Economic structures in south-eastern Europe and Turkey: a view from the metalworking industry

Introduction

This study is an academic accompaniment to the EU project *Strengthening the social dialogue in south-eastern Europe through CSR instruments*. DGB Bildungswerk, the European Metalworkers’ Federation (EMF) and the Office of Co-operation Ruhr University Bochum/Industrial Metal Union (GAS) participated in this project; the latter took over responsibility for the accompanying research effort. The project ran over the course of one year (June 2006 – July 2007).¹

The objective of the study was, on the one hand, an improvement in the information basis with respect to economic development in the countries of south-eastern Europe: Bulgaria; Romania; Croatia; Macedonia;² and Turkey (the focus of this particular article). On the other hand, the objective was an analysis of industrial relations in these same countries (to which a later article to be carried in the *SEER* will turn). Special attention was focused on the situation and structures in the metalworking industry.

In a cross-sectional analysis between the countries surveyed, however, it was necessary to observe respective national framework conditions. Therefore, at the beginning of the second section, the differences in size and performance of the economies surveyed here, as well as the partly strongly varying labour-market situations, are featured which, besides the diverging cultural, social and political framework conditions, have an influence on the different national systems of industrial relations.

Subsequently, a comparison of the economic structures of the countries surveyed is considered in greater depth. After a short evaluation of the countries on the basis of the development of central economic indicators compared to the EU, the economic engagement of foreign companies based on their direct investments is examined. Investment behaviour is broken down from the national economic level via manufacturing industry right down to constituent metalworking industries. Finally, an evaluation of selected locational factors concerning the metalworking industry, like the development of employment, wages and unit labour costs, is carried out.

For this accompanying study, statistics and literature of diverse national, European and other international institutes and organisations were consulted (among others, ILO, Eurofound, *SEER*). The data in section 2 is primarily based on an evaluation of secondary data from EUROSTAT, UNCTAD and the Vienna Institute for Interna-

¹ This study was produced with the support of the European Commission. It is reproduced here by kind permission of the authors and the European Metalworkers’ Federation (EMF). At [http://www.emf-fem.org/projects](http://www.emf-fem.org/projects), two more detailed analyses of the economic structures, as well as the industrial relations in the countries surveyed with appendices, are available as a download. In addition, all presentations of the project workshops can be downloaded with contents and graphics.

² For the purposes of this text, the former Yugoslav Republic of Macedonia is referred to as Macedonia.
Comparison of the economic structures of the countries surveyed

Following the largest expansion of the European Union to date in 2004, the two south-east European countries Bulgaria and Romania were also admitted to the EU on 1\textsuperscript{st} January 2007. At present, the EU consists of 27 member states. Croatia, Macedonia and Turkey, meanwhile, also have the official status of admission candidates so that the admission of these three countries to the EU is being negotiated. The diversity of these five countries surveyed (cf. Chart 1) becomes clear below on the basis of the selected economic and social indicators.

Figure 1 – Map of Europe highlighting the countries surveyed

Table 1 indicates that the five nation states in the south-eastern European region are extremely different national economies, with total populations ranging between about two million and 72 million inhabitants. Gross Domestic Product in south-eastern European countries, measured against GDP per capita in 2005 purchasing power

3 At this point, attention should be drawn to the gaps which appear in this study too due to the non-uniform data situation for the countries surveyed, the partly nationally or institutionally varying classifications and the problem of the comparability of the data.
standards, was still considerably below the average for the EU 25. Thus, the prosperity standard of Romania, Bulgaria and Turkey is approximately one-third of the EU 25 average; Croatia, with approximately half the GDP per capita of the EU 25, has the highest prosperity standard in a comparison of the countries surveyed while Macedonia, with approximately one-quarter of the EU 25 average, has the lowest.

On the basis of the sectoral breakdown of GDP in 2006 in south-eastern European countries, the countries surveyed can be characterised as ‘service economies’ in so far as almost two-thirds of GDP is produced in the service sector. With approximately 6-12%, the respective share of the agricultural sector is very marked in comparison with the industry and service sectors in all the south-eastern European countries surveyed. In particular, in this sector there is a large adjustment volume. With respect to the labour market, this statement concerning the service economy can be underlined by the share of people employed in the service sector in the countries of Bulgaria, Croatia and Macedonia being more than one-half, whereas in Romania and Turkey, in contrast, around one-third of employed people are still involved in agriculture.

Table 1 – Economic power and the labour market in 2006 in the countries surveyed

<table>
<thead>
<tr>
<th></th>
<th>Bulgaria</th>
<th>Croatia</th>
<th>Macedonia</th>
<th>Romania</th>
<th>Turkey</th>
<th>EU 25 (total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (€ bn)</td>
<td>25.1</td>
<td>34.2</td>
<td>5.0</td>
<td>97.1</td>
<td>318.6</td>
<td>11 435.6</td>
</tr>
<tr>
<td>Share of GDP:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Agriculture</td>
<td>9</td>
<td>6</td>
<td>11</td>
<td>8</td>
<td>12¹</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>31</td>
<td>27</td>
<td>26</td>
<td>31</td>
<td>27¹</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>60</td>
<td>67</td>
<td>63</td>
<td>61</td>
<td>61¹</td>
<td></td>
</tr>
<tr>
<td>GDP per capita (€)</td>
<td>3 300</td>
<td>7 700</td>
<td>2 400</td>
<td>4 500</td>
<td>4 400</td>
<td>24 600</td>
</tr>
<tr>
<td>GDP per capita in PPS (%)¹</td>
<td>32.1</td>
<td>48.8</td>
<td>25.4</td>
<td>34.7</td>
<td>30.7</td>
<td>100</td>
</tr>
<tr>
<td>Population (million)</td>
<td>7.72</td>
<td>4.44</td>
<td>2.04</td>
<td>21.61</td>
<td>72.52</td>
<td>463.52 (total)</td>
</tr>
<tr>
<td>Employed persons (million)</td>
<td>3.11</td>
<td>1.59</td>
<td>0.55¹</td>
<td>9.29</td>
<td>22.35</td>
<td>201.56 (total)</td>
</tr>
<tr>
<td>Share of employed (%)¹</td>
<td></td>
<td></td>
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</tbody>
</table>

4 In order to highlight the difference between the countries surveyed in terms of their previous economic development compared to the EU, the average development of the so-called EU 25 states is quoted. Thus, in the following with respect to all figures for the EU, the two new EU states of Romania and Bulgaria are not included in the EU average.
Labour market structures also show considerable differences between the countries mentioned and the EU. For example, the employment rate varied in the countries surveyed in 2006 between 33.8% (Macedonia) and 58.8% (Romania) and was thus considerably below the average employment rate of the EU 25 of 64.7%. The unemployment rates of the countries of Bulgaria (9%), Croatia (11.1%) and Turkey (8.4%) in 2006 were still above the average figure for the EU 25 (7.9%), although Romania’s unemployment rate of 7.3% was clearly below that figure. Macedonia stands out in comparison with the other four countries under comparison with a high rate of unemployment of 35.9% in 2006 – around four times the EU average.

Table 1 also underlines that only a relatively small share of employed people in south-eastern European countries and Turkey are subject to the standards and practices of industrial relations, i.e. the majority of terms and conditions of employment are not collectively regulated. Based on the example of Turkey, these difficulties become particularly clear. Of what is in any case a low number of 22m employed people, only five million employees are in employment which is subject to social insurance (22.7%), i.e. the vast majority of employment relations in Turkey (approximately 77.3%) is to be found in the informal sector or in agriculture.

Economic indicators of the countries in comparison

Gross Domestic Product per capita

Gross Domestic Product per capita (GDP per capita) in Romania, Bulgaria and Turkey has almost doubled in the course of the last five years. This indicates fast economic growth and an increased standard of prosperity in these three countries. In comparison between the three countries, the level of prosperity in Turkey has, since 2001, always been higher than in Romania and Bulgaria. Since 2003, a steadily growing prosperity gap has been developing between Romania and Bulgaria in favour of the former. In 2006, the level of prosperity in Turkey was considerably higher than that in Bulgaria, whereas a reduction in the prosperity difference between Turkey and

<table>
<thead>
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<th>EU 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>10</td>
<td>16</td>
<td>17</td>
<td>32</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>33</td>
<td>30</td>
<td>33</td>
<td>31</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>57</td>
<td>54</td>
<td>50</td>
<td>37</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Employment rate (%)</td>
<td>58.6</td>
<td>55.6</td>
<td>33.8(^1)</td>
<td>58.8</td>
<td>45.9</td>
<td>64.7(^2)</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>9.0</td>
<td>11.1</td>
<td>35.9</td>
<td>7.3</td>
<td>8.4</td>
<td>7.9</td>
</tr>
</tbody>
</table>

1) 2005
2) provisional value

Source: EUROSTAT; WIIW; NSI; CROSTAT; SSO; NIS; TURKSTAT; bfai; KILM, acc. to Sengenberger, 2006; own chart
Romania has been registered compared with the previous four years. Macedonia has the lowest economic development level among the five countries whereas, in comparison with the other south-eastern European countries, Croatia registers the highest level of prosperity.

**Figure 2 – GDP per capita in the countries surveyed at exchange rate parities (2001-2005)**

Source: WIIW; national statistical offices; own chart
Inflation rate

In general, the trend in the inflation rate in Romania, Bulgaria and Turkey has shown a significantly declining trend since 1998, i.e. prices are developing in principle in favour of the consumer. On an overall comparison with the EU 25, however, the inflation rate for 2005 in Bulgaria was still twice as high (4.4%), and in both Romania and Turkey it was around four times higher (8.8% and 8.4%), than the EU average (2.2%). The fulfilment of the EU convergence criteria with respect to price trends could prove to be difficult against this background. For Bulgaria, however, it must be said that, on the database for 1999 and 2003, with inflation rates of 0.7% and 2.3% respectively, the country at least at times has been able to observe the criteria for price stability. In a comparison of the trends, the development of the inflation rate in Romania has been characterised by a continuous decline from a very high level of almost 60% as far as 8.8% in 2005, while in Bulgaria the price trend has described a more volatile course and, as a result, no comparatively steady trend can be established. The trend in the inflation rate in Turkey, like that in Romania, is characterised by a considerable decline from almost 85% in 1998 to 8.4% in 2005 and, since 2004, has been below the inflation rate of Romania.

At this point, it should be noted that the Maastricht convergence criteria do not represent conditions for admission to the EU. In its Article 121, the Treaty of the foundation of the European Union contains four convergence criteria which EU members must fulfil if they wish to join the third stage of European Monetary Union.
With respect to the fulfilment of the EU convergence criteria, the countries of Macedonia and Croatia were able to meet the criterion on price stability. In this connection, for Croatia on the database for 2004, an inflation rate was registered which almost corresponded to the level of inflation in the EU. This approach to the inflation rate for the EU average also applies to 2002, 2003 and 2005 as regards Macedonia which, in 1999 (-1.1%) and 2004 (-0.4%) even registered deflation. Following an initial hyperinflation for consumer goods in 1992 and 1993, the currency has remained stable in Macedonia, with inflation declining to below two per cent since 1997 although it did increase slightly as a consequence of negative world economic developments, regional instability and the armed conflict in 2001. For the Bulgarian national economy, it must be taken into account that the country had already experienced hyperinflation in the course of the financial collapse of the banking sector at the beginning of 1997 but, thanks to the reform programme developed by the International Monetary Fund and the World Bank, it was able to achieve the stabilisation of the price level.

Unemployment rate
The trend in the rate of unemployment is declining in the two countries of Romania and Bulgaria. In particular, Bulgaria registered a dramatic decline between 1999 and 2006, from 18.1% (2000) to 9% (2006), thereby managing to halve the rate of unemployment. The rate of unemployment in Bulgaria had otherwise always been above the corresponding long-term EU average of approximately 9% throughout the period under review, from 1999 to 2005. The rate of unemployment in Romania is also
showing a declining trend. After 2001, the rate of unemployment here has even been consistently below the average of the EU. In comparison with the positive trend in the rate of unemployment in Romania, a contrary trend is registered in Turkey. The rate of unemployment in Turkey corresponded to the EU average of 8.4% in 2001, and was below the EU average between 1998 and 2001, but, between 2002 and 2006, it rose to a level above that of the EU average. Among the five countries surveyed, Macedonia is especially characterised by an extremely strained labour market. The rate of unemployment in Macedonia was regularly over 30% between 1998 and 2006 and, in 2006, it reached a level of 35.9%. Thus, among the five countries surveyed, Macedonia has the most dramatic trends in terms of unemployment. The number of unemployed persons is probably lower, however, due to the informal economy, according to expert estimates, producing around 40% of national economic performance.

Figure 5 – Unemployment rate in the countries surveyed compared to the EU 25 (1998-2005)

Source: EUROSTAT; national statistics offices; own chart

Current account balance
All five countries surveyed show negative current account balances between 2002 and 2006. This negative current account balance shows that, in value terms, the countries have more imports than exports. This becomes particularly obvious in comparison with the positive current account balance of Germany, as a typical exporting

6 In this connection, the relatively low employment rate of 45.9% in 2003, as well as the high share of employees in the shadow economy, should be noted.
country. The negative trend in the current account balance of Romania and Turkey has been accelerating since 2003, which is directly associated with increased FDI inflows (cf. FDI development). This development clearly applies to Turkey and underlines that Turkey, in particular, is of increasing international significance for direct investment. The share of the Turkish current account balance deficit in GDP in 2006 was 7.9% and indicates that, for Turkey in comparison with Bulgaria, whose current account deficit in the same year reached the critical level of 16.7% of GDP, fewer difficulties must be faced in financing the deficit against the background of the high level of the economy. The deficit in the current account balance of Croatia, at 7.6% of GDP in 2006, is on a similar scale to that of Turkey. Macedonia had an almost stable current account balance between 2001 and 2006, so the share of the current account deficit in GDP is relatively marginal (0.37% in 2006). A result of the considerable growth in imports in 2006 is that the trade deficit in Romania has expanded and is causing a deterioration in the country’s current account balance to a critical 10.3% of GDP. The financing of the current account deficit in Romania is, however, as in Turkey, safeguarded by strong FDI inflows and high transfers of money from Romanians working abroad.

7 The current account balance contains several partial balances. A negative current account balance means that more transactions (goods, services, incomes, transfers, etc.) are flowing from foreign countries into the country. Foreign direct investment is part of the balance of income arising from employment and assets so it can be assumed that, with relatively constant partial balances, they are making a contribution to the negative current account balance.

8 cf. in the following explanations on the relationship between current account balance and GDP, the Federal Agency for Foreign Trade (bfai).
Figure 6 – Current account balance in the countries surveyed (2001-2006)

Source: WIIW; NB Romania; own chart

**Foreign direct investments (FDI) in south-eastern European countries**

Comparison of the total FDI among south-eastern European countries

In a comparison of FDI between the countries surveyed during the 1996 to 2005 period, Turkey generally records the largest FDI inflows (over € 20bn), followed by Romania (approximately € 20bn). Well behind these two countries follow Bulgaria (approximately € 11.5bn) and Croatia (€ 10.9bn) in the middle of the comparison table while Macedonia, with approximately € 1.2bn, once again ranks far behind the two countries in the middle.
The development of FDI inflows into the countries of Turkey and Romania is also reflected in the respective trends in their current account balance. A significant increase in FDI inflows has been registered since 2003 for these two countries; Romania, in particular, is thereby registering an over-proportionate increase. A different picture is provided by an examination of per capita FDI inflows in 2005: taking into account the size of population, Turkey does not take up a leading position in terms of FDI inflow but, rather, is in second to last place ahead only of Macedonia. Looked at from this point of view, Croatia, however, moves up into top place in this comparison.
With respect to stocks of FDI, in particular, the share of the respective GDP of the countries surveyed is of relevance. Within the context of such an examination, the differences between the countries surveyed are less marked than when looking at absolute levels of FDI stocks. Consequently, the comparatively small country of Macedonia displayed in 2005 a far larger share of FDI in GDP (34.5%) than did Romania (25.4%) which, in absolute terms, has the highest stock of FDI of the countries surveyed (excluding Turkey). Up to 2005, a far larger stock of FDI has accumulated in Croatia than in Bulgaria.
Figure 9 – FDI stocks (total) in the countries surveyed (excluding Turkey) (1996-2005)

Source: WIIW, own chart

Figure 10 – Share of FDI stocks in GDP in the countries surveyed (excluding Turkey) (2005)

Source: Own calculation and chart
Comparison of FDI between metalworking sectors

*FDI shares in manufacturing industry and in the metalworking industry*

The share of FDI taken by manufacturing industry, as a percentage of the total stock of FDI, amounted only to about 17% for Bulgaria in 2004. This means that FDI flowed predominantly into the service sector (especially the banking sector, property, tourism) as well as into the industrial areas of the energy suppliers (e.g. EVN Electricity, EON, Shell, OTE Mobile, CEZ Electricity). The share of FDI taken by manufacturing industry in Croatia, however, accounted for approximately one-third, and in Romania almost one-half, of total FDI inflows. In Turkey, this share amounted to around one-quarter of total FDI inflows.

The shares of FDI taken by the metalworking industry (NACE dj - dm)* within manufacturing in Bulgaria (11.5%) and Croatia (9.9%) are relatively small. In Macedonia, this share is 37.3% while in Turkey it is 31.3%. The metalworking industry in Bulgaria and Croatia therefore hardly plays a role for foreign investors. In contrast, the significance of the metalworking industry in Romania for foreign investors is much greater, as more than one-half of FDI in manufacturing flows into the metalworking industry (51.6%).

![Figure 11 – Share of FDI inflows in the metalworking industries of the countries surveyed (2004) (manufacturing industry = 100)](https://example.com/figure11)

Source: Bulgarian NB; WIIW; GDFI; own chart

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9 NACE sector dj: ‘manufacture of basic metals and fabricated metal products’; dk: ‘manufacture of machinery and equipment n.e.c.’; dl: ‘manufacture of electrical and optical equipment’; dm: ‘manufacture of transport equipment’.
b. Comparison within the metalworking industry (FDI stocks)

Within the metalworking industry in 2003, the largest FDI shares in the ‘manufacture of basic metals and fabricated metal products’ sector (NACE: dj) were in Romania (48.5%), Bulgaria (67.1%) and, particularly, in Macedonia (94.6%). In this connection, particular mention must be made of the ‘monopoly position’ of the dj sector in Macedonia, which has been characterised since 1997 by the takeover and post-privatisation of the larger metal and steel companies (e.g. Duferco/Makstil, Glencore/Fenimak, Balkan Steel). This also applies in a similar way to Bulgaria. Here, FDI is characterised by larger companies from the field of ‘mechanical engineering’ (e.g. SKF Bearings in Sofia, Palfinger Produktionstechnik in Tscherven Bryag). In Romania, the ‘manufacture of transport equipment’ (dm; approximately 23%) sector is of further great importance for foreign investors whereas in Bulgaria this applies to the ‘manufacture of electrical and optical equipment’ (dl; approx. 30%) sector, in which foreign investors are particularly noticeable in ‘electronics and electrical engineering’ (e.g. Liebherr Hausgeräte in Radinovo, Festo Production in Sofia, ABB Avangard in Sevlievo). In Croatia, in contrast, the ‘manufacture of basic metals and fabricated metal products’ sector plays only a subordinate role, with approximately 15%, while the ‘manufacture of electrical and optical equipment’ sector has an essential significance for foreign investors such that almost three-quarters of foreign direct investment within the metalworking industry flow into this sector. Unlike Bulgaria, Romania and Macedonia, no foreign direct investments were registered in 2003 in the ‘manufacture of transport equipment’ sector in Croatia. On the other hand, this sector plays a considerable role for foreign investment behaviour in Turkey, with a high FDI share. Within the metalworking industry in Turkey, almost three-quarters of FDI in the same year was registered in the transport equipment sector. In particular, the automobile and automobile supply industry, which is principally concentrated in the west of Turkey (e.g. Istanbul and Bursa), is of great importance. Investors in this sector include, among others, companies like Fiat, Renault, Toyota and Hyundai.
Selected location factors in the metalworking industries of the countries surveyed

Development of employment

In Bulgaria and Macedonia, approximately one-quarter of employed people in manufacturing industry work in the metalworking industry; in Romania and Croatia, it is almost one-third. The sector ‘manufacture of basic metal and fabricated metal products’, therefore, has most employees within the metalworking industry.
The trend in the numbers of people employed has been declining continuously since 1996 in Romania and Bulgaria. In this connection, the sectors with the largest numbers of people employed (dj: ‘manufacture of basic metals and fabricated metal products’ and dk: ‘manufacture of machinery and equipment n.e.c.’) have also recorded the largest falls. The ‘manufacture of machinery and equipment n.e.c.’ sector (dk) has also experienced a drastic decline of numbers employed in Romania. Here, the number of people employed has fallen by more than one-half within the last ten years as a result of the privatisation of government-owned companies.\footnote{The new EU states of Romania and Bulgaria are transformation countries which are characterised by a process of structural change. Against a background of privatisation, the question arises as to the extent to which new jobs will be created in other areas as a result of restructuring.}

In comparison with Romania and Bulgaria, the development of employment in Croatia in the sectors of ‘manufacture of basic metals and fabricated metal products’ and ‘manufacture of electrical and optical equipment’ (dj and dl) is more stable. The number of people employed in the Croatian ‘manufacture of machinery and equipment n.e.c.’ sector (dk) rose by approximately 2 000 to almost 22 000 between 1997 and 2005, whereas the number of employees in the ‘manufacture of transport equipment’ (dm) sector fell from 15 000 to 12 000. With respect to the numbers employed in Macedonia, the sectors of ‘manufacture of basic metals and fabricated metal prod-
ucts’ and ‘manufacture of electrical and optical equipment’, as well as ‘manufacture of transport equipment’, show slightly declining trends while the numbers employed in ‘manufacture of machinery and equipment n.e.c.’ remained relatively constant between 2000 and 2005.

**Figure 14 – Development of the numbers employed in the metalworking industries in Bulgaria and Romania (1996-2005)**

Source: WIIW, own chart
Development of wage incomes

Compared to Bulgaria, Romania generally had higher average gross wages in the industry between 1996 and 2005, as well as minimum wages. In terms of the development of wages in manufacturing, both countries recorded almost a doubling of wage levels over this period, although Romania has registered a considerably greater increase than Bulgaria since 2003. However, on an absolute comparison it is evident that wages in manufacturing industry in Romania are equivalent to only 10% of the wage levels of western EU member states. Within manufacturing, wages in the metalworking industry have increased the most strongly and, in absolute terms, these are higher than wage levels in manufacturing.

The wage level in Croatian manufacturing is around four times higher than the two new EU states, while the statutory minimum wage in 2005 was around three times higher. In Croatia, the ‘manufacture of electrical and optical equipment’ (dl) sector recorded the highest wage levels within the metalworking industry (€1 056 in 2005), while the sector with the most employees (‘manufacture of basic metals and fabricated metal products’) had the lowest wages (€627 in 2005).

In Macedonia, the wage level in industry varied between €270 and €285 in the period from 2002 to 2005. Here, unlike all the other countries surveyed, there is no legal minimum wage. In the metalworking industry between 2003 and 2005, the lowest wage levels were to be found in the ‘manufacture of transport equipment’ sector (between €301.70 and €306.40). The ‘manufacture of basic metals and fabricated metal products’ sector registered the highest average monthly gross wage in the metalworking industry in 2005, at about €350.

The statutory gross minimum wage in Turkey has more than doubled in the last five years (it was €139 in 2001 and €332 in 2006). The average gross wage in industry as a whole (€478.3 in 2001) in Turkey was already three times the legal minimum wage in 2001. The situation was similar for the average wage in the ‘manufacture of machinery and equipment’ sector (€517), while the average gross wage in the automobile and automobile supply industry amounted to almost five times the legal minimum wage.
Figure 15 – Monthly gross average wage in manufacturing industry in the countries surveyed (2000-2005)

Source: WIIW, SSO, BM, own chart

Development of labour productivity and unit labour costs

Figure 16 indicates that labour productivity has increased significantly in the countries surveyed, with the exception of Turkey, across all industrial sectors within the last few years. Concerning the areas of the metalworking industry which are of interest here, the development of labour productivity in Bulgaria is marked by a steady upward trend. In contrast, development in Romania in most sectors (dk, dl, dm), except that of ‘manufacture of basic metals and fabricated metal products’ (dj), has been relatively constant or, in some cases, is stagnating. In both countries, the above-average level of labour productivity in the dj industrial sector is clear. This sector also contributes significantly to the overall increase in labour productivity within the metalworking industry in the two countries. Unlike in Romania and Bulgaria, the development of labour productivity is more volatile in Croatia. The ‘manufacture of basic metal production and processing’ and ‘manufacture of machinery and equipment n.e.c.’ (dj and dk) sectors show an increasing trend, while labour productivity in the ‘manufacture of electrical and optical equipment’ and ‘manufacture of transport equipment’ (dl and dm) sectors declined between 1997 and 2005. In Turkey, the automotive and automobile supply industries are becoming increasingly important with increased labour productivity.\(^\text{11}\) In comparison with Turkey and Romania, against the background of stagnating productivity trends and relatively high average wages, the metalworking

\(^{11}\text{cf. also DGB Bildungswerk/IG Metall executive board/joint working group RUB/IGM (publ.) (2005) Country profile: Turkey and the report of the Ankara Embassy on economic development in Turkey.}\)
industries in Croatia and Macedonia are less attractive particularly for foreign investors.

**Figure 16 – Development of labour productivity per employee in the surveyed countries (excluding Macedonia) (EU 25 = 100)**

The trend in unit labour costs could be established only for the two EU states of Bulgaria and Romania. The trend in unit labour costs in Bulgaria between 2001 and
2004, and in Romania between 2000 and 2004, remained relatively constant or increased only minimally. In the area of manufacturing, the figures are additionally relatively low, being less than 10% of the EU average. The development level of unit labour costs in the metalworking industry of both countries is, however, higher than the average in manufacturing. Occasionally, this trend in the two EU states, in particular, indicates that increased wages in the metalworking industry could largely be compensated for by the increase in labour productivity. The relatively low labour costs in these countries still represent a clear competitive advantage compared to those of the EU 25.

**Conclusion and outlook**

In an initial conclusion, it must be said that the economic level of all the south-east European countries surveyed is well below the EU average. Among the five surveyed countries, Turkey has the highest investment growth and, looked at in absolute terms, was able to book the largest inflow of foreign direct investment between 2001 and 2005 following the crisis. Based on GDP per capita, Croatia registered proportionally the highest economic level while Macedonia has the lowest. Among all five countries, FDI inflow comes mainly from the larger west European states. The predominant share of FDI for Bulgaria and Croatia flows into the service sector (especially banks and insurance companies), whereas almost half the FDI inflow in Romania is registered within manufacturing. For foreign investors, the metalworking industry in Romania plays a considerably more important role than in Bulgaria, Croatia, Macedonia.
and Turkey. More than half the foreign direct investment in manufacturing is recorded by the Romanian metalworking industry. Within metalworking, the largest shares of FDI in Bulgaria, Romania and Macedonia flow into the ‘manufacture of basic metals and fabricated metal products’ sector, while in Croatia it is the ‘manufacture of electrical and optical equipment’ sector that is dominant. Against the background of the high share of direct investment within the metalworking industry, the ‘manufacture of transport equipment’ represents an important sector in Turkey.

The important investment activities are based on location factors. In this connection, the low levels of corporate taxes and the low average wages in the metalworking industry in Romania, as well as the reduction in corporate tax implemented in 2006 in Turkey, are among the particular location advantages seen from the point of view of investors. Within the context of the high inflow of FDI and the above-average labour productivity in the metalworking industry (especially in the dj: ‘manufacture of basic metals and fabricated metal products’ sector), Romania out of all the surveyed countries has the most competitive metalworking industry.

Thus, in conclusion, it can be stated that the metalworking industry has a special economic role to play – already today in Romania as well as in Turkey in future. In particular, the metalworking sectors ‘manufacture of basic metals and fabricated metal products’ in Romania and ‘manufacture of transport equipment’ in Turkey register the greatest increases and will become even more important in the future within the context of the European market as regards the investment activity of multinational companies.

References


12 Investment in Bulgaria is mainly in the service sector, in order to open up the market, whereas Romania’s strong industrial sector is integrated into the European value-added chains (‘manufacturing hub’) so that more labour-intensive activities are already being shifted from the Czech Republic and Hungary to Romania.

13 These references constitute a selection of the literature and sources used in this study.


European Bank of Reconstruction and Development (EBRD): http://www.ebrd.com/

European Industrial Relations Observatory (EIRO): http://www.eurofound.europa.eu/eiro/

Federation of International Trade Associations (FITA): http://www.fita.org/


Konföderation der Unabhängigen Gewerkschaften in Bulgarien (KNSB): http://www.knsb-bg.org/eng/enindex.htm


National Statistical Institute of Bulgaria (NSI): http://www.nsi.bg/index_e.htm


Republic of Croatia – Central Bureau of Statistics (CROSTAT): http://www.dzs.hr/default_e.htm


Statistisches Bundesamt Deutschland (DeSTATIS): http://www.destatis.de/

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