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**KEY FEATURES OF INNOVATIVE DEVELOPMENT OF SMES
IN THE REPUBLIC OF KAZAKHSTAN**

This paper proposes new directions in researching innovation in small and medium sized enterprises (SMEs) based on a process perspective. This article includes key factors of innovative development of SME, which are restricted it. Moreover, it is described the structure of SME financing in the Republic of Kazakhstan, defined the main problems of financing SME and made conclusion about using international experience in this way. We propose that our current level of understanding is restricted due to the theoretical and methodological biases that have informed existing research. A better understanding is more likely to be achieved by rejecting normative-variance approaches and assessing innovation in the context of strategic conduct within institutional processes and structures. This should contribute to a better appreciation of innovation in SMEs by focusing on the process of change.

Key words: innovation, SME, innovative development, financing, growth of economy.

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Қазақстан Республикасында ШОБ инновациялық дамуының негізгі ерекшеліктері

Осы мақалада процестің келешегіне негізделген шағын және орта кәсіпорындарда (ШОБ) инновацияларды зерттеудің жаңа бағыттары қарастырылған. Бұл мақалада шектеулі ШОБ инновациялық дамуының негізгі факторлары бар. Бұдан басқа, Қазақстан Республикасында ШОБ қаржыландыру құрылымы сипатталған, ШОБ қаржыландырудың негізгі проблемалары анықталған және инновациялық дамуды ынталандыру мақсатында халықаралық тәжірибені пайдалану туралы қорытынды жасалады. Зерттеу барысында авторлар институционалдық үдерістер мен құрылымдардағы стратегиялық мінез-құлық жағдайында нормативтік дисперсияға және инновацияларды бағалауға қатысты әдістерден бас тарту арқылы қол жеткізуге болатын теориялық және әдіснамалық ескертулерге байланысты шектеулерді атап өтеді. Бұл өзгерістер процесіне назар аударып, ШОБ-та инновацияларды терең түсінуге көмектеседі.

Түйін сөздер: инновациялар, ШОБ, инновациялық даму, қаржыландыру, экономикалық өсу.

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Ключевые особенности инновационного развития МСП в Республике Казахстан

В настоящем документе предлагаются новые направления в исследовании инноваций на малых и средних предприятиях (МСП) на основе перспектив процесса. Эта статья содержит ключевые факторы инновационного развития МСП, которые ограничены. Кроме того, описывается структура финансирования МСП в Республике Казахстан, определены основные проблемы финансирования МСП и сделан вывод об использовании международного опыта в целях стимулирования инновационного развития. В рассматриваемом исследовании авторы отмечают ограниченность ввиду теоретических и методологических предубеждений, что может быть достигнуто путем отказа от подходов к нормативной дисперсии и оценки инноваций в контексте стратегического поведения в рамках институциональных процессов и структур. Это должно способствовать лучшему пониманию инноваций в МСП путем сосредоточения внимания на процессе перемен.

Ключевые слова: инновации, МСП, инновационное развитие, финансирование, рост экономики.

Introduction

In this paper it is researched the problems of innovative development of SME, because of the key points of economic growth. In this way, entrepreneurship is considered to be an important mechanism for economic development through employment, innovation and welfare effects (Acs Z. J., 1988:682; Baumol W., 2002:24; Schumpeter, J. A., 1934:46; Wennekers A. R. M., 1999:32). Furthermore, young innovative firms play a key role in modern knowledge-based economies because they are an important source of new jobs, radical innovations, and productivity growth, as well as a disciplining device for the behavior of established firms (Block J.H., 2016:62). Unfortunately, these firms often suffer from financing constraints, which limit their growth and threaten their survival (Brown J. D., 2017:1042; Carpenter R., 2002:301; Cosh A., 2009:1501).

Innovation plays an important role in leveraging the competitiveness of firms within the construction industry, particularly architectural and engineering design firms (Panuwatwanich K., 2012:52). It also leads to improvement in quality in addition to enriching the range of products on offer, and it positively influences productivity, turnover, profitability, employment (Guinet J., 1999:64), market position stabilization, degree of market share, operational effectiveness, reputation, and the ability to reduce costs (Abernathy, W. J., 1985:6, Cooke I., 1996:7). So, it is important to research the factors, which restricts an innovative development of SME of the Republic of Kazakhstan taking into account experience of foreign countries.

Needless to say, that innovation is not necessarily about technology innovation. Innovation means advancing a company's business, reinventing internal processes, and identifying opportunities to earn more by spending less or even creating value for its customers.

Methodology

Information base of the research of this paper includes information about statistics from the official sources of the agency of statistics, internet sources, as well as data collected from the database of Springerlink.com, Scopus and Web of Science.

The methodological aspects of the study are general scientific methods as analysis, classification, system approach and comparison. In the research the study was conducted at the government level and all main government structures, which take participation in finance process of SME.

Literature Review

Literature particularly focusing on the innovation performance of SMEs can be more successful in the conditions of supporting financing mechanisms.

Currently, in the process of creating an innovative economy, it can be noticeable an increase attention on issue of SME financing. Many scholars argue, that despite the large firms having heavy concentrations on research and development (R&D), small firms are the ones that report for most of the important inventions and innovations (Freeman C., 1997:243). The majority of countries tend to build an innovative economy creating policies to support SME financing after realizing the trend of knowledge based economy (Lerner J., 1999:289,

Lerner J., 2002:28, Mani S., 2004:189). Besides, it is widely discussed among scholars, that the intensity of support for the process of innovation in a region depends on the given institutional arrangement (e.g., universities and other research organizations, vocational education institutions, technology centers and transfer agencies) and the structure of the regional economy (the dominating industry, the accessibility of service firms and appropriate suppliers, organizations offering financial support for innovation, etc.) (Kaufmann A., 2002:149).

Companies that have a culture orientation for innovation are more prepared for contingencies and tend to be more sustainable. The awareness of the importance of innovation always helps the team to identify outputs more quickly when needed and tend to deburr bureaucratic firms by reducing costs (Bresson G., 2016:1989).

Love J.H. and Roper S. (2015) the evidenced some enablers of SME innovation, which are technical skills, finance, research and development (R&D). According to them, Small firms tend to face more problems in accessing external finance for innovation, than multinationals. In terms of external enablers, Love J.H. and Roper S. (2015) determine resource-enhancing or augmenting factors as important for SMEs to overcome internal resource constraints. So, in the light of the challenges SME face in order to keep competitive, understanding

and demonstrating how financial resources (specifically governmental support) may contribute to call attention to the importance of SME, which provide regional development (Love J. H.,2015:31; Galbraith B., 2017:670).

Discussion and Results

In the face of problem of financing SME, we think about starting business, and what difficulties it includes, and in what way innovations could improve and accomplish SME projects.

Some economists consider, that from the business perspective, innovation is considered to be a strategic instrument that serves to build and enhance business capabilities (Farazmand A., 2004:6) and it can be defined as the implementation of something new, original, significant, or valuable (Luecke R., 2003:17) or a significant change that occurs through an array of substantial improvements (to a product, process, or service) in comparison with previous accomplishments (Harper S. M., 2004:7).

According to the ranking of economies on the ease of starting a business is determined by sorting their distance to frontier scores for starting a business, especially for analyzing the position of Kazakhstan, according to the figure 1 we will notice, that Kazakhstan is at the 92 position of ranking, and it is in a worst position than other Europeans and Central Asia Countries.

▼ Figure – Starting a Business in Kazakhstan and comparator economies – Ranking and DTF

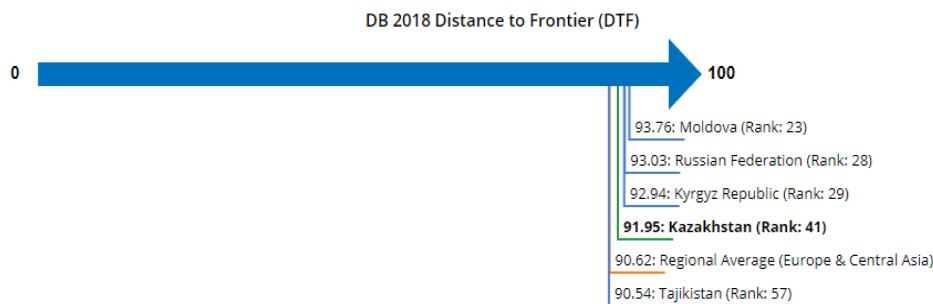


Figure 1 – Starting a Business in Kazakhstan and comparator economies (World bank)

Beginning in 2014, the World Bank rating has been calculated based on the DTF measure – the distance of each economy to the “frontier,” which represents the best performance observed on each indicator across all economies since the 2005 Doing Business sample. An economy’s DTF ranges on a scale from 0-100 with 0 representing

the lowest performance and 100 representing the frontier.

New Zealand and Singapore once again presented the best results, with DTF measured at 86.55 and 84.57, respectively.

Compiled for the 15th year, the Doing Business report examines regulatory standards

that either facilitate or hinder the development of business throughout the entire cycle of activities. It assesses aspects of doing business as such starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, trading across borders, paying taxes, enforcing contracts and resolving insolvency.

Many governments realizing the high-risk nature of SMEs have tried to bridge the valley of death to improve capacity of SMEs. They see the financial

gap (valley of death) as a tricky task and introduce policies to manage the financial risks SMEs face with an aim to help them cross the valley of death.

To improve the financial constraints faced by SMEs, establishment of specialized development banks to offer special type of loan could be a part of government policies. But still, even though the problem (financial or not) is well-documented, the solution can be far from clear if the company doesn't cope with qualified and serious staff, as there is a huge risk of discontinuity of operations.

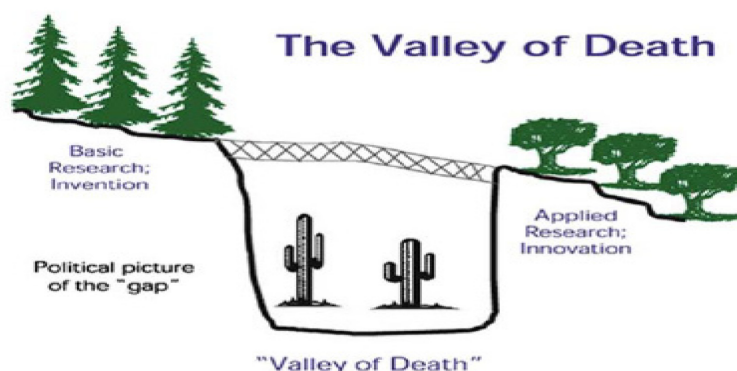


Figure 2 – Valley of death faced by SME

Figure 1 reveals the valley of death i.e. the funding gap, the restriction in accessing the required capital to grow the business by all SMEs. The period before a company is capable of generating revenues is referred to as the valley of death, which makes it difficult to get the financing required to grow a business in the start-up period (Ehlers V.J., 1998:11)

On the other hand, the attribute risk refers to the certainty that the innovation project will achieve the expected results (Sitkin S.B., 1992:13). Innovation is characterized as an uncertain and risky process (Ozer M., 2007:1373; Verworn, 2009:1573). Moreover, risk has consistently been shown to be important in organizational decision-making (Greve H.R., 1998:60). It is the fact, that it is easier to invest in a risk – free projects instead of living in suspense. A well-known problem with loans is that banks are often risk averse and prefer physical assets to secure the loan in case of bankruptcy (Hall B.H., 2002:38); not all SMEs have these assets. That is why, in most cases the government is the main initiator of SME financing, whereas it required some reporting from the side of consumers of this financing. Examples are the European Framework Programs and the Small Business Innovation Research (SBIR) program

in the United States. Although governments often ask little in return, SMEs can experience a high administrative burden in obtaining these funds (Barajas A., 2012:921; Faber J., 2016:416).

As for financing SME in Kazakhstan, according to the State Program of Financing Small and Medium Business in Manufacturing Industry there is general mechanism for the implementation of this program.

Regarding to the figure 3, the given process provide information about mechanism for the implementation of the state program on financing small and medium-sized businesses in the manufacturing industry. During this process, National Managing Holding “Baiterek” allocates funds and reports in the Government of the Republic of Kazakhstan, DAMU controls and monitors the development of targeted use of funds, monitors the financial condition of banks, monitors the payment discipline of banks, reports to the National Managing Holding “Baiterek”. Addition to that, in its turn, the second tier banks accept credit risk, recruits and finances the borrower according to the criteria of the agreement, Reports to the fund, implements on financing monitors of borrowers. Finally, SME receives preferential financing, implements projects

in the manufacturing industry, because they create more jobs and pay higher taxes. However, it doesn't mean that benefits are also given in the taxation

of SMEs. Because in this way many governments invest in R&D by providing subsidies or tax benefits to innovative SMEs (Nooteboom B., 2008:26).

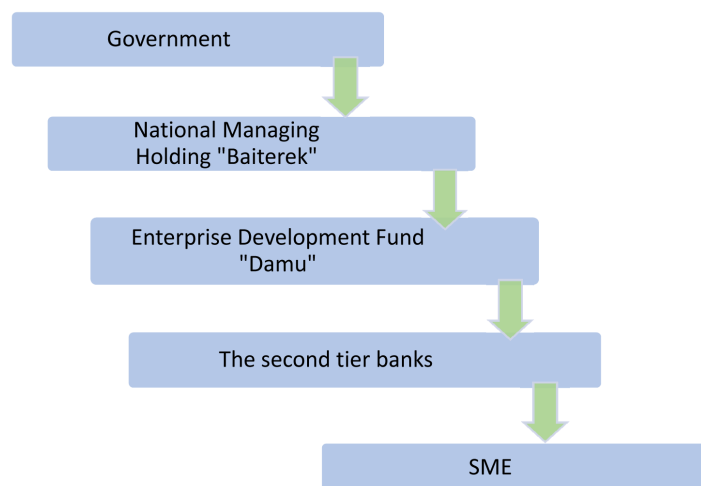


Figure 3 – General mechanism program implementation of State Program of financing small and medium business in manufacturing industry (<https://www.baiterek.gov.kz/ru/programs/msb-program-support/> compiled by the authors on the basis of data of National Managing Holding “Baiterek”)

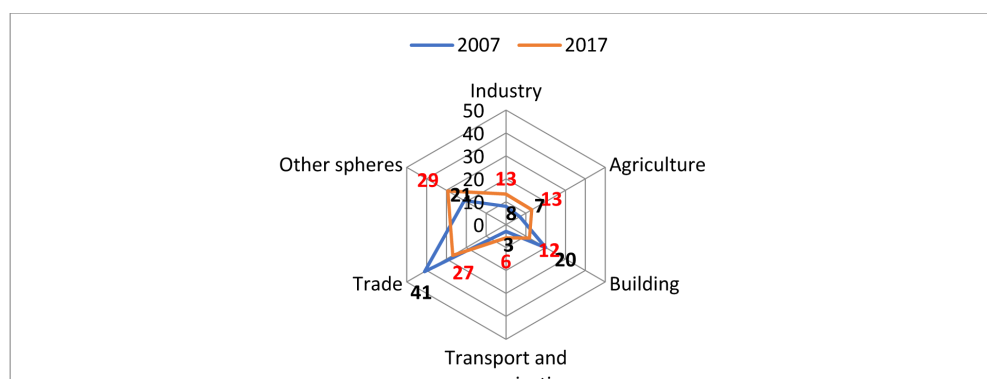


Figure 4 – Credits of second-tier banks to small business entities by spheres

At the result of realizing the State Program of financing small and medium business in manufacturing industry, according to data of figure it is clearly seen, that financing of subjects of SME has increased to 85% for the period from 2007 to 2017. Furthermore, a significant amount of loans issued is accounted for by trade (share in the total amount – 26,8%), industry (13.3%) and agriculture (13%). Besides, comparing with 2007, the share of loans in such sectors as trade and building has decreased for 14% and 8% respectively, while the share of lending for transport and communications has grown to 3%, industry to 5%, agriculture to 6%,

and growth of crediting of other spheres has shown 8% growth for ten-year period.

An external factors identified by Keizer J. (2002:7), which influence innovation in the SME sector and its resulting possibilities, are thus a derivative of the attractiveness of the region where the companies operate. In this way, one of the key factors of acquiring financing is attractiveness of the region. From the perspective of the process of innovation, the region is particularly important for SMEs (Cooke P., 2000:17) because such enterprises are usually strongly integrated; thus, the factors determining their innovativeness are

dependent on the nature of the region (Radas S., 2009:441). The graph (fig.5) below aims to

demonstrate the total number of active SME in the 16 states of Kazakhstan.

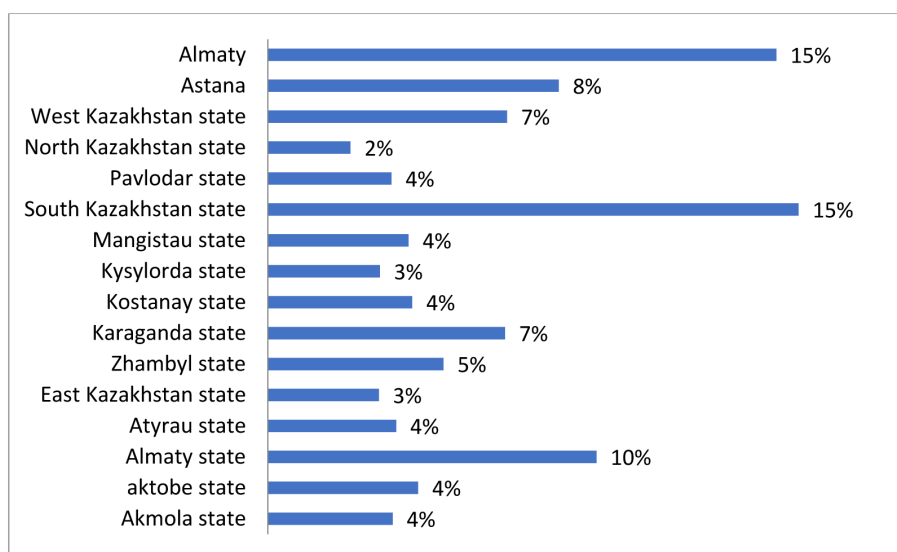


Figure 5 – Share of SMEs in operation by regional state

It is clear, that such areas as South Kazakhstan state, Almaty state and Almaty takes the highest share of active SME with percentage more than 10% for everyone. There is in the middle position West Kazakhstan state, Karaganda state with percentage of 7% and Astana (8%). By the contrast, other states take about 5% share in the total amount due to the lack of industry in that areas.

Conclusion

Innovation is an essential element of business processes. The theme around innovation is still complex and allows a lot of interpretations and adaptations. The main causes that impede the investment in technology of small and medium-sized enterprises are, above all, financial problems.

In Kazakhstan, policies related to SME development, program design, prioritization, and sequencing are evaluated using mainly output-based indicators and insubstantial information on 53 impact. M&E systems are fragmented across implementing agencies. Rigorous impact evaluations that measure the true effect of programs have not yet been conducted, though they provide critical insight into the prioritization, design, re-design and implementation of government programs. In addition existing departments doing M&E are

uncoordinated and do not use robust frameworks. A robust M&E framework ensuring evidence informed policies needs to be in place, resulting in more effective program implementation. This is particularly important in SME support programs which deal with complex market systems.

There is already a think-tank depending on the Ministry of National Economy, the Economic and Research Institute (ERI), with a mandate and structure to evaluate PSD policies in general. ERI carries out already an extensive firm survey and is implementing investment climate assessments across different regions of the country. This institution is, therefore, already mandated with the role of evaluation of these policies, and support will be provided for increased methodological capacity to implement surveys, impact evaluation methods, as well as better institutional design to guarantee independence and cooperation with government agencies and the national statistical agency.

At present, credible third-party monitoring mechanisms are not available to SMEs. This limits private sector-government dialogue around competitiveness and reduces policy transparency since no mechanism for feedback and inputs coming directly from SMEs about the services and policies that impact them are established. Similarly, real-time feedback loops are not in place and available

to high level policy makers, hindering effective adjustments and functioning of programs under implementation.

To sum up, the government of Kazakhstan takes measures for innovative development of SME in the aim of improvement economic growth of the country. However, it consists some restrictions,

which connected with financing. Because, financing SMEs involves high risks for commercial banks. Moreover, SMEs do not have a sufficient volume of liquid collateral and in order to solve all these problems, it is necessary all-round supporting financing of SME taking into account foreign experience.

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