compulsory social insurance coverage for at least one month, the potential transfer payment including non-wage labour costs is transferred to the employer in the form of a wage subsidy for as long as the job lasts, but for a maximum of one year. An analogous measure for all recipients of benefits has been introduced with the amendment of the Labour Market Service Act in 1998.

After a pilot phase of several years, the Business Start-up Assistance Programme (GründerInnenprogramm), which took effect in the autumn of 1997, also uses funds allotted to passive services by paying out start-up unemployment assistance (Gründungsarbeitslosengeld) to unemployed persons during the preparatory phase for starting a new business as well as offering consulting services and the opportunity to obtain further training until a business licence has been granted.

The accession of Austria to the European Union and the bigger budget for active labour market policy measures from the European Social Fund have made it possible to increase subsidies within the framework of Objective 4 for the further training of employees holding jobs. The focus is on older and low qualified workers, which has the purpose of preventing unemployment among the endangered group that could occur due to the structural changes. In the case of job rotation models, the aim is to offer a leave for training purposes during which a unemployed person is hired as replacement.

As a preventive measure especially in the case of unemployment among older workers and long-term unemployment an amendment to the Pension Act was adopted at the end of

1997. This amendment is aimed at redistributing and creating more flexibility in lifetime work in order to create, at least in the short term, jobs for recipients of unemployment benefits. Parallel to the parental leave benefits, "further training benefits" can now be applied for with AMS if persons take a leave for a period of between 6 and 12 months in order to obtain further training. Further training benefits are granted without having to state reasons if the employer gives a replacement job to another benefit recipient.

The goals are similar in the case of the so-called "solidarity premium" that was also resolved in the context of the pension reform. Groups of workers that shorten their working hours so as to create jobs for one or more unemployed person(s), will receive a portion of their fictitious unemployment benefits in proportion to the working hours shortened if the arrangement is agreed to in collective bargaining or contractual agreement between the management and workers' council of an enterprise.

Wage subsidies in the case of shortened or flexible working hours would be another preventive measure which could prevent redundancies in the case of re-structuring measures. The basis for this type of measure was created by the Company Reorganisation Act (Unternehmensreorganisationsgesetz) that took effect on October 1, 1997, and through a credit/debit system obliging companies confronted with structural difficulties to take action as early as possible. This type of instrument would be a useful supplement to traditional short-time work benefits intended to prevent redundancies in the case of unexpected economic difficulties, and in addition, could also supplement the instrument of Job Foundations by effectively influencing personnel policies, if possible before redundancies occur.

The structural changes in the Austrian economy are causing job turnover rates to accelerate. This means that, on the one hand, jobs are created very rapidly, but also that existing jobs will probably disappear within a certain period of time. Even in times of economic expansion the inflow rates into unemployment will be higher than in the past. This may be increased by the tendency in Austria to deregulate employment relations. For many job-seekers this increased dynamic on the labour market will not be a very big problem—new jobs are created in the end. But for some persons this dynamic can be very threatening. On the one hand, the qualifications required for the new jobs will not be identical with those that were important at previous jobs. It may even be the case that jobs will disappear precisely because of the rising level of productivity that will render previous qualifications insufficient to economically justify the wages earned on that job. Moreover, changes in the patterns of employment often come hand-in-hand with regional shifts that often imply considerable costs for the job-seeker in order to keep up.

In the future, more further education and vocational and regional mobility will be demanded from the workforce. Since the option of paying lower wages and making working conditions worse in order to create work for low skilled workers can hardly be considered attractive, a larger number of persons will depend on AMS for help in finding employment and acquiring new qualifications. Support for job-seekers and help in finding jobs is also required if the jobless are not to bear the costs of the adjustment alone. This would be a socially questionable practice, because it is often the weaker workers that lose their jobs first in the course of structural changes. These workers cannot be employed in new jobs without first being trained. The danger exists of a rising number of unemployed persons involuntarily leaving the labour market unless active labour market policy is strengthened. This outflow would generate poverty and put a strain on the social system. Direct job creation can be used for a small percentage of job-seekers. This affects those sectors not in competition with the private sector, such as non-profit organisations and certain social services. However, a close link to the regular labour market should be maintained to avoid dependence traps.

3.6 Education and training

The level of qualification of the labour force in Austria is considered to be an important positive feature of the business location. A large share of youths receive vocational qualification and the share of unskilled workers is low in Austria in comparison to other countries. Available evidence shows that the Austrian system of elementary education at compulsory school level is very good in international comparison with regard to the knowledge acquired.

In quantitative terms the system of apprenticeship training is the largest area of vocational education in the secondary phase of education in Austria. It includes slightly less than half of all people in the relevant age cohort, but has been declining in importance in the past few years. The Austrian system of vocational education covers, in addition to the training of apprentices, the broad spectrum of vocational schooling on the middle and secondary school levels. This type of education has been gaining ground in the past few decades. In comparison to other countries, Austria has a well-established system of vocational education that offers a wide variety of choices and the share of workers with completed vocational education is also high.

As apprenticeship training is seen as the main reason for low youth-unemployment in Austria, a detailed discussion follows. Apprenticeship training is part of formal education and regulated by law. Apprenticeship education and training takes place at two locations. Roughly four fifth of the apprentice's schooling takes place at the enterprise providing training and roughly one-fifth at a vocational school. The training at the enterprise is combined with the apprentice's participation in productive work. In addition to these two schooling locations, a range of options for training outside of enterprises also exists (e.g. training plants, training syndicates), but up to now these have only been taken up in specific sectors (especially construction and restaurants).

The main instrument of regulation for apprenticeship training is the apprenticeship contract that is signed by the enterprise providing training and the apprentice (or his/her legal guardian). The selection of apprentices and the availability of training openings are subject to the criteria of personnel selection of an enterprise. The apprenticeship contract is a contractual labour relationship determined within the scope of negotiations on a management and trade union level with the main parameters (such as duration, working hours, protection against dismissal, etc.) usually precisely defined. Apprentices are covered by the compulsory social insurance scheme and receive an apprenticeship compensation for productive work as fixed in collective bargaining agreements. The amount of apprenticeship compensation (in certain industries) is roughly 20 % of median income in the first year of training and in the third year of training roughly 30-40 % of the median income in the respective industries (OECD 1994). The establishment of an apprenticeship contract obliges the apprentice by law to attend a vocational school.

The basic standard units of apprenticeship training are the apprenticeship occupations that define the curricula of the training at enterprises. Apprenticeship occupations are created by law (by decree pursuant to the Vocational School Act) and regulations governing occupational training exist for every type of occupation (especially occupational profiles, which roughly outline the content and time frame of the training) as well as a recognised vocational qualification. The number of apprenticeship occupations is roughly 230, but the distribution of apprentices across the occupations is highly concentrated (half of all apprentices are being trained in fewer than ten occupations, 90 % of apprentices are trained in less than 50 occupations). Apprenticeship training is highly segregated by gender, the concentration is slightly lower in the case of male apprentices and the occupations are different from those chosen by female apprentices. The main male occupations tend to

concentrate on the productive sector, e.g., automobile mechanics, plumbing, carpentry, masonry, metalworking; the main occupations for female apprentices are in sales personnel, clerical work, hairdresser, restaurant services. The apprenticeship occupation definitions fix the length of the training, which varies between two and four years, but in most cases is around three to three and a half years. The definitions of apprenticeship occupations determine the recognised qualification that is certified by a completion exam.

The system of apprenticeship training is characterised by a very complex organisational framework with numerous competent bodies, a situation which often causes frictional losses in the further development of the system. The following bodies have major influence on apprenticeship training: the Ministry for Economic Affairs has jurisdiction at the enterprise level, the Ministry for Education and Cultural Affairs has jurisdiction regarding vocational schools, the governments of the Länder have functions covering both areas. The social partners are involved in various functions and at various levels in the system (an advisory function in the Federal Council for Vocational Education and in the Council for Vocational Education on Länder level, in collective wage bargaining, the apprenticeship offices at the Chambers of Commerce serve as official points of contact, etc.).

The system of apprenticeship training is financed mainly by enterprises providing apprenticeship training, and on the other hand, by the public sector, which covers the costs of the school education out of the federal and Länder budgets. An analysis of the costs and benefits at enterprise level involves a lot of problems²⁷. Since the enterprises are very different, an average figure does not really mean much. According to a study by Lassnigg and Steiner (1996), the majority of enterprises have net costs at the bottom line, but one-third of enterprises manage to make net earnings on apprenticeship training. These results apply in varying degrees to all occupations.

The interest of enterprises in apprenticeship training has been stagnating or even declining since the beginning of the 1990s, a fact that has been obscured for some time by a drop in the number of youths applying for apprenticeship training due to demographic changes. In the past few years, though, stronger birth years have led to a deficiency in the number of training positions available, which has triggered massive political efforts to find occupations for youths.

There are clear signs that the self-regulating process for finding enough apprenticeship training positions in the various occupations will not work as smoothly in the future as it has in the past. New research results show that apprenticeship training is being strongly affected by the structural changes in the economy. Apprenticeship training concentrates on occupations in the productive sector, most of which show a downward trend (see Lassnigg et al. 1998). Hofer and Pichelmann (1995) also indicate that after completion of the apprenticeship training many youths are confronted with significant problems in entering the labour market, a fact that is manifested by the relatively high degree of mobility associated with periods of unemployment and the switching of occupations (see Lassnigg and Schneeberger 1998).

The emerging lack of apprenticeship training positions has triggered massive short-term measures to promote apprenticeship training and to reduce the burden on the enterprises providing training by reducing costs and slackening restrictive requirements. However, the short-term goal of creating training positions has pushed the discussion on the effectiveness of measures taken to solve the medium and long-term structural problems in the background.

²⁷ Two different recognised research procedures lead to very different results regarding costs and benefits for the individual enterprises (in half of the enterprises the result varies by over ATS 100,000 according to the two procedures).

If the trend observed to date continues, a clear redistribution in the patterns of education levels among youths will occur in the medium to long term. Vocational schools will sooner or later replace apprenticeship training as the predominant category of education; at the same time though, the traditional distinctions of specific vocational training, which are concentrated in the productive sector, will remain. This trend has shaken up the traditional pattern of qualification, and the highly regulated system of vocational education will have great difficulties in adapting to this trend. In Austria, it is especially the mechanisms for identifying and developing new qualification profiles and training programmes that are weak and there is a strong tendency to stick to systems that have worked fine in the past.

The system of university education should also be examined as to its efficiency in the light of the quantitative expansion and attempts to reform it in the past few decades. The rate of university graduates among employed persons is still very low in international comparison and university graduates tend to seek employment in the public sector. The drop-out rate is very high and the duration of studies is very long. Enterprises in the productive sector employ relatively few university graduates. Apart from the low personnel capacity, Austria has also been "technology taker" in the past, spent little on research and technology, posted a negative technology balance of payments and had limited R&D resources, etc. International comparisons show that the rate of persons employed in R&D is not only very low in Austria, but that growth in this segment has even slowed down. All in all, the obvious conclusion is that the existing structure of the system of education, which concentrates highly on the medium-range qualifications, has probably fostered the tendency of enterprises to stand by traditional and not very innovative practices, thus indirectly dampening the dynamic of growth.

One approach of improving the system of university education in Austria has been the foundation of "Fachhochschulen" (non-university higher education institutions providing high-quality professional and academic training for specific occupations). This has created a dynamic, demand-oriented and innovative educational option that gives graduates the new qualifications needed to succeed in the future and required by major economic sectors. The purpose was also to strengthen the applied research and development sector. Up to now this sector has remained quite small in comparison to the universities and the potential for growth is restricted by limited resources.

While the system of primary education in Austria is well-established, in the area of further education a wide and somewhat intransparent range of private and semi-official institutions exists. It is undisputed that the system of further education and lifelong learning has to be promoted and expanded. However, there is not much clarity as to what value may be attached to existing programmes and what path to take in the future. The system in place to date is based, on the one hand, on the individual initiative of workers and enterprises to obtain further education, and on the other, by the qualification measures sponsored through active labour market policy programmes. The further education activities of enterprises and workers are largely voluntary and the programmes organised under the heading of active labour market policy are relatively few. Funding from public bodies is very low in absolute figures and above all in comparison to activities relating to primary education.

For a few years now, many activities have been undertaken to increase transparency in the further education market, such as the creation of a broad-based public information system, which has not yet been completed. The OECD has also recommended greater diversification in the area of further education, which is currently dominated by a few large suppliers. Furthermore, there are approaches and various proposals to create a system of incentives for further education at the level of the individual worker and at the enterprise levels, as well as cost-sharing schemes with the public sector. For example, a trial phase with education vouchers has been completed and a proposal has been put forth to create a system

of time credits for workers. In accordance with the latest guidelines for European employment strategies, measures to raise the level of qualification among workers have also been proposed.

3.7 Product market competition, employment barriers and the business environment

International organisations like the OECD or the IMF argue that the relatively low level of product competition, a highly regulated business environment, and a rather low technical innovative capacity have contributed to the low job-generating capacity of the Austrian economy. The lack of competition has led to higher product prices than in more open economies in some sector, particularly in network industries such as telecommunications and energy. The high share of public enterprises and tight regulations concerning trades and professions may have hampered structural change and the expansion of non-government employment.

Judging from the trends in the patterns of employment in the highly developed industrialised countries, Austria still has great potential for growth in employment in the sector of business-related services and in the area of personal services. For example, the social partners have identified the sector of business-related services as a problem area in which access to certain professions is subject to much stricter regulation than in occupations in manufacturing. Moreover, legal stipulations regarding lawyers and civil engineers fees are a barrier to competition. The ban on forming associations and partnerships should be reconsidered, in so far it prevents the emergence of strong enterprises that are able to offer "package solutions". The current policy regarding subsidies hardly impacts intangible investments.

In addition to the business-related services, the employment potential in the sector of personal services has not been exhausted. In this context education, cultural, health, social, repair and household services have to be mentioned. One of the barriers to developing efficient markets and consequently to creating new jobs in the private sector is the preferences granted to public services because of educational and health policy reasons, as well as the high non-wage costs of labour for social and household services.

The share of self-employed persons in commerce and industry is in Austria significantly below the average of the OECD countries. Weaknesses in the business climate are reflected in the low rate of business start-ups. For this reason the foundation of new enterprises should be promoted with the aim of exhausting the growth and employment potential for small and medium-sized enterprises. Within the scope of such efforts, the following measures are particularly important: elimination of existing deficiencies on Austria's capital market which would make it easier for small and medium-sized enterprises to raise capital. Especially small and medium-sized companies should profit from the instrument of share capital guarantees. The access of new companies to funding should be made easier by assuming liabilities and granting loan subsidies more often. Furthermore, all of these assistance measures should be efficiently and flexibly administrated. In order to trigger a wave of new start-ups, further liberalisation measures are required in business and industries, services and the professions. The practice of territorial protection and the assessment of local demand that are still enjoyed by certain professions and businesses should also be reconsidered.

Furthermore, the lack of innovative capacity, may have been resulted from the low R&D expenditures undertaken in the business sector. The promotion of closer co-operation between the different parts of the "national systems of innovation" within the knowledge-related sector and regarding the transfer of knowledge is important. An efficient dissemination system is also important in this context for granting businesses access to new knowledge (more intensive co-operation programmes between universities and business) and,

on the other hand, also raises the capacity of businesses to adapt. Innovative small and medium-sized enterprises should be able to profit more from technology transfer.

Another approach worth looking into in more detail is the aim of making it easier to change from the status of dependent employment to self-employment (and vice versa). Many regulations still prevent the establishment of new businesses that would create new jobs. A modernisation of the system of regulations is called for. The following are concrete examples: to reduce the administrative burden created by regulations and time-consuming permit procedures; to make decision procedures more transparent and to examine new laws and regulations as to the additional costs they generate for the economy; the liberalisation and efficient monitoring of competition in the energy and telecommunications markets.

3.8 The National Action Plan

The NAP (Nationaler Aktionsplan für Beschäftigung) means a significant move towards a more preventive and activating labour market policy approach for Austria. In its overall employment policy the Austrian government adheres to a comprehensive strategy covering both general economic policies to foster growth and competitiveness, and specific instruments to attack structural problems in labour and products markets. A important general feature of the NAP is the fairly deep involvement of the Social Partners; closer co-operation with the Länder and municipalities and other regional actors is also envisaged in the plan.

Within the Austrian NAP there is a clear emphasis on the employability pillar. The text contribution of the Social Partners also places a central focus on the issues of education and training, in particular for the young. The envisaged measures and instruments are a mix between well established programmes and some new and innovative policies. The AMS will be the main actor in implementing the envisaged programmes, but there is a clear indication that other parties should be involved as well (Social Partners, the Länder and municipalities, other regional bodies, "Regionale Strukturpakete"). The NAP also envisages a set of specific short-run temporary measures to help school leavers with difficulties to find apprenticeship positions (additional funds have already been earmarked for these programmes as firms will be granted a tax credit of ATS 20.000 for each new apprenticeship contract). The envisaged programmes clearly represent a move towards a further strengthening of an activating approach in labour market policy with the most prominent examples being the commitments to reduce the transitions into longer term unemployment spells (6 months for youth and 12 months for adults) by 50% until 2002. Moreover, at least every fifth unemployed should be covered by measures of active labour market policy until 2002. The NAP sets a well defined goal for reducing the share of 20-24 year old workers without further training and education. However, unemployment among older workers, who suffer from a disproportionate share among the long-term unemployed, is not explicitly mentioned.

Regarding the pillar entrepreneurship the NAP contains a broad variety of measures to promote start-ups of new businesses and to reduce administrative and regulatory barriers for employment, in particular in SMEs. In general, the employment potential in the sector of business-related services and in the social services ("third sector") should be more fully utilised. Reducing the overall tax burden on labour is on the agenda of the Tax Reform Commission.

There are only few and rather vague proposals under the heading of the adaptability pillar, and almost no operational targets are set. With respect to the modernisation of work organisation the NAP reproduces the Social Partner contribution which covers several areas of potential progress with respect to new forms of working time arrangements. Thus, the NAP indicates that action in this area falls mainly within the responsibility of the Social

Partners. Very little is said on the issue of fostering in-firm training and the upgrading of skills of the workforce.

A broad variety of programmes are envisaged to enhance equality of opportunities. This includes gender specific targets for enrolment in active labour market policy programmes, and most importantly, another move to expand the supply of child-care facilities. The latter programme is the only example where explicit reference is made to additional funding next year. Further support for the return to work and "Regionale Frauenstiftungen" are other examples for programmes in this pillar. In general, existing programmes are augmented with a sharper focus on targeting women and disadvantaged groups; in particular, people with disabilities apparently face a rising risk of labour market and social exclusion.

Questions about the required financial, staff or technical resources of the NAP will have to be dealt with, at least partly, in the process of drawing up the general federal budget. Furthermore, it is argued that ESF spending under objective 3 should almost completely overlap with active labour policies set up in the NAP. Rough estimates seem to suggest that full implementation of the envisaged programmes will require additional funds amounting to some 3.5 bill ATS.

The NAP argues that the current perspectives for growth and employment, when assisted by structural policy measures as envisaged in the plan, should translate into an additional 100.000 jobs and a reduction of unemployment by one percentage point by the end of the year 2002. Indeed, there can be no doubt that stronger growth by itself will not suffice to master the problems in the labour market, because roughly four fifth of current unemployment in Austria is due to non-cyclical factors according to recent estimates.

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