Building an information system to enhance innovative SMEs in Albania

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Abstract

SMEs play an important role in the national economic development of any country. Nowadays SMEs are becoming more and more a subject of high attention of policy makers especially to developing countries due to their great potential in contribution of sustainable economic growth and employment generation for the national economy. In Albania, SMEs represent about 98% of the total enterprises in the country with a contribution to national GDP for about 70%. The economic performance and the structure of national economy is depended very much on the performance and the contribution of SMEs. Therefore, building an information system on SMEs performance is very important especially related to the objective for enhancing the innovative SMEs in the country. To measure SMEs’ ability to compete on national, regional and international markets requires a lot of information on all aspects, not only insights from SMEs but also contribution from SME experts, policy makers, representatives of associations of private enterprises dealing with SME issues. In addition, survey data analysis is very useful instrument to establish the set of proper indicators (employment, productivity, adopted technology, access to credit, to market) to measure to what extent these indicators are fulfilled by Albanian SMEs. To achieve this objective, the author have used the data collected through sample survey carried out by regional development agency, to 150 SMEs engaged in industrial production, located in 4 regions of the country. The sample results shows that despite the worldwide economic crisis, SMEs in Albania have contributed in growth of new jobs and investments in new technologies. Nevertheless currently SMEs still lack an adequate level of experience with regards to their functioning in the context of a market economy and open competition. The objective of the article, based on sample survey data is to prepare a set of recommendations both for SME’s and the stakeholders committed to SMEs development.

Key words: SME’s, productivity, new technology, competitiveness, international market

Introduction

Many studies conducted in Albania have been focused on competitiveness, R&D and productivity, but less on innovation. These studies have mainly highlighted how companies gain more advantage or profit and how they can be successful among competitors. Main topics addressed in this research are: (a) innovation (b) technology, (c) R&D and (d) environmental awareness. Further more modern economic growth theories stress the importance of ideas or knowledge as underlying drivers of growth. Four key drivers of productivity can be identified as follows: (a) Skills (b) Investment (c) Innovation (d) Competition. In order to draw a comprehensive profile of the factors affecting SMEs competitiveness in Albania, those indicators related to the topics above are matched with other specific competitiveness dimensions: (a) Access to target markets (b) marketing (c) workforce education and (d) labour skills.

General data on SME’s in Albania

The Albanian economy in now-days can be characterized as a market economy with stabilized macro indicators, and as such can be mentioned the growth rate of GDP, the average annual inflation, relatively low unemployment rate. The most important contribution to the economic growth of the country is coming from the private sector, which continuously shows growing trends not only in the traditional sectors of the market economy such as service sector but is increasingly its present in the manufacturing sector. Talking about the private sector of the economy, we naturally make parallelism between it and

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1 GLA Economics’ submission to the Treasury and DTI consultation on productivity indicators, London 2004
2 Include existing companies in agriculture sector, registered for the first time in business register
the SMEs sector. There are strong economic reasons why this parallelism is happening and if we look at the figures it can be concluded that SMEs account for about of:

99% of the total number of active enterprises operating in the national economy.

74% of the registered employment, at the national level

55% of sales (turnover) at the country level

60% of the national GDP (excluding agriculture)

**Table 1 - Number of active enterprises by the economic activity and size class**

<table>
<thead>
<tr>
<th>SMEs by size class</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total economy</td>
<td>103,038</td>
<td>109,039</td>
<td>106,837</td>
<td>111,083</td>
<td>112,537</td>
<td>152,288</td>
</tr>
<tr>
<td>1-4 employees</td>
<td>92,798</td>
<td>97,836</td>
<td>95,520</td>
<td>99,782</td>
<td>101,025</td>
<td>136,470²</td>
</tr>
<tr>
<td>5-9 employees</td>
<td>5,018</td>
<td>5,194</td>
<td>5,636</td>
<td>5,235</td>
<td>5,387</td>
<td>8,172</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>4,078</td>
<td>4,744</td>
<td>4,439</td>
<td>4,660</td>
<td>4,647</td>
<td>5,994</td>
</tr>
<tr>
<td>50+ employees</td>
<td>1,144</td>
<td>1,265</td>
<td>1,242</td>
<td>1,406</td>
<td>1,478</td>
<td>1,652</td>
</tr>
<tr>
<td>Producers of goods</td>
<td>16,049</td>
<td>17,099</td>
<td>16,413</td>
<td>16,842</td>
<td>16,989</td>
<td>37,950</td>
</tr>
<tr>
<td>1-4 employees</td>
<td>12,198</td>
<td>12,991</td>
<td>12,592</td>
<td>13,071</td>
<td>13,273</td>
<td>33,255</td>
</tr>
<tr>
<td>5-9 employees</td>
<td>1,791</td>
<td>1,717</td>
<td>1,718</td>
<td>1,565</td>
<td>1,603</td>
<td>2,080</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>1,649</td>
<td>1,923</td>
<td>1,650</td>
<td>1,681</td>
<td>1,562</td>
<td>1,971</td>
</tr>
<tr>
<td>50+ employees</td>
<td>411</td>
<td>468</td>
<td>453</td>
<td>525</td>
<td>551</td>
<td>644</td>
</tr>
<tr>
<td>Producers of services</td>
<td>86,989</td>
<td>91,940</td>
<td>90,424</td>
<td>94,241</td>
<td>95,548</td>
<td>114,338</td>
</tr>
<tr>
<td>1-4 employees</td>
<td>80,600</td>
<td>84,845</td>
<td>82,928</td>
<td>86,711</td>
<td>87,752</td>
<td>103,215</td>
</tr>
<tr>
<td>5-9 employees</td>
<td>3,227</td>
<td>3,477</td>
<td>3,918</td>
<td>3,670</td>
<td>3,784</td>
<td>6,092</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>2,429</td>
<td>2,821</td>
<td>2,789</td>
<td>2,979</td>
<td>3,085</td>
<td>4,023</td>
</tr>
<tr>
<td>50+ employees</td>
<td>733</td>
<td>797</td>
<td>789</td>
<td>881</td>
<td>927</td>
<td>1,008</td>
</tr>
</tbody>
</table>

**Source:** INSTAT, 2015

Within production of goods sector, manufacturing enterprises represent the main branch for about 61% except the last year, due to the registration for the first time of the existing companies in agriculture sector. In sample survey although the main focus is the manufacturing sector are also included companies operating in agro-industries and processing construction materials.

**Table 2 - Main economic indicators of SME-s by size class**

<table>
<thead>
<tr>
<th>General Indicators at 2015</th>
<th>(1-9)</th>
<th>(10-49)</th>
<th>(50+)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of enterprises</td>
<td>95%</td>
<td>4%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td>Annual average number of employees</td>
<td>45%</td>
<td>19%</td>
<td>36%</td>
<td>100%</td>
</tr>
<tr>
<td>Total income</td>
<td>25%</td>
<td>31%</td>
<td>45%</td>
<td>100%</td>
</tr>
<tr>
<td>Total cost</td>
<td>24%</td>
<td>31%</td>
<td>45%</td>
<td>100%</td>
</tr>
<tr>
<td>Net profit/loss</td>
<td>36%</td>
<td>20%</td>
<td>44%</td>
<td>100%</td>
</tr>
<tr>
<td>Total investments</td>
<td>11%</td>
<td>26%</td>
<td>83%</td>
<td>100%</td>
</tr>
<tr>
<td>Production</td>
<td>22%</td>
<td>26%</td>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>Value added</td>
<td>23%</td>
<td>23%</td>
<td>53%</td>
<td>100%</td>
</tr>
</tbody>
</table>
SMEs play a crucial role in Albania’s economy. They represent roughly 98% of registered businesses in Albania and generate a share for about 70% of GDP. About 15% of them are engaged in production of goods and the rest of companies perform service activity. The highest concentration of SME’s is in the central area of the country.

Detailed analyzes of sample survey data.

A sample of 150 companies in production sector are interviewed to collect data on their performance. The majority of companies are medium-sized and about 23% of them are conducting their activity in “food processing” and “textile production”. The graph below gives more detailed picture on the distribution of companies by industry sectors.

**Graph.1 SMEs by economic activities**

Most of the interviewed entrepreneurs are men, reflecting the overall Albanian situation of low rate of female entrepreneurship. Young entrepreneurship representation as well is very low, in accordance with national data, whilst the average educational level varies from sector to sector.

Employees by the level of education- From the sample survey data it seems that “wood processing” (70%), “recycling” (65%), and “food processing” (62%) sectors declare employees with secondary and high school education to be the most common one. Meanwhile, “shoes” (54%), “textile” (46%), and “construction” (36%) sectors have the predominance of staff with elementary education and less with secondary school. Textile, shoes, footwear, and recycling sectors have the fewest employees with university education. This is because these companies do not require skilled workers or workers with high education. Company owners of these sectors think that the education level of their staff is not an issue for the performance of their business. It is interesting to note that new industries that have invested in new technology recruit staff with higher education, while industries that have invested very little in new technologies do not ask for qualified or potential employees with university education. SMEs should be able to respond quickly and efficiently to regional & international market signals to take advantage of trade and investment opportunities and benefit from the applied trading rules. As result, they need to be competitive and productive to enter to the international market so qualified and educated employees is key element to achieve this objective.

New jobs creation- Interviewed companies operating in industrial sector have declared new job openings during the last two years. This fact does not contradict the recent economic crisis in the region or the official unemployment data. SMEs and large companies are in a tough competition and to be competitive they are seeking to create new jobs. According to sample survey data it results that 18 % of the companies have created (3-10) new jobs, 16% of them have created (1-2) jobs, 11% have created more than 10 new jobs, and the rest about 54% have not created any new jobs during the last two years. Regarding the contribution in job creation by activity it results that “food processing”, “other”, “textile”, and “shoes/footwear” companies have created higher numbers of new jobs compared to other sectors such as “construction processing materials”, “wood processing” and “recycling”. This is due to new contracts signed with foreign partners and great opportunities for exports of
those companies. The highest rate of new jobs creation was identified at «foot wear» (77%), «textile» (48%), «food processing» (46%), «wood processing» (43%). One good reason to explain this situation is related with the fact that the demand for employees for those companies is oriented to people with low level of education and qualification that can be found easily in the labor market. The demand for qualified new jobs by sector varies from 26% to 49.7%. This shows the diverse trend of the level of qualification within these enterprises. A more detailed analysis reveals that “food processing” and “other” sectors employ a bigger percentage of highly qualified people than “construction” and “textile” sector.

Business Improvement environment- Surveyed businesses in regard to the improvement of their business performance over the last two years declare that: 65% of them have considerably increased the quality of their products or services over the last two years, 35% of the responders have increased their production and expanded the range of services provided, 27% declare that have sold in new locations and to new traders, 21% declare they have bought new machinery & equipment, only 7% declare that they have established a new enterprise (the question foreseen more than 1 choice). The interviewers report that compared to two years ago the wage of employees, the personal income (57%) the number of people employed (45%), the profit (43%), and the sales (38%) have stayed at the same. For other elements such as number of clients and number of people employed, 38% and 37% respectively declare that the situation has been improved too. Nonetheless, in overall average the situation has generally stayed the same.

Certificates or patents- New rules introduced through the EU & regional trade integration system require SMEs to comply with higher technical (e.g. technical barriers to trade, tariffs and non-tariffs), environmental (e.g. ISO14000) and labor standards in domestic and export markets, EUREPGAP, HACCP etc. As such, companies in Albania are aware about the standards and certificates needed to fulfill international rules for export and are making further steps. About 24% of companies that have certificates or patents declare that they also have ISO certificate. 10% of them have other local certificates or patents, 4% companies that belong to the food-processing sector and deal with export are equipped with HACCP certificate. More than 60% of respondents did not declare any certificate. The sector that is best equipped with standard certificates is ‘food processing’ (80%). The companies that operate in this sector have invested in fulfilling standards for food safety etc., which has influenced them to invest on standard certification aspects. As for footwear (14%) and textile (46%), the situation is different. These sectors are mostly based on orders from foreign partners their products do not need any strict certification therefor they have not invested in new updated technologies.

Product certification- With regard to the certificates related to any or some certified products by the companies, the situation is that 34% of companies declare they have certified products. 36% of the companies have no certified products and 14% of them are in the process of getting the certificates for their products. Companies offer different responses when asked about practicing certified products. They list local quality certificates or special permission provided by local laboratories for certification of specific products in order to export. However, there are also cases when the tests for quality standards are carried out abroad.

Investments made by companies - The key factors determining business investment decisions are the expected return on the investment, the planning prospect, and the perceived risk of investment. An important segment of the surveyed entrepreneurs reports that they have constantly included investment plans in their business. Thus, 45% of them have made investments in the last 12 months in accordance to prior investment plans, whereas 51% had not invested in the last 12 months. They declare that their investments according to business plans are strongly connected with factors such as, the credit, a safe market and knowledge of the market. Companies that have made the highest investments are food processing and shoes & footwear companies. Fewer investments are made by sectors such as «wood processing» and «construction processing materials». Companies that have invested the most are those formed in recent years. They have made new investments in technology and modern lines. Technological lines are mainly imported from EU countries where local companies engage in new experiences in waste recycling, or processing of paper and plastic.

Type of investments- The scale and location of business investment depends on the business strategies adopted by companies. In this context, ambitious firms that aim to grow strongly prefer more to invest and take risk. The level of business investment is also affected by the Albanian business environment, which is affected by the cost of doing business, the quality of infrastructure, the taxation system and macroeconomic, political and policy stability. Investment is also variable
of local and international competition. With regard to the areas targeted by their investment plans, about 28 % of the companies reported they have made investments in new technology or standard compliance, 22 % have made investments related to the increase of the production volume, 19% have invested in marketing and sales, 15% on efficiency, 12% on adding new processes. Only a few companies report on other elements such as investments for certificates on ISO/HACCP, opening of a new business, etc.

Investment in technology - With regard to new technology invested, about 30% of the companies report investments in new technology, 8% of respondents have invested in second hand machineries. About 62 % of the companies did not answer regarding the technology invested in. This low investment rate is explained due to three main reasons: (i) economic crisis in the region, (ii) low rate of crediting of the enterprises (iii) postponed projected investment in another period of time by companies. From the companies who have invested, “Other” sector, “Food processing enterprises”, “recycling” and “shoes/footwear” have invested more in new technology. Because of strict rules related to food standards and safety, “food-processing” companies are conditioned to invest in new technologies. Some other enterprises have invested in second hand technology as well because of the fact that these industries use to work based on orders and cover a part of the value chain product. (ref. graph 2). Albanian companies have mainly opted not to invest on new machinery and equipment. However, currently there are many pending plans for investments. Through new funds and programs like IPARD Like grant scheme or Italian Credit line, there are great hopes for these plans to be implemented in the near future.

Business skills - Business skills are very important for productivity as more skills enable individuals to work more effectively within the workplace and help facilitate the introduction of new innovative ideas and practices within the production process. Alongside the supply of skills, the need to match the provision of skills to the requirements of employers and then utilize these skills effectively within the workplace are important factors of Albanian SMEs progress in this area. During growth and expansion phases, SME owners must improve their analytical skills regarding the strong and weak points of their enterprise.

Graph 2 Companies by investments in technology

![Investment in Technology by sectors](chart)

Source: sample survey data, calculation by author

They should also strive to develop a thorough understanding of the threats and opportunities posed by and in the business environment. In order to contribute to the growth and success of the business it is essential to develop capabilities related to strategic corporate planning. Interventions aimed at developing the advanced managerial skills required by the modern businesses such as facilitating, negotiating, team building, and networking are also a very significant element of business growth.

Graph 3. Companies by Business skills efficiency

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1 BERR 2008, Productivity and Competitiveness Indicators
The business skills rated the highest by companies are those of market research, marketing and management. On the other hand, companies feel they are lacking in skills such as business plan writing and strategic planning. This is because enterprises consider the preparation of the business plan documents only when they are applying for credits or entering in business deals with foreign investors.

Source: sample survey data, calculation by author

Company level of modernization

There are some interesting results on the company’s level of modernization. More than 85% of the companies have computers or business web pages. This exposure makes them regionally and globally known and some of them able to apply E-commerce. About 88% of the interviewed companies have employed staffs that speak foreign languages. Some 42% of the companies have a written company profile in web or are represented in some other way (a price translated list, product literature etc.). Throughout the year, 18% of companies planned a special budget on marketing. Hence, compared to a few years ago, the situation has significantly improved. Almost all the interviewed companies were positive regarding current and future levels of modernization.

Productivity, R&D, Innovation

Innovation is the successful exploitation of new ideas, encompassing the implementation of new or significantly improved products, processes, marketing and organizational changes that contribute to increased productivity and competitiveness. When asked about innovation in their businesses in the last twelve months, the majority of respondents declare that they continuously innovate (70% of the sample). However, the answer is very subjective. With innovation, most entrepreneurs understand simple changes performed in production lines or machinery, or even simple management practices. It is difficult for them to perceive innovation as a new concept. Companies that innovate the most belong to these sectors: “food processing” (29 enterprises), “other sector” (16 companies), “textile” (14 companies), and “processing of construction materials”.

Innovation aspects

For companies that do innovate, when asked about the field of innovation, the survey has shown that 57% of them innovate in product processing, 25% innovate in marketing and distribution channels, and 18% in business organization, management (HRD), finance etc. Overall average of innovation aspect is estimated for about 8%.

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How would you rate the business skills efficiency of your company

![Bar chart showing the rating of business skills efficiency of companies.](chart)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>Low</td>
</tr>
<tr>
<td>Management</td>
<td>Low</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>Normal</td>
</tr>
<tr>
<td>Business Plan Writing</td>
<td>Normal</td>
</tr>
<tr>
<td>Market Research</td>
<td>Low</td>
</tr>
</tbody>
</table>

No answer | Very good | Normal | Low
Graph 4. Increase of turnover due to new technology applied

Source: sample survey data, calculation by author

When asked about the increase of company turnover due to applying new technology, ‘shoes and footwear’ industries report a 13.1% increase, ‘food processing’ declares a 10.4% increase, ‘recycling’, paper and plastic sector declare 10.8%. Other sectors have experienced lower increases of turnover. This scenario follows the same trend as the sectors that have made the most investment in technology. They are again the ‘food processing’ and ‘recycling’, paper and plastic industries. Overall average of increase turnover due to new technology is about 8%.

Graph 5. Proportion of yearly gross expenditures for R&D in percentage of turnover

Source: sample survey data, calculation by author

When asked about the proportion of gross expenditures for research and development (in % of yearly turnover), “other” sector declares 2.68%, ‘recycling’ 2.21%, “construction” 2.21% and “food processing” 1.98%. These sectors try to innovate and gain expertise by cooperating with brand name companies or with foreign companies that are specialized in similar
areas. The same argument makes sense for the “wood processing” sector. The overall average proportion of yearly gross expenditure for R&D into turnover is estimated for about 1.9%.

Regarding the question of what part of the annual gross expenditures goes to environmental protection and safety, 91% of companies responded with 1-3%. These figures given by entrepreneurs are very subjective. This is because environmental protection or safety is meant as anything that happens in their enterprise, but it is not seen in the context of the whole environment. The overall average gross expenditure that goes for environment protection is about 1.6%.

Conclusions:

Albanian manufacturing businesses so far have gained a considerable experience in a market economy. Yet, there is always room for improvement in order to grow and deal in new markets. Different changes concerning production structure have already happened. However, many businesses are still in the process of adjusting to such changes. The market will still offer good opportunities for products from countries that have effective Free Trade Agreements with Albania.

The manufacturing sector should creatively work to find new ways to increase their productivity and competitiveness. Solving the following challenges will be beneficial to such companies:

- Strengthening the infrastructure services delivery to facilitate market access and reduce the cost of doing business
- Encouraging new SMEs entrepreneurs to learn the modern business language by offering them update and dynamic training courses;
- Providing more training and after care services. This includes continuous information on markets, advice about market trends, introduction to new marketing strategies to increase sales and their presence in domestic or foreign markets;
- Promoting projects on building a clear framework for the qualification and institutionalized support of manufacturing companies.
- Developing economic improvement through adding and using resources in a proper way by shifting from a supply-supporting to a demand-supporting approach;
- Establishing relationships with credit institutions, and other types of funds in order to support investments in new technology
- Promoting productive industries and establishing connections with foreign partners;
- Promoting and assisting the businesses to apply EU standards and create market opportunities

Recommendations

Public institutions working with manufacturing companies remain crucial for guiding and helping SMEs to adjust to new developments. The following actions should be taken in order to stimulate SMEs:

- Develop successful business strategies specifically for SME-s.
- Support the specialization of manufacturing industries and increase common relations between producers, marketing firms and consumers.
- Raise the image of “Made in Albania” products in the eyes of day-to-day consumers, by improving production and marketing processes.
- Increase product safety (conforming to international standards),
- Support modern and attractive packaging as well as highly informative labels.
- Assist the development of domestic suppliers and assign the value chain of products
- Adopt new patterns of local organizations, such as manufacturing companies and explore new marketing channels
- Suggest where and how to get support from the public sector (infrastructure, specialized training, etc.) and focus energies on things within control (customer learning, product upgrades, investing in human resources etc.)
Ensure and guarantee the convergence between government agencies and corporate along with the provision of good infrastructure for entrepreneurship and businesses, as an important factor in stimulating SMEs’ success.

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