PAVING THE WAY FOR BETTER BUSINESS IN KOSOVO

WHAT ARE THE GROWTH OBSTACLES FOR BUSINESS IN KOSOVO?

Pristina, February 2015
PAVING THE WAY FOR BETTER BUSINESS IN KOSOVO

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Dear friends and colleagues,

Following our quarterly Business Climate Survey, the Kosovo Chamber of Commerce now did a bottleneck study on factors impeding growth of the Kosovo economy.

This kind of study is the first of its kind for Kosovo. It not only charts factors outside the companies, but also sheds light on factors inside the company, both hindering growth. It is the only study of this type now well-known and highly valued at international level. It provides valuable information regarding business barriers as indicated by the business sector, for current and future development.

The Kosovo Chamber of Commerce through this study aims at influencing the debate and measures for stimulating growth of the Kosovo companies, and establishing an enabling business environment. This study was conducted with the support of GIZ.

Kosovo Chamber of Commerce throughout its activities aims to increase the general level of awareness of the society about the value of entrepreneurship that Kosovo possesses. The Kosovo business community has an important role to play in creating these internal values and place them in the regional and international market. A thriving and growing Kosovo private sector impacts improvements in the economic welfare and society in general. It will likewise contribute to an improved image of our country and attract foreign investors through various forms of partnership.

This publication will be distributed first of all to all the companies who participated in the study, all governmental institutions, business organizations, diplomatic offices, donor organizations and all other stakeholders who directly or indirectly influence and contribute to the promotion of economic activities of Kosovo.

Sincerely yours,

Safet Gërxtaliu
President
EXECUTIVE SUMMARY

Every quarter, the Kosovo Chamber of Commerce (KCC) publishes a business tendency survey. This is an ongoing survey since beginning of 2013. 8 such surveys have been done.

This business climate survey gives useful information, however it not yet identifies the underlying factors that indicate the perception of the climate by the companies.

Therefore, now the Kosovo Chamber of Commerce adds a research study to identify the major obstacles that are hindering smooth operation of the companies.

The possible obstacles can be outside and internal of nature. Outside obstacles can be of the following:

- economic environment,
- administrative and regulatory conditions
- infrastructural of nature.

Internal obstacles are related to managerial and operational issues.

For most companies, the major external obstacle is the price (57%) and availability of electricity (54%), as well as cost of bank loans (38%). The political instability (at the time of interviews there was no new government yet) was mentioned by 36% and corruption by 35%.

Internal obstacles played a smaller role. For 24% major internal obstacle is no adequate number of customers. This it seems is a symptom of marketing and sales issues. Wholesale reported much more internal obstacles then the others, and construction less. Large did significantly more, and micro less.

More then 50% of the companies participating in the survey indicated that sales would go up in 2015. 40% expects the investment will rise in 2015.

A question related to economic dynamics gave a striking 75% of the companies indicated that they had gained new clients in 2014. This is a sign of a dynamic economy. Likewise, it is also a must for companies to find enough new clients.

The study ends with a number of conclusions and recommendations. These can address the most striking external and internal obstacles, by creating an enabling environment in which companies can operate more smoothly and are assisted to overcome or cope with external and internal obstacles.

As having a business plan was an indicator of relatively less issues, it is recommended to start a nation-wide business plan action. The network of the KCC can be an important asset for that.
A vibrant private sector is crucial for the success of an economy. Businesses employ people and make investments. Thriving, or even better growing business contributes to the economy in a major way. Therefore it is important to understand which factors are hindering businesses in their activity. In a transition economy the economic environment for businesses is changing rapidly. Understanding factors hindering business activity at one point in time is important, and this is what the Kosovo Chamber of Commerce is doing right now with the business survey on obstacles for business. But also to monitor the environment over time, at least on an annual rhythm, is important. With time comparisons, the change of the economic environment can be analyzed and any improvement or worsening can be detected. Hence, to do this survey on an annual basis – which is intended - will even be better.

This survey sheds light on the problems, as perceived by businesses. Differently from several ad-hoc-surveys related to this topic not only bottlenecks in the outside-world of the companies (e.g. infrastructure, taxes, access to finance etc.), but also problems originating on the company level (like quality of products/services, lack of distribution channels, lack of adequate software etc.) are monitored.

The results of the first survey of this new type are presented in this report. The data are split according to the sector the company is working in and the size of the company. It is planned that the KCC will in future conduct this survey on an annual basis. So in the coming next years the KCC can provide a progress report about external and internal obstacles companies are facing in doing business. This information will help all economic agents – economic policy as well as management by itself - to implement measures to improve the business environment.

The results presented in this report are based on a large business survey. The Kosovo Chamber of Commerce developed a questionnaire and implemented the survey. The KCC has received for this purpose financial support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and methodological support by two external experts, Klaus Abberger (ETH Zurich) and Gernot Nerb (Ifo Institute, Munich). The survey was conducted through personal interviews in the time between 1. December and 12 December 2014 businesses responded to the survey.

The report starts with the external obstacles as seen by the companies followed by the internal factors impeding business. The second main topic deals with the planned investment and expected sales for 2015.

The results were analyzed by sector and by size. For size, micro is for 1 – 2 employees, small from 2 to 10, medium from 10 to 50 and large over 50 employees.

A breakdown of survey results by legal status, the gender of persons the company is registered and the age of the company brought no relevant differences and thus are not presented here.
2. OBSTACLES OUTSIDE THE COMPANY

Three different types of external factors were researched. The first one was directed to infrastructure and general conditions, the second on economic environment and the third on administrative and regulatory condition.

2.1 TOP TEN OBSTACLES FOR BUSINESS ACTIVITY IN KOSOVO

The research listed as the top ten obstacles, the following:

- Crime: 25.8%
- Cost and reliability of water supply: 25.9%
- Access to bank financing: 27.1%
- Unfair competition by low quality products: 29.0%
- Unfair competition by grey economy: 32.0%
- Corruption: 34.6%
- Political instability: 35.5%
- Cost of bank financing: 38.1%
- Reliability of electricity: 54.4%
- Cost of electricity: 57.0%

All figures in per cent
It is remarkable that the most pressing obstacles are related to cost and reliability of electricity. The next important obstacles are related to the cost of the bank financing and to a lesser extend access to finance.

Political instability was mentioned very often (35.5%) and it has to be noted that the interviews were done during the time there was no new government installed yet, which might have influenced the opinion of the interviewed businesses.

At the bottom of the top ten list ranks crime (25.8%).

A Dutch investment set up a factory in Kosovo. It is a factory somewhat high on energy consumption. The business plan had taken that into consideration, and the price of electricity was not prohibitive high. The real costs of electricity figured in there and it was not really a problem. When the factory was started, it appeared that the electricity voltage was not constant and varied beyond limits which some of the equipment could handle. Unfortunately the voltage (and the cycles, hertz) were not constant. Also the reliability of availability was not optimal. Sometimes there was electricity, sometimes not. As a result, production was erratic, and many circuits were blown up. It could only be prevented by adding voltage protectors and big generators. These led to additional unexpected investments of almost 100,000 euro. Losses were a result in the beginning stages of the factory. Now, with this additional protection, the factory is doing fine.

2.2.1 Overview of obstacles for businesses; economic environment

In the category economic environment the three main problems were: cost of bank financing (38.1%), unfair competition by grey economy (32%) and unfair competition by low quality of the products (29%).
2.2.2 Overview of obstacles for administrative and regulatory conditions

In general it can be stated that, based on the results of the study, this type of obstacle does not rank amongst the most important problems of companies in Kosovo. Relatively most important problems in this category found to be: tax system, legal environment and customs regulations/procedure and bureaucracy.
The service providing enterprise needed document provided. It was needed for a service to be rendered 10 days later, and that was time enough for obtaining the documents. The manager went to the offices every day, regularly being promised “tomorrow”. His customer called him several times and he promised to be able to deliver at the given time. Unfortunately, the required document did not arrive in time, and he had to request a Macedonian company to come to his rescue to serve this client and to keep him satisfied, and get follow up orders. This individual order unfortunately left him with substantial extra cost, and a loss.
2.2.3 Overview of obstacles for infrastructure and general conditions

This category contains the most important obstacles companies are facing. First of all were mentioned cost and reliability of electricity, followed by political instability.

Obstacles: Infrastructure and general conditions
Answers: major obstacle

- Cost of electricity: 57%
- Reliability of electricity: 54.4%
- Political instability: 35.5%
- Corruption: 34.6%
- Cost and reliability of water supply: 25.9%
- Crime: 25.8%
- Anarchy: 20.1%
- Transport: 15.2%
- Other infrastructure or general issues: 14.5%

All figures in per cent.
It is the perception of the enterprises which is shown here. What would be the position of the electricity producing company? Recently, a conference was organised on the topic, well before the survey started. Some references may be presented here, to confront the enterprises with another opinion.


Some of the key messages from the presentation of the Board member of the Kosovo Energy Regulator "Energy Regulatory Office (ERO), " Krenar Bujupi on the state of the energy sector Kosovo.

- Electricity prices in KOS were in 2013 with 5.16 cents / kWh for consumers and 7.80 cents / kWh far below regional standards. Even after the price increase in June 2014 (4.57%) and again in September 2014 (to 5.18%, the additional costs due to the explosion of electrolysis plant in the lignite power plant Kosova A in June 2014) the prices of 5.66 cents / kWh for households are very low.

- Since 1999, the overaged power plants succeeded in producing energy of 2,835 GWh (2000) to 5520 GWh (2013). But It is now the maximum possible.

- Since 2007, the total losses (technical and commercial) were reduced from 48% to 36% (2013), but nevertheless still above the allowable loss rate of 32% is.

- Investment of the power generator CEC were drastically decreased in recent years: from 75.9 million euros (2012) about 30.8 million EUR (2013) to only 17.7 million (January-September 2014).

- It is of paramount importance to immediately invest in the production of electricity to prevent an energy crisis.

**2.3 OBSTACLES BY SECTOR**

Companies in wholesaling reported more problems than companies in the other sectors. Despite the cyclical difficult times construction sector is in, relatively few construction companies mentioned that external obstacles were affecting them.

Electricity is for all sectors most dominating problem.

When seen the sector, wholesale is in almost all aspects leading. Wholesale companies view more problems. It has to be seen what might cause this over representation of the wholesale sector. What distinguishes these enterprises?
### Obstacles: All obstacles by sector

Answers: moderate or major obstacle

#### Economic
- Insufficient demand
- Lack of skilled labour
- Cost of labour
- Shortage of material
- Arrears in payment from customers
- Liquidity problems
- Access to bank financing
- Cost of bank financing
- Unfair competition by grey economy
- Unfair competition by low quality products
- Maintenance
- Lack of capacity and equipment
- Company money for personal purposes
- Other economic issues

#### Administrative/Regulatory
- Business registration
- Access to land
- Construction permissions
- Legal environment
- Protection of intellectual property rights
- Costs to prove int. quality standards
- Import/export licensing
- Customs regulations/procedures/bureaucr.
- Tax system
- Adequate laws
- Business information on laws
- Business information on markets
- Business information on exports
- Business information on standards
- Management skills
- Other administrative or regulatory issues

#### Infrastructure/General
- Cost of electricity
- Reliability of electricity
- Cost and reliability of water supply
- Corruption
- Crime
- Political instability
- Transport
- Anarchy
- Other infrastructure or general issues

All figures in per cent

<table>
<thead>
<tr>
<th>Sector</th>
<th>Construction</th>
<th>Manufacturing</th>
<th>Wholesale</th>
<th>Retailing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative/Regulatory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure/General</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.4 OBSTACLES BY FIRM SIZE

Electricity appears to be also in size classes the major obstacle. There is a tendency that bigger companies report more obstacles than the smaller ones do.

Obstacles: All obstacles by firm size
Answers: moderate or major obstacle

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Economic
Insufficient demand
Lack of skilled labour
Cost of labour
Shortage of material
Arrears in payment from customers
Liquidity problems
Access to bank financing
Cost of bank financing
Unfair competition by grey economy
Unfair competition by low quality products
Maintenace
Lack of capacity and equipment
Company money for personal purposes
Other economic issues

Administrative/Regulatory
Business registration
Access to land
Construction permissions
Legal environment
Protection of intellectual property rights
Costs to prove int. quality standards
Import/export licensing
Customs regulations/procedures/bureaucr.
Tax system
Adequate laws
Business information on laws
Business information on markets
Business information on exports
Business information on standards
Management skills
Other administrative or regulatory issues

Infrastructure/General
Cost of electricity
Reliability of electricity
Cost and reliability of water supply
Corruption
Crime
Political instability
Transport
Anarchy
Other infrastructure or general issues
3. INTERNAL OBSTACLES

In chapter two obstacles outside the company were discussed. However, problems for companies arise not only from obstacles having their origin outside the company, but also from problems in the industry or the individual company. Among the problems most often mentioned rank “no adequate number of customers”, followed by “profitability is too low”, and “not enough investments in trainings” on top. This type of issues might be symptom of other deficiencies within the company.

3.1 INTERNAL FACTORS IN INDUSTRY

![Bar chart showing internal factors in industry with percentages]
3.2 INTERNAL FACTORS BY SECTORS

Construction companies mentioned to a lesser degree internal problems and wholesale to a higher degree compared to companies in the other sectors. It is worth mentioning that differently from the findings on external obstacles, services companies report more often internal problem than retailers.
3.3 INTERNAL FACTORS BY SIZE CLASS

In general larger companies reported more often internal problems with the exception of “no adequate number of customers”, where small companies appear to have more problems.
4. COMPANY TRENDS

Companies interviewed in the survey showed in 2014 the following level of sales.

What is your estimate for the year 2014 sales level?

Sales expectations for 2015 signal an increase, particularly in manufacturing. The bigger companies report more often sales to grow.

What are your expectations for sales, for the next year (2015)?

The business climate survey indicated that in the 3rd quarter, 34% of the enterprises expected sales to rise, in the next quarter. This went up to 43% in the 4th quarter.

Expectations for employment remained almost the same, although they were a bit lower for the 4th quarter compared to the 3rd.
Please be referred to KCC quarterly business climate survey.

**What are your expectations for sales, for the year 2015? By size class**

- **50 and more**: Going up 50, Going down 10, Remain the same 40
- **10 to < 50**: Going up 40, Going down 20, Remain the same 40
- **2 to < 10**: Going up 40, Going down 20, Remain the same 40
- **< 2**: Going up 60, Going down 10, Remain the same 30

The bigger the company, the bigger the chance of sales increase, according to the enterprises future projections.

**What are your expectations for sales, for the year 2015? By sectors**

- **Services**: Going down 10, Going up 50, Remain the same 40
- **Construction**: Going down 10, Going up 50, Remain the same 40
- **Wholesaling**: Going down 10, Going up 50, Remain the same 40
- **Retailing**: Going down 10, Going up 50, Remain the same 40
- **Manufacturing**: Going down 10, Going up 60, Remain the same 30

Manufacturing expects the biggest growth in sales.

75% of companies managed in 2014 to gain new clients. Particularly successful in this context were the manufacturing sector and generally speaking the bigger companies. Below the average was the share of the new clients in wholesale and amongst the smaller companies.
This question served also as an indicator for business dynamics. As a timeline is not available for this topic, it is not yet possible to indicate growing maturity of the Kosovo economy. Nevertheless, 75% of the companies reporting having acquired new clients. It is assumed this is a good number, witness of good economic dynamics; manufacturing the highest and wholesale the lowest. Size wise, the micro enterprises lacked behind. This is somewhat surprising; literature suggest they are more dynamic of nature.

<table>
<thead>
<tr>
<th>By sector</th>
<th>Did you gain new clients during the year 2014?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>80</td>
</tr>
<tr>
<td>Retailing</td>
<td>72</td>
</tr>
<tr>
<td>Wholesaling</td>
<td>67</td>
</tr>
<tr>
<td>Construction</td>
<td>72</td>
</tr>
<tr>
<td>Services</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
</tr>
</tbody>
</table>
By size class

<table>
<thead>
<tr>
<th>By size class</th>
<th>Did you gain new clients during the year 2014?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>&lt;2</td>
<td>68</td>
<td>32</td>
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<tr>
<td>2 to &lt;10</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>10 to &lt;50</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>50 and more</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>25</td>
</tr>
</tbody>
</table>

More than half of the companies who gained new clients reported that the share was less than 10% of the total number of clients, in 39.9% of cases between 10 and 30% and in only 2.6% of all companies more than 30%.

The majority of the companies kept the investments level in 2014 constant or even increased it. Only 20% of the companies reduced their investments. By sector the most positive answers regarding concerning investments came from manufacturing and to a somewhat lesser extent in wholesaling sector. The highest increase was reported from the larger companies and to a lesser degree from medium-sized companies.
More than 1/3 of the enterprises increased their investment. This should result in growth in the economy in the near future.
More companies than in 2014 will increase in 2015 their investments. This trend is obvious in all sectors, particularly in manufacturing and in the medium-sized and in the larger companies.

More companies than in 2014 will increase in 2015 their investments. This trend is obvious in all sectors, particularly in manufacturing and in the medium-sized and in the larger companies.
Remarkable is the relatively “stand still” of the retailing sector, and to a somewhat lesser extent the construction. Micro firms and somewhat less small enterprises will invest less.
When the investment motives for 2015 are studied more in detail the following can be noted. The main focus of planned investment activity in 2015 lies on “Replacing Old Equipment” (37% of all responses), but also “Expansion of Existing Product-Line/Existing Services” (33% of all responses) appears to be of great importance. Of lesser priority were mentioned “Investments Designed to Streamline Production/Service” (14% of all responses) and “Expansion of Production-/Service-Capacity in New Fields of Production/Services” (13%).

Split by sector and size class some interesting differences become visible: In retailing and wholesaling the “Expansion of Existing Services” ranks even on top of the investment motives for 2015 (42% respectively 51% of responses).

A split of answers according to the size class of companies reveals that larger companies plan more often than smaller companies an “Expansion of the Existing Product-Line/Existing Services” (41% compared to 35%). Also with regard to the “Extension of Production-/Service Capacity in New Fields of Activity” the larger companies seem to be more active in 2015 than the smaller ones: 20% of responses compared to 11%.

**Change of sector of surveyed companies (not very common)**

36 companies changed the main sector and 389 did not change the sector. Changes are recorded mostly from retailing to manufacturing and from wholesaling to retailing.
5. CONCLUSIONS (AND RECOMMENDATIONS)

Following interviews and above presented findings the paramount obstacles are cost and reliability of electricity. The Chamber recommends immediate action as to have available affordable and reliable electricity. It is assumed that the new power-plant would be required.

The next major obstacle involves the cost of financing and related to this is the access to finance. A discussion with the Central Bank of Republic of Kosovo and the commercial banks on the composition of the cost of capital, more specifically the risk component, can lead to affordable cost of financing, as well as accessibility.

Political stability is of crucial importance, both for domestic and foreign direct investments. The result of this survey revealed relatively high political instability which might have been enhanced by the fact that no new government was yet installed when the survey took place. Nevertheless, the Chamber, on behalf of the Kosovo business community, will continue to constructively pressure responsible institutions to increase stability.

A relatively high share of companies mentioned unfair competition by the grey economy and by low quality products. In this context, obligatory standards could help solving these problems.

Linked to the grey economy is the fact that a large number of enterprises are informal. The Chamber would like to stimulate the Government to take positive actions to stimulate enterprises in the grey and black sector to become formal.

Regarding investment, it is noticed that a big number of enterprises did invest in 2014 and even more plan to do so in 2015. This is a very positive and encouraging sign, especially since the manufacturing and wholesale sector plan to invest more, considering the fact that their contribution to the national GDP is very high. Hopefully this increasing investment creates also innovation. The small companies plan to increase investment less than the average; this is unfortunate since most employment generation comes from the small scale sector. However, this needs careful monitoring. In case investments lack behind, corrective or stimulating measures should be implemented.

Sales expectations for the year 2015 show that especially larger firms expect higher sales. These seem to manifest themselves more in the manufacturing sector, which is an encouraging sign as in general it generates more added value.

The survey revealed that there are internal deficiencies regarding the management of companies. However, a number of these deficiencies seem to be a symptom of underlying lack of qualified expertise. A targeted intervention, possibly through training, counselling and consulting, should be designed in order to allow the enterprises to make a step forward and improve their entrepreneurship and management.
Most striking are the notions around business plan and others. Companies have lesser obstacles when having business plan; this is especially true for larger companies, and for the wholesale sector.

There is significant proof that having a business plan (as sign of serious management) leads to fewer obstacles. One can assume that more mature management makes companies better equipped to deal with obstacles. It could be good policy to design a nationwide programme focussing to start with a business plan, or business model generation. Having been confronted through business plan with one's own reality and formulating strategies and/ or actions for it allows better future.

An individual in the health sector wanted to start his own business. He was confident he would attract a good number of customers, but did not know he could really realise enough to cover investment and make a profit. He was assisted by a consultant from KCC to draw up a business plan. All numbers were real, none were inflated. The investment was calculated with the real figures, as was the construction. The possible clients were estimated as good as possible and then downgraded a bit, 10%. Financing was done by own funds and some additional bank loan.

The works started. Every now and then, he would wake up at night, hesitating, unsecure, would he be able to survive. He would go back to his business plan, and check again, only to realise, that it was possible. It could work.

Now his practice is doing very well, and the realised income has surpassed the numbers in the business plan.

It is assumed that for the Kosovo economy to grow, it would be a prerequisite that companies and the economy are dynamic, and take advantage of opportunities that emerge. Specific policies to generate such attitude, and opportunities, can be developed.
6. METHODOLOGY

The growth obstacles for businesses in Kosovo are analyzed in this report with the help of a business survey conducted by the Kosovo Chamber of Commerce. The survey uses a questionnaire, which was especially developed for the economic situation in Kosovo. Two external experts, Klaus Abberger (ETH Zurich) and Gernot Nerb (IFO Institute, Munich) developed together with the KCC staff from respectively department of economic analysis and policies the questions of the survey. The questionnaire was pre-tested with various institutions in Kosovo such as Central Bank of the Republic of Kosovo, Ministry of Finance and in interviews among some firms. The questionnaire consists of four parts:

The first part considers some firm characteristics.

The second part focuses on assessments of the firm’s economic situation regarding sales and investment.

The third part contains question batteries regarding obstacles for the activity of the firms. The obstacles are classified into three broad categories of external obstacles: Economic environment, administrative and regulatory conditions, and infrastructure and general conditions. In addition to the external factors a question battery for internal obstacles is also included.

A last part of questionnaire consists of questions regarding the services of the Kosovo Chamber of Commerce.

The character of the survey is qualitative. So the respondents are mainly asked do give answers on qualitative verbal scales. Typical response options are for example: no obstacle/ moderate obstacle/ major obstacle or does not apply.

The size and structure of the sample fulfills statistical criteria to gain representative results. The data were collected by personal interviews. KCC staff visited the businesses between 1st of December and 12th of December 2014. The visited businesses were selected from the Tax Administration of Kosovo (TAK) database. The sample structure is shown in Table 1.

Table 1: Sample structure

<table>
<thead>
<tr>
<th>Firm size</th>
<th>Construction</th>
<th>Manufacturing</th>
<th>Other</th>
<th>Retail</th>
<th>Services</th>
<th>Wholesale</th>
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<td>2 to &lt;10</td>
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</table>
APPENDIX: REGRESSION RESULTS

To deepen the understanding of the effects of firm characteristics on the perception of obstacles, regression models are estimated. The dependent variable is the count of major obstacles, which firms report. In the survey information on various firm characteristics are collected. The respondents are asked to report the firms size in number of employees (on a categorical scale with <2, 2 to <10, 10 to <50 and equal or more than 50), sector of main activity, the main owner of the firm (private domestic, private foreign, government or state, other), the gender of the person on which the firm is registered (female, male, both). Table A.1 shows the regression results. Model No 1 and 2 contain the results of regressions of the number of reported obstacles on these characteristics. The variables reflecting firm characteristics are named with a leading “f.”. Because firm size is a variable with a ranking the contrasts are coded as backward differences. Model No 1 is a linear regression model estimated by ordinary least squares. Since the number of reported obstacles is a count variable also a quasi-Poisson model is estimated and shown as Model No 2. However, the two models give similar results. Small firms report significant more obstacles than micro firms. Between small and medium size firms is almost no difference. Large firms tend to report more obstacles; however the increase is not significant. Also the sector of main activity matters. In retailing, services and especially in wholesaling significant more obstacles are reported than in the baseline sector, which is construction. So regarding the number of reported obstacles firm size and sector of activity have significant effects. However, it is also interesting to note that the other firm characteristics, gender of person on which the firm is registered and a type of ownership have no significant effect. However, the big majority of firms in the sample are private domestic firms so that a sound differentiation might not be possible.

The survey asks also for specific management tools. Firms are asked whether they have a formal written business plan, whether they have a formal written financial report and whether they apply formal quality management rules. In the regression table these variables are denoted with a leading “m.” Model No. 3 is a linear regression model and Model No. 4 is again a quasi-Poisson model. With both models the estimates show that firms having a formal written business plan report significant less major obstacles than firms without such a plan. A business plan is a formal statement of a set of business goals, the reasons they are believed attainable, and the plan for reaching those goals. So the availability of a business plan points to a strategic and focused management. Also a significant effect has the application of a formal written financial report. However, firms having such a report mark significant more major obstacles than firms, which do not have such a report. Although the given effect is not as strong as the effect of having a business plan. Why the effect is in the opposite direction cannot be concluded from the survey. On explanation could be, that firms are partly forced from outside to draw up such a report.

Regression Model No. 5 is a linear model, including the interaction effects of having a business plan and firm size. The estimates show that the effect of having a business plan is especially strong for large firms. Large firms having a business plan report a considerable less amount of major obstacles than other large firms. The model also contains the interaction between having a business plan and sector. The estimates show that there is a significant reduction of reported major obstacles especially strong in wholesaling, which is the sector reporting in general the most major obstacles.
<table>
<thead>
<tr>
<th>Model No.</th>
<th>OLS (1)</th>
<th>glm: quasipoisson (2)</th>
<th>OLS (3)</th>
<th>glm: quasipoisson (4)</th>
<th>OLS (5)</th>
</tr>
</thead>
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<tr>
<td>f.sizeSmall</td>
<td>4.401**</td>
<td>0.653**</td>
<td>3.299*</td>
<td>0.492</td>
<td>2.719</td>
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<td></td>
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<td>(0.271)</td>
<td>(1.838)</td>
<td>(0.261)</td>
<td>(2.397)</td>
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<td>0.029</td>
<td>0.002</td>
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<td>(0.127)</td>
<td>(1.510)</td>
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<td>0.227</td>
<td>6.713***</td>
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<td>(0.179)</td>
<td>(1.629)</td>
<td>(0.170)</td>
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<td>(1.666)</td>
<td>(0.222)</td>
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<td>0.062</td>
<td>0.159</td>
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<td>(0.565)</td>
<td>(4.812)</td>
<td>(0.549)</td>
<td>(5.207)</td>
</tr>
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<td>f.sectorRetailing</td>
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<td>0.602**</td>
<td>1.982</td>
<td>0.283</td>
<td>5.477*</td>
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<tr>
<td></td>
<td>(1.775)</td>
<td>(0.229)</td>
<td>(1.773)</td>
<td>(0.225)</td>
<td>(2.982)</td>
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<tr>
<td>f.sectorServices</td>
<td>3.873**</td>
<td>0.529**</td>
<td>1.527</td>
<td>0.251</td>
<td>5.914**</td>
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<td></td>
<td>(1.877)</td>
<td>(0.241)</td>
<td>(1.882)</td>
<td>(0.238)</td>
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<tr>
<td>f.sectorWholesaling</td>
<td>7.552***</td>
<td>0.857***</td>
<td>5.411***</td>
<td>0.584**</td>
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<td></td>
<td>(1.976)</td>
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<td>0.222</td>
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<td>(4.540)</td>
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<td>f.genderMale</td>
<td>1.294</td>
<td>0.174</td>
<td>2.517</td>
<td>0.299</td>
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<td></td>
<td>(2.944)</td>
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<td>(2.823)</td>
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<td>f.ownerOther</td>
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<td>-7.774</td>
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<td></td>
<td>(8.927)</td>
<td>(2.098)</td>
<td>(8.590)</td>
<td>(1.977)</td>
<td></td>
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<td>f.ownerPrivate domestic individuals, companies,</td>
<td>3.579</td>
<td>0.442</td>
<td>2.325</td>
<td>0.349</td>
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<td>organizations</td>
<td>(5.051)</td>
<td>(0.690)</td>
<td>(4.862)</td>
<td>(0.647)</td>
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<td>f.ownerPrivate foreign individuals, companies,</td>
<td>3.648</td>
<td>0.445</td>
<td>3.962</td>
<td>0.526</td>
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<td>organizations</td>
<td>(6.117)</td>
<td>(0.785)</td>
<td>(5.841)</td>
<td>(0.734)</td>
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<tr>
<td>m.businessplanYes</td>
<td>-5.440***</td>
<td>-0.669***</td>
<td>0.409</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.136)</td>
<td>(0.138)</td>
<td>(4.488)</td>
<td></td>
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<tr>
<td>m.reportYes</td>
<td>2.157*</td>
<td>0.284*</td>
<td>2.847***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.147)</td>
<td>(0.144)</td>
<td>(1.094)</td>
<td></td>
<td></td>
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<tr>
<td>m.standardsYes</td>
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<td>-0.111</td>
<td></td>
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<td></td>
<td>(1.254)</td>
<td>(0.150)</td>
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<td>m.businessplanYes:f.sizeSmall</td>
<td>1.633</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td>(3.423)</td>
<td></td>
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<td></td>
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<tr>
<td>m.businessplanYes:f.sizeMedium</td>
<td>-0.581</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(3.576)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>m.businessplanYes:f.sizeLarge</td>
<td>-9.207**</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>(4.215)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>f.sectorManufacturing:m.businessplanYes</td>
<td>-3.237</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>(3.566)</td>
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</tr>
</tbody>
</table>
Although the obstacles are mainly outside factors, which cannot directly be influenced by the company, it seems that with a targeted management (availability of business plan) the effect of the outside factors can be dampened. When the major obstacles of firms having a formal business plan are ranked, the resulting ranking is very similar to the overall ranking. Especially for the two main obstacles cost and reliability of electricity. So in this respect the firms with and the firms without a business plan are not very different. However, differences in other respects are visible. Table A.2 contains the share of firms having a business plan conditional on sector. Business plans are most common in construction. In manufacturing about half of the firms report that they have a business plan. In retail trade and in the services sector business plans are not so frequent. In wholesaling just under half of the respondents have a formal business plan. However, the regression results show, that especially in this sector firms with a business plan report less major obstacles than the firms without a business plan. The string effect of a business plan in wholesaling is also visible in Table A.3 which contains the average number of major obstacles reported by firms split by sector and having a business plan.

Table 3: Share of firms having a business plan conditional on sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>0.24</td>
<td>0.76</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.48</td>
<td>0.52</td>
</tr>
<tr>
<td>Retail</td>
<td>0.63</td>
<td>0.37</td>
</tr>
<tr>
<td>Services</td>
<td>0.61</td>
<td>0.39</td>
</tr>
<tr>
<td>Wholesale</td>
<td>0.56</td>
<td>0.44</td>
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</table>
Table 4: Share of firms having a business plan conditional on firm size

<table>
<thead>
<tr>
<th>Sector</th>
<th>Business plan</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Construction</td>
<td>6.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.4</td>
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<tr>
<td>Retail</td>
<td>11.6</td>
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<tr>
<td>Services</td>
<td>11.2</td>
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<tr>
<td>Wholesale</td>
<td>18.1</td>
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</tbody>
</table>

Regarding firm size with the exception of micro firms there is a tendency that the larger the firms the more often they have a business plan (see Table A.4). About half of the micro firms (less than 2 employees) report that they have a formal business plan. However, it might be an interesting point for future studies what they understand under a formal business plan. Table A.5 shows the average number of major obstacles reported by firms split by firm size and having a business plan. The calculations illustrate the regression results that firms with a business plan report fewer major obstacles than other firms. It also shows that this effect is especially pronounced for large firms. Large firms without business plans report considerable more major obstacles than large firms with a business plan.

Table 5: Share of firms having a business plan conditional on firm size

<table>
<thead>
<tr>
<th>Size (employees)</th>
<th>Business plan</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>&lt;2</td>
<td>0.49</td>
</tr>
<tr>
<td>2 to &lt;10</td>
<td>0.61</td>
</tr>
<tr>
<td>10 to &lt;50</td>
<td>0.48</td>
</tr>
<tr>
<td>50 and more</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Table 6: Average number of reported major obstacles by firm size and having a business plan

<table>
<thead>
<tr>
<th>Size (employees)</th>
<th>Business plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
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<tr>
<td>&lt;2</td>
<td>7.85</td>
</tr>
<tr>
<td>2 to &lt;10</td>
<td>10.8</td>
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<td>10 to &lt;50</td>
<td>11.6</td>
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<tr>
<td>50 and more</td>
<td>18.0</td>
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</tbody>
</table>