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MINISTRIA E TREGTISË DHE INDUSTRISË
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PROFILE OF THE CHEMICAL INDUSTRY

2016

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Contents

1. Introduction

This profile provides an overview of the current situation of the chemical industry in Kosovo. Additionally, it shows the recent developments and trends of this industry. Basic industry characteristics draw mainly on secondary data such as official statistics published by the Tax Administration of Kosovo (TAK), Kosovo Agency of Statistics (KAS) and the Kosovo Business Registration Agency (KBRA). In addition, the profile depicts industry's performance using the data from an enterprise survey conducted by the United Nations Development Programme (UNDP) during October-November, 2015. The sample for this survey consists of 40 out of the 122 registered firms in the TAK database under the Nomenclature des Activités Économiques dans la Communauté Européenne (NACE) codes 2011, 2012, 2013, 2014, 2015, 2030, 2041, 2052, 2053, 2059, and 2060.[1,2] It should be noted that firms engaged in manufacturing of basic pharmaceutical products as well as pharmaceutical preparations were excluded since pharmaceuticals are being considered as a separate sector according to the NACE Revised Version 2.[3]

For the purpose of this anlysis, the main activities of this industry based on the survey data will be defined as follows: (i) Manufacture of paints, varnishes and similar coatings, printing ink and mastics, (ii) Manufacture of soap and detergents, cleaning and polishing preparations, and (iii) Manufacture of glues and adhesives.

The analysis shows that the chemical industry is an ever increasing industry in Kosovo, both in terms of sales and employment. Half of the current companies have been created just over the past three years, mainly concentrated in Prishtinë/Priština region. The vast majority of the surveyed firms started exporting after 2010. Currently, less than one-third of firms are engaged in export activities with a symbolic share of exports in their total sales. The gap between imports and exports of chemical products in Kosovo is high; only 3% of imports were covered by total exports in the first three quarters of the year 2015.

This analysis is organized in eight different sections. A short introduction and the methodology of the study are elaborated in the first section. The second section elaborates the basic characteristics of the chemical industry. Section three provides an overview of the current firm performance and capacity utilisation. An analysis of the markets, employment and workforce skills is provided in section four, respectively five. An assessment of the structure and value of assets as well as innovation investments is presented in the section six. Section seven analyses perceived barriers to business development in the chemical industry in Kosovo. The last section concludes.

1 NACE Rev. 2 available at: http://www.arbk.org/repository/docs/NACE_Rev._2_ENG_513445.pdf

2 The initial calculated sample at 95% confidence level and confidence interval of 7% was 75 firms. However, some 35 were excluded from the surveyed sample since those firms reported to have changed their primary activities or switched to other industries/sectors.

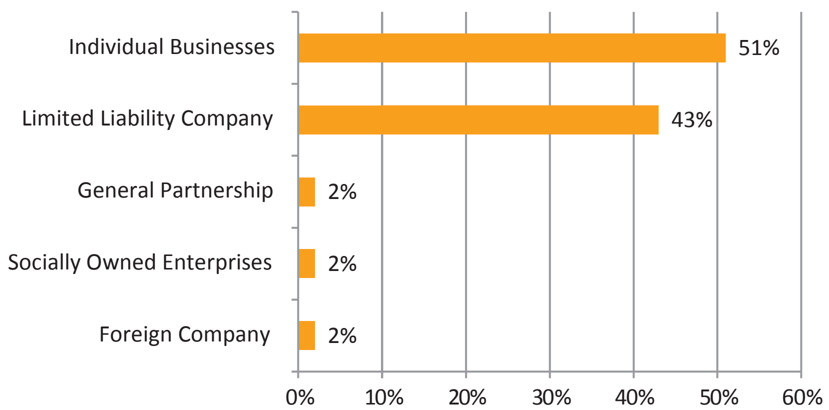
3 http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NACE_REV2&StrLanguageCode=EN&IntPcKey=18496334&StrLayoutCode=

2. Basic firm and industry characteristics

2.1 Size and composition of the chemical industry

According to TAK database, there are 122 businesses operating in the chemical industry. However, not all these operate in the chemical industry; as already noted above, some of them have already changed their primary activities. Most of the businesses in this industry are individual (around 51%); followed by Limited Liability Companies (around 43%). General partnerships, foreign companies and socially owned enterprises, each compose around 2% of total active businesses in the chemical industry.

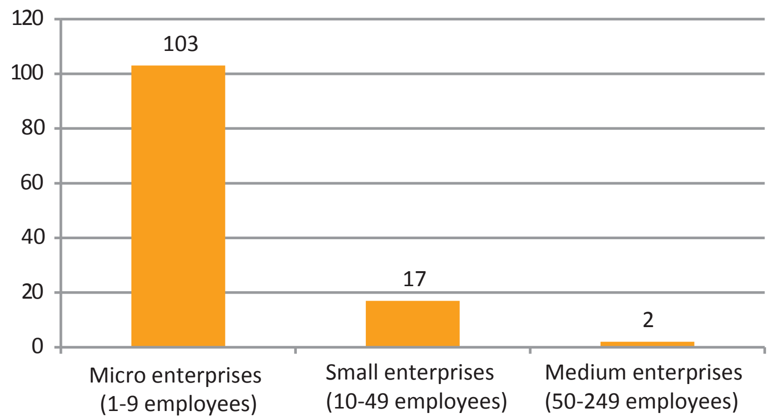
Figure 1: *Structure of firms*



Source: TAK (2015)

According to the same data, 103 firms, or 84%, are micro enterprises, with 1-9 employees; 17 or 14% are small enterprises (with 10-49 employees) and remaining 2 firms, roughly 2%, are medium sized firms.

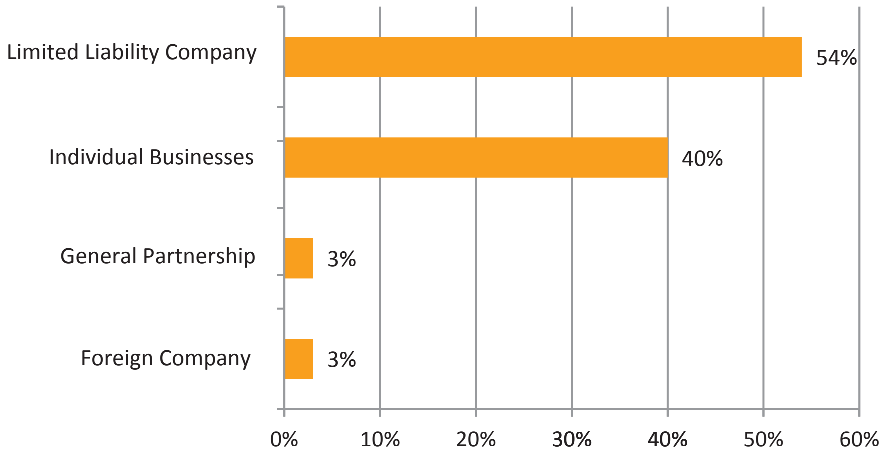
Figure 2: *Size of firms in chemical industry*



Source: TAK (2015)

Almost half of the current companies have been created just over the past three years. According to KBRA, for the period of 2012-2015, a total of 65 new businesses in chemical industry have been created. Out of this number, 54% are Limited Liability Companies (LLC); 40% are individual businesses; 3% are general partnerships and 3% are foreign companies.

Figure 3: *Structure of newly created firms for the period 2012-2015*



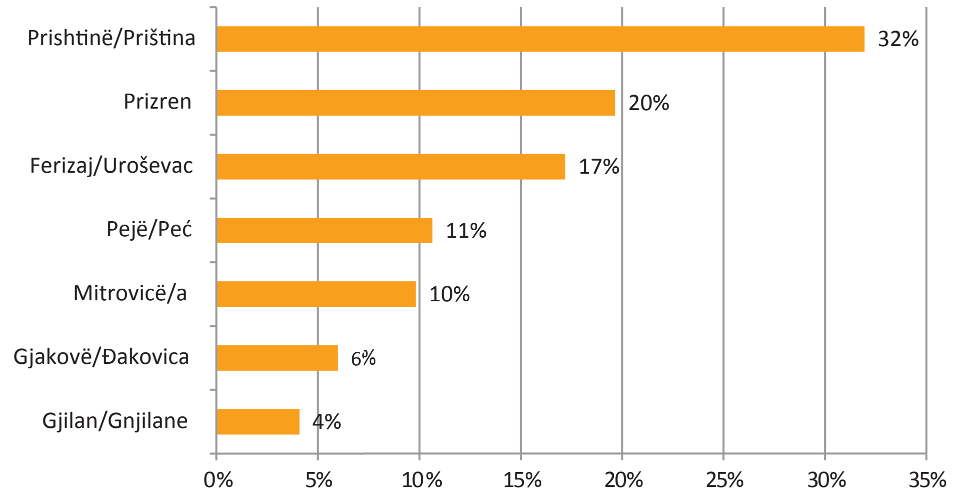
Source: KBRA (2015)

Based on NACE classification codes, 33% of newly created enterprises operate in "Manufacture of soap and detergents, cleaning and polishing preparations (code 2041); 14% in "Manufacture of paints, varnishes and similar coatings, printing ink and mastics (code 2030)"; 14% in "Manufacture of dyes and pigments (Code 2012) and 6% in the "Manufacture of fertilisers and nitrogen compounds (code 2015)".

2.2 Size and geographical location of the firms

According to TAK database, most of the enterprises are located in Prishtinë/Priština region (around 32% of them); followed by Prizren (20%), Ferizaj/Uroševac region (17%) and so on.

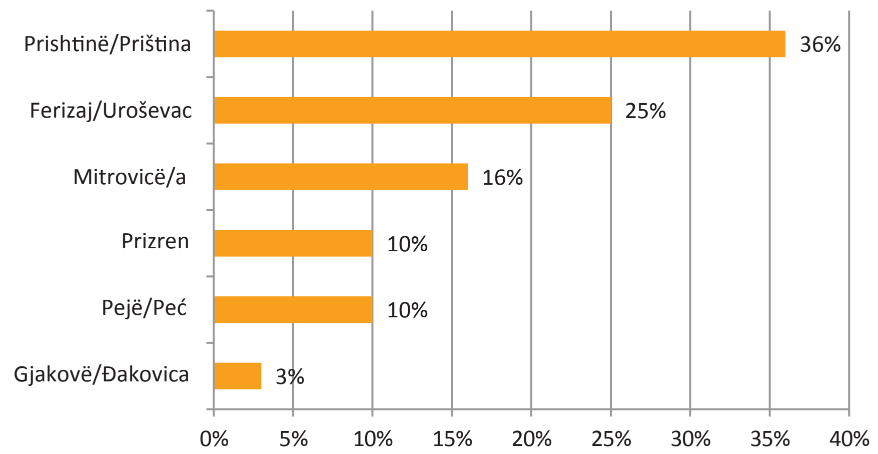
Figure 4: *Geographical location of firms in chemical industry*



Source: TAK (2015)

Similar geographical distribution is evident in newly created enterprises as well. According to KBRA, most of the newly created firms are registered in the Prishtinë/Priština region (around 36%) – with a specific focus also in Fushë Kosovë/Kosovo Polje and Obiliq/ć municipalities. Ferizaj/Uroševac region comes second, with approximately 25% of businesses; Mitrovicë/a third with 16%, Pejë/Peć and Prizren both with 10% while Gjakovë/Đakovica remains last with only 3%.

Figure 5: *Geographical location of newly created firms*

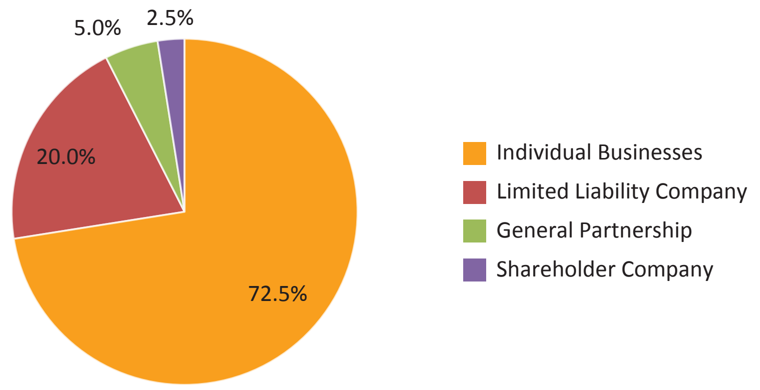


Source: KBRA, 2015

2.3. Ownership of the interviewed firms

According to Figure 6, the vast majority of companies (72.5%) are registered as individual businesses – these are usually businesses owned and run by one individual and in which there is no legal distinction between the owner and the business. Second largest group, (20%) consists of Limited Liability Companies. Only two of the surveyed companies (5%) were general partnerships; while only one company (2.5%) was a shareholder company.

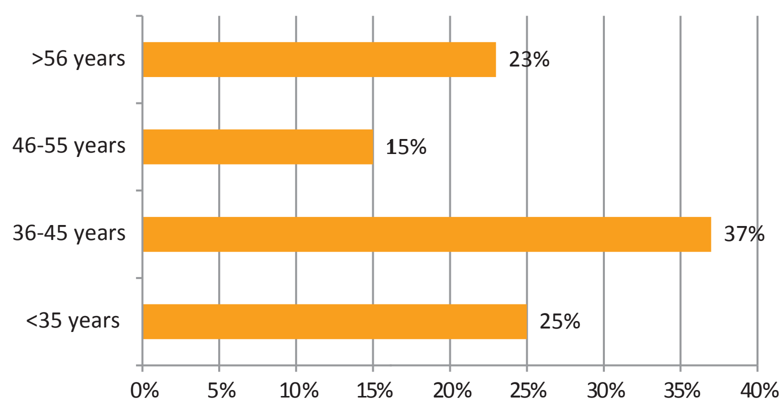
Figure 6: *Organizational structure of interviewed firms*



Source: UNDP survey, 2015

The average age of the owner is 45 years; and 99% of the interviewed firms are owned by Kosovo Albanians. Women-owned firms account for only 8% of total number of surveyed firms. Figure 7 illustrates ownership according to the age groups.

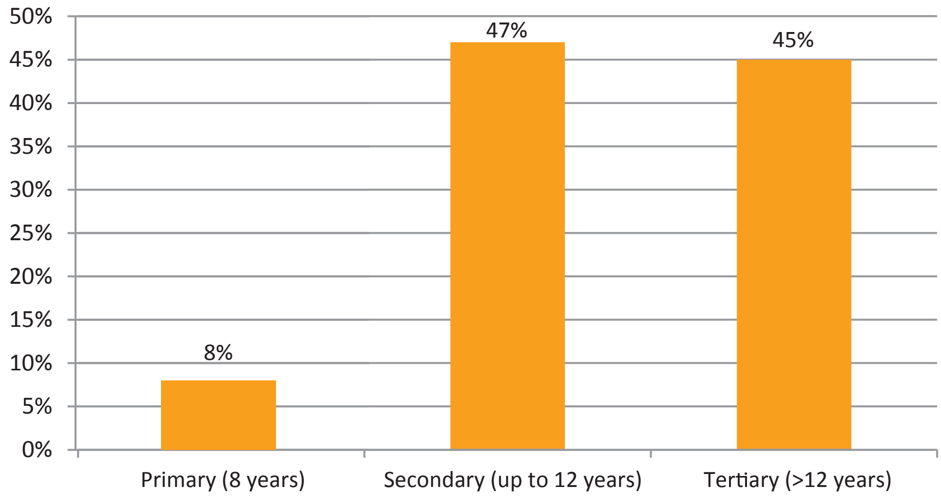
Figure 7: *Firm ownership according to age groups*



Source: UNDP survey, 2015

The following figure depicts the educational level of the owners; with vast majority, around 47%, having secondary education; 45% having tertiary education; and only 8% with primary education.

Figure 8: *Educational level of the owners*



Source: UNDP survey, 2015

Box 1: Profile of a successful business operating in Kosovo

Located in the north of Kosovo, namely Mitrovicë/a, **Eco Color***, is one of the most successful and modern companies in the chemical industry in Kosovo. The company is established in 2008 and currently offers a wide range of paints and varnishes and facades, mainly for the construction sector. It started as an initiative of three enthusiastic entrepreneurs with an extensive experience in this industry.*

After several successful years, Eco Color attracted well-known European manufacturers who were interested to enter the Kosovo market. In 2014, one of the largest companies in the chemical industry in Italy, Gruppo Ivas, became the fourth shareholder of Eco Color. **Gruppo Ivas** *is a specialised company with more than sixty years of experience in producing paints, varnishes, coatings, and different facades that satisfies the most complex requirements of design and construction of its clients in the European market.*

With the new partner on board, the company has recently invested in the new facility with top-of-the-line equipment and technology. The company currently employs 14 full-time and other five seasonal workers. However, the new production line that is expected to be operational during the first half of 2016, will double the number of employees.

Eco Color manufactures its products using the technology and expertise of the Italian partner which makes the company the first ever manufacturer in Kosovo that satisfies international standards for energy efficient products. Such products are mainly present in the local market; only 5% of company's total output is exported in the regional market, mainly Albania. On the other hand, raw materials and intermediate inputs are exclusively imported from the EU market, namely Italy and Germany.

Local wholesalers account for 90% of company's customers; the remaining 10% are predominantly construction companies around Kosovo. Due to continuous investments in the newly built facilities, the company is currently utilising only 50% of its 30 tonnes/day installed capacities. Nevertheless, the management is determined to fully utilize company's capacities and further expand its product range in the coming year.

The company is considering Kosovo's fiscal policy as one of the main impediments to their business operations. According to the company's management, customs duty remains applicable for almost all the raw materials that are used for manufacturing of paints and varnishes.

3. Production

3.1 Inputs

The data from the survey shows that raw materials and intermediate inputs account for the largest share of the cost of inputs for both micro and small firms in the chemical industry, 74% respectively 68% of the total cost of inputs. On the other hand, the ratio of wage costs to total cost of inputs is 20% for both groups – micro and small firms. The average monthly costs of inputs at the sector level for raw materials, intermediate inputs and wages are roughly EUR 29,000 (Table 1).

Table 1: *Average cost of inputs according to firm size in EUR*

Inputs / Firm size	Raw materials and intermediate Inputs	Wages	Electricity	Water	Fuel	Other
Micro (≤ employees)	14,705	3,961	210	34	416	550
Small (10 - 49 employees)	29,974	8,861	1,284	86	3,472	185
Sector average	22,496	6,286	720	59	1,868	307

Source: UNDP Survey (2015)

It is worth noting that most of the raw materials and intermediate inputs used by Kosovan firms in this industry are imported; almost two thirds of surveyed firms reported that the above inputs are exclusively imported, mainly from European Union (EU) as well as member countries of the Central Europe Free Trade Agreement (CEFTA). One-fifth of the firms are supplied with raw materials and intermediate inputs by local traders whereas almost 13% of them are supplied directly from the foreign producers. In addition, 25% firms declared that they use a mix of locally produced and imported raw material and intermediate products. Finally, as one would expect, only 10% of the firms rely on the domestic supply, either own production or other local suppliers (Table 2).

Table 2: *Structure of raw material and intermediate products*

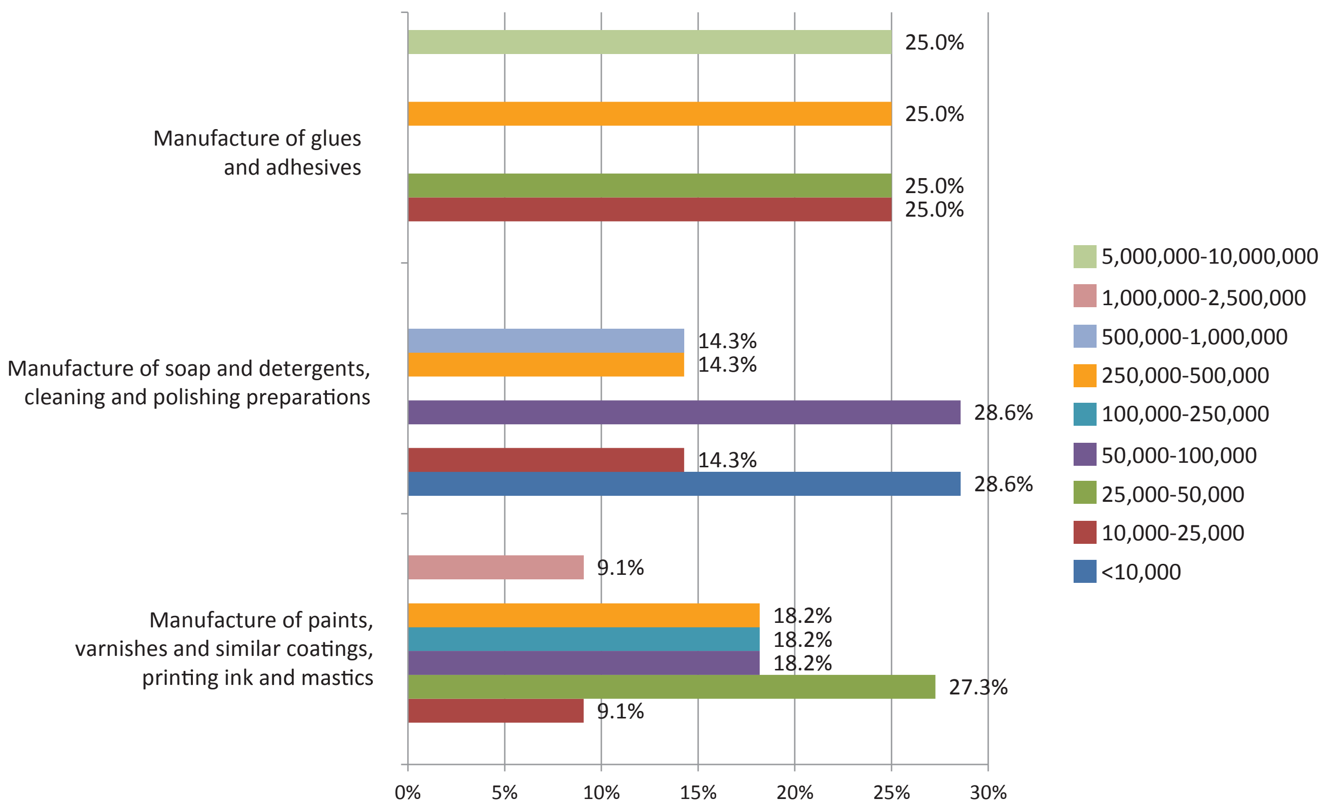
Source	Share of firms
Exclusively locally produced	10 %
In - house production	6.0 %
Local producers	4.0 %
Mix of locally produced and imported	25 %
Exclusively imported	65 %
Local traders	20.0 %
International traders	5.0 %
Foreign Producers (directly)	12.5 %
Mixed imported	27.5 %

Source: UNDP Survey (2015)

3.2. Outputs

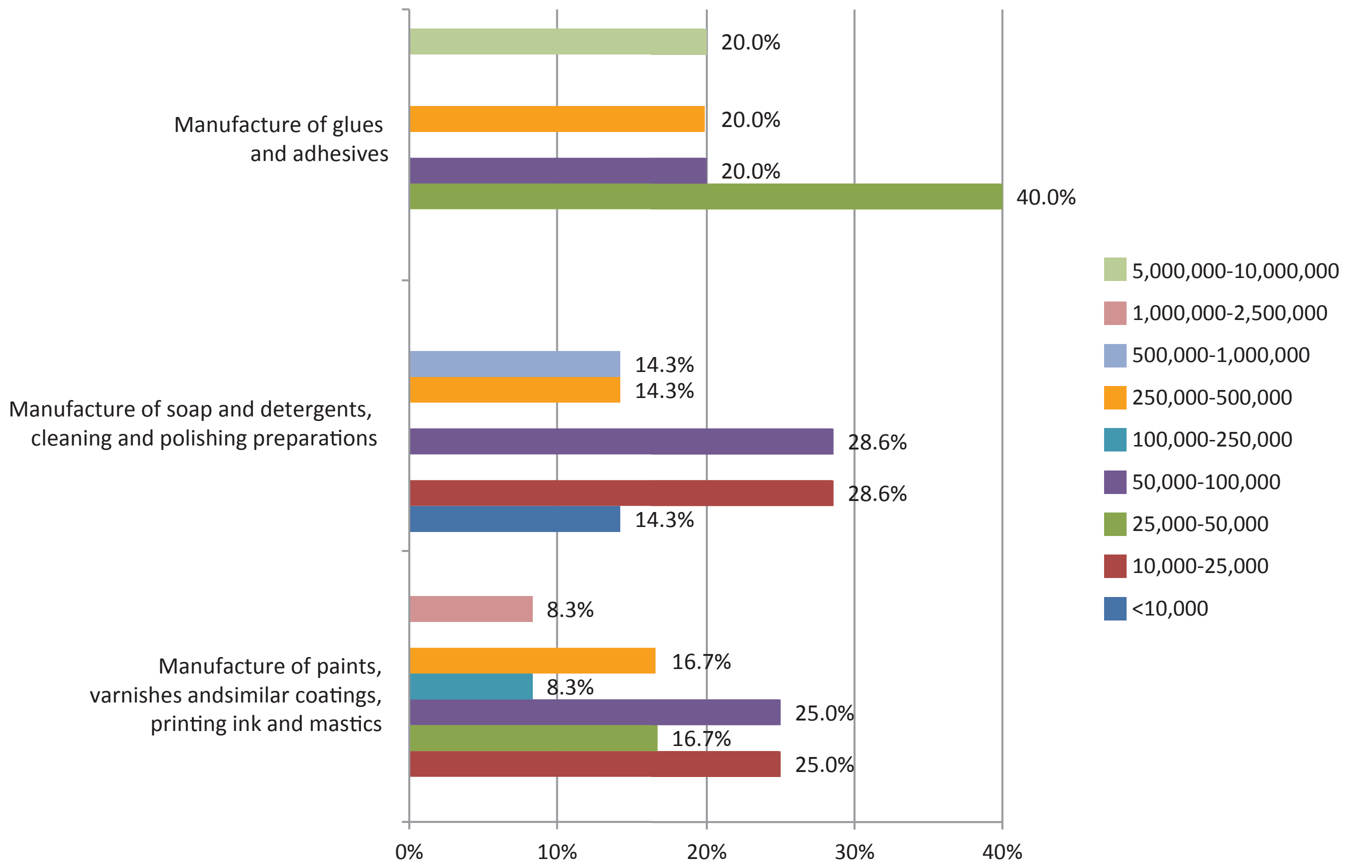
Although firms' reported output varies across sub-sectors, the average value of total output at the industry level in 2014 was around EUR 583,000 (EUR 484,000 in 2013). The annual reported output of all firms that currently manufacture different types of glues and adhesives (mainly used in the construction sector), was greater than EUR 25,000 in 2014. On the other hand, 57% of the soap and other detergent manufacturers respectively 58% of paints, varnishes, and ink manufacturers, reported their annual output above EUR 50,000 for the year 2014 (Figure 9). However, these results should be interpreted with caution because only small number of firms has reported their annual output.

Figure 9: *Annual output value according to firm activity in EUR (2013)*



Source: UNDP Survey (2015)

Figure 10: *Annual output value according to firm activity in EUR (2014)*



Source: UNDP Survey (2015)

3.3. Capacity utilisation

The level of capacity utilisation at the sector level has improved slightly in 2014 compared to the year before. The average level of capacity utilisation in the chemical industry sector was 61% in 2013 and 65% in 2014. In 2014, only 10% of the firms have fully utilised their capacities whereas more than 70% have utilised their capacities between 60% and 100%. It is worth mentioning that the share of firms that utilised their capacities less than 20% has decreased from almost 13% in 2013 to less than 3% of the total surveyed firms in 2014 (Table 3).

Table 3: *Capacity utilisation (2013 and 2014)*

Capacity utilisation	Share of firms	
	2013	2014
Less than 20%	2.50%	2.50%
20% - 39%	5.00%	15.00%
40% - 59%	10.00%	10.00%
60% - 79%	40.00%	35.00%
80% - 100%	32.50%	37.50%
Total	100%	100%

Source: UNDP Survey (2015)

When it comes to capacity utilisation of the firms operating in chemical industry, there is no big difference across subsectors. Glues and adhesive manufacturers managed to utilise on average 79% of their capacities in 2013 and 81% in 2014. During the period 2013-2014, the level of capacity utilisation ranged from 50% to 69% in the manufacture of paints, varnishes, and ink, respectively manufacture of soap and other detergent subsector (Table 4 Panel A).

Similarly, differences in capacity utilisation between firms of different sizes are quite small. Capacity utilisation level is slightly higher in small firms compared to micro ones, 67% respectively 64% in 2014 (Table 4 Panel A and B).

Table 4: *Differences in capacity utilisation*

A: Average capacity utilisation according to sector

Capacity utilisation	**Share(%)**	
	2013	**2014**
Manufacture of paints, varnishes and similar coatings, printing ink and mastics	50%	56%
Manufacture of soap and detergents, cleaning and polishing preparations	65%	69%
Manufacture of glues and adhesives	79%	81%
Average	**61%**	**65%**

Source: UNDP Survey (2015)

B: Average capacity utilisation according to firm size

Capacity utilisation	**Share(%)**	
	2013	**2014**
Micro (≤9 employees)	56%	64%
Small (10-49 employees)	66%	67%
Average	**61%**	**65%**

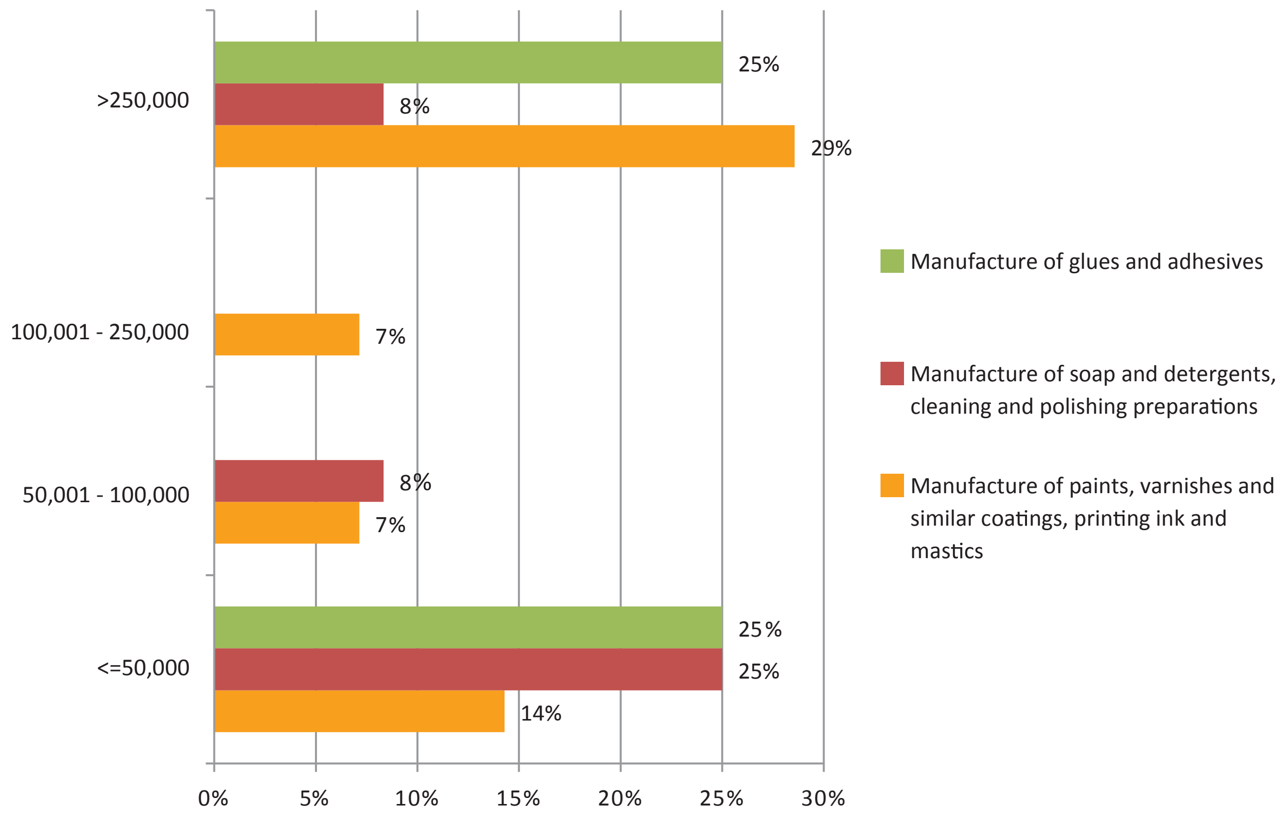
Source: UNDP Survey (2015)

4. Markets, exports and barriers to exporting

4.1. Industry turnover

The average value of the reported sales at the sector level in 2014 was around EUR 376,290 (EUR 367,900 in 2013). As figure below presents, reported sales vary across sub-sectors. The annual reported sales of the 43% of firms that currently manufacture different types of paints, varnishes and similar coatings, was greater than EUR 50,000 in 2013. On the other hand, 16% of the soap and other detergent manufacturers respectively 25% of glues and adhesives reported annual sales above EUR 50,000 for the year 2013 (Figure 11).

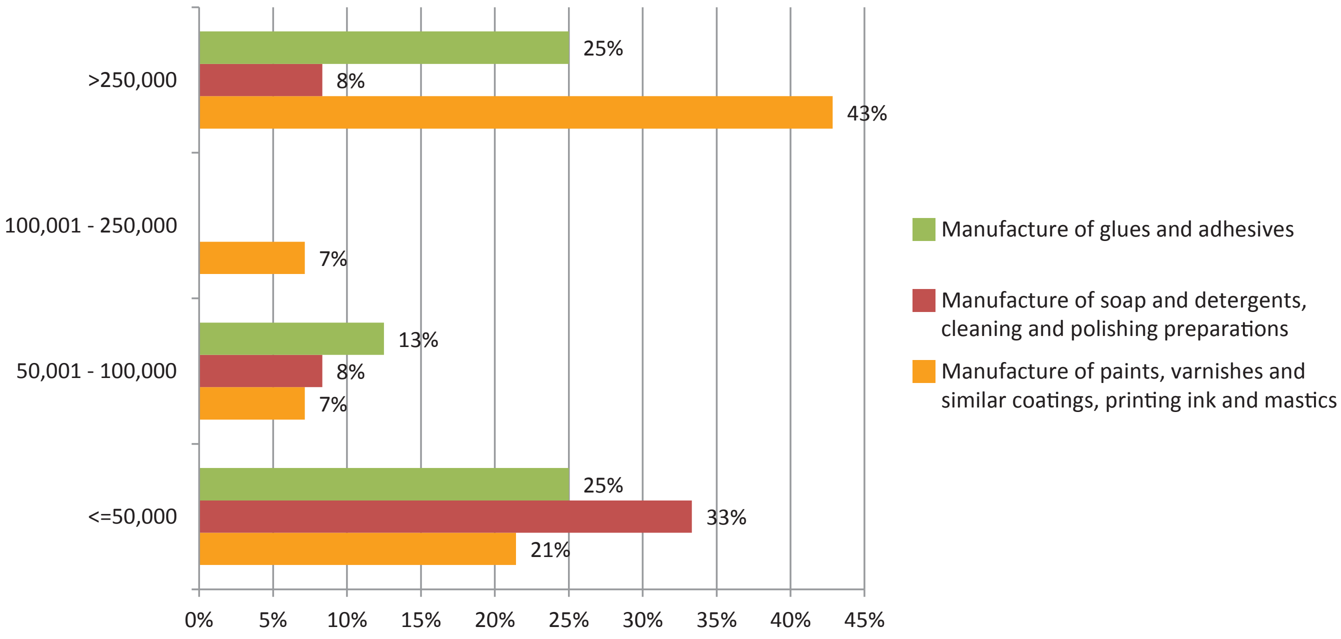
Figure 11: *Annual sales value by firm activity in EUR (2013)*



Source: UNDP Survey (2015)

On the other hand, for the year 2014 the annual reported sales indicate an increasing growth trend. Around 57% of firms manufacturing paints, varnishes and similar coatings, reported annual sales greater than EUR 50,000 (43% in 2013), respectively 38% of manufacturers of glues and adhesives reported annual sales above EUR 50,000 (25% in 2013). On the other hand, same as the previous year, 16% of the soap and other detergent manufacturers reported sales above EUR 50,000 (Figure 12).

Figure 12: *Annual sales value by firm activity in EUR (2014)*



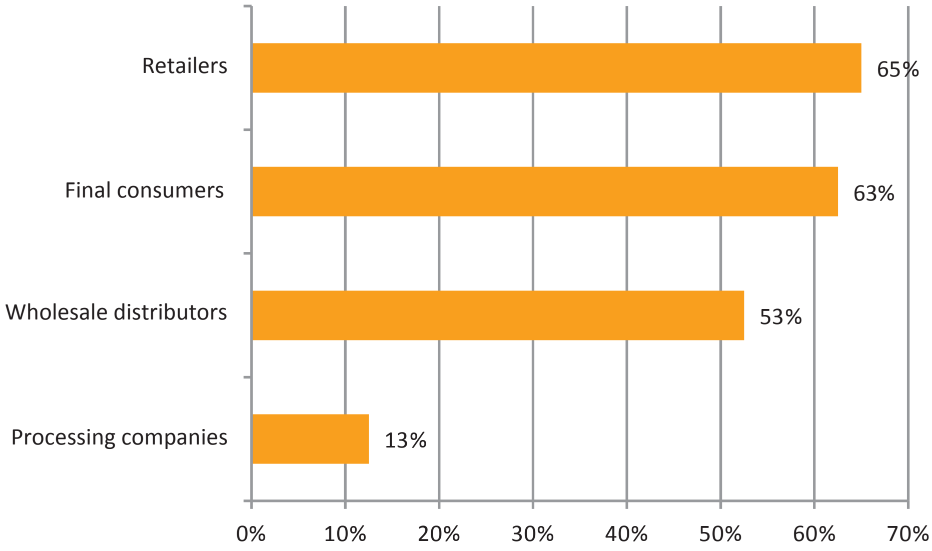
Source: UNDP Survey (2015)

4.2. Domestic market

Final products or services account for most of the sales in the chemical industry, while intermediary products or services are being provided by 7% of firms, and raw material by only 3% of firms. About 70% of the surveyed firms have sold their products entirely in the domestic market during 2014.

Most of the firms selling to domestic market, in year 2014, sold their products and services to wholesalers, retailers or to final consumers. On the other hand, their business trading with other processing firms is shown to happen at a lower intensity, as only around 13% of the chemical sector firms have sold their products to a processing firm in 2014 (Figure 13).

Figure 13: *Share of sales in the domestic market by market channels - buyers*

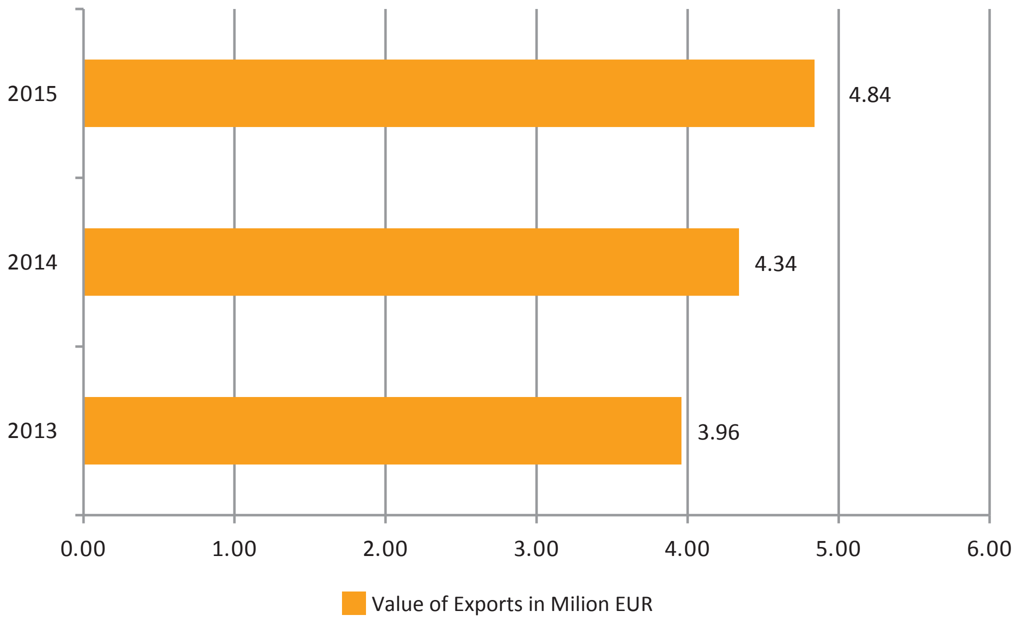


Source: UNDP Survey (2015)

4.3. Export market

According to the official customs data, the overall exports of the chemical manufacturers in Kosovo increased between 2013 and 2015, although at a very low value, reaching EUR 4.84 million in the first 9 months of 2015 (Figure 14). The share of exports in total imports in 2015 has reached 3%, still remaining quite insignificant compared to imports.

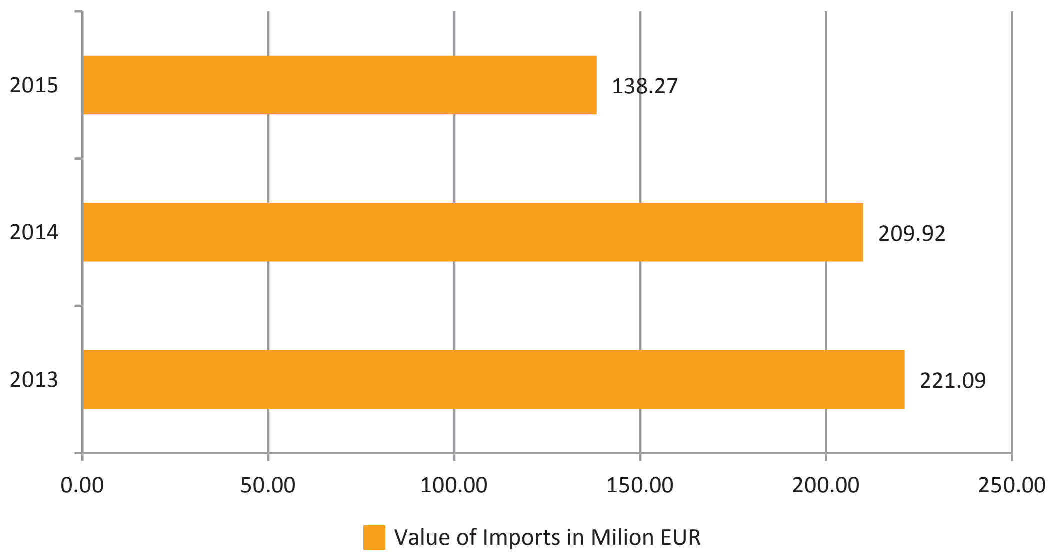
Figure 14: *Chemical Industry Exports (January 2013 – September 2015)*



Source: Kosovo Customs, 2015

On the other hand, unlike the export trend, the value of imports in the chemical industry appears to have decreased in the period from 2013 to 2015. From around EUR 221 Million imported in 2013, there was a slight decrease in 2014 (EUR 209 Million), while between January and September 2015 import value of the sector has reached only at EUR 138 Million (Figure 15).

Figure 15: *Chemical Industry Imports (January 2013 – September 2015)*



Source: Kosovo Customs 2015

In line with the official customs data, the survey data show a substantial increase of exporting firms in the chemical industry in 2014, comprising 30% of the total number of firms compared to 18% of exporting firms in 2013 (Table 5). Following a similar trend, the export intensity, measured by the average share of export sales on total turnover, has increased to 20% in 2014 compared to 19% in 2013. The average value of export sales in 2013 was around EUR 34,850, while in 2014 slightly increased to EUR 35,600. About 75% of the exporting firms in 2014 appear to be small businesses while other 25% are micro businesses. The vast majority of the surveyed firms started exporting only after 2010, which indicates for an early stage of establishing and developing foreign market linkages.

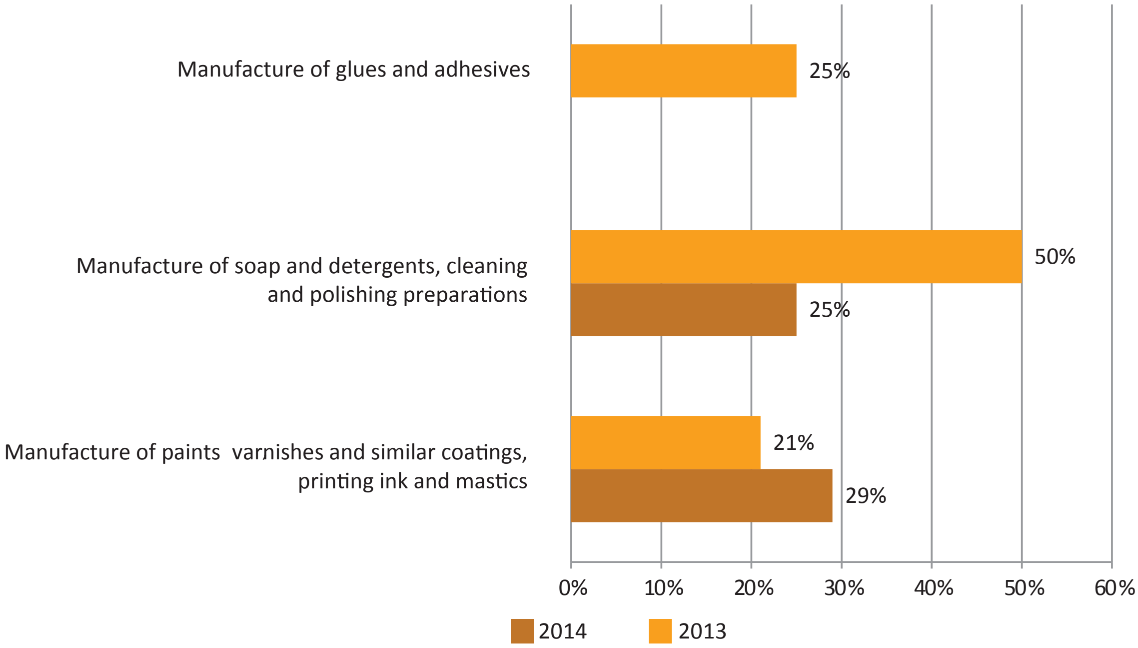
Table 5: *Percentage of exporting firms and the average share of export sales on total turnover*

	2013	2014
Percentage of exporting firms in the sector	18%	30%
Average share of export sales on total turnover	19%	20%

Source: UNDP Survey (2015)

As shown in Figure 16, the highest percentage of exporters is reported by manufacturers of soap and detergents, cleaning and polishing preparations, with about 50% of the exporting firms in 2014 (25% in 2013). A positive trend was observed also for manufacturers of glues and adhesives (25% in 2014), while for manufacturers of paints, vanishes and similar coatings, printing ink and mastics, the percentage of exporting firms dropped to 21% in 2014 compared to 28% in 2013.

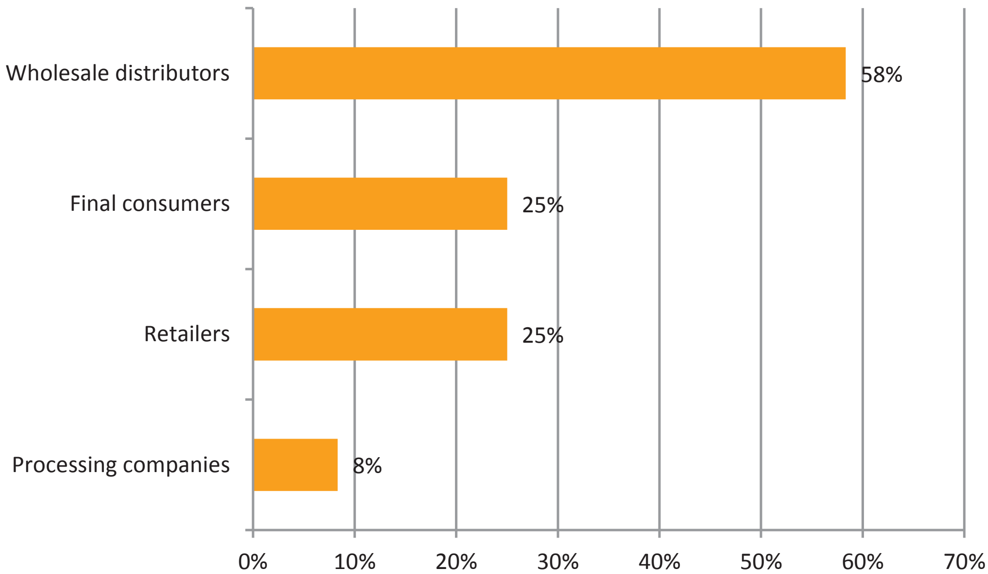
Figure 16: *Percentage of exporting firms by activity*



Source: UNDP Survey (2015)

All exporting firms have reported exporting their final products during 2014, while only 8% of them have exported intermediary products. When asked about their export channels, the vast majority or 58% of them reported to use wholesale distributors, about 25% are using retailers as access to final consumer, while only 8% export to other processing firms (Figure 17).

Figure 17: *Export market channels - buyers*



Source: UNDP Survey (2015)

Main exported products were detergents, glues and adhesives. Main destination countries for the chemical sector products are Albania, Germany and Turkey. Destinations with a good perspective for exports mainly include European and Balkan countries, such as Belgium, Switzerland, Montenegro, Bosnia and Hercegovina and Macedonia.

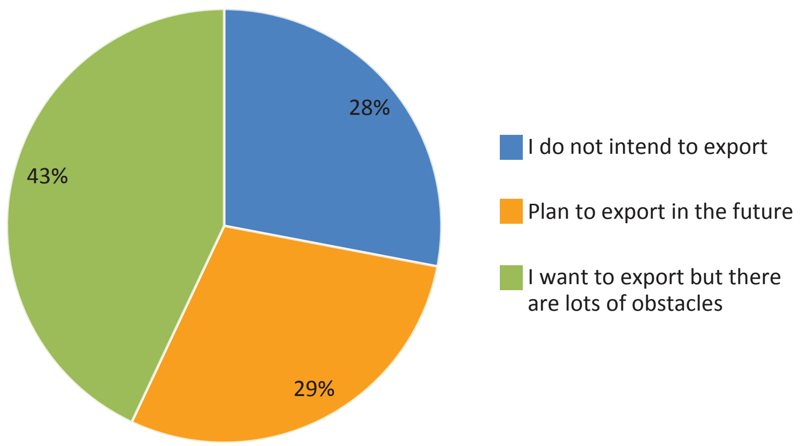
Box 2: Trade regulations and free trade agreements

Kosovo has a general flat rate of 10% for imports and 0% for exports. No custom duties are levied on imports of technology or on intermediate products that are re-exported (after processing). As of 2014, Law No. 04/L-163 on Goods exempt from custom tax and goods with zero rate of customs tax has been enacted, according to which some inputs for the Chemicals Industry (such as pigments and other coloring matter, mixtures of odoriferous substances, , etc.) are treated as zero custom rate products.

Kosovo is a member of CEFTA and it enjoys duty-free access to the EU under the Stabilisation and Association Agreement and to the US under the Generalised System of Preferences (GSP). Kosovo has also signed a free trade agreement with Turkey, but this has not come into power yet. Additionally, Kosovo benefits from trade preferences with Japan and Norway that include only few limitations.

In terms of exporting, around 29% of non-exporting firms indicated that they have a plan to export in the future, 43% would like to export but they consider that they will be challenged with many obstacles, while other firms have no intentions to export at all (Figure 18).

Figure 18: *Reasons why non-exporters do not sell in foreign markets*

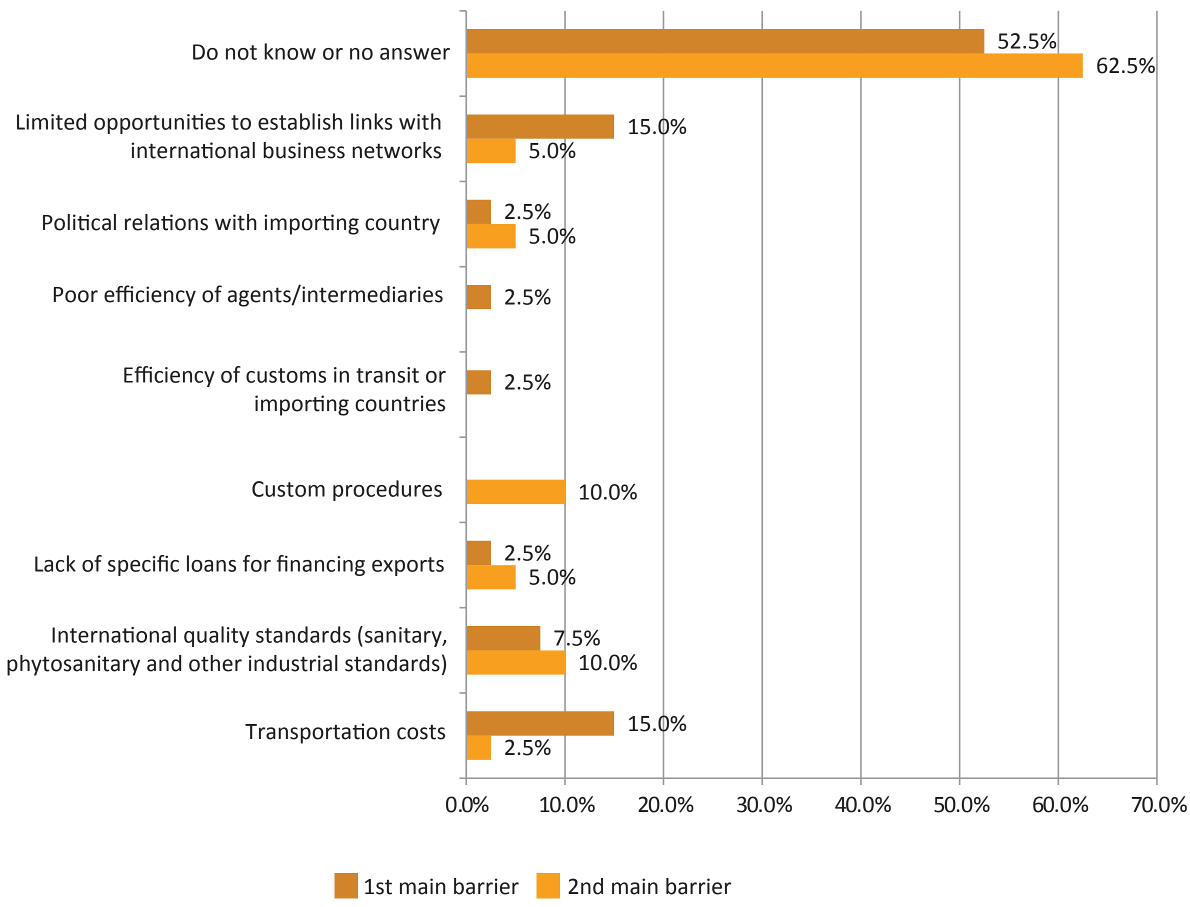


Source: UNDP Survey (2015)

4.4. Barriers to exporting

The surveyed firms were asked to rank first and second main barriers to exporting. Findings reveal that customs procedures and international quality standards are mostly considered as first main barriers to export, whereas limited opportunities to establish links with international buyers and transportation costs are considered as second main barriers to exporting (Figure 19). Around 63% of the surveyed firms could not name a first main barrier, respectively 52.5% when asked to name the second main barrier to exporting.

Figure 19: *First and second main barriers to export*



Source: UNDP Survey (2015)

Box 3: Documents required for cross-border trading

Documents required for export:

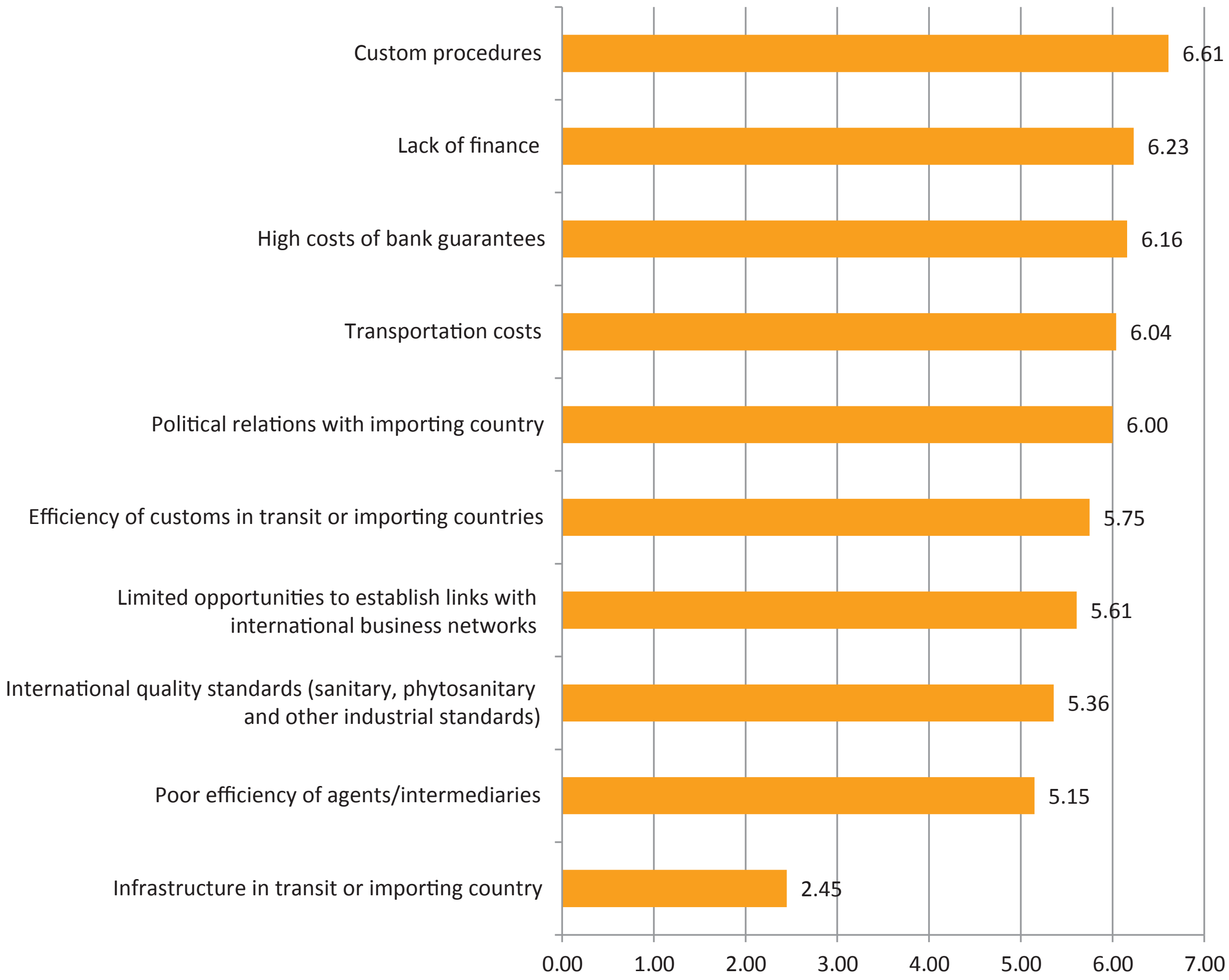
- *Single Administrative Document (i.e. customs declaration)*
- *Commercial Invoice*

Documents required for import:

- *Single Administrative Document (i.e. customs declaration)*
- *Commercial Invoice*
- *Certificate of Origin (for countries Kosovo has an FTA with or any other Agreement which covers exemptions based on rules of origin)*

Surveyed firms were also asked to assess, on a scale from 0 to 10 - with 0 representing the minimal value and 10 the maximal value – whether a particular issue represented an impediment or barrier to their exporting. The average scores for each of the issues are presented in graphical form in Figure 20.

Figure 20: *Barriers to exporting (average scores)*



Source: UNDP Survey (2015)

The data show that largest impediments to exporting are customs procedures, lack of finance, and high cost of bank guarantees. Likewise - despite the investment made in infrastructure, mainly in the construction of highways towards Albania, and recently the one towards Macedonia - the transportation costs are perceived as the fourth factor impeding sector firms exporting. On the other hand, infrastructure in transit or importing countries is perceived as the least impeding factor for exporting.

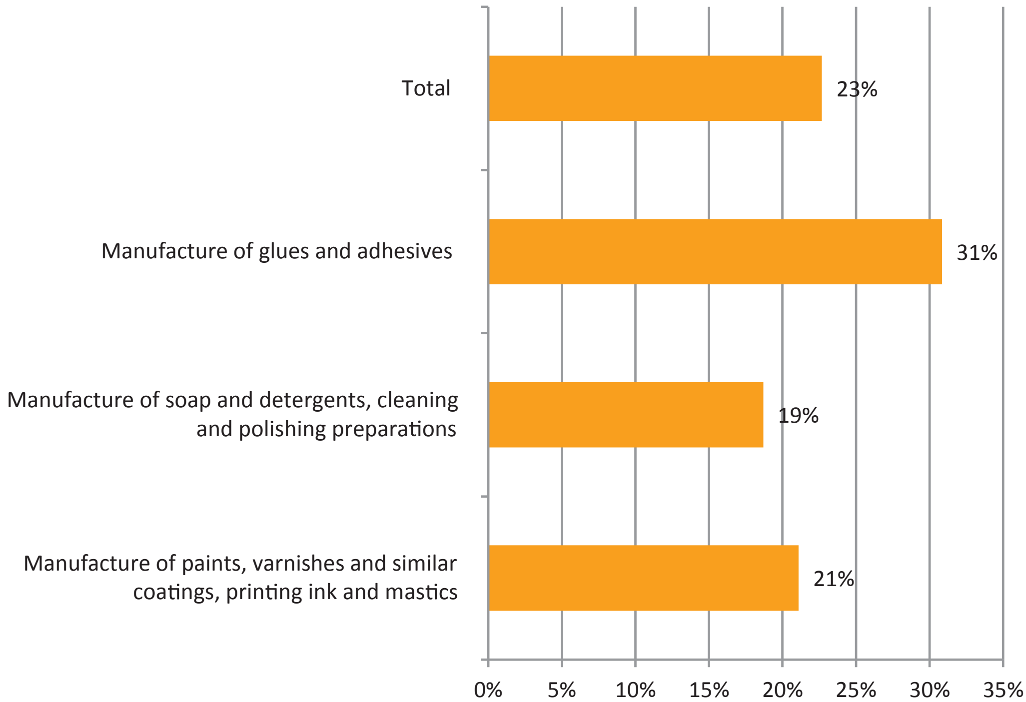
Among other additional obstacles, firms in the chemical industry also consider inability to provide trainings for their employees and inability to trade or place products efficiently in the market as additional significant barriers to exporting.

5. Employment and human capacities

5.1. Employment and demographic structure of employees

Based on the official statistics published by TAK and KAS, in 2014 the chemical industry accounted for only 0.2% of the total registered employees in Kosovo.[4] However, the data from the survey shows that the number of employees in this sector is constantly increasing. Today, the total number of employees in the surveyed firms is 23% greater than it was in 2014. Glues and adhesives manufacturers have experienced the highest growth as far as employment is concerned. On average, such firms have increased the number of their employees by 31% this year followed by manufacture of paints and inks subsector by 21% (Figure 21).

Figure 21: *Firm growth according to number of employees (2014 – 2015)*

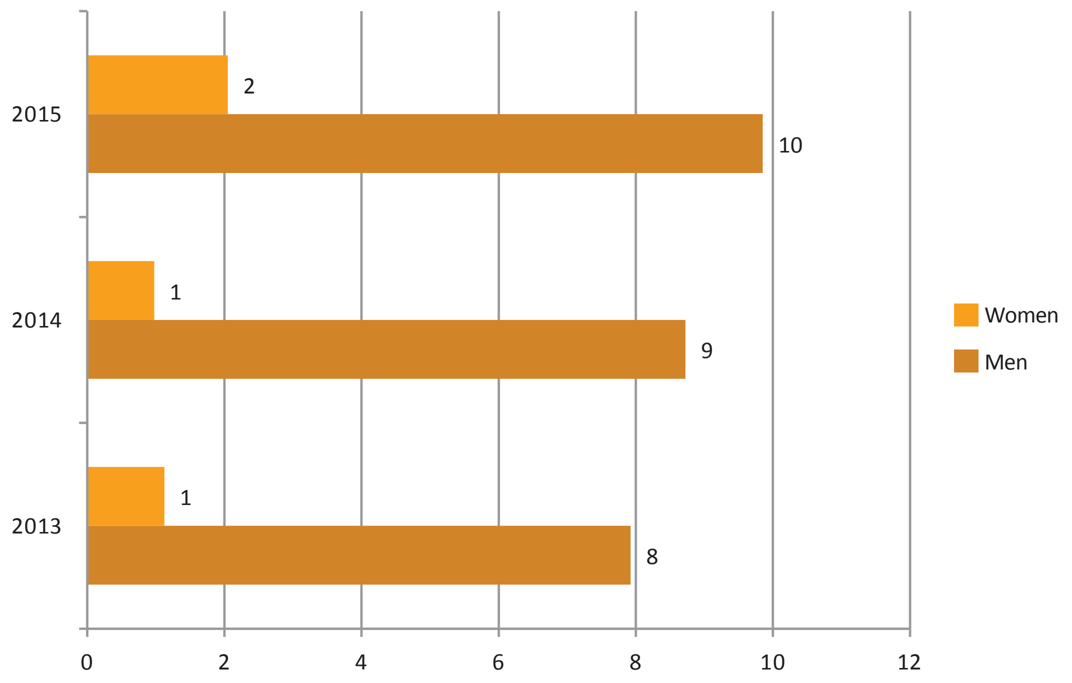


Source: UNDP Survey (2015)

Among the surveyed firms, it seems that the chemical industry is men dominated industry; there is a big difference in employment rates between men and women in the chemical industry. On average, women account for only 13% of the total number of employees during 2013-2015 (Figure 22).

4 KAS (2015) https://ask.rks-gov.net/ENG/labour-market/publications

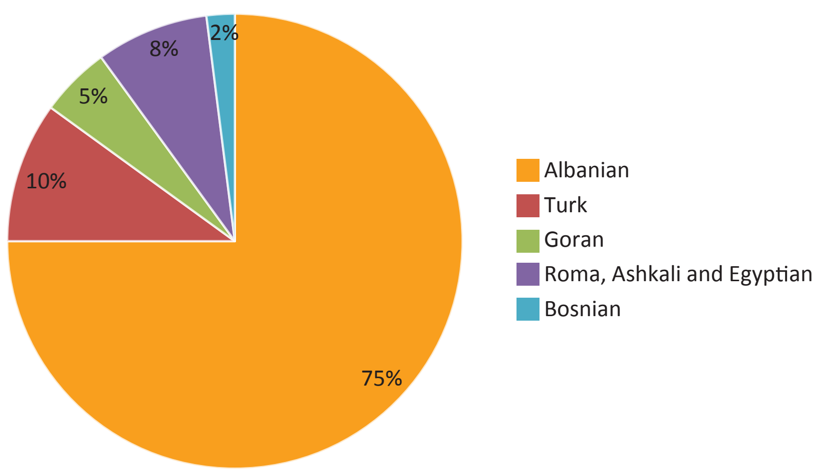
Figure 22: *Gender structure and average number of employees (2013–2014)*



Source: UNDP Survey (2015)

Kosovo Albanians account for the largest share of the total number of employees among the surveyed firms – 75% of the total sector workforce. Turks and Roma, Ashkali and Egyptian community are represented by 10% respectively 8% in the chemical industry workforce; the remaining 7% are Gorani and Bosnians (Figure 23).

Figure 23: *Ethnic structure of employees*



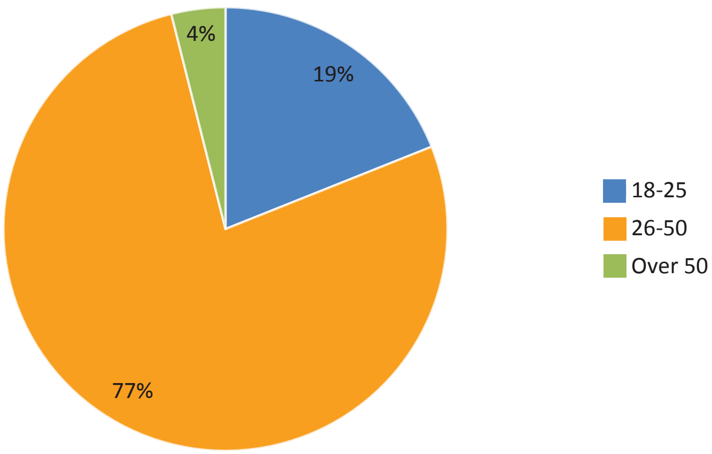
Source: UNDP Survey (2015)

Box 4: Labour market regulations

Kosovo has a highly flexible labour market with a low tax wedge and low rigidities in terms of hiring and firing of workers. The personal income tax rate system is a progressive tax system with a 0-10% tax rate. In addition to that, only a pension contribution of 5% of the total wage is paid by employer (whilst another 5% of the wage is paid by workers). Since 2011, Kosovo has had a minimum wage of €170, or €130 for individuals aged under 35 years. Employment relations are regulated by the Law on Labour (No. 03/L-212) which takes into account the ILO Conventions, EU Legislation and the fundamental principles of free labour market and economy. Since 2013, occupational health and safety are regulated by the Law on Occupational Health and Safety (No. 04/L-161).

More than three quarters of the total sector workforce is represented by middle-aged employees. On average, 19% is the share of young workers in the surveyed firms; only 4% is the share of the group aged 51 years and over (Figure 24).

Figure 24: *Age structure of employees*

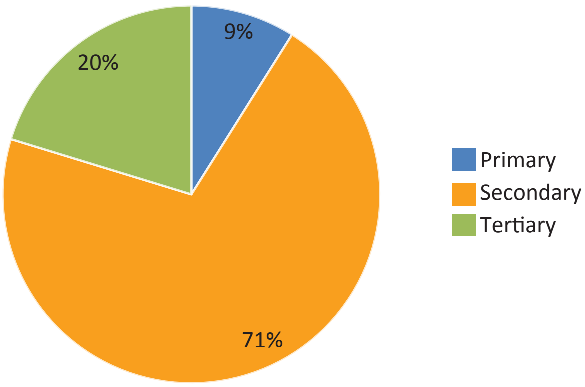


Source: UNDP Survey (2015)

5.2. Workforce skills

Secondary education is the highest level of educational attainment for more than 70% of the work- force in firms engaged in manufacturing of chemical products in Kosovo. Not surprisingly one fifth of employees in this industry have completed tertiary education. Core sector activities require constant supervision by well trained and educated personnel in chemical sciences. The remaining 9% of the employees in the surveyed firms have completed primary education, only (Figure 25).

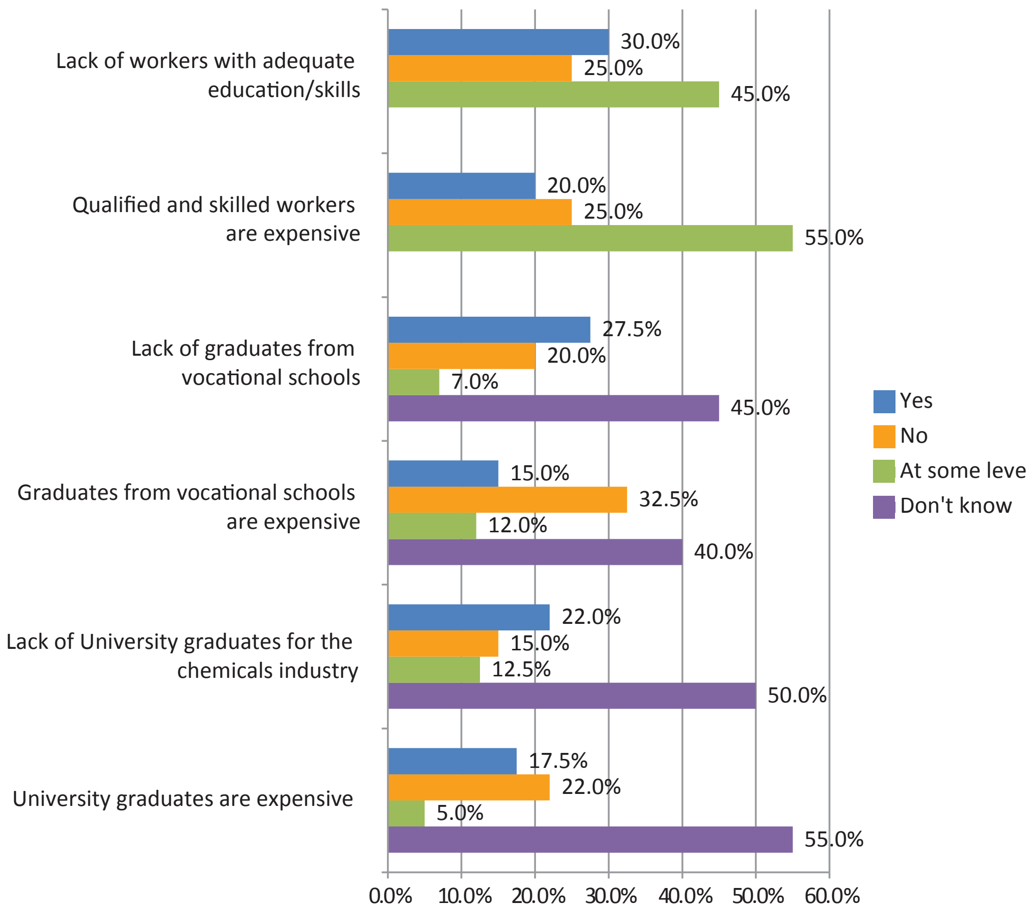
Figure 25: *Structure of employees according to educational level*



Source: UNDP Survey (2015)

The survey results suggest that the lack of workers with adequate education or skills is a challenge that the firms in the chemical industry are currently facing. In addition, qualified workers and university graduates are regarded as expensive by 20% respectively 17.5% of all surveyed firms. On the other hand, 27.5% of firms stated that there is a lack of graduates from adequate vocational schools in the Kosovo labour market. These findings suggest that there is a shortage of relevant profiles in the chemical industry (Figure 26).

Figure 26: *Perception about the cost and availability of skilled and well-educated workers*



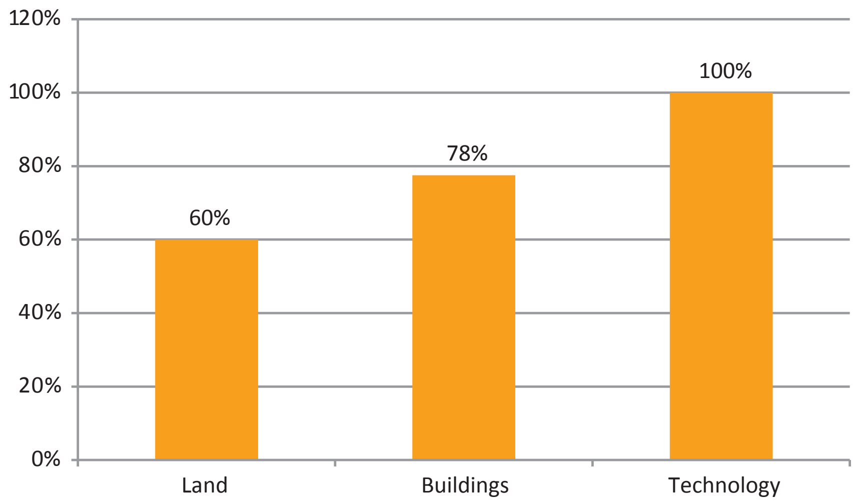
Source: UNDP Survey (2015)

6. Assets, investments and innovation

6.1. Assets

The vast majority of the surveyed firms have reported that they own most of their assets, with a small percentage of them renting some of the assets. Land is owned by 60% of the firms, buildings by 78% of them, while technology as measured by machinery and equipment is entirely under their ownership (Figure 27).

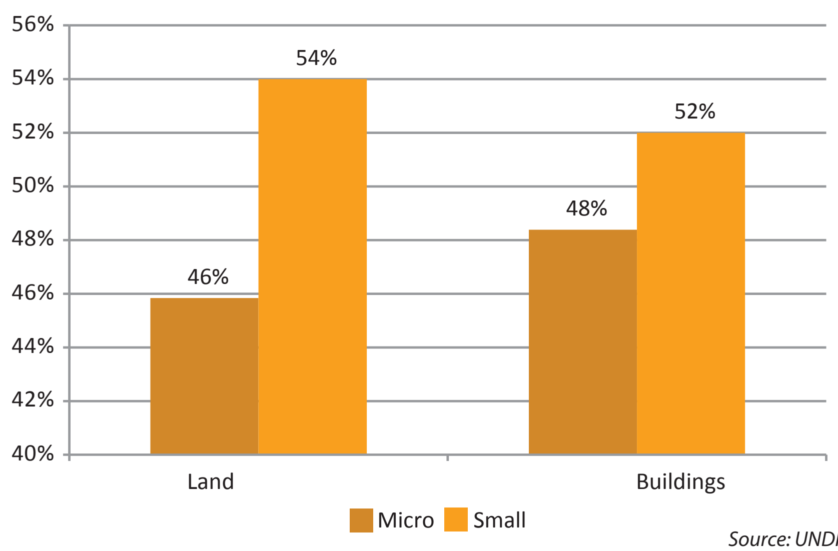
Figure 27: *Percentage of owned assets*



Source: UNDP Survey (2015)

The data reveal that when it comes to technology ownership there is no difference between micro and small businesses as all of them own their technology. Nevertheless, the size of firm is positively correlated with the asset ownership. Compared to micro businesses, small businesses have a share of 52% (48% by micro firms) in owning buildings and 54% (46% by micro firms) in owning land (Figure 28).

Figure 28: *Percentage of owned assets by size*



Source: UNDP Survey (2015)

The value of total assets per company has been reported to be in a range between a minimum of €267,862 and a maximum of €440,000. In 2013, the average value of all assets is estimated to be at around €337,000, increasing to around €389,080 in 2014. This indicates a growing trend of the sector. As presented in Table 6, on average, the share of technology and land in total assets has decreased from 2013 to 2014, whereas the share of buildings in the total assets increased from 30% to 40%. When looking at the micro businesses, results indicate a substantial increase of their technology share in the total assets (increasing from 16% to 53%) compared to the small businesses that have mainly increased the share of buildings in the total assets (Table 6). These findings suggest that between 2013 and 2014 micro businesses have invested in the expansion of their capacities through technology, while small businesses have expanded their facilities by investing in buildings. Nevertheless, because majority of the surveyed firms did not report their asset value, the results should be considered with caution.

Table 6: *Share of asset type in total assets by size*

Firm size	Micro + Small		Micro		Small	
Year	2014	2013	2014	2013	2014	2013
Land	35%	44%	29%	41%	34%	62%
Buildings	40%	30%	17%	43%	41%	4%
Technology	24%	26%	53%	16%	24%	34%

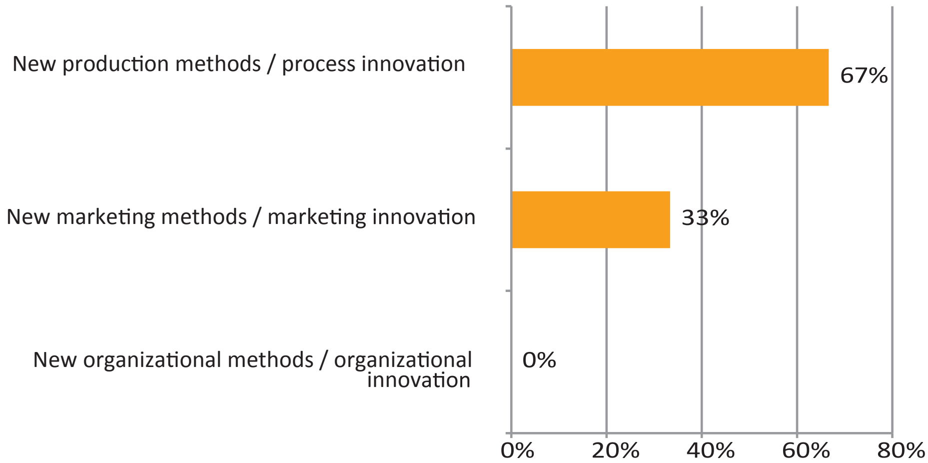
Source: UNDP Survey (2015)

6.2. Investment and Innovation

In terms of investment reported by the surveyed businesses, only 23% reported to have invested in new or innovative products or services. The size of the company seems to matter when it comes to the innovation related investments, as only 22% of the firms that undertook investment are micro businesses compared to small businesses that have a share of 78%. The data show that the size of businesses is positively correlated with the investments in new products and services. In 2014, the average of the total investments in new products or services was around €44,000. To finance these investments, remittances as a source of finance are used only by 5% of the respective firms.

The investments in new equipment and upgrade of production lines were done by the majority of firms (78%) while investment in working capital by a smaller number of firms (22%). Furthermore, only around 15% (67% being small sized) of the firms reported to have undertaken a new method of production, marketing or business organization, during 2014. As shown in Figure 29, from the firms reporting to have introduced at least one of the three innovation types, 67% have introduced a process innovation, 33% a marketing innovation, while none of them has engaged in organizational innovation.

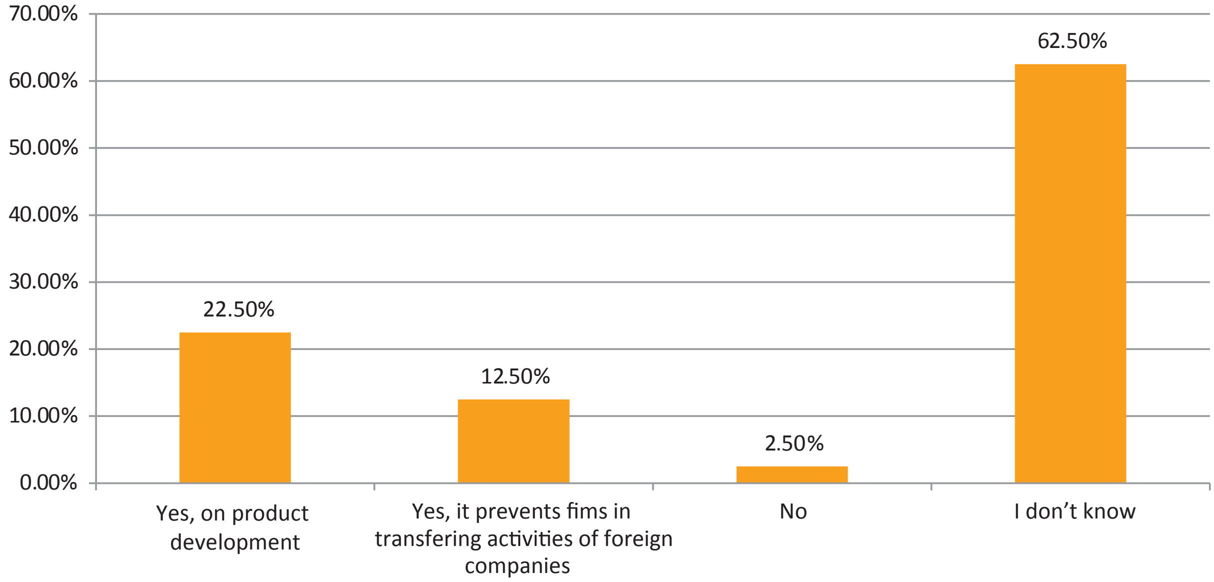
Figure 29: *Percentage of innovative firms by innovation type*



Source: UNDP Survey (2015)

The surveyed firms in the chemical industry have mainly improved design of their products as a form of marketing innovation, and have invested in tools and equipment necessary for a process innovation. Considering all types of innovations reported by firms, including the investments in new products or services, the data shows that there are around 33% of firms having engaged in at least one of the innovation related activities in 2014.

Figure 30: *"Do you think that property rights protection deters your business development"*



Source: UNDP Survey (2015)

When asked about the property rights protection in Kosovo, a small percentage of the surveyed firms consider that the current system is discouraging. As shown in the above figure, 35% of the surveyed firms feel that the property rights protection negatively impacts the sector, either with regards to the development of new products/services (22.5% of firms) or to the transfer of activities of international companies (12.5% of firms).

Table 7: *Patent registration and perceptions on procedures for registration*

	% of all firms	% of patent holding firms
Has registered a patent	15%	-
Difficulties registering a patent deters business development	5%	33%

Source: UNDP Survey (2015)

Moreover, survey data indicate that 15% of the surveyed companies in the chemical industry hold a registered patent (Table 7). On the other hand, some of the companies feel that procedures for registering patents are deterring their business development (5% of all companies, or 33% of the patent holders).

Box 5: Industrial property and patenting in Kosovo

Trademarks *are regulated by the Law on Trademarks (No. 02/L-54)). Trademarks are registered at the Kosovo Industrial Property Agency. The proprietor of a registered trademark will, after registration, have exclusive rights in relation to the goods or/and services covered by the registration. In particular, these rights are: to use the trademark, to authorize another to use the trademark or to obtain legal remedy for a violation of the trademark. Trademark is registered for a period of 10 years and can be renewed for an unlimited time.*

Industrial design *is regulated by the Law on Industrial Design (No. 04/L-038). It is protected by the law up to the point that it is an innovation and has a specific character.*
Protection of an industrial design lasts five years and can be extended to a maximum of 25 years.

Patenting *is regulated by the Law on Patents (No.2004/49). An invention shall be patentable if it is new, involves an inventive step and is industrially applicable. A patent right is granted for the duration of 20 years.*

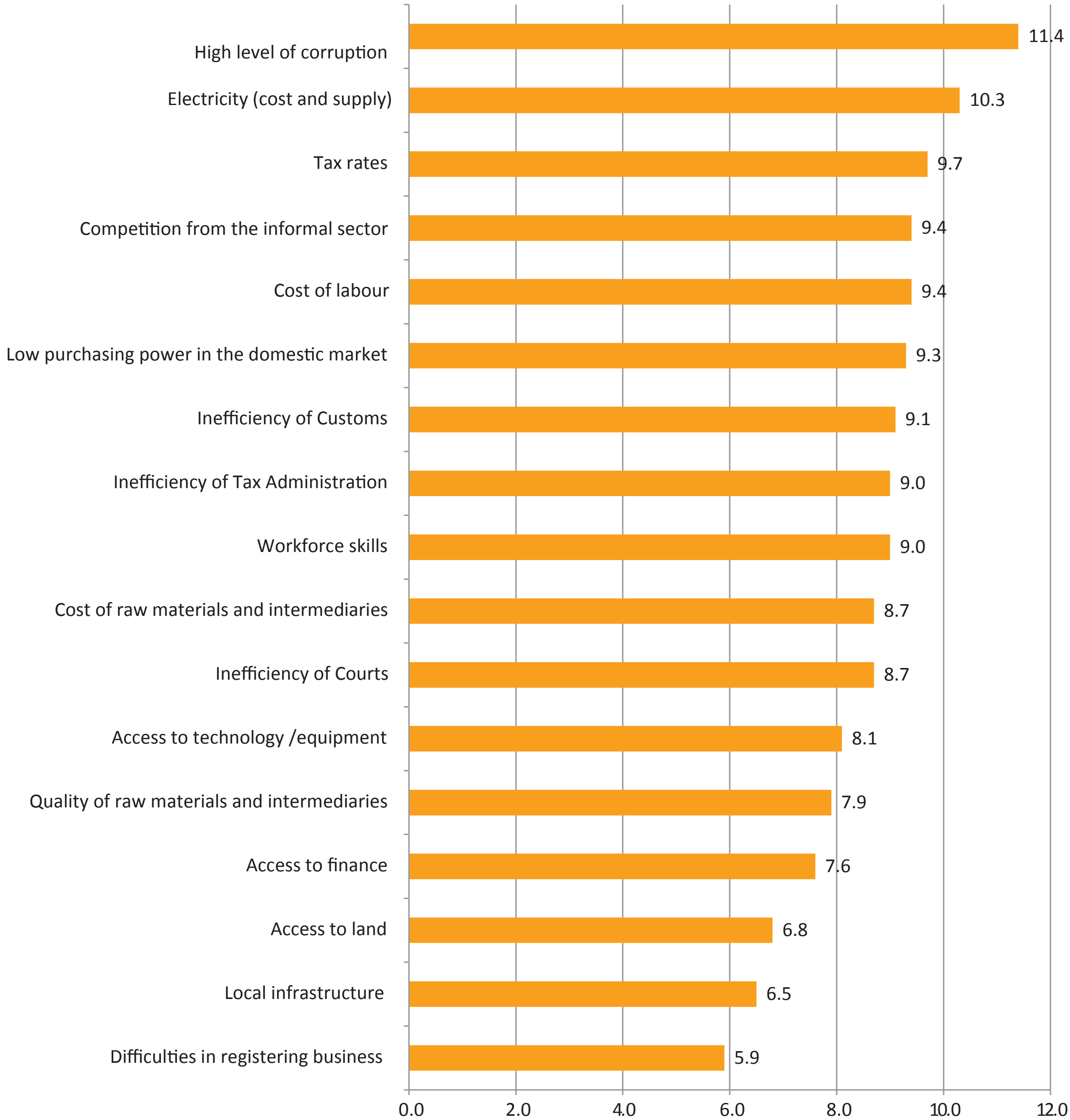
Standardisation *is regulated by the Law on Standardisation (No. 03/L-144). The certification of products, processing, services, quality and personnel systems are regulated by the Law on Standardisation, and the institution responsible for the issuing, application and determination of standards is the Kosovo Standardisation Agency (KSA).*

7. Business environment

7.1. Barriers to business development: Business perceptions

The survey assessed the chemical industry firms' degree of satisfaction and dissatisfaction with the business environment in Kosovo. Surveyed firms were asked to assess, on a scale from 0 to 17 - with 0 representing the minimal value and 17 the maximal value – whether a particular issue or institution represented an impediment or barrier to their business operations. The average scores for each of the issues are presented in graphical form in Figure 31.

Figure 31: *Business barriers (average scores, on a scale from 0-17 – 0 minimal, 17 maximal)*



Source: UNDP Survey (2015)

According to the survey results, firms in the chemical industry seem to be generally satisfied with the procedures required to register their businesses, with the local infrastructure – as well as – with the access to land. The average score for these issues is around 6 points on the scale – considerably below the median value of 8.6. The low ranking of the "registering business" barrier comes as no surprise. It is partly linked with the recent establishment of one-stop shops in 28 municipalities of Kosovo, which are entitled to routinely issue business registration and fiscal numbers for a shorter time period. It also can be attributed to the reforms taken in 2013 that led to: the removal of minimum capital requirement and business registration fee, the elimination of requirements for validation of construction projects and reduction of building permit fee, and finally to the creation of a notary system contributing to the combination of procedures for legalizing sale and purchase agreements. Infrastructure on the other hand, has been a subject of major local, central and international investments and donations. For the past three years, the central institutions of Kosovo as well as local municipalities embarked on major investments, which on average accounted for roughly 22% of the total public budget (Riinvest, 2015)[5].

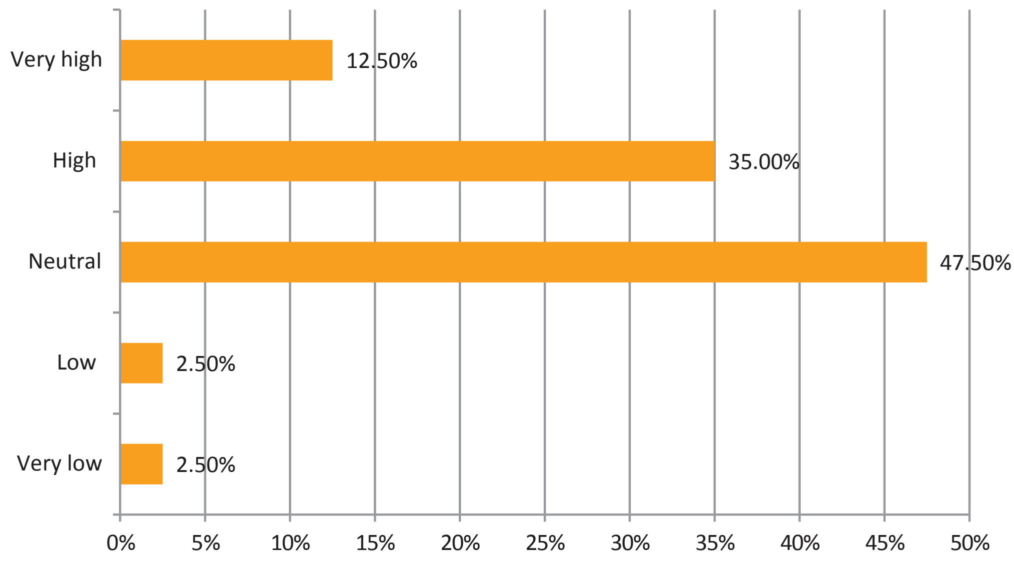
Box 6: Relevant institutions

- ✓ *Kosovo Business Registration Agency (business registration), http://www.arbk.org/*
- ✓ *Kosovo Investment and Enterprise Support Agency (information for foreign investors on starting a business, investment opportunities, potential business partners, etc.), http://www.invest-ks.org/*
- ✓ *Tax Administration of Kosovo (tax payment), http://www.atk-ks.org/*
- ✓ *One stop shops in municipalities (information sources and counselling services)*
- ✓ *Kosovo Customs (information on customs duties and procedures), https://dogana.rks-gov.net*
- ✓ *Business Associations (business networks, fairs, trade missions, advocacy, etc.): Chamber of Commerce; American Chamber of Commerce; Kosovo Business Alliance.*

Another issue for which firm dissatisfaction is quite high is the level of taxation. It received an average score of 9.7. On further investigation of the barrier, as shown in Figure 32, a majority of the sector's micro and small firms view the level of taxation as being either very high (12.5%) or high (35%). A very small share thinks that taxes are low or very low (5% in total). Almost half of respondents are neutral on the topic.

5 Riinvest (20015) available at http://riinvestinstitute.org/publikimet/pdf/Business_Climate_in_Kosovo1421852590.pdf

Figure 32: "How would you best describe the level of taxes?



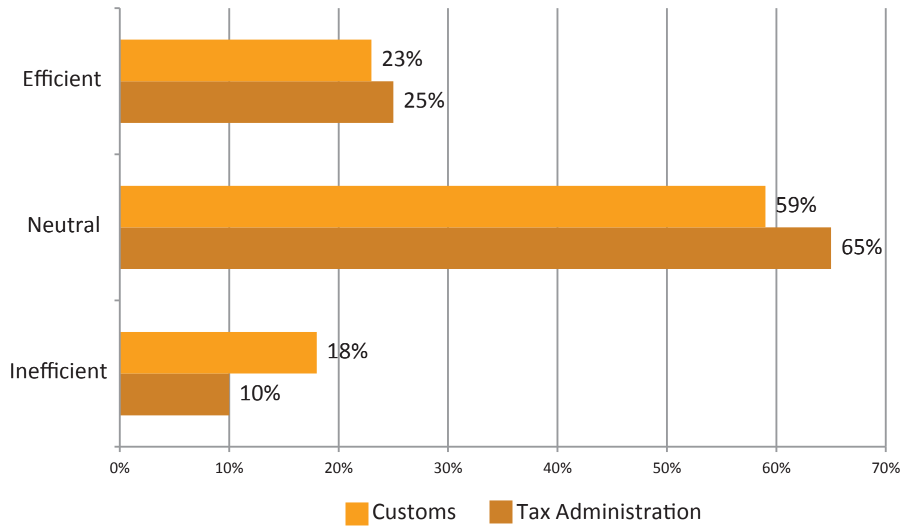
Source: UNDP survey, 2015

Box 7: List of relevant permits and certificates

- ✓ *Business Certificate*
- ✓ *Registration with the Tax Administration of Kosovo*
- ✓ *Registration of employees for the pension scheme with Tax Administration*
- ✓ *Environmental permit*
- ✓ *Fire protection clearance*
- ✓ *Clearance for water*
- ✓ *Construction permit*
- ✓ *Electricity connection*

List of barriers also shows that there is also a high level of dissatisfaction with efficiency of Tax Administration (average score of 9.0) and that of Customs (9.1). Higher dissatisfaction with Customs compared to the Tax Administration is also confirmed from the Figure 33.

Figure 33: *"How would you rate the efficiency of the Tax Administration and Customs?*



Source: UNDP survey, 2015

Though most of the interviewed firms in the chemical industry have neutral perception over the efficiency of both institutions, there is clear dissatisfaction in terms of less effective Customs Administration. Around 18% of respondents believe that Customs are inefficient.

8. Conclusions

The chemical industry is a relatively new and an ever increasing industry in Kosovo. Almost half of the current firms have been created just over the past three years; about one-third of firms are concentrated in Prishtinë/Priština region. Similar geographical distribution is seen also for newly created firms. According to KBRA data, around 36% of the newly created firms are established in the Prishtinë/Priština region. Firms in the chemical industry in Kosovo are mainly active in the following three sub-sectors: manufacture of paints, varnishes and similar coatings, printing ink and mastics, (ii) manufacture of soap and detergents, cleaning and polishing preparations, and (iii) manufacture of glues and adhesives. The majority of them are micro enterprises; small and medium enterprises accounts for 16% of firms in the chemical industry.

Although the chemical industry is not labour intensive, employment is constantly, albeit moderately, increasing. Glues and adhesives manufacturers have experienced the highest growth as far as employment is concerned. However, the data from the survey indicates that women are under-represented in this industry; women account for only 13% of the total workforce in this industry. Secondary education is the highest level of educational attainment for more than 70% of the workforce in firms engaged in manufacturing of chemical products in Kosovo. On the other hand, almost 20% of them have completed tertiary education. However, the lack of workers with adequate education or skills is one of the challenges that firms in the chemical industry are currently facing.

The average reported output as well as capacity utilisation, also shows that the overall performance of the chemical industry is improving. The vast majority of the surveyed firms started exporting after 2010; only 30% of firms have been engaged in export activities in 2014. However, there is a positive attitude toward exporting among non-exporting firms as one-third of them declared that they have a plan to export in the future. Moreover, the fear that firms will face many challenges and obstacles is also hindering exports in this industry. On the other hand, intermediate goods and raw material used by firms in the chemical industry are predominantly imported, mainly from the EU and CEFTA member countries.

Customs procedures and international quality standards are being considered the main barriers to exporting, whereas limited opportunities to establish links with international buyers and transportation costs are considered as second main barriers to exporting.

Only a small percentage of the surveyed firms consider the registering of patents as an obstacle to business development. On the other hand, firms in the chemical industry seem to be generally satisfied with the business registration procedures, local infrastructure and with the access to land.

The top barriers in the chemical industry appear to be related to the high level of corruption as well as the cost and supply of electricity. Another issue for which firm dissatisfaction is quite high is the level of taxation. The majority of micro and small firms view the level of taxation as being high. Although most of the interviewed firms in the chemical industry have neutral perception about the efficiency of Tax and Customs Administrations, there is a clear dissatisfaction in terms of less effective Customs Administration.

References

KBRA, 2015. Database of Registered Businesses in Kosovo Business Registration Agency.

Tax Administration of Kosovo, 2015. Database of Registered Businesses in the Tax Administration of Kosovo.

UNDP Survey, 2015. Survey of firms in the Chemical Industry in Kosovo.

Kosovo Agency of Statistics, 2015. Results of the Kosovo 2014 Labour Force Survey.

Riinvest Institute, 2015. Business Climate in Kosovo: A cross-regional perspective.

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