

GUIDELINES

Socially-Sensitive Labour force Restructuring in South Eastern Europe

CZECH REPUBLIC

Labour Force Restructuring in the Steel Industry

Case Study

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International Labour Office

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1. Introduction

The Czech economy, measured in terms of GDP, has grown continuously since 2002. In 2006 it reached its highest inter-annual growth rate hitherto, at 6.1 per cent. Manufacturing industry (vehicles, electrical and optical appliances, production of base metal, metallurgical and iron articles) is mainly responsible for GDP growth on the supply side. GDP development in 2009 is difficult to predict because of the current financial crisis. However, it has been estimated that GDP growth will rather slow to 3 per cent than fall into recession.

Industrial production has been growing at a high rate since 2000, due in particular to the continuous flow of direct foreign investments in the automotive industry and related production. Employment growth in industry is also linked to this. Labour productivity growth exceeds average nominal wage growth, which has resulted in a fall in nominal unit wage costs. According to the Ministry of Industry and Trade industrial production should grow by 8.5 per cent in 2008.

The unemployment rate has been falling constantly in the last eight years; in 2008 it reached its lowest level within the period under consideration. It is around 5 per cent, owing to the rise in employment in the secondary sector of the economy (industry, construction). The number of unemployed people registered at employment offices for more than 12 months (that is, the long-term unemployed) grew constantly until 2003 (with the exception of a temporary decrease at the end of 2001). In 2004 and 2005 the number of job applicants stabilised and since then has been falling.

1.1 Position of the Steel Industry in the Czech Economy

Metallurgy is a traditional industry in the Czech Republic, and it has continued to reinforce its position in Czech manufacturing (the engineering and building industries are the most important domestic consumers) due to the development of related branches in recent years. This industry is characterised by high materials and energy consumption despite continuous implementation of new manufacturing technology and modernisation. The steel industry is a significant polluter and so activities in this field are strongly restricted by legislation, primarily the system of Integrated Prevention and Pollution Control (IPPC), Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and the Emissions Trading Scheme

(ETS). Another feature of the steel industry is its dependence on raw materials, which are generally imported from abroad.

Metallurgy is an important sector of the economy linking a range of other significant industries (mainly mechanical engineering, the automotive industry and the building industry). The industry is dependent on raw material imports (for example, iron ore and steel for raw iron production) and primary metals for further processing in the non-ferrous metals and foundry industry. Despite the introduction of assistance programmes in connection with steel industry restructuring average revenues from sales of own products and services from 2000 to 2005 amounted to 5.9 per cent of GDP, with a slight 0.3 per cent decline of the industry share in general employment.

Table 1
Metallurgy sector, various indicators, Czech Republic, 2000–2005 (%)

Indicator	2000	2001	2002	2003	2004	2005	Median
Revenues from sale of own products and services (% GDP)	5.89	5.88	5.90	5.01	5.53	7.47	7.21
Added value as % of GDP	1.34	1.33	1.07	1.25	1.68	1.41	1.33
Share in general employment	1.32	1.55	1.54	1.37	1.28	1.26	1.21
Share in exports	5.92	6.05	5.80	5.43	5.58	6.32	6.24
Share in imports	6.95	7.16	6.73	6.47	6.41	7.57	8.02

Source: Czech Statistical Office.

1.2 Historical Context

Metallurgy and the iron industry are traditional Czech industries with a rich history. For example, the Mannesmanngesellschaft Company in Chomutov was founded as early as 1887 and led the world in adopting the new technology of cold seamless tube rolling some years later. The most important companies in this industry at the turn of the century included Banská a Hutní Company (Mining and Metallurgical Company), Vitkovicke zelezarny (Vitkovice Metalworks) and Prazska zelezarska (Prague Iron Company). Metallurgy developed successfully even between the two world wars, as well as in the post-war period.

A significant modern milestone that influenced the further development of the steel industry was the privatisation and fundamental restructuring of enterprises after 1989. The first post-communist government promoted the creation of three holding companies and their subsequent privatisation. In 1992, however, the government changed and this project was not realised. In 1994 the voucher privatisation of companies' assets (limited to about 30 per cent) took place, with the state retaining a controlling interest. However, voucher privatisation did not satisfy the urgent need for investment, which gave rise to serious economic problems in some prominent companies (for example, POLDI OCEL, s.r.o. and Valcovny trub Chomutov, a.s.).

Since the beginning of the 1990s the metallurgical industry has experienced fundamental changes. The transition from a centrally planned to a free market economy put pressure on Czech metallurgical companies, which were compelled to modernise their production, implement new production and sales methods, strongly increase labour productivity and reduce the number of employees, all within a short time in order to be able to stand up to foreign competitors (in addition, the industry suffered from overcapacity). Government decisions regarding privatisation taken in the first half of the 1990s led to a significant deterioration in their economic situation. Consequently, the government decided to help this industry. After negotiations with the EU, the Programme for Restructuring the Czech Steel Industry was adopted in 2001. It focused on the rationalisation of the current production capacities of steel companies and ways of making them more effective (there was also a supplementary social programme aimed at ameliorating the situation of redundant workers). Restructuring was completed in December 2006 when certain steel companies received state economic aid worth CZK 8.3 billion. Today the field is regarded as stabilised, with the most important companies having a powerful strategic owner.

The Programme for Restructuring the Czech Steel Industry, approved by the European Union in 2002, created a favourable environment for incoming foreign investors. Investment in this industry largely involved direct foreign investments in large-sized enterprises. For example, in 2003 Nová Huť a.s. was bought by LNM Holdings N.V. (now ArcelorMittal Ostrava a.s.), and in 2005 the last Czech state metallurgical enterprise Vítkovice Steel a.s. was bought by Mastercrocft Ltd, whose sole owner is the Evraz Group S.A.

1.3 Development of Production in the Czech Steel and Foundry Industry

Due to the character of its production, the metallurgical industry plays an important role among the processing industries in the Czech Republic. The Ministry of Industry and Trade estimates that one job created in this industry is linked to three or four jobs in related industries. Engineering and civil engineering are the main customers of metallurgical and foundry products. Development trends in the Czech metallurgical industry are similar to those in many advanced industrialised countries (though there is some delay in comparison with Western Europe). In recent years there has been a global transition from the supply of commodity-type products to those with higher added value. At the same time, there has been a consolidation of production capacities and market concentration. Another trend is the development of technological partnerships. In the case of the Czech Republic this trend is visible in relations between the metallurgical industry and the automotive industry.

In the last few years annual metallurgical production in the Czech Republic has averaged 6–7 million tonnes of raw steel, approximately 15 per cent of German production and 25 per cent of that of Italy, to mention two of the biggest steel producers in Europe, according to the statistics of Eurofer, the European Association. In terms of the former four ‘Visegrad countries’

Poland is the biggest steel producer, at 10 million tonnes and 10 per cent cumulative growth in the years 2003–2006 (that is, the Polish share of total steel production in the former Visegrad countries in 2003–2006 was 41 per cent, compared to 29.3 per cent for the Czech Republic. Hungary is the smallest producer, at more than 2 million tonnes of steel produced in 2006, an 8.8 per cent share in the total production of the Visegrad countries).

In the coming years, production in the industry will be influenced mainly by the internal consolidation of individual steel companies, the outcome of their negotiations with suppliers of raw materials and energy, on the one hand, and with their main customers on the other, as well as by increasing environmental requirements directed towards reducing pollution. More and more producers will change their strategy from maximising production on the basis of existing capacities and prices to maximising profits through synergy effects coming from the integration of production into chains focused on higher added value products.

1.4 Economic Situation

In 2000 sales of own products and services in the metallurgical industry amounted to CZK 128.7 billion, rising to CZK 214.7 billion in 2005. At the same time, there was an increase in metallurgy's share in the processing industries from 7.2 per cent in 2000 to 7.8 per cent in 2005. The results recorded in the metallurgical industry during this period exhibit average annual growth dynamics of 10.8 per cent. There was 16.3 per cent average year-on-year growth of sales per employee, which roughly doubled the growth in the processing industry as a whole.

The accumulated added value in the industry was CZK 42 billion in 2005, an increase of CZK 12.7 billion compared to 2000. Average annual growth of this indicator was 7.5 per cent, that is, 0.6 per cent higher than in the processing industries as a whole. The added value per employee was CZK 397,700 in 2000 in comparison to CZK 727,000 in 2005 (12.8 per cent annual growth).

In the period 2000–2005 there was still a tendency to create large corporations in the metallurgical and foundry industry (mainly to make it easier to weather sales fluctuations in the global market). At the other end of the industry were locally oriented small and medium-sized companies. The bulk of the accumulated added value was accounted for by companies with 1,000 and more employees, however: 62.6 per cent from 2000 to 2005, with 8.2 per cent average annual growth. In the Czech Republic 85 per cent of metallurgical production is concentrated in three dominant corporations: Třinecké železářny a.s., Vítkovice Steel a.s. and ArcelorMittal Ostrava a.s., all located in two districts of Moravia-Silesia.

In 2005 there were 57,700 employees in the sector, compared with 73,300 in 2000, a 4.8 per cent annual decrease. Structured according to size of company, 47.8 per cent of employees worked in companies with 1,000 employees or over in 2005 compared with 58.7 per cent in 2000 (that is, 27,600 employees in 2005 compared to 43,300 in 2000, an 8.6 per cent annual decrease).

1.5 Foreign Investment

The first foreign investors entered the steel industry sector in the first half of the 1990s. The sale of Nová Huť a.s. in 2003 – now ArcelorMittal Steel Ostrava a.s. – was one of the most important transactions in recent years. Two years later the sale of Vítkovice Steel a.s. to Mastercraft, part of Russian Group Evraz, took place.

1.6 Steel Enterprises and Their Location

In the Czech Republic, production in this sector is regionally concentrated; more than *three quarters of production capacities are found in the Ostrava Region (Moravian-Silesian Region)*. The three largest producers – ArcelorMittal Ostrava, Třinecké Železářny and Vítkovice Steel – account for about 85 per cent of the whole.

2. The Events that Initiated Restructuring

The restructuring of the Czech steel industry is a long-lasting process which started in the mid-1990s. Privatisation without the necessary restructuring caused many steel enterprises serious economic difficulties.

In drawing a comparison with the advanced European countries, the starting conditions for the Czech steel industry were as follows:

- lower level of technology in manufacturing, despite partial modernisation in some enterprises;
- a high proportion of steel melted in oxygen converters (85 per cent compared with 65 per cent in the EU);
- an extremely low proportion of steel melted in electric arc furnaces (10 per cent compared with 35 per cent in the EU);
- a lower proportion of continuous casting steel (62.6 per cent compared with 85 per cent in the EU), entailing a lower proportion of out-of-furnace super refining;
- an extremely undesirable ratio between long and flat products (long products: 62 per cent compared with 30–40 per cent in the EU);
- a low proportion of alloy steel (8 per cent compared with 18 per cent in the EU);
- a low proportion of high quality and progressive steel products, implying a considerable difference between the prices of Czech products and those of its competitors;
- low average price of inputs in particular product portfolios caused by a high proportion of lower quality steel compared with competitors (this applies to particular product lines);
- low technical level of manufacturing platform entailing lower labour productivity.

Nevertheless, the Czech metallurgical industry was able not only to survive but also to modernise in the 1990s (for example, the share of continuous casting steel increased from 4.96 per cent in 1990 to 62.6 per cent in 1998). Some negative effects on the environment could also be eliminated.

One advantage of the Czech metallurgical industry is the high level of material knowledge applied to new products and manufacturing technologies. However, the cost of technological advancement was beyond the financial capabilities of the industry and so the planned development did not take place. The industry's survival and – limited – modernisation were made possible by, among other things, the following factors:

- Czech currency depreciation related to convertible currencies;
- lower energy and transport prices compared with the EU;
- different level of tax depreciation of metallurgical machinery compared with the EU;
- low share of personnel costs related to total costs;
- low prices of iron ore from Ukraine and Russia.

Unfortunately, these factors were temporary. As a result, it was necessary to reduce total manufacturing costs and to increase labour productivity. This could not be done without an extensive and expensive programme of reconstructing and modernisation of the manufacturing and product platform. The Czech Republic, as a continental country with poor access to water-borne transport and lacking in the raw materials (except for black coal and limestone) needed for the charging stock used for manufacturing raw iron, had to reduce the share of steel manufactured in the complete metallurgical cycle to the minimal possible volume in accordance with the quality standards of particular metallurgical products.

The Czech Republic had to apply to the European Commission for an exception from the Association Agreement in order to be able to grant more extensive sectoral assistance. Consequently, in 1999 a marketing study on the volume development and consumption of steel products by 2010 was prepared and changes in the manufacturing platform were proposed (shutting down of some manufacturing capacity, technological modernisation, redundancies, and so on). The total cost of restructuring was estimated at CZK 82 billion. Nevertheless, the global slump in demand for steel products, alongside other events that affected domestic producers, necessitated a re-evaluation of the study (resulting in the reduction of the originally estimated cost to CZK 72 billion). The Czech Steel Industry Restructuring Programme was finally adopted by the government in the form of Government Decree No. 840/2001.

Consequently, in October 2001 negotiations were held regarding privatisation and restructuring in compliance with the above-mentioned Government Decree. It was attended by Commissioners Monti and Liikanen on one side and by Czech Deputy Prime Minister and the Minister for Industry and Trade on the other. The outcome was the continuation of the search for a strategic investor and the detailed working out of the Restructuring Programme. In October 2002 the Additional Protocol to Protocol No. 2 of the European Agreement was signed establishing association between the Czech Republic and the European Communities. The Additional Protocol lay down the legislative framework for adopting the derogation for the Czech Republic concerning public assistance in the steel sector by the Council of Ministers. This was to last for a maximum of six years. The Additional Protocol includes obligations

for approval of the derogation, namely the presentation of the Steel Industry Restructuring Programme and the individual business plans of particular enterprises to the European Commission. The derogation for the Czech Republic concerning public assistance for the steel industry was adopted by the Council of Ministers in December 2002. After approval by the European Commission the objectives of the Czech steel industry were as follows:

- metallurgical manufacturing should amount to 6 million tonnes of steel per year after the elimination of redundant capacities in the metallurgical cycle as a whole;
- the share of flat products should be increased, as well as production in response to domestic demand;
- rationalisation of all activities, leading to a significant reduction in the number of employees (the aim was to reduce the number of employees to 8,500 in basic metallurgical manufacturing, corresponding to productivity of approximately 700 tonnes of steel per employee).

Restructuring had been completed by the end of 2006. From 1997 to 2003 public assistance in the amount of CZK 8.3 billion was provided to selected steel enterprises. Public assistance was cut after EU accession in 2004 (the mandatory limits of the maximum possible amount of public assistance laid down in Protocol No. 2 of the Association Agreement between the Czech Republic and the EU concerning restructuring of the Czech steel industry had been reached).

2.1 Employment and Restructuring

Since 1975 the development of employment in the Czech steel industry has been similar to that in western European countries. In 1979, the decline in productivity was halted and started to increase again in both the Czech Republic and the EU. The decline in production and the reduction of the workforce in the metallurgical industry was slightly higher in the Czech Republic than in western European countries. It corresponds to overproduction in the metallurgical industry during the period of central planning. The first period of decline in metallurgical production – 1990–93 – was not marked by serious social problems in the Czech Republic as the developing services and rising private sector (small and medium-sized enterprises) absorbed former steel workers. Social problems emerged in the second period of steel industry restructuring when the effects of modernisation began to emerge.

Table 2

Decline in employment in the Czech steel industry

	1989	1990	1992	1995	1998	1999	2000	2001	2002	2005	2010
Total employment	136,609	132,251	104,275	77,101	58,447	51,237	43,499	30,555	29,750	26,600	23,690

Source: Hutnictví železa, a.s. (2002).

Due to the high concentration of the Czech steel industry in Moravia–Silesia it is evident that restructuring and its social effects had a regional impact.

2.2 The Labour Market in the Heart of the Steel Industry – Moravian–Silesian Region

Moravia-Silesia is located in the most eastern part of the Czech Republic, about 300 kilometres from the capital. The region benefits from its location, bordering on three states in the centre of Europe, and close to Vienna, Upper Silesia in Poland and Bratislava. Regional actors take advantage of the importance of the location by engaging in networking activities in Moravia-Silesia, Žilina Region and Województwa Śląskiego. The aim is to create a major European centre.

Moravia-Silesia has a population of 1,249,897 (31 March 2008). Most inhabitants live in the Ostrava City district (336,811). The GDP of Moravia-Silesia is CZK 337.9 billion. In total 195,551 natural persons, 20,121 companies, 1,400 cooperative societies and 50 state enterprises are economically active in the region. There are 23 industrial zones covering 1,080 hectares. 5,536 foreign companies are present in Moravia-Silesia, mostly from Slovenia (24.8 per cent), Poland (18.5 per cent) and Germany (14.5 per cent).

Moravia-Silesia is the most populous region of the Czech Republic; there are almost 685,000 people of working age. Average unemployment as of 31 October 2008 was 7.7 per cent compared with 5.2 per cent nationally. Currently (2008), there are about 50,000 registered job seekers. Unemployment in the implementation period of the Steel Industry Restructuring Programme is presented in Table 3.

Table 3
Unemployment rate, 2000–2007 (%)

	Moravia-Silesia	Czech Republic
2000	15.1	9.0
2001	14.9	8.5
2002	15.3	9.2
2003	16.4	9.9
2004	16.2	9.2
2005	14.5	8.9
2006	12.5	7.6
2007	9.6	4.9

Source: Department of Labour and Employment.

The labour market in Moravia-Silesia has been the most problematic in the Czech Republic for many years. At the beginning of 2002 the unemployment rate was about 15.6 per cent and almost 98,000 people were registered at Employment Offices (representing 20 per cent of total unemployed in the Czech Republic). In 2004 the number of unemployed peaked at 110,000.

The number of long-term unemployed increased rapidly – amounting to two thirds of the total – with more than a quarter being unemployed for more than two years. *Employment rate growth was unsatisfactory and redundancies among steel workers might have led to social tensions in the period before 2006.*

The structure of the economy was unfavourable, partly determined by historical developments. In the 1980s, the region registered the highest volume of heavy industry manufacturing in the Czech Republic. There was marked sectoral concentration (iron ore extraction, steel industry and heavy machinery), which from the beginning of the transformation led to scaling back and restructuring. Adverse developments in these companies negatively influenced the small and medium-sized enterprises that were their subcontractors. In 1999, the share of private entrepreneurs in the region was the lowest in the Czech Republic. The dominant sector of the region was industry. *Since 1993 the employment rate in industry has declined by more than 5 percentage points a year, the largest decreases being in mining, metal processing, chemicals, textiles and engineering.* The largest employment increase was registered in commerce, banking, public service, education, building and hotels and catering.

Table 4
Employment in Moravia-Silesia by sector (%)

Sector	1993	1994	1995	1996	1997	1998	2000
Agriculture, hunting, forestry and fishery	4.8	3.9	4.0	4.2	3.9	3.4	2.7
Industry	43.9	40.8	40.1	39.8	39.7	38.5	35.8
Building	7.9	7.8	8.1	8.4	7.7	8.6	8.0
Commerce, repair of motor vehicles and consumer goods	10.2	12.3	12.1	11.9	12.6	12.4	12.9
Hotels and accommodation	2.6	2.4	2.8	2.8	3.0	3.2	2.9
Transport, storage and communication	7.9	6.7	7.2	7.6	7.6	7.7	8.3
Banking and insurance	0.9	1.4	1.1	1.3	1.3	1.8	1.9
Real estate, renting, services, research and development	3.1	4.0	4.0	3.6	3.9	3.5	3.7
Public service, defence, social security	3.7	4.2	4.3	4.9	4.8	5.0	6.7
Education	5.6	6.8	6.9	6.3	6.7	6.7	6.4
Health service, veterinary and social activities	5.4	5.7	6.1	6.0	5.7	5.4	6.9
Other public, social and personal services	4.0	3.9	3.2	3.2	3.0	3.7	3.6
Others (unspecified)	—	0.0	0.0	0.0	0.1	0.1	0.2

Source: Czech Statistical Office.

Because of the poor conditions, the regional labour market was characterised by substantial registered long-term unemployment. For instance, in the first half of 2001, 45,802 job seekers were registered in Employment Offices; 50,205 persons were made redundant, 36,739 (73.2 per cent) of whom got a job. In addition to the revival of small and medium entrepreneurship,

the role of Employment Offices was very important in mediating directly with employers, as well as in implementing active employment policy. The Employment Offices emphasised retraining, not only because it improved applicants' employability, but also because it activated them. The retraining of current employees was a means of both preventing unemployment and improving employees' labour market flexibility if they were made redundant.

The Ministry of Industry and Trade implemented a complex programme to avoid social tensions, based on Government Decree No. 310/2000. Former steel workers received a pay-off equalling 10 times their monthly wage. The Employment Agencies Programme also played a major role in providing outplacement services for former steel workers from 2001 to 2006.

2.3 State Intervention

Metallurgy has always been a strategic sector in manufacturing industry in the Czech Republic. The government has therefore always been concerned with coordination of its development. The metallurgical industry developed in particular after the Second World War. In the end, the sheer size of the industry proved an obstacle to modernisation.

The development of the metallurgical industry was directly connected with the steady increase in steel production under central planning. While most Western European countries reacted to the energy crisis by changing the structure of the economy, introducing energy saving methods in manufacturing, steel manufacturing was increased by one third in the 1970s and 1980s in Czechoslovakia. This caused an increase in the volume of imported iron ore, more intense coal mining and more detrimental effects on the environment. The commencement of socio-economic change in 1989 did not affect the metallurgical industry right away. Difficulties started to emerge when enterprises had to face market competition in the first half of 1991. Enterprises were forced to modernise manufacturing, implement new manufacturing methods and sales techniques, significantly increase labour productivity and reduce the number of employees in a relatively short period of time in order to become competitive in markets abroad.

The first study dealing with restructuring of the Czech steel industry was drafted in 1992 but was never implemented due to a number of deficiencies. The draft dealt with the Czech steel industry as a whole and recommended the creation of three holding companies by type of product which would later be privatised (the total cost of restructuring was estimated at CZK 80 billion and the number of employees was supposed to be reduced to 79,000). The 1992 election brought a change of government and the new regime introduced voucher privatisation. The proposed holding companies were not established and part of the stock of steel enterprises was included in the privatisation process on condition that the government retained a controlling share until restructuring had been completed.

Privatisation put many companies into serious economic difficulties in the first half of the 1990s (the only exception was Trinecke zelezarny a.s., the most modern company in the region and

not in need of major investment). The government and the National Property Fund intervened only to guarantee commercial credits used in the building of three facilities for continuous steel casting. A specific project that affected only a few of those in the sector was the Accompanying Social Programme for steel industry restructuring. The aim of the project, adopted by the government in 2000, was to alleviate the negative effects of Czech steel industry restructuring on former steel workers.

According to the ninth evaluation report of the Ministry of Industry and Trade a total of CZK 1.1 billion was spent between 2000 and 2006 in order to meet the needs of the steel enterprises to provide assistance to redundant employees. A considerable number of those made redundant were between one and five years away from retirement (61 per cent) and 7.8 per cent found a job thanks to the programme.

The Employment Agencies Programme made a major contribution to dealing with the problems of former steel workers and preparing them for 'life beyond the steel company'. It covered the whole territory of Moravia-Silesia. A unique partnership developed in which a network of company employment agencies was formed in cooperation with the Regional Employment Agency. The REA was created and run by RPIC-ViP, a consultancy and training company. This company operates in the labour market independently of the steel companies and provided a link between steel enterprises and the key actors in the region – employment offices, employers, educators, and so on. The regional partnership provided a wide range of services for thousands of people to help them to find a job.

Other instruments for dealing with the effects of steel industry restructuring on society and employment were included in the START Programme for former steel workers who wanted to start their own businesses. It provided 290 interest-free loans in the amount of CZK 109 million in 2006, according to the Ministry of Industry and Trade. More than two thirds of loans were provided to former steel workers looking to set up on their own. The regional development programmes were another source of development support for new work opportunities in regions with restructuring problems.

The Czech steel industry restructuring programme finished on 31 December 2006, after which support for the sector would be in conflict with the Association Agreement between the Czech Republic and the EU. Sustainable development for steel enterprises henceforth had to be achieved without public support.

3. Results of Sectoral Restructuring

Positive economic and productivity development in the Czech steel sector are due to the national restructuring programme. This programme's objective was efficiency in the utilisation of resources.

The transformation and privatisation of steel companies increased the transparency of the restructuring programme, as well as competitiveness, mainly in the case of the three major steel companies that obtained state subsidies.

The strong tradition of the steel industry in the Czech Republic and access to EU markets strongly favour the future prosperity of this sector. Restructuring programmes and business plans can provide opportunities to focus on necessary improvements and strengthen output performance, so making it easier to weather economic downturns.

Measures directed towards avoiding the negative social and employment impact of restructuring helped preserve social consensus in critical regions in which the steel industry was a major employer. Steel companies were able, in accordance with the provisions of Protocol No. 2 of the Accession Agreement on reducing industrial capacity, to keep the number of redundancies to a minimum, so limiting social tensions.

The implementation of more than 40 R&D projects was another key element of the Programme, leading to improvements in the production quality, efficiency and viability of the whole sector.

It must be emphasised that in future public subsidies for the steel industry will be in conflict with the EU Accession Agreement. The sustained viability of the steel companies must therefore be achieved without them. Henceforth the main factors of efficiency will be the development of the steel market and a focus on investment in products with higher added value, as well as meeting the requirements of environmental legislation.

3.1 Employment

Table 5 compares the original aims of the restructuring programme as regards redundancies with the number of employees actually made redundant by 2006, when the Programme ended.

Table 5
Reduction of employees in the steel industry, Czech Republic, 2001–2006

	2001	2002	2003	2004	2005	2006
Total (according to the Programme of August 2001)	38,549	31,060	29,000	28,000	—	—
Total (according to the Programme of December 2002)	38,549	29,535	28,700	26,000	25,600	24,900
Actual number	38,549	29,500	28,250	27,125	25,026	23,780

Source: Czech Statistical Office.

3.2 Labour Productivity

Labour productivity, whose development is presented in Table 6, is a fundamental factor in the metallurgical companies' vitality and a determinant of revenue development in the branch.

Table 6
Labour productivity by level of production, Czech Republic, 2003–2006
(metric tonnes of steel/employee)

	2003	2004	2005	2006
Production	532	641	605	700

Source: Czech Statistical Office.

3.3 Metallurgical Production

Seven million metric tonnes of steel were produced in 2004, 6.2 million metric tonnes in 2005 and approximately 6.9 million metric tonnes in 2006. The amount of the cast steel produced by continuous steel casting had already reached the technological optimum (in 1997) and is now at approximately 90 per cent.

It is worth comparing current steel production (after implementation of the restructuring programme) with the situation in 1975:

- the proportion of cast steel produced by continuous steel casting has increased by 77 per cent;
- the consumption of raw steel per metric tonne of rolled stock has fallen by 223 kg/t;
- the consumption of raw iron per metric tonne of raw steel has fallen by 40 kg/t;
- the energy intensity per metric tonne of steel has fallen by 12 GJ/t.

Table 7

Consumption of steel production per inhabitant, selected countries, 2002–2006 (kg)

State	2002	2003	2004	2005	2006*
Germany	415.8	416.0	441.6	429.4	461.7
Italy	525.4	553.7	568.1	553.0	558.7
France	275.8	262.8	281.5	250.4	270.6
Spain	472.5	507.8	501.7	486.3	532.9
Austria	390.2	393.6	417.9	411.7	452.7
EU-15	370.6	374.1	388.0	368.8	390.9
Czech Republic	409.8	432.4	507.8	513.1	573.2
Slovenia	520.0	490.0	580.0	507.5	527.4
Slovakia	251.1	273.0	319.5	306.3	332.5
Poland	183.3	201.6	225.0	216.8	257.1
Hungary	198.8	209.9	199.2	204.0	216.8
EU-25	346.9	352.2	369.8	352.0	375.5
Russia	173.9	197.7	202.6	214.7	233.3
USA	356.1	343.9	391.0	345.7	384.0
China	144.2	179.1	205.2	237.4	279.3
Japan	562.8	611.8	600.5	609.4	612.1
South Korea	917.3	947.2	978.8	962.7	991.6

Note: * Estimate.

Source: IISI, Short Range Outlook, Spring 2006.

4. Social Dialogue and Its Impact

Social dialogue, based on partnership and coordination between relevant institutions at both national and regional level, played a crucial role in minimising the negative social impact of restructuring. The crucial element was tripartite bargaining, that is, the involvement of employers and trade unions at all levels. From this point of view the role of the consultative team for steel industry restructuring (Ministry of Industry and Trade), the working group for the preparation of the related social programme (Ministry of Labour and Social Affairs) and the Employment Agencies programme for North Moravia were also very important.

4.1 Consultative Team for Steel Industry Restructuring

The consultative team for steel industry restructuring (Ministry of Industry and Trade) has been the most important platform for social dialogue in the steel industry at national level since 2000 (the year of its creation).

The team consists of:

- The Ministry of Industry and Trade represented by the deputy minister (chair of the consultative team) and experts.
- KOVO Trade Union, represented by the chair, who functions as deputy chair of the consultative team.
- Hutnictví železa (Ferrous Metallurgy), an employers' association in the steel industry.
- Representatives of other relevant ministries:
 - Ministry of Finance;
 - Ministry of Labour and Social Affairs;
 - Ministry of Regional Development.
- Employee representatives from the biggest steel companies in the Czech Republic, represented by the chairs of the company trade unions.
- Representatives of the biggest steel companies in the Czech Republic, represented by their HR managers.

- Representatives of other relevant institutions:
 - Director of the Employment Office in Ostrava;
 - Director of the Regional Employment Agency.

The consultative team regularly discusses crucial problems connected with Czech steel industry restructuring. Its members discuss their proposals, seek a consensus, develop recommendations and participate in and monitor their implementation. Meetings of the consultative team take place at the Ministry of Industry and Trade in Prague; there have been more than 50 meetings since 2000.

The main outcome of the consultative team's activities was the authorisation of a complex project to support the social programme for steel industry restructuring, adopted by the Czech government in 2000. The aim of this project was to alleviate social problems arising due to redundancies among steel workers. An amended government decree of 2004 prolonged the social programme until 2006, that is, until completion of Czech steel industry restructuring. In 2005 (Government Decree No. 335/2005) the terms of payment of financial claims arising until the end of 2006 were changed to the end of 2007.

Another important result of the consultative team's activities was its recommendation concerning the provision of services to redundant workers in North Moravia by employment agencies. This programme was implemented between 2001 and 2006.

4.2 Working Group for the Preparation of the Supporting Social Programme (Ministry of Labour and Social Affairs)

The working group for the preparation of the supporting social programme as a part of steel industry restructuring commenced its activities on 12 December 2001 (in accordance with Government Decree No. 840/2001). The working group was led by Dr Jarmila Skvrnova, deputy Minister of Labour and Social Affairs. The aim of the working group was to develop proposals concerning broadening access to the supporting social programme as a basis for discussion between the Minister of Labour and Social Affairs and the Czech government.

Between December 2001 and March 2002 the working group held four meetings, resulting in a proposal for an extended supporting social programme, which contained a summary of conclusions, the recommendations of the working group and the text of the social programme.

The main result was the adoption of Government Decree No. 518/2002 concerning the supporting social programme for the steel industry and related Government Decree No. 591/2002 of June 2002 concerning study of economic transformation in North Moravia in the medium term. These government decrees made it possible to continue implementation of a number of instruments, including the employment agencies programme. However, not all envisaged actions were implemented.

5. Measures to Lessen the Impact of Restructuring

5.1 Financial Benefits for Employees

Just over CZK 1 billion was made available for implementation of the Social Programme (ASP) designed to alleviate the effects of steel industry restructuring between 2001 and 2006. This fully covered the requirements of the steel companies in assisting former employees.

Table 8

State funding of the social programme to alleviate the effects of steel industry restructuring, Czech Republic, 2000–2006

Year	Persons*	Funding (CZK million)
2000	1,971	130
2001	988	215
2002	1,261	171
2003	1,180	203
2004	785	167
2005	694	97
2006	709	110
Total	7,588	1,093

Note: * Employees made redundant due to restructuring complying with the requirements of the appropriate programme.

Source: Department of Trade and Industry, Czech Republic, 10th Report on the Implementation of the Czech Steel Industry Restructuring Programme.

The average period of continuous employment in the metallurgical industry was 31 years among employees made redundant. The majority of those made redundant (61 per cent) were between one and five years from retirement.

The programme also focused on motivating dismissed employees either to find another job or to set up their own business:

- if an employee found another job outside the steel industry, the redundancy payment was increased by 10–20 per cent;
- if an employee started up their own business, the redundancy payment was increased by 30 per cent.

5.2 Other Instruments Directed towards Alleviating the Social Impact of Restructuring

These included the START Programme, an enterprise support programme, and the regional development programme. Under START, 290 interest-free loans were provided in 2006, totalling CZK 109 million. More than two thirds of these loans granted by the Czech-Moravian Guarantee and Development Bank were for redundant employees who wanted to set up their own businesses.

The regional development programme was intended to promote the creation of new jobs in the regions affected by restructuring. It included the Employment Promotion Programme in the Ostrava-Karvina mining district (implemented by the Ministry of Industry and Trade in 1999 in Ostrava City, Frýdek-Místek and Karviná) and the subsequent business support and development programme known as NUTS II Ostrava Region and Northwest (implemented by the Ministry of Regional Development since 2000). These programmes provided financial assistance for new businesses in the amount of CZK 890 million, leading to the creation of 3,156 new jobs (that is, at a cost of CZK 282,000 per new job).

Standard instruments employed to deal with the social consequences of restructuring included:

- early retirement (2–3 years before regular retirement);
- redundancy payments from company resources in accordance with collective agreements, for example, payments for voluntary redundancy;
- retraining, either to keep employees in their current jobs or to train them for new occupations.

5.3 Employment Agency Programme in Moravia-Silesia – Examples of Best Practice

As already mentioned, due to the high concentration of the Czech steel industry in Moravia-Silesia managing restructuring and its social effects was not just a sectoral, but a regional problem.

Within this context the Employment Agencies Programme was implemented in Moravia-Silesia. It was a unique programme in the Czech Republic and internationally recognised as an example of best practice. This positive reception was reflected in the invitation to present the programme at the joint ILO–EC conference on Social Corporate Responsibility in Athens. The presentation ‘Socially sensitive enterprise restructuring – the case of Czech heavy industry in Moravia-Silesia’ attracted considerable attention and resulted in an invitation to a professional workshop in Dublin (by the European Foundation for the Improvement of Living and Working Conditions).

The three main reasons for implementing this programme were as follows:

1. the regional impact of restructuring in Moravia-Silesia;
2. the need to establish professional outplacement services to assist employees from the steel industry in the period before they were made redundant;
3. the need to coordinate the activities of all bodies providing such services in order to maximise efficiency.

In 2001, the Consultative Team of the Ministry of Industry and Trade recommended implementation of the Employment Agencies Programme, financed by the Ministry for Regional Development. The winner of the tender to implement this programme was consultancy and training company RPIC-ViP Ltd. It became the provider of the REA – the Regional Employment Agency – and the coordinator of the activities of company employment agencies established at individual steel companies. Between 2001 and 2006 the REA provided the following services:

- individual consultations with competent public bodies (Ministry of Regional Development, Ministry of Labour and Social Affairs, Ministry of Industry and Trade, government representative for Moravia-Silesia, the regional authorities) on the preparation and implementation of measures to improve the employability (retraining, and so on) of workers made redundant in the course of steel industry restructuring and of other unemployed people;
- coordination of activities with Employment Offices and other institutions that could positively influence employment in the region;
- cooperation in the preparation and implementation of programmes to increase employment in Moravia-Silesia, including projects co-financed from EU funds, especially the PHARE programme;
- regular meetings with employers in search of new job opportunities for redundant workers; identifying and analysing employers’ needs as regards new employees;
- labour market analyses for the purpose of employment support programmes;
- providing an information service on the labour market situation and job opportunities for the benefit of the programme’s participants;
- preparation of methodological materials for the employment agencies;

- consultancy and training services for the staff of company employment agencies, and of departments dealing with redundancies and retraining;
- consultancy on entrepreneurship and vocational change for redundant workers and other unemployed people recommended by Employment Offices and company employment agencies;
- reports and information required by the Ministry of Regional Development;
- cooperation with ministries and steel companies in order to coordinate activities and services provided to workers made redundant due to organisational changes in steel companies. The activities concerned not only company employment agencies but also their subsidiaries and other external companies in Moravia-Silesia. The affected companies included:
 - Vitkovice
 - Třinecké železářny (Trinec Steel Company)
 - Nová Huť (now ArcelorMittal)
 - Válcovny plechu Frýdek – Místek (VVT 'Tube Mill')
 - ŽDB (Bohumin Ironworks and Wire-mill)
 - Jáckl Karvina
- co-financing CEA services from Ministry of Regional Development funds, up to a maximum of 80 per cent;
- co-financing retraining and courses for workers made redundant due to organisational changes in steel companies, including their subsidiaries and external companies;
- financial management of the programme, including monitoring how financial resources were used.

The RZA commenced operations in July 2001. By the end of 2001 an REA and CEA network had been established among the steel companies in Moravia-Silesia. In the period 2002–2006 the following standard services were provided for redundant steelworkers and other unemployed people in Moravia-Silesia:

- Individual consultations: drawing up a work experience profile and registration in the agency job-offer database.
- Evaluation for further occupational orientation.
- Coordination with employers and preparation of clients for job interviews.
- Information on job offers.
- Training in job-seeking skills.
- Internet access for online job seeking.
- Retraining and consultancy programmes.
- Other consultancy services (handling financial contributions, retirement issues, and so on).

RPIC-ViP Ltd introduced a project entitled RESTART within the framework of the European EQUAL Programme. This project made possible the creation and testing of a wide range of newly developed tools for working with unemployed people and redundant workers. These tools were regularly used in the employment agencies programme, too. The following video presentations were among the most successful tools:

- ‘Coping with stress’ (caused by unemployment)
- ‘Before you dial the number’ (how to set up a job interview with a potential employer)
- ‘A challenge for everyone’ (preparation for a job interview)
- ‘It’s not only body language’ (communication skills)

Partnership development at the regional, national and international levels was considered to be a very important part of this project, which was ultimately evaluated as very successful.

The results of the employment agencies programme have been available since 2003 when standardised statistics were introduced. Selected results from 2003–2005 include the following:

- Number of clients: 4,000
- Number of individual services provided: 12,000
- Number of clients in retraining courses: 1,161
- Number of clients reallocated new jobs: 1,439
- Number of clients who found a new job outside the steel industry: 747
- Number of clients who found a job within the original company: 373
- Cost per employment agency client: CZK 3,000

Over the years the Regional Employment Agency (REA) has consolidated its position in the labour market. This has resulted in an increase in the services available to the former employees of steel companies and other categories of the unemployed. More and more clients contacted the REA through the recommendation of the Employment Office, through acquaintances or through information acquired from the Internet. The main asset of the REA was individual consulting, distribution of information on job vacancies, the availability of direct Internet job seeking and other individual services.

Based on these results the Programme Steering Committee and subsequently the consultative team of the Ministry of Industry and Trade adopted the following standpoints and recommendations at their January 2005 meeting:

- The Employment Agencies Programme implemented in 2000–2005 to address the social impact of steel industry restructuring accomplished its purpose and we thank those who took part in its realisation.

- REA services became part of the infrastructure of labour market services provided in Moravia-Silesia and are increasingly being used by other groups of the unemployed and job applicants.
- In 2006 we recommended that the REA continue to provide services to former employees of steel companies and other unemployed persons in Moravia-Silesia and that the cooperation between REA and CEA in the steel companies continue as well, depending on the needs and numbers of redundant employees.
- Early in 2006 we recommended the extension of REA services, in coordination with Employment Agencies and the Region of Moravia-Silesia, to the selection and training of employees-to-be for investors, as well as to the preparation and implementation of programmes focusing on unemployed persons aged 50 and over.
- We recommended the provision of financial resources to maintain co-financing of the required services in 2006. These shall be ensured by the Ministry of Regional Development in cooperation with the Ministry of Industry and Trade, and in some cases with the Ministry of Labour and Social Affairs by the end of February 2006 at the latest.
- We also recommended discussions on the provision of REA services beyond the social programme related to restructuring of the Czech steel industry from 2007 onwards by incorporating them in a relevant programme of the Ministry of Regional Development or the Ministry of Industry and Trade, and in some cases the Ministry of Labour and Social Affairs.

In conclusion, these recommendations were implemented only partially. The REA continued to provide services based on them until the second half of 2006 when it became clear that the relevant ministries could not provide the requisite financial resources. Nonetheless, the established capacities were successfully redirected into similar services for the unemployed in the Region of Moravia-Silesia, namely the 'Find a Job' and 'Preparation for the Job' Projects. These projects were financed by European funds within the 'Human resource development' programme.

6. Lessons Learned and Conclusions from the Restructuring Study

6.1 The Steel Industry and Its Expected Development

The metallurgical industry in the Czech Republic remains an important part of a processing industry that includes other important branches such as the machine industry and construction, but also significant employment opportunities. According to the Ministry of Industry and Trade one job in metallurgy is connected to 3–4 jobs in related branches.

There has been a progressive improvement in economic indicators in recent years. However, the share of the metallurgical industry in GDP remains quite low (1.6 per cent in 2005). This is because the bulk of gross added value is not realised in metallurgy but in related branches. With respect to expected economic development in the EU and the Czech Republic, these positive trends should continue. Labour market development will mainly consist of the outsourcing of service activities and activities not related to metallurgy to other private enterprises.

The development of the metallurgical industry will be significantly affected by environmental legislation. Every year, metallurgical companies invest huge sums in meeting environmental requirements, such as emissions trading, ecological taxes and ongoing restrictions on air and water pollution. The Ministry of Industry and Trade expects these investments to amount to CZK 4–6 billion a year until 2012. Any increase in these environmental requirements could negatively affect production capacity.

Despite the ongoing implementation of new production technologies, the steel industry is characterised by a high material and energy intensity. In the area of input raw materials it depends mainly on the import of iron ore to produce raw iron and primary metals for further processing in the non-iron metal and foundry industry. Although there has been an improvement in the export activities of large companies, the steel industry's international trade balance has been deepening. This trend can be diverted by more intensive exports by Czech metallurgical companies to new EU members or to Russia (for example, the takeover of Vitkovice Steel a. s. by the steel and mining group Evraz opens up the Russian market). Another target region is Asia, especially China, which, according to International Iron and Steel Institute estimates, will probably be the largest consumer of steel and steel products. The Institute expects consumption

of this commodity to reach the two-digit (in percentage terms) level in China in 2007 and 2008 compared to growth of approximately 2 per cent in the EU and 6 per cent in Russia.

The development of the steel industry will be determined by continuous consolidation, especially through mergers and acquisitions (in comparison to the industries which supply it with raw materials and those which consume its products metallurgy is still not sufficiently consolidated in global terms, as indicated by the negotiating positions of individual companies when dealing with suppliers of raw materials and energy or with customers). In terms of their product portfolios a significant transition is still to occur from supplies of raw materials to products with higher added value. The trend is towards building up product supply chains with a higher degree of final products. Another form of coordination among producers and consumers is the building of long-term technological partnerships, which can be observed in the Czech Republic mainly in the automotive industry.

6.2 The Steel Industry and Social Responsibility

The steel industry in the Czech Republic provides a good illustration of the view that social responsibility yields positive returns for companies.

Even in times of restructuring and necessary redundancies some thought must be given to better times, when the workforce will have to be expanded to meet the needs of further development. The three largest steel companies in the Czech Republic currently find themselves in this situation. The availability of qualified workers in technical branches is one of the main conditions for taking advantage of market opportunities.

Companies that just a few years ago made thousands of employees redundant are now taking on hundreds of new ones. The manner in which they dealt with their employees in the past is now paying dividends: new employees are willing to work for them and the young have been encouraged to study technical subjects. These companies are the most active in cooperating with training institutions and the public sector. They are now trying to re-establish the technical secondary schools that were closed down. They are cooperating with universities in the development of modern study programmes. With other partners they are cooperating in innovation projects focusing on soft competitiveness factors, such as the use of human potential, creativity, diligence and loyalty.

The partners cooperating in the Ministry of Industry and Trade's Consultative Team have prepared a new programme, EU RESTART, which focuses on the all round development of workers in the steel industry and related industries. Its vision is 'Professionals for the steel and machine industry 2008+'. At present, negotiations are taking place on possible ways of financing it from EU funds, namely the operational programme Human Resources Development.

A unique programme has been developed in the Region of Moravia-Silesia that focuses on the systematic development of soft skills required by employers. The development of this programme

during the period 2005–2008 was co-financed by the EQUAL European Programme. Many partners from all over Europe – the UK, Belgium, Italy, Spain, Poland, Lithuania and Romania, as well as Turkey – have shown interest in the positive results of the project. As a consequence, the programme has been translated into English and is now being translated into other languages (for more information see www.keycompetencies.eu).

Documents and Legislation Relevant to Restructuring

- The study ‘The First Phase of the Czech Steel Industry Restructuring Programme’, conducted by Hutni Projekt Ostrava, a.s. and VSB – Technical University of Ostrava, and authorised by the Czech government (Government Decree No. 10/60, October 1999), summarises all the relevant information concerning the Czech steel industry up to 1998 (including information on capacity), describing its actual state when restructuring began. The study provides information on the state of the Czech metallurgical industry and its expected development within the framework of the restructuring programme. A number of aspects of the restructuring programme required systematic development (more detailed specification). These improvements were carried out by the Ministry of Industry and Trade, Czech government commissioners, foreign consultants and EU experts.
- The study ‘The Implementation of the Czech Steel Industry Restructuring Plan’, authorised by the government in January 2001 (Government Decree No. 11/2001).
- ‘The Czech Steel Industry Restructuring Programme’, authorised by the government in August 2001 (Government Decree No. 840/2001).
- Government Decree No. 131/2002 of February 2002, which lays down actions required to deal with the problems facing Nova Hut a.s. and Vítkovice a.s., as well as activities demanded by the EC. This government decree was introduced because of the urgency of these problems.
- Government Decree No. 518/2002 concerning the social programme for the steel industry, and related Government Decree No. 591/2002 on the study of the transformation in North Moravia in the medium term.
- Government Decree No. 565/2002, authorised in May 2005, concerning requirements for completing the restructuring and privatisation of Nova Hut a.s.
- Government Decree No. 587/2002, authorised in June 2002, concerning the sale of parts of Nova Hut, a.s. to LNM Holdings.
- Government Decree No. 932/2004, authorised in September 2004, concerning completion of the financial restructuring of Valcovny plechu, a.s.
- Government Decree No. 1127/2004, authorised in November 2004, concerning the sale of shares in Vitkovice, a.s. to Mastercroft Ltd. (part of EVRAZ Holding).

Literature and Sources

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Czech Steel Industry Restructuring Programme (adopted by the Government of the Czech Republic on 29/8/2001)

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