



THE MOST DYNAMIC SME SECTORS IN HERZEGOVINA

Baseline Study

Sectors that should be supported by project CREDO Herzegovina are: Metal, Plastics and Rubber, Tourism, Cheese production and ICT sector. These sectors can provide fastest development in export industry of the Region; and moreover create base for sustainable employment growth.



Asocijacija za ekonomski razvoj
Asocijacija za gospodarski razvitak
Асоцијација за економски развој



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Baseline Study

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“Development without the Internet in the age of networking is like industrialization without electricity”

(Manuel Castells, 2000)

Summary

Regional economic development association for Herzegovina, REDAH is implementing the Competitive Regional Economic Development Herzegovina project (in further text: CREDO Herzegovina project).

Overall objective of CREDO Herzegovina project is **competitiveness increase and the growth of small and medium size enterprises in selected sectors of Herzegovina region.**

Using baseline analysis, four out of twelve potential sectors were selected, which among others, can contribute to the creation of at least 50 jobs; form or/and support at least 150 existing jobs in medium period (3+1 year). Relative sectors are:

- **Metal**
- **Tourism**
- **Plastics and rubber**
- **Cheese production**
- **Information communication technology sector.**

Analysis has also shown that region Herzegovina does not have sufficient number of strongly developing enterprises. And it is crucial to support their development in order to give contribution to separation of BiH from the rear of European transitional countries and to reach level of the advanced transition economies. That issue will be the subject of Integral study, which brings the continuation of this study.

Introduction

Regional economic development association for Herzegovina, REDAH is implementing the Competitive Regional Economic Development Herzegovina project (hereafter, CREDO Herzegovina project).

CREDO Herzegovina project is financed by SIDA (Swedish International Development and Cooperation Agency).

SIDA office in BIH has developed a working model with regional development agencies (RDA) in order to enhance the growth of small and medium enterprises (SMEs) as a part of private sector in BIH. The end goal of the model is creation of jobs in private sector, as well as capacity building of service providers and key development actors in BIH with a goal to reduce high, mass and increasing unemployment, as a leading cause for material poverty. These objectives are in accordance with the BiH Development strategy.

Following these determinations, SIDA financed the project of Competitive regional economic development in north-eastern BIH, which was implemented by regional development agency NERDA. The project offered comprehensive support package through methodology of integrated economical development, which involves three significant components for success of employment policy: public sector, private sector and labor market.

Subsequent to comprising positive experiences from this project; SIDA decided to expand respective methodology at the other regions in BIH. After making comprehensive analysis SIDA chose Herzegovina Region and Regional Economic Development Association for Herzegovina, REDAH as corresponding partner and approved the project of Competitive Regional Economic Development of Herzegovina (CREDO Herzegovina). Duration period of the project is 3+1 year.

Overall objective of CREDO Herzegovina project is **competitiveness increase and the growth of small and medium size enterprises in selected sectors of Herzegovina region.**

CRES (Center for Regional Economic Studies) Mostar had for the purposes of CREDO Herzegovina project undertook the following activities:

1. Created a draft of Baseline study
2. Publicly presented the draft of Baseline study (Livno, Široki Brijeg, Mostar)
3. Prepared the final version of Baseline study including contributions of public consultations
4. Presented final version of Baseline study in order to clarify research results.

Baseline study is primarily based on survey data prepared and completed by REDAH.

Survey data ensured the following quantitative and qualitative indicators:

1. Organizational form of an enterprise and its ownership structure
2. Type of production program
3. Buyers structure (domestic/foreign) and distribution channels
4. Suppliers structure (domestic/foreign)
5. Technology conditions

6. Quality system
7. Number and structure of employees by profession, qualifications and average income
8. Total income and profit/loss
9. Type of production and capacity usage ratio.

Based on respective indicators, the following quantitative indicators for enterprises have been constructed:

- a) Work efficiency indicators
 1. Overall income per employee
 2. Profit(loss) per employee
- b) Export efficiency indicators
 3. Export per employee
 4. Share of export in income
- c) General information on managerial and technological efficiency
 5. Quality insurance (products and/or processes)
- d) Other indicators
 6. Net income per employee
 7. Share of profit in total income.

Baseline study is based on both quantitative and qualitative indicators: possibility that SME/activities create and maintain jobs, opportunities for actualization of economic growth, foundation of sectors on usage of natural resources, level of sector impact on development of the region, usage of modern technologies in business process, tradition, mobility, adaptability and flexibility.

Minimum three out of twelve sectors (number of enterprise samples is presented in brackets) were chosen by using mentioned quantitative and qualitative criteria, for which following data were collected:

1. Timber industry (17)
2. Electrical installations (6)
3. Construction (25)
4. Metal industry (31)
5. Stone processing (14)
6. Paper (5)
7. Plastic (7)
8. Food and beverage sector (36)
9. Leather, textile and foorwear (8)
10. Tourism (17)
11. Energy, gas, and water supply (2)
12. Information communication technology sector (5).

Baseline study, together with survey data from REDAH, as primary research source, also relies on secondary desk research. Therefore, information on recent theoretical discoveries at global level in the area of local and regional support to the development of SME sector, have been included.

I. NECESSITY FOR INCREASEMENT OF COMPETITIVENESS AND EMPLOYMENT IN BH ECONOMY

Small countries should have an open economy. That is the first and main lesson from the experience of the thirteen countries that turned into economic miracles of the world¹. Even without that lesson it is well known that small countries need to be open for international interaction. They have small territory, small population and very limited resources.

A number of econometric studies of individual countries show that trade liberalization of countries and their openness towards foreign trade increases national income of the country. An aspect that foreign trade has positive impact on economical growth is widely accepted, especially in countries with small domestic market. According to these aspects, trade creates and maintains high growth.

Even though liberal trade policy is necessary for economical growth, it is insufficient for insuring the growth, by itself. When trade reform is being implemented in unstable macro economical surrounding, or without sufficient efforts directed at strengthening of trade relationships – domestic with trade of related institution, it usually tends to be a letdown, either by quitting or the growth of trade and income is not achieved.

This inference was well noticed by the Council of foreign investors in BiH, which stated in the “White book” in 2007: “As if the small size of domestic trade is not big enough problem for BH enterprises and their investors, moreover tariff policies and customs practices serve to even better limit the trade. Even when the trade finally reaches its full economical potential, BiH, as a small country will not be capable to satisfy all of its needs, nor it should. Therefore it is very important that BiH is inertly open for international trade. (...) Respectively, domestic and exporting competitiveness of BH companies is dependent on their unrestrained access to adequate resources, raw materials and purchases; no matter if they originate from domestic or foreign markets”.

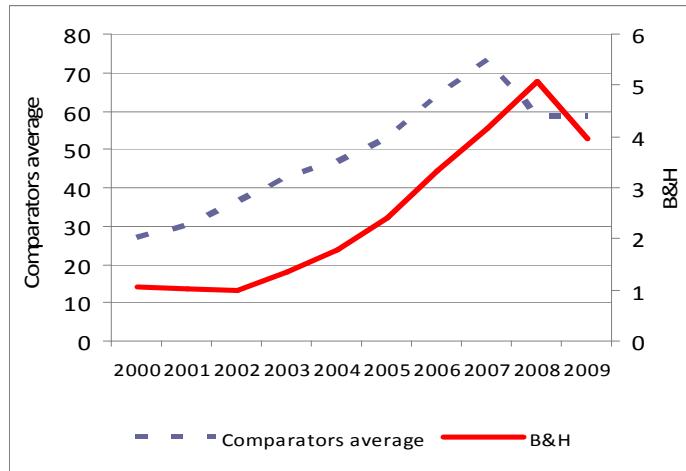
Liberalization of trade means promotion of export, and not substitution of import. For example, former Prime Minister, Vice Prime Minister and Minister of Finance and Economics of South Korea, member of actual Commission on Growth and Development (better known as Spence's committee), Han Duck-soo claims that South Korea in 1950s followed policies of import substitution when economical growth was only 2-3 %. However when South Korea entirely changed foreign trade orientation – from substitution of import, towards export promotion – economical growth has enlarged to over 7% yearly during a long period in 1960 till 2001. Whereas, this country turned into one of the economic miracles of the world.

Starting from 1960s till around 2000, four small Asian countries (Hong Kong, Singapore, Taiwan and South Korea) turned into economical miracles (miracle means economical growth from over 7% per year at the period of minimum 25 years). For example, export of these four small tigers has increased 155 times in that period; from 4.6 to 715 billion US dollars. The most important lesson learned of the economic miracle countries is full engagement in global

¹For details see: Commission on Growth and Development („Spence Report“), (2008).

economy, full openness towards new ideas, know-how and technologies. One should take from the world, what world knows, and provide the world with what the world seeks for. That is the key to success.

It is especially important to clarify issues tied to national competitiveness in times of global crises and afresh balance of economical activity in order to support sustainable, export-guided growth. However it is clear that the export strength of BH economy is decreasing. Related to the group of comparators (small Central European and South European economies)² BiH demonstrates poor results. (see graph 1)

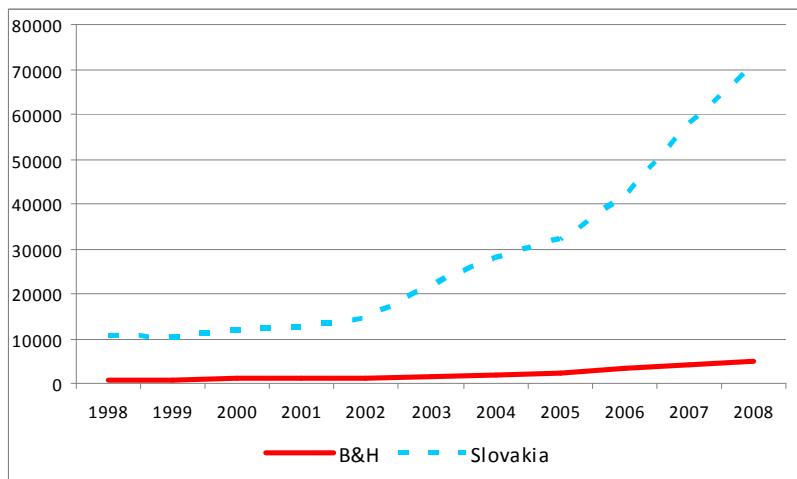


Graph 1 Exports of comparators countries and BiH (in bill US\$)

Comparison of BiH with other comparators shows a great difference in export ratio: 22% (Greece) till 86% (Slovakia). BiH ratio is 39%. This ratio should be increased till the level of 60-90%, and in that way insure that BiH joins to Slovenia, Slovakia, Austria and Switzerland.

As a country with upper middle income, BiH undoubtedly has, in order to reach the countries with high income, to increase the size and strength of export sector. Simply said, BiH policy, as its goal, should set triplication of export per person in following 10 years, (see Graph 2, which shows that this is a realistic

² Countries comparators are: Macedonia, Croatia, Slovakia, Slovenia, Greece, Portugal, Austria and Switzerland



Graph 2 Export of BIH and Slovakia, 1998-2008 (bill US\$)

Slovakia shows the possibility of increase of the national ratio by using the following recipe: attractive investment surrounding, educated labor force, low labor costs and low tax burden. BIH, like Slovakia has good geo-strategic location (proximity to markets with high solvent demand) and strong industrial tradition.

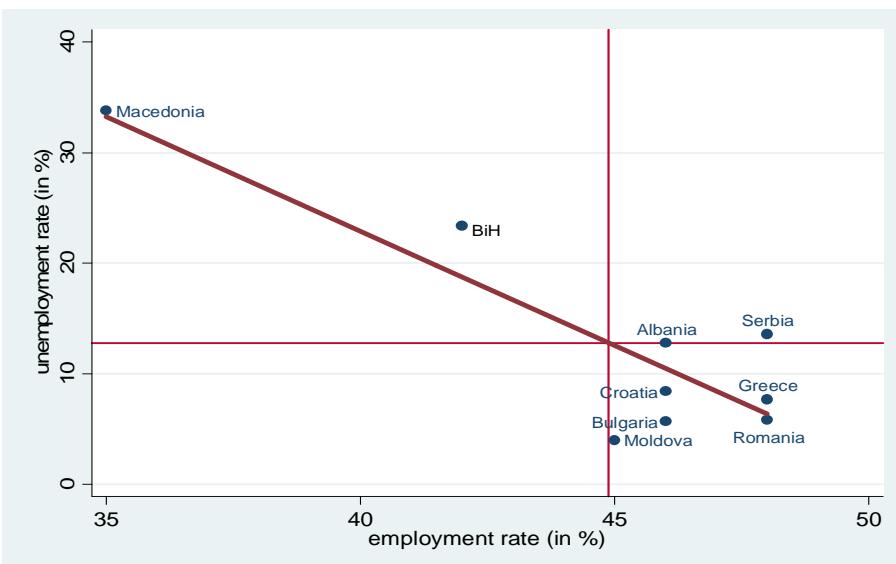
This is even more important for BIH, due to years of “nailed” foreign exchange rate. Therefore, the burden of foreign trade balance is on structural reforms.

BIH needs to search for salvation solution in direct foreign investments (III, in which tartan tiger, Slovakia is grandmaster). In order to attract foreign companies all means should be used, moreover to connect them to domestic perspective enterprises through clusters of appropriate industries and hence increase the export.

Efficient development and trade policy demands active engagement of interested parties and existence of institutional basis for implementation of trade policies. It is necessary to use these policies to stimulate the establishment of export strengths. This means foundation of agglomerate of small and medium sized transnational enterprises so-called “gazelles”. These gazelles, potential exporters should be helped to in establishment of subcontractor relationships with foreign transnational corporations.

If economy is not competitive, the existing jobs are not sustainable; moreover creation of new jobs is hardly possible.

Graph 3 clearly shows that BIH, together with Macedonia is at the worst position at Balkans, and especially in Europe according to unemployment ratio. According to data from World Bank, average ratio of unemployment in Balkans is 12.8%. Albania and Serbia have similar ratio. First Balkan league comprises: Moldova, Bulgaria, Romania, Croatia and Greece. Unemployment ratio of BIH is double the size of Balkan average. Simply said, BIH needs to cut the unemployment ratio in half, to reach the other Balkan countries



Graph 3 Employment and unemployment rate in Balkan countries, 2006

II. NON-COMPETITIVENESS AND UNEMPLOYMENT OF THE REGION HERZEGOVINA

II.1. Non-competitiveness

The level of economic competitiveness of Herzegovina can be seen from the table 1, which provides an overview of foreign trade of the region for 2008 and 2009. The level of coverage of imports by exports is around 30-40 %.

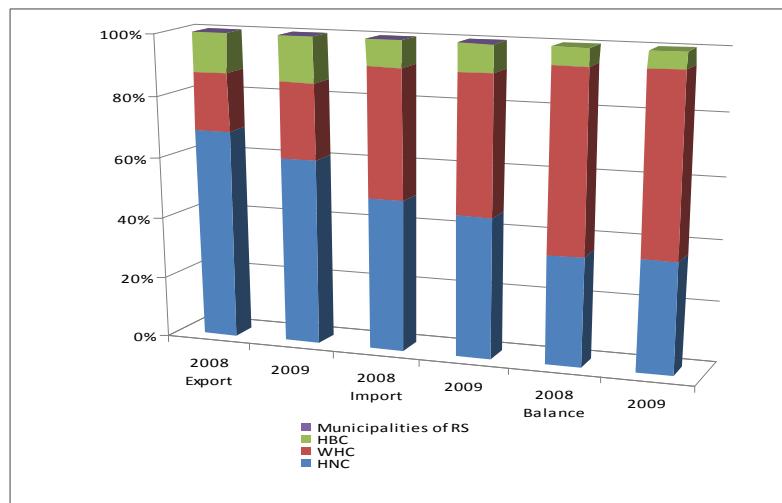
Table 1 Foreign trade exchange of Herzegovina region across sub-regions, 2008-9 (in 000 BAM)

	Export		Import		Balance	
	2008	2009	2008	2009	2008	2009
Herzegovina - Neretva Canton	716912	471772	1230249	905489	-513337	-433717
West Herzegovina Canton	196969	191604	1039777	882651	-842808	-691047
Herzeg – Bosnia Canton	132341	113243	211503	173663	-79162	-60420
Municipalities RS	-	-	-	-	-	-
Herzegovina Region	1046222	776619	2481529	1961803	-1435307	-1185184

Source: Federal Bureau of Statistics.

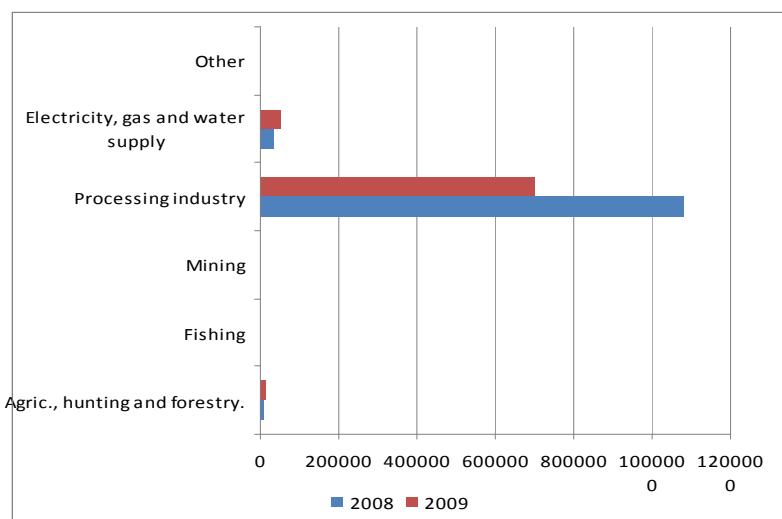
Table 1 clearly shows high foreign trade balance, especially in West Herzegovina Canton, whereas foreign trade deficit amounts around 0.7-0.8 billion BAM. Somewhat better situation is in Herzegovina - Neretva Canton, where foreign trade deficit amounts around 0.5 billion BAM (see graph 4)³.

³ Position of HNC would be much worse, if the greatest BH exporter Aluminij d.d. Mostar would be excluded. Export of this enterprise was 532 mil. BAM in 2008 and 256 mil. BAM in 2009, while the import amounts at 248 mil. BAM in 2008 and 207 mil. BAM in 2009.



Graph 4 Import, export and balance of the cantons in the Region, 2008-09

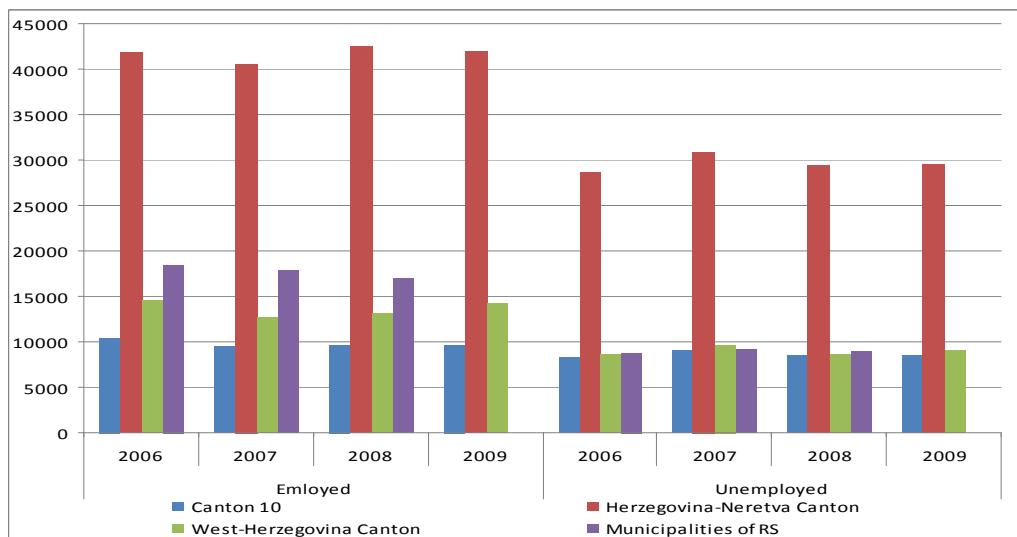
If we look at the structure of region's export divided by areas (see graph 5), it is clearly visible that manufacturing industry represents the only export sector of the region, if the electricity, gas and water supply sector is neglected, i.e. the single enterprise, Elektroprivreda HZ HB.



Graph 5 Structure of export of the Region by area, 2008-09 (in 000)

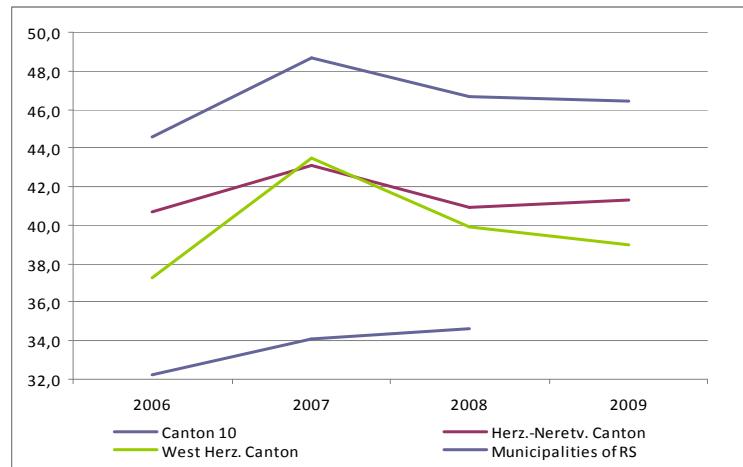
II. 2. Unemployment

Since there are no survey data of labor market at levels lower then entities, and employers survey data does not exist at all, we are forced to rely on administrative data on employment and unemployment of Herzegovina region.



Graph 6 Employed and unemployed in the Region, 2006-09

Overall employment of the region amounts approximately 82,000 persons. Graph 6 shows that greatest employment and unemployment in total dates from Herzegovina - Neretva Canton. Employment of that canton amounts 42,000 persons, RS municipalities follow up, where the number of employed persons amounts around 17,000 and West Herzegovina Canton, where the employment amounts around 14,000, and Canton 10, which employment amounts around 9,000 persons.



Graph 7 Unemployment rate of the Region, 2006-09 (in %)

Canton 10 comprises relatively highest unemployment, as shown in graph 7, while the lowest unemployment comprises RS municipalities. Administrative unemployment of these sub-regions amounts to 47 % respectively 33 %. Respective rates of unemployment are in range with administrative unemployment entity ratios to which they belong to.

III. OVERVIEW OF SEMPLE ENTERPRISES

III.1. Sample size

Total of 216 enterprises have been interviewed, however 172 enterprises have been included in the final sample. Enterprises that belong to trade and agriculture have been excluded together with enterprises that have over 250 employees. Agricultural enterprises have been excluded due to a lack of adequate data; while for trade industry it was decided by REDAH that trade should not be included in sectors which should be supported. There was one company as a part of this sample that employed over 250 employees, which was therefore excluded from the group of small and medium sized enterprises.

Collective business indicators for 172 enterprises (according to estimated data for 2010) are:

- Total income (121 enterprises): 341 mil BAM⁴
- Total export (88 enterprises): 114 mil BAM
- Total number of employees (171 enterprises): 4,836⁵
- Total profit (72 enterprises): 9 mil BAM

III. 2. Enterprise profile

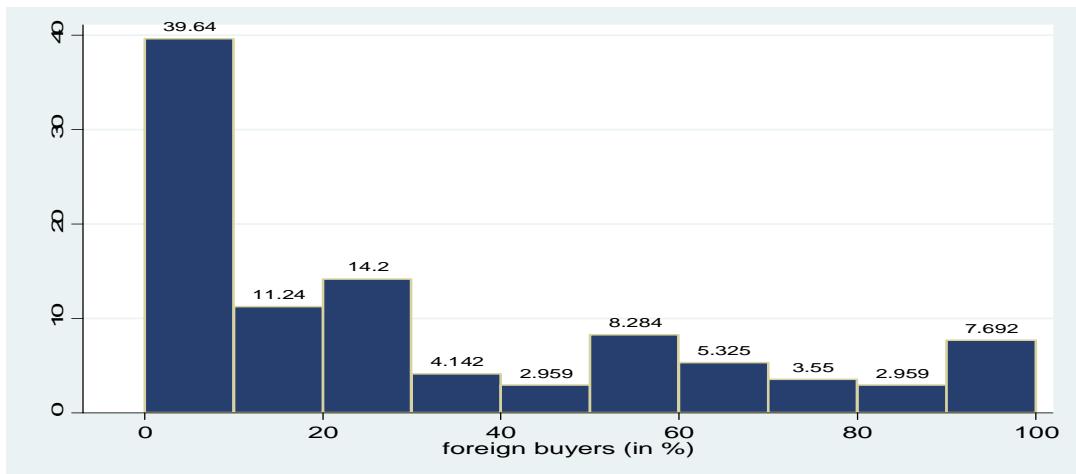
These are private sector enterprises. In 2010, private ownership was 94.5 %, state ownership 2.3% and other kind of ownerships (co-operative etc.) 3.2 % on average. Therefore the issue of ownership will not be further investigated as especially characteristic aspect.

Further, these enterprises have fourth of their business internationalized. Domestic buyers make around three quarters (precisely, 75.3%) of overall size of employers. However, there are significant deviations of mentioned averages. Variations range in span from 0 (there are no foreign buyers or suppliers) to 100% (all of the buyers and suppliers are foreign).

Graph 8 clearly indicates that around 40% of enterprises have a share of foreign buyers up to 10% in the structure of their overall buyers. Practically, two thirds of enterprises has share of foreign buyers less than 30%.

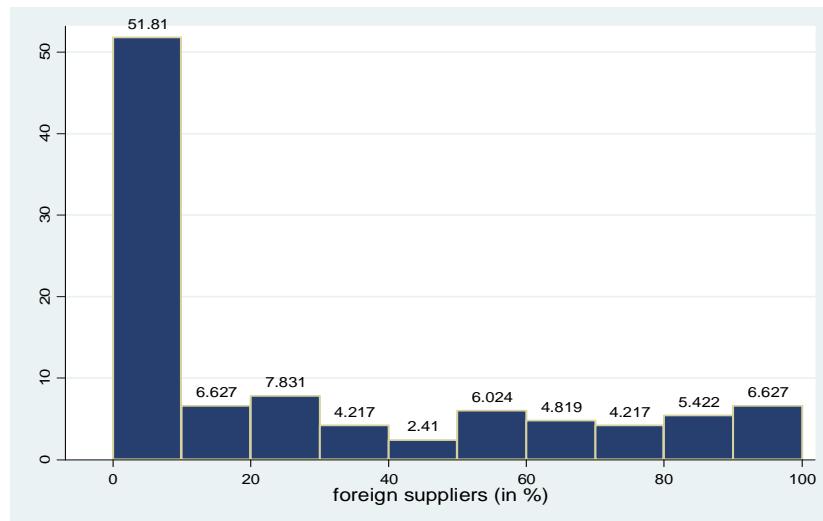
⁴ In order to have a clear perception of stated sizes, it is enough to say that size of total income of enterprise sample companies represents two thirds of total income of Aluminij d.d. Mostar. Moreover the size of sample companies' t export is smaller than one third of Aluminij d.d. Mostar export.

⁵ Number of employees of sample firms creates less than one fifth, more precisely it makes 17.6 % of employees of targeted population. Out of total number of employees in the region, which is around 82,000 persons, 55,000 those who are not in focus of CREDO Herzegovina project should be deducted (state administration, health care, education, financial services, real state, trade, transport and similar



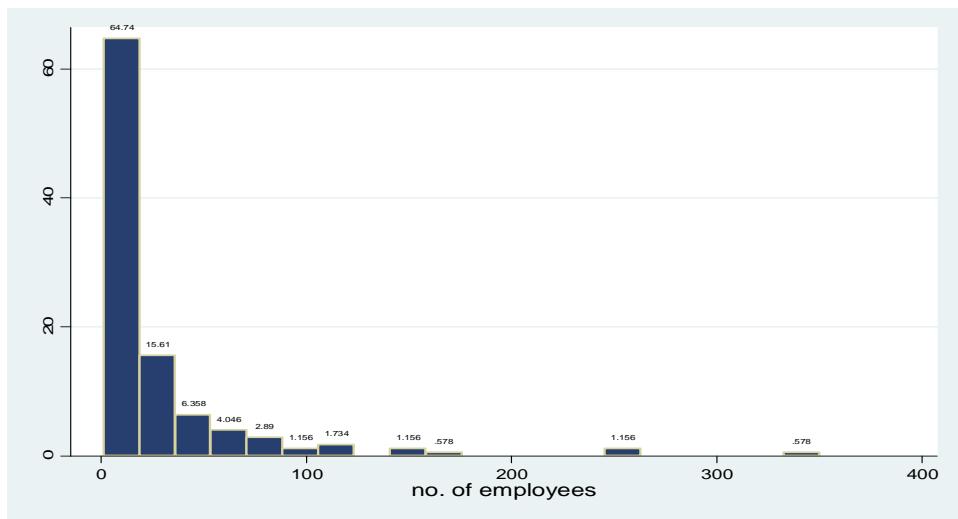
Graph 8 Foreign shares in total buyers of companies in the Region, 2010

Graph 9 clearly indicates that over a half (more precisely, 52%) of enterprises has a share of foreign suppliers in overall suppliers up to 10%. Around two thirds of enterprises have a share of foreign suppliers up to 30%.



Graph 9 Foreign share in total supplies of companies in the Region, 2010

Number of employees in these enterprises amounts in a range from 1 to 250. Average number of employees is 26.01. Almost 40% of enterprises are micro enterprises, i.e. they have up to 10 employees. Almost the half of the enterprises is small enterprises (they have 10-50 employees). Less than 15% (precisely 13.4 %) are medium enterprises (see graph 10).



Graph 10 Number of employees of companies in the Region, 2010

Net salaries range from 282 to 1500 BAM. Average salary amounts 703 BAM

Number of high educated employees of the enterprises ranges from 0 to 70. Average number of employees with university degree in enterprises amounts 2.9. Nine to ten enterprises has less than three employees with university degree.

Degree of capacities usage ranges from 0 to 100%. Average usage of capacities amounts 67.5 %.

Total sales of enterprises (121 enterprises) amounts 340,576, 136 BAM. Observed by each enterprise, total sales ranges from 5,038 to 41,379,816 BAM. Average sales amounts 3,031,436 BAM. Around 84.7 % of enterprises accomplished sales up to 4 mil BAM.

Sales per employee (for 121 enterprises) ranges from 35 to 833,333 BAM. Average yearly sales per employee amounts 107,734 BAM. Almost 60% (precisely 58.9%) enterprises accomplish sales per employee up to 80,000 BAM.

Export (88 enterprises) ranges from 1000 to 37,241,834 BAM. 95% of the enterprises accomplish export less than 4.0 mil BAM. Average export per exporting enterprise amounts 1.352.922 BAM.

Export per employee in exporting enterprises (83 enterprises) ranges from 17 to 800,333 BAM. Average export per employee of exporting enterprise amounts 54,875 BAM.

Profit of enterprises (for 72 enterprises, i.e. around two fifths of the sample) ranges from -34,538 to 1,461,734 BAM. Profit up to 150, 000 accomplishes 77.8% of enterprises. Average profit amounts 123,928 BAM.

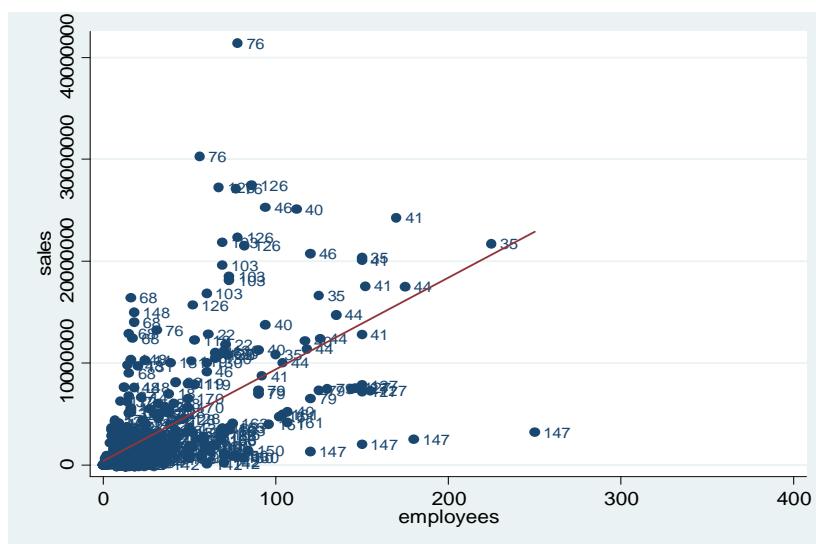
Profit per employee of enterprises (71 enterprises) ranges from -3,140 to 37, 000 BAM. Average profit per employee amounts at 6.150 BAM.

In order to clearly see what kind of enterprises are researched, profile of an average enterprise of the sample is presented:

- Ownership: Private (94.5 %)
- Buyers: Domestic (72.9%)
- Suppliers: Domestic (75.3%)
- Employees: 26 (out of which 21.4 is with secondary high school education and 2.9 with university degree education)
- Average net salary: 703 BAM
- Level of capacity usage: 67.5%
- Sales: 3.031.436 BAM
- Export: 1.352,922 BAM
- Export per employee: 54,875 BAM/e.
- Profit per employee: 6,150 BAM/e.

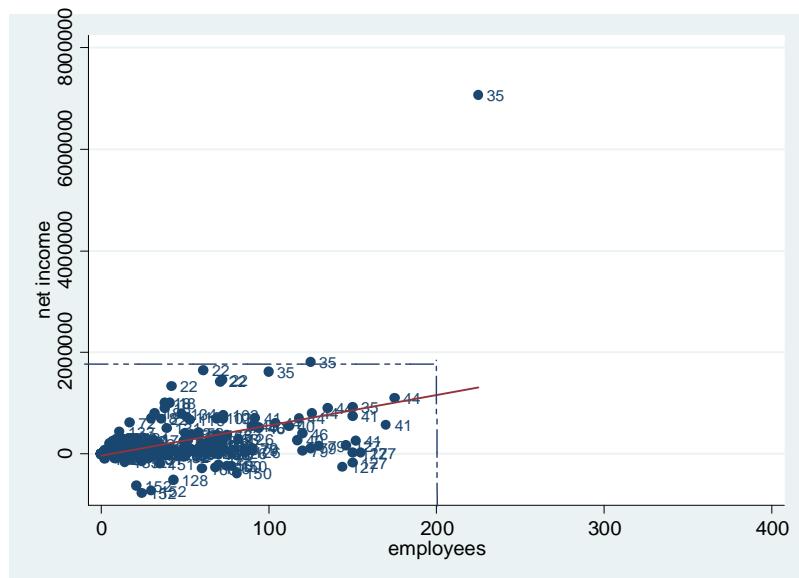
Since we are especially interested in employment, moreover the possibility of its increase or at least its sustainment, formats of regional enterprises will be examined from the point of number of employees on one side and total sales and profit on the other side.

Observing sales and number of employees most of the enterprises of the region falls into format 20 x 200 i.e. their sales are up to 20 mil. BAM and employ up to 200 employees.



Graph 11 Income and number of employees of companies of the Region, 2006-10

As for profit and number of employees, enterprises of the region, with one exception, fall into format 2 x 200 i.e. have the profit up to 2 mil BAM and employ up to 200 employees (see Graph 12).



Graph 12 Profit and number of employees of companies, 2006-10

IV. QUANTITATIVE ANALYSIS SELECTION OF THE MOST DYNAMIC SECTORS

IV.1. High performing sectors in relative terms

Graph 13 illustrates standardized deviations of key business indicators in specific sectors, compared to average business indicators of Herzegovina region business activities.

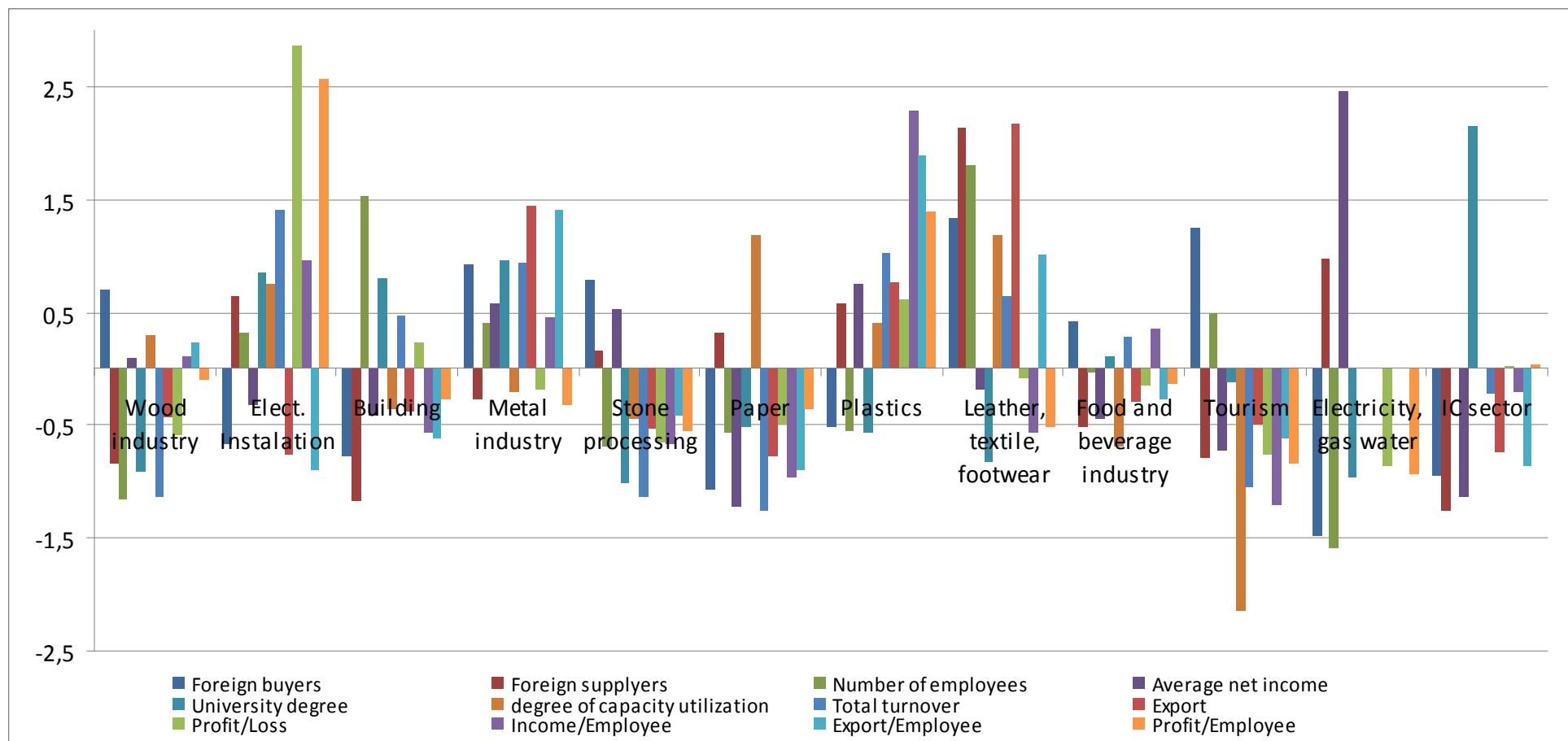
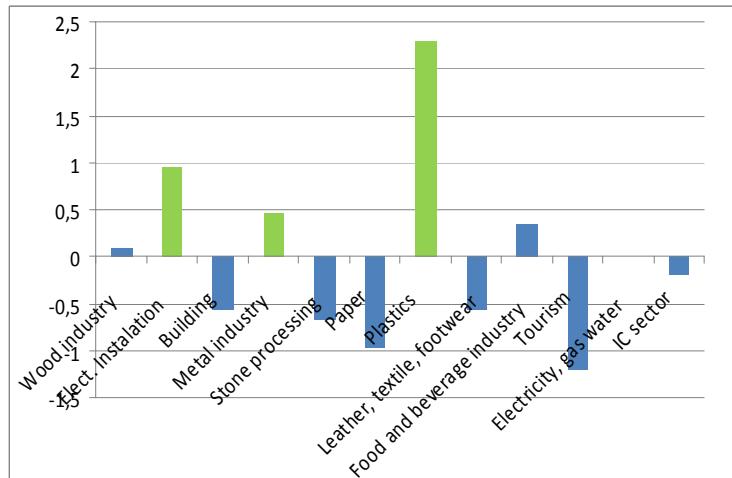


Table 2 Overview of business sector indicators of Herzegovina region, 2010

Nr.	Sector	Foreign buyers	Foreign suppliers	Employees	Average net income	Univers ity degree	Capacity usage ratio	Sales	Export	Profit	Sales/employee	Export/e mployee	Profit/e mployee
1	Wood industry	32.2	15.4	9.5	717	1.1	73.2	1010374	358193	39432	106355	37705	4151
2	Electrical installations	12.0	43.7	29.5	678	4.2	77.5	4518638	10304	506347	153174	349	17164
3	Construction	10.5	8.9	46.0	670	4.1	66.9	3235572	419507	149750	70339	9120	3255
4	Metal industry	35.6	26.0	30.8	762	4.4	68.5	3864207	2377153	92774	125461	77180	3012
5	Stone processing	33.5	34.3	15.9	757	0.9	66.2	1015153	261670	30219	63846	16457	1901
6	Paper	6.0	37.4	17.6	593	1.8	81.7	843333.3	0	50068	47917	0	2845
7	Plastics	14.4	42.5	17.7	779	1.7	74.2	3993925	1652560	201170	225646	93365	11366
8	Leather, textile, footwear	41.9	72	49.8	691	1.25	81.7	3469333	3158913	106000	69665	63432	2129
9	Food and beverage industry	28.2	21.7	24.7	666	2.9	63.8	2953044	511003	97125	119556	20688	3932
10	Tourism	40.5	16.4	31.8	640	2.5	49.9	1120415	291214	15767	35233	9158	496
11	Electricity, gas, water	0.0	50.0	3.5	940	1.0				91			26
12	ICT sector	8.0	7.2	25.2	600	6.5		2268695	28000	120947	90028	1111	4799

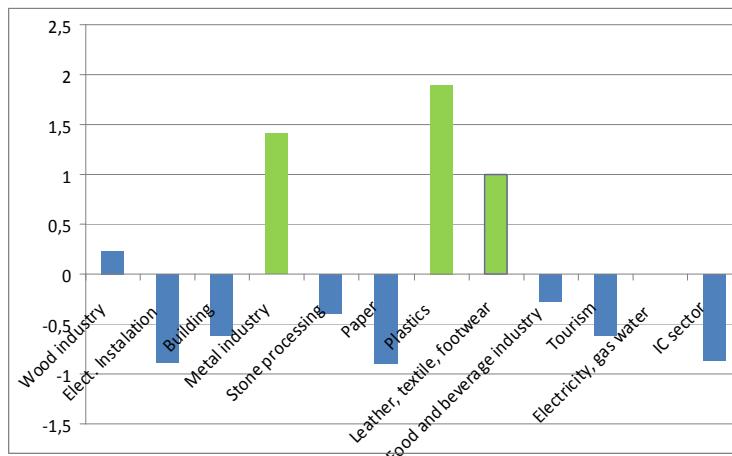
Since graph 13 is not clear enough, specific business sectors will be examined in greater detail, starting with sales per employee indicator.



Graph 14 Income per employee of the sectors of the Region, 2010

Graph 14 illustrates that following sectors achieve above average sales per employee:

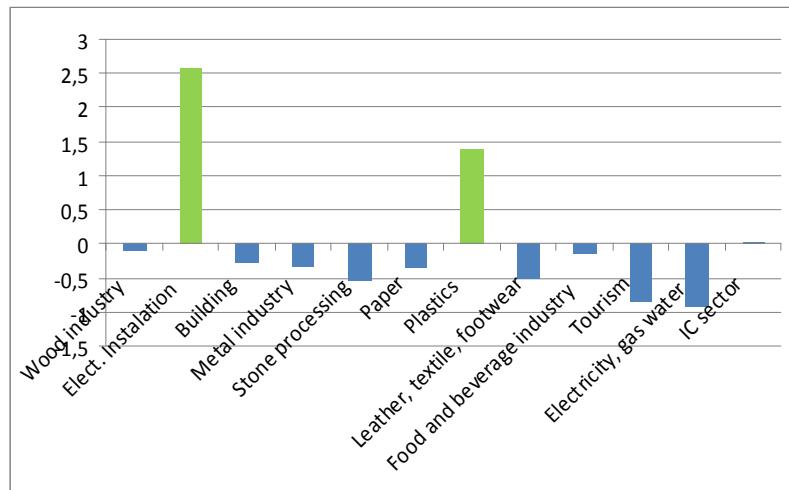
- Plastics
- Electrical installations
- Metals.



Graph 15 Export per employee of the sectors of the Region, 2010

Graph 15 illustrates that following sectors achieve above average export per employee:

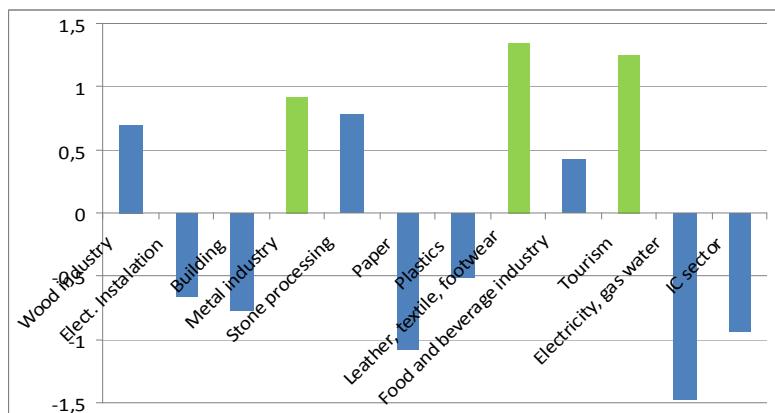
- Plastics
- Metals
- Leather, textile and footwear.



Graph 16 Profit per employee of the sectors of the Region, 2010

Graph 16 illustrates that relatively highest sales per employee is achieved by:

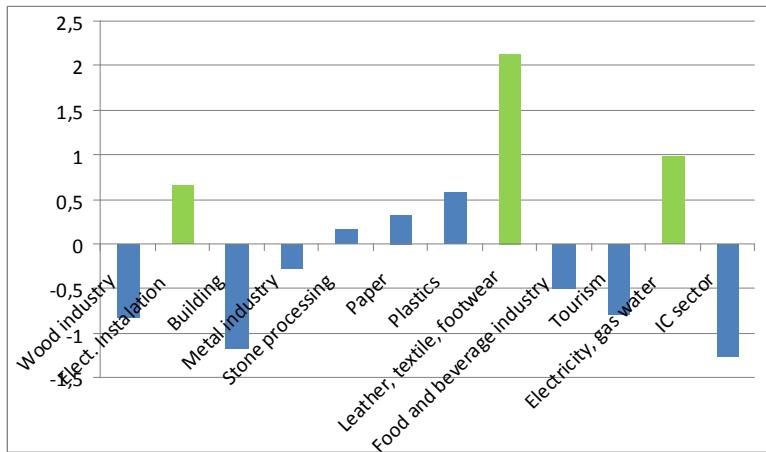
- Electrical installations
- Plastic
- ICT sector.



Graph 17 Foreign buyers of the sectors of the Region, 2011

Graph 17 illustrates that relatively greatest share of foreign buyers in total buyers size have:

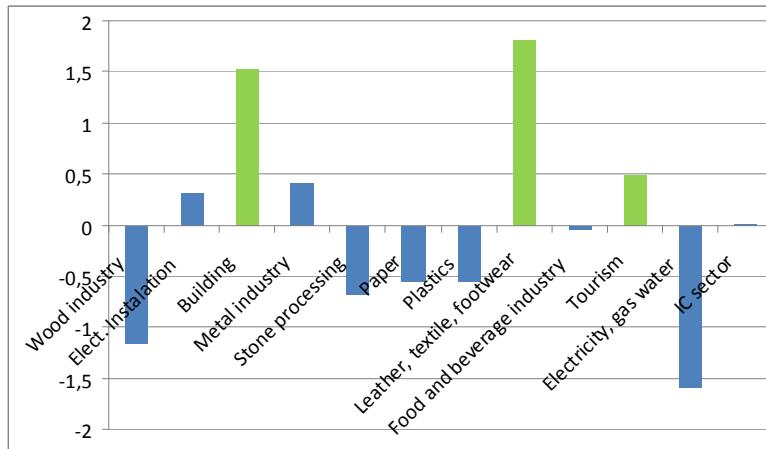
- Leather, textile and footwear
- Tourism
- Metals



Graph 18 Foreign suppliers of the sectors of the Region, 2010

Graph 18 illustrates that relatively the greatest share of foreign suppliers in the suppliers structure have:

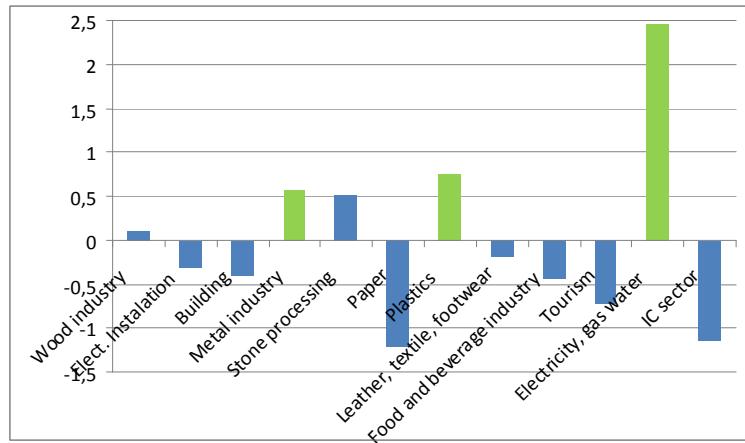
- Leather, textile and footwear
- Electricity supply, gas and water
- Electrical installations.



Graph 19 Number of employees of the sectors of the Region, 2010

Graph 19 illustrates that relatively the most intensive operating sectors are:

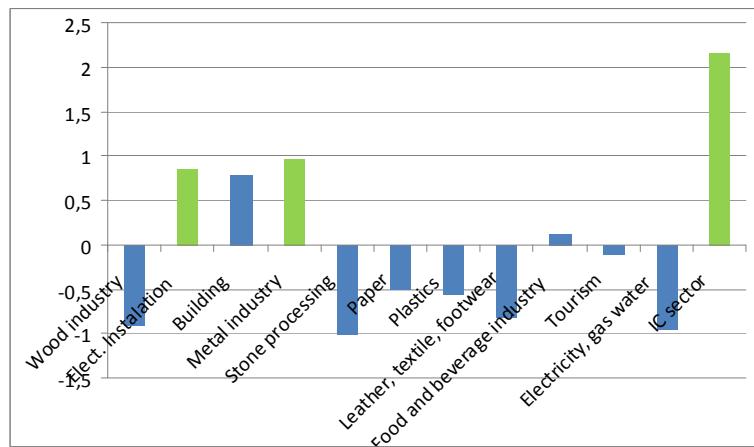
- Leather, textile and footwear (average number of employees is 50)
- Construction (average number of employees is 46)
- Tourism (average number of employees is 32).



Graph 20 Average wage in the sectors of the Region, 2010

Sectors with the highest average salary, as graph 20 illustrates are:

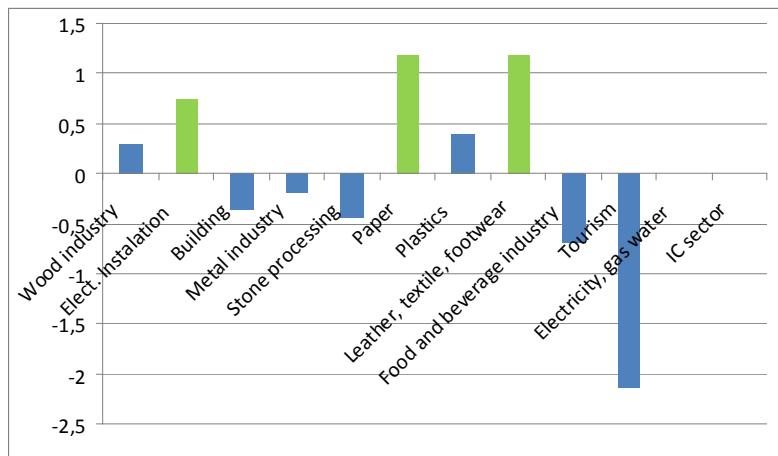
- Electricity, gas and water supply
- Plastics
- Metals.



Graph 21 Employees with University degree in the sectors of the Region, 2010

Graph 21 illustrates that sectors of the region with relatively greatest number of employees with university degree are:

- ICT sector
- Metals
- Electrical installations.



Graph 22 Level of capacity usage of the sectors of the region, 2010

Graph 22 illustrates that the most efficient capacity usage is accomplished by:

- Leather, textile and footwear
- Paper
- Electrical installations.

Previous graphs (13-22) and table 2 have illustrated that 12 examined sectors can preliminary be divided into three sector groups.

Table 3 Preliminary division of 12 sectors

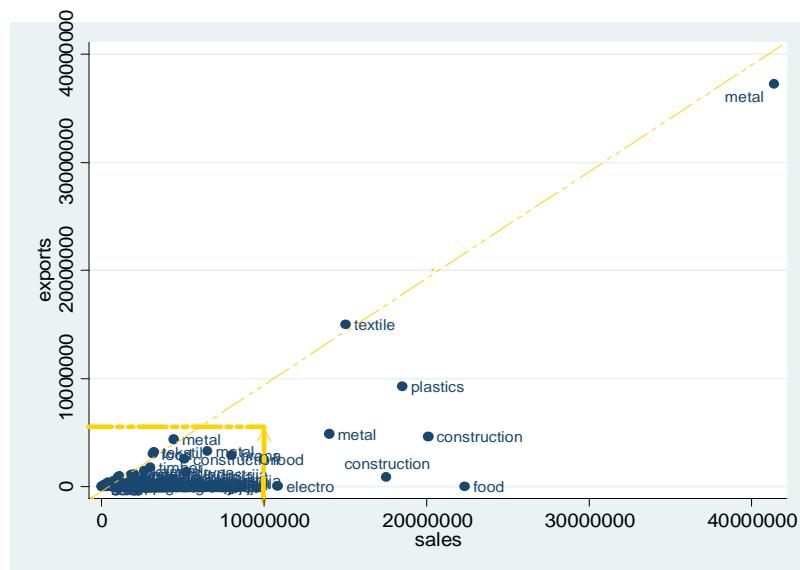
Sectors that are particularly emphasized (I group)	Sectors that stand out to some extent (II group)	Sectors that do not particularly stand out (III group)
Plastics	ICT sector	Stone processing
Metals	Paper industry	Timber industry
Leather, textile, footwear	Tourism	Food and beverages
Electrical installations	Construction	Electricity, gas and water supply

IV.2. Absolute size of relatively high performing sectors

Stressing specific sectors in relative sizes was observed in previous section (IV.1), whereas now specific sectors in absolute sizes will be observed, with emphasis on first and second group of sectors.

IV.2.1. Sales, export, profit and labor

Showing enterprises not by name, but by belonging to its specific sector, Graph 23 demonstrates that there are couples of enterprises out of format 10x5. Hence, there are 10 enterprises with sales greater than 10 mil. BAM, on basis of export, more precisely with sales of 10-20 mil. BAM, of which over 5 mil. BAM is export based. These enterprises could serve as development leaders; moreover they could be cluster initiative developer.



Graph 23 Income and export of companies in the Region, 2010

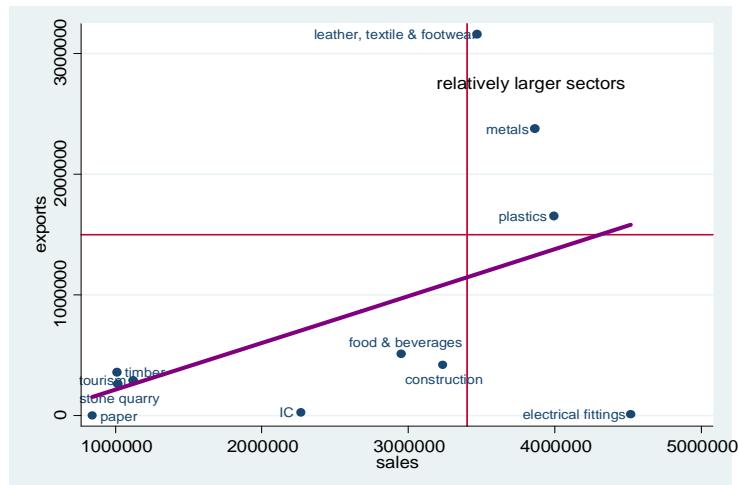
Graph 23 illustrates that respective enterprises belong to first sector group, with exception of electrical installations sector. Moreover, enterprises belong to the following sectors:

- Metals
- Plastics
- Leather, textile and footwear industry

Graph 24 illustrates that sectors to which these enterprises belong to also distinguish according to absolute size of sales i.e.

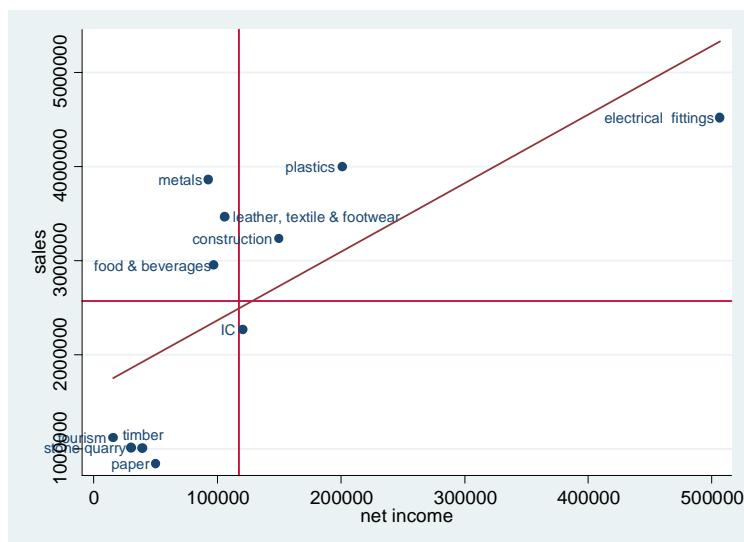
- Metals
- Plastic industry, and
- Leather, textile and footwear industry

Therefore they are considered relatively big sectors (compared to other sectors in the region)



Graph 24 Income and export, sector average, 2010

Now we can raise a question: do sectors that especially stand out in size also stand out in success?



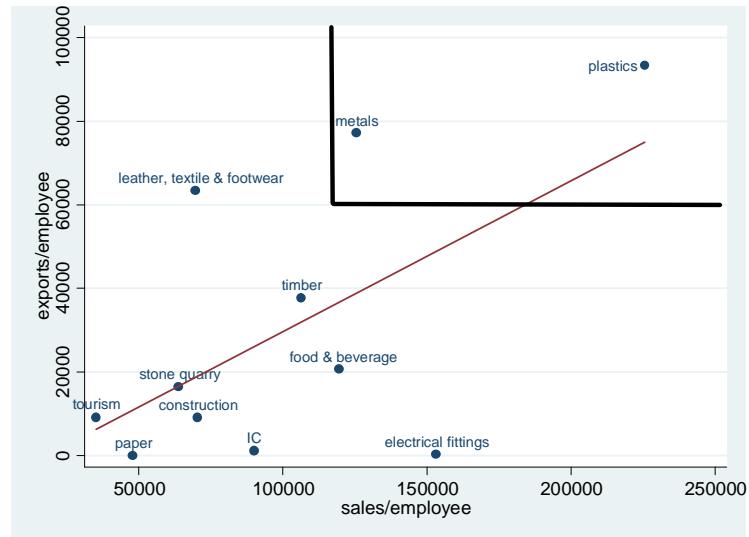
Graph 25 Income and profit of the sectors of the Region, 2010

Graph 25 illustrates that above average sales and above average profit, is achieved by following sectors:

- Plastics
- Electrical installations
- Construction.

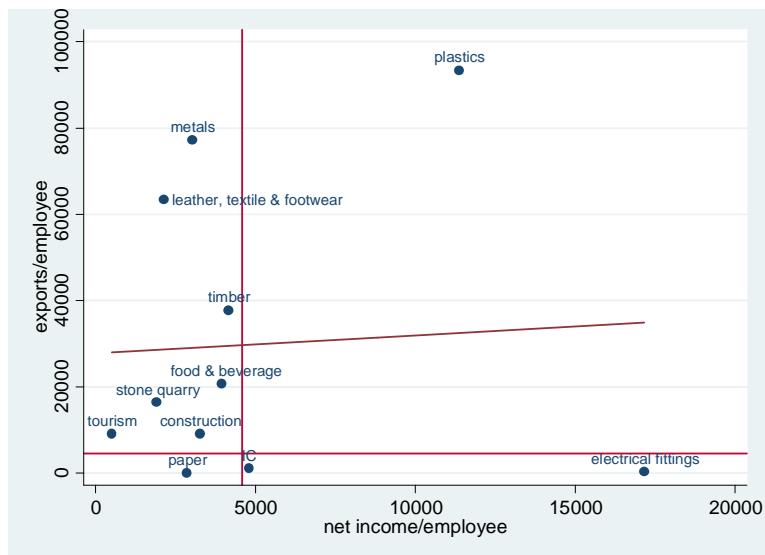
IV.2.2. Sales/labor, export,/labor and profit/labor

Graph 26 helps us establish and realize robustness of specific sectors. It is obvious that, for example, construction sector which has a relatively high sales and profits does not achieve high productivity and profitability i.e. size of sales and profit per employee in the sector.



Graph 26 Income/employee and export/employee of the sectors of the Region, 2010

Since graph 26 illustrates dimensions of yearly exports per employee and yearly sales per employee, based on estimated data for 2010, amounts $800,000 \times 800,000$. However, the majority of enterprises achieve sales per employee less than 200,000 BAM and export per employee less than 100, 00. It can be stated that the majority of enterprises ranges in dimensions at 100, 00 x 200,000 BAM.



Graph 27 Export/employee and profit/employee of the sectors of the Region, 2010

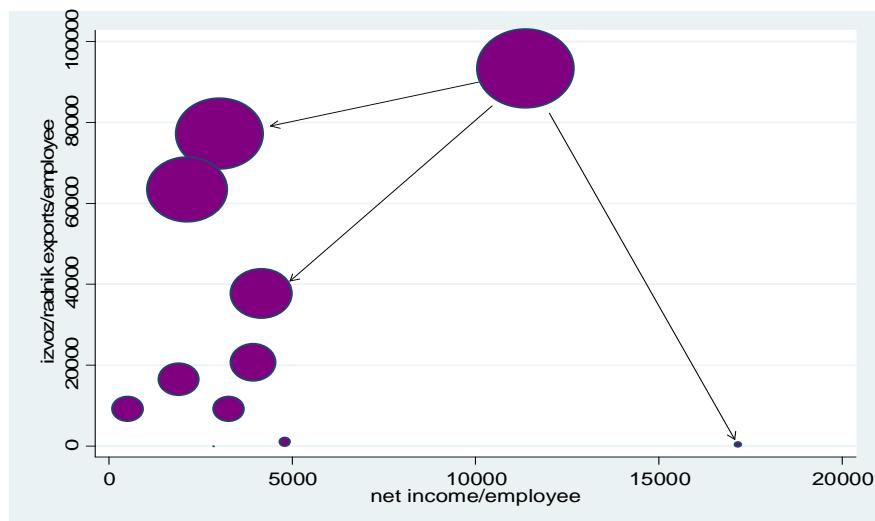
Graph 27 illustrates that above average export per employee have:

- Metals
- Leather, textile and footwear industry, and
- Timber industry

However they have below average sales profit per employee. Sector of electrical installations and ICT sector have above average profit per employee, however they have below average export per employee.

Graph illustrates that only plastic sector has above average export per employee and above average profit per employee.

Dominance of the plastics sector is clearly visible on graph 28, at which the size of balloon represents the size of export per employee. The size of plastics sector predominantly stands out compared to sector of electrical installations and metal industry.



Graph 28 Export and profit of the sectors of the Region, 2010

V. QUALITY ANALYSIS OVERVIEW OF THE MOST DYNAMIC SECTORS

V.1. Overview of priority sectors in EU

V.1.1. Overview of priority sectors of EU member states

While considering priority sector development issues of European Union (EU) member states and candidate countries for EU membership we start from National Strategic Reference Framework, NSRF.

Each EU member state has National Strategic Reference Framework coordinated with Community Strategic Guidelines on Cohesion, CSG. This document defines strategies which are followed by member states, and establishes a list of operative programs for implementation of these strategies.

Priorities of member states are presented in operative programs, together with approaches of their implementation. In order to have a good example of illustration Table 4 presents operative programs of Slovakia. This illustration can be used as one of exemplary comparators⁶ for BIH while examining priorities that should be followed, and amount that should be used for funding.

Table 4 Development goals of Slovakia, 2007-13 (EUR current prices)

Nr.	Priorities	Total (2007-13)	Yearly average	% investment	% GDP	Public Sources of funding	
						EU	Slova kia
1	Transport	3 845 719 991	549 388 570	24.07	1.32	83.39	16.61
2	Rural development ⁴	2 562 585 914	366 083 702	16.04	0.88	76.85	23.14
3	Environment	2 117 647 059	302 521 008	13.25	0.73	85	15
4	Human resource development and social inclusion	2037413625	291059089	12.75	0.70	85	15
	a) employment and social inclusion	1037413623	148201946	6.49	0.35	85	15

⁶ Comparative countries for BIH are: 1. Macedonia and Croatia (candidate states); 2. Slovenia and Slovakia (former transition countries, members of EU); 3. Greece and Portugal (EU member states with market economy) and 2. Austria and Switzerland (federal countries of Central Europe). This is a group of small (by area and population) countries from the Central and Southern Europe (countries of similar climate, which share to a certain degree common culture and industrial development).

	b) education	705 882 355	100840336	4.42	0.24	85	15
	c) healthcare	294117647	42016807	1.84	0.10	85	15
5	Regional development²	1802352942	257478992	11.28	0.62	85	15
6	Research and development	1422841617	203263088	8.90	0.49	85	15
7	Society computerization	1 168 347 536	166 906 791	7.31	0.40	85	15
8	Competitiveness ¹	908235295	129747899	5.68	0.31	85	15
9	Execution	114825201	164 036 00	0.72	0.04	85	15
	TOTAL	15 979 969 180	2 282 852 740	100	5.47	83.32	16.68

¹ Official term for priorities and operative program is Competitiveness and Economic Growth

² Specific priority and operative program for Bratislava region is also included this priority

³ Official term for priorities is Research and Development

⁴ For a difference from other objectives, which are part of National Strategic Reference Framework which is financed by EU funds (European Social Fund, ESF) and European Regional Development Fund (ERDF) and Cohesion Fund (CF), rural development is not constituent part of National Strategic Framework; it is co-financed by EU funds (European Agricultural Fund for Rural Development, EARFD and European Fisheries Fund, EFF).

Detailed overview of regional development objective is presented in the following table due to its immense importance to CREDO project and Herzegovina region. As a part of “regional development” objective, sub-goals are infrastructure (business, innovative-technological, social, educational and physical), human resource development and social inclusion, moreover transport and knowledge economy (informatization of society and economy).

Table 5 Regional development, Slovakia (EUR)

Nr.	Priority	2007-13	%
1	Regeneration of settlements	562 790 000	31.2
2	Education infrastructure	410 000 000	22.7
3	Social services infrastructure	270000000	15.0
4	Tourism	224000000	12.4
5	Transport	180000000	10.0
6	Knowledge economy	44220542	2.5
7	Technical assistance	57304118	3,2
8	Physical infrastructure	54038282	3.0
	Total	1 802 352 942	100

V.1.2. Overview of priority sectors of EU candidate countries

Overview of development goals of EU candidate countries will be presented on the example of Croatia.

Analysis for Croatia is based on the Strategic Coherence Framework 2007-13, which is followed by operative programs for transport, environment, regional competitiveness and human resources for 2007-09; these are co-financed by EU funds (IPA funds).

Goal for rural development is based on the Agricultural and Rural Development Plan for the period of 2007-13, which is also co-financed by EU funds (IPARD funds).

Table 6 Financing of development goals by EU funds, Croatia 2007-09 (in 000 EUR)

	Priorities	Total (2007-9)	Yearly average	% Investm ent	% GDP	Public sources of funding	
						EU	Cro.
1	Rural development	76 900 ¹	25 633	24.67	0.22	75	25
2	Transport	71 334	23 778	22.88	0.21	75	25
3	Environment	71 334	23 778	22.88	0.21	75	25
4	Regional competitiveness	47 133	15 711	15.12	0.14	75	25
5	Human resources	45 032	15 011	14.45	0.13	85	15
	TOTAL	311 733	103 911	100	0.92	75	25

¹ IPARD funds for period of 2007-2011; due to its consistency with other goals the data for period 2007-09 were taken.

V.1.3. Summary overview of priority sectors of EU member and candidate countries

Table 7 presents summary overview of priority sectors of EU member states and candidate countries on one side, and potential priority sectors of CREDO project on the other.

Table 7 clearly illustrates that potential priority sectors of the Herzegovina region can be related to three development goals of EU member countries.

Table 7: Potential congruence of development priorities of EU and CREDO project for Herzegovina region

	Development priority goals of EU	Potential priority sector of CREDO project
1	Rural development	Food and beverages sector
2	Regional development	Tourism
3	Informatization of economy and society	ICT sector

V.2. Overview of priority sectors of development in Development strategy of Bosnia

It is especially important to notice that selecting goals of the Development Strategy BiH⁷ was reached based on:

- overview of all development documents in BiH, from micro to macro level, adopted from the moment of preparation of SR BiH and
- “taking over” of goals that originate from EU path

and was finalized through activities of working groups, composed from government representatives on state and entity/BD level, social partners, civil society and academic society.

Table 8: Potential congruence of development goals for Development Strategy of Bosnia and Herzegovina and CREDO project for Herzegovina region

Nr.	Development priority goals of BiH	Potential priority sector of CREDO project
1	Goal 4: Sustainable development Sub-goal 1: Agriculture food production and rural development <u>Priority 2:</u> <i>Competitiveness improvement in production, processing and trade, while growing the level of quality and security of home grown products.</i>	Food and beverage sector
2	Goal 4: Sustainable development Sub-goal 1: Agriculture, food production and rural development <u>Priority 4:</u> Improvement of living conditions and diversification income of rural employment <i>Measure 4: Promotion of Rural Tourism</i>	Tourism sector
3	Goal 4: Sustainable development Sub-goal 2: Ecology and development of energy resources <u>Priority 4:</u> Encourage the development of energy sector	Electricity, gas and water supply sector

⁷ The latest Development strategy of BiH was supposed to keep abreast to the time framework of EU development documents preparation; accordingly it was supposed to refer to the period of 2008-13, and at the same time maintain continuity with previous development strategies. (Entrepreneurial Society – Global Framework for Development Strategy 2000-04, the Medium Term Development Strategy 2004-07). It needs to be noticed that member states and candidate countries have development documents that refer to the period of 2007-13, and moreover, they have started with preparations of development documents for the period of 2014-20. BiH still does not have connected development planning and budgeting processes i.e. development goals still do not reflect in the budgets of government agencies. In spite of that, development goals strategies are presented, as they reflect considerations of professional agencies tasked with strategy preparation and political views of the public authorities.

	Priority 5: Encourage the development of renewable energy sources	
4.	Goal 4: Sustainable development Sub-goal 3: Transport and Communications <u>Priority 4:</u> Increase of potential for information and communication networking and development of information society <i>Measure 1: To build and develop the ICT infrastructure</i>	ICT sector

V.3. Overview of priority sectors of the BiH Export Strategy

Ministry of Foreign Trade and Economic Relations of BiH and Foreign Trade Chamber of BiH in cooperation with European Commission are preparing BiH Export strategy. This assignment is at the moment implied by part of the EUEXPRO2 project, which started in February 2010.

Coordinator and holder of Development Strategy process is the Export council of BiH, a body founded by the Council of Ministers in 2007 in order to design policies and provide advices and recommendations for all export concerning issues. Council is composed of key government institution representatives, government entities and private sector, in order to properly fit to this assignment.

Through recent works on creation of the Strategy key export sectors have been determined together with support sectors (see table 9).

Table 9 Key export sectors and key support sectors to export sectors

Export environment	Key sector
Legal and regulatory issues	Mining and metal products
Export Finance	Energy
Transport, logistics and information and communication technology	Agriculture and food industry
Institutional support for exporters	Timber industry
Branding and promotion of BiH	Construction materials and services
	Tourism

Table 10 Potential congruence of development goals of BiH Export strategy and CREDO project for Herzegovina region

Nr.	Target Development priority	Potential priority sector of CREDO project
1	Mining and metal products	Metal industry
2	Energy	Electrical energy, gas and water supply
3	Agriculture and food industry	Food and beverages industry
4	Timber industry	Timber industry
5	Construction materials and services	Stone processing
6	Tourism	Tourism

V.4. Overview of priority sectors in Regional strategy of economic growth for economic region Herzegovina

Regional strategy of economic growth for economic region Herzegovina, that was prepared by REDAH, with the support of European Union and respect of view of local actors – members of partner group and consultants of EU RED project, included seven year target period while relying on 20 year vision.

Regional strategy has four strategic goals, out of which one relies on “developed and sustainable economy” Its respective priority goals are illustrated in table 11.

Table 11 Potential congruence of development goals of Regional strategy for economic development for Herzegovina economic region and CREDO project for Herzegovina region

Nr.	Target Development priority of regional strategy	Potential priority sector of CREDO project
1	Development of agriculture: Organized networking of agricultural producers and <u>food processors</u> in order to promote sales and increase export)	Food and beverages
2	Tourism development: Promotion of tourism Tourist facilities improvement Tourism development Development of cross regional networks for tourist activities	Tourism sector

VI. SUMMARY OVERVIEW OF THE MOST DYNAMIC SECTORS

VI. 1. Quantitive analysis overview of the most dynamic sectors

By standardizing business indicators, it was possible to identify sectors that relatively outstand compared to others sectors (see table 12)

Table 12 Sectors with above average regional business indicators, 2010

Foreign buyers	Employees	Average wage	University degree	Capacities usage	Sales/employee	Export/employer	Profit/employee
8	8	11	12	8,6	7	7	2
10	3	7	4	2	2	4	7

Legend: 1. Timber industry, 2. Electrical installations, 3. Construction, 4. Metal industry, 5. Stone procession, 6. Paper industry, 7. Plastics industry, 8. Leather, textile, footwear, 9. Food and beverages, 10. Tourism, 11. Electricity, gas and water supply, 12. Information and communication sector.

Table 12 illustrates that following six sectors particularly stand out:

1. Plastics (the highest sales per employee and highest export per employee)
2. Electrical installations (the greatest profit per employee)
3. Leather, textile and footwear (relatively the greatest number of foreign buyers, employees and capacities usage)
4. Electricity, gas and water supply (relatively the biggest salaries)
5. Information and communication sector (relatively the greatest number of well educated employees)
6. Paper industry (the greatest level of capacities usage)

Further analysis affiliates that particularly two sectors stand out:

- Metals
- Plastics

Metal sector stands out compared to other sectors by its robustness (absolute size of sales, export and profit), while plastics sector stands out with its propulsiveness (relative size of sales, profit and export per employee).

VI.2. Qualitative analysis overview of the most dynamic sectors

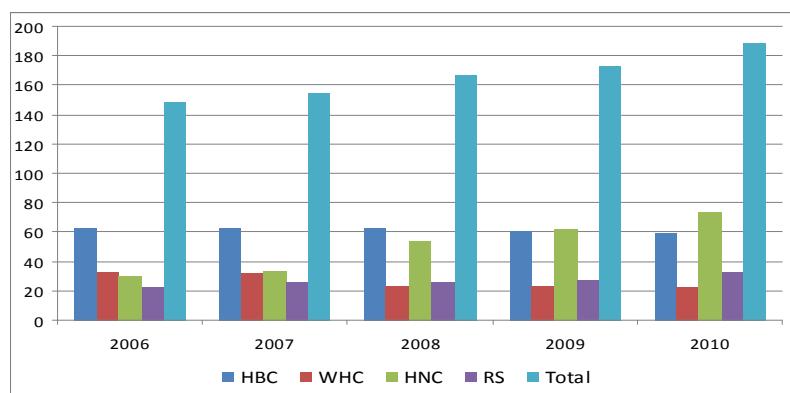
Qualitative analysis affiliates that all relevant strategies stress on two sectors:

1. Food and beverages sector
2. Tourism.

Table 13 Development priorities of relevant strategies and CREDO Herzegovina project

Nr.	Strategy	Priority	Sector of CREDO project
1	EU	Rural development Regional development Computerization of the economy and society	Food and beverages sector Tourism ICT sector
2	BIH	Sustainable development	Food and beverages Tourism Electricity, gas and water supply sector ICT sector
3.	Export strategy of BIH	Mining and metal products Energy Agriculture and food industry Timber industry Construction materials and services Tourism	Metal industry Electricity, gas and water supply Food and beverages sector Timber industry Stone processing Tourism
4.	Regional development strategy of Herzegovina	Development of agriculture Tourism development	Food and beverages sector Tourism

There is a correlation between food and beverages sector on one side and rural development and development of agriculture on the other side. It is possible to associate them with the fact that rural areas insure certain raw materials for development of food and beverages sector. Therefore within the food and beverages sector priority should be given to dairy and dairy products sub-sector, which stand out compared to other sub-sectors by its propulsiveness.



Graph 29 Employment of the dairy sector, 2006-10

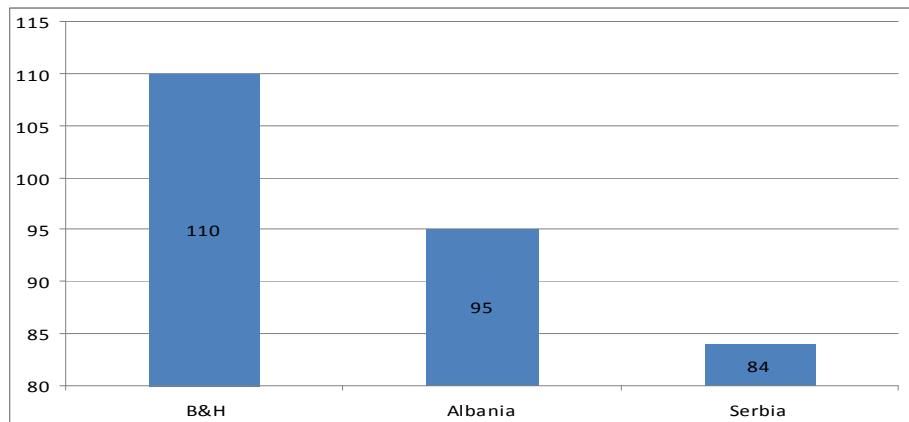
Similar to Export strategy of BIH, which next to export sectors also encloses supporting sectors, we suggest adding ICT sector to the three sectors which should be supported by CREDO Herzegovina project.

In accordance with the modern views of development, middle income countries, such as BIH, on its way to joining countries with high income⁸, need to focus on education, competitiveness, foreign trade and labor mobility in order to achieve prosperity in the long run.

Squeezed into the “trap of the middle income”, between the countries with low income, which compete with low labor costs, and countries with high income, which compete by highly innovative products, BIH inevitably needs new adequate development strategies. These strategies need to indicate areas in which BIH can achieve economics of scale and technology leadership at the global level.

Without modernly equipped and organized scientific research and research development institutes, research development centers at universities and enterprises, centers for technology transfer, innovation centers, technology parks and other kinds of business infrastructure, it is hard to expect significant innovative activities, development of sophisticated products and their placement in foreign markets.

One of the indicators of the actual BIH position in ICT sector is NRI (Networking Readiness Index). In the report from World Economic Forum for 2009 – 2010, BIH was positioned at 110th place (out of 133 countries altogether). According to that index BIH is the lowest ranked European and Balkan country. Low index of BIH derives from poor use of information communication technology.



Graph 30 WEF: The three lowest European countries on the networking readiness index, 2009-10

IT sector should be, in the frame of CREDO Herzegovina project, put in function support of development of priority sectors (metal, etc.) in sense of strengthening computerization of related sectors and sophistication of their production and other business processes.

⁸ Countries with higher middle income are those which in 2007 had gross national income (GNI) in range of 3,705 to 11,455 US\$ *per capita*. GNI of BIH was 3,790 US\$

Quantitative analysis implies that ICT sector of Herzegovina region has relatively the greatest potential for development of knowledge economy (relatively the greatest number of highly educated employees), strong relations with foreign partners.

VI.3. Quantitative and the qualitative analysis overview of the most dynamic sectors

Based on quantitative and qualitative analysis potential priority sector could be:

- Metal sector
- Plastics
- Food and beverages
- Tourism
- ICT sector.

VII. DISCUSSION

While considering which of potential priority sectors should be selected as priority sectors, one should keep in mind certain limitations. For example, how many of potential development leaders are there within these sectors, relatively how many of potentially growing enterprises are there compared to the other enterprises. Besides that, relative prevalence of these sectors throughout sub-regions of Herzegovina needs to be taken into consideration.

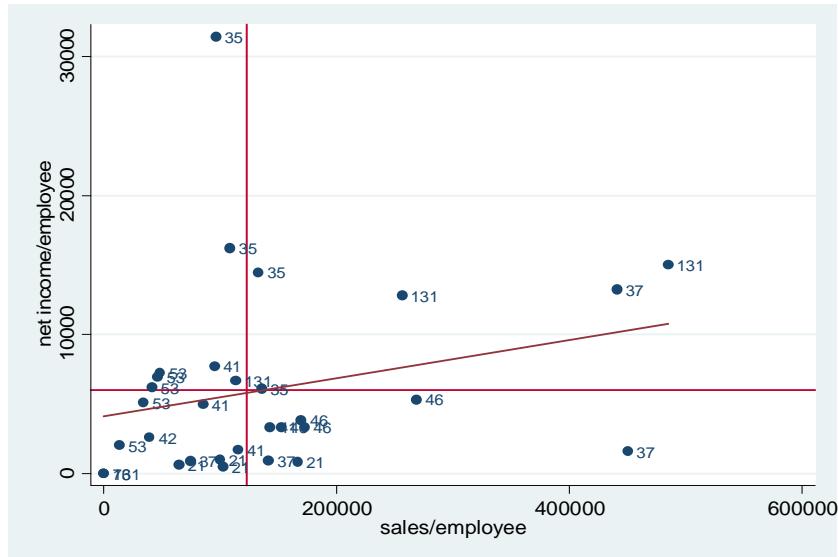
Sector selection needs, without any doubt, to be placed in the content of the CREDO project goals, in order to contribute achieving goals in opening new jobs and maintaining the existing ones.

VII.1. Relatively small number of highly developing enterprises

Population of 172 enterprises contains 10 strongly growing enterprises. These enterprises are those which actualize the growth of number of employees (or sales) over 20% yearly during the period of three years minimum, considering that starting number of employees is minimum 10 employees (stricter criteria would be minimum 20 employees).

Hence, 5.8 % enterprise population has rapid growth. That is the lower limit of presence in the overall enterprise population, observed by international standards. Out of transition countries, Slovakia and Romania have the same result. For example, in the Baltic countries the share amounts 15-20%.

Graph 30 illustrates performances of enterprises which have rapid growth (employment growth and/or sales over 20 % yearly). Graph 30 exemplifies performances of enterprises during the period of 2006-2010. Some enterprises stand out – those are the ones above horizontal red line (sales growth per employee over the average of this enterprises group) and right from vertical red line (sales growth per employee above average of this enterprises group), and above the slanted line.



Graph 31 Companies of the Region with strong growth, 2006-10

Since the region does not have satisfying number of rapidly growing enterprises (their number is 3-6 times smaller, compared to the countries which have relatively the greatest number of rapidly growing enterprises) it is necessary to give recommendations for creation of an ambient that will ensure the appearance of similar enterprises. This is the issue of Integral Study, the second from the CREDO Herzegovina project framework.

VII.2. Relatively inhomogeneous distribution of sectors over sub regions

Table 13 illustrates that only specific sectors in specific sub regions achieve yearly employment growth in the size that overcomes the size of micro enterprise (over 10 employees)

Table 14 Number of employees in Herzegovina sub regions, 2006-10

Table 2. Number of employees in Herzegovina and sub-regions, 2006-2010						
Sector	Region/Sub region/ County	2006	2007	2008	2009	2010
Metal	HBC	26	26	27	27	28
	WHC	47	77	112	142	155
	HNC	221	241	323	341	354
	RS-H	57	58	60	64	64
	Herzegovina	351	402	522	574	601
Plastics	HNC	1	1	1	2	1
	HBC	27	25	25	25	28
	WHC	70	82	84	95	95
	Herzegovina	98	108	110	122	124
Tourism	RS	83	86	84	78	91
	HNC	348	383	418	418	411
	HNC	11	13	14	14	14
	HBC	16	16	18	23	23
	Herzegovina	458	498	534	533	539

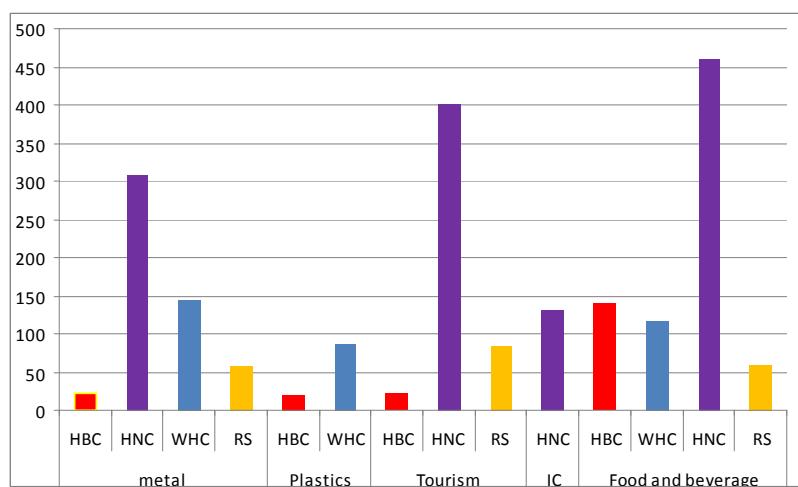
ICT	HNC	76	88	115	135	145
	Herzegovina	76	88	115	135	145
Food and beverages	RS	54	62	70	75	84
	HNC	409	448	506	519	508
	HBC	113	115	118	122	138
	WHC	111	146	142	130	139
	Herzegovina	687	771	836	846	869

Table 14 illustrates regionally unequal sector development. Sectors which have, at least in certain degree regionally balanced development are: metal, tourism, food and beverages. Plastics sector is concentrated in two sub regions (HBC and HNC), while ICT sector is entirely concentrated in HNC (see Table 15).

Table 15 Sector development in Herzegovina sub regions

SECTOR	SUB REGION			
	HBC	HNC	WHC	RS-H
Metal	+	+	+	+
Plastics	+	-	+	-
Tourism	+	+	+	+
ICT	-	+	-	-
Food and beverages	+	+	+	+

Potential source for employment over a short term period (1+3, the length of CREDO project), as earlier mentioned, can be rapidly growing enterprises. According to graph 31, these enterprises can be found in Herzegovina Neretva Canton and West Herzegovina Canton, primarily in the sector of food and beverages, tourism and metal.



Graph 32 Employment of non-micro companies of potentially priority sectors by sub-regions of the Herzegovina, 2010

VII.3. Selection of priority sectors from the employment objective point of view of CREDO Project

It is necessary to investigate priority sectors according to the objectives of CREDO Herzegovina project. It is highly important to examine and investigate where would it be the most reasonable to support the generation of 50 new jobs, maintaining 150 existing jobs. Having in mind sustainability, the most sustainable jobs are those that are created in internationally competitive sectors. Next are sustainable jobs in national and regional competitive sectors, if this can at all be discussed in the era of globalization for a small open economy. In addition BIH aims to follow EU path. Key economic criteria for becoming the member state is competitiveness of the economy, which comes down to competitiveness of business enterprises (see part I of this study).

Table 16 Number of employees in potential priority sectors of the region

Sector	Number of employees				
	2006	2007	2008	2009	2010
Metal - total	351	402	522	574	601
Metal - yearly growth	-	51	120	52	27
Food and beverages	634	678	724	750	774
Food and beverages yearly growth	-	44	46	26	24
Tourism – total	458	498	534	533	539
Tourism yearly growth	-	40	36	-1	6
ICT total	76	88	115	135	145
ICT – yearly growth	-	12	27	20	10
Total	1519	1666	1895	1992	2059
Total – Yearly growth	-	147	193	97	67

Table 16 illustrates yearly employment growth for priority sectors. Total yearly employment growth ranges from 67 (2010) to 193 (2008). The impact of global economic crisis, which hit BIH in the last quarter of 2008, is more than obvious,

Simple calculation shows that every eight job (precisely 8.1)⁹ created in Herzegovina region in period 2011-2012 needs to be created through project CREDO Herzegovina. As the employment growth of the region, especially of priority sectors enlarges (and that means coming closer to the employment growth before crisis which was 11.7, than to the 4.3 which was after the crisis) relative task of CREDO project will be easier.

⁹ That is ratio of average yearly employment growth in period of 2006-2010, which amounts at 100.8, and yearly goal of CREDO Herzegovina project, which is 12.5.

VIII. SELECTION OF PRIORITY SECTORS

Final proposal of priority sectors is:

- a. Metal
- b. Plastics and rubber
- c. Tourism
- d. Cheese production
- e. ICT

As quantitative analysis indicates, metal sector is the most significant sector of Herzegovina region. It stands out with the size of sales and export i.e. global competitiveness. It is well developed not only at the level of the region, but also at the level of its all sub regions.

Having in mind development plans of enterprises of this sector, first of all Aluminij d.d. Mostar and Feal Široki Brijeg, which comprehends creation of technological park, can implicate that there are basis for aluminium cluster initiative development. That is also an environment for development of small and medium sizes enterprises; respectively increase of number of employees.

Plastics sector is the most propulsive sector of the Region. Opportunities for further development in the area of recycling and energy production are vast. Having in mind the unequal representation of sectors in sub regions, objection could be eliminated by expanding the sector to rubber, more precisely rubber recycling.

One should bear in mind that ratio of recycling in European countries (EU plus Switzerland) surpasses 50%, and at some even 80 %. Moreover, in several countries (Sweden, Switzerland, Germany and Denmark) plastic waste burial is prohibited (Sartorius and Wuttke, 2010). Region could turn into BH leader in recycling of plastics and rubber, and usage of energy stored in plastic and rubber waste.

Food and beverages and tourism sectors are according to qualitative analysis highlighted as development priorities in all relevant strategies (from national strategic framework of EU member states, which can be used as comparators for BIH to Regional strategy of economic development for economic region Herzegovina).

Having in mind the heterogeneity of food and beverages sector, which is in range from subsector of medicine and aromatic herbs over subsector of alcoholic beverages and wine production, we suggest that priority of the sector should be cheese production. Relational sub-sector is represented in all sub regions and provides products (cheese) which are globally competitive. Research that was prepared by Swedish Institute for Food and Agricultural Economics (Bajramović et al., 2006, str. 66) states that:

“BIH does not have comparative advantage with its agricultural products at EU market. However, the country can have the advantage in specific products, especially particular kinds of cheese, without comparative advantage at the level of activity for example agriculture as a whole.”

Furthermore, LAMP researches (Linking Agricultural Markets to Producers), Bajramović et al (2006, pg. 83.4) further states:

“A couple of kinds of cheese are produced. At the most Livanjski cheese, which is the most popular and mainly produced in Livno area (..). Livanjski cheese is made out of cow milk, mainly from milk of cows which gaze on fresh grass and which matures at least two months. Livanjski cheese is considered to be delicacy that is well known in Croatia; moreover it has good reputation in the area of Ex Yugoslavia (LAMP 2004). Six dairies produce Livanjski cheese, which are specialized only for this kind of cheese. One of the dairies has export permit for EU. Livanjski cheese cannot compete by price with similar products that are subsidized in EU. Around 70% of Livanjski cheese produced in BIH is mainly exported to Croatia, mainly by informal markets due to difficulty of meeting certain EU standards.”

It is important to mention that some small dairies, and those are dairies of the Region, invest effort in introduction of dairy products, which present source brand – cheese in goat tissues, peppers filled with cheese and cream etc. Even though the production of these products is still symbolic, it is highly important that they are part of their production program. These and similar products could create the development opportunities for small dairies (Farma 2010).

ICT sector is also stated as one of the priorities in national strategic referent frames of certain member states and comparators for BIH. If we discuss regional development priorities, development of that sector is widely mentioned. Strategy of BIH development states ICT sector as development sub goal, while the BIH Export strategy, are seen as one of the sectors which provide support to priority export sectors.

Starting from the fact that developed industrial tradition in producing communication and information technology exists in Herzegovina region (factories UNIS), that there are higher education institutions (three universities), which deal with information and communication staff, we suggest development of micro cluster initiative in ICT sector¹⁰ Relative cluster would be developed through project of public-private partnership. On one side there would be local/regional authorities and on the other private enterprises which are engaged in software business. Partners in this project would be higher education institutions while REDAH would, with SIDA support, serve as project catalyst. It would be good to connect this initiative with ideas of foundation of Technology Park in region, primarily in area of energetic efficiency.

¹⁰ Overall presentation of clusters in European transition economies (Ketels, Kindquist and Sölvell. 2006), which in average have: relatively small number of members (altogether 40% of clusters has more than 20 enterprises, and median is 18), one office (62% of clusters has an office) and two employees.

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