

CEFTA ISSUES PAPER 5

# Industry Concentration and Country Specialisation in CEFTA







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## Foreword

The eight Parties<sup>1</sup> to the Central European Free Trade Agreement (CEFTA) 2006 have set a series of ambitious goals. These are: to expand trade in goods and services; foster investment through fair, stable and predictable rules; eliminate trade barriers; protect intellectual property rights in accordance with international standards; and harmonise provisions on key trade policy issues.

In addition to implementing traditional trade-related liberalisation measures, CEFTA 2006 requires the Parties to undertake investment policy commitments. They include the non-discriminatory treatment of investment underpinned by the principle of national treatment, and require the Parties to coordinate their investment policies and progressively open their government procurement markets. To monitor the implementation of these investment-related clauses, the CEFTA Parties mandated the CEFTA Secretariat to periodically review the status of compliance. The Organisation for Economic Co-operation and Development's Investment Compact for South East Europe (OECD IC) assists the CEFTA Secretariat in this effort, with financial support from the European Commission (EC).

Investment policy is closely inter-linked both with trade flows and with patterns of industrial concentration and country specialisation. This report summarises the OECD-IC assessment of the current industrial structure of the CEFTA region. It aims to provide policy makers with an overview of the region's manufacturing activity and supports the identification of potential opportunities for further integration. The analysis is based on a novel database that was developed by the OECD in co-operation with national statistical offices of CEFTA parties, to measure industry concentration and country specialisation at the sub-regional level.

The key findings of this analysis were presented to the CEFTA Parties and various other stakeholders at the 3<sup>rd</sup> Budapest Roundtable (3-4 November 2011), during CEFTA Week 2011 (22-23 November 2011), and at an OECD workshop on Regional Trade Liberalisation, European Integration and Investment Flows in CEFTA (19-20 June 2012).

This report is part of a series of *CEFTA Issues Papers*, which is jointly produced by the OECD and the CEFTA 2006 Secretariat. These papers provide insights on a wide range of issues, such as intellectual property rights, national treatment restrictions and the elimination of non-tariff barriers (NTBs). They support the wider objective of the OECD-IC and the CEFTA bodies to enhance growth and employment in CEFTA economies through deeper regional, European and global economic integration.

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<sup>&</sup>lt;sup>1</sup> The signatories of CEFTA 2006 are: Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, the Republic of Moldova, Montenegro, Serbia, and Kosovo\*. \* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

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#### **EXECUTIVE SUMMARY**

Trade liberalisation and economic integration affect the decision of firms on where to invest and locate their operations. These decisions are closely inter-linked with both the spatial concentration of industries and the industry specialisation of countries. The adoption of the Central European Free Trade Agreement (CEFTA) 2006 by the eight Parties (Albania, Bosnia and Herzegovina, Croatia, the FYR Macedonia, Moldova, Montenegro, Serbia and Kosovo\*) has liberalised trade and fostered integration among the Parties, bringing them closer to the EU Single Market. To decide on the policies needed to enhance their competitiveness: trade policy, industrial policy, labour market policy, education policy, regional policy etc., policy makers of CEFTA Parties require an accurate understanding of the industrial structure of their economies.

This study provides policy makers with a detailed description of the spatial concentration of manufacturing industries in the CEFTA 2006 area and of the industry specialisation of CEFTA economies. In particular, it analyses the turnover and employment concentration of 22 manufacturing industries across 102 sub-national regions in CEFTA 2006 during the period 2007-2009. Besides providing a descriptive analysis of industry concentration and country specialisation, this study also includes industry and country profiles that present descriptive statistics, Theil indices of relative concentration and specialisation, and maps to provide a detailed snapshot of manufacturing activity in CEFTA 2006.

The analysis reveals that manufacturing in CEFTA 2006 is highly concentrated in Serbia and Croatia where it accounts for 73% of turnover and 58% of employment. Manufacturing is also concentrated at the level of sub-national regions, where 10% of regions have 40% of the CEFTA manufacturing activity. Low and medium-low technology industries are the predominant manufacturing industries in CEFTA 2006, accounting for about 80% of both turnover and employment. "Food and beverages" is by far the largest industry with 28% of manufacturing turnover and 20% of manufacturing employment, followed by "Basic metals" and "Fabricated metal products" which together account for 16% of turnover and 14% of employment. In terms of employment, "Wearing apparel" is another key industry, accounting for 11.6% of manufacturing employment.

The relative concentration of industries and relative specialisation of regions and countries are assessed using Theil indices. The industries with the highest relative concentration, i.e. which differ the most in their geographical distribution from overall manufacturing, are "Tobacco products", "Coke & refined petroleum products", "Other transport equipment", "Basic metals", "Motor vehicles", and "ICT". In contrast, the concentration of "Food products and beverages" is the most similar to manufacturing among all industries.

Country-specific agglomeration forces still seem to play a major role for CEFTA 2006 economies as most of industry concentration is due to regional differences in industrial activity within countries, rather than differences between countries. Regarding the specialisation of countries, the analysis shows that the larger countries – Serbia, Croatia and Bosnia and Herzegovina – show a significant proportion of within

<sup>\*</sup> This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

country specialisation of regions, while the national industry structure is quite similar to the industry structure of CEFTA 2006. On the other hand, the smaller countries – Albania and Montenegro – are more specialised at the country level, as the national industry structure is different to the industry structure of CEFTA 2006.

The novel database gathered for this study and the present analysis can be the starting point for further work. Future data collection would allow assessing, over time, industry concentration and country specialisation. This would enable policy makers to better evaluate the role of CEFTA 2006 for regional industry concentration, and better understand EU accession implications for the location of manufacturing industries. Furthermore, the mapping of industrial activity could be linked to the mapping of main transport infrastructure (such as highway corridors or ports). This would help to assess the determinants of regional agglomeration or regional manufacturing growth, if more regionally disaggregated data becomes available.

#### **INTRODUCTION**

1. The adoption of the CEFTA 2006 Agreement marked an important step on the path towards EU accession for the eight Parties Albania, Bosnia and Herzegovina, Croatia, the FYR Macedonia, Moldova, Montenegro, Serbia and Kosovo<sup>\*</sup>.<sup>3</sup> Full tariff liberalisation on industrial products, partial liberalisation on agricultural products and commitments related to investment policy have deepened regional integration and fostered convergence towards the EU. By lowering trade costs, regional trade liberalisation fosters economic integration and can affect firm's decision of where to locate their operations.

2. This paper provides a detailed assessment of industry location at the sub-national level in the eight CEFTA 2006 Parties. In particular, it analyses the turnover and employment concentration of 22 manufacturing industries across 102 sub-national regions in CEFTA 2006. Taking a different viewpoint, the paper also assesses the industry specialisation of countries and regions.

3. The analysis does not cover the development of industry concentration over time but provides a snapshot of spatial industry concentration for the period 2007 to 2009.<sup>4</sup> Therefore, it is not possible to assess how regional trade liberalisation in the context of the CEFTA 2006 Agreement affected industry concentration and specialisation of CEFTA Parties. Nevertheless, the present analysis and the annexed industry and country profiles provide important insights and a rich source of information for policy makers.

4. Box 1 relates this study to existing research by providing an overview on the empirical literature on industry concentration in Central and Eastern European (CEE) countries and its determinants. Proximity to the EU, human capital and international exposure in terms of trade and FDI were significant determinants of industry concentration for a number of industries in CEE countries and are therefore likely to be also of major relevance for CEFTA economies.

#### Box 1. Economic theory and empirical literature on industry concentration

According to economic theory, the agglomeration of firms and industries is mainly driven by the three Marshallian forces i) inputoutput linkages, ii) labour market pooling and iii) knowledge and technology spillovers. Input-output linkages refer to linkages of firms with their suppliers through inputs and with customers through their output. Strong input-output linkages between firms or industries lead firms to locate closer to each other in order to save on transport costs. If firms have similar labour requirements, a common labour market pool is another force for agglomeration as firms will have less difficulties in finding suitable workers and workers will face less difficulties to find new employment in case of job loss. Knowledge and technology spillovers incentivise firms to locate near to each other as workers might learn skills from each other and firms might improve their knowledge or technology by direct or indirect learning from other firms. Ellison et al. (2010) find that all three forces have strong effects on the coagglomeration of industries in the US with input-output linkages being the most important force.

However, firms and industries can also coagglomerate without any of these three Marshallian forces being at play. In other words, firms may choose independently to operate in the same region because of certain locational advantages. Such locational advantages of regions can be natural advantages related to natural resources, geography or history or also policy or economic determinants such as infrastructure or market access.

Cutrini (2010) finds opposite agglomeration patterns within and between European countries over time. In particular, for regions within countries manufacturing employment actually de-agglomerated. On the other hand, the EU internal market let to a slight increase in

<sup>3.</sup> This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

<sup>4.</sup> The term industry concentration refers to spatial concentration in the context of this paper and not to market concentration or market dominance.

agglomeration of certain industries such as Textiles or Transport equipment between 1993 and 2001. Assessing industry employment for 236 West European regions between 1975 and 2000, Brühlart and Traeger (2005) find that manufacturing employment has become less concentrated geographically in absolute terms but manufacturing has become more concentrated geographically relative to overall employment and textiles in particular.

Hildebrand and Wörz (2003) find that Central and Eastern European countries exhibited increasing concentration in industrial activity between 1993 and 2002, whether it was measured in terms of employment or production. This trend was opposite to what occurred among the EU-15 countries in the same period. This suggests a two-step reaction to post-Communist economic integration of the region. Initially, there was a rise in industrial concentration as resources were reallocated during the transition from centrally-planned economies to market economies. Later, a reversal of this industrial concentration occurred as technology spillovers and higher capital mobility became larger drivers of firm location. When these findings were disaggregated by industry, the analysis found that concentration levels were best determined by production factors such as human capital intensity, labour intensity (negative relationship) and local concentration of domestic demand. Productivity levels, which were aimed to capture technology capability differentials, were the only variable to positively relate to output concentration across all industries. The effects of other variables (economic size of a country, human capital endowment, Foreign Direct Investment) varied across industries. Employment concentration was heavily linked to differences in wage levels.

Using Overman's normalised localisation index to measure industrial concentration, Simone (2008) examines the key drivers of industrial clustering across CEE. Simone finds that trades in input parts and components has a strong impact on the clustering of motor vehicles and office machinery industries, while inputs have no impact on electronic equipment and furniture industries. Comparative advantage as measured by unit labour cost plays a strong role in industry clustering, while home market potential does not contribute to the emergence of industrial clusters. Similarly, Hildebrandt and Wörz (2003) report a multi-faceted picture of factors driving industrial clustering in Eastern Europe industries: exports to the EU have a significant impact on industrial agglomeration for a variety of industries, such as machinery, wood products, chemicals and electronics, while Foreign Direct Investment plays a strong role in geographical concentration in industries such as leathers and mineral products (Hildebrandt and Wörz, 2003). Using the number of employees as a measure of industrial concentration in Hungary, Szanyi et al. (2010) show that there is an element of path dependency for economic development leading to a positive impact on geographical location decision of French firms in Eastern Europe, Procher finds that firms are attracted to locations with a large agglomeration of firms. Industries attract to areas with access to large markets, which supports New Economic Geography theories stressing lower transport costs and scale economies for determining locations (Pardo, Carod, & Sánchez, 2009).

5. The paper consists of five sections and four annexes. Section 2 describes the data and methodology used to assess industry concentration in CEFTA 2006. Section 3 summarises the key characteristics of the manufacturing activity in CEFTA 2006 using descriptive statistics and maps. Section 4 employs Theil indices to analyse the relative concentration of industries and the relative specialisation of countries. Section 5 draws the main conclusions from the analysis.

6. Annexes III and IV provide detailed industry and country profiles. The industry profiles provide key turnover and employment statistics and show how industries are concentrated across countries and sub-national regions with the help of descriptive statistics, Theil indices of relative concentration and maps. Using the same tools, the country profiles show how overall manufacturing is concentrated within countries and the extent of industry specialisation of countries.

#### DATA AND METHODOLOGY

#### Data

7. The novelty of this paper lies in the use of a newly compiled database of turnover and employment data at the level of sub-national regions of each CEFTA 2006 economy for 22 manufacturing industries. The data have been collected by the OECD in collaboration with national offices of statistics. Data sources are detailed in Annex I.

8. The characteristics of the database are threefold, reflecting the choice of geographical units, indicators and industries. First, this analysis treats the CEFTA 2006 region as a whole, revealing its nature as a trade area where tariffs have been completely removed. Based on this approach, data have been collected for 102 sub-regions which are based either on existing or proposed NUTS-3 regions or have been artificially created by the authors to resemble the NUTS-3 typology (based on population and area). This has been done in order to provide comparability of manufacturing activity across the different CEFTA 2006 economies and their sub-regions. A detailed description of the sub-regions and their basic characteristics can be found in the Annex I.

9. Second, the data collection has been focused on both turnover and employment as the sole readily available indicators of manufacturing activity. The decision to conduct the analysis using both measures allowed for cross-checking and as the following sections will highlight, the results using the two indicators are correlated. Third, the data were collected for two-digit NACE Rev. 1.1 industries, the most disaggregated level at which data were available for the sample of countries. As Croatia and Serbia already record their data according to the NACE Rev. 2 classification, their numbers have been converted to NACE Rev. 1.1 using a correspondence table, but this has required to aggregate three high technology intensive manufacturing industries to an information and communication technology (ICT) industry. Thus, the resulting list includes 22 manufacturing industries and four industry groups based on technological intensity, medium-low technological intensity, medium-high technological intensity and ICT.

10. The data have been collected for the three years 2007, 2008 and 2009. Both turnover and employment have been averaged over this period to smooth the fluctuations due to the pre-crisis boom and recession period. Numbers in local currency have been converted to euro using yearly average exchange rates. In some instances, detailed in the Annex I, estimations of employment have been done using the information available for turnover.

#### Methodology

11. Understanding territorial distribution of economic activity has attracted increasing political and academic interest due to its potential implications: the identification of economic clusters or specialisation patterns across the regions studied. There have been numerous developments on assessing concentration of industries or regional specialisation on their own: Bickenbach and Bode (2008) provide an overview of the different methodologies available.

12. A distinction has to be drawn between absolute and relative measures of concentration and specialisation: while absolute measures indicate an industry's concentration or specialisation without a

benchmark and regardless of the overall economic activity, relative measures compare the distribution of an industry to the distribution of the entire manufacturing sector. The key advantage of a relative concentration measure comes from its ability to separate an industry's specific variance from that of the entire manufacturing sector. At a minimum, history and geography can explain a great degree of variance in the manufacturing sector as a whole; industry-specific analysis requires understanding the difference between overall factors pertaining to manufacturing and the one particular to an industry or group of industries. Also, for example, the capital region usually has a high concentration of manufacturing activity; relative concentration captures whether a specific industry is more or less concentrated in the capital region than overall manufacturing.

13. Based on Cutrini (2010), this paper uses indices that evaluate the entire distribution of manufacturing industries across regions. In order to do so, measures of relative concentration and relative specialisation are constructed. The former refers to the divergence in the spatial distribution of an industry with respect to the spread of the overall manufacturing activity in the whole CEFTA 2006. Similarly, relative specialisation can be seen as the divergence between the regional manufacturing structure and the overall structure across manufacturing industries. In this particular example, relative specialisation is the dissimilarity in the manufacturing structures between a particular region and the entire CEFTA 2006 zone. Both relative indices are adaptations of the Theil (1966) dissimilarity index, a measure that studies the discrepancy of two overlapping distributions (Annex I details the formulas of both indices). An advantage of Theil indices is that both concentration and specialisation can be seen as the result of the regional agglomeration economies that happen within countries and of the between countries existing comparative advantages. Specialisation can also be decomposed into a within and a between country component.

#### CHARACTERISTICS OF MANUFACTURING ACTIVITY BY COUNTRY AND INDUSTRY

14. This section will provide an overview of the manufacturing activity in the CEFTA 2006 region, which accounted on average for 15% of GDP in CEFTA economies between 2007 and 2009.<sup>5</sup> It will describe the concentration of overall manufacturing by country and region and the industry specialisation of CEFTA 2006 and its regions.

#### Geographic concentration of manufacturing

15. Over the period 2007-2009, the manufacturing sector in the eight CEFTA 2006 economies produced a yearly average turnover of EUR 42.5 bn and employed a yearly average of 1.08 mn people. The average turnover per employee was EUR 39,443; the minimum of EUR 5,458 is recorded in the Moldovan region composed of Cantemir, Causeni, Cimislia, Leova and Stefan Voda districts and the maximum of EUR 100,451 in the region of Sisak-Moslavina in Croatia.

16. In CEFTA 2006, manufacturing is heavily concentrated in the two largest economies Serbia and Croatia. Figure 1 shows that Serbia and Croatia account for 73% of manufacturing turnover and 58% of manufacturing employment, while Bosnia and Herzegovina is a distant third with 10% of the turnover and 13% of the employment.



Figure 1. Turnover and Employment Shares of CEFTA Parties in CEFTA 2006 Manufacturing

17. Manufacturing in CEFTA 2006 is not only concentrated at the country level, but also at level of sub-national regions. Figure 2 shows that the top ten regions in CEFTA 2006 (out of 102 regions) account

<sup>5.</sup> The average manufacturing share in GDP are taken from the World Development Indicators of the World Bank. Data for Kosovo\* were not available.

for 43% of manufacturing turnover and for 27% of manufacturing employment. Furthermore, the concentration of turnover is higher than that of employment.



Figure 2. Cumulative Distribution of Regions in CEFTA 2006 Manufacturing Turnover and Employment

18. In further detail, out of the top ten regions (presented in Table 1, alongside with their main industries), eight are in either Serbia or Croatia; the sole exceptions are Skopje, the capital of the FYR Macedonia and the Zenicko-Dobojski region in Bosnia and Herzegovina.

19. Table 1 furthermore shows that regions specialise in few industries. In all top ten regions, at least half of the manufacturing activity is found in just three industries. In particular, food and beverages, the petrochemical and heavy industries are among the key industries present in these top regions, already an indication of the specialisation patterns of countries and regions described further below.

20. Not surprisingly, the top 10 regions in terms of manufacturing turnover are also the most important ones in terms of manufacturing exports. Table 1 shows the export ranks of regions based on estimates of manufacturing exports by region<sup>6</sup>. Furthermore, the correlation between turnover and exports for 94 regions in our sample is very high with a correlation coefficient of 0.92.

<sup>6.</sup> Manufacturing exports by region were estimated as follows. First, national exports by industry were allocated to regions by assuming that the distributions of turnover and exports are the same across regions. Second, industry exports by region were aggregated by region to obtain manufacturing exports by region. The differences in the turnover and export rankings of regions therefore mainly result from differing export intensities of industries.

	Turnover Top 3 Industries (by Share in Region's Manufacturing				
	Region	Country	(EUR)	Turnover)	Export
1	Belgrade	SRB	4.6 bn	Food and Beverages (34%), ICT (13%), Chemical Products (8%)	2
2	Zagreb (city)	HRV	2.9 bn	Food and Beverages (32%), Electrical Machinery (17%), Chemical Products (14%)	1
3	South Backa	SRB	2.0 bn	Food and Beverages (53%), Rubber and Plastic Products (8%), Non-metallic Mineral Products (7%)	8
4	Skopje	MKD	1.8 bn	Petroleum Products (29%), Basic Metals (20%), Food and Beverages (14%)	10
5	Primorje- Gorski Kotar	HRV	1.7 bn	Petroleum Products (66%), Other Transport Equipment (9%), Food and Beverages (4%)	3
6	Sisak- Moslavina	HRV	1.3 bn	Petroleum Products (53%), Chemical Products (25%), Food and Beverages (9%)	5
7	Zenicko- Dobojski	BIH	1.0 bn	Fabricated Metal Products (46%), Basic Metals (24%), Non- metallic Mineral Products (10%)	9
8	Podunavlje	SRB	1.0 bn	Basic Metals (82%), Machinery and Equipment (5%), Food and Beverages (4%)	4
9	Istria	HRV	1.0 bn	Tobacco Products (25%), Other Transport Equipment (17%), Non-metallic Mineral Products (13%)	6
10	Zagreb (county)	HRV	1.0 bn	Food and Beverages (43%), Fabricated Metal Products (13%), Non-metallic Mineral Products (11%)	13

#### Table 1. Top 10 Manufacturing Regions in CEFTA 2006 by Turnover

21. The industry profiles in Annex III provide the top five regions for each of the 22 manufacturing industries, thereby illustrating in which region and to what extent the different industries are concentrated. For instance, in the food and beverages industry the three top regions are Belgrade (SRB), South Backa (SRB) and Zagreb (HRV) and these three regions account for 30% of the industry turnover.

#### Industry specialisation of CEFTA 2006, countries and regions

22. The previous section illustrated that manufacturing is concentrated geographically in few countries and regions of CEFTA 2006. This section assesses whether CEFTA 2006 and its countries and regions are specialised in certain industries by looking at the industry composition of a given geographical unit.

23. CEFTA 2006 economies are specialised in low technology and medium low-technology industries. Figure 3 shows that these two industry groupings account for almost 80% of the manufacturing turnover as well as employment, while ICT manufacturing represents a very modest 3% of the total.



Figure 3. Share of Industries in CEFTA 2006 Manufacturing

24. Table 5 in Annex II describes in more detail the focus of CEFTA 2006 on low and medium-low technology manufacturing. All top five industries are either low technology or medium-low tech technology and constitute 59% of turnover and 39% of employment in manufacturing. On its own, the food and beverages industry accounts for 28% of the turnover and for 20% of employment, being by far the largest manufacturing segment in the CEFTA 2006 region. Other significant industries are basic and fabricated metals which together account for 16% of turnover and 14% of employment. While the Wearing apparel industry accounts for only 3% of manufacturing turnover, it is the second biggest employer in manufacturing with an employment share of 12%.

25. The country profiles in Annex IV provide more detail on the industry specialisation of countries.

#### Absolute concentration of manufacturing – mapping of turnover and employment

26. The descriptive observation that manufacturing is concentrated geographically is further supported by the mapping of absolute concentration. Maps 1 and 2 present the geographical distribution of the manufacturing activity, both by turnover and employment. The three main conclusions are that the regions in Serbia and Croatia exhibit the highest concentrations (especially on the border with the European Union), that capitals concentrate a disproportionate part of the activity and that transport corridors, especially corridor number X, are correlated with highly active regions.

27. Transport infrastructure is expected to have a significant role in determining industry concentration as it facilitates input-output linkages between firms and improves market access. For the CEFTA 2006 region, the presence of transport infrastructure reduces in particular the time and cost to access the border with the EU Single Market, the main destination for exports.

28. The main road corridors are closely linked with the top regions of manufacturing activity. For example, six of the top 10 regions are crossed by Corridor X, which roughly cuts the Western Balkans from North to South and provides access to the EU market through Slovenia, Austria, Hungary and Greece. Furthermore, three of the top 10 regions border the trajectory of Corridor X, while at the same time being crossed by Corridor V which centres on Budapest and thus provides access to Central Europe.

Map 1. Absolute concentration of manufacturing turnover in CEFTA 2006



Map 2. Absolute concentration of manufacturing employment in CEFTA 2006



#### RELATIVE CONCENTRATION OF INDUSTRIES AND RELATIVE SPECIALISATION OF COUNTRIES IN CEFTA

29. The descriptive analysis and the mapping of turnover and employment in the previous section provided an overview of absolute concentration of industries in CEFTA 2006, i.e. how the distribution of a given industry varies over geographic space. This section employs Theil indices to capture relative concentration of industries, i.e. how the distribution of industries varies over geographic space relative to the distribution of overall manufacturing. Furthermore, this section also uses Theil indices to assess the industry specialisation of CEFTA 2006 economies. More details on the calculation and the interpretation of Theil indices are given in Section 2 and in Annex I. Theil indices are also included in the industry profiles in Annex IV.

#### Relative concentration of industries in CEFTA 2006

30. Figures 4 and 5 show Theil indices of relative concentration of turnover and employment for low-tech, medium-low tech, medium-high tech and ICT industries in CEFTA 2006. Theil indices are further decomposed into a within country component which measures inequalities between regions within a country and a between country component which measures inequalities between countries. Four main patterns are worth highlighting.

31. First, low, medium-low and medium-high tech industries have a rather low relative concentration. In other words, the geographical distribution of these industries is similar to the geographical distribution of overall manufacturing. Second, the ICT industry has a high degree of concentration relative to manufacturing. Third, within country differences in economic activity are significantly more pronounced than between country differences. However, for the ICT industry the between country component accounts for 34% of its concentration, which indicates that the ICT industry is distributed quite differently between countries compared to manufacturing. Further below, Figure 6 shows that this large between country component is mainly explained by the high concentration of the ICT industry in Serbia. Forth, turnover tends to be more concentrated than employment.



Figure 4. Theil Indices for Turnover Concentration of Industries grouped by Technology



Figure 5. Theil Indices for Employment Concentration of Industries grouped by Technology

32. Figure 6 provides more detail on where industries are concentrated by decomposing the Theil indices for given industries into country contributions. Low tech industries are relatively concentrated in Serbia, medium-low tech industries are relatively concentrated in Bosnia-Herzegovina, Croatia and the FYR Macedonia, medium-high tech industries are relatively concentrated in Croatia and Serbia and the ICT industries are relatively concentrated in Serbia and Montenegro.

33. In some cases, the contribution of a country to the Theil index is negative, which indicates that the industry share of the country in CEFTA 2006 is below its manufacturing share. For instance, in ICT Croatia has a positive within country component and a negative between country component. The positive within country component indicates that within Croatia the ICT industry is more concentrated compared to manufacturing. On the other hand, the negative between country component indicates that Croatia's has a lower share of the ICT industry in CEFTA 2006 compared to its share in CEFTA 2006 manufacturing.



Figure 6. Theil Indices for Industry Concentration of Turnover by Country

34. Figure 7 provides more detail for turnover concentration of disaggregated industries.<sup>7</sup> In terms of turnover, the industries which are the most concentrated relative to overall manufacturing are Tobacco products (Theil=2.05), Coke & refined petroleum products (1.77), Other transport equipment (1.39), Basic metals (1.16), Motor vehicles (1.07), and ICT (0.96). In contrast, the concentration of Food products and beverages is the most similar to manufacturing among all industries. This result is not surprising, as Food products and beverages account for 28% of manufacturing turnover (see Table 5 in Annex II).

<sup>7.</sup> Annex II provides tables of Theil indices for disaggregated industries. Table 5 in Annex II shows the turnover and employment share of industries in overall manufacturing and the Theil indices of concentration as well as the contribution of the within and the between component. Tables 6 and 7 in Annex II show the shares of countries in CEFTA turnover and employment as well as the Theil indices of industry concentration for turnover and employment broken down by CEFTA economy.



#### Figure 7. Theil Indices for Turnover Concentration of NACE 2-digit Industries

35. Figure 7 further shows that the relative concentration of industries in CEFTA 2006 is mainly explained by within country concentration: the distribution of specific industries across regions within countries can differ significantly from the respective distribution of manufacturing. However, the distribution of specific industries relative to manufacturing is more similar at the country level. The importance of within country concentration relative to between country concentration indicates that agglomeration forces have worked so far mainly within countries rather than across countries.

36. In contrast to other industries, for Other transport equipment, which covers mainly shipbuilding, differences between countries play a major role for the high concentration of the industry. The between component contributes 42% to the overall Theil index of 1.39. Croatia accounts for 83% of the CEFTA activity in this industry and also all top 5 regions in terms of turnover are located in Croatia (see the industry profile in Annex III). Also for ICT industries, the differences between countries characterise significantly industry concentration as the between component constitutes 34% of the overall Theil index. Serbia accounts for 66% of ICT turnover in CEFTA and besides Zagreb (HRV) and Skopje (MKD), three of the top five regions are Serbian (see the ICT profile in Annex IV).

#### Relative specialisation of countries in CEFTA 2006

37. Theil indices can also be used to assess the relative specialisation of economies in CEFTA 2006, i.e. how the average regional industry structure of countries differs from the overall industry structure in CEFTA 2006. Figure 8 and Figure 9 show the Theil indices of industry specialisation of countries relative to CEFTA 2006 for turnover and employment respectively. Theil indices are further decomposed into a within country component which measures the inequalities in the industrial structure of regions within a

country and a between component which measures the inequality in the industrial structure of a country and CEFTA 2006.

38. Montenegro is the most specialised countries in terms of turnover with a Theil index of 0.93. The weight of the between country component indicates that Montenegro's industrial structure is rather different compared to the industrial structure of CEFTA 2006. Quite differently, for the large CEFTA economies Bosnia and Herzegovina, Croatia and Serbia, within country specialisation accounts for a great part of the countries' specialisation relative to CEFTA 2006. Hence, in these countries, regions specialise within the country while the overall industry structure is quite similar to the industry structure of CEFTA 2006. For instance, in Bosnia and Herzegovina, the regions Zenicko-Dobojski and Hercegovacko-Neretvanski are relatively specialised in basic metals and fabricated metal products.



Figure 8. Theil Indices for Industry Specialisation of CEFTA 2006 Parties for Turnover



Figure 9. Theil Indices for Industry Specialisation of CEFTA Parties for Employment

#### CONCLUSIONS

39. Manufacturing in CEFTA 2006 is highly concentrated at the level of both countries and subnational regions. At the country level, Serbia and Croatia account for 73% of turnover and 58% of employment. At the level of sub-national regions, the top 10 regions (out of 102) in CEFTA concentrate 40% of the manufacturing activity.

40. Low and medium-low technology industries are the predominant manufacturing industries in CEFTA 2006 accounting for about 80% of both turnover and employment. Food and beverages is by far the largest industry with 28% of manufacturing turnover and 20% of manufacturing employment, followed by basic and fabricated metals which together account for 16% of turnover and 14% of employment. In terms of employment, wearing apparel is another key industry accounting for 11.6% of manufacturing employment.

41. Theil indices are used to assess relative concentration of industries and relative specialisation of regions and countries. The industries which have the highest relative concentration, i.e. which differ the most in their geographical distribution from overall manufacturing are Tobacco products, Coke & refined petroleum products, Other transport equipment, Basic metals, Motor vehicles, and ICT. In contrast, the concentration of Food products and beverages is the most similar to manufacturing among all industries.

42. Most of industry concentration is due to regional differences in industrial activity within countries rather than due to differences between countries. This suggests that agglomeration forces are to a large extent country-specific and play only a minor role at the level of the entire CEFTA 2006 region. However, an assessment over time of industry concentration and country specialisation will be necessary better evaluate the role of CEFTA 2006 for industry concentration in the region.

43. Building on the data of this exploratory work, a variety of further analysis can be conducted. In particular, the mapping of industrial activity can be linked to the mapping of main transport infrastructures such as highway corridors or ports. Furthermore, if more data disaggregated by region become available then the determinants of regional agglomeration or of regional manufacturing growth can be assessed.

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## ANNEX I – DATA AND METHODOLOGY

CEFTA 2006 Party	Office of Statistics' Source of Data		
Albania	Structural Business Survey		
Bosnia and Herzegovina	Industry Reports		
Croatia	PRODCOM survey		
Kosovo*	Not reported		
FYR Macedonia	Business Registry		
Moldova	Financial Reports		
Montenegro	Business Registry		
Serbia	Not reported		

#### Table 2. Sources for turnover and employment data

## Table 3. NACE Rev. 1.1. Industry Classification and Technological Intensity

NACE	NACE Rev 1.1 Description	Technogical
Rev 1.1 Code		Intensity
15	Food products and beverages	Low Tech
16	Tobacco products	Low Tech
17	Textiles	Low Tech
18	Wearing apparel; dressing and dyeing of fur	Low Tech
19	Leather and leather products	Low Tech
20	Wood and wood products	Low Tech
21	Pulp, paper and paper products	Low Tech
22	Publishing, printing and reproduction of recorded media	Low Tech
23	Coke, refined petroleum products and nuclear fuel	Medium Low Tech
24	Chemicals and chemical products	Medium High Tech
25	Rubber and plastic products	Medium Low Tech
26	Other non-metallic mineral products	Medium Low Tech
27	Basic metals	Medium Low Tech
28	Fabricated metal products, except machinery and equipment	Medium Low Tech
29	Machinery and equipment n.e.c.	Medium High Tech
30	Office machinery and computers	ICT
31	Electrical machinery and apparatus n.e.c.	Medium High Tech
32	Radio, television and communication equipment and apparatus	ICT
33	Medical, precision and optical instruments, watches and clocks	ICT
34	Motor vehicles, trailers and semi-trailers	Medium High Tech
35	Other transport equipment	Medium High Tech
36	Furniture; manufacturing n.e.c.	Low Tech

Albania – 12 prefectures										
Region	Area (km²)	Population	Map Code	Region	Area (km²)	Population	Map Code			
Berat	1,802	170,845	ALB-9	Korce	3,711	257,576	ALB-10			
Diber	2,507	140,002	ALB-4	Kukes	2,373	79,303	ALB-2			
Durres	827	310,499	ALB-5	Lezhe	1,581	158,829	ALB-3			
Elbasan	3,278	343,115	ALB-7	Shkoder	3,562	246,060	ALB-1			
Fier	1,887	374,074	ALB-8	Tirane	1,586	800,347	ALB-6			
Gjirokaster	2,883	102,549	ALB-11	Vlore	2,706	211,773	ALB-12			

Table 4. Sub-national Regions in CEFTA 2006

Bosnia and Herzegovina – 10 cantons in the Federation of Bosnia and Herzegovina, 1 autonomous region (Brcko), 5 artificial NUTS-3 regions in the Republika Srpska								
Region	Area (km²)	Population	Map Code	Region	Area (km²)	Population	Map Code	
Bosansko-Podrinjski	505	33,225	BIH-13	Brcko	208	75,635	BIH-8	
Hercegbosanski	4,934	81,396	BIH-10	Sana	2,180	170,638	BIH-1	
Hercegovacko- Neretvanski	4,401	226,632	BIH-15	Vrbas	6,797	485,145	BIH-2	
Posavski	325	40,513	BIH-7	Sava	3,120	255,878	BIH-3	
Sarajevo	1,277	421,289	BIH-12	Drina	3,349	287,840	BIH-4	
Srednjebosanski	3,189	255,648	BIH-11	Herzegovina	9,171	237,976	BIH-5	
Tuzlanski	2,649	497,813	BIH-9					
Unsko-Sanski	4,125	287,998	BIH-6					
Zapadno-Hercegovacki	1,362	81,833	BIH-16					
Zenicko-Dobojski	3,343	400,848	BIH-10					

Croatia – 21 NUTS-3 regions									
Region	Area (km²)	Population	Map Code	Region	Area (km²)	Populati on	Map Code		
Bjelovar - Bilogors	2,638	124,646	HRV-6	Sibenik - Knin	2,994	114,122	HRV-19		
Dubrovnik - Neretva	1,782	127,473	HRV-21	Sisak - Moslavina	4,448	171,975	HRV-13		
Primorje - Gorski Kotar	3,590	304,228	HRV-15	Slavonski Brod - Posavina	2,027	172,681	HRV-3		
Istra	2,813	214,991	HRV-16	Split - Dalmacija	4,524	482,501	HRV-21		
Karlovac	3,622	132,150	HRV-14	Varazdin	1,260	180,252	HRV-9		
Koprivnica - Krizevci	1,734	119,586	HRV-7	Virovitica - Podravina	2,021	87,596	HRV-5		
Krapina - Zagorje	1,230	136,357	HRV-10	Vukovar - Srijem	2,448	197,472	HRV-2		
Lika - Senj	5,350	49,924	HRV-17	Zadar	3,643	175,682	HRV-18		
Medimurje	730	117,891	HRV-8	Zagreb	3,078	328,123	HRV-11		
Osijek - Baranja	4,149	319,239	HRV-1	Grad Zagreb	640	790,298	HRV-12		
Pozega - Slavonija	1,821	81,891	HRV-4						

Kosovo* - 7 districts									
Region	Area (km²)	Population	Map Code	Region	Area (km²)	Population	Map Code		
Ferizaj	1,021	181,501	KOS-5	Pec	1,364	287,883	KOS-3		
Dakovica	1,225	118,423	KOS-7	Pristina	2,164	676,723	KOS-2		
Gnjilane	1,345	218,982	KOS-4	Prizren	1,739	401,335	KOS-6		
Kosovska Mitrovica	2,052	268,292	KOS-1						
		FYR Mac	edonia – 8 I	NUTS-3 regions					
Region	Area	Population	Map Cada	Region	Area	Population	Map Code		
	(KM <sup>2</sup> )	-			(KM <sup>2</sup> )	-			
Eastern	4,188	200,946	MKD-2	Polog	2,479	313,110	MKD-8		
Southeastern	2,741	172,485	MKD-1	Northeastern	2,306	174,415	MKD-3		
Southwestern	3,280	222,064	MKD-7	Skopje	1,818	597,914	MKD-4		
Pelagonia	4,719	234,659	MKD-6	Vardar	3,346	133,026	MKD-5		

Moldova – 9 artificial NUTS-3 regions								
Region	Area (km²)	Population	Map Code	Region	Area (km <sup>2</sup> )	Population	Map Code	
Briceni, Donduseni, Edinet, Ocnita, Riscani	3,925	329,317	MDA-1	Anenii Noi, Criuleni, Dubasari, Orhei, Rezina	3,735	369,910	MDA-5	
Falesti, Glodeni, Singerei, Balti	2,938	396,766	MDA-3	Chisinau	572	789,534	MDA-7	
Drochia, Floresti, Soroca, Soldanesti	3,749	323,831	MDA-2	Cantemir, Causeni, Cimislia, Leova, Stefan Voda	4,865	342,614	MDA-8	
Calarasi,Nisporeni,Telen esti, Ungheni	3,314	337,148	MDA-4	Basarabeanca, Cahul, Taraclia, Gagauzia	4,361	358,812	MDA-9	
Hincesti, Ialoveni, Straseni	2,985	312,498	MDA-6					

Montenegro – 3 artificial NUTS-3 regions										
Region	Area (km <sup>2</sup> )	Population	Map Code	Region	Area (km²)	Population	Map Code			
Bar, Budva, Cetinje, Danilovgrad, Herceg Novi, Kotor, Niksic, Tivat, Ulcinj	5,056	256,134	MNE-2	Adrijevica, Beran, Bijelo Polje, Kolasin, Mojkovac, Plav, Pluzine, Pljevlja, Rozaje, Savnik, Zabljak	7,304	195,991	MNE-1			
Podgorica	1,399	169,132	MNE-3	ž						

Serbia – 25 districts											
Region	Area (km <sup>2</sup> )	Population	Map Code	Region	Area (km²)	Population	Map Code				
Bor	3,506	132,464	SRB-16	Raska	3,918	299,155	SRB-20				
Branicevo	3,865	189,556	SRB-15	Sumadija	2,387	289,496	SRB-13				
Grad Beograd	3,222	1,630,582	SRB-9	Toplica	2,231	94,570	SRB-21				

Jablanica	2,769	227,116	SRB-24	Zajecar	3,623	124,423	SRB-18
Kolubara	2,474	180,293	SRB-10	Zlatibor	6,141	296,858	SRB-11
Macva	3,268	310,839	SRB-8	South Backa	4,016	607,282	SRB-4
Moravica	3,016	215,422	SRB-12	South Banat	4,245	300,874	SRB-7
Nisava	2,729	374,017	SRB-22	North Backa	1,784	192,118	SRB-2
Pcinja	3,520	228,254	SRB-25	North Banat	2,329	153,708	SRB-3
Pirot	2,761	95,861	SRB-23	Central Banat	3,256	193,067	SRB-5
Podunavlje	1,248	203,118	SRB-14	Srem	3,486	325,734	SRB-6
Pomoravlje	2,614	216,186	SRB-17	West Backa	2,420	195,573	SRB-1
Rasina	2,668	244,241	SRB-19				

#### Data Estimation

#### **Bosnia and Herzegovina**

Neither the autonomous region Brcko nor the Federation of Bosnia and Herzegovina had any data for employment dissagregated at the region level. However, for the Federation, complete turnover data and employment data at the level of each industry were available. Using the shares of each region in each industry's turnover, the employment of each region was thus estimated. Brcko – a region of its own – had only total turnover and employment along with the breakdown of turnover at the level of each industry. Using data for Republika Sprska and the Federation of Bosnia and Herzegovina, each industry's employee-to-euro ratio was calculated as a measure of the intensity of labour in each industry's production function. This was then used in combination with the turnover data at industry level in Brcko to estimate the employment figures whose sum comes very close to the reported total employment in Brcko.

#### Methodology

Relative Industry Concentration and Country Specialisation

Let:

 $x_{ijk}$  = turnover in manufacturing industry k (k = 1, ..., n) of region j ( j = 1, ..., r<sub>i</sub>) belonging to

country i (i = 1,  $\ldots$ , m)

 $x_{ij}$  = manufacturing turnover in region i of country j

 $x_{ik}$  = turnover in the manufacturing industry k of country i

 $x_i = turnover in country i$ 

- $x_k$  = turnover in manufacturing industry k in CEFTA 2006
- x = manufacturing turnover in CEFTA 2006
- N = number of manufacturing industries
- R = number of regions in the whole CEFTA 2006

The main index for relative concentration used  $-T_k$  – builds on either employment or turnover data to measure the degree of concentration of industry k:

$$T_k = \sum_{i=1}^m \sum_{j=1}^{r_i} \frac{x_{ijk}}{x_k} \ln\left(\frac{x_{ijk}/x_k}{x_{ij}/x}\right)$$

 $T_k$  is further decomposable into two measures, separating the within-country variance from the between-country variance:

$$T_k = T_k^w + T_k^b$$

The within-country relative concentration -  $T_k^w$  – captures the variance of how industry k differs in distribution from the overall manufacturing distribution in individual countries:

$$T_k^w = \sum_{i=1}^m \sum_{j=1}^{r_i} \frac{x_{ijk}}{x_k} \ln\left(\frac{x_{ijk}/x_{ik}}{x_{ij}/x_i}\right)$$

The between-country relative concentration  $-T_{k}^{b}$  – captures the variance of how industry k differs in distribution from the overall manufacturing distribution between individual countries:

$$T_k^b = \sum_{i=1}^m \frac{x_{ijk}}{x_k} \ln\left(\frac{x_{ik}/x_k}{x_i/x}\right)$$

The main index for relative country specialisation  $- aRS_i$  – builds on either employment or turnover data to measure the degree of specialisitation of country i:

$$aRS_{i} = \sum_{j=1}^{r_{i}} T_{ij} \frac{x_{ij}}{x_{i}}$$
  
Where  $T_{ij} = \sum_{k=1}^{n} \frac{x_{ijk}}{x_{ij}} ln(\frac{x_{ijk}/x_{ij}}{x_{k}/x})$ 

 $aRS_i$  is further decomposable into two measures, separating the within-country variance from the betweencountry variance:

$$aRS_i = aRS_i^w + T_i^b$$

The within-country relative specialisation -  $aRS_i^w T_k^w$  – captures the variance of how country i is specialised within its borders:

$$aRS_i^w = \sum_{j=1}^{r_i} T_{ij}^w \frac{x_{ij}}{x_i}$$

Where 
$$T_{ij}^w = \sum_{k=1}^n \frac{x_{ijk}}{x_{ij}} ln(\frac{x_{ijk}/x_{ij}}{x_{ik}/x_i})$$

The between-country (national) relative specialisation  $-T_i^b$  – captures the variance of how country i is specialised when compared with the industrial structure of the entire CEFTA 2006 region:

$$T_i^b = \sum_{i=1}^m \frac{x_{ik}}{x_i} \ln(\frac{x_{ik}/x_i}{x_k/x})$$



Figure 10. CEFTA 2006 Map with Codes for sub-national Regions

				Turn	over			Emplo	yment	
		•			Theil			•	Theil	
NACE	Industry	Tech*	Manuf. Share	overall	within	between	Manuf. Share	overall	within	between
15	Food products and beverages	LT	27.8%	0.20	81%	19%	20.3%	0.18	63%	37%
29	Machinery and equipment n.e.c.	MHT	2.9%	0.34	85%	15%	4.8%	0.33	81%	19%
28	Fabricated metal products	MLT	8.1%	0.37	73%	27%	9.0%	0.28	83%	17%
36	Furniture and other manufacturing	LT	2.9%	0.40	96%	4%	5.0%	0.30	98%	2%
25	Rubber and plastic products	MLT	4.1%	0.43	91%	9%	4.1%	0.32	87%	13%
26	Oth.non-metallic mineral products	MLT	6.6%	0.44	76%	24%	5.7%	0.25	81%	19%
22	Publishing and printing	LT	2.4%	0.47	83%	17%	3.5%	0.50	83%	17%
21	Pulp, paper and paper products	LT	2.8%	0.49	94%	6%	1.8%	0.42	94%	6%
24	Chemicals and chemical products	MHT	7.9%	0.56	86%	14%	4.4%	0.60	86%	14%
18	Wearing apparel	LT	2.6%	0.63	73%	27%	11.6%	0.45	48%	52%
31	Electrical machinery n.e.c.	MHT	3.5%	0.74	93%	7%	3.5%	0.62	89%	11%
20	Wood and wood products	LT	2.9%	0.85	70%	30%	4.2%	0.57	67%	33%
17	Textiles	LT	1.0%	0.87	93%	7%	3.2%	0.55	93%	7%
19	Leather and leather products	LT	1.0%	0.93	71%	29%	4.7%	0.73	74%	26%
30,32,33	3 ICT	ICT	3.1%	0.96	66%	34%	2.8%	0.75	69%	31%
34	Motor vehicles, trailers	MHT	1.4%	1.07	72%	28%	2.8%	1.01	61%	39%
27	Basic metals	MLT	8.2%	1.16	78%	22%	4.0%	0.97	87%	13%
35	Other transport equipment	MHT	2.1%	1.39	58%	42%	2.6%	1.43	61%	39%
23	Coke, refined petroleum product	MLT	6.7%	1.77	69%	31%	1.1%	1.58	66%	34%
16	Tobacco products	LT	1.9%	2.05	98%	2%	1.0%	1.49	73%	27%

#### ANNEX II – TABLES OF THEIL INDICES

*Notes:* Theil index: *overall = within + between*. The *within* component measures inequality between regions within countries, while the between component measures inequality between countries in CEFTA 2006.

\*LT - low tech; MLT - medium low tech; MHT - medium high tech; ICT - information and communication technology.

Ind	CEF	TA	A	ALB	E	BIH	н	RV	U	INK	N	1KD	N	1DA	N	1NE	S	RB
	EUR	Theil	%	Т	%	Т	%	Т	%	Т	%	Т	%	Т	%	Т	%	Т
All Manuf.	42,522	0	3%	0	10%	0	33%	0	1%	0	8%	0	4%	0	1%	0	39%	0
Low	19,278	0.1194	3%	-0.0005	9%	0.0122	31%	0.0278	2%	0.0038	7%	-0.0020	5%	0.0233	1%	-0.0032	42%	0.0581
Medium-low	14,300	0.2251	4%	0.0209	14%	0.0851	32%	0.0687	2%	0.0050	12%	0.0566	2%	-0.0070	1%	0.0000	31%	-0.0041
Medium-high	7,613	0.2095	1%	-0.0097	6%	-0.0091	41%	0.1401	1%	-0.0045	5%	-0.0238	2%	-0.0111	2%	0.0050	44%	0.1226
ICT	1,330	0.9603	0%	-0.0015	2%	-0.0145	16%	0.0574	0%	-0.0015	5%	-0.0002	2%	-0.0066	9%	0.1908	66%	0.7364
15	11,807	0.2031	2%	-0.0059	7%	-0.0031	31%	0.0472	2%	0.0070	6%	-0.0165	6%	0.0397	0%	-0.0022	46%	0.1368
16	828	2.0509	0%	-0.0017	9%	0.1627	32%	0.7820	2%	0.0244	13%	0.1907	3%	0.0076	3%	0.0512	37%	0.8341
17	445	0.8672	1%	0.0038	9%	0.1062	28%	0.3070	2%	0.0100	12%	0.0593	9%	0.2369	4%	0.0404	35%	0.1036
18	1,107	0.6349	9%	0.1280	4%	-0.0133	27%	0.1085	0%	-0.0030	23%	0.3542	5%	0.0247	1%	0.0065	30%	0.0294
19	441	0.9290	21%	0.4565	12%	0.0992	22%	0.1662	0%	0.0003	9%	0.0717	4%	0.0159	2%	0.0019	31%	0.1174
20	1,224	0.8513	1%	-0.0037	35%	0.7803	29%	0.1337	2%	0.0196	4%	-0.0214	1%	-0.0109	2%	0.0043	25%	-0.0507
21	1,173	0.4945	1%	-0.0017	10%	0.0954	37%	0.2237	0%	-0.0038	5%	-0.0202	3%	0.0079	1%	-0.0033	43%	0.1964
22	1,011	0.4719	3%	0.0137	4%	0.0050	44%	0.3176	3%	0.0508	10%	0.0288	5%	0.0366	3%	0.0348	28%	-0.0155
23	2,837	1.7671	5%	0.0502	5%	0.0294	66%	1.4209	0%	-0.0001	19%	0.2722	0%	-0.0015	3%	0.0387	3%	-0.0427
24	3,375	0.5615	1%	-0.0096	5%	0.0050	33%	0.1394	1%	-0.0022	4%	-0.0144	2%	-0.0089	0%	-0.0045	54%	0.4566
25	1,735	0.4280	2%	-0.0065	8%	0.0098	24%	-0.0232	3%	0.0292	7%	-0.0045	4%	0.0106	1%	0.0001	51%	0.4124
26	2,817	0.4379	8%	0.0863	9%	0.0085	36%	0.1934	5%	0.0811	7%	0.0016	8%	0.0741	1%	0.0008	26%	-0.0079
27	3,488	1.1601	4%	0.0235	20%	0.2575	10%	0.0084	0%	-0.0012	20%	0.2289	0%	-0.0026	1%	-0.0031	44%	0.6487
28	3,423	0.3654	3%	0.0001	24%	0.3265	28%	0.0501	1%	-0.0027	6%	-0.0146	2%	-0.0077	0%	-0.0044	36%	0.0181
29	1,243	0.3422	0%	-0.0044	7%	0.0085	42%	0.2559	1%	-0.0016	5%	-0.0106	3%	-0.0015	3%	0.0198	40%	0.0762
ICT	1,330	0.9603	0%	-0.0015	2%	-0.0145	16%	0.0574	0%	-0.0015	5%	-0.0002	2%	-0.0066	9%	0.1908	66%	0.7364
31	1,479	0.7439	1%	-0.0062	5%	0.0457	44%	0.4912	0%	-0.0030	7%	0.0105	2%	-0.0099	2%	0.0191	39%	0.1964
34	607	1.0719	0%	0.0000	16%	0.2753	10%	-0.0447	0%	-0.0001	5%	0.0135	0%	-0.0038	6%	0.0978	64%	0.7339
35	910	1.3926	0%	-0.0018	1%	-0.0081	83%	1.4583	0%	-0.0011	1%	-0.0179	0%	-0.0040	2%	0.0148	12%	-0.0475
36	1,242	0.4007	3%	0.0048	12%	0.0676	31%	0.1069	1%	-0.0017	5%	-0.0165	4%	0.0080	3%	0.0218	42%	0.2098

 Table 6.
 Turnover and Theil Indices by Industry and Country

Ind	CEF	TA	ŀ	ALB	E	BIH	н	IRV	ι	JNK	N	1KD	M	IDA	N	INE	S	RB
	Empl.	Theil	%	Т	%	Т	%	Т	%	Т	%	Т	%	Т	%	Т	%	Т
All Manuf.	1,078	0	4%	0	13%	0	24%	0	2%	0	10%	0	11%	0	2%	0	34%	0
Low	595	0.0557	6%	0.0152	13%	0.0144	21%	-0.0130	2%	0.0000	12%	0.0326	15%	0.0457	2%	-0.0046	29%	-0.0345
Medium-low	258	0.1331	4%	0.0047	15%	0.0562	23%	0.0162	3%	0.0146	9%	0.0027	6%	-0.0288	2%	-0.0001	38%	0.0676
Medium-high	195	0.2151	1%	-0.0141	9%	-0.0152	32%	0.1360	1%	-0.0048	5%	-0.0226	5%	-0.0302	2%	0.0011	45%	0.1650
ICT	31	0.7533	0%	-0.0047	7%	0.0051	30%	0.2556	0%	-0.0012	3%	-0.0182	10%	0.0301	14%	0.2629	35%	0.2237
15	219	0.1790	3%	-0.0059	11%	0.0088	20%	-0.0071	2%	0.0088	6%	-0.0240	21%	0.1423	0%	-0.0065	37%	0.0626
16	10	1.4860	1%	0.0058	10%	0.1131	9%	0.1180	5%	0.1345	28%	0.5291	15%	0.0988	13%	0.3013	18%	0.1855
17	34	0.5513	1%	-0.0064	18%	0.2180	24%	0.1135	2%	0.0021	12%	0.0297	11%	0.0411	4%	0.0248	29%	0.1284
18	125	0.4543	10%	0.0931	8%	-0.0121	16%	-0.0160	0%	-0.0031	30%	0.3732	16%	0.0747	1%	-0.0063	20%	-0.0491
19	51	0.7278	18%	0.2767	22%	0.1948	17%	0.1182	0%	-0.0026	10%	0.0920	8%	0.0029	2%	-0.0010	23%	0.0469
20	45	0.5727	2%	-0.0089	33%	0.5201	29%	0.1672	3%	0.0128	6%	-0.0208	4%	-0.0373	2%	-0.0028	22%	-0.0577
21	20	0.4242	7%	0.0599	10%	0.0729	23%	0.1034	1%	-0.0048	9%	0.0015	9%	0.0172	4%	0.0295	38%	0.1446
22	37	0.5038	3%	0.0053	11%	0.1035	38%	0.3067	4%	0.0580	9%	0.0172	12%	0.0443	4%	0.0314	20%	-0.0627
23	12	1.5792	15%	0.2820	28%	0.6441	30%	0.3724	0%	-0.0003	7%	0.0700	1%	-0.0055	13%	0.2645	6%	-0.0481
24	47	0.6024	2%	-0.0126	9%	0.0195	27%	0.1809	1%	0.0002	5%	0.0050	5%	-0.0281	2%	-0.0051	49%	0.4426
25	44	0.3226	2%	-0.0122	11%	0.0078	18%	-0.0241	3%	0.0198	10%	0.0188	8%	-0.0077	3%	0.0105	46%	0.3097
26	61	0.2506	6%	0.0310	10%	0.0018	25%	0.0628	6%	0.0796	6%	-0.0172	12%	0.0242	2%	0.0059	32%	0.0626
27	43	0.9675	5%	0.0298	15%	0.1398	16%	0.0991	3%	0.0305	14%	0.1177	0%	-0.0117	2%	-0.0004	44%	0.5627
28	97	0.2786	3%	-0.0113	17%	0.1443	27%	0.0855	1%	-0.0024	8%	-0.0058	5%	-0.0322	1%	-0.0084	39%	0.1089
29	52	0.3333	1%	-0.0092	12%	0.0428	27%	0.0689	0%	-0.0038	4%	-0.0226	10%	0.0117	3%	0.0118	42%	0.2338
ICT	31	0.7533	0%	-0.0047	7%	0.0051	30%	0.2556	0%	-0.0012	3%	-0.0182	10%	0.0301	14%	0.2629	35%	0.2237
31	38	0.6230	2%	-0.0094	8%	0.0733	29%	0.2266	0%	-0.0044	7%	0.0140	6%	-0.0043	2%	-0.0026	46%	0.3298
34	30	1.0115	0%	0.0000	10%	0.0804	12%	-0.0022	0%	-0.0001	3%	-0.0156	0%	-0.0036	4%	0.0295	71%	0.9231
35	28	1.4299	1%	-0.0049	5%	-0.0001	72%	1.3914	1%	0.0121	2%	-0.0136	1%	-0.0145	2%	-0.0032	17%	0.0628
36	54	0.2980	4%	-0.0023	15%	0.0659	24%	0.0980	1%	-0.0024	8%	-0.0128	10%	0.0069	3%	0.0106	36%	0.1340

 Table 7. Employment and Theil Indices by Industry and Country

#### ANNEX III – INDUSTRY PROFILES

## FOOD PRODUCTS AND BEVERAGES

## **Key Figures, CEFTA**

Turnover (EUR millions)	11,957
Industry share in CEFTA LT* turnover	62%
Industry share in CEFTA manufacturing turnover	28%

	Turnover	Share	Employment	Share
ALB	229	 2%	6.5	3%
BIH	775	 6%	23.0	10%
HRV	3,667	 31%	44.5	20%
KOS	209	 2%	5.0	2%
MKD	679	 6%	13.0	6%
MDA	757	 6%	45.0	20%
MNE	159	 1%	4.7	2%
SRB	5,483	 46%	80.8	36%
*LT = Low Tech				

Employment (Thousands)	223
Industry share in CEFTA LT* employment	37%
Industry share in CEFTA manufacturing employment	21%

#### **5 Most Specialised Regions, CEFTA**

-				
Region, Country	Turnover	Share	Employment	Share
Belgrade, SRB	1,562	13%	21.1	9%
South Backa, SRB	1,064	9%	11.6	5%
Zagreb (city), HRV	931	8%	9.5	4%
Zagreb (county), HRV	410	3%	2.8	1%
West Backa, SRB	395	3%	3.7	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	20	<b>.</b>	0.20
			Share
Within-country relative concentration		<b>.</b>	81%
Between-country relative concentration		<b></b>	19%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	20	 0.18
		Share
Within-country relative concentration	<b>.</b>	63%
Between-country relative concentration	· · · · · · · · ·	37%

## **Absolute Concentration Map (Turnover)**

## **Absolute Concentration Map (Employment)**







## **TOBACCO PRODUCTS**

## **Key Figures, CEFTA**

16

Turnover (EUR millions)	806
Industry share in CEFTA LT* turnover	4%
Industry share in CEFTA manufacturing turnover	2%

	Turnover	Share	Employment	Share
ALB	2	 0%	0.1	2%
BIH	77	 10%	1.1	11%
HRV	266	 33%	0.9	9%
KOS	13	 2%	0.6	6%
MKD	106	 13%	2.9	31%
MDA	27	 3%	1.5	16%
MNE	7	 1%	0.4	5%
SRB	309	 38%	1.9	20%
*LT = Low Tech				

Employment (Thousands)	9
Industry share in CEFTA LT* employment	2%
Industry share in CEFTA manufacturing employment	1%

#### **5** Most Specialised Regions, CEFTA

_	-			
Region, Country	Turnover	Share	Employment	Share
Istria, HRV	241	30%	0.6	6%
Nisava, SRB	199	25%	0.9	9%
Sarajevo, BIH	65	8%	0.6	7%
Pelagonia, MKD	59	7%	1.6	17%
Pcinja, SRB	55	7%	0.5	5%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	1		2.05
			Share
Within-country relative concentration		<b>.</b>	98%
Between-country relative concentration		<b></b>	2%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	2	 1.49
		Share
Within-country relative concentration	· · · · · · · · · ·	73%
Between-country relative concentration	· · · · · · · · ·	27%

## **Absolute Concentration Map (Turnover)**









31

17

5	8'		·	-	 -				
Turno	ver (El	JR mil	lions)						

Turnover (EUR millions)	432
Industry share in CEFTA LT* turnover	2%
Industry share in CEFTA manufacturing turnover	1%

	Turnover	Share	Employment	Share
ALB	6	 1%	0.3	1%
BIH	40	 9%	6.2	18%
HRV	125	 29%	8.2	25%
KOS	7	 2%	0.5	2%
MKD	52	 12%	4.0	12%
MDA	41	 10%	3.6	11%
MNE	4	 1%	0.7	2%
SRB	158	 36%	9.8	29%
*LT = Low Tech				

Employment (Thousands)	33
Industry share in CEFTA LT* employment	6%
Industry share in CEFTA manufacturing employment	3%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Krapina-Zagorje, HRV	48	. 11%	1.4	4%
South Backa, SRB	40	. 9%	1.2	3%
Belgrade, SRB	35	. 8%	1.0	3%
Calarasi-Nisporeni-				
Telenesti-Ungheni, MDA	27	. 6%	0.7	2%
Medimurje, HRV	24	. 6%	1.3	4%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	8		0.87
			Share
Within-country relative concentration		<b>.</b>	93%
Between-country relative concentration		<b></b>	7%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

Total relative concentration	Rank* 11	 Value 0.55
		Share
Within-country relative concentration		93%
Between-country relative concentration	<b>.</b>	7%

## Absolute Concentration Map (Turnover)





0.25-0.5%
0.5-1%
1-2%
2-3%
3-4%
4-5%
+5%





+5%

# 18 WEARING APPAREL, DRESSING AND DYEING OF FUR

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,092
Industry share in CEFTA LT* turnover	6%
Industry share in CEFTA manufacturing turnover	3%

	Turnover	Share	Employment	Share
ALB	95	 9%	12.2	10%
BIH	47	 4%	9.6	8%
HRV	300	 27%	20.3	16%
KOS	2	 0%	0.2	0%
MKD	251	 23%	36.8	30%
MDA	59	 5%	19.5	16%
MNE	2	 0%	0.4	0%
SRB	335	 31%	24.7	20%
*LT = Low Tech				

Employment (Thousands)	124
Industry share in CEFTA LT* employment	21%
Industry share in CEFTA manufacturing employment	11%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Belgrade, SRB	109	10%	4.4	4%
Medimurje, HRV	53	5%	2.1	2%
Zagreb (city), HRV	51	5%	2.8	2%
Skopje, MKD	38	3%	4.2	3%
Zlatibor, SRB	34	3%	2.6	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	11		0.63
			Share
Within-country relative concentration		· · · · · · · · ·	73%
Between-country relative concentration		<b></b>	27%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

Total relative concentration	13	 0.45
		Share
Within-country relative concentration	<b>.</b>	48%
Between-country relative concentration	<b>.</b>	52%

#### **Absolute Concentration Map (Turnover)**

#### **Absolute Concentration Map (Employment)**







Value

# 19

## LEATHER AND LEATHER PRODUCTS

## **Key Figures, CEFTA**

Turnover (EUR millions)	435
Industry share in CEFTA LT* turnover	2%
Industry share in CEFTA manufacturing turnover	1%

	Turnover	Share	Employment	Share
ALB	91	 21%	9.2	18%
BIH	54	 12%	11.0	22%
HRV	96	 22%	8.6	17%
KOS	2	 0%	0.1	0%
MKD	38	 9%	5.2	10%
MDA	18	 4%	4.3	8%
MNE	1	 0%	0.7	1%
SRB	136	 31%	11.7	23%
*LT = Low Tech				

Employment (Thousands)	51
Industry share in CEFTA LT* employment	9%
Industry share in CEFTA manufacturing employment	5%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Tirane, ALB	39	9%	3.9	8%
Belgrade, SRB	36	8%	2.6	5%
Durres, ALB	27	6%	2.8	6%
Srem, SRB	20	5%	1.3	3%
Krapina-Zagorje, HRV	18	4%	0.4	1%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	7	<b>.</b>	0.93
			Share
Within-country relative concentration		· · · · •	71%
Between-country relative concentration			29%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	7	 0.73
		Share
Within-country relative concentration	· · · · · · · · · ·	74%
Between-country relative concentration	<b>.</b>	26%

### **Absolute Concentration Map (Turnover)**

## **Absolute Concentration Map (Employment)**







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## WOOD AND WOOD PRODUCTS

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,229
Industry share in CEFTA LT* turnover	6%
Industry share in CEFTA manufacturing turnover	3%

	Turnover	Share	Employment	Share
ALB	17	 1%	0.9	2%
BIH	431	 35%	15.0	31%
HRV	358	 29%	13.0	27%
KOS	29	 2%	1.1	2%
MKD	47	 4%	2.8	6%
MDA	14	 1%	2.0	4%
MNE	24	 2%	3.3	7%
SRB	308	 25%	9.9	21%
*LT = Low Tech				

Employment (Thousands)	48
Industry share in CEFTA LT* employment	8%
Industry share in CEFTA manufacturing employment	4%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover Share Employment		Share	
Srednjebosanski, BIH	239	19%	6.4	13%
Belgrade, SRB	88	7%	2.0	4%
Vrbas, BIH	48	4%	2.5	5%
Zagreb (county), HRV	42	3%	1.2	3%
Moravica, SRB	41	3%	1.0	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	9		0.85
			Share
Within-country relative concentration		<b>.</b>	70%
Between-country relative concentration		· · · · •	30%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration		 0.57
		Share
Within-country relative concentration	<b>.</b>	67%
Between-country relative concentration	<b>.</b>	33%

## **Absolute Concentration Map (Turnover)**









## PULP, PAPER AND PAPER PRODUCTS

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,173
Industry share in CEFTA LT* turnover	6%
Industry share in CEFTA manufacturing turnover	3%

	Turnover	Share	Employment	Share
ALB	13	 1%	1.3	7%
BIH	118	 10%	2.0	10%
HRV	430	 37%	4.5	23%
KOS	3	 0%	0.1	1%
MKD	59	 5%	1.7	9%
MDA	36	 3%	1.7	9%
MNE	10	 1%	0.8	4%
SRB	504	 43%	7.5	39%
*LT = Low Tech				

Employment (Thousands)	20
Industry share in CEFTA LT* employment	3%
Industry share in CEFTA manufacturing employment	2%

#### **5** Most Specialised Regions, CEFTA

—	-			
Region, Country	Turnover	Share	Employment	Share
Belgrade, SRB	311	26%	2.3	12%
Zagreb (city), HRV	123	11%	1.1	6%
Osijek-Baranja, HRV	91	8%	1.0	5%
Krapina-Zagorje, HRV	40	3%	0.2	1%
Republika Srpska 2, BIH	38	3%	0.5	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	13	<b>.</b>	0.49
			Share
Within-country relative concentration		<b>.</b>	94%
Between-country relative concentration		<b></b>	6%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	14	 0.42
		Share
Within-country relative concentration	<b>.</b>	94%
Between-country relative concentration	<b>.</b>	6%

### **Absolute Concentration Map (Turnover)**









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## **Key Figures, CEFTA**

Turnover (EUR millions)	1,007
Industry share in CEFTA LT* turnover	5%
Industry share in CEFTA manufacturing turnover	2%

	Turnover	Share	Employment	Share
ALB	33	 3%	1.2	3%
BIH	37	 4%	4.2	11%
HRV	442	 44%	14.0	38%
KOS	33	 3%	1.3	4%
MKD	98	 10%	3.2	9%
MDA	51	 5%	4.4	12%
MNE	26	 3%	1.5	4%
SRB	287	 28%	7.4	20%
*LT = Low Tech				

Employment (Thousands)	37
Industry share in CEFTA LT* employment	6%
Industry share in CEFTA manufacturing employment	3%

#### 5 Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Zagreb (city), HRV	220	22%	7.9	21%
Belgrade, SRB	143	14%	3.3	9%
Skopje, MKD	65	6%	2.0	5%
Chisinau, MDA	49	5%	3.8	10%
Zagreb (county), HRV	48	5%	0.6	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	14	<b>.</b>	0.47
			Share
Within-country relative concentration		<b>.</b>	83%
Between-country relative concentration		<b></b>	17%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	12	 0.50
		Share
Within-country relative concentration	· · · · · · · · · ·	83%
Between-country relative concentration	· · · · · · · · ·	17%

## **Absolute Concentration Map (Turnover)**



**Absolute Concentration Map (Employment)** 

0.25-0.5%	0.25-0.5%
0.5-1%	0.5-1%
1-2%	1-2%
2-3%	2-3%
3-4%	3-4%
4-5%	4-5%
+5%	+5%

#### 37

## COKE, REFINED PETROLEUM AND NUCLEAR FUEL

#### **Key Figures, CEFTA**

23

Turnover (EUR millions)	2,756
Industry share in CEFTA MLT* turnover	19%
Industry share in CEFTA manufacturing turnover	6%

	Turnover	Share	Employment	Share
ALB	148	 5%	1.8	17%
BIH	134	 5%	3.4	32%
HRV	1,866	 68%	3.6	34%
KOS	0	 0%	0.0	0%
MKD	533	 19%	0.9	8%
MDA	3	 0%	0.1	1%
MNE	0	 0%	0.0	0%
SRB	72	 3%	0.8	7%
*MLT = Mediu	im Low Tech			

Employment (Thousands)	11
Industry share in CEFTA MLT* employment	4%
Industry share in CEFTA manufacturing employment	1%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Primorje-Gorski Kotar, HRV	1,157	42%	1.1	11%
Sisak-Moslavina, HRV	689	25%	1.0	9%
Skopje, MKD	529	19%	0.9	8%
Tirane, ALB	117	4%	1.1	10%
Tuzlanski, BIH	86	3%	1.2	11%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	2		1.77
			Share
Within-country relative concentration		<b>.</b>	69%
Between-country relative concentration		<b></b>	31%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	1	 1.58
		Share
Within-country relative concentration	· · · · · · · · · ·	66%
Between-country relative concentration	· · · · · · · · · ·	34%

### **Absolute Concentration Map (Turnover)**



#### **Absolute Concentration Map (Employment)**





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# CHEMICALS AND CHEMICAL PRODUCTS

## **Key Figures, CEFTA**

24

Turnover (EUR millions)	3,379
Industry share in CEFTA MHT* turnover	45%
Industry share in CEFTA manufacturing turnover	8%

	Turnover		Share	Employment	Share
ALB	35		1%	0.9	2%
BIH	165		5%	4.3	9%
HRV	1,124		33%	12.6	27%
KOS	25		1%	0.6	1%
MKD	129		4%	2.3	5%
MDA	54		2%	2.3	5%
MNE	20		1%	0.6	1%
SRB	1,826		54%	23.2	50%
*MHT = Mediu	m High Tech	ı			

Employment (Thousands)	47
Industry share in CEFTA MHT* employment	24%
Industry share in CEFTA manufacturing employment	4%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
South Banat, SRB	560	17%	5.5	12%
Zagreb (city), HRV	400	12%	5.0	11%
Belgrade, SRB	380	11%	5.7	12%
Sisak-Moslavina, HRV	325	10%	2.9	6%
South Backa, SRB	126	4%	1.1	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	12		0.56
			Share
Within-country relative concentration		<b>.</b>	86%
Between-country relative concentration		<b></b>	14%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	9	 0.60
		Share
Within-country relative concentration	86%	
Between-country relative concentration	· · · · · · · · ·	14%

## **Absolute Concentration Map (Turnover)**









# 25

## RUBBER AND PLASTIC PRODUCTS

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,724
Industry share in CEFTA MLT* turnover	12%
Industry share in CEFTA manufacturing turnover	4%

	Turnover		Share	Employment	Share
ALB	29		2%	1.0	2%
BIH	143		8%	4.7	11%
HRV	421		24%	7.9	18%
KOS	50		3%	1.1	3%
MKD	122		7%	4.3	10%
MDA	65		4%	3.5	8%
MNE	9		1%	0.5	1%
SRB	886	•••	51%	20.4	47%
*MLT = Mediu	m Low Tech				

Employment (Thousands)	43
Industry share in CEFTA MLT* employment	17%
Industry share in CEFTA manufacturing employment	4%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Pirot, SRB	162	9%	2.8	6%
South Backa, SRB	158	9%	2.1	5%
Belgrade, SRB	122	7%	2.1	5%
Srem, SRB	83	5%	1.8	4%
Zagreb (city), HRV	82	5%	1.0	2%

## **Theil Indices (Turnover)**

	Rank*	Value	
Total relative concentration	16		0.43
			Share
Within-country relative concentration		<b>.</b>	91%
Between-country relative concentration		<b></b>	9%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	16	 0.32
		Share
Within-country relative concentration	· · · · · · · · ·	87%
Between-country relative concentration	· · · · · · · ·	13%

## **Absolute Concentration Map (Turnover)**

## **Absolute Concentration Map (Employment)**







# 26

## OTHER NON-METALLIC MINERAL PRODUCTS

## **Key Figures, CEFTA**

Turnover (EUR millions)	2,831
Industry share in CEFTA MLT* turnover	20%
Industry share in CEFTA manufacturing turnover	7%

	Turnover		Share	Employment	Share
ALB	229 .		8%	4.0	7%
BIH	241 .	••	9%	6.3	10%
HRV	1,026 .	••	36%	15.0	25%
KOS	139 .	••	5%	3.5	6%
MKD	202 .		7%	3.9	6%
MDA	213 .		8%	7.5	13%
MNE	36.		1%	0.7	1%
SRB	746 .	••	26%	19.3	32%
*MLT = Mediu	m Low Tech				

Employment (Thousands)	60
Industry share in CEFTA MLT* employment	23%
Industry share in CEFTA manufacturing employment	6%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Split-Dalmatia, HRV	194	7%	1.8	3%
Tirane, ALB	152	5%	2.6	4%
South Backa, SRB	149	5%	1.6	3%
Osijek-Baranja, HRV	128	5%	1.2	2%
Istria, HRV	126	4%	1.4	2%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	15		0.44
			Share
Within-country relative concentration		· · · · · •	76%
Between-country relative concentration		<b></b>	24%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

Total relative concentration	Rank* 19		Value 0.25	
	-		Share	
Within-country relative concentration				
Between-country relative concentration	· · · · · · · · ·		19%	

### **Absolute Concentration Map (Turnover)**

## **Absolute Concentration Map (Employment)**







## **Key Figures, CEFTA**

27

Turnover (EUR millions)	3,655
Industry share in CEFTA MLT* turnover	25%
Industry share in CEFTA manufacturing turnover	9%

	Turnover	Share	Employment	Share
ALB	141	 4%	2.2	5%
BIH	705	 19%	6.4	14%
HRV	352	 10%	7.0	15%
KOS	15	 0%	1.2	2%
MKD	709	 19%	6.0	13%
MDA	3	 0%	0.2	0%
MNE	199	 5%	4.7	10%
SRB	1,530	 42%	18.9	41%
*MLT = Mediur	n Low Tech			

Employment (Thousands)	47
Industry share in CEFTA MLT* employment	18%
Industry share in CEFTA manufacturing employment	4%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Podunavlje, SRB	823	23%	5.9	13%
Skopje, MKD	352	10%	3.0	6%
Hercegovacko-Neretvanski, H	263	7%	1.6	3%
Zenicko-Dobojski, BIH	241	7%	1.5	3%
Bor, SRB	220	6%	2.4	5%

## **Theil Indices (Turnover)**

	Rank*		Value
Total relative concentration	4	<b>.</b>	1.16
			Share
Within-country relative concentration		<b>.</b>	78%
Between-country relative concentration		<b></b>	22%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	5	 0.97
		Share
Within-country relative concentration	<b>.</b>	87%
Between-country relative concentration	<b>.</b>	13%

## **Absolute Concentration Map (Turnover)**

## **Absolute Concentration Map (Employment)**







## FABRICATED METAL PRODUCTS

## **Key Figures, CEFTA**

Turnover (EUR millions)	3,454
Industry share in CEFTA MLT* turnover	24%
Industry share in CEFTA manufacturing turnover	8%

	Turnover	Share	Employment	Share
ALB	87	 3%	2.5	3%
BIH	838	 24%	16.8	17%
HRV	955	 28%	26.4	27%
KOS	31	 1%	1.1	1%
MKD	189	 5%	7.3	7%
MDA	69	 2%	5.0	5%
MNE	42	 1%	1.9	2%
SRB	1,243	 36%	37.8	38%
*MLT = Mediu	n Low Tech			

Employment (Thousands)	99
Industry share in CEFTA MLT* employment	38%
Industry share in CEFTA manufacturing employment	9%

#### **5** Most Specialised Regions, CEFTA

_				
Region, Country	Turnover	Share	Employment	Share
Zenicko-Dobojski, BIH	462	13%	7.4	7%
Belgrade, SRB	348	10%	7.1	7%
Hercegovacko-Neretvanski,	E 176	5%	2.8	3%
Zagreb (county), HRV	124	4%	2.7	3%
Krapina-Zagorje, HRV	111	3%	1.7	2%

## **Theil Indices (Turnover)**

		*	Value	
Total relative concentration	18	8	<b>.</b>	0.37
				Share
Within-country relative concentration			<b>.</b>	73%
Between-country relative concentration				27%
*Out of 20 manufacturing industries				

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	18	 0.28
		Share
Within-country relative concentration	<b>.</b>	83%
Between-country relative concentration	· · · · · · · · ·	17%

## **Absolute Concentration Map (Turnover)**









# 29

# MACHINERY AND EQUIPMENT N.E.C.

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,220
Industry share in CEFTA MHT* turnover	16%
Industry share in CEFTA manufacturing turnover	3%

	Turnover		Share	Employment	Share
ALB	4		0%	0.5	1%
BIH	83		7%	6.0	11%
HRV	523		43%	14.1	27%
KOS	7		1%	0.2	0%
MKD	65		5%	2.1	4%
MDA	37		3%	5.4	10%
MNE	9		1%	2.5	5%
SRB	492		40%	21.9	42%
*MHT = Mediu	m High Tecl	h			

Employment (Thousands)	53
Industry share in CEFTA MHT* employment	27%
Industry share in CEFTA manufacturing employment	5%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Belgrade, SRB	205	17%	8.3	16%
Karlovac, HRV	70	6%	1.3	2%
South Backa, SRB	62	5%	1.8	3%
Zagreb (city), HRV	61	5%	3.0	6%
Istria, HRV	59	5%	1.1	2%

## **Theil Indices (Turnover)**

	Rank*	Value	
Total relative concentration	19		0.34
			Share
Within-country relative concentration		<b>.</b>	85%
Between-country relative concentration		· · · · •	15%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	15	 0.33
		Share
Within-country relative concentration	· · · · · · · · · ·	81%
Between-country relative concentration	· · · · · · · · · ·	19%

### **Absolute Concentration Map (Turnover)**









# ICT INFORMATION AND COMMUNICATION TECHNOLOGIES

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,215
Industry share in CEFTA ICT* turnover	100%
Industry share in CEFTA manufacturing turnover	3%

	Turnover	Share	Employment	Share
ALB	1	 0%	0.1	0%
BIH	25	 2%	2.2	8%
HRV	208	 17%	9.1	34%
KOS	1	 0%	0.1	0%
MKD	70	 6%	1.0	4%
MDA	25	 2%	3.0	11%
MNE	11	 1%	0.2	1%
SRB	875	 72%	10.9	41%

\*ICT = Information and Communication Technologies

#### **Theil Indices (Turnover)**

	Rank*	Value	
Total relative concentration	6	<b>.</b>	0.96
			Share
Within-country relative concentration		<b>.</b>	66%
Between-country relative concentration		<b></b>	34%
*Out of 20 manufacturing industries			

# Employment (Thousands)27Industry share in CEFTA ICT\* employment100%Industry share in CEFTA manufacturing employment2%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Belgrade, SRB	616	51%	6.3	24%
Zagreb (city), HRV	175	14%	4.4	17%
Nisava, SRB	87	7%	1.9	7%
South Backa, SRB	75	6%	0.8	3%
Skopje, MKD	66	5%	0.7	3%

#### **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	6	 0.75
		Share
Within-country relative concentration		69%
Between-country relative concentration	· · · · · · · · ·	31%

### **Absolute Concentration Map (Turnover)**



**Absolute Concentration Map (Employment)** 



#### 45

## ELECTRICAL MACHINERY AND APPARATUS N.E.C.

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,444
Industry share in CEFTA MHT* turnover	19%
Industry share in CEFTA manufacturing turnover	3%

	Turnover		Share	Employment	Share
ALB	22		2%	0.6	2%
BIH	67		5%	2.9	8%
HRV	644		45%	11.1	30%
KOS	5		0%	0.2	0%
MKD	110		8%	2.8	7%
MDA	23		2%	2.4	6%
MNE	1		0%	0.2	0%
SRB	572		40%	17.4	46%
*MHT = Mediu	m High Tech	ı			

Employment (Thousands)	38
Industry share in CEFTA MHT* employment	19%
Industry share in CEFTA manufacturing employment	3%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Zagreb (city), HRV	502	35%	7.2	19%
Belgrade, SRB	148	10%	3.0	8%
Kolubara, SRB	65	5%	1.1	3%
Skopje, MKD	61	4%	1.5	4%
South Backa, SRB	53	4%	1.6	4%

## **Theil Indices (Turnover)**

			Value	
Total relative concentration	10		0.74	
			Share	
Within-country relative concentration		· · · · · •	93%	
Between-country relative concentration		<b></b>	7%	
*Out of 20 manufacturing industries				

## **Theil Indices (Employment)**

Total relative concentration	8	 0.62
		Share
Within-country relative concentration	<b>.</b>	89%
Between-country relative concentration	<b>.</b>	11%

Value

Rank\*

### **Absolute Concentration Map (Turnover)**



**Absolute Concentration Map (Employment)** 



## 46

31

## MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS

#### **Key Figures, CEFTA**

34

Turnover (EUR millions)	573
Industry share in CEFTA MHT* turnover	8%
Industry share in CEFTA manufacturing turnover	1%

	Turnover		Share	Employment	Share
ALB	0		0%	0.0	0%
BIH	94		16%	2.9	10%
HRV	60		11%	3.6	12%
KOS	0		0%	0.0	0%
MKD	30		5%	1.0	4%
MDA	1		0%	0.0	0%
MNE	0		0%	0.1	0%
SRB	387		68%	21.4	74%
*MHT = Mediu	m High Tecl	h			

## **Theil Indices (Turnover)**

	Rank*	Value	
Total relative concentration	5		1.07
			Share
Within-country relative concentration		<b>.</b>	72%
Between-country relative concentration		<b></b>	28%
*Out of 20 manufacturing industries			

# Employment (Thousands)29Industry share in CEFTA MHT\* employment15%Industry share in CEFTA manufacturing employment3%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Sumadija, SRB	113	20%	6.1	21%
Belgrade, SRB	78	14%	4.0	14%
Tuzlanski, BIH	70	12%	1.6	5%
North Banat, SRB	34	6%	0.9	3%
Rasina, SRB	23	4%	3.1	11%

## **Theil Indices (Employment)**

Total relative concentration		 1.01	
		Share	
Within-country relative concentration	· · · · · · · ·	61%	
Between-country relative concentration	· · · · · · ·	39%	

#### **Absolute Concentration Map (Turnover)**









Value

# OTHER TRANSPORT EQUIPMENT

## **Key Figures, CEFTA**

Turnover (EUR millions)	906
Industry share in CEFTA MHT* turnover	12%
Industry share in CEFTA manufacturing turnover	2%

	Turnover		Share	Employment	Share
ALB	1		0%	0.1	1%
BIH	10		1%	1.4	5%
HRV	758		84%	20.1	71%
KOS	2		0%	0.3	1%
MKD	11		1%	0.7	2%
MDA	1		0%	0.2	1%
MNE	18		2%	0.9	3%
SRB	105		12%	4.6	16%
*MHT = Mediu	m High Tecl	h			

Employment (Thousands)	28
Industry share in CEFTA MHT* employment	15%
Industry share in CEFTA manufacturing employment	3%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Split-Dalmatia, HRV	242	27%	6.5	23%
Istria, HRV	167	18%	3.2	11%
Primorje-Gorski Kotar, HRV	165	18%	4.8	17%
Zagreb (city), HRV	99	11%	2.9	10%
Brod-Posavina, HRV	37	4%	0.2	1%

## **Theil Indices (Turnover)**

	Rank*	Value	
Total relative concentration	3	<b>.</b>	1.39
			Share
Within-country relative concentration		<b>.</b>	58%
Between-country relative concentration		<b></b>	42%
*Out of 20 manufacturing industries			

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	3	 1.43
		Share
Within-country relative concentration	· · · · · · · · · ·	61%
Between-country relative concentration	· · · · · · · · · ·	39%

## Absolute Concentration Map (Turnover)



## **Absolute Concentration Map (Employment)**





## FURNITURE AND OTHER MANUFACTURING

## **Key Figures, CEFTA**

Turnover (EUR millions)	1,232
Industry share in CEFTA LT* turnover	6%
Industry share in CEFTA manufacturing turnover	3%

	Turnover	Share	Employment	Share
ALB	36	 3%	2.1	4%
BIH	145	 12%	8.1	15%
HRV	382	 31%	12.7	24%
KOS	11	 1%	0.6	1%
MKD	66	 5%	4.1	8%
MDA	48	 4%	5.4	10%
MNE	23	 2%	0.8	1%
SRB	522	 42%	19.2	36%
*LT = Low Tech				

Employment (Thousands)	53
Industry share in CEFTA LT* employment	9%
Industry share in CEFTA manufacturing employment	5%

#### **5** Most Specialised Regions, CEFTA

Region, Country	Turnover	Share	Employment	Share
Belgrade, SRB	133	11%	3.1	6%
Pcinja, SRB	80	6%	4.3	8%
Medimurje, HRV	69	6%	1.1	2%
Sumadija, SRB	63	5%	1.3	2%
Zagreb (city), HRV	47	4%	0.8	1%

## **Theil Indices (Turnover)**

			Value	
Total relative concentration	17		0.40	
			Share	
Within-country relative concentration		<b>.</b>	96%	
Between-country relative concentration		<b></b>	4%	
*Out of 20 manufacturing industries				

## **Theil Indices (Employment)**

	Rank*	Value
Total relative concentration	17	 0.30
		Share
Within-country relative concentration	· · · · · · · · · ·	98%
Between-country relative concentration	· · · · · · · · · ·	2%

### **Absolute Concentration Map (Turnover)**









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## ANNEX IV - COUNTRY PROFILES

# **ALBANIA**

## Manufacturing

17.4
%

Low Tech Turnover	43%
Medium Low Tech Turnover	52%
Medium High Tech Turnover	5%
ICT Turnover	0%

#### Key Industries (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Food and Beverages	228.8	6.5	19%
Non-metallic mineral Products	228.7	4.0	19%
Petroleum Products	147.7	1.8	12%
Basic metals	141.2	2.2	12%
Wearing Apparel	95.3	12.2	8%

## **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	5	0.57
		Share
Within-country relative specialisation		35%
Between-country relative specialisation		65%
*Out of 8 CEFTA Parties		

#### Employment (Thousands)...... 47.7 Share in CEFTA Manufacturing...... 4% Medium Low Tech Employment...... 24% Medium High Tech Employment...... 5%

#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Tirane	777.3	23.6	64%
Durres	119.9	8.1	10%
Fier	99.0	4.1	8%
Vlore	51.6	2.5	4%
Elbasan	36.6	1.4	3%

## **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	4	0.60
		Share
Within-country relative specialisation		37%
Between-country relative specialisation		63%

## **Absolute Concentration Map** (Overall Manufacturing by Turnover)





# BOSNIA AND HERZEGOVINA

## Manufacturing

Turnover (EUR millions)	4,229.2
Share in CEFTA Manufacturing	10%
Low Tech Turnover	41%
Medium Low Tech Turnover	49%
Medium High Tech Turnover	10%
ICT Turnover	1%

#### Key Industries (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Fabricated metal products	837.8	16.8	20%
Food and Beverages	774.6	23.0	18%
Basic metals	704.8	6.4	17%
Wood Products	431.5	15.0	10%
Non-metallic mineral Products	240.7	6.3	6%

## **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	2	0.88
		Share
Within-country relative specialisation		72%
Between-country relative specialisation .		28%
*Out of 8 CEFTA Parties		

#### 

#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Zenicko-Dobojski	1,001.8	23.7	24%
Tuzlanski	504.7	17.0	12%
Hercegovacko-Neretvanski	482.0	5.9	11%
Vrbas	448.6	18.9	11%
Sarajevo	404.7	13.0	10%

## **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	2	0.64
		Share
Within-country relative specialisation		85%
Between-country relative specialisation .		15%

**Absolute Concentration Map** 

(Overall Manufacturing by Employment)

## Absolute Concentration Map (Overall Manufacturing by Turnover)





# CROATIA

## Manufacturing

1%

Turnover (EUR millions)	14,003.1
Share in CEFTA Manufacturing	33%
Low Tech Turnover	43%
Medium Low Tech Turnover	33%
Medium High Tech Turnover	22%

ICT Turnover.....

#### Key Industries (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Food and Beverages	3,666.6	44.5	26%
Petroleum Products	1,865.7	3.6	13%
Chemical Products	1,124.1	12.6	8%
Non-metallic mineral Products	1,025.7	15.0	7%
Fabricated metal products	955.5	26.4	7%

#### **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	4	0.72
		Share
Within-country relative specialisation		88%
Between-country relative specialisation		12%
*Out of 8 CEFTA Parties		

#### 

#### Key Regions (by turnover)

Turnover (EUR m)	Employment ('000)	Share
2,906.8	54.8	21%
1,744.6	17.6	12%
1,308.9	13.0	9%
969.5	14.5	7%
955.2	14.8	7%
	Turnover (EUR m) 2,906.8 1,744.6 1,308.9 969.5 955.2	Turnover (EUR m)         Employment ('000)           2,906.8         54.8           1,744.6         17.6           1,308.9         13.0           969.5         14.5           955.2         14.8

#### **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	6	0.47
		Share
Within-country relative specialisation		86%
Between-country relative specialisation		14%

## Absolute Concentration Map (Overall Manufacturing by Turnover)





# KOSOVO\*

#### Manufacturing

Turnover (EUR millions)	585.2
Share in CEFTA Manufacturing	1%
Low Tech Turnover	53%
Medium Low Tech Turnover	40%
Medium High Tech Turnover	7%
ICT Turnover	0%

#### Key Industries (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Food and Beverages	209.1	5.0	36%
Non-metallic mineral Products	139.2	3.5	24%
Rubber and Plastic Products	49.5	1.1	8%
Publishing and Printing	32.6	1.3	6%
Fabricated metal products	31.4	1.1	5%

## **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	3	0.72
		Share
Within-country relative specialisation		45%
Between-country relative specialisation .		55%
*Out of 8 CEFTA Parties		

#### 

#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Urosevac	98.8	2.7	17%
Pristina City	96.5	3.4	16%
Prizren	93.0	3.2	16%
Pristina	78.9	1.6	13%
Pec	76.7	1.9	13%

## **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	1	0.68
		Share
Within-country relative specialisation		43%
Between-country relative specialisation		57%

## Absolute Concentration Map (Overall Manufacturing by Turnover)





## MOLDOVA

#### Manufacturing

2%

Turnover (EUR millions)	1,544.3
Share in CEFTA Manufacturing	4%
Low Tech Turnover	68%
Medium Low Tech Turnover	23%
Medium High Tech Turnover	8%

ICT Turnover.....

#### Key Industries (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Food and Beverages	757.1	45.0	49%
Non-metallic mineral Products	212.6	7.5	14%
Fabricated metal products	68.7	5.0	4%
Rubber and Plastic Products	64.7	3.5	4%
Wearing Apparel	59.2	19.5	4%

#### **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	8	0.51
		Share
Within-country relative specialisation		37%
Between-country relative specialisation		63%
*Out of 8 CEFTA Parties		

#### 

#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Chisinau	894.9	61.3	58%
Balti-Faleni-Glodeni-Sangerei	226.3	16.2	15%
Anenii Noi-Criuleni-Dubasari-			
Orhei-Rezina	94.1	6.4	6%
Drochia-Floresti-Soroca- Soldanesti	92.5	6.4	6%
Basarabeanca-Cahul-Gagauzia- Taraclia	82.0	9.4	5%

#### **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	8	0.35
		Share
Within-country relative specialisation		41%
Between-country relative specialisation		59%

## Absolute Concentration Map (Overall Manufacturing by Turnover)





## **MONTENEGRO**

#### Manufacturing

2%

Turnover (EUR millions)	599.9
Share in CEFTA Manufacturing	1%
Low Tech Turnover	42%
Medium Low Tech Turnover	48%
Medium High Tech Turnover	8%

ICT Turnover.....

#### Key Industries (by turnover)

Legend

	Turnover (EUR m)	Employment ('000)	Share
Basic metals	199.3	4.7	33%
Food and Beverages	159.3	4.7	27%
Fabricated metal products	41.6	1.9	7%
Non-metallic mineral Products	36.2	0.7	6%
Publishing and Printing	25.7	1.5	4%

## **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	1	0.93
		Share
Within-country relative specialisation		31%
Between-country relative specialisation .		69%
*Out of 8 CEFTA Parties		

#### Share in CEFTA Manufacturing...... 2% Medium High Tech Employment..... 16%

#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Bar-Budva-Cetinje-Kotor-			
Danilovgrad-Herceg Novi-	301.7	8.2	50%
Niksic-Tivat-Ulcinj			
Podgorica	243.0	10.4	41%
Andrijevica-Berane-Kolasin-			
Bijelo Polje-Mojkovac-Plav-	55.2	71	9%
Pluzine-Pljevlja-Rozaje-	55.2	7.1	110
Savnik-Zabljak			

#### **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	3	0.63
		Share
Within-country relative specialisation		26%
Between-country relative specialisation		74%

## **Absolute Concentration Map** (Overall Manufacturing by Turnover)





# FYR MACEDONIA

## Manufacturing

2%

Turnover (EUR millions)	3,566.4
Share in CEFTA Manufacturing	8%
Low Tech Turnover	39%
Medium Low Tech Turnover	49%
Medium High Tech Turnover	10%

ICT Turnover.....

#### Key Industries (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Basic metals	709.5	6.0	20%
Food and Beverages	678.7	13.0	19%
Petroleum Products	533.0	0.9	15%
Wearing Apparel	251.2	36.8	7%
Non-metallic mineral Products	201.7	3.9	6%

## **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	7	0.51
		Share
Within-country relative specialisation		37%
Between-country relative specialisation .		62%
*Out of 8 CEFTA Parties		

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#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Skopje	1,798.0	28.9	50%
Vardar	374.3	10.3	10%
Pelagonia	332.9	15.1	9%
Eastern	289.0	20.5	8%
Southeastern	266.1	12.0	7%

## **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	5	0.52
		Share
Within-country relative specialisation		28%
Between-country relative specialisation		39%

# Absolute Concentration Map (Overall Manufacturing by Turnover)



## Absolute Concentration Map (Overall Manufacturing by Employment)



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# SERBIA

## Manufacturing

5%

Turnover (EUR millions)	16,776.3
Share in CEFTA Manufacturing	39%
Low Tech Turnover	48%
Medium Low Tech Turnover	27%
Medium High Tech Turnover	20%

Key Industries (by turnover)	
ICT Turnover	

	Turnover (EUR m)	Employment ('000)	Share
Food and Beverages	5,483.1	80.8	33%
Chemical Products	1,826.2	23.2	11%
Basic metals	1,530.4	18.9	9%
Fabricated metal products	1,243.3	37.8	7%
Rubber and Plastic Products	885.7	20.4	5%

## **Theil Indices (Turnover)**

	Rank*	Value
Total Relative Specialisation	4	0.72
		Share
Within-country relative specialisation		88%
Between-country relative specialisation		12%
*Out of 8 CEFTA Parties		

Employment (Thousands)	369.4
Share in CEFTA Manufacturing	34%
Low Tech Employment	47%
Medium Low Tech Employment	26%
Medium High Tech Employment	24%
ICT Employment	3%

#### Key Regions (by turnover)

	Turnover (EUR m)	Employment ('000)	Share
Belgrade	4,628.3	81.2	28%
South Backa	2,009.3	31.4	12%
Podunavlje	998.4	11.5	6%
South Banat	935.0	14.4	6%
North Backa	702.5	13.9	4%

## **Theil Indices (Employment)**

	Rank*	Value
Total Relative Specialisation	6	0.47
		Share
Within-country relative specialisation		86%
Between-country relative specialisation		

## Absolute Concentration Map (Overall Manufacturing by Turnover)





# www.investmentcompact.org

# www.cefta2006.com

