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ABSTRACT

This report provides an overview of the state of vocational education and training systems in the Czech Republic, in the context of the history and the present economic development of the country. The report is organized in nine sections that cover the following topics: (1) political and socioeconomic background information, including economic development, demographics, and the labor market; (2) modernization of vocational education and training; (3) human resources development, including the preparation of managers and administrators; (4) research on the labor market and vocational education and training; (5) institutions responsible for the educational system, which is very decentralized; (6) legislation; (7) financing of vocational education and training and continuing training; (8) bilateral and multilateral donors to vocational education and training reform; and (9) constraints, challenges, and future needs. The document also contains a list of acronyms and abbreviations, a list of major organizations involved in vocational education and training in the study, a bibliography listing 70 references, a list of reports and proceedings prepared by the Czech National Observatory, 8 tables, and 14 charts. (KC)

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Report on the vocational education and training system

NATIONAL OBSERVATORY COUNTRY REPORT

Czech Republic 1999

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Modernisation of Vocational Education and Training in the Czech Republic

Editor and co-ordinator:

Věra Czesaná

Team of authors:

Věra Czesaná, National Observatory
Jaromír Coufalík, National Observatory
Olga Stryjecka Ilyina, National Observatory
Věra Havlíčková, National Observatory

Background material was prepared by:

Miroslava Mandíková, National Training Fund
Jarmila Modrá, National Training Fund
Olga Kofroňová, Research Institute of Technical and Vocational Education
Jaromír Krejčí, Ministry of Education, Youth and Sports
Ladislava Steinichová, Ministry of Labour and Social Affairs
Marcin Stryjecki, National Training Fund -
Programme Leonardo da Vinci, National Coordination Unit
Jiří Vojtěch, Research Institute of Technical and Vocational Education

Information and data were provided by:

Jiřina Frühbauerová, Ministry of Finance
Jan Hammersack, Ministry of Education, Youth and Sports
Ivo Makalous, Czech Statistics Office
Michaela Kleňhová, Institute for Information on Education
Zdeněk Palán, Ministry of Education, Youth and Sports
Miroslav Příbyl, Ministry of Labour and Social Affairs

Technical support:

Linda Hrochová, National Observatory
Pavel Kubů, National Training Fund



National Observatory, National Training Fund,
Václavské nám. 43, 110 00 Prague 1, Czech Republic;
Tel: +420 2 24 22 87 32, +420 2 24 22 88 92; Fax: +420 2 24 21 45 33, +420 2 24 21 44 75;
e-mail: oli@observatory.nvf.cz
Prague, 1999 update

Preface

The purpose of this report is to present a survey of initial and further vocational education and training in relation to the development of the Czech labour market and economy, and to outline challenges and problems to be addressed in the future. This report follows on from other reports on vocational education and training presented during recent years. It updates data and provides analytical conclusions based on information available in 1999. In drafting this report, the authors attempted to follow the new conceptual framework required by the European Training Foundation. However, this attempt was not entirely successful. It is intended that the 2000 report will fully incorporate the new concept.

Our methodology was based on expert secondary analysis of data available in the public domain, and gathered from a number of specific research projects. To ensure objectivity, we have also drawn on studies about the Czech Republic published by the Organisation for Economic Co-operation and Development, the World Bank and the European Commission. The team of authors has also benefited from the assistance of experts from ministries, research institutions and social partners. The report is as factual as possible. Data and graphs have been incorporated in the body of the text, in addition to an extensive annex of tables.

Clearly, there is a lack of systematic monitoring, analysis and forecasting which could help determine where new job opportunities will arise in the future, what professions will be in demand, and what skills and training employers will look for. All we have is short-term forecasts by individual labour offices and rare examples of company field research. There are no studies of sectoral development and staff requirements. The above factors circumscribe our ability to objectively assess the structure of initial and further vocational education and training routes and areas in terms of their responsiveness to labour market needs.

A number of new policy papers drafted in the Czech Republic during 1999 relate to, and will have a major impact on, the development of vocational education. These include the National Education Development Programme and the National Employment Plan, as well as programme documents preparing for the country's accession to the European Union, including a human resources development programme. The authors tried to incorporate these documents, although their practical outcomes have yet to be verified by future developments.

Executive summary

A decade of economic and social transformation has had a major impact on the Czech labour market and education system although not all economic transformation measures have been completed. Certain legislative and institutional conditions still have to be created to improve the regulatory environment and increase the flexibility of individual markets. Despite rapid privatisation, many large companies and banks are still owned by the state. At the same time, the take-overs being negotiated with strategic owners will bring an injection of new capital and business strategies into enterprises. There has been a relatively steady inflow of foreign direct investment throughout the decade. Twenty per cent of companies are controlled by foreign capital and an additional twenty per cent act as suppliers to them. Small and medium-sized enterprises account for 56% of overall employment and play an important job creation role.

Regional administrative reform is underway. January 1st 2000 saw the creation of new regions at the NUTS 3 level and these are expected to become operational in 2001. Eight statistical regions have been set up at the NUTS 2 level, comprising between one and three NUTS 3 regions. In 1999, regional development strategies and regional operational programmes were drafted for the newly established regions. Two NUTS 2 regions - Ostrava and North-Western Bohemia - have been selected as pilot regions for Phare 2000 funding.

With regard to the employment structure, the service sector has experienced significant growth of up to 54.6%, while agricultural employment fell to levels comparable with European Union Member States. The mining and processing industries have also become leaner. These changes are likely to continue.

In contrast to European Union Member States, low part-time employment is still typical of the Czech labour market. Unemployment has risen rapidly over the past three years, reaching 9.4% by the end of 1999. This negative labour market development has particularly affected those groups already struggling with disadvantage, such as school-leavers (especially those leaving basic and secondary schools), low-skilled persons, Romanians, and persons with disabilities.

Czech employment policy is based on an efficient network of labour offices and on basic active employment measures. Growing unemployment brought with it a need for more labour market tools. The National Employment Plan was adopted in 1999 as a mid-term strategy conforming to European Union labour market policies. In addition to broadening the range of active employment measures, the Plan also contains measures to promote business and help employers and employees respond to structural changes. The plan also focuses on job creation, education and equal opportunities.

There is a steady shrinkage in the size of the age cohorts entering secondary schools and the beginnings of population ageing. These trends are expected to increase during the coming decade. During the 1990s, social and economic changes resulted in a dramatic fall in birth rates, with the population as a whole falling since 1992.

The main structural features of the Czech initial vocational education system, such as types of school, how they are organised and the length of their educational programmes, have evolved over many years. During the 1990s, new school types and education measures were introduced in

response to fundamental political, economic and social changes. These changes have modified the school system and made it more comprehensive.

There are three main secondary school types:

- Gymnasia provide general secondary education;
- secondary technical schools provide upper secondary vocational education culminating in the Maturita in a particular field of study; and
- secondary vocational schools offer apprenticeship training in trades and related occupations.

During the past decade traditional school types have been joined by new ones, mainly in an attempt to merge features of the two main school types. Technical and business lycea combine the broad general education provided by Gymnasia with the basic vocational theory provided by secondary technical schools. Integrated secondary schools offer two different educational programmes which used to be available only in secondary technical schools or secondary vocational schools respectively. Vocational training centres offer continuing vocational training programmes as well as initial vocational education. The post-secondary education level now also includes a new school type, known as higher professional schools.

Vocational education provision has been further enhanced by the introduction of many new educational programmes by schools formerly in the state system and by new private schools. Access to education has also improved. The number of schools has grown, increasing the density of the school network while reducing average school size. The demographic decline has reduced the overall demand for education, rendering access to secondary schools easier for young people.

Despite these structural changes to the school system, transfers have not been made much easier. Longer and linear education programmes still prevail and students cannot obtain certification of partial education. The school structure continues to be criticised for not offering sufficient opportunities to those who, for various reasons, have not completed their education in a particular type of school, as well as those who would like to pursue higher education after gaining some work experience.

With regard to student numbers, there have been several trends. The ratio of students in general secondary schools (Gymnasia) to students in vocational schools remains roughly the same and is heavily weighted in favour of vocational schools. The proportion of students enrolling in vocational programmes culminating in the Maturita has grown, meaning that the average length of time spent in education is longer. Although dropout rates have stayed low, and are fairly constant throughout secondary education as a whole, there has been an increase in dropout rates among students of vocational education programmes which do not culminate in the Maturita.

Government plays a central, and almost exclusive, role in managing vocational education. It does this through the Ministry of Education, Youth and Sport at a national level and through school offices, i.e., devolved units of the ministry, at a district level. No other ministries or social partnership bodies are regularly involved in decisions about the future development of the vocational education and training system. It is expected that central bodies will devolve certain powers over vocational education and training to local governments and administrations, the fundamental reform of which has already been decided.

The past two years have seen attempts at a more strategic approach to the development of Czech vocational education and training. The "Czech Education and Europe" study analysed trends in Czech and European education, proposing measures in respect of the Czech Republic's accession to the European Union. This study drew on outcomes of an extensive Phare Vocational Education and Training Reform programme which was conducted over a number of years. A mid-term strategy for

the development of Czech vocational education and training is also being drafted, and is expected to be finalised in late 2000, when it will be presented as the National Education Development Programme.

Initial vocational education is mainly funded from the state budget. The Ministry of Education, Youth and Sport and its district school offices allocate funds to schools on a per-capita basis combined with a marginal history-based funding approach. With certain exceptions, apprentice education and training is also funded from the state budget without employer participation. Although the cabinet has promised an increase in funds for education, real spending has stagnated throughout the recession. The problems with regard to financing remain low capital investment, inadequate teacher remuneration and the absence of incentives for employers to become involved in funding vocational education and training.

Continuing vocational training has undergone major changes in the Czech Republic over the past decade, becoming highly diversified and differentiated. Its evolution is based on supply and demand. Private institutions predominate among the providers of continuing vocational training, and funding is also predominantly private (both companies and individuals). Links between initial and continuing vocational education remain tenuous. The inadequate legal framework for the development of continuing vocational education and training continues to attract criticism.

Although there are significant differences between individual companies, it can be said that the general development of in-house training as part of continuing vocational education and training slumped after a period of rapid growth during the first half of the 1990s. In fact, it has stopped altogether in those companies which were hit by the recession. Most companies have not included continuing vocational education and training and human resources in their development strategy. Current discussions about continuing vocational education and training view its inadequate development as being due to the absence of incentives, and propose that state bodies and representative social partners should jointly prepare and introduce a suitable system of incentives.

With regard to the continuing vocational education and training of job seekers registered with labour offices, retraining measures have been gradually increasing. In recent years, the Ministry of Labour and Social Affairs has increased its investment in active employment policy, resulting in increased numbers undergoing retraining. The National Employment Plan envisages growth in continuing vocational education in order to promote employability.

Continuing vocational education is mainly funded from corporate and other private resources, while the retraining of registered job seekers is mainly funded by the government. The contribution made by chambers of commerce and industry, professional associations, trade unions and regional and local authorities to the funding of further vocational education and training is negligible.

Key issues for the continuing reform of the vocational training and education system include finalising the conceptual planning steps for an education strategy and implementing the main recommendations of the Phare Vocational Education and Training Reform programme (1994-1998). In this regard, implementation should focus on priority issues, such as: the involvement of social partners in vocational education and training; the adjustment of education content, methods and outcomes to labour market demands; enhancing the link with continuing training; and completing the systemisation of quality assurance, assessment and certification mechanisms. In the field of continuing vocational training, the priority is to develop a comprehensive national strategy. This includes defining institutional responsibilities, creating the conditions for quality assurance and transparency of training provision, and providing mechanisms to ensure improved access to continuing vocational training.

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1. Political and socio-economic background information

The Czech Republic is a Central European country with a population of 10.3 million, a territory of 78, 864 km² and a population density of 131 inhabitants per square kilometre. The parliamentary system is bicameral.

The European Association Agreement between the Czech Republic and European Communities was signed in 1993, and in 1997 the country was nominated as one of the states which will join the European Union in the first wave of accession. The Czech Republic became a member of the Organisation for Economic Co-operation and Development in 1996, and joined NATO in 1999.

1.1 *Economic developments*

The basic market reforms were implemented in the early 1990s. The effectiveness of these early reforms was, however, limited by an inadequate legal and institutional framework and unfavourable microeconomic conditions.

Price and foreign trade deregulation have created free market conditions. Ninety-five per cent of gross domestic product is currently generated from free price transactions, while the prices of housing, household fuel and electricity, public transport and medical services will only be gradually deregulated up to 2002.

The Czech Republic's commercial and financial relations with other countries are characterised by a significant degree of liberalism, while the Czech Crown (CZK) is fully convertible in current transactions and most capital market operations. Following the 1993 tax reform and follow-up modifications, the tax system is now compatible with that obtaining in European Union countries. Among other changes, the reform introduced a value-added tax, as well as a system of social security payments and health insurance.

Throughout the 1990s, inflation in the Czech Republic was low compared with other transition economies, typically hovering around 10%. The inflation rate decreased remarkably fast in 1998-1999, and during the first half of 1999 the consumer price index was just 1.1%¹. However, the tight monetary and budgetary policy which kept inflation under control had a negative impact on economic growth.

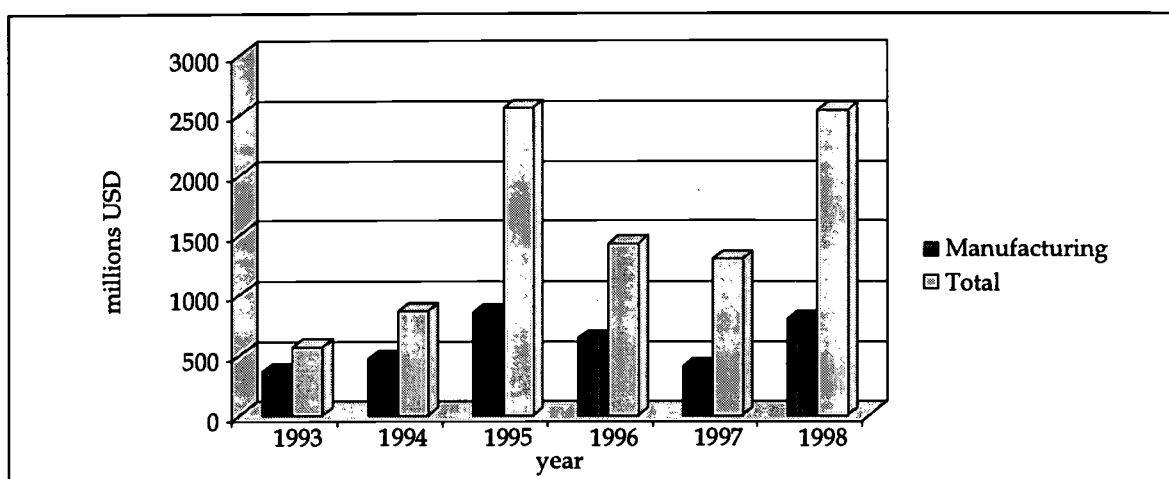
Privatisation, as the pillar of economic reform, was carried out using both traditional methods, such as property sales, and alternative methods such as voucher privatisation. So far, approximately 80% of the assets allocated for privatisation have already either been privatised or transformed into shareholding companies with mixed ownership. While, in 1989, there was virtually no private sector, and the non-governmental sector (including co-operatives and local authority owned

1 Czech Statistics Office.

enterprises) generated approximately 11% of gross domestic product, in 1996 the non governmental sector's share of gross domestic product amounted to 75%. However, the speed of privatisation was detrimental to its effect. Vouchers have neither generated the capital which is indispensable to further development of companies, nor have they attracted long-term owners who could improve management quality. Most companies are therefore undercapitalised, and suffer from high debts and low levels of technology. Some of the large companies and banks in which voucher-holders or the state retain a major share are still awaiting sale to strategic owners, most of whom will be foreign.

The lack of restructuring of industry and enterprises in general, and the consequent low level of economic efficiency, appear to represent the most serious problems of transition. Little data is available on the extent of modern production and information technologies introduced in enterprises. The introduction of progressive technology is mainly limited to enterprises with foreign capital, while the low economic efficiency level as a whole clearly indicates that the application of new technology is not widespread in the majority of other enterprises.

Chart 1.1 Development of foreign direct investment, 1993-1998



Source: The Theory and Practice of Foreign Direct Investment, a paper from the workshop of The Czech Economic Society, Prague 1999.

The Czech Republic has managed to attract a significant amount of foreign direct investment. This represents an important source of restructuring, bringing new know-how, access to new markets and other intangible attributes. Chart 1.1 shows the development of foreign direct investment.

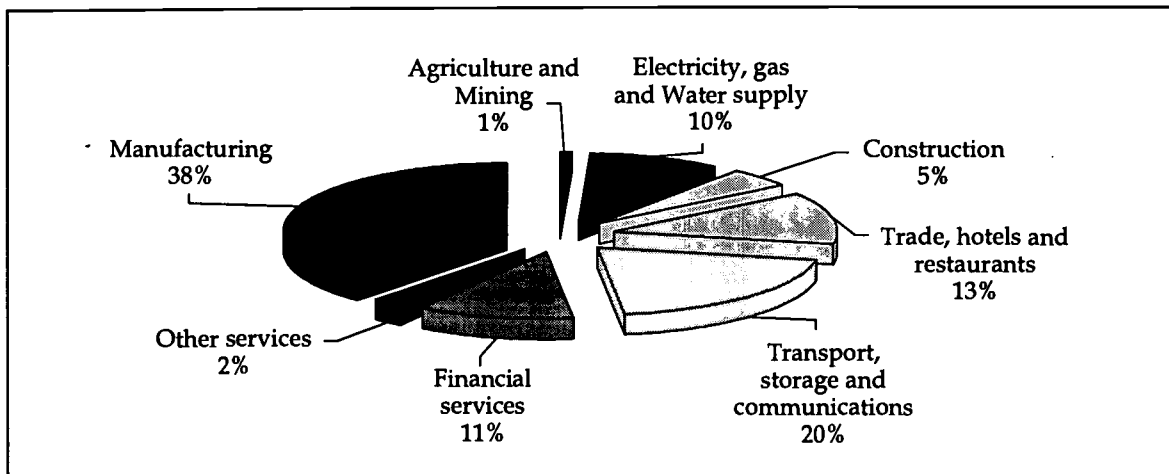
The Czech Republic's average foreign direct investment/gross domestic product ratio of 3.2% from 1991 to 1997 is third in the region, behind Hungary at 5.5% and Estonia at 3.5%². The flow of foreign direct investment into the Czech Republic continued to increase in 1999. In view of the current bank privatisation, foreign direct investment is expected to peak this year. In the medium term, the current wave of investment in the banking industry could improve the functioning of the financial system and exert a favourable, albeit indirect, influence on manufacturing industries.

2 Moreover this Czech figure does not include the largest foreign direct investment generating areas such as banks, airline companies and public utilities, whose sales were large in other countries.
Source: A World Bank Country Study - Czech Republic Toward European Union Accession, the World Bank, Washington, D.C. 1999.

As a result of major investment in technology, human resources, organisation and distribution networks, the efficiency of companies with foreign capital is roughly double³ that of locally owned companies. Companies with foreign capital also tend to require a higher labour force quality than locally owned companies. Foreign capital exerts competitive pressure on local companies, precipitating a natural selection process and subsequent labour force movements.

About 20% of companies are currently controlled by foreign capital, while a further 20% are linked to those companies by supplier relations. Some studies indicate that the number of joint venture and contracting projects with European Union partners is significantly higher in the Czech Republic than in either Hungary or Poland. This can be partly explained by the large number of medium-scale manufacturers supplying intermediate products to Austrian and German firms across the border. A further influx of foreign direct investment, and its absorption by the Czech economy, will largely depend on the labour force's readiness and state of development, and the relationship with foreign companies.

Chart 1.2 Foreign direct investment by branches, 1993-1998



Source: The Theory and Practice of Foreign Direct Investment, a workshop paper published by the Czech Economic Society, Prague 1999.

Small and medium-sized enterprises have been rapidly developing in the Czech economy since the early stages of transition during which the so-called small-scale privatisation allowed Czech entrepreneurs to own businesses without the need for much external capital. Small and medium-sized enterprises have received further support through state-run programmes which facilitate access to credit, provide consultancy services, offer employment subsidies and promote export opportunities. Small and medium-sized enterprises have been the main force driving labour market flexibility in the Czech Republic, especially in the service sector. This sector has been absorbing the labour force released from industry, thus also helping to maintain low unemployment during the initial period of economic reform. The emergence of small firms also increased the demand for craftsmen.

³ The Theory and Practice of Foreign Direct Investment, a paper from the workshop of the Czech Economic Society, Prague 1999.

At the end of 1998, small and medium-sized enterprises⁴ employed 56% of all those working in industry, construction, business, catering and services⁵. However, this figure remains lower than the European Union average, which is around 66%.⁶ Small and medium-sized enterprises dominate in certain industries, both in terms of employment and production (table 1.1). The growing strength of small and medium-sized enterprises is conducive to job creation. The micro-business sector, i.e., own-account workers⁷, has been growing steadily and has even weathered economic recession. It now accounts for 9.6%⁸ of overall employment, and provides new job opportunities for some of the workers laid off by large companies. The whole self-employed sector, including other categories in addition to "own-account workers," amounted to almost 14% of the total workforce in 1999. Further details on this sector can be found in chapter 1.5.

Table 1.1 Share of small and medium-sized enterprises in overall employment and outputs, 1998

	Share of employment %	Share of outputs %
Industry	42.9	34.6
Construction	74.2	68.6
Trade	83.4	91.0
Hotels and restaurants	86.8	85.6
Transport	21.6	44.4
Financial services	23.0	25.2
Other services	83.7	87.8
Total	56.4	51.7

Note: Small and medium-sized enterprises are enterprises with 0-249 employees, including free-lance entrepreneurs.

Source: Czech Statistics Office, calculation by the Ministry of Industry, 1999.

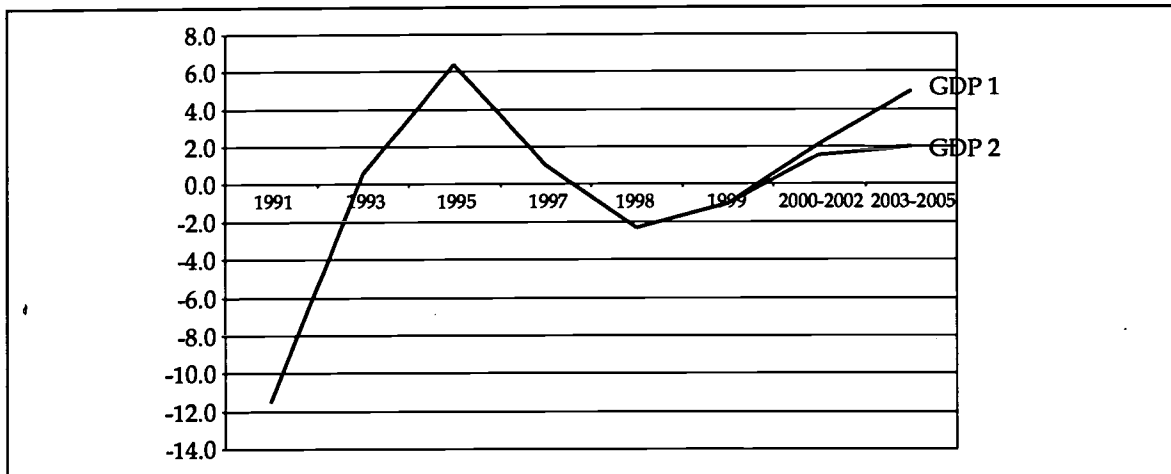
In 1998, gross domestic product was ECU 50.8 billion, which amounts to ECU⁹ 11,860 per capita in purchasing power parity terms. Following the initial decline in output associated with the first years of transition, recovery started in 1993 and picked up in 1995-1996 with gross domestic product growth rates of 6.4% and 3.8% (see table 1.1-1 in the annex). This recovery was interrupted by a growth slowdown in 1997 and recessions in 1998 (-2.3%) and 1999, when there was an estimated drop of between 1.0%¹⁰ and 0.0.

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- 4 As recommended by the European Commission, small and medium-sized enterprises have been defined, since 1997, as companies with less than 250 employees.
- 5 As of 31 December 1998, Czech Statistics Bureau.
- 6 Fifth Annual Report, The European Observatory for small and medium-sized enterprises, 1997.
- 7 See chapter "Glossary of Terms".
- 8 Analysis of Employment and Unemployment Development in first half of 1999, Ministry of Labour and Social Affairs, 1999.
- 9 Czech Statistics Office, 1999.
- 10 Joint Assessment of the Economic Policy Priorities of the Czech Republic, draft paper, August 1999, Government of the Czech Republic, European Commission.

The worsening economic performance in recent years reflects fundamental weaknesses in enterprises and in the financial sector. These weaknesses, which accumulated over time, include the limited restructuring of the corporate sector. This sector had been held back by the immaturity and imperfection of the formal and informal market institutions, and in particular, the weak framework for corporate governance, as well as unclear ownership rights, a poorly functioning capital market, and a non-operational bankruptcy law. However, short-term causes probably also contributed to production problems. These included an earlier restrictive monetary and fiscal policy to combat inflation, which necessarily resulted in state budgetary expenditure falling, with an associated drop in domestic demand and related factors.

In May 1999, the government adopted its "Strategy of Accession to the European Union". The document lays down mid-term economic policy principles, particularly with regard to the key monetary, fiscal, agricultural, regional, social and labour market policies. Moreover, measures have been prepared to support restructuring and reform of the financial sector, and to encourage investment. In 1999, major programmes to revitalise and privatise large companies and major banks were put into effect. The newly created Revitalisation Agency will manage the programme in respect of selected large enterprises; the programme is due to be completed in 2002. The Agency will also seek out strategic owners. Bank privatisation is progressing satisfactorily, and the state share of total banking assets had fallen from 70% to 45% by the beginning of 1998.

Chart 1.3 Gross domestic product annual growth scenarios



Note: GDP 1 = Pro growth scenario, GDP 2 = Do nothing scenario.

Source: Joint Assessment of the Economic Policy Priorities of the Czech Republic, draft paper, August 1999, published by the Government of the Czech Republic and the European Commission.

The outlook for the coming years is now more optimistic. According to development scenarios prepared jointly by the Czech government and the European Commission, economic growth is expected to be between 1.6 and 2.1% during the period from 2000 to 2002, rising to between 2.0 and 5.0% during the period from 2003 to 2005. Further details can be found in table 1.1-2 in Annex¹¹. Despite the economic recovery, employment will fall further as a result of company restructuring and the application of new technologies.

¹¹ Joint Assessment of the Economic Policy Priorities of the Czech Republic, draft paper, August 1999, Government of the Czech Republic, European Commission.

1.2 Regional developments

In terms of administration, the Czech Republic is divided into 77¹² districts with an average of 120,000 inhabitants (equivalent of NUTS 4).

The district authorities perform all public administration tasks with a few exceptions, two of which are education and employment services, which are administered at a district level by School Offices and Labour Offices respectively. At present, elected bodies only operate in municipalities, of which there are 6,233. However, as provided for in the Constitution, Act No. 347 adopted in 1997 stipulates the formation of fourteen higher units of self-government at regional level (VUSC), to be established from 1 January 2000. These will be equivalent to NUTS 3. At NUTS 2 level, the Czech Republic is divided into eight statistical regions comprising 1 to 3 VUSC.

Table 1.2 NUTS II regions in the Czech Republic

Region	Area (km ²)	Population (31/12/1998, thousand)	1996 ratio of GDP to Czech Republic average (%)	Ratio of GDP* to European Union average (%)
Prague	496	1,193.3	185.9	123.0
Central Bohemia	11,014	1,108.5	76.0	50.3
South-West Bohemia	17,616	1,179.2	95.5	63.2
North-West Bohemia	8,650	1,131.7	91.9	60.8
North-East Bohemia	12,440	1,490.9	85.5	56.6
South-East Moravia	3,991	1,660.4	89.6	59.3
Central Moravia	9,103	1,241.8	84.4	55.8
Ostrava	5,554	1,283.9	96.7	64.0
Average CR	9,858	1,286.2	100.0	66.2

* in purchasing power standard.

Source: Czech Statistics Office, cited in the National Development Plan, University of Economics, Prague, 1999.

In pursuance of state administration reform, the government adopted a number of draft Acts¹³ to define the powers and responsibilities of regional authorities and devolve selected central powers to them. In these draft acts, the government proposes to establish regional authorities on 1 January 2001, having held regional elections in November 2000.

The government has decided to transfer property and devolve powers to regions. The Government proposal envisages, inter alia, closing district school offices and transferring their powers 'upwards' to regional school authorities. These regional school authorities will be able to establish and close secondary technical schools, secondary vocational schools, gymnasiums, special schools, basic art

12 According to another system of counting, where Prague is considered an agglomerate of 10 districts, there are 86 districts.

13 The Government adopted the proposed Acts on 15 November 1999. The Parliament is expected to pass them in the spring of 2000.

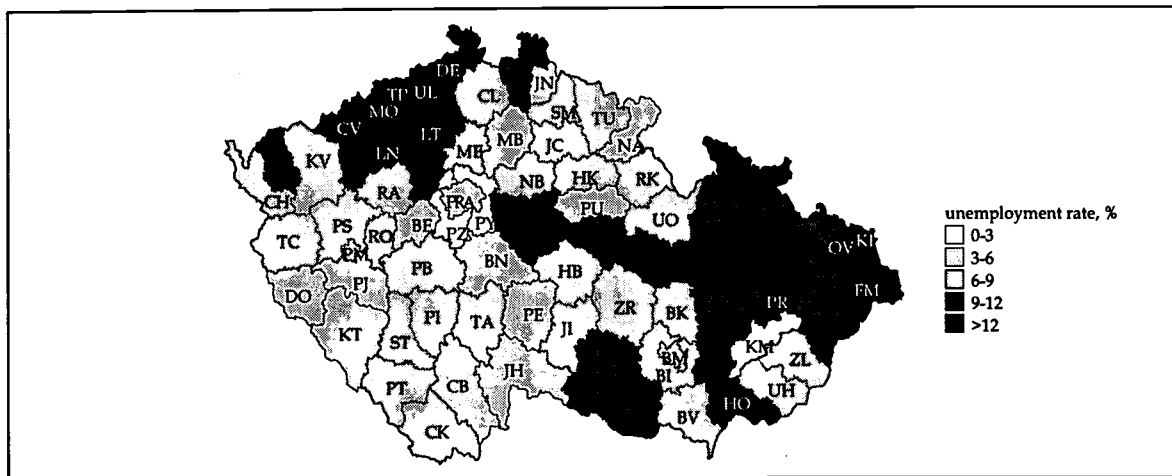
schools, hands-on training centres, school support centres, information technology centres and similar institutions. On the other hand, labour offices will continue operating under the Ministry of Labour and Social Affairs. Nevertheless, both the Ministry and Labour Offices will have to co-operate with regional authorities, and will have to discuss with them, in advance, any measures pertaining to the region's development and the regional authority's powers.

Regional diversification is gradually starting to emerge in the course of economic transition. Regional distinctions remain insignificant in terms of the economic activity of the population, but there are significant regional disparities in terms of unemployment, vacancies, investment activity and economic efficiency.

The problems associated with regional labour market disparities are compounded by low inter-regional labour force mobility. This is due both to traditional factors and to a housing shortage in areas with available vacancies. Low inter-regional mobility was also a consequence of deteriorating public transport services in rural areas, which put small towns in peripheral areas at a disadvantage.

The differences in economic levels and living standards between regions are less significant in the Czech Republic than in a number of European countries. In recent years, however, following a considerable improvement in 1994 and 1995, the regional differences have again become more pronounced. The 1995 the gap between the districts with the lowest and highest unemployment levels was 6.5 percentage points, while in June 1999 this had climbed to 15.5 percentage points¹⁴. Chart 1.4 shows a map of unemployment by districts in 1999.

Chart 1.4 The unemployment rate in the Czech Republic, June 1999



Source: Employment statistics, Ministry of Labour and Social Affairs.

The main development regions are the greater Prague area and regions with large centres, primarily in the western part of the Czech Republic, together with those regions utilising their location and tourism potential. These areas are characterised by a low level of unemployment, a significant inflow of foreign capital, dynamic development of services and tourism, a low proportion of problem enterprises. These areas have the most favourable conditions for the development of private enterprise, and enjoy the largest share of investment. For example, in Prague, per capita

¹⁴ Analysis of Employment and Unemployment Development in the first half of 1999, Ministry of Labour and Social Affairs, 1999.

investment and the number of private entrepreneurs per thousand inhabitants, is two to three times greater than the national average, while the lowest figures are in North Moravia¹⁵.

Structurally weak regions are those with considerable heavy industry and high unemployment, such as the North Bohemia coal basin and the districts of Ostrava and Kladno. Economically weak regions typically have a lower economic level and living standard, combined with a higher level of unemployment. Most economically weak regions are in rural provinces which often lag behind national developments and which tend towards population decline.

Current regional policy measures are focused on promoting the economic development of weaker regions by supporting small and medium-sized enterprises, using financial levelling mechanisms to redistribute budget revenues from higher tax yielding regions to economically weak ones, strengthening active employment policy in problem regions, and subsidising investment in infrastructure development and environmental measures.

The Government adopted a draft Act on Regional Development Support¹⁶ in December 1999. This draft Act defines the areas where regional development is to be supported, and provides for support to be concentrated on so-called "focus regions". These are regions which have been heavily affected by structural changes and are economically disadvantaged regions. The draft Act also includes programme documents for supporting and providing the institutional infrastructure for regional development in the Czech Republic, including co-ordination with the European Union's economic and social cohesion policy.

According to this draft Act, state support of regional development is to be channelled through regional development programmes in addition to sectoral programmes. The Government adopted four regional development programmes in 1999, with funding from the state budget and CZK 1,070 million are earmarked for that purpose in the Ministry of Regional Development's budget. These programmes will support two NUTS 2 regions, namely the Northwest and the region of Ostrava, selected economically disadvantaged and structurally affected regions, and the former military area of Ralsko-Mlada.

For the development of peripheral border regions, most of which are situated in mountain areas, it is important to create linkages with neighbouring countries. The Phare Cross-border Co-operation programme is very significant in this regard. The programme started in 1994 on the German borders, and has operated on the Austrian borders since 1995. The programme is co-ordinated with the European Union INTERREG II programme, which supports border regions within the European Union's internal and external borders. A wide spectrum of investment and non-investment projects on the part of municipalities, as well as joint projects intended to favourably influence neighbouring regions, have been developed within the INTERREG framework.

Infrastructure projects are the most common, along with projects to support the development of businesses, tourism, agriculture and forestry, human resources etc. In 1994, ECU 25 million were allocated to the cross-border co-operation programme, while approximately ECU 155 million were allocated for the 1995-1999 programme. The programme is conditional on local co-financing of 25% of total costs.

In accordance with the government's regional policy principles¹⁷, and following the negotiations for the Czech Republic's accession to the European Union, systematic work on relevant programmes

15 Okresy v České Republice v roce 1998; Districts in the Czech Republic in 1998 Czech Statistics Office, 1999.

16 The Parliament is expected to pass the proposed Act in the spring of 2000.

17 Zásady regionální politiky vlády ČR; Principles of Regional Development Policy of the Government of the Czech Republic, Government Decree No 234/98.

commenced in the regions in 1998. This work refers both to the national regional development policy and the European Union's economic and social cohesion policy. In March 1999, Regional Development Strategies were drafted in all future NUTS 3 regions, creating a foundation for the programme work mentioned above. A Regional Development Strategy was drafted at national level, pursuant to the terms of Government Decree No 713/99. It draws on regional strategies, conceptualising them to a certain degree, and will serve as the policy document underpinning support for regional development.

In April 1999, Regional Management and Monitoring Committees and working groups for priority areas in regional strategies were established in all eight NUTS 2 regions. For example, human resources working groups were established in all regions, including representatives of selected labour offices, school offices, district authorities, communities, universities and the non-profit sector. These committees orchestrated work on the so-called Consultation Documents on NUTS 2 regions, briefly summarising regional analyses (including SWOT), presenting the regional development strategy and outlining the related priorities, measures and budget proposals.

The regional and sectoral Consultation Documents prepared the ground for the drafting of the Czech Republic's National Development Plan for 2000-2006. The Plan, which relates to European Union economic and social cohesion, will be used not only for the future absorption of European Union structural funds into the Czech Republic, but also for the pre-accession support of the Czech Republic by the European Union (Phare, ISPA and SAPARD).

The proposed National Development Plan assumes that the prospective European Union structural funding will be channelled through selected sectoral (trans-regional) as well as regional operating programmes based on all the Czech Republic's NUTS 2. The Development Plan is far from complete, and will continue to be fine-tuned. The content of the Regional Operational Programmes and the Sectoral Operational Programmes will have to be clarified, in that these plans must be complementary but must not overlap. This means that a specific project can be covered wither by a Regional or by a Sectoral programme, but not by both.

The NUTS 2 regions of Ostrava and North-western Bohemia have been selected to run Phare 2000 funded pilot projects for the application of operational programmes.

1.3 *Demography*

The population of the Czech Republic is relatively ethnically homogenous, with ethnic Czechs comprising 93.5% of the total. With 2.7% of the population, Slovaks are the largest of the ethnic minorities¹⁸. In the 1991 census, the Romany population accounted for just 0.3% of the total, although informed estimates put the figure at approximately 1.5 to 2%¹⁹. Other ethnic groups account for up to 1.3%²⁰.

Of the total population, 65% reside in cities²¹, and 23% live in cities with over 100,000 inhabitants.

The demographic structure of the Czech population is uneven, as can be seen from table 1.3-1 in the Annex.

18 Population Census of the Czech Republic, Czech Statistics Office, 1991.

19 Zpráva o situaci romské komunity v ČR, Report on the situation of the Roma minority in the Czech Republic, 1997.

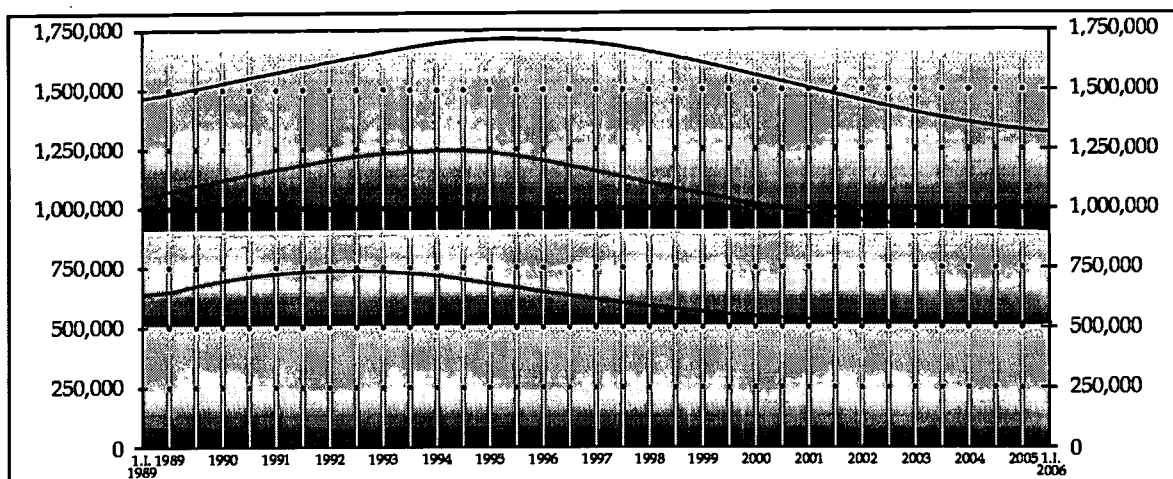
20 Population Census of the Czech Republic, Czech Statistics Office, 1991.

21 The notion of 'city' is not precisely defined – in this case settlements with more than 5,000 inhabitants are regarded as cities (Population Census of the Czech Republic, Czech Statistics Office, 1991).

In 1998, young people under 15 represented 17% of the population, while those aged over 60 accounted for 18.1%. Until the end of the 1980s, the elderly accounted for a relatively small proportion of the Czech population, and the proportion of children was relatively high. The ageing of the population was slowed down by a high death rate in the over 40 age group coupled with an increased birth rate during the 1970s. From the end of the 1980s onwards, the child population started to shrink, while the numbers of elderly went up only slightly. Population ageing has thus been marginal during this period.

The near future will, however, witness major changes. According to demographic projections, the child population will shrink further while the elderly population will grow significantly. With regard to education, these developments are already being felt in the education sector in terms of reduced enrolment numbers at certain education levels. In particular, there is a continuing steep drop in the numbers enrolling in secondary education.

Chart 1.5 Age cohorts at different levels of education, 15-18, 19-21 and 22-24, 1989-2005



The uneven demographic development will impact on the labour market up to 2000, with a sharp increase in the number of people aged between 25 and 35 (table 1.3-1 in annex). Given the fall in the 15-24 age group, the growth in the economically active age group will be modest compared with the past, and will gradually start to stagnate.

The economic and social transformation has had an impact on several demographic aspects. The most significant impact has been the rise in the age at which people establish families and have children. The birth rate has declined dramatically, from 12.4 live births per 10,000 inhabitants in 1989 to 8.8 in 1998. The number of births is decreasing, and the total population has been shrinking since 1992. We are seeing the first signs of ageing of the whole population, and this trend will increase after 2005.

Population ageing is spread across all regions, albeit to different degrees. The highest proportion of senior citizens is found in Prague, in large cities and in Southern Bohemia. Conversely, Northern Bohemia and Northern Moravia have relatively young populations, but they have been hit by difficulties stemming from the restructuring of mining and heavy industry, and are therefore suffering from a sharp fall in job opportunities.

1.4 Social protection and social policy

Before 1989, the social security system was excessively protective and very costly. Reforms have therefore focused on establishing a system of social protection aimed at encouraging individuals to take responsibility for their own social situation, and differentiating the system in terms of family income levels. A social protection system was established during the initial phase of economic transformation, and this has subsequently been gradually improved.

Minimum subsistence, pension and wage levels were introduced. The levels of the subsistence and pension minimums are pegged to the cost of living and inflation, and are regularly re-evaluated. The minimum wage is increased by the government at irregular intervals. It is quite low, amounting to only around 30% of the average wage. This enables employers to pay low wages to low-skilled workers and young people. On the other hand, the net minimum wage is well below the subsistence minimum, and therefore discourages low-skilled workers from taking up employment. The government's current aim is to achieve parity between the net minimum wage and the subsistence minimum by 2003.

The social security system that came into effect at the beginning of 1996 is based on three components²².

■ Social insurance

This includes pensions insurance, health insurance and sickness benefits, as well as the employer and employee contributions to the state employment policy. Apart from health insurance, social insurance remains linked to the state budget²³. Along with compulsory pensions insurance, there is the option of individual pension co-insurance, to which the state contributes financially.

■ State social benefits

These relate to maternity, disability, childcare and similar benefits. They include approximately 10 benefit types, of which about half are tested and designed according to the stipulated subsistence level relating to the number of household members and their age.

■ Social assistance

This covers households below subsistence minimum level.

The social system presumes a gradual postponement of the retirement age, a process which started as far back as 1996. By 2007, the retirement age will be 62 for men and 57 to 61 for women. The retirement age in 1999 was 60 years and 8 months for men, and between 56 and 59 for women²⁴. In view of the constraints on the state budget and the ageing of the population, a new retirement insurance system has been under consideration for several years. The government plans to rely on partial adjustment of the existing pay-as-you-go system, together with supplementary pensions insurance. More employer involvement is being considered, and the goal is to maintain the public pensions/net wage ratio of about 55-60%.

22 For more details on total social policy costs, insurance rates, amounts of individual social security benefits, please refer to Main Economic and Social Indicators, Czech Republic, No 8, Research Institute of Labour and Social Affairs, Prague 1996.

23 Contributions are made up of a fixed percentage (partly paid by the employer and partly by the employee) which is deducted from wages and taken into the state budget. Then social security benefits are given from the state budget. Obligatory pension insurance funds in the state budget framework are accumulated on a separate account and it is possible to transfer the balance of one year into the budgets of further years. At present discussions are being held on a complete separation of this account from the state budget and the setting-up of an independent pension fund and other changes to be made in the pension insurance system.

24 An upper age limit is fixed for women without children. The number of children influences the retirement age limit.

The employees' contribution to social security and health insurance is 12.5% of the gross wage, while the employer pays 35% (table 1.4-1 in the annex). A progressive personal income tax is imposed on gross earnings less social security contributions and deductibles. The tax rate ranges from 15% to 32%. The overall average Czech tax wedge, i.e., the share of all income and payroll tax contributions in gross labour costs, is relatively high. An average earner's wage, net of all social security contributions and income taxes, constitutes on average 52% of the employers' total wage costs. Especially in view of the country's level of economic development, this excessive tax burden not only lowers labour demand, but also creates incentives for massive tax evasion by both firms and workers. Unreported employment and wage payments have become widespread in smaller firms²⁵.

Following decades of stagnation since the beginning of the transformation period, household incomes are starting to be differentiated. While the share of low and middle households, as a proportion of all household income, has been falling during recent years, the share of the one fifth of highest-income households has increased from less than 35% in 1988 to an estimated 40-45% at present.

While pensioners represented the lowest income group in 1988, by 1996 they had moved to the lower middle income bracket, and been partially replaced in the lowest income group by young families. The lowest income households are now primarily economically active, low-wage households with children. In general, the rate of household poverty in the Czech Republic, as measured by the number of households below minimum subsistence level, is relatively low and is estimated at between 3% and 5% of all households²⁶. However it is likely that the current recession will swell the numbers on low incomes, thus generating a heavier reliance on social transfer.

1.5 *The labour market*

Economic activity rate

The economic activity rate of the population, which was quite high in the past, has fallen somewhat during the transformation period. This reduction has primarily affected those groups with previously high economic activity levels, specifically women and pensioners. To a certain extent, the drop is also due to the growth of the black economy.

Despite the drop, female economic activity in the Czech Republic remains quite high when compared with many other countries. In respect of the main cohort of women aged between 30 and 49, economic activity ranges from 78% to 90%, depending on the specific age subgroup. Further details on labour force activity can be found in table 1.5-1 in the annex.

While the economic activity rate of the population has stagnated during the past two years, it has fallen further among young people, indicating higher participation in education. The most marked shift has occurred in the 15-19 age group. This shift is related to the extension of the study period and the preference being given to longer training courses culminating in the Maturita, the gateway to tertiary education. The economic activity of young people aged 20 and over has also fallen slightly as a result of enhanced opportunities at tertiary level.

25 Munich, D. - Jurajda, S. - Cihak, M: Background Study on Labour Market and Employment in the Czech Republic, Prague, July 1999.

26 For more details on income and property differentiation, please refer to Human Resources Development Report, Czech Republic 1996, Faculty of Natural Sciences, Charles University, Prague 1996.

Development and structure of employment

Since labour productivity is still moderate, employment development has depended on the rate of economic growth. Following a relatively strong increase of about 1% in 1995-1996, employment fell by about 1% in 1997 and fell by a further 1.5% 1998. This development paralleled an economic slowdown. Official data shows that foreign workers, mainly from Slovakia, the Ukraine and Poland, now account for around 2% of the total labour force. This number began to fall in 1998/99 due to a more stringent labour permit policy on the part of labour offices.

In contrast to many European Union countries, employment is mainly in full-time jobs, which account for the main employment of about 94.7% of workers. Part-time workers account for 5.3%²⁷ of the workforce and they work an average of 25 hours per week while the full working week is 40 to 42 hours. In most cases, employees have themselves requested part-time work for a variety of personal, health and other reasons. Just 1.4% of all employees are under-employed as defined by the International Labour Organisation. About 2.7% of employees have a second job, usually to supplement their incomes.

The transformation undergone by the Czech Republic has also has a significant impact on the sectoral structure of employment, as can be seen from table 1.3 and table 1.5-3 in the annex. The share of agriculture and forestry has fallen to a level comparable with that in most Organisation for Economic Co-operation and Development and European Union countries. Both the absolute number and the proportion of secondary sector workers have decreased substantially, particularly in mining and most manufacturing sectors. However, the proportion of such workers is still high when compared to the European Union, as can be seen from table 1.5-4 in the annex. By 1999, the service sector already dominated, accounting for 54.6% of total employment. Employment continued to grow particularly in trade, public administration, hotels and catering and financial services, although the latter two show signs of falling employment during 1998.

Table 1.3 Employment trends by sector

	1990	1993	1995	1997	1998	1999
Number of employed persons (thousand)	5,381.1	4,773.9	4,939.7	4,944.7	4,853.7	4,764.8
Structure per sector (%)						
Primary	11.4	6.8	6.0	5.7	5.5	5.3
Secondary (including mining)	45.9	44.3	41.5	40.9	41.1	40.1
Tertiary	42.6	49.1	52.5	53.4	53.4	54.6

Source: 1990-1997: Employment and Unemployment - Analysis of Trends, Ministry of Labour and Social Affairs.
1998, 1999: Employment and Unemployment in the Czech Republic, as measured by the Labour Force Sample Survey, (quarterly) Czech Statistics Office, III. Quarter 1998, II. Quarter 1999.

While prior to 1989 almost all economically active people were employees, during the transformation period a significant new group of self-employed persons has emerged, primarily private entrepreneurs, owners and co-owners. The self-employed, including members of production co-operatives and others²⁸, now account for 13.8% of the work force. The highest proportion of self-employed is in the services and construction sectors, as can be seen from the table overleaf.

27 Employment and Unemployment in the Czech Republic, as measured by the Labour Force Sample Survey, (quarterly) Czech Statistics Office, 3rd Quarter 1999.

28 The **self-employed**, i.e., working in their own business, comprise all **employers** (entrepreneurs with employees), **own-account workers** (entrepreneurs without employees), all **members of producer's or agricultural cooperatives** (employees of these cooperatives do not fall into this group) and **contributing family workers** (irrespective of the number of hours they work during the week).

Table 1.4 Ratio of self-employed to the total number of employed by type of economic activity (NACE) (%)

Czech Republic	1993	1996 Spring	1997 II.Q	1998 II.Q	1999 II.Q
Total	9.0	11.3	11.8	13.3	13.8
Agriculture and forestry	7.8	12.2	12.5	14.7	14.6
Mining and quarrying	0.7	1.0	1.1	1.3	1.3
Manufacturing	4.3	5.1	5.8	6.3	6.8
Electricity, gas and water supply	2.8	2.8	3.1	3.1	6.0
Construction	6.1	19.0	20.2	25.7	29.0
Trade, repair of motor vehicles and consumer goods	21.3	24.3	24.1	26.0	25.7
Hotels and catering	15.0	16.7	15.9	16.4	18.1
Transport, storage and communications	7.7	8.6	8.3	10.6	10.1
Financial services and insurance	2.3	6.6	6.6	9.5	9.6
Real estate, renting and business activities	24.5	31.1	33.2	31.6	32.2
Public administration and defence	1.4	0.9	0.8	0.4	0.9
Education	1.2	1.3	0.9	1.5	2.1
Health and social work	4.5	6.6	7.0	8.1	7.3
Other community, social and personal service	17.1	16.9	19.5	25.7	23.9

Source: Employment and Unemployment in the Czech Republic as measured by the Labour Force Sample Survey, Czech Statistics Office. (Calculation produced by the National Observatory).

Given the structural changes in employment in the Czech Republic during the initial transition years, the demand for technical and agricultural skills has dropped. At the same time, there has been increased demand for employees in traditional service sectors, such as trade and food services. The establishment of new market economy institutions, especially in the financial sector, together with the business booms and development in marketing and specialised commercial, consultancy, computer and other services, has also led to increased demand for employees with business and law qualifications.

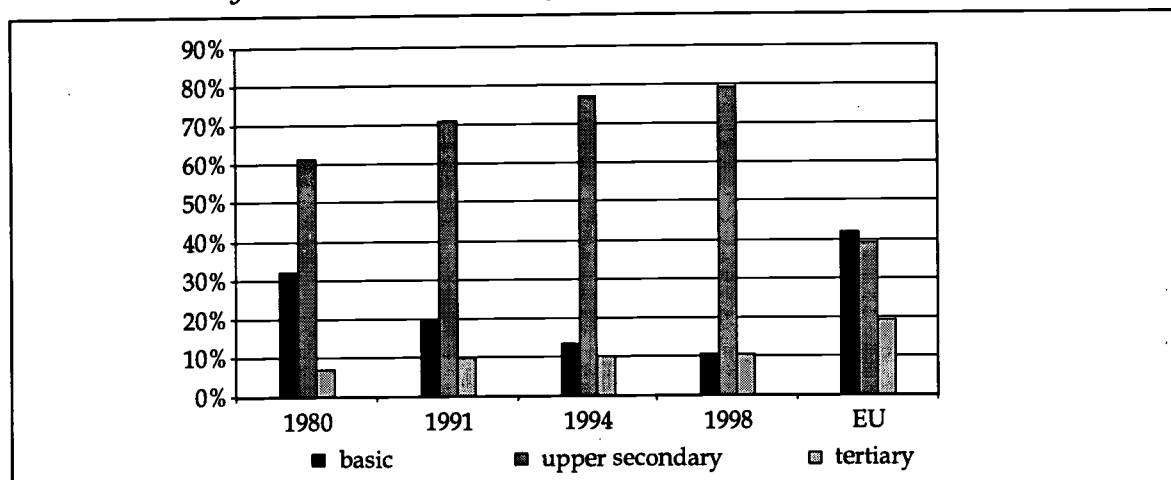
The changes in employment have slowed down since 1995, and the employment structure is now more or less stable. The current stabilisation of industry's share in the employment structure has increased the demand for higher education graduates in technical fields and for skilled workers²⁹, while low-skilled workers are in least demand.

The Czech Republic's employment structure shows that a high proportion of those in employment, including qualified workers, has a secondary education: this group accounted for 79.7 in 1999. The proportion of workers with (or without) basic education is falling and is currently 8.6%. Employees with a four to six-year university type education account for around 11.7% of the workforce³⁰.

29 In some regions, the demand by enterprises for these categories of educational attainment in 1996 went beyond the available supply and the number of vacancies exceeded the number of registered unemployed.

30 Employment and unemployment in the Czech Republic as measured by the Labour Force Sample Survey, Czech Statistics Office, 3/1999.

Chart 1.6 Structure of economically active population by education in Czech Republic (1980-1998) and EU (1996)



Source: Czech Statistical Office, OECD.

Wage structure

Along with business and capital revenues, salary differentiation, which increasingly depends on an employee's place of work, position and qualifications, has quite a significant impact on the differentiation of household incomes. In 1988 the average salary of secondary school graduates with *Maturita* was 3% higher than the salary of a qualified worker, while salaries of higher education graduates were only 12% higher than salaries of secondary school graduates. Ten years later, this difference had increased by 30% and 103% respectively. More detailed information on wage levels according to employees' educational attainment and age structure is given in table 1.5. This differentiation encourages young people to obtain higher levels of education and increase their professional mobility.

Table 1.5 Relation of wages to educational attainment, age and gender* (%) - 1996 and 1998

Age group	Male							Female						
	Level of educational attainment													
	Lower secondary (basic)		Secondary without Maturita	Secondary with Maturita		Tertiary		Lower secondary (basic)		Secondary without Maturita	Secondary with Maturita		Tertiary	
	1996	1998		1996	1998	1996	1998	1996	1998		1996	1998	1996	1998
Total	86	85	100	128	130	205	203	94	94	100	143	138	215	192
15-19	90	96	100	111	114	—	—	91	94	100	119	116	—	—
20-24	92	91	100	118	118	139	144	93	96	100	133	128	154	142
25-29	86	88	100	121	121	165	171	95	95	100	139	138	192	193
30-39	84	85	100	122	126	189	194	95	95	100	141	137	213	191
40-49	86	86	100	132	134	215	213	92	93	100	146	142	224	202
50-59	86	85	100	137	139	217	210	90	90	100	150	143	217	188
60+	80	76	100	147	155	246	246	89	88	100	155	154	265	242

* The figures are calculated only for employees with 1,700 or more paid hours. The level of educational attainment of secondary technical and vocational education without Maturita is assumed to be 100% in both 1996 and 1998.

Source: Wages of Employees 1996, Czech Statistics Office, 1997; Wages of Employees 1998, Czech Statistics Office, 1999.

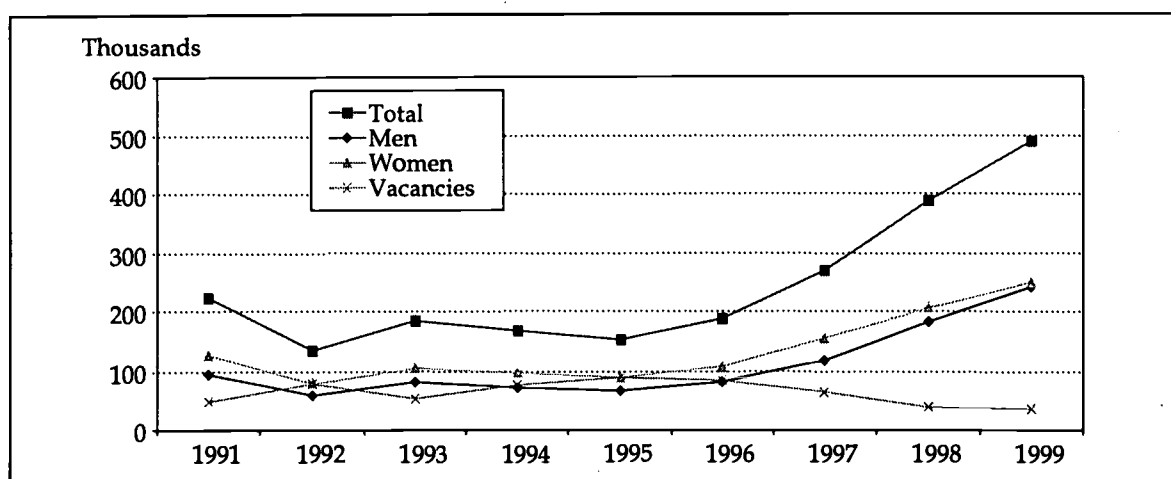
Given the decisive share of employment income in total household income, it is important to facilitate the entry of all population groups into the labour market. The Labour Code of the Czech Republic provides basic protection for those groups facing disadvantage on the labour market. A mother can stay at home until her children reach the age of four, and her former employer is obliged to offer her a job within three years.

People with disabilities face many difficulties in finding a job. The law therefore provides that those employing 20 or more workers must reserve 4.5% of jobs for people with disabilities. In practice, however, employers do not always adhere to this quota. The active employment policy detailed below includes an increased focus on risk groups on the labour market.

Unemployment

The unemployment rate, which had been stabilised at a relatively low level, started to rise sharply from 1997 to 1999, reaching 9.4% by the end of 1999. The unemployment rates measured by the Ministry of Labour and Social Affairs, and by the Labour Force Survey using the International Labour Organisation methodology, do not differ substantially as can be seen from chart 1.5-1 in the annex.

Chart 1.7 Changes in the numbers of unemployed registered at labour offices, 31 December (1991-1999)



Source: Ministry of Labour and Social Affairs.

The situation of vulnerable groups in the labour market, especially young people is worsening. There are major differences between various population groups or regions. Overall, female unemployment now exceeds male unemployment by 3.6 percentage points, whereas the figure was just 0.5 percentage points in 1994. This gap is widening. During the second quarter of 1999, for example, the Labour Force Survey shows that 29.6% of those aged between 15 and 19 were unemployed and that the corresponding female rate was 31.6%. The figures for the 20 to 24 age group were 12.4% and 13.7%, respectively. This contrasts with an overall unemployment rate of 8.4%. Unemployment of basic school graduates is also high, while those with higher qualifications are far less likely to be unemployed. The unemployment rate for apprentices is around 20.1%, while just 4.8% of those graduating from higher education are unemployed³¹. See chapter 1.2 for information on regional unemployment differences.

31 Source: Nezaměstnaní absolventi škol (Unemployed school graduates), Ministry of Education, Youth and Sports, 1999.

In terms of economic sectors (table 1.6), the highest unemployment rate is in those sectors experiencing production falls such as mining and quarrying, as well as those sectors with the highest privatisation rates, such as hotel services, trade, manufacturing, agriculture and construction. In contrast, unemployment is low in those sectors with a high degree of state participation, such as education, health, transport, public administration and the electricity industry, as well as those sectors experiencing growth in recent years, such as financial and business services.

Table 1.6 Ratio of the unemployed* to the total number of employed by type of economic activity (NACE) (%)

Czech Republic	1993	Spring 1996	II.Q 1997	II.Q 1998	II.Q 1999
Total	3.0	2.6	4.7	6.3	7.5
Agriculture and forestry	3.2	2.8	3.8	4.7	8.4
Mining and quarrying	3.5	7.0	7.2	11.2	14.1
Manufacturing	3.2	2.9	3.9	5.6	9.6
Electricity, gas and water supply	1.6	1.5	2.0	2.2	4.9
Construction	4.2	2.8	4.2	5.3	8.9
Trade, repair of motor vehicles and consumer goods	4.0	2.7	4.5	7.2	8.3
Hotels and restaurants	7.0	5.7	8.5	9.9	13.3
Transport, storage and communications	1.7	2.2	2.4	4.4	5.4
Financial services and insurance	0.8	0.2	2.2	4.2	4.4
Real estate, renting and business activities	2.3	1.3	2.3	3.5	4.1
Public administration and defence	1.4	2.5	2.1	2.7	3.2
Education	2.5	1.4	2.0	3.2	3.0
Health and social work	1.6	1.5	2.5	4.1	4.6
Other community, social and personal service	3.7	3.6	4.1	4.1	7.1

* Only unemployed persons who were previously employed are included.

Source: Employment and unemployment in the Czech Republic as measured by the Labour Force Sample Survey, Czech Statistics Office. Time intervals of the Labour Force Sample Survey surveys were changed in 1997 to calendar years.

The overall supply of job opportunities has been fairly high in 1994-1996. Due to slow economic growth in 1997, and the economic recession in 1998-99, the number of vacancies dropped rapidly. The significant simultaneous increase in unemployment means that there was just one vacancy per six job seekers (See table 1.7 for details on the structure in terms of individual qualification groups).

Table 1.7 Number of registered unemployed for each vacancy

	1994	1996	1998	1999-June
Total	2.1	2.2	10.3	12.6
Basic	4.6	3.5	11.9	15.4
Apprenticeship	1.4	1.4	7.9	10.0
Technical without Maturita	3.2	3.5	13.3	14.5
Vocational with Maturita	1.9	3.1	24.5	26.3
Gymnasium	6.3	12.6	59.9	56.5
Technical with Maturita	2.3	3.3	15.1	16.9
Higher education	0.7	1.2	5.9	6.1

Source: Data of the Ministry of Labour and Social Affairs

Although we have some reservations regarding the reliability of registered vacancies as an indicator, there is obviously great demand for staff with the highest qualifications (6.1 unemployed per vacancy). In reality, the number of vacancies for university graduates exceeds the number registered on the files of labour offices. Indeed, the job seeker-to-vacancy ratio is even more favourable, since companies prefer to recruit university graduates through channels other than labour offices. The job seeker-to-vacancy ratio is extremely unfavourable for graduates of general secondary schools, indicating people without vocational skills face difficulties in the Czech labour market, and that companies are not accustomed to recruiting employees without these skills and training them on the job.

However, this indicator may be skewed by the fact that some of these unemployed are secondary school-leavers who were not accepted by universities, are not interested in working, and are only registered with labour offices while they wait for a place in tertiary education institutions.

Future development

Despite the economic recovery, the near future is likely to see a further deterioration in the labour market. The unemployment rate is expected to reach around 11% in 2000 due to restructuring of enterprises, new technologies and anticipated pressure to rationalise labour costs in enterprises³².

Active employment policy

The basic legislative framework, institutions and instruments of employment policy were established at the very beginning of the transformation process. Employment policy is implemented by Labour Offices in individual districts, some of which have branch offices in problem micro-regions. They monitor and analyse the labour market, mediate employment, implement measures in the context of an active employment policy, and provide consulting services.

In the context of passive preventive employment measures, relatively strict criteria have been established for the payment of unemployment benefits. The benefit payment period is six months, and benefits amount to 50% of the former salary for the first three months and 40%³³ for the next

32 Expectations of the Ministry of Labour and Social Affairs.

33 The figures are actual for 1998. These figures were 60% and 50%, respectively, in preceding years.

three months. The maximum payment should not exceed 1.5 times the subsistence minimum. In recent years, active employment policy expenditure accounted for between 17% and 25%³⁴ of total costs, as can be seen from table 1.5-3 in the annex. The main focus of active employment policy is on assisting disadvantaged groups, such as the long-term unemployed, low skilled, young people under 18, school-leavers, people with disabilities and women with small children. Active employment policy also focuses on providing assistance to disadvantaged regions.

The following are the principal active employment policy instruments utilised³⁵.

■ *Supporting job creation for disadvantaged groups*

Labour Offices subsidise employers creating new jobs, or these subsidies are given to the unemployed as soon as they start independent profit-oriented activities.

■ *Supporting the employment of low-skilled labour*

Employers are reimbursed a part of a low-skilled worker's salary after a certain period of time.

■ *Supporting employment for people with disabilities*

Labour Offices subsidise employers creating new jobs in sheltered workshops.

■ *The general provision of retraining courses*

Such courses are divided into two types. Specialised retraining courses for specific professions are associated with a concrete promise of employment by the employer. Non-specific training courses provide participants with skills to enhance their chances on the labour market. These courses are not associated with a concrete offer of employment.

■ *Focus on school-leavers*

Labour Offices reimburse employers with the salary costs associated with employing school-leavers after a certain period of time. This means that, after finishing school, young unemployed people can acquire at least basic practical experience, thus increasing their chances of finding permanent employment.

Outside the current statutory labour market policy framework, some innovative measures are being implemented through the programmes of the Phare fund Palmif. New projects supported by this fund are proposed on central and local levels, and are then tested in practice. If these projects are successful in addressing unemployment, they may be incorporated in the statutory active employment policy instruments.

In recent years an increase in unemployment among the low-skilled, the Romany population and, in particular, young people under the age of 18 with only basic school education, has given rise to specific new programmes focussing on these groups. These programmes aim at a complex approach towards unemployment. This approach includes the provision of employment in public utilities, the provision of specific occupational qualifications, professional orientation, practical retraining and job-seeking assistance. These programmes have introduced the subject of Career Choice into the curriculum of the basic schools participating in the project. The programme has proven effective, and the Ministry of Education has recommended that the "Career Choice" subject be introduced into all basic schools. Labour Offices can pay the requalification courses for the teachers involved.

34 The costs relate to implementation of individual programmes in the framework of active employment policy, and do not include Labour Offices' running costs. If these are incorporated into the above policy costs (according to International Labour Organisation methods), the amount would be about one-third higher.

35 Employment Services in the Czech Republic, Ministry of Labour and Social Affairs, Prague 1996.

The high level of unemployment amongst the Romany population (approx. 70%) represents one of the main problems facing this minority group. The Romany population is being included in different programmes generally targeted at the low-skilled and special programmes for the Romany population exist in some regions, especially in North Moravia and North Bohemia. They include social reintegration and training courses, job-seeking assistance, support for Romany entrepreneurs by creating job opportunities aimed at the Romany population, specialised consulting services etc. The requalification courses also prepare Romany specialists to work as social legal assistants in individual regions. In some regions, district school offices organise "zero grades", a preparatory year for Romany children within the school system in an effort to eliminate their language and social disadvantages. Although the number of such classes and participating pupils has been quite low, improvements to the system are planned; these are detailed in chapter 2.2. It is intended to increase the number of classes, as well as preparing more manuals and training extra teachers.

One of the problems facing the Romany population in terms of employment is the low minimum wage level, and the low level of wages associated with low-skilled work. When compared with the subsistence minimum, these low wages act as a disincentive to taking up employment.

Present active employment policy does not include specific programmes for women with young children. Measures to facilitate the reintegration of women into the labour market after maternity leave form part of the innovation projects financed by the Palmif Fund. These projects focus on requalification and knowledge upgrading. As is the case with other disadvantaged groups, employers are subsidised to create new jobs for women with young children.

Career Guidance Centres play a significant part in Labour Offices' activities and, since 1996, all Labour Offices have included such centres. Their services are provided free of charge to all those interested, including students and the unemployed as well as those in jobs. Since being established, Career Guidance Centres assumed some of the responsibility both for career guidance and for monitoring opportunities offered by training providers. Their task is to assist people such as graduates in choosing a career and a suitable educational institution in which to prepare for that career, based on the abilities and interests of the individual involved, as well as available labour market information. These services are provided to all those interested in choosing a career, or in perfecting, extending or changing their profession. The employees of these centres are in constant contact with educational institutions in the region, and they also monitor the study branches provided by individual schools. Special attention is paid to the final years in basic schools.

However, career guidance provision needs to become more tailor-made, focussing on younger students and developing complex methods of ability testing and career planning. Government Decree No 640 of July 1999, on support measures for employment of people facing disadvantages on the labour market, assumes the establishment of a functional network of the "Centres de bilan". These Centres will provide psychological assessments and work out individual career plans. They will also provide counselling services.

In 1998-1999, state policy gradually responded to deteriorating conditions on the labour market. New labour market realities called for employment policy objectives and measures, as well as the actors shaping further development, to be redefined. The National Employment Plan, adopted by the Government in May 1999, gives clear preference to creating new jobs, improving employability and increasing worker flexibility, while discouraging reliance on the social safety net. It represents a new medium term comprehensive employment policy which creates new boundaries of competence and shifts the responsibility for employment and unemployment matters from the Ministry of Labour and Social Affairs to the parties involved, including the Government, its various departments such as education and industry, and the social partners.

The National Employment Plan contains, *inter alia*, several measures to enhance the education system's responsiveness to labour market needs. These measures include:

- introducing "Career Choice" as a compulsory subject at all school levels from the academic year 2000/2001;
- incorporating the acquisition of practical skills and habits in basic school curricula;
- introducing entrepreneurial skills into the curricula;
- creating the conditions in secondary and higher education for the vocational element to be upgraded so as to keep pace with developments in technology and industry; and
- establishing a uniform evaluation system for schools and study fields.

Another task will involve the preparation of legislation and implementation of management and funding reform in vocational training and education so as to introduce employer participation. As proposed by the National Employment Plan, the responsibility of the Ministry of Labour and Social Affairs was extended to include the area of continuing vocational education and training.

NATIONAL EMPLOYMENT PLAN

1. IMPROVING EMPLOYABILITY

- 1.1 To implement a reform of the school system - including its management and financing, - in particular, at vocational education at upper secondary level and higher professional level, with a view to creating conditions for achieving an appropriate balance between the graduates' levels and range of skills and labour market needs.
- 1.2 In order to facilitate the transition of school-leavers to work, to introduce a specific subject, "Career Choice", into the curricula of all schools which are subject to compulsory school attendance, with a view to promoting a proactive attitude and approach by pupils, students and their parents. Employment services will be required to supply all relevant information concerning the present and future labour market trends to basic schools and secondary schools.
- 1.3 Gradually, to increase the relative weight of income from work compared with social protection income, with special regard to low income families, by providing better conditions for economically active persons than those provided to persons relying on social protection. To achieve this objective, levels of minimum wages will be gradually increased to bring them to a level which would exceed the statutory minimum subsistence amount for a single adult person.
- 1.4 To change and widen the legal, organisational and financial framework for employment services and increase their responsibilities so as to enable them to respond to current and future labour market needs.
- 1.5 To increase the budget line for active labour market policies in order to respond better to unemployment trends.
- 1.6 To match the employment of migrant workers with the labour market situation and, in particular, to combat illegal forms of employment and illegal business activities.
- 1.7 To develop a suitable system for providing employment opportunities to citizens with disabilities, including the method of financing, by:
 - a) introducing an integrated rehabilitation system as a prerequisite for reintegration of citizens with disabilities into productive work;
 - b) redefining the range of citizens with disabilities who are entitled to increased protection in the labour market;
 - c) introducing economic incentives for the employment of persons with disabilities and consolidating the existing support provided to employers for their employment.

- 1.8 To implement measures to promote employment among the long-term unemployed, paying special attention to members of the Romany community.

2. DEVELOPING ENTREPRENEURSHIP

- 2.1 To implement a system of investment incentives based on Government Resolutions No 298/98 and 844/99 concerning employment promotion.
- 2.2 To implement the programme of industrial zones based on Government Resolution No 4/1999 concerning employment promotion.
- 2.3 To develop a comprehensive system of small and medium-sized enterprise promotion using both direct financial support and tax relief measures.
- 2.4 To create conditions for the development of counselling and training services for small and medium-sized enterprises with a view to promoting their competitiveness.
- 2.5 To take advantage of public procurement for creating employment opportunities for job seekers, in particular for those with labour market handicaps.
- 2.6 To develop and implement a programme to deal with the economic problems of selected industrial undertakings.

3. ENCOURAGING ADAPTABILITY OF BUSINESSES AND THEIR EMPLOYEES

- 3.1 To establish conditions for the introduction of flexible forms of work organisation and flexible working time arrangements with a view to achieving the required balance between the employers' and employees' needs and, gradually, to create conditions for the reduction of working hours and the development of part-time working. The introduction of flexible working time arrangements is expected to exert pressure on the amount of overtime.
- 3.2 To provide incentives to employers with a view to encouraging them to organise training of their employees as a means of promoting the competitiveness of their companies.

4. STRENGTHENING EQUAL OPPORTUNITIES POLICIES FOR WOMEN AND MEN, COMBATTING LABOUR MARKET DISCRIMINATION

- 4.1 To strengthen legal and institutional tools and mechanisms with a view to combating all forms of labour market discrimination.
- 4.2 To create opportunities for citizens to take advantage of temporary measures in favour of those groups whose access to employment is particularly difficult.
- 4.3 To monitor enforcement of the right to employment in respect of groups of citizens who are liable to suffer from discrimination.
- 4.4 To work towards reducing and/or removing the gap in wage levels between men and women.

2. Modernisation of vocational education and training

2.1 Organisation of education and training

The duration of compulsory education in the Czech Republic is nine years of basic school, or "základní škola", which is the equivalent of primary and lower secondary level. This does not include those pupils admitted to the first years of the extended gymnasium scheme. These pupils, who account for approximately 8% of the relevant age cohort, leave basic school after five or seven years of attendance. Following the completion of basic school almost all pupils continue their education at secondary schools, normally up to the age of 18.

There are three main secondary school types in the Czech Republic: gymnasiums; secondary technical schools; and secondary vocational schools³⁶. Applicants to secondary schools, except for those catering for pupils with disabilities, are generally accepted on the basis of exams, although a school director can now decide to accept students on the basis of their academic record, without their having to sit an exam. Since individual schools set the exams, their degree of difficulty differs. The most difficult and selective are the exams set by gymnasiums and secondary technical schools, for which competition is strongest. The rate of successful entrants is 56% for gymnasiums, 77% for secondary technical schools and 87% for secondary vocational schools³⁷.

Gymnasiums (ISCED 3) are secondary schools providing general education. They offer a broad background of general knowledge primarily aimed at preparing students for university. Gymnasium studies culminate in a final examination or Maturita. Gymnasiums can offer four, six, or eight years of study, as shown in the diagrams of the education system in charts 1 and 2 in annex II. The curriculum allows students to specialise in the humanities, sciences, or general studies.

Secondary technical schools, or střední odborná škola - ISCED 3, usually provide a complete secondary vocational education lasting for four years and culminating in the Maturita. They also sometimes offer a lower-level two or three-year secondary vocational education without a final examination (ISCED 3). They aim to develop practical application-based skills and knowledge. Secondary technical schools prepare students for technical work in their chosen specialisation. Those who have completed the four-year course with Maturita can continue their education at higher professional schools or universities.

In 1998/99, students could attend around 294 education programmes³⁸. About 40% of teaching time is devoted to general education, while the scope of vocational/technical education is varied.

36 Act No 29/1984 Coll., on the System of Basic, Secondary and Higher Vocational Education (School Act), as amended by Law No 171/1990 Coll., 522/1990 Coll., 134/1993 Coll., 190/1993 Coll., 331/1993 Coll., 49/1994 Coll., 256/1994 Coll., and 138/1995 Coll.

37 Alternative Approaches to Financing Lifelong Learning, Czech background study for the Organisation for Economic Cooperation and Development, National Training Fund, 1999.

38 VÚOŠ, Research Institute of Technical and Vocational Education, 1999.

Practical and theoretical lessons often overlap, and there is a lot of emphasis on acquiring skills in laboratories and other school-based workshops. Schools co-operate with companies on curricula amendments and in-company internship programmes, which are compulsory for second and third-year students. The tuition at secondary technical schools usually takes the form of regular full-time studies. Mature students at those schools can also take evening classes or study through distance learning while working.

Secondary vocational schools, or střední odborné učiliště – ISCED 3, usually offer three-year, or occasionally two-year, apprenticeship training courses culminating in a final exam and apprenticeship certificate. They may also offer a four-year secondary vocational education course culminating in the Maturita. This exam is recognised at other types of secondary schools and allows students to continue their studies at higher professional schools or universities. Practical training aimed at acquiring manual or manipulative skills forms an integral part of the tuition, accounting for about 50% of teaching time in three-year courses³⁹. The remaining teaching time is devoted to general education and the theoretical study of technical subjects. School graduates can immediately look for a job in the labour market, while those who have completed the three-year programme can continue their studies by taking follow-up courses culminating in the Maturita. Due to quality control considerations, and in order to maximise the efficient use of financial resources, the Ministry of Education currently only funds 10% of the total number of students attending these schools, and that only up to 50% of the per capita standard rate⁴⁰.

Secondary vocational schools offer qualifications in 272 vocational education programmes and 69 Maturita education programmes. About 28% of teaching time is devoted to general education, while the technical training emphasises skills acquisition. Secondary vocational schools provide both theoretical and practical training, the latter sometimes taking place directly in companies.

Besides the three main secondary school types, there are also “integrated” secondary schools and vocational training centres (ISCED 3), established during the first half of the 1990s as a result of the transformation of secondary vocational schools⁴¹. The integrated secondary schools, or “integrovaná střední škola”, offer both secondary technical school programmes and secondary vocational school programmes. A trial joint first grade for both types of studies has been introduced at some integrated schools participating in the Phare Vocational Education and Training Reform Programme experiment. The educational programmes are separated in the second year, when students make a choice. Nineteen out of the 1,448 vocational and technical schools⁴² have participated in the experiment. Integrated secondary schools help to create a broader education choice, and make it easier for students to transfer to a higher level course. Additional advantages include the availability of secondary vocational school resources for teaching secondary technical subjects, better utilisation of equipment for technical training, lower overhead costs etc. There were about 190 integrated secondary schools in 1997/98⁴³.

39 Vojtěch, J. – Kofroňová, O. : Kurikulární politika po r. 1989 a její odraz ve vývoji oborů přípravy ve středním odborném školství; Curriculum Policy after 1989 and its Impact on the Development of Educational Branches in Secondary Vocational Education, Prague, VÚOŠ, 1996, p.95.

40 Alternative Approaches to Financing Lifelong Learning, Czech background study for Organisation for Economic Cooperation and Development, 1999.

41 See Kofroňová, O. – Vojtěch, J.: Integrované střední školy. Analýzy empirického šetření pro projekt grantové agentury ČR Proměny českého školství v evropské perspektivě; Integrated Secondary Schools. Analysis of the Empirical Survey for the Project of the Granting Agency of the Czech Republic – Changes in the Czech School System in the European Perspective, Prague, 1995.

42 September 1997 state of affairs. Special schools and education institutions for disabled are not counted. Statistická ročenka školství 1997/1998, Výkonové ukazatele, Statistics Yearbook of Education, ÚIV, 1998.

43 Statistická ročenka školství 1997/1998, Výkonové ukazatele, Statistics Yearbook of Education, ÚIV, 1998.

Centres for vocational training, or "centrum odborné přípravy", represent yet another form of secondary school. As well as vocational education for young people, these centres – of which there are over 30 – also provide job-seeker training and retraining courses for Labour Offices, companies and the public. In recent years the centres proved to be flexible in terms of requalification provision and reacting to labour market needs.

There are also special vocational education schools providing training to young people with disabilities. These schools provide education to physically disabled students at the level of a standard school for the general population, but using special methodology. There are special gymnasiums, secondary technical schools, secondary vocational schools, conservatoires and practical centres. The share of special school students in the corresponding age cohort is relatively stable, amounting to 3% of the relevant cohort.

Technical and business lycea are another type of secondary school which emerged during the 1990s. These schools try to transcend the sharp boundaries dividing general and vocational secondary schools. Their curricula therefore contain a large portion of the general subjects taught in general secondary schools, as well as theoretical aspects of the vocational subjects that are typical of secondary technical schools. Most graduates of technical and business lycea continue their technical and business education in colleges and universities. These lycea, of which there are a few dozens, usually operate within a secondary technical school rather than independently.

Post-Maturita studies, which used to be the dominant form of post-secondary education, are currently being phased out. These post-Maturita studies offered regular full-time or part time courses for those who had completed secondary schools in general studies. The full-time courses lasted one or two years. The 1995 Education Act abolished post-Maturita studies, introducing a new system of higher professional schools, usually established within existing secondary technical schools.

Higher professional schools, or "vyšší odborná škola" – ISCED 5, have been operating since 1996/97. They provide the necessary qualifications for demanding technical activities which do not require a university degree. The courses last a minimum of two years and a maximum of three-and-a-half years. There are 156 higher professional schools providing tuition in approximately 200 branches. Students pay tuition fees at higher professional schools.

Non-state schools, whether private, enterprise or church schools, are a new feature of the Czech education system. Their emergence helped broaden the supply of education and facilitated evolution of a competitive environment in the education system. These schools account for about a quarter of all secondary schools. They focus primarily on economics, tourism, business administration and other fields where the education supply had been limited. Subject to certain conditions, the state subsidises non-state schools to the tune of 60% to 90% of the standard rate of non-investment costs allocated to the same type of state schools. Around one-third of higher professional schools are in the non-state sector.

2.2 *Main features of the vocational education and training system*

The vocational education system has a school-based dimension, both in terms of preparing students with technical qualifications at secondary technical schools, and in terms of apprenticeship training at secondary vocational schools. There is no dual system of apprenticeship in the Czech Republic. Practical training of students is an integral part of school education, regardless of whether it takes place in school workshops or in enterprises.

Links between theoretical and practical education in vocational education and training depend on the type of education. Practical training is most extensive in the field of apprenticeship training. When preparing students for technical occupations at secondary technical schools, practical in-company training is included to familiarise them with the world of work. The proportion of such training varies according to the type and needs of the sector involved. At a minimum, such training accounts for two weeks during the second and third years. In higher professional schools, great emphasis is placed on familiarising students with practical work, sometimes in combination with the education process. More qualified higher professional schools offering longer courses often have a six-month preparatory in-company internship.

Responsibility for provision of training

In the Czech Republic, the responsibility for providing initial education lies with the state, specifically the Ministry of Education, Youth and Sport according to the terms of the Division of Responsibility Act. The Ministry proposes education acts, and enacts secondary legislation implementing and expanding on the provisions laid down in those acts. With very minor exceptions, state bodies are the sole decision-makers in respect of education and its development. Employers are therefore not involved in making decisions about vocational education, and this even applies to apprenticeship training. Apprentices being prepared for manual or and craft work in Czech secondary vocational schools enjoy the same legal status as other secondary students, and therefore usually have no relationship with a particular company. Industrial enterprises co-finance hands-on training for about 5% of these apprentices. However, even in these cases there are no apprentice-company contracts as are common elsewhere.

Communities or regions are also not involved in making critical decisions on education. They participate in designing, operating and financing networks of nursery schools and basic schools in their area, but are not involved in vocational training. In 1999, the cabinet proposed a number of acts to reform public administration and self-government in the Czech Republic but these acts have not yet been adopted by the Parliament. If adopted, they will increase the powers of communities and regions in education and other areas, as detailed in chapter 1.2.

Transparency, equivalency, permeability

Vertical permeability⁴⁴ is ensured by a system of educational pathways enabling students to pass smoothly from basic to other types of secondary education. There are no dead ends in secondary education, and students of gymnasiums, secondary technical, vocational and integrated schools have access through different paths to the Maturita exam which serves as a basis for further education. The equivalence of Maturita exams passed at gymnasiums and at secondary vocational and technical schools after four years is very important in this regard. The students of secondary vocational schools, who usually finish three-year courses with an apprenticeship certificate, can continue their education in follow-up courses. These courses allow them to finish their secondary education with a Maturita examination although, as detailed in chapter 2.1, this option is limited. Permeability at the higher education level is naturally limited by the existing capacities of higher educational establishments.

§20 of the Schools Act provides for horizontal permeability between individual secondary school branches. When accepting an applicant a school director decides on the transfer terms, which may, for example, include a "difference" examination. In reality, horizontal permeability is limited due to the linear character of educational courses, and due to the fact that they do not allow recognition or

44 The vertical permeability of the education system and the variability of education pathways are indicated by arrows on the Education System Diagram - see annex II, chart 2.

certification in respect of partial course completion. Transfer to another branch is rare, and usually takes place when weak students are transferred from secondary technical schools with Maturita to less difficult courses.

Access to training and, provision of equal opportunities

All social groups regardless of gender have access to some type of vocational education. Young people with disabilities can attend the special schools detailed in chapter 2.1. The development of special education in the Czech Republic has been along traditional lines. The most seminal change relates to the attitude to children with disabilities in society at large, which no longer seeks to isolate such children. Today, if their health allows, these children attend the same school as children without disabilities. Special practice schools also provide for special school graduates with mental disabilities, as well as pupils with incomplete basic school education. These are non-professional schools providing practical abilities and skills and preparing students for simple activities in one or two-year courses.

However, disadvantaged children face clear social and economic barriers impeding access to education. Socially disadvantaged children study in worse conditions and show less interest in education. The vicious cycle of low social status, unemployment and insufficient training tends to pass from one generation to another.

This trend is especially marked among the Romany minority, with two-thirds to three-quarters of Romany children attending schools for children with special learning needs – in many cases following their parents. Yet these children do not suffer from mental problems; rather, they are disadvantaged mainly by insufficient knowledge of the language of instruction and a bad support network. Experts have made recommendations to create conditions conducive to adjustments in the system of education that would make it possible for Romany children to become as successful as other children. These measures include overcoming the language barrier, introducing preparatory classes preceding basic and secondary schools, using Romany as an ancillary language in schools, hiring Romany assistants in schools, promoting individual approaches to pupils, and establishing flexible and transferable catch-up classes. Catch-up classes would enable Romany children to gradually overcome knowledge gaps in certain subjects and return to regular classes. Some schools have already implemented certain of these measures, in particular catch-up classes preceding basic school and hiring Romany assistants.

Parity of esteem

Vocational education enjoys a high status in the Czech Republic. Although part of the community, particularly in cities, considers general secondary education to be more “elite,” the demand for some areas of vocational education exceeds interest in general education. This is particularly true of educational fields such as the arts, business, hotel management, the tourist industry, catering, information technology and teaching. The prestige of vocational education in the country is indicated by the high percentage of young people educated in vocational school network, which has developed largely in response to demand.

Enrolment figures, number of pupils in different school types, drop out levels and participation rates

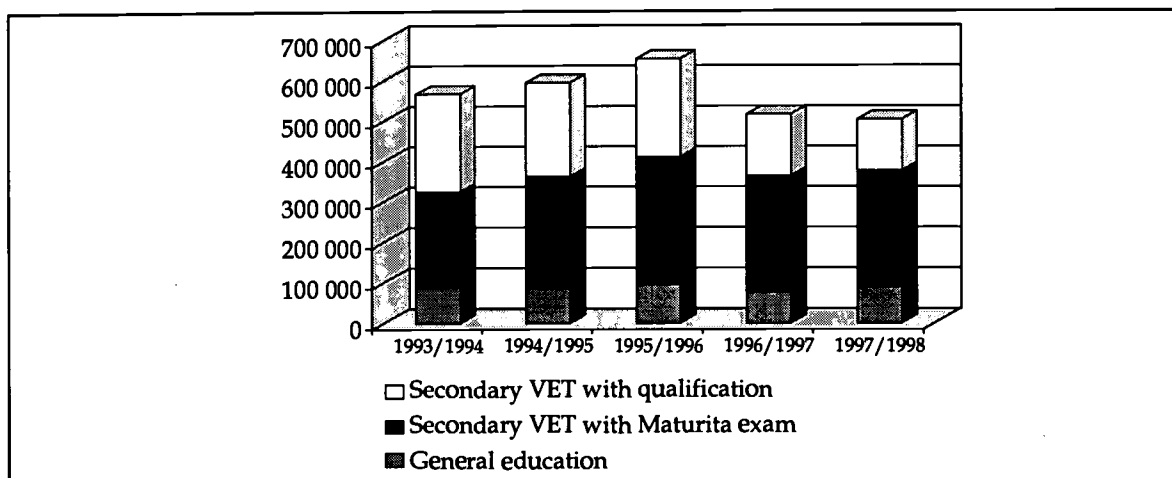
At present about 95% of those graduating from compulsory basic school or lower level of gymnasiums (ISCED 1 and 2) continue their education⁴⁵. These young people enter or continue at one of the three secondary school types (ISCED 3). Currently, about 18% of those entering secondary

45 Estimate.

education enrol in four-year secondary general schools, or gymnasiums, or continue their studies at eight-year gymnasiums. Around 42% enter secondary technical schools, mostly with four-year courses, while about 40% enter secondary vocational schools, mostly with three-year courses⁴⁶. Further details are given in the annex, table 2.2-1.

Students attending all three secondary school types usually complete their education, since the dropout levels for these courses are very low. Calculations carried out by the Ministry of Education indicate that, of those accepted in gymnasiums, about 95% complete their studies, compared to 93% of those in secondary technical schools and about 90% of those accepted for study at secondary vocational schools. The less successful students may continue their education in less demanding types of schools or branches of secondary education. The chart below shows participation in general education and in vocational education culminating in Maturita and with a qualification, at the ISCED 3 level. Due to the introduction of the compulsory ninth year in basic schools, or lower secondary level, since 1996/97, there is an "empty" year at upper secondary level - resulting in a sudden decrease in participation at ISCED 3.

Chart 2.1 Participation in secondary education (ISCED 3 level) from 1993-1998



Source: Key Indicators, National Observatory, 1998.

The majority of young people in the Czech Republic start their working life after finishing secondary school, while only a small proportion continue their studies at higher professional schools or higher education establishments. It is estimated that, in 1997, only about 19% of nineteen-year olds were studying at tertiary level education institutions (ISCED 5,6), while about 15% were in higher education establishments and about 4% in higher professional schools⁴⁷.

Regardless of age, the proportion of all successful applicants in the population of 18-year-olds is still quite low: 8.1% for higher professional schools, and 26.8% for universities during the 1998/99 school year. A positive aspect, however, is a visible increase in the numbers since 1996/97. This is due to the diversification of tertiary education: in 1996/97 the proportion enrolling in higher professional

46 J.Vojtěch, Vývoj proporcí počtu žáků v systému vzdělávacích cest středního a vyššího vzdělávání, 1989-1997, Odborné vzdělávání - analýzy a informace, Development of proportions of numbers of students in the system of education pathways of secondary and higher education, VÚOS, 1998.

47 Key Indicators, Czech Republic, estimates made by the Czech National Observatory on the basis of data provided by the Institute for Information on Education (ÚIV) and other sources, Czech NO, 1998. The estimate takes into account the year of birth of the enrolled and presents a pure participation rate for 19-year-olds.

schools was only 5.4% while those enrolling in universities accounted for 22.2%⁴⁸. A quarter of the total number accepted by higher education establishments complete bachelor studies, usually lasting three years, while over three-quarters complete university studies, normally lasting five years. The low capacity of tertiary education remains a problem, despite a relaxation of pressure on capacities following the introduction of higher professional schools. The number wishing to enter higher education is steadily growing, and although universities are also expanding their capacity, this has not kept pace with the increasing numbers of applicants. In 1989/90, 52% of applicants to higher education were accepted, while in 1997/98 only 41.6% of applicants were successful⁴⁹.

The 1990s saw several changes in post-secondary education. Post-Maturita programmes at the ISCED 4A and 5B levels, previously the most significant types of post-secondary education, were discontinued in the mid 1990s, while higher professional schools, a new type of vocational school, filled the gap between upper secondary education and universities. The numbers attending post-Maturita courses has been fluctuating, peaking at 17,434 students attending higher professional schools during the academic year of 1995/96. See section 2.1 for more details about higher professional schools - ISCED 5B. Student numbers in higher professional schools have been growing steadily, reaching 26,827 in the academic year 1998/99.

The situation is different with regard to distance learning. Follow-up courses at ISCED 4A after 3C levels have been the most common type of post-secondary education chosen by graduates of secondary vocational schools' three-year courses. Student numbers at these schools grew throughout the 1990s, peaking in the 1997/1998 academic year with 33,132 students. However, numbers then started to fall because the Ministry of Education decided to allocate fewer funds to these schools than to comparable types of vocational education. Advocates of a liberal approach to education criticise this step as an administrative restriction of access to education.

The bulk of applicants to higher education comes from gymnasiums (40.9%) and secondary technical schools, which account for 40.2% of all applicants. The share of applicants from secondary vocational schools and integrated secondary schools is, conversely, low at 5.6% and 5.2% respectively⁵⁰. The fact that the most successful applicants are gymnasium graduates, representing 49.7% of all those admitted, is evidence of the way curricula in gymnasiums is targeted at continuation of education. Seven point eight per cent more females than males apply to higher education, but male applicants are more successful, with 10.6% more being admitted⁵¹.

The level of participation in education is high among young people between the ages of 15 and 18 or 19. In 1997, over 90% of 15 to 17 year-olds, 65.1% of 18 year-olds and 36.9% of 19 year-olds participated in education. These figures have grown slightly in the lower half of the age spectrum, while growing rapidly in respect of those aged between 15 and 19. For example, between 1990 and 1997 the participation rate grew by 27.6% among 18 years old students, and by 14% among 19 years old students. The main reasons for this development include the year added to basic schools and increased numbers attending longer four-year courses leading to the general certificate of secondary education. The increased participation of 19 year olds in education reflects the growing number of students in tertiary education.

48 Data of the Ministry of Education, Youth and Sports, 1998.

49 Uspokojil v roce 1997/98 náš vzdělávací systém poptávku po VŠ studiu?, Did our education system satisfy the need for higher education?, Press release, ÚIV, 1998, p.1.

50 Ibid., p.2.

51 Ibid., p.3.

In an international comparison, the Czech Republic scores highly and exceeds the European Union average in terms of the participation of upper secondary school age students in education. Conversely, participation in education is below the European Union average in respect of those aged over 18.

Number of teachers

The number of teachers in Czech vocational schools has been affected by school and student numbers, as well as by the student-teacher ratio. In the early 1990s, the overall number of teachers and foremen in vocational schools at upper secondary level grew along with the number of schools and students. In the second half of the 1990s, the figures stagnated or dropped along with numbers of students. Apart from demographic reasons, the decrease was caused by adding a year to basic schools while dropping a year from secondary schools. In 1998, 40,767 teachers and foremen were employed in vocational schools at upper secondary level. Most were teachers in secondary technical schools. The figure includes 7,570 foremen who train apprentices in secondary vocational schools, and 4,000 teachers in non-state vocational schools.

Higher professional schools employed 2,050 teachers in the 1998/1999 academic year. The figure is higher than in previous years because student numbers in these schools also grew, increasing by 550 over the past two years.

For demographic reasons, the numbers attending vocational schools at upper secondary level are expected to shrink in the coming years, which will in turn lead to a slight decrease in the number of teachers at those schools. Another factor will be the pressure exerted by the Ministry of Education through their secondary school network optimisation project. On the other hand, the number of teachers in higher professional schools is expected to stabilise or grow, along with an anticipated rise in student numbers at these schools.

The student/teacher ratio has been changing over the past ten years, both in total and among the different types of schools. If we compare vocational schools with general secondary schools, it again becomes apparent that there are fewer students per teacher in vocational schools. This is because more teaching is done in smaller groups, in specialised classrooms, laboratories and in workshops. The higher the proportion of such teaching, the fewer students per teacher. On average, there were 13.4 students per teacher in secondary general schools, or gymnasiums, during the 1998/99 academic year. In secondary technical schools and secondary vocational schools, there were 7.3 and 6.5 students per teacher, respectively. These figures are lower than in other countries⁵². On average, there were 14.4 students per teacher in higher professional schools in the same academic year.

The student/teacher ratio has been growing in most Czech school types. Over the past three years, it rose from 12.3 to 13.4 in general secondary schools, from 7.1 to 7.3 in secondary vocational schools, and from 10.0 to 14.4 in higher professional schools. On the other hand, it dropped from 7.1 to 6.5 in secondary trade, or apprentice, schools, mainly because the Ministry of Education increased the number of lessons teachers have to teach. The trend is reversed in secondary vocational schools, mainly due to the amount of practical training, which limits the ratio for reasons of work safety. Current trends are expected to continue.

52 For instance, in 1995, vocational colleges in Organisation for Economic Cooperation and Development countries averaged 14.2 students per teacher. (Education at a Glance, Organisation for Economic Cooperation and Development, 1997).

2.3 *Adaptation of vocational education and training to the labour market and to socio-economic changes*

2.3.1 *General aspects*

Vocational education and training has undergone significant changes along with other economic and social sectors. Changes in the vocational education and training system were influenced by changes in the national economy and in the education system as a whole.

The nature of economic reforms is based on the transition from a centrally controlled economy to a free market. The free market brought substantial changes to vocational education and training in terms of education content and curriculum design, as well as the introduction of new education branches. The changes in employment structure altered the distribution of students among education branches, with the numbers studying agricultural and mining subjects falling while those studying subjects related to the service sectors increased.

Since 1989, the transformation of the education system has been based on the following principles⁵³:

- de-politicisation of education and training;
- breaking down the state monopoly in education;
- recognition of the right of pupils to choose their educational path;
- equal access to education; and
- decentralisation in the management of the education system by increasing the economic and educational independence of schools and delegating more decision-making powers to municipalities.

Transformation has not been carried out as a single reform, but rather as an ongoing process of improvements, innovations and flexible adjustments of the system.

The period between 1989 and 1994 saw a spontaneous grass-roots transformation process. The centre created the necessary legal conditions, especially by giving individual schools autonomy and by introducing per-capita financing. At the beginning this process was uneven. Transition has given rise to diversification, and to a significant quantitative development in vocational education and training. Vocational education and training underwent certain changes resulting from changes in the economic structure. For example, the decrease in output and employment in mining and heavy industry was accompanied by a fall in the numbers studying such subjects, as well as a drop in the number of relevant subjects available. Education supply has thus broadened, creating space for competition.

There have also been rapid developments in training courses as an integral part of continuing training outside the school-based education system. However, the broadened scope of education supply has not always been of adequate quality. Rather than becoming an integrated system, continuing vocational education and training is usually initiated by private training companies and enterprises. The main general obstacle to the present transformation of the vocational education and training system was a lack of clearly defined priorities. The reforms in the field of vocational

53 Koncepce rozvoje odborného vzdělávání ve středním školství. Souhrnná zpráva o řešení grantového úkolu; Conceptual Framework of Development of Vocational Education in the Secondary School System. Summary report on the realisation of grant assignment, Prague, VÚOŠ, 1991, p.56.

education and training to date have occurred mostly as the result of initiatives by school directors and teachers, mirroring the reforms in other parts of the education system. While these reforms have improved vocational education and training at a local level, they have not resulted in reform of the concept of vocational education as a whole.

With regard to curricula, the options for preparing educational programmes at schools were extended. For example, schools are now allowed to adjust up to 10% of teaching hours to suit their individual needs, and can also adjust up to 30% of teaching content. An important aspect is the fact that schools now have an opportunity to devise their own curricula, which are then subject to approval by the Ministry of Education. Many schools have availed of this opportunity, and in so doing have triggered a modernisation of the system. While in 1989 there were about 400 branches of study, currently there are about 920 branches, including those offered by private schools.⁵⁴ However, this increase has caused fragmentation of the curriculum structure and it also has had other negative results such as increased teaching costs and teaching in smaller groups of only around 10 students. These aspects are now gradually being eliminated. Curriculum innovations have been introduced in almost all vocational schools, either by introducing curricula in new branches or by modifying existing curricula.

In 1994, the Ministry of Education, Youth and Sports issued a document entitled *Quality and Accountability*⁵⁵. This document described the situation in education before 1989 and the key subsequent changes, as well as outlining the main principles of transformation and setting future objectives. While the removal of barriers has created room for spontaneous individual initiatives and led to an improvement in the quantity and diversity of educational provision, the next steps in the transformation process will aim at a well-balanced and rational education system, improved quality-assurance mechanisms, effectiveness and evaluation, and the creation of support systems for schools and teachers. These support systems include continuing vocational teacher training, monitoring, evaluation and assessment of vocational education quality, as well as information and guidance services. The transformation period to date has also led to a better internal climate at schools, for example improved interaction between teachers and students as well as more co-operation with parents.

The Phare Vocational Education and Training Reform programme was implemented in the Czech Republic between 1994 and 1998. Its main objective was to contribute to the long-term reform of vocational education. Several important vocational education innovations were prepared and tested at 19 pilot schools in this programme. These innovations included:

- introducing a common first year for students in four-year programmes ending in the Maturita exam and three-year programmes ending in an apprentice examination, thus allowing young people to delay deciding on their field of specialisation;
- introducing a two tier curriculum, in which a part is determined by the state and a part determined by the school;
- introducing key competencies into the curriculum;
- testing modular teaching in some areas; and
- testing project-based teaching methods.

54 Kofroňová, O. – Vojtěch, J. : České odborné školství v evropské perspektivě, Czech Vocational Education in European Perspective, in: Czech Education in European Perspective, Prague, Pedagogical Faculty, Charles University, 1996, p. 39; Vojtěch, J., Comments to the report Resolving Basic Problems of Apprenticeship Training, 1999.

55 Kvalita a odpovědnost, Quality and Accountability, Prague, Ministry of Education, Youth and Sports, 1994.

The results of the four-year programme were summarised in a draft vocational education and training strategy entitled Education For Prosperity. In 1998, the draft was submitted for public debate with a view to gaining wide public support. The results of the debate were incorporated into another strategic document entitled "Further Steps in Transformation", and included recommendations of which only a few have been implemented.

A project called Czech Education and Europe was implemented in the Czech Republic in late 1998/early 1999. Its aim was to analyse development trends in Czech education and compare them with trends in European Union Member States. The project analysed trends, identified strengths and weaknesses of the Czech system of education, including vocational education and training, and presented proposals for decision makers aimed at improving the current situation. Recommendations have yet to be implemented.

The Ministry of Education has completed a draft policy on education and development of the education system. The Government approved the main policy objectives and commissioned a strategic document, with an end 2000 deadline for presentation, on the implementation of the National Education Development Programme. In late October, a public debate was initiated on the recommended changes to initial and further education. The results of this debate, as well as the results of all the other endeavours, are due to be summarised and presented in a White Paper called "Challenge for 10 million".

**The main objectives of the educational policy of the Czech government,
as approved on April 7th 1999**

- 1. Development of education opportunities and equal access to education**
 - Implement changes in the system of education that will allow access to higher education even for children from less motivating social backgrounds.
 - Enable two-thirds to three-quarters of young people to acquire Maturita (four years upper secondary school leaving certificate) in the secondary general or vocational education.
 - By 2005, provide one half of the age group with an opportunity to continue in some form of tertiary education.
 - Increase the average duration of education from the current 14.7 to 16.7 years by the year 2005, and thus reach the current average duration in the European Union Member States.
- 2. Changes in approach and contents of education as well as characteristics of schools**
 - Create a diverse and permeable system of education, which will develop key skills and competencies and opportunities for lifelong learning.
 - In the year 2000, submit a framework study programme (national curriculum) for elementary schools for public debate, and, gradually, until 2002, submit study programmes for other schools.
 - After a public debate, finalise the reform of the Maturita examination in 2001, and implement its compulsory national part.
 - Enhance schools' involvement in the leisure time activities of children and youth and support schools' initiatives in offering further education for all citizens.
- 3. Changes in the structure of the system of education**
 - Strengthen the development of preschool education and lower secondary education as well as the amount and variety of education offered, in order to respond better to the different interests and potential of children.

- **Eliminate**, by 2002, dead ends in the interface between elementary and secondary education, and within the system of secondary schools.
 - **Promote** development of diversified **tertiary education** comparable with those in European Union Member States.
 - **Develop** a concept and strategy of development of further education (adult education), including the relevant legislation and means of financing.
- 4. Raise the status of teachers and in financial provision for the system of education**
- **Develop** conditions for appropriate initial teacher training, their **in-service training** as well as their professional, career and salary growth.
 - **Ensure** that **average salaries** in state education will grow in the forthcoming years on average by 6-8% faster than the national average. Thus, in 2005, the salaries of teacher will reach a level comparable with European Union Member States, relative to salaries in other sectors and gross domestic product.
 - **Establish and implement development and innovation programmes**, promoting, in particular, creative work in schools and the development of further education.
 - **Decrease the financial burden on families** resulting from their contribution to the costs of placing their children in kindergartens, elementary art schools, hobby clubs and leisure time activities.
 - **Increase public spending** on education from less than 4.5 % of gross domestic product to 6% in 2002.

Involvement of enterprises

The system of vocational education and training management in the Czech Republic still does not support co-operation between vocational schools and enterprises, with the result that there is no systematic collaboration at a national level between the bodies managing education and industry. Secondary technical school curricula only include a small element of student practical training in enterprises. Neither the initial nor the continuing training of vocational teachers have regard to the need for teachers to make study visits to enterprises. In apprenticeship training, which has a high proportion of practical training, the contacts with enterprises are more intensive. However, there is no system to encourage enterprises to co-operate in the educational process.

Co-operation between vocational schools and enterprises occurs most frequently on a local level. This co-operation, however, is generally spontaneous rather than systematic, and does not address all relevant aspects. It generally concentrates on the provision of practical in-company training, and sometimes also involves consultation in relation to curricula and specialisation.

This situation varies widely between individual regions and sectors. One example of best practice is the efforts made by the Czech Society for Technical Appliance, a member of the Economic Chamber, to co-operate with and help secondary vocational schools in terms of curriculum innovation, elaboration and publishing of new text-books, acquiring the necessary equipment for practical training, and ensuring regular continuing teachers' training. Another example of positive co-operation between employers and vocational schools at a sectoral level involves the national vocational knowledge competitions organised by the Car Repair Services Association of the Czech Republic together with vocational schools offering car-repair subjects. While there are some examples of excellent co-operation, there are also examples of the reverse. In recent years enterprises have increased their interest in co-operation with vocational schools. Proposals on improving such co-operation were included in the evaluation of the Phare Vocational Education and Training Reform programme.

2.3.2 *Special aspects*

Monitoring vocational education and training development and labour market trends

The development of vocational education and training is permanently monitored. The Institute for Information on Education (ÚIV), as a centre of statistical information on education, plays the central role in this monitoring process. For example, it processes statistics on the numbers of schools, total students and those in individual school years, newly admitted applicants and graduates. These data are available by district and also by education branches, and can be further tracked according to the level of education attained, with or without a Maturita certificate, in accordance with the national system and with the international ISCED education classification system. The data have been available since 1992. The problem is that education statistics are maintained separately from the financial statistics, with the former being processed by the Institute for Information on Education, while the latter is analysed by the Ministry of Finance.

Since 1996, the ÚIV has also monitored some qualitative aspects of secondary education. Within the framework of the Indicators of Education Systems project, the Institute is co-operating with the Organisation for Economic Co-operation and Development to prepare a large-scale survey of employers. This survey will focus on education system outputs and on the degree to which the system or graduates meet employers' requirements.

There are two main sources of labour market information in the Czech Republic. Since 1993, the Czech Statistics Office has been conducting Labour Force Sample Surveys in households according to International Labour Organisation methodology. The aim of these surveys is to collect quarterly data on labour force supply, as well as on the population's economic activities broken down according to various social and demographic indicators and regions. In addition, Labour Offices also process data on the unemployed, including jobless school graduates, and on the results of the active labour market policy. These data only include those economically active individuals who have contacted Labour Offices seeking employment. There is a general absence of research to anticipate the essential skills and qualifications needed in enterprises and regions.

Labour market monitoring for the purposes of vocational education and training focuses primarily on the labour market prospects of graduates in individual disciplines. Since 1993, the Research Institute of Technical and Vocational Education (VÚOŠ) has developed an information system based on selective surveys of the social, demographic and professional structure of unemployment, with special emphasis on the professional structure of unemployment among graduates.

In response to growing unemployment, particularly among school graduates, the Ministry of Education joined forces with the Ministry of Labour and Social Affairs to launch regular analyses of graduate labour market placement. In 1999, unemployment among school graduates, as well as graduates of higher professional schools and universities, was almost double the overall unemployment rate of nearly 10% (9.4% in December 1999).

Development of national standards

In 1997, the Research Institute of Technical and Vocational Education formulated education standards for secondary technical and vocational education in the context of the Phare Vocational Education and Training Reform programme. The Ministry of Education approved these standards, with the result that all new curricula implemented after 1 January 1998 must meet the new requirements.

Since 1998, the Ministry of Labour and Social Affairs has been orchestrating efforts to create a system of occupations that will serve as national occupational standards. These efforts are supported by documentation provided by some twenty working groups established on the basis of individual fields of study, and including employer representatives as well as vocational school teachers.

Revision of curricula and development of new curricula

The opportunity for schools to devise innovative or new training programmes,⁵⁶ and submit them for approval, has become the driving force in the reform of vocational education. 1,132 innovative and new curricula were approved in 1990-1998, 204 of which were approved in 1998 in the context of the Phare pilot schools. The curricula are continually upgraded, and 370 are currently recommended for elimination. The most significant contribution towards curricula innovation has been made by teachers themselves. Curriculum modernisation usually focuses on:

- matching education supply to the local demand for qualified personnel;
- adjusting education supply to meet the diverse needs of different local student groups; and
- creating an image to distinguish a school from other similar schools and attract more students and associated financial resources.

Many curriculum changes track changes in the relevant branches, with the aim of ensuring that the education provided to students studying those branches meets the needs of private business. This mainly relates to studies in management, marketing, finance, preparation for small-scale production and handcraft technologies, trade and services occupations, as well as foreign language teaching. There is a tendency to make vocational education more general, which increases flexibility and graduate job opportunities. Although, before 1989, vocational education and training programmes in both secondary technical and secondary vocational schools concentrated primarily on vocational knowledge and practice, today vocational education and training also focuses on providing a broader education. The proportion of general education subjects ranges from 20% to 60% depending on the branch involved.

At the same time, there have been changes. Vocational education curricula culminating in the Maturita have become more general, and are still regarded as the basis for continuing specialised education. This continuing perception is confirmed by the changes in these courses' curricula, which tend to concentrate more on general and basic vocational education and on essential skills, as well as the significant increase in interest in post-secondary education.

The curricula of secondary vocational schools now include a larger proportion of practical training. Stress is placed on providing manual skills which are not only to be directly utilised in concrete enterprises, but also to be generally used in the framework of European Union standards.

The influence of the labour market on curriculum innovations is still indirect, and is reflected in the students' or parents' demands on education. It represents a reaction to the present situation on the labour market rather than acceptance of medium or long-term economic trends. Curriculum modification is complicated by unsystematic communication with social partners due to the absence of a statutory framework. In addition, the Labour Offices only have a consultative role in the establishment of new branches at schools.

56 As basic material for preparation of this part of the chapter the following study was used: J.Vojtěch, O.Kofroňová: Kurikulární politika po r. 1989 a její odraz ve vývoji oborů přípravy ve středním odborném školství; Curriculum Policy after 1989 and its Reflection on Branch Development in Secondary Vocational Education, Prague, VÚOŠ, 1996.

A new classification of fields of education was introduced in the Czech Republic in 1999. The new classification recognises fewer, but broader, fields of education. The new classification makes it easier for employers and potential students to find their bearings in the system of vocational education.

Assessment, certification and transparency of certificates

In the Czech Republic, generally accepted certificates only exist within the framework of the school system. The two main certificates⁵⁷, apprenticeship certificate and the Maturita certificate, are recognised in the labour market as expressing educational and qualification levels attained. Graduates of higher professional schools receive diplomas, or the Absolutorium, indicating the field in which they graduated.

Certification in the field of continuing vocational education has not been sufficiently addressed. Outside the school system, graduates of continuing education courses organised by employers or private institutions receive certificates of attendance, but the recognition of these varies⁵⁸. Requalification courses for registered unemployed people are provided by institutions accredited by the Ministry of Education. While retraining documentation is valid throughout the country, such documents are not analogous to certificates awarded in the school sector and are not always fully recognised by employers.

Following 1989, a greater degree of independence for schools has allowed them more freedom in determining the contents of the final examinations on the basis of which certificates are issued. This led to a greater certificate flexibility in terms of changing vocational and study branches. Simultaneously, however, it caused confusion in the entire certification system. The lack of equivalence between outputs in individual branches of study at various schools also poses a problem, while the issue of Maturita standardisation is currently under discussion⁵⁹. Certificates would be more credible if employers were involved in developing and implementing tests and in ensuring that graduation requirements are related to work applications.

The limited validity of certificates obtained outside the school system complicates the continuity between initial and continuing education, and limits the diversity of the educational pathways open to young people.

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- 57 Vicensk, P.: *Nástin koncepce žádoucích změn v ukončování studia a přípravy na povolání ve středních školách ve vztahu k vývoji koncepcí vzdělávání a přípravy na povolání; Conceptual Outline of Necessary Changes in School Graduation and Vocational Training...*, Prague, VÚOŠ, 1996.
- 58 Certificates for courses, organised by employers, are valid within the enterprise, and certificates of training providers outside the school system have nation-wide validity if the requalification activities are accredited by the Ministry of Education or if the valid nation-wide standard norms, or ministerial procedures are applied. All institutions, including schools, have to apply for accreditation of education and training activities that do not correspond to the activity description in the founding protocol.
- 59 The Maturita exam has been legally codified (the regulation of the Ministry of Education on Secondary School Graduation) mostly in terms of procedures while equivalency of different secondary types of schools and educational programmes was retained. Schools are responsible for administering Maturita exams with an external head of the Maturita commission. Drafts of Maturita standardisation under the initiative of the Ministry of Education are focused on the unification of demands in the general education component to be obtained through standard tests. Taking into account the heterogeneous nature of curricula, especially differences in the general part of education at gymnasiums and secondary technical schools and also in individual vocational education branches, the aforementioned standardisation is very difficult to achieve. In 1998-1999, a pilot testing Maturant is conducted on a sample of all Maturita graduates where standardised tests in subjects of the Czech language, foreign language and Maths are verified. A standardised Maturita exam is being further elaborated.

Development of vocational orientation and career guidance

Career guidance has developed considerably in recent years. Educational programmes at basic schools include information on careers, the labour market and other aspects of employment, usually provided as part of the civics subject. In 1999, as one of the many measures contained in the National Employment Plan, the Ministry of Education recommended introducing a new subject, Career Choice, into the curricula of all basic schools. Depending on the school, Career Choice could be either compulsory or elective. The schools should co-operate with the Labour Offices in this regard.

In 1994, the Ministry of Education established the Educational and Psychological Institute of the Czech Republic. The aim of the Institute is to provide information and to guarantee professional services in the field of guidance on a nation-wide basis. Counselling services are provided to children and young people, including those with disabilities, to their parents and other legal guardians, to teachers, and to other educators from schools and educational facilities. Within the education system, the counselling system comprises guidance counsellors, school psychologists, special teachers, Educational and Psychological Counselling Centres and Special Educational Centres. Guidance counsellors, school psychologists and special teachers provide counselling services in schools.

Pedagogical and Psychological Counselling Centres constitute a basic link in guidance practice in district capital cities. The network of Special Education Centres consists of 101 facilities across the Czech Republic. They mainly provide psychological and special pedagogical services to children aged between 3 and 19. They provide guidance in the choice of education and career pathways when so requested by the school or by parents. They focus primarily on gifted students, students with developmental problems, and those at risk of poor socialisation. Within the education sector, a further link in the guidance programme consists of guidance counsellors in all types of schools. Their career guidance role consists primarily of bringing students into contact with special guidance units.

In 1996, Information and Guidance Centres were established in Labour Offices. These centres provide information on education opportunities and vocational preparation, education facilities, forms of study, labour market conditions and services for unemployed young people. These centres also work with high-risk groups of children and young people, as detailed in chapter 1.5.

In 1997, the Ministry of Education and the Ministry of Labour and Social Affairs signed the Agreements on Co-operation and Transfer of Information and on Provision of Career Guidance Services. The school sector continues to provide services relating to the choice of an individual pathway and professional career, delivered through educational counsellors, school psychologists, pedagogical-psychological counselling centres and special pedagogical centres. They focus on defining the individual abilities of children for further studies or professional preparation, and harmonising these personal abilities with students' interests. The Labour Offices' Information and Guidance Centres play an important role in selecting appropriate careers and positioning students in the labour market, as they have more detailed and up-to-date information available.

The National Resource Guidance Centre was recently established under the Leonardo da Vinci programme. Its aim is to map and monitor all available information sources in the field of educational and employment guidance and counselling and related information, and to link these sources providing a better system of orientation for institutions, experts and individuals. This will facilitate a synergy among existing institutions, programmes and experts, and will contribute to transparency in counselling and guidance services.

Teacher and trainer training

In formal terms, the qualification structure and the level of teachers' qualifications are high. The majority of teachers have a relevant education. A high percentage of teachers of vocational subjects have pedagogical qualifications acquired at pedagogical faculties or during post-graduate methodological studies. All teachers of theoretical subjects must have completed higher education. Programmes for continuing education and training of teachers are provided in different institutions, including pedagogical centres, School Offices' training centres, and other organisations accredited by the Ministry of Education, such as some vocational training centres and schools. At present there are 250 accredited institutions.

However, with regard to teachers of vocational subjects, there is still a problem related to the updating of vocational knowledge and contact with rapidly changing practices. This should be addressed not only by means of continuing training, but also through professional practice and placements during initial training. It is also important to acquire and develop the most active forms of pedagogical practice, such as problem solving, project practice and activating methods.

Learning-oriented teaching and training methods

Descriptions and analyses of the Czech education system often show that learning mainly involves traditional teaching methods based on presentation of packaged facts by teachers, with little student involvement. Although some schools use progressive teaching methods, traditional methods still prevail. Project-based teaching has been introduced in Phare Vocational Education and Training Reform programme pilot schools. Although these schools were happy with project-based teaching, it has not spread to a wider circle of vocational schools.

3. Human resources development

3.1 Continuing training

Continuing vocational training has undergone a number of changes during the 1990s. These changes took place during a period of political, economic and social liberalisation and in the absence of the conditions necessary for a consistent and coherent policy. At the start of the transformation in individual sectors training institutions were under the control of sectoral ministries in charge of continuing vocational training for employees in the sector involved. A number of employers' associations also included similar educational institutions, which have, mostly, been privatised or reorganised in the meantime.

Continuing vocational training in the Czech Republic can currently be characterised as a supply-and-demand free market with both positive and negative aspects.

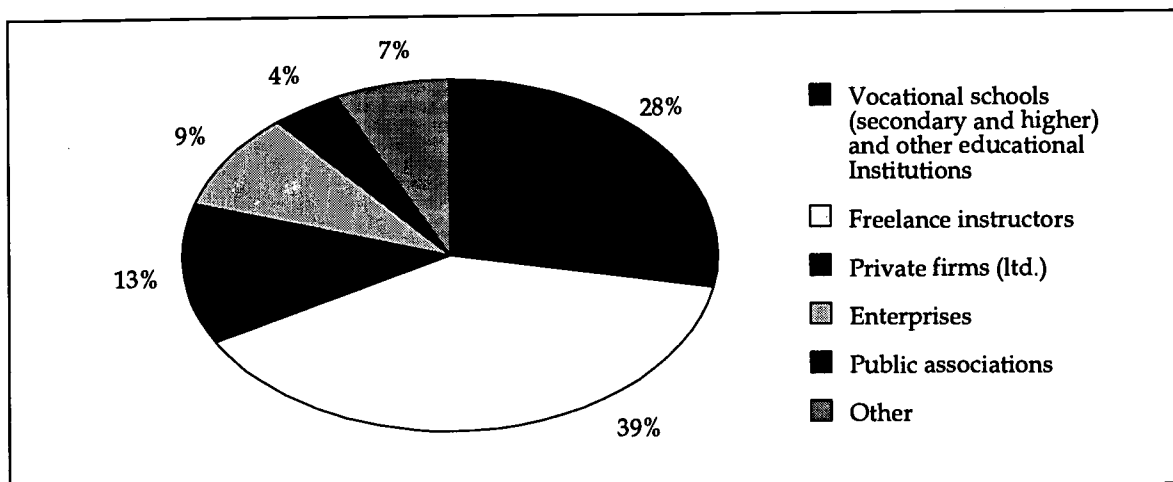
Positive features

Positive features of continuing vocational training in the Czech Republic include flexibility and the availability and diversity of training institutions and their services. Continuing vocational training is mainly provided by private training and consultancy firms, non-profit organisations, secondary vocational schools and universities. These institutions offer training services and products developed internally or adopted from abroad in the context of support programmes or through purchase. Competition has forced continuing vocational training providers to expand their provision, with the result that there is significant oversupply of continuing vocational training⁶⁰. There are currently about 1,500 training firms active in continuing vocational education and training, including freelance instructors⁶¹. At the beginning of the 1990s, there were about 1,200 training firms as a result of the rapid growth in demand for continuing vocational education and training following the development of new economic disciplines, new legislation and the introduction of new technologies. This was reflected in the number of courses and in the number of trainees. In 1991, it was estimated that there were around 23,000 courses, and this had risen to around 38,000 by 1995. The number of course participants was around 470,000 in 1991, rising to around 650,000 in 1995.

60 In-depth Study on Continuing Vocational Education and Training in the Czech Republic, National Observatory, Czech Republic, 1998.

61 Database of continuing vocational education and training providers, Ing. Jan Hammersack, September 1999.

Chart 3.1 Providers of adult education/continuing training



Source: Ing. Jan Hammersack database, September 1999

Negative features

Negative features of the present situation include the difficulty of finding one's way around the continuing vocational training provision due to its fragmentation and spontaneity. There is a need for an effective information system in the field of continuing vocational education and training that could be used by state bodies, employers and potential course participants. Such a system could form the basis for the co-ordination of educational institutions. At present information sources are fragmented and are generally obtained by chance, as can be seen from table 3.1.

Table 3.1 Sources of information on continuing education courses, programmes etc.

Source of information	Number of respondents	%
Employer	98	28.0
Friends, relatives, colleagues	95	27.1
Another school or training institution	40	11.4
Advertisements in a newspaper or magazines	32	9.1
Printed advertisements (leaflets, posters etc.)	17	4.9

Source: Adult Education in the Czech Republic, Draft Report, Ministry of Education, Youth and Sports, April 1997. Data quoted from the MORI Survey of Continuing Education.

District Labour Office Information and Guidance Centres represent another source of information on continuing vocational training. These centres gather information on continuing vocational training from regional training institutions and present them in several ways. Formats include lists of schools' training programmes, catalogues and leaflets of training firms, video recordings etc. The impact of this information is limited, though those interested in continuing vocational training can find lots of information concerning regional provision in this manner. The diminished impact is due

to the fact that these centres tend to be visited by job seekers rather than those already in employment⁶².

Other negative aspects of continuing vocational training provision include the lack of co-ordination and the absence of mechanisms to assess the quality of continuing vocational training. This often leads to irresponsible management and has a detrimental impact on quality.

Certification is another issue that affects the quality and standardisation of continuing vocational training, and which is only in its early stages in the Czech continuing vocational training system. There are generally accepted certificates attesting to the acquisition of a defined level of training such as secondary education, and some continuing vocational training programmes culminate in such a certificate. These programmes, however, account for only a small proportion of the total number of continuing vocational education training programmes. There are also certificates acquired when one passes specified examinations required for performing certain work activities, such as electrical engineering. These certificates, however, are restricted to a small range of work activities. In addition, certificates are awarded on passing some imported training programme. While these are usually acknowledged internationally, they again only account for a small proportion of the total number of continuing vocational training programmes. There is no overall certification system to standardise certification of the most frequently attended short-term courses organised by various providers⁶³.

There is no comprehensive legislation regarding continuing vocational training in the Czech Republic, although the Ministry of Education has prepared a draft adult education act. However, this draft has not been adopted due to several outstanding problems in the economic area relating to employers' and municipal bodies' obligations, changes in the taxation system etc⁶⁴. Surveys on adult training policy⁶⁵ indicate that the absence of a legal norm governing continuing vocational training is viewed as negative and seen as a brake on the development of adult training, indicating an underestimation on the part of the state of the role played by continuing vocational training. The 1991 Act No 455 on trade entrepreneurship allowed any natural person or legal entity to educate adults without restriction. The only restriction was adopted in 1992 with Act No 450 following the 1991 Employment Act No 1. This restriction governs requalification courses organised by the Ministry of Labour and Social Affairs. The Ministry of Education's Regulation No 21/1991, as amended by the Regulation No 324/1992, stated that all training institutions planning to offer the requalification courses must be accredited by the Ministry. The legislation specifying the responsibilities of individual ministries do not assign responsibilities in the area of adult training or continuing vocational training to any of the ministries, or to the social partner bodies and municipal bodies. In addition, current legislation does not include any financial or other incentives supporting the development of continuing vocational training⁶⁶.

62 In-depth Study on Continuing Vocational Education and Training in the Czech Republic, National Observatory, Czech Republic, 1998.

63 As above.

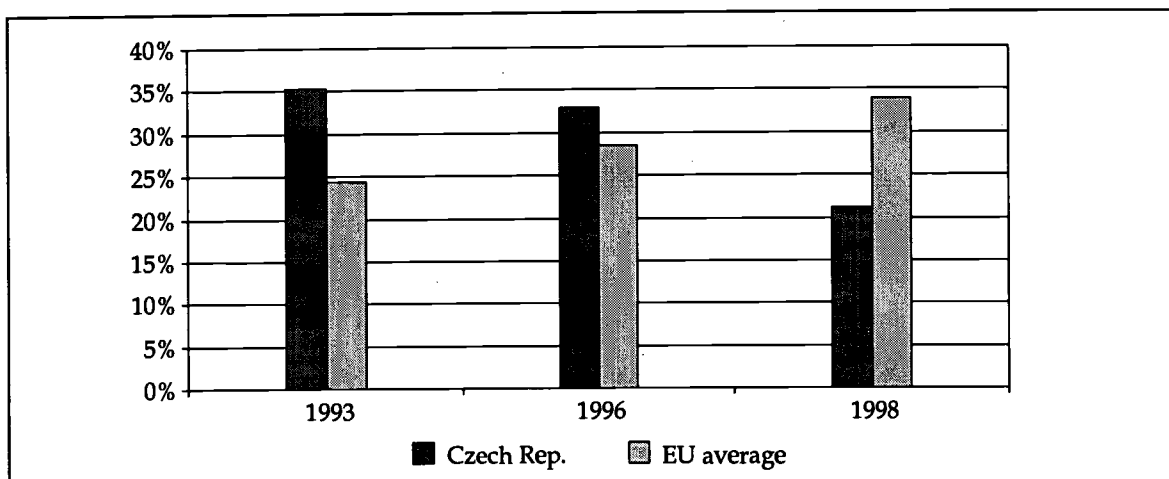
64 *Vzdělávání dospělých, výtah z dokumentů a publikací, Education of Adults, Abstracts of Documents, ÚIV, 1997.*

65 E.g. *Ročenka vzdělávání dospělých '95, Yearbook of Education of Adults '95, Prague, Česká společnost pro vzdělávání dospělých (Czech Society for Education of Adults), 1995.* P. Hartl et al., *Budoucnost vzdělávání dospělých v Evropě, The Future of Education of Adults in Europe - Eurodelphi 1993 - 1996, Prague, National Training Fund and Charles University, 1998.*

66 In-depth Study on Continuing Vocational Education and Training in the Czech Republic, National Observatory, Czech Republic, 1998.

The Labour Code and other regulations include several rules regarding continuing vocational training. These include the obligation of the employee to acquire further training enabling him/her to perform his/her current profession, and the obligation of the employer to cover the costs of continuing vocational training if this training corresponds with the employer's needs. They also specify that the employer can oblige the employee to enhance his/her qualifications by participating in training. In addition, the legal framework governing employment contracts stipulates that employees are entitled to more time off in order to enhance their qualifications⁶⁷. The rule requiring the employer to refund the costs of employee's continuing vocational training, and to bear the costs of associated employee absences, may have a negative impact on the development of continuing vocational training, especially in small and medium-sized enterprises⁶⁸.

Chart 3.2 Evolution of the participation rate in further education in the Czech Republic and the European Union



Source: Labour Force Surveys, 1993, 1996, 1997
 Note: EU countries - 1988, 1993, 1997

Although both the significance and the scale of continuing vocational training increased during the first half of the 1990s, this growth was halted in recent years due to the economic recession.⁶⁹ A gradual change in the development of continuing vocational training in enterprises has been noticed since 1994-1995. This was due to foreign investment inflows, the presence of foreign companies on the Czech market, an increase in domestic companies' demand for a competitive environment, and the shortfall of necessary qualifications amongst the available labour force. However, according to one recent enterprise survey⁷⁰, the priority accorded to continuing vocational training by enterprises' human resource managers has fallen since 1993. In 1996, only 12% of Czech companies ranked continuing vocational training amongst their main human resource management priorities,

67 Employment - Labour Code, Trade Links, Prague, 1997.

68 In-depth Study on Continuing Vocational Education and Training in the Czech Republic, National Observatory, Czech Republic, 1998.

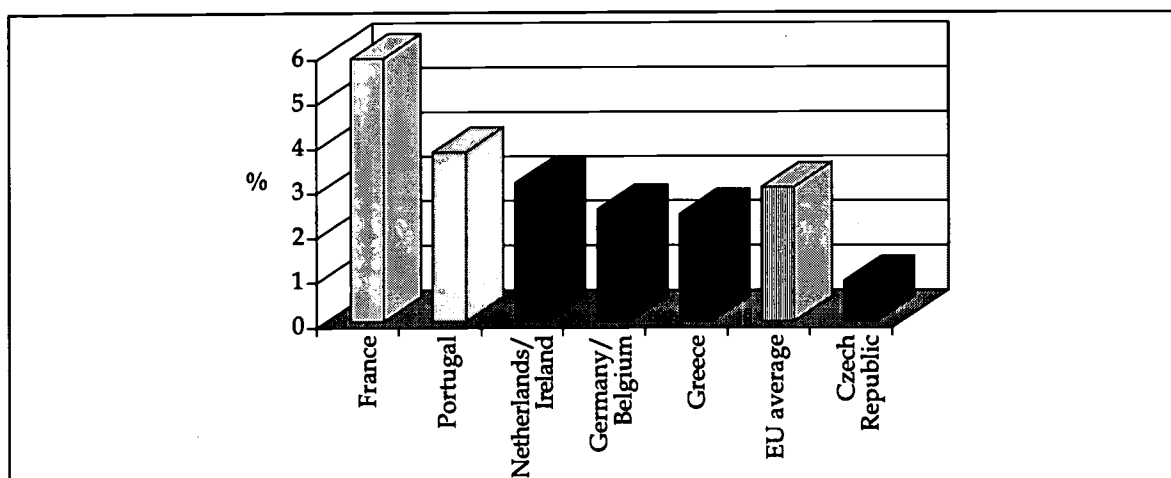
69 The extent of continuing vocational training of employees in enterprises is shown in data of an international research study carried out in European Union countries and in the Czech Republic as well. According to this research (The Price Waterhouse Cranfield Project on International Strategic Human Resource Management, Cranfield University, 1994), employees engaged in manual work are educated about 1-3 days a year, managers 3-5 days a year and technical employees more than 10 days a year.

70 The Cranfield Project on European Human Resource Management, results of the survey, 1995 - 1996, Prague, Vysoká škola ekonomická, 1997.

while 40% ranked recruitment as their top priority. This indicates a low prioritisation of manpower investment in the new and newly privatised enterprises. Only 57% of Czech companies had drawn up a continuing vocational training policy by 1996. While this figure is slightly higher than in other post-communist countries, it is much lower than in advanced European countries, where the figure fluctuates between two thirds and four fifths. Approximately 15% of Czech companies had no continuing vocational training policy at all⁷¹.

Financing of continuing vocational training in enterprises is still considered overly expensive in terms of company spending. While in European Union countries the share of enterprises' education expenditure in relation to yearly payroll is around 3%, in Czech companies the share is just 0.9%, as can be seen from chart 3.2⁷².

Chart 3.3 *Financing of education and training by enterprises as a percentage of wage expenditure*



Source: Adult Education in Czech Republic. Draft Report, Ministry of Education, Youth and Sports, April 1997, p.25.

One of the latest sample surveys, however, shows that the average enterprise expenditure on training, requalification and qualification upgrading reached 1.16% of the annual payroll. The highest rate of spending is in the tertiary sphere where expenditure reached 1.59%, although this figure does not include schools which spend just 0.58% of wage costs on personnel training⁷³.

Employee participation in continuing vocational education and training is generally at the initiative of the enterprises where they work, and sometimes at their own initiative. Where the enterprise takes the initiative for continuing vocational education, the employer generally covers the costs. According to expert estimates, employers pay for employee training in the majority of cases. Although some large enterprises have training units available - and some even have their own training providers - the majority of enterprises utilise private training companies or secondary technical schools for the continuing vocational training of their employees, with short-term courses

71 In-depth Study on Continuing Vocational Education and Training in the Czech Republic, National Observatory, Czech Republic, 1998.

72 EC Report, Research on the Czech Republic carried out by the Ministry of Education (see Adult Education in the Czech Republic, Draft Report, p. 25)

73 Assessment of vocational education and training and Institutional Development in North Moravia Region, Draft Report, pilot project, Czech NO - Garep s.r.o., 1998. Results of an empirical survey in enterprises covered almost 500 subjects and the results present the required credibility.

being the most popular. The 1996 Cranfield Survey results⁷⁴ show that 23% of employees participated in some form of continuing vocational training, a significantly higher figure than in other post-communist countries and comparable to many European Union countries. In 1993, 49% of Czech enterprises systematically analysed their continuing vocational training needs and this figure rose to 56% in 1996. Nevertheless, this figure was the lowest of all monitored countries except for Bulgaria and Hungary, and was only around 75% of the average among advanced European countries⁷⁵.

With regard to in-company training, the results of the Cranfield survey show that subjects were ranked as follows: personal skills; marketing and sales; quality management; computer skills and implementation of new technologies; development of strategies; customer services; change management; safety at work and health protection; and company administration.

Social partners are not systematically involved in continuing vocational education and training. If a company is developing a programme of continuing vocational training, it is also discussed with trade union representatives. However, there is inadequate central level co-operation between social partners (see chapter 3.2.1).

Continuing vocational education and training takes different forms. Face-to-face study dominates⁷⁶, accounting for around 60% of the total, followed by residential courses⁷⁷ which account for around 25%. Other study forms include courses using various information technology media, correspondence courses based on written material, and combined forms of studies⁷⁸. Where enterprises organise continuing vocational training, participants are granted time off while their wages continue to be paid. However, if an employee participates in training on his/her own initiative, such training generally takes place outside working hours.

Although, the development of distance learning is not yet on a systematic basis, in 1992-1994 the conditions for the introduction of primarily distance university studies were created with the support of the Higher Education Development Fund, and the Association of Distance University Education was established. The Ministry of Education recognises distance learning as being equal to attendance studies. During the same period, distance education was developed in technical schools and institutions of continuing vocational education and training⁷⁹. Distance learning has started developing in terms of in-company education, where education very often takes a "hybrid" form in which distance learning is combined with attendance studies and practice⁸⁰.

Traditional school-based adult education at secondary and higher education levels (combination of studies and work) provided at state schools is usually funded by the Ministry of Education. This form is slowly decreasing at the secondary level, although the process has been uneven over the last eight years. While, in the 1990/91 school year, there were approximately 51,000 students combining employment with studies at a secondary level, in 1993/94 there were only around 31,000 such students. In 1997/98, the number of adult students rose to nearly 46,000, but fell again last year to around 38,000. Over half of all such students are males. In 1997/1998, 72% of these study

74 The Cranfield Project on European Human Resource Management, results of the survey, 1995 - 1996, Prague, Vysoká škola ekonomická, 1997.

75 In-depth Study on Continuing Vocational Education and Training in the Czech Republic, National Observatory, Czech Republic, 1998.

76 Study when a student is regularly present, e.g., once in a week, once a month, daily.

77 One-off weekend, week etc. residential course, organised off-site in a training centre.

78 Rapid-Dema, s.r.o.: Educating Society, 1997.

79 Academy of Jan Komenský, METER, European School of Courses by Correspondence, Open University Fund in the Czech Republic and others are the most active in this field.

80 Adult Education in the Czech Republic, Draft Report, Ministry of Education, April 1997.

programmes were follow-up courses leading to Maturita, designed mainly for graduates of vocational programmes leading only to a special qualification⁸¹.

The combination of employment with studies in higher educational establishments was once quite widespread in the Czech Republic. However, while there were over 20,000 such students in 1989/90, the numbers fell substantially from 1992 to 1995, with around 11,000 such students in each of those years⁸². However, in 1997/98, the figure rose again to nearly 20,000 students⁸³, combining higher education with employment, 57% of whom were females. In addition, nearly 13,000 students were registered in continuing vocational training courses⁸⁴ provided at universities, 32% of whom were studying at teachers training courses to obtain or broaden their pedagogic qualification⁸⁵.

Requalification courses are also part of the range of continuing vocational training. Act No 1/1991 defines requalification as any change of current qualification that will allow the job seeker to get a job, or will prepare an applicant to obtain a job in another profession. Although requalification mostly involves job seekers, it may also involve employees who will remain employed by the same employer, but will perform other duties. In either case, training must be for occupations that are in high demand in the labour market. Normally the costs of the course are covered by the Ministry of Labour and Social Affairs Employment Services for registered job seekers. The length of requalification depends on the demands of the new job, and may vary from several days to one year. A certificate is awarded following requalification. Labour Offices arrange requalification, usually in co-operation with regional vocational schools or other private training institutions accredited by the Ministry of Education. In 1998, approximately 16,500 people enrolled in requalification courses, and 94% successfully completed the course⁸⁶. In 1997 those attending requalification courses were mainly technicians, clerks, school graduates (34.8%) and workers. At 64.6%, the proportion of requalified women was higher than that of men⁸⁷. A recent sample survey of 1994-95 participants in active labour programmes shows that about 55% of requalification course participants reported that the course helped them to find a job⁸⁸. According to current Ministry of Labour and Social Affairs estimates, 40% to 60% of course participants find work within two months of completing the course, while up to 80% are placed within one year.

3.2 *Management and administration training*

The current situation in the field of management training displays the same characteristics as continuing vocational training in general, and is a product of the supply and demand situation on the free market. Training programmes for managers are currently provided by a wide range of

81 Vývojová ročenka školství, Retrospective Yearbook of Education, ÚIV, 1997.

82 As above.

83 The data include students at higher professional schools and universities (Master and Bachelor studies), excluding postgraduate students. Statistická ročenka školství 1997/1998, Výkonové ukazatele, Statistics Yearbook of Education, ÚIV, 1998.

84 Includes courses for obtaining or broadening pedagogic qualification, requalification courses, teaching of selected subjects or higher educational programme for adults.

85 Statistická ročenka školství 1997/1998, Výkonové ukazatele, Statistics Yearbook of Education, ÚIV, 1998.

86 Statistics of the Ministry of Labour and Social Affairs, 1999.

87 Statistická ročenka trhu práce v ČR, 1997, Statistics Yearbook of the Labour Market in the Czech Republic, 1997, Ministry of Labour and Social Affairs, 1998.

88 Impact of Active Labour Programmes, Cross-Country Evaluation, Czech Republic, Ministry of Labour and Social Affairs, 1998.

different institutions, including secondary and higher education institutions, private training institutions, various associations and professional corporations. According to a 1996 Ministry of Education survey, 277 institutions provide management training, and eight schools and institutions award Master of Business Administration degrees. Anybody can offer management training as there are no restrictions in this sector.

The role of the state in management training is very limited and it is not taking any structured steps to support and develop the area systematically. None of the central state bodies is responsible for management training and expertise in this field is not restricted by any legal regulations.

Training institutions develop their own programmes reacting flexibly to the demands of clients, or provide original or adapted know-how transferred from developed countries in the framework of foreign aid programmes such as Tempus and Phare, or on the basis of Czech agreements on bilateral collaboration. In general, institutions award certificates which are not guaranteed or accredited by any state body. Training institutions design training programmes on the basis of their own training needs analysis and no qualification standards are applied to this process. Most of the training institutions provide open courses as well as programmes tailored to their client's requirements. Some training institutions are members of the Czech Association of Management Education and Training Institutions (CAMETIN).

The range of management programmes' contents is very wide. The most popular are programmes on marketing, finance, quality and strategic management, as well as the strategic management and training of managers in the areas of communications, leadership, teamwork and trade skills. Among managers and entrepreneurs, the interest in programmes focused on general management is declining, while there is increased interest in targeted programmes on modern management practices in specific fields. In connection with the Czech Republic's future accession to the European Union, international and inter-cultural management subjects as well as programmes on the harmonisation of legislation, regulations and procedures are attracting increasing attention. Large and medium-sized enterprises are becoming more interested in the introduction of the 'learning company' principle.

In the Czech Republic, there is at present no authorised body within the institutional set-up which could systematically address the issue of the quality of training of managers and management qualifications at a national level. To a certain extent, initial attempts in that direction are linked to the establishment of the National Training Fund. The National Training Fund, which was established as a foundation with Phare support, has been active in the area of management training and development since 1994. The National Training Fund's original mission was to support and develop management training from a practical point of view. This involved increasing the quality of management training, developing the range of management training, widening the access of managers to relevant training and improving the management level in the private and public sectors. In the area of management training, the National Training Fund's long-term goal is to develop a mechanism ensuring systematic training of managers in the Czech Republic, and to implement principles and mechanisms guaranteeing and assessing the quality of the management training system and ensuring compatibility of managerial qualifications with those of European Union countries.

National Training Fund activities

The National Training Fund's main activities in the area of management training during the previous four years were the following: building up an open network of collaborating training institutions providing training for professional managers (34 institutions in the whole country); monitoring, evaluating and supporting selected management training programmes (100 various types of programmes for 5,000 managers per year); developing new programmes and transferring high-quality foreign know-how for medium-level and top managers; developing teaching and methodological materials for general management and human resource management; creating an information base in the area of management training and providing information services; developing training and counselling know-how in human resources development in firms, based on the best foreign experience; performing needs analyses of management development in specific sectors; and supporting initiatives on quality assessment and quality assurance of management training. At present, the National Training Fund is preparing the training programme for management trainers and consultants and a modular training programme on corporate governance.

Continuing vocational training focused on the target group of owners/managers is key to the development of small and medium-sized enterprises. Some European Union countries support training and counselling programmes based on the transfer of management knowledge and experience from managers of big enterprises to owners/managers of small and medium sized enterprises. The National Training Fund is working on a project aimed at preparing a draft programme in this regard.

Improving the quality of training and consulting services in the field of human resource development, including continuing vocational training, requires the development of projects which generate counselling and training know-how delivered directly in Czech companies in different economic sectors. The National Training Fund has initiated a number of such projects, for example, in the construction, health care and industry sectors. This practice must be extended to other sectors of the economy.

Programme examples provided by the National Training Fund

An example of successful programmes on the Czech management training market is the CIMA training programme. This originates from the transfer of Dutch know-how in the context of bilateral collaboration and the Phare Programme and deals with preparing managers and professional experts to work in the area of marketing. This project enabled the transfer to the Czech Republic of a training system for marketing experts which is compatible with corresponding training in European Union Member States. This system established clearly defined training and qualification standards for each level and includes transparent evaluation mechanisms guaranteeing a high level of quality (accreditation of the training institutions which implement programmes, certification of trainers, accreditation of acquired knowledge and skills by a CIMA independent commission). This project involved two qualification levels (CIMA A, CIMA B). Of the 3,906 participants in CIMA A training, 1,490 passed the examination and were awarded a corresponding certificate. Of the CIMA B participants, 406 gained a specialised CIMA B degree and 139 were awarded the certificate. Ten Czech training institutions have been accredited to teach the CIMA programme so far. The third level, CIMA C, is being prepared in cooperation with European Marketing Confederation.

During 1995-1998 a **management trainers training** project was worked out with the support of the British Know How Fund. Within the scope of this project, 20 top management trainers were trained in accordance with the programme of the British Institute of Personnel and Development. These trainers were awarded the appropriate certificate. A further 100 trainers were trained on the basis of the Czech version of the same programme, and the Czech training materials for trainers were drawn up.

In the field of public administration, the reform process in the Czech Republic has already started. Due to the high priority given to reform in this field, the National Training Fund has broadened its activities to public service development. In 1997, a training programme in European Union affairs was finalised. This programme, under the aegis of the Ministry of Foreign Affairs, trained 80 selected civil servants from all ministries and 11 trainers. The Ministry of Foreign Affairs has initiated a continuation of the programme with Phare support, and the tender process is currently underway. The National Training Fund has also participated in drafting a strategy for regional stakeholders' training under the aegis of the Ministry for Regional Development.

Improvement of Public Administration - 1st Phase, a project managed by the National Training Fund, started in December 1997 and was finalised in December 1998. Two resultant reports - *Analysis of Public Administration in the Czech Republic* and the *Draft Strategy for Public Administration Reform in the Czech Republic* - were prepared and submitted to the Ministry of Interior as a framework for a governmental reform strategy.

Three other complementary documents have been drawn up in the context of this project: *Analysis of University Programmes for Public Administration*; *Draft Strategy for Human Resources Development in the Central Administration of the Czech Republic*; and *European Dimension of the Reform of Public Administration - Implications of European Union Membership for the Czech Republic Administration*. The project was followed in 1999 by a number of activities in the field of human resources development, information and communications, and reform of specific areas of public administration.

4. Research on the labour market and vocational education and training

4.1 Labour market research

Due to the absence of a labour market in the Czech Republic before 1989, previous research activities focused on the planned labour force placement and qualification, as well as demographic and social circumstances. In the course of the reforms during the 1990s, basic institutions and information systems had to be established in the areas of labour market and employment policy. The research community participated in this endeavour through specific applied projects such as the *Labour Market Restructuring* project funded by Phare. A well-rounded system of modern labour market research has not yet been established, although many high quality papers have been written and a number of projects were linked to prestigious international institutions such as the International Labour Organisation, the Organisation for Economic Co-operation and Development and foreign universities.

Labour market research suffers from fragmentation. The Research Institute of Labour and Social Affairs is the only centre in the country specialising in labour market research. The Institute of Sociology and the Economic Institute at the Czech Academy of Sciences pursue basic research in some areas of the labour market. Different humanities faculties at universities such as the Charles University and Masaryk University, and a number of institutes within those universities, are involved in labour market research. Phare and the Ministry of Labour and Social Affairs support labour market research through grants.

The Research Institute of Labour and Social Affairs reports and supplies analyses to the Ministry of Labour and Social Affairs, so a relatively large proportion of its resources is expended in the area of social policy research. Labour market research activities include analysing employment policy tools to identify suitable solutions for unemployment problems related to restructuring, the position of people with disabilities, and the position of other disadvantaged groups on the labour market. However, there is no systematic, across-the-board review of employment policy effectiveness. One of the first attempts at such a review came with the World Bank study in 1998 detailed below. Traditionally, research into salaries, wage differentiation and pay systems has been encouraged since the Ministry is responsible for determining reference salaries in the public sector.

Links between employment and education policies have recently formed a new focus of research. The objective is to develop tools that could be used in fine-tuning the educational policy to the needs of the labour market. One project involves questionnaire-based research aimed at job centres and employers.

In recent years, some research focused on preparing labour market policies and institutions for Czech accession to the European Union. A research project entitled "*Social and economic consequences of the Czech Republic's entry into the European Union*" analysed the key areas of the labour market that are subject to screening and pre-accession negotiations with the European Commission. These mainly relate to free movement of labour, employment and salaries, social dialogue and social

security. A separate project deals with issues of gender equality and equal opportunities in the Czech Republic.

The Ministry of Labour and Social Affairs initiated, and has been funding and supervising, a project called "Information System on Typical Jobs", and the basics of this information system will be in place by 2001. The system will provide a well-rounded classification of jobs, and will gather information on jobs and the requisite skills. It will also serve as a system of professional standards, and, in conjunction with current educational standards, will facilitate incorporation of employer requirements into vocational school curricula. Tools should be developed to use the information in the areas of labour, salaries and employment. The possibility of linking the information system on typical jobs with information systems relating to the labour market, education and salaries at both a national and regional level is also under consideration. This would create a comprehensive system that could be used by job centres, counselling centres and employers, whether public or private.

The Economic Institute at the Academy of Sciences and the Centre for Economic Research and Graduate Education of Charles University co-operate closely in researching issues relating to the transition to a market economy, and labour market research plays a significant role in this regard. Overseas experts and centres such as Pittsburg University are represented on research teams. Due to the scientific nature of the institutions, their research is rather theoretical and methodological, although some projects have also had elements of applied research. One of their main research programmes studied the relationships between economic liberalisation, structural changes and labour market dynamics.

The Economic Institute and the Centre for Economic Research are currently the only centres addressing labour market development projections. Methods of forecasting the development of employment and unemployment, and its duration at central and, more importantly, regional levels, were developed and tested within a Phare-supported project entitled "*Study Methods for Forecasting Employment and Unemployment in the Czech Republic.*" Although these methods are available to employment services, more extensive use of the methods is limited because the available information only provides a short-term view and the basic reference points are retrospective. The project outlines other more forward-looking forecasting methodologies based on a Labour Force Survey, and makes recommendations to improve statistical surveys that could be used for that purpose.

Experts from these institutions' analytical project team are also involved in a project entitled "*Forecasting Qualifications Needs of the Labour Market*" managed by the National Observatory and detailed below.

One element of the research conducted by the Institute of Sociological Studies at the Faculty of Social Sciences at Charles University analyses the professional and qualifications structure related to placement on the labour market and conducts field surveys of graduates and their academic and professional careers. Their research is linked to international projects, such as the Organisation for Economic Co-operation and Development INES project - Network B.

Research conducted by the Faculty of Social Sciences at the Brno Masaryk University focuses mainly on the social aspects of long-term and repeated unemployment, as well as on employment in conditions of accumulated handicaps in the labour market and issues of social networks and employment policy. The research team has links with Phare and International Labour Organisation projects.

The analytical unit of the Czech and Moravian Chamber of Trade Unions has developed a rather extensive research project focussing mainly on labour costs and wages, pensions, social benefits and minimum income, since these issues are at the forefront of their attention. Areas of employment, particularly in relation to education and skills development, are less extensively covered.

The World Bank has involved the Czech Republic in an analytical project entitled "*Impact of Active Labour Market Programmes – Cross Country Evaluation*"⁸⁹. It is the first attempt in the country to evaluate whether participants in active labour market programmes fare better on the labour market than other groups of job seekers, and how these programmes could be made more effective.

4.2 Research in the field of education

Research in the field of education in the Czech Republic is conducted by university pedagogical faculties and research institutes established by the Ministry of Education. Other institutions which obtain research grants from the Ministry are also involved.

Field research at schools is generally conducted by universities and higher education institutions, especially pedagogical faculties. This research is linked to the training needs of teachers and focuses on teaching at primary and secondary schools. The Pedagogical Faculty at Charles University in Prague works closely together with the Institute of Research and Development of Education, which is involved in education policies, comparative pedagogy and various international projects. The Educational Policy Centre also works within the framework of the Charles University. It focuses on educational policy as well as on Czech participation in international projects, especially Organisation for Economic Co-operation and Development projects such as Reviews of National Policies for Education, the First Steps of Tertiary Education in Organisation for Economic Co-operation and Development Countries etc.

The Ministry of Education has established and funded several research institutes.

- The Institute for Education Research, researches issues concerning primary and secondary general education, in particular curricula and standards, and is also involved in pupil achievement evaluation.
- The Centre for Higher Education Research, which carries out analytical and conceptual work in the field of university education, provides professional resources for the accreditation of universities and higher education institutions and branches, and also co-ordinates international projects such as Tempus.
- The Research Institute of Technical and Vocational Education (VÚOŠ), is a research, advisory and co-ordinating institution for vocational education. The Institute focuses on conceptual work, occupational and educational standards, certification, the social partnership question, the inter-relationship between education and the labour market, and information services. The Institute has put considerable effort into conceptualising curricula and elaborating standards. In the context of international co-operation, VÚOŠ functions as a national centre for UNEVOC (managed by the United Nations Educational, Scientific and Cultural Organisation) and is involved in bilateral co-operation, for example with BIBB.
- The Institute for Information on Education (ÚIV) is a statistics processing and analytical centre. It is in charge of collecting, processing, and publishing statistical data on education, as well as developing alternative information resources by holding selective inquiries, and conducting analyses for public administration purposes. Among its most prominent publications, are the *Annual Report on the State and Development of the Educational System in the Czech Republic*, the *Statistics Yearbook of Education*, the SET ('Segment Evaluation and Typology') Programme comparing qualitative aspects of secondary schools, the *Public Attitudes to Education* opinion poll, and the

⁸⁹ Apart from the Czech Republic, the analysis was conducted in Hungary, Poland and Turkey.

Analysis of School's Network Development. Its international activities are focused on the INES Organisation for Economic Co-operation and Development, EURYDICE, EUDISES, and Education Thesaurus projects.

Non-governmental organisations also conduct research. These include:

- the Association of Higher Professional Studies which develops methodology for quality evaluation;
- the J.A. Komenský Academy involved in continuing education support; and
- the National Training Fund, which supports and implements analytical and strategic studies and publications in the field of human resource development. (Its works is explained further in chapters 3.3.2 and 6.2.2)

The National Observatory was established as a new unit within the framework of the National Training Fund. The Observatory collects, analyses and regularly updates information on the vocational education and training system and the labour market in the Czech Republic. These activities result in the production of National Reports on vocational education and training and studies on specific vocational education and training issues. The latter include *Post-secondary and Tertiary Professional Education in the Czech Republic*, *The Role of Social Partners in Vocational Education and Training*, *In-depth Study on Continuing Vocational Training*, *Assessment of Vocational Education and Training and Institutional Development in the Ostrava Region*. The National Observatory also publishes statistical data, or Key Indicators, on selected educational aspects and labour force preparation. As a member of the international network, the Observatory provides the Czech entities with information on systems of vocational education in associate countries. The Observatory also focuses on analysing the function of information links between the key vocational education actors at regional level and the relevant institutions. The Czech National Observatory has also initiated a project to develop and test a methodology for forecasting labour market training and skills needs. The National Observatory, as part of the National Training Fund, will provide and co-ordinate a new edition based on regular monitoring and analysis of human resources development. The first publication was issued in 1999 in co-operation with ÚIV. Every two years a follow up study will be published maintaining the continuity of basic data, identifying the position of the Czech Republic among developed countries and analysing the selected topics and relationships. Each study will concentrate on different issues to gradually form a three-dimensional picture of human resources development.

International projects supported and financed from abroad played a significant role in the development of research into vocational education and training in the Czech Republic. The Phare Vocational Education and Training Reform programme resulted in an analysis of eight basic areas of vocational education and training development in the Czech Republic: curriculum, evaluation, training of teachers, co-operation with social partners, management, financing, legislation and research. The Phare programme also resulted in the policy paper *Education for Prosperity: Towards a Learning Society*, and a short-term and long-term action plan. The latter document should pave the way for further development of the overall system of education in the Czech Republic.

Among recent research activities with significant analytical outcomes, a number of projects on graduates on the labour market should be mentioned. Exchange of information and data, and a common publication on unemployment of graduates, are a part of the 1997 agreement between the Ministry of Education and the Ministry of Labour and Social Affairs. The Ministry of Education also finances the *Employment of Graduates of Higher Education* thematic research, which includes a sample survey of graduates of all universities and faculties. The Organisation for Economic Co-operation and Development project *Transition from Initial Education to Working Life*, financed by the Ministry of

Education and co-ordinated by the National Observatory – National Training Fund, has contributed to the field by analysing the situation, mapping the problem areas, and gathering recommendations on how to overcome system deficiencies from Organisation for Economic Co-operation and Development experts. The project also included analysis of educational paths and a sociological survey of young graduates from all school types aged between 20 and 29. The Institute for Information on Education and the agency AMD carried out another survey on the entry of graduates to the labour market and also surveyed employers' opinions of school graduates. The Research Institute of Technical and Vocational Education conducted an analysis of unemployment among secondary vocational and technical school graduates based on available statistics and other sources. Finally, at the beginning of 1998, the Ministry of Education established a working group on the Employment of Graduates and the Labour Market within the Ministry. This working groups aims at exchanging information on ongoing activities in the field and initiating new activities.

Two other research projects under the aegis of the Organisation for Economic Co-operation and Development have substantially contributed to research into vocational education and training. One is the *Second International Adult Literacy Survey*, which assessed the quality of manpower capital and the degree of conformity between functional literacy and educational levels, and defined the groups with low levels of functional literacy at risk on the labour market. Another Organisation for Economic Co-operation and Development project is *Alternative Approaches to Financing Lifelong Learning*. This project has been invaluable in mapping the Czech Republic's funding system, and also attempted to cover the data blank spots and the obstacles to lifelong learning in terms of the funding system.

One of the most important attempts to analyse the overall situation in the education sector before European Union accession, and to suggest development tasks, was the 1998 strategic study of human resources in the Czech Republic entitled *Czech Education and Europe*. The study was financed by Phare and prepared by a team of experts on the basis of background materials compiled by different institutions from the human resources sector. Using these resources, it identified the interdependent and multidisciplinary character of the issue. The study summarised the basic principles of European Union education policy and their consequences for the further development of Czech education, and analysed the development to date of all components of the education system. Although the study attempted to formulate a general view of future directions and tasks for development, it lacks recommendations for concrete measures and actions to reach the defined objectives.

Despite the fact that education-related research in the Czech Republic has a fairly broad scope, it is neither balanced nor sufficiently co-ordinated. There is a lack of emphasis on future-centred research and on implementing research findings in practice. Research into vocational education and training has often been carried out on an ad hoc basis according to the demands of individual research workplaces and individual schools in respect of existing national and international projects. The results are not always analysed, nor have they been sufficiently related to each other. There is insufficient focus on monitoring and researching continuing education in terms of its relation to the labour market. One of the weaknesses in terms of current research is a general absence of multi-disciplinary education research which could link analyses of initial and continuing vocational education and training, the labour market, socio-economic aspects and similar issues.

5. Responsible bodies

The Ministry of Education, Youth and Sports is responsible for the education system. Its main responsibilities are to plan the concepts and strategies of the government's education policies, to prepare draft education bills and decrees and to manage the public administration of education. The Ministry also supervises schools in education matters and approves curricula. The Ministry of Education is also responsible for allocating financial resources to districts and for the appointment and dismissal of directors of secondary technical and secondary vocational schools.

The Ministry of Education is also in charge of vocational education, apart from secondary vocational schools in the agricultural sector, which are under the authority of the Ministry of Agriculture, and police and military schools, which are the concern of the Ministry of Interior and the Ministry of Defence respectively. During 1992-1996 secondary vocational schools were under the authority of the Ministry of Economy, but in 1996 responsibility was transferred to the Ministry of Education. The Ministry of Labour and Social Affairs is responsible for retraining unemployed people. There is no national body to co-ordinate the work of the various ministries involved in vocational education.

District School Offices (SOs) which are responsible to the Ministry of Education form another tier of administration in education. They deal mostly with aspects of the administration of kindergartens and primary schools. Their main task with regard to secondary education is the allocation of finance to schools. Other powers relating to secondary and vocational schools include the appointment of school directors. District school councils exist to represent the interests of parents and pupils. In 1996 the School Offices took over the administration of secondary vocational schools from the Ministry of Economy. They now deal with the administration of nearly all types of primary and secondary schools. On foot of decree No 12/98 of the Minister for Education the Assigned School Offices at the new regional level (VÚSC) were set up to co-ordinate activities in secondary and higher vocational education (see also 4.2).

Secondary school directors have significant powers. They are responsible for the implementation of approved training programmes, for professional and pedagogical standards in schools as well as for the efficient use of financial resources and the hiring and firing of teachers and other staff. Schools can also voluntarily set up their own school boards which act as consultative bodies.

The Czech School Inspectorate is a state body established by the Ministry of Education to conduct inspections. The inspectors examine and assess the quality of education in schools taking into account the curriculum, the standard of instruction and the manner in which financial resources allocated from the State budget are used. The results are recorded in inspectors' reports, which are given to the school management and are available to the public. Given the increased autonomy of schools, the inspectorate's role is changing from administrative control to assessment and evaluation. The inspectorate carries out thorough inspections aimed at evaluating the operation of schools from a pedagogical and legal viewpoint. Moreover, each year the Ministry of Education conducts a thematic inspection focusing on important aspects of the education system (for example the integration of people with disabilities and art education) which are the subject of cross-section evaluation at selected schools.

There is no national body in the Czech Republic responsible for continuing education and its management and co-ordination. A few voluntary associations work in this area, e.g., the Czech Society for Adult Education, but they have no decision-making powers.

The involvement of the social partners in vocational education at all levels of management (national, regional, local) continues to be on a voluntary basis, so it is not systematic and its scope varies significantly by sector and by region. Co-operation between technical and vocational schools and commercial enterprises is not formalised and usually consists of voluntary and non-binding consultations on curricula and the practical training of students in the enterprises.

5.1 *Centralisation/decentralisation and common standards*

Vocational education and training management is being decentralised, thereby increasing the autonomy of individual schools. But there is also a downside to this development. The number of secondary schools has grown rapidly over the past eight years, from 1,246 in 1989/90 to 1,927 in 1996/97. Secondary technical schools have mushroomed, growing from 375 to 827 between 1989 and 1997. There is now more diversity in education but the average number of pupils per school has dropped from 416 to 226. The Ministry of Education's rationalisation of the school network has resulted in a reduction in the number of schools in 1997 and 1998. The number of secondary technical schools was reduced to 756, and the average number of pupils attending secondary schools of all types is now 256. The number of secondary school places has been reduced to 31,525. Another trend evident in vocational education and training is that in order to enrol more students and generate more income a number of schools are now offering courses in subjects they cannot provide due to lack of personnel and/or equipment. Because of the declining youth population, education supply is greater than demand and competition is starting to grow.

The unorganised nature of co-operation between the social partners represents a significant weakness in vocational education and training management. As a result, the courses offered correspond to the interests of individual schools and do not necessarily meet the needs of employers and the labour market. There is a need for greater participation by the social partners in vocational education and training in the introduction of new courses, deciding on the number of enrolments, designing curricula, setting final exams and drawing up new regulations. In November 1997, the Research Institute of Technical and Vocational Education established 22 working groups in order to bring the representatives of employers and vocational education and training together. The aim of these working groups, organised at sectoral level, is to improve co-operation between industry and education in the field of curricula design and to discuss proposals for qualifications.

At district level, co-operation between has improved somewhat during last year. Although lacking an institutional structure, co-operation developed in the framework of the Agreement on Co-operation between the Ministry of Education and the Ministry of Labour and Social Affairs. This co-operation has been especially fruitful in the exchange of information and data on school graduates. In a number of districts School Offices and Labour Offices established joint councils to deal with education and training issues in the framework of the above-mentioned agreement. Additionally a representative of the Labour Office normally participates in committees at School Offices charged with specific tasks, e.g., rationalisation of the school network.

In 1996, Organisation for Economic Co-operation and Development experts pointed to the lack of a link at regional level in vocational education and training management. The average district population, approximately 120,000 inhabitants, is adequate for the management of kindergartens

and primary schools, but it is far too small for managing secondary schools. Therefore, in 1998, the Ministry of Education, on foot of a Ministerial decree, began the process of reorganisation of administration by giving one of the district School Offices the task of management and co-ordination at the newly introduced regional level (VÚSC). The fourteen Assigned School Offices are in charge of co-ordination in secondary and higher vocational education, including rationalisation of the school network, gathering information on schools from district school offices, pedagogical-psychological counselling, conceptual elaboration of the schools' branch structure, teacher's further training etc.

In the framework of the 1998 evaluation of the Phare Programme on Vocational Education and Training Reform, drafts on the improvement of vocational education and training management were prepared. Recommendations included establishing a National Council for Vocational Education as part of the National Council for Education of the Czech Republic with the task of promoting co-operation between the ministries and representatives of the social partners. The Council's brief would be to negotiate and initiate vocational education and training policy measures, e.g., legislative proposals and other regulations, methods of financing etc.

The structure of management bodies in the Czech Republic has been criticised in the past for not providing enough room for non-pedagogical aspects and for not paying due attention to the opinions and requests of other sectors, in contrast to standard practice in Western Europe. The conclusions and recommendations of important projects and programmes in vocational education call for the establishment of a Council for Education to represent different sectors and the social partners. This council was eventually established after lengthy debate, but serves only as an advisory body to the Minister for Education, Youth and Sports. It has almost twenty members, more than half of whom come from the education sector. Given its short existence, the council's work has yet to bear fruit. The new Education Bill envisages the council having greater authority than the Ministry of Education, Youth and Sport.

6. Legislation

Legal regulations in the field of education are based on Article 33 of the Charter of Fundamental Rights and Freedom. The Charter's most important provision sets out the right of every citizen of the Czech Republic to education, the obligation to attend school for the period stipulated by the law (in the Czech Republic school attendance is compulsory for 9 years) and the right to free education in basic and secondary schools. Although Article 33 of the Charter of Fundamental Rights and Freedom does not go into detail on certain issues, e.g., the right to education, and does not contain any regulations on continuing vocational education and training, it is practically impossible to amend it because it is a constitutional law.

At present, there are three fundamental laws in the field of basic, secondary and higher professional education. Two of them were approved before 1989 – Act No 29/1984 on the System of Basic and Secondary Schools (the School Act) and Act No 76/1978 on School Facilities. Both of them have been amended since 1989.

Act No 564/1990 on State Administration and Self-government of Schools was approved in 1990. Among other changes, the new law introduced 'sectoral management of education', in other words, an independent school management structure independent of other state administration sectors.

Act No 29/1984 on the Structure of Basic Schools, Secondary Schools and Higher Professional Schools (the School Act) outlines the schools system in general, sets out the framework of school types and the detailed characteristics of individual education levels from basic level up to higher professional education. It stipulates the essential conditions for the operation of basic, secondary, higher professional and special schools, and the requirements for students to commence and complete studies. It also contains several provisions of an organisational and technical nature which deal with compulsory school attendance, obligatory school documentation, the school year organisational framework as well as basic regulations on teaching materials and manuals. It briefly defines teaching personnel including, for example, vocational training instructors and schoolmasters. In the case of secondary vocational schools it lays down a detailed process for their establishment and closure. The Law on State Administration and Self-government of Schools applies to other types of schools.

The School Act was amended eight times, twice very substantially. The first major amendment was made in 1990 through Law No 171/1990. Following the basic changes in society, the autonomy of schools was strengthened to such a degree that secondary schools became independent legal entities and compulsory school attendance was changed to 9 years at basic school. This law also allowed the establishment of private and church schools providing education equivalent to that in state schools. It set out the number and characteristics of educational levels at secondary schools: secondary vocational education for vocational training branches ending with a final exam and an apprenticeship certificate; complete secondary vocational education for fields of study leading to Maturita; and higher professional education at conservatoires ending with the Absolutorium. Under this and later amendments the establishment of secondary vocational schools – until then mostly founded by company associations – became the responsibility of central public administration bodies and co-operatives.

As a result of the amendment to the Act on the Responsibilities of Ministries and Other Public Administration Bodies of the Czech Republic, the Ministry of Economy controlled the majority of secondary vocational schools for four years from December 1992. In 1996, the Ministry of Education acquired control over the majority of secondary vocational schools and also over secondary technical and higher professional schools in the healthcare sector.

In 1990, under the Act on Public Administration and Self-government of Schools, the responsibility for secondary technical schools was transferred to the Ministry of Education.

In 1995 another significant amendment to the School Act, Law No 138/1995, was approved. It completed the move to a 9-year basic education and to a new basic school structure. Furthermore, higher professional schools were introduced into the school system. Higher professional education was established as a newly defined educational level, distinct from a conservatoire type and ending with a leaving certificate. The conservatoire was defined as a specific type of a secondary technical school. Under this amendment schools become a part of the education structure immediately after being included in the school network. The duration of the education process at secondary schools which ends with Maturita was set at four years except for multi-year cycles. The process of admission to basic schools and secondary schools, and essential conditions for completing schools with courses of varying duration were also specified. The law allowed practical training not only at schools and school-based training centres but also at authorised commercial enterprises. Changes were also made in post-Maturita studies. Some parts of these studies were discontinued and others were transferred to higher professional schools. For the professional preparation of people with disabilities, in addition to the existing vocational school, a new 'practical school' was introduced on an experimental basis. These institutions were designed to increase the opportunities available to young people with disabilities. It became possible to use not only traditional education plans and programmes in the curriculum but also other teaching materials based, for example, on modular programmes. This amendment also made it possible to charge tuition fees at state schools, and in some cases at municipal higher professional schools.

Act No. 564/1990 on Public Administration and Self-government of Schools deals with relations within the school system and determines the powers and obligations of individual administration bodies (such as School Offices and central public administration bodies), the Czech School Inspectorate and bodies in charge of public administration (school directors and municipalities), as well as self-governing bodies (municipalities, local school councils, and some school councils).

The Act was amended three times, most notably in 1995 with the introduction of Law 139/1995. Under this amendment school councils were established as voluntary school bodies with as yet rarely used powers such as, for example, approval of an annual school report, school budget and school financial report. The process of determining which schools and school facilities should be included in or excluded from the school network was changed considerably. The authority of the Czech School Inspectorate was significantly reinforced in terms of obtaining and evaluating education results as well as supervisory activities. Until 1996, when control over secondary vocational and medical schools was transferred to the Ministry of Education, the amendment empowered the Ministry of Economy and the Ministry of Health to carry out school inspection using their own inspectors.

Act No. 76/1978 on School Facilities also deals with facilities for vocational education (besides the usual school facilities such as school canteens, hostels, school libraries), of which the most important are educational guidance facilities and school agricultural, forestry, and gardening farms and other secondary technical schools. Special-interest study facilities include schools for applied art, public stenography schools, and some language schools.

The most notable change was implemented under Law No 138/1995. It required school facilities as a part of the education system to observe the regulations on inclusion into the schools' network and school facilities and to keep basic records. The range of schools allowed to manage and generate their own finances was broadened. According to Section 45 of the School Act, productive units, e.g., school farms, could be part of the school.

Act No. 111/1998 on higher education codified all the significant socio-political changes of recent years, and it annuls Act No. 172/1990 on higher education in its amendment Law No. 216/1993 as and from January 1st 1999. The new act introduced a concept of university and non-university forms of higher education [§ 2(3)]. A university conducts courses of four to six years for a Master degree (magisterské studium) and doctoral studies (three years) but it also can run Bachelor studies (bakalařské studium) consisting of three to four year programmes. It has a right to organise itself into faculties with their own self-governing academic bodies. A non-university type of higher educational establishment provides bachelor studies and cannot be divided into faculties. Bachelor studies programmes are mostly concerned with professional training but they also deal with certain theoretical aspects [§ 45(1)]. Master programmes are based on acquiring theoretical knowledge on the basis of contemporary scientific learning, research and development [§ 46(1)]. Both university and non-university types of higher education may undertake related scientific research and development, and promote the creative arts.

Along with state and public higher education, the law also made provision for private higher education [§ 2(7)]. All institutions and their study programmes have to be accredited by the Ministry of Education. The law introduced the basis for calculation of tuition fees at public schools: 5% of the average amount per student of the total non-investment spending from the ministerial budget to public higher educational schools [§ 58(2)]. The Ministry of Education is obliged to announce the basis at the beginning of each calendar year, calculated from the previous year's figures. Fees for tuition at private schools are set by each school as it deems appropriate [§ 59]. Public higher education schools are entitled to subsidies for operating accredited study programmes and lifelong learning programmes and related scientific/artistic activities. Subsidies can also be given to public schools for student accommodation and meals [§ 18(3)]. Private higher education schools generally have to be self-financing, but where a school acts as a public-profit organisation, it can be entitled to subsidies from the Ministry. The level of such subsidy depends on long-term plans of the school and the ministry, the type and financial costs of the accredited study programmes, the number of students, as well as the education, research and other achievements of the school [§ 40].

Besides these laws, individual regulations with the force of law, issued mainly by the Ministry of Education, are still very relevant to the organisation of vocational education and training activities. Of particular importance are those regulations that set out in considerable detail:

- the conditions for admission to secondary schools;
- the organisation of secondary school studies with an outline of manuals and study branches;
- the completion of secondary school studies, organisation of studies and their completion in higher professional schools; and
- the governmental subsidy towards school fees at higher professional schools.

At present, legal norms deal mainly with initial vocational education. Continuing education has not been subjected to any comprehensive legal regulation, apart from Regulation No 21/1991 on Conditions for requalification of Job Seekers and Employees issued by the Ministry of Labour and Social Affairs. The requalifications being made in the framework of the Active Employment Policy by state schools have been regulated since 1998 by the 'Guideline for implementation and finishing of requalification studies at state schools', which was prepared jointly by the Ministry of Education

and Ministry of Labour and Social Affairs and published in the Journal of the Ministry of Education, Youth and Sports in July 1998. The Guideline sets out the conditions for requalification, allows for the recognition of previous types of studies and specifies the conditions for completing the requalification and certification.

An attempt in 1993 to draft a law on adult education was abandoned as it was decided to include its provisions in the Law on Education, which was then under preparation. As this law has never been submitted for discussion in Parliament due to continuing administrative reforms, there is no specific legal provision for adult education. The legal regulations for initial education still apply to the education of adults in the framework of basic, secondary and higher professional schools, with regard to admission to studies, organisation of training, finishing studies etc.

The evaluation of the Phare Programme for Vocational Education and Training Reform, concluded that the present legal norms and regulations would have to be changed as vocational education and training development, especially in recent years, is being slowed down by an inflexible legislative framework despite new social demands on education. More innovations in the organisation of teaching and learning are being used. These relate to educational standards, educational programmes, educational modules, basic and school curricula etc. However, the present legal framework is based on different concepts and terminology and does not correspond to the current phase of reform. Therefore, it will be necessary to integrate the new concepts into a new school act.

A decision should be made on the present structure of study courses, which in recent years has undergone hasty and poorly co-ordinated development. The vocational education and training branch structure should be made more transparent and basic principles for this structure should be introduced to ensure its long-term stability and to make it more cohesive. This would require an end to the sharp distinction between technical and vocational study branches which would allow practical legalisation of new vocational education and training types. The preparation of a new educational structure will not only necessitate changes in the terminology and content of the School Act, but regulations of lesser legal force will have to be altered.

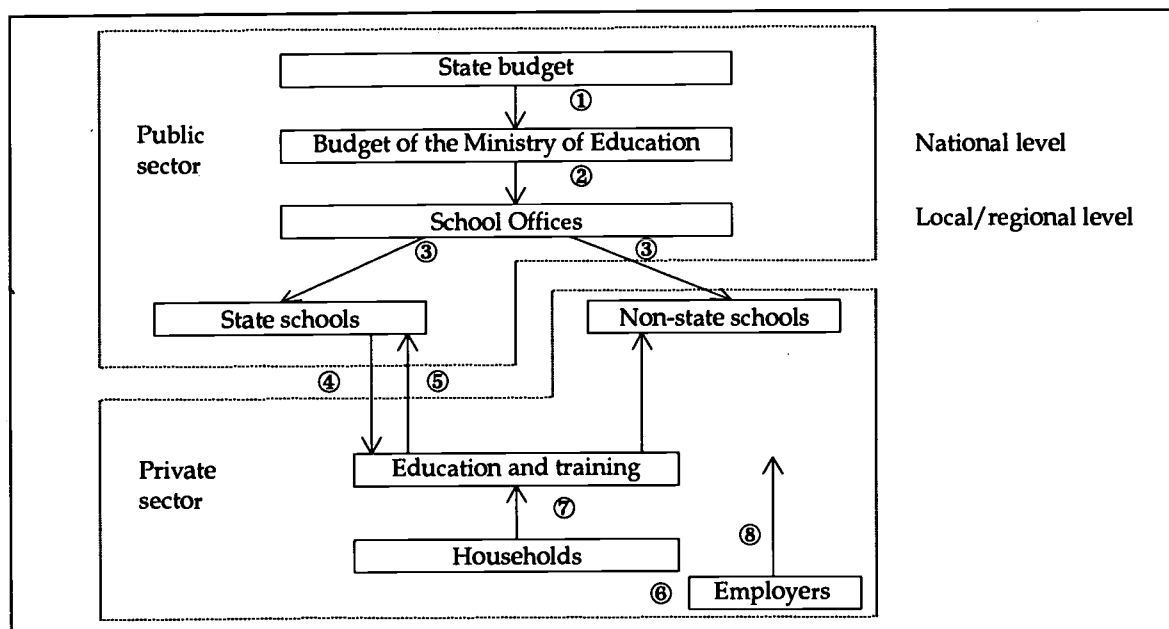
Reform of the legislative framework of education, in the form of a new School Act, should include appropriate modification of vocational education and training financing and management, adjustments to the secondary school system aimed at increasing the quality of education, corresponding changes in education certification, arrangements for the involvement of social partners in the process of vocational education and finally, if possible, an explicit definition of lifelong learning.

The Ministry of Education is now preparing a new School Act, which will take all these needs into account. The Ministry is planning to draw extensively on the views expressed in the public debate on the mid-term strategy for the development of the education system which is to form part of the National Education Development Programme. The draft act is expected to be ready in June 2000.

7. Financing of vocational education and training and continuing training

With a few exceptions, state vocational schools are funded from the government budget while the bulk of funds come from the Ministry of Education with some contributions from other ministries. The current method of funding introduced in the post-1990 reform period is based on the principle of financial resource allocation for operational costs to schools according to the number of students and the cost of their education programmes. The Ministry of Education sets its standard per capita rate annually. The standard rates vary depending on the cost of education in individual branches. However, the amount of the annual standard rate is not taken into account during the allocation of funds from the central budget to the budget of the Ministry of Education. Therefore, although the standard rate set for operational costs is growing from year to year, investment in education is restricted to a great extent by the central budget.

Chart 7.1 *Financial disbursement at the upper secondary level*



Notes:

- (1) Allocation of budget for education from the state budget
- (2) Allocation of budget for expenditures on secondary vocational and technical education by Ministry of Education
- (3) Allocation of budget to schools in districts by School Offices
- (4) Scholarships for students
- (5) Expenditures on accommodation and meals
- (6) Tuition fees
- (7) Households' expenditure on education
- (8) Employers' expenditures on education of non-state apprentices

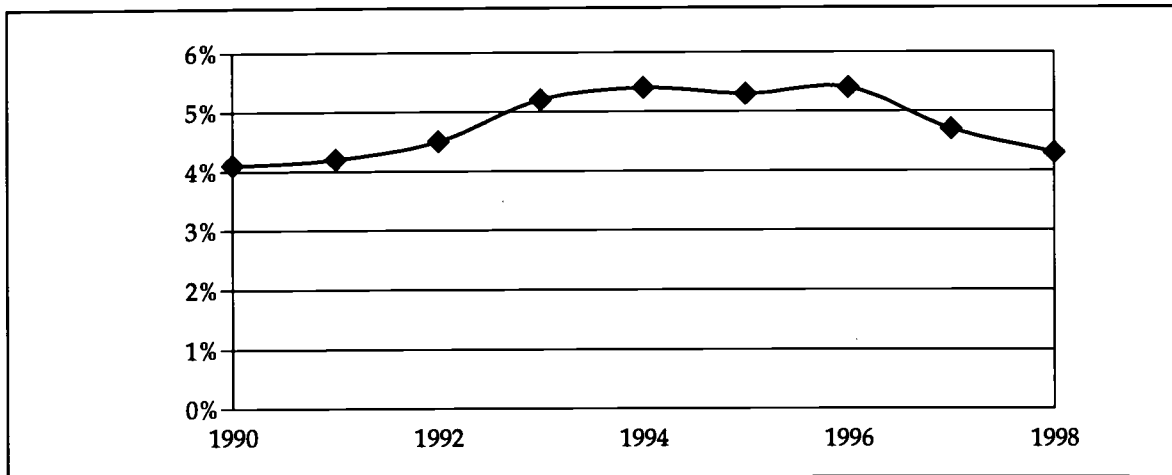
Source: Alternative Approaches to Financing Lifelong Learning, Czech National Report for Organisation for Economic Co-operation and Development, 1998-99.

The method of per capita financing of vocational schools is used primarily in the distribution of the total amount of financial resources from the Ministry of Education to the local level School Offices. Since 1995, School Offices do not strictly adhere to national financial standard rates in allocating funds to specific schools, but instead use individual calculations according to a standard formula. The purpose of this measure was to ensure that funds distributed for operational costs correspond more closely to the needs of specific schools, while respecting binding state indicators, i.e., per capita financing is used in combination with history based funding.

The method of per capita financing has proved efficient even though there are some drawbacks. It encourages schools to accept as many applicants as possible. This results in lowering entry requirements and also admitting applicants to a branch without taking account of labour market conditions and employers' needs. The Ministry of Education, therefore, is preparing a further modification of financing mechanisms.

Total public expenditure on education amounted to 5.4% of gross domestic product in 1996, the highest in recent years. It had been increasing since 1990, when it was 4.1%, but due to problems in the economy public expenditure on education has decreased during the last two years, amounting to 4.7% of gross domestic product in 1997 (approximately CZK 78.3 billion) and to approximately 4.3% in 1998. Besides this, the household expenditure survey shows that households spent a further CZK 1.7 billion on education in 1997.

Chart 7.2 Public expenditure on education as % of GDP



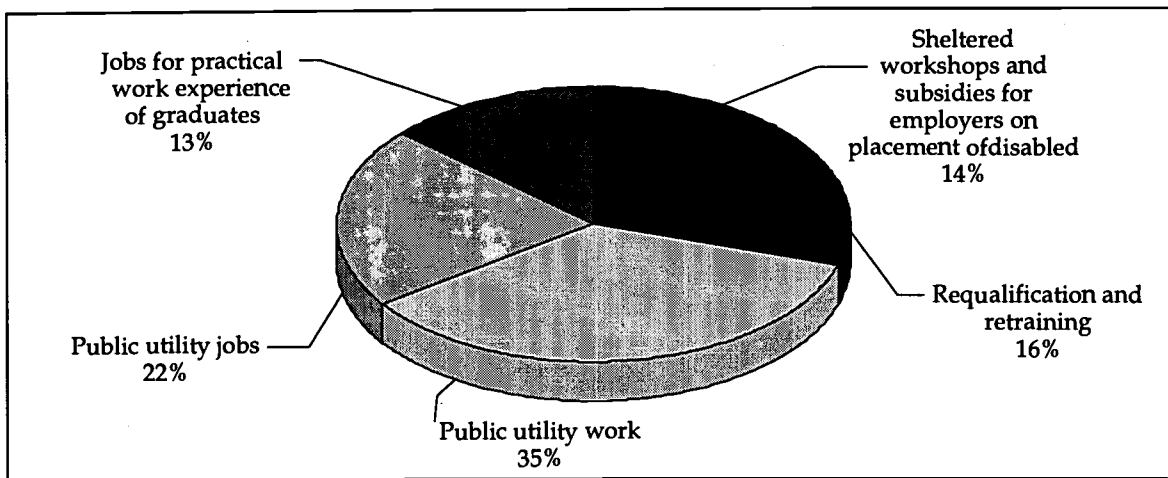
Source: Retrospective yearbook on education, ÚIV, 1997. Key Indicators, National Observatory 1997. 1998 - estimate: České vzdělávání a Evropa, Czech Education and Europe, Prague, 1998.

Expenditure related to vocational education, i.e., on secondary vocational schools, secondary technical schools and higher professional schools, amounts to approximately one quarter of the total education budget. Secondary vocational schools can also receive a contribution from commercial enterprises as a payment for apprentice training and from their own profit-making activities. (During the training process students produce goods which are subsequently sold by the schools; the revenues from these sales cover around 10% of schools' costs.) Vocational education costs break down into 90% running costs and 10% capital investment. The largest single item in the running costs break-down is labour.

The government also makes contributions to private vocational schools, equivalent to 60-80% of the contributions provided to state vocational schools. Private vocational schools charge tuition fees.

As far as continuing vocational education and training is concerned, the costs of part-time courses at state schools are met by the government and are therefore free of charge to the students. The cost of on-the-job training of staff in companies is usually paid by the companies and therefore the courses are free for staff. Continuing vocational training delivered by private training providers is paid for by course participants. Several studies indicate that companies invest about 1% of the total gross labour expenditure in training and education of their personnel (see 3.3.1). The costs of retraining for job seekers, requalification and state requalification programmes are covered by the employment services of the Ministry of Labour and Social Affairs financed out of the active employment policy fund. These costs amounted to CZK 147 million in 1998. Ministry of Labour and Social Affairs employment services' spending on active employment policy measures amounted to approximately CZK 903 million in 1998. The chart below shows the structure of budget spending on active employment measures.

Chart 7.3 Breakdown of budget expenditure on active employment measures



The decreasing financial contributions from enterprises providing apprentice training is a serious problem. In the years 1994-97, contributions dropped from CZK 1,153 million to CZK 374 million and resulted in increased demand for governmental resources. In the initial stage of economic reform, during the privatisation process, secondary vocational schools were separated from enterprises and they became independent institutions. At that time the interest of commercial enterprises in apprentices declined as employment in the enterprises dropped and the state began to pay for the education of these students without designating the enterprise where they would work after finishing their education. The proportion of these "state apprentices" gradually increased and today represents more than 90% of all students and now constitutes a major problem in vocational education and training financing. Proposals are therefore being prepared for corrective financial measures, which would reduce the current numbers. It is thought that, in future, a system of financial incentives will encourage companies to focus on human resource development.

Low capital investment in vocational education and training (approximately 10% of total expenditure) is also a problem because it does not provide scope for upgrading schools and their facilities. This situation has become markedly worse since the onset of economic recession and the consequent drop in public spending on education. Long-term project finance could be increased either through increasing the investment budget or through changing the rules concerning the use of fiscal resources. The Ministry of Education has attempted to cut public spending on education by reducing the excessively large number of schools through closure or merger of small schools (see 4.2). The total number of secondary schools has been reduced from 1,927 in 1995/96 to 1,812 in

1997/98. The average number of pupils per school, however, has dropped from 354 students per school to 293, due to the introduction of the compulsory 9th grade at basic schools which reduced student inflow to ISCED 3, and also to continuing demographic decline.

Financial restrictions also have an adverse affect on teachers' pay which absorbs about three quarters of operating costs. The Ministry of Education decided to cut operating costs in 1997/98 by reducing compulsory teaching hours by two hours per week. Teachers and trade unions, however, have reacted negatively to this measure. Although teachers' salaries had been growing slightly faster than the wages of other professions in previous years, their remuneration remains inadequate: teachers' salaries in 1998 dropped to approximately 85% of the average salary. The new government of the Czech Republic in its 1998 Programme Declaration set a target to increase expenditure on education to 6% of gross domestic product by 2002. The main targets of this budget allocation will be:

- development of research and higher education;
- motivation and remuneration of teachers;
- combating the deficit and stabilising operating costs; and
- strengthening investments in infrastructure.

8. Bilateral and multilateral donors' contribution to vocational education and training reform

The bulk of financial aid to the Czech Republic since 1990 has come in the framework of the Phare Programme. During the seven years of its existence, the Phare Programme has experienced substantial development, from assistance towards the most urgent environmental problems and the first steps of school and university co-operation within the Tempus programme, to assistance in the transformation process and preparation of the country for European Union accession. Among the new initiatives introduced in 1994 was a multi-year indicative planning programme in which the priorities of Phare assistance are formulated in accordance with the medium-term economic policy of the Czech government. The reorientation of Phare priorities in 1994 laid special emphasis on the harmonisation of Czech law with the European Union and cross-border co-operation, as well as on continuing support for the private sector, industrial and labour market restructuring, human resource development, regional support and infrastructure development. The new Phare approach with a special focus on legislative integration and the implementation of the Europe Agreement has been further developed in the 1995-1999 Indicative Programme.

Up to the end of 1996, the Phare allocation to human resources development was about ECU 32.8 million, and ECU 45.8 million to Tempus. This allocation reflects the broad scope of human resource development in the Czech Republic, including the programme of labour market restructuring, employment and social development, the National Training Fund, Tempus, vocational education and training reform, RES, support for non-governmental organisations etc. Additionally the European Community Delegation initiated a programme of public administration improvement costing about ECU 500,000 (1997-1998).

In addition, human resource development draws funds from other programmes such as cross-border co-operation with Germany and Austria. About 2% (ECU 2.25 million) of the 1995-99 National Multi-annual Indicative Programme of German-Czech cross-border co-operation was allocated for employment measures and related vocational training activities aimed at requalification in the service sector. A further ECU 1 million was allocated for vocational education and training in the 1995-99 Czech-Austrian cross-border programme. Under the Cross-Border Co-operation programme a substantial increase in resources allocated to human resource development is planned in 1999.

Multi-country Phare programmes, such as co-operation in distance learning and higher education, Tempus, and LIEN have also contributed to vocational education and training in the Czech Republic (see examples of multi-country programmes in chapter 6.2.2).

Bilateral assistance aimed at supporting initial and continuing vocational education has been provided at several levels: to central government, to the social partners and especially to training institutions (for a list of examples of projects, see annex III-A). There are several different kinds of bilateral donors: ministries, foreign offices or financial aid divisions of western state governments; the International Labour Organisation; the United Nations Development Programme; the Council of

Europe; the United Nations Educational, Scientific and Cultural Organisation; the Organisation for Economic Co-operation and Development, and other funds such as the British Know-How Fund and the Austrian ECO Fund. It is very difficult to estimate the financial impact of bilateral assistance, since unsystematic and incomplete records were kept of such projects. A rough estimate of financial contributions has been made on the basis of the Organisation for Economic Co-operation and Development database for 1990-1995 which is now at the disposal of the Bilateral Co-operation Unit of the Ministry of Finance. It is estimated that between 1990 and 1995 more than USD 10 million were allocated from bilateral donors in the area of vocational education and training, and over USD 4 million for projects in labour market restructuring, employment policies and social dialogue. Furthermore, the United States Agency for International Development (USAID) has allocated almost USD 135 million to the Czech Republic in grant assistance since 1991, out of which approximately 25% was devoted to education and training projects and project components. These include subsidising the establishment of the Czech Management Centre with a postgraduate Master in Business Administration programme, support for the Centre for Graduate Research and Graduate Education with postgraduate programmes in economics, and the Participant Training project of internships and training in the US for Czech professionals. Since 1996, the US has reduced its aid programmes in Central Europe, redirecting funds to Eastern Europe, especially the former Soviet republics.

Future priorities for donors' activities will be closely linked to the pre-accession strategy of the Czech Republic, laying special emphasis on the adoption of European Union methods and procedures, preparation for European Structural Funds intervention, public administration reform and institution building, with particular regard to regional policy.

Greater co-ordination of various donor activities will be essential in order to achieve maximum efficiency and to provide synergy in the implementation of different programmes. The Centre for Foreign Assistance, overseen by the Ministry of Finance, plays the main role in defining priorities and specifying budget allocations for future Phare funding, while at the same time co-ordinating ongoing Phare programmes. It has created a database of Phare programmes. Records of the major bilateral activities are kept by the Ministry of Finance's Bilateral Co-operation Unit. The latter database contains information on projects implemented since 1993 in the framework of governmental bilateral programmes. The projects conducted at sectoral level are not registered. The database is incomplete, as there is no mechanism to make the registration of projects compulsory. Data on financing bilateral projects since 1996 are in many cases missing, and, it has therefore been impossible to estimate their financial input. Further consolidation of the co-ordination of donor activities is necessary, as is additional elaboration of an information system with complete records of various foreign assistance programmes.

Content-related impact

Most national Phare schemes concerned with human resource development have included an initial or continuing vocational education and training component. They were designed and implemented in co-operation with a number of ministries, e.g., the Ministry of Education and the Ministry of Labour and Social Affairs receive grants and are also in charge of implementing these schemes. There have, however, been only two major projects aimed at the reform of the education system: the Renewal of the Education System (RES) and the Vocational Education and Training Reform programme.

The Renewal of the Education System programme, which cost ECU 5.75 million from 1993 to 1996, covered the entire education system, including both vocational and general education. Under the programme, reforms were introduced in the different educational sectors which improved the quality of primary and secondary education, enhanced foreign language teaching and learning,

strengthened decentralised management and administration of schools, and contributed to the diversification of higher education.

The Phare Vocational Education and Training Reform programme, which cost ECU 6.57 million began with a strategic study in 1993 and was implemented between 1994 and 1998. It represents a significant contribution to vocational education and training in the Czech Republic. The objectives were to contribute to long-term vocational education and training reform through new approaches to curriculum development, educational standards, management, teacher training, quality control, involvement of the social partners and vocational education and training financing. Nineteen schools were selected for a pilot scheme to develop and test innovative curricula and to participate in school development and staff training courses.

In 1997, a policy paper based on an evaluation of the programme recommended major vocational education and training reform. A background discussion policy paper was published which formed the basis of a broad public debate. Arising from this debate a programme, Further Transformation Steps, was published in 1998. It contained proposals for concrete short-term and long-term tasks and measures, presented at the final conference of the vocational education and training Reform programme in September 1998. As the programme is formally completed, responsibility for implementing the proposals nationally now rests with vocational education and training stakeholders, particularly the Ministry of Education.

The National Training Fund's Human Resource Development programme, with ECU 7 million since it was launched in 1994 when a foundation bearing the same name was established. The foundation's work initially focused on the development of continuing training (especially management training) and its application in companies and commercial enterprises together with linking formal and informal education with the labour market. The National Training Fund was directed by the Ministry of Labour and Social Affairs and the Ministry of Education to advance human resource development by supporting training programmes and promoting management development in enterprises. Furthermore, the National Training Fund was given the task of completing the Phare Vocational Education and Training Reform programme, setting up a co-ordination unit for the European Union Leonardo da Vinci programme and, together with the European Training Foundation, establishing a National Observatory for Vocational Education and Training. These arrangements make it possible to combine the results of individual programmes and projects as well as the preparation of follow up programmes.

At the end of 1997 the National Training Fund was set the task of launching and managing the project for improving public administration and ECU 500,000 were allocated to do so. It was charged with two major tasks: first, to carry out an analysis of Czech public administration, and second, to develop a global reform strategy. The proposed strategic plan based on the analysis served as a framework for a reform proposal put to the government.

The Labour Market Restructuring programme, with funding of ECU 8 million, was established in 1992 to develop policies, institutions and instruments for the promotion of employment and labour market efficiency, and proactive labour market interventions. The programme was implemented in 1992-1994 with a significant vocational education and training component aimed at increasing the flexibility and efficiency of training in order to respond to labour market developments. The following projects have been organised under the programme:

- the strategic study on vocational education and training (Birks, Sinclair and Associates Ltd 1993);
- adult education policies and programmes (designed by AFPA 1994); and
- information and career guidance network as an integral part of the labour office system (devised by DHV R, pilot run 1995, implementation 1996-97).

The Labour Market Development programme of 1995-97, with funding of ECU 6 million, develops regulations and mechanisms under the active labour market policy and the new Employment Act with specific reference to problem regions and vulnerable groups, and promotes further institutional development of the employment services administration.

Many multilateral programmes also have a vocational education component. The Trans-European Co-operation Scheme for Higher Education (Tempus) was designed in 1990 to help partner countries reform their higher education. It concentrated on Joint European Projects of European Union Member States and Czech higher education institutions, staff and student placement and exchanges, revising curricula, upgrading training materials etc.

An allocation of ECU 13 million was made to all Phare countries for multi-country co-operation in distance learning. This resulted in the setting up of a National Centre for Distance Learning under the auspices of the Centre for University Studies in Prague and the establishment of four regional centres (three sited in universities and one in an adult training institution). During 1997, European studies programmes and trainers' training programmes were adapted and tenders were invited for the provision of new training programmes in priority fields at all levels.

Multi-country co-operation in higher education included four projects: quality assurance in higher education; internationally acceptable indicators for education; diploma equivalence and recognition; and European Studies. Although these programmes focus on university education, some of their outcomes will be applicable in secondary and post-secondary education.

There are many other Phare and other bilateral and multilateral donor programmes linked to education that focus on the exchange of know-how, modernisation and the introduction of new methods. Most projects have specific objectives and are targeted at particular groups. However, the dissemination of outcomes and follow up programmes is not obligatory. Priorities must be reordered very carefully, taking account of pre-accession objectives while avoiding damaging programmes already in progress. Project continuity should be considered as a means of achieving maximum cost effectiveness. Phare projects should follow as much as possible the instruments and procedures of the European Union Structural Funds and, in particular, the European Social Fund in order that the structures, mechanisms and human resources are brought closer to European Union criteria before accession.

Financing in the Framework of the Leonardo da Vinci Programme

The Czech Republic joined the Leonardo da Vinci programme in 1997. Full participation in the programme entailed covering the costs of participation of Czech institutions in selected Leonardo projects through an annual 'entry ticket'. On the basis of the country size, population, gross domestic product per capita and other statistical indicators, the European Commission, former DG XXII, estimated ECU 2,654 million as the amount of the annual entry ticket for the Czech Republic. Half of the above mentioned amount is drawn from the state budget by the Ministry of Education while the remainder is covered by Phare. Due to very strong interest from Czech institutions and their high quality performance in the framework of the programme the entire entry ticket for 1998 has been spent. In addition to these funds, Phare has supported the participation of Czech organisations in the amount of ECU 900,000.

9. Constraints, challenges and further needs

A mid-term strategy is currently under preparation after years of mostly ad hoc development of the Czech education system. First, the main direction of policy was decided by government and then a set of seven studies was prepared to identify the main problems and propose solutions. These studies cover pre-school education, basic education, secondary education, tertiary education, continuing education, schools as agents of change and the teaching profession. The secondary education study examines initial vocational education and the study on continuing education considers continuing vocational education and training. The content of these studies has been debated at a number of meetings of relevant actors and in articles in specialist education and other magazines. Drawing on the studies and the outcomes of the public debate, the strategy proposal will be completed by the end of 2000 and presented as the National Education Development Programme. It will deal with strengths and weaknesses of the Czech vocational education system as detailed below.

The Czech education system is highly selective and quite rigid. The concurrent and linear design of learning programmes makes moving from one type of secondary school to another difficult. The programmes follow a teaching plan all the way through to an attestation certificate, apprentice certificate or the general school learning certificate of complete secondary education. At the moment, the vast majority of learning programmes correspond, in terms of duration of study and entrance requirements, with the duration of study and entrance criteria of the type of schools that offer them. Education programmes usually do not contain smaller modules and, in effect, preclude the entry of applicants other than basic school-leavers, thus severely limiting the number of educational pathways. This arrangement is too uniform to suit the more differentiated structure of applicants. Eighty-three per cent of the upper-secondary school-aged population study in vocational or technical secondary schools, which still offer mostly highly specialised learning programmes and impede the flexibility necessary to respond to labour market needs.

The structure is rigid, does not allow students to combine learning programmes, and makes it difficult to transfer from one type of school to another without having to go back, losing part of the credit and, given the length of studies, a lot of time. If students do not go through the whole learning programme and pass the final examinations, they will not receive credit for the part they completed. There is no shorter programme leading to a second Maturita. Students cannot extend their specialisation and get an apprentice certificate once they have obtained their Maturita from a secondary technical or a secondary vocational school.

Although a modular approach has been partly tested within the Phare Vocational Education and Training Reform programme, its spread is hampered by legislative⁹⁰ and administrative obstacles. Schools therefore introduce new learning programmes along the lines of subjects rather than modules, creating new, yet traditionally linear, programmes that vary only slightly. In current

90 Legislative obstacles include a strictly set number of lessons to be taught (21 per week) and a set weekly schedule that hampers flexible allocation of lessons in modules. Modular learning is also hindered by student assessment guidelines that are based around subjects, semesters or academic years.

circumstances, it might be easier to achieve smoother transfers from one programme to another by introducing forked and incremental learning programmes that will enable the issue of certificates for the completion of a part of the programme. Whether we opt for forked and incremental or modular programmes, the desirable outcome will not be obtained by leaving the initiative to schools, but rather by unifying criteria and quality assessment for all types and levels of certificates and by ensuring that all schools follow them.

Separate educational pathways with limited transfer possibilities highlight the crucial importance of the initial choice. Therefore, the information system on the labour market, educational pathways, quality of schools and career counselling will need to undergo major improvement.

Although the Ministry of Education approved a model curriculum for the new 'Career Choice' subject, and recommended in 1998 that to be taught in all schools, schools received no further support and only a fraction has introduced the new subject in their curricula.

The career guidance system still only provides information rather than more elaborate counselling services which are needed. If the whole system is to be effective, other counselling centres, such as the planned "Centres de bilan", will have to be involved and the current career guidance centres will have to broaden the scope of their activities and provide their clients with tailored counselling which covers training, work-related and social issues.

The broader range of learning programmes and growing school autonomy make it hard for job seekers and employers to find their way in the system. They also make it difficult to compare outcomes and the quality of different schools. Although a number of individual evaluations were conducted, there is no comprehensive system in place to assess educational programmes based on clearly-defined learning objectives and ensuing criteria and tools. Current evaluation methods rely mostly on pedagogical criteria rather than the placement of graduates on the labour market. Public availability of information and opportunities for comparison are rather limited.

A standard for secondary vocational education entered into force on 1 January 1998, laying down basic requirements for learning programmes to be delivered in secondary vocational schools and apprentice schools. Covering key skills as well as general and broad vocational knowledge, the Core Curriculum Documents break new ground with regard to flexible career development. In reality, this educational standard is binding only for newly established learning programmes and affects only 14% of the existing ones. Learning in schools is still overburdened by encyclopaedic knowledge and pays limited attention to the need to develop desirable attitudes, skills and knowledge of the particular trade.

The mere existence of educational standards will not guarantee the quality of vocational training. In order to set out relevant learning objectives, educational standards must be based on occupational standards. This is particularly true of their practical part as it needs to adjust to developments in a given occupation. Occupational standards reflect a consensus of educational institutions, researchers and employers. They have not been introduced in the Czech Republic because there are no structures in place to facilitate their creation and updating.

The lack of links to the world of work is a major flaw in the Czech school system. Current legislation leaves responsibility for initial education solely to the Ministry of Education. Other ministries and the social partners are not involved. This has a number of negative impacts: there are no links between educational standards of vocational schools and occupational standards; industry is not involved in setting goals and determining the content of education; and it does not participate in quality control, final examinations, innovations in education etc. Contacts between schools and companies are so weak and random that most graduates enter the labour market without the necessary knowledge of the work environment. Furthermore, schools are not involved in the

placement of their graduates. All these factors make a major contribution to the steadily growing unemployment rate among school graduates. With that in mind, legislation must be introduced that will enable other ministries and the social partners to shoulder their share of responsibility and be involved in decisions about the development of education, its management and funding. A system needs to be set up to increase the involvement of companies in vocational education and to forge school-company ties. Lack of practical experience among teachers is another reason for weak contacts between the worlds of education and work. Unfortunately, in-service training of teachers does not eliminate the problem.

Research and analyses have identified several severe problems in continuing vocational training. A more precise definition and possible remedies are being discussed as part of the work on the future development strategy for the education system. This is a response to the hitherto unfavourable trends in continuing vocational education and against a background of forecasts predicting an increased need for continuing education in the future.

Until three years ago, indicators of continuing vocational training of company employees were positive in the Czech Republic and other neighbouring countries. However, several separate pieces of research conducted by different institutions confirmed that this trend had reversed in the Czech Republic during the past three years. Significant differences in continuing vocational training of staff continue to exist between companies. Although overall economic recession is a factor in this development, experts and employers agree that lack of motivation on the part of employers, training providers and students is one of the major reasons for the current predicament in continuing vocational training.

We recommend that the government build in financial incentives to support and promote continuing vocational training. Employers could, for example, be encouraged by the introduction of tax incentives or differentiated social security payments. We suggest that the preferred solution be agreed in tripartite negotiations between representatives of government, employers and trade unions. These recommendations have also been supported by representatives of employers and human resources managers in the ongoing public debate.

In recent years, another significant trend has been observed in the continuing vocational training of job seekers registered with labour offices. While the number of participants in retraining programmes has grown, particularly in 1998 and 1999, their share in the overall job seeker population has been declining. The Ministry of Labour and Social Affairs has addressed the need for further growth of vocational retraining in the National Employment Plan, and has arranged for a major increase in funds allocated to active employment policy measures, which will see the amount more than double next year. However, labour offices report that job seekers are less willing to retrain even if vocational retraining programmes are available and offered to them. The draft of the strategy document therefore proposes to motivate job seekers by introducing major differentiation in benefits depending on whether job seekers participate in retraining or not.

We recommend that further growth in continuing vocational training be encouraged by incentives for the participants in continuing vocational training courses. We suggest that tax reductions could be granted to people who participate, on their own initiative, in self-financed continuing vocational training.

The inadequate legal framework is another significant impediment to further growth in continuing vocational training, in that, for example, powers and responsibilities for continuing education are not clearly assigned. We recommend that the powers and responsibilities of the state and the social partners in this area be clearly defined and that state bodies lay down clear financial and other rules for continuing vocational training. A clearer assignment of powers and responsibilities could, in our opinion, serve as a starting point for overcoming other related drawbacks. It could, for example,

help to improve the quality of and access to continuing vocational education by furnishing more information about providers and their learning programmes and by introducing systematic certification.

List of acronyms and abbreviations

CSO	Czech Statistical Office
LFS	Labour Force Survey
CSI	Czech School Inspektorate
VÚSC	Vyšší územně správní celek (Higher unit of self-government region)
NUTS	Nomenclature of Territorial Statistical Units
GDP	Gross domestic product
ISPA	Instrument for Structural Policies for Pre-Accession
SAPARD	Special Action Programme for Pre-Accession Aid for Agriculture and Rural Development
ESF	European social fund
NACE	General Industrial Classification of Economic Activities within the European Communities
HRD	Human Resource Development

Major organisations

Major organisations of principal organisations involved in vocational education and training and continuing training

Organisation (in English) Organisation (in Czech)	Street No.	Town/ City	Post Code	Telephone Fax E-Mail Internet site address
Governmental organisations				
Ministry of Education, Youth and Sports Ministerstvo školství, mládeže a tělovýchovy	Karmelitská 5,7,8	Praha 1	110 00	+420 2 57 19 31 11 http://www.msmt.cz
Ministry of Labour and Social Affairs Ministerstvo práce a sociálních věcí	Na poštěním právu 1	Praha 2	128 00	+420 2 21 92 11 11 http://www.mpsv.cz
Employment Services Administration of MoLSA Správa služeb zaměstnanosti MPSV	Na poštěním právu 1	Praha 2	128 00	+420 2 21 92 11 11 +420 2 21 92 33 15 mailto:souhradova@mpsv.cz z http://www.mpsv.cz
Social partners institutions				
Czech-Moravian Confederation of Trade Unions Českomoravská konfederace odborových svazů	nám. W. Churchilla 2	Praha 3	130 00	+420 2 24 46 11 11
Confederation of Industry Svaz průmyslu a dopravy	Mikulandská 7	Praha 1	110 00	+420 2 24 91 56 79 +420 2 24 91 93 11 http://www.spcr.cz
Union of Employer Associations Unie zaměstnavatelských svazů	Škrétova 6	Praha 2	120 00	+420 2 24 23 05 61

Organisation (in English) Organisation (in Czech)	Street No.	Town/ City	Post Code	Telephone Fax E-Mail Internet site address
Czech-Moravian Trade Union of School Staff Českomoravský odborový svaz pracovníků ve školství	nám. W. Churchilla 2	Praha 3	130 00	+420 2 24 46 23 06 +420 2 24 21 80 10
Information and research institutions				
Czech Statistical Office Český statistický úřad	Sokolovská 182	Praha 8	180 00	+420 2 66 04 11 11 +420 2 66 31 12 43 http://www.czso.cz
Research Institute of Technical and Vocational Education Výzkumný ústav odborného školení	Pod stanicí 2/1144	Praha 10	102 00	+420 2 786 22 51 +420 2 786 52 49 http://www.vuos.cz
Institute for Information on Education Ústav pro informace ve vzdělávání	Senovážné nám. 26	Praha 1	111 21	+420 2 243 98 111 +420 2 26 71 37 http://www.uiv.cz
Research Institute of Labour and Social Affairs Výzkumný ústav práce a sociálních věcí	Palackého nám. 4	Praha 2	120 00	+420 2 29 56 89 martin.macha@ecn.cz
Klub personalistů ČR	Partyzánská 7	Praha 7	170 05	+420 2 66 75 35 71 +420 2 6675 3574 http://www.personnclub.c z
Institute of Sociology of the Academy of Sciences of the CR Sociologický ústav Akademie věd ČR	Jilská 1	Praha 1	110 00	420 2 24220993 - 7, 420 2 24220278 socmail@soc.cas.cz
CAMETIN Czech Association of Manager Education and Training Institution Network Česká asociace manažerských vzdělávacích a výcvikových institucí	Oldřichova 36	Praha 2	120 00	+420 2 69 27 368 +420 2 69 27 385

Organisation (in English) Organisation (in Czech)	Street No.	Town/ City	Post Code	Telephone Fax E-Mail Internet site address
CAMBAS Czech Association of MBA Schools Masaryk Institute of Higher Studies of CTU Prague Česká asociace MBA škol Masarykův ústav vyšších studii, ČVUT Praha	Horská 3	Praha 2	128 00	+420 2 24 91 53 19 +420 2 24 91 48 34 hajkova@fsih.cvut.cz
ATKM Association of Management Trainers and Consultants Asociace trenérů a konzultantů managementu	Gorkého 13	Brno	602 00	+420 5 41 21 90 05 +420 5 41 21 03 86
Others				
National Training Fund Národní vzdělávací fond	Václavské nám. 43	Praha 1	110 00	+420 2 26 78 41 +420 2 24 21 45 33 http://www.nvf.cz
Institut of pedagogic and psychological guidance of CR Institut pedagogicko- psychologického poradenství ČR	Vojáčkova 431	Praha 9	196 00	+420 2 90 00 38 3 +420 2 83 93 34 53
Career Guidance Centres within district Labour Offices Informační a poradenská centra při úřadech práce	within each of the 77 district Labour Offices			
Economic Chamber of the Czech Republic Hospodářská komora České republiky	Argentinská 38	Praha 7	170 04	+420 2 24096 111 +420 2 24096 222
Akademy of J. Amos Komensky Akademie J. Amose Komenského	Komenského nám. 11	Třebíč	674 01	+420 618 21 729 +420 618-21 729
Department of Adult Education and Personnel Management Faculty of Arts Charles University Prague Katedra andragogiky a personálního řízení Filosofická fakulta Universita Karlova Praha	Celetná 20	Praha 1	110 00	+420-(0)2-24 491 380

Organisation (in English) Organisation (in Czech)	Street No.	Town/ City	Post Code	Telephone Fax E-Mail Internet site address
Department of sociology and Education of the Adults Philosophical Faculty Palacký University Olomouc Katedra sociologie a andragogiky Filosofická fakulta Universita Palackého Olomouc	Wurmova 7	Olomouc	772 00	+420 68 563 3392

Bibliography

1. Background study on Labour Market and Employment in the Czech Republic.
2. Act No. 29/1984 Coll., on the system of Basic, Secondary and Higher Vocational Education (School Act), as amended by Law No. 171/1990 Coll., 522/1990 Coll., 134/1993 Coll., 190/1993 Coll., 331/1993 Coll., 49/1994 Coll., 256/1994 Coll., and 138/1995 Coll.
3. Alternative Approaches to Financing Life Long Learning, Czech background study for OECD, National Training Fund, 1999.
4. Analýza a aktualizovaná prognóza makroekonomického vývoje ČR v roce 1998 a 1999; Analysis and Updated Prognosis of Macro-economic Development of the Czech Republic in 1996 and 1997, Czech Statistical Office, Prague, 1999.
5. Analýza vývoje zaměstnanosti a nezaměstnanosti v první polovině roku 1999; Analysis of Employment and Unemployment Development in the First Half of 1999, Ministry of Labour and Social Affairs.
6. Birks, Sinclair and Associates Ltd., Strategic Review of Vocational Education and Training – Czech and Slovak Republics, Prague, Phare, Labour Market Restructuring, 1993.
7. Budoucnost vzdělávání dospělých v Evropě – Eurodelphi 1993-1996; Future of Adult Education in Europe – Eurodelphi 1993-96, Czech National Report.
8. Comparative Research: Learning Society, Rapid-Dema, s.r.o., 1997.
9. Czech Info Phare, EC Delegation, CFA, January 1996.
10. Časové řady trhu práce; Time Series Statistics of the Labour Market, Ministry of Labour and Social Affairs, 1999.
11. Časové řady základních ukazatelů statistiky práce; Time Series of Key Indicators of Employment Statistics, Czech Statistical Office, 1999.
12. Database OECD CCET Register, Bilateral Co-operation Unit, Ministry of Finance of the Czech Republic.
13. Employment and Unemployment in the Czech Republic, as measured by the Labour Force Sample Survey, (quarterly) Czech Statistical Office, 1996, 1997, 1998, 1999.
14. Employment Services in the Czech Republic, Ministry of Labour and Social Affairs, Prague 1996.
15. Employment statistics, Ministry of Labour and Social Affairs, Bulletin Czech Statistical Office, 1999.
16. Employment statistics, Ministry of Labour and Social Affairs, Bulletin Czech Statistical Office, 1999.
17. From Pilot Schools to Reform Strategy, Outcomes of the Phare Reform of Vocational Education and Training programme, Prague, 1997.

18. Analýza rozvoje odborného vzdělávání a institucionálního rozvoje v ostravském regionu, pracovní verze; Analysis of Vocational Education and Training and Institutional Development in the North Moravia Region, Report, Czech National Observatory.
19. Human Resources Development Report, Czech Republic 1996, Faculty of Natural Sciences, Charles University, Prague 1996.
20. Indicatives Programmes 1/1995, European Commission.
21. International Strategic Human Resource Management, Price Waterhouse, Cranfield University, 1994.
22. Joint Assessment of the Economic Policy Priorities of the Czech Republic, Government of the CR, European Commission, August 1999.
23. Klíčové ukazatele, Key Indicators, Czech Republic, Czech National Observatory, 1989, 1993 - 1998.
24. Kofroňová, O. - Vojtěch, J. : České odborné školství v evropské perspektivě; Czech Vocational Education in European Perspective, in: Czech Education in European Perspective, Prague, Pedagogical Faculty, Charles University, 1996.
25. Kofroňová, O. - Vojtěch, J.: Integrované střední školy. Analýzy empirického šetření pro projekt grantové agentury ČR Proměny českého školství v evropské perspektivě; Integrated Secondary Schools. Analysis of Empirical Survey for the Project of the Granting Agency of the Czech Republic- Changes in the Czech School System in the European Perspective, Prague, 1995.
26. Koncepce rozvoje odborného vzdělávání ve středním školství. Souhrnná zpráva o řešení grantového úkolu; Conceptual Framework of Development of Vocational Education in the Secondary School System. Summarising report on the realisation of grant assignment, Prague, Research Institute of Technical and Vocational Education, 1991.
27. Kvalita a odpovědnost; Quality and Accountability, Prague, Ministry of Education, Youths and Sports, 1994.
28. Lidské zdroje v České republice, 1999; Human resources in the Czech Republic, 1999; National Training Fund, 1999.
29. Main Economic and Social Indicators, Czech Republic, No 8, Research Institute of Labour and Social Affairs, Prague 1996.
30. Mzdy zaměstnanců za rok 1996, 1997, 1998; Wages of Employees in 1996, 1997, 1998, Czech Statistical Office, 1997, 1998, 1999.
31. National Report on the Role of Social Partners in Development of Vocational Education and Training in the Czech Republic, NTF, National Observatory, Prague, October 1997.
32. Nezaměstnaní absolventi škol na trhu práce; Unemployed School Graduates on the Labour Market, Ministry of Labour and Social Affairs, 1996.
33. Nezaměstnaní absolventi škol - duben 1999; Unemployed School graduates - April 1999, Ministry of Education, Youth and Sports, 1999.
34. Okresy v České Republice v roce 1995; Districts in the Czech Republic in 1995, Czech Statistical Office, 1996.
35. Partnership for Change, USAID in the Czech Republic, Prague 1997, pp. 15-16, 18.
36. Phare in the Czech Republic, ReproMedia, Prague, 1994.

37. Phare Programme Database, Centre for Foreign Assistance, Ministry of Finance, Czech Republic.
38. Phare Programme in the Czech Republic, Ministry of Economy of Czech Republic, Prague, 1995.
39. Programme and Contract Information 1995, Multi-Country and Cross-Border Programmes No. 1, European Commission.
40. Projekce obyvatelstva; Demographic Projection, Czech Statistical Office, 1995.
41. Reviews of National Policies for Education, Czech Republic, OECD, 1996.
42. Ročenka vzdělávání dospělých '95, Yearbook of Adult Education '95, Czech Institute for Adult Education, 1998.
43. Sčítání lidu, domů a bytů k 3.3.1991; Population Census of the Czech Republic, Czech Statistical Office, 1991.
44. Statistical Yearbook of the Czech Republic, Czech Statistical Office, 1994, 1995, 1996.
45. Statistická ročenka školství, výkonové ukazatele; Statistical Yearbook of Education, Institute for Information on Education, 1996, 1997, 1998, 1999.
46. Statistická ročenka trhu práce v ČR, Statistical Yearbook of the Labour Market in the Czech Republic, The Ministry of Labour and Social Affairs, 1998, 1999.
47. Statistika aktivní politiky zaměstnanosti; Statistics of Active Employment Policy, Ministry of Labour and Social Affairs, 1996, 1997, 1998, 1999.
48. Statistika uchazečů o zaměstnání a volných pracovních míst; Statistics of Job Seekers and Vacancies, Ministry of Labour and Social Affairs, (monthly) 1996, 1997, 1998, 1999.
49. Structure of Earnings – Survey 1996, Czech Statistical Office, 1997.
50. Study on Continuing Vocational Education and Training in the Czech Republic, Czech National Observatory, 1998.
51. Školství v pohybu, výroční zpráva o stavu a rozvoji výchovné vzdělávací soustavy v letech 1997-1998; Education in Transition, Annual Report 1997-98, Prague, Institute for Information on Education, 1999.
52. Školství v pohybu, výroční zpráva o stavu a rozvoji výchovné vzdělávací soustavy v letech 1995-1996; Education in Transition, Annual Report 1995-96, Prague, Institute for Information on Education, 1996.
53. The Cranfield Project on European Human Resource Management, results of the survey, 1995 – 96, University of Economics, Prague, 1997.
54. Transition from Initial Education to Working Life in the Czech Republic, Background Report, NTF, 1997.
55. Transition from Initial Education to Working Life, OECD Country Note: the Czech Republic, 1997.
56. USAID projects database, American Embassy in the Czech Republic.
57. Uspokojil v roce 1997/98 náš vzdělávací systém poptávku po VŠ studiu?, Did our education system satisfy the interest in higher education?, Press release, Institute for Information on Education, 1998.

58. Věkové složení obyvatelstva v České republice v roce 1996; Age Structure of the Population of the Czech Republic in 1996, Czech Statistical Office, 1997.
59. Viceník, P. Nástin koncepce žádoucích změn v ukončování studia a přípravy na povolání ve středních školách ve vztahu k vývoji koncepcí vzdělávání a přípravy na povolání; Conceptual Outline of Necessary Changes in School Graduation and Vocational Training, Prague, Research Institute of Technical and Vocational Education, 1996.
60. Vojtěch, J. - Kofroňová, O. : Kurikulární politika po r. 1989 a její odraz ve vývoji oborů přípravy ve středním odborném školství; Curriculum Policy after 1989 and its Impact on the Development of Educational Branches in Secondary Vocational Education, Prague, Research Institute of Technical and Vocational Education, 1996.
61. Vojtěch, j. Vývoj proporcí počtu žáků v systému vzdělávacích cest středního a vyššího vzdělávání, 1989 - 1997, Odborné vzdělávání - analýzy a informace, Development of proportions of numbers of students in the system of educational pathways of secondary and higher education, Research Institute of Technical and Vocational Education, 1998.
62. Vývoj obyvatelstva v České republice; Demographic Development in the Czech Republic, Czech Statistical Office, 1997, 1998, 1999.
63. Vývojová ročenka školství, Retrospective Yearbook of Education, Institute for Information on Education, 1997.
64. Vzděláváním k prosperitě. Na cestě k učící se společnosti, podklad k veřejné diskusi; Education for Prosperity, Towards a Learning Society, Fragment, 1998.
65. White Paper on Education and Training: Teaching and Learning, Towards the Learning Society, the European Commission, 1995.
66. White Paper on Preparation of the Associated Countries of CEE for Integration into the Internal Market of the Union, adopted by the European Commission on 3.5.1995.
67. A World Bank Country Study - Czech Republic toward EU Accession, the World Bank, Washington, D.C. 1999.
68. Zásady regionální politiky vlády ČR; Principles of Regional Development Policy of the Government of the Czech Republic, Paper of the Ministry of Regional Development, May 1997.
69. Zpráva o situaci r mské komunity v ČR, Report on the situation of the Roma minority in the Czech Republic, Government Office 1997.
70. Zpráva o stavu vzdělávání dospělých v ČR, návrh materiálu pro poradování vedení MŠMT; Adult Education in the Czech Republic, Draft Report, Ministry of Education, Youth and Sports, April 1997.

Reports and proceedings prepared by the Czech National Observatory

- **Vocational education and training system in the Czech Republic: Recent Changes, Challenges and Reform Needs, National Observatory, Prague, 1997, 1998.**

This report surveys the policy of initial and continuous vocational education, its financial and legislative aspects, the involvement of social partners and the impact of bilateral and multilateral international support. It also outlines development issues in vocational education with regard to its links to the labour market. The report is addressed to the European Training Foundation, the network of National Observatories, state administration and other institutions.

- **Report on Tertiary Education in the Czech Republic, National Observatory, Prague, 1997.**

This report surveys the development and structure of tertiary education in the Czech Republic, focusing mainly on the legislative and organisational framework, powers, funding, curricula, entry and exit requirements, links to the employment system, etc.

- **Key Indicators Tables (selected statistical indicators of the labour market and education), National Observatory, Prague, 1996, 1997, 1998, 1999.**

The Observatory has been furnishing selected annual indicators (for the years of 1989 and 1993-1998) to the European Training Foundation for their comparative analyses of the economic activity of population groups, participation in education, school drop-outs, and public-private funding of vocational education.

- **Report on the role of social partners in vocational education and training in the Czech Republic, National Observatory, Prague, 1998**

This study is part of an international comparison made by the European Training Foundation. It surveys current conditions in the Czech Republic, particularly with regard to the legal framework, the financial aspects and the organisational structure of social partnership in different vocational training areas. The report was made available to the Foundation for their comparative survey of social partnerships in Central and Eastern Europe.

- **Proceedings of the seminar on the role of social partners in vocational education and training, National Observatory, Prague, 1998.**

This book of proceedings contains papers of Czech and international participants of a seminar on the role of social partners in co-funding vocational training and drafting vocational training standards.

- **Overview of Continuous Vocational Training in the Czech Republic, National Observatory, Prague, 1998.**

This is an overview of the conditions of vocational education in the Czech Republic and constrains of its further development. It covers in-house training, training services market, sponsoring, continuing training as part of the active employment policy, and sectoral projects in human resources development.

■ **Analysis of vocational training and institutional development in the Ostrava Region, National Observatory, 1999.**

This study analyses skill needs in the regional labour market based on field survey among employers on their intentions to hire and lay off staff of particular skill levels and professions. It assesses readiness of the region's information and institutional structure and links to participate in future European Social Fund sponsored projects. The study is addressed to state administration and the expert community in the region as well as nationally. Input of the region's representatives at a workshop organised in the Ostrava region and outcomes of debates at the workshop have been incorporated in the conclusions of the report.

■ **National Report on the Transition from Initial Education to Working Life, National Training Fund, 1997.**

In the framework of the OECD project, this report surveys education, labour market and policies of relevant institutions playing role in the youth transition from school to work. It maps out study and work patterns of different age groups of young people, and outlines recent changes, including the influence of the economic transformation on transition models. The influence of schools on the placement of young graduates on the labour market is explored in terms of the structure and duration of initial education, success rates at completion, credibility of certificates, exposure of students to working life during their education, career guidance, etc. In depicting labour market conditions that influence the placement of graduates, the report covers unemployment according to levels and areas of education as well as demographic aspects, the development of job opportunities, salaries, etc. The report surveys policies relevant to the transition from initial education to work, touches upon changes that have been made in the school system, and presents active employment policy programs that focus on young people and school graduates.

■ **The Transition from Initial Education to Working Life, Country Note: The Czech Republic, 1997.**

In this report, OECD experts evaluate conditions in the Czech Republic based on their team visit. They describe strengths and weaknesses of the educational system in the country. A subchapter is devoted to improving decision-making frameworks. Recommendations contained in the report focus on the structure of the Ministry of Education, Youth and Sport, on interdepartmental co-operation, work with employers and social partners. Suggestions are made to separate decision-making structure for basic and post-basic education and to set up advisory bodies for the ministry.

■ **Seminar proceedings: Problems of Youth Transition from School to Work, National Observatory, 1999.**

This book of proceedings contains papers presented by local and international participants of the seminar. International papers included presentations by OECD experts, in which they shared conclusions of comparative studies in selected OECD member countries, and remarks by other foreign research institutions (ROA). Local papers discussed results of local research projects related to youth transition from school to work. The book of proceedings also contains standpoints of labour market and education institutions.

■ **Background Study of Labour Market and Employment in the Czech Republic, 1999 Chapter 6 on Vocational Education and Training System.**

The objective of this study is to survey major developments in the Czech labour market in order to provide a background analysis for the employment policy reviews of accession countries

prepared by DG V of the European Commission. The study describes current conditions in the Czech Republic regarding employment, employment policy institutions, employment policy implementation mechanisms and the links between vocational education and the labour market. A chapter contributed by the Observatory gives an overview of the initial VET system, its responsiveness to labour market needs, and its financing. It also describes problems regarding specific types of continuous education and training (in-house training, management training, training of the unemployed).

■ **Human Resources in the Czech Republic, National Training Fund, IV, 1999.**

This publication contains a description of links among several areas that are usually dealt with separately, i.e. the education system, the current labour market, growing demands for people real skills, and value motivation mechanisms promoting work and profession flexibility. Readiness of the Czech Republic for its accession to the EU is another important aspect. An extensive data annex compares local statistics with statistical sources of the EU and OECD. It also features several specific analytical surveys.

■ **Concept of initial education system from the point of view of the employment policy, 1999.**

This study aims at evaluating links of the Czech system of initial education to the labour market and employment, and proposes to take measures to avoid the growth of school graduate unemployment. It draws on the output of regular research and one-off probes of a number of organisations, on reports and studies describing and evaluating the Czech education system, and on research of graduate placement on the labour market. It also features conclusions of international comparisons.

■ **Research on vocational education and training at the crossroads of transition in Central and Eastern Europe, in: 2nd report on current vocational training research in Europe 1999, forthcoming, CEDEFOP 2000.**

The report provides an analytical overview of the main research in the field of vocational education and training and labour market in eleven countries of transition. The study was initiated by CEDEFOP within the framework of the annual research report in Europe. The background studies for the report in ten countries were supported by the European Training Foundation. The objective of the analysis was to bring about transparency of research achievements in the field of vocational training and labour market, and, in particular, to identify areas of research which had not been sufficiently covered. A set of policy recommendations was provided with the view of further developments in the vocational training research field.

■ **Forecasting education and training needs in transition economies: Lessons from Western European experience, National Observatory, Tauris, Prague 1999.**

The book has been the first outcome of the project *Regular Forecasting of Training Needs: Comparative Analysis, Elaboration and Application of Methodology*. This project aims at elaborating forecasting methodology, applicable not only in relatively stabilised western economies but also in the transitional countries of Central Europe. The two-year project, financed by the EU Leonardo da Vinci programme, compares existing prognostic approaches in the countries of the partnership and beyond. The leader of the project – the Czech National Observatory of Vocational Training and Labour Market – invited an extensive transnational partnership to enrich existing forecasting methods (the Centre for Economic Research and Graduate Education at the Economic Institute of the Czech Republic (CERGE), the Research Centre for Education and the Labour Market of the Netherlands (ROA), the Economic and Social Research Institute of Ireland (ESRI), Quaternaire and the Regional Employment and Training Observatory of Burgundy in France (OREF), and National Observatories of Slovenia and Poland).

- **Strietska-Ilina: Ways of identifying skills for the future: Perspective of a country in transition, in Proceedings of QCA International Research Seminar Meeting the needs of learners, forthcoming, Qualifications and Curriculum Authority, London, 2000.**

The discussion paper presents main surveys and analyses in the area of skill needs identification in the Czech Republic and explains the principle concept of the current project *Regular Forecasting of Training Needs: Comparative Analysis, Elaboration and Application of Methodology*, conducted by the Czech National Observatory.

Annex – Tables and charts

Number of tables and charts correspond to the number of chapter.

Table 1.1-1 Main economic and social indicators Czech Republic 1990-1999

Variable ¹⁾	1991	1993	1995	1997	1998	1999 I-IIQ ²⁾
GDP, constant prices	-11.5	0.6	6.4	1.0	-2.3	-1.9
Employment	-5.5	-1.6	2.6	-1.0	-1.4	
Productivity	-6.4	2.2	3.7	2.0	-0.9	
Industrial output	-21.6	-5.3	9.2	4.5	3.1	
Export, current prices	43.8	21.8	23.2	20.2	17.7	3.7 ²⁾
Import, current prices	18.5	5.4	33.7	13.3	7.9	1.3 ²⁾
Consumer prices	56.6	20.8	9.1	8.5	10.7	2.3 ²⁾
Nominal wages	15.4	25.2	18.5	10.5	9.3	8.3
Real wages	-26.3	3.7	8.6	1.8	-1.3	5.5
	billion USD					
Trade balance	0.8	0.3	-3.6	-4.4	-2.5	
Balance of payments, current account	x	0.4	-1.4	-3.2	-1.9	
Foreign direct investments	0.7	0.6	2.6	1.3	2.5	
Gross debt	x	8.5	16.3	21.4		
Foreign exchange reserves	x	6.2	17.2	17.3	17.0	
State budget balance +/-	x	0.0	0.3	-0.5	-1.0	
	labour force rates					
Activity rate ³⁾	63.6	61.5	61.4	61.1	61.0	60.9
- male activity rate	72.9	71.2	71.4	71.1	70.8	70.4
- female activity rate	55.0	52.6	52.2	51.8	52.0	52.0
Registered unemployment rate ⁴⁾	2.6	3.0	3.0	4.4	7.5	8.4
LFS unemployment rate ⁵⁾	x	3.7	3.6	4.7	7.3	8.4
- male unemployment rate	x	3.0	3.2	3.8	5.7	7.1
-female unemployment rate	x	4.5	4.1	5.7	9.3	10.1

Notes:

- 1) in case of some variables - revised time series
- 2) January - August
- 3) labour force in % of the total population aged 15+, end of the year
- 4) 1995-1997 - annual averages, 1998 - end of the year, 1999 - end of the period
- 5) unemployment rate, end of the period, 1999 - in the last quarter (Labour Force Sample Survey).

Sources: Czech Statistical Office, 1998.

x) Analýza makroekonomického vývoje ČR v roce 1998 a v I. pololetí 1999 (Analysis of macroeconomic development of the Czech Republic in 1998 and I-II Q 1999), Czech Statistical Office, 1999.

Table 1.1-2 Scenarios of GDP annual growth

Indicator	1998	1999	2000-2002			2003-2005		
	Actual	Forecast ^{1/}	Do nothing scenario	Pro growth scenario	Difference	Do nothing scenario	Pro growth scenario	Difference
Average annual growth rates in %, 1995 constant prices								
GDP	-2.3	-1.0	1.6	2.1	+0.5	2.0	5.0	+3.0
Household consumption	-3.0	1.2	1.7	1.4	-0.3	1.9	3.7	+1.8
Government consumption	0.8	3.2	1.0	1.0	0.0	1.2	1.8	+0.6
Gross fixed capital formation	-3.8	-5.7	2.3	2.8	+0.5	3.1	6.0	+2.9
Export incl. Services	10.7	4.2	5.1	6.4	+1.3	5.8	8.3	+2.5
Import incl. Services	7.9	4.0	5.0	5.8	+0.8	5.7	7.4	+1.7
Average annual growth rates in %								
Average nominal wages					-			+0.9
Average real wages ^{2/}	-				-			+0.2
Labour productivity ^{3/}	-				+0.2			+2.0
Consumer prices ^{4/}	10.7	2.2	4.2	4.6	+0.4	3.2	3.9	+0.7
Employment (civil) ^{4/}	-1.4	-2.5	-1.6	-1.3	+0.3	-0.6	0.4	+1.0
Rates in the given period								
Unemployment rate in % of labour force ^{5/}	7.5	9.4	13.0	12.7	-0.3	14.7	10.8	-3.9
Current account balance in % of GDP	-1.9	-1.2	-1.8	-0.8	+1.0	-2.2	+0.7	+2.9
General government budget balance in % of GDP ^{6/}	-1.5	-3.6	-3.2	-2.9	+0.3	-6.8	-4.1	+2.7

- 1/ Model forecast for the current year
2/ Nominal wages deflated by consumer price index
3/ GDP per employed person in constant prices
4/ Annual average
5/ Data as of the end of the year
6/ Revenue from privatisation included

Table 1.3-1 Pro ection of population development

Age	1990 ¹⁾	1995 ¹⁾	2000	2005	2010	1990 ¹⁾	1998 ¹⁾	2000	2005	2010
Europe						Czech Republic				
0-4	48,409	41,133	37,774	37,233	37,652	649	472	451	466	479
5-9	49,628	48,592	41,296	37,825	37,248	687	623	571	452	468
10-14	50,235	49,941	48,846	41,411	37,889	857	656	643	572	454
15-19	51,472	50,703	50,284	48,997	41,509	865	733	682	644	574
20-24	53,138	52,056	51,071	50,423	49,055	688	910	853	685	647
25-29	56,266	53,611	52,330	51,134	50,409	695	775	867	857	690
30-34	56,469	56,422	53,699	52,247	51,010	694	695	691	870	861
35-39	53,570	56,305	56,238	53,451	51,982	817	648	690	692	871
40-44	48,455	53,062	55,769	55,687	52,987	850	746	682	689	692
45-49	39,214	47,601	52,125	54,780	54,817	680	808	794	676	685
50-54	45,245	38,177	46,317	50,693	53,375	524	776	814	780	666
55-59	39,340	43,232	36,690	44,472	48,726	520	584	636	786	755
60-64	39,535	36,789	40,406	34,560	41,918	533	453	473	602	746
65-69	31,667	35,699	33,353	36,646	31,674	506	464	439	434	556
70-74	20,031	27,299	30,617	28,821	31,748	259	409	407	381	382
75-79	19,753	15,835	21,611	24,187	23,024	279	304	326	324	309
80+	19,887	21,787	20,903	23,906	27,232	259	234	249	337	407
Total	722,314	728,244	729,329	726,473	722,255	10,362	10,290	10,268	10,247	10,242
	Europe in %					Czech Republic in %				
0-4	6.7%	5.6%	5.2%	5.1%	5.2%	6.2%	5.9%	4.4%	4.6%	4.7%
5-9	6.9%	6.7%	5.7%	5.2%	5.2%	6.6%	6.0%	5.5%	4.4%	4.6%
10-14	7.0%	6.9%	6.7%	5.7%	5.2%	8.2%	6.4%	6.2%	5.6%	4.5%
15-19	7.1%	7.0%	6.9%	6.7%	5.7%	8.3%	7.1%	6.6%	6.3%	5.6%
20-24	7.4%	7.1%	7.0%	6.9%	6.8%	6.6%	8.8%	8.3%	6.7%	6.3%
25-29	7.8%	7.4%	7.2%	7.0%	7.0%	6.7%	7.5%	8.4%	8.4%	6.8%
30-34	7.8%	7.7%	7.4%	7.2%	7.1%	6.7%	6.7%	6.7%	8.5%	8.4%
35-39	7.4%	7.7%	7.7%	7.4%	7.2%	7.9%	6.3%	6.7%	6.8%	8.5%
40-44	6.7%	7.3%	7.6%	7.7%	7.3%	8.2%	7.2%	6.6%	6.8%	6.8%
45-49	5.4%	6.5%	7.1%	7.5%	7.6%	6.5%	7.8%	7.7%	6.6%	6.7%
50-54	6.3%	5.2%	6.4%	7.0%	7.4%	5.0%	7.5%	7.9%	7.6%	6.5%
55-59	5.4%	5.9%	5.0%	6.1%	6.7%	5.0%	5.7%	6.2%	7.7%	7.4%
60-64	5.5%	5.1%	5.5%	4.8%	5.8%	5.1%	4.4%	4.5%	5.9%	7.3%
65-69	4.4%	4.9%	4.6%	5.0%	4.4%	4.9%	4.5%	4.3%	4.3%	5.5%
70-74	2.8%	3.7%	4.2%	4.0%	4.4%	2.5%	4.0%	4.0%	3.7%	3.7%
75-79	2.7%	2.2%	3.0%	3.3%	3.2%	2.7%	3.0%	3.2%	3.2%	3.0%
80+	2.8%	3.0%	2.9%	3.3%	3.8%	2.5%	2.3%	2.4%	3.3%	4.0%

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Table 1.4-1 Social security and health insurance contribution rates (% of gross wage)

	Employee	Employer	Total
Total social security	8.0	26.0	34.0
Of it:			
- Pension	6.5	19.5	26.0
- Sickness insurance	1.1	3.3	4.4
- Unemployment	0.4	3.2	3.6
Health insurance	4.5	9.0	13.5
Total social security and health insurance	12.5	35.0	47.5

Source: Background Study on Labour Market and Employment in the Czech Republic, CERGE, Prague, 1999.

Table 1.5-1 Economic activity rate

	1993	1994	1995	1996	1997	1998	1999
	Men						
15-19	37.9	37.5	32.9	28.7	25.9	25.5	21.6
20-24	86.2	85.2	85.5	84.9	82.4	80.5	79.4
25-29	96.4	96.6	96.9	96.8	96.4	96.2	96.0
30-34	97.8	97.3	97.7	97.7	97.2	97.9	97.6
35-39	97.3	97.3	97.4	96.9	97.3	97.1	96.4
40-44	96.9	96.5	96.5	96.4	96.3	95.7	96.8
45-49	93.6	94.7	94.3	94.0	94.5	95.0	94.7
50-54	88.3	88.1	88.8	89.0	89.5	89.2	90.2
55-59	71.1	73.0	75.9	77.4	78.0	75.3	78.0
60+	14.9	14.7	14.8	15.7	14.8	13.9	26.4
	Women						
15-19	33.1	32.1	25.5	22.2	19.8	19.6	19.1
20-24	53.8	56.9	59.1	58.2	57.9	60.3	61.3
25-29	64.4	63.6	64.6	61.6	61.7	63.8	65.3
30-34	80.2	80.3	78.5	76.9	77.2	78.2	75.4
35-39	89.8	89.7	89.0	87.4	86.8	86.4	87.3
40-44	91.4	92.0	92.0	91.3	91.6	90.8	92.1
45-49	91.9	91.1	90.7	90.6	90.5	89.6	90.6
50-54	78.5	78.4	79.5	81.2	82.1	81.8	81.7
55-59	26.0	27.7	29.7	33.0	34.6	32.8	32.6
60+	6.0	5.7	5.8	5.7	5.4	5.0	12.8
	Total						
15-19	35.5	34.8	29.2	25.5	22.9	22.6	20.4
20-24	70.4	71.4	72.6	71.9	70.4	70.6	70.6
25-29	80.8	80.5	81.1	79.6	79.4	80.3	81.0
30-34	89.1	89.0	88.3	87.5	87.4	88.3	86.7
35-39	93.6	93.6	93.2	92.2	92.1	91.9	91.9
40-44	94.1	94.3	94.2	93.9	94.0	93.3	94.5
45-49	92.7	92.9	92.5	92.3	92.5	92.3	92.7
50-54	83.2	83.1	84.0	85.0	85.7	85.4	85.9
55-59	47.4	49.2	51.7	54.2	55.3	53.2	54.4
60+	9.6	9.3	9.4	9.7	9.2	8.6	19.1

Source: Labour Force Survey, 3rd Quarter 1999, Czech Statistical Office

**Table 1.5-2 Labour force participation (in thousands)
Czech Republic - 4th quarter 1998**

Age group	Population	Economically active population			Participation in %	Economically inactive population					
	Age 15	Total	Employed	Unemployed		Total	Students, Apprentices	Add. child care leave	In household	Pensioners	Others
Total											
15-19	738.9	183.2	132.7	50.5	24.8	555.8	537.6	2.6	3.1	2.4	10.1
20-24	927.0	653.0	579.4	73.7	70.4	274.0	167.0	52.3	34.8	7.1	12.8
25-29	756.1	607.5	554.7	52.8	80.3	148.6	14.0	76.0	41.4	9.6	7.5
30-34	709.5	625.0	581.1	43.9	88.1	84.5	0.7	39.2	28.3	8.9	7.4
35-39	623.9	572.1	539.3	32.8	91.7	51.8	—	14.2	19.1	11.4	6.9
40-44	755.2	708.4	669.6	38.8	93.8	46.8	—	1.7	12.7	23.7	8.6
45-49	806.7	744.9	706.9	38.0	92.3	61.8	—	—	11.3	38.6	11.7
50-54	792.2	675.6	646.4	29.2	85.3	116.6	—	—	7.4	92.9	15.7
55-59	569.6	303.5	291.9	11.6	53.3	266.1	—	—	3.5	247.3	14.8
60-64	444.0	89.3	85.1	4.2	20.1	354.7	—	—	2.6	341.3	10.6
65 +	1,413.8	70.0	65.9	4.1	5.0	1,343.8	—	—	4.5	1,321.2	17.9
Total 15+	8,537.1	5,232.5	4,852.9	379.6	61.3	3,304.6	720.3	187.2	168.7	2,104.3	124.0
Men											
15-19	378.1	105.0	80.6	24.5	27.8	273.0	266.7	—	—	1.4	4.9
20-24	472.7	376.7	337.8	38.8	79.7	96.1	85.8	—	0.4	4.8	5.0
25-29	386.3	370.9	348.6	22.3	96.0	15.4	8.1	—	—	4.6	2.3
30-34	362.5	354.3	339.9	14.4	97.7	8.2	0.7	—	—	4.9	2.6
35-39	317.2	307.7	295.4	12.3	97.0	9.5	—	—	1.0	5.3	2.7
40-44	380.1	365.8	350.8	15.1	96.3	14.2	—	—	0.7	10.6	2.9
45-49	401.6	380.6	366.1	14.5	94.8	21.0	—	—	0.5	16.8	3.7
50-54	388.6	347.2	335.0	12.2	89.3	41.4	—	—	0.3	36.2	4.5
55-59	273.2	206.4	199.0	7.4	75.6	66.7	—	—	0.6	60.6	5.3
60-64	204.5	56.8	55.0	1.8	27.8	147.7	—	—	—	141.7	5.8
65 +	542.0	45.3	43.3	2.0	8.4	496.8	—	—	—	489.9	6.9
Men 15 +	4,106.8	2,916.9	2,751.5	165.4	71.0	1,189.9	361.7	1.1	3.7	776.9	46.6
Women											
15-19	360.9	78.1	52.1	26.0	21.6	282.7	270.9	2.6	3.1	1.0	5.2
20-24	454.3	276.4	241.5	34.8	60.8	178.0	81.2	52.2	34.4	2.3	7.8
25-29	369.9	236.7	206.1	30.5	64.0	133.2	6.0	75.7	41.2	5.0	5.2
30-34	347.0	270.7	241.2	29.5	78.0	76.3	—	39.2	28.3	4.0	4.7
35-39	306.7	264.4	243.9	20.5	86.2	42.4	—	14.0	18.2	6.0	4.2
40-44	375.1	342.6	318.8	23.7	91.3	32.6	—	1.7	11.9	13.1	5.8
45-49	405.1	364.2	340.8	23.5	89.9	40.9	—	—	10.8	21.8	8.0
50-54	403.6	328.4	311.4	17.0	81.4	75.2	—	—	7.1	56.7	11.2
55-59	296.4	97.1	92.9	4.1	32.7	199.4	—	—	2.9	186.6	9.5
60-64	239.5	32.5	30.1	2.4	13.6	207.0	—	—	2.5	199.6	4.8
65 +	871.7	24.7	22.6	2.1	2.8	847.0	—	—	4.5	831.3	11.1
Women 15+	4,430.3	2,315.7	2,101.4	214.3	52.3	2,114.6	358.6	186.1	165.0	1,327.5	77.4

Source: Labour Force Survey 1998, Czech Statistical Office

Table 1.5-3 Employment structure by branches as of 31 December

Branch of activity by NACE, rev.1	1990 Total	1993 Total	1995 Total	1997 Total	1998 Total	1993/1990 Index in %	1995/1993 Index in %	1997/1995 Index in %	1998/1997 Index in %
Total in thousands	5,387.1	4,773.9	4,939.0	4,971.3	4,792.2	88.6	103.5	100.6	97.5
Total in %	100%	100%	100%	100%	100%				
Agriculture, hunting, forestry, fishing	11.4	6.8	6.0	5.3	5.1	53.1	91.1	89.4	91.9
Total industry	38.1	34.9	32.7	32.0	32.5	81.1	97.1	98.3	98.1
Including: mining and quarrying	9.1	6.3	5.4	4.9	4.6	56.7	83.5	87.7	93.0
Manufacturing	87.1	88.4	89.0	95.1	90.4	82.3	97.8	98.9	98.5
Construction	7.8	9.4	8.8	8.6	7.9	105.7	97.5	98.5	88.1
Trade, repair of motor vehicles and personal and household goods	9.2	12.8	14.6	16.2	16.0	123.6	117.6	111.7	101.6
Hotels and restaurants	1.7	2.4	2.8	3.3	3.2	121.0	123.9	118.0	97.3
Transport, storage and communication	7.1	7.5	7.2	6.9	6.8	93.3	99.5	96.4	95.4
Financial mediation and insurance	0.6	1.4	1.7	1.9	1.8	230.6	121.8	111.4	96.7
Real estate, renting and business activities	7.1	6.4	7.6	7.7	8.1	79.3	123.5	101.6	100.9
Public administration and defence; compulsory social security	2.0	3.0	3.4	3.6	3.7	128.2	118.2	105.7	101.0
Education	6.0	6.8	6.6	6.2	6.3	100.4	100.7	94.4	98.7
Health and social work	5.2	5.5	5.3	5.3	5.4	93.6	100.3	101.1	97.8
Other community, social and personal services	3.7	3.3	3.3	3.0	3.1	77.5	103.4	94.1	96.5

Source: Calculation based on Time Series of Employment Statistics, Czech Statistical Office, 1998 and Statistical Yearbook of the Czech Republic 1999.

Table 1.5-4 Comparison of employment structures to EU

Industrial Branch	CR 1998 %	EU 1997 %	Occupations	CR 1998 %	EU 1997 %
Agriculture, forestry	5.5	5.0	Legislators, managers	6.7	8.0
Manufacturing, mining, energy	31.2	21.7	Researchers and professionals	9.6	12.6
Construction	9.7	7.8	Technicians, teachers, health	17.9	14.4
Trade, repairs	16.7	19.1	Lower administrators	8.1	13.6
Transport, storage, telecommunication	7.8	5.9	Operations in trade and services	12.3	13.3
Finance and insurance	2.0	3.5	Qualified workers in agriculture and forestry	2.2	3.9
Commercial services, R D	5.1	7.6	Craftsmen	21.1	15.9
Public administration, defence	6.6	7.7	Machine operators	12.6	8.7
Education	5.9	6.8	Ancillary and not qualified workers	8.5	9.0
Health and social services	5.5	9.3	Armed forces	1.0	0.6
Other services	3.8	5.6			

Source: Background Study on Labour Market and Employment in the Czech Republic, CERGE, Prague 1999

**Table 1.5-5 Vacancies and job seekers registered at labour offices
(education/qualification structure) number of registered at labour offices to 30.6.1999**

	1999 June							
	Total	Basic and no education	Apprenticeship	Technical without Maturita	Vocational with Maturita	Gymnasium	Technical with Maturita	Tertiary education
Structure of vacancies according to qualification/education requirements								
Total number of vacancies	34,451	8,475	18,096	300	726	289	4,084	2,481
Prague	4,010	771	1,482	177	268	75	669	568
Central Bohemia	4,726	1,551	2,168	39	87	28	579	274
Southern Bohemia	2,642	716	1,444	5	38	33	265	141
Western Bohemia	3,798	964	2,078	14	16	18	499	209
Northern Bohemia	4,695	943	2,680	31	59	3	596	383
Eastern Bohemia	5,293	1,642	2,750	2	68	58	504	269
Southern Moravia	5,823	1,358	3,504	14	127	24	450	346
Northern Moravia	3,464	530	1,990	18	63	50	522	291
Structure of job seekers according to qualification/education requirements								
Total number of job seekers	435,005	130,896	180,115	4,363	19,073	16,339	69,020	15,199
Prague	19,592	4,220	6,571	533	650	1,178	4,651	1,789
Central Bohemia	37,750	11,766	15,515	501	1,399	1,426	6,055	1,088
Southern Bohemia	20,003	5,495	8,264	201	921	781	3,505	836
Western Bohemia	31,453	11,535	12,054	304	1,027	907	4,779	847
Northern Bohemia	73,746	29,896	28,513	603	2,281	1,955	9,275	1,223
Eastern Bohemia	44,122	11,386	18,858	472	2,027	1,853	7,950	1,576
Southern Moravia	87,101	21,334	37,477	816	4,197	3,543	15,921	3,813
Northern Moravia	121,238	35,264	52,863	933	6,571	4,696	16,884	4,027

Source: Ministry of Labour and Social Affairs, database of Employment Services.

Table 1.5-6 Structure of the employment policy (expenditures in th. C)

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Expenditures on employment policy	2,450,270	3,145,028	2,166,077	2,562,588	2,416,637	2,664,493	3,972,035	5,096,712	7,631,216
Passive employment policy	1,677,270	1,423,352	1,416,669	1,844,265	1,781,846	2,106,406	3,420,038	4,193,698	5,709,466
Active employment policy	773,000	1,721,676	749,408	718,323	634,791	558,087	551,995	903,014	1,921,750
Active employment policies									
Jobs for graduates									
created jobs	18,994	25,996	8,178	7,025	5,502	5,094	3,757	9,464	11,131
placed graduates	14,398	21,907	7,380	6,853	5,292	4,971	3,515	9,232	10,945
expenditures	47,740	325,528	245,190	127,053	117,754	100,334	101,759	177,777	304,790
Publicly useful jobs									
created jobs	42,006	67,793	9,547	9,436	5,963	3,612	2,626	8,805	14,800
placed people	33,868	60,370	12,250	9,874	6,603	4,025	2,931	8,178	16,069
expenditures	496,800	968,620	217,855	241,482	163,636	102,427	66,193	201,514	481,915
Socially purposeful jobs									
created jobs	20,077	29,028	12,095	13,432	11,446	9,838	11,760	11,024	15,445
placed people	18,414	25,503	11,760	12,927	10,821	10,259	11,888	11,905	15,804
expenditures	78,390	223,027	159,605	183,741	189,470	199,069	224,926	280,828	525,563
Retraining									
newly acquired	7,967	17,590	12,095	14,814	13,454	12,107	11,448	16,381	22,938
finished	3,662	18,435	12,521	15,167	14,034	12,133	11,918	15,488	
expenditures	40,000	97,602	73,359	103,248	100,091	91,727	90,418	147,325	236,232
Special workplaces for disabled									
created jobs	n.a.	1,415	1,005	851	824	622	533	920	1,059
placed people	n.a.	1,308	947	748	724	562	493	853	951
expenditures	7,088	55,699*	48,667*	61,630*	26,510	17,683	15,881	50,505	165,836
Operational expenditures	n.a.	n.a.	n.a.	n.a.	33,351	39,749	44,005	76,533	
Other expenditures	102,656	51,200	4,732	1,169	3,979	7,099	8,814	28,492	

Source: Ministry of Labour and Social Affairs

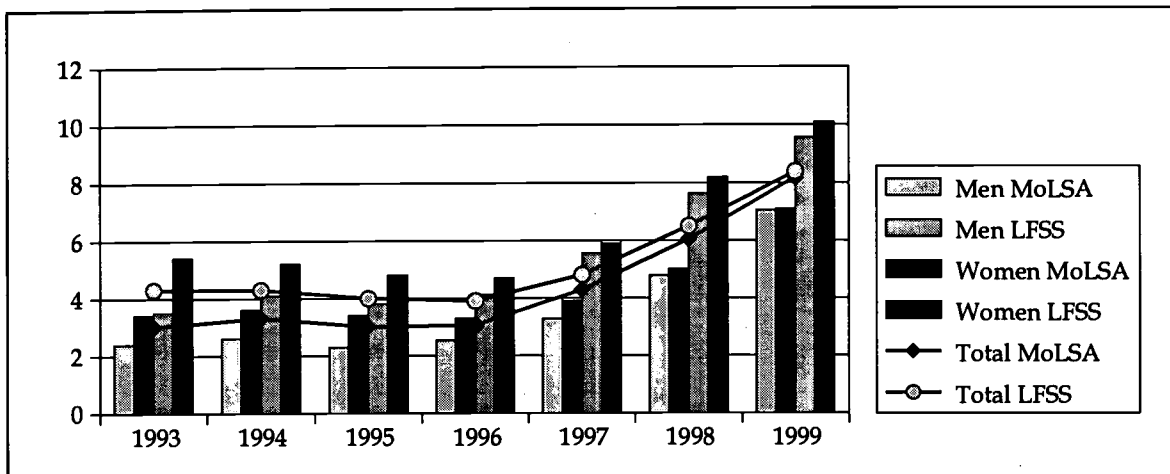
*Expenditures include the means for operation of protected workplaces for disabled individuals

NOTES:

Active employment policy includes publicly useful jobs, socially purposeful jobs, jobs for graduates, individuals in retraining and special workplaces for disabled.

Passive employment policy includes social assistance to those who seek jobs.

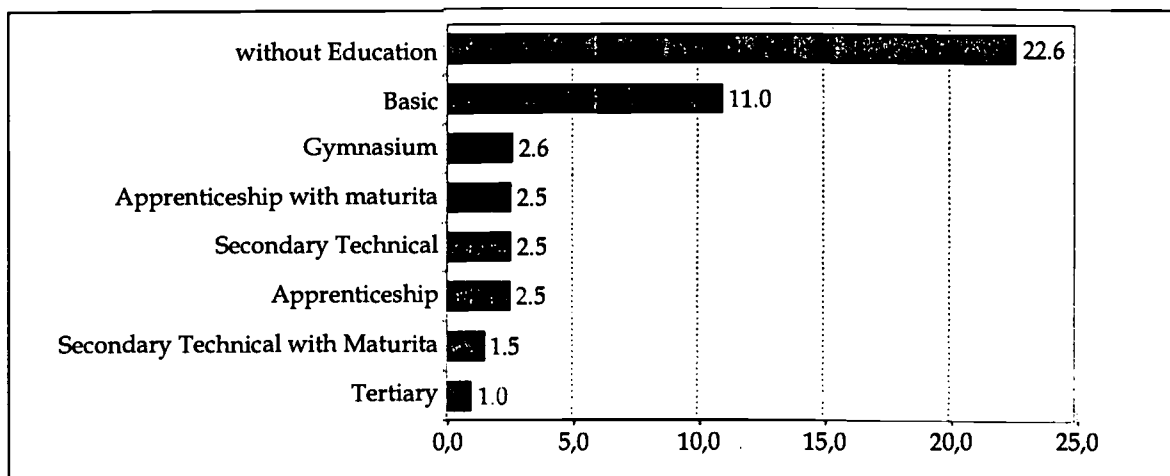
Chart 1.5-1 Development of the unemployment rate measured by Labour Force Survey and Ministry of Labour and Social Affairs methods



Note:

- 1) Labour Force Surveys produced by the Czech Statistical Office
- 2) Statistics produced by the Labour Offices and the Ministry of Labour and Social Affairs

Chart 1.5-2 Long-term unemployment



Source: Czech Statistical Office, 1998

Table 2.2-1 Number of regular students of secondary schools

School year	Number of students	Branches providing complete upper secondary education (ISCED 3A)	Branches providing upper secondary education (ISCED 3C)	Follow-up courses (ISCED 4A following ISCED 3C)
1989/90	569,655	293,253	272,719	—
1990/91	577,967	307,057	266,048	—
1991/92	565,011	303,404	253,424	1,275
1992/93	572,407	311,584	242,756	2,985
1993/94	596,934	329,621	240,959	6,058
1994/95	628,881	358,584	229,958	15,965
1995/96	639,965	374,948	207,553	30,747
1996/97	514,811	320,941	133,642	48,275
1997/98	486,435	322,884	114,565	44,634
1998/99	451,070	316,973	100,043	30,951

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998.

Table 2.2-2 Numbers of regular students of tertiary (post-secondary) education level

School year	Number of students total	Post-secondary study (ISCED 4A 5B)	Higher professional schools (ISCED 5B)	Higher education institutions (ISCED 5A,6)
1989/90	92,853	3,683	—	89,171
1990/91	100,533	4,154	—	96,379
1991/92	100,660	5,937	—	94,723
1992/93	112,844	11,060	1,271	100,513
1993/94	125,182	15,146	2,161	107,875
1994/95	137,224	17,004	4,332	115,888
1995/96	146,989	17,434	6,095	123,460
1996/97	158,364	8,307	12,294	136,763
1997/98	167,546	1,020	21,429	145,097
1998/99	178,546	—	26,827	151,719

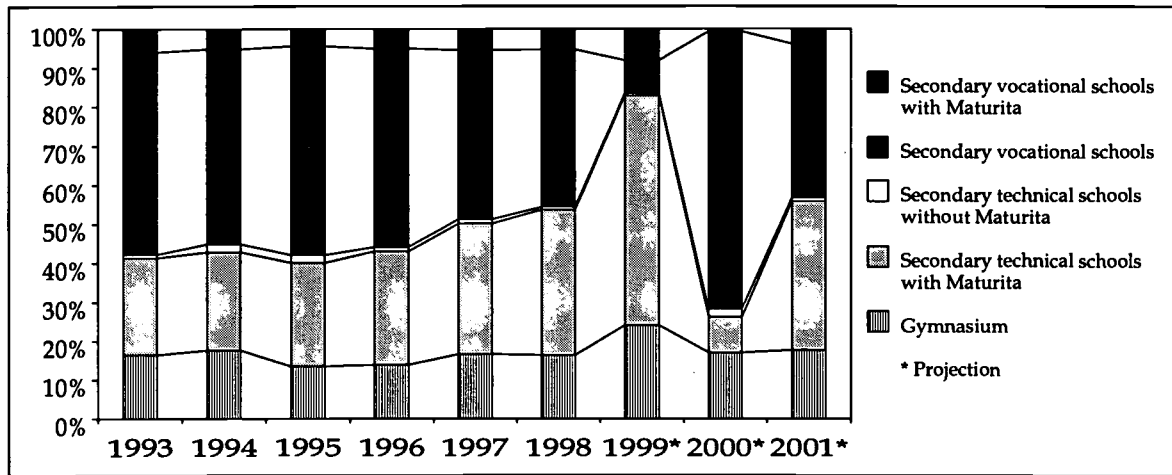
Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998

Table 2.2-3 Participation in education at the upper secondary level (ISCED3) in 1993-1998

	1993/1994	1994/1995	1995/1996	1996/1997	1997/1998
General education	87,087	85,933	94,749	76,000	89,300
Male	33,820	33,669	38,894	30,993	36,900
Female	53,267	52,264	55,855	45,007	52,400
Sec. VET with Maturita Exam	237,688	277,013	316,557	287,600	287,300
Male	106,273	125,448	143,907	133,224	133,600
Female	131,415	151,565	172,650	154,376	152,700
Sec. VET with qualification	242,409	231,602	241,582	151,416	126,200
Male	145,450	136,358	144,656	91,245	79,800
Female	96,959	95,244	96,926	60,171	46,400
Total Sec. Education (ISCED 3)	582,797	612,540	652,888	515,016	502,800
Male	295,160	305,948	327,457	255,462	250,300
Female	287,637	306,592	325,431	259,554	252,500

Source: Key Indicators, Czech National Observatory, 1997, 1998.

Chart 2.2-1 Structure of secondary school graduates



Source: Human Resources in the Czech Republic, 1999

Table 3.1-1 Adult part-time students of upper secondary schools

School year	Total number of adult students	Branches providing ISCED 3A	Branches providing ISCED 3C	Follow-up courses (ISCED 4A after 3C)	Higher professional education */ (ISCED 5B)
1991/92	30,799	12,255	2,612	15,823	119
1992/93	26,841	8,346	2,145	15,930	420
1993/94	25,958	6,269	1,450	17,549	690
1994/95	31,965	6,173	1,894	23,292	2,606
1995/96	39,059	7,032	1,903	27,807	317
1996/97	41,850	9,705	1,660	30,395	90
1997/98	44,912	10,389	1,318	33,122	83
1998/98	38,154	10,098	1,134	26,802	120

*/ Education provided by conservatories and by experimentally operating higher professional schools

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1988.

Table 3.1-2 Adult part-time students in tertiary education programmes

School year	Total number of adult students	Post-secondary studies (ISCED 4A or 5B)	Higher professional schools (ISCED 5B)	Higher education institutions (ISCED 5A, 6)
1989/90	20,850	—	—	20,850
1990/91	23,202	4,509	—	18,693
1991/92	18,781	4,285	—	14,496
1992/93	16,361	5,074	120	11,167
1993/94	16,784	5,540	277	10,967
1994/95	16,441	5,448	299	10,694
1995/96	18,694	5,061	207	13,426
1996/97	20,199	2,723	1,637	15,839
1997/98	20,261	899	2,097	17,265
1998/99	21,556	—	2,739	18,817

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998.

Table 7.1 Public spending on education and its relation to GDP in 1989-1999

Year	Public spending on education (mill. C K)	Ratio of education expenditure to GDP (%)
1998	21,720	4.09
1990	24,166	4.12
1991	31,936	4.17
1992	39,239	4.52
1993	53,622	5.21
1994	63,225	4.82
1995	71,862	4.67
1996	82,583	5.21
1997	78,069	4.64
1998*	61,723	—
1999*	68,872	—

*Only Ministry of Education, Youth and Sport

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998



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