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The globalization of financial news and their impact on the financial markets

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Abstract.
This study presents the correlation between the globalization of the financial news and their impact on the financial markets. The national news are replaced by international news or by the national news caught in a global frame. For instance, a certain text extracted from the body of a piece of news can determine the investors to buy company's X stocks or to sell company's Y stocks. It is obvious that financial news have a significant contribution to the evolution of the financial market. As a direct consequence of this fact, and also as a side effect that there are no more barriers in front of capital flows found into the global financial system, during the last decades appeared companies that were exclusively dedicated to this type of news. The most relevant example for the above-mentioned idea is company Bloomberg L.P. Therefore, at the end of this study we will analyse the evolution of this company and we will look over the market share distribution inside the financial data market.
Key words: globalization; news; financial markets

Introduction

"Society is changing at a pace that defies the perception and adaptation. There is more change and transformation that we are able to digest. Tied nets are thrown over the Planet, as if protecting it from disintegration. One net is the one of instant communication, another one – of unlimited information, another one – financial and banking and of the Global economy (...). We call this banding of the Planet with kerchiefs and nets Globalisation." (Malita, 2001). There isn't any final and concise definition of Globalisation, but this scientific approach might start with some explanations that characterise this phenomenon. Robertson says that the world became one single place (Robertson, 1992). Globalisation is the process through which a supra-territorial area – without distances or borders – has been added to the social space [3].

The technological progress is one of the important pillars, which support Globalisation. Therefore, due to the information boom during the last decades, the less developed countries are interconnected with the developed countries, with those, which set the trend for the whole world.

By minimising the above-mentioned framework, the Globalisation phenomenon reaches an area, which is in connection with the dissemination of information, i.e. mass-media sector. One may ask why mass-media was so much touched by the trans-nationality phenomenon; might be two approaches of this matter: the first answer to be drafted (technical and structural) is that the innovation facilitated the transfer of the information, cancelling thus the dead-times on the information route; a second answer (rather empirical and intuitive) might be found in a better understanding of a local problem, when it is holistically treated. The best way to realise the impact of Globalisation on mass-media is by observing the news and the modality in which the news are able to break the space and time barriers.

By mirroring the above reasoning, we could say it might function also in reverse side. To a great extent, mass media significantly contributed to the propagation and dissemination of the concepts referring to trans-nationality. For this reason, the communicational sovereignty of the states (i.e. state authority exercised on the flow of ideas and information inside a certain territory [4]) has been affected.

The globalization of news - the case of financial news

News' industry was like apiece, which had a significant influence on this entire mechanism. News agencies have been the first world organisations which acted not just globally, but also completely, in the production and dissemination of "consciousness" through news exchange; they acted in ways which had serious implications in helping us to understand and perceive the time and the space [5]. News industry appeared in the 19th Century in Europe and North America in response to a defined need: to be informed. There were four types of information requests: request for political news – made by those who were part either of the civil society or of the public life;

request for sport news – made by the fans of different sport teams; request for social news, concerning various events; and request for financial news.

We may say that the news represents the main factor that contributes to Globalisation in mass media. Consequently, on a social level, one may say that the Globalisation process facilitates togetherness of worldwide people, bringing thus together and closer the world cultures and nations.

In fact, the news agencies have been classified from the very beginning in a simplistic manner, however well defined manner: the big news agencies, operating globally and the local media agencies. Once the mass-media industry has not been any more regulated and innovative technologies for news dissemination appear, above almost stable classification starts loosing the accuracy.

A well-defined sub-category of the news is the one represented by the news regarding the financial markets, hereinafter called *financial news.* This news category went also through some changes during the last decades, as its coverage area extended due to the global world. In this paper our intention is to observe the influence of the media channels (both classical and modern), but mainly we will try to observe the niche created by this sector of informational transfer. In order to better emphasize the inclusion of the above-described sectors, we will further use a logic diagram:



Fig. 1. Spheres of inclusion; source: the author

The first big important news agency, which has been involved in the financial sector, was Reuters. As Donald Read, the company historian, pointed out, 'the founder, Paul Julius Reuter, was not primarily a reporter, but an important entrepreneur in the news sector. In the second half of the 19th century the news became a big opportunity, but also goods of the industrial revolution. If he (Julius Reuter) has entered the business at the beginning of the 20th century, he would have become an oil tycoon (oil-man).' [6]

In 1856 Reuters established the first connections with the financial sector. How did this happen? The agency began to provide information regarding stock prices to the brokers and merchants, once or twice per day, at the stock exchange opening and closing. So, in that year Reuters concluded contracts with local agencies from France (Havas) and Germany (Wolff) with regard to the financial information. It can be noticed that Julius Reuters was a visionary person and he targeted a market which is still targeted by others after 160 years.

The news moves the markets and the news represents a market. The revelation of this pun couldn't be better reflected but by the economic sector and by the services of financial news. The revenues on this market are impressive, but so are the costs: research and development, investments in the technological infrastructure of the transfer data networks etc. The sales men for news and financial data claims that they bring an extra value to the news, because an investor can easier express his option, in real buying or selling time, due to the last minute information. Another value-added element is represented by the analysis based on information, provided by those agencies, which are specialised also in the financial news offered to the customers.

The volume of the financial news in a news agency may be explained by the fact that daily the consumers of this type of news are confronted with a new set of decisions, which should be taken. The financial decisions are not taken only in the context of the economic and financial flows, but there are also taken into consideration influences of other types of factors. For instance, if a war breaks out between two countries, the investors decide to withdraw the capital from the areas affected directly or indirectly by the conflict. If the Government decides to invest in infrastructure, this fact will be 'translated' into an increase of the government debts. If for the current year the forecast is for a poor cotton harvest due to diseases affecting the plant, the cotton stock exchange quotation will increase, both on the spot market and on the futures market (for term contracts). Which will be the decision of a cotton producer who has also stocks from the previous years? Most probably, he will decide to wait

till the demand and the price for his product increase, given the rarity of his goods. Therefore, the market fluctuations may be often anticipated based on the news regarding a certain subject.

On the other side, a textiles producer will want to keep the price of the resource he needs for processing, so he will buy the cotton at that moment or will buy on term contracts for cotton, in order to avoid price fluctuations for the production price of these products. Almost any news of this type broadcast via media on-line or via classical media channel will have a financial implication for a person in some corner of the world.

Some increases in stock price quotations may thus be explained through an intense promotion made by the news agencies. This means certain goods or shares having an ascending trend will attract the investors. In continue in the sense of the above-mentioned example, will again discuss about cotton. The spectacular increase of the goods has been heavily advertised in the specialised groups during the last months, or at least until April this year. It can be easily thought that in this moment the price is not reflecting the available quantity of cotton on the market, but is a price involving more speculative elements. The evolution of the quotation of this raw material during the last year can be seen on the graph below:

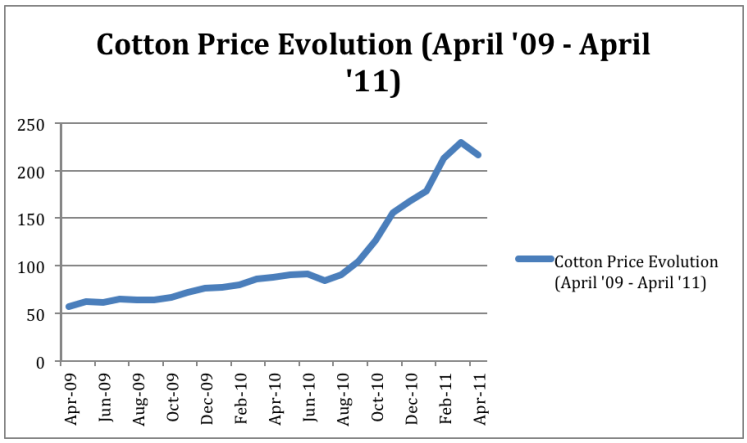


Fig. 2. Cotton price evolution (April 2009 – April 2011); source: the author (the data set was provided by www.indexmundi.com)

A certain text from certain news may determine the sale of Company X's shares or the buying of Company Y's shares. The impact the news can have on the price of the shares, on the transactions' volume or even on the future revenues of the company results both from the information element of certain news and from the emotional connections of the investor with what is communicated through the news; connections with his preferences and options and also with the related portfolio. As an intermediate conclusion, it may be said that the financial news can put a lot of pressure on the price of the shares, pressure that is felt in both ways, either positively or negatively.

As a consequence of these processes, but also as an emergent effect of the fact that there are not any more important barriers in front of capital flows in the global financial system, during the last two decades has been set up companies exclusively dedicated to the financial markets, being specialised in financial results, analysis and in providing trading platforms, personalised for certain types of customers – the investors; however they have inside the Trust a news agency. A relevant example for this fact is Bloomberg L.P. Company.

Bloomberg L.P. has been set up by Michael Bloomberg (at the time of writing – Mayor of the city of New York), after he has been fired by the investments bank Salomon Brothers (currently part of Citigroup), where he was partner. He received compensation package with a value of 10 million US dollars and the money was used to set up a new company, called Innovative Market Systems. In 1982, the investment fund Merrill Lynch was the first company client and bought 22 terminals used for accessing in real time the stock quotes; they were also the first investor of the new company, investing in it the amount of 30 million US Dollars [7].

In 1986 the name of the company has been changed into Bloomberg L.P. and sold more than 5000 such terminals. During several years, the company continued its development and launched also a trade platform (Bloomberg Tradebook), messaging system Bloomberg (Bloomberg Messaging Service) and the news service Bloomberg.

The services connected to the financial news came as a natural completion of the financial services provided by them till 1990, when the news division of Bloomberg has been launched. Currently, this news agency has an extremely important role inside the company, which has more than 2000 employees and 145 offices around the world. They produce more than 5000 news daily [8]. They provide information for almost 350 newspapers and reviews worldwide. Among the most important publications we can mention '*The New York Times', 'The Economist' and 'USA Today'.*

Currently Bloomberg owns the following news channels: Bloomberg television and the radio station WBBR. Besides these channels, the on-line channel and also the mobile telephone applications area are used, too. The value of the company at the half of 2008 was around 22.5 billion US dollars.

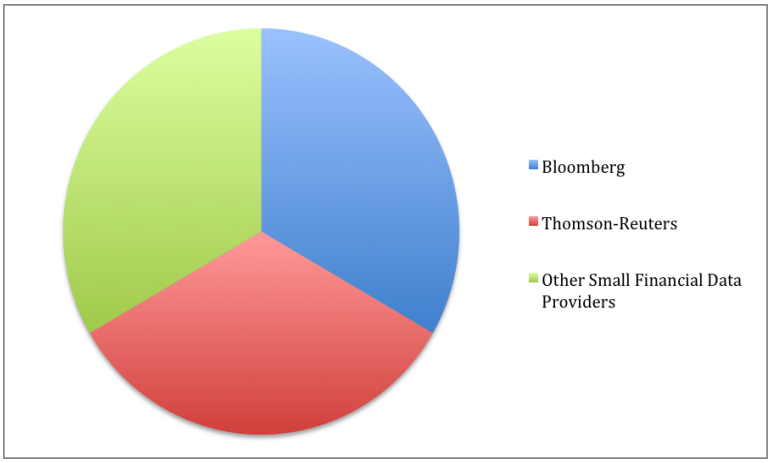


Fig. 3. Market shares on the financial data market; source: the author (the data set was provided by The New York Times)

In the same time, Bloomberg controlled one third of the global market of financial data. The value of this market is 16 billion dollars. Thomson-Reuters controlled another third of this market, and small players owned the last third of the market. This analysis clearly reflects what actually means the globalisation of the financial news and that in a global financial world there is a need for players on this market at the global level, that are able to broadcast in real time either news, quotations or analysis which may directly influence decisions which are in the area of the investment placements.

Conclusions

We are going through a period in which the feeling of trans-nationality is not any more a simple ideological concept, but is a patent fact. The local level of certain news, especially of the financial news, remains valid only if it is treated in a larger context, adapted to the global world. The capital can create news, but most necessary, the news can bring extra capital. It is still open the discussion regarding the interests, who guide certain agencies, and regarding the question 'who do they serve'? It is no doubt that the news connected to financial contexts act as a driving force for the quotations of certain shares, goods or derivatives financial instruments. This kind of news may influence quotation of the shares, either positively or negatively. With regard to the market of news and financial data, Bloomberg L.P. and Thomson – Reuters are the main providers, and they represent the main mechanism through which the transfer out of the financial environment, but also inside it is made, having both vertical and horizontal directions.

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Evaluating Quality of Services in Islamic Azad University of Aliabad Katoul Using Servqual Model

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Abstract.
The present study seeks to evaluate the quality in different serving organizations; such evaluations date back to less than 20 years ago. This research project has used Servqual Model in order to evaluate the quality of services in Islamic Azad University of Aliabad Katoul Branch from the following five aspects:

1. The appearance and organization facilities or physical dimensions
2. Reliability of supplied services
3. Accountability rate
4. Service quality guarantee
5. Understanding the customer

This research is an applied one in nature; the methodology being used is descriptive and inferential. The society of the research was 6000 university students and the selected sample was 361 people. Books, magazines, questionnaires and interviews were utilized to collect the data and inferential statistics model was applied to analyze the data. The result showed a gap in all standards of Servqual. The gaps (from lowest to highest) are: tangible factors, reliability, empathy, confidence and accountability.

Key words: Service Quality; Quality; Servqual Model.

Introduction

Complexity in knowing qualities or affective parameters on quality of services in comparison with manufacturing processes is the main reason which hinders development of quality evaluating tools. Studies by Parasoraman, Zithamel, and Berry in the 1980s are the starting point of the scientific studies regarding quality of services. Servqual is made up of 22 different variables which evaluate quality of services in organizations from five aspects. These five aspects are as follows:

- The appearance and organization facilities or physical dimensions
- Reliability of supplied services
- Accountability rate
- Method of service quality guarantee
- Understanding the customer

Servqual analytical model of gap quality can present managers appropriate tools to recognize quality deficiencies systematically (Bayat, Alizadehsani, 2006). The present study tries to apply a suitable model in order to evaluate quality of the services in Aliabad Katoul Islamic Azad University to understand whether the held services are qualified enough or not?

Statement of the problem

It is difficult to define quality of services; it includes:

- The appearance and organization facilities or physical dimensions
- Reliability of supplied services
- Accountability rate
- Method of service quality guarantee
- Understanding the customer

The above mentioned aspects are used to define the concept of gap quality. This gap is based on what a customer expects of a service. Due to the importance of the quality, quality of services is one of the fundamental issues. To this end, Islamic Azad University has to use new strategies to measure quality of services; this action leads to more customer satisfaction and less complaints; so the research question is as follows: how should quality of services in Islamic Azad University of Aliabad Katoul be?

Research questions

1. Of what kind are aspects of quality with regard to Servqual model?
2. Is there any gap between students' expectations and presented services by the university?

- Is there any gap between responsiveness and expectations?
- Is there any gap between self-reliance and expectations?
- Is there any gap between empathy and expectations?
- Is there any gap between visible understandings and expectations?
- Is there any gap between reliability and expectations?

Review of the related literature

New trends in recent years show that services have developed in nowadays. Industries are getting smaller and services are rendered more. Managers of the manufacturing and serving institutions in all governmental, cooperative and private sectors understand that quality is not the only discrimination factor and the focus of attention should turn from market oriented into customer oriented (in Arabi, et al, 200).

to the variety and number of customers, not only organizations have to consider the customers' expectations, but also they need to understand customers' attitude toward organizations and the way they render services; so it has made organizations pay more attention to the measurement of quality of services. The problem that organizations face is nothing but how to evaluate a problem which is different in size, kind, and presentation (Alvani, Riahi, 2004).

Services are not as visible as goods and are considered as an inseparable part of servers**;** it has made customers' evaluation difficult (Zinhamel, 1981; Rushton& Carson, 1989; cited in Prugsamatz & Pentocost, 2006). So, organizations need defined models in order to evaluate quality of services; such a model has proved the ability of the evaluation system and is a suitable criterion to evaluate customers' satisfaction (Alvani & Riahi, 2004).

Services

- Machines are of physical goods but the way they behave with customers is a kind of service, as a result throughout the 60s and 70s, many of the introduced definitions consider services; however, a perfect definition of a service has not been introduced yet (Gronroos, 2000).
- A service is a kind of activity or profit that is presented and is basically invisible and contains no possession of anything; the result may be physical or not (Kolter& Armestrong, 2000, in Seyyedjavadian & Kimasi, 2006).
- A service is a process including a series of more or less invisible activities which naturally, but not necessarily, happens in interactions among customers, employees, physical resources, goods, or service rendering systems in order to be a solution for customers' problems (Gronroos, 2000).

Quality means correspondence with specifications (Levitt, 1979), with needs (Karzabi, 1979), deserve to use (Juran & Binghan), value (feigenbaum, 1951), loss avoidance (Taguchi, 1979), achieving customers' expectations (Parasoraman et al, 1985; cited in Ebrahimi, 2003).

Quality of services. Throughout the past decades, acceptance and application of TQM and other quality frameworks both in industry and servicers have increased; quality is considered as an important factor of success and growth (Quinn & Humble,1993; Anderson et al, 1994; Donaldson, 1995; Rust et al, 1995, in Sahni, 2003).
Most definitions of quality of services are customer oriented (Gallowy& Wearn, 1998in Sahni et al, 2003) though customer satisfaction is part of the presented service (Anderson & Sullian, 1993) or those presented services are part of customer satisfaction (Parasoraman, et al, 1998).

Methodology

This research is applied in nature, descriptive as well as inferential statistical model were utilized to analyze the data. The participants were all university students in Aliabad Katoul Islamic Azad University (6000 students) and the chosen sample included 361 individuals. TWO questionnaires were used to collect data; two of which considered understanding and expectations of the customers (students). The questionnaires were valid enough because they were checked and analyzed by the experts in the field; the reliability of these questionnaires was calculated via Alfa Cronbach and to analyze the data, Excel as well as SPSS was used.

Data analysis

To analyze the data, descriptive as well as inferential statistical methods were utilized. The collected data is correlated, so it is tried to answer the following question: 'Is there any gap between students' expectations and understandings of university services?'
In all tests, the null hypothesis has been rejected and hypothesis 1 has been accepted meaning that there is a kind of confirmed gap.

Conclusion

In the present study, Servqual model were used to examine the quality of services held in Aliabad Katoul Islamic Azad University. Servqual Model is composed of five aspects such as:

- The appearance and organization facilities or physical dimensions
- Reliability of supplied services
- Accountability rate
- Method of service quality guarantee
- Understanding the customer

Table 1: Expectations Criteria Percentage

question	criterion	very little	little	average	much	too much	expectations (percent) E
4-1	visible factors	116	132	295	429	472	73.98
9-5	reliability	95	151	343	562	654	76.94
13-10	responsiveness	83	139	263	444	515	76.19
1`7-14	self-reliance	64	159	264	445	512	76.37
22-18	empathy	110	176	312	558	649	76.18

Table 2: Understandings Criteria Percentage

question	criterion	very little	little	average	much	too much	expectations (percent) E
4-1	visible factors	152	277	508	408	99	60.35
9-5	reliability	221	396	598	435	155	58.97
13-10	responsiveness	242	367	407	312	116	55.75
1`7-14	self-reliance	208	363	431	341	101	56.
22-18	empathy	305	416	519	395	170	

Table 3: Gap Between Expectations And Understandings

criterion	understandings (percentage) P	expectations (percentage) E	quality of services (percent)
visible factors	60.35	73.97	-13.63
reliability	58.97	76.94	-17.97
responsiveness	55.75	76.19	-20.44
self-reliance	56.73	76.37	-19.64
empathy	56.78	76.18	-19.40

And 22 minor factors. The comparison between students' expectations and understandings shows that quality of services in Aliabad Katoul Islamic Azad University is not high enough. According to the gained results, we can conclude that students are not satisfied with the presented services by the university because the university has received negative points in all aspects. The ranking of the gaps are as follows:

- Visible factors
- Reliability
- Empathy
- Self-reliance
- Responsiveness

In order to make sure of the above mentioned gap of services Sign test also confirmed the above gaps.

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An Investigation of the relation between Core values of Company and decision making of investors in Tehran Stock Exchange

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Abstract.
The main goal of this article is to investigate the effect of Core Values of Company on investing decisions of investors at TSE. Meanwhile, Core Values of company include: Customer Satisfaction, Profitability, ROA , Economical Stability.Therefore,130 Manufacturing companies have been selected from statistical society considering that their necessary information for a five years period from 1382 to 1386 have been available. The necessary data of the research have been collected from the financial statements of the companies. Core values of company have been regarded as independent variables and share buy volume has been considered as dependant variable. Univariate regression technique has been used to investigate the hypotheses. The results show that there is a relation between Core Values of Company and investing decisions of investors in Tehran Stock Exchange.
Key words: Customer Satisfaction, Profitability, Economic Stability, Share Buy Volume, ROA

Introduction

Decision making is one of the most important affairs of life nowadays and it has a broad range which some of them have been made in business, investing, financing and so on. Decision making at stock market is critical and investors should examine the information of company accurately to make decision about their investing on shares. However, Companies trying to exist in competitive environment and to manage their durability they need to finance themselves with financing tools which one of the common way of financing is publishing and selling the shares. CEO need to be aware about the determinant factors which impact the decisions of investors at stock market to win among other companies for financing themselves and increasing the wealth of shareholders of company. Thus, in this research we investigate the relation between Core Values of Company and decision making of investors at Tehran Stock Exchange (TSE).

Walters & Halliday state core values have different interpretations and in commercial concepts, core values emphasis the stakeholders satisfaction and it is not restricted to customer satisfaction and include other factors like employer's needs, supplier's needs, shareholders, government and unities. (Walters David, HallidayMichael, 2005). Moreover, in a research model of bankruptcy of companies was examined via financial ratios, liquidity ratios, performance and leverages in this model ratios like: net income, total debt , current debt were used. There is a direct relation between debt ratio and bankruptcy risk (Zeithmal, Leonard and Parasuraman, 1996). Martinez, in a research in federal bank of Columbia investigated determinant factors of bankruptcy of companies via debt ratio, profitability ratio and liquidity ratio, his findings show that bankrupt companies have higher debt ratio than usual companies in industry but profitability and liquidity ratio are lower in comparison with not bankrupt companies (Martinez, 2003). Eriotis,in a research expresses that high debt ratio in Greek companies caused less profitability for them (Eriotis, 2007). In a research findings show that if customers be satisfied by receiving the products or services ,their purchasing will be increased and they repeat their purchasing (Zeithmal , Leonard and Parasuraman, 1996). There is a positive relation between customer satisfaction and financial performance of company (Yeung and Ennew, 2000). Besides, in a research was shown there is a positive relation between customer satisfaction and profitability of company (Anderson and Mazvanchery, 2004). Rahgozar examined the application of financial criterions based on values according to share prices and the results show that customer satisfaction which was measured by sales volume has a positive relation with share price (Rahgozar, 2007).

Research Hypothesises

1. There is a relationship between Economical Stability of company and decision making of investors at TSE.
2. There is a relationship between ROA of company and decision making of investors at TSE.
3. There is a relationship between Profitability of company and decision making of investors at TSE.
4. There is a relationship between Customer Satisfaction of company and decision making of investors at TSE.

Research Methodology

This research is a correlation ones which pursues applicable target and the sample is 130 manufacturing companies at TSE which have been selected from statistical society considering that their necessary information for a five years period from 1382 to 1386 have been available at TSE .To analyze data SPSS software was used.

Variables

In this research, decision making of investors at TSE is an dependant variable and core values of companies which can be measured by financial criterions are independent variables.

Investors: whoever buys shares at TSE.

Decision Making of investors: in this research decision making of investors was shown by purchasing volume of share by investors.

Customer Satisfaction: in long term customer satisfaction is the only cause that makes customers purchase from the company and sales volume of company increases when Customers are satisfied thus, in this research customer satisfaction is measured by sales volume of company.

Profitability: in this research profitability was measured by operating profit margin.

Economical Stability: it expressed the durability and existence of company in business environment and in this research it is measured via debt ratio.

ROA: it expressed how company spend capital to create income and it is measured by Total income-Total Asset.

Examination of hypothesis

1. First hypothesis expresses that there is a relation between economical stability of company and decision making of investors in TSE.

Model	Unstandardized coefficients		standardized coefficients	t	Sig.
	B	Std.Error	Beta		
constant	18.636	0.719		25.907	0
Debt ratio	-0.044	0.10	-0.344	-4.150	0

As the test result shows ,***B= - 0.044*** and ***sig < α =0.05*** accordingly it is possible to express with %95 assurance there is a reverse relationship between debt ratio and decision making of investors in TSE.

2. Second hypothesis shows that there is a relation between ROA of company and decision making of investors in TSE.

Model	Unstandardized coefficients		standardized coefficients	t	Sig.
	B	Std.Error	Beta		
constant	14.783	0.283		55.220	0
ROA	0.056	0.014	0.341	4.103	0

As the test result shows ***B= 0.056*** and ***sig < α =0.05*** accordingly it is possible to declare with 95% assurance there is a positive relationship between ROA and decision making of investors in TSE.

3. Third hypothesis states that there is a relation between Profitability of company and decision making of investors in TSE.

Model	Unstandardized coefficients		standardized coefficients	t	Sig.
	B	Std.Error	Beta		
constant	14.762	0.276		53.579	0
Operation profit margin	4.36	0.998	0.359	4.353	0

As the test result shows ***B= 4.36*** and ***sig < α =0.05*** subsequently it is possible to announce with 95% assurance there is a positive relationship between Operation Profit Margin of company and decision making of investors in TSE.

4.The Last hypothesis claims that there is a relation between customer Satisfaction of company and decision making of investors in TSE.

Model	Unstandardized coefficients		standardized coefficients	t	Sig.
	B	Std.Error	Beta		
Constant	15.165	0.173		87.451	0
Sales Volume	0.001	0	0.504	6.599	0

As the test result shows ***B= 0.001*** and ***sig < α =0.05*** subsequently it is possible to announce with 95% assurance there is a positive relationship between Sales Volume of Company and decision making of investors in TSE.

Conclusion

Research results show that investors decrease purchasing of
Company's shares when the Debt ratio of companies increase at TSE.In other words, there is a positive relationship between economical stability of company and decision making of investors at TSE.

Meanwhile, when ROA increase investors buy the relevant shares more and more therefore, there is a positive relationship between ROA of company and TSE.

Results also declare that there is a positive and direct relationship between operation profit margin and decision making of investors at TSE.In other words, profitability of companies cause investors buy shares increasingly.

Finally, the result show that there is appositive relationship between customer satisfaction of company and investors decision making at TSE . In other words, increasing in customer satisfaction level of company cause increase in stock value and this is mainly considered by investors at TSE.

To Sum UP: Customer Satisfaction, Profitability, Economical Stability and ROA which are titled Core values of company have impacts on decision making of investors, moreover investors at TSE usually tend to use fundamental analysis to buy shares and investing.

Suggestion

1. In long term Customer satisfaction of company's products have influences on stockholder`s wealth, so the CEO should provide customer satisfaction mainly by tools like good after sales services, quality improvement etc.

2. Financing the company by publishing the new shares.

As high debt ratio increases the bankruptcy risk of company, it is recommended companies increase finance themselves by publishing new shares instead of publishing bonds.

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Effects of Corruption on Bank Lending: Evidence From Sub-Saharan Africa

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Abstract.
The aim of the paper is to investigate the impact of corruption on bank lending in Africa. The study contributes to existing literature by investigating the effect of corruption on bank lending from the African perspective. In addition, it creates better understanding of the factors associated with financial and economic development in African economies.

Key words: corruption, bank lending, Sub-Saharan Africa

Introduction

The role of banks in economic development is widely documented in the literature. Financial institutions perform this role by mobilizing funds from savers and lending them to borrowers in an efficient manner. The efficiency of funds mobilization can be undermined by corrupt practices.

Corruption problem is of endemic proportion in developing countries due to prevailing environment characterized by lapses in the rule of law, inefficient judicial system, weak prudential regulations, and weak development of institutions crucial for good governance. The corruption perception index of Transparency International consistently ranked Sub Saharan African countries highly corrupt in the World (TI 2010). Some studies link high incidence of corruption in part to weak economic growth and consequently argue that improved economic condition would significantly abate incidence of corruption. However evidence from countries having high economic growth rate with persisting high corruption presents contrary result.[1]

The direct and indirect cost of corruption can be phenomenal. When banks' lending is inefficient and driven by selfish desire to lend to borrowers with poor investment opportunities, fewer credits are available for borrowers with good investment opportunities. This ultimately hinders economic growth as good investments opportunities are stifled of critical funds. From poverty reduction perspective, Barth, Caprio, and Levine, (2006) note that innovative ideas from the poor and non influential people which potentially could lift them out of poverty are vulnerable to inattention and neglect when funds are denied to these class of entrepreneurs.

The aim of the paper is to investigate the impact of corruption on bank lending in Africa. The hypothesis guiding the study is that high level of corruption impedes bank lending in an economy. High level of corruption in an economy increases corruption perception in key institutions of governance and consequently raises uncertainty from banks' perspective on the ability of the court to enforce contract, Weill L (2010). This may lower banks incentives to lending to firms. On the other hand, increased risk averse by bank managers engendered by uncertainty in the credit market could reduce lending, thereby prompting borrowers to resort to desperate and often illegal methods to obtain loans from banks.

The study contributes to existing literature by investigating the effect of corruption on bank lending from the African perspective. In addition, it creates better understanding of the factors associated with financial and economic development in African economies. The relationship between bank lending and economic growth has been a prominent theme in academic discussion. (Levine and Zervos, 1998; Levine, Loayza and Beck, 2000), and following the lead from Weill, L, (2009), the study examines the determinants of bank lending in African countries with a view to assessing the effects of corruption on economic development of bank credit in Sub Saharan Africa. Furthermore, the study will generate region specific information useful for comparative analysis of corruption in bank lending among regions. From policy perspective, the study will be useful for formulating anticorruption measures to safeguarding banks and strengthening their ability to engage in efficient lending to private sector firms.

Despite considerable literature on corruption, no study has focused on the impact of corruption on bank lending from the African perspective. Recent research efforts in this area target largely developed and transitional economies with no effort directed at the determinants of corruption in bank lending to firms in sub Saharan Africa countries. This research deficiency exists despite the fact that Sub Saharan African rank among the world's corruption affected region. Studies by Beck, et al (2006), Barth R. J. et al (2009) among others rely

[1] See Shleifer and Treisman, (2000), and Levin and Satarov (2000, p.113)

on cross country data heavily dominated by developed and transition economies to measure corruption in bank lending. The rest of the paper is organized as follows. Section 2 presents discussion on the role of corruption on bank lending. Section 3 presents data variables, and methodology. Results and concluding remarks are presented in sections 4 and 5 respectively.

Corruption in Africa

Among the developing regions of the world, countries of the sub-Saharan Africa cluster in the lower scale of the Transparency International corruption perception index. Development economists associate poor economic growth and development in the region in large part to corruption epidemics that permeate fabrics of public and private institutions. Attempt to abate the problem led to the establishment of various development focused initiatives such as NEPAD, an economic development cooperation program between Africa and the developed countries designed to usher in good governance inter alia.

Though corruption is endemic and perverse in the region, for brevity, a brief review of corruption cases in two key sectors, namely the banking and judiciary is presented. The region is under banked and concentrated, resulting in low competition in the industry. At the same time the existence of information asymmetry gave bank managers wide ranging discretionary powers on lending decisions. Unlike normal lemons market, where only borrowers with bad investment projects seek to borrower at high interest rate, the African credit market characterized by dearth of loanable funds forces both good and bad borrowers to compete for available funds. Irrespective of the initiator of bribe payment, what is paramount is that the prevailing shortage of loanable funds, amid wide discretionary powers of bank managers and low regulatory enforcement provide opportunities for bank managers to seek or be receptive to private rent from lending transaction. Evidence of this relates to the fact that while the 2008 and 2009 global financial crises was engendered mainly by mortgage sector bubble, in Africa especially in Nigeria a different kind of financial crises was engendered by non performing loans. In Nigeria, the central bank injected 50 billion Naira to rescue five domestic banks that were entangled with massive N747billion bad loans made under questionable circumstances. Eleven bank directors and three stock brokers are subsequently charged for suspicious loans worth over 504 billion naira and reckless abuse of office.

Also, the Nigeria's corruption agency is investigating the corruption scandal in which a N528.010m shares in Oceanic Bank owned by a regional government, Delta State Government was used as collateral for a phantom loan worth over N44billion granted to a private company, Ascot Offshore Nigeria Limited by Intercontinental Bank Plc.

Confidence in the judicial system is a major factor in facilitating business transactions including bank lending. Such confidence can be developed through efficient and independent judiciary that ensures fair contract enforcement and also ensure that abuse of office for private rent are subject to fair judicial process. The judiciary is not immune from corruption that pervades the fabric of public and private sectors in the region. Weak regulatory environment, external influence, and poor working conditions are among the factors that encourage corruption in the judiciary.

Judicial corruption undermines justice by denying victims and the accused the right to a fair and impartial trial. While it erodes national and international effort at combating crimes, it also adversely impacts on free trade and economic growth. According to Transparency International, when judicial corruption is evident, "corrupt judiciaries fracture and divide communities by keeping alive the sense of injury created by unjust treatment and mediation. Judicial systems debased by bribery undermine confidence in governance by facilitating corruption across all sectors of government. In so doing, they send a blunt message to the people: in the country that corruption is tolerated".[2]

Estimation approach and data variables

The approach follows cross-country regressions of bank credit on a set of variables consisting of corruption and various control variables. The explained variable is *Bank Credit*, which is defined as the ratio of total credit to private firms by deposit money banks and other financial institutions to GDP. The data are obtained from Beck, Demirgüc-Kunt and Levine (2000). The variable is widely used in cross-country studies on bank credit (e.g. Beck and Levine, 2004; Djankov, McLiesh and Shleifer, 2007, and Weill, L. 2010).

The main explanatory variable is corruption. We measure corruption using two indices alternatively in different models: Namely: the Corruption Perceptions Index (CPI) of Transparency International (*Corruption-CPI*), the index of corruption (*Corruption-WB* developed by the World Bank). Méon and Sekkat, (2005), and

[2] TI Combating Corruption in the Judicial System Advocacy Toolkit (2008).

Weill. et. al (2010) use the indices as alternative measure in cross country studies of corruption. The first measure is the integral index for the perception of corruption (*Perception*). The indices are composite aggregates of survey responses, based on the indices of public trust and corruption perception of everyday corruption and business corruption by individuals and businesses. Use of the indices is preferred because despite differences in the sets of composite indicators of corruption that they aggregate; they complement each other (Weill, L (2010). The CPI developed by Transparency International ranges from zero, the most corrupt situation, to ten, the least corrupt[3] Consistent with the literature, we reverse the index scale to lower values for least corrupt to higher values for most corrupt, Weill, L. (2010). The World Bank's index ranges from -2.5 to 2.5, with higher values indicating less corruption. This is also rescaled from 0 to 10 so that higher values indicate more corruption, while lower values indicate less corruption.[4]

Competition

Measure of banking competition as key independent variable is used in past studies. Justification for use is based on the notion that competition in banking industry will mitigate corruption in lending by lowering the interest rate and the bargaining power of the bank official (Weill, L.2010). Concentration ratio is widely used as measure of bank competition (see Demirguc-Kunt, Laeven and Levine, 2004). The share of the five largest banks in total bank deposits (Banking Concentration (Deposit)) obtained from BCL (2006) is used to measure bank concentration. Higher bank concentration implies less competition in the industry. As alternative measure of concentration, share of total assets held by the five largest banks in the industry (*Banking Concentration (Asset)*) is used.

Also, we measure bank competition and concentration with Herfindahl-Hirschman Index (*HHI*), estimated as equal to the sum of the squares of the market shares (deposits) of each individual bank in individual countries in the sample. The (normalized) Herfindahl-Hirschman Index ranges from 0 to 1 with a higher value indicating greater monopoly power.

It has been shown that concentration ratios may not capture potential competition or contestability in an industry and its measures may endogenously reflect the market-share gains of efficient firms rather than represent an exogenous measure of competition, (Weill, L. 2010). Also, Berger et al. (2004) consider bank competition as multifaceted to the extent that it is impacted by other factors such as regulatory restrictions, including entry barriers and other legal impediments that impede competition. Consistent with Barth, L.et al (2006), we address the problem by adding two more measures of bank competition, namely Entry Barrier and Application Denied. Both variables are obtained from Barth et al.(2006). Entry Barrier variable measures the stringency of entry requirements into the banking industry. Barth, L. et al (2006), survey questions inquire whether various types of legal submissions (i.e., draft by-laws, intended organization chart, financial projections for the first three years, financial information on the main potential shareholders, the background of future directors and managers, sources of funds to be disbursed in the capitalization of the new bank and market differentiation intended for the new bank) are required to obtain a banking license. Entry Barrier index ranges from 0 (low entry requirement) to 8 (high entry requirement). The *Application Denied* variable captures the fraction of new bank applications not approved by the authorities in the past five years.

Bank level characteristics

The nature of bank ownership can affect corruption in bank lending. Government and foreign ownership in the banking sector tend to abate corruption in bank lending, because of their proclivity toward better managerial incentives, market competition and culture of nurturing good corporate reputation (Barth, et Al (2006). To measure bank ownership structure in the banking industry, Foreign Bank Ownership and Government (Public) Bank Ownership variables are used. Foreign Bank Ownership is the fraction of the banking system's assets in banks that are 50% or more owned by foreign investors. Government (Public) Bank Ownership is the fraction of the banking system's assets in banks that are 50% or more owned by private investors. Ownership is controlled with dummy variable for public ownership (Public) and foreign ownership (Foreign)

As lending activities of banks can be affected by the differences in bank size, we account for the possible size effect on lending by measuring the size of bank (*Size*), using logarithm of total assets Also, the role of age, defined as the number of quarters since the creation of the bank to control for the difference between old and newly established banks has been noted in the literature. Indeed existing knowledge[5] find *Age* variable, to be

[3] The CPI from the Transparency International is obtained from the organization's website.

[4] See Kaufmann, Kraay and Mastruzzi (2007).

[5] See Sharpe, (1990).

positively associated with the credit market, whereby older banks seemingly are in better position to mitigate asymmetric information and consequently lend more loans than the relatively new banks. The argument is that Banks with long history of business operation tend to have higher corporate name and capital assets over relatively new banks. Due to dearth of data, we are unable to include Age variable at this point. Sources of financing can affect the lending behavior of banks with banks with larger deposits having the capability to lend more than banks with low deposits. We control the estimations using ratio of deposits to total assets (*Deposits to Assets*).

Macroeconomic control variables

In the analysis, we control for several firm specific attributes and the operating environment. Some studies emphasize the importance of legal environment and contract enforcement on corporate governance, firm valuation, and reinvestment decisions[6]. Our hypothesis predicts that an improved legal environment and law enforcement discourage bank-lending corruption The empirical analysis includes two variables related to legal environment and contract enforcement. The legal environment variable is based on a question that asks about the fairness and impartiality of the court system in resolving business disputes (*Court Fairness*). The law enforcement variable relates to a question that asks about the enforceability of a court's decision (*Law Enforcement*). The survey offers respondents six choices: 1 (never), 2 (seldom), 3 (sometimes), 4 (frequently), 5 In some studies legal origin substitute legal environment (e.g La Porta, et. al 1997). For sub-Saharan Africa, we strongly feel that prevalence of corruption is related to weak governance which the governance indicators capture.

The two indices of corruption do not disaggregate or distinguish between various types of corruption. However, the World Business Environment Survey provides specific information on corruption in bank lending. The strength of the link between corruption and bank credit is examined by controlling for other potential determinants of bank credit in the regression analysis. A variety of country controls are included in our sensitivity analysis: Inflation rate (*Inflation*), defined as the consumer price index growth rate is included in the model following findings that inflation has effect on financial development (Boyd, Levine and Smith (2001.) Also, Beck, Demirgüc-Kunt and Levine (2003) document that latitude helps explain financial development. Based on this we include *Latitude*, which is defined as the country's distance from the equator. To control for differences in economic development and institutions across sub Saharan African countries, we include variable *GDP per capita*, expressed as the logarithm of GDP per capita in the analysis. Higher GDP per capita is associated with less corruption, (Svensson, 2005). Barth et al 2006 note that policies designed to restrict market and political competition could influence the extent of corruption in a country. Thus, we account for openness to trade by taking the ratio of trade to GDP (*Trade*), (Beck, Demirgüc-Kunt and Levine (2001).

Also, state or foreign ownership of the firm may be associated with fewer bribery payments. We therefore include two dummy variables that identify a firm's ownership type. Dummy variable *Government* equals 1 if any government agency or state body has a financial stake in the ownership of a firm, and 0 otherwise. Dummy variable *Foreign* equals 1 if any foreign investor has a financial stake in the ownership of a firm, and 0 otherwise.

Following BDL (2006), we also include overall financing obstacle as an additional control variable (*General Financing Obstacle*) based on a firm's response to the question "how problematic is financing for the operation and growth of your business?" (1-no obstacle, 2-a minor obstacle, 3-a moderate obstacle, 4-a major obstacle). As BDL (2006) point out, if a firm manager is particularly pessimistic by simply complaining about other factors on the firm's performance, this should be reflected in its response to general financing obstacle and its response to corruption in lending as well. Incorporating this control could therefore lower the likelihood that the results are biased by idiosyncratic firm responses.

Additional banking sector and country control

We include World Governance Indexes[7] from Kaufmann et al., 2006) for robustness test. The indexes measure various dimensions of governance such as voice and accountability, government effectiveness, political instability, regulatory quality, rule of law, and control of corruption. Table 1 presents the definitions of the indices. Of the six governance indicators, we use four indicators comprising of voice and accountability, government effectiveness, rule of law, and control of corruption.

[6] (La Porta, Silanes, Shleifer, and Vishny, 1998, 1999, 2000, 2002)

[7] World Governance Indexes is based on 276 individual variables from 31 different sources produced by 25 different organizations.

We checked the correlations among the banking variables and firm-characteristic variables for possible serious multicollinearity problem and find none. Most of the correlation coefficients are minimal and below .7, making it possible to include these variables in the models. With the exception of constant variables controlling for latitude, the rest of the variables are expressed as a 5-year average (2005 to 2009), to smooth out business cycle effects. Table 1 presents descriptive statistics for all variables.

The dataset for the study is taken from the following major sources: (i) the World Business Environment Survey (WBES) (ii) the Barth, J., Caprio, G., Levine, R., 2006 (BCL) dataset on bank supervision and regulation and (iii) the World Bank World Economic Indicators dataset (2010) (WBWEI) and (iv) the Bankscope. The WBES provides data on corruption in over 80 countries. The BCL (2006) dataset on bank supervision and regulation covers over 152 countries. Part of firm-level data for the study was obtained from the WBES survey. The 2000 survey conducted by the World Bank team surveyed managers from over 9,000 firms in more than 80 countries with a standard questionnaire. The purpose of the survey is to identify impediments to enterprise performance and growth in many countries. The questionnaire coverage on firm's operations is extensive capturing corruption, regulation, and institutional environment. The advantages of WBES data in bank corruption studies according to BDL (2006), is that it provides better in sight on the extent to which corruption in lending poses an obstacle to firms. Also the fact that firms in the survey exhibit different characteristics in terms of size, ownership (both public and private), industrial sector, and organizational structure makes the dataset a preferred choice over other surveys. While other surveys concentrate mostly on large companies, WEBS dataset covers a large proportion of small- and medium-size enterprises. Finally, the firm-level survey data allow for control of firm-specific characteristics and consequently better judgment on the relationships between corruption and other bank variables.

Data for bank concentration and ownership are sourced from BCL (2006). The dataset are generated from a World Bank survey on bank regulation and supervision in 152 countries during 2001-2003. Other data sources used in the study include the World Development Indicator (WDI, 2004), the World Governance Indicator assembled by Kaufmann et al. (2006), and Triesman (2000), to control for macro- and institutional factors that might affect level of bank corruption in a country.

Empirical results

This section presents a review of methodology and results. The methodology is regression analysis of bank lending on a set of key variables and subsequent control variables to test the robustness of the results. To examine corruption in bank lending, we assume that the firm's behavior would be represented by variables in this model:

$$\text{Bank Credit}_{j,k} = \alpha + \beta_1 \text{Government}_{j,k} + \beta_2 \text{Foreign}_{j,k} + \beta_3 \text{Trade}_{j,k} + \beta_5 \text{Latitude}_{j,k} + \beta_6 \text{Bank competition}_{j,k} + \beta_7 \text{Firm Size}_{j,k} + \beta_8 \text{Deposit to asset} + \beta_9 \text{Inflation}_k + \beta_{11} \text{Corruption CPI}_k + \text{Corruption WB}_k + \beta_{12} \text{GDP per capita}_k + \text{Risk aversion}_k + \text{Loans to Government}_k + \text{Loans to private sector}_k + \varepsilon_{j,k}.$$

The j and k subscripts depict firm and country indicators respectively.

The research data is grouped into two major components:

(i) Corruption data

To measure corruption, two indices of corruption based on survey conducted by Transparency International (*Corruption-CPI*), and the World Bank index of corruption. Both indices assign 0 to country with the smallest level of corruption and 1 to country with the highest level of corruption. (See Weill, L 2010, Lambsdorff, 2003, Méon and Sekkat, 2005).

(ii) Bank-level data and control variables

Four quarters of bank-level data is used for the sample. We measure bank lending using the logarithm of total customer loans comprising of all loans except interbank loans. The method is consistent with the literature. (See Haselmann, Pistor and Vig (2006)). Furthermore, bank-level control variables are used to account for bank characteristics such as the size of the bank (*Size*), measured by the logarithm of total assets. Ownership is controlled with dummy variables for public ownership (*Public*) and foreign ownership (*Foreign*).

To control for the environment, two region-level variables namely: *Bank Concentration* and *Per Capita Income* are used. *Bank Concentration* is estimated with the Herfindahl index of country bank concentration for

loans from the dataset. *Per Capita Income* is estimated as the logarithm of gross domestic product per capita to control for economic development.

Main estimation

Table 3 presents results of regression analysis of bank lending on corruption and other variables. Both Transparency International and World Bank measures of corruption were used alternatively in the regression analysis. We obtain a negative coefficient of *Corruption*, significant at 1% confidence level. The result generated from both corruption measurements are not significantly different, thus supporting the observation that corruption variable is not dependent on its measurement. Also, the result is robust to the set of control variables output. We infer that bank lending is impeded by corruption. The variable size has positive sign and can be explained by the fact that big banks given their relative higher financial resources tend to make more loans than small banks. The variable *Deposits to Assets* is negative. The observation is consistent with the notion that banks that rely more on deposits tend to be less aggressive on lending (Weill, L.2010). The dummy variables for foreign and public ownership are both significantly negative.

After controlling for size of the bank, our finding shows that domestic public banks lend more than foreign banks. The variable Bank Concentration is not significant, indicating that concentration has little or no effect on lending in the industry. Also, we find variable Per Capita Income positive and significant. This tends to support widely shared notion of positive association between economic growth and financial development.[8] In Russia and few other countries, (Weill, L.(2010) document significant negative association between economic growth and bank lending.

We further examine if other factors such as risk aversion other than corruption factor impedes bank lending, Corruption is a twosome or multiple actors' game in which bribery initiative could come from any of the actors. It has been noted that high risk aversion by banks would lower credit lending, thus prompting desperation from loan seekers to resort to bribes to ensure successful loan application. An environment characterized by low industry competition and credit risk as is the case in sub-Saharan Africa can be capitalized on by rent seeking bank officials to pressure loan seekers to facilitate loan applications with bribe offers. In either scenario, increase banks' reluctance to grant loans will encourage bribery activities. Thus while corruption may have negative effects on lending, it is important to ascertain if the effect is dampened by banks risk aversion

Consistent with the literature, we use risk aversion variable to examine the possible effect of risk aversion on bank lending (See McShane and Sharpe (1985), Maudos and Fernandez de Guevara, 2004).[9] Risk aversion is defined as the ratio of equity to total assets. Also, according to Maudos and Fernandez de Guevara, (2004), the equity/assets ratio is a measure of capitalisation, *presenting* limitations as a measure of risk aversion given the influence of regulation on minimum equity. However, caution is advised when interpreting the result. Table 4 presents the results of these estimations. As expected, the coefficient of Risk Aversion is negative and significant, supporting the view that risk-averse banks tend to lend less. Also, the finding shows that negative impact of corruption on bank lending is not influenced by the degree of bank risk aversion.

Estimation by categories of loans

Next we add categories of borrowers to ascertain if different groups of borrowers are affected differently by corruption in bank lending. Due to data constraints, we categorize borrowers into private (household and firms) and government (comprising all three levels of government). The usual approach is to test the proposition that corruption is less detrimental for bank lending to the proposition.

The existence of information asymmetry and low confidence on the effectiveness of contract enforcement, are expected to impact adversely on bank lending. In other words, the greater the degree of information asymmetries and low confidence in the effectiveness of contract enforcement, the higher the adverse effect on bank lending. However, government backed by its taxing powers habours less information asymmetry and faces less lending restrictions compared to private borrowers. (Haselmann and Wachtel 2006) On the other hand, as noted by Weill, l. (2010) corruption is associated with institutional inefficiencies, thus seeking answers on whether corruption affects bank lending to government agencies.

[8] See Levine and Zervos, 1998

[9] Alternative *Risk aversion* measurement approach focusing on the difference between the value of the capital adequacy ratio (N1) and the requirement for this ratio were used in some studies eg Weil, L. 2010.

To examine these issues, logarithm of category of loans to private sector and government are indicated as explained variable and tested. Table 5 presents the results of the analysis. The coefficient for *Corruption* is negative and significant for explained variable loans to private sector. The conclusion is that corruption hampers bank lending to households and to firms. For explained variable loan to government, positive and significant coefficient for *Corruption* is observed. The observation is consistent with earlier studies indicating that corruption selectively favors bank lending to government, but not the private borrowers.

The tendency of banks to lend to government agencies may be explained by minimal information asymmetries. Explanation for the positive impact according to Weill, L. (2010) may be related to dishonest civil servants capitalizing on prevailing weak institutions of governance to extort money from banks. Caution is advised in the interpretation of the result given that lending to government does create crowding out effect detrimental to economic growth and development.

Robustness tests

Robust test was conducted using the following alternative variable to measure banks lending: The coefficient of *Corruption* remains negative and significant "while the control variables are unaffected" For brevity, table for robust checks is not shown here.

Concluding remarks

The study examined the role of corruption on bank lending in Sub Saharan African countries using regional data for corruption and bank-level data for lending. Our results indicate that corruption adversely affects bank lending. Also, when risk aversion factor is taken into account, the adverse effect is not weakened. Also, when categories of borrowers are considered, the results indicates that banks tend to favour government agencies due to the latter's lower information asymmetry. In conclusion, corruption is detrimental to bank lending in sub Saharan African region. It creates uncertainty in the financial market and the courts system.

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Internationalisation Strategies in the Automotive Sector.

The PSA Peugeot Citroen and Fiat Auto Groups: a Comparison between the two Models

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Abstract.

The motor industry is the most affected by the effects of the current international crisis involving almost all the major world manufacturers that, as a matter of fact, have been recording a widespread drop in sales, owing to two factors that can be described as follows. On the one hand, the shrinkage in family per capita income leading the consumer to cut down his luxury goods expenses (like cars); on the other one, the high upkeep of cars due to a sharp increase in the cost of fuel, of insurance as well as of road tax, especially in some European countries (like Italy).

Besides this deep recession reducing the car producing companies' receipts, the high costs to be borne to renew the industrial plants in accordance with the environmental regulations as well as to design products that are able to meet the consumer's changing needs led motor companies to reorganise their competitive strategies with growing attention, as compared to the past, to a kind of strategy oriented to "innovation and flexibility", allowing the design of new high technology products that are environment-friendly and energy saving with low selling prices compared to the quality offered.

In particular, these targets can be achieved by implementing such strategies as those pursued by some producers in recent years: significant mergers with other car companies aimed at combining their own peculiar features so as to properly widen the range of products marketed; production relocation to emerging countries in order to benefit from low costs of raw materials and labour to minimise production costs; boosting research and development to design cars that are able to run with alternative energy sources; re-launching neglected brands through creative promotional campaigns that are likely to stir up new emotions in the consumer.

Therefore, on the occasion of Peugeot bicentenary, the object of the present work is mainly to analyse the strategic evolution of one of the most ancient motor companies on the international scene, to make the right point about the innovative ideas brought into the market, the kind of organisational structure adopted within the company itself, as well as the future prospects of the transalpine firm.

In particular, the paper is intended to assess whether the strategic choices made are able to meet the successful factors to be considered, in order to assume the possible result that the new models suggested are likely to achieve on the consumer's market.

Afterwards, the most suitable organisational structure to be adopted to support the strategic choices made in the present market conditions will be carefully weighed up; finally, the research will make a comparison between such internationalisation strategies and those implemented by the transalpine company's competitor, namely Fiat, in order to assume which of the two strategic choices could turn out to be the most performing one in the years to come.

Key words: Peugeot, Fiat, entrepreneurs, internationalization, production, organization

Introduction

Before starting to analyse PSA Peugeot Citroen's strategic choices, it is probably convenient to examine the competitive scene of the automotive market, in order to understand its own peculiarities and its evolution as well as the critical success factors to be met to ensure competitiveness [1], so as to find out, subsequently, whether the strategic dynamics of the Group are likely to fulfil the expectations of customers that have become, at the same time, increasingly demanding.

In this regard, it must be underlined that the automotive market is among the most dynamic and complex ones, owing to a number of special features characterising it, that can be described as follows: the huge investment needed to implement innovative models, the high technological level of the product, the wide range of the goods offered, their high value, the fragmentation of suppliers involved in the production of the car and so on. The motor sector is the one that has been mostly suffering from the international recession for the last two years, although its recovery has slowly started since the second half of 2010, with increased sales in the leading European producers. Unfortunately, the new political instability, resulting from the wars currently raging in the

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Middle East countries (Tunisia, Egypt, Libya, Syria, Yemen, Bahrain) - i.e. the major oil producers, has led to soaring fuel costs, whose rise is even due to speculative manoeuvring, thus seriously endangering the motor companies' recovery.

Consequently, in the light of the latest events, among the already known critical success factors to be met, such as the product quality and innovation, minimised production costs, organisational flexibility in order to keep pace with the market evolution, it seems that, as compared to the past, international manufacturers are increasingly oriented to promoting technological research, aimed on the one hand, at protecting the environment through reducing CO2 emissions and, on the other one, at dramatically slowing down fuel consumption to face the current serious energy crisis.

As a matter of fact, the above scenario has changed not only the leading producers' strategies, but also the demand for cars internationally, allowing those car manufacturers that are able to penetrate promptly new market segments to get significant competitive advantages.

Specifically, as far as the supply of the product is concerned, the automotive market evolution trends show that the major manufacturers are willing to relocate upstream activities, including the final assembly, to Eastern Europe, by exploiting the competitive advantage of the low cost labour force in those countries, while the presence in the BRIC countries (Brazil, Russia, India, China) is explained by a strong technology transfer that, by the time passing, will lead the countries benefiting from the technology to reach complete autonomy.

These choices have caused a job shortage in industrialised countries; which, together with the end of incentives for car scrapping, has led the car company to experience a serious financial and social crisis (as shown by the events that have recently involved Fiat in Italy).

On the other side, as regards the supply, there is evidence that the international recession has brought about a divergence of trends in car registrations between the USA and the European Union, on the one hand, and such countries like China, India and Brazil on the other one. In fact, if the former have reduced registrations because of the recession, the latter experienced registration increase significantly due to a highly positive GDP (Gross Domestic Product), even in such a difficult period like the current one.

As to the new market segments, those cars equipped with gas or methane engines are increasingly making their way together with hybrid and electric cars in particular, that represent the vehicles of the future, especially in such countries like Italy which have no oil wells and power plants.

Supporting this trend, one of the most attractive markets in the sector is definitely the Chinese one, due to two main factors.

The first one is that, in 2009, the Chinese market was characterised by a production capacity of about 17 million cars, that is expected to grow in the future, and a large concentration of producers (the first 10 covered about 87.15% of the total), which makes one understand that to date, this market has not any problem of exceeding capacity. The second factor is related to the fact that the Chinese Government has included, in its five-year plan, the so called "new energy" plan among the seven strategic emerging industries supported by tax measures such as governmental incentives as well as tax reduction or exemption; the above sector will benefit from a public investment of 1.46 billion Dollars to fund technological research and the production of special components for electric cars, and its market is expected to reach between 5% and 10% of the total sales of cars in the near future.

PSA Peugeot Citroen Group and its Development Strategies

The work is now going to draw attention to PSA Peugeot Citroen Group's development strategies, to assess whether or not they comply with consumer's expectations, as well as whether they fulfil the critical success factors suggested by the market.

In this regard, in 2007, PSA Peugeot Citroen Group decided to pursue, among its strategies of action, the goal of sustainable development, implementing a plan called "10 sustainable development objectives for 2010-2011" in four areas, namely environment, social responsibility, governance and society; in the Group's expectations, these aims should allow the company to achieve the ambitious target of rising from tenth, at present, to seventh in the world producers rankings by 2015 [2].

With regard to the first issue**,** the Group focused on the following items: the drastic cut in carbon dioxide emissions below the threshold of 120 grams of CO2 per km., which allowed a sale of about two million vehicles in the period 2007-2010; the development of eco-design aiming at using the massive percentage of green materials (i.e. recycled organic materials, natural materials, polymers that do not come from the petrochemical industry); the construction of vehicles having a polymer content of 20% by 2011 and, finally, environmental management aiming at reducing the energy consumed for each car to be produced.

The goal of social responsibility has already been pursued for several years and the Transalpine Group is in the lead compared to other manufacturers because, since 2003, the Group has been part in the agreement called Global Compact, providing for the Universal Declaration of Human Rights, the Declaration on

Fundamental Principles and Rights at Work, the Rio Declaration on Environment, the United Nations Convention against Corruption and, since 2009, the United Nations initiative called "Caring for Climate".

As far as these agreements are concerned, the Group wishes to involve trade unions and engineering industries and is committed to foster the staff's growth, the workers' safety and welfare, social cohesion, the respect and promotion of the employees' rights.

With regard to corporate governance, it will focus mainly on a better dialogue with shareholders, on the implementation of socially responsible investment, as well as on greater awareness of their responsibility for suppliers that must be all certified in compliance with ISO (International Standards Organization) regulations providing for the fulfilment of such standards as price, quality, service and time to market.

Finally, concerning social commitment, the Group has focused its attention on the safety of passengers, on the development of communication services such as, for example, emergency call systems, with which 1 million vehicles are going to be equipped in 10 European countries by 2011. Moreover, a charter for responsible communication has been drawn up, whose main task is to establish social responsibility standards for all the advertisements made by the Group and by the Group-related brands.

As regards the strategic choices made to re-launch the Group, they were centred on restyling their image by focusing on redesigning the mark, on launching new innovative advertising campaigns, on renovating the product range, on developing environment-friendly products, an efficient after-sales service as well as strategic and operational alliances aimed at enhancing as well the international image of the Group, so that to facilitate the entry into those emerging markets, where the automotive industry shows a clear growth trend.

In particular, considering the strategic dynamics of the Group, it can be noted that the historic Lion Rampant logo has become more aggressive, dynamic and modern, because of its three-dimensional drawing made on a background coloured with a stronger shade of blue than in the past.

In regard to the new advertising campaign, it is based on a spot that, by the "Motion & Emotion" message, shows that the transalpine company wishes to focus on such items as the emotional side of the cars produced, environmental protection, that has increasingly become a critical success factor to be met to ensure competitiveness, as well as the pursuit of solutions enabling a large scale urban mobility through the production not only of cars but also of commercial vehicles, scooters and bicycles.

Thus, in order to promote the new brand identity internationally, the renovating programme includes the new stylistic manifesto aiming at innovating some of the car models, to make them more appealing to consumers.

Besides, the Group's strategy has focused on widening the range variety by setting the goal to produce 14 new environment-friendly models by 2012, to meet the demands of both Western consumers and emerging countries, the latter becoming increasingly demanding [3].

In detail, a line of "custom-built" cars started by RCZ is expected to be put on the market, together with low environmental impact motor vehicles such as the 3008 HYbrid4 (a 200 HP four-wheel drive hybrid diesel reducing fuel consumption by as much as 35%) as well as the creation of a new family of 3-cylinder gasoline engines.

Furthermore, the BB1 production acts as a link between cars and scooters; it is a small city electric car, 100% emission-free, about two metres and a half long, with a very special look, as it seems made up of two side by side scooters, which are incorporated in a single compartment equipped with a handlebar instead of the steering wheel and two long motor-bike saddles to hold four passengers [4].

As regards standard-luxury segments, Peugeot is launching the 508 model that would replace the 407; the new model shows an innovative body style, better use of the driver and passenger internal compartment and very low CO2 consumption and emissions.

In the years to come, thanks to 50% funding, namely 200 million Euros granted by the European Investment Bank (EIB) to Peugeot, as part of the ECTF (European Clean Transport Facility) funding program, in order to reduce drastically CO2 emission, the latter will introduce plug-in hybrid technology to be used from diesel-hybrid HYbrid4 rechargeable engine, which is going to represent a real breakthrough in terms of emissions, pursuing the ambitious goal of achieving less than 50 grams of CO2/km. with 2.0 l/km. consumption [5].

Another distinguishing feature is the expansion of after-sales services which now include the innovative "Mu by Peugeot", an initiative that allows you to rent any car of the transalpine company at any official Peugeot dealer, through a system of progressive Credit cards based on "units of mobility". In detail, the card, that is rechargeable via the Internet, allows you to rent cars and accessories (such as GPS or roof bars) as well as to buy the services provided by some partners (travels, airplane or train tickets, hotel rooms, etc.) [4].

On the side of international alliances, the transalpine Group and the Fiat Group are likely to join for the production of cars, a solution that would supplement the collaboration already started since 1978 between the two producers in the field of commercial vehicles.

In fact, the cooperation in this segment, which started with the creation of a platform for industrial commercial light vehicles under the direction of Fiat, has developed over the time with the creation of a second

platform, this time under the control of PSA Peugeot Citroen Group, to produce middle-sized space-wagons and commercial vehicles manufactured in the factory of Sevelnord in Valenciennes, then ending with the final agreement reached in 2008 with Tofas, to build small-sized commercial vehicles.

This cooperation made it possible to renew more promptly the range, to keep pace with the present times, to fully satisfy the expectations of professionals and companies and to share costs and resources between the two producers.

Thus, the increased load capacity of trucks, a more appealing style of design, the best performance on the road and more suitable equipment in terms of comfort and safety allowed successful results to be achieved, considering that the two brands rank 1st and 3rd in Europe for large vans and compact vans respectively.

The alliance recently signed between Renault and Mercedes is likely to speed up the Agreement between PSA Peugeot Citroen and Fiat with the birth of a mega group that can produce nearly 6 million vehicles per year (represented by the sales of 2 million vehicles by Fiat in 2009, 1.3 million by Chrysler and 3.2 million by PSA Peugeot Citroen) [6].

However, the above merger could be hindered by the joint venture that has just been made, on an equal basis, between Peugeot Citroen and BMW German company to develop new technologies for hybrid engines. This joint venture, called "BMW Peugeot Citroen Electrification", that should be operational by the end of 2011, should focus on the study and production of components, batteries, retrieval systems and management software, aimed at increased penetration of the hybrid market and at the extension of the current agreement, providing only the joint development of the new Euro 6 four-cylinder gasoline, to the carbon fibre material, that, though being very expensive, is at the same time increasingly present in the automotive industry to reduce the weight of the newly designed models [7].

As for the relocation of production, PSA Peugeot Citroen Group, like other major international producers, having previously concluded partnership in the Eastern countries (Hungary, Poland and Czech Republic), now appears to have oriented its investments to emerging markets like China, where, the agreement with Dongfeng was followed by another one that led to the joint-venture with Chang'an local firm.

The initial investment was fixed at 395 million Euros per year, for the construction of about 200,000 items, namely engines, commercial vehicles and French cars made in four factories. In addition, as compared to the agreement with Dongfeng selling models under the two brands of the French PSA Peugeot Citroen Group, the products manufactured by this joint venture will be marketed under a new brand [8].

The strategies adopted by the Group brought about more significant results than expected in 2010; in fact, the analysts' forecasts had predicted a profit slightly below one billion Euros. The end result was a net profit of 1.13 billion Euros that, compared to a loss of 1.16 billion Euros in 2009, represents an increase of 15.8% [9].

This result will allow the full redemption of the remainder of the 2 billion loan granted by the State, as well as stable results expected for 2011, which will facilitate the entry into some emerging markets such as Russia, whose growth is estimated at 15%, China (where the three-volume 408 model will be presented, the model being designed specifically for the Chinese market), as well as Latin America with 10% and 4% growth respectively.

In addition, the special attention given to the environment, resulting from the recent agreement with Mitsubishi for the construction of the iOn electric car (a compact and handy utility passenger car with a top speed of 130 km/h), ranked the Group 1st with regard to the electric car market and allowed the Group itself to be awarded the "Energy and Mobility" prize for the production of the latest e-HDi diesel engine equipped with mass-produced StopStart, which will allow 15% reduction in fuel within the whole range by 2011.

Fiat Group's Development Strategies

After surveying the internationalisation strategies adopted by PSA Peugeot Citroen Group, it is useful to examine those implemented by Fiat Auto Group, even in view of a possible merger in the near future, as it was previously pointed out.

From the analysis conducted it comes out that, unlike PSA Peugeot Citroen Group, the Turin firm's development strategies involve two main trends that can be described as follows. The first one is internationally-oriented through the relocation of the production process to countries offering such competitive advantages [10] as low labour costs, cheap energy, tax incentives and so on, as shown by the latest joint venture between Fiat and the Serbian Government, which, in December 2009, gave birth to Fiat Automobiles Srbija (FAS), of which two-thirds are owned by Fiat and the remaining part by the Serbian Government that took over the Kragujevac-based Zastava Automobiles. The second trend is oriented to redesigning the governance within the company, by splitting the Group into two separate companies, namely Fiat Auto and Fiat Industrial [11].

As regards the first point, the agreement made with the Serbian Government provides that Fiat is going to make the most important foreign investment in the Balkan country (reaching 700 million Euros over three years) aimed at producing about 200,000 "LO" space wagon models in the former Zastava factory, thus replacing well-known models such as the Fiat Multipla, the Fiat Idea and the Lancia Musa.

The advantages of this agreement are related to the opportunity of producing cars at a competitive cost, thanks to the low cost skilled labour force whose wages are about 400 Euros per year, namely well below both the Italian and Polish ones, reaching about 1,200 Euros and 600 Euros respectively [12].

What is more, the State bears the total cost of the factory decontamination (to dispose of about 370 tons of dioxins resulting from the Nato air raids in 1999, during the war that caused the former Yugoslavia to split), handing over its ownership to the Fiat Group.

Another advantage which is worth considering concerns the number of employees that are currently paid by the Fiat Group. In fact, for the moment, only 1,060 out of the 2,600 total staff are paid by the Turin Company, while the remaining ones will be on the payroll of the Serbian Government until the development of the Kragujevac factory allows new recruitment for which, on the other hand, the "Lingotto factory" will be granted a loan of 10,000 Euros for each new employee by the Serbian Government.

Furthermore, the Italian motor company will be allowed remarkable tax reduction; in fact, both Belgrade Government and Kragujevac municipality are willing to exempt the company from taxation for the following ten years.

The strategic importance of such an investment in the heart of the Balkan area is even related to the fact that Fiat can use Serbia as a launching pad to market the product in Russia on highly competitive terms, thanks to a free trade agreement involving the motor industry as well. In fact, through the elimination of customs duties and with a view to achieving the ambitious goal of 200,000 cars exported per year, the above agreement will allow the Turin firm to earn, averagely, 2,000 Euros more on each motor vehicle, for a total amount of 400 million Euros.

Besides, the workers quitting the Zastava company of their own will benefit from a gratuity of 300 Euros for each year's service completed, while those employees that are not going to take legal proceedings against the firm to assert their own rights and to be paid off interest on the arrears from 1997 to 2001 will get a total settlement of the debt (for a total value of 10 million Euros) [13].

In addition, the agreement is favourable to the Turin firm even on the fiscal side, thanks to a number of benefits and tax relief granted by the Serbian Government, namely, the voluntary conveyance of the factories to the Fiat Group, exemption from paying taxes to the municipality for ten years, the creation of a "free zone" of 75 hectares (55 for the Fiat Group) [14], in order to allow the duty-free import of goods from Italy, as well as the concession of another industrial estate to house 14 Fiat-related firms (from Iveco to Ditec and Magneti Marelli) involved in the construction of a motorway link for the E75 aimed at improving the road network in the area.

On the other side, the main disadvantages of the agreement are mostly of a social nature.

In fact, the above agreement has stirred up tension both in Serbia and in Italy. Indeed, in the Balkan country, following the production of the new Fiat Punto at the end of 2009, a fire was deliberately set to the factory in Kragujevac, destroying the conveyer belt between the painting line and the assembly line; the management considered this event as a warning sign aimed at urging more care in employing the staff.

In Italy, instead, there was much tension between the Turin firm and the unions about the Mirafiori factory that, as a matter of fact, lost the "LO" production.

Nevertheless, at the beginning of the year, the Mirafiori factory's owners held a referendum concerning the acceptance or not of the new labour agreement, in exchange for considerable production investment reaching 1 billion Euros to produce new "luxury" models (like Jeep and Giulietta). The referendum was successful, with the favourable opinion of 54.1% of the workers, out of the total staff of 5,400 employees in the factory.

In particular, the agreement is penalising for workers who, nevertheless, due to the current international economic recession, opted for keeping their job despite reduced rights.

In detail, the agreement provides for reduced breaks, shrinking from 40 to 30 minutes, with a monthly supplement of 32.47 Euros to the wage packet for the extra minutes worked, the non-payment of the first day off sick for those employees who will be out shortly before holidays or on their weekly day off for more than twice a year, a 40-hour weekly work salary, including breaks, spread over a total of 18 work-shifts, compulsory overtime up to 80 hours per year and, above all, new sanctions about striking that can lead to the worker's dismissal if production is seriously endangered [15].

Significantly, the assent of almost all the trade unions to this independent contract providing that the Joint Trade Union Committee (JTUC) is replaced by the corporate one is only possible because the Fiat Group is no more party to the Italian Manufacturers' Association (Confindustria).

Another disadvantage is, however, related to this corporate Taylor-style policy inhibiting workers from any kind of protest.

Which, in the long run, is likely to stir up growing social unrest caused by exhausting work-shifts, lack of dialogue with the top management, as well as a worker's wages which are not up to the average standard of living of the country. All these factors are likely to lead the employee to develop a state of depression thus

causing either long periods of absenteeism from work or lesser commitment by the worker as compared with his own potential.

On the fiscal side, even if the elimination of customs duties to enter the Russian market allows the company to collect 400 million Euros, considering 200,000 motor vehicles exported, this amount is not going to be cashed by the Turin firm but it will be handled by the Kragujevac joint company [13].

Moreover, it is to be underlined that the incidence of the labour cost doesn't exceed 7% of the total capital in a highly complex and technologically advanced structure, with a final saving that, after all, should only reach 3% of the end-product.

Which would make one consider that the GOM (Gross Operating Margin) is very low if, to keep it steady, given the current international recession, the social peacefulness of the firm has to be sacrificed.

As to the internal strategy, aimed at changing the corporate organisation, in order to expedite the decision-making process, as well as to achieve the flexibility needed to meet promptly the market's evolution, in September 2010, as it was already described above, the Fiat group split into two separate companies: Fiat Auto and Fiat Industrial. The first will include, besides Fiat Group Automobiles, such companies as Ferrari, Maserati, Magneti Marelli, Teksid, Comau and Fiat PowerTrain automobiles; the second will incorporate CNH and Iveco, in addition to the industrial and marine sector of Fiat PowerTrain.

Such reorganisation will eventually allow the motor sector to go its own way and the management and funders to really understand the extent of the value yielded through the production and sale of cars. In fact, from a financial point of view, the above shake-up will also include a fair distribution of the industrial debt between the two groups reaching approximately 2.5 billion Euros as well as initial liquidity of 10 billion Euros for Fiat Automobiles and of 3 billion Euros for Fiat Industrial [16].

Furthermore, the spin-off of the automotive industry from the industrial one has allowed Fiat Automobiles and Fiat Industrial securities to be listed separately on the Stock Exchange as from the beginning of the year; which was highly appreciated by the financial community.

Given the current situation of the international market which is experiencing a state of turmoil due to a proceess of continuous change influencing its evolution, the logic of the above demerger is primarily oriented to eliminating the heterogeneity of the businesses that made it up because of a clear distinction betwween the two main activities as regards their specific features, commitments, capital profitability, margins and dynamics of their markets.

In this way, each of the two business units will be able to focus on its own SBA (Strategic Business Area) with goals easily identified and recognised by the market and to display specific features by adopting strategies that are determined autonomously, as well as to bring out the amount of value that each entity is likely to yield.

In particular, the Fiat Group will be able to improve its competitive position on a world scale and to enhance its efficiency thanks to an alliance with Chrysler, whose share should reach 51% by the end of the year, thus profiting from the best distribution in the Chrysler's sale network; which will enable Fiat to make its brand known internationally, giving birth to a "four-headed heart": Turin for the European market (that is going to control the Italian factories as well as those based in Poland, Serbia, Turkey and Russia), Detroit for the North-American one (covering American investments in addition to those in Canada and Mexico), Betim for South-America (that is going to control Brazil as well as Argentina) and finally Peking, for the Asian area (that is going to run the newly established Chinese factory in Changsha, as well as India).

The results achieved seem to support the Group's strategies, in spite of the cut in governmental incentives; in fact, it seems that, on one side, the Group's net proceeds have risen from 50,102 million Euros in 2009 to 56,258 million Euros in 2010 and, on the other one, 2009 negative net result, recording a loss of 848 million Euros, was turned into a profit in 2010, namely 600 million Euros. Finally, the car sector alone has increased the result concerning the ordinary management, shifting from 719 million Euros in 2009 to 934 in 2010, while, thanks mainly to the partnership with PSA Peugeot Citroen, vehicles have doubled and over their positive result, rising from 105 to 270 million Euros from 2009 to 2010 [17].

Prospects for the future are highly ambitious for the Turin firm whose turnover is expected to reach 64 billion Euros within four years, which would actually double the amount expected for 2010, of which as much as 80% would result from Fiat Group Automobiles, 6% from Ferrari and Maserati, while the remaining part would come from component production [16].

PSA Peugeot Citroen and Fiat Auto: their Organisational Philosophy

From the analysis carried out on the corporate organisational structures of PSA Peugeot Citroen and Fiat Auto it turns out that the two carmakers rely on the Toyotist principles based on the lean production model.

The reasons for this organisational orientation are connected with the turbulence of the markets that has changed the companies' strategic structure (meant as the company's organisation that is strategically relevant) that, being originally of a unitary kind (namely having a single competitive reference system), has got diversified (i.e. involving companies that are willing to compete in different areas and ranges of activities characterised by different reference economic operators and different rules).

Given the current international situation, a radical reinterpretation of the production process is increasingly needed, in order to meet successfully the new requirements of the market.

In order to achieve this goal, World Class Manufacturing (WCM) [18], [19] was worked out, which represents a modern evolution of the Japanese model known as the "Toyota Production System" [20], [21] that developed in the automotive industry in the eighties and consists in an Innovative Production System based on such techniques as Lean Production, Total Quality Management (TQM), Total Productive Maintenance (TPM) and Just-in Time [22], aimed at a rapid and continuous improvement in the whole logistics and production cycle of the company, through eliminating any kind of waste and loss (Muda), which can be achieved only by involving the company's human resources at all organisational levels, through the strict application of the suitable standards and methodologies such as "Six Sigma" [23], [24], [25], [26], [27].

Instead, the purpose is that of segmenting the corporate system into processes both at a global level and for each single SBA (Strategic Business Area), which means subdividing the system into a set of sub-systems involving homogeneous activities that are interconnected and aimed at the creation of value for the customer, by transforming an input into an output [28].

In particular, it is to be pointed out that this organisational structure is based on a set of fundamental criteria with which compliance is critical to the effectiveness and efficiency of the structure itself. They include: the process diversification, the decision-making power delegated to employees, the tasks unification, avoiding production waste thanks to the Just-in-time system, the process activity outsourcing, the total involvement of suppliers [29], [30], [31], [32], [33], [34], [35], [36].

In detail, the main purpose of WCM is, therefore, to be successful on the market with high quality products at competitive prices, by meeting customer needs and ensuring maximum flexibility, through the strict application of "zero defects in everything" formula, namely the "nine zeros" on which this management philosophy relies, represented by: zero customer dissatisfaction, zero mismatches, zero bureaucracy, zero shareholders' dissatisfaction, zero waste, zero non-value adding work, zero stops, zero missed opportunities, and zero lost information [19].

From a purely strategic point of view, WCM System is based on three meanings [37]:

- the sense of innovation, meant as the search for a way to do something better than it has ever been done before;
- the sense of achieving quality through constantly pursuing a perfection standard made up of details;
- the sense of efficiency, as a result of reduced waste.

In order to achieve these goals, the key actions to be pursued when applying this philosophy are thus summarized as follows:

- improving processes;
- avoiding waste and correcting errors;
- detecting errors before they become defects;
- investing the resources saved in Value adding activities for the customer;
- displaying waste through scientific observation and a graphic display of flows.

After explaining the principles supporting WCM, it is necessary to assess the validity of this management philosophy, to understand whether it is likely to match the current competitive context and to benefit the companies adopting it, both economically and qualitatively. The analysis carried out has revealed that WCM is able to achieve significant results such as:

- 100% increased productivity;
- 90% shrinkage in both stock and production time;
- 50% reduction in both errors for the customer and in scraps for the process;
- 50% reduction in Time to Market**;**
- low extra cost supply of a wider range of products;
- very modest investment.

Besides, once adopted, WCM allows productivity to be doubled, over time, through incremental improvements over two or three years, as well as stock-in-trade**,** errors and time to be halved over the same space of time [38].

Therefore, in the light of what is examined above, it can be stated that the new organisational structure of the two producers considered radically changes the main criteria on which the old hierarchical-functional model was based, thus leading to replacing the management by "functions" with that by "process", to completely redesigning the decision-making system through the setting up of the "Business Units", as well as to abolishing the "teams" by establishing the "basic organisational Units" [39].

Ultimately, the benefits of this organisational reshaping are mainly two:

- the first is the fact that, in this way, it is possible to understand the economic impact (cost) of each activity on the end-product;
- the second one concerns the possibility of establishing what are the key business processes, namely those able to create value for the customer as well as of favouring those processes at the expense of others that do not allow such a result and are, therefore, eliminated from the company.

Conclusions and implications

The purpose of the present research was, first, to analyse PSA Peugeot Citroen Group's development strategies, in order to assess whether such strategies were in accordance with market expectations, and second to compare them with those of the Fiat Auto Group, trying to find out the main differences between the two car manufacturers, as well as to identify, subsequently, the kind of organisational structure that would best support the business goals planned.

Thus, from the analysis carried out and the results examined it comes out that, in the current international context, the automotive industry is definitely one of the most affected by the recent war in the Middle East, owing to the evident rise in fuel prices.

In particular, the sector is characterised by significantly reduced fragmentation in competition, as compared to the past, due to the joint ventures made between international manufacturers and local governments, especially in developing countries, as well as to the merger between traditionally leading producers, aiming at allowing the realization of those synergies ensuring competitiveness.

Among those synergies, the one that is increasingly pushing its way among the others is that oriented to the development of the expensive innovation concerning energy saving in order to introduce either hybrid or electric engine cars, which, in the current phase of serious international recession, increasingly represents a critical success factor to be met.

Specifically, the PSA Peugeot Citroen Group's strategy is going this way, thus being more and more oriented towards environmental protection and energy saving, being well supported by the Government and the unions, so that they now rank 1st for the production of electric vehicles in the international scene and currently represent 10% of the overall French car market, even thanks to 5,000 Euros discount on cars, funded by the State that is also committed to purchase these cars to renew the public car park.

This result is related to two main factors. On one side, the availability of large quantities of electricity that is not exploited, due to the nuclear power plants production that would encourage the development of infrastructures for recharging electric vehicles on the area; on the other one, the concern for employment shortage in the French automotive industry, due to the relocation of production by the leading transalpine manufacturers that are concentrated on seeking low-cost labour in emerging countries.

Actually, though, on one side, they do not want to give up the idea of relocating activities abroad for the above reasons, in order to ensure the creation of value in A and B segments which represent about 80% of the market, on the other one, it is also true that they are fully willing to produce electric cars on a local base; which would favour both employment and an increase in domestic sales, with the prospect of penetrating the Chinese market that appears to be the most attractive on an international scale, due to high demand for cars as well as to tax relief granted for electric car production.

Unfortunately, as regards the electric car segment, the Fiat Group starts from a position of clear disadvantage, since it cannot rely either on nuclear power or, for the moment on the Government's funding; such factors do not make the purchase cost of those vehicles very competitive, namely 35,000 Euros on average; besides, they do not allow the national territory to be equipped with a widespread supply network [40].

Concerning the production location, the Fiat Group shows a greater geographical decentralisation compared to PSA Peugeot Citroen Group, due to a wider network of production and sales, supplied in all continents by a widespread organisation known as "four-headed heart", in which the "heads" are represented by

the parent company located in Turin for Europe, by Detroit headquarters of Chrysler in North America, by Betim for South America and Peking for Asia.

The reasons for this stronger decentralisation, as compared to PSA Peugeot Citroen Group, are related not only to the search for low cost labour, but also to the search for affordable energy resources and, above all, to the low level of productivity of the Italian factories, reaching 54% (this percentage falls to 37% if one considers the technical capacity), compared to the foreign ones in which work commitment is equal to 126% (and to 78% considering the workers' technical training).

As a matter of fact, this relocation has stirred up considerable social tension in Italy, particularly after the decision to produce the "LO" model, originally planned in the Mirafiori plant in Turin, in the new Kragujevac-based factory in Serbia.

Another aspect emerging from the analysis conducted on the two automotive groups examined is related to their political relaunching.

Actually, the transalpine Group has focused its attention on its image restyling, by redesigning the brand, launching innovative advertising campaigns, developing a wide and various range of products focused on environment-friendly and energy saving engines, as well as on an efficient after-sales service through the "Mu by Peugeot" initiative. On the contrary, Fiat Group's re-launching strategy was different, aiming mainly at redefining the corporate structures both nationally, through the demerger giving birth to the two companies, namely Fiat and Fiat Auto Industrial, and internationally, through the acquisition of Chrysler.

The spin-off implemented has eliminated the heterogeneity of the businesses, thus enabling each SBA (Strategic Business Area), to establish specific objectives easily identified by the market, to expedite the decision-making process with independent strategies and to bring out the amount of value that each entity is likely to produce; instead, the French Group is still experiencing this kind of heterogeneity, due to the merger of the automotive and business sectors into a single corporate structure as well as to the presence of the Citroen brand.

With regard to the acquisition of Chrysler, it allows a more widespread distribution network at an international level, mostly in North America, as well as the exploitation of the know-how in the standard and luxury segments of the American company to complete the product range, thus creating successful cars relying on quality engines and high technology in those segments where the Turin company is not competitive, being focused, mostly, on utility passenger cars.

Finally, as regards the organisational structure adopted by the two manufacturers, it was noted that the model used is the same, namely no longer the one based on functions, but one that focuses on processes, based on WCM management philosophy, allowing organisational efficiency and effectiveness to be improved, thus fulfilling a number of critical success factors that can be described as follows: the streamlining of production that is likely to better both the business flexibility and the product quality, greater decision-making power delegated to employees, whose increased involvement leads to improved commitment, minimised costs thanks to reduced stock-in-trade and waste, improved information, whose effectiveness is ensured by the high technological value of the computer system, reduced assembly time of the car through the location of suppliers close to the parent house and so on.

In conclusion, in the light of the analysis carried out, it can be maintained that both the strategies adopted by the two manufacturers surveyed have been successful and that, indeed, their merger, in the years to come, could be facilitated by a common organisational structure and it is likely to allow the transalpine Group to exploit the wider relocation of production and distribution of Fiat Auto to enter new markets, as well as its specialisation in the production of utility passenger vehicles to get stronger in this segment; on the other side, the Italian company will be allowed to exploit the low cost of French energy in order to minimise production costs, as well as technology and the degree of specialization achieved in the segment of electric cars, to ensure the development of this segment in the domestic market, producing cars whose average cost is lower than the current one.

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Estimation of the number of hotels related to health tourism in Bulgaria

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Abstract.

Bulgaria is among the European countries most abundant in diverse and sometimes unique mineral waters. At present the country boasts 225 clusters of mineral water springs with total capacity of 5000 l/s. The potential capacity is estimated at 10 000 l/sec.

About 80% of the springs have healing power which was well known and used millennia ago by the Thracians - the oldest inhabitants of today's Bulgarian lands. Later, in Roman and Byzantine times, some of the most famous ancient SPA facilities here were established by the emperors Trajan, Septimius Severus, Maximilian and Justinian – Augusta Trajana (today Hissar), Pautalia (today Kyustendil), Aqua Calide (today Burgas mineral baths), Germaneya (today Sapareva Banya),Tanzos (today Sliven Baths), Ulpia Serdica (today Sofia), Odessos (today Varna), Skaptopara (today Blagoevgrad), Dezudava (today Sandanski).

In the last decades, the importance of SPA and wellness for Bulgarian tourism industry is widely recognized as it will support the geographic and temporal diversification of Bulgarian tourism (which is today mainly based on seasonal Black sea vacation tourism) and also for the creation of holistic high quality tourism packages which will generate more revenues and higher job occupancy rates.

In order to use the potential of SPA and wellness in its full capacity, there is a need of systematic scientific investigation of all aspects of health tourism – identification and analysis of the available resources, their valorization, analysis of existing and forecast of SPA and wellness infrastructure, demand and revenues.

The aim of this paper is to estimate the demand for health tourism in Bulgaria and the revenues obtained from health and SPA tourists.

Key words: health tourism, SPA, wellness, demand, revenues,

1. Introduction.

The demand of health tourism is measured by sales – real or potential. It is characterized by volume, value, structure, dynamics, geographic distribution, social and demographic characteristics of the tourists, their expectation.

When studying demand and the way to stimulate it of great importance is the degree of satisfaction of tourists and their feedback about the consumed supply.

The organization of the article is as follows. In Section 1, volume and value estimation of current real demand of health tourism in Bulgaria is performed. In Section 2, social and demographic characteristics of health tourists as well as their feedback about health services is studied. In Section 3, general trends, potential and strategy for growth are presented.

2. Health tourism demand – volume estimation.

To establish the actual demand of health tourism in Bulgaria, we first definethe hotels suitable for SPA and wellness tourism in Bulgaria. For this purpose we select from all the hotels in Bulgaria (see Figure 1) a subset of hotels called Health Tourism Universe (HT_UNIVERSE) where health tourism can be practiced. In HT_UNIVERSE we include:

The hotels with highest quality category (4 and 5 stars according to the categorization applied in Bulgarian tourism industry);

The so called balneo hotels in Bulgaria where actually Medical SPA is practiced;

3 stars hotels in sea and SPA resorts (where obviously health tourism can be also practiced).

For further investigation of this universe we make stratification based on geographical principal. We use administrative division of the country according to which Bulgaria is divided to 28 provinces (oblast). Four regions are defined as follows:

Sofia region (Sofia-city and Sofia-oblast provinces);

Black sea region (provinces Varna, Bourgas and Dobrich);

North Bulgaria (all provinces of North Bulgaria with exception of Varna and Dobrich);

South Bulgaria (all provinces of South Bulgaria with exception of Bourgas, Sofia-city and Sofia-oblast provinces).

Table 1. Hotels of HT_UNIVERSE by regions about June 2013.

Region	Number of 4 and 5 stars hotels - June 2013	Number of 3 stars hotels about June 2013	Number of 3 stars hotels in sea or SPA resorts	Number of balneo hotels	Total number of hotels for SPA and wellness
Sofia	48	54	-	2	50
Black Sea	170	317	250	2	422
South Bulgaria	70	305	18	9	97
North Bulgaria	24	128	15	4	43
Total	312	804	283	17	612

The number and the distribution of 4 and 5 stars hotels can be easily obtained as there are periodic publicly available data about them in the reports of the National Statistical Institute of Republic of Bulgaria. The case of 3 stars hotels for SPA and wellness tourism as defined in our study is more difficult as we do not have explicit data about them. To easily determine the number of the 3 stars hotels suitable for health tourism, we use projection factors calculated on the basis of the Registry of the categorized hotels maintained by Ministry of Economy and Energy (MEE) of Republic of Bulgaria.

The data used to calculate the projection factors as well as the calculated factors are presented in Table 1. The formula used for calculation is

$$F = \frac{N_1}{N},$$

where N_1 is the number of the 3 stars hotels suitable for health tourism and N is the total number of 3 stars hotels in the corresponding region.

Table 2. Projection factors for 3 stars hotels about June 2013 per regions.

Region	Number of 3 stars hotels about June 2013	Number of 3 stars hotels in sea or SPA resorts	Number of balneo hotels	Total number of 3 stars hotels for SPA tourism and balneo hotels	Factor
Sofia	54	-	2	2	0.04
Black Sea	317	250	2	252	0.79
South Bulgaria	305	18	9	27	0.09
North Bulgaria	128	15	4	19	0.15
Total	804	283	17	300	

By using the projection factors we may estimate the number and the capacity of the hotels of HT_UNIVERSE for any (near to June 2013) period. For the number of hotels, it is sum of full census numbers of 4 and 5 stars hotels and estimated numbers of 3 stars hotels suitable for health tourism. For the capacity, it is similarly calculated. In Table 3, Table 4 and Table 5 are presented the estimated number of hotels, number of beds and number of beds-nights correspondingly for HT_UNIVERSE.

Table 3. Number of hotels in HT_UNIVERSE at the end of 2013, estimate.

Region	Number of 4 and 5 stars hotels at the end of 2013 - estimate	Number of 3 stars hotels for SPA tourism	Total number of hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	23	18	41	0,06
Sofia	50	2	52	0,08
Black sea	182	287	469	0,68
South Bulgaria	95	33	128	0,19
Total	350	340	690	1

Table 4. Number of the beds in HT_UNIVERSE at the end of 2013, estimate.

Region	Number of beds in 4 and 5 stars hotels at the end of 2013 - estimate	Number of beds in 3 stars hotels for SPA tourism	Total number of beds in hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	2708	834	3542	0,02
Sofia	10130	164	10294	0,06
Black sea	85320	53157	138477	0,81
South Bulgaria	17067	1564	18631	0,11
Total	115225	55719	170944	1

Table 5. Number of beds-nights in the hotels of HT_UNIVERSE at the end of 2013, estimate.

Region	Number of beds-nights in 4 and 5 stars hotels at the end of 2013 - estimate	Number of beds-nights 3 stars hotels for SPA tourism	Total number of beds-nights in hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	962038	282716	3542	0,02
Sofia	3521750	50152	10294	0,06
Black sea	13081567	7155294	138477	0,81
South Bulgaria	4400552	459853	18631	0,11
Total	21965907	7948015	170944	1

To study the occupancy of the hotels we may use data of National Statistical Institute of Republic of Bulgaria (NSI). NSI publishes monthly, quarterly and yearly data about the hotels' activity by provinces and hotel categories. From here we may directly obtain the occupancy for 4 and 5 stars hotels. For 3 stars hotels suitable for SPA and wellness tourism the calculated projection factors may be used. Tables 6, 7, 8, 9, 10, 11 show different characteristics obtained using this procedure.

Using this data we may estimate the number of the tourists who have consumed health tourism services in 2013 in Bulgaria and also the revenues from health tourism in Bulgaria for 2013. For that purpose, we have to substract from the total number of the visitors of hotels of HT_UNIVERSE those who did not consume health tourism services. We do this using the following algorithm:

1. Based on data published by NSI we calculate the percentage of Bulgarian and foreign hotels visitors who stayed at the hotels for recreation (not for business). For Bulgarians, the percentage is 55%. For foreigners it is 54%.

2. By expert estimate, we define percentage of the tourists (both Bulgarians and foreigners) who have spent their vacation in hotels of HT_UNIVERSE and at the same time have consumed SPA and/or wellness packages. This percentage is 25%.

3. We multiply the number of visitors in the hotels of HT_UNIVERSE in 2013 by the percentages from points 1 and 2 to obtain the number of the tourists who have consumed health tourism services in Bulgaria in 2013.

4. We define the relative share of the foreign and Bulgarian tourists, who have used health packages of the total number of the foreign and correspondingly Bulgarian visitors of HT_UNIVERSE.

5. The shares obtained in point 4 are multiplied by the revenues from Bulgarian and foreign HT-UNIVERS hotels visitors. In this way we obtain the revenues from accommodation of foreign and Bulgarian tourists.

6. To the revenues for accommodation calculated in point 5 we add the spending for sport and recreation services (data cited by NSI).

After applying this procedure, we obtain that about 280 000 foreign tourists have consumed health tourism services in Bulgaria in 2013 and their spending are about 150 000 000 BGN (about 75 000 000 euro). Also, about 140 000 Bulgarian tourists have consumed health tourism services in Bulgaria in 2013 and their spendings are about 32 000 000 BGN (about 16 000 000 EUR).

Table 6. Number of visitors of hotels of HT_UNIVERSE in 2013, estimate.

Region	Number of visitors in 4 and 5 stars hotels at the end of 2013 - estimate	Number of visitors in 3 stars hotels for SPA tourism	Total number of visitors in hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	91067	35086	126153	0,040934432
Sofia	531302	7669	538971	0,174886618
Black sea	1224242	631970	1856212	0,602308173
South Bulgaria	517601	42894	560495	0,181870777
Total	2364212	717619	3081831	1

Table 7. Number of foreign visitors in the hotels of HT_UNIVERSE in 2013, estimate.

Region	Number of foreign visitors in 4 and 5 stars hotels at the end of 2013 - estimate	Number of foreign visitors in 3 stars hotels for SPA tourism	Total number foreign visitors in hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	30194	6028	36222	0,017
Sofia	391534	2942	394476	0,191
Black sea	1009463	433411	1442874	0,697
South Bulgaria	188316	8148	196464	0,094
Total	1619507	450529	2070036	1

Table 8. Number of nights spent in hotels of HT_UNIVERSE in 2013, estimate.

Region	Number	Number	Total	Share of the	Occupancy

	of nights spent in 4 and 5 stars hotels at the end of 2013 - estimate	nights spent in 3 stars hotels for SPA tourism	number of nights spent in hotels suitable for SPA and wellness tourism	region	– percentage of the nights spent of the total number of potential nights
North Bulgaria	143329	63874	207203	0,015732333	15,46%
Sofia	942076	14553	956629	0,07263411	26,78%
Black sea	6912006	3755591	10667597	0,809960199	52,83%
South Bulgaria	1241145	97946	1339091	0,101673358	27,90%
Total	9238556	3931964	13170520	1	41,94%

Table 9. Number of nights spent by foreigners in the hotels of HT_UNIVERSE in 2013, estimate.

Region	Number of nights spent by foreigners in 4 and 5 stars hotels at the end of 2013 - estimate	Number nights spent by foreigners in 3 stars hotels for SPA tourism	Total number of nights spent by foreigners in hotels suitable for SPA and wellness tourism	Share of the region	Occupancy – percentage of the nights spent by foreigners of the total number of potential nights
North Bulgaria	44660	11559	56219	0,005	4,60%
Sofia	722920	6268	729188	0,067	20,41%
Black sea	6271773	3114182	9385955	0,873	47,82%
South Bulgaria	553663	23591	577254	0,053	12,25%
Total	7593016	3155600	10748616	1	34,29%

Table 10. Income (in BGN) of the hotels of HT_UNIVERSE in 2013, estimate.

Region	Income of 4 and 5 stars hotels at the end of 2013 - estimate	Income of 3 stars hotels for SPA tourism	Total income of hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	7463686	2246844,9	9710530,9	0,014890344
Sofia	79325858	602673,16	79928531,16	0,122564183
Black sea	360728341	132359470,9	493087811,9	0,75611179
South Bulgaria	65909722	3499528,14	69409250,14	0,106433684
Total	513427607	138708517,1	652136124,1	1

Table 11. Income (in leva) from foreigners of the hotels of HT_UNIVERSE in 2013, estimate.

Region	Income from foreigners of 4 and 5 stars hotels at the end of 2013 - estimate	Income from foreigners of 3 stars hotels for SPA tourism	Total income from foreigners of hotels suitable for SPA and wellness tourism	Share of the region
North Bulgaria	2616701	509058,3	3125759,3	0,006
Sofia	64804197	302663,08	65106860,08	0,122
Black sea	322528769	110214614,3	432743383,3	0,811
South Bulgaria	31811464	936391,5	32747855,5	0,061
Total	421761131	111962727,2	533723858,2	1

The main conclusion is that hotels for health tourism are not uniformly distributed across the country. They are mainly concentrated on Black sea coast. Of course there is also some concentration in big cities and SPA and nountain resorts but still there is a need of more, high category hotels inside country. There is a need of more highest quality and modern SPA centers at Black sea coast to stimulate using health packages of the summer vacation tourists and to attract health tourists outside the high summer season.

Also, the degree of use of the hotels is not so high. It varies between 16% in North Bulgaria and 63% at Black sea coast with a mean of 42%. There is high potential to increase the occupancy and to attract much more tourists to fill not used hotel capacity. This could be achieved by introducing more attractions inside country and by strong marketing presence at the generating markets.

References

The statistical data used in the article are provided by National Statistical Institute of Bulgaria.