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REGIONAL DEVELOPMENT OF SMALL AND MIDSIZE BUSINESSES IN THE CONDITIONS OF FORMING OF INNOVATIVE ECONOMY OF KAZAKHSTAN: A CASE STUDY

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**Abstract.** The article is devoted to the development of small and medium-sized enterprises (SMEs) in Kazakhstan which is recognized worldwide as an effective lever for economic growth of the country. It examines the current status and scope of activity of this business in Kazakhstan, as well as the possibility of its development in the future. It was found that the level of SMEs development in the low country, and the current structure of employment of its subjects are far from perfect. The causes of structural deformation of SMEs in business which is related to its lack of development in the industrial sector; the lack of its subjects in the manufacture of certain sectors define the intensive development of the economy. On the example of developed countries, where SMEs take the largest share in the production of the gross domestic product, the substantiation of the possibility of transformation of the business into a major sector of the economy in terms of its development on an innovative basis. Particular attention is paid to the SMEs creation around new innovative enterprises using the outsourcing system, franchising, and other business cooperation. At the same time recommendations on the use of the state to support mechanism to accelerate the growth of SMEs in the industrial sector and fully implement its technical industrial and socio-economic potential.

**Keywords:** small and medium enterprises; investment; innovation; cluster; outsourcing; franchising mechanism; localization and consulting

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## 1. Introduction

In the modern period, the Republic of Kazakhstan, despite the negative impact of the global crisis, continues to hold the positive development of its economy (Caurkubule et al., 2020). A role in the growth of the economy has played entrepreneurship, the development of which manifested themselves in recent years, some trends of improvement, especially in its forms, both small and medium businesses. Usually entrepreneurial activity in the sphere of production and services made within the enterprise as a separate entity of market relations, regardless of its size, in which they are divided into small, medium and large (Wiklund & Shepherd, 2013). Despite some growth in the number of enterprises, SMEs have not received the expected proper development, its contribution to the scale of the country's economy remains insignificant. Therefore, to study the state of SMEs, the conditions of its formation and functioning in Kazakhstan is an important problem whose solution is crucial for the successful implementation of the plan of the second five-year state program of forced industrial-innovative development for 2015-2019 years (The state program of industrial-innovative development of Kazakhstan for 2015-2019, 2014). In developed countries, the SME market economy is a major sector of the economy which produces a significant portion of their gross domestic product. In Kazakhstan, the share of SMEs in this product is low due to the fact that up to the end has not worked out a state program of support and assistance for the development of this business, it was half-hearted, and did not give the desired result. SMEs in the pursuit of a temporary benefit to establish and develop their business are the most commercial and intermediary business, rather than in production. As a result, the structure of employment in the prevailing SMEs became deformed in business. It shows that the mechanism of organizational and economic impact of the state at choice by subjects of SME types of an entrepreneurship and the sphere of its maintaining, the main signs and its differences from other forms of economic activity are insufficiently studied and is a gap in scientific research. Small and medium business is not some special kind of management, but the integral part of economic activity regulated by the state in order to create the necessary conditions for its implementation. For this type of business is needed, as well as other kinds of business, the high level of management with appropriate attributes that should be created by the state for the normal functioning of its subjects in the economic environment which also remains not studied enough in research. Proceeding from the above, in the article is given an attempt to fill this gap in a certain extent. According to this aim, it provides a theoretical rationale solution for the creation and development of SMEs as well as increasing its role in the development of the innovation-based economy. In this regard, the authors consider the indisputable advantages of SMEs, the need and the opportunity to better use in the industrial sector, concentrating its business on the major companies in this sector with their relationship lighting (Namagembe et al., 2019).

The results and findings of scientific research can be used in determining the direction and scope of the measures taken into account and implemented by the state innovation policy. The proposals put forward in promoting effective partnerships between small and medium businesses and large business — this would make the policy comprehensive and intensify their activities. This will positively affect the development of the production sector of the country, carrying out modernization of its key sectors to expand the range of manufactured and development of new products based on the establishment of interaction between small, medium and large businesses. The conceptual basis of the relationship of these types of businesses are represented more specifically on the example of the industry, in particular, the engineering industry, and may be of interest to self-regulating business institutions not only in Kazakhstan but also abroad.

## 2. Materials and Methods

The creation and development of small and medium-sized businesses play a major role in economic development and addressing its social and economic problems. This type of business has own characteristics associated with its benefits and value in securing employment and market saturation of domestic goods and services. Given this characteristic, the basis of the SME study put the economic analysis method to its ways to study the role and

importance of SMEs, the disclosure of its advantages and conditions of operation in the economic environment, determine the cause of the uneven development of small and medium-sized businesses in the manufacturing and non-manufacturing sectors. The economic analysis shows that the state support and help stimulating the impact of the state at choice by its subjects of a specific type of an entrepreneurship and the sphere of its development for SMEs is of a great importance. In terms of methodology, it is paramount to reveal the advantages of small and medium-sized businesses, and it differs from the other types of management and role in improving the business structure in the economy. Small and medium business is a mobile and productive sector of the economy; in some countries, this type of business is a predominant part of its structure and creates a significant share of the gross domestic product. The implementation of the SMEs in business has such advantages as efficiency, flexibility, rapid adaptability to changing market conditions, willingness to take risks. Using a comparative analysis with statistical and analytical data of the Statistical Agency of the Republic of Kazakhstan revealed a number of reasons hindering the development of SMEs, suggest measures to eliminate them (Small and medium enterprises in the Republic of Kazakhstan, 2014). However, this made it possible to justify the need to attract more SMEs in the manufacturing sector and focus their business on new innovative enterprises created in some sectors of the economy of Kazakhstan. SMEs will learn a particular innovation faster than large enterprises, will initiate the innovational rise of these companies, and release their innovative products (Pierluigi & Paolo, 2011).

The described methodological approach to the problem of formation and development of SMEs in the industrial sector provides a clearly defined nature of specific ways of development in this business field, assist it for the favorable functioning state aid, and have support from the large enterprises.

### **3. Literature Review**

Study of SMEs devoted a lot of domestic and foreign research works, revealing its essence and operating conditions in the economic environment. They are the detailed definition of SMEs using the adopted legislative and normative acts regulating its activity in relation to the conditions of the country. In the Business Code of the Republic of Kazakhstan is fully considered the small and medium business which is used by the authors as a methodological basis for the study along with the works of classical economics, domestic and foreign scientists economists (Entrepreneurial Code of the Republic of Kazakhstan, 2015). The Code provides a definition of entrepreneurship as an initiative independent activity of citizens and their associations, aimed at making a profit, carried out at their own risk and on the financial responsibility (Jenkins, 2012). A similar definition of entrepreneurship is accepted in the international practice (Cavusgil, Knight & Reisenberger, 2013). The interrelation of the regulatory base, financial and credit support, and specific projects of entrepreneurs (taking into account interests of both the states and entrepreneurs) is worked conceptually out. Regarding small and medium business, specific actions for many directions for improvement of an economic environment of its functioning and the mechanism of implementation of the state support and help of a business type to it are provided. In the organizational plan of small and medium business in the Code were allowed some omissions at the opinion of the authors.

For the efficient organization of enterprises, SMEs require a high level of organization which provides a system of business development and the provision of its wide range of assistance measures and the protective measures it against unfair competition. The developed world has an extensive network of not only the public but also of public associations designed to promote the development of SMEs. In the US there is the Small Business Administration, in Japan - Office for Small and Medium-Sized Enterprises, in Saudi Arabia - Saudi House of Consulting Services, and in Russia - the State Committee for Support and Development of Small Businesses, in regions of the country - the Department of Support of Small Business; their function is to coordinate and help small businesses by the government. Activities of the Office of the Affairs of small and medium enterprises in Japan are built under the motto of the creation of SMEs in business environment in which their shortcomings have had a minimal effect, and the maximum benefits of exercise (Rosin, 1993; Martynova et al., 2017). In Kazakhstan

a course taken on the accelerated development of SMEs and its transformation into the dominant economy, would lead borrowing of foreign experience to shape and implement the correct policy of the Government in relation to this business. Created in Kazakhstan SMEs as "Union of Entrepreneurs of Kazakhstan", "Entrepreneurship Development Fund" due to the lack of powers of the authorities cannot fully carry out their functions in support of SMEs. In the domestic literature on the development of SMEs was not raised the question of the need for state bodies, local government regulation, and support of the business entities. The need to create such a body in the form of an independent agency or department in the Ministry of National Economy, Ministry of Industry and Innovative Development of the Republic of Kazakhstan Government dictated the course of the transformation of SMEs in a major sector of the economy.

#### **4. Results**

Small and medium-sized businesses are the necessary elements of the market economy which allows solving important socio-economic problems in society (Martynova, 2018). This kind of business is a mobile and productive sector of the economy because of its undeniable advantages associated with its efficiency, flexibility and fast adaptability to changing market conditions. It is the main generator of innovative processes and dynamically responds to the changing consumption patterns (Zamanbekov, 2014a).

This is confirmed by the experience of developed countries, where small and medium business has a strong position in the development of the national economy, with the share of GDP from 50% to 80%. In Kazakhstan, the share of this business in 2017 amounted to 28% of GDP according to the task in 2050 it will be increased to 50% (Nazarbaev, 2012). To solve this problem in the country today are already opened up the new horizons for the accelerated growth of small and medium-sized businesses, and expanding the scope of activities in connection with the transition of the economy to a qualitatively new level of development based on the use of innovation (Zamanbekov, 2014b). The first small and medium business in Kazakhstan appeared on a cooperative basis in 1992, when it became carried out the privatization and denationalization process of transition to a market economy. At that time, the number of such enterprises was 34506. In subsequent years, their number is reduced, then increased to a tipping point in 2000, when the economy began to develop steadily. However, for the reasons of both objective and subjective associated with high taxes, lack of funds, violation of the rights and interests of businesses, the bureaucratic intervention of the local authorities, the growth of the small and medium business is very slow.

To improve the situation of small and medium-sized businesses and eliminate existing barriers to its development in the country it was conducted a system complex of protective measures of entrepreneurship including preventive, special and managerial measures. At the same time, from the moment of the small and medium-sized businesses formation till present, was accepted six state programs on its development among which the most important is "The Road Map of Business - 2020". Implementing these programs in the development of small and medium-sized businesses, the past decade, where the business got a significant growth, stands out. In 2014, the number of registered small and medium business enterprises increased compared with 2005 by 2.2 times, and with 2010 - 138.3% including the number of active small and medium-sized enterprises respectively by 182.8% and 140.1 %. The share of small and medium-sized enterprises in the production of gross domestic product amounted to 10.5% in 2005, in 2010 - 20.6% and in 2014 - 26.2%.

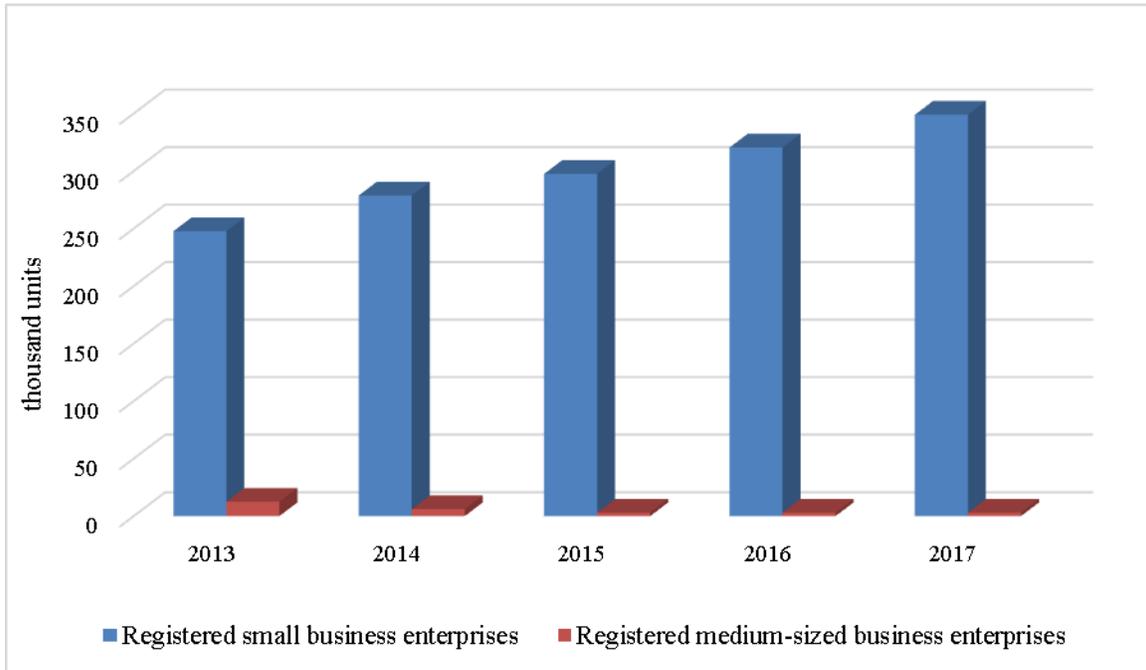
The main object of the study is the small and medium-sized businesses which operate as private enterprises without a legal entity that is governed by the law of Kazakhstan "On private entrepreneurship". The subjects of this enterprise produced the bulk of the product by all small and medium-sized businesses. For example, the share of small and medium enterprises in the total volume of production by all the subjects of small and medium businesses accounted for 81,6% in 2013, in 2017 - 88.4%. The remaining part of the product accounts for individual enterprise and the peasant (farmer's) economy. The transformation of small and medium-sized

businesses in the largest sector of the economy is highly dependent on the level of SMEs that in the course of its operation have the opportunity to grow and be the basis for the formation of large organizational and economic structures, increasing the number of existing large companies, as well as to develop innovative business as external coauthors conducted such scientific and technical programs the by companies to promote the creation of the country's innovation economy. The data on the development of SMEs are given in Table 1 and Figure 1.

Table 1 shows the number of enterprises that are actively engaged in the entrepreneurial activity for the period under review, and has increased significantly, but its growth has slowed over the past five years. The number of medium-sized business enterprises even reduced for 68,7%. Although the output of SMEs increased by 2,5 times during this period by 2.1 times, ensuring the growth of the share of small and medium-sized businesses in the GDP due to their products.

**Table 1.** Dynamics of development of small and medium-sized business enterprises in 2013-2017 (%)

№	Primary factors	Units of measurement	Years					2017 year in % comparing to 2013
			2013	2014	2015	2016	2017	
1.	<b>Registered enterprises of small business</b>	thousands of units	247,7	278,8	297,6	320,5	349,0	140,7
	including:							
	Active small businesses enterprises	thousands of units	61,1	278,9	297,6	320,5	349,0	3.4 times
	Production of small business enterprises	billions of US dollars	12,4	74,8	175,8	189,6	208,7	4 times
	The number of employed in small businesses enterprises	thousands of people	527,5	51,7	55,5	39,4	49,8	2,5 times
2.	<b>Registered enterprises of medium-sized businesses</b>	thousands of units	12,6	6,1	3,1	3,1	3,0	24,0
	including:							
	Active medium-sized enterprises	thousands of units	8,3	4,6	2,9	2,7	2,6	31,3
	Production of medium-sized business enterprises	billions of US dollars	37,2	37,5	16,7	10,1	12,2	32,8
	The number of employed in medium-sized enterprises	thousands of people	711,8	516,5	351,8	353,0	361,4	51,0
Source: Small and medium enterprises in the Republic of Kazakhstan / Statistical Yearbook. - Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.								



**Figure 1.** Number of small and medium-sized enterprises in 2013-2017. Source: Small and medium enterprises in the Republic of Kazakhstan. Statistical Yearbook. Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.

The Concept of the draft of the Entrepreneurial Code is developed for fixing positive tendencies in the growth of small and medium business and creation in the country of favorable conditions for its further development. After its statement, it will serve as an initial platform of systematization of the entrepreneurial legislation and elimination of gaps in legal regulation of an entrepreneurship. Provisions of this Concept are developed adequately developing conditions of development of Kazakhstan during the modern period and its implementation to provide the implementation of the program tasks containing in "Strategy "Kazakhstan - 2050".

With respect thereto the President of the Republic of Kazakhstan in the Message to the people of Kazakhstan, "Kazakhstan way – 2050: the single purpose, single interests, single future", specified that "It is necessary to increase a tendency of the favorable conditions which developed in the country for business implementation, to create effective mechanisms of the methodical help to the beginning businessmen and to develop this business around the new innovative entities". Follows from this task that today it is necessary to apply the innovative approach providing a new view to conditions of its activities that development of this business was adequate to the process of forming and functioning in the country of industrial economy of the innovative type to problems of development of SMEs. In this regard for improvement of an economic environment of the functioning SMEs, it is necessary to make purposeful changes in the process of use of market regulators, especially their types as credit and tax systems, to review at the same time methodical approaches to determination of a taxation basis, having established a threshold of the most admissible total tax withdrawals and obligatory payments at such possible level which provides incentives to development of small and medium business first of all in the production sphere, that is the created new innovative entities in the country.

In modern conditions when the country started implementation of a task of the second five-year period of industrial and innovative development, activities activation of SMEs in combination with the large-scale production concentrated on the large and largest enterprises of the industry is important. These entities thanks to benefits of large-scale production constitute a basis of the industrial system in the country, being "the bearing

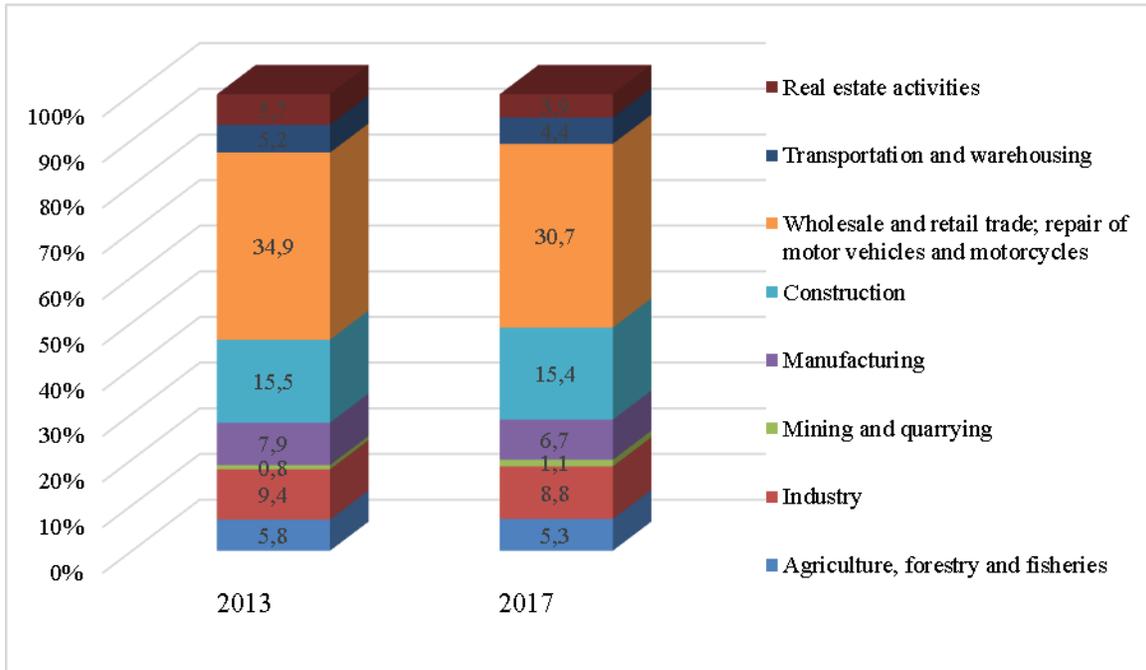
design" its economies. But efficiency of their activities is directly connected with expansion around itself network of SMEs, specializing in the production of individual parts of the final product, from the issue of which they are released due to the small amount and get an opportunity to improve productivity, reduce production costs and increase the output of their final product (Small and medium enterprises in the Republic of Kazakhstan, 2015).

The foreign industrially developed countries which realized the concept of the innovative approach of economy development on an innovative basis, managed for the short historical period of time to create the effective national innovative systems including the mechanisms of interaction of the state, business, science and education, and to achieve the increase in science intensity of GDP. With respect thereto Kazakhstan for ensuring sustainable development of national economy on the basis of the implementable program of the forced industrial and innovative development it is necessary to use the experience of foreign countries in the creation of the small innovative enterprises and rendering the state support to them with its tools. Today it is important for it doubly in connection with a small number of the subjects of small and medium business occupied in industries and their absence in some industries, including mechanical engineering where they have the most optimum conditions for participation in the getting solution of tasks on development of scientific and technical progress, and implementation of its achievements.

Now in the country, the greatest number of the acting subjects of small-scale business enterprises perform the activities in the sphere of trade and transport, in agricultural industry, in production and service trade, and their smallest number are engaged in the industry and construction, in other industries of the non-productive sphere (see Table 2 and Figure 2).

**Table 2.** Structure of production of enterprises and number of employment in SMEs in the Republic of Kazakhstan by types of economic activity in 2013 and 2017, %

№	The list of industries	The number of SMEs		The production volume of SMEs		The number of employed in SMEs	
		2013 year	2017 year	2013 year	2017 year	2013 year	2017 year
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
including:							
1.	Agriculture, forestry and fisheries	5,8	5,3	3,7	3,3	7,1	6,3
2.	Industry:	9,4	8,8	20,9	21,9	17,2	16,1
	- Mining and quarrying;	0,8	1,1	3,7	7,6	1,8	1,8
	- Manufacturing.	7,9	6,7	14,3	12,2	12,5	12,1
3.	Construction	15,5	15,4	23,4	19,1	16,1	15,1
4.	Wholesale and retail trade; repair of motor vehicles and motorcycles	34,9	30,7	21,6	23,7	18,8	21,2
5.	Transportation and warehousing	5,2	4,4	6,4	6,2	5,9	5,5
6.	Real estate activities	5,7	3,9	2,7	2,9	5,0	4,5
Source: Small and medium enterprises in the Republic of Kazakhstan / Statistical Yearbook. - Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.							



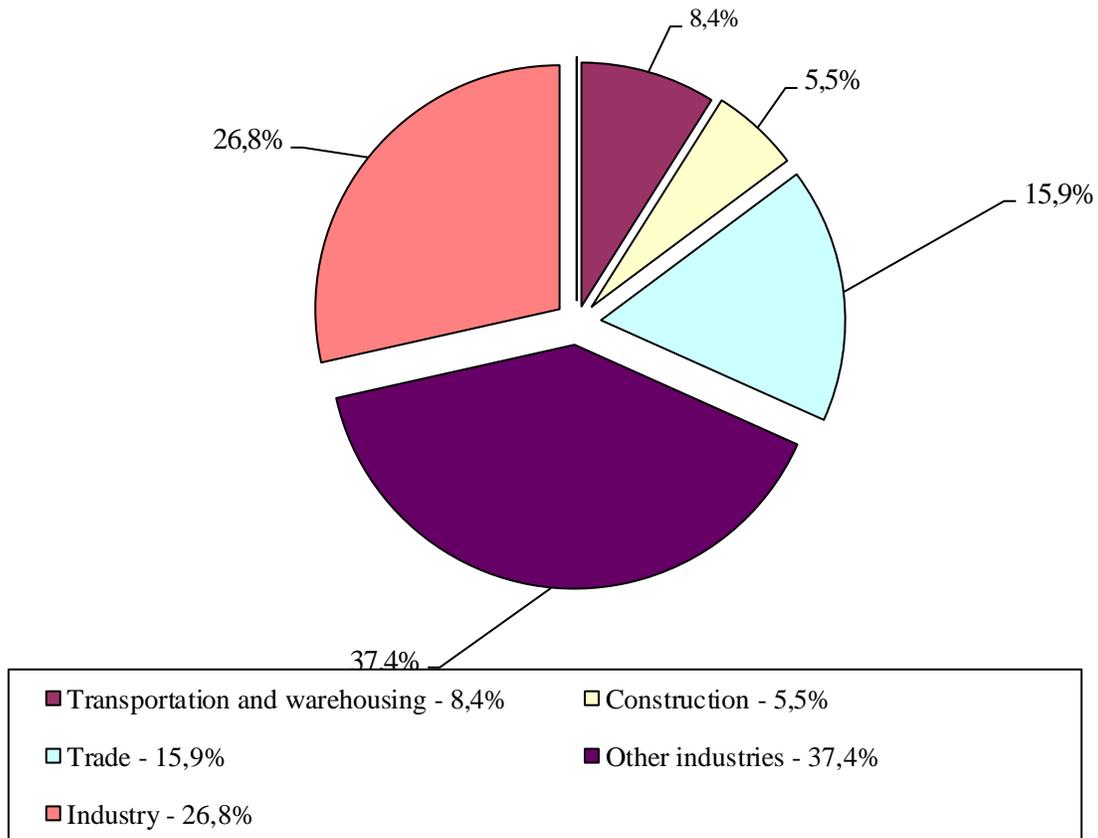
**Figure 2.** Number of small and medium-sized enterprises by industry. Source: Small and medium enterprises in the Republic of Kazakhstan. Statistical Yearbook. Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.

As can be seen from Table 2, the current structure of employment of small and medium businesses in the industrial and commercial activity is far from perfect and does not meet the installations of the strategy "Kazakhstan - 2050" which provides for the introduction of the science-intensive economic model to increase the share of non-oil products in Kazakhstan export potential to 70% (Nazarbaev, 2012). In this connection, it is necessary to improve the system of state regulation of business to strengthen state influence on the existing structure of SMEs. For this purpose, first of all, need to give priority supporting the business engaged in the industry to intensify its involvement with big business in the production of end products based on the development of new technology, creation, and development of knowledge-intensive industries, etc. The importance is the provision of effective assistance to it by the state to create a system of cooperation (franchising) between SMEs and large business, as well as the legal framework for its implementation (Villa, 2011). This will speed up the implementation of economic restructuring and improve its branch structure.

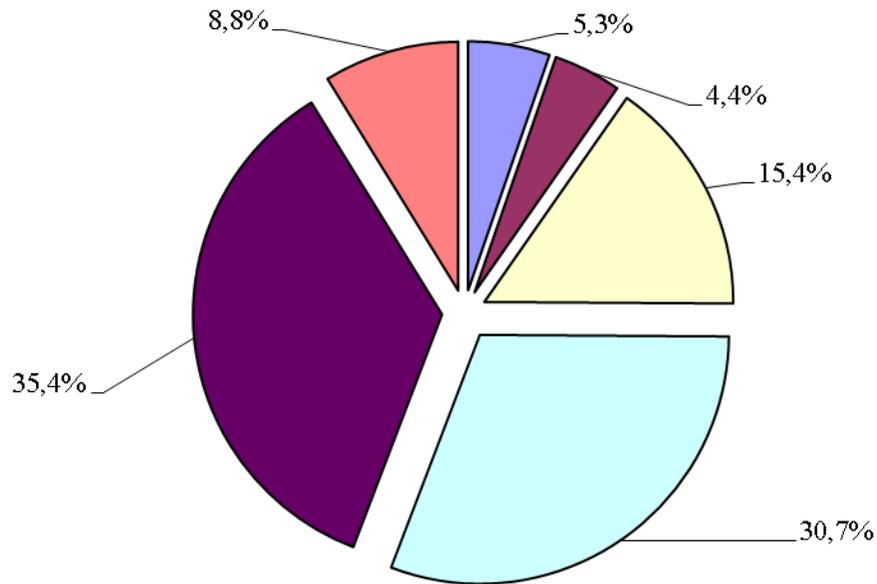
Figure 3 shows the current sectoral structure of the economy with the gross domestic product which is an aggregate measure of production and in its structural slice reflects the share of the production of each sector of the economy. Industry accounts for just 27.6% in the product, and in the industrial production of the extractive industry occupies 38,4%, with an downward trend and nevertheless remain as the basis for the development of the country's economy to the nearest period. Products of this type of industry continue occupying almost 90% of the country's total exports, while the share of animal and vegetable products accounts for 4%, chemical industry – 4%, machinery and equipment - 1%.

In the commodity structure of export, the high-tech products are virtually non-existent. Therefore, the priority development of metallurgy and metalworking, electrical engineering, chemical industry, mechanical engineering, in the country is aimed at implementation of the innovative industrial economy, and improve on this basis its branch structure. Among the challenges faced by these industries for their development, the most important is to create innovative SMEs, whose activity is of great importance in building up the release of product innovation

and raising the technical level of production in other sectors, especially in manufacturing which is very important for its restructuring. Figure 4 and Figure 5 shows the structure of SMEs and the volume of their production by economic activity in 2014 as a percentage.

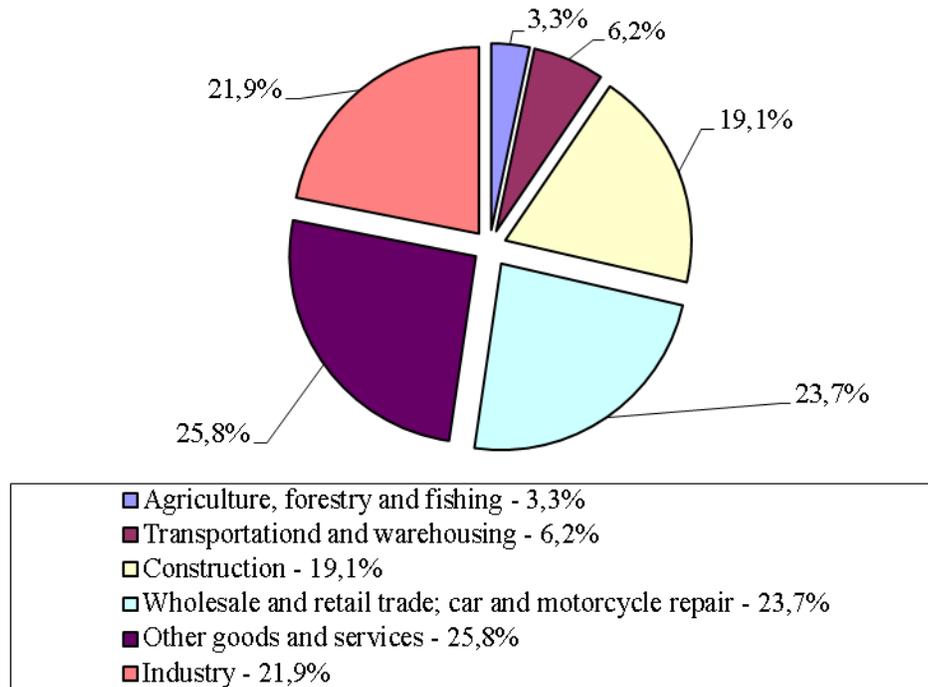


**Figure 3.** The share of manufacturing industries in the gross domestic product of the Republic of Kazakhstan in 2017,%. Source: Small and medium enterprises in the Republic of Kazakhstan / Statistical Yearbook. - Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.



- Agriculture, forestry and fishing - 5,3%
- Transportation and warehousing - 4,4%
- Construction - 15,4%
- Wholesale and retail trade; car and motorcycle repair - 30,7%
- Other goods and services - 35,4%
- Industry - 8,8%

**Figure 4.** Structure of enterprises by economic activity of SMEs in the Republic of Kazakhstan in 2017,%. Source: Small and medium enterprises in the Republic of Kazakhstan / Statistical Yearbook. - Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.



**Figure 5.** The structure of SMEs production by economic activity in the Republic of Kazakhstan in 2017,%. Source: Small and medium enterprises in the Republic of Kazakhstan / Statistical Yearbook. - Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.

Figure 4 and 5 shows that the largest number of active of SMEs account for wholesale and retail trade, repair of motor vehicles and motorcycles, whose share in the total number of enterprises is 30,7%, and the volume of production - 23.7%, in the industry - 9.7% and 25%. Expansion of business activities in the sphere of production is of paramount economic importance since it is created products in this area. In connection with this increase in the number of enterprises engaged in the SMEs production, the output will undoubtedly lead to an increase in the proportion of them in the production of the gross domestic product.

Revitalization of SMEs in the field of industrial production, particularly in the engineering industries is preferred for the economy because it allows solving the problem of improving the structure of employment, ensuring the work of the working population, and the decrease in the level of monopolization of production, etc (Tukkel, 2002). In connection with this state to activate the processes of creation and development of SMEs in the engineering industry, it should have the intended effect of the process by using measures such as the provision of state support and aid the formation mechanism of regular exchange of information between small, medium and large businesses, expanding training programs for skilled workers for their production function, creation of industrial design centers, technology transfer, etc (Devos, van Landeghem & Deschoolmeester, 2014). All this will eventually lead to an increase in the share of the business structure in the industrial production which in the future should bring it to the structural level in the developed world.

Among industries, machinery stands out for its special role played in the industrialization of the country through the implementation of process innovation, as well as the release of product innovation and providing its innovative emerging needs of the economy in the country (Zamanbekov, 2013a). The enterprises of this industry are the main core of the production process in the sectors of mining and manufacturing industries. Produced by them every year more, newer, modified vehicles, and equipment with the best qualities to a large extent determine

the level of development of industries based on the economy innovation. Therefore, mechanical engineering in Kazakhstan is now elevated to the priority sectors of the economy and transferred to an intensive, outstripping development path. In this industry, there are more possibilities in the creation of large innovative companies that carry out research and development and engineering works on the issue of innovation and develop on the basis of high-tech business.

The machine-building complex of Kazakhstan includes today more than twenty sectors and sub-sectors, each of which is participating in the state program of industrial-innovative development of the country, update the products, create new techniques and technology designs; some of them borrow advanced foreign technology, modify manufactured products for economic modernization.

Currently, the country's needs in the engineering industry are met by the domestic production is at 20%, the remaining 80% are covered by supplies from foreign countries. According to the forecast volume of production engineering in the short term will continue to grow faster than the projected rate of GDP growth, and the country needs for its products will increasingly be met by domestic production, which will lead to the gradual reduction of its imports.

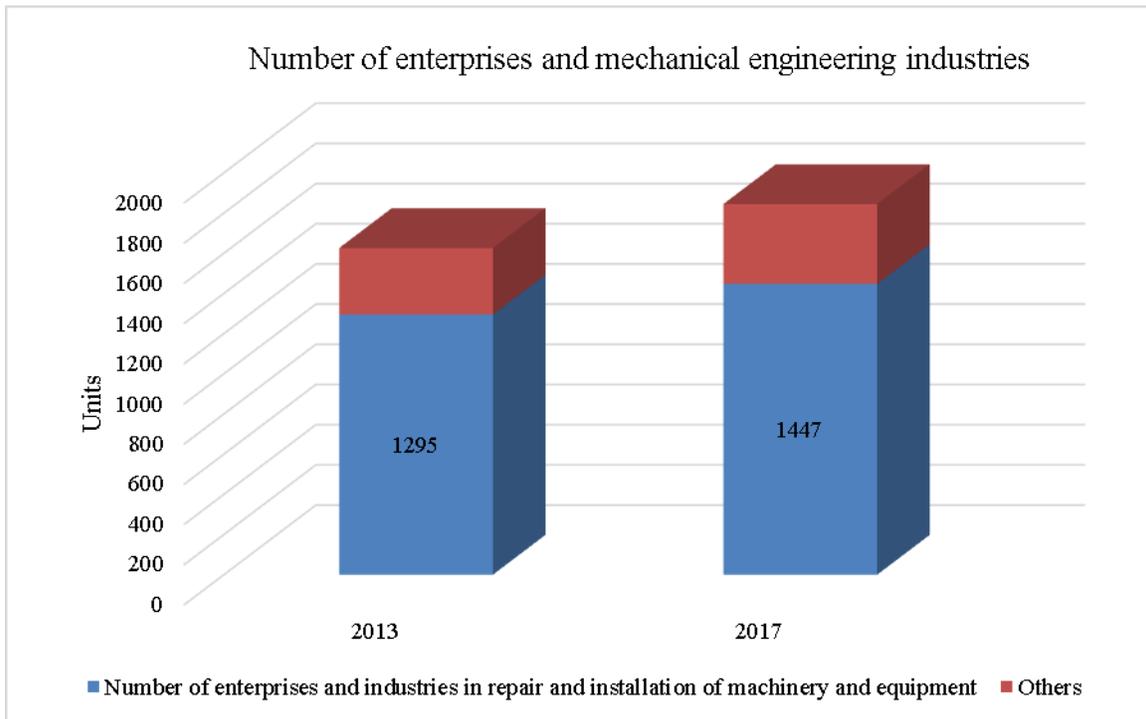
Domestic engineering thanks to the successful implementation of the measures taken for the implementation of state programs for the industrial-innovative development of the country in recent years shows a positive trend of sustained growth.

Machine-building production of the country is available now mostly for large and medium-sized enterprises. According to the data of Statistics Agency of RK, the vast majority of existing companies in this industry are engaged in repair and installation of machinery and equipment. In industries of SMEs engineering is very small, sometimes their number is reduced, due to the suspension in some years of the numerical growth of these enterprises due to the complex structure of products, consisting of machinery, spare parts, and units (see Table 3 and Figure 6).

The data in Table 3 shows that for the period from 2013 to 2017 engineering products decreased to 91,7%. Among the enterprises and mechanical engineering industries, nearly 80% of them are engaged in repair and installation of machinery and equipment which are mainly related to the form of services provided to individuals and legal entities for the maintenance and repair of vehicles, and other types of machines, rather than to final product manufacture or its individual parts.

**Table 3.** Dynamics of indicators of Kazakhstan Engineering Development for 2013-2017

Indicators	Years		
	2013	2017	2017 in % comparing to 2013
Engineering Products, billion USD	5,7	3,0	53,0
The share of mechanical engineering in the total volume of industrial production,%	4,8	4,4	91,7
Number of enterprises and mechanical engineering industries, units.	1626	1845	113,5
including: - The number of enterprises and industries in repair and installation of machinery and equipment units.	1295	1 447	111,7
Source: Small and medium enterprises in the Republic of Kazakhstan. Statistical Yearbook. Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.			



**Figure 6.** Number of enterprises and mechanical engineering industries in 2013 and 2017. Source: Small and medium enterprises in the Republic of Kazakhstan. Statistical Yearbook. Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.

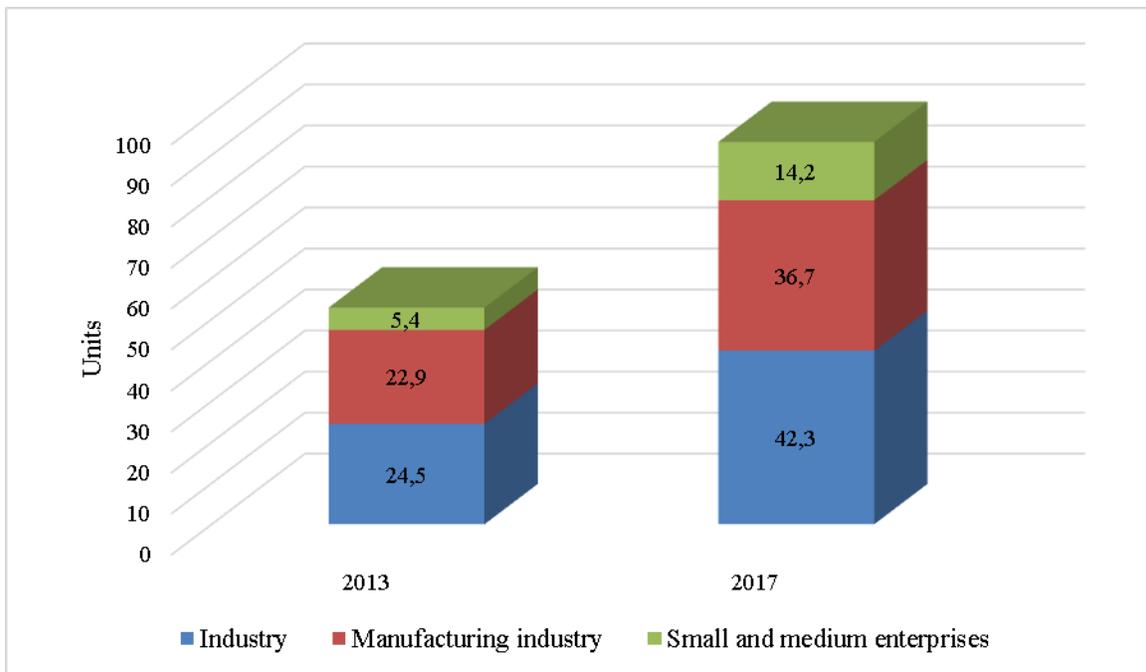
If these enterprises for the manufacture of the products will receive the necessary raw materials (long products, casting a variety of materials from the special procurement enterprises, for example by casting and forging plants, individual parts and units of machines - from the small and medium enterprises, it will lead to a simplification of their structure and improve production efficiency in the sectors of the industry most operating large enterprises that produce in the greater part of its production; small and medium enterprises are very small and their number does not increase. The largest number of active SMEs are engaged in the manufacturing sector of the economy in industries (see Table 4 and Figure 7).

To date, there is still not justifying the old system in Kazakhstan when one industrial company makes almost everything - from processing raw materials to the finished end product. For example, at many machine-building enterprises of the country, there are exist archaic industrial structure that hampers diversification. The industrial structure of these companies are included in addition to the primary (collection and processing) procurement workshops (casting, forging, pressing, cutting and harvesting) and other workshops (instrumental, repair), portions and service economy. Of course, the enterprise becomes difficult to manage and uncompetitive not only on the outside with a production structure, but also in the internal market (Zamanbekov, 2014c).

**Table 4.** Dynamics of active SMEs growth and output of their products in the industrial sector for 2013, 2017

Indicators	2013 year		2017 year		2017 year in % comparing to 2013 year	
	the number of SMEs, thousand of units	production volume, billion USD	the number of SMEs, thousand of units	production volume, billion USD	the number of SMEs, thousand of units	production volume, billion USD
1	2	3	4	5	6	7
Industry – total	24,5	10,6	42,3	14,2	172,7	134
including: manufacturing industry (of them: )	22,9	7,1	36,7	7,6	160,3	112,0
- small and medium enterprises - Individual entrepreneurship	5,4		14,2		262,0	107,0

Source: Small and medium enterprises in the Republic of Kazakhstan. Statistical Yearbook. Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.



**Figure 4.** Dynamics of active SMEs growth in the industrial sector in 2013 and 2017. Source: Small and medium enterprises in the Republic of Kazakhstan. Statistical Yearbook. Astana, NEM Committee on Statistics of Kazakhstan, 2018, 42 p.

As can be seen from the data in table 4, SMEs are concentrated in manufacturing industries, the number of which over the period under review increased by 60.3%, and their output increased 2.5 times. This is due to the development of the process of concentration of production within these enterprises and the transfer of some small enterprises to the category of medium-sized enterprises or individual entrepreneurship, the number of which

increased by 2.6 times. Their production growth amounted to 2.4 times, and they play a decisive role in manufacturing industries, since they account for only 92.8% of the total manufacturing output.

Today, the old system, which is not justifying itself, is still being preserved in Kazakhstan, when one industrial enterprise does almost everything - from processing raw materials to producing finished products. For example, many operating machine-building enterprises of the country have an archaic production structure that impedes the diversification of production. In addition to the main (processing and collection), the production structure of these enterprises includes procurement workshops (foundry, forge, press, cutting and procurement) and other workshops (tool, repair), sections and service farms. Of course, with such a production structure, an enterprise becomes difficult to manage and uncompetitive not only in the external, but also in the domestic market (Zamanbekov, 2014c).

Under these conditions, the operation of SMEs as a "satellite" is essential for the maintenance of those or other needs of enterprises giants and freeing them from some units of farm structures. But government supports this requires for these enterprises, summing up their infrastructure and support also on the part of the backbone enterprises by providing brand products, if necessary, isolation loan on favorable terms, the provision of consulting services and the provision of rental premises, machinery, equipment, etc. These entities at the same time receive an opportunity to gradually narrow the sphere of own business for the benefit of improvement of the economic indicators as a remuneration (Semenova & Loginov, 2008).

Releasing them from inefficient production due to small scale which is possible with the integration of small and medium-sized enterprises specializing in these types of production, i.e., production of individual parts of the final product (nodes, components, containers for packing of finished products, etc.) create favorable conditions for development of small and medium-sized businesses. Midsize businesses can enter into cooperation with large enterprises to complete the operation on the assembly of the finished product and its realization. They can establish cooperative ties with small businesses and for the organization of production and implementation of new products with a distinct quality and high price that gives them stable financial stability (Anshin, 2008).

For the dynamic development of industrial production on an innovative basis, the new horizons in connection with the implementation in the country of the accepted Strategy "Kazakhstan - 2050" in the case of which the small entrepreneurship shall develop deep into and in breadth opens. In the Messages of the last years, the President of the Republic of Kazakhstan specified the importance of building up in the country development of rare-earth metals considering their importance for the knowledge-intensive industries – electronic engineers, the laser equipment, the communication and medical equipment. In these Messages, the Head of state also specified, "Within the second and the subsequent five-years periods till 2050 it is necessary to base industries of mobile and multimedia, nano-space technologies, robotics, genetic engineering, search and discovery of energy of the future" (Nazarbaev, 2012). In these guidelines president justified the provisions of the Strategy "Kazakhstan - 2050", in the course of which Kazakhstan should enter the top 30 developed countries of the world, creating an industrial economy which will gradually be transformed into a post-industrial system with the development of fundamentally different values. In this context, the specialized exhibition "EXPO-2017" held in the capital of Kazakhstan (Astana), and will be of a great importance for the rapid development of the economy in the coming five-year period through a gradual transition of the energy sector on a competitive basis.

At the present stage in the most developed countries of the world dominated by the fifth technological order and manifest elements of the sixth technological order (biotechnology, artificial intelligence redundant system, integrated high-speed vehicles, the network of the business community, etc.) Kazakhstan, based on the positive experience of these countries, started using new technologies as a developing factor of a modern economy and has already made some steps in this direction. In particular, the established industrial and innovation clusters, techno, technology parks, incubators, design offices in the near future will create agglomerates in the four major cities of

the country that will provide the real sector of the economy in one line with global trends, based on a knowledge-based innovation model. Under the influence of these structural elements of the infrastructure there will be created, in the opinion of the authors, Kazakhstan Venture Company which will support the projects implemented mainly by small start-ups in the high-tech sphere. An important role in this area plays a machine-building complex on the extent of which depends on the activation of innovation processes in the economy. Therefore, the creation of this complex network INSME enterprises, especially small innovative firms, is of a great importance for the dynamic development of the engineering industry and increase its role in economic restructuring and transfer it to an innovative path of development.

Currently, the industrial enterprises in Kazakhstan have not properly appreciated all the advantages of innovative development. Therefore, the competitiveness of their products lows in comparison with similar products imported from the foreign countries. In manufacturing, the number of enterprises engaged in the process of creating innovations, made in 2014 year, 1940 units of them with the products and process innovations is 1303 units. Their share in the total number of enterprises was, respectively, 8.1% and 5.4%. The total volume of sales of innovative products in 2014 amounted to 3.239 billion US dollars including industrial production - 2,935 billion US dollars of which in manufacturing - 2,451 billion US dollars. If the share of innovative products and services GPD amounted to 0.7% in 2010, and in 2014 – to 1.5%. In the area of small business, innovation is very effective but in spite of this level of activity is very low due to the small amount of businesses in the industrial sector.

Therefore, to improve the functioning of the economic environment of small firms and optimize the structure of employment of their production and non-production areas, it is necessary to form a multi-level integrated support system of providing them with access to the production-technological, financial, labor and information resources. In this regard, Kazakhstan introduced Unprecedented in the post-program "Business Road Map-2020". The experience of Kazakhstan in support of small and medium-sized businesses, the establishment and improvement of its business measures provided in this program may be of an interest not only to the neighbor but also distant foreign countries.

Within the framework of the program "Business Road Map-2020" drafted Entrepreneurial Code of the Republic of Kazakhstan and upon approval by the authorized body will be set up on entrepreneurship development with several national institutions. In the program "Business Road Map-2020" were introduced new financial instruments: the new system of the loan guarantee, subsidizing of interest rate, provision of service support and training, etc. In Kazakhstan was started to be implemented the project entitled "Business Communications" with new components "Senior Seniors" and "Business Advocacy" by the investment project "Business support". Collectively, these projects are aimed to improve the conditions of activity of enterprise structures and the creation of a favorable climate for the business development in all the types of economy. But the development of small businesses in the engineering industry, the provision of the state support and assistance remains a priority as this type of business is the foundation and guarantee of the rapid economic growth of the country.

In recent years the industry in the country has formed a whole system of the high-tech enterprises for the production of metal products, long products, equipment and machinery well-known foreign brands. For example, in the automotive industry, there are companies for the production of cars "General Electric", "Nissan", "Toyota", "Lada", "Aljeton" and several other models. But these enterprises, specially created in the first five years of SPAIID, have a local content which is still not high with many sets of spare parts, components, and units of machines imported from the foreign countries. For example, road and rail engineering level of localization of domestic production is only 30%. Therefore, enterprises in these sectors play a significant role by the gradually increasing local content in the near future to provide a significant growth in the level of localization. There is a need to develop SMEs by the focusing it on the large machine-building enterprises, passing it through the production of imported import components of the final product.

Under these conditions, the large machine-building enterprises establishing and securing relationships with the SMEs act for it as a supplier of raw materials and as a wholesale customer of its products. It is not excluded dictating their conditions to SMEs, which carries them to a significant risk of loss of independence. Therefore, SMEs not to become too attached to the production scheme of a large company should specialize in small-scale or individual production and pursue its relatively independent policy. But this is only possible on condition that the SMEs will be established as an independent economic entity on the basis of contracts. Establishing cooperation with companies on the basis of cooperation of SMEs is beneficial for large enterprises themselves. Enterprises SMEs, in practice, can be their main generator of innovative processes, providing them with new types of individual components for the production of innovative products in the form of new models of vehicles, machinery, and equipment.

In connection with this important creation in the region through joint efforts of existing companies are large companies to SMEs, making one of them on the machining center, the other - for welding, the third - on the casting or the manufacturer of cutting tools, etc. But such large enterprises as "SemAP" in Semipalatinsk, "Agromashholding" in Kostanay, "Asia Auto" in Ust-Kamenagorsk, instrument-making factory in Kokshetaue, Excavator Plant in Kentae, plant "Electrical Apparatus" in Shymkent, etc., given the specificity of their end products, SMEs can create around themselves for the following types of components, namely, for the production of gears, gear wheels, sprockets, shafts, non-standard metal products, iron castings, followed by machined, stamped metal parts, plastic casings and other products. The relationship with the SMEs should be based on the contract and the subcontract. At the same time to strengthen the business relationship between them is necessary to use a system of cooperation (franchising) which opens up additional opportunities for SMEs to expand their activities and increase its effectiveness.

As known, under the right franchise is providing a large company to another entity, in particular small, the right to sell its products or services under the trademark of a large company. On the one hand, this is the easiest painless way to establish a new venture for those who do not have sufficient business experience and not prone to the commercial risk. On the other - for large companies is the solution to many problems associated with the expansion of sales markets, attracting additional capital savings in the development of its own distribution network, etc., partially shifting the responsibility to small businesses, large companies snapping up smaller than its "core" capital (Gupta, Seetharaman & Raj, 2014).

The most favorable conditions for the development of relations between the large companies and SMEs are cluster enterprises (Zamanbekov, 2013b). The joint development have interrelated them within the cluster association beneficial to both SMEs and large businesses. This happens due to the establishment of cooperation between educational institutions and preparation of the required staff, ensuring access to production infrastructure for their activities, the expansion of cooperation in the field of research collaboration and marketing of goods, attracting investments, etc.

## **5. Discussion**

In sales terms of the forced industrial and innovative development program of the country for 2015-2019 the entities of mechanical engineering issuing new or modified machine and the equipment are the innovative entities now which shall provide with the products upgrade of production in industries of the economy and its transfer to an innovative way of development (Bianchi et al., 1985). For them, the main task is the search for advanced technology and release of a product innovation which raises the competitiveness of the entities. Implementation of the innovative projects provided by the "Map" of industrialization of the country happens on the terms of separation of risks between its participants and active use of the system of outsourcing today. At the same time, the systemically important entities as the project integrator, i.e. the large machine-building enterprise participating the products in the implementation of this project are engaged only in the assembly of an end product, logistics

and sales and all the rest of the production of accessories and the equipment are transferred to the entities of SMEs. Such job specialization between large businesses and SMEs will lead to the growth of the nomenclature of spare parts made in the country for the assembly issued by the domestic plants of machines and to increase in their content in Kazakhstan.

The entities of SMEs establishing relations with the large companies will constantly feel guardianship from their party, speaking in images, they will be under their "wing", and the entrepreneurial opportunities to implement with the greatest efficiency. Expanding the activities, SMEs during the development from some kind of base on which higher "floors" of the functioning economy having high potential production and the considerable amount of production and sales of products will grow. As a result of the entity of SMEs will take gradually the priority place in the economy, and the dominated provision of large enterprises will decrease respectively. But it does not mean that large-scale production to give way in market structure of the small and medium business, losing the benefits. On the contrary, its value will increase as the systemically important entity representing the major market structure which the development multiplies the resource capacity of the country, ensuring its economic safety (Spitsyn, 2004).

Establishment of business relations on the basis of reciprocity between large enterprises and the entities of SMEs give a powerful impulse for their mutual development. Created by the large innovative enterprises of small and medium business will have more opportunity for strengthening of the provision and proliferation, and also to develop steadily in the production sphere, carrying out separate transactions in a technological chain of production of an end product. On this basis, the structural deformation of business activity existing in the country will be overcome that is caused by a low share of these activities in the sphere of industrial production, especially in mechanical engineering. For example in this industry with a general growth of a number of machine-building enterprises for the considered period for 5,5%, the number of the entities on repair and installation of machines and the equipment increased by 3,6%.

By the size, these entities, i.e. by the number of busy workers and output, treat small enterprises are an allowance not only their growth but also medium scale enterprises. In 2014, the volume of produced industrial output amounted to 2.01 million US dollars or 2.1% of total industrial production. At the same time with a core activity, 783 entities were engaged that constitutes about 70% of their total quantity. Therefore among these entities, there are entities which are allocated with rather a large amount of production and are engaged not only in repair and installation of machines and the equipment but also the production of an end product of the industry of mechanical engineering. For example, JSC "Almaty Car-repair Plant" which is engaged along with repair of a railway rolling stock, its nodes, and aggregates, both production and recovery of the spare parts and nodes of the capital equipment, necessary to it, even in the production of the non-standard equipment. Such more or less large enterprises are available in other industries of mechanical engineering, in particular, oil and gas, mining, agricultural, electric equipment and instrument making.

The vast majority of the entities occupied with repair and installation of machines and the equipment began to develop steadily now, broadening the sphere of the activities in connection with the increased requests from the served clients. These entities have a real opportunity, relying on a government assistance and support, to pass into the category of averages and to promote the intensive development of domestic engineering industry. For this purpose in the country were created the favorable conditions on the basis of the made decision by the government about stimulation of the accelerated transition of the small entities to averages with the support of the state are created (Cohen, 2015). They are in the course of the formation by the mid-scale businesses and will have gradually an advantage peculiar to this business.

Medium scale enterprises, as practice shows, flexibly react to the change of a market situation, have high degree of efficiency on change of production engineering procedures, are capable to make competitive products and on

this basis to provide processes of upgrade of technical base of production and growth of its amounts with rather high rates, recovering the investment activity. But the priority in the development of industries remains so far behind the operating large enterprises which around themselves can concentrate the entities of SMEs and enter with them into cooperative communications, having charged them the production of necessary semifinished products, details, nodes and products of separate stages of engineering procedure for release of end products. And large enterprises have at the same time an opportunity to expand the production and to pay more attention and funds for designing and designing of new products, improvement of the production technology, enhancement of control methods of product quality etc.

Creation of stable work of the entities of SMEs in industries of mechanical engineering requires entering into the current legislation of the changes and additions determining legal, economic and social conditions and guarantees of small and medium business in its relations with the large innovative enterprises. Within the legislation, it is necessary to develop the new regulatory legal acts directed to the protection of freedom of business activity of subjects in small, medium and large business, their state support by creation of an efficient incentive system, and also the mechanism of implementation of provisions of the legislation (Anderson et al., 2015).

For the purpose of the increase in effectiveness of activities of subjects of SMEs functioning in the production sphere, it is necessary to make the change to use of such market regulators as credit and tax systems, the insurance directed to the improvement of an economic environment for their development. With respect thereto it is necessary to review methodical approaches to determination of a taxation basis, having established a threshold of the most admissible total tax withdrawals and obligatory payments at such level which provides incentives to the development of small and medium business, first of all in industries.

Most the created entities of SMEs in the production sphere have no at the beginning of the activities of sufficient means for immediate purchase of the real estate necessary to them, property and the equipment. In this regard leasing firms and the companies which mechanism of use of leasing shall be favorable for these entities on acquisition the equipment and compensation of an interest rate for it shall play an important role in production organizations at the entities of SMEs (Toxanova, 1999).

## **Conclusions**

During the modern period in the major industries clusters are created and function. Entry into their structure of the entities of small and medium business united with the large businesses which create for them additional opportunities for expansion of their activities and increase in a number of subjects of this business in the production sphere. Now, Kazakhstan has the sufficient resource potential and favorable conditions for the development of small and medium business and formation by its prevailing structural part of the national economy. But owing to the known reasons of objective and subjective nature not all registered subjects of SMEs are acting, from them only a third (2014 of-73,5%) actively are engaged in business activity in the sphere of commerce and trade (Scott & Regan, 2012).

For the purpose of creating favorable conditions for fruitful activities of subjects of SMEs, it is necessary to enhance the legislation in the direction of strengthening in it the guarantees represented to them and protective measures of their business activity, its barrier from illegal infringement of it and respect by entrepreneurs of generally accepted standards of morality and ethics in the work. There was allowed to use its technical and production and social and economic potential in the practice of managing for ensuring the growth of employment of the population and a market saturation with goods of production and consumer appointment and services.

For improvement of the situation of small and medium business, it is necessary to make also changes in acting legislative and the regulatory legal acts of an entrepreneurship allowing to stir up its activities in the way of development of this business to a large sector of the economy. For this purpose was developed practical approaches to creation and concentration of SMEs around the large innovative enterprises with the use of the system of outsourcing, a franchising and other types of business cooperation are of great importance for expansion of business activity.

Because of the importance of such types of cooperation, there is a significant value for the intensive development of this business in industries that described possibilities of use of cluster consolidation. It will promote creation and development of small and medium business first of all in the production sphere, for the purpose of the increase in its share in the total amount of gross internal output. Therefore the concentration of SMEs around the new innovative entities functioning in industries of Kazakhstan is very important. These entities will receive a powerful boost for the development being under their guardianship and protection that will help them to strengthen the position, to raise and develop quantitatively. The small enterprises which are engaged in repair and installation of machines and the equipment can also establish business relations with the large innovative enterprises on the basis of reciprocity and develop these relations having a real opportunity to enter in the long term category of medium scale enterprises.

Implementation of the provisions provided in conclusions of the article and the measures proposed to accelerate the increase in production in industries by means of the interconnected development of the entities in small, medium and large business, will provide stability and efficiency of their functioning that is very important for forming of the innovative national economy.

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