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ABSTRACT

This study provides a background analysis of the current situation in the Slovak Republic in terms of employment, employment policy institutions, and employment policy delivery mechanisms, with special attention to their preparedness for meaningful participation in the European Union (EU) employment coordination process. The study was based primarily on statistics provided mainly by the Slovak Statistical Office, the Ministry of Labour, Social Affairs and Family, and the National Labour Office. The study found that Slovakia has been one of the most successful among the countries undergoing transformation, with an annual growth rate of 7 percent. However, since 1998, the government has made major cuts in public spending, taxes have risen, prices have risen, unemployment has grown, and employment has fallen. The demographic situation is favorable, however, with strong growth in the numbers of young adults. Almost all the population is educated, and many are participating in higher education or vocational training. A variety of labor market policies is set by the government. (The report also contains six appendixes that contain statistical and regulatory data and 82 references.) (KC)

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WORKING DOCUMENT

Background study

Employment *and* labour market *in the* Slovak Republic

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Background study on employment and labour market in the Slovak Republic

by

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Foreword

This study is part of the preparation process for the accession of Slovakia to the European Union. The authors describe the Slovak labour market, its institutions and its functioning in a broader macroeconomic context to allow assessment of its readiness to become a part of harmonised European employment policies within the Single Market. The study provides a background for the employment reviews prepared by Directorate General V of the European Commission and has been written under the supervision of DG V and the European Training Foundation. The funding has been provided by the European Union.

The study was written according to the Terms of Reference of DG V and the European Training Foundation, and an outline and guidelines provided by the EU advisers: Susanne Oxenstierna, Stockholm University, and, especially for Chapter 6, Japp de Koning, Netherlands Economic Institute. The drafts of the report were discussed at three workshops during spring 1999 in which the national experts from the Central and Eastern European countries writing the corresponding background studies for their countries participated.

The authors would like to acknowledge the input of Ludmila Gajdosikova of the Slovak Academy of Sciences, who contributed comments and information on the legal and institutional background. The authors would like to express special thanks to members of the Ministry of Labour, Social Affairs and Family of the Slovak Republic who have cooperated in this study, in particular to Mrs. Lubica Gajdosova, Mrs. Maria Janusova and Mr. Peter Rusinak, who provided useful consultation and material. Thanks are also extended to Hjordis D'Agostino of DG V and Peter Greenwood of the European Training Foundation, for providing guidelines, comments and co-ordination of the project within the group of accession countries. Finally, we acknowledge useful comments and suggestions from the national experts from the Central and Eastern European countries writing the corresponding background studies, and from other experts, researchers, and administrators from the above-mentioned institutions.

Final editing was done by Ms Oxenstierna, and by Mr Timothy Chamberlain of Chamberlain Language Services, Stockholm.

Bratislava, October 1999

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Executive summary

Slovakia has been one of the most successful among the transition countries in the field of macro-economic stabilisation. Since 1995, the annual GDP growth rate has been close to 7% for three years in a row, accompanied by a single-digit inflation rate. The growth slowed down in 1998 and a further reduction is expected for 1999. While the initial recovery of economic growth in 1994 was mainly export-driven, after the emergence of negative tendencies in the external balance in 1996 large-scale government consumption and investment have effectively substituted for the role of the external sector in maintaining GDP growth. This process came to an end when the new government elected in autumn 1998 imposed a package of restrictive measures, including major cuts in public investment and consumption. The sustainability of high economic growth has also been questioned in the light of the slow pace and lack of depth of structural reforms.

Until 1995 the decline in real GDP exceeded that in total employment. Only since 1996 has a rough indicator of labour productivity – measured as the ratio of real GDP to total employment – started to exceed its 1989 level. The economic growth was not translated into any very substantial growth of employment. According to administrative data, the cumulative reduction of total employment between 1989 and 1998 was close to 20%. Employment has declined both in absolute terms and relative to the working-age population. LFS data show positive tendencies in employment growth occurred in 1995-96. Since 1997 total employment has started to decline again. The drop in employment was disproportionately larger for females. During the transition period, the working-age population increased. Unfortunately, under the conditions of transitional depression, the demographic pressure on the labour market was accompanied mainly by increasing unemployment. A larger share of the decline in employment was borne by unemployment than by exits from the labour force.

Many of the current difficulties with employment can be attributed to the relatively high share of industrial employment, and to the current crisis of industry. The industrial structure inherited from the socialist era is biased in favour of heavy industry and low-value-added production. The third largest industrial branch in terms of output – engineering – has suffered from the massive conversion (cutback) of military production. Some of the current employment problems can be attributed to the unclear ownership status of many enterprises, which results from the non-transparent large-scale privatisation (for example, share warranties in many cases complicate the identification of the owners).

Another factor that hampers employment growth is the relatively heavy tax burden. The average burden of taxes and social insurance payments represents more than 20% of employees' gross wages. According to enterprise survey data, taxes and insurance payments in 1997 represented on average 23% of gross employee wages. Furthermore, wages represented on average 68.8% of employers' total labour costs and the total burden of taxes and obligatory social insurance payments in 1997 represented on average 42.2% of total labour costs.

Administrative data show that agricultural employment, which originally accounted for 12% of the total, has gradually declined to less than 9%. The share of industry in overall employment has been reduced in the course of transition, while the share of services has expanded. There is still a substantial discrepancy between the industrial employment shares in Slovakia and in the EU, the

Slovak share being higher by approximately 10 percentage points. The opposite holds for the shares of employment in services, where the Slovak share is almost 13 percentage points lower than the EU average. These results indicate that a further decline in the share of industry and increase in the share of services in employment should occur in order to converge to the EU employment structure.

Regional disparities in the country are high. There is a sharp distinction between the capital Bratislava and the rest of the country. As regards employment, the regional differentiation is not as important in terms of employment rates as it is in terms of employment structure. There are many specialised districts, which tend to have relatively high unemployment rates, especially if the prevailing sector is a problematic one, such as heavy engineering or agriculture. District unemployment rates vary by more than 30 percentage points. At the same time, the mobility of the labour force has decreased by some 20% between 1990 and 1998.

Despite the fact that wage regulation has been in effect only on an irregular basis and for short periods, nominal wages have grown relatively modestly. Since its introduction in 1991, the minimum wage has been blamed for providing disincentives to employment, mainly due to its low level compared with non-labour income from social benefits. The real wage gap with respect to the year 1989 had not been closed by the end of 1998 (real wages were still about 8% below the 1989 level). In the light of the new restrictive economic measures, the real wage gap is expected to survive the year 1999 too. The gender wage gap in Slovakia is of the order of 20%, which means that the average wage of females is about 80% of that of males. There is a clear tendency in Slovakia towards increasing returns to education.

An alarming tendency is the slow but persistent growth of registered unemployment since 1997. The registered unemployment rate at the end of 1998 was 16% (428 000 persons). The LFS unemployment rate was slightly lower at 12.1%. However, by the end of June 1999, LFS unemployment has also increased to more than 400 000 people and the corresponding LFS unemployment rate has reached 16%. Soon after the beginning of the transition, long-term unemployment started to increase, until its share in total unemployment according to LFS data reached approximately 50%. This share is only slightly higher than the EU average in 1997 (49%). The share of registered long-term unemployed at the end of 1998 was 38%.

The educational structure of the long-term unemployed reveals that the most vulnerable groups are those with the lowest skills and education. In this context, the labour market position of the Romany ethnic group has to be mentioned. The labour market position of this group is very poor. Romanies are over-represented in unemployment, especially in long-term unemployment. Notwithstanding the disincentive effects of social benefits and prejudiced employers, one of the main reasons is to be seen in the extremely low level of education and skills among the Romany population. Education and training has a major task to achieve in this respect.

The Slovak labour market is relatively rigid, if judged by the employee protection regulations, which were inherited from the socialist period. At the same time, the labour market is flexible in terms of the frequency of institutional changes and reforms. Firing costs are relatively high due to the strict requirements for layoffs, the statutory 2-month period for redundancies and notice, and the three to five months' severance pay. According to the Labour Code, employees can be laid off only for special reasons, such as the closure or major restructuring of the company (so-called organisational reasons) or serious misconduct. Under these conditions, flexibility in the labour market is achieved by fixed-term contracts rather than by part-time work. Data indicate that only about 2-3% of workers have part-time contracts. Several observations indicate that there is a marginalised group of workers with fixed-term contracts and seasonal workers, who are hit hardest during labour market crises. It appears that particularly from the point of view of employees' protection, the status of seasonal workers is not sufficiently regulated by labour law.

Both passive and active labour market policies are financed from contributions paid to the so-called Employment Fund, mainly by employers and employees. The National Labour Office supervises financial flows within the system. The Office is a tripartite public legal entity, which also supervises the network of district and local labour offices throughout the country. In times of increasing unemployment, the contribution base for the Employment Fund tends to fall. Given that passive unemployment payments have priority, limited means are then left for active labour market policies. Subsidised job creation has played a major role in the active labour market policies in the Slovak Republic, both in terms of expenditure and participants. Socially purposeful jobs were the most important throughout the transition period, followed by publicly useful jobs and retraining. Retraining has been used modestly and the rest of the programmes claimed only a negligible share of total expenditures.

Job creation appears to be low. Survey results indicate that on average about half of the jobs created are reported to the labour offices. However, the numbers of reported vacancies are still very low compared to the numbers of registered unemployed. At the end of 1998 there were about 39 registered unemployed per one registered vacancy. In some regions the ratio was close to 80 to one. It is difficult to analyse the structural mismatch when the numbers of vacancies are so negligible compared to the numbers of unemployed. Consequently, the active labour market programmes aimed at eliminating the structural mismatch (such as retraining or the support of labour mobility) cannot alleviate the current unemployment situation to any great extent. Subsidies for job creation may be more suitable in the short run. The very large share of low-educated people in long-term unemployment indicates the need for substantial retraining, once job creation is higher.

The lack of industrial policies and a clearer concept for future development have been blamed for many aspects of the critical situation in the labour market, from weak job creation to the difficulties in linking the educational system to labour market needs. The Ministry of Labour has opted for an active approach, preparing in the course of 1999 the concept of employment policies and the national employment plan. However, the absence of a "vision" for future priorities and strategies in industrial policy and other branches complicates any forward-looking decision-making in the field of employment policy.

1. Introduction

1.1 The objectives of the study

The aim of this study is to provide a background analysis of the current situation in the Slovak Republic in terms of employment, employment policy institutions and employment policy delivery mechanisms, with special attention to their preparedness for meaningful participation in the EU employment co-ordination process. The authors also try to indicate the priorities for human resources development strategy as a background for preparatory work for ESF or ESF-type action planning and programming.

1.2 Methodology

The study was prepared by a team of three experts. Martina Lubyova of the Slovak Academy of Sciences drafted the study, with the support of Daniela Ochrankova of the Slovak National Labour Office, who provided data and information. Chapter 6 was prepared jointly with Juraj Vantuch, the Head of the Slovak National Observatory of Vocational Education and Training.

The study contains factual and descriptive material based on the existing data sources. The authors attempt to provide a summary of the key issues that emerge from their analysis of the labour market situation and to identify possible areas of joint action between the Commission and the Slovak Republic. When suitable, the official data are complemented by anecdotal evidence and the results of academic studies by domestic and foreign researchers. Given the limited volume of text, extensive documentary information is included in six annexes.

The primary sources of information used in this study are official statistics provided mainly by the Statistical Office, the Ministry of Labour, Social Affairs and Family, and the National Labour Office. The authors have also consulted publications of the European Commission, the Organisation for Economic Co-operation and Development, the International Labour Organisation, the European Bank for Reconstruction and Development, the World Bank and other international organisations and institutions. Where possible, the Slovak figures based on Labour Force Surveys were compared to the EU15-averages based on the Community Labour Force Survey, as published in Employment in Europe, European Communities, 1998.

1.3 Limitations

The major limitations of the study are related to the availability of data and statistics, which do not always exist in a form compatible with the EU standards. In some cases the continuity of time series is disturbed by institutional reforms.

A Labour Force Survey (LFS) compatible with the ILO standards was introduced in the second quarter of 1993. Consequently, time series of annual LFS data are available since the year 1994. It is important to note that the quarterly LFS are shifted by one month with respect to calendar quarters. For example, the last quarter of a year according to LFS denotes the November and December of the year indicated together with January of the following year.

The main labour market indicators employed in this study are monitored in Slovakia by at least two independent sources. In order to facilitate proper interpretation of the results presented, the authors provide two summary tables in Annex 3. The tables contain a brief description of the sources and methodology of monitoring population, employment, unemployment, incomes and expenditures, wages, and labour market policies. Sources are described in terms of the periodicity of data collection, type of survey, sample size and coverage, sampling procedure, selection criteria, global representativeness and possible biases, the beginning of time series and the main indicators monitored.

2. Labour market situation in the Slovak Republic

2.1 *General trends*

As regards macro-economic stabilisation, Slovakia has been one of the most successful among the countries undergoing transformation. Since 1995, the annual GDP growth rate was close to 7% for three years in a row, accompanied by a single-digit inflation rate (Table 2.1). While the macroeconomic picture of Slovakia appears much improved, a positive evaluation cannot be applied to structural reform. If the pace and depth of structural reforms are believed to be important for future development, the moderate speed of key reforms raises the question of the sustainability of the current economic growth.

The initial recovery of economic growth in 1994 was mainly export-driven. Negative tendencies in the external balance started to arise in 1996. Large-scale government consumption and investment have effectively substituted for the role of the external sector in maintaining GDP growth. The combination of generous government spending with a tight monetary policy has led to high interest rates and severe liquidity constraints, especially for small and medium enterprises.

The development of the private sector has been marked by the inconsistent style of privatisation across time. Small-scale privatisation began in 1991. Large-scale privatisation followed in 1992 with the first round of the so-called voucher scheme. In 1995 the planned second wave of large-scale voucher privatisation was cancelled and strategic enterprises were defined and excluded from privatisation. The slowdown of the privatisation process may have temporarily alleviated the problem of unemployment. However, it has added to the long-term costs of transition in terms of the growth prospects of the economy.

The new government, which came into office after the general elections of 1998, has announced major cuts in public investment and consumption. This has included stopping ambitious public construction programmes, such as highways and dams. A new economic package is being implemented in 1999, including a rise in the value-added tax on all goods, the lifting of some regulated prices, the reduction of some benefits, and other restrictive measures. External balance problems have induced the introduction of an import surcharge. At the same time, registered unemployment is growing and employment falling.

Table 2.1: Economic development in Slovakia 1990 - 1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
GDP nominal, current prices									
Index 1989=100	104	120	124	138	165	193	215	245	270
GDP real, constant prices 1995									
Annual change (%)	-2.5	-14.6	-6.5	-3.7	4.9	6.9	6.6	6.5	4.4
Inflation, annual averages, % change									
Consumer prices		61.2	10.1	23.2	13.4	9.9	5.8	6.1	6.7
Cost-of-living index	10.6	56.0	10.7	23.1	13.6	9.6	5.8	6.2	6.6
Unemployment rate, ILO definition (a)									
Annual averages, %	-	-	-	12.2	13.7	13.2	11.1	11.6	11.9
Labour productivity (b)									
Index 1989=100	99	97	90	89	94	98	106	116	121

Note: *(a) Labour Force Surveys started in the second quarter of 1993*
(b) Expressed as real GDP in constant prices (1995) divided by total administrative employment
1998 data on GDP and productivity are preliminary
Source: *Statistical Office of the Slovak Republic*

When looking at global changes with respect to 1989, until 1995 the reduction of real GDP exceeded that of total employment. The initial transitional fall in output was accompanied by a less than proportional but substantial fall in employment. As an illustration, during the initial transition period of 1989-93, the decrease in real GDP in constant prices was approximately 25%, while the decrease in total employment was about 15%. For industrial output and employment the figures were 38 and 25%, respectively. Only in 1996 was the tendency reversed so that a rough indicator of labour productivity (measured as the ratio of real GDP to total employment) started to exceed its 1989-level (Table 2.1).

The development of labour productivity has been sector-specific (Table 2.2). Labour productivity in services has exhibited the largest growth, followed by that in agriculture. Industrial labour productivity has grown modestly, while in the construction sector the productivity has declined by more than 10% between 1989 and 1998. The current development of labour productivity and real wages in the sectors and branches of the national economy is provided in Table A2 of Annex 1. In 1998, the largest annual increases of labour productivity (expressed in value added) were recorded in the trade sector, followed by industry. Declining productivity occurred in the energy sector, hotels and restaurants, and construction. These three sectors are also characterised by the largest excessive growth of real wages over the growth of labour productivity. Among industrial branches, the highest increases of labour productivity are currently observed in the production of transportation facilities, electrical and optical devices and leather goods. Decreases in labour productivity have occurred in the production of coal and refined oil products and the production of metals.

Table 2.2: Development of labour productivity 1989-1997

Index 1989=100	1990	1991	1992	1993	1994	1995	1996	1997
Industry	97	87	84	83	91	96	99	103
Construction	97	70	91	70	71	75	78	86
Agriculture	95	94	78	92	90	97	105	108

Note: Real output in constant 1995 prices divided by total employment in the indicated branch.
Source: Own calculations based on data from Statistical Office of the Slovak Republic

Despite the fact that wage regulation was in effect only on an irregular basis and during short periods, nominal wages grew relatively modestly, so that the real wage gap with respect to the year 1989 had not been closed by the end of 1998. Real wages were initially undermined by the price liberalisation of 1991, which resulted in an annual drop of 27%. At the end of 1998 they were still about 8% below the 1989 level.

The absolute number of registered unemployed at the end of 1998 was 428 000 persons, corresponding to a 16.4% unemployment rate. Comparable LFS figures were slightly lower - 302 000 persons and 12.1%. An alarming tendency is the slow but persistent growth of registered unemployment since 1997. The share of long-term unemployment (more than 1 year) is relatively high: at the end of 1998, the shares according to LFS and registered data were 50% and 38%, respectively.

2.2 *Wage structure, social security and taxes*

Slovakia is a country with a traditionally low level of income inequality. This tendency continued during the transitional period. Rutkowski (1996) studied wage differentiation in transitional economies during the early period of transition. He found Slovakia to be an outlier among all the studied countries, having the lowest degree of wage inequality and relatively low levels of poverty incidence. Other academic studies seem to confirm the result (Garner, Lubyova and Terrell, (1994), OECD (1996)). Rencko (1995) reported that in 1994 about two thirds of employees were receiving less than twice the minimum wage and 90% were below the level of three times the minimum wage. This led to the conclusion that in the initial stage of transition, wages were viewed more as a tool of macroeconomic stabilisation, while the microeconomic functions of wages were neglected, especially those pertaining to the motivation of workers.

Table 2.3: Average earnings 1989-1998. (Average gross earnings in SKK per month)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average wage (SKK/month)										
Nominal	3 142	3 281	3 770	4 543	5 379	6 294	7 195	8 154	9 226	10 003
Annual change (%)	-	4.4	14.9	20.5	18.4	17.0	14.3	13.3	13.1	8.4
Index 1989=100	100	104.4	120.0	144.6	171.2	200.3	229.0	259.5	293.6	305.5
Real										
Annual change (%)	-	-5.6	-26.3	8.9	-3.8	3.0	4.3	7.1	6.5	2.8
Index 1989=100	100	94.4	69.6	75.7	72.8	75	78.2	83.8	89.2	91.8
Minimum wage (SKK/month)										
Nominal	-	-	2 000	2 200	2 450	2 450	2 450	2 700	2 700	3 000
Annual change (%)	-	-	-	10.0	11.4	0.0	0.0	10.2	0.0	11.1
Cost-of-living index										
Annual change (%)	-	10.6	56.0	10.7	23.1	13.6	9.6	5.8	6.2	6.6
Index 1989=100	100	110.6	172.5	191	235.1	267.1	292.7	309.7	328.9	350.6
Min. W / Avg. W										
Ratio (%)	-	-	53.1	48.4	45.5	38.9	34.1	33.1	29.3	30.0

Notes: *Cost-of-living index used as deflator of real wage.*
SKK is Slovak crown (prior to 1993 Czechoslovak crown).
Minimum wage was introduced in 1991.
ECU equivalent: 38.3 SKK as of end 1997, EUR equivalent: 43 SKK as of end 1998.
Source: *Ministry of Labour, Social Affairs and Family of the Slovak Republic*

Real wage growth in Slovakia has been relatively modest. During the period 1989-98, average nominal wages grew by more than 300%, but in real terms they fell by 8% (Table 2.3). The Euro equivalent of the average gross monthly wage at the end of 1998 was about 220. Minimum wage legislation was introduced in 1991. The level of the minimum wage is determined by an ad hoc administrative decision. Starting at 2 000 crowns per month in 1991, in 1999 it has reached 3 600 crowns per month, which is about one third of the average wage in the national economy. Since its introduction in 1991, the minimum wage has been blamed for providing disincentives to employment, mainly due to its low amount as compared to non-labour income from social benefits (see section 8.2).

Wage differentiation

Recent data show substantial progress for wage differentiation. The data suggest that the differentiation by individual characteristics, such as education or occupation, is more pronounced than the differentiation by aggregate characteristics, such as type of ownership or sector of the economy. As documented in Table 2.4, workers in the agricultural sector have experienced the largest drop in relative wages. While in 1989 the wage levels in agriculture and industry were approximately equal, in 1998 employees in the two sectors ended up with 79% and 100% of the national average, respectively. Wages in construction have traditionally been higher than the national average, reaching 103% of the national average in 1998, which is roughly equal to the pre-transition figure.

Table 2.4: Wage Structure 1989-1998. Average wage in sectors of national economy

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average wage (SKK/month)										
Total	3 142	3 281	3 770	4 543	5 379	6 294	7 195	8 154	9 226	10 003
% of total in:										
Agriculture	102	103	98	91	85	82	81	81	80	79
Industry	102	101	102	100	102	103	104	104	104	100
Construction	108	107	102	102	103	103	104	107	108	103

Note: *Data originate from enterprise reporting to the Statistical Office of the Slovak Republic (see Annex 3). It is not possible to provide a comparable series for services due to changes in the sector classification and lack of aggregate statistics. ECU equivalent: 38.3 SKK as of end 1997, EUR equivalent: 43 SKK as of end 1998.*
Source: *Statistical Yearbooks of the Slovak Republic, Statistical Office of the Slovak Republic*

A more detailed breakdown of average wages by branch can be found in Table A3 in Annex 1. By far the highest wages are observed in financial services. Wages are also relatively high in public administration and defence, real estate, and research and development. In the primary sector relatively high wages can be found in mining and the energy industry.

Table 2.5: Wage structure. Average gross wages of employees by type of ownership

	1997
Wage survey (a)	
Total (SKK/month)	10 886
Proportion (%) by ownership:	
Private	95.9
Co-operative	89.7
Municipal	86.0
State	106.6
Foreign	104.9
Polit. parties, charities	81.3
International private	103.5
Mixed	110.2

	1996	1997
Enterprise reporting (b)		
Total (SKK/month)	8 224	9 369
Proportion (%) by ownership:		
Private	101.6	100.5
Co-operative	78.6	77.1
Public	98.6	99.6
State	99.7	100.7
Foreign	126.8	128.9

Notes: *(a) Own calculations based on enterprise survey "Information System on the Cost of Labour"*
(b) Excluding employees of small firms and employees of private firms not in business register (therefore, the total averages differ from those presented in table 2.3).
ECU equivalent: 38.3 SKK as of end 1997, EUR equivalent: 43 SKK as of end 1998
Source: *(a) 1997Analysis of wage structure of employees in the Slovak Republic, 1997, Statistical Office of Slovak Republic*
(b) Yearbook of Labour, Social Affairs and Family 1997, Ministry of Labour, Social Affairs and Family of the Slovak Republic

The latter is also known for having the largest discrepancy between the increases in labour productivity and real wages (in favour of real wages) among the industrial branches. Among the sectors with relatively low wages there are hotels and restaurants, education, trade, and the health and social services sector, in which the average wage is comparable to that of agriculture and forestry.

Wages in the private sphere on average do not seem to differ substantially from those in the state sector (Table 2.5; for methodological notes see Annex 3). The highest pay can be found in firms with foreign ownership, the lowest in co-operatives and non-profit organisations, such as municipal and political organisations and charities.

Gender wage gap

The gender wage gap in Slovakia is of the order of 20%, which means that the average wage of females represents about 80% of that of males (Table 2.6). Gender differentials are most pronounced in the case of contract wages (i.e. negotiated wages in the entrepreneurial sector) and in lower wage grids. With increasing education and increasing wages, the differentials gradually decrease; however, they tend to persist.

Table 2.6: Gender wage gap. (Ratio of average gross wages: female / male, in %)

Female / male ratio (%)	1995	1996	1997
Total	80.09	78.42	78.0
By education group:			
Basic	74.5	73.8	73.9
Apprentice lower	77.5	75.9	67.5
Vocational lower	77.5	75.9	72.6
Apprentice full sec.	83.5	81.4	75.7
Grammar	78.5	81.6	68.1
Vocational full sec.	74.5	77.3	74.7
University	79.1	77.5	84.2
Scientific	79.9	86.7	107.6
By wage grids:			
Lowest ratio (7-th grid)	77.6	78.3	
Highest ratio (11-th grid)	96.3	97.0	
Contract wage	64.5	70.6	

Notes: *In 1995 and 1996 based on average hourly wages at end of year. In 1997 based on average monthly wages during the year. For description of education groups see section 6.1, or Annex 6.*
Wage grids are used in budgetary sphere. Usually there are 12 wage grids.
Source: *1995 and 1996 from Kostolna and Hanzelova (1997), for 1997 own calculations based on enterprise survey "Information System on the Cost of Labour"*

Returns to education

There is a clear tendency in Slovakia towards increasing returns to education. Results based on the enterprise survey "Information System on the Cost of Labour" (Table 2.7) illustrate substantial and increasing wage differentiation according to education. In 1998 the wages of the lowest and highest education group represented about 80% and 160% of the average, respectively. More detailed information on wage structure by occupations can be found in Table A4 of Annex 1.

Filer, Jurajda, and Planovsky (1999) estimate development of returns to education in Slovakia, using the same enterprise survey data ("Information System on the Cost of Labour", see Annex 3 for details). The sample analysed ranged from 1.9 to 3.9% of the total labour force in the Slovak Republic. In 1997 the coefficient capturing the effect of college education as compared to primary school education was 0.7. The comparable figure for the Czech Republic was 0.8. Roughly comparable figures from other studies for other countries include 0.64 for the United Kingdom, 0.73 for Western Germany, 0.56 for Italy and 0.42 for Sweden. Thus, the authors have documented that by 1997 the returns to education in Slovakia had reached the level observed in traditional market economies. Among other interesting results there was the finding that returns to education in Slovakia increased substantially between 1995 and 1997, when they reached a level two to three times higher than in 1984. Returns to education increased more in the private sector than in the public sector and more among young workers than among older workers. The rate of increase was approximately equal for men and women.

Table 2.7: Wage Structure. Average gross wages of employees by educational attainment

	1996	1997	1998
Total (SKK/month)	9 106	10 086	65.92(a)
Proportion (%) by education:			
Basic	81.7	66.1	78.3
Apprentice	94.5	86.1	92.6
Vocational	87.6	75.3	86.4
Vocational complete sec.	93.9	93.9	101.3
Grammar	99.6	86.9	101.0
University	156.9	189.1	158.6

Note: *Based on enterprise survey "Information System on the Cost of Labour" (for methodological details see Annex 3).*
(a) In 1998 gross hourly wages in SKK in the last quarter
Source: *Statistical Yearbook of the Slovak Republic (1996), Analysis of wage structure of employees in the Slovak Republic (1997), Statistical Office of the Slovak Republic*

Regional differentiation

Data presented in table A5 of Annex 1 illustrate wage differences by regions. It can be seen that the regional wage structure is influenced by the presence of large cities (such as Bratislava, Kosice, Banska Bystrica). By far the highest wages (123% of the total average) are observed in Bratislava. The lowest wage level was found in the region of Presov in the eastern part of the country, where the unemployment rate is the highest. Rencko (1995) concluded, in his analysis of wages policy in Slovakia, that there is an indirect (downward-sloping) relationship between the unemployment rate and wage level among Slovak districts.

Tax burden

The overall burden of taxes and social security contributions is relatively high (Table 2.8). Total contributions amount to 50% of pre-tax wages, the incidence for employers and employees being 38 and 12%, respectively. Employers pay 38% of the total wage bill for the social security of employees. The income tax rate is slightly progressive, ranging from 15 to 42%. For high incomes (exceeding approximately 25 000 Euro) the rates are further progressively increased. Income tax rates are the same for corporate and personal income.

The average burden of taxes and social insurance payments represents more than 20% of employees' gross wages. According to the enterprise survey "Information System on the Cost of Labour", taxes and insurance payments in 1997 represented on average 23% of gross employee wages. Furthermore, wages represented on average 68.8% of total employers' labour costs. An additional 24.8% of employers' labour costs were obligatory social insurance contributions and 1.6% were taxes related to wage payments by the employer. These figures imply that the total burden of taxes and obligatory social insurance payments in 1997 represented on average 42.2% of total labour costs. The tax burden has increased over time, because the income brackets for various tax rates were denominated in absolute nominal terms in 1992 and have not changed by 1999.

Table 2.8: Taxes and social security contributions

Contribution rates for social insurance				Income tax			
	Total (a)	Incidence (b)		Tax base (ths. SKK)	Tax rate %	Tax deductions (c)	
		Employer	Employee				(ths. SKK)
Total	50	38	12	0 – 60	15	Tax payer	21
By insurance type:				60 – 120	20	Dep. child	9
Pension	27.5	21.6	5.9	120 – 180	25	Dep. spouse	12
Health	13.7	10	3.7	180 – 540	32		
Sickness	4.8	3.4	1.4	540 - 1 080	40		
Unempl.	4	3	1	1 080 -	42		

Notes: *(a) Base: total wage bill for dependent employment, 1/2 of personal income tax base for self-employed.*
(b) Base: employees' gross wage. (c) Annual untaxed income
Source: *Collection of Law*

The real level of the old-age pension in 1998 represented only 83% of its 1989 level (Table 2.9). The gross replacement rate of average wage by average old-age pension has also declined, hitting about 44% in 1998. As will be discussed in what follows, pensioners have experienced a decrease in overall inequality since 1989. The equalisation of old-age pensions can be partly attributed to the valorisation mechanism. The amount of valorisation is determined on an ad hoc basis. Given the limited means of the pay-as-you-go system, the pressure of legally stipulated minima results in the tendency to increase the lower pensions relatively more than the higher ones. Expenditures on old age pensions related to GDP have increased slightly over the transition period, approaching the level of about 8% of GDP in 1998.

Table 2.9: Pensions and social benefits 1990-1998.

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average pension (a)									
Nominal (SKK/month)	1 544	1 676	2 199	2 532	3 049	3 320	3 727	4 124	4 490
Real 1989 = 100	98	84	71	66	70	73	78	81	83
Ratio to gross average wage:		**(%)**		**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Old-age pension				47.1	48.4	46.1	45.7	44.7	44.9
Sickness benefit		daily basis		62	57	59	52	56	54
Sickness benefit		monthly basis		26.4	25.1	23.9	23.7	24.4	27.4
Caring for sick family member		monthly basis		9.9	9.3	8.7	9.1	9.0	10.0
Maternity benefit		monthly basis		35.6	36.1	35.1	35.5	35.0	38.4
Compensation in pregnancy		monthly basis		10.0	9.5	11.3	10.8	12.0	11.9

Notes: *(a) Full old-age pensions*
Source: *Social Policy, 1998, Ministry of Labour, Social Affairs and Family of the Slovak Republic*

The development of overall income inequality in Slovakia between 1989 and 1995 was analysed on the basis of individual data from Household Budget Surveys and Microcensus (Table 2.10). The most robust results from the analysis were the following: pensioners experienced a decline in inequality with regard to all the inequality measures used (Gini and Theil indices). Blue-collar workers and agricultural workers experienced an increase in some measures and a decline in others, while white-collar workers experienced an increase in all the measures. The self-employed, who were only monitored later in the transition period, had the highest degree of inequality among all the social groups. These trends were consistent for both income and expenditure-based concepts of inequality. The effect of social transfers was derived from the comparison of the inequality results based on labour income and total income, the differences being due to the impact of social transfers. It was shown that for all the groups except the self-employed, the social transfers compensated for the labour income inequality to a large extent. The only exception was the group of self-employed, for whom the labour income inequality slightly prevailed over the total one.

Table 2.10: Income distribution. Gini index for total incomes and labour incomes of Slovak households, 1989-1995

	1989		1992		1995		% change 95 vs. 89	
	Labour income	Total income	Labour income	Total income	Labour income	Total income	Labour income	Total income
Total	0.316	0.215	0.308	0.199	0.388	0.208	22.5	-3.7
By social group(b)								
Blue collar	0.226	0.185	0.219	0.171	0.256	0.195	13.0	5.1
Self-employed (c)	n.a.	n.a.	n.a.	n.a.	0.299	0.247	n.a.	n.a.
White collar	0.217	0.192	0.245	0.209	0.282	0.221	29.9	15.0
Agricult. worker	0.22	0.188	0.209	0.163	0.282	0.214	27.3	14.2
Pensioner	0.527	0.166	0.614	0.171	0.597	0.146	13.2	-12.2

Notes: *Gini index is a measure of inequality, bound to interval ; 1. The higher Gini, the higher inequality.*
(a) Net adjusted household income (OECD equivalence scale)
(b) Social status of household head
(c) Self-employed were not monitored before 1989
Source: *Lubyova et al. (1998), based on micro-data from Household Budget Surveys*

2.3 *Key issues*

- A high GDP growth rate in Slovakia is accompanied by low job creation and high unemployment rates. The recovery of economic growth, initially driven by exports and later fostered by generous government spending, has not been accompanied by any very substantial job creation process. Due to the moderate speed of structural reforms, enterprise restructuring is far from being completed. After a slight temporary recovery, employment has started to decline again since 1996.
- The Slovak labour market is characterised by large structural imbalances. Regional segmentation is very high: district unemployment rates vary by more than 30 percentage points. The internal mobility of the labour force is low. The structural mismatch between the unemployed and vacancies is mostly due to the very low number of reported vacancies. At the end of 1998 there were about 39 registered unemployed per one registered vacancy. In some regions the ratio was close to 80. Vocational education and training lacks linkages to labour market needs. Retraining is used only modestly. The educational structure of unemployment signals a need for massive retraining when job creation increases.
- The relatively good demographic structure translates into annually increasing cohorts entering the productive age. The demographic pressure and the transitional decline of employment were absorbed relatively more by increasing unemployment than by exits to inactivity. A reversal of the demographic trend and ageing of the population is expected only after the year 2005. The statutory retirement age is still rather low, and is unequal for males and females (53 to 57 for females, 60 for males), which burdens the pay-as-you-go pension scheme. Pension reform is under preparation: a new system should come into effect around the year 2002.

- Disincentive effects provided by social benefits are believed to be high, as the replacement ratio of non-labour versus labour income is close to one for certain groups of households (mostly for households with more dependent children or with unskilled adults). New restrictive measures proposed in 1999 aim to weaken the disincentives and decrease the burden of social benefits and unemployment benefits.
- Ethnic issues in Slovakia are strongly connected to the labour market position of the Romany ethnic group. The share of the Romany population according to official data is about 1.5% (based on self-reporting in the Population Census of 1991). The estimated share is about 8%. Their share in registered unemployment at the end of 1997 was 19%. Among the main problems for integration of the group into the labour market is the extremely low level of education and skills.
- The Slovak authorities are very active in the field of labour market reforms. The restrictive reform of passive labour market policies in 1992 was followed by further softening reforms in 1995-97. A new restrictive reform is envisaged in the fall of 1999. A substantial reform of active labour market programmes redefined their structure in 1996, putting more emphasis on preventive measures and targeting. A geographical-administrative reform enacted in 1996 resulted in a redefinition of the system of regions and districts.

3. Employment

The initial period of economic transformation in Slovakia was accompanied by a sharp decline in employment. According to administrative data, the cumulative reduction of total employment between 1989 and 1998 was close to 20%. Employment has declined both in absolute terms and relatively to the working-age population. This decline can be decomposed into three phenomena: changes in demographic relations, outflow to unemployment and outflow to the state of economic inactivity (out of the labour force).

During the transition period, the working age population was increasing. Unfortunately, under the conditions of transitional depression, the demographic pressure on the labour market was accompanied mainly by increasing unemployment. This can be documented by a simple calculation based on administrative data. In 1990, the shares of people employed, unemployed and inactive (outside the labour force) in the population aged 15-64 were approximately 72%, 1%, and 27%, respectively. By 1998 the shares had changed to approximately 56%, 12%, and 32%, respectively. Thus, the share of the employed in the population aged 15-64 decreased by 15 percentage points, while the share of inactive people increased by some 5 percentage points and the share of unemployed increased twice as much. In this sense, a relatively larger share of the burden of the decline in employment was placed on unemployment than on exits from the labour force.

The initial transitional fall in employment was smaller than the fall in output. As shown in Table 2.1, until 1995 the gap in real GDP with respect to the 1989-level exceeded that in total employment. This trend was reversed only in 1996.

3.1 *General changes in employment*

Overall trends in the development of employment are summarised in Table 3.1. Administrative data based on enterprise reporting document the abrupt fall in employment in 1991, which was more pronounced for women. It appears that between 1989 and 1997 total employment was reduced by almost 18%. This reduction was disproportionately larger for females, whose employment fell by almost 25%, as compared to about 9% for males. The share of females in total employment decreased by 4 percentage points. With the exception of two years, total employment has been declining on an annual basis. Administrative data tend to understate total employment as compared to the information from LFS. However, the decline in employment is currently recorded also by the latter source.

LFS data show certain positive tendencies in employment growth that occurred in 1995-96. Since 1997 total employment has started to decline again. The annual change in 1997 was -4.7% in total and -6.7% for females. These figures may be compared to the 1997 EU annual employment growth rates of 0.6% in total and 0.8% for females. In Slovakia the employment decline continued further in 1998. However, compared to 1994, male employment increased in both absolute and relative terms and that of females decreased accordingly.

Table 3.1: Employment in Slovakia 1990 - 1998.
(Thousands of persons, administrative end of year, ILO definition 4Q)

Administrative	1989	1990	1991	1992	1993	1994	1995	1996	1997	Change 1997-89
Total	2 504	2 459	2 152	2 175	2 118	2 096	2 147	2 117	2 059	-445
Annual change	(%)	-1.8	-12.5	1.1	-2.6	-1.0	2.4	-1.4	-2.7	-17.8
Women	1 139	1 094	932	911	892	874	891	872	857	-282
Annual change	(%)	-4.0	-14.8	-2.2	-2.2	-2.0	1.9	-2.1	-1.8	-24.8
% share	45.5	44.5	43.3	41.9	42.1	41.7	41.5	41.2	41.6	-4.3
Men	1 365	1 365	1 220	1 264	1 226	1 222	1 256	1 245	1 202	-120
Annual change	(%)	0.0	-10.6	3.6	-3.0	-0.4	2.8	-0.9	-3.4	-8.8
% share	54.5	55.5	56.7	58.1	57.9	58.3	58.5	58.8	58.4	4.3

ILO definition	1993	1994	1995	1996	1997	1998	EU15 (a)	Change 1998-94
Total	2 196	2 178.5	2 243.5	2 293.7	2 185.2	2 171.9	149042	-6.6
Annual change	(%)	-0.8	3.0	2.2	-4.7	-0.6	0.6	-0.3
Women	Abs.	1 006.8	1 032.3	1 051.3	981	980	62 342	-26.8
Annual change	(%)		2.5	1.8	-6.7	-0.1	0.8	-2.7
% share		46.2	46.0	45.8	44.9	45.1	41.8	-4.4
Men	Abs.	1 171.7	1 211.2	1 242.4	1 204.2	1 191.9	86 700	20.2
Annual change	(%)		3.4	2.6	-3.1	-1.0	0.4	1.7
% share		53.8	54.0	54.2	55.1	54.9	58.2	4.4

Notes: *Total administrative employment excludes women on maternity leave, includes employees with second jobs. Employment according to ILO definition is based on LFS.*
(a) Based on the Community Labour Force Survey, figures for 1997
Source: *Statistical Office of the Slovak Republic, for (a) Employment in Europe, European Communities, 1998*

Many of the current difficulties with employment can be attributed to the relatively high share of industrial employment, and the current crisis of industry. The industrial structure inherited from the socialist era is biased in favour of heavy industry and low-value-added production. The situation in engineering, which represents the third largest industrial branch in terms of output (after the chemical industry and heavy industry), is especially critical. This sector has suffered also from the massive conversion (cutback) of military production. In the absence of conversion programmes and of new technologies, the loss of many engineering enterprises is permanently increasing. The current increase of productivity in engineering is being achieved mainly by labour shedding, which further contributes to the tensions in the labour market. Some of the current employment problems can be attributed to the unclear ownership status of many enterprises, which results from the non-transparent large-scale privatisation (for example, share warranties in many cases complicate the identification of the owners).

3.2 Structural changes in employment

The structure of employment by branches has undergone substantial changes during the transitional period (Table 3.2). Administrative data show that the industrial share of overall employment has been reduced from about 44% to 37%. Conversely, the share of services has expanded from 44% to 54%. Agricultural employment, originally representing 12% of the total, has gradually declined to less than 9%. Although Slovakia was traditionally the more agricultural part of the former Czechoslovakia, the current share of agriculture in the economy is not very large. LFS data indicate about an 8% share for agricultural employment, which is not much higher than the EU average value (5% in1997) and it is lower than the comparable figure for Portugal, Greece and Ireland.

There is still a substantial discrepancy between the industrial employment shares in Slovakia and in the EU, the Slovak share being higher by approximately 10 percentage points. The opposite holds for the shares of employment in services, where the Slovak share is almost 13 percentage points lower than the EU average. These results indicate that a further decline in the share of industry and increase in the share of services in employment should occur in order to converge to the EU employment structure.

Table 3.2: Employment structure by sector.
(Administrative employment end of year, ILO definition 4Q)

Administrative		1989	1990	1991	1992	1993	1994	1995	1996	1997
Total		2 504	2 459	2 152	2 175	2 118	2 096	2 147	2 117	2 059
Female / Total		0.46	0.45	0.43	0.42	0.42	0.42	0.41	0.41	0.41
Index previous year=100			98.2	87.5	101.1	97.4	99.0	102.4	98.6	97.3
% share in:										
Agriculture		12.1	12.0	12.6	11.8	9.4	10.2	9.4	9.0	8.9
Industry		43.7	43.3	44.0	39.4	37.8	36.9	37.8	37.0	37.1
Services		44.2	44.7	43.4	48.8	52.8	52.9	54.1	54.0	54.0
ILO definition			**1994**	**1995**	**1996**	**1997**	**1998**	**EU15 1997 (a)**		
Total			2 178.5	2 243.5	2 293.7	2 185.2	2 171.9	149 042		
Female / Total			46.2	46.0	45.8	44.9	45.1	41.8		
Index previous year=100			99.2	103.0	102.2	95.3	99.4	100.6		
% share in: (b)										
Agriculture	Total		9.9	8.7	9.1	8.2	7.5	5.0		
	Female		34.1	32.3	32.9	29.4	31.3			
Industry	Total		39.7	38.9	39.9	39.4	39.6	29.4		
	Female		34.8	34.5	33.2	31.6	31.0			
Services	Total		50.4	52.4	51.0	52.4	52.9	65.6		
	Female		57.6	56.9	58.0	57.3	57.7			

Notes: *Total administrative employment excludes women on maternity leave, includes employees with second jobs.*
Employment according to ILO definition is based on LFS.
(a) Based on the Community Labour Force Survey
(b) Total shares correspond to employment in the indicated sector / total employment.
Female shares correspond to female employment in the indicated sector / total employment in the indicated sector

Source: Statistical Office of the Slovak Republic, for (a) Employment in Europe, European Communities, 1998

A similar picture of employment structure is provided by employment rates in particular sectors (Table 3.3). The most pronounced trend over time is the growth of non-employment rates, in particular for females. Relations between sector employment rates are similar to those observed in the EU, in the sense that males are more active in agriculture and industry, while females prevail in services and non-employment. The development of the structure of employment by branches according to the Labour Force Survey can be found in Table A6 of Annex 1.

Table 3.3: Employment rates by sector.
(Employed in the sector / total working age population (15-64). Administrative employment end of year, ILO definition 4Q)

Administrative (a)	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total									
Agriculture	8.9	8.6	7.9	7.4	5.7	6.0	5.6	5.3	5.0
Industry	32.2	31.1	27.5	24.7	22.8	21.8	22.6	21.7	20.9
Services	32.6	32.1	27.1	30.5	31.8	31.2	32.4	31.6	30.5
Non-employment	26.3	28.3	37.5	37.4	39.7	41.0	39.3	41.5	43.6
ILO definition									
Total	1994	1995	1996	1997	1998				
Agriculture	6.1	5.4	5.8	4.9	4.4				
Industry	24.3	24.3	25.3	23.6	23.4				
Services	30.9	32.8	32.3	31.4	31.2				
Non-employment	38.7	37.4	36.6	40.1	41.0				
Male									
Agriculture	8.1	7.4	7.8	7.0	6.1				
Industry	32.1	32.2	34.1	32.6	32.5				
Services	26.5	28.5	27.4	27.0	26.6				
Non-employment	33.3	31.8	30.7	33.4	34.8				
Female									
Agriculture	4.1	3.5	3.8	2.9	2.7				
Industry	16.8	16.6	16.6	14.8	14.4				
Services	35.2	37.0	37.2	35.7	35.7				
Non-employment	43.9	42.9	42.4	46.7	47.1				

Notes: *Total administrative employment excludes women on maternity leave, includes employees with second jobs. Employment according to ILO definition is based on LFS.*
(a) Ratio of total employment to 15-64 population is a proxy for employment rates (employment was not monitored by age groups).
Source: *Statistical Office of the Slovak Republic*

The employment rates by gender and age group summarised in Table 3.4 indicate the absence of major fluctuations after 1994. The current employment rate for the population aged 15 to 64 is 58.8%, which is close to the comparable 1997 EU average value of 60.5%. In terms of gender differences, in Slovakia we can still observe relatively higher employment rates for females and relatively lower

employment rates for males than the EU averages, which are 50.5 and 70.5%, respectively. It is important to note that the retirement age in Slovakia is 60 years for males and 53 to 57 years for females, which is lower than in the other transitional countries and in the EU. Consequently, the employment rates based on the "true" working age population (15-54F/59M) in Slovakia are still higher than the EU averages.

Table 3.4: Employment rates by age groups and gender. (Employed/working age population, end of year)

	1994			1995			1996			1997			1998		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
15-64	61.1	66.3	56.0	62.3	67.9	56.8	63.2	69.0	57.5	59.7	66.3	53.1	58.8	65.1	52.6
15 - 24	36.3	37.4	35.2	37.8	38.8	36.8	39.2	41.5	36.9	34.2	36.5	31.9	31.7	33.0	30.3
25 - 49	81.0	84.5	77.4	82.2	86.3	78.0	82.7	87.1	78.3	78.6	85.4	71.9	78.9	84.9	72.8
50-64	36.8	50.4	25.3	39.9	54.5	27.6	41.2	54.5	29.9	38.9	52.3	27.4	39.5	51.9	28.9
65+	1.6	3.0	0.7	1.6	2.6	1.0	1.3	2.5	0.5	1.4	1.8	1.0	1.3	2.0	0.9
15-pen.	66.9	69.7	63.9	68.1	71.2	64.7	68.8	72.3	65.1	65.0	69.4	60.2	63.8	67.8	59.4

Note: "pen." denotes pension age (59M/54F)
Source: Own calculations based on Labour Force Survey and population data by the Statistical Office of the Slovak Republic

From the limited time series (due to the absence of suitable LFS data before 1994) it is obvious that the most pronounced decline in employment rates has occurred in the group of young people aged 15 to 24 (table 3.4).

The educational attainment of the population is not systematically monitored by the regular population statistics. Therefore, employment rates by educational attainment comparable to those presented in Table 3.4 cannot be computed. The structure of employment by educational attainment and gender based on the Labour Force Survey is provided in Table A7 of Annex 1. It can be seen that females have about a 60% share in the groups of employed persons with primary education, complete vocational education and grammar education. Other educational groups are dominated by males. By far the largest share of total employment is represented by workers with lower apprentice and complete vocational education.

3.3 *Employment in private sector*

The building-up of the private sector started in practice in 1990 and continued in 1991 with small-scale privatisation (Table 3.5). Large-scale privatisation followed in 1992 with the first round of the voucher scheme. In 1995 the second wave of voucher privatisation was cancelled and so-called strategic enterprises were defined and excluded from privatisation. The process of large-scale privatisation has come under criticism for a lack of transparency. Direct sales to domestic owners were frequently realised for fractions of the market price of the privatised companies. In 1998 the privatisation process was nearing its completion. Strategic companies representing about 30% of the book value of all productive state assets remain excluded from the privatisation process (for example, utilities, telecommunications and railways).

Table 3.5: Employment by ownership. (Administrative data, end of year)

Employment	1989	1990	1991	1992	1993	1994	1995	1996	1997
% share in total employment									
Private	1.0	5.0	12.8	17.1	32.2	44.7	52.5	56.6	58.7
Co-operative	16.5	15.0	13.1	11.3	8.6	8.1	7.0	6.5	5.9
Public	82.5	80.0	74.2	71.6	59.2	47.2	40.4	36.9	35.4
Annual change (%)									
Private		396.0	121.8	35.6	82.8	37.2	20.5	6.3	0.8
Co-operative		-10.7	-23.8	-12.8	-25.3	-7.1	-11.2	-9.3	-10.9
Public		-4.8	-18.8	-2.4	-19.5	-21.0	-12.3	-10.0	-6.7
Ratio to 15-64 population (%)									
Private	0.7	3.6	8.0	10.7	19.4	26.4	31.5	33.1	33.1
Co-operative	12.2	10.8	8.2	7.1	5.2	4.8	4.2	3.8	3.3
Public	82.5	80.0	74.2	71.6	59.2	47.2	40.4	36.9	35.4
% women in									
Private + Co-op.		37.7	35.1	35.2	37.8	39.0	34.1	34.2	34.6
Public		46.2	46.1	44.5	45.0	44.8	52.3	53.1	54.3

Note: Ratio to 15-64 population is a proxy for employment rates (employment was not monitored by age groups)
Source: Statistical Office of the Slovak Republic

The gradual building up of the private sector is reflected in the structure of employment. The share of the private sector in total employment was about 1% in 1989. Currently it has increased to approximately 60%. This growth has been achieved at the expense of public-sector employment, which has shrunk from about 80 to 35% of total employment. The third group, represented by employment in co-operatives, has also declined, by more than 100%, and currently represents only about 7% of total employment. Co-operatives can also be classified under the private (non-public) sector. It can also be seen from Table 3.5 that females are relatively more abundant in the public sector than in the private and co-operative sector.

It is important to note that the private sector has exhibited persistently faster employment and output growth than the public sector. The growth of private employment has likely been understated, especially in the early years of transition, due to the absence of effective methods of measurement. Small private enterprises were either not obliged to co-operate with the Statistical Office, or the obligation was not effectively enforceable, especially in the case of self-employed, small entrepreneurs not registered in business registers, and their employees.

The Labour Force Survey provides an indicator of "generic" private employment, i.e. entrepreneurs with or without employees. In the last quarter of 1998, entrepreneurs represented 7% of total employment; about 100 000 were small entrepreneurs without employees (4.6% of total employment) and about 50 000 were entrepreneurs with employees. About 93% of total employment was constituted of dependent employees.

3.4 Regional distribution of employment

The regional distribution of employment reflects one of the basic Slovak controversies - the high degree of regional segmentation. There is a sharp distinction between the capital Bratislava and the rest of the country. There is also a high diversification of labour market indicators among the Slovak districts. The two aspects of regional segmentation mentioned are particularly pronounced in terms of unemployment.

As regards employment, the regional diversification is not as important in terms of total numbers as it is in terms of structure. As can be seen in Table A8 of Annex 1, the share of Bratislava in total Slovak employment is currently over 14%, with the other seven regions ranging from 10 to 13%, which roughly corresponds to the shares of the working age population in the regions. However, the branch structure of employment tends to be much more concentrated. There are many mono-industrial districts, typically specialised in engineering - former military production (Povazska Bystrica, Dubnica nad Vahom, Martin, Zvolen), metallurgy (Kosice, Ziar nad Hronom), the chemical industry (Humenne), or the production of leather goods (Topolcany) (see the map in Annex 2). Furthermore, there are typical agricultural districts located mainly in the south-east lowlands, which exhibit very high unemployment rates.

Regional concentration is well manifested also in the regional distribution of entrepreneurs - legal entities. The dominant position of Bratislava is confirmed by its 28% share in the Slovak total. As noted in OECD (1999), when it comes to entrepreneurial entities with foreign capital, the share of Bratislava is as high as 52%. Among private entrepreneurs - physical persons - almost 20% are located in Bratislava. Regional segmentation has serious implications for the labour market situation. As will be discussed further in this report, there are many depressed districts with extremely low job creation, where the chances of unemployed persons finding a job are negligible.

3.5 "Hidden employment" and "hidden unemployment"

The share of the hidden economy in Slovak GDP before the year 1990 was estimated to be around 3%. The share has increased during the initial period of transition to 15-20%. There are no regular evaluations of the extent of the shadow economy. Hajnovicova (1995) evaluated the volume of shadow (unregistered) production and activities in 1993 to be about 12.8% of GDP. Out of that, production reaching 5.6% of GDP was estimated as hidden due to statistical reasons, such as non-response by small and medium enterprises. Among industrial sectors, the largest share in the shadow economy was attributed to trade, hotels and restaurants (38%), followed by trade services (26%), and construction (15%). The rest was allocated mainly to processing industry, transportation and agriculture.

Another source provides estimates of the development of the hidden economy in Slovakia in relation to the total value added. As can be seen in Table 3.6, the volume of hidden production has increased in nominal terms. However, the estimated share of hidden production in total value added declined between 1993 and 1996 from about 13 to about 12%.

Table 3.6: Estimates of hidden production in the Slovak economy between 1993 and 1996

	1993	1994	1995	1996
Billion SKK	43.3	51.5	54.6	63.0
% of total value added	13.0	13.1	12.0	12.0

Source: Infostat and Statistical Office of the Slovak Republic

Unregistered unemployment

One of the aspects of the shadow economy is unregistered employment. The volume of the so-called "envelope salaries" has not yet been estimated. However, given the relatively high burden of taxes and contributions (the average load of taxes and contributions in 1997 represented about 42.2% of total labour costs; see section 2.2 for more details), the phenomenon of envelope salaries is believed to be widespread, notably in the small private sector.

According to LFS data for the last quarter of 1998, more than 34 000 unemployed people were not registered with labour offices, which represents about 11% of all the unemployed according to the ILO definition. The share of males and females in the group was roughly equal. At the same time, there were about 1.6 thousand persons (900 men and 700 women) that were classified as employed according to the ILO definition, but were registered unemployed. Their share in total employment is negligible and their share in registered unemployment was also rather low, about 0.4%.

LFS data do not capture the illegal employment of foreign workers. The number of registered foreign workers in Slovakia is close to 6 000, representing only about 0.25% of total employment. Among illegal workers the prevailing nationality is probably Ukrainian.

Furthermore, the group of registered unemployed includes about 20 000 persons (about 5%) who are not readily available for work. These are unemployed persons in retraining, persons on sickness leave, caring for a sick family member, etc. By disregarding these people the registered unemployment rate can be decreased by about 1 percentage point.

3.6 Vacancies and structural imbalances

Job creation in Slovakia seems to be very low. The numbers of vacancies reported to the labour offices by employers represent an indicator of the job-creation process. Despite the usual deficiencies of the vacancy data, it is believed that the reporting of vacancies is relatively high. This is mostly due to the legal obligation of employers to report their vacancies to the labour offices. Further interaction between employers and labour offices, such as wage subsidies and loans, is conditional on the reporting of vacancies. Under severe liquidity constraints, many employers are interested in obtaining the subsidies available within active labour market programmes.

The Research Institute of Labour, Social Affairs and Family organised a survey of the state of vacancy reporting and co-operation between employers and labour offices in several Slovak districts (Liska et al., 1996). The results show that co-operation depends on the size of the enterprise. For example, in small firms employing up to 24 employees, the ratio of reported vacancies to the total number of jobs created was between 50 and 75%. The most effective reporting was achieved by large firms with more than 500 employees, where the ratio of reported to total jobs created was as high as 90 to 95%. On average, firms recruited 45 to 55% of workers via channels other than labour offices (mediating agencies, advertisements, etc.).

Table 3.7: Reported vacancies. Structure by education and occupation. (End of year stocks)

Total vacancies	1991	1992	1992	1994	1995	1996	1997	1998
Stock, end of year	8 201	16 204	7 676	13 046	15 473	14 118	19 318	11 106
% structure by education group								
Less than basic	0	1	1	1	1	1	2	2
Basic	20	11	11	7	7	9	12	9
Apprentice lower	0	47	45	50	32	46	44	50
Vocational lower	50	7	11	8	9	12	5	9
Apprentice compl.	0	7	5	7	5	8	5	6
Vocational compl.	18	12	13	14	14	10	14	9
Grammar	0	6	3	3	9	4	4	6
Higher secondary	0	0	0	1	13	2	2	1
University	12	9	11	10	9	8	10	8
Scientific	0	0	0	0	2	1	2	3

	1996	1997	1998
% structure by occupation (ISCO)			
1 to 4 (see note)	18	24	22
5 Maintenance staff in trade and services	18	15	17
6 to 8 (see note)	56	50	52
9 Unskilled workers	7	11	9

Note: Apprentice and vocational education: "lower" education is shorter and more practically oriented than the "complete" education. The latter form includes general leaving examination. ISCO groups: 1 to 4: 1Legislators, leading professionals,2 Scientists and specialists,3 Technicians, health-care, pedagogic staff 4 Lower administrators. 6 to 9:6 Skilled workers in agriculture and forestry, 7 Skilled workers in other branches, 8 Technical maintenance of machinery

Source: National Labour Office of the Slovak Republic

In the light of these figures, it is alarming that the numbers of reported vacancies are very low compared to the numbers of registered unemployed. At the end of 1998 there were about 39 registered unemployed per one registered vacancy. In some regions the ratio was close to 80 to one. The structure of notified vacancies by required educational attainment is illustrated in Table 3.7. It is noteworthy that at the end of 1998, one half of all the vacancies were suitable for workers with the lower apprentice education, i.e. those with practical skills and relatively little general education. However, the results should be interpreted with caution given the large discrepancy between the unemployed and vacancies. Educational and occupational aspects of the mismatch between the unemployed and the reported vacancies are discussed in detail in section 5.2 of this report.

The cumulative inflow of vacancies in 1996 was more than 120 000, in 1997 more than 150 000. Compared to the stocks of vacancies, these figures imply that the average duration of vacancy is in the order of one month. The calculation is likely biased upwards due to the fact that the vacancy register may be "cleaned" at regular intervals and so may lag behind the true time when vacancies are filled.

Structural imbalances between the labour demand and supply from the regional point of view can be illustrated by a simple indicator of the mismatch between the total numbers of vacancies (V) and unemployed (U). The ratio (U - V) / U can be interpreted as the share of unemployed that cannot be placed in regular jobs by the labour offices. Values close to 1 indicate that whatever the absolute number of vacancies, it is negligible compared to the number of unemployed in the given group. The average value of the indicator over the whole period after 1990 in every Slovak district (with three to four exceptions) was above 0.95. The same was true for time series of the indicator in particular districts: with the exception of the very early period (end of 1990), the average value of the indicator was higher than 0.95. These results imply that the Slovak labour market is characterised by a permanent and severe shortage of notified vacancies available to the unemployed.

4. Labour force participation

4.1 Demographic trends

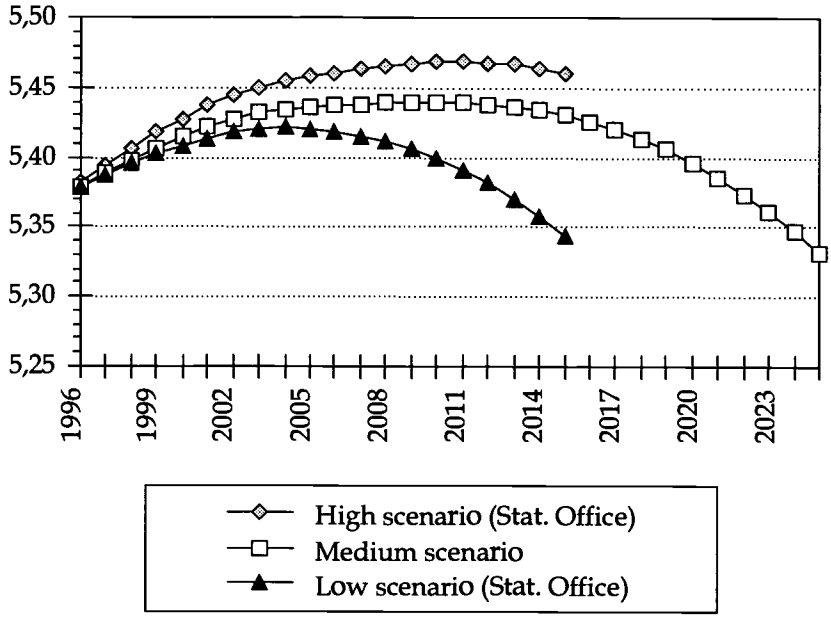
Compared to other transition countries, the demographic situation of Slovakia is relatively good. Mostly due to strong generations in the 1970s, the population of productive age is still growing both in absolute terms and in relation to the total population. The so-called dependency ratio, defined as the ratio of population of post-working age to population of working age, is still slightly declining. It is projected to start growing only after 2005-2010 (this fact has enabled the Slovak authorities to postpone any radical solutions for the pay-as-you-go pension scheme). However, the sharp reduction in birth rates after 1989 is reflected in an alarming new tendency: despite annually increasing absolute numbers of females of child-bearing age, the absolute numbers of live births are persistently decreasing.

Table 4.1: Total population by gender 1989 -1998 and forecast until 2015. (In thousands)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Annual average									
Total	5 297.8	5 283.4	5 306.5	5 324.6	5 347.4	5 363.7	5 373.8	5 383.2	5 390.7
Male	2 590.6	2 578.0	2 587.6	2 594.7	2 605.0	2 612.2	2 616.3	2 620.3	2 623.0
Female	2 707.2	2 705.4	2 718.9	2 730.0	2 742.4	2 751.4	2 757.5	2 762.9	2 767.7
End of year stock									
Total	5 310.7	5 295.9	5 314.2	5 336.5	5 356.2	5 367.8	5 378.9	5 387.7	5 393.4
Male	2 595.9	2 583.2	2 590.2	2 600.0	2 607.5	2 613.7	2 618.4	2 622.0	2 623.7
Female	2 714.8	2 712.6	2 723.9	2 736.4	2 747.0	2 754.1	2 760.5	2 765.6	2 769.7
Forecast	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total	5 398.0	5 406.7	5 414.6	5 421.5	5 427.3	5 431.8	5 434.8	5 436.2	5 437.1
Male	2 626.5	2 630.0	2 633.2	2 635.9	2 638.0	2 639.5	2 640.4	2 640.4	2 640.3
Female	2 771.6	2 776.7	2 781.4	2 785.6	2 789.3	2 792.2	2 794.4	2 795.8	2 796.8
Forecast	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	5 438.0	5 438.8	5 439.3	5 439.2	5 438.6	5 437.5	5 435.8	5 433.6	5 430.4
Male	2 640.2	2 640.1	2 639.9	2 639.5	2 638.9	2 638.1	2 636.9	2 635.5	2 633.5
Female	2 797.8	2 798.7	2 799.4	2 799.7	2 799.7	2 799.4	2 798.9	2 798.1	2 796.9

Note: Forecast end of year stocks, corresponding to the "medium scenario" plotted at Figure 4.1, base year of the forecast was 1995
Source: Statistical Office of the Slovak Republic, Institute for Forecasting of the Slovak Academy of Sciences

Figure 4.1: Population projections, Slovak Republic. (In millions)



The population forecasts presented in this study come from the Statistical Office of the Slovak Republic (1995) and the Institute for Forecasting of the Slovak Academy of Sciences (Lubyova, 1996). The former forecast is based on the true population figures of 1993 (it was substantially revised in 1995). The latter is based on 1995 population data. Three forecasts of the future development of the Slovak population can be seen in Figure 4.1. The high and low scenario of the Statistical Office of the Slovak Republic uses as its starting point actual mortality rates in 1994 and 1995, respectively. The medium scenario uses as a base the age-specific mortality rates for 1995, which are further slightly reduced. The medium scenario further assumes a continued decline in birth rates until 2005 and very slight growth afterwards.[1] The development of basic demographic indicators in Slovakia since the 1950s and a more detailed population forecast by gender and basic age groups can be found in Annex 1, Tables A9 and A 10 respectively.

1 Implied values of total fertility per one woman in fertile age in 2015 according to the low, medium and high scenario are 1.33, 1.42 and 1.60, respectively.

Table 4.2: Total population by gender and age groups 1989-1998. (In thousands, end of year stocks)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Pre-work. age									
Total	1 331	1 301	1 279	1 256	1 226	1 200	1 165	1 134	1 102
Male (0-14)	680	665	653	642	634	627	596	580	564
Female (0-14)	651	637	626	614	606	600	569	554	538
Working age									
Total	3 059	3 076	3 112	3 152	3 195	3 232	3 266	3 300	3 332
Male (15-59)	1 591	1 595	1 612	1 632	1 651	1 668	1 694	1 714	1 600
Female (15-54)	1 468	1 481	1 500	1 520	1 537	1 552	1 572	1 586	1 732
Post-work. age									
Total	922	918	924	929	936	943	948	954	959
Male 60+	326	323	326	326	323	323	328	328	328
Female 55+	596	595	598	603	604	608	620	626	631
Other age groups:									
(15-64)									
Total	3 429	3 443	3 475	3 512	3 552	3 585	3 617	3 648	3 681
Male	1 697	1 701	1 717	1 736	1 757	1 775	1 792	1 809	1 826
Female	1 732	1 742	1 758	1 776	1 795	1 810	1 825	1 840	1 855
(15-24)									
Total	813	829	850	874	896	911	922	928	928
Male	431	423	414	406	456	464	469	473	473
Female	382	406	436	468	440	447	453	455	455
(25-49)									
Total	1 883	1 884	1 897	1 910	1 926	1 945	1 961	1 997	1 987
Male	813	828	843	857	966	977	986	993	1 000
Female	1 070	1 057	1 054	1 053	959	968	975	1 004	988
(55-64)									
Total	733	730	728	727	774	729	733	747	765
Male	330	341	352	361	353	334	336	343	353
Female	404	389	376	366	421	395	397	403	412

Source: Statistical Office of Slovak Republic

Migration

The scope of international migration in Slovakia is negligible. As is documented in Table 4.3, the share of foreign residents in the total population in 1998 was about 0.5%, while the share of legal foreign workers in the total labour force and employment were 0.23 and 0.27%, respectively. Among foreigners working legally in Slovakia, more than one third come from the Czech Republic, followed by workers from Poland (12%) and Ukraine (11%). Among illegal workers the most numerous group probably comes from Ukraine.

Slovaks working abroad are concentrated mainly in the Czech Republic (about 70 000 workers in 1998, according to administrative data from the labour offices). The Slovak Labour Force Survey for the last quarter of 1998 indicates that about 47 000 workers (2.2% of Slovak employment) worked abroad, of whom about 34 000 (1.5% of Slovak employment) worked in the Czech Republic.

Table 4.3: International migration: foreign population and foreign workers in Slovakia. (In persons, end of year stocks)

	1994	1995	1996	1997	1998
Foreign population					
Total	16 868	21 873	24 143	26 280	27 442
% share of					
population	0.31	0.41	0.45	0.49	0.51
Foreign workers					
Total	3 942	3 876	4 793	5 540	5 841
% share of (c)					
labour force	0.16	0.15	0.19	0.22	0.23
employment	0.18	0.17	0.21	0.25	0.27
% share of total foreign workers in Slovakia by country of origin					
Selected Central and Eastern European countries:					
Czech Republic	30	31	31	31	36
Ukraine	14	10	12	12	11
Poland	10	8	10	10	12
Yugoslavia	6	5	4	3	2
Russia	3	5	3	3	2
Selected OECD countries:					
USA	6	5	8	6	5
UK	4	4	5	4	4
Germany	2	3	4	4	4
Austria	1	2	2	2	2

Notes: *(a) Valid residence permits (medium-term, long-term and permanent) at the end of the indicated year, for 1998 as of 31 June*
(b) Valid work permits and registered Czech workers
(c) Labour force and employment data used from LFS of the last quarter
Source: *National Labour Office of the Slovak Republic*

A comparison of numbers of Slovak workers abroad and foreign workers in Slovakia in both absolute and relative terms is contained in Table 4.4 for four major countries of interest: the Czech Republic, Hungary, Germany and Austria. Workers from these four countries account for approximately 40% of all foreign workers in Slovakia. The Czech Republic and Germany seem to be the countries with the highest numbers of legally employed Slovak workers. Data in Table 4.4 refer only to seasonal Slovak workers in Germany (working for up to 3 months). These amounted to some 6 365 persons in 1997, which represented about 3.1% of total seasonal workers in Germany.

The Slovak National Labour Office registers data on the total employment of Slovaks in Germany based on the bilateral agreements. At the end of 1997 there were more than 5 000 Slovaks employed in Germany for a period shorter than one year. About 400 of these jobs were mediated by labour offices and the rest were arranged by the private initiative of employees. The vast majority of the contracts are short-term. At the end of 1997 only about 500 Slovaks had an employment contract in Germany for a period exceeding one year. It is interesting to note that most of the Slovaks working legally in Germany come from Central and Eastern Slovakia, while the shares of people from Bratislava are rather low. This may be because of lower unemployment rates in Bratislava (about 5% as compared to the national average of about 16%) and also because of the proximity of the Vienna and Bratislava areas. The situation between Slovakia and Hungary regarding the reciprocal employment of workers is more or less balanced in relative terms. The shares of foreign workers are rather small (about 2% of total foreign workers).

Table 4.4: Comparison of Slovak workers abroad and foreign workers in Slovakia for selected countries

Slovak workers in:					Foreign workers in Slovakia from:				
	1993	1994	1995	1996		1993	1994	1995	1996
Czech Rep.	23 336	39 200	59 323	72 200	Czech Rep.	1.439	1.198	1.190	1.499
(a)	45.3	54.4	53.0	50.4	(b)	..	30.4	30.7	31.3
Hungary	..	3 402	3 544	3 749	Hungary	..	49	47	78
(a)	..	2.5	2.5	2.6	(b)	..	1.2	1.2	1.6
Germany	7 781	3 939	5 443	6 255	Germany	96	129	170	195
(a)	4.3	2.5	3.2	3.2	(b)	..	3.3	4.4	4.1
Austria	518	1 761	2 786	3 699	Austria	48	85	103	122
(a)	0.2	0.7	1.4	1.4	(b)	..	2.2	2.7	2.5

Notes: *(a) % of total foreign workers in the Czech Republic and Austria.*
% of total seasonal foreign workers in Germany.
% of total registered foreigners in Hungary
(b) % of total foreign workers in Slovakia

Source: *National Labour Office of the Slovak Republic. Slovak workers abroad from Annual Trends in Migration, OECD, 1998*

4.2 *Labour force participation of the population*

Regarding the development of participation rates, the transitional period can be divided into two sub-periods. Until 1994 there was a relatively sharp decline in the participation rate, disproportionately burdening females. Administrative employment data for females show a decline of almost 22% during the period 1989-94. According to OECD (1996), the participation rate in Slovakia has traditionally been lower than in the Czech Republic (although the difference was small - about five percentage points). This tendency has remained stable also during the transition. The participation rate in Slovakia has declined more than in the Czech Republic and Poland, but less than in Hungary. Since 1994 the participation rate in Slovakia has been more or less stable both for males and for females.

The participation rate based on LFS data and the population aged 15 to 64 in Slovakia is summarised in Table 4.5. In 1997 the participation rate was 67.6%, almost identical to the EU average value for that year (67.8%). Comparable Slovak values for males (75%) and for females (61%) indicate that males are still relatively less active and females are relatively more active than in the EU (78 and 58%, respectively). In 1998 the participation rate of the population aged 15 to 64 in Slovakia declined further to 66.8%. The highest participation rates are achieved in the age group of 25 to 49 years: 94% for males and 81% for females. The very low participation rate of 1.4% in the oldest age group (over 64 years) reflects the low statutory retirement age in Slovakia. Only 2% of males and 1% of females older than 64 years are economically active.

Table 4.5: Labour force participation rates by age groups and gender (Labour force/working age population, end of year)

	1994			1995			1996			1997			1998		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
15-64	70.8	76.7	65.1	70.9	76.7	65.2	70.7	76.3	65.1	67.6	74.5	60.7	66.8	73.2	60.4
15 - 24	49.4	52.1	46.6	48.7	51.2	46.1	48.7	51.3	46.0	44.7	48.2	41.1	43.2	45.3	40.9
25 - 49	91.5	94.9	88.1	91.7	94.9	88.5	91.1	94.5	87.6	87.1	93.6	80.6	87.2	92.6	81.7
50-64	40.1	54.6	27.9	42.9	58.6	29.7	43.7	57.6	31.9	41.6	55.6	29.8	42.4	55.6	31.0
65+	1.7	3.1	0.8	1.8	2.9	1.0	1.4	2.9	0.5	1.4	2.0	1.0	1.5	2.3	1.0
15-pen.	77.6	80.7	74.3	77.5	80.4	74.3	77.0	79.9	73.9	73.7	78.1	68.9	72.5	76.4	68.3
Total	47.1	51.9	42.6	47.5	52.3	43.0	47.7	52.5	43.1	45.9	51.6	40.5	45.7	51.1	40.6

Note: "pen." denotes pension age (59M/54F)
Source: Own calculations based on Labour Force Survey and population data by the Statistical Office of the Slovak Republic

Age profiles of the labour force participation rate based on LFS data show that the female participation rate is closest to that of males during the age interval of 40 to 44 years. The low retirement age for females (53 to 57 years) is manifested in the dramatic reduction of their participation rate after 55 years of age, when it drops to about 10%, as compared to about 70% for males.

4.3 Regional and ethnical characteristics

From the regional point of view, the economically active population is distributed rather evenly among the eight Slovak regions (Table A11 in Annex 1, map of regions in Annex 2). Certain disparities can be seen in the relative concentration of the economically active population. For example, the region of Bratislava has a larger share in the economically active population in the Slovak Republic than in the total population and has the highest rate of economic activity. The opposite tendency is observed in the eastern regions of Kosice and Presov.

Hungarian minority

There are two large minorities in Slovakia: the Hungarian minority and the Romany ethnic group. Table 4.6 illustrates the nationality structure of the Slovak population. Hungarians, who amount to almost 570 000 persons (10.6% of the total population), represent the largest minority in Slovakia. As can be seen from figure 4.2, Hungarians are heavily concentrated in the south-east part of the country, adjacent to the Hungarian and Ukrainian borders. The highest concentration of Hungarians (more than a 60% share in the district population) can be found in the southern districts of Dunajska Streda (DS), Komarno (KN), Galanta (GA), Sala (SA) and Nove Zamky (NZ), as well as in the more eastern district of Rimavska Sobota (RS). These are predominantly agricultural districts, which in the past served as the main agricultural area for the whole Czecho-Slovak Federation. During the transition, many of these districts were hit by relatively high unemployment rates, mostly due to the crisis of the agricultural sector.

Romany minority

The second largest minority in Slovakia is the Romany minority. According to the latest Population Census (1991) the number of Romanies was about 80 000. This number is believed to be seriously under-reported, mostly because of the self-reporting method of the census. Authorities estimate that about 300 000 Romanies are settled in Slovakia and an additional 50 000 lead a nomadic life. As can be seen from Figure 4.3, the Romany minority is more spread across the country than the Hungarian minority, with district population shares ranging up to a maximum of 7.8%. The highest concentration can be found in the eastern part of the country - in the regions of Presov and Kosice and partly also in that of Banska Bystrica.

Table 4.6: Population by ethnical groups 1990-1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Index
Population										98/91
Total (ths.)	5 310.7	5 295.9	5 314.2	5 336.5	5 356.2	5 367.8	5 378.9	5 387.7	5 393.4	102.3
Structure (%)										
Slovak	86.7	85.6	86.0	86.4	86.7	86.9	85.7	85.7	85.6	102.2
Hungarian	10.9	10.7	10.7	10.7	10.7	10.7	10.6	10.6	10.5	100.1
Romany (a)	-	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.7	117.9
Czech (b)	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	100.0

Notes: (a) Romanies were not monitored separately in 1990. (b) Including Moravians and Silesians
Source: Statistical Office of the Slovak Republic

The shares of the Slovak population of pre-working, working and post-working age in 1998 were 20.4, 61.8, and 17.8%, respectively (the figures refer to the "true" working age 15-54F/59M). Age structures for other nationalities in Slovakia exhibit wide variation. The most obvious outlier in this sense is the Romany ethnic group with only a 5% share in the post-working age group and almost 40% in the pre-working group. Other nationalities have in common lower shares of pre-working age and higher shares of post-working age than Slovaks.

If we divide the nationalities living in Slovakia into groups according to the difference between their birth and mortality rates, then the birth rate exceeds the mortality rate for Romanies, Czechs and Moravians, Poles, Ukrainians and Ruthenians, Germans, Romanians and Vietnamese. The mortality rate prevails over the birth rate for Hungarians, Russians, Bulgarians and Austrians. However, the results presented should be interpreted with caution, as with the exception of Hungarians and Romanies, the number of people in other groups is very small. Table 4.6 provides an index of population numbers in1991/98 for the main nationality groups. The value of 117.9 for Romanies is by far the largest, followed by 102.2 for Slovaks and 100.1 for Hungarians.

Figure 4.2: Share of Hungarian population in Slovak districts. (Per cent of the total district population)

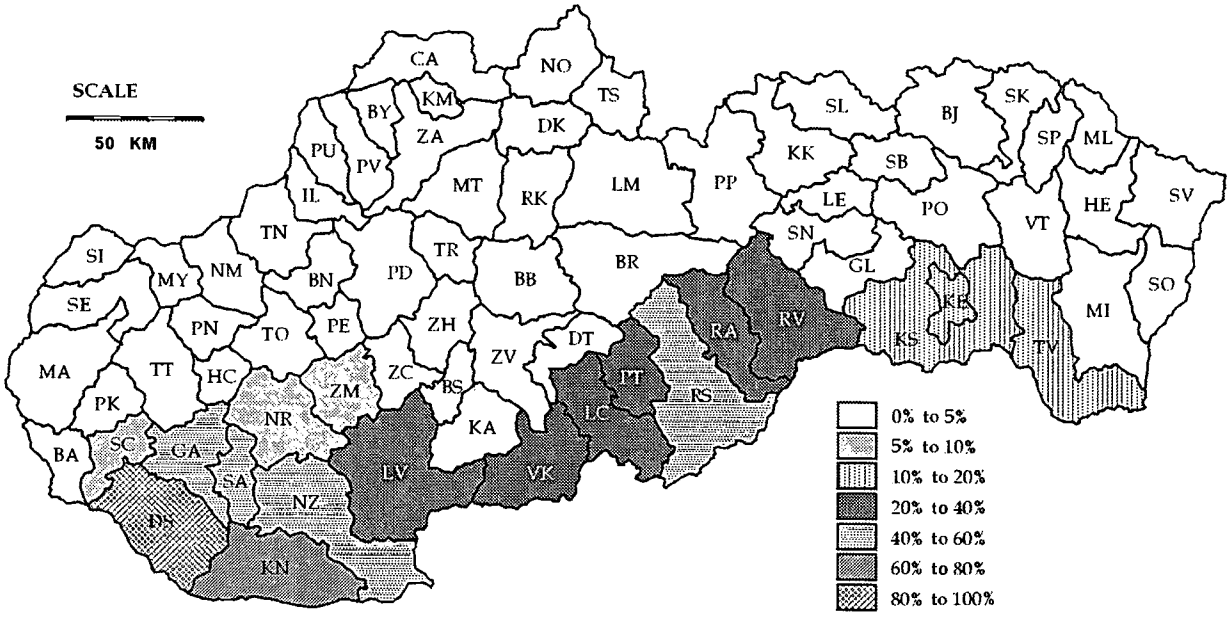
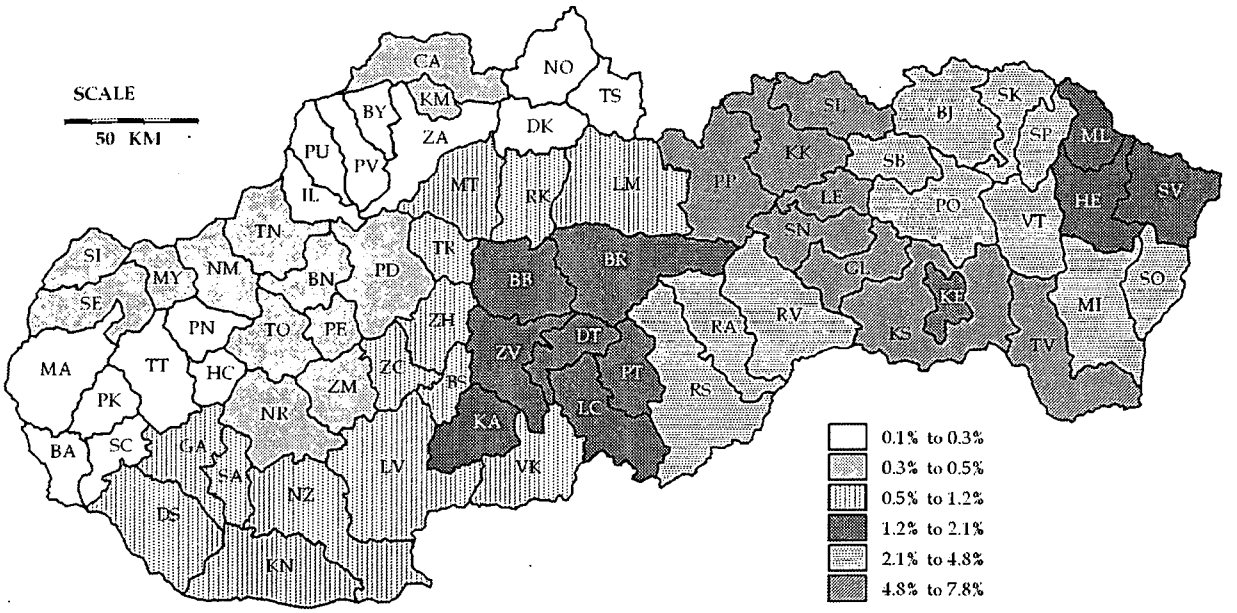


Figure 4.3: Share of Romany population in Slovak districts. (Per cent of the total district population)



Note: Legend to figures 4.2 and 4.1 (districts and regions) can be found in Annex 2.[2]

It is difficult to assess the position of minorities on the Slovak labour market because of the lack of appropriate statistics. However, some basic facts are presented in chapters 5 and 6 of this study. The main difficulty arises from the fact that among the three main indicators - employment, population and unemployment - only the latter two are monitored by nationality. Further limitations stem from the biased nationality structure of the population data (the self-reporting based census) and the absence of aggregate statistics on unemployment by nationality. Administrative employment data based on enterprise surveys does not contain information about the nationality of workers. The employment structure by nationality is monitored in LFS, but it is not available at the aggregate level, either.

4.4 *Supply of hours*

Working hours are relatively rigidly determined in Slovak labour law. The Labour Code stipulates a maximum of 43 working hours per week. Regular weekly (full-time) work ranges from 40 to 43 hours (typically 40, 41.25, or 42.5 hours), depending on the type of work or economic sector. Since 1991 it has been possible to set different full-time weekly working hours (not exceeding 43 hours) in collective agreements. However, this does not apply to the budgetary sphere. Part-time working hours (the so-called shorter working hours) can be stipulated in labour contracts at the initiative of employer or employee. In the light of the high unemployment rate, overtime is in general discouraged by stipulating maximum overtime hours on a weekly and annual basis (8 hours per week or 150 hours per year). Exemptions may be granted in certain sectors or for certain types of work (such as production in a 3-shift system, transportation, etc.). However, employees cannot be forced to work longer hours than the mentioned maxima. In practice, excess overtime may be compensated by paid leave.

2 The population shares in figures 4.1 and 4.2 serve for illustration purposes. They are not absolutely accurate, due to the lack of regional population statistics (population data are based on the old structure of districts, which are in some cases difficult to aggregate into the new districts).

Survey data from the Information System on the Cost of Labour (for details see Annex 3) indicate on average 147 hours worked per month in 1997 (Tables A3 – A5 in Annex 1). This would imply from 32 to 36 hours worked on a weekly basis. The highest supply of hours was found in the health and social services sector, agriculture, and construction, the lowest in financial services and education.

From the occupational point of view, the average number of supplied hours seems to decline with the level of skills: the higher the skills, the lower the average hours worked (Table A4 in Annex 1). Regional differences in hours worked are not very pronounced (Table A5 in Annex 1). The region of Trnava exhibits the highest supply (on average 160 hours per month).

LFS data from the last quarter of 1998 show that about 80% of those employed (including the self-employed) worked between 40 and 43 hours per week. About 15% worked more than 43 hours and about 5% less than 40 hours.

Part-time work

According to LFS data, the extent of part-time work is very modest. About 2% of the employed worked part-time in the last quarter of 1998. The share was higher for females (3%) than for males (0.8%). These shares are strikingly low in comparison to the EU average values for 1997 (17% total, 6% for males and 32% for females). The large disparities imply that the Slovak labour market is rather rigid in terms of work load, with most economically active people being either employed full-time or unemployed.

According to LFS data, only 0.5% of the employed were under-employed in the last quarter of 1998, in the sense that they worked part-time because they could not find full-time work, or because the employer was not able to provide full-time work. About two thirds of part-timers worked less than 30 hours per week. About one half of part-time workers worked between 20 and 24 hours per week. Gender differences regarding the supply of hours do not seem to be very important.

Table 4.7: Part-time work and "two jobs"

% of employed	Working part-time	With additional job(s)	Distribution of part-time workers by average hours worked per week			
	Total	Total	Hours	Total	Male	Female
Total	1.9	1.0	0	1.1	0.0	1.4
Male	0.8	1.2	1-9	1.7	0.0	2.3
Female	3.2	0.8	10-19	6.3	14.2	3.9
	Under-employed	Income supplement	20-24	16.2	48.0	45.7
Total	0.5	0.6	25-29	10.6	11.9	10.3
Male	0.1	0.8	30-34	28.6	25.6	29.5
Female	0.9	0.5	35+	5.4	0.4	6.9

Note: *Last quarter of 1998*
Source: *Labour Force Survey, Statistical Office of the Slovak Republic*

Second job

The phenomenon of "second jobs" is believed to be widespread in the transition economies. However, the recent Slovak data indicate only a modest share of people with an additional job. Administrative data imply that about 3% of the employed have an additional job. LFS data indicate an even lower share: 1% on average, 1.2 and 0.8% of employed males and females, respectively. Only 0.8% of employed males and 0.5% of employed females stated income supplement as the motivation for having an additional job. The relatively low survey data come as a surprise, given the low real living standards. A possible explanation is that most of the additional activities are not registered.

5. Unemployment

5.1 *Unemployment data*

At the beginning of transition, the initial steep increase in unemployment was welcomed as a sign of restructuring in the economy. However, after eight years of transition, the Slovak labour market remains trapped with a double-digit and increasing unemployment rate. Unemployment in Slovakia is monitored by the National Labour Office (registered unemployment) and by the Statistical Office. The latter has performed regular quarterly Labour Force Surveys since the second quarter of 1993, which allows the provision of internationally comparable unemployment statistics (ILO-definition of unemployment). Table 5.1 provides basic information about the development of unemployment by gender and age group according to the two sources mentioned. A more detailed breakdown can be found in Table A 12 in Annex 1. The unemployment rates of these groups are further described in section 5.3 of this chapter.

5.2 *General trends in total unemployment*

In 1991 the unemployment rate in Slovakia increased from almost zero to 12%. Since then it has fluctuated at around double digit levels, reaching about 16% (428 000 people) at the end of 1998. A new concept of "available registered job seekers" was introduced by the Ministry of Labour as a restrictive definition of registered unemployment, capturing only those registered unemployed who are immediately available for work (excluding those in retraining, caring for children, or receiving sickness allowances). The corrected unemployment rate is approximately 1% lower than the total registered unemployment rate.

Table 5.1: Unemployment according to ILO definition (LFS) and unemployment register by gender and age groups. (In thousands, registered end of year, LFS last quarter)

ILO definition		1994	1995	1996	1997	1998
Total		346.4	307.8	270.7	287.9	294.7
Male		182.8	155.7	131.0	148.9	149.4
Female		163.6	152.1	139.7	139.0	145.3
By age groups						
Total	(15 – 24)	117.3	99.3	87.3	97.5	106.5
Total	(25 – 49)	203.4	185.4	164.0	169.7	165.1
Total	(50 +)	25.8	23.0	19.4	20.8	23.3

Registered unemployment	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	39.6	302.0	260.3	368.1	371.5	333.3	329.7	347.8	428.2
Male	19.8	144.9	129.9	193.1	190.1	161.7	156.5	170.9	200.6
Female	19.8	157.1	130.4	175.0	181.4	171.6	173.2	176.9	227.6
By age groups									0.0
Total (15 – 24)	93.8	88.2	121.1	116.5	101.4	102.9	111.1	137.8	
Total (25 – 49)	191.1	154.6	222.1	227.2	174.2	166.1	205.6	250.4	
Total (50 +)	17.1	17.5	24.9	27.8	57.7	60.7	31.1	40.0	

Note: Comparable LFS data available since 1994.
Source: National Labour Office of the Slovak Republic, Statistical Office of the Slovak Republic

Labour market dynamics, as captured by flows into and out of registered unemployment, are in general weak. Using averages of monthly data within separate calendar years, one can show that total unemployment turnover (the sum of inflow and outflow) represents less than 20% of the unemployment stock (Table 5.2). Weak labour market dynamics are also reflected in the magnitude of monthly unemployment flows, which have rarely exceeded 10% of the unemployment stock. In 1990-91 inflows prevailed substantially over outflows, thus allowing a high stock of unemployment to build up. Later the inflows and outflows became roughly balanced, thus conserving the high unemployment stock. In 1997 and 1998 inflows again prevailed over outflows.

Table 5.2: Unemployment dynamics. (Registered unemployment)

In %	1990	1991	1992	1993	1994	1995	1996	1997	1998
Inflow / Stock	66.2	18.3	8.8	10.7	7.4	8.5	9.8	9.9	9.4
Outflow / Stock	28.5	5.2	10.0	7.9	8.2	9.4	9.9	9.4	7.7
Outflow / Inflow	43.1	28.4	113.8	73.9	110.0	110.7	100.9	95.5	81.4
(Inf.+Outf.) / Stock	94.7	23.5	18.9	18.5	15.6	17.9	19.7	19.3	17.1

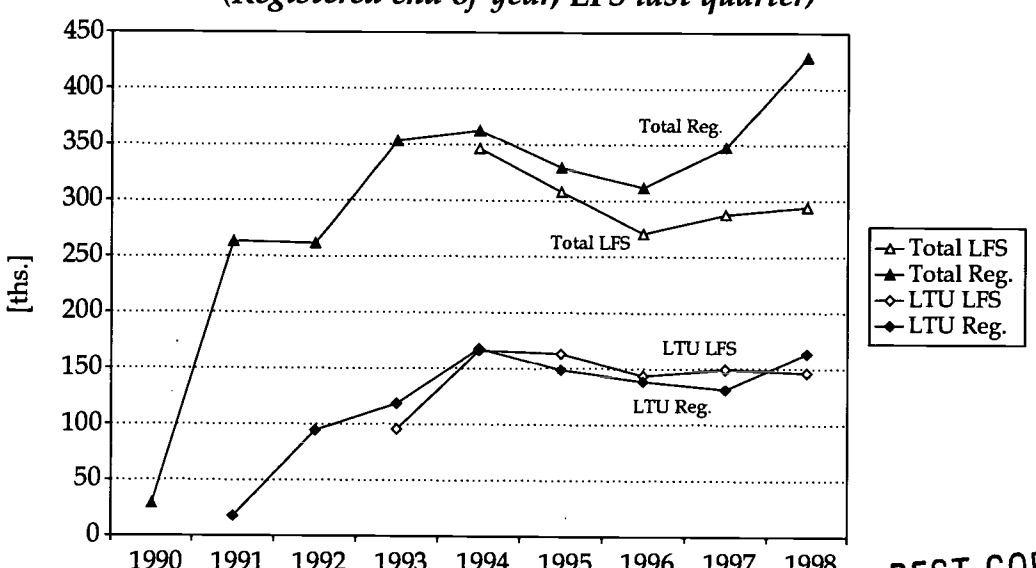
Note: Data refer to annual averages computed from monthly data
(flows are 1/12 of annual flows, stocks are averages of end of month stocks in the indicated year)
Source: National Labour Office of the Slovak Republic

Registered unemployment in Slovakia is higher than LFS unemployment, implying possible disincentive effects of unemployment insurance and social benefits. The discrepancy between the LFS-based and registered unemployment rates at the end of 1998 was close to 5 percentage points in favour of the latter (11.8 versus 16.4%). In terms of long-term unemployment, the difference between registered unemployment and LFS unemployment is much less pronounced. Figure 5.1 demonstrates that the large discrepancy between the registered and LFS unemployment is mainly due to the group of short-term and medium-term registered unemployed.

Duration

Soon after the beginning of transition, long-term unemployment started to increase, until its share in the total unemployment according to LFS data reached approximately 50%. This share is relatively high. However, it was only slightly higher than the EU average of 1997, which was 49% in total, 48 and 51 for males and females, respectively. Comparable Slovak figures were 52% in total, 50 and 54% for males and females, respectively. The share of registered long-term unemployed at the end of 1998 was 38%. Table 5.3 captures the development of unemployment by duration groups. Absolute numbers by duration groups and gender can be found in Annex 1, Table A13.

Figure 5.1: Unemployment and long-term unemployment (LTU) according to unemployment register (Reg.) and Labour Force Survey (LFS). (Registered end of year, LFS last quarter)



Source: National Labour Office of the Slovak Republic, Statistical Office of the Slovak Republic

Table 5.3: Unemployment level by duration. (Registered end of year, LFS last quarter)

ILO definition (LFS)	1994	1995	1996	1997	1998
Total	346.4	307.8	270.7	283.9	294.7
% of total					
< 6 months	32.4	30.3	32.3	32.8	32.1
< 12 months	49.9	44.9	46.9	47.4	48.8
12 + months	48.0	53.0	53.1	52.6	49.7

Registered unemployment	1991	1992	1993	1994	1995	1996	1997	1998
Total	302.0	260.2	368.1	371.5	333.3	329.7	347.7	428.2
% of total								
< 6 months	60.3	46.0	45.8	38.1	40.7	42.0	44.3	42.3
< 12 months	93.9	63.7	67.8	54.8	55.4	58.0	62.1	61.8
12 + months	6.1	36.3	32.2	45.2	44.6	42.0	37.9	38.2

Source: Statistical Office of the Slovak Republic, National Labour Office of the Slovak Republic

The educational structure of the long-term unemployed reveals that the most vulnerable groups are those with the lowest skills and education. According to LFS, at the end of 1998 the group with basic or no education represented 37.5% of long-term unemployment, while their share in total unemployment was 27.4%. The share of people with less than complete secondary education in long-term unemployment was 75% (Table 5.4).

Table 5.4: Structure of long-term unemployment by education. (In%)

No education	Basic	Apprent. (lower)	Vocational (lower)	Apprent. (compl.)	Vocational (complete)	Grammar	University
2	31	38	5	2	14	6	2

Note: For apprentices and vocational education "lower" denotes the schools without general leaving examination, "compl." denotes complete secondary education – with general leaving examination.
Source: Labour Force Survey, 4Q 1998, Statistical Office of the Slovak Republic

Mobility

In addition to what was said about regional disparities on the Slovak labour market in section 3.5, we here provide an indicator of the mobility of the labour force. As illustrated in Table 5.5, the extent of internal mobility has declined by almost 25% compared to the 1980s. However, the structure of internal migration with respect to the type of migration remains roughly constant. The share of

migrants declines with the distance of migration: while more than 50% of migration is realised within districts, about 25% concerns movements among districts within the same region and only about 20% involves migration between regions.

Table 5.5: Frictional unemployment. Regional mobility - internal migration among districts and regions

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of migrants	115.6	102.2	100.8	93.1	92.6	85.0	82.6	68. 3	80.2	82.5	84.8
of which % shares:											
Within districts	56.5	57	59.4	60.2	61.1	59.6	58.7	55.8	50.0	43.5	44.0
Within regions	24.0	23.3	22.5	21.5	21.5	22.2	21.9	23.5	50.0	33.4	33.8
Among regions	19.5	19.7	18.1	18.3	17.4	18.2	19.4	20.7	-	23.1	23.2

Note: *Migration defined as the change of permanent address. "-"data for regions for 1996 are not available (administrative-geographical reform was enacted in 1996).*
Source: *Statistical Office of the Slovak Republic*

Variation between the unemployment rates of different districts has been increasing over time (see section 5.5). Until 1998, information about vacancies was exchanged mainly by neighbouring districts. In order to facilitate the exchange of information about available vacancies between districts, the National Labour Office of the Slovak Republic has established a national computerised vacancy register. Lists of vacancies are regularly published in selected media.

Mismatch between the unemployed and vacancies

The mismatch between the unemployed and vacancies by educational group, as captured by the U/V ratio, is described in the first part of Table 5.6. It is obvious that people with basic or no education are in the worst situation, whilst those with university education have the best position. There are interesting differences within the secondary education group, where the type of education matters as well as the level. Lower secondary education applies to vocational schools and apprentice training centres. It is in general shorter and more practically oriented. Complete secondary education applies to vocational schools, apprentice training centres and grammar schools. It is more complex, including more abstract and general knowledge and it is completed by a general leaving examination (the so-called maturity examination). It is interesting to note that in the group of workers who have attended the apprentice training centres, those with lower education are in a better labour market position (as measured by the U/V ratio) than those with complete secondary education. The distinction is not so clear for workers with vocational education. In general, the lower apprentice education seems to provide the highest chance of obtaining a suitable job within the whole secondary education group, as measured by the U/V ratio. Grammar education does not seem to provide any better position than vocational or complete apprentice education. Grammar schools are intended to serve mainly as a preparation for university study. However, when interpreting the results about structural mismatches based on the U/V ratio, one has to bear in mind that the total volume of vacancies is negligible compared to the number of unemployed.

The structural mismatch between available vacancies and the unemployed from the occupational point of view (ISCO-88 classification) is characterised in the second part of Table 5.6. The results are not very informative, due to the high aggregation of vacancy data. However, the basic tendency

seems to be clear: the higher the degree of skills/qualification, the better the labour market position. It is obvious that those in the most critical situation are in occupational group 9, i.e. unskilled workers. A special group is formed by occupational group zero - people without prior work experience (mostly school-leavers and people leaving home). In this category vacancies are not reported; these unemployed people are therefore not included in the computation and the results are in general biased downwards.

Table 5.6: Structural unemployment by education groups. (Registered unemployment and vacancies, end of year stock)

Educational mismatch							
U/V	1992	1993	1994	1995	1996	1997	1998
TOTAL	16	50	28	22	23	18	39
Less than basic	110	152	73	77	162	28	80
Basic	50	146	137	120	95	51	131
Apprentice lower	6	20	10	11	12	11	23
Vocational lower	39	87	73	48	23	35	29
Apprentice compl.	16	75	29	27	19	26	45
Vocational compl.	27	42	24	19	29	17	61
Grammar	11	56	36	10	27	19	28
Higher sec	8	15	9	0	2	2	12
University	6	11	7	5	6	4	10
Scientific	35	8	3	0	0	0	0

Occupational mismatch			
U/V by ISCO categories	1996	1997	1998
1 to 4 (see note)	13	8	15
5 Maintenance staff in trade and services	11	9	17
6 to 8 (see note)	8	7	16
9 Unskilled workers	79	45	98

Note: Mismatch indicator is the ratio of registered unemployed to registered vacancies. Apprentice and vocational education: "lower" education is shorter and more practically oriented than the "complete" education. The latter form includes general leaving examination. ISCO groups: 1 to 4: 1Legislators, leading professionals,2 Scientists and specialists,3 Technicians, health-care, pedagogic staff 4 Lower administrators. 6 to 9:6 Skilled workers in agriculture and forestry, 7 Skilled workers in other branches, 8 Technical maintenance of machinery

Source: National Labour Office of the Slovak Republic

5.3 Unemployment by age group and gender

According to the LFS, the unemployment rate for the age group 15-64 was 12% in the last quarter of 1998 (Table 5.7). This seems to be slightly higher than the EU average of 10.6% in 1997. The same thing can be said of the rates for males and females separately, where the 1997 Slovak figures can be compared to EU averages of 9.3 and 12.4%, respectively.

The incidence of unemployment in Slovakia is relatively high for females and for young people. Unemployment rates for females have been persistently higher than for males. At the end of 1998, the difference was about two percentage points (11.1 as compared to 12.9%). Young people under 25 years of age appear to be at a serious handicap on the labour market, as their unemployment rate was about 27% at the end of 1998 and 24% as of 1997. In this category the comparable EU average value for 1997 was 21%.

Unemployment by age

For the youngest and the oldest group in labour force, the female unemployment rate is lower than that of males. In the young group (15 to 24 years) this may be partly the effect of military service. Employers are reluctant to accept young men before military service. Under the current budget deficit, the waiting period for starting military service is tending to increase. Authorities are considering shortening the obligatory military service. Another explanation of the lower unemployment rate of young females is their relatively large withdrawal from the labour force. As will be demonstrated in chapter 6 of this study (Table 6.6), females aged 21 to 25 have a much larger exit to out-of labour-force status than their male counterparts.

Table 5.7: Unemployment rates by age groups and gender. (Unemployed/Labour force, end of year)

	1994			1995			1996			1997			1998		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
15-64	13.8	13.6	14.0	12.1	11.4	12.9	10.6	9.5	11.7	11.7	11.0	12.5	12.0	11.1	12.9
15 - 24	26.5	28.3	24.4	22.4	24.3	20.1	19.4	19.1	19.9	23.5	24.3	22.5	26.6	27.1	25.9
25 - 49	11.5	11.0	12.2	10.4	9.0	11.9	9.2	7.9	10.6	9.8	8.8	10.8	9.5	8.4	10.9
50-64	8.2	7.6	9.1	7.1	7.0	7.3	5.7	5.5	6.2	6.6	5.8	7.9	6.8	6.8	7.0
65+	4.2	2.9	7.4	7.8	9.1	5.4	11.8	12.1	10.5	3.5	6.5	0.0	12.4	13.2	11.1
15-pen.	13.8	13.6	14.0	12.1	11.4	12.9	10.6	9.5	11.9	11.7	11.0	12.6	12.0	11.2	13.0
Total	13.7	13.5	14.0	12.1	11.4	12.8	10.6	9.5	11.7	11.6	11.0	12.4	11.9	11.1	12.9

Note: "pen." denotes pension age (59M/54F)
Source: Own calculations based on Labour Force Survey and population data by the Statistical Office of the Slovak Republic

5.4 Unemployment by educational attainment

The composition of the unemployment pool by educational attainment (Annex 1, Table A 14) shows a dominance of unemployed with lower apprentice education (37%), followed by those with basic education (22%) and those with complete vocational education (19%). It was shown in section 5.2 that among the three groups, the lower apprentice education provides the highest chance of obtaining a job, as captured by the U/V ratio. However, the share of this group in total unemployment is by far the largest. In practice it may also be the case that workers with lower apprentice education have to compete for their vacancies with other secondary forms of education (notably the complete apprentice education, or vocational education, which provide the required practical skills). Education and skills seem to be the sore points of Slovak unemployment. About two thirds of the unemployed have less than complete secondary education, while those with a university degree represent less than 5% of the unemployment pool. The shares of the two groups in employment are less than 0.5 and more than 10%, respectively. The fact that low education is really a handicap on the labour market is revealed still more by the educational structure of long-term unemployment. The share of people with less than complete secondary education in long-term unemployment is close to 80%.

Table 5.8: Unemployment rates by educational attainment and gender. (Unemployed/Labour force, end of year)

	1994			1995			1996			1997			1998		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
Total	13.7	13.5	14.0	12.1	11.4	12.8	10.6	9.5	11.7	11.6	11.0	12.4	11.9	11.1	12.9
Basic	27.4	32.1	23.6	26.9	29.8	24.7	23.7	26.0	22.0	27.6	33.4	22.0	25.8	30.2	22.3
App. low.	14.4	13.7	15.7	13.1	12.2	14.7	10.8	9.8	12.6	11.0	10.2	12.5	12.7	11.8	14.7
Voc. lower	13.6	12.7	15.0	12.7	10.8	15.7	10.0	8.6	12.6	11.3	8.4	16.8	10.8	8.7	14.6
App. com.	15.3	15.1	15.6	9.5	7.2	13.7	8.1	6.8	10.2	10.6	9.5	12.3	9.6	9.8	9.3
Voc. com.	9.8	8.6	10.7	7.1	6.2	7.8	7.4	6.2	8.3	8.2	6.7	9.5	8.7	7.1	9.8
Grammar	13.1	14.9	12.1	14.3	13.1	15.0	11.8	7.1	14.4	14.6	10.2	17.0	13.8	9.9	16.0
University	3.8	3.4	4.4	2.9	2.2	3.7	3.4	2.8	4.1	3.2	2.9	3.7	4.2	3.6	5.0
None	44.2	47.8	40.0	39.5	34.8	45.0	64.3	50.0	66.7	66.7	50.0	75.0	88.5	87.5	90.0

Note: *"Lower" education is shorter and more practically oriented than the "complete" education. The latter form includes general leaving examination. University includes higher secondary, i.e. further education following after the completion of complete secondary education, but less than university.*

Source: *Own calculations based on Labour Force Survey data by the Statistical Office of the Slovak Republic*

Unemployment rates by educational attainment based on LFS data are provided in Table 5.8. Not surprisingly, the lowest unemployment rates pertain to the group of workers with university education. The rates for those with no education are quite catastrophic (close to 90%). The situation of uneducated people has worsened over time. Among people with secondary education, the highest unemployment rates are observed for graduates of grammar schools, in particular females. Here the lack of practical skills tells when the graduates do not continue their studies at university. Among apprentice and vocational education, those with complete secondary education (completed by the general leaving examination) are better-off than those with the lower form of education.

5.5 Unemployment by region and ethnic groups

The regional segmentation of the Slovak labour market is high: the difference between district unemployment rates in the first quarter of 1999 was over 30 percentage points. The progress of district unemployment rate differentiation is described in Table 5.9. It is demonstrated that the variability of district unemployment rates has been increasing over time, both in absolute and in relative terms. The coefficient of variation of district unemployment rates increased between 1991 and 1998 by almost 70%. A certain part of this increase must be attributed to the geographical-administrative reform of 1996, which increased the number of districts from 38 to 79.

Table 5.9: Development of unemployment rate variability among districts

(%)	1991	1992	1993	1994	1995	1996	1997	1998
Standard deviation	3.2	3.7	4.9	5.1	4.8	5.1	6.0	7.3
Coefficient of variation	25.1	30.9	29.6	31.5	32.9	34.8	42.6	41.6

Note: *Computed on the basis of registered district unemployment rates at the end of the indicated year. Standard deviation is an absolute measure of variability, coefficient of variation is a relative measure of variability (st. deviation/mean). Break in the geographical division of the Slovak Republic occurred between 1996 and 1997 (see the text).*
Source: *Own calculations based on data from the National Labour Office of the Slovak Republic*

The unemployment situation in Slovak regions is described in Table 5.10. The region of Bratislava has the lowest unemployment rate and the lowest variability of district unemployment rates in absolute terms. In relative terms, internal (inter-district) variability is largest in the Bratislava region. An opposite tendency holds for the region of Presov, where the highest unemployment rate is accompanied by a low relative variability among districts.

Table 5.10: Regional variability of unemployment rate in 1997-98

(%)	Unemployment rate			Standard deviation			Coefficient of variation		
Region of:	1997	1998	Rank 98	1997	1998	Rank 98	1997	1998	Rank 98
Bratislava	4.6	5.48	1.	2.2	2.7	1.	45.7	45.9	8.
Trencin	9.1	11.6	2.	3.3	4.4	6.	33.8	34.8	6.
Trnava	11.48	13.3	3.	2.9	3.1	3.	26.4	23.3	4.
Zilina	11.69	14.78	4.	3.1	3.4	4.	24.7	21.8	3.
Nitra	15.04	18.45	5.	2.5	2.8	2.	16.2	14.7	1.
Banska Bystrica	15.87	20.58	6.	6.3	8.2	8.	38.2	38.2	7.
Kosice	18.33	21.78	7.	5.6	6.3	7.	31.1	29.3	5.
Presov	18.86	23.09	8.	3.3	3.7	5.	16.8	15.7	2.

Note: *Map of regions in Annex 2. Computed on the basis of registered regional unemployment rates at the end of the indicated year. Standard deviation is an absolute measure of variability, coefficient of variation is a relative measure of variability (st. deviation/mean).*
Source: *Own calculations based on data from the National Labour Office of the Slovak Republic*

Judging by both absolute and relative variability criteria, the largest segmentation of the labour market in terms of unemployment rates is present in the regions of Banska Bystrica, Trencin and Kosice, while the lowest segmentation can be seen in the region of Nitra.

It is difficult to assess the position of ethnic groups on the Slovak labour market because of the lack of suitable data. However, some basic facts are presented in this part of the report. The main difficulty arises from the fact that among the three main indicators - employment, population and unemployment - only the latter two are monitored by nationality. The fact that the unemployment register contains information on nationality has been criticised on several occasions by representatives of the Romany[3] and Hungarian minorities. Further data limitations are caused by the biased nationality structure of the population data (the self-reporting based Census) and the absence of aggregate statistics on unemployment by nationality. The limited available information is provided in Table 5.11.

Table 5.11: Unemployment by ethnical groups

	1990	1990	1992	1993	1994	1995	1996	1997	1998
Total (ths.)	39 603	301 951	260 274	368 095	371 481	333 291	329 749	347 753	428 209
Share Roma (%)	21.2	15.5	15.5	14.0	13.5	16.6	19.0	19.2	n.a.
Eligibility for unemployment benefits (a)									
	1992	1993	1994	1995					
Total (%)	33.6	33.4	22.9	27.0					
Roma (%)	15.2	10.7	4.7	5.3					

Notes: (a) Within-group share of those with insurance-based unemployment benefits
Source: National Labour Office of the Slovak Republic

According to aggregate indicators, at the end of 1996 there were 62 000 unemployed Romanies registered at the labour offices, which represented 19% of all the registered unemployed. This can be compared to the 1.6% share of Romanies in the Slovak population (according to the official census data), or to the population share of less than 10% (according to the most generous estimates). Furthermore, the share of unemployed receiving unemployment benefits in the group of Romany unemployed is lower than the average share. This is mostly due to the long duration of unemployment spells of Romanies. After exhausting their eligibility period for insurance-based unemployment benefits, they are transferred to the open-ended social security benefits. Of course, the aggregate comparison can be used only as a rough illustration since it does not capture, for example, the age structure of the population.

Individual data on the unemployed are aggregated at the district level, where the nationality information is dropped (with the exception of the Romany ethnic group), and the data collected and published by the National Labour Office do not contain a breakdown by nationality. Therefore, evidence about the unemployment of separate nationalities is mostly anecdotal. For example, a study dedicated to the evaluation of active labour market policies in Slovakia (Lubyova and Van

3 Notably the fact that for the sake of prevention of the self-reporting bias, the ethnicity was determined by the labour office staff. The grounds for separate monitoring of Romanies come mostly from the fact their characteristics and reasons for their low ability to integrate into the society are so specific that they cannot be unambiguously "diluted" and split-up among the other disadvantaged groups, as this would hide one of the substantial causes of the problem. Monitoring can also be useful in the sense that it illustrates the bad labour market position of Romanies, preparing the ground for more targeted actions.

Ours, 1999) indicates that total inflow into unemployment during 1993 in 20 selected Slovak districts consisted of 4% Hungarians, 5% Romanies, and the rest were Slovaks. With respect to the main indicator examined – the exit rate to regular jobs - Hungarians were no different from Slovaks while Romanies had a lower exit rate to jobs than any other group.

However, practically no robust statements can be made on the basis of aggregate data about the Romany unemployed, as these data do not capture whether the situation is mostly due to prejudiced employers, voluntarily unemployed Romanies, or both. Therefore, only anecdotal evidence and studies based on special surveys can clarify the situation. So far, studies have led to the conclusion that Romanies have the greatest difficulties on the labour market, though none of the studies have been able to measure robustly the discrimination and incentive effects. Nevertheless, it is clear that the key to solving the poor labour market position of Romanies is education. The educational level of the group is extremely low, as is documented in more detail in Annex 6.

6. Vocational education and training systems

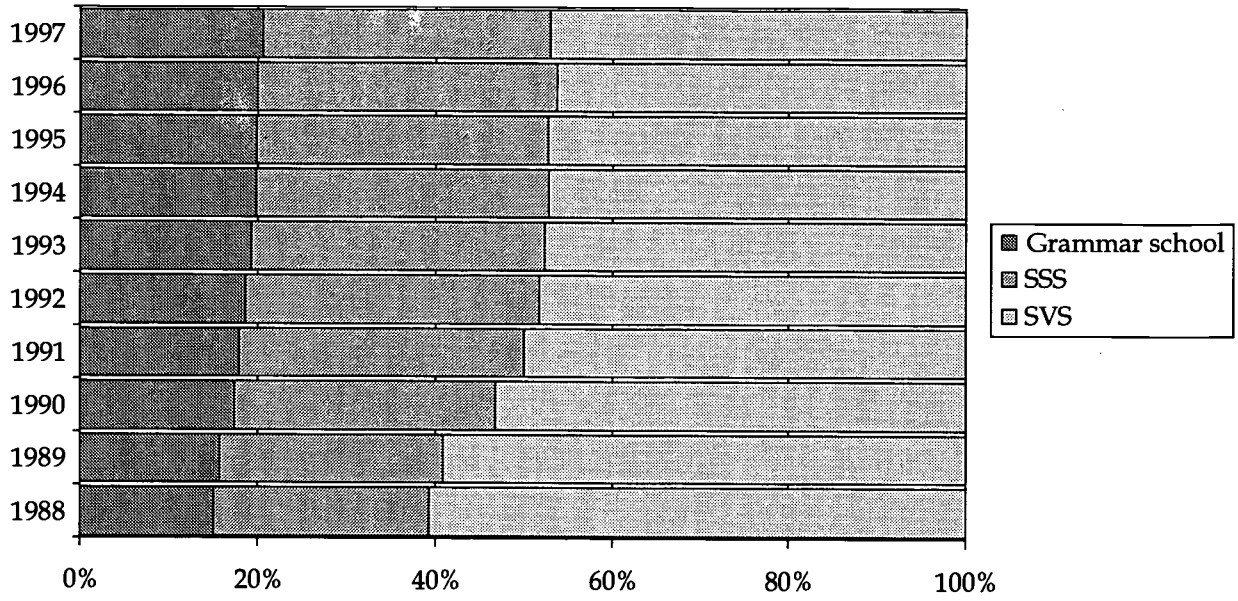
6.1 *General status of the education and training system*

Secondary education in Slovakia can be classified into three general streams, which were established in the 1976 school reform (however, their content has undergone major changes since – see Annex 6). The academic stream represented by grammar schools provides more general and abstract knowledge and it is intended to serve as a preparation for further, university study. The two streams of vocational education and training are represented by the so-called secondary specialised schools (SSS – further denoted as vocational schools), and the so-called secondary vocational schools (SVS – further denoted as apprentice centres). Vocational schools provide professionally oriented theoretically based education for specialists, while apprentice centres provide more practically oriented training for blue-collar professions. A simplified scheme of the education system in Slovakia with short explanations is given in Annex 6.

Another distinction within secondary vocational education and training (vocational schools and apprentice centres) relates to the "completeness" of studies. The "complete" (full) form of secondary education is in general longer and includes the so-called maturity examination, which is a general school-leaving examination, required for continuing education at the universities. The maturity examination is provided in all grammar schools, in almost all study branches of vocational schools and in some study branches of apprentice schools. The "lower" form of secondary education is in general shorter and provides the so-called certificate of qualification.

The participation rate in basic education is close to 100%. Only less than 0.03% of children are unable to receive education. Enrolment trends in secondary education during the past decade are summarised in Table 6.1 and depicted in Figure 6.1. More detailed insight into the participation rates of 14-19 years olds in education is provided in Table A6.1 in Annex 6 (there is no analogous information about students older than 19 years). Basic trends in the numbers of students, graduates and teachers by type of secondary education during the past decade are summarised in Annex 6, Tables A6.2 to A6.5. The figures document a substantial increase in the enrolment of students in higher education and a remarkably slower increase in the numbers of graduates.

Figure 6.1: Enrolment in secondary education (ISCED 3)



Note: SSS and SVS are forms of vocational education and training. SSS denotes vocational schools, SVS denotes apprentice-training centres (for detailed explanation see the text and Annex 8).

Table 6.1: Enrolment in secondary education during 1988 – 1998, in %

Year	Grammar	Vocational (SSS)	Apprentice(SVS)
1988	15.12	24.16	60.72
1989	15.76	25.14	59.10
1990	17.41	29.31	53.28
1991	17.89	32.06	50.05
1992	18.65	33.06	48.30
1993	19.32	33.00	47.69
1994	19.84	32.91	47.24
1995	19.88	32.80	47.32
1996	19.95	33.74	46.30
1997	20.62	32.29	47.09
1998	21.19	32.92	45.89

Note: SSS and SVS are two forms of vocational education and training (see the text and Annex 6 for more details).
Source: Statistical Yearbook of Education, Institute of Information and Prognoses in Education

Student-to-teacher ratio statistics in Slovakia are in general not available. Data are biased due to the lack of information about the teaching load of part-time teachers. Estimated ratios are provided in Table 6.2. A comparison of costs of separate types of education can be based on Table 6.3. It is estimated that the modernisation debt of primary and secondary schools in Slovakia represents 30% of annual expenditure on education. This sum refers just to the basic equipment of schools, without any requirements for technological development. At present, the financing of education is reduced to wage costs and to the operational needs of school facilities. Under the tight budget constraints, a new education development strategy would require either the mobilisation of alternative resources or a radical reform. The involvement of the entrepreneurial sphere in financing vocational education and training is desirable.

Table 6.2: Students/teachers ratio estimate, in %.

Type of education	All teachers	Full-time teachers
Kindergarten	15.8	15.8
Primary	39.7	39.7
Secondary	26.1	21.2
Higher education	10.2	8.8

Source: Statistical Yearbook of Education in 1997
Institute of Information and Prognoses in Education

There are no specialised data on dropouts at primary and secondary schools. Less than 3% of students are unable to complete the basic school at the end of their 10-year compulsory education. Approximately half of these continue their education at the schools for students with special needs, which provide qualification for occupations with low demands. Estimates of dropout rates in secondary education in 1997 are provided in Table 6.4.

Table 6.3: Expenditures by type of school in 1997, in SKK.

Type of school	Students (ths.)	Expenditures (ths. SKK)	
		Total	Per student
Pre-primary institutions	169.0	2 905	17.2
Basic schools	623.8	9 055	14.5
Grammar schools	67.2	1 209	18.0
Vocational schools	100.1	2 068	20.7
Vocational schools of arts	2.1	124	58.0
Apprentice schools run by branch ministries	94.5	2 747	29.1
Apprentice schools run by the Ministry of Education	28.5	816	28.6
Schools for students with special needs	26.2	983	37.5
Schools run by church	35.9	566	15.8
Sports schools	18.2	64	35.0
Private schools	9.8	81	8.3
Total	3 384.1	24 122	7.1

Note: ECU equivalent: 38.3 SKK as of end 1997, EUR equivalent: 43 SKK as of end 1998
Source: Institute of Information and Prognoses in Education

Table 6.4: Dropouts at the secondary level in 1997. (Estimates in absolute numbers and in%)

Dropouts by type of education	Grammar	Secondary VET with maturity	Secondary VET with CoQ	Secondary VET total
Absolute number	3 127	3 327	4 017	7 344
Dropout rate per year (%)	4.9	1.9	4.7	2.8

Note: *Maturity – maturity examination, "complete" form of secondary education*
CoQ - Certificate of qualification, "lower" form of secondary education (see text or Annex 6 for details)
Source: *Institute of Information and Prognoses of Education*

6.2 *Initial vocational education*

Linking theoretical studies to the practical utilisation of the knowledge and skills acquired is one of the general problems of the Slovak education system. Education is in many respects rather formal and lacks an applied character. Whereas in the general education stream (grammar schools and partly vocational schools) this situation is related to the "academic" nature of teachers' training, in apprentice schools the main reasons are the lack of experience in curriculum development and the lack of funding. It is very difficult to harmonise the curricula for general subjects and vocational subjects with the conditions of schools for practical training. In this respect, it is important to note that several Phare activities in Slovakia resulted in the transformation of selected schools, which accumulated a remarkable reform potential. In co-operation with partner schools from the EU, these schools were adapted to new technical and curricular conditions. In the future, these schools could serve as models for schools with similar profiles.

Romany minority

One of the key goals of vocational education and training in Slovakia is to prevent the Romany ethnic minority from being excluded from the labour market. Specialised intervention has to be established, since their educational level and competitiveness in the labour market is very low. A closer look at the structure of domestic graduate students by nationality reveals that in the school year 1996/97 the share of Slovaks was 94.3%, followed by those of Hungarians (4.6%), Czechs (0.6%), Ukrainians (0.3%) and Ruthenians (0.1%). The shares of other nationalities were negligible. In this context, special attention should be paid to the negligible share of Romanies in university education. Only two Romany students were reported at the universities in the monitored year (one at the Pedagogical Faculty in Nitra and one at the Faculty of Law in Kosice).[4] Among all the minorities in Slovakia, the Romany minority is the most problematic from the point of view of education. More detailed information on the educational situation of the Romany ethnic minority can be found in Annex 6.

4 Here again, as in the case of the Population Census, data are not reliable as self-reporting causes a downward bias. If one considers that two universities (in Nitra and Presov) have Departments of Romany Culture in their Pedagogical Faculties, it is unlikely that there are no students from the Romany minority. However, there is no doubt about the fact that the enrolment of Romanies in higher education is extremely low.

Labour force participation by educational attainment

Labour force participation rates by educational attainment and age groups are provided in Table 6.5. These activity rates are based on the estimates of educational attainment of the population, originating in the Labour Force Survey, prepared by the Statistical Office of the Slovak Republic.

Table 6.5: Labour force participation rates by educational attainment of the population in 1997, in%

	Males			Females			Total		
ISCED / Age group	0-2	3	5-7	0-2	3	5-7	0-2	3	5-7
24 and younger	10	73	77	7	64	80	9	68	79
25-29 year olds	79	96	98	56	72	85	66	85	91
30-39 year olds	86	97	98	69	87	91	76	92	95
40-49 year olds	86	95	99	81	92	95	83	93	97
50-59 year olds	70	77	92	27	55	83	40	67	88
59 and older	1	6	23	1	4	15	1	5	21

Source: Statistical Office of the Slovak Republic

Youth

The situation of youngsters up to 25 years old in the labour market is shown in Table 6.6. Two interesting facts are obvious from the table. First, the share of those in education and training declines with age, the decline being compensated by increases in the shares in employment and other activities, while the share of unemployed in the group remains stable as age increases. Second, while both genders have approximately the same shares in education and training, young females in the older age group (21 to 25) have a much larger outflow to out-of-labour-force status than males. This is probably related to maternity and the status of housewives. Unemployment shares of young males are higher by two percentage points. In chapter 5 of this study we presented the fact that the unemployment rates for the 15 to 24 age group are also larger for males than for females. It seems that young females are withdrawing from the labour market by going from education to inactivity. It was shown in chapter 3 that part-time jobs represent a negligible share of total employment (about 2%). In the absence of more flexible conditions, young females with children are more or less forced to stay at home, often because of prejudiced employers. This complicates their later integration in the labour market. Persons without prior work experience represent a substantial share of total unemployment.

The distribution of youngsters aged 14 - 19 years among types of education is described in Table 6.7. The data confirm the increased inclination towards general education at the expense of the vocational type of education.

Table 6.6: Youngsters on the labour market in 1997. (In% of the total population in the indicated age group)

	Percentage of individuals by main activity:				
	In education and training	Employed	Unemployed	Other	Total
Total					
16-20 years	60	22	10	8	100
21-25 years	12	64	10	14	100
16-25 years	37	42	10	11	100
Males					
16-20 years	60	20	11	9	100
21-25 years	12	73	11	4	100
16-25 years	37	46	11	6	100
Females					
16-20 years	60	24	9	7	100
21-25 years	12	54	9	25	100
16-25 years	38	38	9	15	100

Source: Statistical Office of the Slovak Republic

Table 6.7: Education of 14 - 19 year olds, (per cent of the indicated age group)

Type of education	1995	1997
Secondary and postsecondary vocational	46.15	44.32
All education	70.74	71.89

Source: Statistical Office of the Slovak Republic

The labour market position acquired by completing vocational training is illustrated in Table 6.8, summarising the structure and numbers of school leavers who have become registered unemployed.

Table 6.8: Registered unemployed school leavers. (Absolute numbers and trends)

	1992	1993	1994	1995	1996	1997
Total, absolute numbers	33 306	49 474	54 021	48 632	45 175	25 475
Total, index 1992 = 100	100	148.5	162.2	146.0	135.6	76.5
Structure by education (in %):						
Higher education	5.6	4.3	3.0	2.2	2.3	4.1
Grammar schools	9.6	8.0	7.2	8.4	9.8	10.4
Vocational schools	17.8	17.6	16.7	16.3	18.9	29.6
Apprentice with maturity examination	9.9	11.3	11.5	10.8	11.2	16.9
Apprentice without maturity examination	41.6	46.8	47.6	45.8	36.9	37.2
Juvenile graduates of basic schools	15.4	12.0	14.1	16.4	20.9	1.7
Index (1992 = 100) by education type:						
Higher education	100	113	86	57	55	56
Grammar schools	100	123	121	127	138	83
Vocational schools	100	147	152	134	144	127
Apprentice with maturity examination	100	169	188	160	154	130
Apprentice without maturity examination	100	167	185	161	120	68
Juvenile graduates of basic schools	100	116	149	156	184	9

Note: See the explanations in Annex 6 regarding the type of education
Source: Statistical Office of the Slovak Republic

It is obvious that the overall burden of school leavers in absolute terms has decreased over time. However, this cannot be said about all types of education. One remarkable feature is the relatively bad performance of graduates of vocational and apprentice schools with the maturity examination, as compared to graduates of apprentice schools with the certificate of qualification. As was shown in chapter 5 of this study, the structural mismatch between unemployed and vacancies is relatively low for the latter group. Nevertheless, we should remind the reader that unemployed people with the lower form of apprentice education represent the lion's share (close to 40%) of total unemployment.

The education and training of the employed and unemployed by age groups is shown in Annex 6, Table A6.6. The educational attainment of employed young people (16-24) versus employed adults (25-64) on the labour market is shown in Table 6.9.

Table 6.9: Total employment by educational attainment and age groups in 1997. (Thousands of persons)

Educational attainment	16-24 year olds				25-64 year olds			
	Total	%	Males	Females	Total	%	Males	Females
Less than basic	-	0.0	-	-	0.2	0.01	0.1	0.2
Basic education	11.1	3.5	6.9	4.2	208.3	11.2	93.4	114.9
Secondary lower	171.1	53.9	108.4	62.7	774.6	41.7	522.3	774.2
Secondary complete	126.9	40.0	53.5	73.3	612.1	32.9	264.7	347.5
Higher education	8.5	2.7	3.7	4.8	264.2	14.2	146.8	117.3
Total	317.6	100.0	172.5	145.0	1 859.4	100.0	1 027.3	832.1

Notes: Based on Labour Force Survey data
Source: Statistical Office of the Slovak Republic

6.3 Continuing training and adult education

Since 1989, the system of continuing vocational education and training has undergone more significant changes than that of initial vocational education. Originally, continuing vocational education took the form of external study (evening classes) and of employee training within enterprises. During the growing economical difficulties of the 1980s, enterprises took over the funding of training. Higher education institutions provided only know-how and the certification of students. So-called training centres belonged to the standard social infrastructure of almost every enterprise. Training facilities were usually connected to recreation facilities for employees. In education and healthcare, the system of continuing education was guaranteed by the state, and career-profiles were regulated by legislation.

Training providers

During the transitional economic crisis, continuing vocational education in enterprises experienced a similar decline to that of apprentice schools. In most of the enterprises there were no means for training. Training and recreation facilities went through the privatisation process and started to be utilised commercially. Continuing education institutions in education and healthcare suffered from budgetary restrictions, and their activities in the educational area were reduced to a minimum. After the initial recession period, the interest in continuing education started to rise again. This was reflected in the establishment of new providers - non-state institutions, such as entrepreneurs, commercial companies, foundations and citizens' associations.

In Slovakia there is a wide range of training institutions of state, private and enterprise character. They provide both long-term study programmes (lasting from 1 to 4 years), and short- and medium-term programmes and courses (lasting typically 40-120 hours within a few months). Vocational and apprentice schools themselves provide courses, mainly according to their profile. The most frequent subjects include administration techniques, single and double-entry book

keeping and basic PC-skills. Training providers co-operate with employers and labour offices in setting up also non-standard training programmes. The quality of courses provided is not yet systematically monitored. Educational institutions lacking contacts with similar institutions abroad are short of know-how and methodological experience. The Association of Adult Education Institutions was created in 1991. Currently there are about 60 paying members.

Legal underpinning

According to the Act on Employment, continuing vocational education and training (together with education in primary and secondary schools and institutions of higher education) has become a legitimate part of the educational system of the Slovak Republic. Continuing education is seen as lifelong education, and everybody, regardless of age and education attainment, has the right to continue his/her education in accordance with his/her abilities and interests. The act specifies procedures such as the establishment of continuing training institutions, conditions of accreditation, the issuing of certificates of completed training, etc.

According to Act No. 152/1994, financial means from the so-called Social Fund (a fund established by every enterprise and representing at least 1% of the total amount of wages) can be spent on training. These means are, however, usually spent on other activities that benefit employees. The costs of training provided to own employees are tax-deductible. However, the number of stable enterprises is still small and so is the number of enterprises that have established human resource development programmes. Approximately half of Slovak institutions have neither a department, nor a person, responsible for dealing with these issues.

Occupational standards

An important impulse for the improvement of both initial and continuing training could be seen in the enhancement of co-ordination between the developers of occupational and educational standards. In 1994, the Vocational Information Resource Centre was established at the Research Institute of Labour, Social Affairs and Family in Bratislava (under the auspices of the Phare Programme). The initial task of the centre was to gather information on occupations (their content), as well as on their labour market position. The need to develop occupational standards was acknowledged by the authorities. In accordance with a governmental decree (No. 75/1996) passed in 1996, the Ministry of Labour, Social Affairs and Family, the Vocational Information Resource Centre, and the State Institute of Vocational Education and Training, have jointly established an interdisciplinary working group, which is to cope with this task. 840 occupations have been identified, and standards have already been developed for 330 of these. Approximately 90 occupational standards are found at the State Institute of Vocational Education and Training, and are available for the development of educational standards.

6.4 *Training for the unemployed*

Retraining belongs among the regular active labour market policy measures. The definition of retraining provided by the Act on Employment is rather broad. It includes theoretical or practical preparation aimed at maintaining, increasing, or changing skills, provided to unemployed or employed persons with the aim of finding or keeping their jobs. Retraining is provided by the network of district labour offices and is financed by the National Labour Office of Slovak Republic. Equal conditions for state and non-state educational institutions regarding the provision of retraining courses are guaranteed by the state.

Providers of retraining must receive accreditation from the Ministry of Education. This accreditation is a necessary pre-condition for the provision by labour offices of financial means for retraining. Between 1991 and 1997 the ministry awarded more than 4.5 thousand credits for different short-term (40-60 hours) and long-term (6-12 months) retraining courses to 1 186 training institutions. The majority of the credits awarded went to non-school based training institutions (48.3%). Private apprentice schools received 27.5%, and private vocational schools 14.8% of credits, while higher education institutions received 5.7%.

Despite the fact that retraining is considered to be a very important labour market tool, expenditures on retraining have been relatively modest, representing about one tenth of the overall spending on active labour market policies. To illustrate, at the end of 1998 only 0.2% of the registered unemployed were enrolled in retraining programmes. Expenditure on retraining in 1998 represented about 7% of the total expenditure on active labour market policies. The number of unemployed that are offered retraining programmes early in their unemployment spells could be increased. According to data from the Bratislava region, 35% of the retrained unemployed in 1997 started their training during the first 3 months and 27% during the next three months of their unemployment. Table 6.10 further illustrates the modest role of retraining in the Slovak labour market.

Table 6.10: Population excluded from the labour market (16 – 64 year olds) benefiting from vocational training and retraining in 1997, in%.

Age group of 16 – 64 year olds	Total	Males	Females
Receiving vocational training	9.19	9.27	9.11
Receiving retraining	0.06	0.05	0.07

Source: Statistical Office of the Slovak Republic

The development of retraining as captured by the stocks of enrolled persons at the end of the year shows a declining trend after the year 1992 (Table 6.11). The large numbers of trainees in 1992 were due to the boom of active labour market policies in Slovakia in connection with the split of the Czecho-Slovak Federal Republic. Funds for active labour market policies in the federal budget had to be spent prior to the split of the federation. A major increase was then recorded also in the programmes of subsidised job creation. Afterwards the numbers of retrained persons decreased substantially.

Between 2 and 4% of the overall retraining budget annually was spent on the retraining of employees. Employees represented almost one third of trainees at the end of 1992. Later their share has declined to about one tenth of retrained persons. In terms of annual inflows into the programme, employees have represented approximately 7% during the past four years.

Expenditure per trainee are lower for the employed, as labour offices provide up to 50% of costs (in justified cases the coverage may be higher). This contribution is conditional on the prevention or reduction of mass layoffs, or on a minimum of 12-month employment after the completion of courses. The rate of successful completion of courses within separate calendar years seems to be higher for employed than for unemployed trainees (Table 6.11). However, there is a potential for dead-weight loss, in particular when all the costs of retraining are covered by the labour office.

Table 6.11: Retraining of unemployed and employees provided by labour offices

	1992	1993	1994	1995	1996	1997	1998
Persons in retraining							
End of year stock	10 282	4 432	3 744	4 666	3 772	7 494	1 194
% share							
Unemployed	73	72	78	80	84	91	87
Employees	27	28	22	20	16	9	13
Expenditure on retraining							
Total (million SKK)	70. 7	117. 4	108. 2	164. 1	200. 6	257. 6	167 .0
% share							
Unemployed	96	96	96	97	98	97	98
Employees	4	4	4	3	2	3	2

	1995	1996	1997	1998
Annual inflow of persons	20 566	22 184	26 802	15 028
% share				
Unemployed	93	93	93	96
Employees	7	7	7	4
Expenditure / inflow				
Total (thousand SKK)	8.0	9.0	9.6	11.1
Unemployed	8.3	9.5	10.0	11.3
Employees	3.2	2.8	4.4	5.5
Successful completion / inflow (%)	-	104	87	142
Unemployed	101	103	85	140
Employees	-	116	105	195

Source: National Labour Office of the Slovak Republic

A case study from the two Slovak districts of Lucenec and Rimavska Sobota (Liska et al., 1996) indicates that the rate of success in retraining unemployed persons was rather high. In 1994 about 80% of retrained unemployed persons were placed in jobs after completing their retraining; in 1995 the share was close to 60%. This may have been a result of the practice at many labour offices of requiring an ex ante promise of job placement before the retraining. Given the severe shortage of reported vacancies (see section 3.5) the strategy is not unreasonable. In most Slovak districts, retraining has been applied only modestly compared to subsidised job programmes. But the high share of low-educated people in long-term unemployment (almost 80% of the long-term unemployed have less than complete secondary education) indicates the need of sizeable retraining, once job creation is boosted.

The new system of active labour market programmes also contains several targeted programmes. The young according to the Act on Employment, young people under 18 who have not continued their education after finishing their compulsory education, and school leavers are among the groups that are entitled to special attention from labour market institutions (special care).

Counselling

The role of information availability and counselling for job placement is one of the key points within the improvement of continuing vocational training. Counselling is provided free of charge at several levels: by schools, guidance centres run by the Ministry of Education, labour offices and regional authorities. In primary and secondary schools there are counsellors for career guidance. Counselling provided by labour offices may be of an individual or group character. Special counselling assistance is offered to specific groups, such as young people without a completed education, school graduates without experience, women after prolonged maternity leave, the disabled, the long-term unemployed, and low-educated individuals. Within the group-counselling framework, there are "labour clubs" operating at labour offices, focusing also on the psychological burden of unemployment. In this context, it is noteworthy that after the reform of active labour market policies (Act 387/1996 Coll.), counselling was excluded from the system of active labour market programmes. Consequently, it has to be financed by the general budget of labour offices and runs the risk of being crowded out by other operational needs of labour offices.

7. Labour market institutions

7.1 Government bodies

Two key labour market institutions in Slovakia are the Ministry of Labour, Social Affairs and Family of the Slovak Republic (henceforth, Ministry of Labour) and the National Labour Office of the Slovak Republic (henceforth, National Labour Office). Before the year 1990, the rare cases of "open unemployment" were dealt with by the labour force departments of the so-called National Councils (local organs of state administration). After the dissolution of the National Councils, in the course of 1991 a nation-wide network of 38 district labour offices was created, which took over the labour market agenda. In a short time the offices have been equipped with computers and software applications and a uniform system of labour market statistics and monitoring has been introduced at all regional levels.

Until the end of 1992 there were two Ministries of Labour acting in Slovakia: the federal ministry of the former CSFR and the Slovak ministry. At that time, labour market policies were still financed from the general state budget. Active labour market measures were financed from the federal budget. These funds had to be used up before the dissolution of the federation. Therefore, expenditure on active labour market programmes was extremely high in Slovakia in 1992 and then fell abruptly to less than one third of that level in 1993. The introduction of the insurance principle in the social security system resulted in a need to separate the insurance-based payments from the general state budget. In 1993 the Employment Fund of the Slovak Republic was created as an autonomous public legal entity with the main responsibilities for supervising financial flows related to labour market policies. Top organs of the Fund – the Board of Directors, Supervisory Board, and Administrative Board – were established on a tripartite basis. The local tripartite administrative boards represented local organs of the Fund. The functioning of the Fund was initially simulated within the state budget but since 1995 labour market financing has been separated from the state budget. Intake into the Fund comes mainly from the contributions paid by employees and employers, who pay 1% of their gross wages and 3% of the wage bill, respectively). For a limited group of persons, contributions are paid by the state. The Fund provides the means for both active and passive labour market policies. Given the absence of an alternative source of financing, during times of high unemployment (such as 1998-99) passive expenditures leave little room for active (for more details see section 8).

Within the Ministry of Labour, the Employment Service of the Slovak Republic was created as the top organ of the network of labour offices. Therefore, all regional levels of the state administrative organs (the Employment Service and labour offices) had counterparts based on tripartism (the Employment Fund and its boards), which shared the ambition to take an active part in decision making, especially in the field of active labour market policies. In 1997 the two institutions were united within the newly established National Labour Office of the Slovak Republic. The National Labour Office is built on tripartite principles. It is a public legal entity supervising the financial flows on the labour market (collecting contributions and paying for passive and active policies).

Table 7.1: Employment service

	1991	1992	1993	1994	1995	1996	1997	1998
Number of staff	2 026	993	1 128	3 062	3 527	3 279	4 441	4 462
Unemployed / staff	149	262	326	121	94	101	78	96
Staff / unemployed	0.007	0.004	0.003	0.008	0.011	0.010	0.013	0.010
Number of placements							107 889	111 204
Placements / staff							24	25
Placements / unempl.							0.31	0.26
Staff by main type of activity - % share	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	
Job mediation	4	2	29	30	24	22	24	
Counselling	14	14	5	5	5	3	4	
Retraining	10	8	2	2	2	2	2	
Economic admin.	22	23	9	9	7	9	10	
Benefit payments	3	3	11	10	8	7	7	
Other	47	49	44	44	53	57	53	

Source: National Labour Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic

The Ministry of Labour is the top labour market and employment policy organ within the state administration. The main responsibilities of the Ministry lie in developing labour market legislation and supervising and co-ordinating various related activities. The Ministry underwent organisational changes after the general elections of 1998. The new organisational scheme of the Ministry is depicted in Annex 4.

7.2 *Labour market regulations*

The Slovak labour market is relatively rigid, if judged by the employee protection regulations, which were inherited from the socialist period. The Labour Code has been amended extensively since 1989, but its core dates back to 1964. At the same time, the labour market is flexible in terms of the frequency of institutional changes and reforms.

Firing costs are relatively high due to the strict requirements for layoffs, statutory 2-month period for redundancies and notice, and 3 to 5 months' severance pay. According to the Labour Code, employees can be laid off only for special reasons, such as the closure or major restructuring of the company (so-called organisational reasons) or serious misconduct. Under these conditions, flexibility in the labour market is achieved rather by fixed-term contracts than by part-time work. Data indicate that only about 2-3% of workers have part-time contracts, despite the fact that the right to work part-time is laid down by the Labour Code. The regulation of working hours contained in the Labour Code (described in more detail in section 4.5) in general discourages overtime.

Several observations indicate that there is a marginalised group of workers with fixed-term contracts and seasonal workers, who are hit hardest during labour market crises. For example, the number of workers who were registered as unemployed after the expiration of a fixed-term contract was about 4 000 in August 1998. In March 1999, after a sharp increase in unemployment, the number

of such workers was around 18 000. It appears that particularly from the point of view of employees' protection, the status of seasonal workers is not sufficiently regulated by labour law.

Another deficiency of the labour law is the absence of a guarantee fund to cover the wage claims of employees of enterprises that go bankrupt. Given the soft bankruptcy legislation in the past, such a shortcoming was not particularly serious. However, after the tightening of bankruptcy law, appropriate new legislation is under preparation.

Equal opportunities are not strictly enforced. For example, until recently, vacancies were registered and presented in the vacancy register as suitable either for males or for females. Advertising for jobs in the media allows distinctions by gender, which results in a quite high open demand for young males after military service, while females are in general discouraged from applying, or are directed to specific occupations (administrative assistants, etc.).

Labour market regulations in the field of unemployment benefit insurance have changed frequently, the changes being motivated mainly by budgetary considerations. For example, the unusual reforms relaxing the system, which occurred in 1995-97 (see section 8.1), were motivated by the fact that social insurance contributions for unemployed persons entitled to unemployment benefits started to be paid by the National Labour Office. By prolonging the entitlement period for unemployment benefits, many unemployed persons and their insurance payments were shifted back to the Employment Fund, thus saving state budget funds.

The Act on Collective Bargaining stipulates several conditions which in practice complicate the organisation of strikes. There is obligatory arbitration between the parties, trade unions have to issue a main list of strike participants, strikes are only allowed for reasons related to the conclusion of collective agreements, etc. Consequently, only two strikes were registered in Slovakia in the year 1997 and no strikes occurred during the previous period (since 1991), with the exception of a few token strikes. Other conflicts were settled by a process of mediation and arbitration. The number of conflicts submitted to licensed mediators increased from 8 in 1991 to 29 in 1997; since 1993 about 2 conflicts per year have been submitted to licensed arbitrators.

7.3 *Industrial relations*

The basic instrument of social dialogue is collective bargaining, either on a bipartite level (between representatives of employers and employees), or on a tripartite level (among the representatives of government, employers and trade unions). The former is regulated by the Act on Collective Bargaining (in effect since 1992), the latter by the new Act on Tripartism (in effect since 15 June 1999). Bargaining between employers and employees results in lower-level collective agreements. Bargaining between associations of employers and employees results in higher-level agreements. These may be declared by the Ministry of Labour to be binding for the whole branch of the economy. The Act on Collective Bargaining provides regulations for the settlement of disputes via mediation and arbitration and defines the rules for strikes and lockouts.

The largest employers' organisation is the Association of Employers' Unions and Associations of the Slovak Republic, which consists of 27 employers' unions and associations. Apart from these, there are about 30 other employers' unions. Furthermore, there are several organisations representing small and medium-sized enterprises (small enterprises are those with less than 100 employees, medium-sized enterprises are those with less than 500 employees). The largest organisation of employees is the Confederation of Trade Unions, which involves 42 trade unions, each of which is a legal subject sui juris.

Political tensions have sometimes been translated into the tripartite dialogue at the top level. A "schism" within tripartite dialogue originated during the previous government's term in 1997 when the original national tripartite body, the Council of Economic and Social Agreement, stopped functioning due to a boycott by the trade unions (mainly due to disagreement on wage policies). The Council was replaced by a new tripartite body. Restored in 1998, the original tripartite Council was threatened at the beginning of 1999 by an employers' boycott.

Tripartite system

The tripartite set-up in Slovakia was introduced at the very beginning of the transition period in 1990 by the creation of the so-called Council of Economic and Social Agreement (henceforth, the Council). This body consisted of 21 members (7 representatives from each of the three groups: employers, trade unions, and government). Council negotiations resulted in the conclusion of the General Agreement, a treaty stipulating the main goals of economic and social policy for the upcoming year. The General Agreement was renewed on an annual basis, the former one being valid until the signature of the new one, or until 1 March of the following year, whichever of these came sooner. The first General Agreement of 1991 contained many specific goals in the labour market field. For example, the minimum wage was set at 2 000 crowns per month; the government was obliged to spend 25% of its budget on projects supporting employment, small businesses and retraining; and an indexing mechanism for wages was proposed - 1% growth of inflation above the 5% level should lead to a 1% increase of wages. The latter goal was soon abandoned, as the price liberalisation of 1991 led to a more than 50% jump in inflation. This implied that the minimum wage should have been raised by approximately 50%, too. However, the elimination of inflationary pressures was of greater importance to the government, and the minimum wage was kept at the original level of 2 000 crowns per month. Although the provisions of General Agreements were not legally enforceable, they should have been viewed by the parties as binding rules. In the light of this experience, the 1992 General Agreement was less specific in its main goals. Formulations were rather broad, such as "to be active in the field of employment support", etc.

Trade unions

The role of trade unions in active labour market policies in Slovakia directly follows from their position as a social partner represented at all levels of the National Labour Office and its organs. The National Labour Office (established by the Act on Employment, in effect since January 1997) is governed by an autonomous Administrative Board, consisting of 5 representatives form each social partner's side. A certain supremacy of the state is still achieved by the rule that the Chairman of the Administrative Board is ex officio the Minister of Labour. Similar tripartite boards are created at the regional and district levels. The executive organs of the National Labour Office - General Directorate and the regional and local labour offices are responsible to the autonomous tripartite organs of the National Labour Office.

8. Labour market policies

Labour market policies (employment policies) became a standard part of the General Agreements. The stipulated obligations mostly concerned the government. Formulations were rather broad, such as: "The government will support active labour market policies by an effective utilisation of budgetary means allocated for the creation of public works". Despite the lack of exactness, a few quantitative targets were defined, of a more or less preventive nature. The General Agreement for 1994 committed the government to undertake all types of actions to ensure that the overall unemployment rate would not exceed 17%. This level proved to be rather generous, as the overall rate of unemployment peaked at a level of about 15% and thereafter slightly declined. Therefore, in the General Agreement of 1995 the upper limit was decreased to 15% and in 1996 further decreased to 13%. The substantial regional segmentation of the Slovak labour market has been addressed in General Agreements, too: in 1994 the social partners were obliged to undertake a set of specific measures (not defined in more detail) in those districts where the unemployment rate exceeded the critical level of 25%. In 1995 the critical level was set at 23% and a statutory three-month period was introduced for the implementation of the measures. In 1996 the critical level was further decreased to 20%, and the government was required to evaluate the effect of the measures after 6 months and to inform the Council of the results.

8.1 Passive labour market measures

Slovak authorities have been very active in the field of institutional reforms in the labour market. Passive labour market policies have undergone major reforms more often than in other Central and Eastern Europe countries. A major reform tightening regulations, inspired by the soaring payments for unemployment benefits, occurred in January 1992. The original 12-month entitlement period for unemployment benefits was halved, eligibility conditions for unemployment benefits were tightened and replacement ratios were slightly decreased (from 65 and 60%, corresponding to the first and second half of the entitlement period, to 60 and 50%, respectively). The reform was applied retroactively and the old entitlements were not grandfathered.

Table 8.1: Public expenditure for employment policies. (% of GDP)

	1991	1992	1993	1994	1995	1996	1997	1998
Employment service(a)	1.02	1.66	0.80	0.82	1.16	1.29	1.08	1.08
Labour market training(b)	0.02	0.02	0.03	0.02	0.03	0.03	0.04	0.02
Subsidised employment(c)	0.13	1.01	0.26	0.39	0.67	0.62	0.36	0.22
Unemployment benefits	0.86	0.51	0.50	0.38	0.31	0.33	0.43	0.54
Retirement pensions	6.71989		8.9	8.4	8.3	8.2	8.0	8.1

Notes: *(a) Total expenditures on passive and active labour market policies*
(b) Including training of employees supported by the labour offices
(c) Youth measures are part of subsidised employment
Source: *National Labour Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic*

Unlike in other transforming economies, the unemployment insurance system in Slovakia was relaxed in 1995, and additional softening steps followed in 1996 and 1997. After the gradual reforms, the entitlement conditions for unemployment benefits were back to the pre-1992 level and the entitlement period for unemployment benefits was lengthened according to the age of the unemployed, later according to the previous contribution record. Currently the entitlement period is 6 months, 9 months or 12 months, for unemployed persons with a previous contribution record of up to 15 years, 15 to 25 years, and more than 25 years, respectively. The entitlement period is cut by 3 months for those who quit their previous job voluntarily without a serious reason (as defined by the Act on Employment). The replacement rate is 60% during the first 3 months of unemployment and 50% during the rest of the entitlement period. The base for the unemployment benefit is either the previous average wage or the minimum wage (mostly for people without prior work experience). Benefits are not taxed.

The share of the unemployed receiving unemployment benefits was sensitive to the reforms mentioned above. Originally as high as 82%, after the reform of 1992 tightening conditions it fell abruptly to 34%. The reform of 1995, which relaxed conditions, was reflected in an increase in the share from 23% in 1994 to 28% in 1998. Unemployed people not eligible for unemployment benefits are covered by the social safety net. Social benefits top up the household income to the minimum living standard (for details see section 8.2). However, if an unemployed person is not actively seeking a job, he or she may be classified as being needy for subjective reasons. Then the income guaranteed by social benefits is only one half of the relevant minimum living standard.

Table 8.2: Unemployment benefits

	1991	1992	1993	1994	1995	1996	1997	1998
Registered unemployed receiving UB								
Stock	247 728	87 322	122 853	85 032	89 995	93 517	92 914	119 931
% share of total unemployment								
Total	82	34	34	23	23	28	27	28
Male	81	34	34	23	23	30	29	30
Female	83	33	35	23	23	26	24	26

Source: *National Labour Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic*

Impact analysis

Despite the fact that the aggregate level of unemployment has proved to be slightly responsive to unemployment insurance reforms (mostly after the 1992 reform tightening the rules), the existing empirical research at the micro-level has not proved any substantial effects of passive policies on the duration of unemployment. Lubyova and Van Ours (1997) examined the effects of unemployment insurance reforms on exit rates from unemployment. The tightening and relaxing of unemployment insurance rules did not greatly influence individual re-employment probabilities. Instead, the alternative exit possibility, leaving the labour force, seemed to be more sensitive to the changes.

Early retirement

Retirement has been used since the very beginning of the transition as a tool for decreasing the registered unemployment. Pensioners and workers of retirement age have gradually withdrawn from the labour force. As can be seen from table 8.4, the share of employed pensioners in overall employment declined from about one-third to about 10% during the transition period. Currently it is possible for old age pensioners to work and receive both their pension and a reduced salary, providing that their labour contract is for a definite period of up to one year (although it can be renewable). Exits to early retirement have represented between 4 and 5% of unemployment inflow. Early retirees do not have to be registered in the unemployment register prior to their retirement. Early retirement can be granted up to two years before reaching the regular retirement age, provided that the person is laid off for so-called organisational reasons and he/she cannot be offered a suitable job. Given the low statutory retirement age, early retirement can be granted as early as at the age of 51 years for females and 58 years for males. For some groups of workers the retirement age can be even lower, depending on the so-called labour categories, which classify jobs into groups with preferential treatment. This extensive usage of retirement as a labour market tool will have to come to an end in the near future, as the pay-as-you-go pension scheme may soon approach a negative balance.

Table 8.3: Early retirement pension schemes

	1989	1993	1994	1995	1996	1997
Annual inflows						
Early retirements	-	19 546	15 996	17 250	14 142	15 675
Relation to unempl. inflow	(%)	4.7	4.9	4.8	3.7	3.9
Stocks end of year						
Early retirement	138	27735	25766	23050	21738	22385
Ratio to stock of pensioners	(%)	3.8	3.5	3.1	2.9	2.9
Ratio to unempl. stock	(%)	7.5	6.9	6.9	6.6	6.4
Share of employed	1984	1987	1990	1992	1994	1996
pensioners	33.3	32.7	27.7	13.1	12.6	10.4

Note: *All shares are in %*
Source: *Ministry of Labour, Social Affairs and Family of the Slovak Republic*

8.2 *Active labour market measures*

Simultaneously with the use of passive labour market measures, the Slovak authorities have extensively implemented active labour market policies. These policies were introduced in 1991 and have gradually developed into a comprehensive system of more than eight basic types of programmes. The last major re-organisation occurred in 1997. Until the end of 1996 the active labour market policies in Slovakia contained the following measures:

- socially purposeful jobs;
- publicly useful jobs;
- retraining;
- counselling;
- sheltered workplaces for the disabled;
- subsidies for shortened working hours;
- jobs for school-leavers.

A more detailed breakdown of active labour market expenditure is given in Table 8.4. It is obvious that socially purposeful jobs were the most important throughout the period, followed by publicly useful jobs and retraining. The shares of publicly useful jobs were higher at the beginning and at the end of the period. Retraining has been used modestly and the rest of the programmes occupied only a negligible share of total expenditures.

Subsidised job creation has played a major role in the Slovak active labour market policies, both in terms of expenditures and participants. Socially purposeful jobs are subsidised jobs in the private sector. The concept and rules of the programme have undergone numerous revisions, as they were constructed while the authorities were in the process of learning how to tailor the programmes to the labour market conditions. From March 1991 on, every job created on the basis of an agreement with a labour office by an employer in production, business or other profit-oriented activities was considered to be a socially purposeful job. In 1992 the profit-seeking requirement was eliminated and the requirement that the job had to be filled by a person registered as unemployed was introduced. The latter requirement was partially relaxed in 1994 when school-leavers, persons younger than 18 years and persons who would be full-time self-employed under the socially beneficial job scheme were allowed to participate without prior registration in the unemployment register.

Table 8.4: Active labour market measures towards the unemployed. (Unemployment data are end of year stocks)

Registered unemployed	1991	1992	1993	1994	1995	1996	1997	1998
Total	301 951	260 274	368 095	371 481	333 291	329 749	347 753	428 209
% share in:								
Training	0.8	2.9	0.9	0.8	1.1	1.0	2.0	0.2
Subsidised jobs:								
Public works	3.1	8.9	0.9	1.8	8.5	5.8	5.8	0.5
Other	6.9	39.3	30.9	27.7	32.8	30.5	18.0	7.8
Expenditure	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total budget (mil. SKK)	522.5	3 812.8	1 107.2	1 896.2	3 899.1	4 290.4	3 098.7	2 289.1
% share on:								
Training	9	8	11	6	4	5	7	7
Disabled	0	1	1	1	3	2	5	5
Subsidised jobs:	91	92	88	93	93	93	40	
Public works	21	11	15	9	21	31	24	
Youth measures	-	3	5	2	0.5	8	0.8	
Active / Passive	**0.19**	**2.23**	**0.60**	**1.11**	**1.79**	**1.40**	**0.78**	**0.42**
Contributions / Expenditure				**1.23**	**1.02**	**0.97**	**1.06**	**1.03**

Note: *Subsidised jobs include public works, youth measures and socially purposeful jobs (subsidised jobs in private sector). The latter includes start-up loans.*
Source: *National Labour Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic*

The main forms of support introduced in 1991 were subsidies, interest repayments and loans. These were later reduced to 2-year loans and subsidies. The upper limit for financial support per job was originally set at 12 times the average monthly unemployment benefit paid by the relevant labour office during the last calendar quarter. Later the reference area was changed to the whole of Slovakia. In 1992 the ceiling was set at 50 000 crowns, later raised to 60 000 and then to 200 000 crowns per job. A minimum duration for jobs was introduced in 1992 and set at two years. If the original worker is laid off or quits the job, he/she is supposed to be replaced by another registered unemployed person within 30 days.

Stocks of jobs created built up in the course of 1992 to approximately 120 000, and stabilised thereafter. Inflows were subject to fluctuations depending on financing decisions. Generous spending before the end of 1992 resulted in a major inflow of almost 25 000 jobs. Another large inflow of about half that size occurred at the end of 1994.

In terms of participants, stocks and expenditures, publicly useful jobs rank next after socially purposeful jobs. Publicly useful jobs are public works (community works) designed mostly for lower-qualified workers for a limited period of time. The jobs were introduced in 1991 as short-term employment created on the basis of an agreement between a labour office and an employer who is not in production, business or other profit-oriented activities (for example, state administrative ...ns, municipalities, local administration). The requirement of a non-profit orientation for the

employer was cancelled in 1992. State budgetary organisations and state contributory (partial budgetary) organisations were excluded from the programme in 1994. The upper limit for financial support was originally set as the wage costs of the participants and was later extended to cover also the participants' social insurance contributions. The maximum duration of publicly useful jobs in 1991 was 6 months. Given that participation in the programme led to renewed unemployment benefit entitlements, many unemployed people alternated between publicly useful jobs and open unemployment. Therefore, the maximum duration of jobs was raised to 9 months in 1994 and to 12 months in 1995.

Stocks of publicly useful jobs and participants in the programme have not exceeded one-sixth of those of socially purposeful jobs. The stocks built up strongly after two major inflows of about the same size, which occurred in the financing boom of 1992 and in the first half of 1995. The latter inflow was a result of changed priorities in 1995, with more means being put into publicly useful jobs at the expense of other programmes. Because of the limited duration of publicly useful jobs, the stocks were rapidly depleted after the large inflows.

Act No. 387/1996 Coll. on Employment, effective since January 1997, stipulated the following active labour market measures:

- retraining;
- support of job creation;
- support of employment of specific target groups;
- support for prevention of layoffs;
- support for maintenance of existing jobs;
- support for elaborating proposals for revitalisation of employment;
- support for employment of the disabled.

A comparison of the old and new structures of active programmes makes it obvious that more attention is currently being paid to measures of a preventive nature, as well as to targeting the measures towards specific groups (the disabled, older people, the long-term unemployed, the young and school leavers). The original job creation programmes were formally unified into one programme for job creation, although the distinction between the two types of job was preserved. It is also interesting to note that counselling is not included in the new structure of active labour market tools. This implies that counselling has to be financed from labour offices' general administrative budgets and is therefore under a serious risk of being crowded out by the operational needs of labour offices.

According to the National Labour Office, the new system of active programmes has several deficiencies. The preventive nature of some programmes and the system of decision-making (tripartite boards) opens the way for corruption, distortions in market competition among enterprises, and the substitution of economic employment policies. A solution could be found, for example, in an across-the-board application of the programmes in the form of tax and contribution reductions for employing persons from target groups. Another criticism of the current system stems from the fact that after the geographic and administrative reform of 1996, the number of district labour offices was approximately doubled (according to the number of new districts). The system is administratively costly, especially when the National Labour Office estimates that among 79 district labour offices, about 40 are supervising a "real" labour market.

The Ministry of Labour, Social Affairs and Family is currently preparing a concept of employment policies, including short-term actions. It has to be mentioned here that the financing of the active

measures is now seriously cramped by the soaring passive payments: thus, in the first quarter of 1999 the ratio of active to passive expenditures was 1 to 14. Under these conditions, accompanied by insufficient job creation and a large stagnant pool of low-qualified unemployed, a short-term priority goal is to put more emphasis on the creation of community works. An experimental programme involving an individual approach and retraining for the young unemployed is planned in several districts of Eastern Slovakia, where the problem of youth unemployment is most pronounced.

Closer co-operation between labour offices and employers is one of the crucial conditions for improving the efficiency of labour market institutions. According to the Ministry of Labour, contacts with employers show certain improvements, which (apart from intensified supervisory activities) is mostly due to the monitoring of key employers in the respective regions. However, direct job-seeking activities are not normally part of the responsibilities of the labour offices. Until 1998 the exchange of information about vacancies took place mainly between neighbouring districts. In order to facilitate the exchange of information about available vacancies among districts, the National Labour Office of the Slovak Republic has established a national computerised vacancy register. Lists of vacancies are regularly published in selected media.

Impact of active measures

In one of the very few studies on the effects of active labour market policies in Slovakia (Burda and Lubyova, 1995), an augmented matching function approach was applied to aggregate district panel data for both the Czech and Slovak Republics for the initial transition period up to 1993. In general, active measures were found to have statistically significant and positive effects on unemployment outflow. One of the interesting results was a higher long-term elasticity of unemployment outflows with respect to active labour market expenditures in Slovakia than in the Czech Republic. The Slovak situation was special, as during 1992 active labour market expenditures increased enormously in order to spend the available funds in the federal budget before the federation split up. In 1993 expenditures were reduced by more than two thirds. Simulations indicated that if the active labour market expenditures in Slovakia had been maintained at the 1992 level in 1993, monthly unemployment outflows would have increased in the long-term by 30% and the stationary unemployment rate in Slovakia in 1993 would have been lower by 1.9%. The main finding with respect to active labour market policies was that they were not important in explaining the tremendous differences between the unemployment rates in the two countries.

The structural aspects of the labour market mismatch presented in section 5.2 imply that there is a potential scope for structural active labour market measures, such as retraining and the promotion of labour mobility. However, at the current stage the absolute lack of vacancies does not allow for a successful application of these tools. First it is necessary to boost job creation. This can be done to some extent by the subsidised job creation within the active labour market programmes. But the volumes of jobs thus created can never be sufficient. For example, the stocks of existing socially purposeful jobs and publicly useful jobs at any time during the period 1990 - 1996 did not exceed a level of approximately 150 000, while the numbers of registered unemployed (not to mention other job seekers) are close to 400 000.

Currently the implementation of active labour market programmes is jeopardised by the decline of employment and the accompanying fast growth of unemployment. Since the resources for active policies come from contributions paid in mainly by employers and employees, the intake into the Employment Fund is decreasing with employment. Furthermore, the means for active measures are being taken over by passive expenditures, represented mainly by unemployment benefits and by contribution payments for the social insurance of the registered unemployed.

8.3 Industrial policies

The privatisation process in Slovakia started in 1991 and it was practically completed by 1999. Small-scale privatisation was realised mainly by auctions. The system of large-scale privatisation, introduced in 1992 by the first round of voucher privatisation, was later changed. In 1995 the second wave of voucher privatisation was cancelled. Direct sales to domestic owners prevailed among privatisation methods. Enterprises were often sold for fractions of their market value and the whole process has been criticised for a lack of transparency and for corruption. So-called strategic enterprises were defined in 1995 and excluded from the privatisation process. These are mostly natural monopolies and resources-related enterprises, amounting in their value to up to one third of total state assets.

Despite of the restructuring in favour of the private sector, the profitability of enterprises has in general remained low. Secondary indebtedness and the absence of effective bankruptcy procedures has further undermined market discipline. Furthermore, the revitalisation law enacted in 1997 induced more than a thousand enterprises to apply for tax and debt relief. In the course of 1998 some 18 programmes were started, mostly in the field of agriculture. Ultimately, the programmes have not been realised, as the new government has cut the revitalisation scheme. However, the prospects of the programme contributed to a weakening of the market atmosphere.

The soft bankruptcy legislation was amended in 1998 in order to speed up procedures. The obligatory mediation between debtors and creditors was abolished and an automatic trigger for declaring bankruptcy was introduced (after 60 days of over-indebtedness). The speeding up of bankruptcies is likely to further undermine current employment, in particular in the branches in crisis.

The industrial structure inherited from the socialist era is biased in favour of heavy industry and low-value-added production. The current crisis of industry is particularly visible in the branches of heavy industry and engineering. Engineering, which represents the third largest industrial branch in terms of output (after chemicals and heavy industry) has suffered from the massive conversion of military production, which was not phased out gradually but began in the absence of conversion programmes. Many of the enterprises are undercapitalised and equipped with obsolete technologies. Some of the current employment problems can be attributed also to the unclear ownership status of many enterprises, which resulted from the non-transparent large-scale privatisation (share warranties, non-public decision-making, sales for fractions of market price, excessively advantageous loans, etc.).

A lack of foreign direct investment is often blamed for the critical situation. Among the most obvious examples is the Eastern Slovak Steel-Mill Company (VSZ), once a giant of the Slovak economy, currently suffering from major problems that threaten its existence, and striving to involve a strategic investor (US Steel).

Finally, the lack of industrial policies and a clearer concept of future development have been blamed for many aspects of the critical situation in the labour market, from weak job creation to the difficulties in linking the educational system to labour market needs. The Ministry of Labour has opted for an active approach, preparing in the course of 1999 the concept of employment policies and the national employment plan. However, the absence of a "vision" of future priorities and strategies in industrial policy and other branches complicates any forward-looking decision-making in the field of employment policy.

8.4 Wage policy, social security and tax policies

Wages are in general determined by a process of collective bargaining. Collective agreements at a higher (usually sectoral) level may determine sector-specific minimum wages, which cannot fall below the nation-wide minimum wage. The nation-wide minimum wage is defined by law. In the budgetary sector only certain wage items can be subject to bargaining, others are determined according to wage grids. There is no state intervention in the process of collective bargaining. However, higher level collective agreements have to be submitted to the Ministry of Labour. The Ministry can also make a collective agreement binding on all enterprises in a sector.

Wage policy

Wage setting is regulated by law. In 1992, the Act on Salaries and Act on Wages replaced more than 300 different wage setting rules and grids inherited from the centrally planned economy. The former act determines wage setting in the budgetary/municipal sector by stipulating wage grids (tariffs) related mainly to qualification and tenure. The latter act determines wage setting in the rest of the economy. It guarantees minimum wage tariffs in the absence of collective agreements.

Explicit wage regulation in Slovakia has been applied sporadically. It was in effect throughout 1991, during the second halves of 1992 and 1994, and during most of 1998. In 1991 the regulation was introduced in order to prevent wage growth induced by price liberalisation. The main principle of regulation was a tax-based incomes policy. Prohibitive taxes were imposed on firms that achieved excessive growth of wages. Growth targets were set on the basis of qualitative criteria related to the performance of enterprises. Some of the regulations were not applied across-the-board (for example, companies with a certain level of foreign capital were not subject to the regulation). In some cases the regulation was targeted towards specific sectors with excessive wage growth, such as the financial sector and the energy industry.

In addition to the minimum wage grids, there is a generally binding nation-wide minimum wage defined by law. The minimum wage was introduced by the Minimum Wage Act, in effect since 1991. Originally set at 2 000 crowns per month, the minimum wage has been upgraded several times, currently reaching the level of 3 600 Slovak crowns per month. The minimum wage is often blamed for providing disincentives to employment. This was mainly because of its low level compared to the minimum income guaranteed by the social security system - the so-called minimum living standard.

Social security

The minimum living standard was introduced by legislation in 1991. Originally it contained two components - the personal allowance (depending on age) and the household allowance (depending on the number of household members). The household allowance was later abandoned. The development of the minimum living standard is depicted in Table 8.5.[5]

The adjustment mechanism of the minimum living standard is related to the growth of the cost-of-living index for low-income households. An adjustment is to be made when the index has grown by more than 10% since the time of the last adjustment. The amount of adjustment is determined on an ad hoc basis. Therefore, the adjustment is not made automatically and usually it comes into effect with a certain delay. The same type of adjustment mechanism applies to the minimum wage.

5 Currently the implicit equivalence scale of the personal allowance stands between the internationally recognised equivalence scales of OECD and Eurostat: an additional adult in the household has a relative weight of 0.7, the relative weights of children are between 0.45 and 0.59, depending on their age.

Table 8.5: Welfare benefits. Minimum living standard and state social benefits

(SKK/month)	MLS 1991	MLS 1998	State social benefits(a)
Personal allowance			
Adult	1 200	3 000	
Additional adult	1 200	2 100	
Child up to the age of 6	900	1 350	1 350
Child from 6 to 10	1 000	1 350	1 660
Child from 10 to 15	1 200	1 350	1 500
Child over 15	1 300	1 350	1 770
Household allowance (SKK/month)			
1- member household	500	-	
2- member household	650	-	
3 or 4 - member hh.	800	-	
5 or more member hh.	950	-	

Note: (a) Margins used for income testing for the purposes of state social benefits
Source: Collection of Law of the Slovak Republic

Interaction between the minimum living standard, the minimum wage and various social benefits is rather complicated and complex. During certain periods the gross minimum wage has been very close to the level of the minimum living standard. For example, prior to its last raise, the minimum wage was 3 000 crowns per month and so was the minimum living standard for a single adult. Both the minimum living standard and the minimum wage serve as benchmarks for several types of social benefits and contributions. The government has often been reluctant to raise the minimum wage, because it serves as a benchmark for contributions to the insurance-based systems of social security. Social insurance contributions for certain categories of citizens (such as students, registered unemployed not eligible for unemployment benefits, women on maternity leave, etc.) are paid by the state. Similarly, the ceiling on insurance-based unemployment benefits is determined as a multiple of the minimum wage.

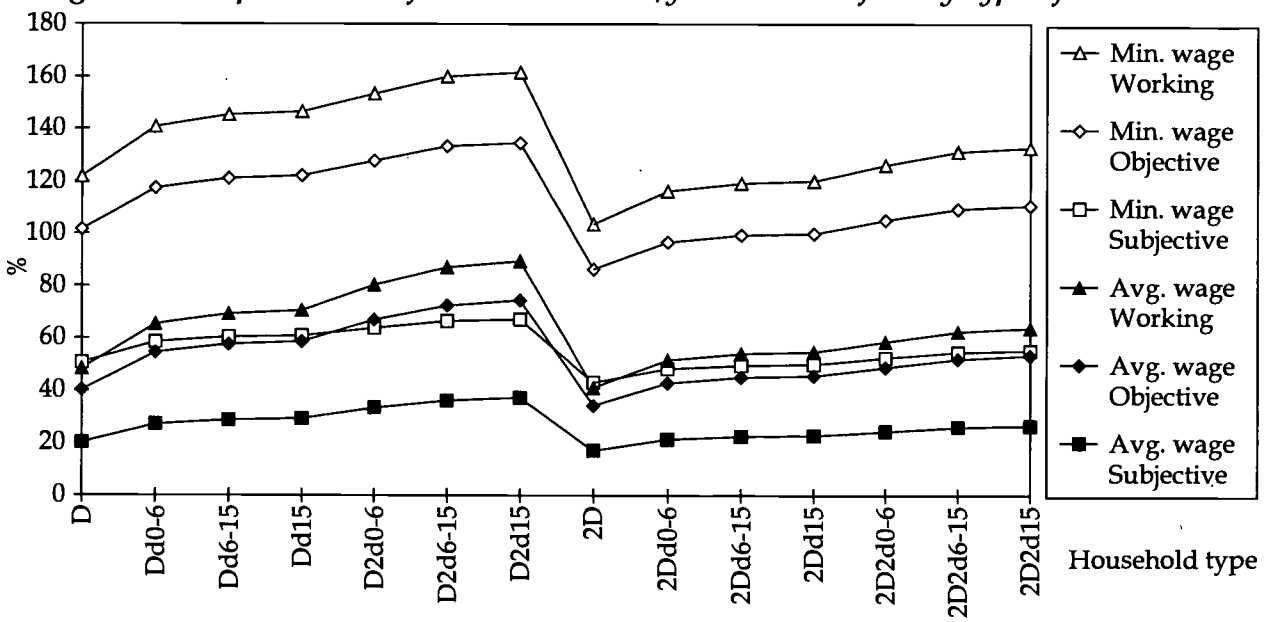
Child allowances

Child allowances are among the benefits that are most often blamed for providing disincentive effects for employment. Since 1993 child allowances are means-tested. In 1994 they were transferred from sickness benefit payments to state social benefits. In cases where the net household income falls below certain multiples of the relevant income-test margins (1.36 and 1.99-multiples), the household is entitled to child allowances. Means testing implies the existence of thresholds for household income, above which a marginal increase in the gross labour income results in a decrease in net household income, due to the loss of child allowances. For every type of household there are two such thresholds (since there are two eligibility margins). Disincentives increase with the number and age of children.

General social benefits represent another type of benefit often blamed for providing disincentives to employment. The Act on Social Assistance, effective since 1998, has redefined the eligibility

conditions for social benefits. A novel feature is that the needy are classified according to the reason for their deprivation. While in the case of objective reasons (for example, registered unemployed actively seeking work, health reasons, etc.), the social benefit guarantees the minimum living standard, in the case of subjective reasons, the benefit only guarantees one half of the minimum living standard. In the case of employment or other working activity, the income is topped up by social benefits up to a 1.2-multiple of the minimum living standard. Given that eligibility for social benefits is related to household income rather than individual income, an analysis of disincentive effects has to be performed on a household basis. Figure 8.1 illustrates replacement ratios for various types of households under the three alternatives (objective and subjective reasons for deprivation and working activity).

Figure 8.1: Replacement of labour income by social transfers by type of household



Notes to figure 2.1: *Figure illustrates the ratio of social income (including social benefits and children allowances) to labour income (for more details, see section 8.3).*
Legend: *Minimum and average wage denote labour income of adult household members. "Working", "subjective" and "objective" denote the following states: working activity, non-working and deprived for objective reasons, non-working and deprived for subjective reasons, respectively.*
X-axis: *type of household is determined by the number and age of household members. "D" denotes adults, "d" denotes children. Figures before D or d denote number of adults or children, respectively. Figures after d denote age of children. (For example, 2D2d6-15 denotes household with two adults and two children aged between 6 and 15 years)*
Source: *Own calculations based on legally defined minimum living standards, social assistance benefits and children allowances in 1999*

9. Conclusions

The current economic situation in Slovakia exerts negative pressures on the labour market situation. The relatively high GDP growth that started in 1994 was initially mainly export-driven. After problems with external balances started to occur, the growth was achieved through extensive government spending, which proved to be too generous. The moderate speed of key structural reforms further threatens the development of employment. Due to the absence of effective bankruptcy procedures, the presence of secondary indebtedness, attempts to introduce revitalisation programmes for selected enterprises, non-transparent privatisation procedures and similar factors, the restructuring of enterprises is still underway and their profitability in general remains low. As some of these barriers to restructuring have been recently removed, a further deterioration of the employment situation can be envisaged in the near future.

The initial transitional fall in output was accompanied by a less than proportional but substantial fall in employment. When looking at global changes with respect to 1989, until 1995 the reduction of real GDP exceeded that of total employment. Only since 1996 has the tendency been reversed so that a rough indicator of labour productivity (measured as the ratio of real GDP to total employment) has started to exceed its 1989 level. Many of the current difficulties with employment can be attributed to the relatively high share of industrial employment and the current crisis of industry.

Conversion

The industrial structure inherited from the socialist era is biased in favour of heavy industry and low-value-added production. Especially critical is the situation in engineering, which represents the third largest industrial branch in terms of output (after chemicals and heavy industry). This sector has suffered also from the massive conversion of military production, which took place abruptly and without appropriate conversion programmes. An increase of productivity in engineering is currently being achieved mainly via labour shedding, which further contributes to the tension on the labour market. There are many mono-industrial districts, typically specialising in engineering - former military production (Povazska Bystrica, Dubnica nad Vahom, Martin, Zvolen), metallurgy (Kosice, Ziar nad Hronom), chemical industry (Humenne), or production of leather goods (Topolcany). Furthermore, there are typical agricultural districts located mainly in the south-east lowlands. Mono-industrial districts exhibit very high unemployment rates, as job creation is weak and the chances of the unemployed obtaining a regular job are negligible.

The share of the service sector in total employment has increased during the transition, at the expense of both agriculture and industry. Still, the Slovak employment structure in 1998 deviated substantially from the average EU structure. This is mostly due to the high share of industrial employment (40% in Slovakia as compared to 29% in EU) and the low share of employment in services (53% in Slovakia as compared to 66% in EU). The employment share of the private sector exceeded 60% by 1998. It is important to note that the private sector has exhibited consistently faster employment and output growth than the public sector. However, the unclear ownership status of many enterprises, which has resulted from non-transparent large-scale privatisation, contributes to the current employment problems.

The current demographic structure of the Slovak population is relatively good. Strong generations in the 1970s are entering the labour market, which results in an annually increasing working age population, both in absolute and relative terms. However, this exerts pressure on the labour market. The labour force participation rate of the population aged 15 to 64 has declined to the current value of 67%, which is equal to the EU-average figure for 1997. The participation rate of Slovak females is still higher than the average rate of females in the EU and the opposite holds for Slovak males. The decline of participation rates has not been sufficient to accommodate the decline of employment. The latter, accompanied by demographic pressure, has resulted in the growth of the unemployment share in the working-age population. This has been about twice as large as the growth of the share of economically inactive persons.

The unemployment rate rose steeply during 1991 and it has never fallen to a single-digit value since. Temporary improvements were achieved during 1992 and 1995. However, unemployment is currently reaching its maximum: at the end of 1998 the unemployment rate reached 16.4% and 11.8%, according to registered and LFS data, respectively. By the end of February 1999, the former reached 17.4%. The new concept of "available registered job seekers" introduced by the Ministry of Labour captures only those registered unemployed who are immediately available for work. This decreases the registered unemployment rate by about one percentage point.

Low job creation

High unemployment is mostly a consequence of very low job creation. Survey results indicate that on average about half of the jobs created are reported to the labour offices. However, the numbers of reported vacancies are still very low compared to the numbers of registered unemployed. At the end of 1998 there were about 39 registered unemployed per one registered vacancy. In some regions the ratio was close to 80 to one. It is difficult to analyse the structural mismatch when the numbers of vacancies are so negligible compared to the numbers of unemployed. Consequently, the active labour market programmes aimed at removing the structural mismatch (such as retraining or the support of labour mobility) cannot alleviate the current unemployment situation to any great extent. Subsidies for job creation may be more suitable in the short run. The very large share of low-educated people in long-term unemployment indicates the need for substantial retraining, once job creation is higher.

The labour market position of the Romany ethnic group is very poor. They are over-represented in unemployment, especially in long-term unemployment. Notwithstanding the disincentive effects of social benefits and prejudiced employers, one of the main reasons is to be seen in the extremely low level of education and skills among the Romany population. Education and training has a major task to achieve in this respect.

Regional disparities

Regional disparities in the country are high. There is a sharp distinction between the capital Bratislava and the rest of the country. Bratislava has an 11% share of the total population but 20% of all private entrepreneurs (physical persons), 28% of all entrepreneurs (legal entities), and 52% of all entrepreneurial entities with foreign capital. As regards employment, the regional diversification is not as important in terms of employment rates as it is in terms of employment structure. There are many specialised districts, which tend to have relatively high unemployment rates, especially if the prevailing sector is a problematic one, such as heavy engineering or agriculture. District unemployment rates vary by more than 30 percentage points. At the same time, the mobility of the labour force has decreased by some 20% between 1990 and 1998.

Wage growth in Slovakia has been relatively modest. By 1998 nominal wages had grown by more than 300%, but in real terms they were still 8% lower compared with the level in 1989.

The Euro equivalent of the average gross monthly wage at the end of 1998 was about 220. The minimum wage represented about one third of the average wage. Income and wage differentiation during the initial phase of transition was relatively modest: overall inequality in Slovakia in 1993 ranked among the lowest in Central and Eastern Europe. Among old-age pensioners inequality has even decreased. Recent data show substantial progress in wage differentiation. Data suggest that the differentiation by individual characteristics, such as education or occupation, is more pronounced than the differentiation by aggregate characteristics, such as type of ownership or sector of the economy. Returns to education increased mainly during the period 1995-97 and reached the level usual in some EU countries. Returns to education increased more in the private sector and among young workers.

Equal opportunities

Equal opportunities are not strictly enforced. For example, until recently, vacancies were registered and presented in the vacancy register as suitable either for males or for females. Advertising for jobs in the media allows distinctions by gender, which results in a quite high open demand for young males after military service, while females are in general discouraged from applying, or are directed to specific occupations (administrative assistants, etc.). The very low share of part-time employment also contributes to excluding females with children from working careers. The employment rates and labour force participation rates of Slovak females are about 3% higher than the EU average values for females. This may be due to the fact that because of the low real wages in Slovakia, the living standards of single-earner households are low. The gender wage gap is of the order of 20% (rough estimate on the basis of aggregate data).

Rigidities

The flexibility of the labour market is decreased by regulations, such as strict requirements for reasons for layoffs, a statutory 2-month period for redundancies or notice, and 3 to 5 months of severance pay. The burden of taxes and social contributions is relatively high (according to survey results, the burden represents on average about 42% of total labour costs). In particular, the share of part-time workers in Slovakia is much lower than the EU average (2% as compared to approximately 17%). Employers likely prefer fixed-term contracts to part-time ones. Workers with fixed-term contracts are most likely to become a marginalised group, bearing the consequences of any labour market crisis.

Registered unemployment is higher than LFS unemployment, implying possible disincentive effects for employment provided by the social security system. Simulations show that for certain types of households (usually those with dependent children and adults earning wages close to the minimum wage) the replacement rate of labour income by social income is very close to 100%. The minimum wage serves in some cases as a benchmark for social insurance contributions paid by the state. Therefore, the government is motivated to keep the minimum wage low.

Interaction within the social security system is rather complex and may lead to a poverty trap for certain groups of the unemployed. For the sake of improved stimulation of employment, the government has decreased by 50% the amount of social benefits for those who are deprived for "subjective reasons" and increased by 20% the guaranteed income for those who work. However, the share of deprived households is increasing. About 80% of the cases are connected to unemployment. The Ministry of Labour is seeking ways to decrease the burden of social expenditures, which represented 13.8% of GDP and almost 30% of the state budget in 1998. The current pay-as-you-go pension system is one of the hot candidates for reform. The system guaranteed by the state will hit a negative balance in a few years. A major reform of the basic ions system is expected to start around 2002.

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Wages:

1. Act on wages, No. 1/1991 Coll.
2. Act on salaries, No. 143/1992 Coll.
3. Act on minimum wage, No. 366/1997 Coll.

Social security benefits:

1. Act on social security, No.100/1988 Coll.
2. Act on Minimum Living Standard, No.364/1991 Coll.
3. Instruction about social deprivation, No. 234/1993 Coll. of Law

Industrial relations:

1. Act on collective bargaining, No. 2/1991 Coll.
2. Act on tripartite, No. 106/1999 Coll.

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Annexes

ackground Study on Labour Market Policy in the Slovak Republic
by Martina Lubyova, Daniela Ochrankova, uraj Vantuch

ratislava, September 1999

Annex 1 - Tables

Table A.1: Economic development in the Slovak Republic 1991-1998

	1991	1992	1993	1994	1995	1996	1997	1998
GDP nominal								
In billion SSK	320	332	370	441	517	576	654	730
GDP real, constant prices 1995								
Annual change (%)	-14.6	-6.5	-3.7	4.9	6.9	6.6	6.5	4.4
Gross industrial output								
Annual change (%)	-19.4	-9.2	-3.8	4.9	8.3	2.5	2.7	4.6
Social expenditures								
Share of GDP	-	-	16.2	14.1	14.5	14.0	13.6	13.8
Share of the state budget	-	-	100	32.3	35.1	31.2	28.5	28.9

Source: Statistical Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic

Table A.2: Development of average wages (AW) and labour productivity (LP) in entrepreneurial sector by branch

Branch (NACE classification)	Labour product. Index 98/97	Average wage Index 98/97	Difference Index 98/97 (AW - LP)
C. Mining	100.4	105.8	-5.4
D. Industry	108.9	108.9	0.0
E. Energy prod. and distribution	96.4	110.2	-13.8
F. Construction	94.9	106.6	-11.7
G. Trade and repairs	119.6	113.5	6.1
H. Hotels and restaurants	95.0	107.5	-12.5
I. Transportation	107.6	111.1	-3.5
K. Real estate, com. services, R D	107.5	112.5	-5.0
N. Health and social care	101.3	110.7	-9.4

Note: Labour productivity based on value added
Source: Statistical Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic

Table A.3: Average wage per branch of industry. Gross wage of employees in 1997

All wages in SKK/month ECU e uivalent: 38.3 SKK as of end 1997 43 SKK as of end 1998	Average hours per month	Average wage					Taxes and social insur.
		Gross				Net	
		Total	Part-time	Full-time	Base tariff		
Total	147	10 086	5 301	10 299	6 121	7 749	2 337
ECU equivalent (end 1997)		263	138	269	160	202	61
By branches (NACE)							
A. Agriculture and forestry	156	8 860	3 104	8 970	6 328	6 925	1 936
C. Mining	143	11 706	6 287	11 747	6 664	9 096	2 611
D. Industry	143	9 450	4 619	9 530	5 474	7 358	2 092
E. Energy industry	144	11 652	4 098	11 754	6 890	8 885	2 768
F. Construction	155	10 060	3 957	10 152	5 530	7 751	2 310
G. Trade	143	8 234	3 652	8 511	5 263	6 368	1 867
H. Hotels and restaurants	146	6 999	2 478	7 179	4 210	5 500	1 499
I. Transportation	146	10 859	12 399	10 846	6 987	8 324	2 535
J. Financial services	141	15 395	4 332	15 663	8 964	11 125	4 270
K. Real estate, research and development	149	11 589	3 865	11 876	6 646	8 830	2 759
L. Public administration and defense	144	12 690	6 768	13 567	7 502	9 511	3 178
M. Education	141	7 834	3 501	8 341	5 016	6 113	1 722
N. Health and social sector	161	8 503	4 034	8 663	5 473	6 619	1 884
O. Other services	144	7 984	3 478	8 263	5 230	6 213	1 771

Note: Based on enterprise survey "Information System on the Cost of Labour"
Source: Structure and differentiation of the wages of employees in 1997, Statistical Office of the Slovak Republic

Table A.4: Occupational wage structure. Gross wage of employees in 1997 by occupation

All wages in SKK/month ECU e uivalent: 38.3 SKK as of end 1997 43 SKK as of end 1998	Average hours per month	Average wage					Taxes and social insur.
		Gross				Net	
		Total	Part-time	Full-Time	Base tariff		
Total	147	10 086	5 301	10 299	6 121	7 749	2 337
ECU equivalent (end 1997)		263	138	269	160	202	61
1. Legislators, leading professionals	150	24 824	3 970	25 262	13 491	17 582	7 242
2. Scientists and specialists	145	15 818	4 710	16 543	10 119	11 705	4 113
3. Technicians, health-care and pedagogical staff	147	10 230	6 584	10 313	6 241	7 875	2 355
4. Lower administrators	143	8 219	3 777	8 329	5 461	6 418	1 801
5. Maintenance staff in trade and services	151	7 437	8 903	7 192	4 377	5 872	1 564
6. Skilled workers in agriculture and forestry	152	7 976	3 868	8 076	5 540	6 291	1 685
7. Skilled workers in other branches	150	9 439	4 073	9 515	5 479	7 403	2 037
8. Technical maintenance of machinery	149	9 126	4 275	9 195	5 343	7 161	1 965
9. Unskilled workers	140	5 639	2 640	5 976	3 646	4 575	1 064

Note: *Based on enterprise survey "Information System on the Cost of Labour"*
Source: *Structure and differentiation of the wages of employees in 1997, Statistical Office of the Slovak Republic*

Table A.5: Average wage by region. Gross wage of employees in 1997

All wages in SKK/month ECU e uivalent: 38.3 SKK as of end 1997 43 SKK as of end 1998	Average hours per month	Average wage					Taxes and social insur.
		Gross				Net	
		Total	Part-time	Full-time	Base tariff		
Total	147	10 086	5 301	10 299	6 121	7 749	2 337
ECU equivalent (end 1997)		263	138	269	160	202	61
1. Bratislava	148	12 456	5 085	12 714	7 608	9 371	3 085
2. Trnava	160	8 891	4 326	9 057	5 396	6 881	2 010
3. Trencin	144	8 778	3 814	8 926	5 141	6 881	1 897
4. Nitra	143	8 716	2 913	9 086	5 126	6 747	1 969
5. Zilina	145	8 929	3 481	9 130	5 652	6 963	1 967
6. Banska Bystrica	144	10 250	4 430	10 407	6 360	7 889	2 360
7. Presov	148	7 863	3 126	8 009	5 218	6 204	1 659
8. Kosice	146	10 490	9 039	10 630	5 884	8 082	2 407

Based on wage survey "Information System on the Cost of Labour"
Structure and differentiation of the wages of employees in 1997, Statistical Office of the Slovak Republic

Table A.6: Employment by branch and gender (ILO definition)

Employment (ths.)	1994	Fem.	1995	Fem.	1996	Fem.	1997	Fem.	1998	Fem.
Total	2178.5	%	2243.5	%	2293.7	%	2185.2	%	2171.9	%
Agriculture	215.3		195.1		208.6		179.4		163.7	
Mining	29.9		30.2		35.0		35.9		31.1	
Manufacturing	598.0		604.8		620.4		573.5		574.3	
Energy industry	49.8		47.2		59.6		52.1		48.6	
Construction	188.1		191.4		200.1		198.2		206.6	
Trade	218.1		233.6		243.6		260.4		268.7	
Transport	171.5		173.2		166.5		166.7		166.5	
Financial services	25.1		32.5		29.3		34.1		34.5	
Public admin., defence	131.6		148.9		168.2		159.4		144.7	
Education	175.4		178.1		179.1		160.8		161.9	
Health and social work	145.6		147.8		148.8		146.6		147.3	
Other services	229.9		260.7		234.5		218.1		224.0	

Note: *Fourth quarter. Female shares in the indicated branch.*
Source: *Labour Force Survey, Statistical Office of the Slovak Republic*

Table A.7: Employment by education and gender (ILO definition)

Employment (ths.)	1994	Fem. %	1995	Fem. %	1996	Fem. %	1997	Fem. %	1998	Fem. %
Total	2178.5	46.2	2243.5	46.0	2293.7	45.8	2185.2	44.9	2171.9	45.1
Primary	249.9	58.4	242.0	57.3	248.6	57.5	221.4	54.6	188.0	57.9
Apprenticeship lower	725.2	34.8	737.5	33.8	727.4	34.0	688.9	33.3	750.2	32.9
Vocational lower	152.7	39.0	174.0	36.6	158.2	34.6	150.6	31.5	140.0	34.2
Apprenticeship compl.	67.0	34.6	69.3	34.6	92.4	35.1	107.6	35.7	116.1	38.8
Vocational compl.	617.5	57.5	647.9	57.6	704.7	56.0	641.1	55.8	607.8	57.2
Grammar	91.3	65.0	93.6	64.4	104.0	62.1	115.1	63.2	121.3	63.2
University (+higher)	272.4	40.3	276.7	44.1	258.0	44.4	260.3	43.8	248.2	42.9

Note: *Fourth quarter. Female shares in the indicated education group.*
Apprentice and vocational education: "lower" education is shorter and more practically oriented than the "complete" education. The latter form includes general leaving examination.
Source: *Labour Force Survey, Statistical Office of the Slovak Republic*

Table A.8: Employment by region (ILO definition, LFS)

Region	Total employment				Unemployment rate (in %)	
	Absolute		Share in the Slovak Republic (in %)			
	IV. Q. 1997	IV. Q. 1998	IV. Q. 1997	IV. Q. 1998	IV. Q. 1997	IV. Q. 1998
Bratislavsky	302.5	303.3	13.8	14.0	5.4	7.5
Trnavsky	223.4	228.0	10.2	10.5	11.8	12.1
Trenciansky	256.6	268.4	11.7	12.4	7.7	7.6
Nitriansky	281.8	276.0	12.9	12.7	14.1	13.2
Zilinsky	294.9	288.9	13.5	13.3	8.0	10.8
Banskobystricky	264.7	258.7	12.1	11.9	12.9	13.4
Presovsky	278.4	281.3	12.7	13.0	16.8	17.8
Kosicky	283.0	267.5	13.0	12.3	15.5	20.5
Slovak Republic total	2 185.2	2 171.9	100.0	100.0	11.6	11.8

Source: Statistical Office of the Slovak Republic

Table A.9: Development of basic demographic indicators in Slovak Republic (1950-1998)

Year	Total population	Total population increase	Live births per 1 000 people	Abortions per 1 000 people	Marraiges per 1 000 people	Divorces per 1 000 people	Deaths per 1 000 people	Nat. incr. per 1 000 people
1950	3 463 446	45 595	28.8		11.3	0.52	11.5	17.3
1951	5 508 698	47 988	28.7		10.2	0.53	11.5	17.1
1952	3 558 137	43 570	28.3		9.3	0.59	10.4	18.0
1953	3 589 761	52 573	27.5	1.6	7.9	0.42	9.9	17.7
1954	3 661 437	65 135	26.9	2.6	8.6	0.35	9.5	17.3
1955	3 726 601	61 935	26.6	2.5	8.5	0.41	8.8	17.8
1956	3 787 111	59 542	26.3	2.4	9.3	0.47	8.7	17.6
1957	3 844 277	54 444	25.3	2.5	7.4	0.48	9.3	16.0
1958	3 899 751	54 370	23.9	5.5	8	0.58	8.2	15.7
1959	3 946 039	44 831	22.3	6.7	8	0.61	8.6	13.7
1960	3 994 270	48 723	22.1	7.4	8.1	0.58	7.9	14.2
1961	4 191 977	50 320	20.8	7.9	7.5	0.59	7.5	13.3
1962	4 238 056	42 722	19.8	7.6	7.2	0.58	8.1	11.7
1963	4 282 865	44 935	20.4	6.6	7.2	0.55	7.7	12.7
1964	4 327 949	45 714	20.1	6.5	7	0.54	7.6	12.5
1965	4 373 595	41 570	19.3	6.7	7	0.57	8.2	11.1
1966	4 413 853	39 796	18.5	7.4	7	0.64	8.2	10.2

Year	Total population	Total population increase	Live births per 1 000 people	Abortions per 1 000 people	Marraiges per 1 000 people	Divorces per 1 000 people	Deaths per 1 000 people	Nat. incr. per 1 000 people
1967	4 450 880	35 606	17.4	7.7	7.3	0.57	8	9.5
1968	4 483 656	33 486	17	7.8	7.5	0.67	8.5	8.5
1969	4 518 773	35 896	17.7	8	7.7	0.75	9	8.7
1970	4 528 459	33 969	17.8	7.9	7.9	0.76	9.3	8.5
1971	4 559 341	35 117	18.2	8	8.4	0.98	9.4	8.8
1972	4 596 330	43 229	19.1	7.6	8.7	0.91	9	10.1
1973	4 640 673	46 417	20	7.4	9	0.9	9.4	10.6
1974	4 691 014	49 940	20.8	7.5	9	1.16	9.6	11.2
1975	4 739 301	49 024	20.6	7.5	9.2	1.3	9.5	11.1
1976	4 789 452	51 779	20.8	7.8	9.2	1.26	9.5	11.4
1977	4 840 819	50 209	20.6	7.7	9.2	1.19	9.7	10.8
1978	4 891 673	49 039	20.5	7.9	9	1.26	9.8	10.7
1979	4 940 223	48 657	20.3	8	8.6	1.22	9.7	10.6
1980	4 984 331	41 392	19.1	8.2	7.9	1.33	10.1	8.9
1981	5 017 032	39 552	18.6	8.2	7.8	1.39	9.9	8.7
1982	5 054 770	38 435	18.3	8.4	8	1.3	10	8.4
1983	5 091 537	35 310	18.1	8.5	7.9	1.36	10.3	7.8
1984	5 127 719	34 942	17.7	8.5	7.7	1.35	10.1	7.6
1985	5 161 789	34 399	17.5	8.8	7.5	1.51	10.2	7.3
1986	5 192 789	29 741	16.8	9.7	7.4	1.6	10.2	6.5
1987	5 223 609	28 264	16.1	11.1	7.4	1.62	10	6.1
1988	5 251 120	27 248	15.8	11.3	7.1	1.57	10	5.9
1989	5 276 186	23 443	15.2	10.7	6.9	1.57	10.2	5.0
1990	5 297 774	23 048	15.1	10.6	7.6	1.67	10.3	4.8
1991	5 283 404	24 166	14.9	10	6.2	1.49	10.3	4.5
1992	5 300 020	18 278	14.1	9.3	6.4	1.52	10.1	4.0
1993	5 318 178	22 300	13.8	8.6	5.8	1.53	9.9	4.2
1994	5 347 413	19 752	12.4	7.7	5.3	1.62	9.6	3.7
1995	5 363 638	11 583	11.5	6.7	5.1	1.67	9.8	2.2
1996	5 373 810	11 142	11.2	5.7	5.1	1.75	9.5	2.1
1997	5 387 650	8 718	11.0	5.2	5.2	1.70	9.7	1.6
1998	5 393 382	5 732	10.7	4.9	5.1	1.73	9.9	1.1

Source: Stav a pohyb obyvatelstva the Slovak Republic v rokoch 1950 -1996 (Population stocks and flows in the Slovak Republic in 1959-1996).
Statistical Office of the Slovak Republic

Table A.10: Total population by gender and age group, forecast 1998-2015 (end of year stocks)

Forecast	1998	1999	2000	2001	2002	2003	2004	2005	2006
Pre-work. age									
Total	1 107	1 078	1 049	1 023	999	974	952	929	906
Male	566	551	536	523	511	498	487	475	463
Female	541	527	513	500	488	476	465	454	443
Working age									
Total	3 329	3 358	3 386	3 409	3 424	3 438	3 446	3 453	3 455
Male (15-59)	1 730	1 747	1 762	1 775	1 787	1 798	1 806	1 815	1 822
Female (15-54)	1 599	1 611	1 624	1 634	1 638	1 640	1 641	1 638	1 633
Post-work. age									
Total	962	971	980	990	1 004	1 020	1 036	1 054	1 076
Male 60+	331	332	335	338	341	343	347	350	355
Female 55+	631	639	645	652	664	676	689	704	721
Forecast	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Pre-work. age									
Total	887	870	859	854	848	844	839	835	831
Male	454	444	439	437	434	431	429	427	425
Female	433	425	420	417	415	412	410	408	406
Working age									
Total	3 449	3 441	3 425	3 400	3 375	3 349	3 324	3 301	3 277
Male (15-59)	1 823	1 822	1 817	1 806	1 794	1 782	1 769	1 756	1 742
Female (15-54)	1 626	1 619	1 608	1 594	1 580	1 567	1 555	1 545	1 535
Post-work. age									
Total	1 102	1 129	1 155	1 185	1 215	1 245	1 272	1 298	1 323
Male 60+	364	374	384	397	411	425	439	453	467
Female 55+	738	755	771	788	805	820	833	845	856

Note: *Forecast corresponds to the medium scenario" plotted at Figure 4.1. Base year for the forecast is 1995*
Source: *Institute for Forecasting, Slovak Academy of Sciences*

Table A.11: Economically active population by region

Region	Population		Economically active population				Economic activity rate (%)	
	Share in the Slovak Republic (%)	Density (pers. / km²)	Absolute (ths.)		Share in the Slovak Republic (%)			
			1997 IV Q	1998 IV Q	1997 IV Q	1998 IV Q	1997 IV Q	1998 IV Q
Bratislavsky	11,5	302	319	327	12.9	13.1	64.3	65.9
Trnavsky	10,2	132	253	258	10.2	10.3	58.7	59.8
Trenciansky	11,3	136	278	293	11.3	11.7	58.3	61.4
Nitriansky	13,3	113	328	317	13.3	12.7	57.5	55.5
Zilinsky	12,3	101	321	327	13.0	13.1	61.2	62.3
Banskobystricky	12,8	70	304	305	12.3	12.2	58.2	58.3
Presovsky	14,4	86	335	339	13.5	13.5	58.8	59.5
Kosicky	14,1	112	335	334	13.5	13.4	57.7	57.6
the Slovak Republic total	100	109	2 473	2 500	100.0	100.0	59.3	59.9

Source: Ministry of Labour, Social Affairs and Family of the Slovak Republic

Table A.12: Unemployment according to ILO definition (LFS) and unemployment register, by gender and age group (in thousands)

ILO definition		1994	1995	1996	1997	1998
Annual averages						
Total		333.6	324.5	277.6	287.1	297.0
Male		180.0	171.8	136.6	146.6	156.1
Female		153.7	152.8	141.0	140.6	140.9
End of year stock						
Total		346.4	307.8	270.7	287.9	294.7
Male		182.8	155.7	131.0	148.9	149.4
Female		163.6	152.1	139.7	139.0	145.3
By age group						
15 - 24	Total	117.3	99.3	87.3	97.5	106.5
	Male	67.3	57.8	45.9	55.3	58.2
	Female	50.0	41.5	41.4	42.2	48.3
25 - 49	Total	203.4	185.4	164.0	169.7	165.1
	Male	100.6	83.8	73.7	82.2	77.3
	Female	102.8	101.6	90.3	87.5	87.8
50 +	Total	25.8	23.0	19.4	20.8	23.3
	Male	14.9	14.2	11.4	11.4	14.0
	Female	10.9	8.8	8.0	9.4	9.3

Registered unemployment		1990	1991	1992	1993	1994	1995	1996	1997	1998
Annual averages										
Total		14.3	169.1	285.5	323.2	366.2	349.8	324.1	337.4	382.8
Male		7.2	83.4	141.1	167.2	189.5	174.8	154.9	163.4	195.4
Female		7.1	85.7	144.4	156.0	176.6	175.0	169.3	174.0	187.5
End of year stock										0.0
Total		39.6	302.0	260.3	368.1	371.5	333.3	329.7	347.8	428.2
Male		19.8	144.9	129.9	193.1	190.1	161.7	156.5	170.9	200.6
Female		19.8	157.1	130.4	175.0	181.4	171.6	173.2	176.9	227.6
By age group										0.0
15 - 24	Total		93.8	88.2	121.1	116.5	101.4	102.9	111.1	137.8
	Male		46.5	47.6	98.2	68.8	56.5	55.8	61.3	78.9
	Female		47.2	40.6	22.9	47.7	44.9	47.1	49.8	58.9
25 - 49	Total		191.1	154.6	222.1	227.2	174.2	166.1	205.6	250.4
	Male		87.8	72.1	107.4	104.6	75.9	70.5	91.6	124.1
	Female		103.3	82.4	114.7	122.6	98.3	95.7	114.0	126.4
50 +	Total		17.1	17.5	24.9	27.8	57.7	60.7	31.1	40.0
	Male		10.5	10.1	15.2	16.6	29.3	30.2	18.0	24.6
	Female		6.6	7.4	9.7	11.1	28.4	30.5	13.1	15.3

Note: Comparable LFS data available since 1994
Source: National Labour Office of the Slovak Republic. Statistical Office of the Slovak Republic

Table A.13: Unemployment level by duration and gender. (In thousands, registered end of year, LFS last quarter)

ILO definition (LFS)		1994	1995	1996	1997	1998
TOTAL		346.4	307.8	270.7	283.9	294.7
< 6 months	% of total	32.4	30.3	32.3	32.8	32.1
	Absolute	112.3	93.2	87.4	93.0	94.6
	Male	60.1	46.8	40.9	49.7	45.6
	Female	52.2	46.4	46.5	43.3	49.0
< 12 months	% of total	49.9	44.9	46.9	47.4	48.8
	Absolute	173.0	138.3	126.9	134.6	143.8
	Male	93.4	70.9	61.9	72.1	74.0
	Female	79.6	67.4	65.0	62.5	69.8
12 + months	% of total	48.0	53.0	53.1	52.6	49.7
	Absolute	166.2	163.2	143.8	149.3	146.5
	Male	85.2	80.9	69.1	75.0	73.9
	Female	81.0	82.3	74.7	74.3	72.2

Registered unemployment		1991	1992	1992	1994	1995	1996	1997	1998
TOTAL		302.0	260.2	368.1	371.5	333.3	329.7	347.7	428.2
< 6 months	% of total	60.3	46.0	45.8	38.1	40.7	42.0	44.3	42.3
	Absolute	182.0	119.8	168.6	141.4	135.6	138.5	154.0	181.2
	Male	86.9	63.5	92.4	74.6	72.0	73.8	84.0	104.4
	Female	95.1	56.3	76.2	66.8	63.6	64.7	70.1	76.8
< 12 months	% of total	93.9	63.7	67.8	54.8	55.4	58.0	62.1	61.8
	Absolute	283.6	165.8	249.6	203.6	184.6	191.2	216.0	264.5
	Male	135.7	84.0	132.1	104.4	93.5	97.3	113.7	148.0
	Female	147.9	81.8	117.5	99.2	91.1	93.9	102.3	116.5
12 + months	% of total	6.1	36.3	32.2	45.2	44.6	42.0	37.9	38.2
	Absolute	18.4	94.4	118.5	167.9	148.7	138.5	131.7	163.7
	Male	9.2	45.9	61.1	85.6	68.2	59.2	57.1	79.6
	Female	9.2	48.6	57.4	82.3	80.5	79.3	74.6	84.1

Source: Statistical Office of the Slovak Republic, National Labour Office of the Slovak Republic

Table A.14: Unemployment by educational attainment (ILO definition, LFS last quarter)

Education group	1994	1995	1996	1997	1998
Less than basic	0.5	0.6	0.3	0.1	0.8
Basic	27.2	29.0	28.6	29.4	22.2
Apprentice lower(a)	35.3	36.0	32.4	29.6	37.2
Vocational lower(a)	7.0	8.2	6.5	6.6	5.8
Apprentice complete (a)	3.5	2.4	3.0	4.4	4.2
Vocational complete (a)	19.5	16.2	20.7	20.0	19.5
Grammar	4.0	5.1	5.1	6.8	6.6
University (b)	3.1	2.7	3.4	3.0	3.7

Notes: (a) "Lower" education is shorter and more practically oriented than the "complete" education. The latter form includes general leaving examination.
(b) Includes higher secondary, i.e. education following after completion of the complete secondary education (leaving examination), but less than university.
Source: Labour Force Survey, Statistical Office of the Slovak Republic

Table A.15: Registered unemployment rate by regions (annual averages in %)

Old macro-regions:(a)						
	1991	1992	1993	1994	1995	1996
Bratislava	3.92	5.61	4.43	5.42	5.00	4.33
Western Slovakia	7.69	12.58	13.93	14.2	13.56	12.06
Central Slovakia	6.83	10.9	12.8	14.29	13.09	11.96
Eastern Slovakia	7.91	12.77	12.34	17.6	17.57	16.79
Total	7.04	11.32	12.86	14.39	13.76	12.62

New macro-regions:					
	1997	1998		1997	1998
Bratislava	4.85	4.91	Banská Bystrica	15.00	17.63
Trnava	11.45	12.27	Presov	17.85	20.22
Trencin	8.68	9.81	Kosice	17.74	20.04
Nitra	15.2	16.59	Total	12.97	14.53
Zilina	11.13	12.66			

Table A.15 cont., end of year

New districts:			New districts:		
	1997	1998		1997	1998
Bratislava I	3.38	4.49	Banská Bystrica	5.96	8.07
Bratislava II	4.23	4.34	Banská tiavnica	13.42	15.97
Bratislava III	2.43	4.94	Brezno	15.78	20.64
Bratislava IV	3.17	3.66	Detva	13.93	16.86
Bratislava V	4.37	4.63	Krupina	17.07	20.98
Malacky	9.41	12.12	Lucenec	20.47	25.91
Pezinok	5.59	7.06	Poltár	18.59	26.40
Senec	5.51	6.41	Revúca	24.20	30.89
Bratislava region	4.60	5.48	Rimavská Sobota	28.10	34.92
Trnava	9.51	17.38	Velký Krtíš	23.04	31.38
Dunajská Streda	15.76	16.50	Zvolen	8.39	11.11
Galanta	13.93	11.64	Zarnovica	16.01	19.63
Hlohovec	9.58	9.13	Ziar nad Hronom	10.84	14.81
Pieštany	7.28	13.72	B.Bystrica region	15.87	20.58
Senica	11.04	13.47	Prešov	15.61	26.90
Skalica	9.88	10.27	Bardejov	21.10	22.90
Trnavský kraj	11.48	13.30	Humenné	17.90	24.54

New districts:			New districts:		
	1997	1998		1997	1998
Trencín	4.61	15.66	Kezmarok	22.50	22.33
Bánovce n/Bebr.	12.14	7.62	Levoca	18.24	23.44
Ilava	7.16	15.29	Medzilaborce	19.22	18.23
Myjava	10.81	11.62	Poprad	15.89	19.27
Nové Mesto n/Váh.	8.23	20.70	Sabinov	20.60	26.60
Partizánske	16.22	13.64	Snina	19.04	23.40
Povazská Bystrica	11.19	11.56	Stará Lubovna	14.50	18.79
Prievidza	9.52	12.52	Stropkov	20.97	27.46
Púchov	8.42	5.78	Svidník	20.77	25.82
Trencin region	9.10	11.60	Vranov n/Toplou	26.85	31.06
Nitra	11.36	19.66	Prešov region	18.86	23.09
Komárno	16.99	22.54	Košice I	11.90	25.16
Levice	18.35	13.89	Košice II	10.46	12.54
Nové Zámky	16.15	19.73	Košice III	12.45	12.61
ala	16.08	19.10	Košice IV	10.33	16.81
Topolcany	12.76	16.45	Košice – okolie	18.47	13.18
Zlaté Moravce	14.39	19.30	Gelnica	20.53	22.54
Nitra region	15.04	18.45	Michalovce	23.24	26.92
Zilina	9.38	13.57	Roznava	22.65	26.63
Byt a	11.13	17.32	Sobrance	24.50	26.91
adca	12.86	18.92	Spišská Nová Ves	20.94	24.80
Dolný Kubín	15.75	21.51	Trebišov	23.07	27.31
Kysucké N. Mesto	14.43	11.01	Košice region	18.33	21.78
Liptovský Mikuláš	8.11	13.96			
Martin	10.85	19.56			
Námestovo	18.68	13.46			
Ruzomberok	11.37	13.43			
Tur ianske Teplice	10.92	17.94			
Tvrdošín	15.23	12.32			
Zilina region	11.69	14.78			

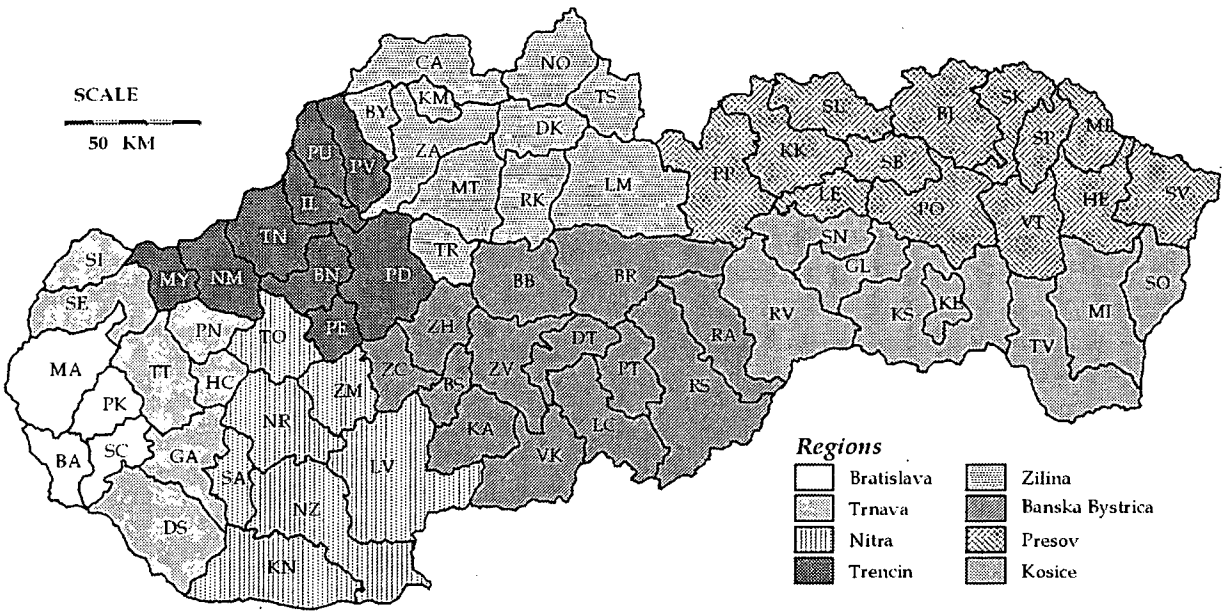
Table A15 cont., end of year

Old districts:						
	1991	1992	1993	1994	1995	1996
Bratislava	6.53	3.81	4.50	5.01	4.66	4.11
Bratislava environs	15.32	9.64	13.28	8.21	7.42	6.32
Dunajská Streda	17.36	16.27	20.38	18.36	16.65	15.24
Galanta	15.80	14.94	19.91	18.00	15.49	15.06
Komárno	10.17	12.73	21.71	20.69	17.99	18.17
Levice	14.23	11.76	16.56	18.90	17.91	18.50
Nitra	16.97	12.57	14.70	16.37	14.25	11.94
Nové Zámky	11.95	11.29	17.83	17.39	16.47	16.36
Senica	11.07	8.86	13.44	10.85	9.63	10.29
Topolcany	12.25	11.82	15.87	15.07	12.38	12.69
Trencin	10.84	8.22	8.12	7.55	6.63	6.30
Trnava	11.89	10.18	13.57	11.97	11.40	9.16
Western Slovakia	13.31	11.36	15.35	14.41	12.90	12.12
Banská Bystrica	11.62	7.60	11.05	11.64	10.63	10.20
Cadca	20.23	16.25	21.04	16.86	13.79	12.83
Dolný Kubín	16.67	12.85	17.86	16.35	14.18	14.28
Liptovský Mikuláš	8.83	6.51	11.12	10.07	9.06	10.11
Lucenec	13.95	14.30	20.28	20.36	19.21	19.19
Martin	7.96	7.55	10.71	10.47	8.68	9.79
Povazská Bystrica	11.19	9.33	13.56	11.70	9.37	8.47
Prievidza	10.91	8.86	13.64	13.32	11.01	10.51
Rimavská Sobota	14.74	16.60	26.41	28.41	26.39	23.81
Velký Krtíš	11.66	13.78	21.66	21.39	20.92	21.95
Zvolen	9.01	8.97	12.65	12.59	11.46	11.28
Ziar nad Hronom	9.97	7.92	12.20	14.43	12.52	13.36
Zilina	10.99	9.00	13.16	12.69	10.44	9.36
Central Slovakia	11.76	10.03	14.75	14.36	12.53	12.27
Bardejov	18.95	15.72	20.79	19.73	18.22	17.77
Humenné	8.68	10.52	14.77	15.28	13.25	15.54
Košice - mesto	7.30	6.84	10.01	12.35	11.31	10.49
Košice - vidiek	16.52	16.54	22.60	16.35	16.58	16.37
Michalovce	14.10	16.44	22.48	21.09	20.89	20.49
Poprad	14.30	10.63	15.72	18.95	16.96	19.32

Old districts:						
	1991	1992	1993	1994	1995	1996
Prešov	11.94	10.40	16.42	15.93	16.46	15.64
Roznava	14.09	16.99	22.28	23.67	21.95	22.48
Spišská Nová Ves	13.85	14.81	23.30	21.88	19.32	19.06
Stará Lubov a	13.64	9.95	14.32	13.69	13.53	14.47
Svidník	12.25	13.74	19.40	22.29	18.31	18.60
Trebišov	16.44	19.26	19.56	23.29	18.98	22.42
Vranov n/Toplou	15.57	15.99	22.63	21.40	19.03	20.99
Eastern Slovakia	12.49	12.42	17.35	18.15	16.73	17.24
Slovakia total	11.82	10.38	14.44	14.59	13.11	12.84

Note: *(a) Geographic-administrative reform in effect since 1997*
Source: *National Labour Office of the Slovak Republic*

Annex 2
Map of Slovak regions and districts



	Area [sq. km]	Population [ths.]	Econ. active popul. [ths.]	Pop. density [pers./sq.km]	Unempl. rate LFS [%]
Slovak total	49 034	5 379	48,4	109	13,44
Regions:	**Shares in the Slovak total**			**[pers./sq.km]**	**LFS [%]**
Bratislava	4,2%	11,5%	12,2%	302	4,90
Trencin	8,5%	10,2%	10,5%	132	11,85
Trnava	9,2%	11,3%	11,3%	136	8,97
Nitra	12,9%	13,3%	13,4%	113	16,10
Zilina	13,8%	12,3%	12,7%	101	11,64
Banska Bystrica	19,3%	12,8%	12,8%	70	15,62
Presov	18,3%	14,4%	13,7%	86	18,35
Kosice	13,8%	14,1%	13,5%	112	18,18

Bratislava region	Trencin region	Bansk Bystrica region	Presov region
BA Bratislava	MY Myjava	ZC Zarnovica	PP Poprad
MA Malacky	NM Nove Mesto n/Vahom	ZH Ziar n/Hronom	KK Kezmarok
PK Pezinok	TN Trencin	BS Banská tiavnica	SL Stara Lubovna
SC Senec	IL Ilava	BR Brezno	LE Levoca
Trnava region	PU Puchov	BB Banská Bystrica	SB Sabinov
SI Skalica	BN Banovce n/Bebravou	ZV Zvolen	PO Prešov
SE Senica	PE Partizanske	DT Detva	BJ Bardejov
TT Trnava	PD Prievidza	PT Poltar	SK Svidnik
PN Pieštany	**Martin region**	KA Krupina	SP Stropkov
HC Hlohovec	MT Martin	VK Velký Krtíš	ML Medzilaborce
GA Galanta	RK Ruzomberok	LC Levice	VT Vranov n/Toplou
DS Dunajská Streda	LM Lipt.Mikulas	RS Rimavská Sobota	HE Humenné
Nitra region	TR Turc. Teplice	RA Roznava	SV Snina
NR Nitra	CA Cadca	**Kosice region**	
ZM Zlate Moravce	KM Kys. N. Mesto	RV Roznava	KE Kosice
TO Topolcany	ZA Zilina	SN Spisska Nova Ves	TV Trebisov
SA Sala	NO Namestovo	GL Gelnica	SO Sobrance
NZ Nove Zamky	DK Dolny Kubin	KS Kosice environs	MI Michalovce
LV Levice	TS Tvrdosin		
KN Komarno	BY Bytca		

Annex 3

Basic labour market indicators

Main sources of information and methodology of monitoring

Summary table 1

Source	Periodicity	Type of survey	Sample si e/ Coverage	Sampling procedure	Selection (stratification) criteria	Global represen-tative ness	Possible bias in represen-tative ness	Start of series	Monitored indicators
Labour Force Survey	Quarterly	Sample survey	≈ 10 ths. HH (30 ths. individ.)	Stratified quota	Region	After re-weighting	Regionally not representative	1993	E, U, OLF
Register of Labour Offices	Continuous	Administrative	All registered unemployed	-	-	Yes	Not ILO definitions	1990	U, PLMP, ALMP
Information System on the Cost of Labour	Irregular (annually)	Sample survey	≈ 1 ths. firms	Stratified quota	Region of employees Branch	No	Towards large firms	1992	Wage structure hours worked, labour costs
Enterprise Surveys	Monthly Quarterly Annually Annually	Exhaustive survey Exh. survey Sample survey Guess	All firms24emp.(a) All firms24emp. 20% firms emp. Self-employed	- - Random -	- - - - -	No	Towards large firms	Before 1989 Before 1989 1993 1993	E, Wages
Population Register	Continuous	Administrative	All residents	-	-	Yes	Short-term residents not covered	Before 1989	Permanent and long-term residents
Population Census	10 years	Exhaustive survey	All residents	-	-	Yes	Short- and long-term res. not covered	Before 1989 (last in 1991)	Permanent residents
Household Budget Survey	Annually	Sample survey	≈ 2-3 ths. HH (5-10 ths. individ.)	Stratified quota	Region Social group(b) children Net PC income	No	Total incomes and wages not representative	Before 1989	Wages, Expenditures
Microcensus	4-5 years	Sample survey	≈ 10 ths. HH (30 ths. individ.)	Random	-	Yes	Relatively little information on expenditures	Before 1989 (last in 1989, 1992, 1996)	Wages, Incomes

Notes: *(a) All firms registered in business register with more than 24 employees in industry, trade, transportation and construction*
(b) Social group of household head
(c) Number of dependent children, for households of pensioners without economically active members - number of household members

Abbreviations: *HH - Household, PC income - Per capita income*
E - Employment, U - Unemployment, OLF - Out-of-labour-force
PLMP/ALMP - Passive/Active labour market policies

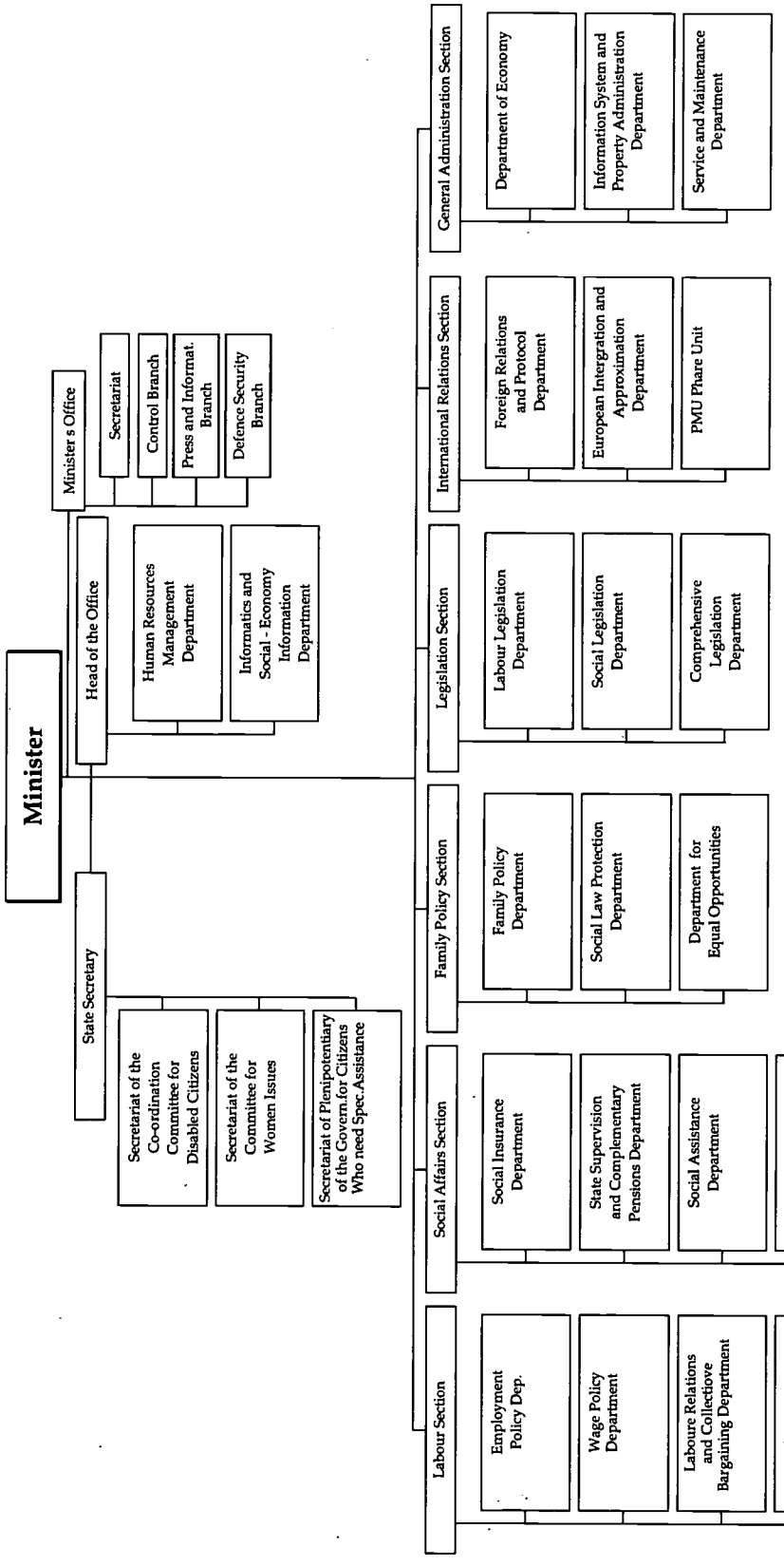
Summary table 2

Indicator / Source	Employment	Unemployment	PLMP ALMP	Population	Wages
Labour Force Survey	✓ (ILO definition)	✓ (ILO definition)	-	-	Main wage brackets until 1994
Register of Labour Offices	Only employment of foreigners	✓ (Registered)	✓	-	Wage on the last job for unemployed
Information System on the Cost of Labour	✓ (Hours worked)	-	-	-	✓
Enterprise Surveys	✓	-	-	-	✓
Population Register	-	-	-	✓	-
Population Census	-	-	-	✓	-
Household Budget Survey	-	-	-	-	✓
Microcensus	-	-	-	-	✓

Abbreviations: *PLMP/ALMP - Passive/Active labour market policies*

Annex 4 - Ministry of Labour Social Affairs and Family

Organisation chart



Annex 5
Labour market regulations

Labour market regulations in Slovakia are contained the following system of norms and rules:

- Constitution
- Acts of parliament
- Lower legal norms
- Collective agreements
- Internal prescriptive acts
- Technical standards
- Rules of decency and civic coexistence
- International agreements and conventions

Constitution is the highest legal norm of the state. Acts of parliament and lower legal norms (decrees and instructions of central state administration organs) are published in the Collection of Laws and they are generally binding. Other norms and rules are binding within the institutions which issued them. International agreements and conventions have in general priority over the domestic law.

Constitution of the Slovak Republic, approved by the Slovak National Council in 1992 (Act No. 460/1992 Collection of Law), guarantees the basic principles governing labour relations: prohibition of discrimination (Art. 12), prohibition of forced labour (Art. 18), right to free selection of vocational training and education, right to work (Art. 35). Right to just and satisfactory working conditions (Art. 36) is to be further determined by legal norms, including right to remuneration providing for a dignified standard of living, protection from inadequate dismissal and discrimination at work, protection of health and safety at work, maximum duration of the worktime, adequate rest after work, minimum duration of paid vacation, right to collective bargaining. Furthermore, the Constitution stipulates special protection to women, juveniles and the handicapped in relations governed by the labour law. Women are generally entitled to increased protection of occupational health and to special working conditions (Art. 38); pregnant women are ensured special care, special protection in labour law relations and adequate working conditions (Art. 41, par. 2). Juveniles and handicapped workers are also entitled to increased protection of health at work, special working conditions, special protection in labour relations and assistance in vocational training (Art. 38). For industrial relations and collective bargaining it is important that the Constitution stipulates the right of all citizens to freely associate with others in order to protect their economic and social interests, as well as the freedom to associate in unions and the right for strike (Art. 37).

Principal act of labour law is the Labour Code, originating from the year 1965 (Act No. 65/1965 Coll.) and its numerous amendments. Among other crucial acts of labour law there is Act on Employment (Act 378/1996 Coll.) containing the regulation of labour market institutions and labour market policies, Act on Collective Bargaining (Act 2/1992 Coll.), three acts regulating wages, salaries and the minimum wage, and act on tripartite social dialog (Act 106/1999).

Multilateral conventions

After the split of CSFR, the Slovak Republic succeeded in becoming a member of the International Labour Organisation and as such is bound by 57 ILO Conventions, which were ratified by the former CSFR before the year 1993. Since 1 January 1993 the Slovak Republic has ratified a further five ILO Conventions: Convention No. 144/1976 on mutual consultations for supporting the implementation of international labour norms, Convention No. 105/1957 on abolishment of forced work, Convention No. 138/1973 on the minimum age for employment, Convention No. 176/1995 on health and safety standards in mines, Convention No. 173/1992 on protection of workers' wage claims in case of insolvency of their employer.

This last convention is of particular importance in Slovakia. Until very recently, there was no guarantee for employees' wages in the case of insolvency of the employer. Given that bankruptcy legislation was practically not enforced in the past, the situation was not too critical. However, under the new economic conditions, more frequent bankruptcies are envisaged. Therefore, current amendments of the labour law stipulate the introduction of the so-called guarantee funds for wage claims of employees.

The Social Charter of Europe was signed by the former CSFR in 1992. The Slovak Republic succeeded into this position in 1993. The ratification procedure in parliament was completed in June 1998 and the Charter became valid in Slovakia in July 1998. Article 19 on the rights of migrating workers is among those, which are not binding for the Slovak Republic yet.

The Association Agreement between the European Community and the Slovak Republic (further Association Agreement) was signed on 4 October 1993 in Luxembourg and it became valid in February 1995. Title IV of the Association Agreement contains stipulations regarding the movement of workers, and the establishment and provision of services.

Article 38 of the Association Agreement stipulates equal treatment regarding working conditions, wage and termination of employment. From the Slovak side, the prohibition of discrimination on the basis of any status is contained in the Constitution (Article 12). Furthermore, Act on Employment stipulates equal legal status to Slovak citizens and foreigners in all the legal relationships governed by the Act. This implies an equal position for domestic and foreign workers in terms of working conditions, wage and termination of employment. However, the access to employment for foreigners is in general conditioned by work permit requirements.

Article 38 of the Association Agreement further stipulates granting access to labour market for spouses and children of legally employed workers who are legally residing in the country (not including spouses and children of seasonal workers and workers employed on the basis of bilateral agreements). This provision is partially implemented by the current Slovak legislation.

Article 39 of the Association Agreement contains regulations regarding co-ordination of social security systems: cumulative accounting of pension entitlements, entitlement to family allowances for workers, and free transferability of social benefits (Slovakia is obliged to grant the latter two conditions). Regarding the provision of child allowances, a recent amendment of the Slovak social legislation modified the conditions to suit the needs of foreign residents better. Child allowances are granted to foreigners and their children with long-term residence in Slovakia. Direct payment of child allowances abroad is not possible yet. However, in the case of foreigners and their children who have permanent residence in the Slovak Republic, the allowances can also be paid during their temporary stay abroad to an account at a bank in the Slovak Republic, or to a person in the Slovak Republic, denominated for these purposes by the foreigner.

Article 42 of the Association Agreement stipulates maintaining and possible improvement of the existing bilateral agreements regarding the employment of citizens, and a positive consideration of the possibility of concluding such an agreement with Slovakia by the other member states of the European Union. The Slovak Minister of Labour addressed 13 member states in 1996 regarding the possibilities of concluding such agreements (Germany and Austria were not addressed, as there were valid agreements with Germany and two agreements with Austria were in the process of preparation). Finland, Luxembourg and Portugal reacted positively to the exchange of skilled workers for the purposes of increasing qualifications and language abilities and Greece initiated proposal for an agreement regarding seasonal workers. Currently there are valid agreements only with Germany, Finland and Luxembourg. Two agreements with Austria have been postponed by the Austrians. There is no reaction currently from Portugal and Greece. Other member states either refused such an initiative or did not react to the proposal from the Slovak Ministry of Labour.

There is a co-operation in the field of labour migration between the Ministry of Labour, Social Affairs and Family and the UNHCR Office in the Slovak Republic. Negotiations mostly concern the feedback between current employment legislation and the legislation on refugees in the Slovak Republic. According to the Act on Employment, UNHCR can enter the procedure of granting work permits to refugees at any stage and has also the right of appeal. Access to employment for refugees was liberalised in 1997 by the last Act on refugees

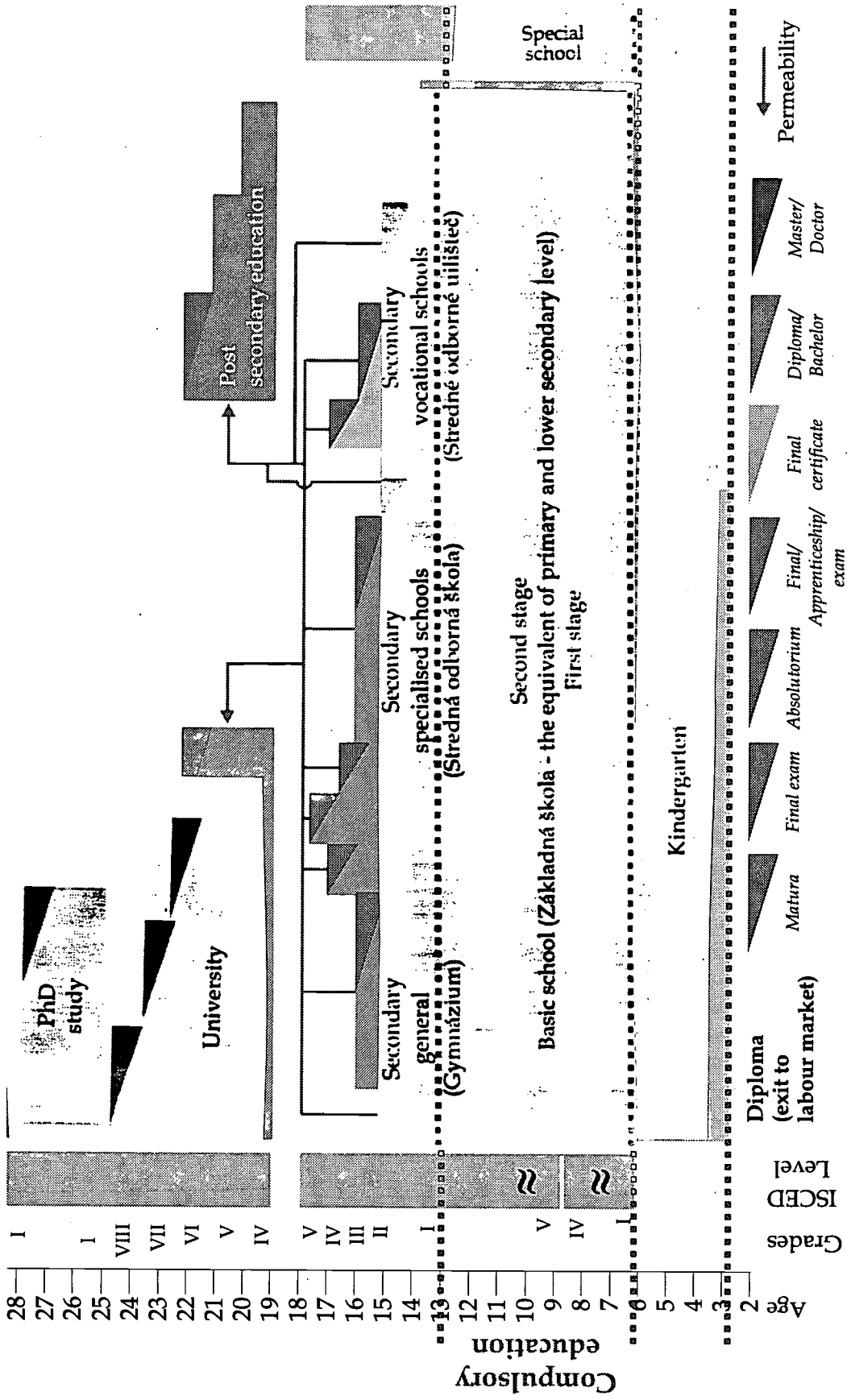
ilateral agreements

Among the countries, which had strong traditions in bilateral co-operation with the Czechoslovak Socialist Republic in the field of labour migration, there are countries whose agreements were either terminated nor realised during the transition period: Angola, Cuba, Laos, Mongolia, and North Korea. Slovak Republic has current bilateral agreements on the mutual employment of workers with the following countries: Czech Republic, Germany, Poland, Russian Federation, Vietnam, Ukraine, Luxembourg, Finland and Switzerland. Under preparation are agreements with Austria, Romania and Hungary.

Slovak Republic has concluded agreements in the field of social security with the following countries: Bulgaria, Cyprus, Czech Republic, France, Yugoslavia, Croatia, Hungary, Poland, Russia, Romania and Switzerland. In the process of preparation there are agreements with United Kingdom, Austria, Italy and Luxembourg.

Annex 6 - Vocational education and training

Figure A6.1 System of education in the Slovak Republic in 1999



- Basic school - length was 8 years until 1990, and has been 9 years since
- Grammar school – complete form of secondary education (maturity examination)
- SSS - Vocational schools (VET) - complete form (maturity examination) or lower form (certificate of qualification)
- SVS - Apprentice schools (VET) - complete form (maturity examination) or lower form (certificate of qualification)
- " Maturity examination" is a general school leaving examination confirming the "complete (full) secondary education" in all grammar schools, in almost all study branches of vocational schools and in some study branches of apprentice schools.

Table A6.1: Enrolment in education and training of 14 - 19 years olds

Years of age	All education/training								
	1995			1996			1997		
	M	F	Total	M	F	Total	M	F	Total
14	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3
15	99.2	99.2	99.2	99.2	99.2	99.2	99.1	99.2	99.1
16	90.9	92.5	91.7	91.9	94.5	93.2	92.1	92.8	92.4
17	65.2	78.6	71.7	66.8	77.5	72.1	70.3	81.6	75.8
18	36.3	43.5	39.8	40.0	44.5	42.2	41.8	47.2	44.5
19	22.1	23.2	22.7	23.4	24.5	23.9	24.7	26.2	25.5
14-19	68.8	72.7	70.7	69.3	72.5	70.9	70.4	73.4	71.9
	Grammar school education								
	1995			1996			1997		
	M	F	Total	M	F	Total	M	F	Total
14	45.2	49.2	47.1	45.7	48.7	47.2	54.9	60.4	57.6
15	21.6	28.0	24.8	18.8	25.1	21.9	24.8	30.3	27.5
16	14.0	21.0	17.5	14.7	21.3	18.0	15.2	20.9	18.0
17	13.2	21.1	17.1	13.5	20.2	16.8	14.2	20.7	17.4
18	4.6	7.5	6.0	4.7	7.3	5.9	4.8	7.1	5.9
19	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2
14-19	16.3	21.0	18.6	15.9	20.1	18.0	18.6	22.7	20.6

	Secondary VET with maturity exam								
	1995			1996			1997		
	M	F	Total	M	F	Total	M	F	Total
14	25.0	31.1	28.0	26.2	32.8	29.4	21.1	25.9	23.5
15	35.2	43.7	39.4	37.7	46.9	42.2	36.2	45.2	40.6
16	34.4	43.7	39.0	35.6	46.0	40.7	37.5	46.4	41.9
17	36.9	47.3	42.0	39.1	48.1	43.5	42.6	51.9	47.1
18	13.7	18.7	16.1	15.3	19.8	17.5	16.6	21.2	18.9
19	0.4	1.2	0.8	0.7	1.7	1.2	1.0	2.3	1.6
14-19	24.4	31.1	27.6	25.6	32.3	28.9	25.5	31.7	28.6
	Secondary VET with certificate of ualification								
	1995			1996			1997		
	M	F	Total	M	F	Total	M	F	Total
14	29.0	18.9	24.1	27.3	17.7	22.6	23.3	13.0	18.3
15	42.4	27.5	35.1	42.7	27.2	35.1	38.0	23.7	31.0
16	42.5	27.8	35.3	41.6	27.2	34.6	39.3	25.5	32.5
17	15.2	10.2	12.7	14.2	9.2	11.8	13.6	9.0	11.3
18	0.7	0.5	0.6	0.6	0.4	0.5	0.5	0.3	0.4
19	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-19	21.7	14.2	18.0	20.6	13.3	17.1	18.7	11.6	15.2
	Post-secondary vocational technical								
	1995			1996			1997		
	M	F	Total	M	F	Total	M	F	Total
18	0.7	1.9	1.2	0.9	1.5	1.2	1.1	1.8	1.4
19	0.9	2.4	1.6	1.0	2.2	1.6	1.0	2.0	1.5
14-19	0.3	0.7	0.5	0.3	0.6	0.5	0.4	0.7	0.5
	Higher education								
	1995			1996			1997		
	M	F	Total	M	F	Total	M	F	Total
18	16.7	15.0	15.9	18.5	15.6	17.1	18.9	16.8	17.8
19	20.7	19.4	20.0	21.4	20.3	20.9	22.6	21.7	22.1
14-19	6.2	5.7	6.0	6.8	6.1	6.5	7.2	6.7	7.0

Table A6.2: 1989 – 1998 basic trends. Grammar schools. (Index 1989 = 100)

Year	Schools	Full time study			Part time study			Teachers	
		Students	Enrolled	Graduates	Students	Enrolled	Graduates	Full time	Part time
1989	100	100	100	100	100	100	100	100	100
1990	103.1	107.4	110.4	108.7	71.4	67.8	61.7	100.6	108.5
1991	114.8	114.8	113.8	113.8	41.0	11.5	43.6	108.1	151.2
1992	128.9	123.3	125.7	120.1	37.5	78.2	34.6	119.9	210.2
1993	136.7	132.0	132.3	133.8	23.0	3.4	9.8	123.9	214.6
1994	143.0	139.9	137.6	131.8	37.5	82.8	0.0	130.5	250.3
1995	148.4	148.2	139.9	142.0	74.9	196.6	29.3	140.4	309.4
1996	153.1	154.0	140.6	140.7	151.5	374.7	47.4	146.6	313.2
1997	154.7	155.5	122.8	138.1	189.5	392.0	130.1	150.5	341.2
1998	160.2	156.5	119.8	n.a.	320.6	849.4	n.a.	158.1	295.6

Source: Institute of Information and Forecasting in Education

Table A6.3: 1989 – 1998 basic trends. Vocational schools. (Index 1989 = 100)

Year	Schools	Full time study			Part time study			Teachers	
		Students	Enrolled	Graduates	Students	Enrolled	Graduates	Full time	Part time
1989	100	100	100	100	100	100	100	100	100
1990	101.7	108.2	115.6	108.8	88.0	83.2	103.8	103.1	107.3
1991	151.7	117.6	129.8	113.4	63.8	51.0	90.8	99.8	124.6
1992	177.0	129.0	141.8	118.5	41.3	35.5	66.8	123.6	187.6
1993	191.0	138.7	143.8	134.5	30.1	30.1	45.3	134.4	209.7
1994	202.8	145.6	145.2	147.8	34.3	45.8	42.7	139.6	218.0
1995	204.5	148.9	146.9	158.2	48.7	75.4	58.7	151.2	242.1
1996	206.2	151.5	151.2	162.0	63.1	96.7	71.2	157.1	231.9
1997	205.1	145.0	122.3	164.5	75.7	119.0	92.2	159.8	238.8
1998	197.2	138.2	118.4	n.a.	74.3	101.2	n.a.	164.8	225.5

Source: Institute of Information and Forecasting in Education

Table A6.4: 1989 – 1998 basic trends. Apprentice schools. (Index 1989 = 100)

Year	Schools	Full time study			Part time study			Teachers	
		Students	Enrolled	Graduates	Students	Enrolled	Graduates	Full time	Part time
1989	100	100	100	100	100	100	100	100	100
1990	100.0	96.6	89.4	111.6	94.0	93.3	89.2	98.3	98.3
1991	101.9	92.3	86.2	98.8	69.0	71.0	65.2	94.3	107.0
1992	111.9	89.8	88.1	127.6	67.4	74.2	59.3	94.9	102.2
1993	110.6	89.2	88.4	92.5	77.6	85.7	72.0	92.1	96.1
1994	115.4	89.0	88.7	93.2	88.5	100.6	73.0	93.4	100.5
1995	114.8	90.0	90.1	98.2	84.8	85.8	91.9	94.0	121.8
1996	114.1	87.4	88.3	97.9	85.1	93.2	78.8	94.1	141.7
1997	111.3	81.7	75.9	93.7	78.9	76.9	82.0	94.7	128.4
1998	112.2	75.7	70.2	n.a.	66.8	63.6	n.a.	93.7	121.1

Source: Institute of Information and Forecasting in Education

Table A6.5: 1989 – 1998 basic trends. Higher education institutions. (Index 1989 = 100)

Year	Schools	Full time study			Part time study			Teachers	
		Students	Enrolled	Graduates	Students	Enrolled	Graduates	Full time	Part time
1989	100	100	100	100	100	100	100	100	100
1990	100.0	107.2	104.0	85.5	97.2	78.7	110.2	97.0	102.0
1991	100.0	106.7	102.2	96.8	75.3	31.1	166.1	97.7	62.0
1992	107.7	113.0	124.2	95.4	75.0	68.6	160.8	100.5	71.9
1993	107.7	119.7	140.4	95.4	86.0	113.1	159.0	96.4	35.9
1994	107.7	136.1	155.4	73.9	85.3	131.2	184.8	96.6	56.4
1995	107.7	147.5	161.4	100.5	107.7	163.4	192.9	99.4	65.7
1996	107.7	158.8	173.0	109.3	137.2	208.6	117.7	104.9	63.7
1997	138.5	167.7	179.4	137.3	185.8	299.5	186.1	109.0	81.0
1998	138.5	174.4	180.1	137.8	243.0	372.2	236.2	111.0	113.7

Source: Institute of Information and Forecasting in Education

Table A6.6: Active population (16- 64 years olds) with vocational qualification – employed and in continuous education/training. (%)

Age group of 16 – 64 year olds	Total	Males	Females
Employed	62.26	69.33	55.33
Employed with vocational qualification	52.70	61.09	44.48
Employed graduates of SSS and SVS	44.90	52.39	37.56
Employed with vocational qualification receiving continuous E/T	0.04	0.05	0.04
Employed graduates of SSS and SVS receiving continuous E/T	0.04	0.05	0.04
Age group of 16 – 24 year olds			
Employed	38.59	41.10	35.99
Employed with vocational qualification	34.50	37.50	31.38
Employed graduates of SSS and SVS	33.47	36.62	30.19
Employed with vocational qualification receiving continuous E/T	0.12	0.09	0.15
Employed graduates of SSS and SVS receiving continuous E/T	0.12	0.09	0.15
Age group of 25 – 39 year olds			
Employed	78.38	86.17	70.36
Employed with vocational qualification	69.48	78.16	60.58
Employed graduates of SSS and SVS	58.88	66.86	50.69
Employed with vocational qualification receiving continuous E/T	0.03	0.06	0.01
Employed graduates of SSS and SVS receiving continuous E/T	0.03	0.06	0.01
Age group of 40 – 64 year olds			
Employed	62.66	71.66	54.18
Employed with vocational qualification	49.57	60.77	39.32
Employed graduates of SSS and SVS	40.26	49.65	31.66
Employed with vocational qualification receiving continuous E/T	0.01	0.01	-
Employed graduates of SSS and SVS receiving continuous E/T	0.01	0.01	-

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