pacinno

REPORT – V 3.0

Platform for **trans-Academic Cooperation in Innovation within the Adriatic Region**

IMPRESSUM

Platform for trans-Academic Cooperation in Innovation (PACiNNO) Project

PACINNO is a collaboration platform that connects into a single regional innovation system researchers and academic institutions, policy makers, and innovative companies of the eight countries belonging to the Adriatic region (Albania, Bosnia-Herzegovina, Croatia, Greece, Italy, Montenegro, Serbia, and Slovenia). The goal of PACiNNO is to establish a platform for cooperation in research and innovation covering the whole Adriatic region. Targeting research institutions, policy makers and business entities, the project will help develop new bridges between the research and scientific activities, carried out at academic institutions, and the economic system, with specific reference to the technological needs of SMEs. More generally, PACiNNO is aimed at overcoming the main obstacles and barriers to the economic development of the Adriatic countries, fostering the competitiveness of their minor firms (both in the high-tech fields and in the traditional industries), and promoting the creation of innovative start-ups.

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Platform for **trans-Academic Cooperation in Innovation within the Adriatic Region**

Let's grow up together Adriatic IPA Cross Border Cooperation 2007-2013

Programme co-funded by the EUROPEAN UNION

WORK PACKAGE 4: MICRO-FOUNDATIONS OF INNOVATION

ACTIVITY 4.1: SURVEY OF INNOVATIVE COMPANIES

REPORT – V 3.0

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INTRODUCTION

This cross-country report provides great insights into the current situation of the firm-level innovation at the level of the whole Adriatic Region. Report data are of the descriptive nature and hence they carry valuable information for understanding firm-level innovation in the region. Platform for trans-Academic Cooperation in Innovation -PACINNO project enabled such insights in detailed and comprehensive manner. The aim of this report it to serve as a base for preparation of innovation related policy proposals, as well as a valuable insight for various stakeholders.

Report contains information about the product (goods or services) innovation and the extent to which firms use innovation as a driver for revenue and growth. Innovativeness of firms was measured as well as the innovativeness of processes within the firm. We then outline what are the most important factors that hamper the innovation activities and that are the reason why not to innovate. They differ across countries but they are mostly related to costs and knowledge issues. In addition, the extent of R&D was explored and the way of firms' spending on research and development.

Different sources of innovation (internal, market, institutes, and other) and their relevance for the Region as well as for each country are then presented in the report. Additionally, the extent of cooperation between firms and their potential partners from the own country/region and from other countries of the Adriatic Region and beyond is shown. Besides, the organizational innovation, process (administrative/marketing) innovation, social innovation and market orientation of firms was measured. Finally, we show the performance indicators of firms as well as their descriptive data.

In the first chapter, we describe research aims and research background leaning on the various reports and scientific papers. This serves as a context in which we conceptualized and conducted this research and interpreted the data placed before the reader of this report.

Second chapter describes methodology of the research as well as the sampling process. Also, this chapter serves as an insight into country specific descriptive statistics for all participant countries.

Thrid chapter is dedicated to results regarding internationalization, product innovation, process innovation, factors that are hampering innovation, research and development, sources of innovation, organizational and marketing innovation, social innovation and in the end, performance.

1. Aims and research background

There is little doubt about the fact that innovation is one of the most important growth drivers of countries and, likely, the most important engine of the firms' competitiveness. That is why all over the world data related to the innovation capabilities of countries, regions and firms are systematically collected and analyzed in order to inform public bodies about the most suitable supporting policies and to help firms in choosing the best strategies available.

At the European level, the most complete source of comparative data in this regard is probably the Community Innovation Survey (CIS). The CIS is a sort of sum of different surveys relying on a common platform carried out by national statistical offices at the European level. This tool has a crucial importance to policy makers, scholars, and public bodies since it allows comparisons of the innovativeness of different sectors and regions. The CIS survey is also the main source of data for the Innovation Union Scoreboard (IUS), which is the main instrument used by the European Commission to provide a complete comparative assessment of the innovation performance of the EU Member States.

However, despite its unquestionable usefulness, the IUS suffers from an important limitation: it does not currently cover many of the countries involved in the IPA Adriatic CBC Program. In particular, it fully covers Italy, Slovenia, Greece and Croatia; it provides partial coverage for Serbia. No coverage is given to Bosnia & Herzegovina, Montenegro and Albania. Hence the need to provide a detailed, updated depiction of the innovation performance of the Adriatic area as a whole, a depiction that complements the ones provided by the CIS surveys and by the Innovation Union Scoreboard by relying on comparable methodologies, concepts and modes for data representation. To the best of our knowledge, this study is the very first attempt to do that for the whole Adriatic area.

In order to ensure reliability of the measures used in this study and also to ensure comparability with the currently existing studies and reports at the European level, we decided to heavily rely on the structure of the CIS questionnaire to collect the data here represented and commented. Further, the use of a widely recognized standard facilitates the benchmarking of the countries involved in the study and of each country within the whole European area.

The CIS questionnaire was then complemented with the use of additional modules arising from the latest cutting-edge innovation, management, and marketing academic literature. In parallel, we relied upon well-established theories of the firm such as the resource based view (Wernerfelt, 1984) and the distinctive capabilities framework (Day, 1994). The aim was to use constructs and measures developed by the most recognized scholars in both fields to analyze and compare the performance of firms at the Adriatic level.
Innovation is one of the most important concepts in today's economics and business. It is also established as one of the vital factors for successful firm operations in practice. This is the reason why innovation has been accepted in almost every field and researched extensively at both the macro and micro levels. This report deals with the micro-level research in innovation, more precisely – firm or organizational level. The role of innovation for organizations has been a very dynamic topic over the past 20 years, with interesting research paths (e.g. Han, Kim, & Srivastava, 2014; Hurley & Hult, 1998; Kim & Mauborgne, 1992).

Perspective on the innovation that we have in this report explains that: An innovation is the introduction of a new or significantly improved offer, process, organizational method, or marketing method by your enterprise. An innovation must have characteristics or intended uses that are new or that provide a significant improvement

over what was previously used or sold by your enterprise. However, an innovation can fail or take time to prove itself. An innovation needs to be new or significantly improved for your enterprise. It could have been originally developed or used by other enterprises.

The report goes on to explain the methodology used, at the overall level and at the country level. Further, we present descriptive statistics on the firms in each of the eight samples. We then present the results in each of the nine sections: internationalization, product innovation, process innovation, factors hampering innovation, research and development (R&D), sources of innovation, organizational and marketing innovation, social innovation and performance. The data were analyzed at the Adriatic Region level and at the country level. Analyses are accompanied with comments outlining interesting and important findings of the survey. Finally, we conclude with outlining contributions of this report and its recommendations.

2. Methodology and descriptive statistics

Methodology of this research was jointly developed by PACINNO partners, where the researchers engaged in the WP4 activity agreed upon every step of the process in order to ensure the final output quality and comparability. The first step in the process was focused on developing the questionnaire, based on literature review and expertise of researchers engaged. The final questionnaire is comprised of 12 sections. Section 1 is focused on general information about the enterprise including its NUTS, main activity and NACE, and market presence (national, Adriatic region and above). The next step (Section 2) was focused on learning about product (goods or services) innovation in terms of new or significantly improved goods or services introduction, both new to the market and new to the firm. Additionally, the first dimensions of the scale measuring firm innovativeness (Škerlavaj, Song, & Lee, 2010), product and service innovation, is included in this part. In Section 3, we aimed to learn about the process innovation of firms, defining process innovation as a new or significantly improved production process, distribution method or supporting activity.

Section 4 of the questionnaire was focused on factors hampering product and process innovation activities. A list of possible factors that are preventing firms from innovating (or hampering innovation activities) was made. These factors are grouped into: cost factors, knowledge factors, market factors and reasons not to innovate. Activities and expenditures for product and process innovation were included in Section 5, which explores whether firms implement in-house R&D, external R&D and what is the level of spending on those activities. Furthermore, this part also explored the extent of public financial support for innovation activities by local/regional authorities, central government and the European Union. In Section 6, sources of information and co-operation for product and process innovation were explored, and they were grouped into internal sources, market sources, education and research institutes, and other sources. Additionally, this section explores cooperation between firms and their potential partners from the own country/region and from other countries of the Adriatic region and beyond.

Section 7 of the questionnaire targets the organizational innovation concept, which represents a new method in the firm's business practices (including knowledge management), workplace organization or external relations that have not been previously used by the firm (as a strategic decision made by management, and mergers/acquisitions excluded). Items for this section were taken from Vaccaro and colleagues (2012). The next important concept for innovation was included in Section 8 – process (administrative/marketing) innovation (Škerlavaj et al., 2010).

Self-reported performance measure (compared to the most direct competitor) was included in Section 9 (Auh & Merlo, 2012), and it evaluates market share, revenues, profit, cash flow and decrease costs. Firmographic data were described in Section 10. Furthermore, researchers of WP4 aimed to learn more about the extent of development of the social innovation in firms' perceptions and in countries of the region. Hence, Section 11 was devoted to exploring the understanding and extent of the social innovation. Finally, in Section 12, the concept of firms' market orientation was included. It was developed by Kohli, Jaworski and Kumar (1993) and includes three dimensions: intelligence generation, intelligence dissemination and responsiveness.

After the English version of questionnaire was finalized (see Appendix A), all partners had the questionnaire translated into their local languages. Researchers decided that the back translating method is the most appropriate for getting the best and most adjusted local versions of the questionnaire (Brislin, 1970). This implies using one translator for translating the English version into the local-language version, then using another translator for translating that local-language version back to English version and then finally using

the third person to translate that version again to the local language one. Finally, comparison of all versions and correction of irregularities is necessary. The next step was checking the understandability of the items by testing the questionnaire with experts and managers from practice.

When the questionnaire in local language was finalized, researchers continued with final preparation steps, which included putting the questionnaire online to the Limesurvey (www.limesurvey.org) platform. The platform was hosted by School of Economics and Business Sarajevo (WP4 lead partner); each partner received its username and password and was able to upload and administer the survey online. In the later implementation of the survey, partners used the online survey as well as the paperback version, which was then uploaded to the Limesurvey database.

In parallel with finalizing the questionnaire, WP4 researchers discussed the sampling method for the 4.1 surveys. The stratified random sampling method was evaluated as the most appropriate method – if possible to be implemented in all partner countries. This implies selecting subsets of the overall firm-population in the country and then randomly selecting a sample from those subsets. In the case of 4.1 surveys, subsets were the selected innovative industries in each country. Researchers from the country decided upon the appropriate industry. For some countries, official secondary data on the most innovative industries existed, while for some they did not and the decision was made based on prior qualitative research and assessment. In case this described sampling method was not technically and objectively viable in a country, researchers were free to select another sampling method, trying to take into account the general criteria.

The survey was officially launched in the end of May 2014 and lasted until the end of September 2014 (and in some countries, aiming for increased response rate and for overcoming administrative issues it also lasted through October and November 2014). The exact methods used as well as the descriptive data per country are described below for each partner country separately. Further, each of the countries prepared a separate report for country-level analyses. These reports were then integrated, and cross-country analyses added.

Finally, it should be noted that methodologies used in the countries are often not comparable, hence, that one should be careful when deriving the conclusions for the whole Adriatic Region based on the descriptive data offered in this report, as the results may be sample-biased. However, each partner took great care to select suitable firms; consequently, valuable insights into the situation were obtained.

2.1. Sample and descriptive statistics – **Italy**

Sample

We conducted a survey by collecting data from a sample of Small and Medium Enterprises (SMEs) located within the IPA eligible area. Accordingly with EU recommendation 2003/361, we considered only those enterprises which employ less than 250 persons and which have an annual turnover above 1 million and not exceeding EUR 50 million.

Since our interest is focused on innovative firms rather than high-tech industries, we consider also low, medium/low, and medium-/high-tech industries, classified according to their NACE code (2 digits). The starting population generated on the basis of the Aida Bureau van Dijk database allowed us to identify a sample of 16,686 SMEs located in the eligible area.

Overall, a stratified sample of 5,475 Italian companies (in terms of industries, sales volume, and regional location) were contacted by phone and or by email to participate in the study. To collect data we used the questionnaire technique, administered through CAWI interviews conducted in the period between October and December 2014. One hundred and four SMEs completed the questionnaire (missing value <10%), while 207 firms were excluded because they filled less than 70% of the form.

Of the respondents, 76% were either the CEO or a member of the board of directors; the remaining 24% were senior executives, such as R&D and sales managers. The possibility of non-response bias was checked by comparing the characteristics of the respondents with those of the original population sample. The t-statistics for the number of employees, sales volume, and regional location are all not significant, suggesting that there is no statistical difference between the respondent and non-respondent groups.

N. OF FIRMS CONTACTED	**7.763**
UNCOMPLETED QUESTIONNAIRES	307
COMPLETED QUESTIONNAIRES	**434**

Table 1: Survey response rate – Italy

Descriptive statistics

The average turnover of the firms in the sample is above 12.5 million euros and 62 employees. The ratio of foreign sales to total sales averages 37%. The figures show a significant growth in the last three years (2011-2013) in terms of both sales, size, and international intensity.

	2010	2013	CAGR
TOTAL SALES	7.426,86	8.331,99	12,19%
EMPLOYEES	41,52	45,21	8,86%
EXPORT SALES / TOTAL SALES (%)	22,57	26,86	4,29
N. OF FIRMS		**434**	

Table 2: Descriptive statistics Italy: Average Size (Total Sales, Employees) and Export Ratio of sampled firms

In line with our stratification strategy, the composition of the sample shows a wide scope in terms of industries covered. Firms from manufacturing industries represent more than 87% of the sample, while service firms represent around the 13%. Mechanical engineering (machinery & equipment and metal products) is the most represented industry with more than the 25% of the total of the firms.

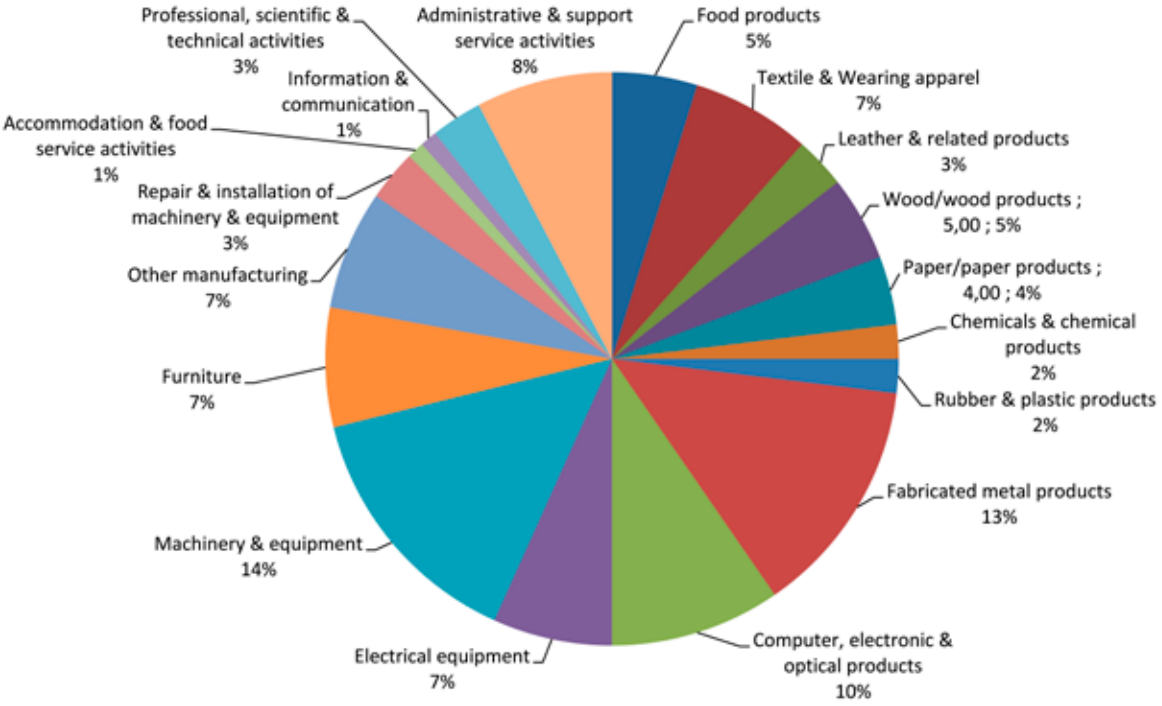


Figure 1: Descriptive statistics Italy: Industry composition

The majority of the firms in the sample are independent firms. However a noteworthy percentage (28%) belongs to a group located in Italy. No firms belonging to foreign groups participated in the survey.

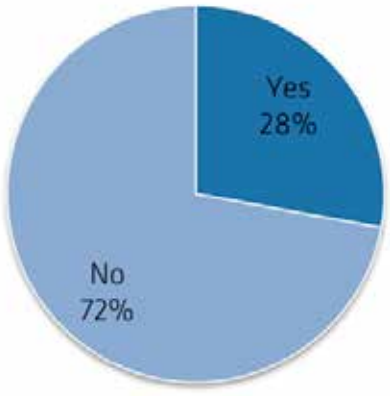


Figure 2: Descriptive statistics Italy: Group belonging

2.2. Sample and descriptive statistics – **Slovenia**

Sample

In Slovenia, the questionnaire was sent to a sample of 1.705 small and medium firms that were also the target of the longitudinal survey of high-tech companies in previous years. A total of 241 partial responses were received. 92 were completed in the satisfactory manner, making the response rate 5.4 percent.

Descriptive statistics

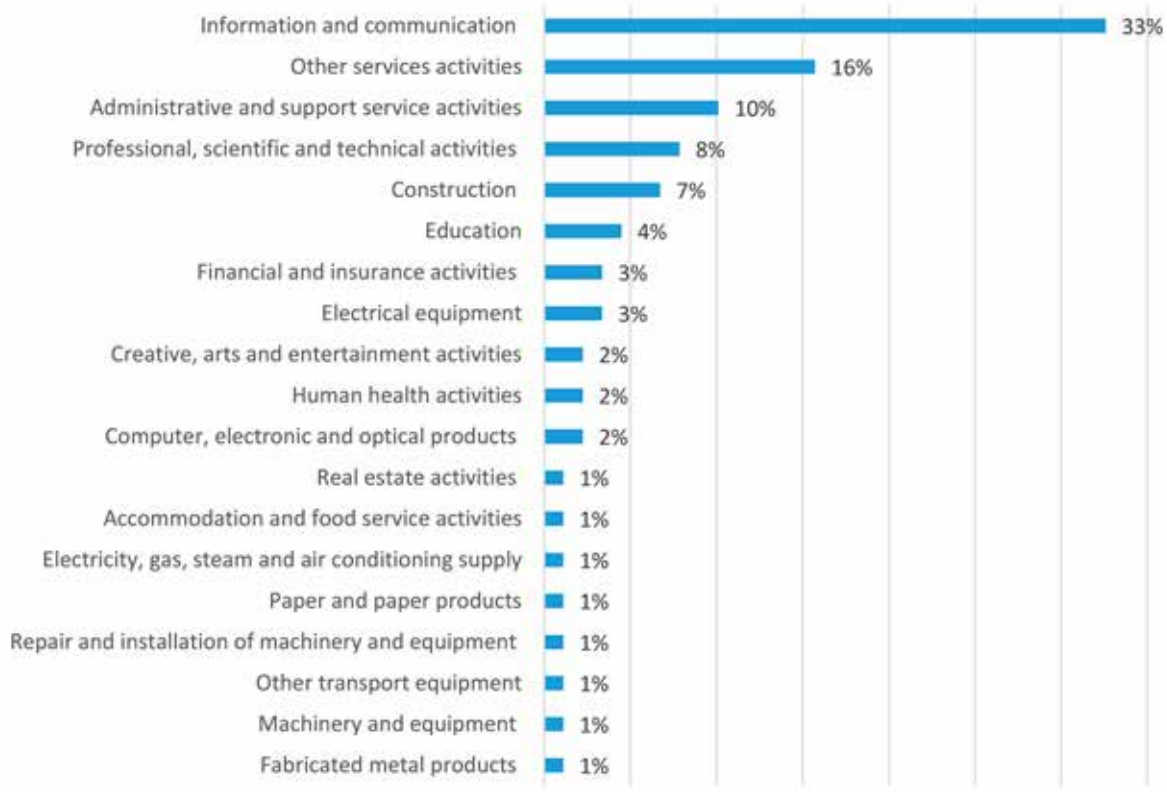


Figure 3: Descriptive statistics Slovenia: Industry composition

When it comes to industry composition of firms from Slovenian sample, majority of firms comes from the information and communication industry (33%), and specific services (other services, 16%; administrative and support services, 10%; professional, scientific and technical, 8%).

2.3. Sample and descriptive statistics – **Croatia**

Sample

The enterprises were categorized according to the Croatian National Classification of Activities, 2007 (NKD 2007, Croatian Bureau of Statistics, http://unstats.un.org/unsd/cr/ctryreg/ctrydetail.asp?id=1088), which is based on and identical to the classification structure of NACE Rev.2.

First, we analyzed the structure of the national industry by main economic activities, and then focused on Adriatic counties. The total amount of micro, small and medium enterprises was extracted from the national database of enterprises provided by the Croatian Chamber of Economy.

The sampling framework was created using the following criteria: active enterprises that have submitted the yearly financial report in 2012, which was the latest available data from the database.
The categorization of micro, small and medium enterprises was made based on two criteria:

1. Number of employees,
2. The total amount of turnover before taxes.

Categorization was done in line with the classification for micro, small and medium enterprises recommended by the EU Commission (Recommendation 2003/361/EC published in the Official Journal of the European Union L 124, p. 36 of 20 May 2003 as the sole authentic basis for determining the conditions regarding qualification as an SME).

According to the research objectives, the selected enterprises were taken from eight regions within the Croatian Adriatic Region and coded according to NUTS-3 Nomenclature of Territorial Units for Statistics (NUTS) of the European Union for Croatia (Dubrovnik-Neretva County (HR037), Istria County (HR036), Karlovac County (HR04D), Lika-Senj County (HR032), Primorje-Gorski Kotar County (HR031), Split-Dalmatia County (HR035), Šibenik-Knin County (HR034) and Zadar County (HR033), which constitute the IPA Adriatic eligible area.

The selected enterprises were taken from the following national activities: C - Manufacturing industry; D - Electricity, gas, steam and air conditioning supply; E - Water supply; sewerage, waste management and remediation activities ; F – Construction; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transporting and storage; I - Food preparation and accommodation; J - Information and communication; K - Financial and insurance services; L - Real estate activities; M - Professional, scientific and technical activities; N - Administrative and other services; P – Education; Q - Health and social security services; R - Art, entertainment and recreational services. These 15 activities were chosen as focus activities for this research.

According to the research goal of the evaluation of innovation activities, 6 activities were excluded from this research: A - Agriculture, forestry and fishing; B - Mining and quarrying; O - Public administration and defense; mandatory social insurance; S - Other services; T - Household activities as employers and U - Offshore organizations and bodies' activities.

The sample was formed on the basis of the following criteria:

1. Due to their overall small number, all medium-sized enterprises were taken into account.
2. Due to their overall higher number, from the overall number of small enterprises, 10% was included from eachcategory.

Due to their overall higher number, from the overall number of micro enterprises, 10% was included from each category, except 1% from activities F, G, I and L (F – Construction; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; I - Food preparation and accommodation and L - Real estate activities) in order to reduce otherwise large representation of enterprises in those activities in the sample. In activities where only 4 or less micro and small enterprises are registered, all enterprises were included.

	NUMBER OF ENTERPRISES IN ADRIATIC REGION				NUMBER OF ENTERPRISES INCLUDED IN SAMPLE			
COUNTY	Size				Size			
	Micro	Small	Medium	sum	Micro	Small	Medium	sum
PRIMORJE-GORSKI KOTAR (HR031)	6.953	677	126	**7.756**	350	68	126	**544**
ISTRIA (HR036)	7.548	467	92	**8.107**	324	52	92	**468**
ŠIBENIK-KNIN (HR034)	1.554	135	33	**1.722**	71	29	33	**133**
DUBROVNIK -NERETVA (HR037)	2.615	249	50	**2.914**	123	33	50	**206**
SPLIT-DALMATIA (HR035)	9.133	811	134	**10.078**	421	86	134	**641**
ZADAR (HR033)	2.425	231	37	**2.693**	118	34	37	**189**
LIKA-SENJ (HR032)	429	67	12	**1.450**	32	16	12	**60**
KARLOVAC (HR04D)	1.237	169	44	**508**	70	25	44	**139**
Sum	**31.894**	**2.806**	**528**		**1.509**	**343**	**528**	
Total				**35.228**				**2.380**

Table 3: Croatia – Number of enterprises in Adriatic region and number of enterprises included in sample by size and county

The selected enterprises were chosen randomly from each of the 15 activities (C, D, E, F, G, H, I, J, K, L, M, N, P, Q, R) inside the subgroups of micro and small enterprises in each county, according to previously defined criteria.

In that way, the representative sample is ensured as a proportion of the overall micro, small and medium enterprises in all activities. The final sample database of enterprises in the Adriatic region consists of 2.380 enterprises (1.509 micro, 343 small and 528 medium enterprises) included in the survey of innovative companies.

The survey was conducted from July 2014 till December 2014. The questionnaire was sent to the stratified random sample of 2.206 firms from the IPA eligible area. A total of 401 respondents were reached after three reminder rounds administered via online survey platform LimeSurvey (18 % response rate). A total of 149 responses were completed at the level of 70% (cut-off criteria) and hence used for further analysis.

Descriptive statistics

The average number of employees in the sample is 25, and the average turnover is around 1,25 million Euros. The average sales and export in total sales ratio has increased in the period from 2010 – 2013.

	2010	2013	RELATIVE GROWTH
TOTAL SALES	1.233.841,00	1.299.432,77	5,32%
EMPLOYEES		25	
EXPORT SALES / TOTAL SALES (%)	9,63	13,69	4,06
N. OF FIRMS	**149**		

Table 4: Descriptive statistics Croatia: Average Size (Total Sales, Employees) and Export Ratio of sampled firms

	MEAN	MAXIMUM
MANAGERS	2,078	17,0
DOCTORAL DEGREE	0,118	3,0
MASTER DEGREE	2,517	65,0
BACHELOR DEGREE	1,636	19,0
LOWER QUALIFICATIONS	15,149	212,0

Table 5: Descriptive statistics Croatia: Structure and education of employees

The employees' educational background shows that most enterprises have a majority of lower qualified workers employed, followed by an average of 3 employees with a four- or five-year college education (Master's degree). The majority of the respondents are service-providers (80%).

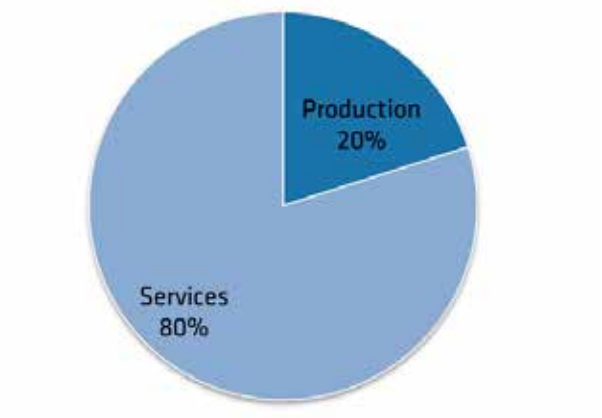


Figure 4: Descriptive statistics Croatia: Industry composition

When it comes to industry composition, majority of the sample is consisted of service firms (79,9%). Here, the highest share is attributed to professional, scientific and technical activities (26%).

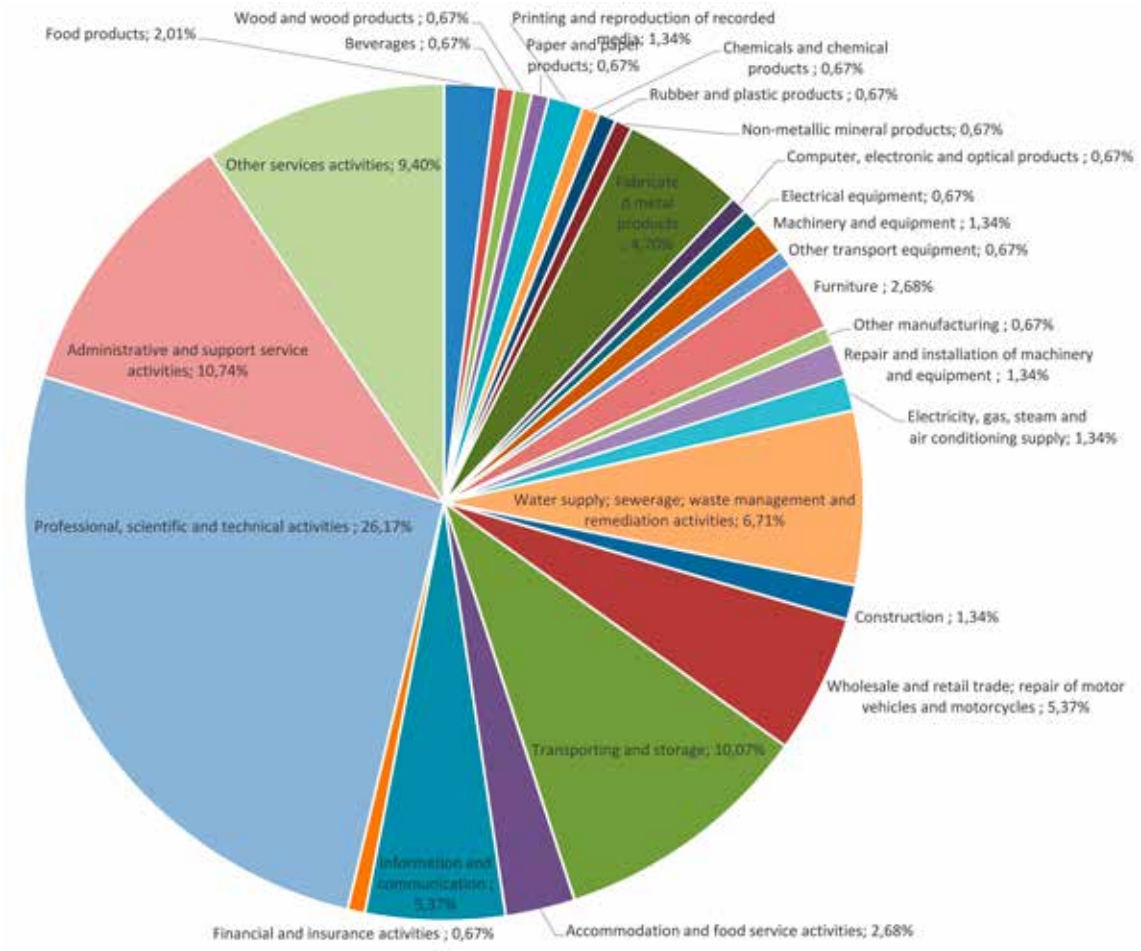


Figure 5: Descriptive statistics Croatia: Industry composition

The large majority of the respondents (93%) do not belong to an enterprise group and the rest are mostly part of domestic groups (70%).

Figure 6: Descriptive statistics Croatia: Group belonging

2.4. Sample and descriptive statistics – **Bosnia and Herzegovina**

Sample

The sample was stratified by industries, business activity and SME share (using the number of employees as well as the yearly revenues as criteria). In B&H, external expertise of the agency was used in order to compile the database of firms. Agency had access to all firms in the country and randomly extracted the requested sample.

Furthermore, the sample was stratified by its business activity and SME share (using the number of employees as well as the yearly revenues as criteria). In B&H, external expertise of the agency was used in order to compile the database of firms. Agency had access to all firms in the country and randomly extracted the requested sample.

The survey was conducted from May to September 2014. The questionnaire was sent to the stratified random sample of 1387 firms from the IPA eligible area. A total of 548 respondents were reached after two reminder rounds administered via online survey platform Limesurvey (39,51% response rate). A total of 109 responses were completed at the level of 70% (cut-off criteria) and hence used for further analysis.

BUSINESS ACTIVITY	PRODUCTION : SERVICES	50:50
SME SHARE	Micro	15%
	Small	35%
	Medium	50%
SME CRITERIA (COMBINATION OF THE TWO INDUSTRIES	Number of employees	Yearly revenues
SELECTED INDUSTRIES	60%	
	ICT	
	Wood industry	
	Chemical and plastic industry	
	Metal-processing sector	
	Knowledge-intensive services	
OTHER INDUSTRIES (ACCORDING TO DATA AVAILABILITY)*	40%	

* As there were no national-level information on innovative industries, researchers made the assessments based on secondary data

Table 6: Bosnia and Herzegovina: Sampling criteria description

Descriptive statistics

B&H sample firms have the average turnover above 4 million EUR for year 2013, with the average of 25 employees per firm. We can notice that there was no growth in sales from 2010 to 2013 in B&H, but that exports increased by 3,5%.

	2010	2013	CAGR
TOTAL SALES	4.210.538,49	4.217.431,17	0,16%
EMPLOYEES	-	24,80	-
EXPORT SALES / TOTAL SALES (%)	23,83%	27,34%	3,51%
N. OF FIRMS	**109**		

Table 7: Descriptive statistics Bosnia and Herzegovina: Average Size (Total Sales, Employees) and Export Ratio of sampled firms

Due to the fact that we approached sampling with specific, targeted industries, the resulting sample is cross-industry, and includes industries evaluated as innovative in B&H. ICT services represent the most dominant industry in the sample, with 29% companies, followed by other services (13%) and manufacturing of wood and wood products (12%).

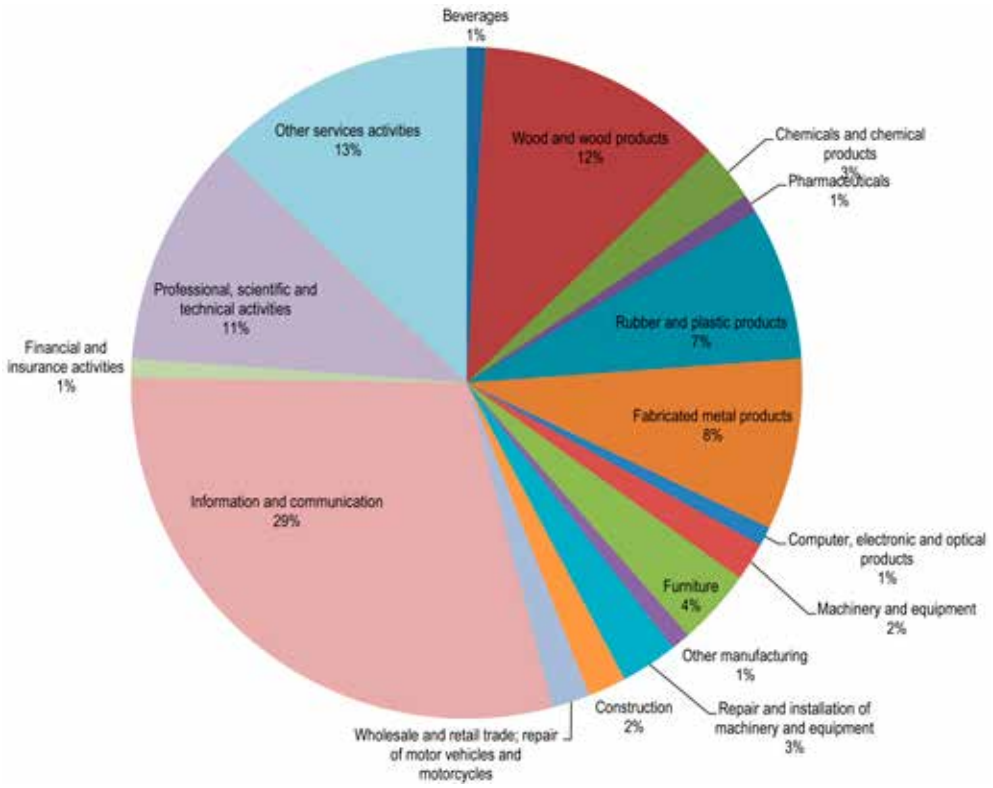


Figure 7: Descriptive statistics Bosnia and Herzegovina: **Industry composition**

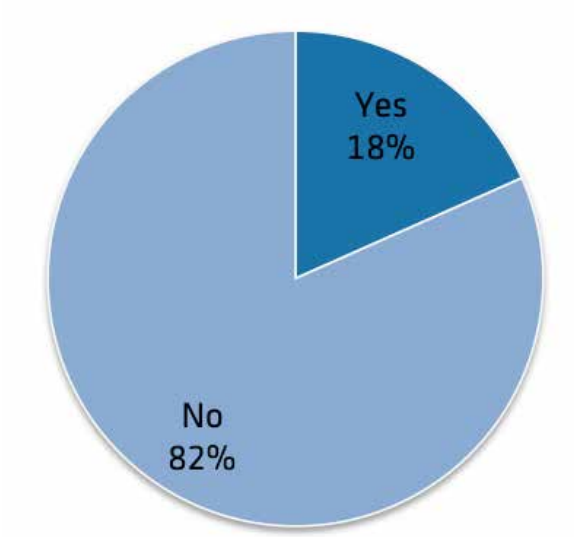


Figure 8: Descriptive statistics Bosnia and Herzegovina: **Group belonging**

Additionally, we aimed to explore whether firms from the selected innovative industries operate alone and independently or as part of group. Majority of the firms in the sample are independent firms (82%).

Employees' education is important in the context of innovation. We see that lower-educated workforce prevails in the sample firms (on average, 16 employees do not possess a higher-education degree), followed by those with the first-cycle degree (8 employees). Higher degrees are less present; on average, there are 2 employees with master's degrees and 0 employees with PhD.

	MANAGERS (AND OTHER PROJECT/ FUNCTION RESPONSIBLE)	DOCTORAL DEGREE	MASTER'S DEGREE	BACHELOR DEGREE	LOWER
MEAN	3,77	0,27	2,05	8,22	16,17
MEDIAN	3	0	1	4	5
MODE	1	0	0	1	5
MINIMUM	1	0	0	119	179
MAXIMUM	60	4	26	1	0

Table 8: Descriptive statistics Bosnia and Herzegovina: **Structure and education of employeeseducation of employees**

2.5. Sample and descriptive statistics – **Serbia**

Sample

In order to collect the surveys the team of Mihajlo Pupin institute sent e-mails using the database of "Innovative incubator", but the replay rate was very low. Only two companies took part in the survey. Even when the call was repeated, we didn't have much success. To resolve this situation we organized a team which contacted the companies per e-mail or telephone and organized the meeting. After that they visited each company and together with responsible person from company, filled the survey. When the surveys were collected, we were entering the data from paper surveys into the online survey platform Limesurvey.

During our sampling process we tried to include companies from different sectors, but since an important requirement was that the company is innovative, 42% of sampled companies were from ICT sector. This was expected, since during last couple years this sector has the big opportunity for growth and development. Hence, there are 71 firms in the final sample of Serbian firms that was focused on ICT industry.

Descriptive statistics

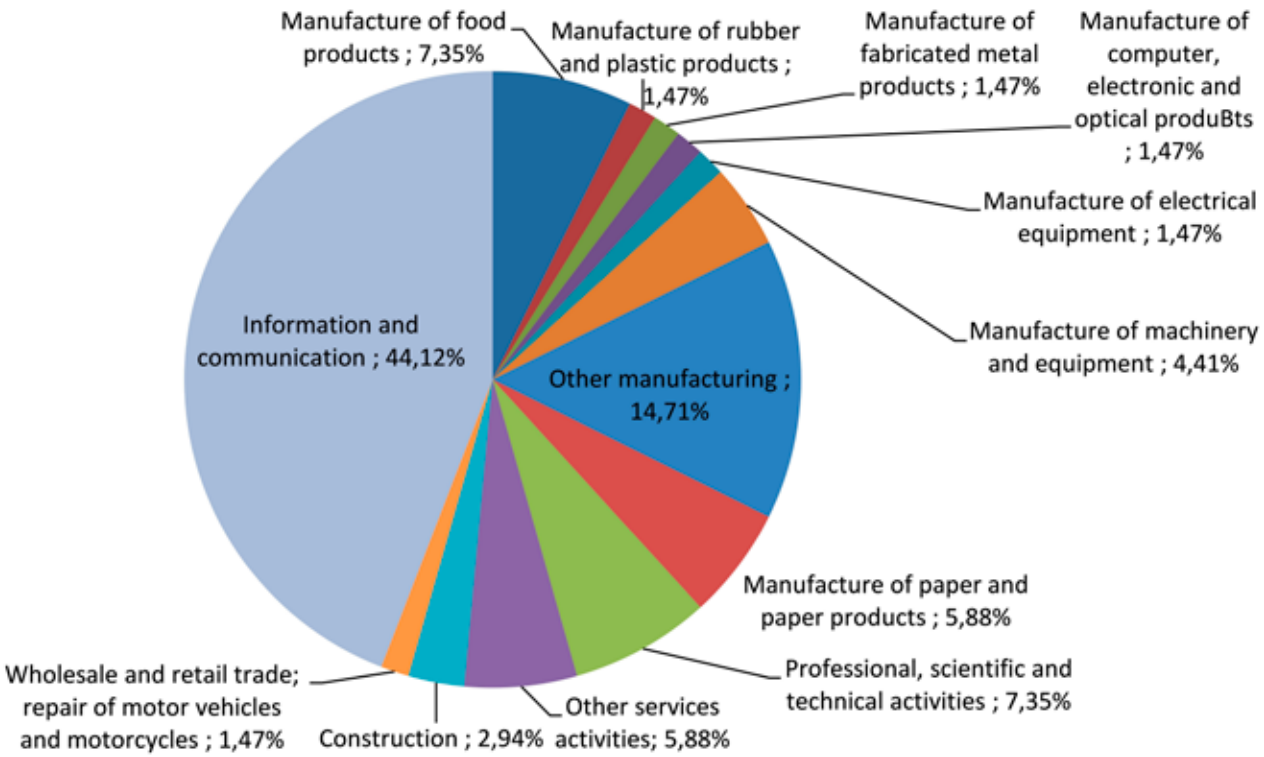


Figure 9: Descriptive statistics Serbia: Industry composition

The focus of the Serbian sample was on the ICT industry, which is also seen in the representation of industries – 44,12%.

Between selected companies 19% were micro companies (maximum 10 employees), 19% were small (between 10 and 50 employees) and 62% were medium high companies (between 50 and 250 employees). On average, these companies have 61 employees. We can notice that there was no growth in sales from 2010 to 2013 in but that export increased for around 3% (In 2010 export was 29.9% and in 2013 it was 32.9%).

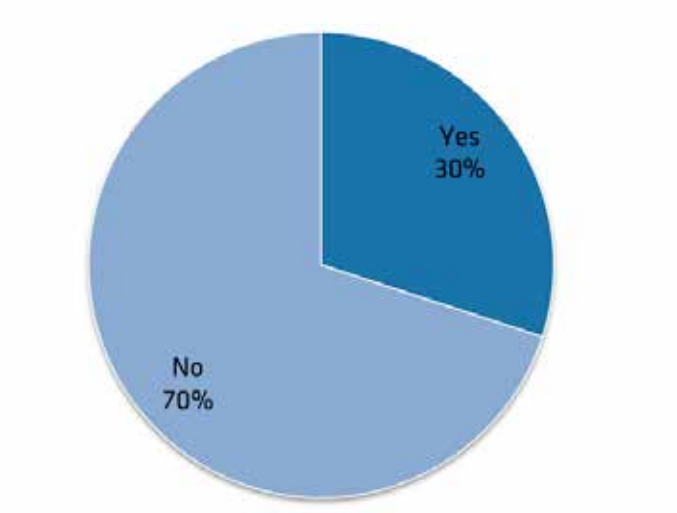


Figure 10: Descriptive statistics Serbia: **Group belonging**

We were exploring whether selected innovative companies operate alone and independently or as a part of group. One third of companies are part of a bigger company group and two third are independent. For those companies, that are the part of a group, corporate headquarters is located mostly in west Europe and USA.

2.6. Sample and descriptive statistics – **Montenegro**

The team from the Faculty of Economics Podgorica, University of Montenegro, contacted a privately-owned market research company in order to have the survey completed. The survey was conducted from June to September 2014. The questionnaire was sent to a random sample of 411 firms from the IPA eligible area. A total of 369 responses were obtained, 118 out of which were classified as completed responses (at the level of 70% completed or higher).

The biggest sampling problem in Montenegro was its country size, resulting in a small number of active companies, and consequently, a small number of innovative companies. Therefore, some compromises were needed in order to obtain the required number of responses, mainly to do with lowering the threshold of what exactly is considered as an innovative company. The team went to great lengths to include as many companies from various sectors that could be considered innovative, but the quality of sampling should be taken with some reserve due to objective constraints.

The sample companies in Montenegro have an average turnover of 2 million EUR, with 28 employees per firm on average. The rise in total sales was almost negligent, which was to be expected due to the recession in the previous period. However, increase in export-to-total sales ratio by over 34% shows that companies tried do find new markets in order to deal with the recession.

	2010	2013	CAGR
TOTAL SALES	2.017.680,82	2.023.014,86	0,26%
EXPORT SALES /TOTAL SALES (%)	9,69%	13,02%	34,37%
N. OF FIRMS	**118**		

Table 9: Descriptive statistics Montenegro: Average Size (Total Sales, Employees), Export Ratio of sampled firms

As expected, wholesale and retail trade represent the dominant sector in the sample, since this is the case on the national level as well. Since Montenegro has a large tourist sector, it is of no surprise that accommodation and food make up 22% of the sample, while other services account for 11%.

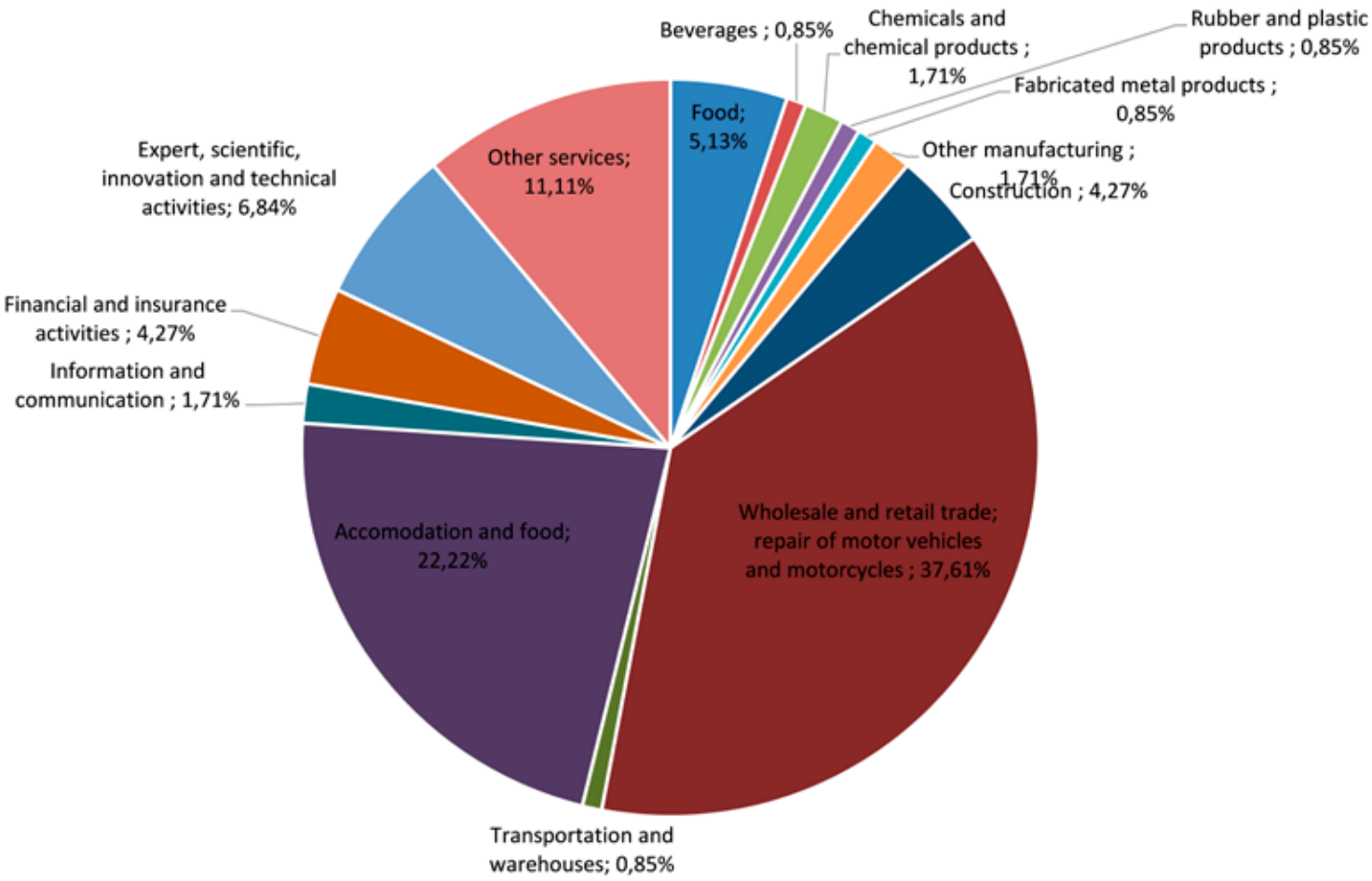


Figure 11: Descriptive statistics Montenegro: **Industry composition**

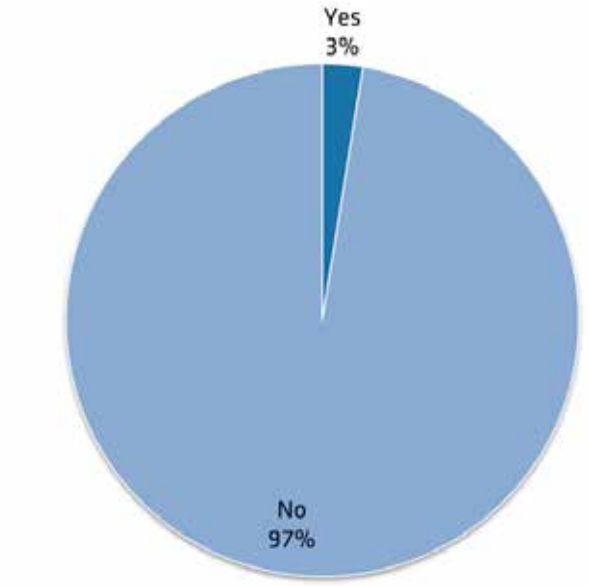


Figure 12: Descriptive statistics Montenegro: **Group belonging**

Additionally, we aimed to explore whether firms from the selected innovative industries operate alone and independently or as part of group. A vast majority of firms in the sample are independent firms (97,5%).

Employees' education is important in the context of innovation. We see that lower-educated workforce prevails in the sample firms (on average, 16 employees do not possess higher education). On average, less than 4 employees have bachelor's degrees, and less than 1 person has a Master's degree or PhD.

	MANAGERS (AND OTHER PROJECT/ FUNCTION RESPONSIBLE)	DOCTORAL DEGREE	MASTER'S DEGREE	BACHELOR DEGREE	LOWER
MEAN	2,66	0,03	0,16	3,56	16,15
MEDIAN	2	0	0	2	8
MODE	1	0	0	1	5
MINIMUM	0	0	0	0	0
MAXIMUM	29	1	5	28	97

Table 10: Descriptive statistics Montenegro: **Structure and education of employees**

2.7. Sample and descriptive statistics – **Albania**

Sample

Albanian research team involved in WP 4.1 activity identified the companies to be contacted from a database generated by INSTAT (Institute of Statistics) based on the latest survey on innovation financed by UNESCO in 2013. The list was a random selection of 870 companies classified as innovative or with a potential to innovate. A sample of 440 companies was randomly selected following the suggested and approved sample characteristics: 50% production and 50% service companies; 15% micro, 35% small and 50% medium sizes. The general purpose was to use "The number of employees" due to the profile of the database.

Regarding the profile of the Services and Manufacturing companies the selection criteria aimed to identify the companies of the most innovative industries. On the basis of NACE classification the range of the selected industries were as follows in the table below.

MANUFACTURING COMPANIES TARGET 50%	
Criteria: High/Medium/Low-Techminimum target 50%	
NACE REV 2 DETAILED STRUCTURE	**DIVISION NACE REV 2**
C Manufacturing	10-33
D Electricity, gas, steam and air conditioning supply	35
E Water supply; sewerage, waste management and remediation activities	36-39
F Construction	41 – 43
Services Companies Target 50%	
Criteria: Knowledge Intensive Service Providers minimum target 25%	
NACE REV 2 DETAILED STRUCTURE	**DIVISION NACE REV 2**
Section J : Information and Communication	58-63
Section K- Financial and Insurance activities	64-66
Section M – Professional scientific and technical activities	69-71 and 74
Section N- Administrative and support service activities	77-81
Section P, Q – Education& Human activities	85-88

Table 11: Albania: **Sampling criteria description**

The list generated contained company addresses and phone numbers and the researchers, divided based on the regions (except for Tirana region, which was covered by all researchers) tried to get in touch with these companies.

We asked, and obtained, the Managing Authority permission to conduct the survey not only within the eligible area but in the entire Albanian territory so the data gathered for the survey would be more representative. Due to the fact that most of the service companies are based in Tirana, the production companies are scattered

in other regions. Thus we had included other companies from different regions such as central Albania that is important for the production of metals where the sample frame contained 67,18% of the companies; South Albania where are based important companies from manufacturing and construction sector, 16,92% of the sample frame companies; and North Albania which has important companies from the energy industry, 15,9% of the sample frame companies.

After emails sent, phone calls and direct visits, only 19% (85 companies) out of 440 agreed to collaborate and fill the questionnaire. In order to reach the number of 100 filled questionnaires, other companies from the initial database were contacted, with the goal of preserving the initial sampling based on size, sector and NAICS. Being unable to reach the number of 100 questionnaires from companies within the initial list, the researchers used their personal contacts and included (21) companies from the initial list in the research, but trying to preserve the sampling regarding the sector, size and NAICS. Finally, 106 companies filled the questionnaire.

Different approaches were used to fill the questionnaire. Most of them were filled via a structured face-to-face interview, which enabled the researchers to create a more accurate opinion on the status of innovation by companies operating in Albania. 20% questionnaires were filled directly by the company representatives entering the responses in LimeSurvey. Even in these cases, a short introductory meeting was conducted beforehand. As a result of these strategies, the completeness rate was very satisfactory. The missing data rate was less than 10%.

Descriptive statistics

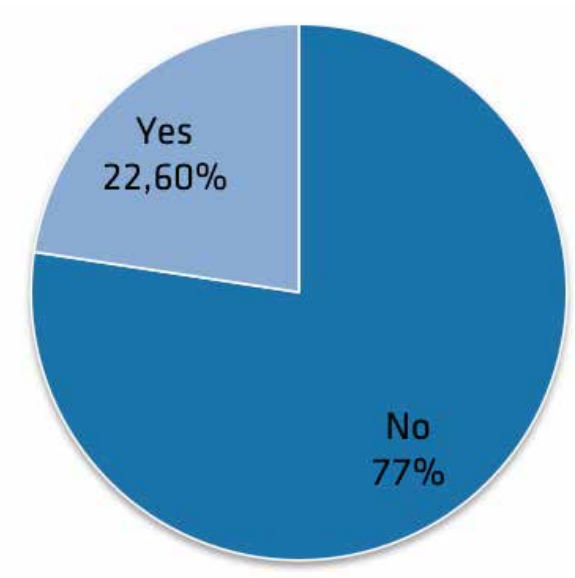


Figure 13: Descriptive statistics Albania: **Group belonging**

Out of 106 companies, 22,6% are part of a group of companies. Most companies are headquartered in Albania and only 6 companies are branches of multinationals in Europe.

Most companies (47,2%) are medium sized with over 50 employees, 37,7% are small with 11-50 employees and 12,3% are micro sized with up to 10 employees.

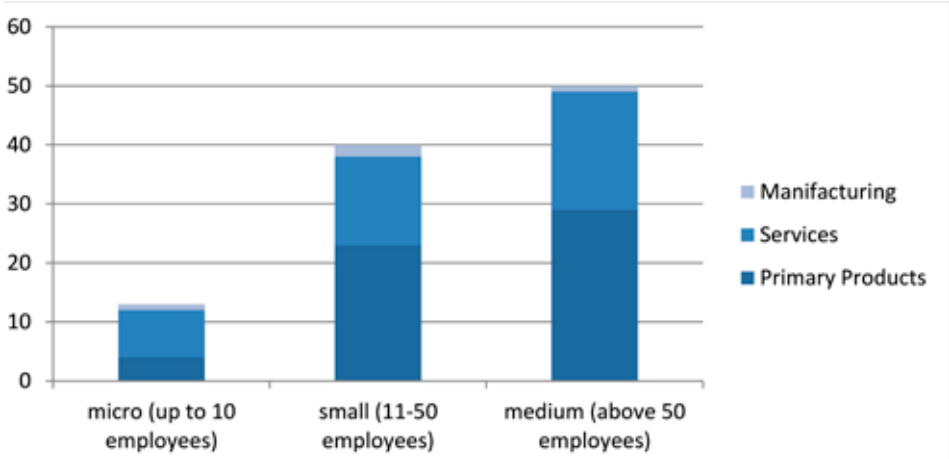


Figure 14: Descriptive statistics Albania: **Distribution by sector and size**

The majority of companies (55%) are manufacturing companies, followed by the service sector, which represents 41% of the total. Only 4% of the companies operate in the primary sector.

A closer look at the industries by each sector shows that in the service sector, 41% of the companies offer different services like consultancy, graphic design, travel etc. The biggest homogeneous group of service companies is represented by the financial and insurance sector.

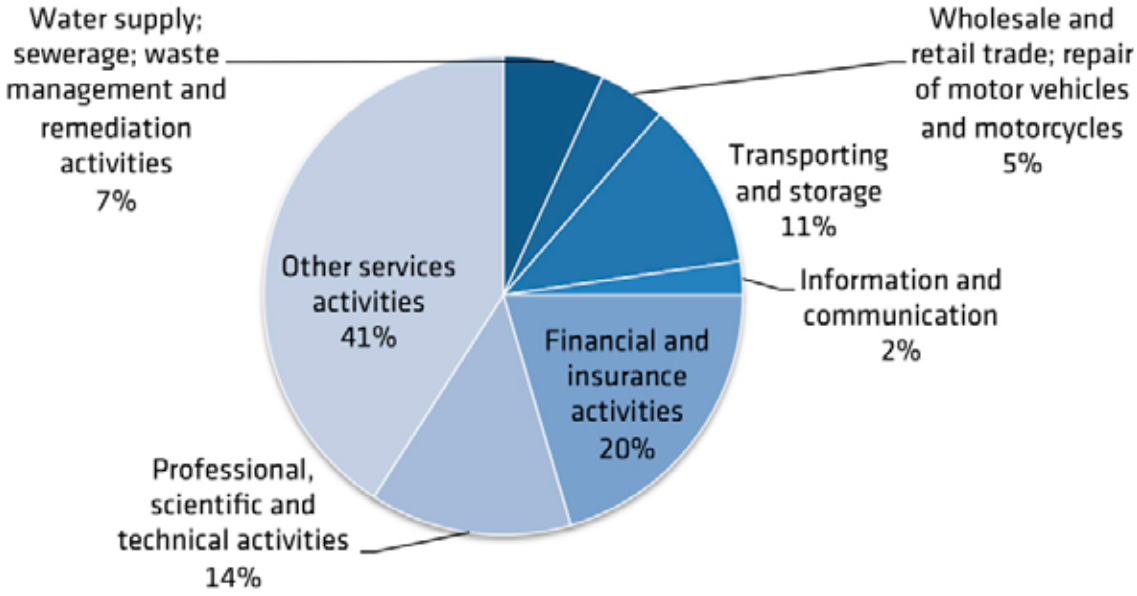


Figure 15: Descriptive statistics Albania: **Industry composition – service companies**

Most of the studied companies in the manufacturing sector operate in the wearing apparel, food products and textile industry, which are considered to have a high potential of innovation and were highly represented in the randomly selected sample.

Disclosing financial data from companies for research issues is quite a challenge in Albania. Still, the researchers could reach an up to 70% response rate on the turnover question. The companies declared an average turnover of 9.380.383 EUR in 2010 and 14.904.451 EUR in 2013. A total of 51 companies, which represent almost 70% of the companies which declared turnover data on both years, experienced a turnover increase in the last three years. 61% of these companies operate in the manufacturing sector and 59% are medium-sized companies with more than 50 employees. 61% of the companies declaring a turnover increase also declared to have introduced product innovations during the last three years. 55% declaring both product and process innovation experienced a turnover increase over the last three years. None of the 13 companies that experienced a turnover decrease declared to have introduced a product innovation and only 7 introduced at least one feature of process innovation.

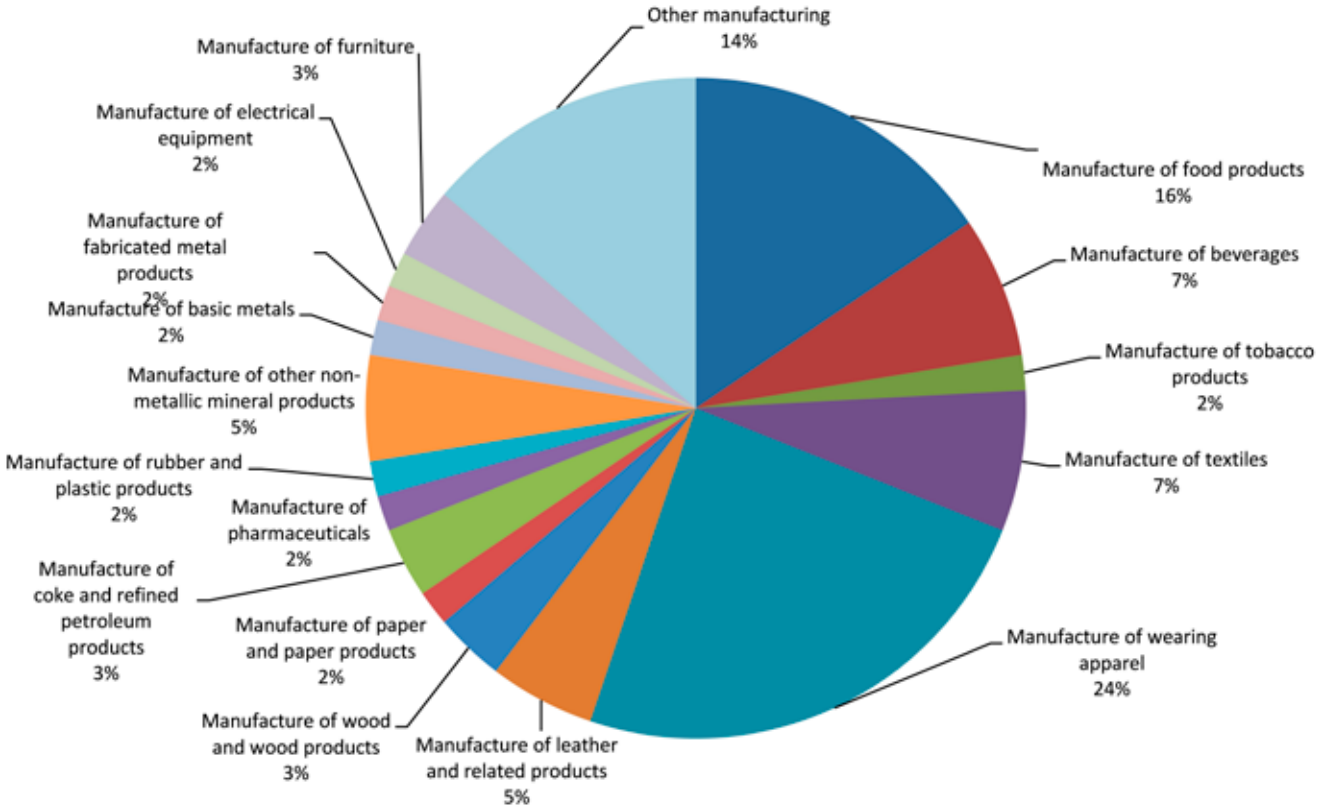


Figure 16: Descriptive statistics Albania: **Industry composition – manufacturing companies**

On average, foreign turnover represented 35% of total turnover in 2010 and in 2013 this share increased to 41%. But there is a high dispersion among data since in 2010, 23 companies (28% of the companies which answered this question) have a foreign turnover rate higher than 90%. In 2013, the number of companies with more than 90% foreign turnover, increased to 28 (32% of the companies which answered this question). Most of these companies operate in the manufacture of wearing apparel sector and 100% of the product is exported (mainly to Italy and Greece).

Albanian enterprises are quite young since only in 1991 the country was introduced to the free market economy and private property. Due to this fact, the experience in exporting is 9,5 years long on average. Only 23% of the companies that answered this question began exporting before 2000.

Regarding employees' job position and proper education, the data show that approximately 13% of the company staff is placed in managerial positions. But after analyzing the data according to the company size we conclude that the share of managerial positions in the total number of employees decreases with the increase of the company size. In micro enterprises with the maximum of 10 employees, 22% of staff holds managerial positions. These micro companies have informal structures, and therefore tasks and responsibilities are not properly defined. It is reported that 13% of employees in small enterprises work in managerial positions, while this category represents only 7% of the total employees in medium-sized companies with more than 50 employees. This percentage is higher in service companies like banks, insurance companies or wholesale and retail trade, and lower in labor intensive companies like manufacture of wearing apparel.

	MANAGERS	DOCTORAL DEGREE	MASTER'S DEGREE	BACHELOR DEGREE	LOWER
MEAN	8,5841584	1,159574	5,360825	22,91	54,108911
MEDIAN	4	0	1	6	17
MODE	2	0	0	3	0
MINIMUM	0	0	0	0	0
MAXIMUM	120	28	65	400	685

Table 12: Descriptive statistics Albania: **Level of employees' education**

With respect to the employees' level of education, the distribution of employees according to the company size is as follows. Employees with PhD degree represent a maximum of 4% in micro companies and only 1% in medium-sized ones. The share of employees with master or bachelor degree decreases with the increase of the company size, same as the share of employees holding a lower level of education diploma than a bachelor degree. Transporting and storage; manufacture of wearing apparel, textiles, food products, leather and related products; water supply; sewerage; waste management and remediation activities are the sectors where more than 50% of employees have a lower education level.

2.8. Sample and descriptive statistics – **Greece**

Sample

Following are the characteristics of the sample from Greece:

- Response rate per Country (Sample 1.200, 85 responses 14,1% response rate.)
- Descriptive statistics on respondents per Country:
  - Average size of firms is 104,67
  - Distribution of firms by industry is primaryproducts=18, manufacturing=18, services=35, N/a = 14
  - Group belonging (yes/no), 15/45 (25 did not respond)

	2010	2013	CAGR
TOTAL SALES	3.629,17	4.152,22	12,19%
EMPLOYEES	-	28,84	-
EXPORT SALES/TOTAL SALES (%)	3,8	2,6	-
N. OF FIRMS	**85**		

Table 13: Descriptive statistics Greece: **Average Size (Total Sales, Employees) and Export Ratio of sampled firms**

We aimed at 1.200 firms out of which 85 responded, a response rate of 14,1%. Almost half of them chose not to provide their size in employees; however, among those that responded the average size is 15,9 employees. For most of the firms (41,2%) the main activity was "Services", while for the equal number of firms (21,2%) the main activity was "Primary Products" and "Manufacturing". The majority (52,9%) of the firms did not belong to a group of companies.

Based on the firms that provided these data, the mean value of their total turnover in 2010 was 3.662.000 EUR, and in 2013 it was 4.132.000 EUR. Moreover, the percentage of their foreign turnover in 2010 was 3,8%, and in 2013 it was 2.6%. Also, the average size of the firm in total employees was 26,9. The average number of managers per firm was 3,6. The number of employees with doctoral degree was 1,1; number of employees with master degree was 6,2, and number of employees with bachelor degree was 18,3.

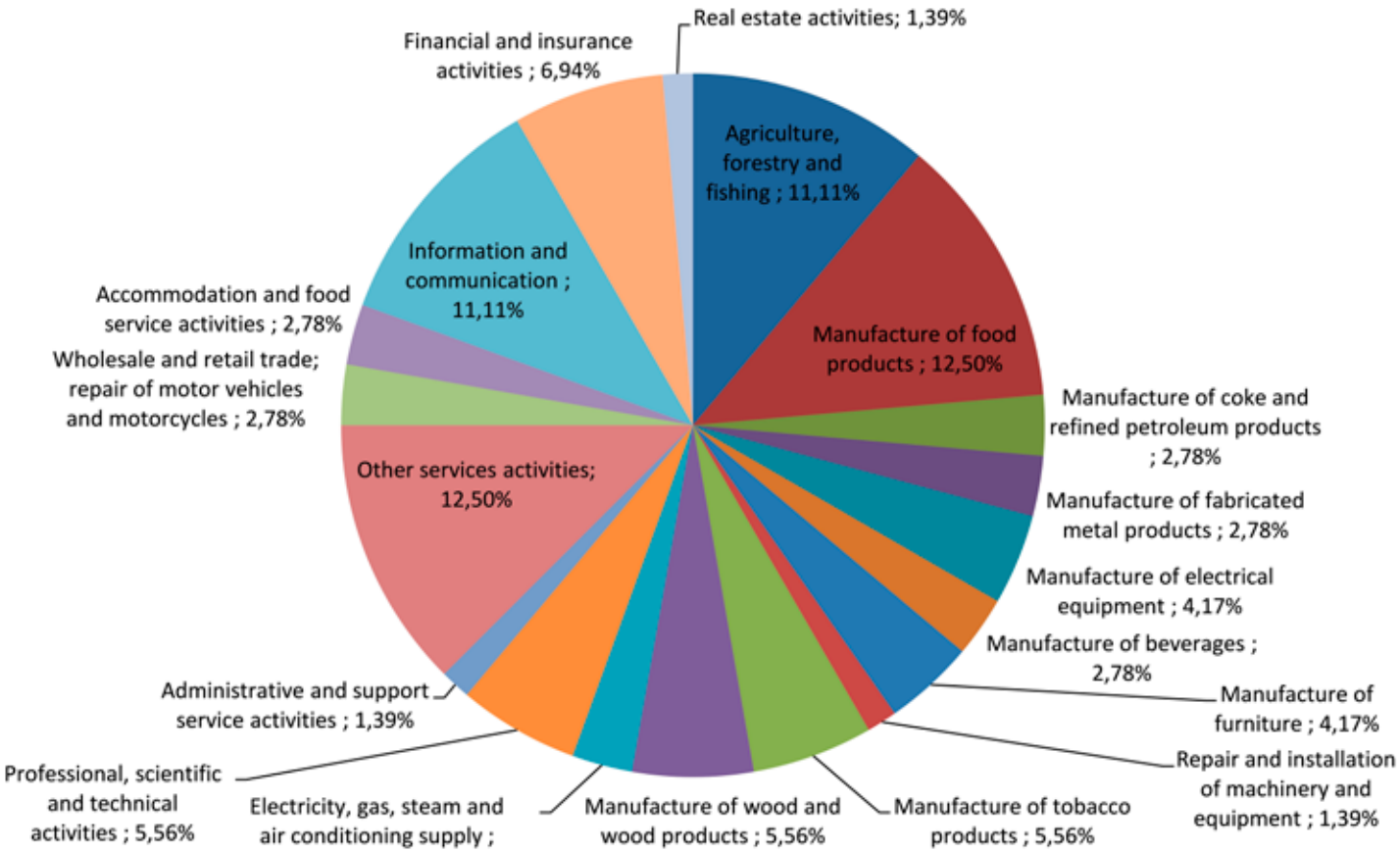


Figure 17: Descriptive statistics Greece: **Industry composition**

When it comes to industry composition, the highest share was split between other services (12,5%) and manufacture of food products (12,5%).

3.Results

In this part of the report we descriptively present the results of the survey. For some segments, results are presented at the level of the whole Adriatic Region and for some both at the level of an individual country and at the level of the Adriatic Region.

At the PACINNO project level, the goal was to collect the sample of 800 questionnaires from 8 countries. PACINNO partners collected 835 questionnaires from 8 countries in time for this report, and hence exceeded the target.

3.1. Internationalization

With respect to the degree of internationalization, we first aimed to understand in which geographic markets companies sold goods and services in the past period (3 years). The results shown in the figure below demonstrate that for the firms in our sample, national market is the most dominant selling point (94,8%) which is then followed by by other Adriatic Region countries (38,4%) and Western and Central Europe (37,5%). Here we may conclude that apart from the own country, Adriatic Region represents a relevant geographic market for the firms, which underlies the importance of regional approach towards this part of the Europe.

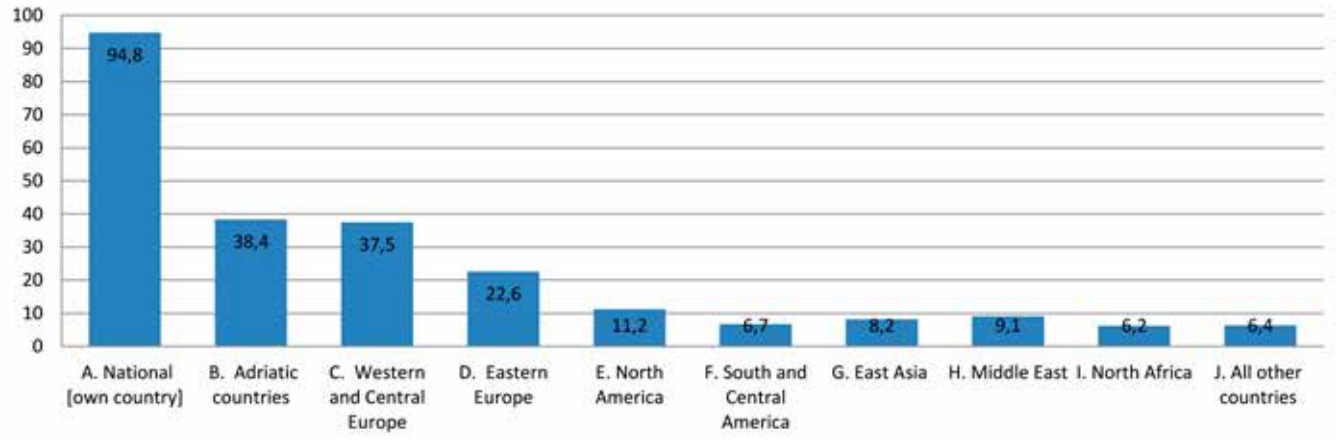


Figure 18: Adriatic Region: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

However, when it comes to the importance of the market in terms of turnover there is an interesting change (presented in the figure below). Namely, companies who said they do sales on a specific market were then asked how much of turnover they have from each of the specified market. Most of the revenue was generated from the national market (74,56%), and then from the Western and Central Europe countries (11,78), while a fairly low share of the revenue was generated from the other Adriatic Countries (9,49). Hence, although more firms sell on the Adriatic Market than on Western and Central Europe countries, the latter are more potent in terms of sales and revenue for the firm.

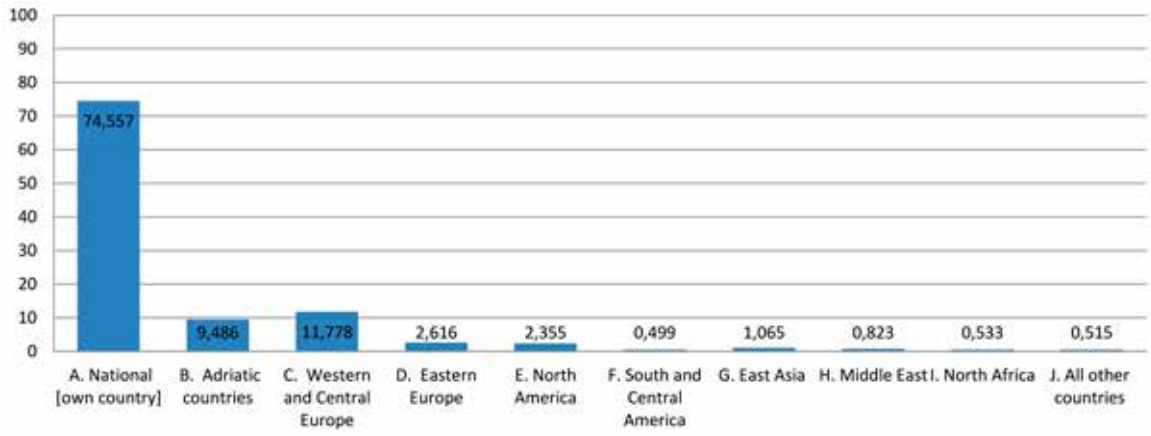


Figure 19: Turnover from the geographic market for Adriatic Region

This is confirmed with similar percentages we obtained by asking firms which of the areas was the largest market in terms of turnover. The table below shows the responses, count and percentage and we may see that individual firms' reports are in line with the summary structure from the graph above.

GEOGRAPHIC MARKET	COUNT	PERCENTAGES
A. NATIONAL [OWN COUNTRY]	636	76,10
B. ADRIATIC COUNTRIES	57	6,83
C. WESTERN AND CENTRAL EUROPE	76	9,20
D. EASTERN EUROPE	10	1,20
E. NORTH AMERICA	17	2,04
F. SOUTH AND CENTRAL AMERICA	1	0,12
G. EAST ASIA	7	0,84
H. MIDDLE EAST	4	0,48
I. NORTH AFRICA	4	0,48
J. ALL OTHER COUNTRIES	0	0,00
N/A	23	2,75
TOTAL	835	100

Table 14: Adriatic Region: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

Thereupon, the degree of internationalization was measured by the approximate number of enterprises' current active export countries for 2013. Results are presented in the figure below, where we see that majority of enterprises are either not exporters (42,8%), or that they export to 1-5 countries (30,5%).

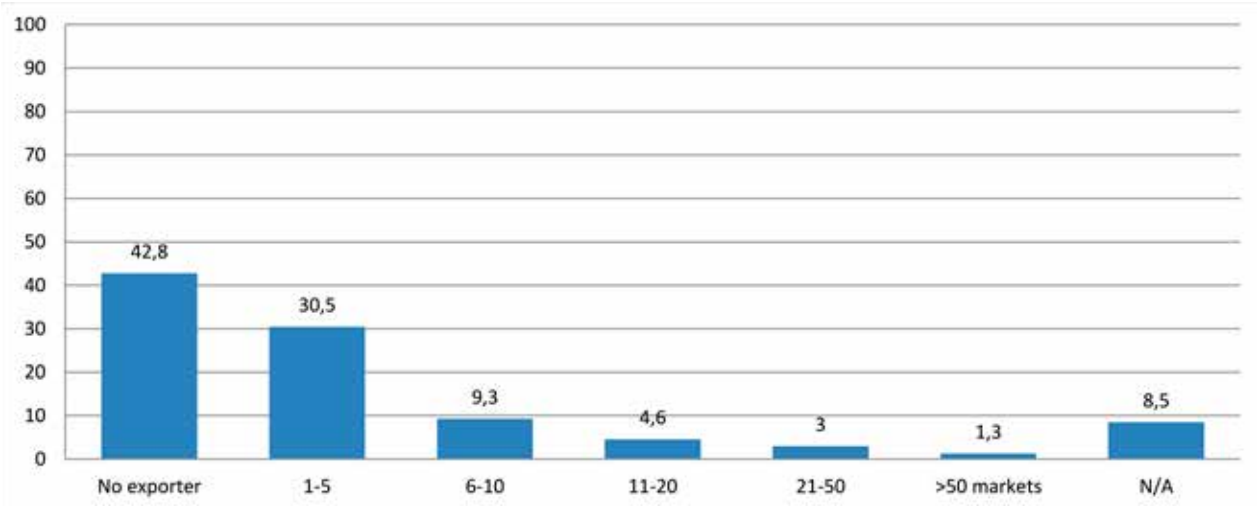


Figure 20: Adriatic Region "What was approximately your enterprise's current number of active export countries for 2013?"

Several countries also provided individual reports on the level of internationalization of their firms and they are presented below.

Several countries also provided individual reports on the level of internationalization of their firms and they are presented now, firstly through the cross-country comparison and later on in the country-by-country form. Here, we may see that situation differs across countries, probably due to the difference in samples and firms themselves, hence Croatia and Montenegro have countries with least export activities (76% and 94% respectively) while Italy, Slovenia, Serbia vary with around 30% of firms exporting to 1-5 countries.

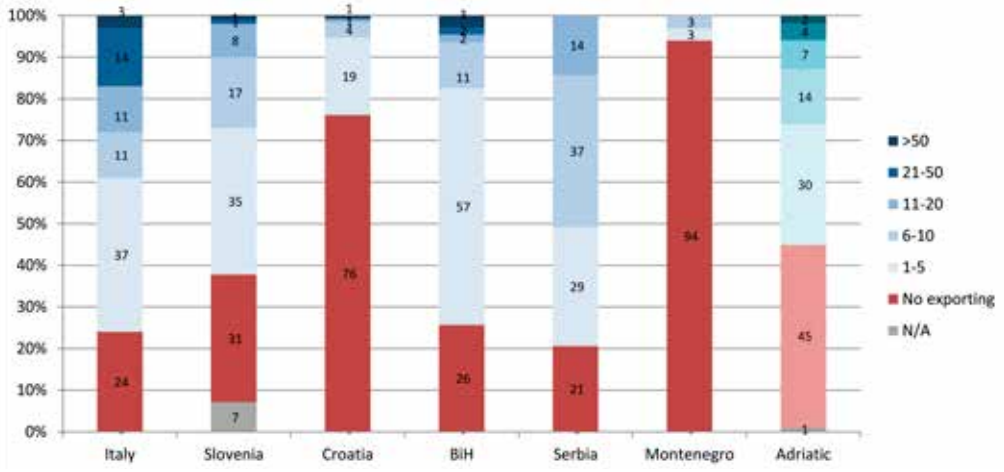


Figure 21: Cross-country comparison "What was approximately enterprise's current number of active export countries for 2013?"

Now we present the separate country-by-country situation.

Italy

The degree of internationalization of the surveyed SMEs has been measured through the following measures: the international scope and the international intensity.

With regards to the international scope, Western and Central Europe represents the main market for the sampled firms, collecting the 70% of preferences. Such markets are followed by Eastern European markets (44%).

The Adriatic Region is a relevant sales market for about one third of the surveyed firms, at the same level of North America.

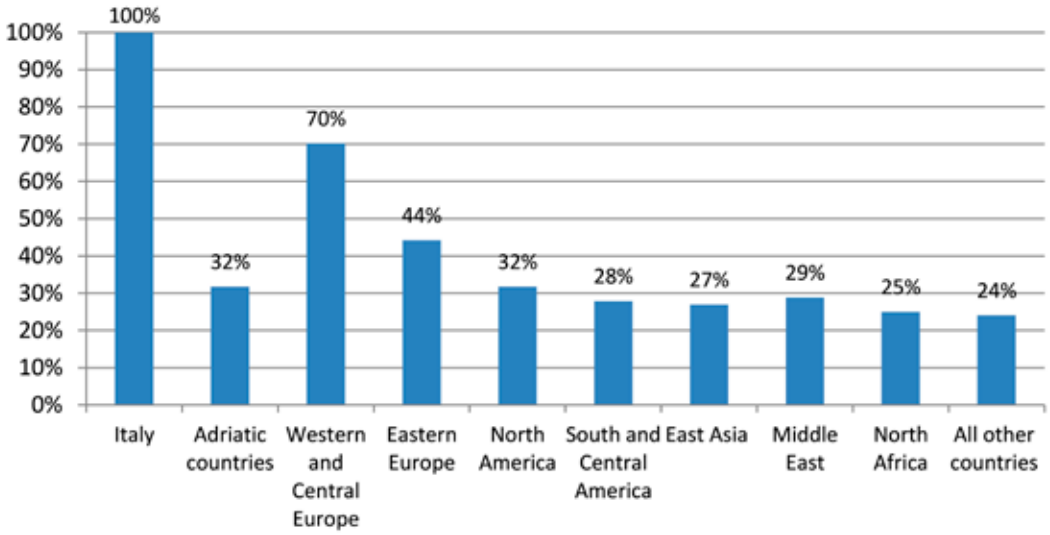


Figure 22: Italy: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

The relevance of Western and Central European markets is further confirmed by the amount of foreign sales on total sales realized by the firms in such markets that is close to 20%. This region is the most important market for the 18% of the sample.

Sales coming from Eastern European markets are still limited (5%) and the Adriatic Region account even less (2%). However, similar data can be retrieved from the North American and the Asian markets.

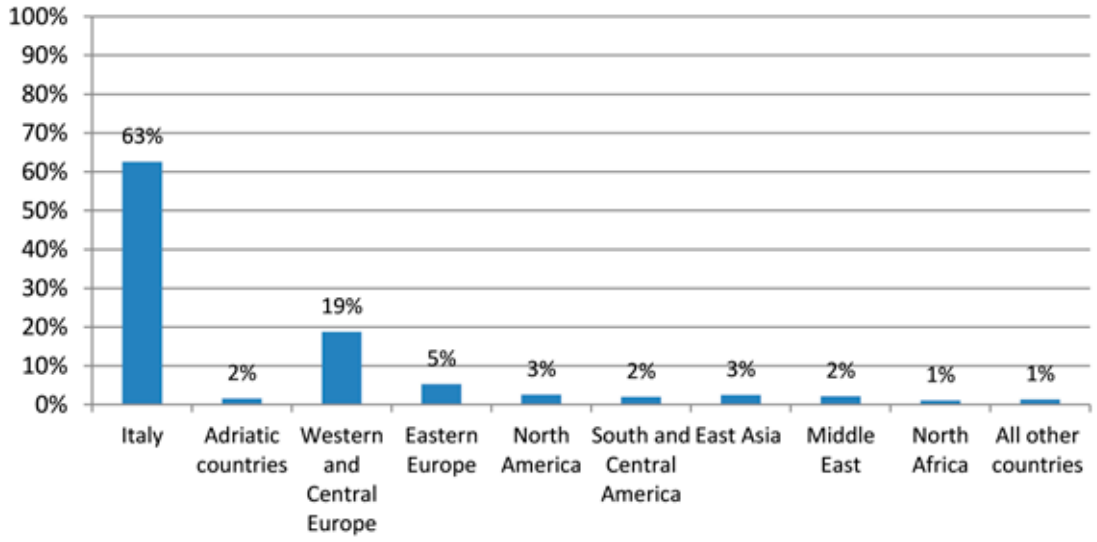


Figure 23: Italy: Distribution of turnover by market. Years 2011, 2012, and 2013.

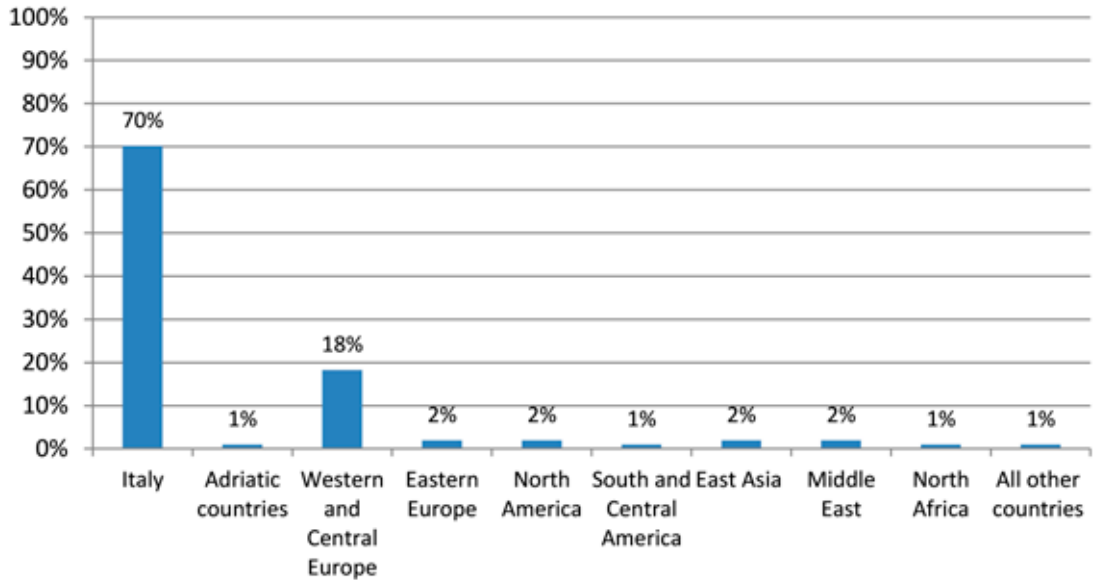


Figure 24: Italy: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

The firms in the sample cover a relatively broad range of foreign markets. Overall, almost 50% of firms sell their products in more than 5 markets. The 34% of firms have a narrower scope, serving just between 1 and 5 foreign markets, while non-exporting firms are the 24% of the sample.

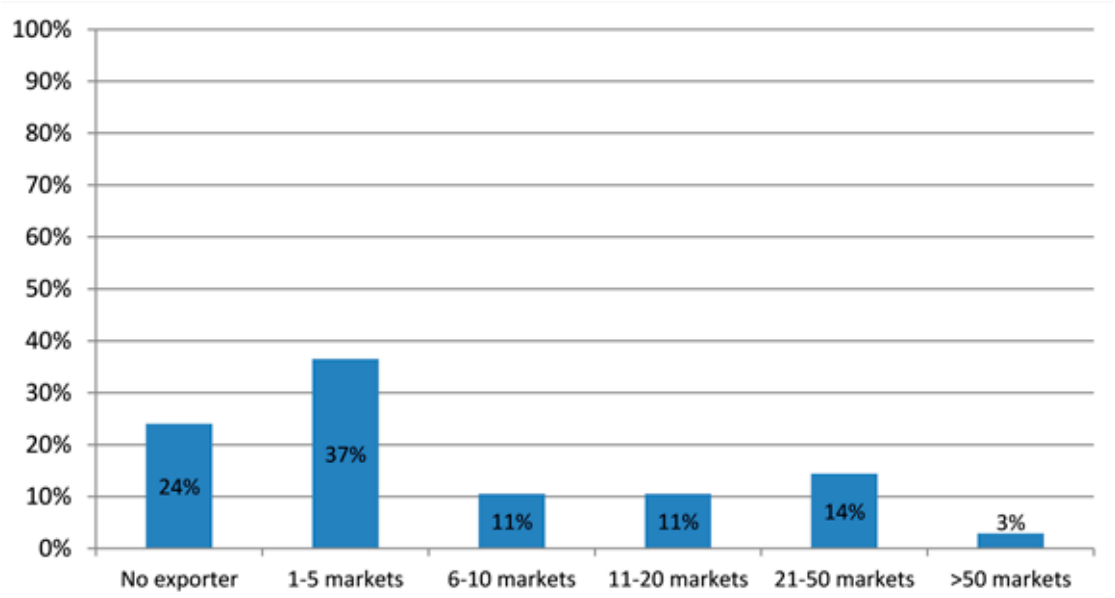


Figure 25: Italy "What was approximately your enterprise's current number of active export countries for 2013?"

Slovenia

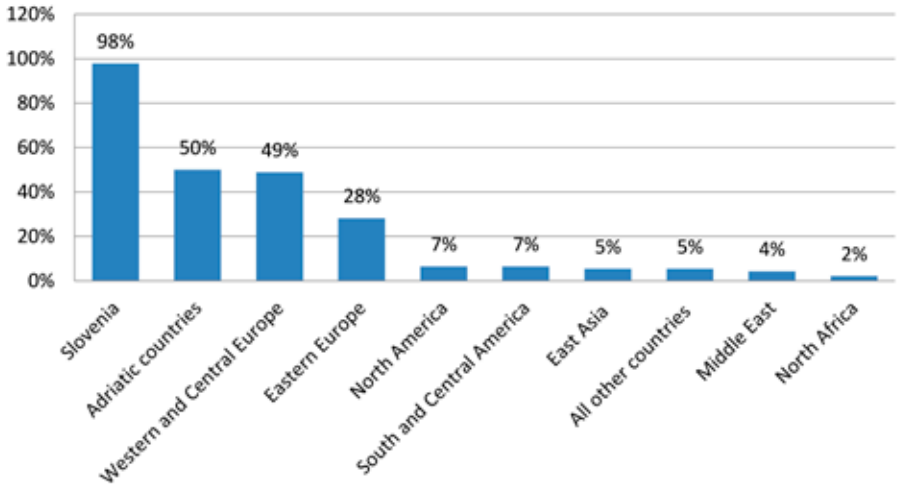


Figure 26: Slovenia "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

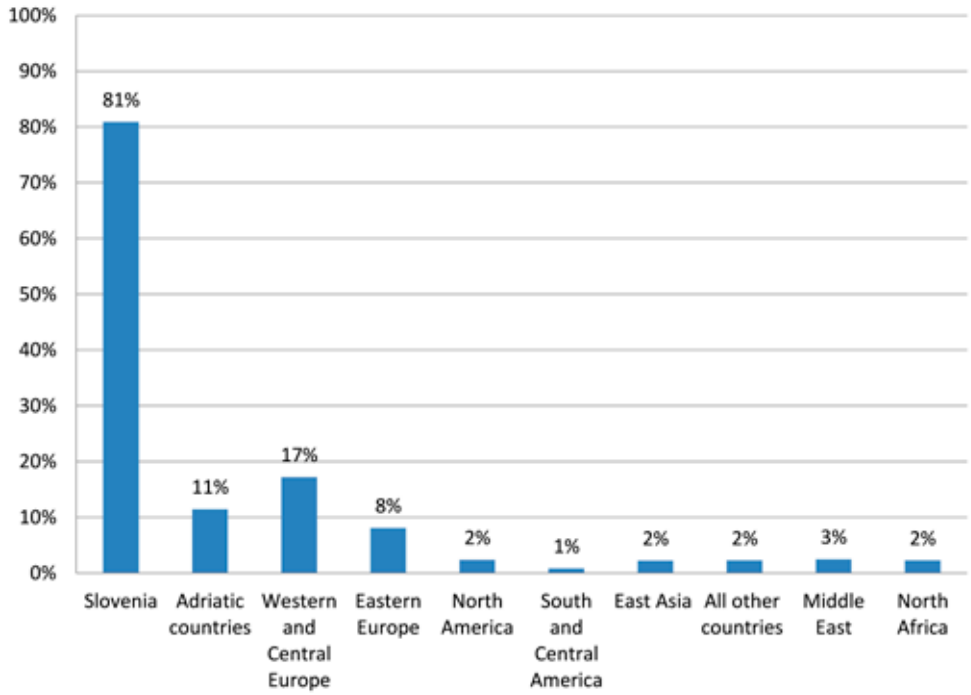


Figure 27: Slovenia: "Distribution of turnover by market, years 2011, 2012, and 2013"

We see that for Slovenia, apart from the home country, most important countries are Western and Central European countries and Adriatic Region countries. Latter are slightly more significant in terms of market share and geo presence, while Western and Central European countries are more significant in terms of turnover.

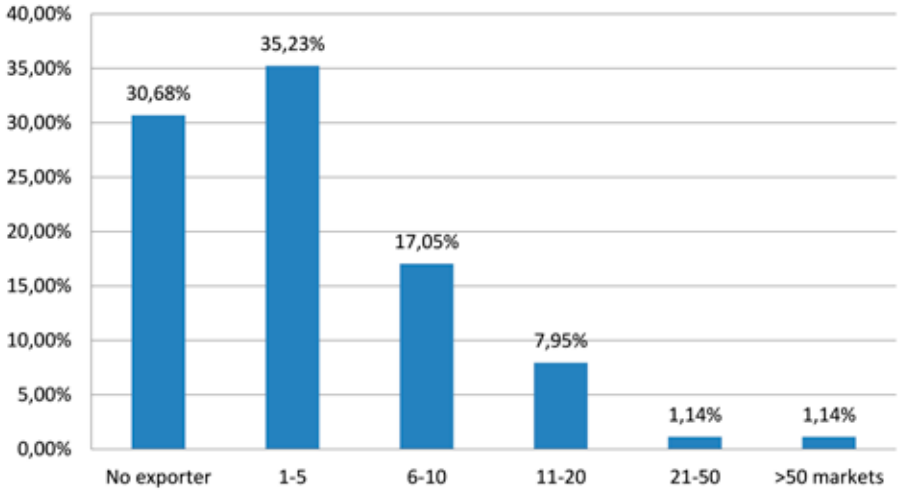


Figure 28: Slovenia "What was approximately your enterprise's current number of active export countries for 2013?"

Firms in the Slovenian sample are either non exporter (one third) or they export to 5 or less markets (35,23%).

Croatia

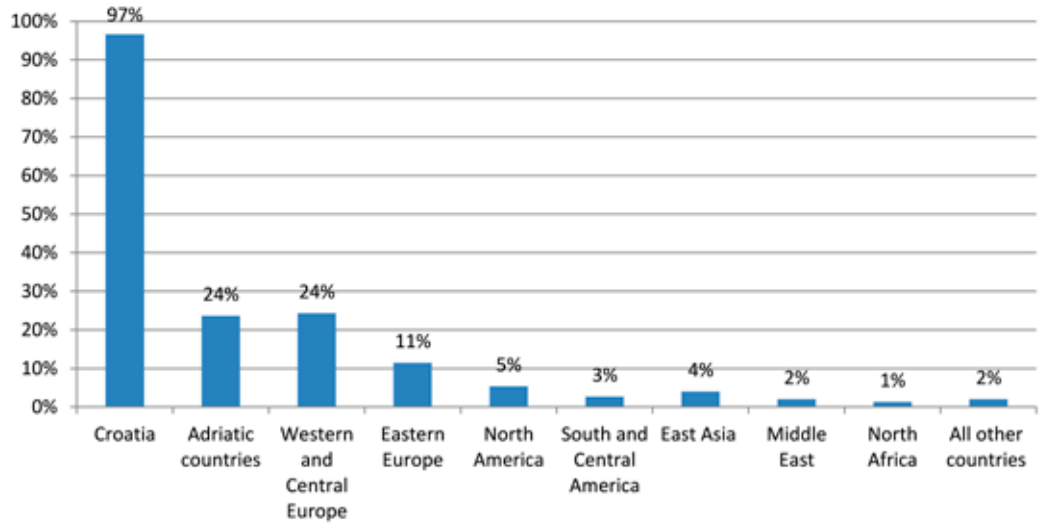


Figure 29: Croatia: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

Majority of the respondents were present only on the national market. The enterprises that export their products are present in Western and Central Europe (24,32%), on the markets of neighboring countries in the Adriatic region (23,64%), as well as in Eastern Europe (11,48%), which are the three most important export geographical areas for the respondents, followed by North America (5,40%).

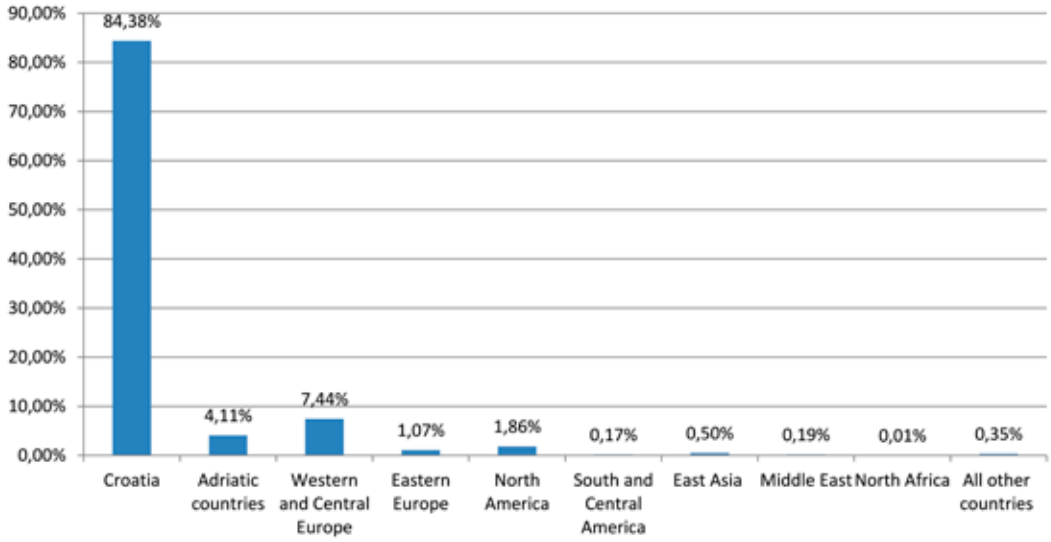


Figure 30: Croatia: "Distribution of turnover by market, years 2011, 2012, and 2013"

Majority of turnover is earned on the domestic market, while the rest of the respondents are enterprises whose export is focused on Western and Central Europe (7,44%), Adriatic region (4,11%) and North America (1,86%), slightly more than Eastern Europe (1,07%).

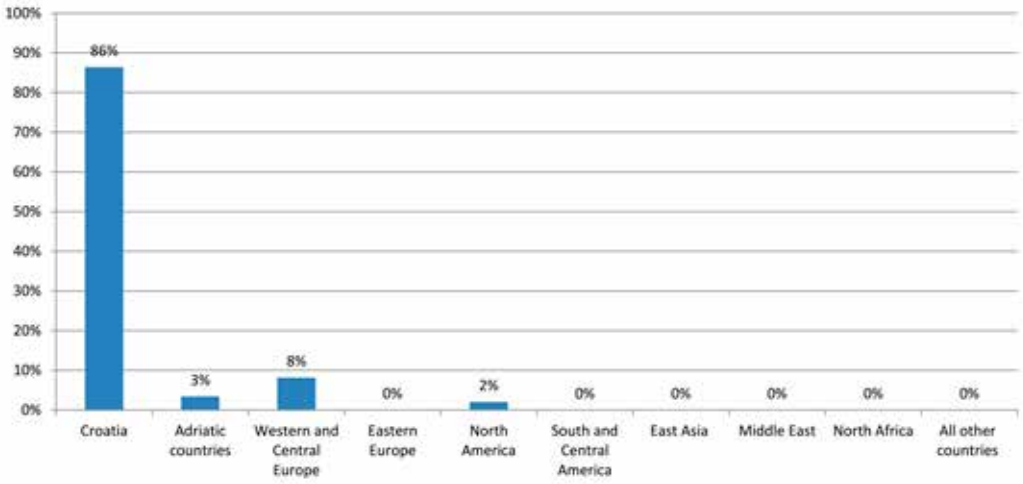


Figure 31: Croatia: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

The data show that the majority of enterprises' turnover comes from the domestic market, which is in line with the fact that most of them are present only on the domestic market, followed by Western and Central Europe, the Adriatic region and North America.

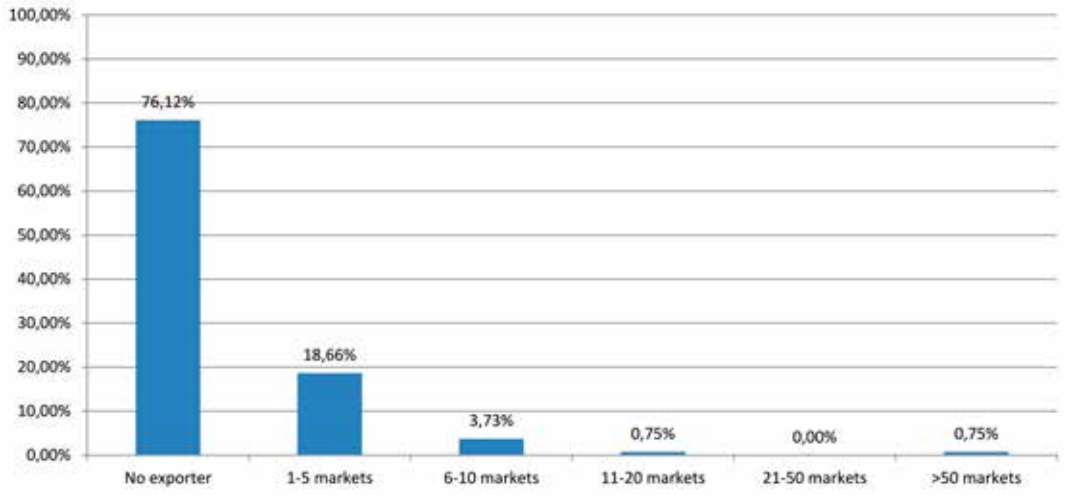


Figure 32: Croatia: "What was approximately your enterprise's current number of active export countries for 2013?"

The data clearly show that a significant percentage of enterprises do not export at all (76,12%). Most of the exportoriented companies export to up to five countries.

Bosnia and Herzegovina

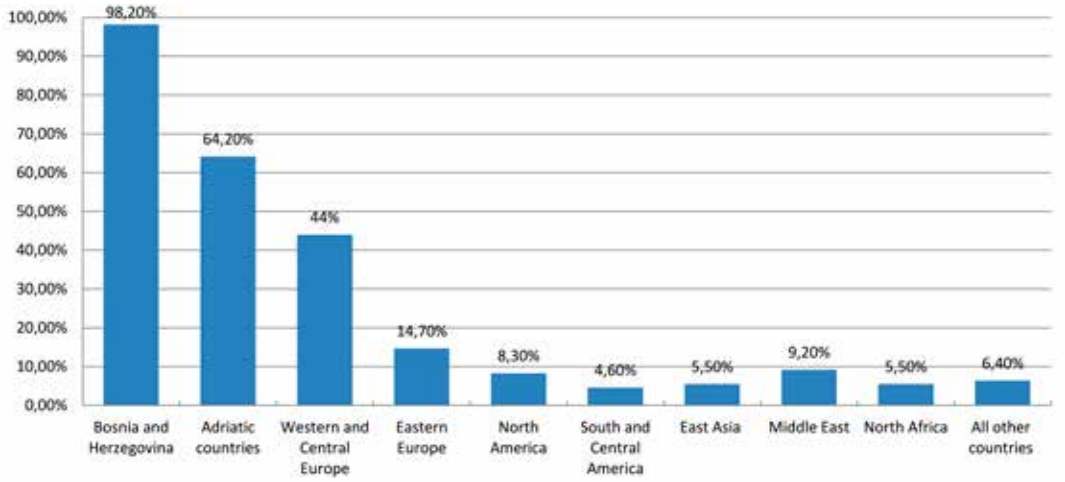


Figure 33: Bosnia and Herzegovina: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

We may see that apart from the local market where most of the companies operate (98,20%), countries from the Adriatic Region are the most important for B&H firms (64,20%). They are followed by countries of Western and Central Europe (44%), Eastern Europe (14,70%) and the Middle East (9,20%).

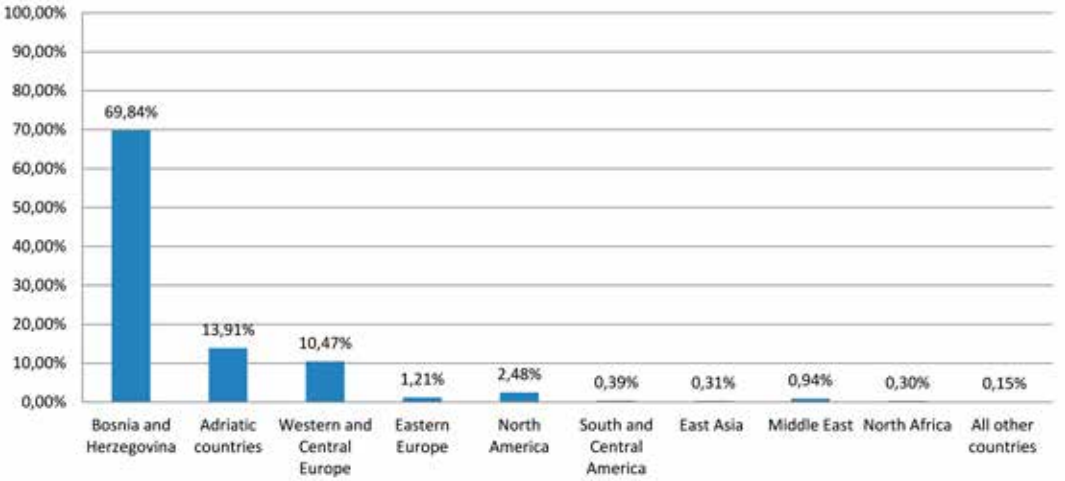


Figure 34: Bosnia and Herzegovina: "Distribution of turnover by market. Years 2011, 2012, and 2013"

With respect to the percentage of turnover recorded in the selected markets, the highest turnover for sample firms comes from the domestic market (almost 70%), followed by the Adriatic countries (13,91%) and Western and Central Europe countries (10,47%).

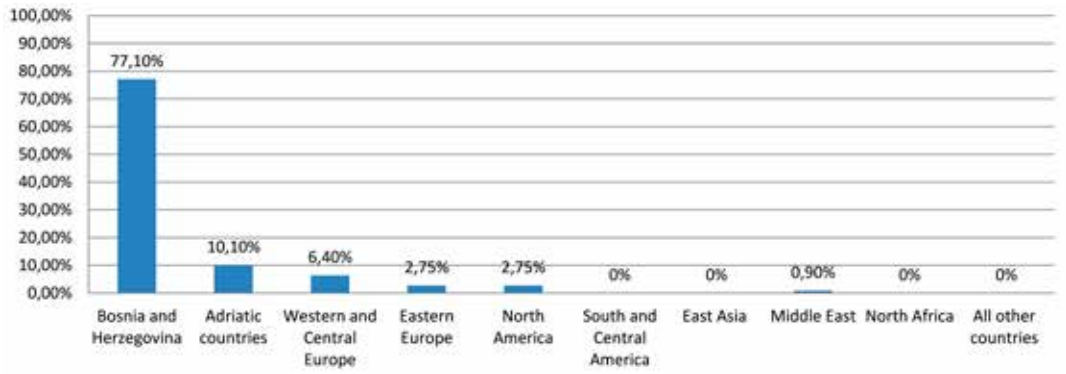


Figure 35: Bosnia and Herzegovina: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

Similarly, when it comes to the area that represents the largest market to sampled firms, for more than three quarters of firms it was domestic, B&H, market, and for 10% it was the market of Adriatic countries. Other important markets are: Western and Central Europe (6,40%), Eastern Europe (2,75%), North America (2,75%) and the Middle East (less than 1% of the sample).

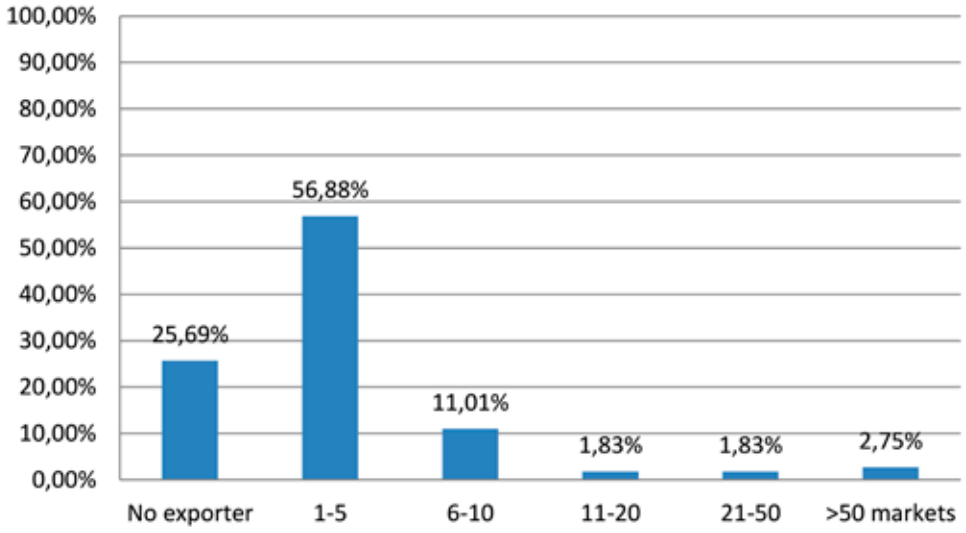


Figure 36: Bosnia and Herzegovina: "What was approximately your enterprise's current number of active export countries for 2013?"

Finally, when it comes to the exporting activity, most companies in the sample (57%) export to 1-5 markets. ¼ of the companies in the sample are not exporters.

Serbia

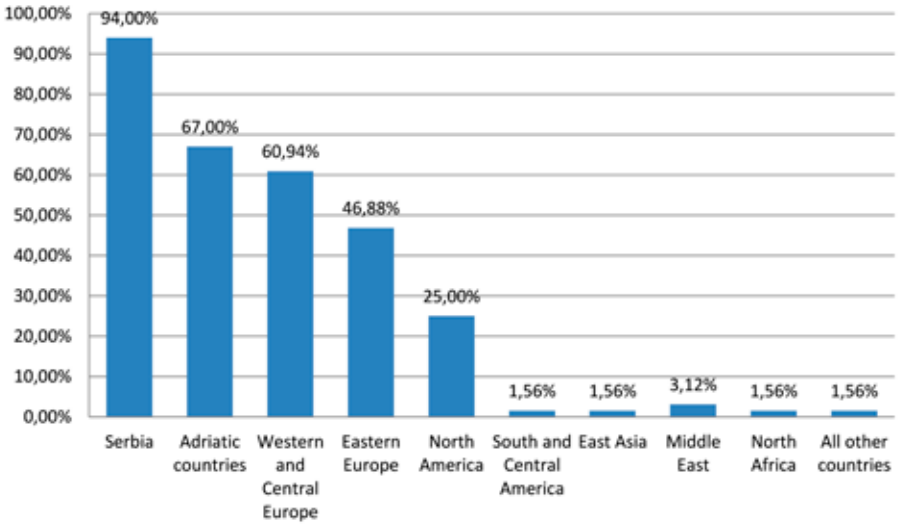


Figure 37: Serbia: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

We can see that apart from the national market where most of the companies operate (94%), countries from the Adriatic Region are the most important for Serbian companies (67%). They are followed by countries of Western and Central Europe (61%), Eastern Europe (46.88%) and North America (25%).

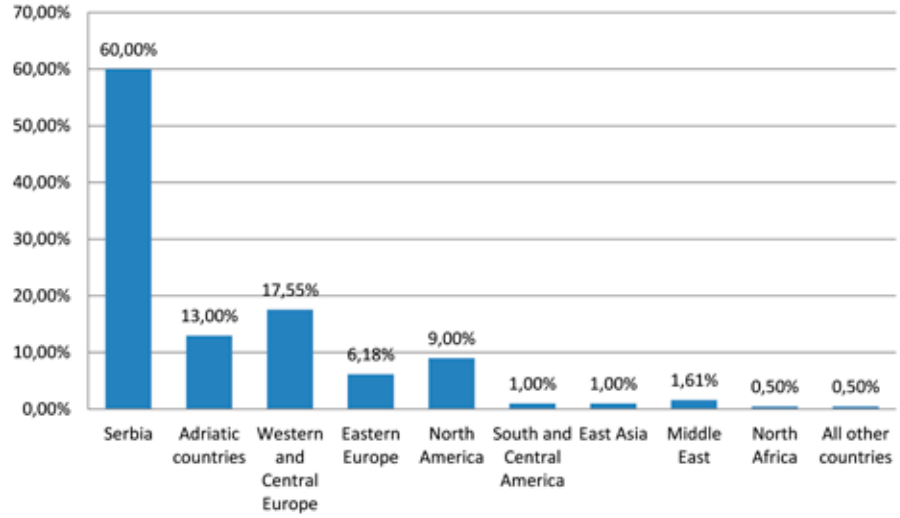


Figure 38: Serbia: "Distribution of turnover by market. Years 2011, 2012, and 2013"

When it comes to percentage of turnover that occurred in the selected markets, highest turnover for sample companies comes from the national market (60%), followed by the Western and Central Europe Countries (17,55%), and Adriatic countries (13%).

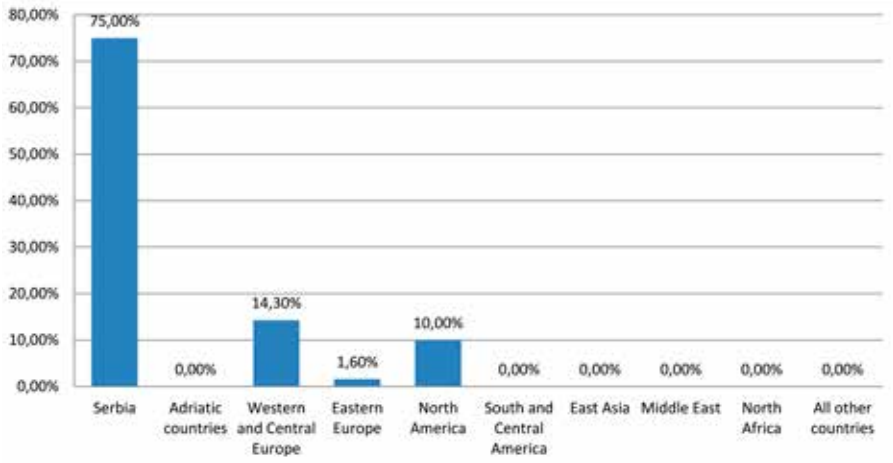


Figure 39: Serbia: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

Similarly, when it comes to the area that represents a largest market in terms of turnover to sampled companies, for 70% of companies that was national market, and for 14,3% it was the market of western and central Europe.

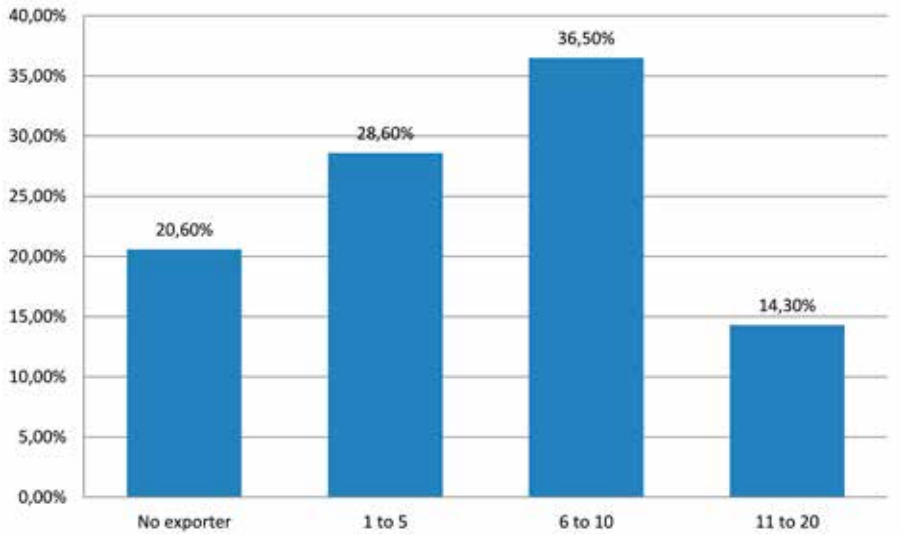


Figure 40: Serbia: "What was approximately your enterprise's current number of active export countries for 2013?"

Finally, when it comes to the exporting activity, 20 % of sampled companies are not exporters and 36% export to 6-10 markets.

Montenegro

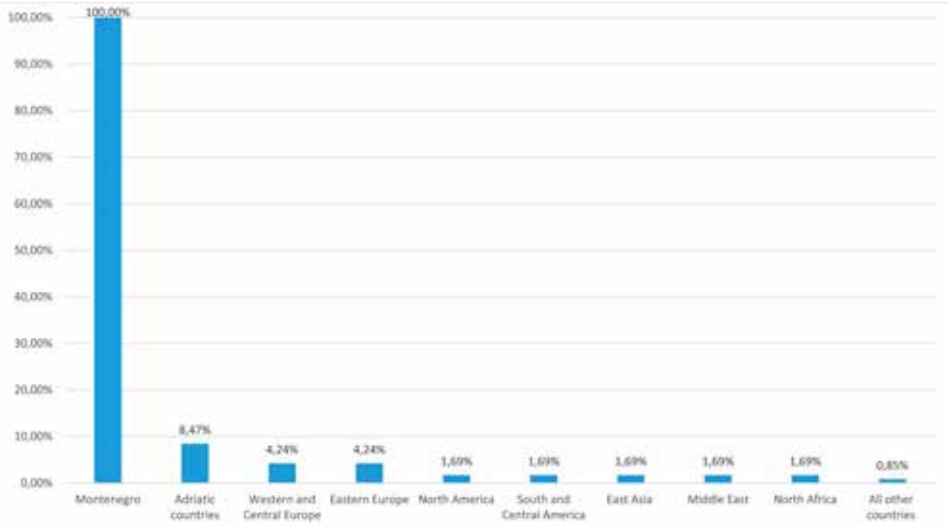


Figure 41: Montenegro: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

We can see that almost all companies practically exclusively operate on the local market. This is a major characteristic of most Montenegrin SMEs, and is reflected in our samples. Europe, especially the Adriatic countries, is the only market of some importance.

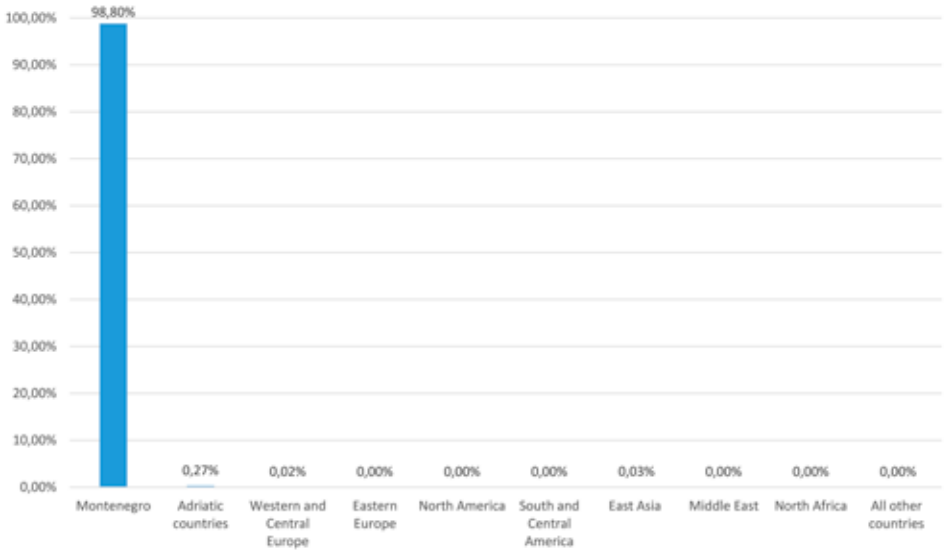


Figure 42: Montenegro: "Distribution of turnover by market. Years 2011, 2012, and 2013"

When it comes to the percentage of turnover recorded in the selected markets, the companies earned their revenues almost exclusively in the local market.

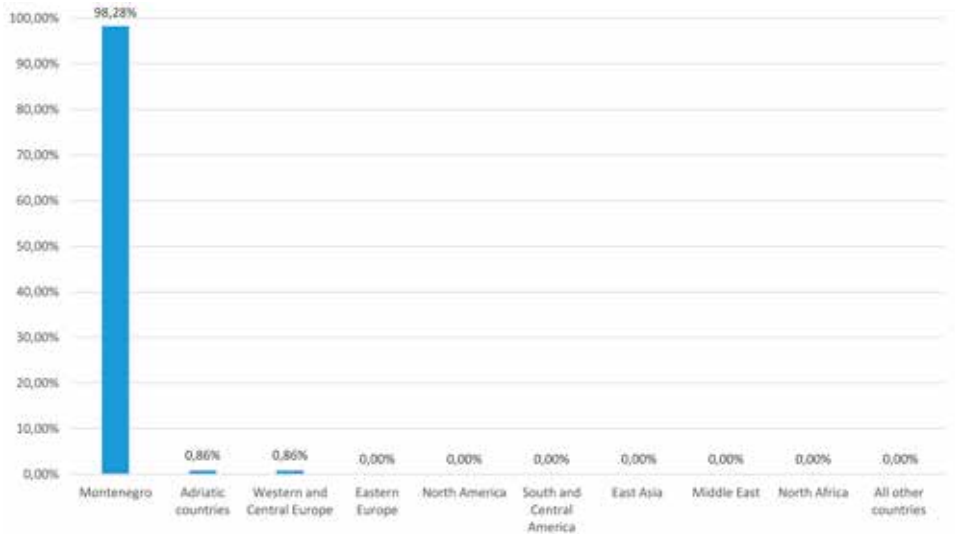


Figure 43: Montenegro: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

Only two companies did not achieve most of their turnover in the local market – one had the Adriatic countries as their dominant market, and the other had Western Europe.

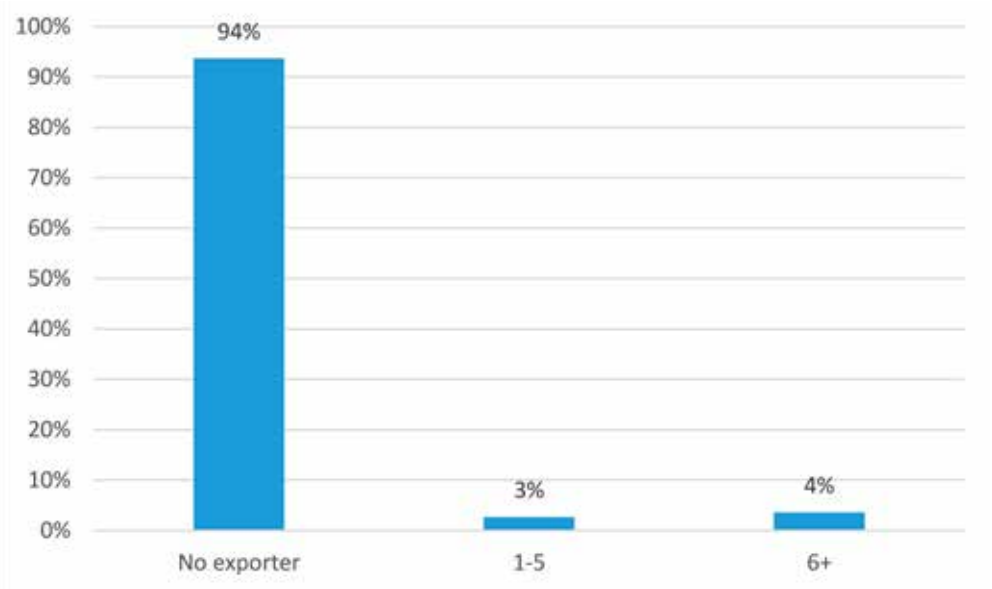


Figure 44: Montenegro: "What was approximately your enterprise's current number of active export countries for 2013?"

Finally, with respect to the exporting activity, most companies in the sample (94%) do not export to any country. About 3% of the companies export to 1-5 markets, and 4% of the companies export to 6 countries or more (with the highest number of exporting markets in the sample being 15).

Albania

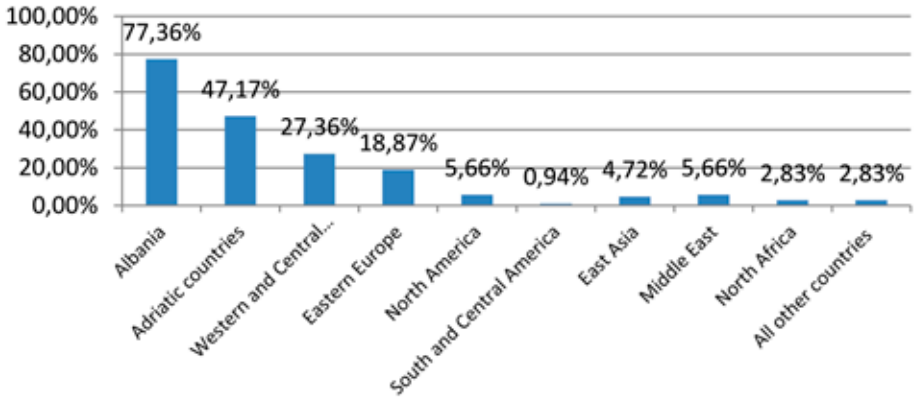


Figure 45: Albania: "In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?"

In Albania, for most of the companies included in the study (82 companies or 77,36% of the sample), local market is the destionation for the goods and services sold, followed by other European countries, more specifically, Adriatic countries (47.17%), Western and Central Europe (27.36%) and Eastern Europe (18.87%)

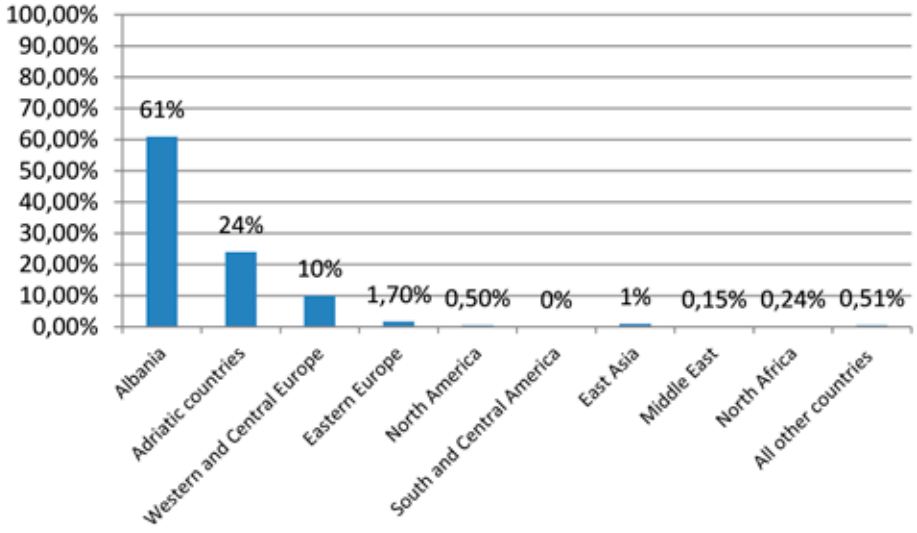


Figure 46: Albania: "Distribution of turnover by market. Years 2011, 2012, and 2013"

Distribution of turnover by market is following the distribution of goods and/or services sold in geographic areas. 61% of the turnover comes from domestic market (61%), followed by Adriatic countries (24%), Western and Central Europe (10%) and Eastern Europe (1.70%).

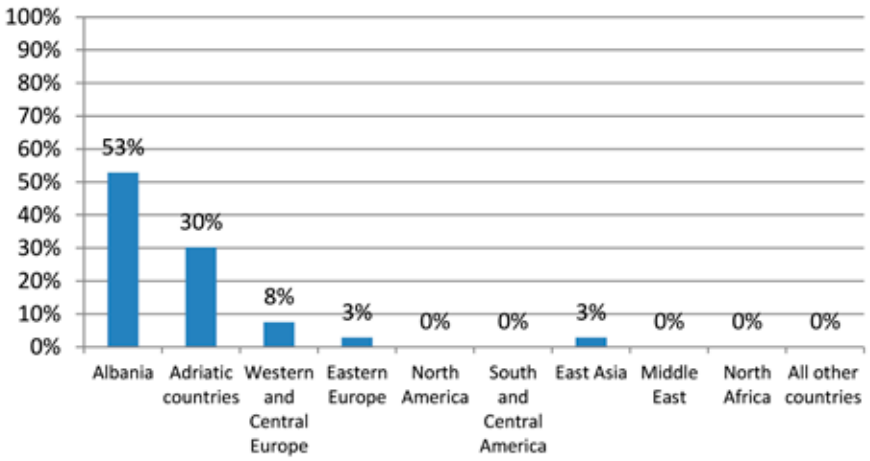


Figure 47: Albania: "Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013?"

Albania was the largest market in terms of turnover for 53% of the companies participating in the study. For 30% of the cases, Adriatic countries represent the largest market. Most ofhese companies operate in manufacture of wearing apparel and are only export oriented. Both Eastern Europe and East Asia are the largest market for 3% of the sample.

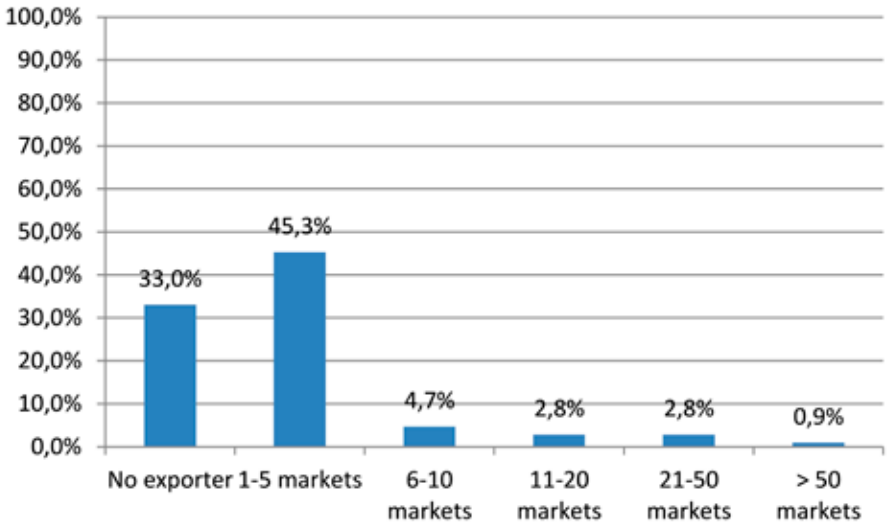


Figure 48: Albania: "What was approximately your enterprise's current number of active export countries for 2013?"

The majority of companies that export, sell their products and/or services in 1-5 markets, while 33% are no exporters.

3.2. Product Innovation

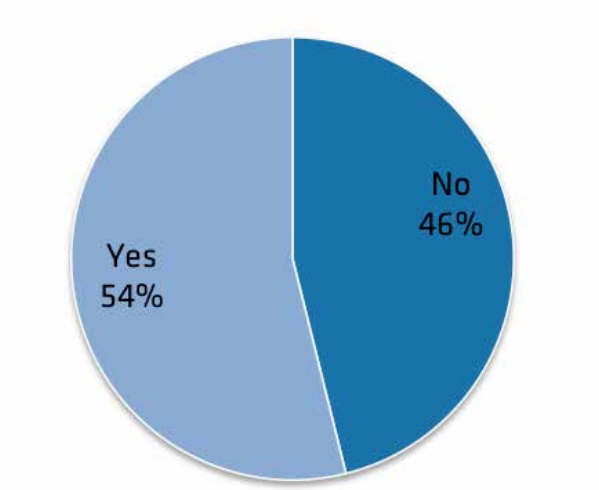


Figure 49: Adriatic Region: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

The first innovation-related focus was on the product innovation. From the figure below we may see that more than a half of respondent firms (54%) introduced product innovation in the past three years, at the level of the Adriatic Region.

Italy

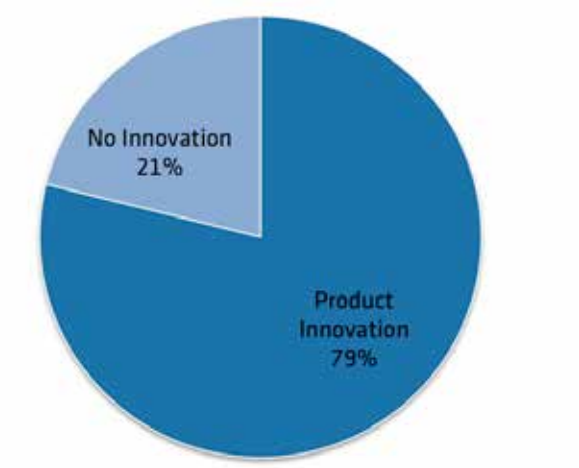


Figure 50: Italy: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

The great majority of the companies in our sample (79%) introduced a product innovation in the last three years. Further, 47 companies (representing the 45% of the sample) introduced a "new to the market" innovation in the same period, while the 34% of firms introduced a product that was new just to the firm.

Slovenia

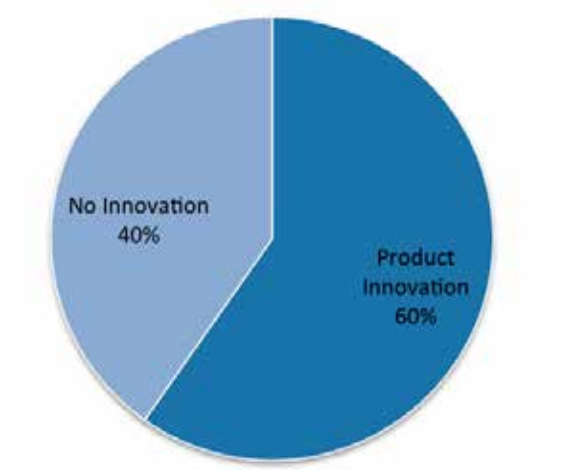


Figure 51: Slovenia: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

Exactly 60% of firms in the Slovenian sample introduced product innovation in the period from 2011 to 2013, while the rest did not have innovation in their products or services.

Croatia

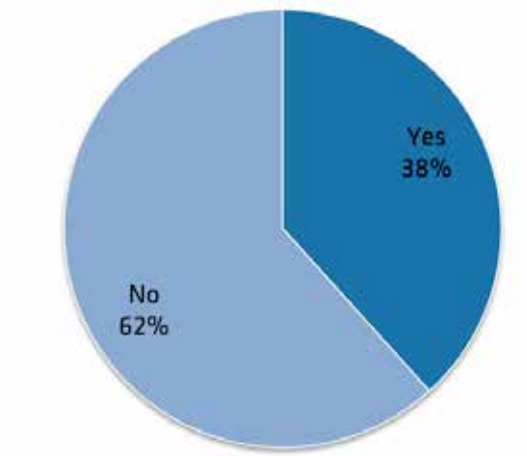


Figure 52: Croatia: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

Over 60% of the surveyed companies did not introduce any product or service innovation in the given three year period, in contrast to 38,29% that did introduce a new product/service.

Bosnia and Herzegovina

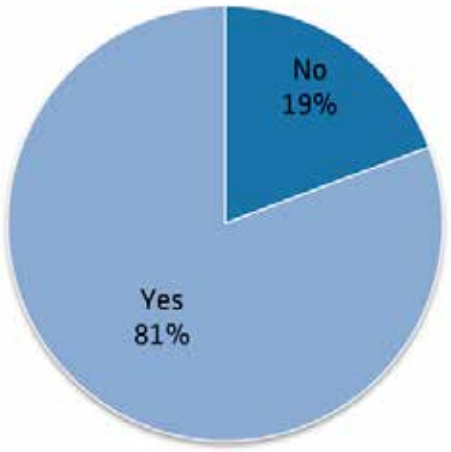


Figure 53: Bosnia and Herzegovina: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

We may see that majority of companies from B&H sample introduced product innovation in the past three-year period (88 out of 109).

Serbia

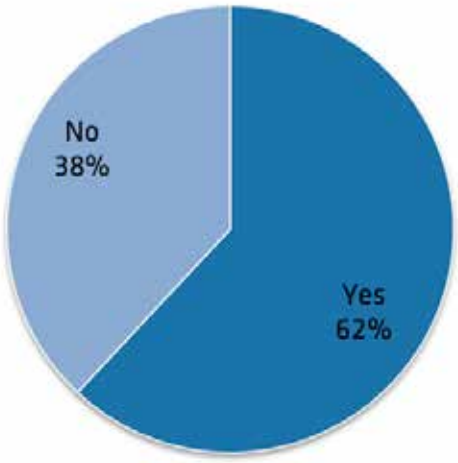


Figure 54: Serbia: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

Majority of firms in Serbian sample introduced product innovation during the course of three years (2011-2013), while 38% firms did not innovate.

Montenegro

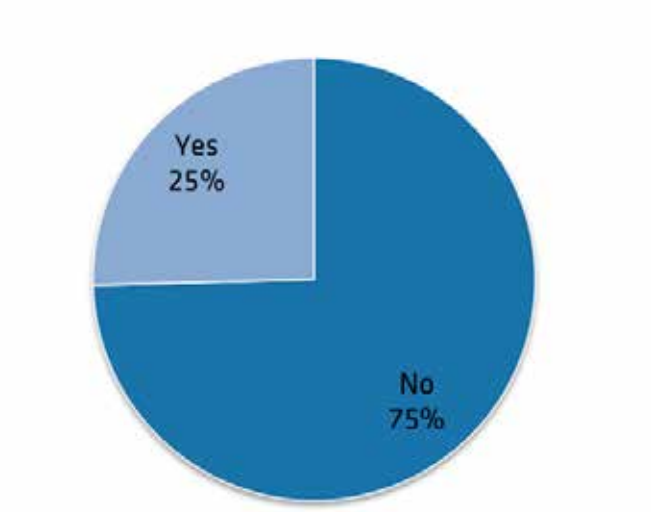


Figure 55: Montenegro: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

We may see that a quarter of the sample companies from the Montenegrin sample introduced product innovations in the past three-year period (30 out of 118).

Albania

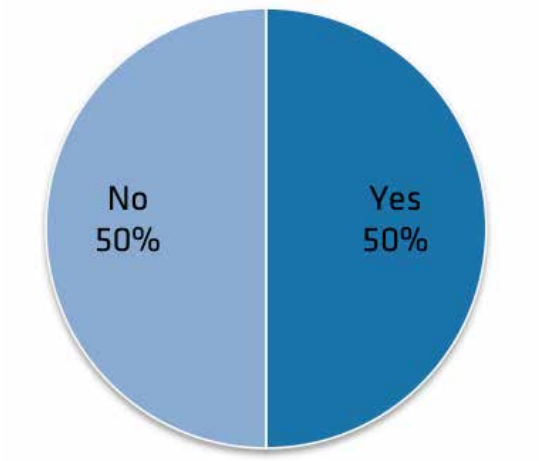


Figure 56: Albania: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

It results that out of 106 respondents, 50% of them introduced a product innovation during 2011, 2012, 2013 while the rest claim to have not introduced any innovative product. It has been observed that the main sectors which are innovative for 2011-2013 are: financial and insurance activities, and manufacture of food products and beverages. On the other hand, companies that have not introduced any innovative product belong to the transporting and storage sector, manufacture of other non-metallic mineral products sector, and manufacture of furniture.

Greece

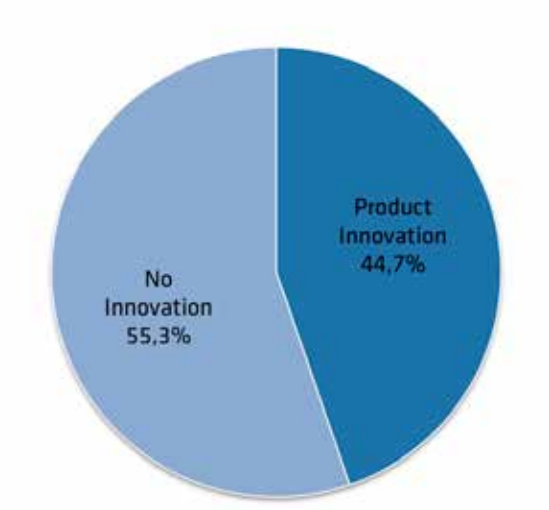


Figure 57: Greece: "During the three years: 2011, 2012 and 2013, did your enterprise introduce: Product innovations"

Figure above describes the product innovations introduced by companies in Greece during the years 2011, 2012 and 2013. The majority of the firms (55,3%) did not introduce any product innovations during these years. However, the 44,7% that did introduce a product innovation are above the Greek average and near the EU average based on the Innovation Union Scoreboard of 2014.

Product innovations - New to the market

Following the general question on the introduction of product innovation, we were interested to learn what is the extent of the (new to the market) product innovation introduced. At the level of the Adriatic Region, 75% of the introduced product innovation is new to market as well.

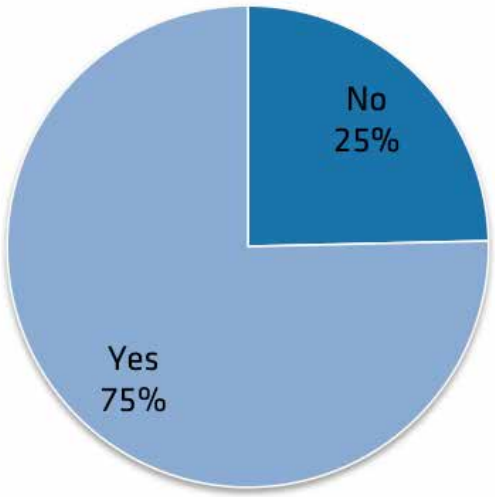


Figure 58: Adriatic Region: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?"

Product innovation - New to firm

In comparison to the new to market product innovation, roughly the same proportion of firms in the Adriatic Region introduce innovation that is new to firm as well (77%).

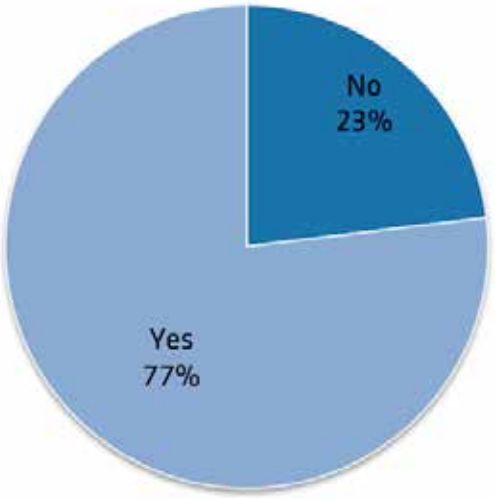


Figure 59: Adriatic Region: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? – Just new to your firm?"

Now we will see the overview of the situation for product innovations new to the market country by country.

Italy

While the companies showed to be quite innovative in terms of new products launched in the market, in relation to the revenues generated by product innovations we found that the majority of turnover in 2013 was still generated through unchanged (in the 3-years period) products. An additional 45% was generated through products that were new to the firm but not to the market while close to 38% came from radically new products.

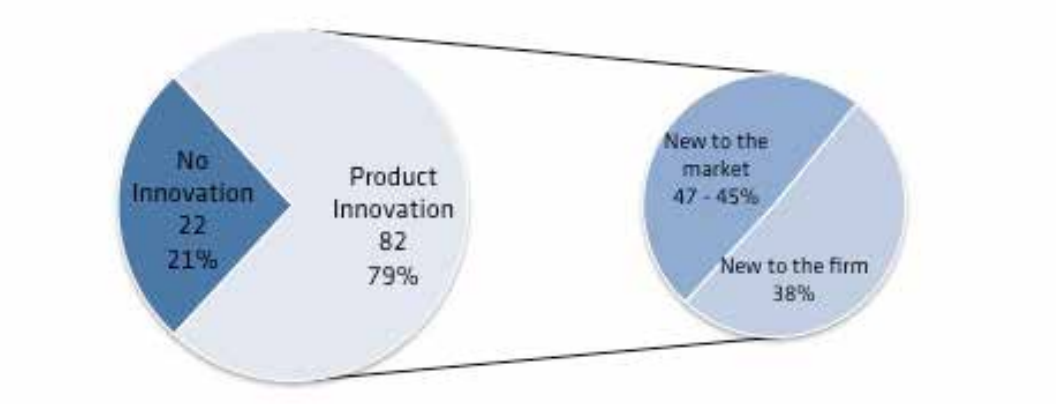


Figure 60: Italy: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?/New to the firm?"

Slovenia

We see that 91% of the introduced new products are new to the market, while 95% are also new to the firm.

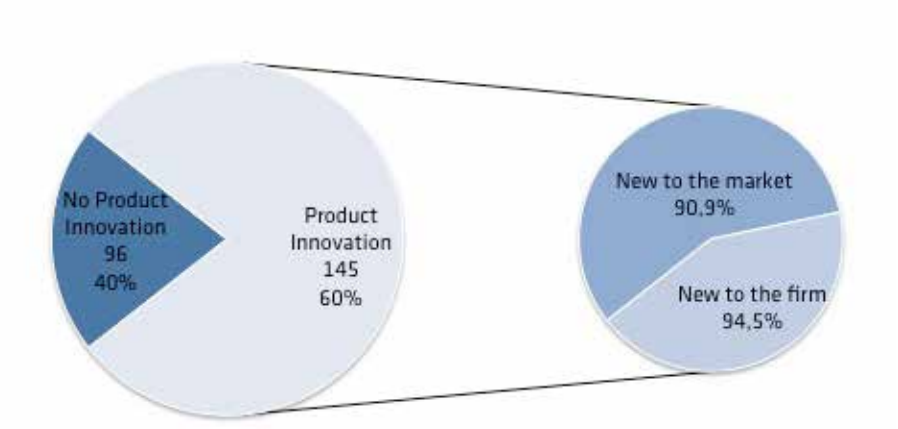


Figure 61: Slovenia: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?/New to the firm?"

Bosnia and Herzegovina

In Bosnia and Herzegovina, 81% of the introduced products are new to the market, while the rest is already known to the market.

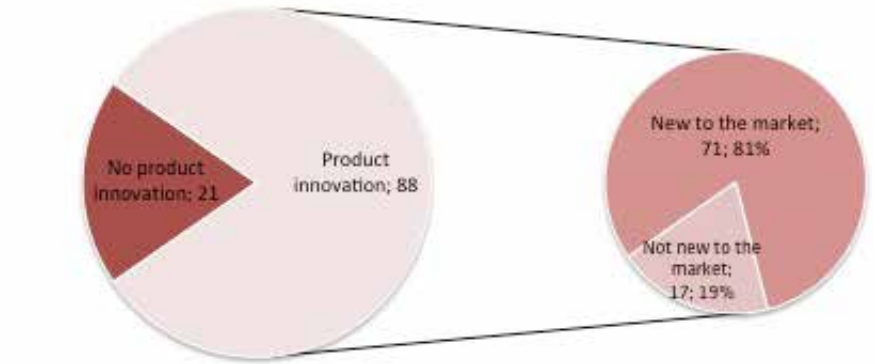


Figure 62: Bosnia and Herzegovina: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?"

We may from the two figures above that product innovations are new to the market in 81% of the cases, while they are also new to the firm in 64% of the cases.

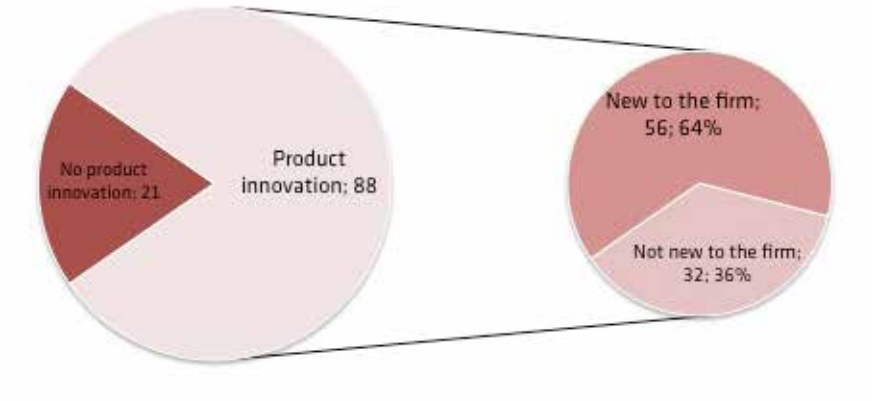


Figure 63: Bosnia and Herzegovina: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? – Just new to your firm?"

Serbia

We see that 54% of the innovation present in Serbia is new to the market.

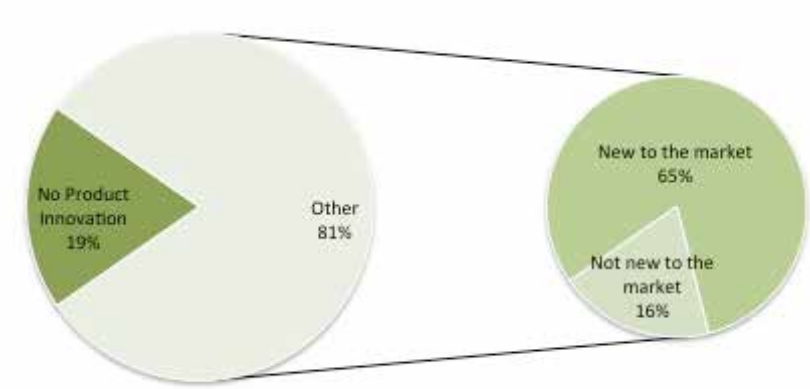


Figure 64: Serbia: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?"

We also see that the less extent of new products is new to the firm - 41%.

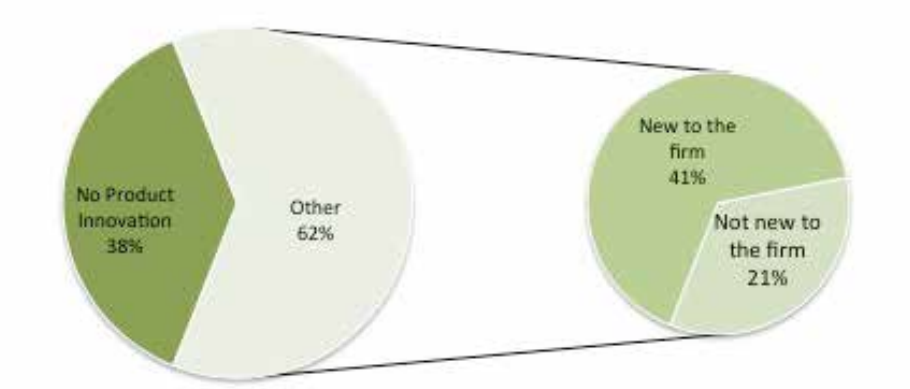


Figure 65: Serbia: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? – Just new to your firm?"

Montenegro

In Bosnia and Herzegovina, 81% of the introduced products are new to the market, while the rest is already known to the market.

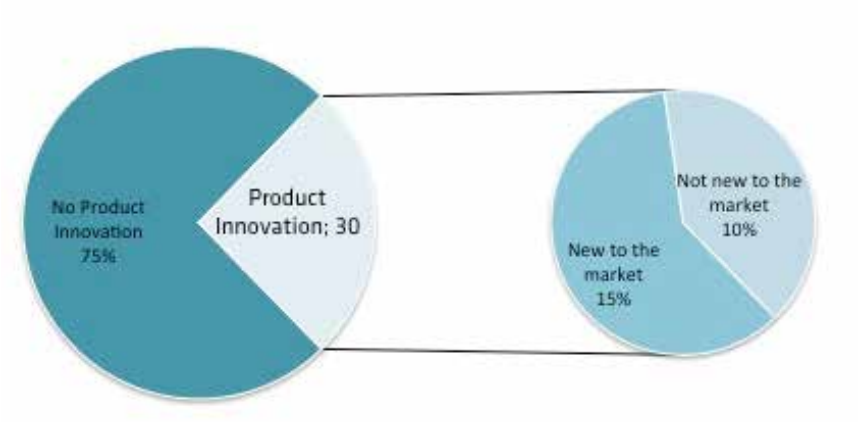


Figure 66: Montenegro: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?"

We may see that product innovations are new to the market in 60% of the cases, while they are also new to the firm in 83,3% of the cases.

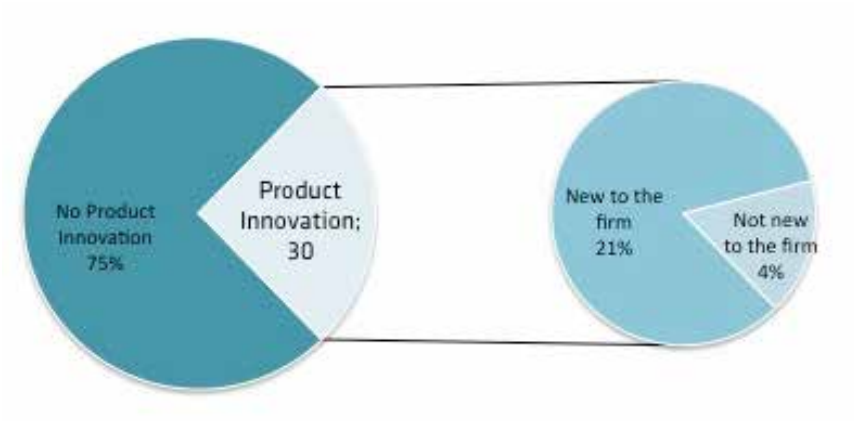


Figure 67: Montenegro: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? – Just new to your firm?"

Albania

Out of 53 companies declaring to have introduced product innovation during 2011-2013, 48 of them (91%) confirmed to have introduced an innovative product or service to their market. It has been observed that the main sectors which are innovative to their market are part of service sector.

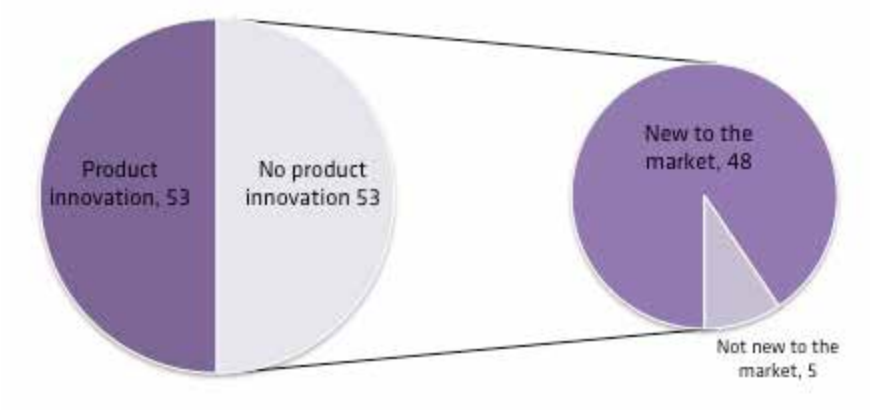


Figure 68: Albania: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? - New to your market?"

Out of 53 companies declaring to have introduced product innovation 2011-2013, 39 of them (74%) confirmed that these proucts or services are new to their firm.

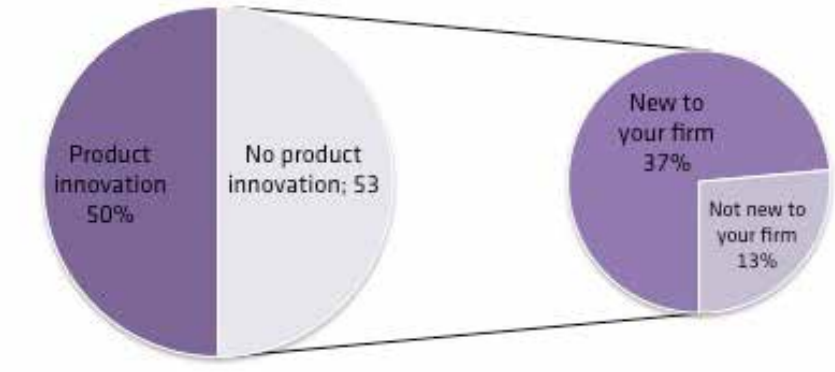


Figure 69: Albania: "Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013? – Just new to your firm?"

Now we present results for the percentage of total turnover that pertained to the new or significantly improved products introduced in the past three years that were new to the market, new to the firm and other products, country by country.

Italy

The companies in our sample perceive themselves as innovative as their main competitors. However, they believe to generally be more flexible in terms of producing and delivering customized products and services to their clients. Their product innovativeness is primarily based on continuous improvements of existing products rather than on breakthrough innovations. By reinforcing their commitment on continuous incremental innovation, it follows that the firms' products are not generally perceived as highly novel.

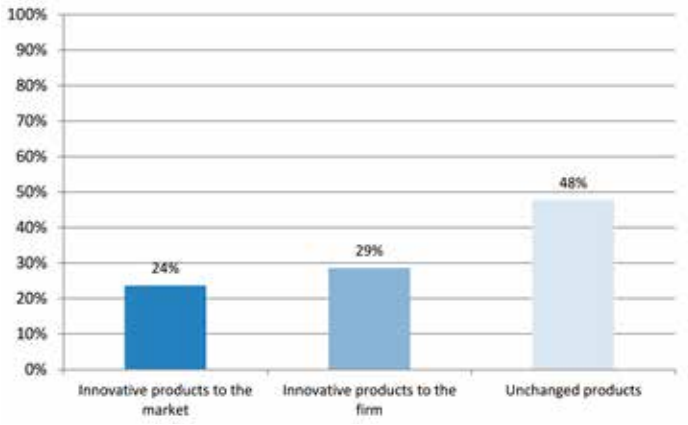


Figure 70: Italy: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Slovenia

When it comes to the allotted percentage of turnover to new products, Slovenian sample firms attribute 24% of their turnover to products that are new to the market, while 19% of the turnover is attributed to products new to the firm.

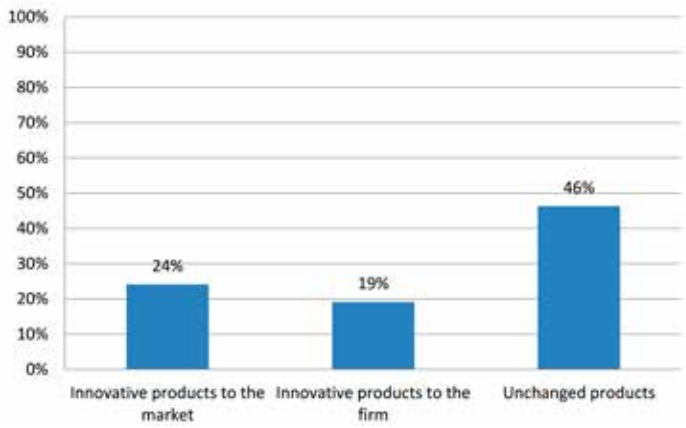


Figure 71: Slovenia: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Croatia

The main portion of the turnover of the sampled companies that introduced product innovations still comes from the unchanged products.

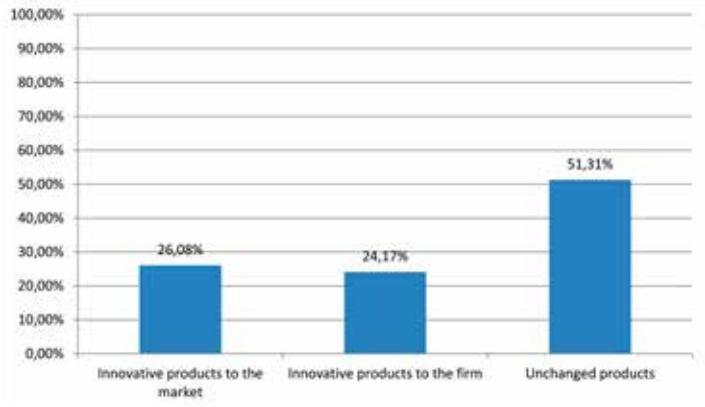


Figure 72: Croatia: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Bosnia and Herzegovina

We conclude that main portion of the turnover for the firms still comes from the unchanged products, and that innovative products contribute less to the total revenue of the firm. One of the reasons could be the time necessary for the market to accept new products/innovation and the level of the development of channels and overall market position for those products. Namely, the "unchanged" products sometimes serve as "Cash Cows" while innovative products are going through the market test.

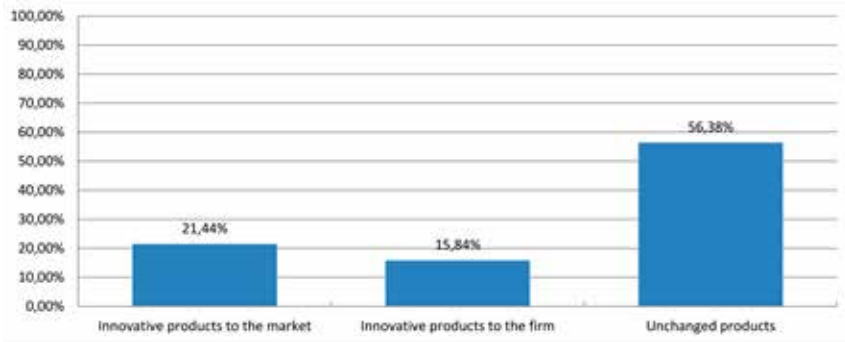


Figure 73: Bosnia and Herzegovina: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Serbia

We may see that in the Serbian sample, percentage of turnover that is reserved for products that are new to market is slightly higher (28,5%) than a percentage of turnover for products new to firm.

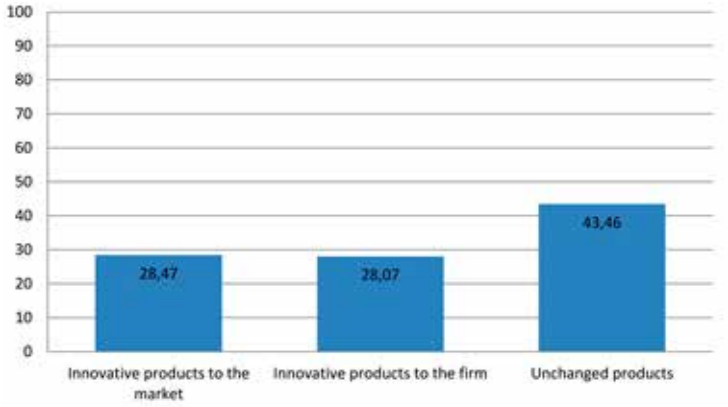


Figure 74: Serbia: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Montenegro

We can conclude that about half of the companies' turnover comes from unchanged products, while a little less than half comes from innovative products. During the survey, it was concluded that the unchanged products are usually used as a base for financing new products.

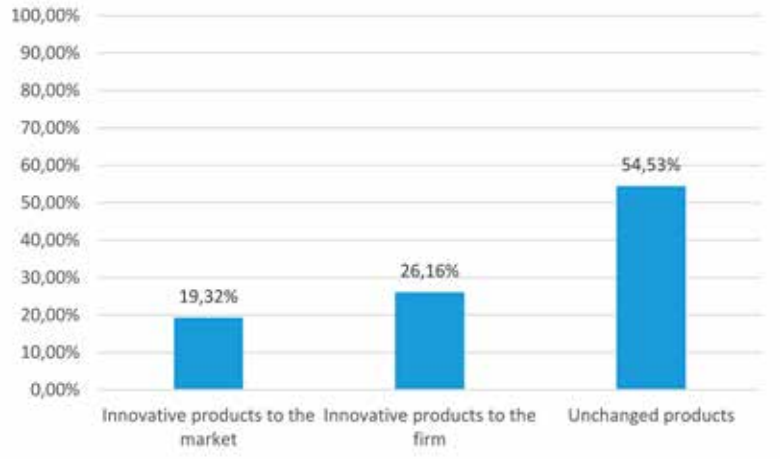


Figure 75: Montenegro: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Albania

The main item of the turnover for the innovative companies from 2011-2013 consists of the turnover from the introduction of innovative products new to their market (56,37%). The rest of the turnover comprises turnover from other products (20,35%) and only 16,4% refers to the turnover from innovative products new only to their firm.

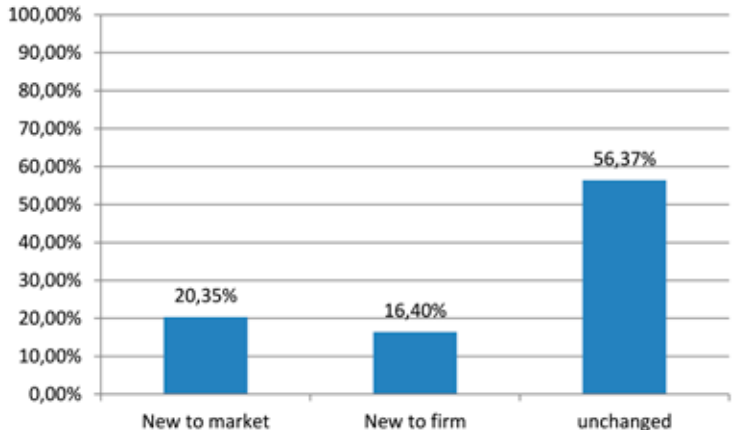


Figure 76: Albania: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Greece

The figure and table describe the percentage of the overall turnover in 2013 based on mean value, for products that were new to the firm's market, new to the firm only and other products. Verifying the results presented above, most firms introduced new or significant products first to their market (TURNMAR), creating a high turnover for them. Moreover, most firms introduced some kind of innovation and the mean values of their turnover is higher for products that were "new to the market" (TURNMAR) or "new to the firm" (TURNIN), than the turnover from unchanged products (TURNUNG).

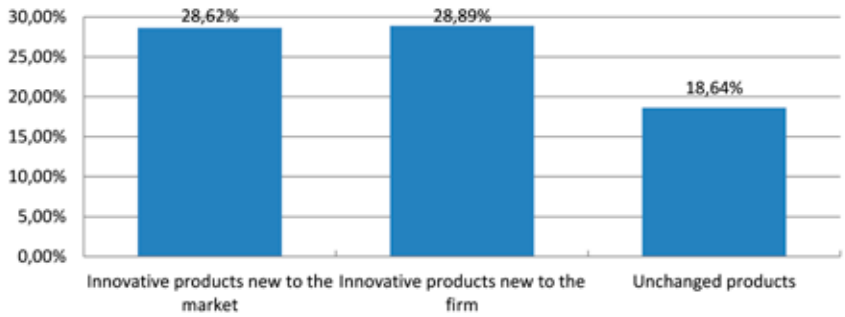


Figure 77: Greece: Percentage of turnover for new products to the market, new products to the firm and unchanged products

Finally, as the analysis of product innovation, we make an overview of statistics for product innovation concept, country by country.

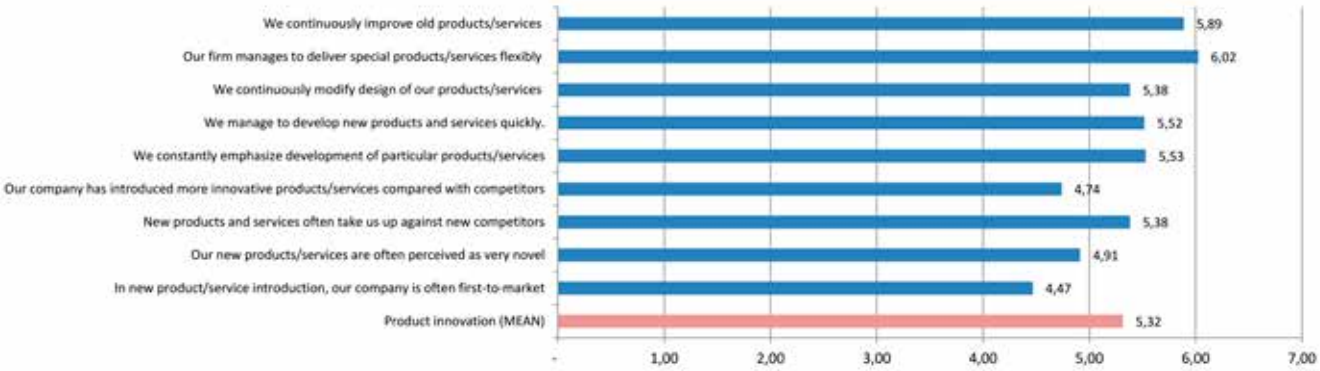


Figure 78: Italy: Product Innovation - statements

For Italian firms, flexibility in delivery of special products/services has the highest score amongst the product innovation items.

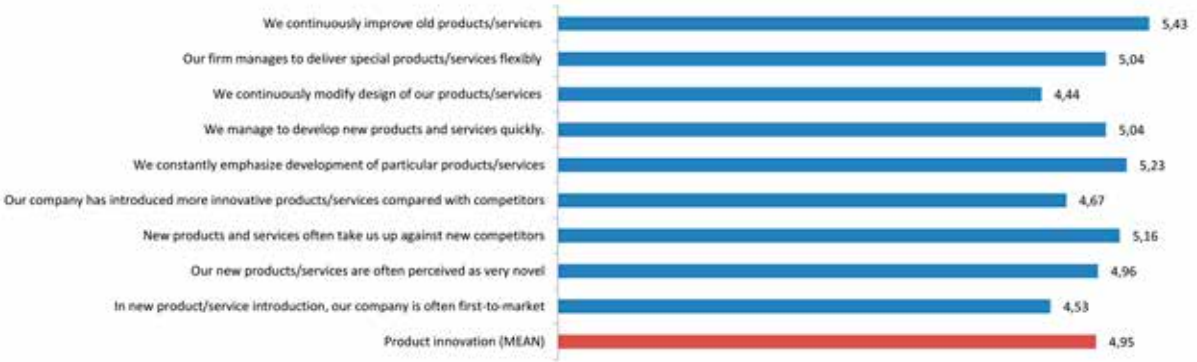


Figure 79: Slovenia: Product Innovation - statements

Slovenian firms rate continuous improvement and being first-to-market in new product/service introduction the highest.

Figure 80: Croatia: Product Innovation - statements

The data show that companies most highly esteem their flexibility and continuous improvement of existing products in implementation of product innovation.

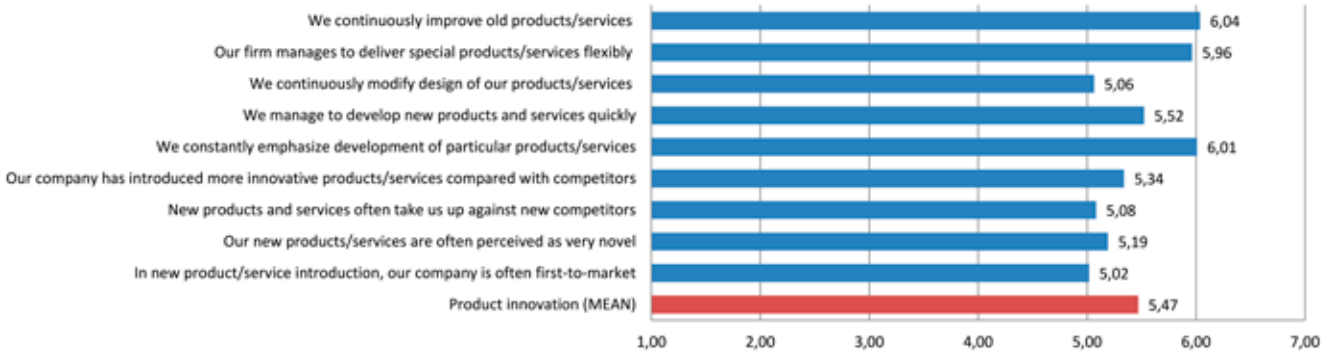


Figure 81: Bosnia and Herzegovina: Product Innovation - statements

We may see that, on average, respondents gave high ratings (>5,00 out of 7,00) to all statements related to the product innovation. Highest score was put on the continuous improvement of old products/services as well as on the development of particular products/services.

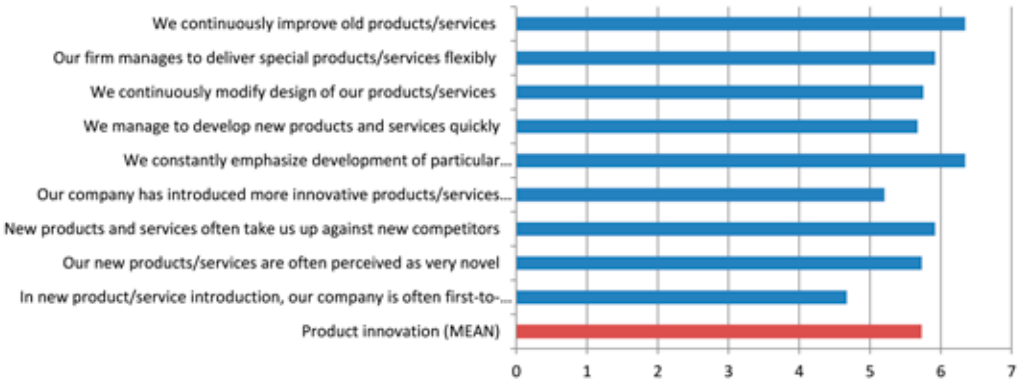


Figure 82: Serbia: Product Innovation - statements

Serbian firms rated same items as Bosnian and Herzegovinian the highest – constant development of particular services/products and continuous improvement of old products/services.

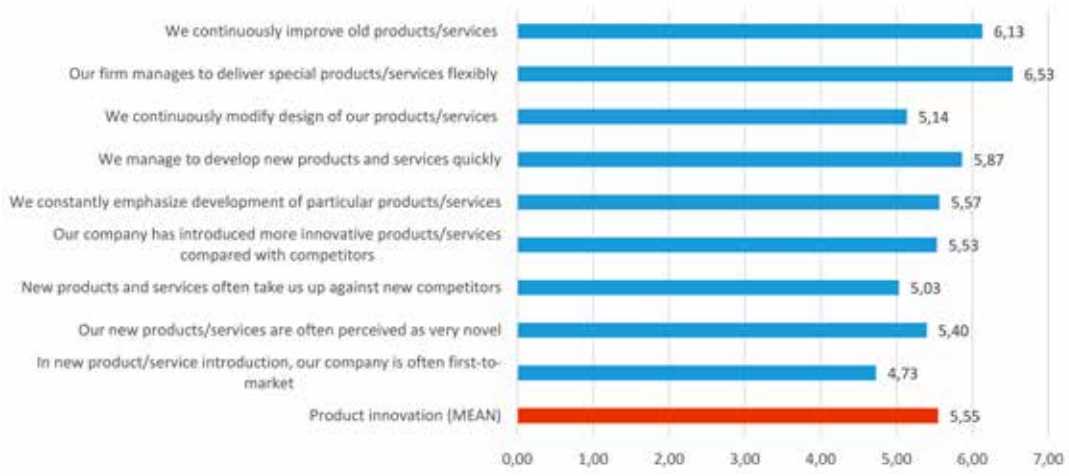


Figure 83: Montenegro: Product Innovation - statements

We may see that, on average, respondents gave high ratings (>5,00 out of 7,00) to all statements related to the product innovation, except for the company being often first-to-market, which got 4.73 (somewhat decreasing the first mover advantage). In total, product innovation is rated very high, with the mean being 5.55 out of 7.

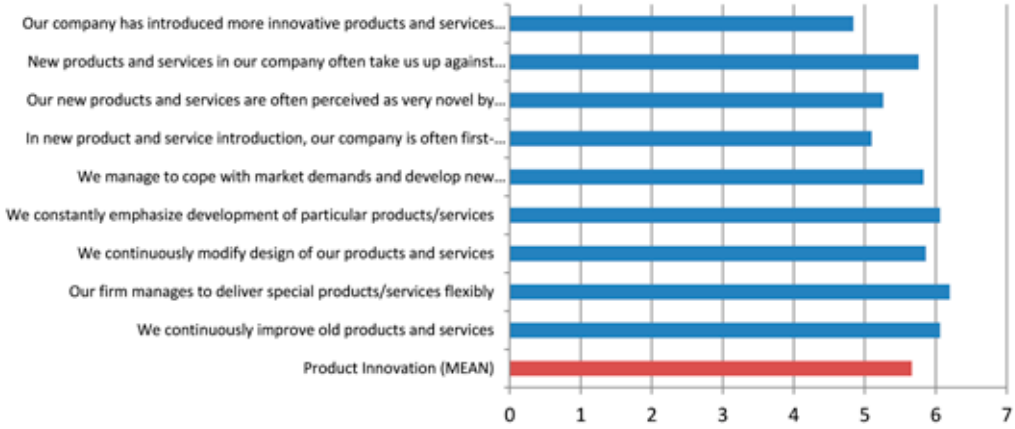


Figure 84: Albania: Product Innovation - statements

The respondents answered these issues by selecting the importance of each statement on a scale from one to seven. It can be observed that all the statements have a mean value of more 5.67, which means that all the innovative firms agree with the statements. The three statements with the highest mean value are: 1. our firm manages to deliver special products/services flexibly according to customers' orders. (mean value 6.2); 2. we continuously improve old products and services and raise quality of new products (mean value 6.06). 3. We constantly emphasize development of particular products and services (6.02).

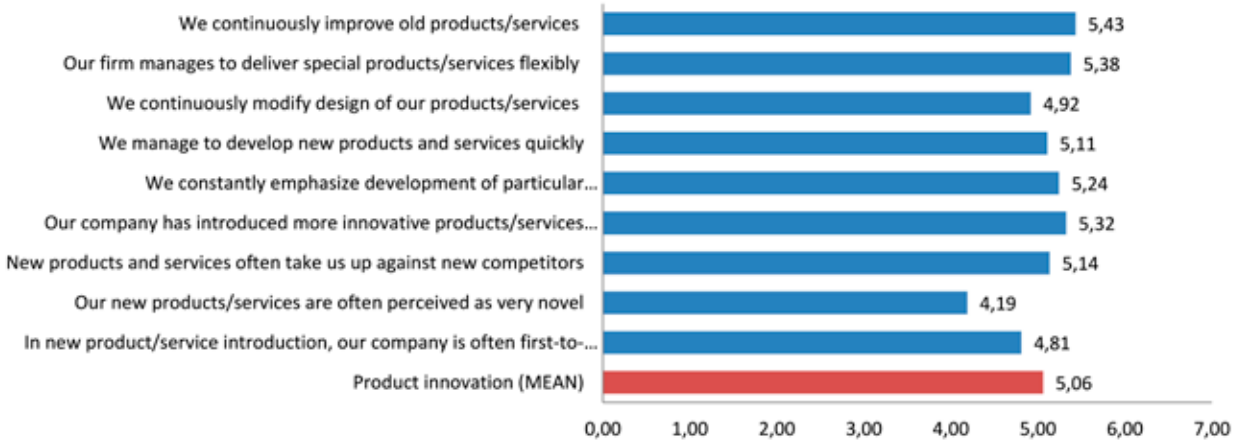


Figure 85: Greece: Product Innovation - statements

Greek firms put the highest ranking on continuous improvement of old products/services and on flexible delivery ofspecial products/services.

3.3. Process Innovation

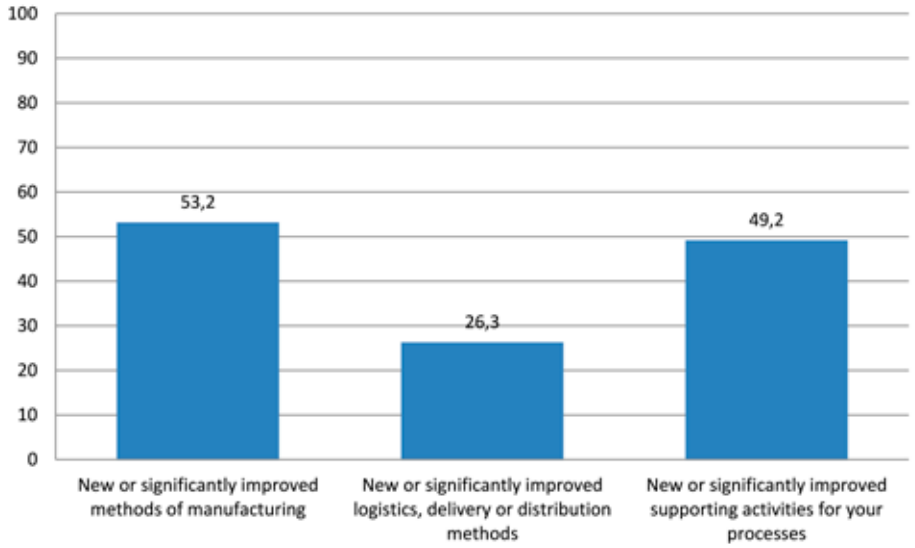


Figure 86: Process Innovation (whole Adriatic Region)

At the overall level, firms from the Adriatic Region most frequently introduce new or significantly improved methods of manufacturing as a form of process innovation (51%). This is followed by introduction of new or significantly improved supporting activities for the processes (49%). Least frequent is the introduction of new or significantly improved logistics, delivery or distribution methods (33%).

Now we will see the situation country by country.

Italy

The companies in our sample were more inclined to introduce significantly improved methods of manufacturing and improved logistics rather than supporting activities for their process. More than a half of companies introduced improved methods in manufacturing and processes while 38% of them improved their logistics and distribution. 12% of the sample improved the supporting activities.

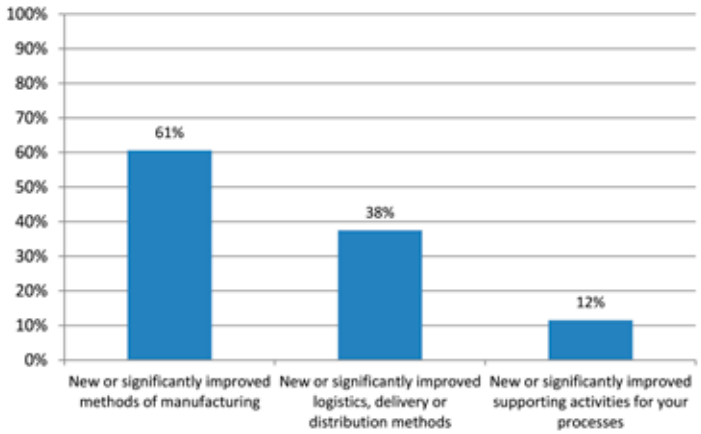


Figure 87: Italy: Process Innovation

Slovenia

The same as at the overall level, Slovenian firms score highest on new or significantly improved methods of manufacturing as a process innovation (63%), followed by new or significantly improved supporting activities (53%), while new or significantly improved logistics, delivery or distribution methods is also the rarest form of process innovation (35%).

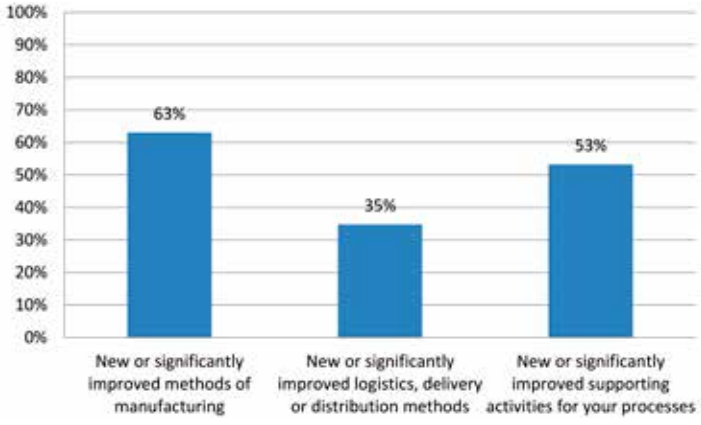


Figure 88: Slovenia: Process Innovation

Croatia

We can see that a significant portion of respondents implemented some kind of process innovation - improved methods of manufacturing (41,38%), logistics and distribution method (27,27%) or improved supporting activities for the processes (49,31%).

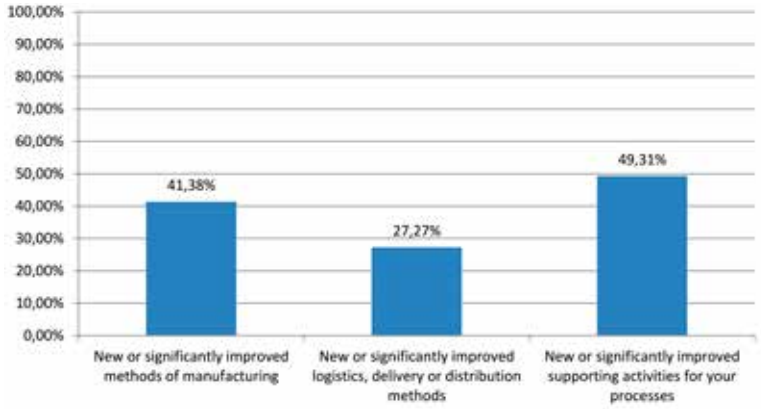


Figure 89: Croatia: Process Innovation

Bosnia and Herzegovina

With respect to the innovation of processes, most companies altered methods of manufacturing/service production (delivery) processes (69%), as well as the supporting activities (67%).

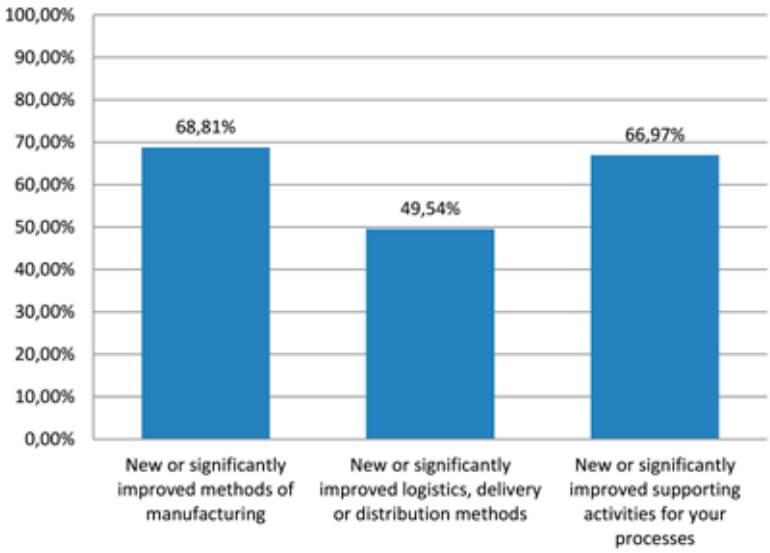


Figure 90: Bosnia and Herzegovina: Process Innovation

Serbia

In contrast to other countries, lowest frequency for Serbian sample firms is reserved for new or significantly improved supporting activities for the processes (below 20%), while the highest frequency is again with the new or significantly improved methods of manufacturing (just above 50%).

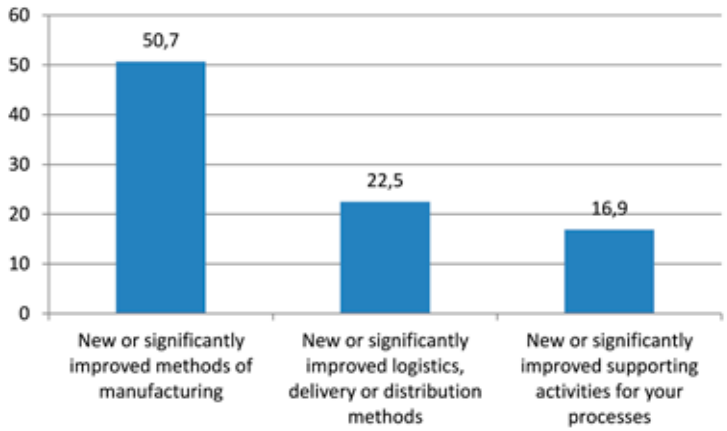


Figure 91: Serbia: Process Innovation

Montenegro

When it comes to the innovation of processes, similarly to the product innovation ratios, between 23% and 30% of the companies altered methods of manufacturing/service production (delivery) processes, as well as the supporting activities.

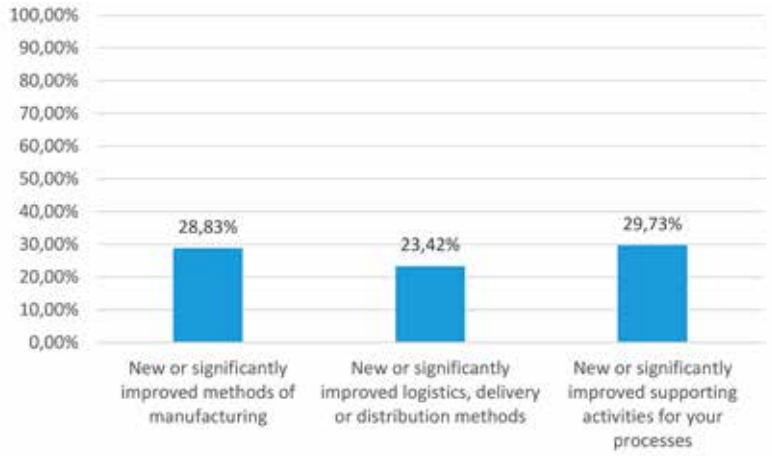


Figure 92: Montenegro: Process Innovation

Albania

It is observed that out of 106 companies 64 companies (58%) introduced a new or significantly improved method of manufacturing. 44 companies (42%) did not introduce any new method of manufacturing. Out of 64 companies which introduced new methods in manufacturing 27 companies belong to the service sector, 28 to the manufacturing sector and only 5 to the primary products sector.

One may observe that 53 out of 106 companies (50%) admitted to have introduced new or significantly improved logistics, delivery or distribution methods. A slightly lower number of companies admitted not to have introduced any new logistics, delivery or distribution methods (48 companies or 45%).

Out of 106 companies, 59 (56%) claimed to have introduced new or significantly improved supporting activities for their processes, such as maintenance systems or operations for purchasing, accounting or computing. 43 out of them (41%) admitted not to have introduced any maintenance systems or operations for purchasing, accounting or computing.

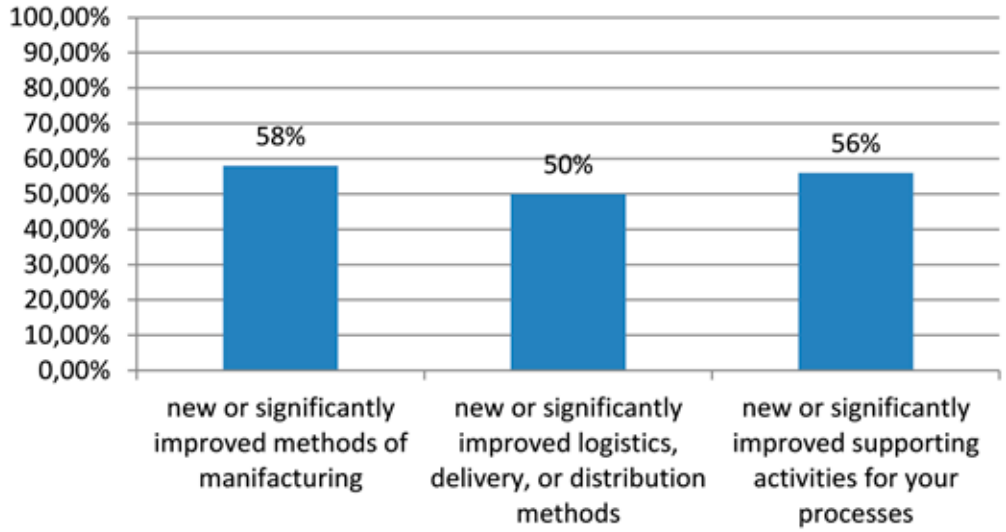


Figure 93: Albania: Process Innovation

Greece

The figure above shows that that in 2011, 2012 and 2013 majority of the firms (58.1%) introduced new or significantly improved methods of manufacturing or producing goods or services in accordance with the high rate of product innovation mentioned earlier.

However, the majority of the firms (57.4%) did not introduce new or significantly improved logistics, delivery or distribution methods for their inputs, goods or services, and the vast majority (65.9%) did not introduce new or significantly improved supporting activities for their processes, such as maintenance systems or operations for purchasing, accounting, or computing.

The results show that innovative firms in Greece focus on the production of new products and services, but they fail to improve their logistics and any supporting activities of the manufacturing process.

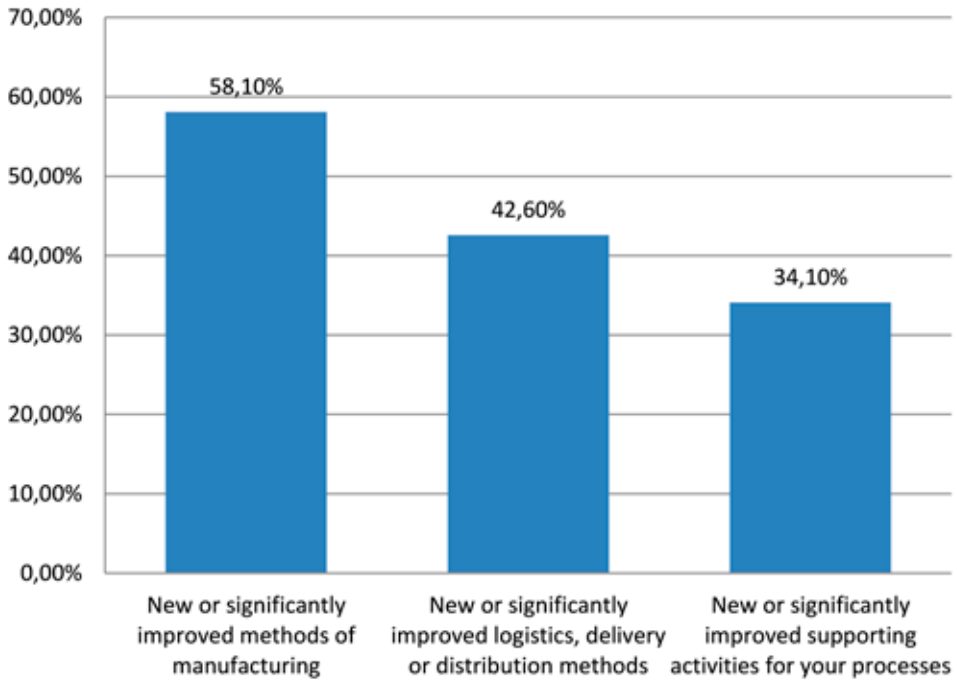


Figure 94: Greece: Process Innovation

3.4. Factors hampering innovation

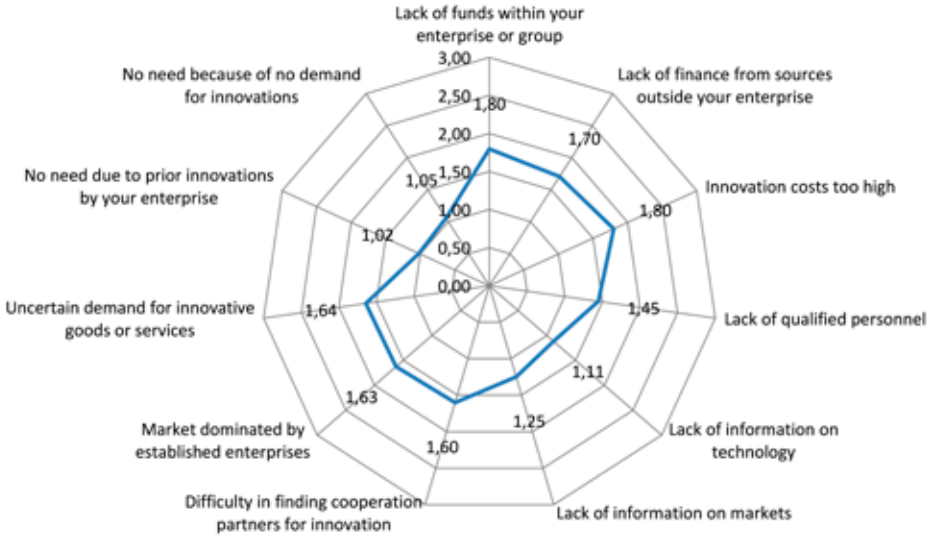
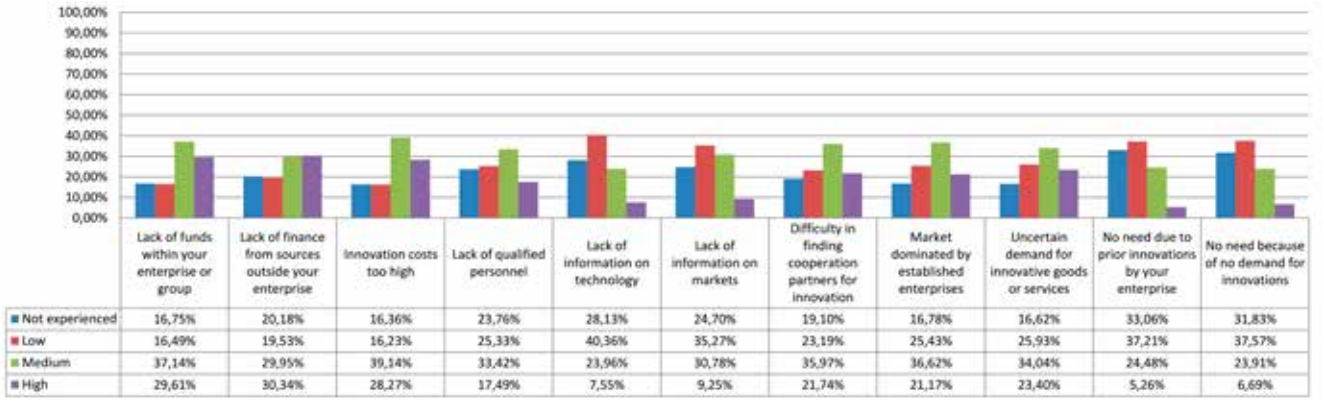


Figure 95: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities?" (Averages for whole Adriatic Region)

At the overall level, firms in the Adriatic Region report that the most significant hamper of innovation is that its costs are too high. It is followed by the statements that here are lack of funds within the enterprise or group and that there is an uncertain demand for innovative goods or services.



	Lack of funds within your enterprise or group	Lack of finance from sources outside your enterprise	Innovation costs too high	Lack of qualified personnel	Lack of information on technology	Lack of information on markets	Difficulty in finding cooperation partners for innovation	Market dominated by established enterprises	Uncertain demand for innovative goods or services	No need due to prior innovations by your enterprise	No need because of no demand for innovations
Not experienced	16,75%	20,18%	16,36%	23,76%	28,13%	24,70%	19,10%	16,78%	16,62%	33,06%	31,83%
Low	16,49%	19,53%	16,23%	25,33%	40,36%	35,27%	23,19%	25,43%	25,93%	37,21%	37,57%
Medium	37,14%	29,95%	39,14%	33,42%	23,96%	30,78%	35,97%	36,62%	34,04%	24,48%	23,91%
High	29,61%	30,34%	28,27%	17,49%	7,55%	9,25%	21,74%	21,17%	23,40%	5,26%	6,69%

Figure 96: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities?" (Relative overview for the whole Adriatic Region)

When it comes to the relative level of importance, we see that the highest percentage is reserved for the finance-related innovation hampers, followed by market characteristics and lack of qualified personnel.

Italy

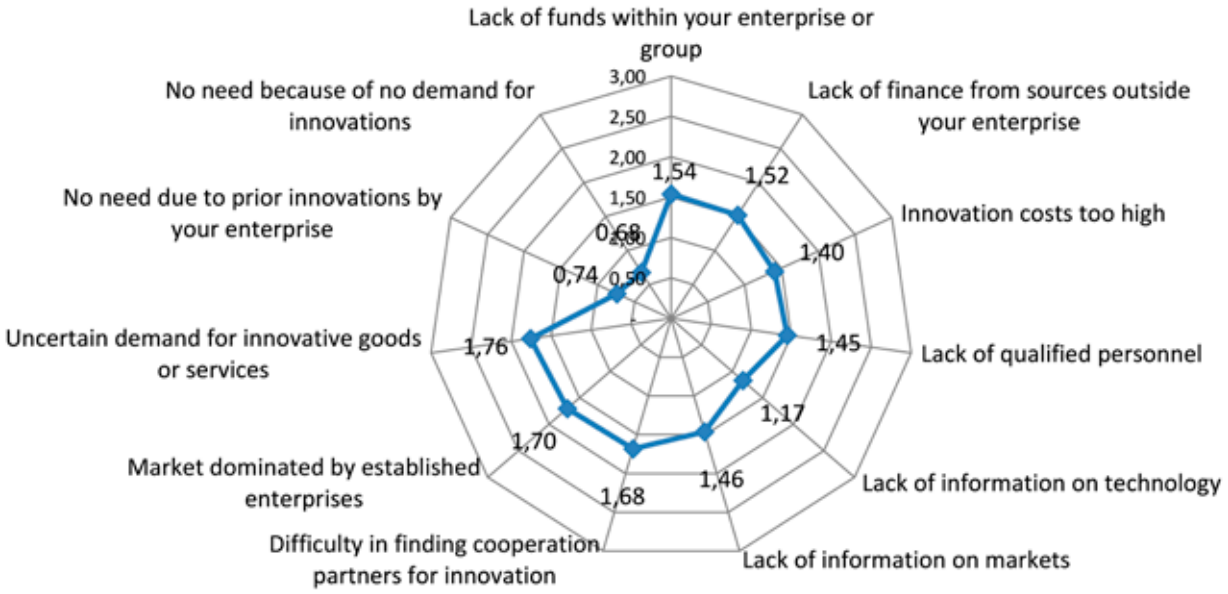


Figure 97: Italy: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities

Among the factors hampering firms' innovativeness, the main limitation resides in uncertain demand for innovative products and in markets dominated by incumbent innovators. A second group of critical factors is the difficulty in finding cooperation partners for innovation. These two factors are quite connected and recall the idea that innovation is not a "stand-alone" process: firms tend not to innovate if they cannot get help through cooperation or if they do not have enough strength to face the top firms in the markets.

Also, costs for innovation and the lack of funds are perceived as important factors hampering innovation, thus implying that the financial liquidity (and a temporary lack thereof) plays an important role in firms' decision whether to innovate or not. Other factors, such as the lack of qualified personnel, show lower values. However, their crucial role is quite close to the previous factors. Prior innovation internally developed and the lack of demand for innovative products are not considered as real obstacles for firm innovativeness.

Croatia

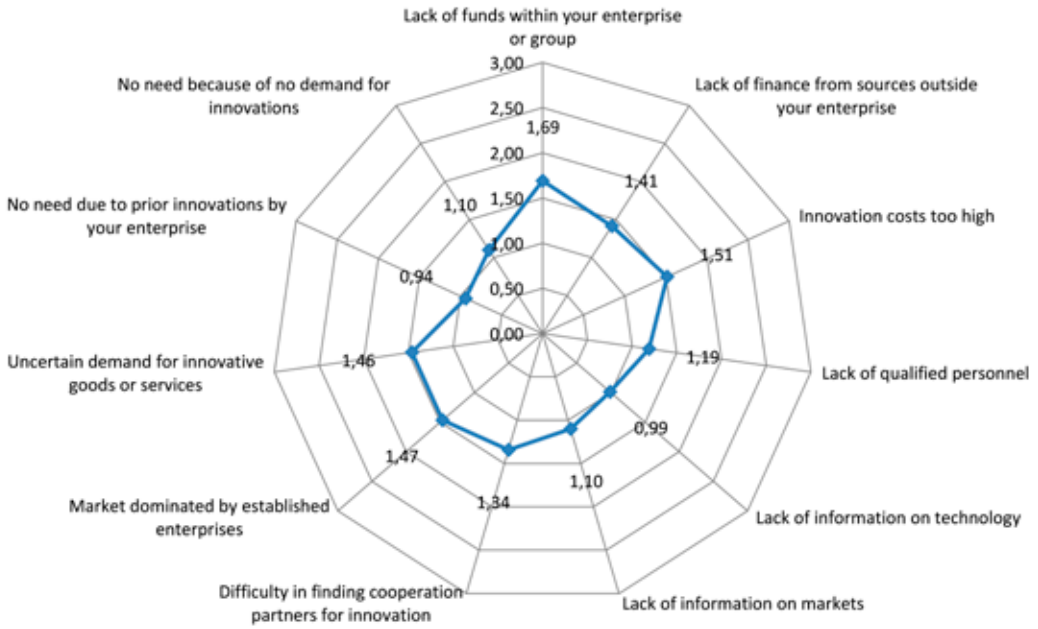


Figure 98: Croatia: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities"

The biggest factor that prevents companies from innovating is the lack of funds, followed by innovation costs, fear of established competition and the uncertain demand for innovative goods or services.

Bosnia and Herzegovina

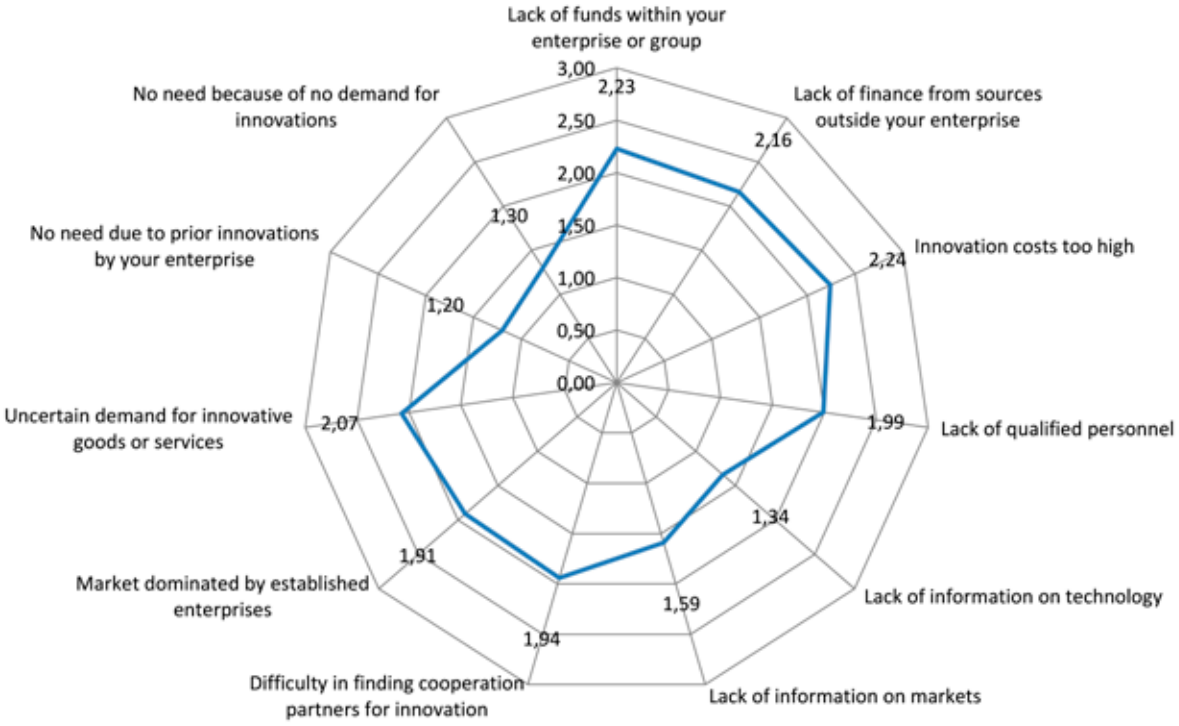


Figure 99: Bosnia and Herzegovina: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities"

High costs of innovation (2,24) and lack of funds within the enterprise/group (2,23) emerged as the main limitations of innovation. They are followed by uncertain demand for innovative goods/services (2,07) and lack of finance from sources outside the enterprise (2,16).

We see that firms from the sample do not believe that there is no need for innovation as those two statements got the lowest rating as limitation.

Serbia

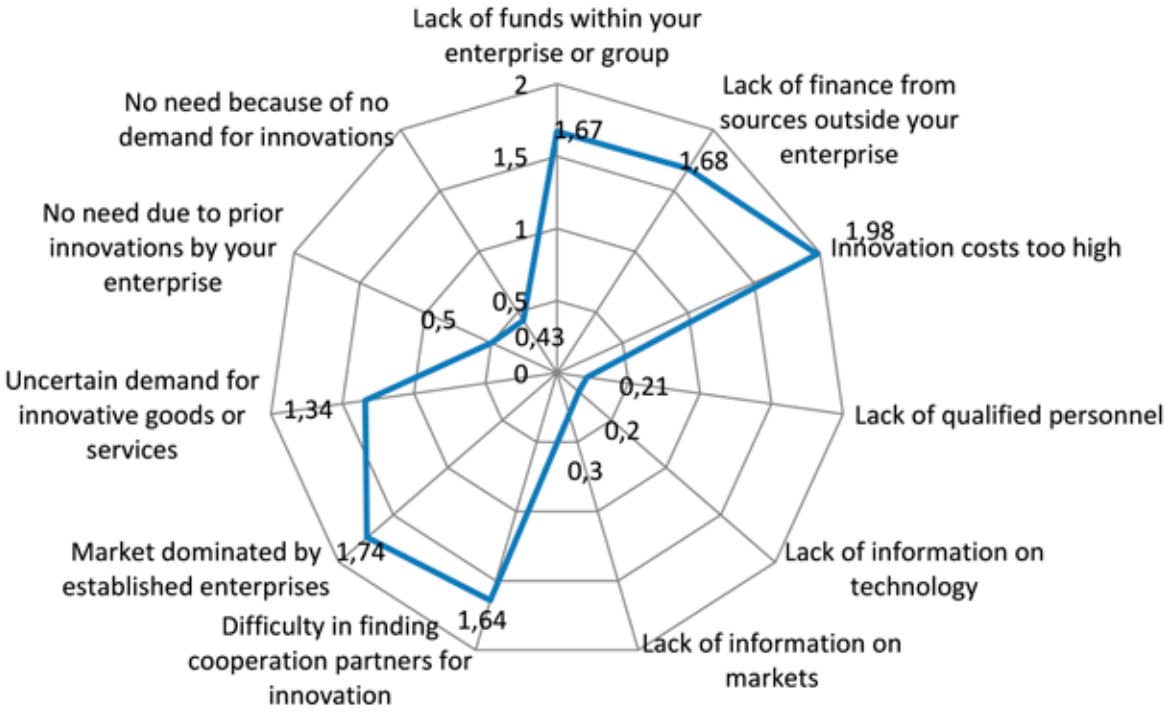


Figure 100: Serbia: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities"

When we analyze what are the main reasons for lack of innovations companies marked four basic items: high cost of innovation (1,98), market is already divided between established enterprises (1,74), lack of funding within and outside the company (consecutive ratings 1,67 and 1,68).

On the other hand the companies considered that we have enough qualified personnel and that they are well acquainted with new technologies and market (consecutive ratings 0,21; 0,2 and 0,3).

Montenegro

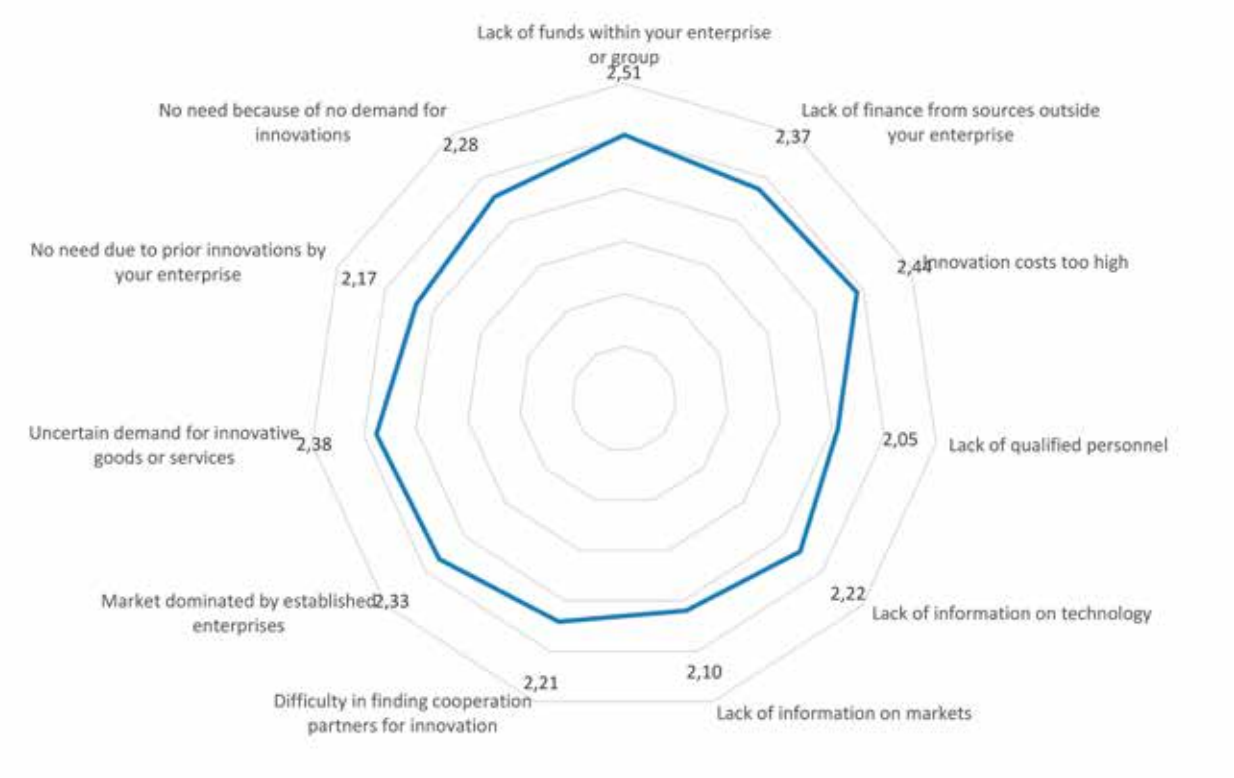


Figure 101: Montenegro: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities"

The most important factor that hampered innovation in our sample companies was lack of funds, which was also singled out as the main factor deemed responsible in a survey of companies that was done in 2012 by a team of researchers from the Faculty of Economics.

The other two main factors are uncertain demand for goods and service and a lack of financial sources from outside the enterprise, which is directly tied to the criticism that can often be heard in Montenegro that banks do not support SMEs in a satisfactory manner. All of the factors were rated at a rate of 2 (moderate) or higher, which indicates that Montenegro still has a long way to go in order to improve the innovation environment in the country.

Albania

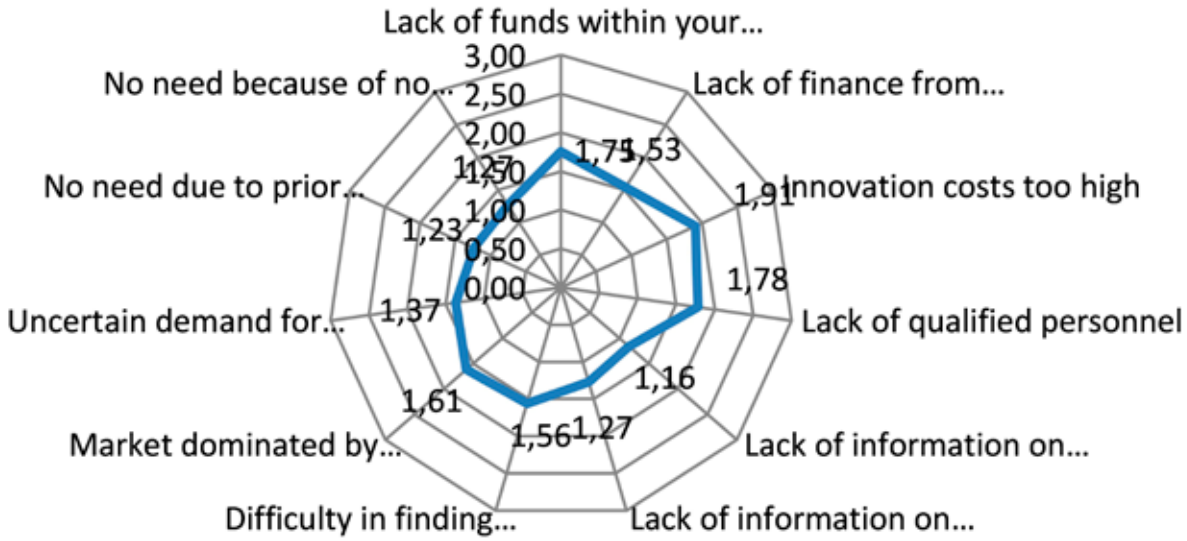


Figure 102: Albania: "During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities"

Reffering to the sampling procedure for this research, selected companies were extracted based on a list of innovative companies or with potential to innovate. Selected companies identified the rate of importance different factors pose in hampering their innovation process. In the figure above, is calculated the mean value of the importance rate (1-Low, 2-Medium, 3-High) for selected factors.

As it can be noticed, none of the factors, in average level, is perceived as of low importance. Two out of three factors of major importance in preventing companies to innovate in the Albanian sample, fall in the costs factors category. High costs of innovation has the higest importance, followed by lack of qualified personnel and lack of funds within the enterprise or group. Market dominated by established enterprises is perceived as a market related obstacle. Companies percieveing higher preventions to innovate, operate in manufacturing sector.

3.5. R&D

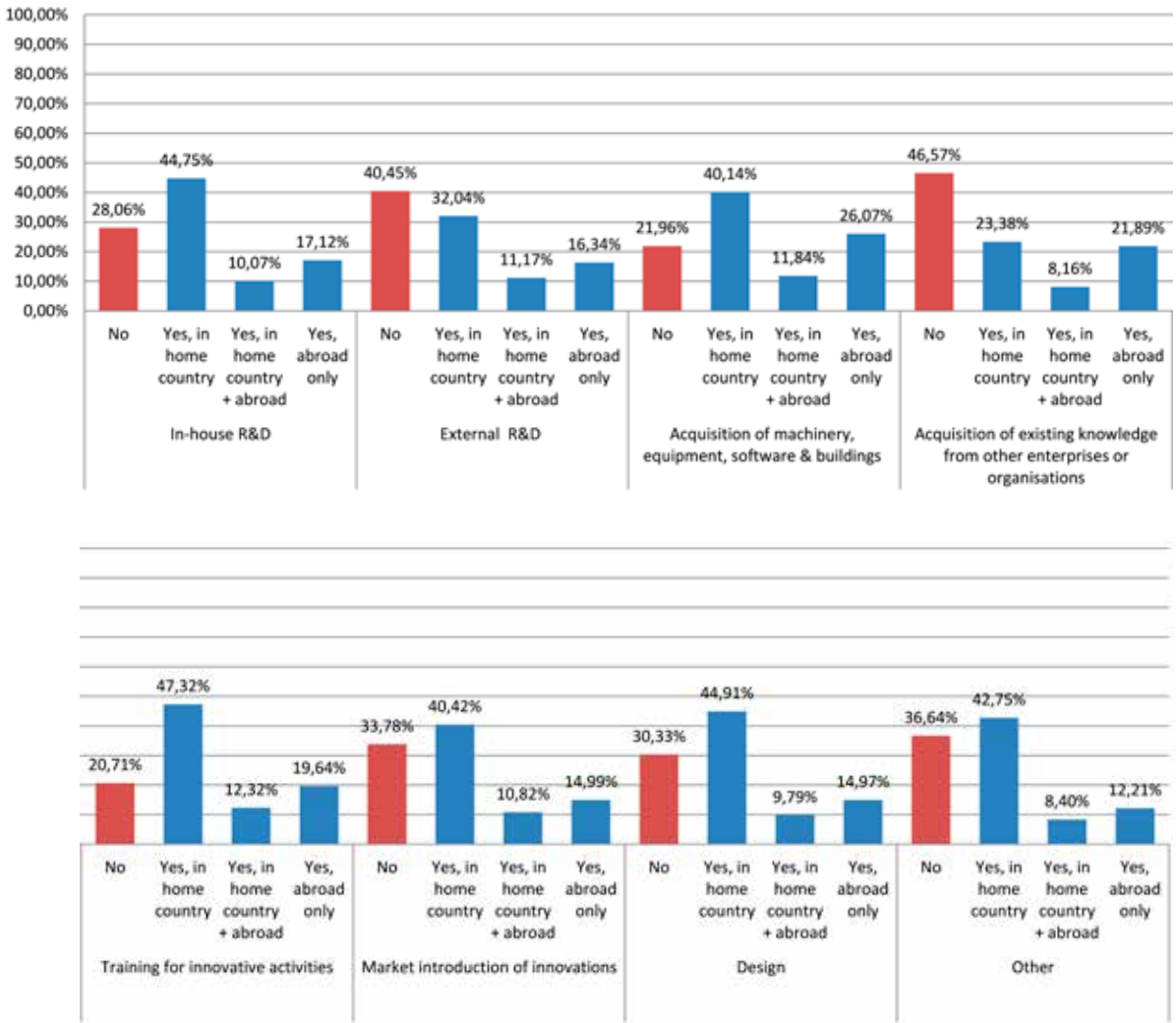


Figure 103: "During the three years 2011, 2012 and 2013, did your enterprise engage in the following innovation activities?" (Whole Adriatic Region)

When it comes to the activities related to the innovation, at the level of the Adriatic Region, having the in-house R&D in the home country (44,75%) is more popular than having the external R&D in the home country (32,04%). When observing the innovation activities, firms in the Adriatic Region have the highest engagement in training for innovative activities in their home countries (47,32%), followed by design (44,91%) and other innovation related activities in the home countries. It could be noted that there is a low level of innovative activities that are being pursued abroad, and that in the relative sense, firms prefer having such activities either in their home country either abroad only, as the combination has the lowest score for all activities. Activity that has the lowest presence for firms in the sample is the acquisition of existing knowledge from other enterprises or organizations (46,57%).

Italy

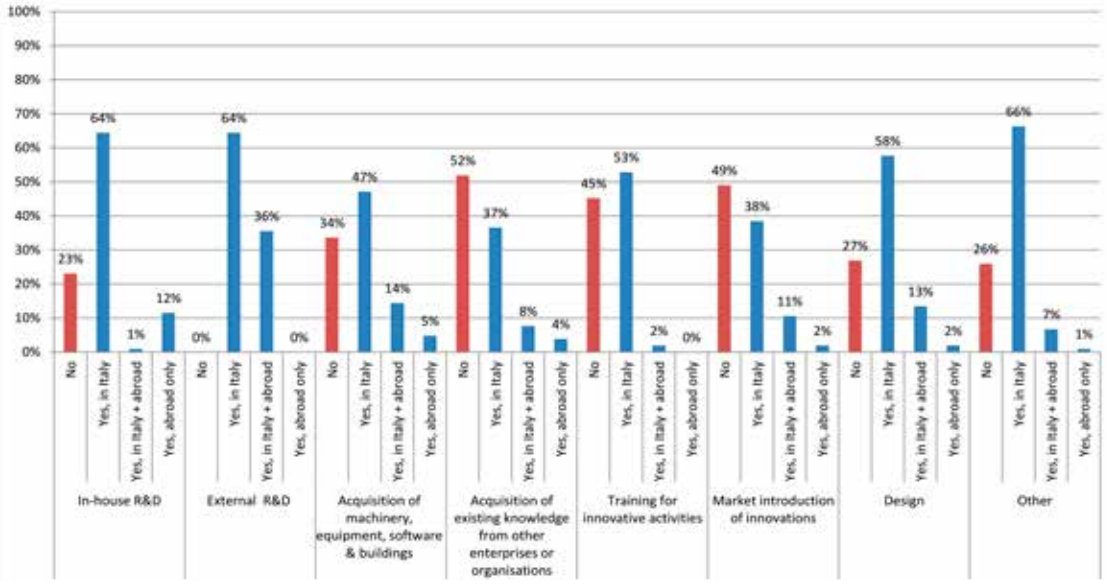


Figure 104: Italy: "During the three years 2011, 2012 and 2013, did your enterprise engage in the following innovation activities?"

In line with the expectations, in-house R&D is the most important and used innovation activity performed by respondents. However, external R&D seems to be quite important for the absorption of technology and knowledge acquired from outside the firm.

Other forms of external acquisition of knowledge are also very much used, such as acquisition of embodied technology, and training for innovative activities. The activities that seem not to be very common are the acquisition of existing knowledge, design, market introduction of innovations, and other activities.

In geographical terms, all innovation activities are mainly undertaken within the national borders. The only activities that are substantially undertaken abroad – although always for less than half of firms – are the acquisition of technology (15%), and market introduction for innovation (13%).

Croatia

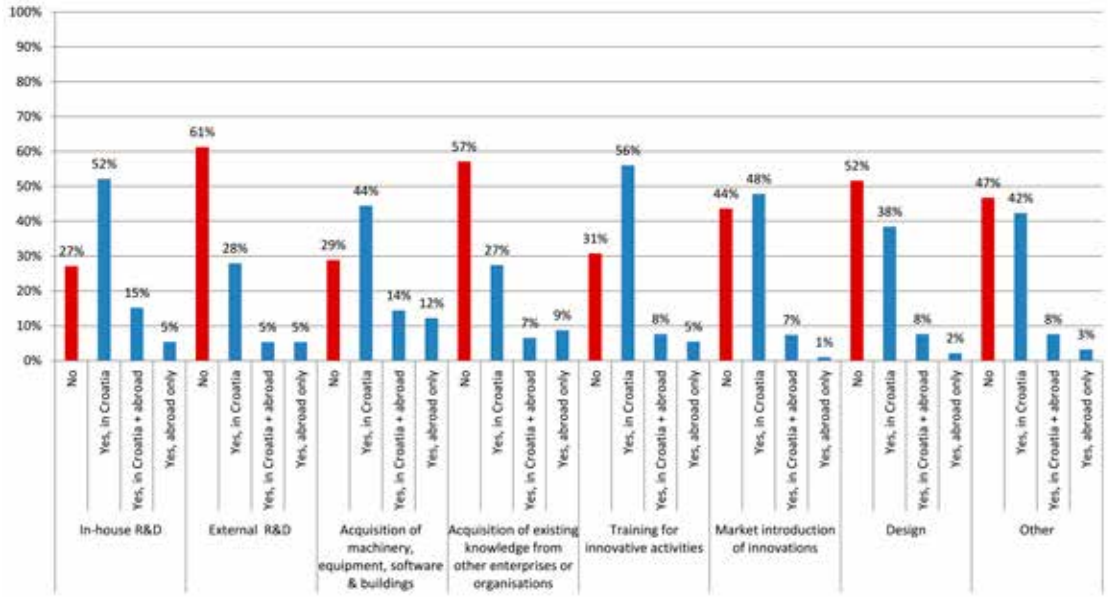


Figure 105: Croatia: "During the three years 2011, 2012 and 2013, did your enterprise engage in the following innovation activities?"

Firms in the Croatian sample reserve their actions mostly for the in-house R&D in the home country (52%), comparing to the external R&D (38% in total, at home, as well as the combination with the abroad).

Highest score for the innovation related activity is again for the training related activities in the home country (56%) followed by market introduction of innovation in the home country (48%).

Activity that has the lowest presence for firms in the sample is the acquisition of existing knowledge from other enterprises or organizations (57%).

Bosnia and Herzegovina

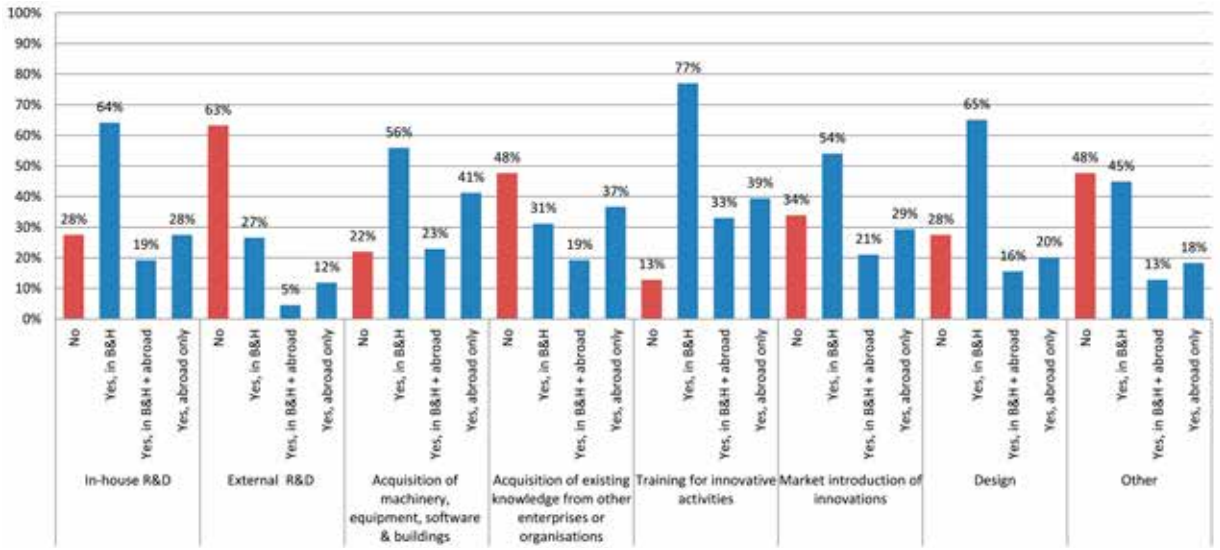


Figure 106: Bosnia and Herzegovina: "During the three years 2011, 2012 and 2013, did your enterprise engage in the following innovation activities?"

Firms in the B&H sample reserve their actions mostly for the in-house R&D in the home country (64%), comparing to the external R&D (44% in total, at home, as well as the combination with the abroad).

Highest score for the innovation related activity is again for the training related activities in the home country (77%) followed by design related activities in the home country (65%).

Activities that have the lowest presence for firms in the sample are the acquisition of existing knowledge from other enterprises or organizations and other innovation related activities (48% respectively).

Albania

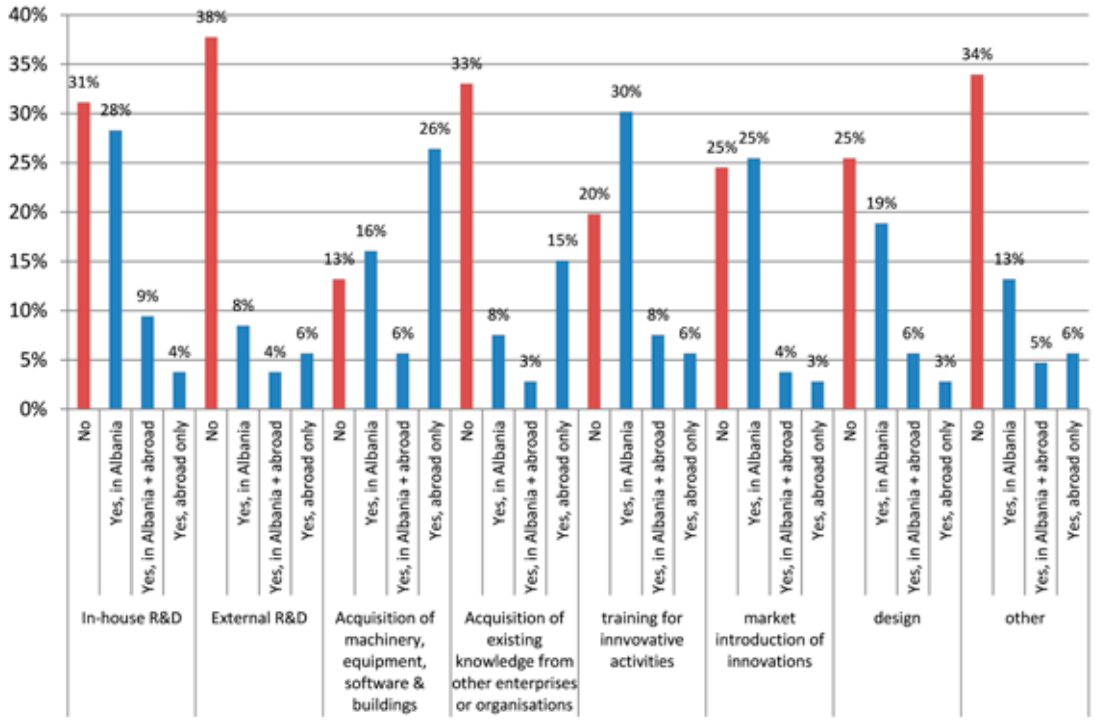


Figure 107: Albania: "During the three years 2011, 2012 and 2013, did your enterprise engage in the following innovation activities?"

Innovation activities where selected companies in Albania were engaged, are shown in the figure above. As it can be noticed, training for innovative activities, is the activity with the highest engagement of 30% of selected companies. Acquisition of machinery, equipment, software & buildings is another innovation activity of relative high involvement but is mainly coming from abroad (for 26% of the companies in the sample), while market introduction of innovations (for 25% of the companies) is developed and offered inhouse.

Design as well, if existing as an innovative activity, is mostly developed inhouse. External R&D, in house R&D, acquisition of existing knowledge from other enterprises or organisations and design, are the activities for which the responding companies declared to be mostly not engaged.

Now we were interested at the level of the spending on innovation activities.

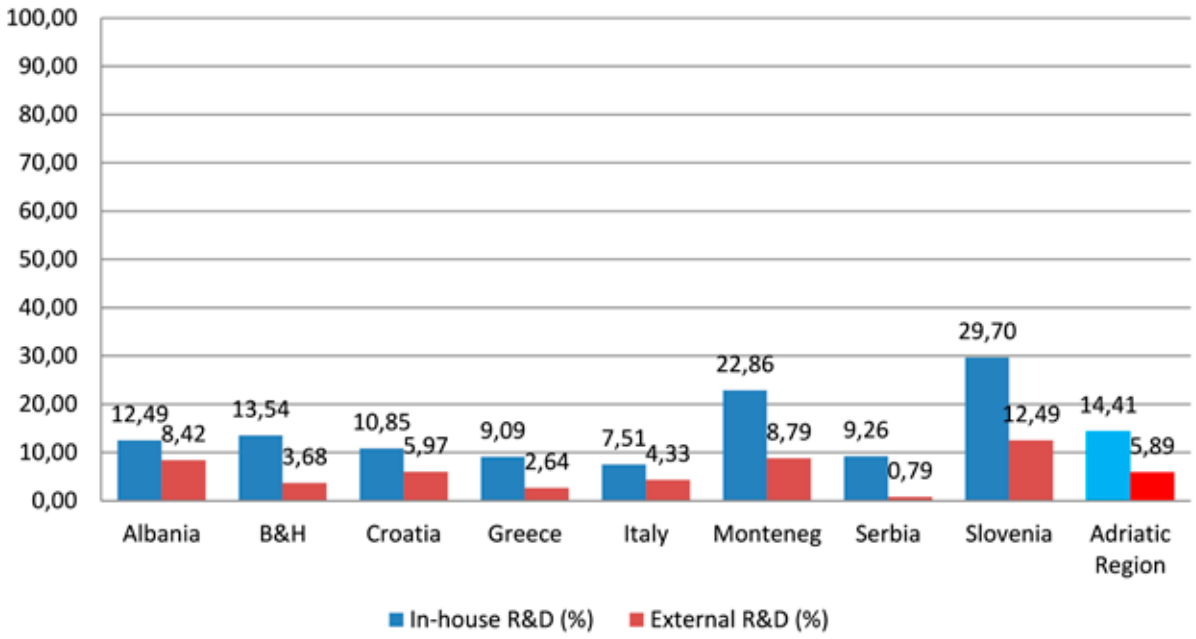


Figure 108: "How much did your enterprise spend on each of the following innovation activities in 2013 only – INHOUSE R&D/EXTERNAL R&D?" (Whole Region and Country by Country)

Spending on in-house R&D is generally higher for all countries than spending on external R&D. At the level of the Adriatic Region, in-house R&D spending is 14,30% of the turnover, while external R&D spending is 5,73% o f the turnover.

Italy

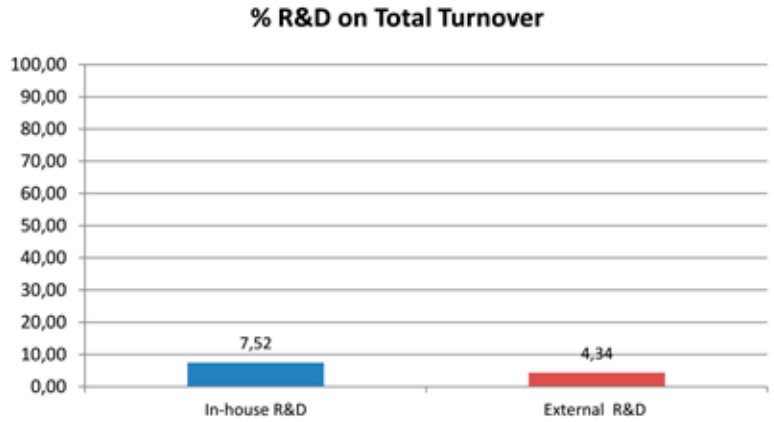


Figure 109: Italy: "How much did your enterprise spend on each of the following innovation activities in 2013 only – IN-HOUSE/EXTERNAL R&D?"

In terms of expenditures, R&D activities required over 10% of total turnover. The main category of R&D expenditures resides in in-house R&D, which represents more than 7% of total turnover, while external R&D represent less than 5%.

Croatia

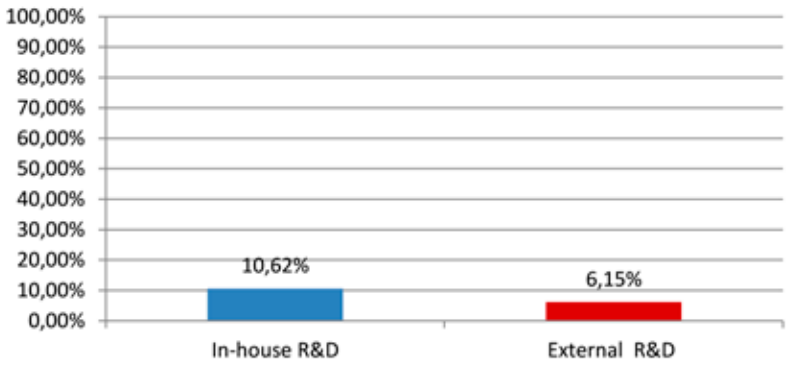


Figure 110: Croatia: "How much did your enterprise spend on each of the following innovation activities in 2013 only – IN-HOUSE/EXTERNAL R&D?"

The data shown above refer to respondents that introduced product or process innovation and are expressed as a percentage of turnover, in-house R&D is at the level of 10,62% of the turnover, while external R&D is lower, 6,15% of the turnover.

Bosnia and Herzegovina

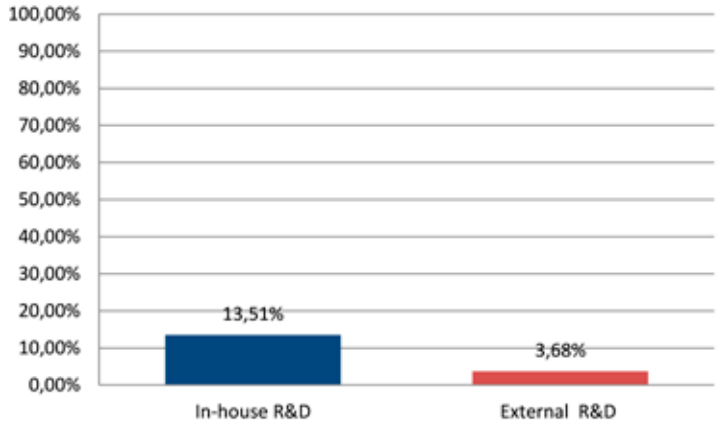


Figure 111: Bosnia and Herzegovina: "How much did your enterprise spend on each of the following innovation activities in 2013 only – IN-HOUSE/ EXTERNAL R&D?"

If R&D spending is presented as a percentage of turnover, firms in B&H sample spend roughly around 17% of their revenues on innovation. Majority is reserved for in-house research and development (13,51%), while a really low amount of spending goes to the external R&D services (3,68%).

Serbia

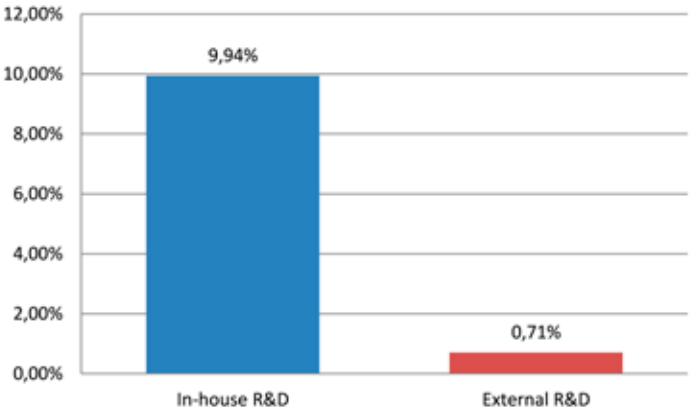


Figure 112: Serbia: "How much did your enterprise spend on each of the following innovation activities in 2013 only – IN-HOUSE/EXTERNAL R&D?"

Analyzing how much of turnover companies spent for R&D we can see that sampled companies sped very low percentage of turnover, only around 10%. Majority is reserved for in-house research and development (9,9%), while really low amount of spending goes to the external R&D services (0,71%).

Montenegro

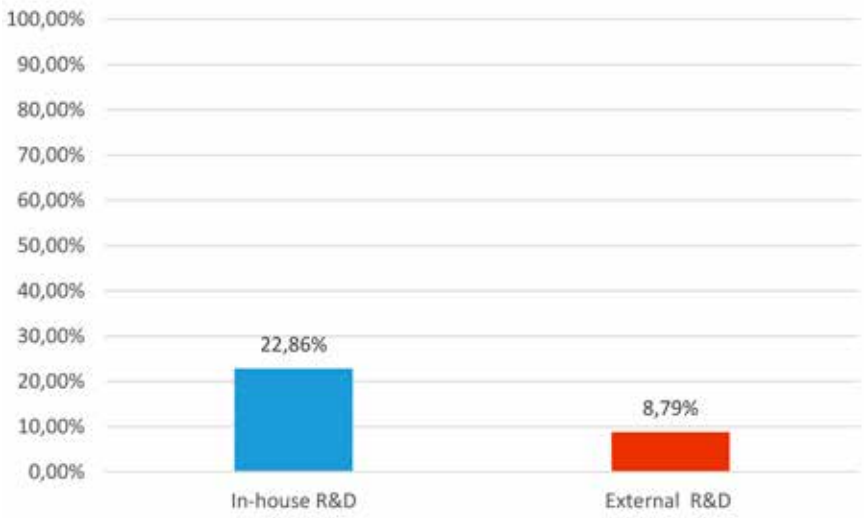


Figure 113: Montenegro: "How much did your enterprise spend on each of the following innovation activities in 2013 only – IN-HOUSE/EXTERNAL R&D?"

If R&D spending is presented as a percentage of turnover, innovative companies in Montenegro spend about 30% of their turnover on innovation (70% of that is in-house R&D). One has to reiterate that this figure is an average only for the companies that actually innovated in the observed period, which is fewer than 30% of all companies in the country.

Albania

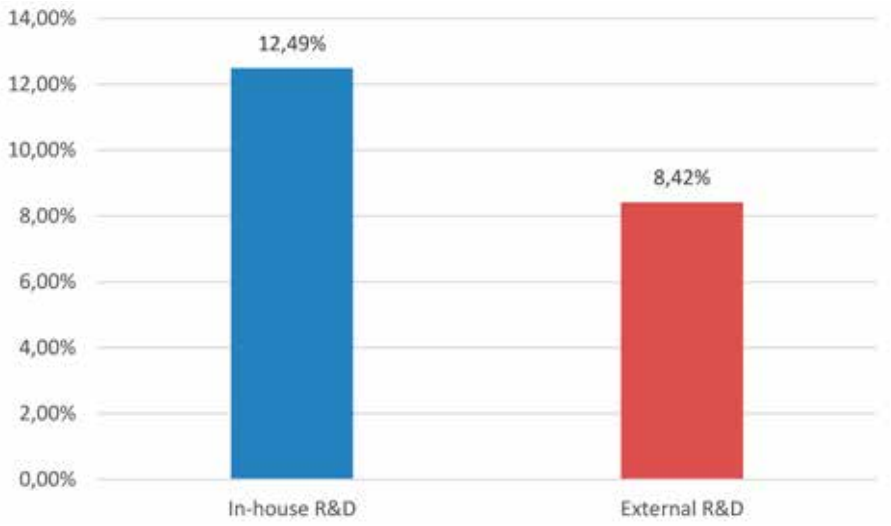


Figure 114: Albania: "How much did your enterprise spend on each of the following innovation activities in 2013 only – IN-HOUSE/EXTERNAL R&D?"

R&D spending as a percentage of turnover is very low for the selected companies in Albania and is higher for inhouse R&D. Nevertheles, Albanian businesses were rather reluctant to answer this question, for two main reasons.

First, the required data was related to their turnover, which is a very sensitive issue in a country with a high rate of informal activities.

Secondly, even those who were willing to answer found serious difficulties with accurate calculations, because of the lack of proper accounting tools enabling the discrimination of R&D expenses.

Thus, the result of 11% for in-house R&D in 2013 should be considered with moderate confidence; however it is very valuable as the first estimation ever in the country and might serve as reference for next surveys. Furthermore, the result of 6% for external R&D in 2013 might be explained by the financial inability of most Albanian companies to subcontract external subjects for R&D purposes.

Greece

The mean value of In-house R&D in 2013, which is 73.946,91 EUR. This means that, in 2013, the firms spent the average the amount of 73.946,91 EURs for research and development activities undertaken by them. Comparing this amount with the average total turnover in 2013 (33.837.653,85 EUR) the firms spent only 0,21% of their total turnover on in-house R&D, suggesting that more focus needs to be placed on in-house R&D.

The mean value of External R&D in 2013, which is 21.923,09 EUR. This means that, in 2013, the firms spent the average amount of 21.923,09 EUR for research and development activities undertaken by other firms. Comparing this amount with the average total turnover in 2013 (33.837.653,85 EUR), the firms spent only 0.06% of their total turnover on external R&D, suggesting that more focus needs to be placed on external R&D, especially by firms that do not have R&D departments.

We proceed by reporting the level of the received public financial support related to the innovation.

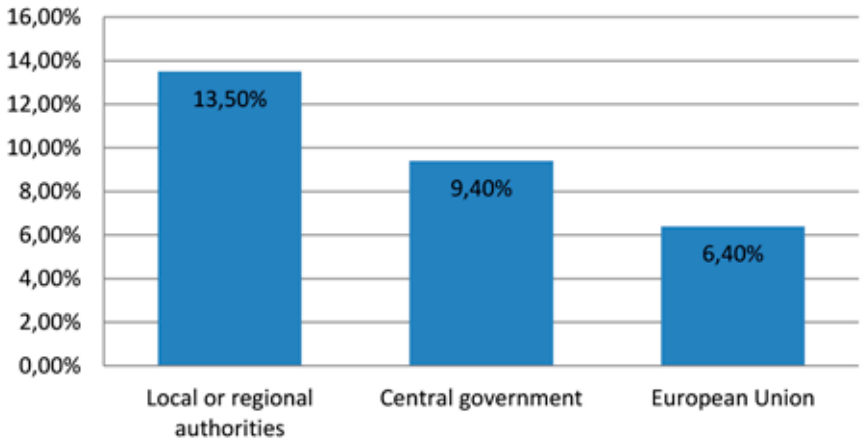


Figure 115: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?" (Whole Adriatic Region)

We may observe that the level of the received support is low for all three options, with highest support being from the local or regional authorities (13,5%), which is followed by the central government support (9,4%). Surprisingly, firms report that they receive the lowest support from the European Union, only 6,4%.

Italy

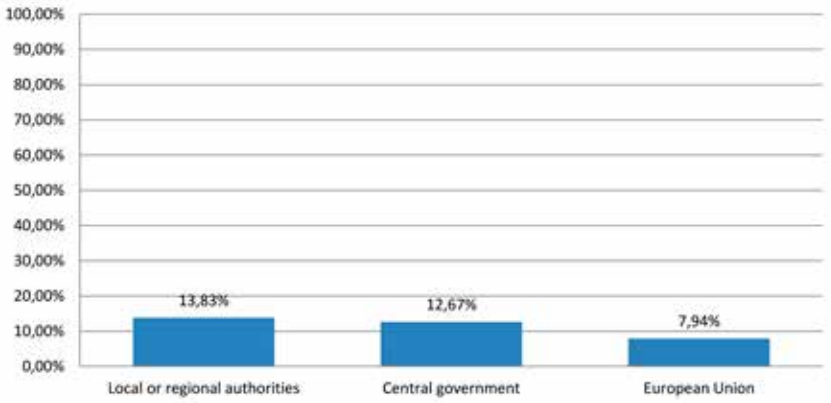


Figure 116: Italy: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?"

As regards the main sources of public financial support, those closer to the firm (namely: local or regional authorities) provided the highest share, while the support received for innovation activities from the central government and the European Union was quite limited.

Croatia

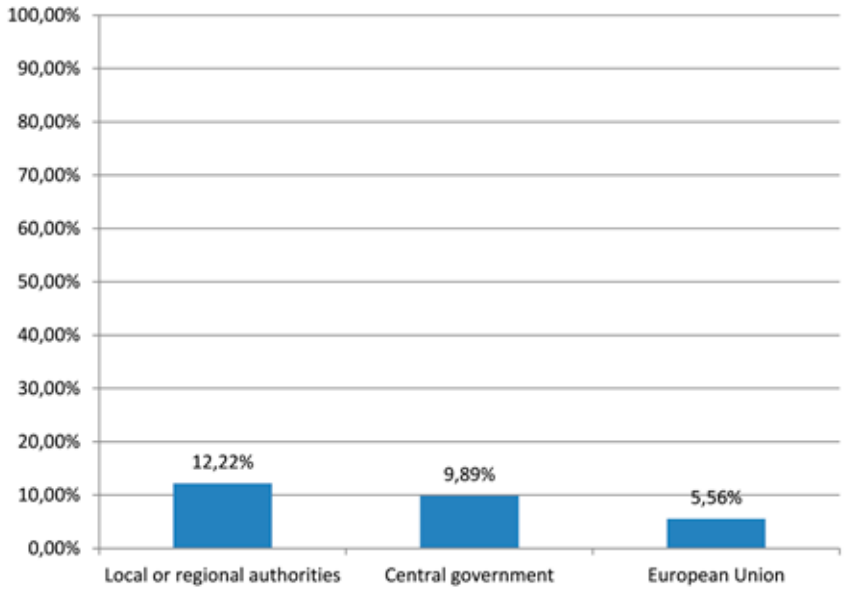


Figure 117: Croatia: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?"

The data shown above refer to respondents that introduced product or process innovation and indicate that the majority of innovating companies did not receive any kind of public financial support for innovative activities.

Bosnia and Herzegovina

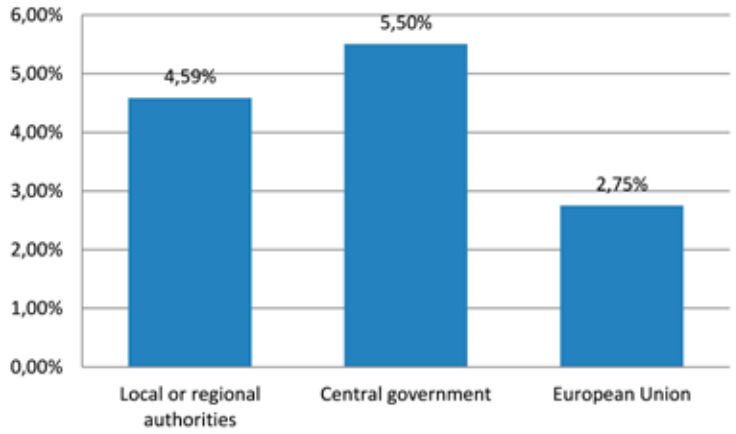


Figure 118: Bosnia and Herzegovina: "During the three years, 2011, 2012 and 2013, did your enterprise receiveany public financial support for innovation activities from the following levels of government?"

Public financial support is worryingly low – and ranges from 6 firms (5,50%) that received governmental support to 3 (2,75%) firms that received support of the EU.

Serbia

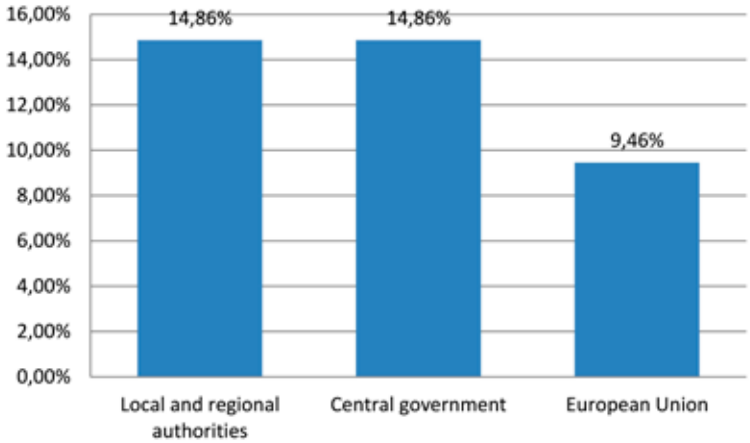


Figure 119: Serbia: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?"

Same numbers of companies are getting financial support from local authorities and central government (14 companies) and nine companies receive the support from European Union.

Montenegro

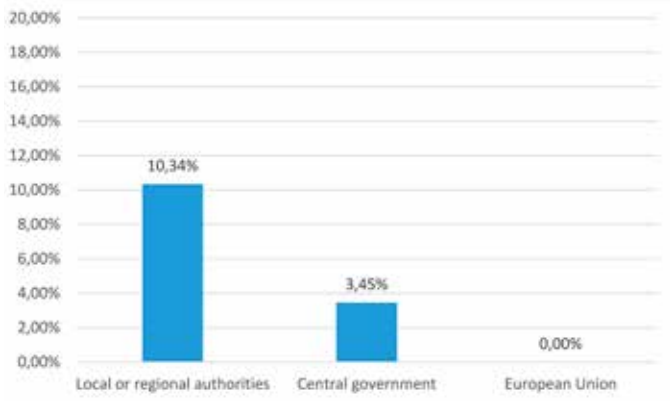


Figure 120: Montenegro: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?"

Public financial support can only be described as woeful. Only 10% of companies received local or regional support, only 1 company received government support while no company received any kind of support from the EU.

Albania

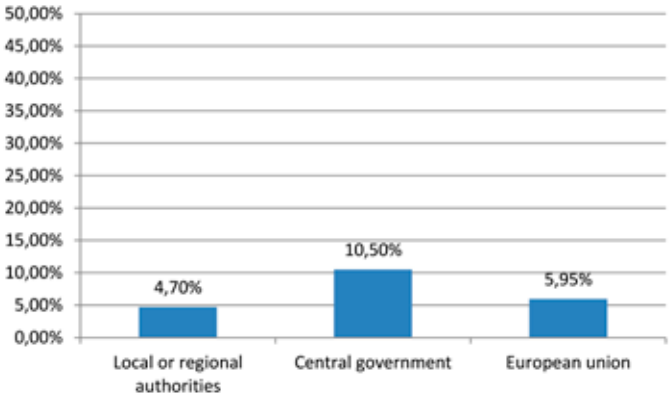


Figure 121: Albania: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?"

The result of 10,5% for central government seems to be justified, since government remains the main funding source for R&D in Albania, as shown by secondary research. The relatively low level of EU funding (5,95%) might be explained with the delayed candidate status for Albania (June 2013) and the lack of capacities of Albanian companies to apply for EU funds, under the stabilization and association agreement. The result for local and regional authorities (4,7%) seems to be rather overestimated, because of the very limited financial possibilities of Albanian Local Government Units (their budget accounts for only 3% of the total state budget).

Greece

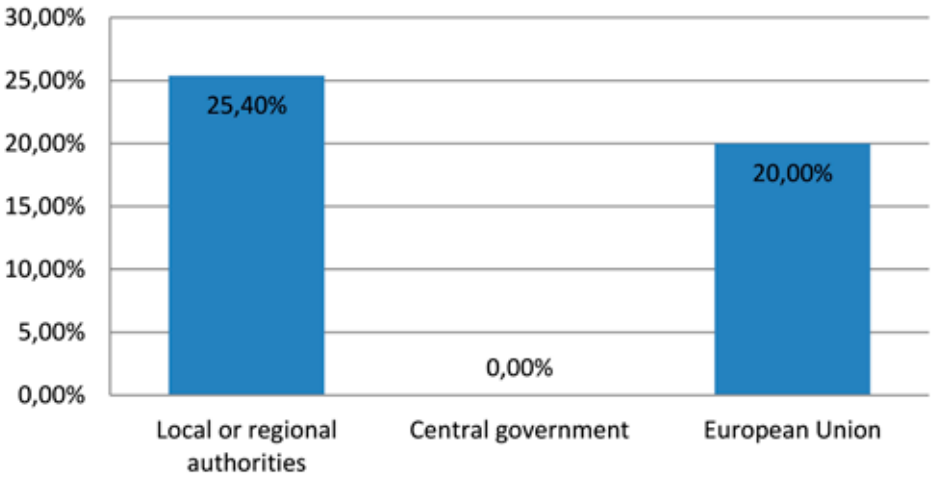


Figure 122: Greece: "During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government?"

Figure above shows that firms that received public financial support from local of regional authorities represent a mean value of 0,31. This accounts for 25,4% of the total number of firms. Moreover, none of the firms received any funding from the central government.

Finally, 20% of the firms, with a mean value of 0,29 received funding from the European Union. The findings suggest that public funding remains low for Greek firms, which partly explain the decreased expenditures on R&D.

3.6. Sources of innovation

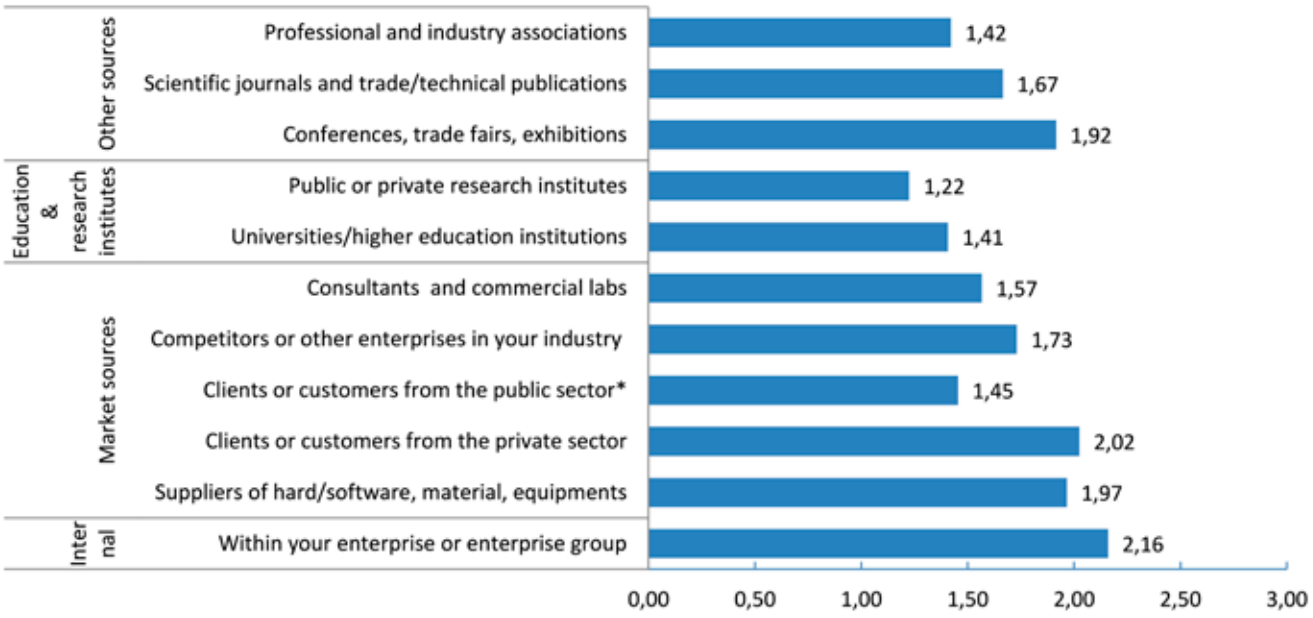


Figure 123: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources? " (whole Adriatic Region)

At the level of the Adriatic Region, we see that the highest ranked source of innovation is the internal one – so everything that is happening within the enterprise or enterprise group.

This is followed by market sources, where two of them are particularly high ranked – clients/customers from the private sector and suppliers. Interestingly, lowest rank is attributed to the public/private research institutions.

Italy

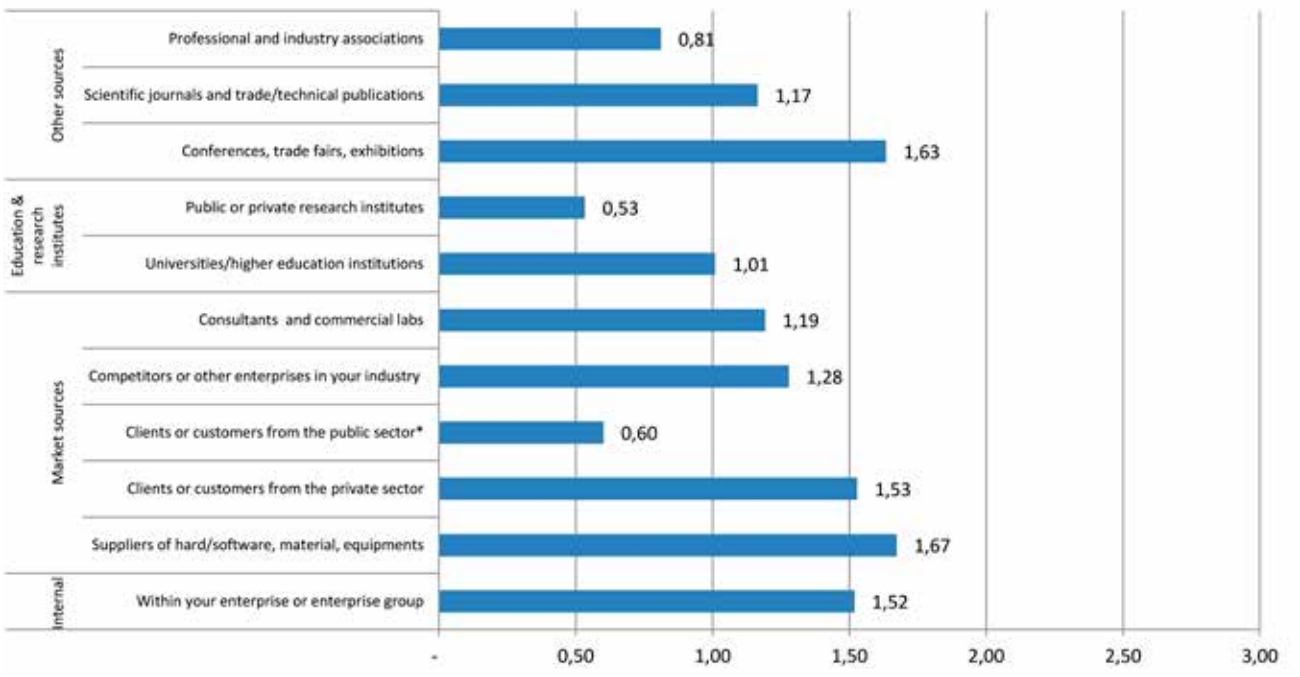


Figure 124: Italy: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?"

Suppliers have been the most importance source of information for the companies in our sample. It is followed by information from trade fairs and exhibitions. Internal sources and another market-related factor, private clients and customers, are also considered as some of the most important sources of information.

An interesting aspect is the fact that sources outside the value chain have been among those of the highest importance for the companies. However, internal sources of information are also considered quite relevant for developing innovations. The relationship with universities and higher education institutions seems underdeveloped in this sample.

Croatia

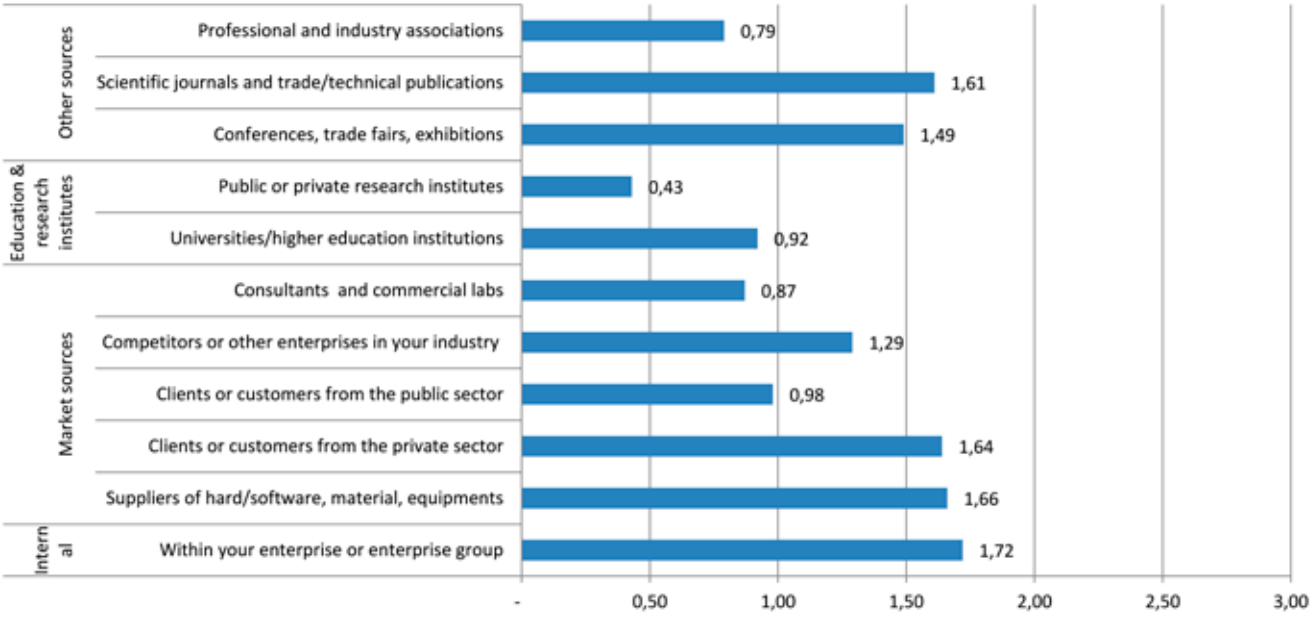


Figure 125: Croatia: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?"

Although the most important sources of innovation are internal, respondents also frequently relied on suppliers, clients from the private sector and other sources, such as scientific and technical publications and conferences and exhibitions.

Bosnia and Herzegovina

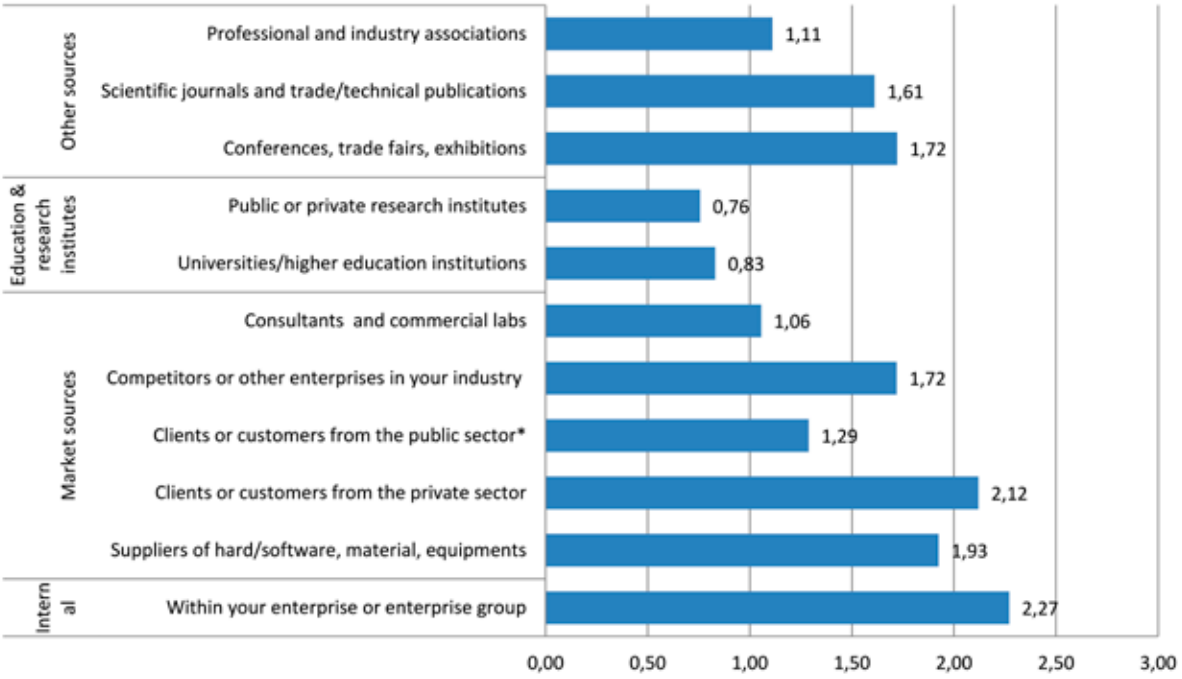


Figure 126: Bosnia and Herzegovina: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?"

The most important sources of information for the sample firms are internal (2,27) followed by selected market and other sources. Education and research institutes as sources of information/innovation are ranked as the least important (0,76 and 0,83 respectively).

Serbia

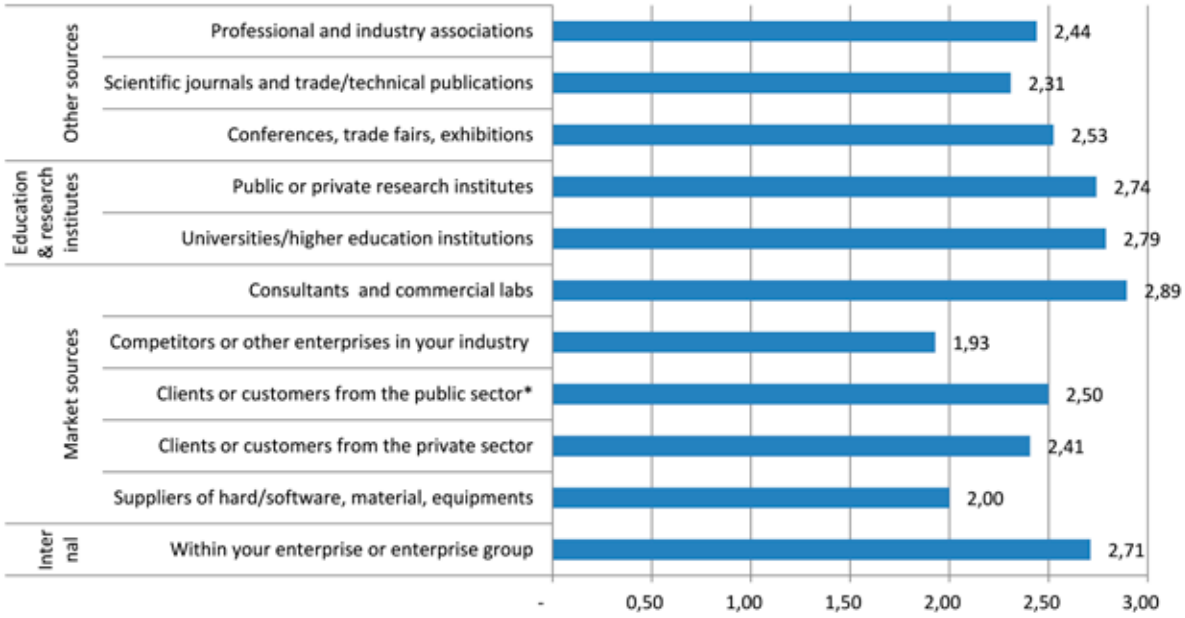


Figure 127: Serbia: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?"

The most important sources of information for the sample companies are internal (2,7).

Although clients and customers from private sectors are marked as very important source of information (rank 2,5), competitors or other enterprises in same industry were rank as lowest important (1,93). The most important marketing sources are consultants and commercial labs (2,89).

Finally, Serbian firms rely a lot on public/private institutes and higher education institutions (2,74; 2,79 respectively).

Montenegro

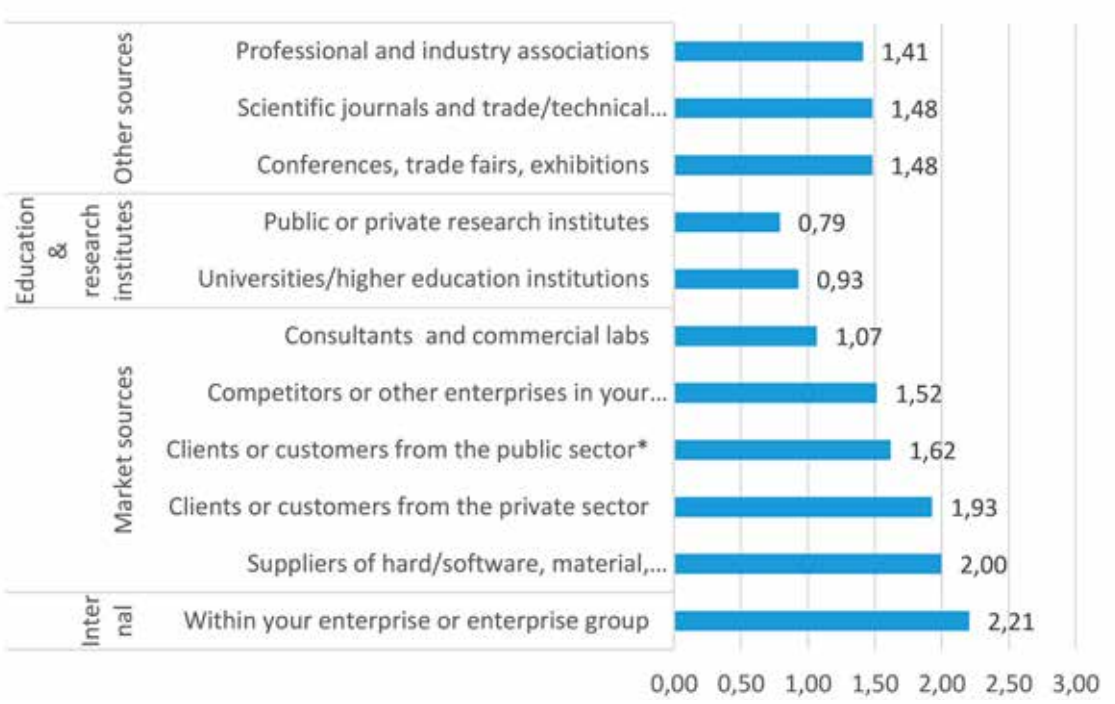


Figure 128: Montenegro: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?"

The most important sources of information for the sample firms are internal (2,21), followed by suppliers of hardware, software and equipment. Research institutions and universities are ranked as the least important (0,76 and 0,83 respectively).

Albania

Figure 129: Albania: "During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?"

Internal sources of information were the most important for innovation activities (2.13), followed by suppliers (2.05), conferences, trade fairs, exibitions (2.04) and clients from private sector. External sources are ranked as less important.

3.7. Cooperation

This section explains the level of cooperation in innovation activities with other enterprises and institutions.

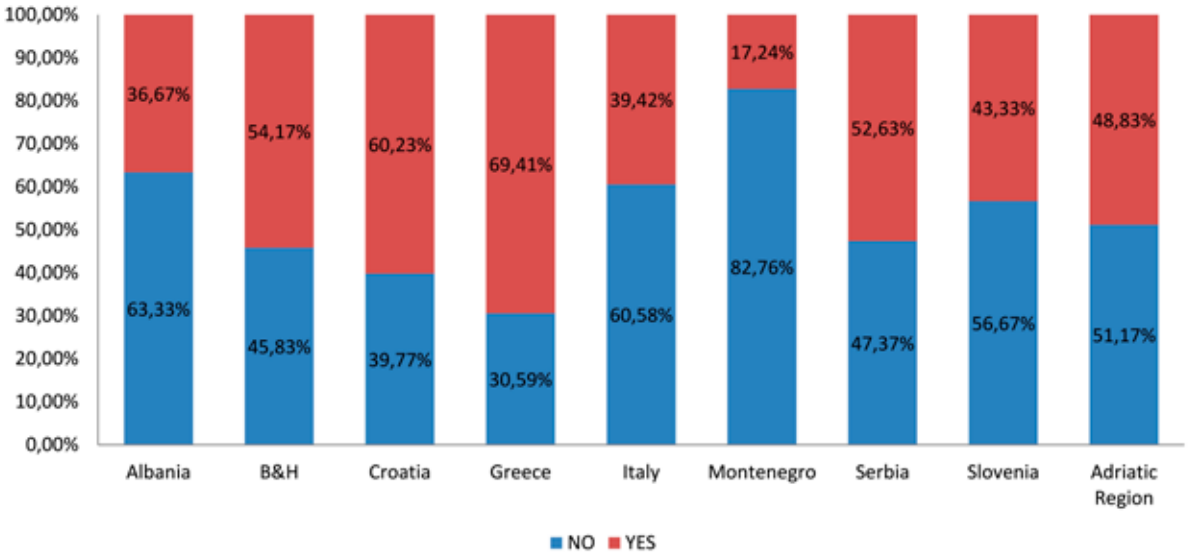


Figure 130: "During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?" (Whole Region and Country by Country)

We see that at the overall Adriatic Level, there is a balanced ratio of firms who are cooperating with other enterprises for innovation (48,83%) and ones who are pursuing innovation activities themselves (51,17%).

Italy

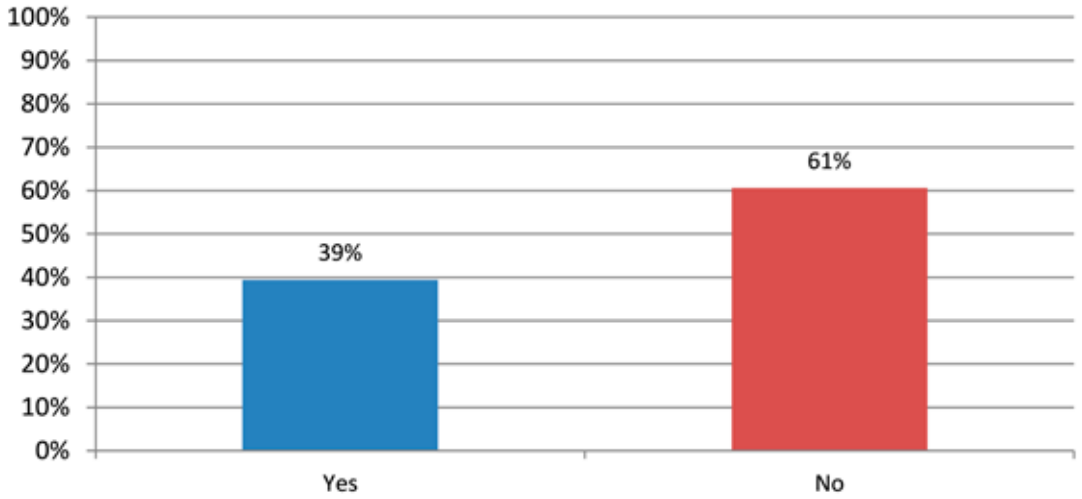


Figure 131: Italy "During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?"

The respondents have declared a low collaboration with other sources for their innovation activities. Only 39% of the sample (41 firms) declared to have developed collaborative activities for innovation with external actors.

This is a very interesting result as it indicates a prevalent close innovation model. This raises concerns since collaboration is widely acknowledged as a driver for innovation in the scientific literature.

Croatia

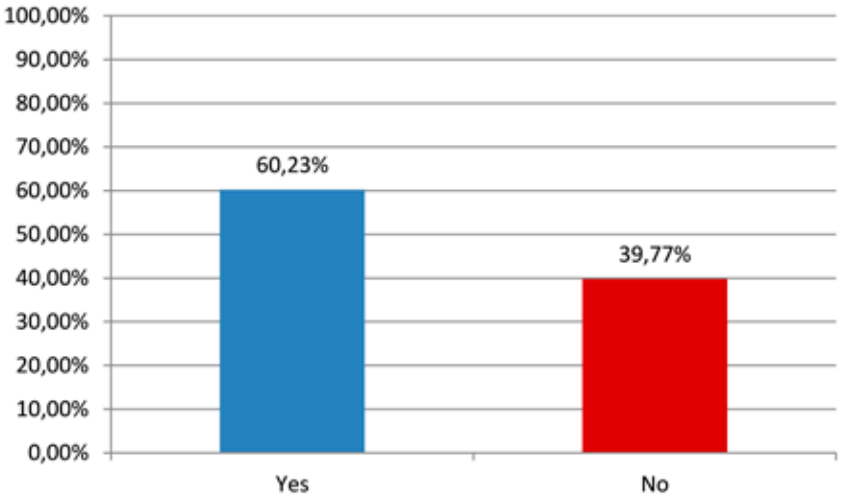


Figure 132: Croatia "During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?"

Most innovating companies relied on cooperation with other enterprises and institutions – mostly clients, suppliers and other enterprises in the group, which are to the greatest extent located in the same country.

Bosnia and Herzegovina

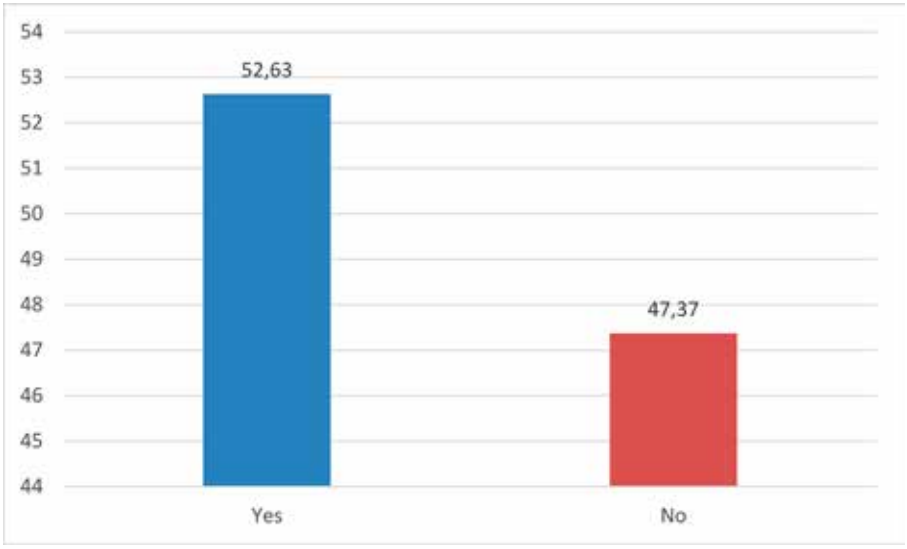


Figure 133: Bosnia and Herzegovina: "During the three years, 2011, 2012 and 2013, did your enterprise cooperate on any of your innovation activities with other enterprises or institutions?"

When it comes to cooperation on innovation activities with other enterprises and/or institutions, 54% of firms from B&H sample report they already had such cooperation.

Serbia

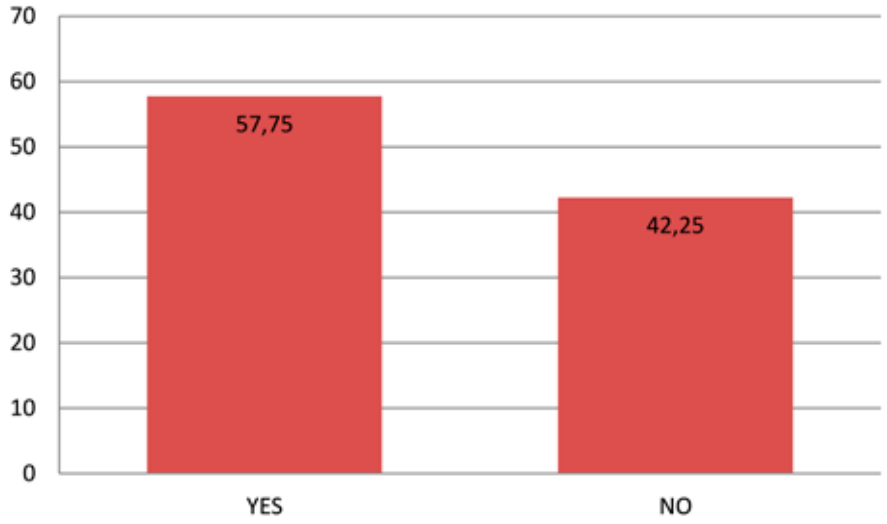


Figure 134: Serbia: "During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?"

Majority of Serbian firms in the sample report they already had cooperation on innovation activities with other enterprises (58%).

Montenegro

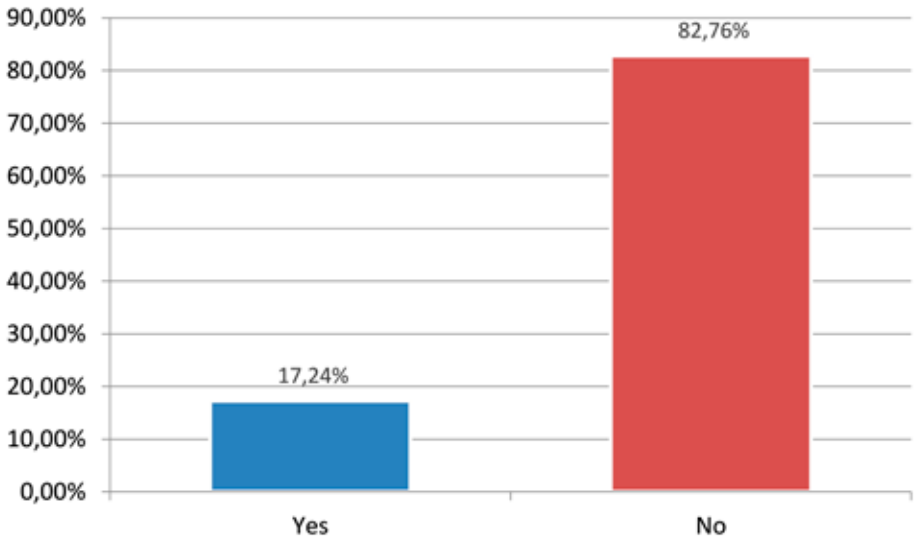


Figure 135: Montenegro: "During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?"

Majority of firms from Montenegro sample didn't cooperate with other enterprises or institution on their innovation activities (83%).

Albania

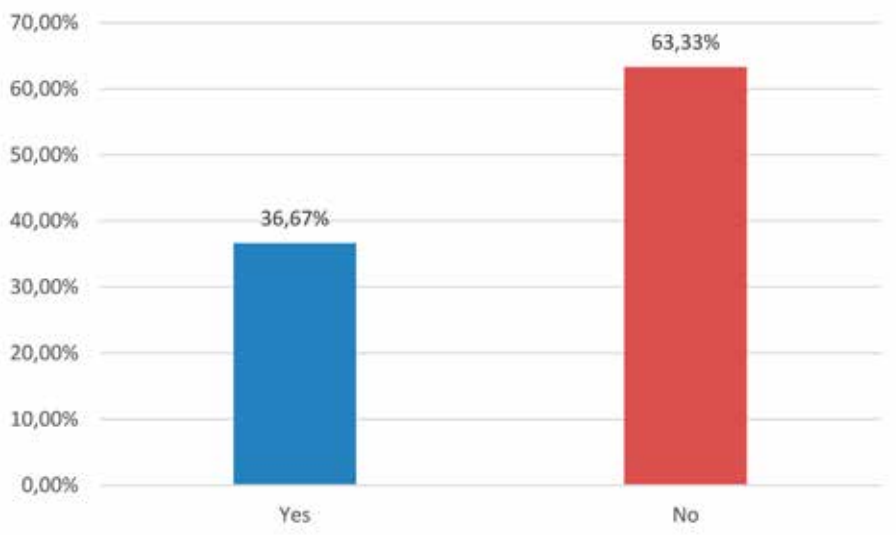


Figure 136: Albania: "During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?"

Less than 1/3 of Albanian companies in the survey state they had cooperation with other domestic or foreign institutions, with regard to innovation activities.

It might reflect the relative isolation of Albanian economic subjects from international markets on the one hand, and the lack of trust in mutual benefits from synergies in R&D on the other.

Out of those subjects who answered positively, more than half belong to the service sector (53%), followed by the manufacturing sector (38%).

Greece

The majority of the firms (69%) did not cooperate with other firms or institutions, which is explained by the low levels of external R&D.

	ITALY	SLOVENIA	CROATIA	BOSNIA AND HERZEGOVINA	SERBIA	MONTENEGRO
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	1,92%	1,92%	2,44%	1,72%	1,76%	0,72%
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	2,02%	2,25%	2,73%	3,58%	2,21%	0,13%
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	1,89%	2,83%	3,81%	4,17%	3,12%	1,59%
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	0,29%	1,17%	1,11%	2,12%	1,20%	0,39%
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	0,65%	1,50%	1,99%	2,51%	1,69%	0,59%
F. CONSULTANTS AND COMMERCIAL LABS	0,59%	0,65%	0,65%	1,53%	0,75%	0,29%
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	0,26%	0,23%	0,85%	2,57%	0,91%	0,23%
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	0,13%	0,81%	0,36%	1,17%	0,68%	0,23%

	ALBANIA	GREECE	OTHER EUROPE*	UNITED STATES	BRICS**	ALL OTHER COUNTRIES
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	0,72%	0,62%	2,60%	0,49%	0,13%	0,52%
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	0,46%	0,68%	3,38%	1,46%	0,42%	0,81%
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	0,98%	0,81%	3,61%	1,30%	0,39%	0,91%
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	0,46%	0,23%	0,75%	0,16%	0,10%	0,23%
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	0,68%	0,20%	1,92%	0,75%	0,29%	0,46%
F. CONSULTANTS AND COMMERCIAL LABS	0,26%	0,20%	0,85%	0,26%	0,16%	0,20%
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	0,39%	0,23%	0,59%	0,16%	0,03%	0,03%
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	0,29%	0,20%	0,46%	0,10%	0,07%	0,13%

Table 15: Please indicate the type of innovation co-operation partner by location (whole Adriatic Region)

Italy

	ITALY	SLOVENIA	CROATIA	BOSNIA AND HERZEGOVINA	SERBIA	ALBANIA
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	10,8%	0,7%	0,4%	0,0%	0,2%	0,2%
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	10,9%	0,7%	0,0%	0,1%	0,2%	0,0%
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	9,2%	0,7%	0,6%	0,1%	0,1%	0,0%
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	4,2%	0,1%	0,1%	0,0%	0,0%	0,0%
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	7,5%	0,1%	0,1%	0,0%	0,1%	0,0%
F. CONSULTANTS AND COMMERCIAL LABS	8,1%	0,2%	0,1%	0,1%	0,2%	0,1%
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	7,9%	0,1%	0,1%	0,0%	0,1%	0,0%
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	4,0%	0,2%	0,0%	0,0%	0,0%	0,0%
TOTAL	**62,5%**	**3,1%**	**1,5%**	**0,4%**	**1,1%**	**0,4%**

	MONTENEGRO	GREECE	OTHER EUROPE*	UNITED STATES	BRICS**	ALL OTHER COUNTRIES	TOTAL
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	0,0%	0,0%	2,3%	0,5%	0,6%	1,1%	**16,9%**
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	0,0%	0,1%	2,4%	1,2%	0,2%	1,1%	**17,1%**
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	0,0%	0,2%	4,4%	1,3%	1,2%	1,8%	**19,8%**
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	0,0%	0,1%	1,2%	0,4%	0,4%	0,7%	**7,2%**
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	0,0%	0,0%	2,1%	0,6%	0,2%	0,4%	**11,1%**
F. CONSULTANTS AND COMMERCIAL LABS	0,1%	0,1%	1,6%	0,5%	0,4%	0,4%	**12,0%**
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	0,0%	0,1%	1,1%	0,5%	0,2%	0,1%	**10,4%**
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	0,0%	0,0%	0,9%	0,1%	0,0%	0,2%	**5,5%**
TOTAL	**0,1%**	**0,7%**	**16,0%**	**5,1%**	**3,3%**	**5,9%**	**100%**

Table 16: Italy: Please indicate the type of innovation co-operation partner by location

All in all, while collaboration is not an important factor for many firms, those that have declared collaboration present a rather concentrated scope of collaboration, at regional and even more national level.

International collaborations are much less frequent. European partners are mostly selected by Italian SMEs (16,1%) to develop collaborative activities.

As regards the Adriatic Region, we may observe a geographical proximity effect since the number of firms collaborating with partners in Slovenia and Croatia is higher than other Adriatic countries. On the other hand, Italian firms have no collaboration at all with Montenegro.

By disaggregating the data we find that suppliers and clients are the main collaborators, and this is important mainly at the national and regional level. However, there is a more intense collaboration with European suppliers and customers.

When it comes to collaboration with university, Italian firms are mainly collaborating with regional or national institutions.

Croatia

	CROATIA	SLOVENIA	BOSNIA AND HERZEGOVINA	ITALY	SERBIA	ALBANIA
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	10,9%	0,4%	0,0%	0,8%	0,4%	0,0%
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	14,9%	0,8%	0,0%	2,0%	0,8%	0,0%
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	15,3%	0,4%	0,8%	1,6%	0,8%	0,0%
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	8,5%	0,4%	0,0%	0,0%	0,0%	0,0%
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	8,9%	0,1%	0,0%	0,4%	0,0%	0,0%
F. CONSULTANTS AND COMMERCIAL LABS	5,6%	0,0%	0,0%	0,4%	0,0%	0,0%
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	6,5%	0,0%	0,0%	0,4%	0,0%	0,0%
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	2,4%	0,0%	0,0%	0,0%	0,0%	0,0%
TOTAL	**73,0%**	**2,4%**	**0,8%**	**5,6%**	**2,0%**	**0,0%**

	MONTENEGRO	GREECE	OTHER EUROPE*	UNITED STATES	BRICS**	ALL OTHER COUNTRIES	TOTAL
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	0,0%	0,0%	2,4%	0,8%	0,0%	0,0%	**15,7%**
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	0,0%	0,0%	2,8%	0,4%	0,0%	0,4%	**22,2%**
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	0,4%	0,0%	3,6%	0,8%	0,0%	0,8%	**24,6%**
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	0,0%	0,0%	0,0%	0,0%	0,0%	0,4%	**9,3%**
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	0,0%	0,0%	0,8%	0,4%	0,0%	0,0%	**10,9%**
F. CONSULTANTS AND COMMERCIAL LABS	0,0%	0,0%	0,8%	0,0%	0,0%	0,0%	**6,9%**
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	0,0%	0,0%	0,4%	0,4%	0,0%	0,0%	**7,7%**
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	0,0%	0,0%	0,4%	0,0%	0,0%	0,0%	**2,8%**
TOTAL	**0,4%**	**0,0%**	**11,3%**	**2,8%**	**0,0%**	**1,6%**	**100%**

Table 17: Croatia: Please indicate the type of innovation co-operation partner by location

Firms from the Croatian sample report highest level innovation cooperation with firms from Italy, and then with Slovenia and Serbia. Cooperation with other countries from the Adriatic Region is low, while cooperation with other European countries is high. Highest cooperation is with clients/customers from the private sector.

Albania

	ALBANIA	SLOVENIA	CROATIA	ITALY	SERBIA	BIH
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	12,26%	0,00%	1,89%	13,21%	1,89%	0,94%
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	13,21%	0,94%	1,89%	19,81%	1,89%	0,94%
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	19,81%	0,00%	0,94%	14,15%	0,00%	0,00%
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	11,32%	0,00%	0,00%	2,83%	0,00%	0,00%
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	14,15%	0,94%	1,89%	4,72%	0,94%	0,94%
F. CONSULTANTS AND COMMERCIAL LABS	5,66%	0,00%	0,00%	9,43%	0,00%	0,00%
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	7,55%	0,94%	0,00%	1,89%	0,94%	0,00%
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	7,55%	0,94%	0,94%	2,83%	1,89%	0,94%
TOTAL	**91,51%**	**3,77%**	**7,55%**	**68,87%**	**7,55%**	**3,77%**

	MONTENEGRO	GREECE	OTHER EUROPE*	UNITED STATES	BRICS**	ALL OTHER COUNTRIES	TOTAL
A. OTHER ENTERPRISES WITHIN YOUR ENTERPRISE GROUP	2,83%	3,77%	10,38%	1,89%	0,00%	1,89%	**50,94%**
B. SUPPLIERS OF EQUIPMENT MATERIALS, COMPONENTS, OR SOFTWARE	0,00%	2,83%	10,38%	1,89%	2,83%	3,77%	**60,38%**
C. CLIENTS OR CUSTOMERS FROM THE PRIVATE SECTOR	0,00%	1,89%	6,60%	3,77%	0,94%	4,72%	**52,83%**
D. CLIENTS OR CUSTOMERS FROM THE PUBLIC SECTOR*	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	**14,15%**
E. COMPETITORS OR OTHER ENTERPRISES IN YOUR SECTOR	0,94%	0,94%	1,89%	1,89%	0,94%	1,89%	**32,08%**
F. CONSULTANTS AND COMMERCIAL LABS	0,00%	0,94%	3,77%	1,89%	0,94%	1,89%	**24,53%**
G. UNIVERSITIES OR OTHER HIGHER EDUCATION INSTITUTIONS	0,00%	0,00%	0,94%	0,00%	0,00%	0,00%	**12,26%**
H. GOVERNMENT, PUBLIC OR PRIVATE RESEARCH INSTITUTES	0,94%	1,89%	2,83%	0,94%	0,00%	1,89%	**23,58%**
TOTAL	**4,72%**	**12,26%**	**36,79%**	**12,26%**	**5,66%**	**16,04%**	

Table 18: Albania: Please indicate the type of innovation co-operation partner by location

Appart from Albanian companies, Italy is the origin country for collaboration in innovation (for 68.87% of the companies), followed by other European Countries. Suppliers of equipment, materials, components, or software are the most frequent (explained by high number of companies in the sample operating in manufacture of wearing apparel) followed by clients from private sector.

3.8. Organizational and Marketing Innovation

Figure 137: "Organizational Innovation" – Adriatic Region

When it comes to organizational innovation, at the level of the Adriatic Region, highest score is given to the renewal of internal rules and procedures in firms, followed by the development of structure effectiveness.

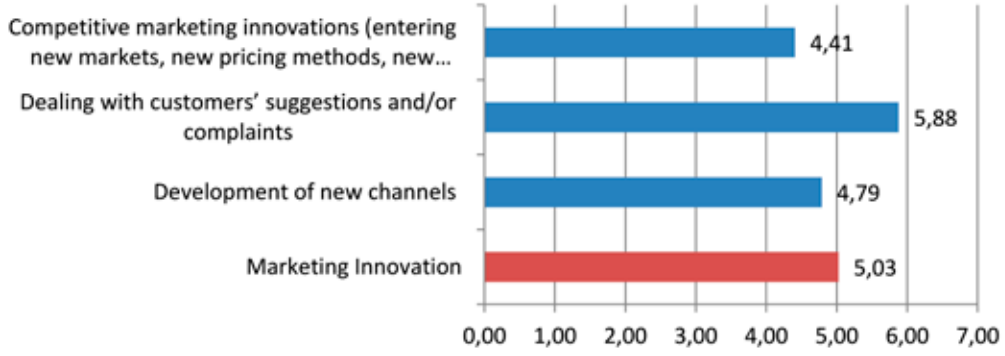


Figure 138: "Marketing Innovation" Adriatic Region

When it comes to marketing innovation, highest score is allotted to dealing with customers' suggestions and complaints, at the level of the Region.

Italy

On average, the companies in our sample evaluated their organizational and marketing innovation with significantly lower scores than product innovation. Between them, marketing innovation was rated slightly higher, particularly due to the evaluation that the companies are able to deal with customers' suggestions and complaints. On the other hand, organizational innovation was weighted down due to a particularly low score on compensation policies, reflecting rigid labor market regulations in the surveyed countries. Nevertheless, it seems that selfimprovement and non-product innovations are less popular and receive less attention than more traditional product or service innovations.

This can also mean that Italian SMEs have a potential to improve further if they were able to expand the scope of their innovative activities.

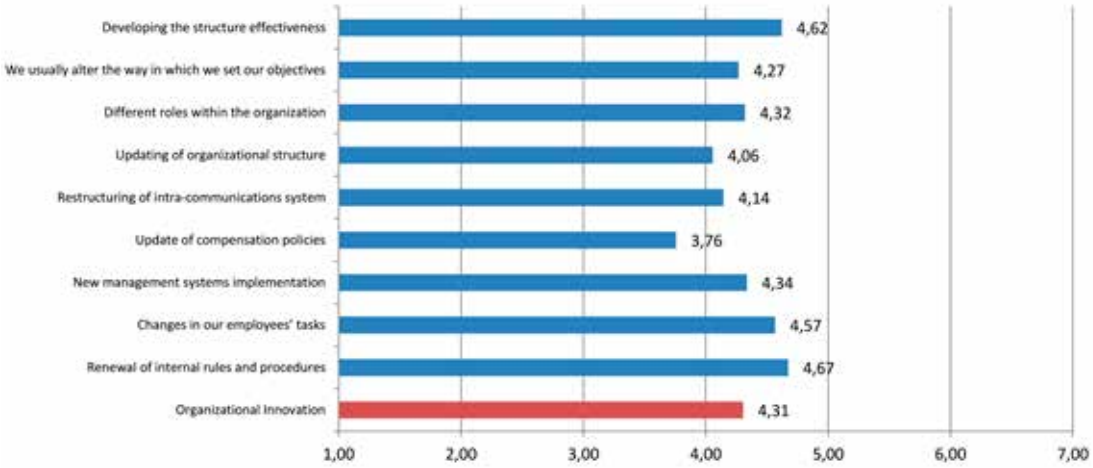


Figure 139: Italy: "Organizational Innovation"

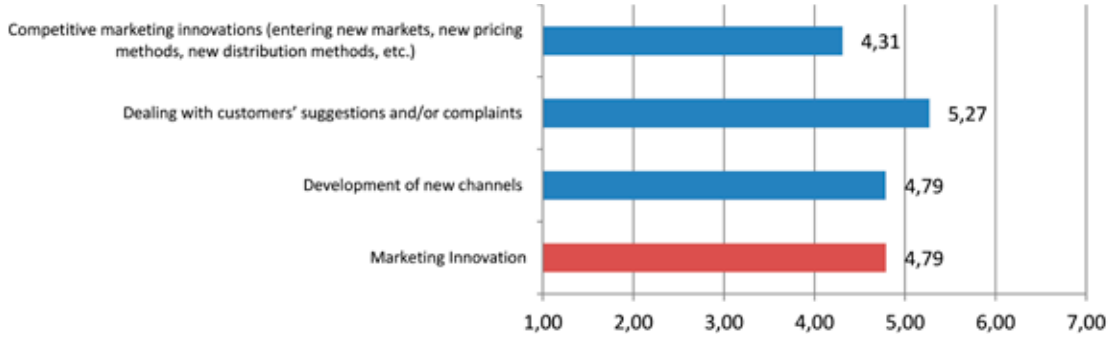


Figure 140: Italy: "Marketing Innovation"

Croatia

Figure 141: Croatia: "Organizational Innovation"

As seen from the above graph, the way that companies introduce organizational innovation mostly reflects the organizational/structure effectiveness and the renewal of internal rules and procedures. However, the overall construct shows a general lack of innovative behavior, especially in terms of compensation policies.

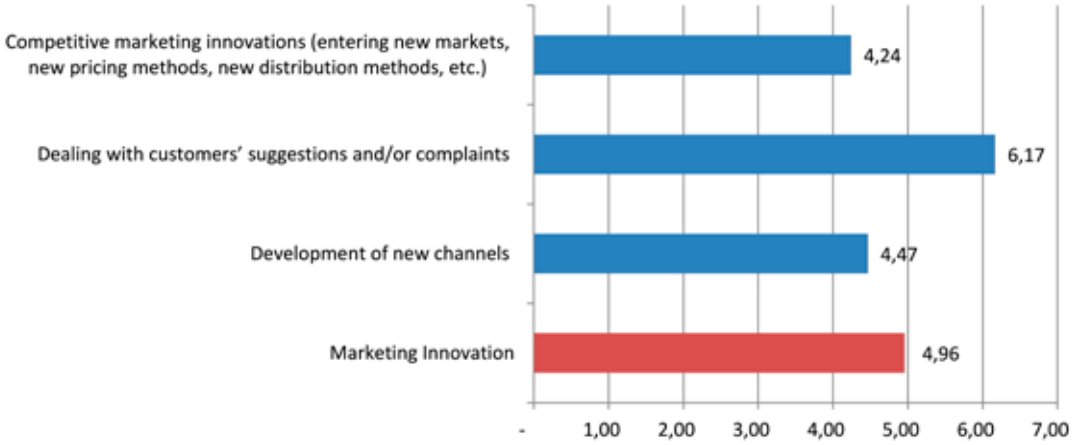


Figure 142: Croatia: "Marketing Innovation"

Regarding marketing innovation, the development of customer service is largely what has defined the innovation in the field of marketing, but the overall construct shows more inclination towards performing this type of innovation activity than the organizational innovation, which is characteristic of small, service-oriented companies that are trying to reach new and retain existing customers.

Bosnia and Herzegovina

Figure 143: Bosnia and Herzegovina "Organizational Innovation"

Firms in the B&H sample ranked renewal of internal rules and procedures the highest when it comes to organizational innovation. It is followed by different roles within the organization and development of the structure effectiveness.

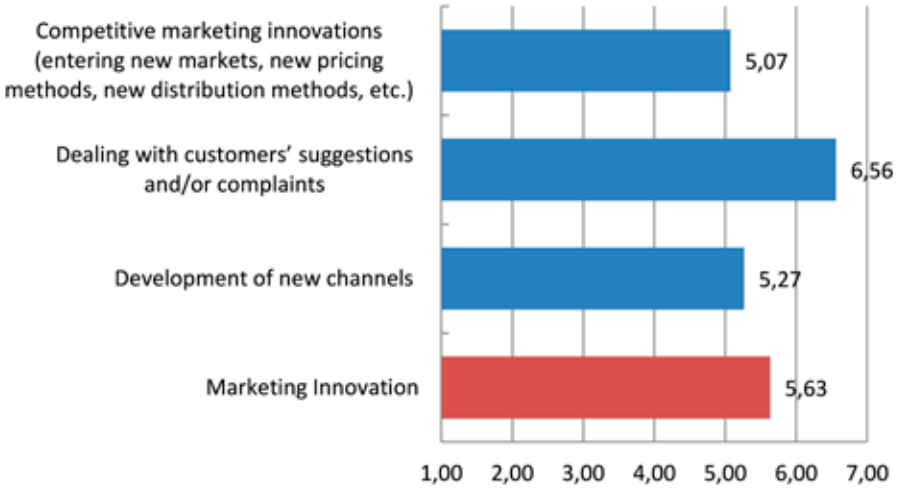


Figure 144: Bosnia and Herzegovina "Marketing Innovation"

The same as at the Adriatic Region level, B&H firms rank dealing with customers' suggestions and/or complaints the highest when it comes to marketing innovation. It is followed by the development of new channels.

Serbia

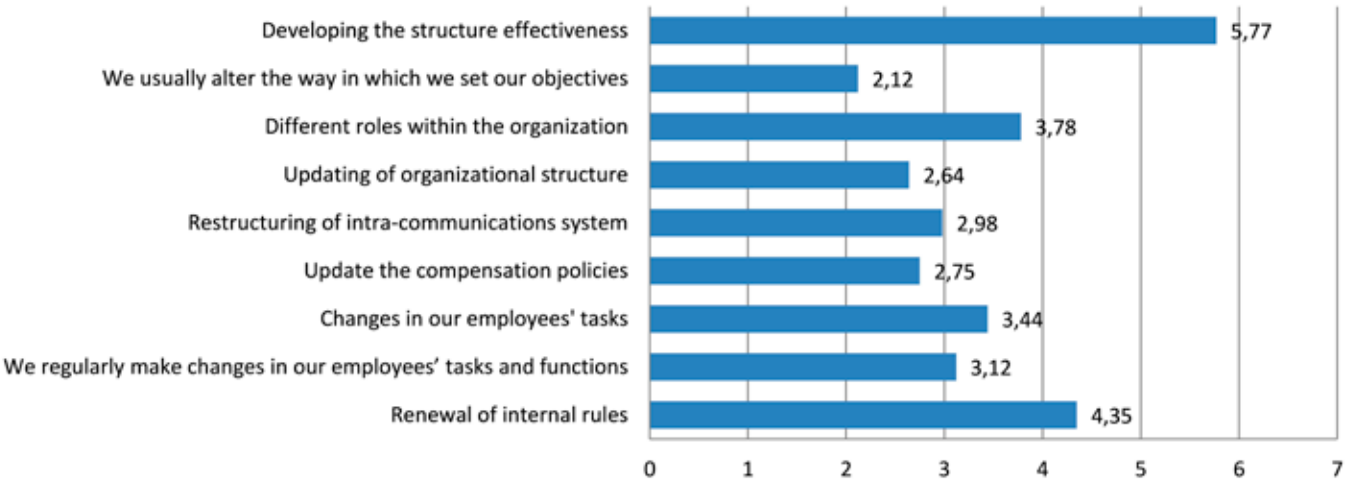


Figure 145: Serbia "Organizational Innovation"

Organizational level innovation for Serbian sample firms is mostly assumed as developing the structure effectiveness and as renewal of internal rules.

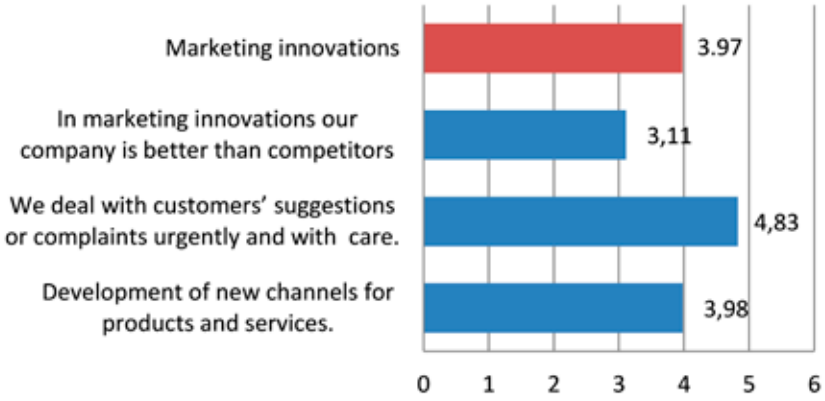


Figure 146: Serbia "Marketing Innovation"

Dealing with customers' suggestions or complaints urgently and with care is the top priority for Serbian firms.

Montenegro

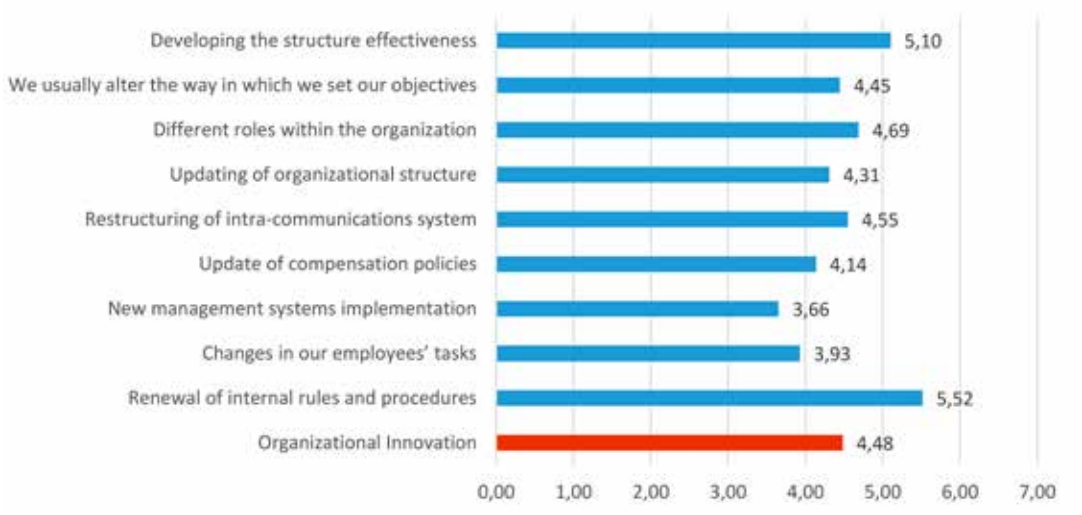


Figure 147: Montenegro "Organizational Innovation"

Most of organizational innovation is derived from the renewal of internal rules and procedures and the organization structure, but the lowest rating has been given to new management systems implementation (the only rating below 4). This clearly illustrates that, while absolutely prepared to change things for the employees, management is reluctant to change their own practices.

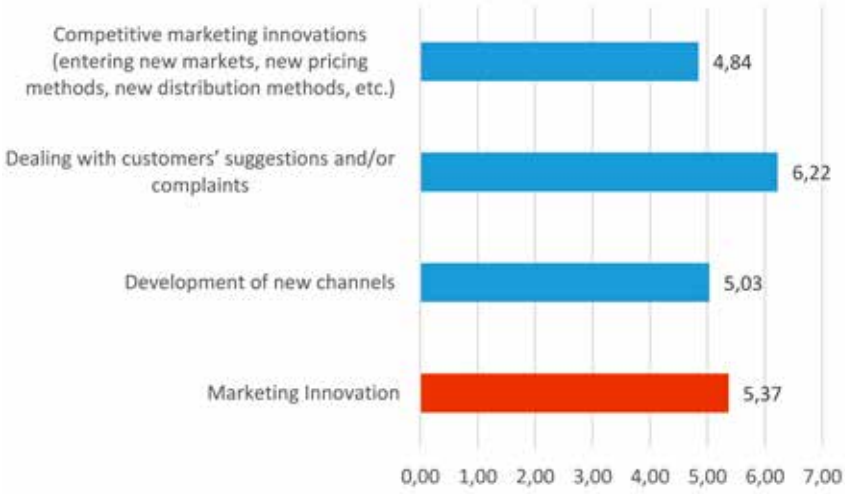


Figure 148: Montenegro "Marketing Innovation"

Almost all of the companies in the sample rate their dealing with customer suggestions and complaints extremely high, while the lowest rating was given to competitive market innovations.

Albania

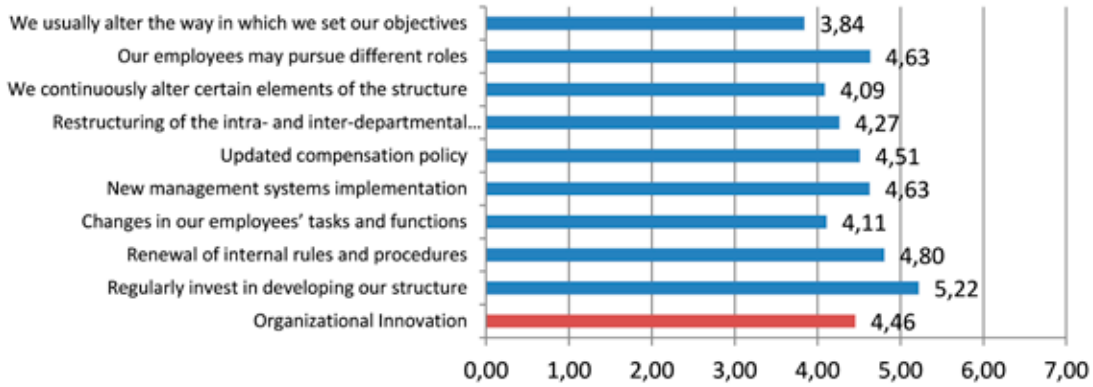


Figure 149: Albania "Organizational Innovation"

The survey on organizational innovation shows that companies favor new methods of business practices within the organization, new arrangements of their structures, and also new ways of knowledge management. Data show that firms have negative inclination toward renewing rules and procedures within their organization even though from the graph above we can see that from the second question to the last one, the most common answer tends to be the right side end. Despite a high cumulative average toward activities that might indicate organizational innovation, a subjective interpretation would be that the answers to those questions are inflated due to a lack of managers' seriousness demonstrated during some dimensions of the questionnaire. Not attaching the appropriate relevance to a certain dimension of innovation in the questionnaire makes the surveyed less careful about the answers, thereby inflating them by giving the best answer or almost the best one toward positivity.

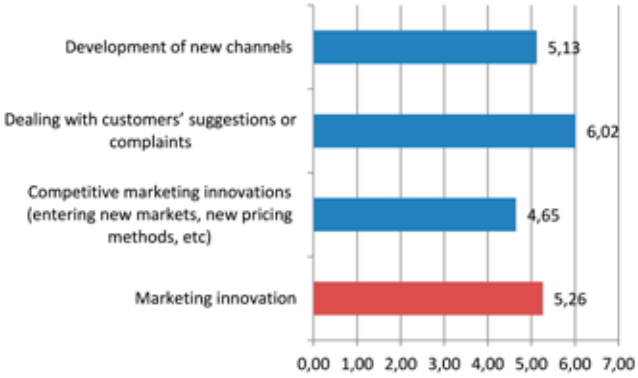


Figure 150: Albania "Marketing Innovation"

The perception is that companies lately tend to perform better in objectives and tasks such as entering new markets, new pricing methods, and new distribution methods. Companies develop new channels for products and services but on the other hand answers to the third question show that they perform badly in entering new markets and new pricing methods, or at least not as good as they pretend to do in the first question. Lastly, with respect to the response to customer suggestions or complaints, companies tend to perform exceptionally well.

Greece

The mean value of organizational innovation is 4.13, on a 7-point Likert scale, suggesting that the firms' perceptions of their organizational innovation are only average. Taking into account the results regarding innovation within the firm the perceptions seem to be a bit higher from the actual organizational innovation.

The mean value of marketing innovation is 4.64, on a 7-point Likert scale, suggesting that the firms' perceptions of the implementation of new marketing concepts or strategies that differ significantly from the firm's existing marketing methods and that have not been used before are only a little above average. This might be explained by the low amount of money firms spend on R&D and the low funding from public authorities. Comparison of the low funding, the average marketing innovation and the number of firms that innovate suggests that although the firms innovate they know that there is still a lot more room for improvement.

We now move to the new dimension of market orientation.

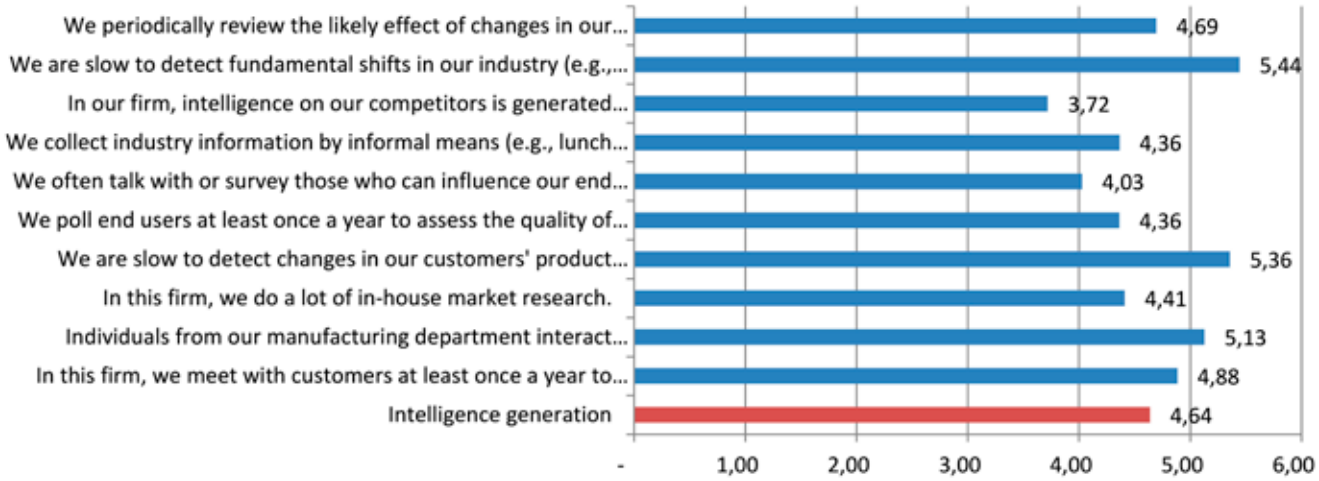


Figure 151: "Market Orientation –Intelligence Generation" Adriatic Region

This report covers the market orientation of firms in the Adriatic Region. First dimension of market orientation is intelligence generation. We see the scores for each of the intelligence generation items, where the highest score is given to the interaction of individuals from manufacturing department with customers. This is followed by meeting with customers to learn new information.

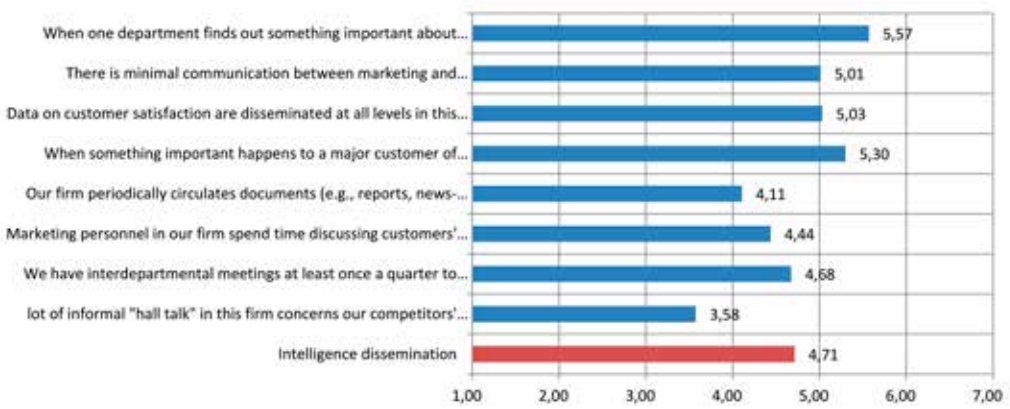


Figure 152: "Market Orientation –Intelligence Dissemination" Adriatic Region

Second dimension of market orientation is intelligence dissemination. Item that scores the highest at the Adriatic Region level is referring to the dissemination of information about important events with the major customer at the market within the firm. It is followed by the dissemination of data on customer satisfaction at all levels in the firm on regular basis.

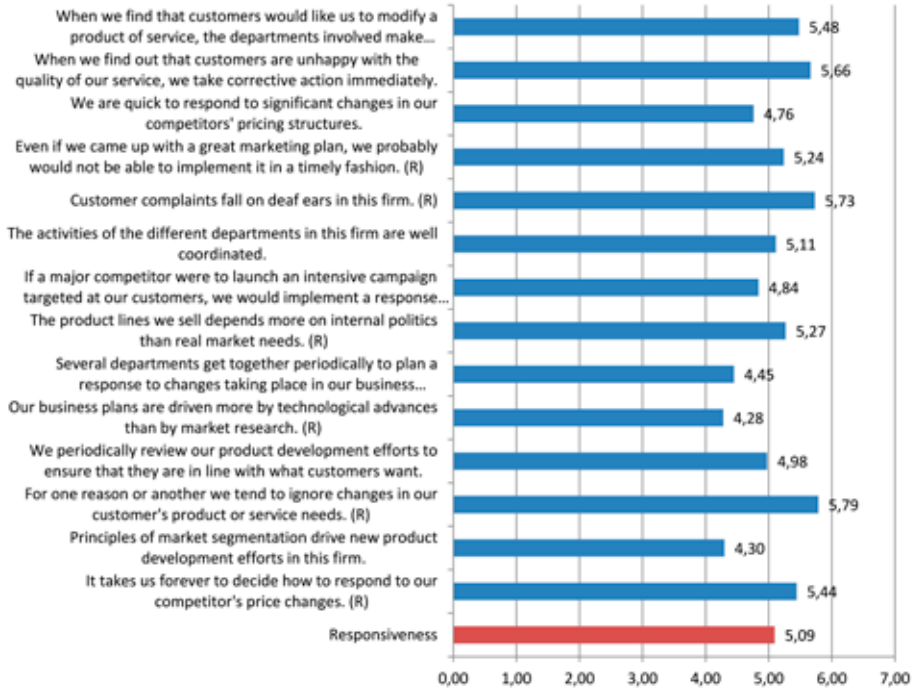


Figure 153: "Market Orientation – Responsiveness" Adriatic Region

When it comes to the final – third – dimension of market orientation – responsiveness, the highest score at the level of the Adriatic Region is related to responding to customer unhappiness. It is followed by responding to other customers' requests.

Italy

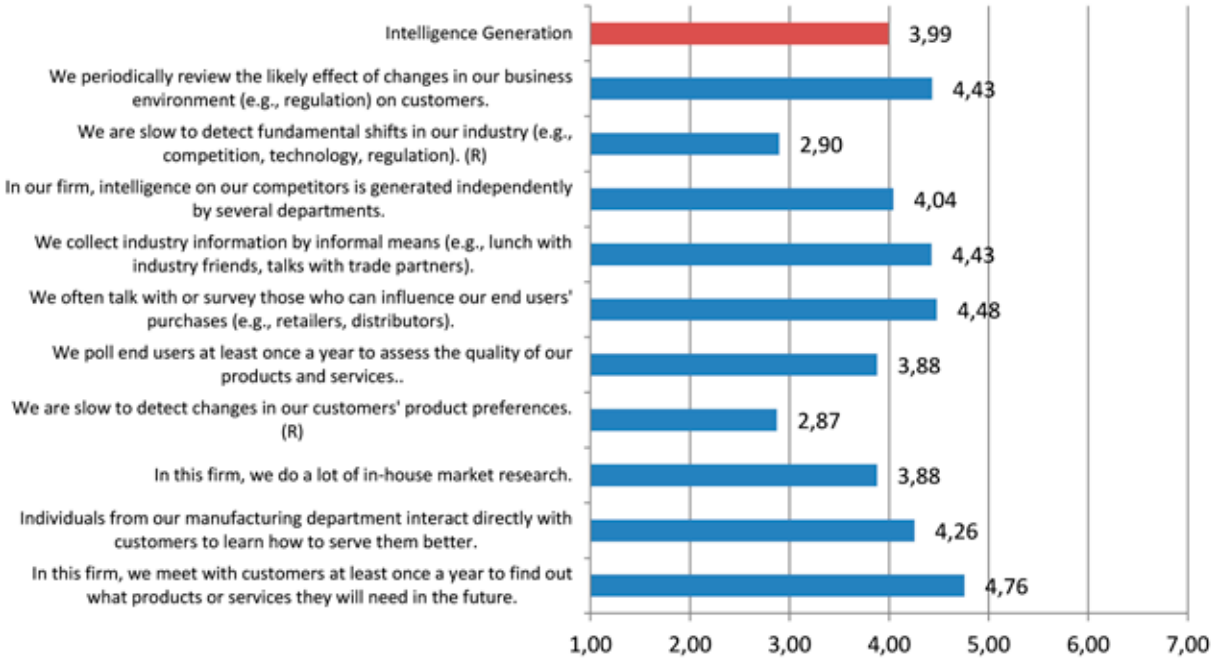


Figure 154: Italy: "Market Orientation – Intelligence Generation"

When it comes to the Italian sample, highest score is given to the in-house market research and direct interaction between manufacturing department representatives and customers.

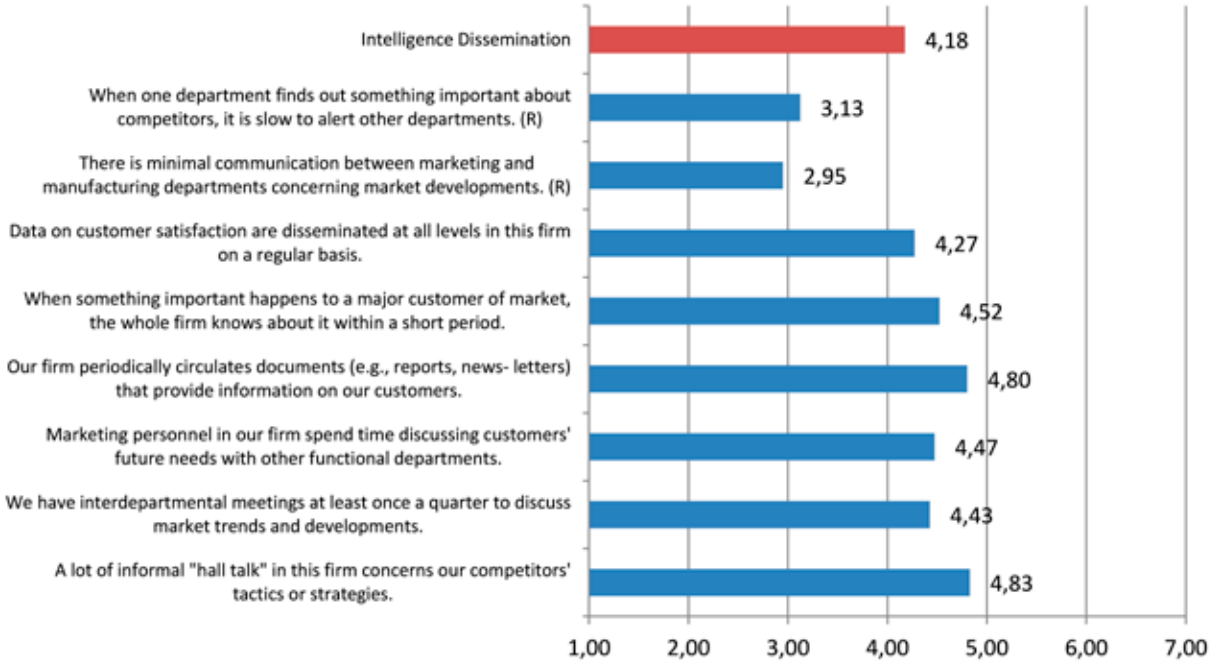


Figure 155: Italy: "Market Orientation – Intelligence Dissemination"

When it comes to intelligence dissemination dimension, highest score is attributed to the informal discussions about competitors' tactics or strategies, followed by interdepartmental meetings as a mean of dissemination.

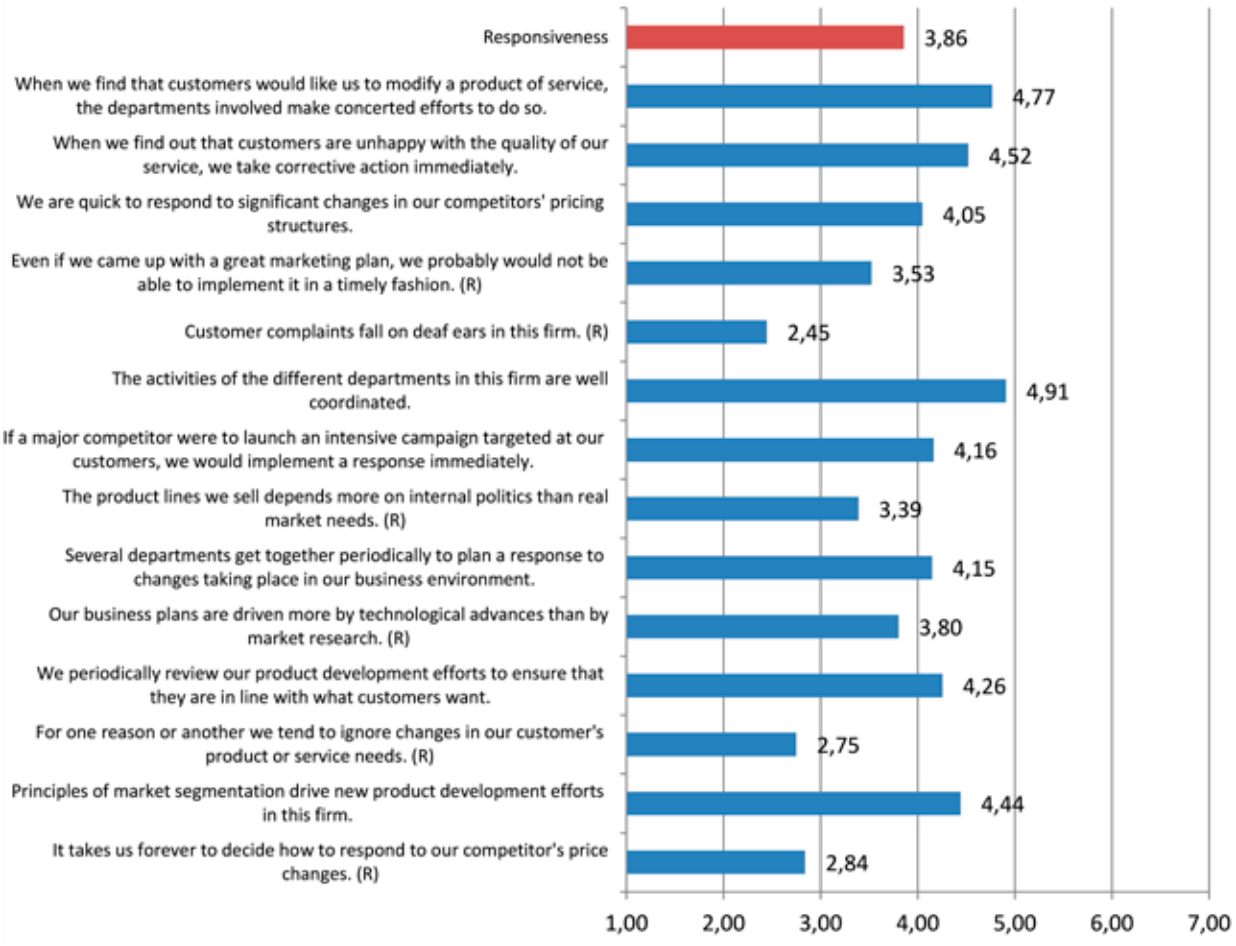


Figure 156: Italy: "Market Orientation – Responsiveness"

Responsiveness, as the third dimension of market orientation, for Italian sample scores the highest on coordination of activities of different departments.

Croatia

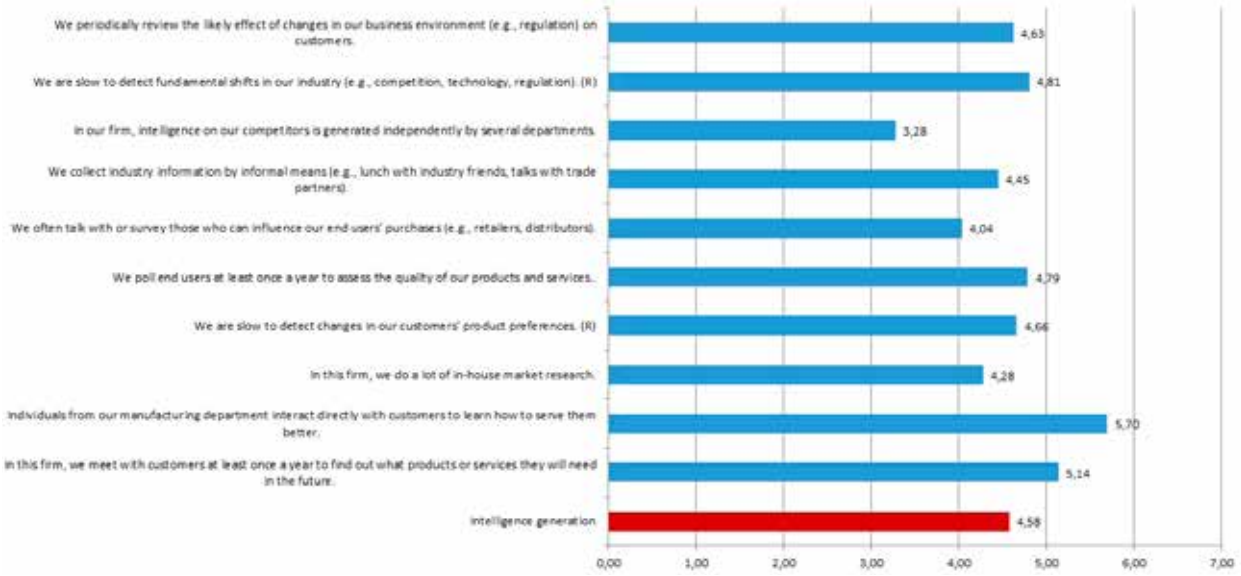


Figure 157: Croatia: "Market Orientation – Intelligence Generation"

In terms of business intelligence generation, higher ratings were given to activities concerning direct contact with customers and collecting their opinions and remarks in order to meet their demands and lower ratings were given to independent intelligence generation by several departments, which describe flexible, smaller companies that could quickly adapt to changes in the environment.

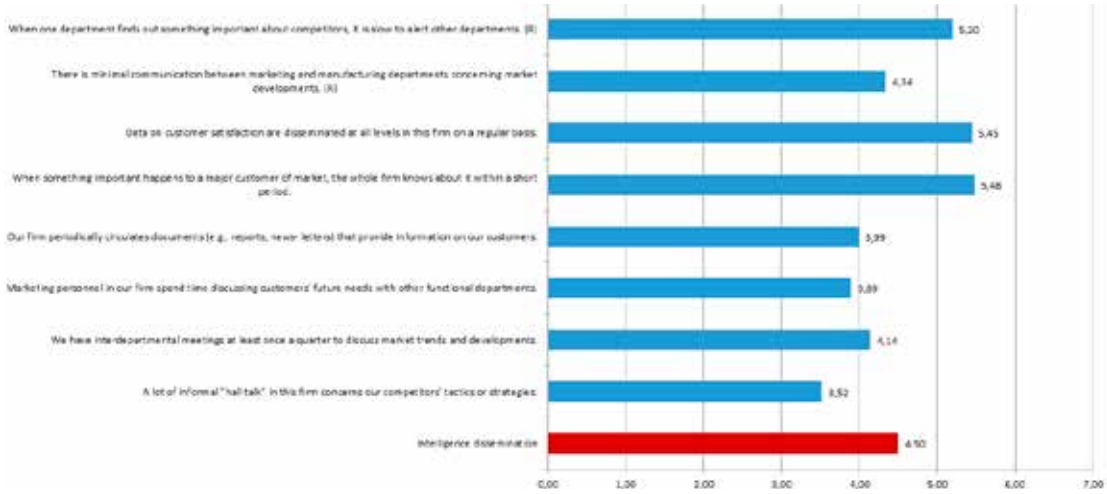


Figure 158: Croatia: "Market Orientation – Intelligence Dissemination"

The majority of respondents gave a higher rating to activities related to customer satisfaction data and dissemination of information on important customers in the company. Lower ratings were given to the possibility of lack of communication in the company as well as dwelling on competition tactics and strategies.

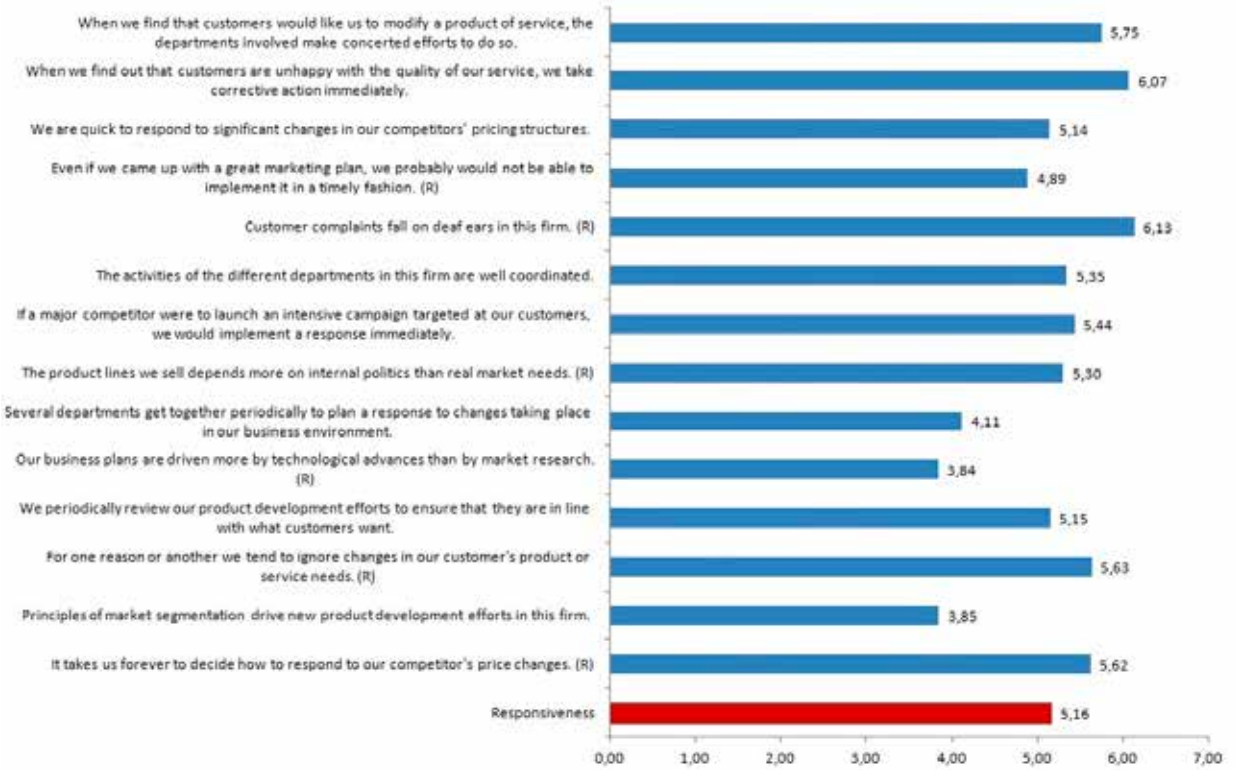


Figure 159: Croatia: "Market Orientation – Responsiveness"

The construct of market responsiveness shows that in general respondents consider their companies to be more responsive to the changes in the market and the environment, with a special focus on consumer behavior.

Bosnia and Herzegovina

Figure 160: Bosnia and Herzegovina: "Market Orientation – Intelligence Generation"

For B&H firms, highest score in the intelligence generation is for the meetings with customers to learn about their needs. It is followed by the direct interaction between individuals in the manufacturing department and customers.

Figure 161: Bosnia and Herzegovina: "Market Orientation – Intelligence Dissemination"

In terms of intelligence dissemination, firms in B&H are highly devoted to disseminating information about important changes to major customers on the market, as well as to the dissemination of the data on customer satisfaction.

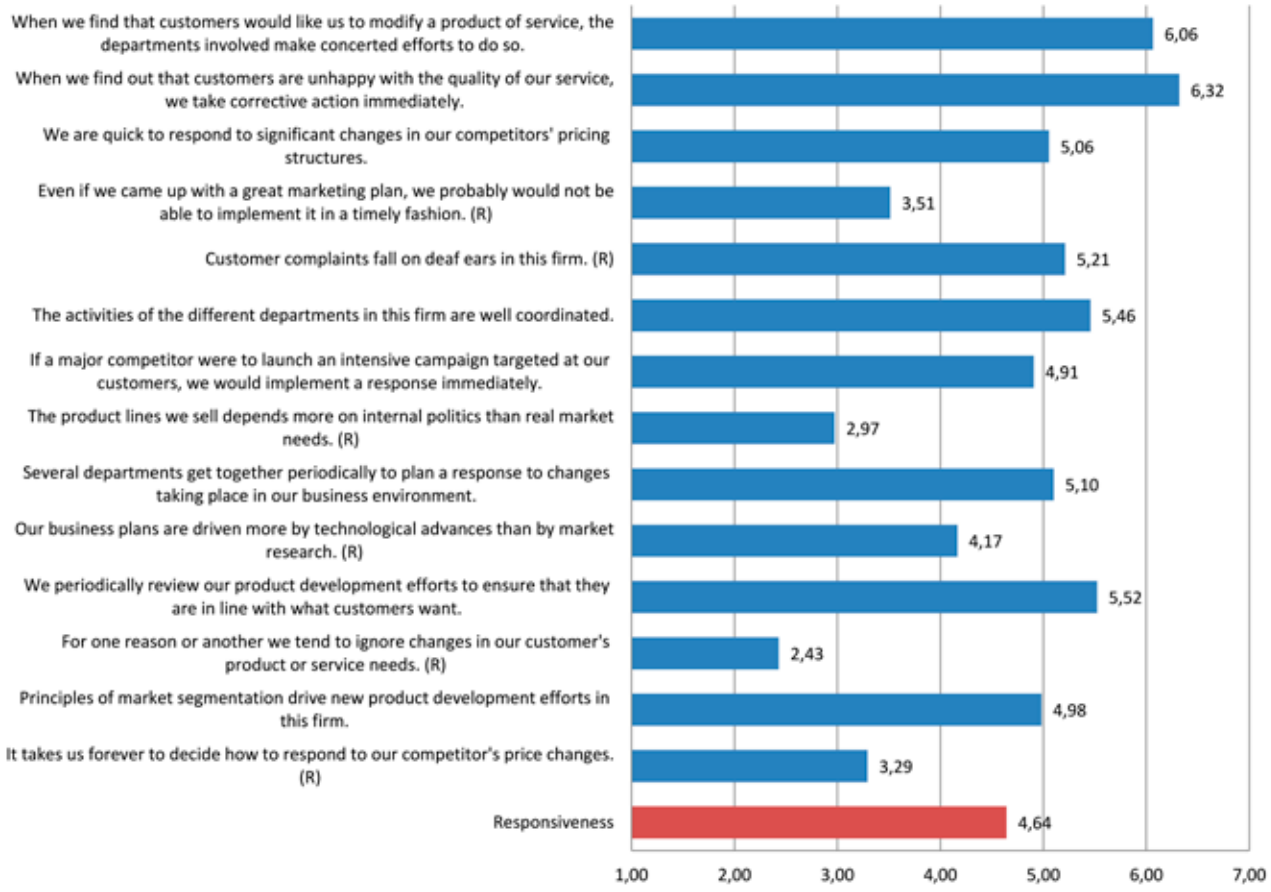


Figure 162: Bosnia and Herzegovina: "Market Orientation – Responsiveness"

Finally, in terms of responsiveness, highest score is given to the corrective actions that serve to immediately remove customer unhappiness. Similarly, related to customers, firms in the B&H sample claim that their respond to customers signals for modification of products/services.

Serbia

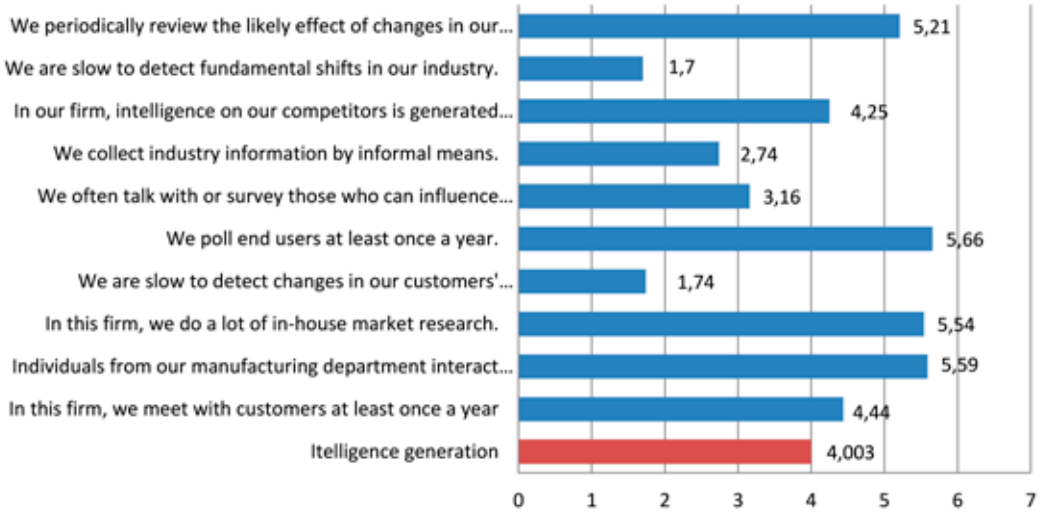


Figure 163: Serbia: "Market Orientation – Intelligence Generation"

When it comes to market orientation of Serbian firms, in terms of intelligence generation, highest ranking is achieved by polling the end users and by interaction.

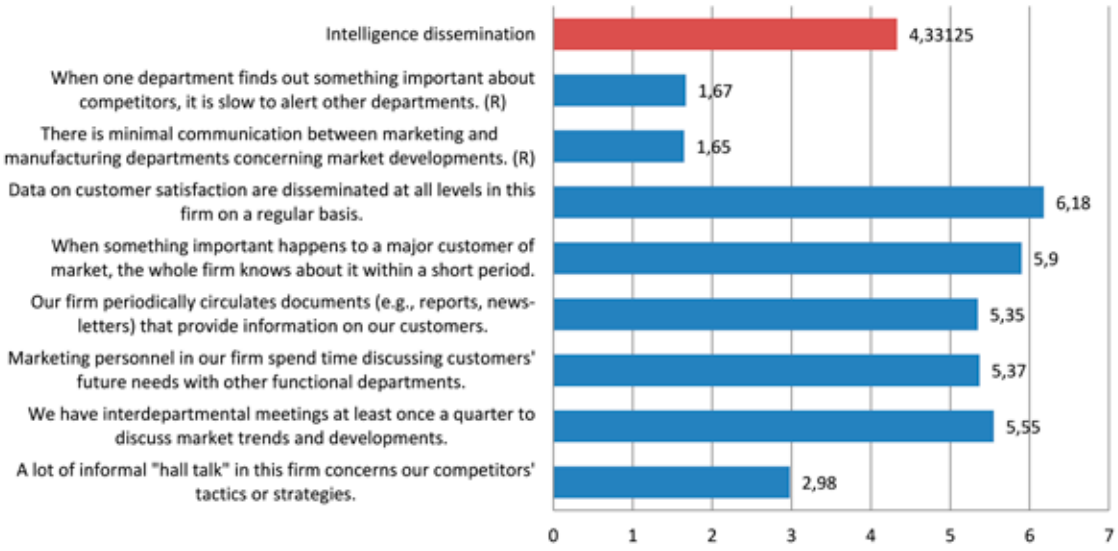


Figure 164: Serbia: "Market Orientation – Intelligence Dissemination"

When it comes to the way intelligence is disseminated, customer satisfaction data score the highest for Serbian firms.

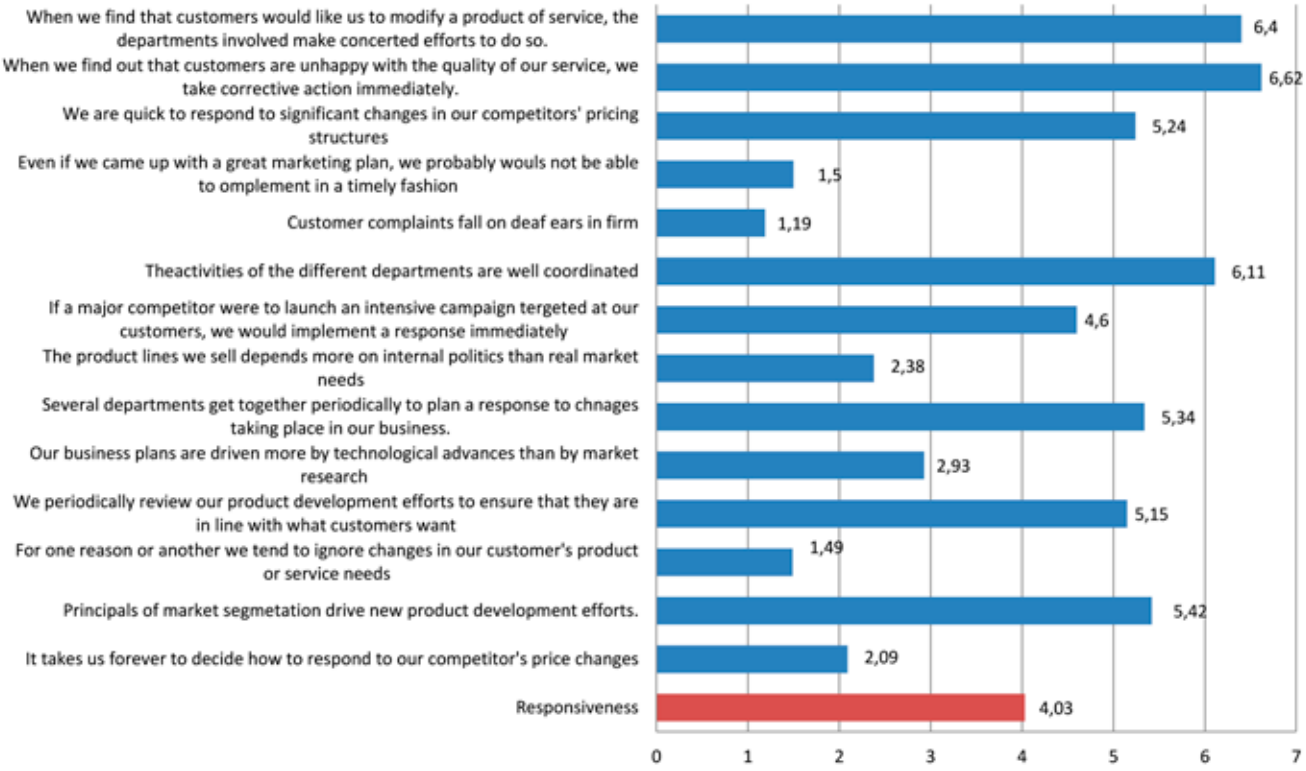


Figure 165: Serbia: "Market Orientation – Responsiveness"

In terms of responsiveness, highest score is achieved by activities related to responding to customers, followed by good coordination of the activities between different departments.

Montenegro

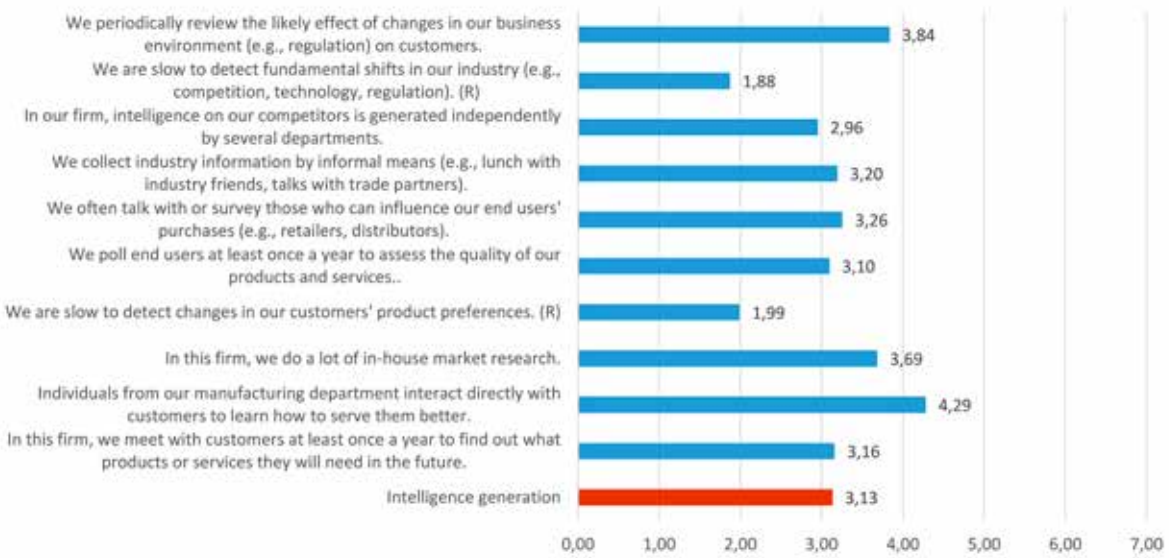


Figure 166: Montenegro: "Market Orientation – Intelligence Generation"

For firms in the Montenegrin sample, highest score in terms of intelligence generation is reserved for cooperation between customers and representatives of manufacturing department in the firm.

Figure 167: Montenegro: "Market Orientation – Intelligence Dissemination"

In intelligence dissemination, highest score is, as with most of the other countries, allotted to disseminating information about the important event for the major customer on the market.

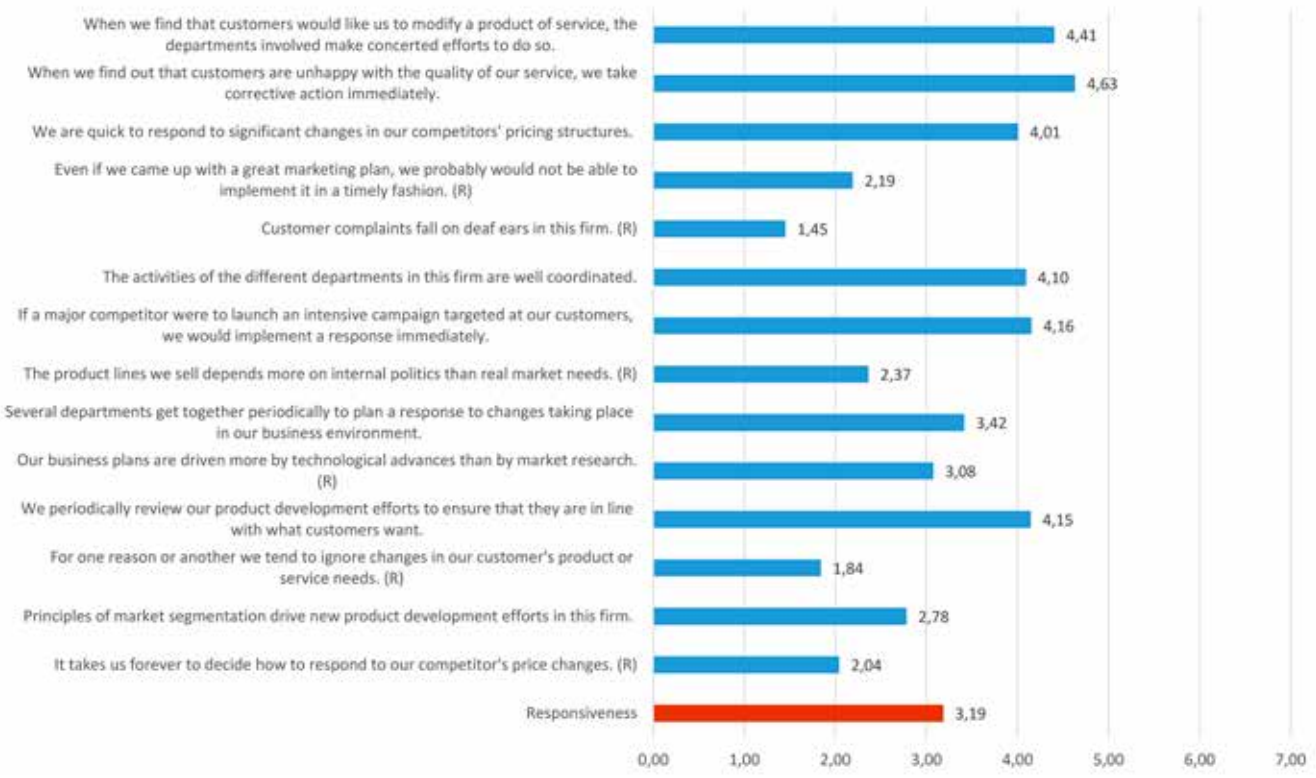


Figure 168: Montenegro: "Market Orientation – Responsiveness"

For market orientation, highest score is related to corrective actions as a response to customer complaints and to customer suggestions about products and services.

Albania

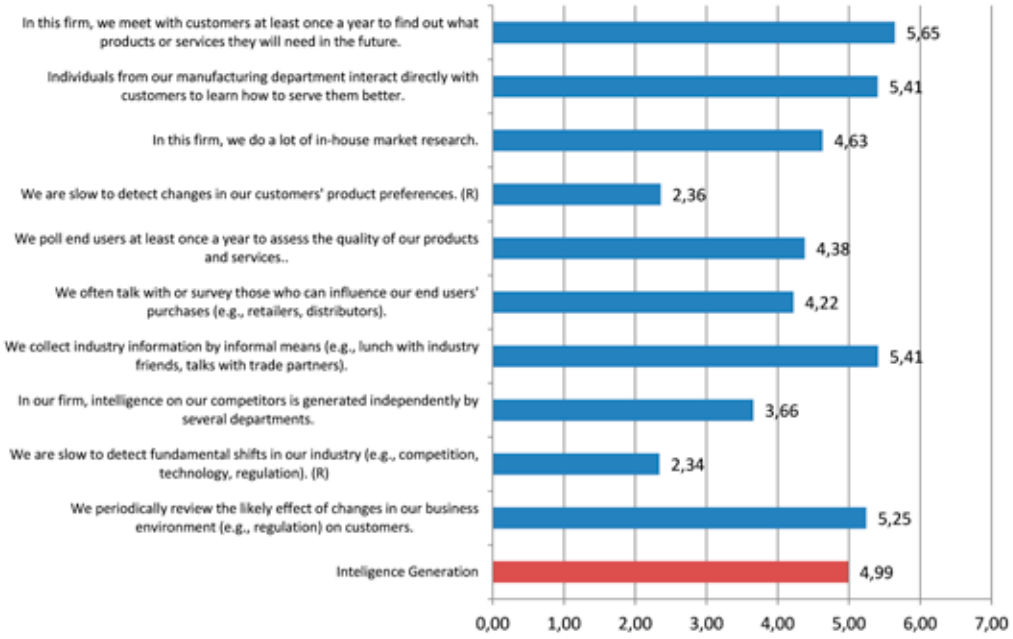


Figure 169: Albania: "Market Orientation – Intelligence Generation"

For intelligence generation, meeting with customers, interaction with clients from individuals within the firm, and informal meetings, are rated the highest. This corresponds with the way of doing business in Albania, based more on personal ties than on professional sources of information.

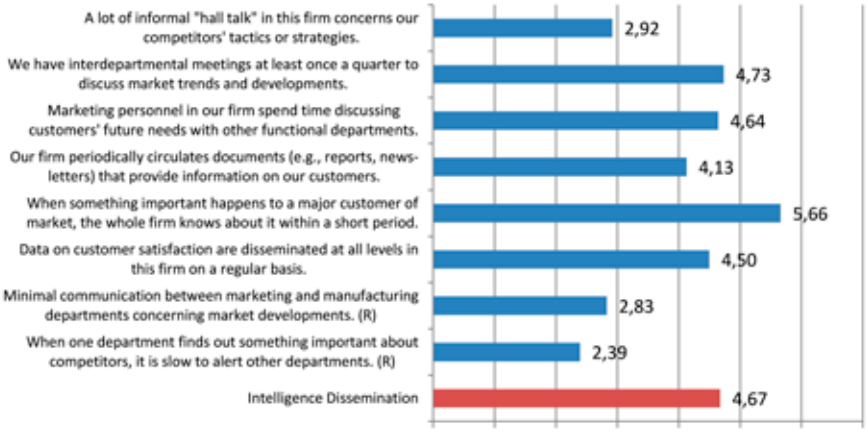


Figure 170: Albania: "Market Orientation – Intelligence Dissemination"

Inteligence dissemination in the companies of Albanian sample is above average and the highest rated question corresponds with the information whithin a short time of the firm if something important happens to a major customer, showing a high rate of internal informal communication.

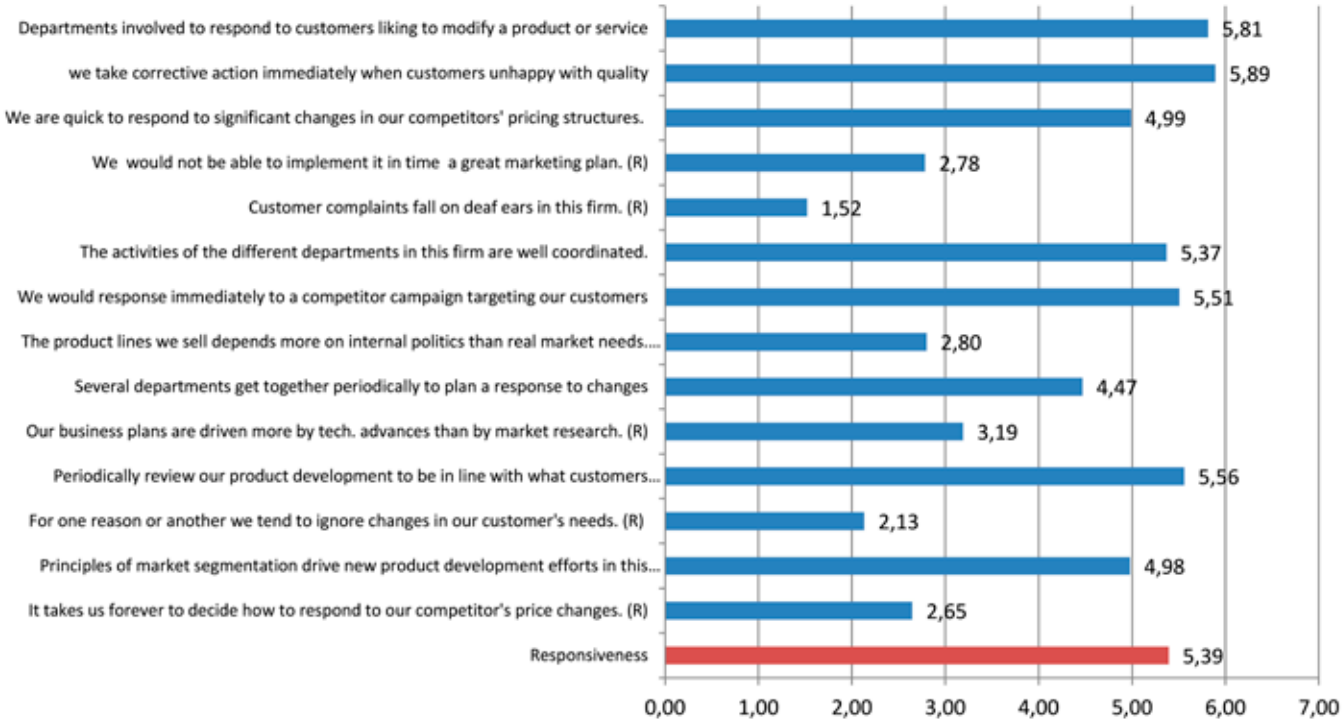


Figure 171: Albania: "Market Orientation – Responsiveness"

Results of the market orientation survey show more a wishful thinking than events close to reality. Almost all managers tend to overstate their market orientation. This means that managers tend not to accept public perception but stick to their beliefs.

Greece

The mean value of the first dimension of market orientation, i.e. intelligence generation, is 3.28, on a 5-point Likert scale, suggesting that the firms' perceptions about their business approach that focuses on identifying customers' needs are slightly above average. This might be explained by the low amount of money firms spend on R&D.

Furthermore, the mean value of the second dimension of market orientation, i.e. intelligence dissemination, is 3.18, on a 5-point Likert scale, suggesting that the firms' perceptions about their business approach that focuses on identifying customers' needs are slightly above average. This might be explained by the low amount of money firms spend on R&D.

Finally, the mean value of the third dimension of market orientation, i.e. responsiveness, is 3.13, on a 5-point Likert scale, suggesting that the firms' perceptions about their business approach that focuses on identifying customers' needs are slightly above average. This might also be explained by the low amount of money firms spend on R&D.

3.9. Social Innovation

Social innovation reflects the new ideas, services and models that firms introduced in order to better address social issues. Overall, the firms in the sample show a significant breadth of their economic and innovative goals toward social and environmental issues.

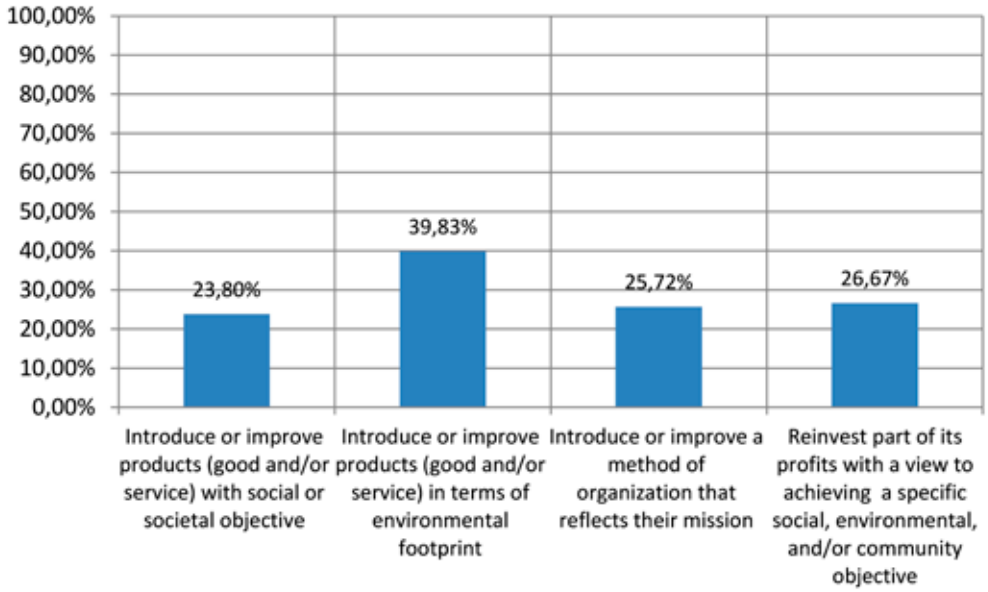


Figure 172: "Social Innovation" (whole Adriatic Region)

At the level of the Region, highest attention is devoted to introduction/improvement of products in terms of environmental footprint.

Italy

Environmental concerns are considered the most important issues. Almost one half of the firms in the sample improved their products in order to meet environmental concerns, while one third was focused on introducing novel methods and routines that reflect their mission and organizational values. The reinvestment of part of the profits in order to achieve social objectives (26%) and the introduction of new product with societal aims (21%) are slightly less frequent but not rare and less important.

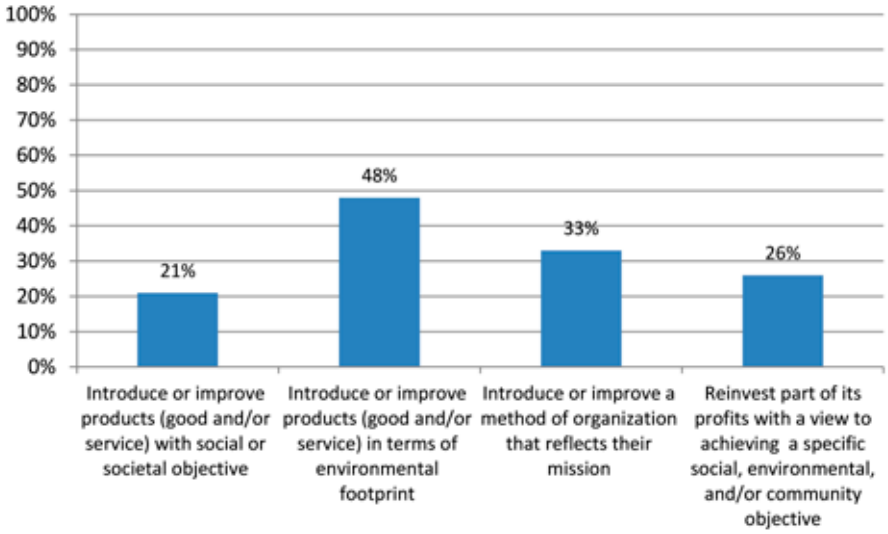


Figure 173: Italy: "Social Innovation"

Croatia

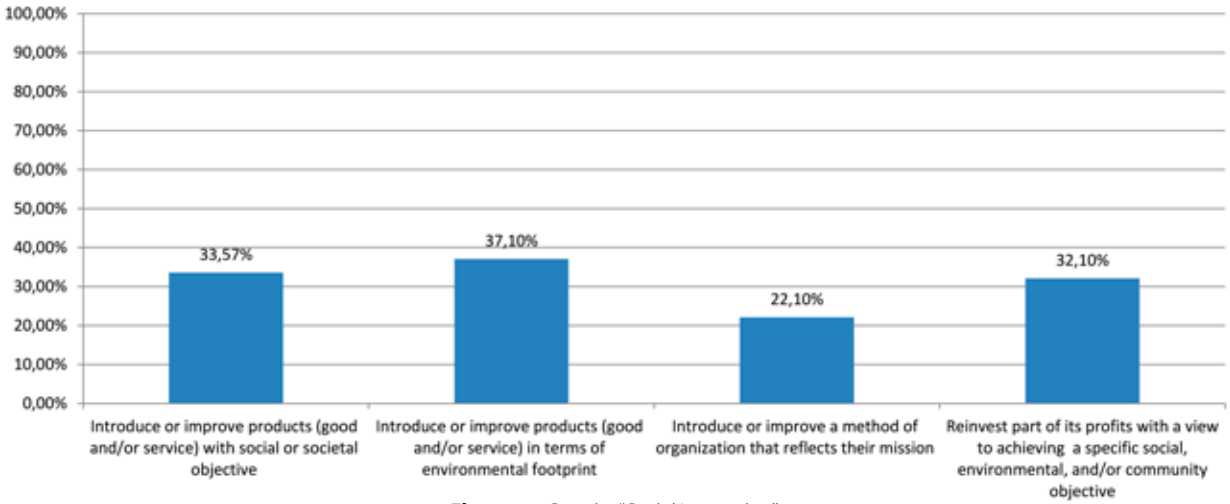


Figure 174: Croatia: "Social Innovation"

Regarding social innovation, the focus was given to improving products and services in terms of the environmental footprint (37,10%), and the overall average for introducing this innovation shows that almost 1/3 of the respondents introduced some sort of social innovation.

Bosnia and Herzegovina

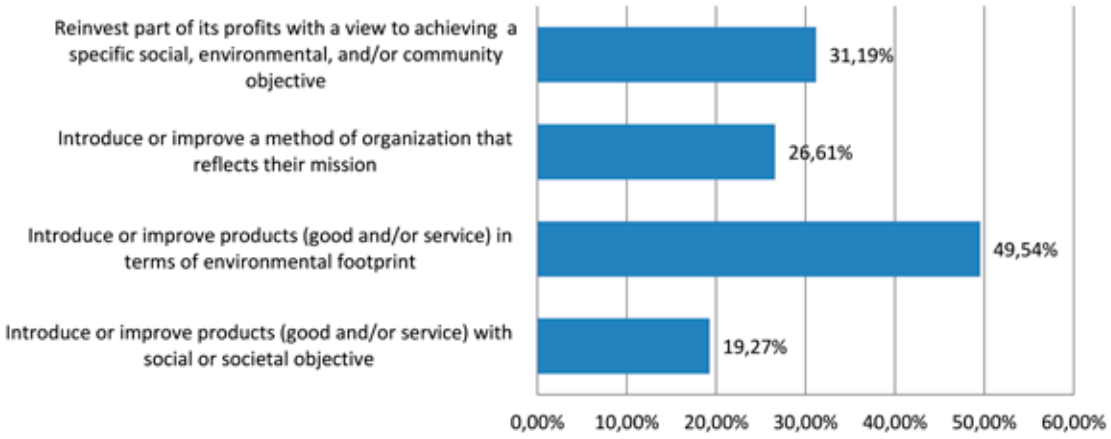


Figure 175: Bosnia and Herzegovina: "Social Innovation"

With respect to variables describing social innovation, in Bosnia and Herzegovina, the most of the social innovation pertained to the environmental footprint improvement of products (49,54%), followed by reinvestment of profits with a view of achieving a specific social, environmental and/or community objective (31,19%).

Montenegro

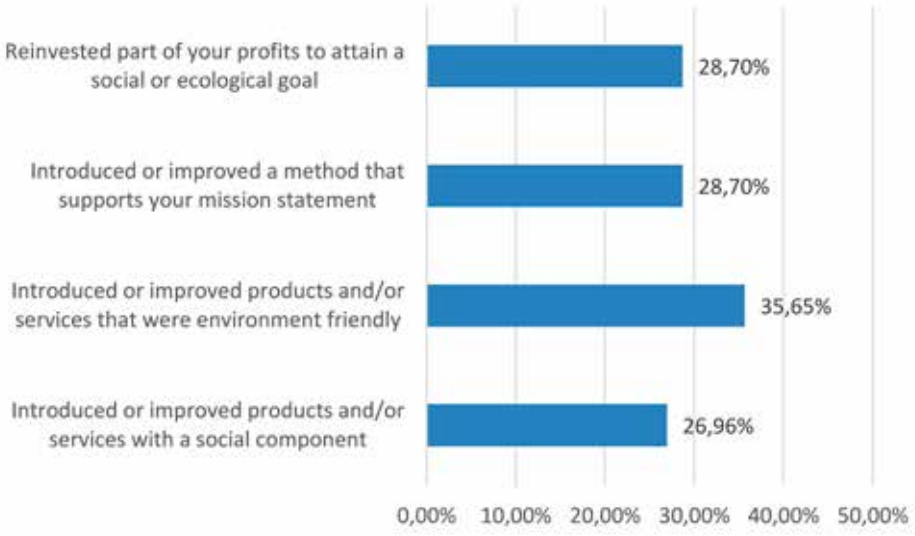


Figure 176: Montenegro: "Social Innovation"

The data show that the companies from the sample are most of all concerned with building more "green", ecofriendly products. The other three groups of activities are almost equally represented.

Albania

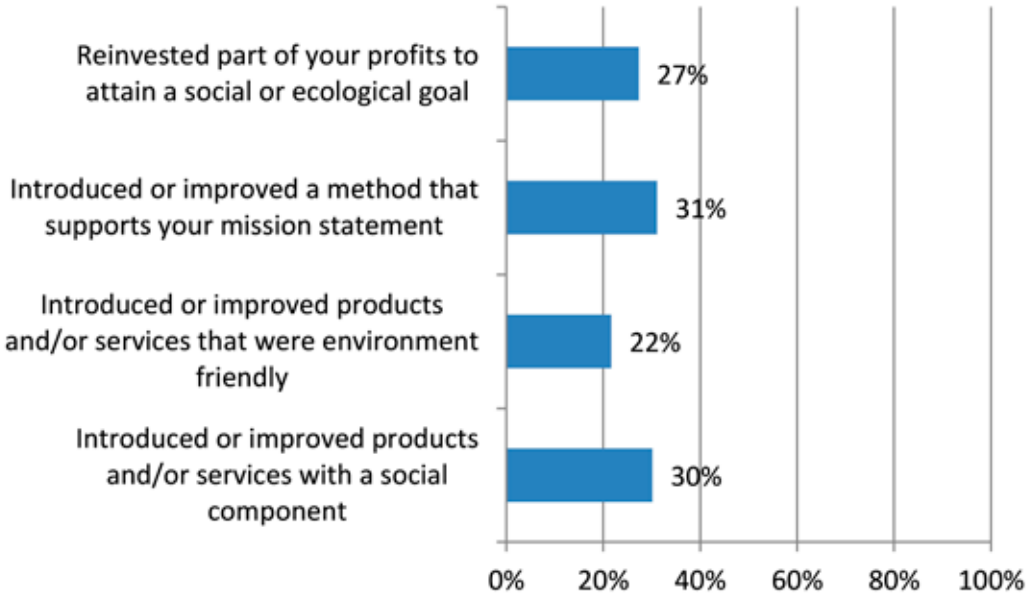


Figure 177: Albania: "Social Innovation"

Around one third of companies from Albanian sample were involved in innovation with a social component. 31% declared that introduced or improved a method that supports thier mission statement, and 30% Introduced or improved products and/or services with a social component.

Researchers believe that this last result is expected to be lower in reality due to the most respondents not accurate information on the social compoents of a service/product.

3.10. Performance

Finally, in order to make the survey on innovation in firms complete, we included indicators about the performance of firms.

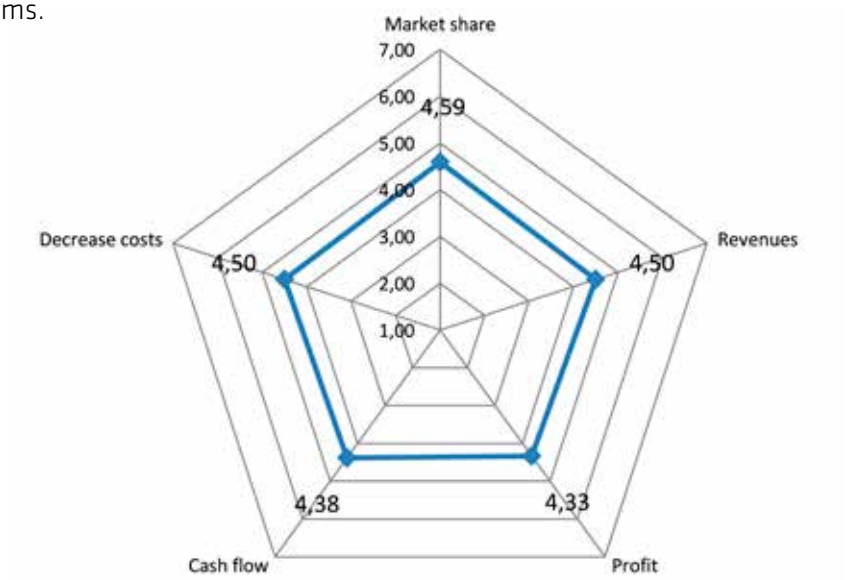


Figure 178: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor" (whole Adriatic Region)

When it comes to the way performance is measured, five important performance indicators were included: market share, revenues, profit, cash flow and decrease in costs. Respondents were asked to assess themselves in comparison to their most direct competitors. Hence, this is not an objective and absolute measure of performance; it is rather indirect and relative performance indicator. At the overall level, sampled firms assess their own performance very good – as all indicators are higher than 4. With the assessment of own position in terms of market share being the highest, mean = 4,59.

	MEAN	STD. DEVIATION
MARKET SHARE	4,59	1,511
REVENUES	4,50	1,476
PROFIT	4,33	1,586
CASH FLOW	4,38	1,498
DECREASE COSTS	4,50	1,427

Table 19: Adriatic Region: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

Table above shows means and standard deviations of each performance measure, where we can see that lowest assessments are made for profit and cash flow, while highest for market share. Interestingly, revenue and the ability to decrease costs are assessed relatively high (4,50) while profit, which might be seen as the result of the two, is assessed the lowest.

Italy

The different firm's innovative behaviors - in terms of product, process, collaborative activities, organizational structure and marketing – are reflected in the overall performance indicators. In fact, average performance scores are slightly higher than the mid-point (4) of the Likert scale (1-7). This means that higher performance achieved by the most innovative firms – in terms of revenues, market share, profit, cash-flow, and decrease costs – are partially moderated by those firms that were unable to introduce effective innovations.

The scores of these perceived performances need to be compared to the effective results achieved by firms in terms of both revenue and employees that highlight a substantial growth (see Descriptive Analysis).

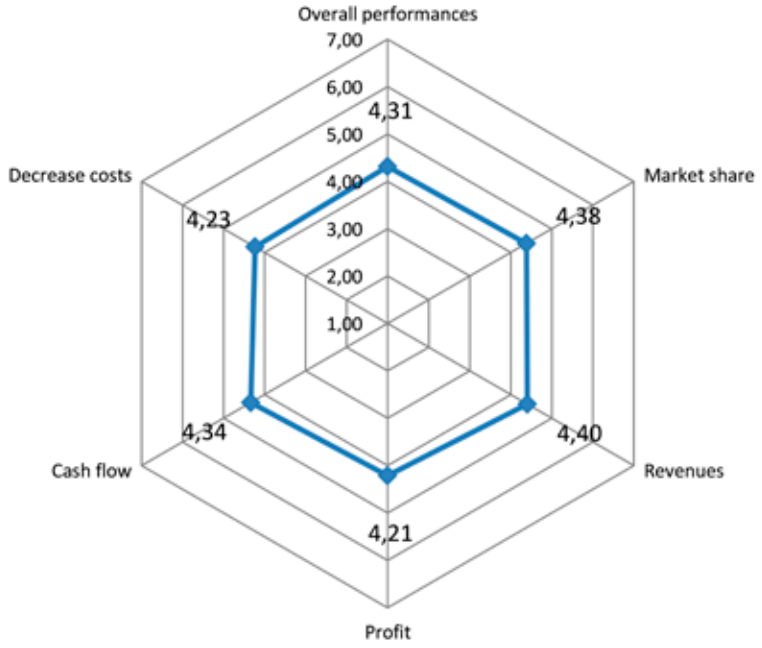


Figure 179: Italy: "Taking into account the last three years (performance compared to your most direct competitor"2011, 2012 and 2013), rate your overall business

PERFORMANCE INDICATORS	MEAN	STD. DEVIATION
MARKET SHARE	4,38	1,32
REVENUES	4,40	1,40
PROFIT	4,21	1,60
CASH FLOW	4,34	1,62
DECREASE COSTS	4,23	1,46

Table 20: Italy: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

Croatia

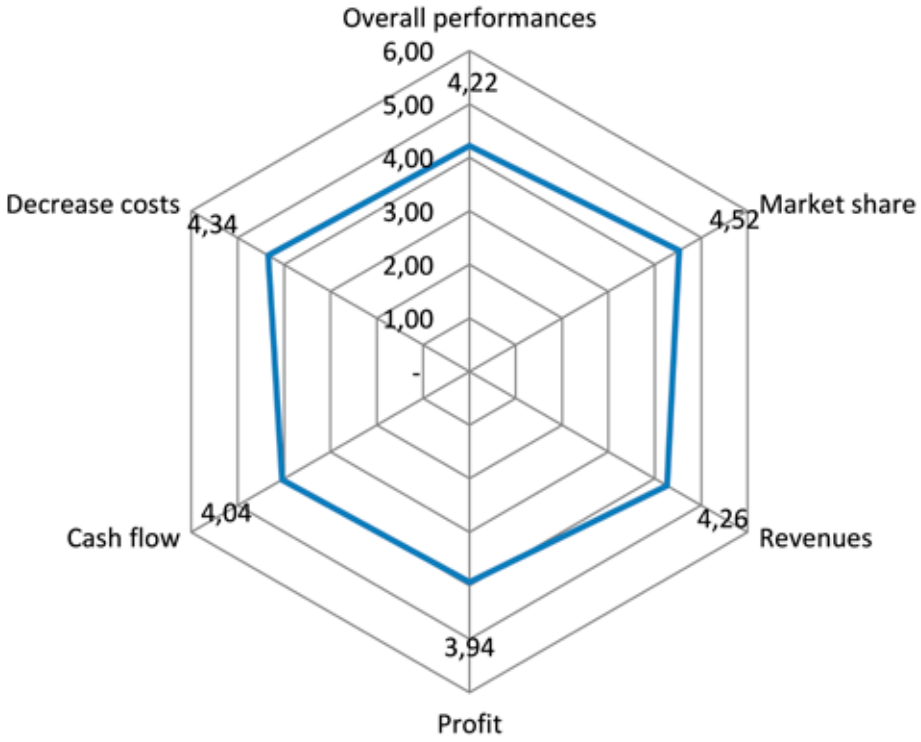


Figure 180: Croatia "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

The respondents have shown that they believe that in comparison to their direct competitor, their strength in the size of market share; however they also rated their profit as the weakest point in comparison to competitors.

Bosnia and Herzegovina

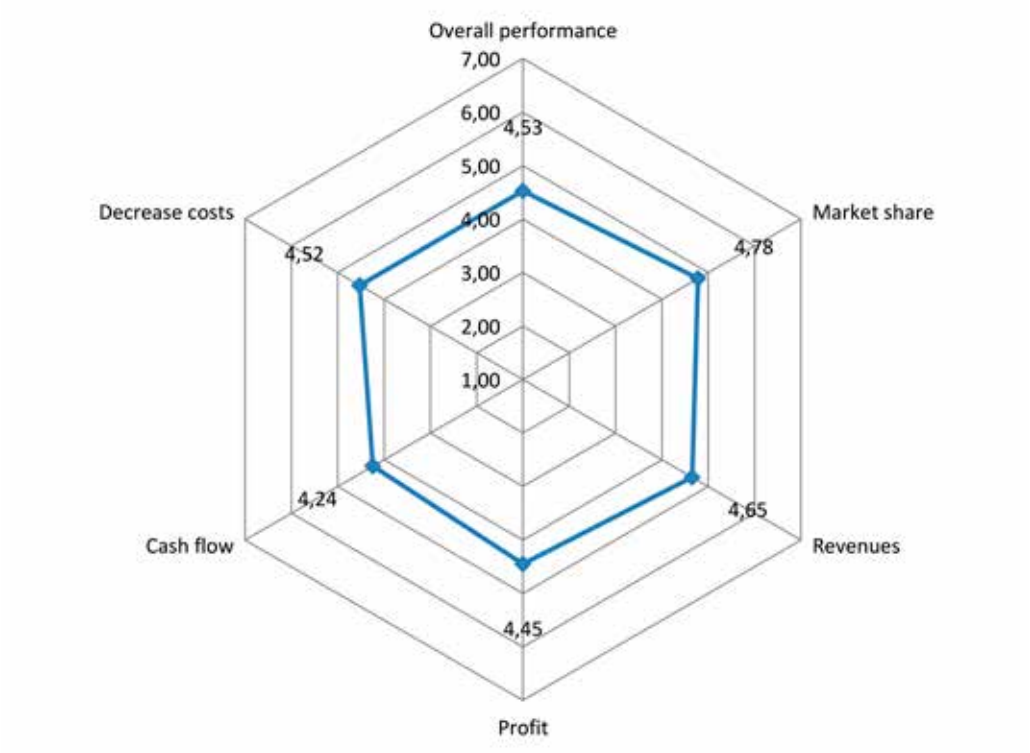


Figure 181: Bosnia and Herzegovina: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

PERFORMANCE INDICATORS	MEAN	STD. DEVIATION
MARKET SHARE	4,78	1,81
REVENUES	4,65	1,73
PROFIT	4,45	1,64
CASH FLOW	4,24	1,69
DECREASE COSTS	4,52	1,67

Table 21: Bosnia and Herzegovina: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

When it comes to firms in B&H, they assess their market share position as the best comparing to competitors, while their position related to the cash flow is rated the least in comparison to the competition.

Serbia

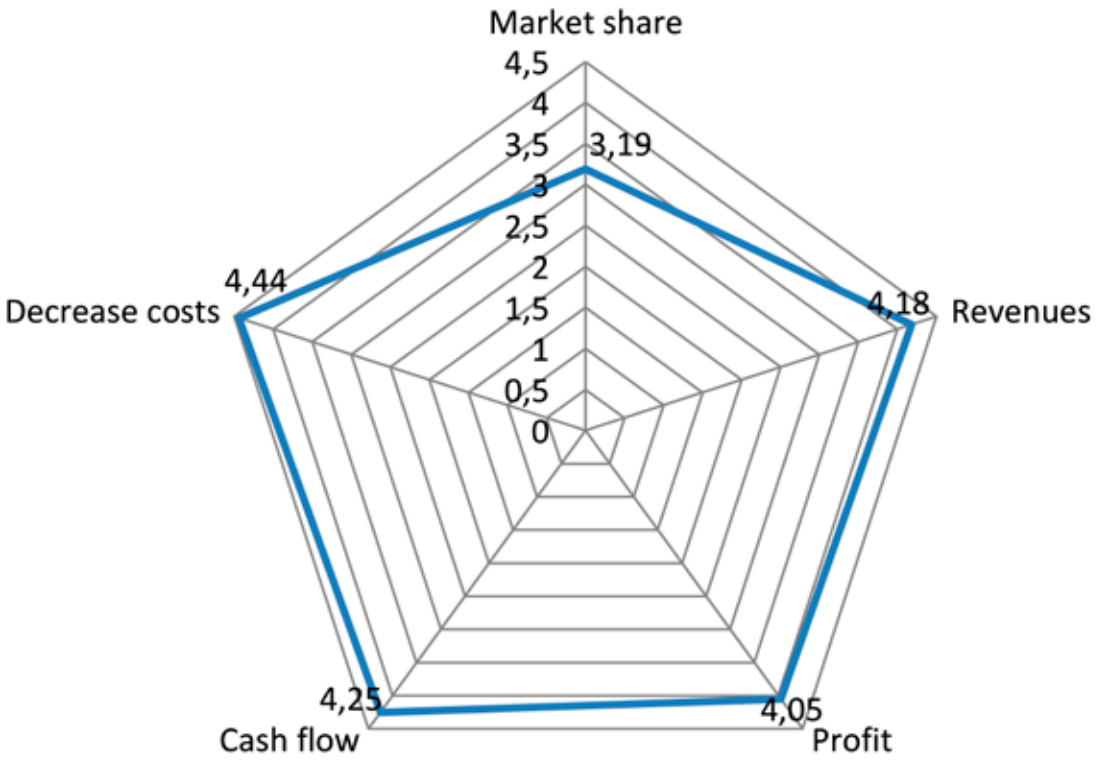


Figure 182: Serbia: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

When it comes to the Serbian firms in the sample, in contrary to other countries, they assess themselves as the best in decreasing costs and in achieving revenues, while they put the lowest score on their market share related activities.

Montenegro

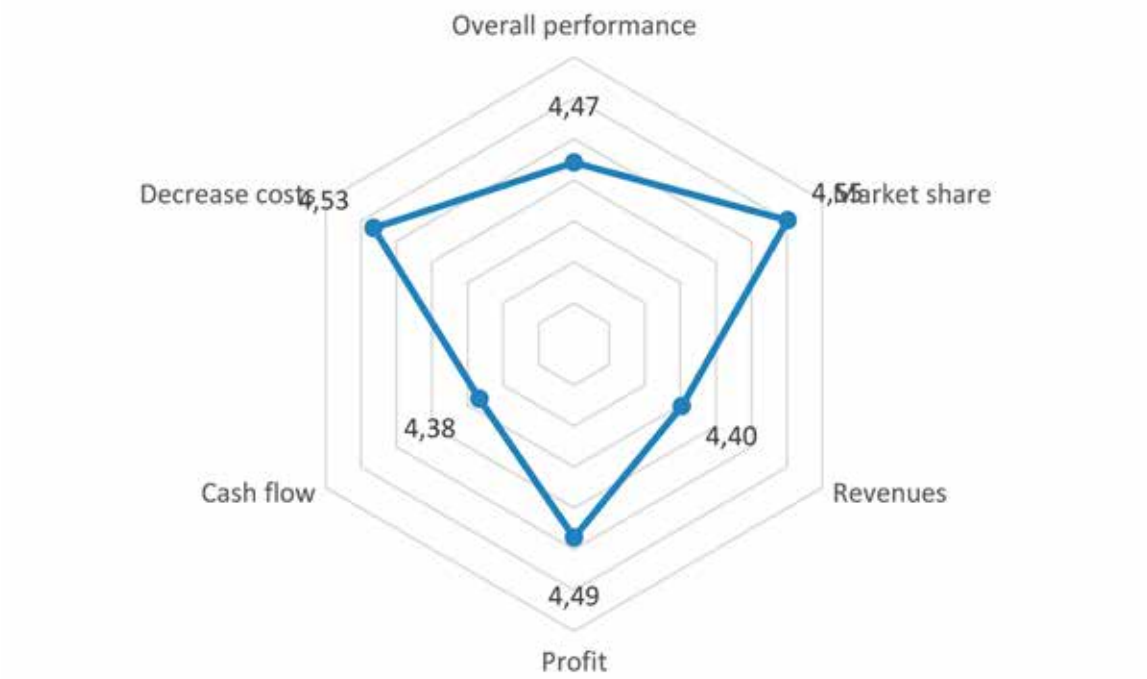


Figure 183: Montenegro: "Taking into account the last three years (2011, 2012 and 2013), rate your overal business performance compared to your most direct competitor"

PERFORMANCE INDICATORS	MEAN
MARKET SHARE	4.55
REVENUES	4.40
PROFIT	4.49
CASH FLOW	4.38
DECREASE COSTS	4.47

Table 22: Montenegro: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

Similarly to firms in B&H, firms in Montenegro assess their market share position the highest in comparison to competitors, while their cash flow position is problematic and assessed the lowest in comparison to competitors.

Albania

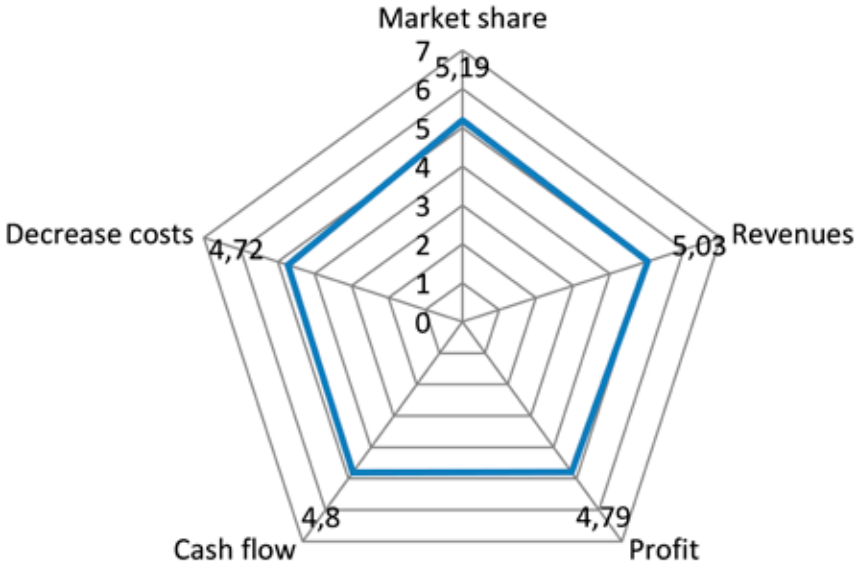


Figure 184: Albania: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

PERFORMANCE INDICATORS	MEAN	STD. DEVIATION
MARKET SHARE	5,19	1,45
REVENUES	5,03	1,37
PROFIT	4,79	1,39
CASH FLOW	4,8	1,39
DECREASE COSTS	4,72	1,38

Table 22: Montenegro: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

As can be observed from the graph above, all the performance indicators are rated as above average, but the market share is the performance indicator rated highest by the companies interviewed. This also corresponds to the status most companies have, which is the growth phase when gaining a higher market share is a safer way toward maturation. Market share and revenues are the highest-rated performance indicators in case of companies which claimed to have introduced a product innovation.

Greece

PERFORMANCE INDICATORS	MEAN
MARKET SHARE	4.54
REVENUES	4.54
PROFIT	4.43
CASH FLOW	4.57
DECREASE COSTS	4.26

Table 24: Greece: "Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor"

The table above shows the mean values of business performance which vary from 4.26 to 4.57, on a 7-point Likert scale, suggesting that the firms' perceptions about their performance compared to their most direct competitor is above average.

The findings suggest that firms believe that they perform better than the competition, but not a lot better. Investing in R&D would likely increase their performance.

4.Conclusion

This report offers several important insights. When it comes to the internationalization of Adriatic Region firms, we see that for the firms in the sample, national market is the most dominant selling field (94,8%) which is then followed by Western and Central Europe (41,1%) and by other Adriatic Region countries (31,0%). At the individual level importance of Adriatic Region varies and for some countries it is more important than Western and Central European countries. Sales and financial results are more than twice the size when generated from Western and Central Europe, than when generated by Adriatic Region countries. Furthermore, the degree of internationalization is relatively low, as majority of firms are either not exporters (42,8%), or they export to 1-5 countries (30,5%).

When it comes to innovation-related results, our results show that majority of firms in the sample (54%) introduced product innovation in the period from 2011-2013. Most of these new products (goods/services) are introduced as new to the market (75%) and new to the firm (77%). The process of innovation is also frequently introduced by sampled firms of Adriatic Region. Namely, firms introduce new or significantly improved methods of manufacturing as a form of process innovation (51%), new or significantly improved supporting activities for the processes (49%) and new or significantly improved logistics, delivery or distribution methods (33%). These percentages can be regarded as relatively high, since the expected values were somewhat lower. Considering the noted results, one can say that further improving of the innovation process is indeed a field that is worth investing into, mainly in the field of logistics, delivery and distribution methods considering its low scoring percentages.

This report also offers important insights into innovation hampers. At the overall level, firms in the Adriatic Region report that the most significant hamper of innovation is that its costs are too high. It is followed by the statements that here are lack of funds within the enterprise or group and that there is an uncertain demand for innovative goods or services. Therefore, enriching the knowledge with further qualitative findings on the main hampers of innovation is the next logical step for future scientific endeavors.

Regarding the activities related to the innovation, at the level of the Adriatic Region, having the in-house R&D in the home country (44,75%) is more frequently present than having the external R&D in the home country (32,04%). When observing particular innovation activities, firms in the Adriatic Region have the highest engagement in training for innovative activities in their home countries (47,32%), followed by design activities (44,91%). It could be noted that there is a low level of innovative activities that are being pursued abroad, and that in the relative sense, firms prefer having such activities in their home country. Activity that has the lowest score for firms in the sample is the acquisition of existing knowledge from other enterprises or organizations (46,57%). Spending on in-house R&D is generally higher for all countries than spending on external R&D. At the level of the Adriatic Region, in-house R&D spending is 14,30% of the turnover, while external R&D spending is 5,73% of the turnover.

the level of the received support for innovation is low for all three options, with highest support being from the local or regional authorities (13,5%), which is followed by the central government support (9,4%). Surprisingly, firms report that they receive the lowest support from the European Union, only 6,4%. This opens up a field for questioning and researching firms' ability to participate in these forms of support, particularly in terms of information, interest, discourse and skills.

Sources of innovation were also examined. At the level of the Adriatic Region, we see that the highest ranked source of innovation is the internal one (within the enterprise or enterprise group). This is followed by market sources, where two of them are particularly highly ranked – clients/customers from the private sector and suppliers. Interestingly, lowest rank is attributed to the public/private research institutions.

This report also offers important country-level insights which could serve to understand innovation in particular Adriatic Region countries better. All in all, report offers a good basis for preparation of cross-country overviews, policy implications and policy recommendations for the Region and for individual countries as well as a solid base for further scientific research.

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Appendices

Appendix A: Questionnaire

This survey collects information on your enterprise's innovations and innovation activities during the three years: **2011, 2012 and 2013**

An innovation is the introduction of a new or significantly improved offer, process, organisational method, or marketing method by your enterprise.

An innovation must have characteristics or intended uses that are new or that provide a significant improvement over what was previously used or sold by your enterprise. However, an innovation can fail or take time to prove itself.

An innovation needs to be new or significantly improved for your enterprise. It could have been originally developed or used by other enterprises.

Sections 2 to 6 refer to product and process innovations. Organisational and marketing innovations are covered in sections 7 and 8.

Please complete **all** questions, unless otherwise instructed.

Person we should contact if there are any queries regarding the form (OPTIONAL FOR EACH COUNTRY):

Name: _____

Job title: _____

Organisation: _____

Phone: _____

Fax: _____

E-mail: _____

Position in the organization

_____

_____

Number of year in that position

_____

1. General information about the enterprise

Name of enterprise _____ID

City_____ NUTS

Please briefly describe your enterprise's **main** products? (only one option should be allowed)
☐ Primary Products MP1
☐ Manufacturing MP2
☐ Services MP3
Main Activity_____NACE[1]

1.1. In 2013, was your enterprise part of an enterprise group? (A group consists of two or more legally defined enterprises under common ownership. Each enterprise in the group can serve different markets, as with national or regional subsidiaries, or serve different product markets. The head office is also part of an enterprise group.)
Yes ☐ In which country is the head office of your group located? [2]_____ GP
No ☐

1.2. In which geographic markets did your enterprise sell goods and/or services during the three years: 2011, 2012, and 2013?

	Yes / 1	**No /** 0	**If Yes,** %
GM1 A. National [your country]			
GM2 B. Adriatic countries *			
GM3 C. Western and Central Europe**			
GM4 D. Eastern Europe***			
GM5 E. North America			
GM6 G. East Asia****			
GM7 H. Middle East*****			
GM8 I. North Africa			
GM9 J. All other countries			

Which of these geographic areas was your largest market in terms of turnover during the three years: 2011, 2012 and 2013? (Give corresponding letter)		LARMAR
What was approximately your enterprise's current number of active export countries for 2013?		ACEXP

*Albania, Croatia, Greece, Italy, Montenegro, Serbia, Slovenia - Remember to adapt this part to the need of EACH Country
**Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Iceland, Ireland, Liechtenstein, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovenia, Switzerland, Spain, Sweden and the United Kingdom.
***Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Poland, Romania, Slovakia, Ucraina, Russia, Bulgaria,
**** China, Indonesia, Korea, Malaysia, Vietnam, Myanmar, Cambodia, Thailand, Laos PDR, East Timor, Mongolia
***** Arab Peninsula, Turkey, Israel, Egypt, Iran, Iraq, Syria

1 Pulldown menu (appendix)
2 Country code according to ISO standard

2. Product (good or service) innovation

A product innovation is the market introduction of a **new** or **significantly** improved **good or service** with respect to its capabilities, user friendliness, components or sub-systems.

- Product innovations (new or improved) **must be new to your enterprise,** but they **do not need to be new to your market.**
- Product innovations could have been originally developed by your enterprise or by other enterprises or institutions.

A **good** is usually a tangible object such as a smartphone, furniture, or packaged software, but downloadable software, music and film are also goods. A **service** is usually intangible, such as retailing, insurance, educational courses, air travel, consulting, etc.

2.1. During the three years: 2011, 2012 and 2013, did your enterprise introduce:

	Yes 1	No 0	
Product innovations: New or significantly improved goods or services (exclude the simple resale of new goods and hanges of the solely aesthetic nature)			INPDGD

If no, go to section 3 Otherwise go to question 2.2 and 2.3.

2.2. Any of your product innovations (goods or services) introduced during 2011, 2012 and 2013?

	Yes 1	No 0	
New to yourmarket? Your enterprise introduced a new or significantly improved product onto your market **before your competitors** (it may have already been available in other markets)			NEWMKT
Only new to your firm? Your enterprise introduced a new or significantly improved product that was already available from your competitors in your market			NEWFRM

Using the definitions above, please give the percentage of your total turnover[3] in 2013 from:

New or significantly improved products introduced during the three years 2011, 2012 and 2013 that were new to your market — TURNMAR ☐☐☐ %

New or significantly improved products introduced during the three years 2011, 2012 and 2013 that were **only new to your firm** — TURNIN ☐☐☐ %

Other products (**unchanged or only marginally modified**) — TURNUNG ☐☐☐ %

Total turnover in 2013 1 0 0 %

3 For Credit institutions: Interests receivable and similar income, for insurance services: Gross premiums written

2.3. Taking into account your product innovation, please circle one choice for each of the following statements.
(1 = strongly disagree, 4 = nor disagree nor agree, 7 = strongly agree)

	[4] Innovativeness	1	2	3	4	5	6	7
ITI1	In new product and service introduction, our company is often first-to-market.							
ITI2	Our new products and services are often perceived as very novel by customers.							
ITI3	New products and services in our company often take us up against new competitors.							
ITI4	In comparison with competitors, our company introduced more innovative products and services during past 3 years.							
ITI5	We constantly emphasize development of particular products and services.							
ITI6	We manage to cope with market demands and develop new products and services quickly.							
ITI7	We continuously modify design of our products and services and rapidly enter new markets.							
ITI8	Our firm manages to deliver special products/services flexibly according to customers' orders.							
ITI9	We continuously improve old products and services and raise quality of new products.							

4 Innovativeness (Škerlavaj et al., 2010) – first dimension: product and service (technical) innovations

3. Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or supporting activity.

- Process innovations **must be new to your enterprise**, but they **do not need to be new to your market.**
- The innovation could have been originally developed by your enterprise or by other enterprises or institutions.
- Exclude purely organisational innovations – these are covered in section 8.

3.1. During 2011, 2012 and 2013, did your enterprise introduce?

	Yes 1	**No** 0	
New or significantly improved methods of manufacturing or producing goods or services			INPSPD
New or significantly improved logistics, delivery or distribution methods for your inputs, goods orservices			INPSLG
New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing			INPSSU

Using the definitions above, please give the percentage of your total turnover[3] in 2013 from:

New or significantly improved products introduced during the three years 2011, 2012 and 2013 that were new to your market

TURNMAR ☐☐☐ %

New or significantly improved products introduced during the three years 2011, 2012 and 2013 that were **only new to your firm**

TURNIN ☐☐☐ %

Other products (**unchanged or only marginally modified**)

TURNUNG ☐☐☐ %

Total turnover in 2013 1 0 0 %

4. Factors hampering product and process innovation activities

4.1. During 2011, 2012 and 2013, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities?

DEGREE OF IMPORTANCE						
		Low 1	Medium 2	High 3	Factor not experienced 0	
Cost factors	Lack of funds within your enterprise or group					
	Lack of finance from sources outside your enterprise					
	Innovation costs too high					
Knowledge factors	Lack of qualified personnel					
	Lack of information on technology					
	Lack of information on markets					
	Difficulty in finding cooperation partners for innovation					
Market factors	Market dominated by established enterprises					
	Uncertain demand for innovative goods or services					
Reasons not to innovate	No need due to prior innovations by your enterprise					
	No need because of no demand for innovations					

If your enterprise had no product or process innovations or innovation activity during the 2011, 2012 and 2013 (no to all options in questions 2.1, 3.1), go to section 8. Otherwise, go to section 5

5. Activities and expenditures for product and process innovations

5.1. During the three years 2011, 2012 and 2013, did your enterprise engage in the following innovation activities? (you may tick more than one option)

		No 0	Yes Home Country 1	Yes Abroad 2	
In-house R&D	Research and development activities undertaken by your enterprise to create new knowledge or to solve scientific or technical problems (include software development in-house that meets this requirement)				IHRD1
	If yes, did your enterprise perform R&D during 2011, 2012 and 2013: Continuously (your enterprise has permanent R&D staff in-house) ☐ 1 Occasionally (as needed only) ☐ 2				IHRD1A
External R&D	R&D that your enterprise has contracted out to other enterprises (including other enterprises in your group) or to public or private research organisations				ERD1
Acquisition of machinery, equipment, software & buildings	Acquisition of advanced machinery, equipment, software and buildings to be used for new or significantly improved products or processes				ERD2
Acquisition of existing knowledge from other enterprises or organisations	Acquisition of existing know-how, copyrighted works, patented and non-patented inventions, etc. from other enterprises or organisations for the development of new or significantly improved products and processes				ERD3
Training for innovative activities	In-house or contracted out training for your personnel specifically for the development and/or introduction of new or significantly improved products and processes				ERD4
Market introduction of innovations	In-house or contracted out activities for the market introduction of your new or significantly improved goods or services, including market research and launch advertising				ERD5
Design	In-house or contracted out activities to design or alter the shape or appearance of goods or services				ERD6
Other	Other in-house or contracted out activities to implement new or significantly improved products and processes such as feasibility studies, testing, tooling up, industrial engineering, etc.				ERD7

5.2. How much did your enterprise spend on each of the following innovation activities in 2013 only? Innovation activities are defined in question 5.1 above. Include current expenditures (including labour costs, contracted-out activities, and other related costs) as well as capital expenditures on buildings and equipment.[5]

Please fill in '0' if your enterprise had no expenditures for an activity in 2013
*With a lack of precise accounting data please use % **on total turnover***

In-house R&D (Include current expenditures including labour costs and capital expenditures on buildings and equipment specifically for R&D)

RRDINX ☐☐☐ %

External R&D (R&D that your enterprise has contracted out to other enterprises (including other enterprises in your group) or to public or private research organisations)

RDEXX ☐☐☐ %

5.3. During the three years, 2011, 2012 and 2013, did your enterprise receive any public financial support for innovation activities from the following levels of government? Include financial support via tax credits or deductions, grants, subsidised loans, and loan guarantees. Exclude research and other innovation activities conducted entirely for the public sector* under contract.

	Yes 1	**No** 0	
Local or regional authorities			FUNLOC
Central government (including central government agencies or ministries)			FUNGMT
The European Union (EU)			FUNEU

*The public sector includes government owned organisations such as local, regional and national administrations and agencies, schools, hospitals, and government providers of services such as security, transport, housing, energy, etc.

5 Give expenditure data in 000's of national currency units to eight digits.

6. Sources of information and co-operation for product and process innovation

6.1. During the three years, 2011, 2012 and 2013, how important to your enterprise's innovation activities was each of the following information sources?

Include information sources that provided information for new innovation projects or contributed to the completion of existing projects.

Degree of importance Tick 'not used' if no information was obtained from a source.						
	Information source	Low	Medium	High	Not used	
Internal	Within your enterprise or enterprise group					SENTG
Market sources	Suppliers of equipment, materials, components, or software					SSUP
	Clients or customers from the private sector					SCLPR
	Clients or customers from the public sector*					SCLPU
	Competitors or other enterprises in your industry					SCOM
	Consultants and commercial labs					SINS
Education & research institutes	Universities or other higher education institutions					SUNI
	Government, public or private research institutes					SGMT
Other sources	Conferences, trade fairs, exhibitions					SCON
	Scientific journals and trade/technical publications					SJOU
	Professional and industry associations					SPRO

6.2. During the three years, 2011, 2012 and 2013, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?

Innovation co-operation is active participation with other enterprises or institutions on innovation activities. Both partners do not need to commercially benefit. Exclude pure contracting out of work with no active co-operation.

Yes ☐

No ☐ (Please go to question 7.1) CO

6.3. Please indicate the type of innovation co-operation partner by location

Type of co-operation partner	CODE	Your Region	Your country (BiH)	Slove-nia	Croatia	Italy	Serbia	Alba-nia	Mon-tene-gro	Greece	Other Eu-rope*	US	BRICS**	All other coun-tries
A. Other enterprises within your enterprise group	TI1													
B. Suppliers of equip-ment, materials, com-ponents, or software	TI2													
C. Clients or custom-ers from the private sector	TI3													
D. Clients or custom-ers from the public sector*	TI4													
E. Competitors or other enterprises in your sector	TI5													
F. Consultants and commercial labs	TI6													
G. Universities or oth-er higher education institutions	TI7													
H. Government, public or private research institutes	TI8													

*: Include the following European Union (EU) and associated countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom.

**Brazil, Russia, India, China, South Africa

7. Organisational Innovation

An organisational innovation is a new organisational method in your enterprise's business practices (including knowledge management), workplace organisation or external relations that has not been previously used by your enterprise.

- It must be the result of strategic decisions taken by management.
- Exclude mergers or acquisitions, even if for the first time.

Please rate your agreement/disagreement with the following statements on a 7-point scale, where 1 stands for disagree" and 7 stands for "totally agree".

	[6]	1	2	3	4	5	6	7
MI1	Rules and procedures within our organization are regularly renewed							
MI2	We regularly make changes in our employees' tasks and functions							
MI3	Our organization regularly implements new management systems							
MI4	The policy with regard to compensation has been changed in the last three years							
MI5	The intra- and inter-departmental communication structure within our organization is regularly restructured							
MI6	We continuously alter certain elements of the organizational structure							
MI7	Our employees may pursue different roles within the organization							
MI8	We usually alter the way in which we set our objectives							
MI9	We regularly invest in developing our structure so as to make the most of our staff							

6 Management innovation (Vaccaro, Jansen, Van Den Bosch, & Volberda, 2012)

8. Marketing innovation

A marketing innovation is the implementation of a new marketing concept or strategy that differs significantly from enterprise's existing marketing methods and that has not been used before.

- It requires significant changes in product design or packaging, product placement, product promotion or pricing.
- Exclude seasonal, regular and other routine changes in marketing methods.

Please circle one choice for each of the following statements.
(1 = strongly disagree, 2 = disagree, 3 = nor disagree nor agree, 4 =agree, 5 = strongly agree; X = do not know)

	[7]	1	2	3	4	5	6	7
IPI1	Development of new channels for products and services offered by our corporation is an on-going process.							
IPI2	We deal with customers' suggestions or complaints urgently and with utmost care.							
IPI3	In marketing innovations (entering new markets, new pricing methods, new distribution methods, etc.) our company is better than competitors.							

9. Performance

9.1. Taking into account the last three years (2011, 2012 and 2013), rate your overall business performance compared to your most direct competitor (1 = much worse, 4 = equal, 7= much better)

	[8]	1	2	3	4	5	6	7
FMS	Market share							
FR	Revenues							
FP	Profit							
FCF	Cash flow							
DC	Decrease costs							

7 Innovativeness (Škerlavaj et al., 2010) – second dimension: process (administrative/marketing) innovations
8 Business performance according to (Auh & Merlo, 2012)

10. Firmographics

10.1. What was your enterprise's total turnover in EUR for 2010 and 2013?[9] Turnover is defined as the market sales of goods and services (Include all taxes except VAT[10])

2010 ☐☐☐☐☐☐☐☐☐ TURN10

2013 ☐☐☐☐☐☐☐☐☐ TURN12

10.2. What was approximately your enterprise's percentage of foreign turnover on total turnover for 2010 and 2013?

2010 ☐☐☐% TURNF10

2013 ☐☐☐% TURNF12

10.3. In which year approximately did your enterprise start to export?

_____ EXP

10.4. What was your enterprise's average number of

Total employees	2013 ☐☐☐☐☐☐	TE
Managers (and other project/function responsible)	2013 ☐☐☐☐☐☐	TEM
Doctoral degree	2013 ☐☐☐☐☐☐	TEDD
Master degree	2013 ☐☐☐☐☐☐	TEMD
Bachelor degree	2013 ☐☐☐☐☐☐	TEBD
Lower	2013 ☐☐☐☐☐☐	TEL

9 Give turnover in '000 of euros units. Leave space for up to nine digits.
10 For Credit institutions: Interests receivable and similar income; for Insurance services give gross premiums written.

11. Social innovation[11]

The term 'social innovation' is used for te new ideas - products, services and models - that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations (i.e. providing social services and/or goods and services to vulnerable persons; giving access to employment for people disadvantaged, being environmentally friendly etc.).

During the three years: 2011, 2012 and 2013, did your enterprise

	Yes 1	**No** 0	
Introduce or improve products (good and/or service) with social or societal objective (e.g. access to housing, health care, assistance for elderly or disabled persons, inclusion of vulnerable groups, child care, products addressed to disabled, etc.)			SI1
Introduce or improve products (good and/or service) in terms of environmental footprint (e.g. product/service with low environmental footprint, eco-design products, etc.)			SI2
Introduce or improve a method of organization or ownership system that reflects their mission (e.g. access to employment and training for elderly or disabled, dependency management, environmental technologies, use of clean energy, green procurement, etc.)			SI3
Reinvest part of its profits with a view to achieving a specific social, environmental, and/or community objective			SI4

11 Social innovation – two indicator questions

12. Market Orientation

Please rate your agreement/disagreement with the following statements on a 7-point scale, where 1 stands for "totally disagree" and 7 stands for "totally agree".

	[12]	1	2	3	4	5	6	7
MOIG1	In this firm, we meet with customers at least once a year to find out what products or services they will need in the future.							
MOIG2	Individuals from our manufacturing department interact directly with customers to learn how to serve them better.							
MOIG3	In this firm, we do a lot of in-house market research.							
MOIG4	We are slow to detect changes in our customers' product preferences. (R)							
MOIG5	We poll end users at least once a year to assess the quality of our products and services.							
MOIG6	We often talk with or survey those who can influence our end users' purchases (e.g., retailers, distributors).							
MOIG7	We collect industry information by informal means (e.g., lunch with industry friends, talks with trade partners).							
MOIG8	In our firm, intelligence on our competitors is generated independently by several departments.							
MOIG9	We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation). (R)							
MOIG10	We periodically review the likely effect of changes in our business environment (e.g., regulation) on customers.							

	[13]	1	2	3	4	5	6	7
MOID1	A lot of informal "hall talk" in this firm concerns our competitors' tactics or strategies.							
MOID2	We have interdepartmental meetings at least once a quarter to discuss market trends and developments.							
MOID3	Marketing personnel in our firm spend time discussing customers' future needs with other functional departments.							
MOID4	Our firm periodically circulates documents (e.g., reports, news- letters) that provide information on our customers.							
MOID5	When something important happens to a major customer of market, the whole firm knows about it within a short period.							
MOID6	Data on customer satisfaction are disseminated at all levels in this firm on a regular basis.							
MOID7	There is minimal communication between marketing and manufacturing departments concerning market developments. (R)							
MOID8	When one department finds out something important about competitors, it is slow to alert other departments. (R)							

12 Market orientation (Kohli, Jaworski, & Kumar, 1993) – first dimension: intelligence generation
13 Market orientation (Kohli et al., 1993) – second dimension: intelligence dissemination

	[14]	1	2	3	4	5	6	7
MOR1	It takes us forever to decide how to respond to our competitor's price changes. (R)							
MOR2	Principles of market segmentation drive new product development efforts in this firm.							
MOR3	For one reason or another we tend to ignore changes in our customer's product or service needs. (R)							
MOR4	We periodically review our product development efforts to ensure that they are in line with what customers want.							
MOR5	Our business plans are driven more by technological advances than by market research. (R)							
MOR6	Several departments get together periodically to plan a response to changes taking place in our business environment.							
MOR7	The product lines we sell depend more on internal politics than on real market needs. (R)							
MOR8	If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.							
MOR9	The activities of different departments in this firm are well coordinated.							
MOR10	Customer complaints fall on deaf ears in this firm. (R)							
MOR11	Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion. (R)							
MOR12	We are quick to respond to significant changes in our competitors' pricing structures.							
MOR13	When we find out that customers are unhappy with the quality of our service, we take corrective action immediately.							
MOR14	When we find that customers would like us to modify a product of service, the departments involved make concerted efforts to do so.							

14 Market orientation (Kohli et al., 1993) – third dimension: responsiveness

Annex A

Industries and Main Activities (Nace 2 – Eurostat)

A. Primary
- A.1 Agriculture, forestry and fishing
- A.2 Mining and quarrying

B. Manufacturing
- B1 Manufacture of food products
- B.2 Manufacture of beverages
- B.3 Manufacture of tobacco products
- B.4 Manufacture of textiles
- B.5 Manufacture of wearing apparel
- B.6 Manufacture of leather and related products
- B.7 Manufacture of wood and wood products
- B.8 Manufacture of paper and paper products
- B.9 Printing and reproduction of recorded media
- B.10 Manufacture of coke and refined petroleum products
- B.11 Manufacture of chemicals and chemical products
- B.1C Manufacture of pharmaceuticals
- B.13 Manufacture of rubber and plastic products
- B.14 Manufacture of other non-metallic mineral products
- B.15 Manufacture of basic metals
- B.16 Manufacture of fabricated metal products
- B.17 Manufacture of computer, electronic and optical produBts
- B.18 Manufacture of electrical equipment
- B.19 Manufacture of machinery and equipment
- B.20 Manufacture of motor vehicles, trailers and semi-trailers
- B.21 Manufacture of other transport equipment
- B.22 Manufacture of furniture
- B.23 Other manufacturing
- B.24 Repair and installation of machinery and equipment

C. Service
- C.1 Electricity, gas, steam and air conditioning supply
- C.2 Water supply; sewerage; waste management and remediation activities
- C.3 Construction
- C.4 Wholesale and retail trade; repair of motor vehicles and motorcycles
- C.5 Transporting and storage
- C.6 Accommodation and food service activities
- C.7 Information and communication
- C.8 Financial and insurance activities
- C.9 Real estate activities
- C.10 Professional, scientific and technical activities
- C.11 Administrative and support service activities
- C.12 Other services activities

Appendix B: Descriptive statistics

	N	MIN	MAXI	MEAN	STD. DEV.	SKEWNESS	STD. ERROR	KURTOSIS	STD. ERROR
GP	809	.0	2.0	.412	.6893	1.388	.086	.479	.172
GM [GM1]	830	.0	1.0	.948	.2218	-4.052	.085	14.451	.170
GM [GM2]	810	.0	1.0	.384	.4866	.478	.086	-1.776	.172
GM [GM3]	810	.0	1.0	.375	.4845	.516	.086	-1.738	.172
GM [GM4]	804	.0	1.0	.226	.4187	1.310	.086	-.284	.172
GM [GM5]	795	.0	1.0	.112	.3155	2.466	.087	4.092	.173
GM [GM6]	795	.0	1.0	.067	.2496	3.481	.087	10.143	.173
GM [GM7]	793	.0	1.0	.082	.2745	3.054	.087	7.343	.173
GM [GM8]	791	.0	1.0	.091	.2878	2.849	.087	6.133	.174
GM [GM9]	791	.0	1.0	.062	.2412	3.641	.087	11.288	.174
GM [G10]	791	.0	1.0	.064	.2458	3.553	.087	10.654	.174
PGM [PGM1]	808	.0	100.0	74.557	34.8404	-1.108	.086	-.306	.172
PGM [PGM2]	654	.0	100.0	9.489	20.3607	3.182	.096	10.300	.191
PGM [PGM3]	653	.0	100.0	11.780	21.6585	2.281	.096	4.906	.191
PGM [PGM4]	622	.0	45.0	2.617	6.1049	3.229	.098	12.473	.196
PGM [PGM5]	606	.0	100.0	2.355	9.9496	6.456	.099	49.260	.198
PGM [PGM6]	599	.0	40.0	.499	2.9311	9.057	.100	95.939	.199
PGM [PGM7]	600	.0	80.0	1.066	5.4991	8.913	.100	99.774	.199
PGM [PGM8]	598	.0	68.0	.823	4.0630	10.099	.100	138.433	.200
PGM [PGM9]	597	.0	39.0	.533	3.2624	8.362	.100	76.170	.200
PGM [PG10]	597	.0	50.0	.516	3.3362	10.612	.100	129.820	.200
INPGD	826	.0	1.0	.539	.4988	-.156	.085	-1.981	.170
TPI [NEWMKT]	475	.0	1.0	.754	.4313	-1.181	.112	-.607	.224
TPI [NEWFIRM]	472	.0	1.0	.769	.4219	-1.281	.112	-.361	.224
TURN [TURNMAR]	415	.0	100.0	21.536	25.4745	1.531	.120	1.870	.239
TURN [TURNIN]	413	.0	100.0	19.457	22.7855	1.466	.120	1.838	.240
TURN [TURNUNG]	416	.0	100.0	57.178	33.7088	-.374	.120	-1.199	.239
ITI [ITI1]	466	1.0	7.0	4.747	1.6721	-.343	.113	-.530	.226
ITI [ITI2]	467	1.0	7.0	5.137	1.6568	-.853	.113	.146	.225
ITI [ITI3]	465	1.0	7.0	5.243	1.5808	-.836	.113	.131	.226
ITI [ITI4]	463	1.0	7.0	5.032	1.6765	-.605	.113	-.282	.226

ITI [ITI5]	464	1.0	7.0	5.718	1.5074	-1.359	.113	1.429	.226
ITI [ITI6]	467	1.0	7.0	5.497	1.4973	-1.053	.113	.582	.225
ITI [ITI7]	464	1.0	7.0	5.119	1.6760	-.744	.113	-.189	.226
ITI [ITI8]	465	1.0	7.0	5.886	1.4119	-1.532	.113	2.254	.226
ITI [ITI9]	466	1.0	7.0	5.923	1.3829	-1.552	.113	2.312	.226
INP [INPSPD]	785	.0	1.0	.532	.4993	-.130	.087	-1.988	.174
INP [INPSLG]	779	.0	1.0	.363	.4813	.570	.088	-1.680	.175
INP [INPSSU]	784	.0	1.0	.492	.5003	.031	.087	-2.004	.174
CF [CF1]	770	.0	3.0	1.796	1.0445	-.471	.088	-.950	.176
CF [CF2]	758	.0	3.0	1.704	1.1047	-.298	.089	-1.244	.177
CF [CF3]	765	.0	5.0	1.797	1.0345	-.448	.088	-.809	.177
CF [CF0]	766	.0	3.0	1.446	1.0361	-.026	.088	-1.173	.176
CF [KF1]	769	.0	5.0	1.114	.9114	.476	.088	-.335	.176
CF [KF2]	758	.0	5.0	1.251	.9396	.248	.089	-.646	.177
CF [KF3]	759	.0	3.0	1.603	1.0284	-.207	.089	-1.090	.177
CF [MF1]	752	.0	5.0	1.626	1.0046	-.163	.089	-.888	.178
CF [MF2]	752	.0	3.0	1.642	1.0157	-.195	.089	-1.064	.178
CF [MF3]	723	.0	3.0	1.019	.8868	.416	.091	-.739	.182
CF [MF0]	732	.0	3.0	1.055	.9073	.432	.090	-.713	.180
IHRD1 [IHRD10]	406	.0	1.0	.480	.5002	.079	.121	-2.004	.242
IHRD1 [IHRD11]	493	.0	1.0	.631	.4831	-.544	.110	-1.711	.220
IHRD1 [IHRD12]	349	.0	2.0	.387	.5328	.921	.131	-.269	.260
IHRD1A	421	1.0	2.0	1.527	.4998	-.110	.119	-1.997	.237
ERD1 [ERD10]	440	.0	3.0	.705	.6843	1.225	.116	2.789	.232
ERD1 [ERD11]	345	.0	1.0	.574	.4952	-.300	.131	-1.921	.262
ERD1 [ERD12]	268	.0	1.0	.377	.4855	.511	.149	-1.752	.297
ERD2 [ERD20]	390	.0	3.0	.626	.9004	1.574	.124	1.724	.247
ERD2 [ERD21]	349	.0	1.0	.670	.4707	-.729	.131	-1.478	.260
ERD2 [ERD22]	279	.0	1.0	.545	.4989	-.181	.146	-1.982	.291
ERD3 [ERD30]	466	.0	3.0	.727	.7367	1.257	.113	2.258	.226
ERD3 [ERD31]	273	.0	1.0	.462	.4994	.155	.147	-1.991	.294
ERD3 [ERD32]	271	.0	1.0	.435	.4967	.262	.148	-1.946	.295
ERD4 [ERD40]	334	.0	1.0	.347	.4768	.644	.133	-1.594	.266
ERD4 [ERD41]	361	.0	1.0	.734	.4424	-1.064	.128	-.873	.256
ERD4 [ERD42]	271	.0	1.0	.406	.4920	.385	.148	-1.865	.295

ERD5 [ERD50]	385	.0	1.0	.462	.4992	.152	.124	-1.987	.248
ERD5 [ERD51]	323	.0	1.0	.659	.4746	-.676	.136	-1.553	.271
ERD5 [ERD52]	253	.0	1.0	.312	.4643	.815	.153	-1.346	.305
ERD6 [ERD60]	352	.0	1.0	.449	.4981	.207	.130	-1.969	.259
ERD6 [ERD61]	358	.0	1.0	.654	.4765	-.648	.129	-1.588	.257
ERD6 [ERD62]	247	.0	1.0	.316	.4658	.797	.155	-1.375	.309
ERD7 [ERD70]	363	.0	1.0	.529	.4999	-.116	.128	-1.997	.255
ERD7 [ERD71]	351	.0	1.0	.638	.4812	-.578	.130	-1.676	.260
ERD7 [ERD72]	238	.0	2.0	.336	.5400	1.331	.158	.823	.314
EXP [RRDINX]	479	.000	130.000	14.42311	22.680475	2.440	.112	5.912	.223
EXP [RDEXX]	469	.000	107.000	6.22739	14.331651	4.130	.113	20.089	.225
FUN [FUNLOC]	599	.0	1.0	.139	.3458	2.098	.100	2.408	.199
FUN [FUNGMT]	599	.0	1.0	.127	.3331	2.248	.100	3.062	.199
FUN [FUNEU]	592	.0	1.0	.079	.2706	3.119	.100	7.757	.201
SOUR [SENTG]	615	.0	4.0	2.159	1.0418	-.912	.099	-.236	.197
SOUR [SSUP]	613	.0	4.0	1.966	.9854	-.435	.099	-.299	.197
SOUR [SCLPR]	603	.0	4.0	2.025	1.0267	-.678	.100	-.508	.199
SOUR [SCLPU]	603	.0	4.0	1.454	1.2183	.444	.100	-.762	.199
SOUR [SCOM]	606	.0	4.0	1.731	1.0454	-.081	.099	-.590	.198
SOUR [SINS]	604	.0	5.0	1.566	1.2816	.433	.099	-.807	.199
SOUR [SUNI]	606	.0	5.0	1.408	1.2546	.586	.099	-.634	.198
SOUR [SGMT]	601	.0	6.0	1.225	1.2850	.970	.100	.059	.199
SOUR [SCON]	603	.0	33.0	1.915	1.6679	10.669	.100	199.819	.199
SOUR [SJOU]	600	.0	4.0	1.665	1.0961	-.009	.100	-.775	.199
SOUR [SPRO]	596	.0	4.0	1.421	1.2225	.532	.100	-.658	.200
COOP	639	.0	1.0	.432	.4957	.276	.097	-1.930	.193
TTI [A_BiH]	403	.0	1.0	.132	.3384	2.189	.122	2.805	.243
TTI [A_SLO]	423	.0	1.0	.139	.3469	2.089	.119	2.374	.237
TTI [A_CRO]	404	.0	1.0	.186	.3893	1.623	.121	.637	.242
TTI [A_IT]	402	.0	1.0	.147	.3543	2.004	.122	2.026	.243
TTI [A_SRB]	400	.0	1.0	.135	.3422	2.144	.122	2.611	.243
TTI [A_ALB]	398	.0	1.0	.055	.2288	3.907	.122	13.331	.244
TTI [A_CG]	403	.0	1.0	.055	.2275	3.936	.122	13.558	.243
TTI [A_GR]	412	.0	1.0	.046	.2100	4.344	.120	16.952	.240
TTI [A_OTHEREU]	408	.0	1.0	.196	.3975	1.537	.121	.363	.241

TTI [A_SAD]	399	.0	1.0	.038	.1905	4.880	.122	21.928	.244
TTI [A_BRICS]	399	.0	1.0	.010	.0997	9.874	.122	95.974	.244
TTI [A_OTHER]	402	.0	1.0	.040	.1957	4.726	.122	20.435	.243
TTI [B_BiH]	394	.0	1.0	.279	.4492	.988	.123	-1.029	.245
TTI [B_SLO]	411	.0	1.0	.168	.3742	1.784	.120	1.187	.240
TTI [B_CRO]	397	.0	1.0	.212	.4089	1.418	.122	.010	.244
TTI [B_IT]	401	.0	1.0	.155	.3620	1.918	.122	1.687	.243
TTI [B_SRB]	395	.0	1.0	.172	.3780	1.744	.123	1.045	.245
TTI [B_ALB]	394	.0	1.0	.036	.1854	5.037	.123	23.492	.245
TTI [B_CG]	396	.0	1.0	.010	.1001	9.836	.123	95.223	.245
TTI [B_GR]	411	.0	1.0	.051	.2205	4.092	.120	14.820	.240
TTI [B_OTHEREU]	406	.0	1.0	.256	.4370	1.121	.121	-.746	.242
TTI [B_SAD]	401	.0	1.0	.112	.3160	2.466	.122	4.103	.243
TTI [B_BRICS]	394	.0	1.0	.033	.1789	5.249	.123	25.682	.245
TTI [B_OTHER]	398	.0	1.0	.063	.2429	3.617	.122	11.142	.244
TTI [C_BiH]	401	.0	1.0	.319	.4667	.779	.122	-1.401	.243
TTI [C_SLO]	426	.0	1.0	.204	.4036	1.473	.118	.169	.236
TTI [C_CRO]	403	.0	1.0	.290	.4545	.927	.122	-1.146	.243
TTI [C_IT]	403	.0	1.0	.144	.3514	2.036	.122	2.158	.243
TTI [C_SRB]	401	.0	1.0	.239	.4273	1.226	.122	-.499	.243
TTI [C_ALB]	393	.0	1.0	.076	.2659	3.203	.123	8.303	.246
TTI [C_CG]	401	.0	1.0	.122	.3279	2.316	.122	3.380	.243
TTI [C_GR]	406	.0	1.0	.062	.2407	3.661	.121	11.461	.242
TTI [C_OTHEREU]	407	.0	1.0	.273	.4459	1.024	.121	-.955	.241
TTI [C_SAD]	399	.0	1.0	.100	.3007	2.672	.122	5.166	.244
TTI [C_BRICS]	397	.0	1.0	.030	.1714	5.509	.122	28.487	.244
TTI [C_OTHER]	401	.0	1.0	.070	.2552	3.389	.122	9.530	.243
TTI [D_BiH]	403	.0	1.0	.161	.3683	1.849	.122	1.425	.243
TTI [D_SLO]	424	.0	1.0	.085	.2791	2.989	.119	6.967	.237
TTI [D_CRO]	403	.0	1.0	.084	.2783	3.002	.122	7.047	.243
TTI [D_IT]	402	.0	1.0	.022	.1481	6.481	.122	40.203	.243
TTI [D_SRB]	400	.0	1.0	.093	.2901	2.824	.122	6.002	.243
TTI [D_ALB]	399	.0	1.0	.035	.1842	5.072	.122	23.849	.244
TTI [D_CG]	403	.0	1.0	.030	.1702	5.554	.122	28.987	.243
TTI [D_GR]	406	.0	1.0	.017	.1303	7.445	.121	53.691	.242

TTI [D_OTHEREU]	403	.0	1.0	.057	.2323	3.833	.122	12.755	.243
TTI [D_SAD]	399	.0	1.0	.013	.1114	8.797	.122	75.774	.244
TTI [D_BRICS]	400	.0	1.0	.007	.0864	11.460	.122	129.975	.243
TTI [D_OTHER]	400	.0	1.0	.017	.1313	7.387	.122	52.834	.243
TTI [E_BiH]	402	.0	1.0	.192	.3940	1.574	.122	.479	.243
TTI [E_SLO]	422	.0	1.0	.109	.3120	2.518	.119	4.362	.237
TTI [E_CRO]	405	.0	1.0	.151	.3581	1.961	.121	1.854	.242
TTI [E_IT]	403	.0	1.0	.050	.2174	4.163	.122	15.408	.243
TTI [E_SRB]	403	.0	1.0	.129	.3357	2.221	.122	2.949	.243
TTI [E_ALB]	403	.0	1.0	.052	.2225	4.046	.122	14.439	.243
TTI [E_CG]	405	.0	1.0	.044	.2063	4.438	.121	17.780	.242
TTI [E_GR]	403	.0	1.0	.015	.1213	8.041	.122	62.975	.243
TTI [E_OTHEREU]	409	.0	1.0	.144	.3518	2.032	.121	2.141	.241
TTI [E_SAD]	402	.0	1.0	.057	.2325	3.827	.122	12.711	.243
TTI [E_BRICS]	402	.0	1.0	.022	.1481	6.481	.122	40.203	.243
TTI [E_OTHER]	401	.0	1.0	.035	.1838	5.086	.122	23.992	.243
TTI [F_BiH]	396	.0	1.0	.119	.3238	2.367	.123	3.621	.245
TTI [F_SLO]	409	.0	1.0	.049	.2159	4.199	.121	15.707	.241
TTI [F_CRO]	397	.0	1.0	.050	.2190	4.127	.122	15.108	.244
TTI [F_IT]	398	.0	1.0	.045	.2081	4.394	.122	17.391	.244
TTI [F_SRB]	397	.0	1.0	.058	.2339	3.799	.122	12.494	.244
TTI [F_ALB]	397	.0	1.0	.020	.1407	6.856	.122	45.228	.244
TTI [F_CG]	403	.0	1.0	.022	.1479	6.490	.122	40.314	.243
TTI [F_GR]	401	.0	1.0	.015	.1216	8.021	.122	62.642	.243
TTI [F_OTHEREU]	403	.0	1.0	.065	.2460	3.559	.122	10.716	.243
TTI [F_SAD]	398	.0	1.0	.020	.1405	6.865	.122	45.353	.244
TTI [F_BRICS]	396	.0	1.0	.013	.1118	8.763	.123	75.174	.245
TTI [F_OTHER]	397	.0	1.0	.015	.1222	7.979	.122	61.975	.244
TTI [G_BiH]	422	.0	1.0	.187	.3905	1.610	.119	.593	.237
TTI [G_SLO]	398	.0	1.0	.018	.1316	7.368	.122	52.548	.244
TTI [G_CRO]	400	.0	1.0	.065	.2468	3.542	.122	10.601	.243
TTI [G_IT]	401	.0	1.0	.020	.1400	6.892	.122	45.728	.243
TTI [G_SRB]	398	.0	1.0	.070	.2561	3.373	.122	9.423	.244
TTI [G_ALB]	397	.0	1.0	.030	.1714	5.509	.122	28.487	.244
TTI [G_CG]	402	.0	1.0	.017	.1310	7.406	.122	53.120	.243

TTI [G_GR]	402	.0	1.0	.017	.1310	7.406	.122	53.120	.243
TTI [G_OTHEREU]	402	.0	1.0	.045	.2071	4.419	.122	17.613	.243
TTI [G_SAD]	397	.0	1.0	.013	.1117	8.775	.122	75.374	.244
TTI [G_BRICS]	397	.0	1.0	.003	.0502	19.925	.122	397.000	.244
TTI [G_OTHER]	398	.0	1.0	.003	.0501	19.950	.122	398.000	.244
TTI [H_BiH]	403	.0	1.0	.089	.2856	2.890	.122	6.386	.243
TTI [H_SLO]	424	.0	1.0	.059	.2358	3.758	.119	12.180	.237
TTI [H_CRO]	404	.0	1.0	.027	.1629	5.832	.121	32.167	.242
TTI [H_IT]	402	.0	1.0	.010	.0994	9.912	.122	96.724	.243
TTI [H_SRB]	403	.0	1.0	.052	.2225	4.046	.122	14.439	.243
TTI [H_ALB]	403	.0	1.0	.022	.1479	6.490	.122	40.314	.243
TTI [H_CG]	408	.0	1.0	.017	.1300	7.464	.121	53.977	.241
TTI [H_GR]	406	.0	1.0	.015	.1208	8.072	.121	63.475	.242
TTI [H_OTHEREU]	405	.0	1.0	.035	.1829	5.114	.121	24.278	.242
TTI [H_SAD]	403	.0	1.0	.007	.0861	11.503	.122	130.975	.243
TTI [H_BRICS]	402	.0	1.0	.005	.0704	14.124	.122	198.480	.243
TTI [H_OTHER]	403	.0	1.0	.010	.0993	9.924	.122	96.974	.243
MI [MI1]	670	.0	7.0	4.727	1.6875	-.423	.094	-.473	.189
MI [MI2]	666	.0	7.0	4.036	1.7960	-.148	.095	-.941	.189
MI [MI3]	657	.0	7.0	3.924	1.7935	-.068	.095	-.933	.190
MI [MI4]	646	.0	7.0	3.723	1.9415	.107	.096	-1.126	.192
MI [MI5]	659	.0	7.0	3.951	1.8452	-.089	.095	-.991	.190
MI [MI6]	652	.0	7.0	3.736	1.7713	.036	.096	-.960	.191
MI [MI7]	660	.0	7.0	4.620	1.8352	-.481	.095	-.743	.190
MI [MI8]	663	.0	7.0	3.861	1.8514	-.057	.095	-1.031	.190
MI [MI9]	662	.0	9.0	4.701	1.7861	-.401	.095	-.731	.190
IPI [IPI1]	789	1.0	7.0	4.787	1.7848	-.409	.087	-.688	.174
IPI [IPI2]	797	1.0	7.0	5.881	1.4194	-1.406	.087	1.810	.173
IPI [IPI3]	772	1.0	7.0	4.409	1.6475	-.092	.088	-.616	.176
PERF [FMS]	766	1.0	7.0	4.586	1.5107	-.120	.088	-.378	.176
PERF [FR]	760	1.0	7.0	4.503	1.4762	-.217	.089	-.289	.177
PERF [FP]	755	1.0	7.0	4.331	1.5863	-.266	.089	-.386	.178
PERF [FCF]	749	1.0	7.0	4.381	1.4980	-.138	.089	-.286	.178
PERF [DC]	753	1.0	7.0	4.502	1.4265	-.129	.089	-.232	.178
TURN10	485	.000	10000000000	79408036706	54731141058 17	14.334	.111	238.414	.221

TURN13	509	.000	10000000000	9140092.03753	57853610.17854	12.707	.108	190.964	.216
TURNF10	582	0	15000000	28547.38	623109.653	23.963	.101	576.566	.202
TURNF13	597	.00	15000000.00	28966.0212	616063.59358	24.172	.100	588.066	.200
EXP	373	.0	2014.0	1841.890	545.6013	-3.095	.126	7.628	.252
SIZE [TE]	758	.0	1500.0	51.223	116.7023	6.524	.089	56.494	.177
SIZE [TEM]	629	.0	120.0	4.297	8.4717	7.633	.097	79.067	.195
SIZE [TEDO]	560	.0	78.0	.646	3.8926	15.512	.103	287.678	.206
SIZE [TEMD]	579	.0	70.0	3.143	7.6497	5.251	.102	33.846	.203
SIZE [TEBD]	630	.0	400.0	10.065	30.8785	7.591	.097	71.440	.194
SIZE [TEL]	607	.0	818.0	27.784	72.0963	6.840	.099	59.500	.198
SI [SI1]	743	.0	1.0	.268	.4431	1.051	.090	-.898	.179
SI [SI2]	736	.0	1.0	.452	.4981	.191	.090	-1.969	.180
SI [SI3]	711	.0	1.0	.302	.4596	.862	.092	-1.260	.183
SI [SI4]	706	.0	1.0	.316	.4652	.794	.092	-1.374	.184
MO [MOIG1]	766	.0	7.0	4.884	1.8914	-.533	.088	-.705	.176
MO [MOIG2]	748	1.0	8.0	5.128	1.7339	-.722	.089	-.230	.179
MO [MOIG3]	750	1.0	7.0	4.411	1.7921	-.250	.089	-.755	.178
MO [MOIG4]	745	.0	7.0	2.644	1.5772	.768	.090	-.156	.179
MO [MOIG5]	739	1.0	7.0	4.363	2.0471	-.217	.090	-1.182	.180
MO [MOIG6]	721	.0	7.0	4.028	1.9704	-.133	.091	-1.045	.182
MO [MOIG7]	737	1.0	7.0	4.364	1.9831	-.339	.090	-.997	.180
MO [MOIG8]	701	1.0	7.0	3.719	1.7799	.092	.092	-.824	.184
MO [MOIG9]R	724	.0	7.0	2.550	1.5661	.808	.091	-.056	.181
MO [MOIG9]	722	1.0	7.0	5.443	1.5625	-.814	.091	-.055	.182
MO [MOIG10]	714	1.0	7.0	4.695	1.5448	-.355	.091	-.316	.183
MO [MOID1]	706	1.0	7.0	3.575	1.8252	.097	.092	-.921	.184
MO [MOID2]	703	1.0	7.0	4.676	1.8758	-.427	.092	-.774	.184
MO [MOID3]	682	1.0	7.0	4.438	1.8671	-.355	.094	-.885	.187
MO [MOID4]	695	1.0	8.0	4.108	1.9195	-.155	.093	-1.010	.185
MO [MOID5]	711	1.0	7.0	5.301	1.5417	-.711	.092	-.110	.183
MO [MOID6]	705	1.0	7.0	5.033	1.7090	-.604	.092	-.437	.184
MO [MOID7]R	667	1.0	7.0	2.985	1.9156	.674	.095	-.687	.189
MO [MOID7]	667	1.0	7.0	5.015	1.9156	-.674	.095	-.687	.189
MO [MOID8]R	676	.0	7.0	2.419	1.6744	1.101	.094	.427	.188

MO [MOID]	673	1.0	7.0	5.571	1.6703	-1.108	.094	.427	.188
MO [MOR1]R	693	1.0	7.0	2.557	1.6177	1.002	.093	.401	.185
MO [MOR1]	693	1.0	7.0	5.443	1.6177	-1.002	.093	.401	.185
MO [MOR2]	642	1.0	7.0	4.298	1.6907	-.067	.096	-.702	.193
MO [MOR3]R	682	.0	7.0	2.210	1.4925	1.177	.094	.636	.187
MO [MOR3]	681	1.0	7.0	5.787	1.4912	-1.180	.094	.637	.187
MO [MOR4]	691	1.0	7.0	4.975	1.5653	-.509	.093	-.256	.186
MO [MOR5]R	682	1.0	7.0	3.720	1.7617	.119	.094	-.840	.187
MO [MOR5]	682	1.0	7.0	4.280	1.7617	-.119	.094	-.840	.187
MO [MOR6]	666	1.0	7.0	4.452	1.7527	-.300	.095	-.696	.189
MO [MOR7]R	657	1.0	7.0	2.731	1.6543	.824	.095	-.058	.190
MO [MOR7]	657	1.0	7.0	5.269	1.6543	-.824	.095	-.058	.190
MO [MOR8]	687	1.0	7.0	4.838	1.6682	-.402	.093	-.566	.186
MO [MOR9]	678	1.0	7.0	5.112	1.5428	-.672	.094	.014	.187
MO [MO10]R	701	.0	7.0	2.264	1.8869	1.380	.092	.657	.184
MO [MO10]	699	1.0	7.0	5.730	1.8857	-1.382	.092	.652	.185
MO [MO11]R	675	1.0	7.0	2.761	1.6624	.738	.094	-.234	.188
MO [MO11]	675	1.0	7.0	5.239	1.6624	-.738	.094	-.234	.188
MO [MO12]	668	1.0	7.0	4.762	1.5657	-.290	.095	-.533	.189
MO [MO13]	709	1.0	7.0	5.663	1.4645	-.935	.092	.203	.183
MO [MO14]	700	1.0	7.0	5.479	1.4981	-.787	.092	.056	.185
Valid N (listwise)	4								

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