Problems of Enterprise System Development in the Primorye Territory

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Abstract: This paper deals with the status and development trends of the enterprise system in Primorye Territory. The definition is given to "Enterprise System" and "Entrepreneurial System", used as the main concepts. Systematic approach allows authors to give an integrated assessment of the small business development in the Primorye Territory. The main factors affecting the efficient development of small business are identified based on questioning. The application of the expert assessment method allowed identifying the most significant factors. It is typical that small business development is strongly influenced by external factors, which depend on public policies with respect to concerned type of businesses. The performed analysis of major conventional statistical factors of the small business development, presented in the paper, allows the authors to make conclusion that current development trends in the Enterprise System are not stable and depend on the implementation of major federal projects. The main problem identified in the course of study concludes in completion of the preparation for the APEC summit and toughening the legislation with regard to the retail trade of certain groups of goods. All this can lead to the aggravation of the small business status in the Primorye Territory and the reduction of main factors characterizing its development.

Key words: Entrepreneurship · Primorye Territory · Expert evaluation · Development trends · APEC

INTRODUCTION

In the today's world, tending to integration and globalization, various small enterprises are the first to alert to changes both in the global and the domestic economies of their own countries. In all developed countries, small and family businesses provide jobs for a large percentage of the population, allowing reduction of social strains in times of economic crisis and other negative phenomena. For a long time the main emphasis was made on the study and advancement of large enterprises. However, the importance of development of small and medium-sized businesses is better understood in the present-day economic environment. Due to the political system that existed in our country for 80 years, Russian entrepreneurship was almost completely destroyed and only reforms that emerged in early 90's allowed business to arise and to develop up to present stage. Before starting the campaign on preparation for the APEC summit, small business in the Primorye Territory was mainly focused on commerce. In particular, the automobile business noticeably progressed. This circumstance was stipulated by the proximity of the region to the border and the availability of two major ports, though changes in the sales regulation policy conformably to the vehicles imported from Japan, taking place since 2006, causes a gradual reduction in this business sector. Since 2008, the main reason affecting the development of entrepreneurship in the Primorye Territory was the construction of various facilities in the frameworks of the APEC Summit preparation campaign. The completion of major construction projects, as well as various changes in legislation concerning the tightening of tobacco and alcohol retail sales will probably result in reducing both the total number of small businesses in the Primorye Territory by the end of 2013 and the worsening the general conditions in small business in the region.

A systematic approach to the study of small business allows one to obtain an integrated assessment of its status, to take into account the effect of different factors on its future development and to develop recommendations in order to improve its overall performance.

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When using a systematic approach, it is advisable to use the term "Enterprise System". To clarify the terminology it is necessary to consider different approaches described in the works of various scholars and economists in respect to definition of the term "Entrepreneur" and "Entrepreneurship".

The Main Part: The study of the economic literature allowed us to distinguish three approaches to the definition of the term "Entrepreneurship" [1-3, 5, 6].

The first approach was supported by the following economists: I. Thünen, F. Knight, G. Mangold, A. Smith, *et al.* This approach was based not only on the definition of the entrepreneur as the owner, but also on addiction to take risk in conducting business. The main factor, that differs the entrepreneur from the owner or business owner, is the ability of a person to take a risk for the activities carried out and the results obtained [2].

Supporters of the person-centered approach defined the entrepreneur as a person having certain qualifications needed for entrepreneurship-oriented endeavors to expand markets and obtain the related income. I. Shumper, A. Shapiro, R. Hizrich, *et al.* are the main representatives of this approach [3, 5].

In the definition of "Entrepreneurship", today's economists most frequently are focused on the approach which is based on the management aspect. Typical representatives adhering to this approach are G. Bodo, H. Howard, N.A. Kravchenko and L.G. Milyaeva [2].

Summarizing the foregoing, we can define the entrepreneurship in its present form as a kind of economic activity, which is based on the management of the production factors using an innovative approach aimed at generating income.

In Russia, entrepreneurship is often identified with small business, while in its own way the entrepreneurship is the only part of the business. Business is a more standardized process with established mechanisms of operation and control, while the entrepreneurship is, in the first instance, a persistent intellectual functioning, search for new ideas and approaches to business processes [4]. Entrepreneurship and business can become apparent in an activity of one and the same person, at the meantime the business can exist without entrepreneurship. In our further research we will equate these two terms since it is impossible to separate entrepreneurship and business from each other.

When considering enterprise organizations as a system, one should refer to the main principles which are used in the current literature when applying a systematic approach [7]:

- The integrity principle, allowing one to consider a specific ensemble of entrepreneur organizations as an integral whole.
- Structuring principle, allowing one to analyze the system elements and their relationships within a particular organizational structure. Functioning of the entrepreneurial system will be influenced not so much by the properties of individual enterprises that are part of it, as by the properties of the structure itself.
- Consistency principle, concluding in the fact that a set of objects must have all the characteristics of the system. At that, the characteristics of a system for many of its elements are as follows: the unity of the main goals for all elements, existence of the links between them, in addition, the group of objects should be ordered or organized to some extent.

Thus, considering the principles of a systemic approach when studying entrepreneurial organizations as a totality and systematizing the above mentioned approaches to up-to-date definition of entrepreneurship as small and medium-sized businesses, as well as based on the definition of the term "System" given in the Great Dictionary of Economics, we can define the concepts of "Enterprise System" and " Entrepreneurial System."

Entrepreneurship	System
Entrepreneurship is a form of economic activity based on the management of the production factors using an innovative approach aimed at generating income.	System is a set of elements that are in relationships and connections with each other, which forms a certain integrity and unity [9].
Business is a standardized process with established functioning and management mechanisms [4].	The economic system is a set of interrelated economic elements forming certain integrity and the economic structure of society, as well as developing based on the production, distribution, exchange and goods [8].
unanimity in relations	
consumption of economic	

Enterprise System is a set of inter-related enterprises that are in a relationship with each other, forming a certain integrity and unity and possessing a characteristic sign that binds them together (the geographical localization, the range of activity, the size of the enterprises, availability of cluster attributes, etc.)

Entrepreneurial System is a set of complicated relationships that are formed between the members of entrepreneurial organization whose functional purpose consists in its development.

Any Enterprise System, regardless of its linking sign, can not be isolated from the influence of factors, which together form the environment for activity of concerned system.

When considering the influence of different factors, it should be taken into account that the effect of these factors changes with the development of the economic situation and the social economy. In particular, this phenomenon is the case in developing economies.

The following crucial factors that influence the development and expansion of small business in Primorye Territory were identified based on the polling:

- Availability of engaged funding sources;
- Availability of human resources in the region;
- Level of market competition;
- Level of personal income;
- Level of administrative barriers;
- Support from the public authorities;
- State tax policy.

To determine the effect of each factor on the Enterprise System in Primorye Territory, the authors used the expert assessment method. It is a combination of logical, mathematical and statistical methods and procedures for processing the results of the survey, at that, the results of the survey are the only source of information. Such approach provides a possibility of using intuition, life and professional experiences of the respondents [11]. This method is used when the lack or total absence of information does not allow the use of other resources. The method is based on the survey of several independent experts, for example, to evaluate the risk level or to determine the influence of various factors on the risk level. Then the resulting information is analyzed and used for the intended purpose. The main limitation in its use is the difficulty in choosing the group of experts [12].

The Method Is Performed in Several Stages:

- At the first stage the experts rank various factors according to their importance.

  Ranking is the representation of the objects of examined multitude in descending order of their preference. The opinions derived from experts are expressed in ordinal scale, so the expert determines the importance of one factor over another. The ranks are assigned to factors in decreasing order of importance.

- At the second stage, the consistency of expert assessments is checked.

  Various methods to evaluate the coherence and obtain generalized (averaged) expert opinion have been developed [11].

  To determine the consistency of the experts' opinion, the authors have calculated coefficient of concordance (consistency), i.e. general rank correlation coefficient for a group of five experts.

  For calculations authors have used Kendall's coefficient of concordance [12].

  Kendall's coefficient of concordance W is given by:

$$W = \frac{12S}{n^2\left(m^3 - m\right)}$$

where n is the number of experts;

m is number of factors;

S is a sum of squared deviations of all ordered estimates taken for each object of examination relatively to the average opinion, which is:

$$S = \sum_{i=1}^{m} *\left(\sum_{i=1}^{m} xij - \frac{n*(m+1)}{2} \right)^2$$

where xij is the rank given by i-th expert to j-th object;

n is the number of experts;
m is the number of factors.

Coefficient W ranges from 0 to 1. It's equality to unity means that all of the experts have assigned to objects the same rank. The closer the coefficient W is to zero, the less consistent are the assessments of the experts.

Table 1: presents ranking and calculation of the square deviation from average needed to calculate the Kendall's coefficient of concordance.

	Factor	Experts					Sum of the ranks	Square deviation from the average
		1	2	3	4	5		
1	Availability of engaged funding sources;	2	1	1	1	1	6	188.0816
2	Availability of human resources in the region;	5	3	3	2	3	16	12.00128
3	Level of administrative barriers;	4	2	5	6	2	19	0.510204
4	Level of personal income;	7	6	6	7	7	33	176.5102
5	Level of market competition;	6	7	7	5	6	31	133.0727
6	Support from the public authorities;	1	4	2	3	3	12	52.04592
7	State tax policy.	3	5	4	4	4	20	0.081633
	Total						138	562.3036
	Average						19.71429	-

Table 2: Calculation of weight coefficient of the factors presented.

|	Factor	Sum of the ranks	Final rank	Weight coefficient
1	Availability of engaged funding sources;	6	1.20	0.24
2	Availability of human resources in the region;	16	3.25	0.17
3	Level of administrative barriers;	19	3.80	0.15
4	Level of personal income;	33	6.60	0.05
5	Level of market competition;	31	6.25	0.06
6	Support from the public authorities;	12	2.50	0.20
7	State tax policy.	20	4.00	0.14
	Total	137	27.60	1
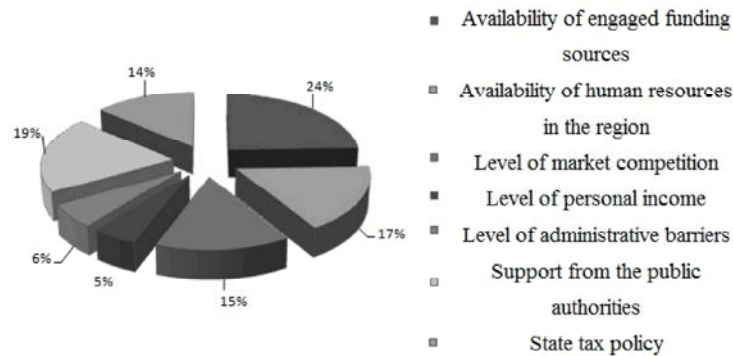
Fig. 1: The influence of the Enterprise System factors.

Calculation according to the above formula shows that W = 0.81.

That is, the consistency of the experts is 81%, therefore the experts' opinions are fairly consistent and can be used in future research.

Using the arithmetic mean, let us define the rank of each of the factors and calculate factor loading in the total structure [13]. Let us represent the results in the form of Table 2. The calculation was made using the following formula:

$$G = \frac{(m+1) - r_i}{\sum_{i=1}^{m} r_i}$$

where m is the number of factors;
r_i is factor's final rank.

$$r_i = \frac{\sum_{i=1}^{n} x_{ij}}{m}$$

Based on the diagram shown in Figure 1, the main factor affecting the development of the Enterprise System is the availability of engaged funding sources that primarily means the availability of bank loans for startup and development of small business. The second most important factor is the state support of entrepreneurs.

It is typical that the external factors have the greatest impact on the development of the Enterprise System. Thus, its normal development and functioning requires the optimum combination of interests of the state, consumers and business entities.

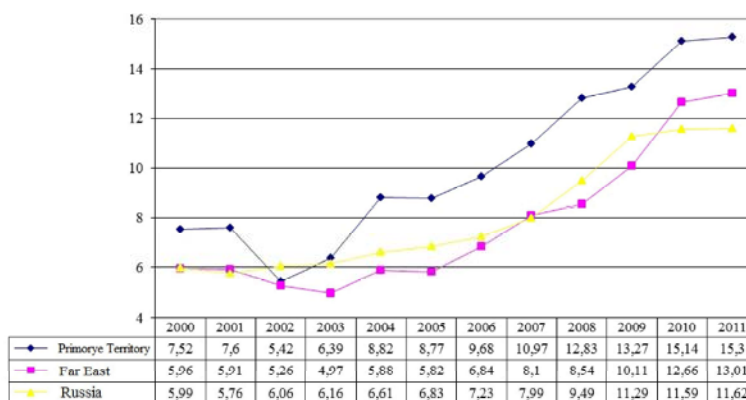|	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primorye Territory	7,52	7,6	5,42	6,39	8,82	8,77	9,68	10,97	12,83	13,27	15,14	15,3
Far East	5,96	5,91	5,26	4,97	5,88	5,82	6,84	8,1	8,54	10,11	12,66	13,01
Russia	5,99	5,76	6,06	6,16	6,61	6,83	7,23	7,99	9,49	11,29	11,59	11,62

Fig. 2: The number of small business enterprises per 1,000 people.

The main prerequisites of a system approach to small and medium-sized businesses located in the Primorye Territory was the possibility of their representation as an integral object, consisting of interconnected parts.

For analysis of the small Enterprise System development in Primorye Territory, one can compare principle factors indicating the economic environment quality improvement with the similar factors characterizing the all-Russian and Far Eastern small Enterprise Systems.

At present, the following generally accepted statistical factors are used worldwide to assess the small business functioning [14]:

- The number of small business enterprises and the number of entities operating by the end of the year;
- The average number of employees;
- Trade turnover of organizations including the cost of shipped goods, manufactured in-house using own operations and services.
- Amount of investments in capital assets, i.e. total expenditure on new construction, purchase of machinery, equipment, vehicles, the cost of forming the main herd, perennial plants, etc.

To compare data, it is necessary to convert them in order to get the figures per thousand people [13].

As shown in Figure 2, the number of small business enterprises per 1,000 people in the Primorye Territory is growing steadily and exceeds the same factor for Russia and Far East. One explanation for this phenomenon may be the fact that the all-Russian and Far East factors takes into account total population, including the areas where development conditions for small business enterprises are not so much favorable due to the specific activities formed historically and the climate conditions. Characteristically, even during the financial crisis started since 2008, the total number of enterprises did not decrease. This may be due to the effect of various government programs adopted to increase entrepreneurial activity of the population.

According to statistics, commercial enterprises constitute the largest share in the small Enterprise System. Commerce is the simplest option in organization of business. It requires minimum financial and capital investments. The crisis developments that occurred in 2008 have reduced the share of commercial enterprises in the small Enterprise System in Primorye Territory, but the increase in number of construction projects, such as construction of bridges, the Far Eastern Federal University, etc., has compensated the mentioned decrease owing to the construction and transportation industries.

On the contrary, the number of workers employed by small business enterprises in the Primorye Territory is below the Russian national factor and since 2006 is smaller than that for the Far East region (Fig. 3). Its lower value, as compared with the previous years, indicates the small size of the operating enterprises. These results may indirectly confirm the fact that most of the enterprises are involved in commercial and service activities not requiring a large number of employees.

The sharp rise of employment in the small Enterprise System in the Primorye Territory since 2008 was due to the preparation for the APEC Summit held in Vladivostok in 2012, as well as the increase in the number of construction companies that require greater average number of employees. The completion of these projects can lead to a reduction in the number of workers employed in the small businesses.
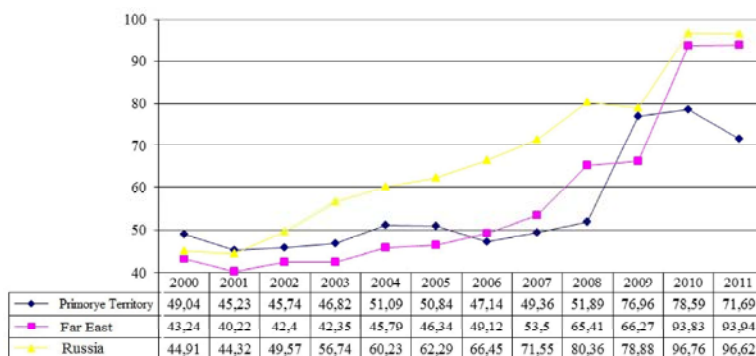
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primorye Territory	49,04	45,23	45,74	46,82	51,09	50,84	47,14	49,36	51,89	76,96	78,59	71,69
Far East	43,24	40,22	42,4	42,35	45,79	46,34	49,12	53,5	65,41	66,27	93,83	93,94
Russia	44,91	44,32	49,57	56,74	60,23	62,29	66,45	71,55	80,36	78,88	96,76	96,62

Fig. 3: The average number of employees involved in small business enterprises per 1,000 people.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primorye Territory	4,34	5,33	7,23	11,63	15,81	59,35	62,88	88,46	108,18	113,19	155,87	166,7
Far East	49,46	49,08	43,7	41,25	48,79	46,81	53,03	72,19	97,34	79,22	181,08	192,32
Russia	4,18	5,83	7,97	11,63	15,48	67,03	84,34	107,69	131,58	118,9	133,42	133,56
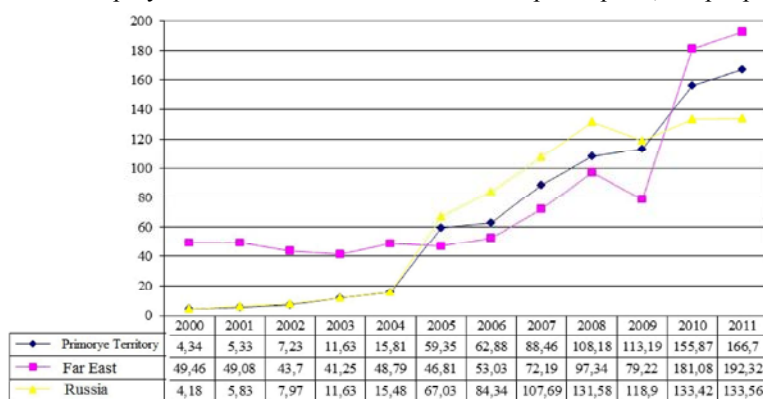
Fig. 4: The turnover of the small business organizations in million rubles counting upon 1,000 people.

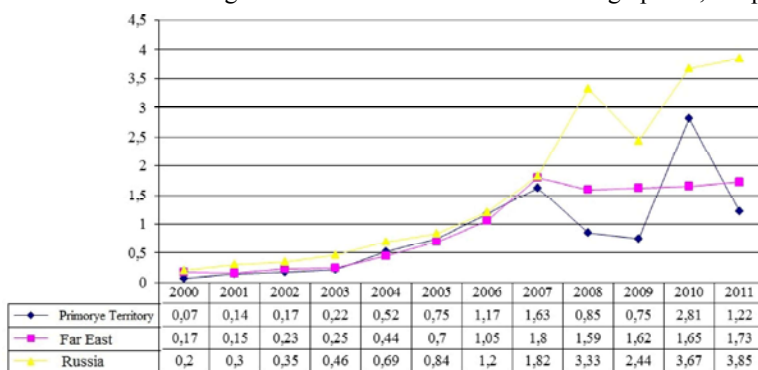|	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primorye Territory	0,07	0,14	0,17	0,22	0,52	0,75	1,17	1,63	0,85	0,75	2,81	1,22
Far East	0,17	0,15	0,23	0,25	0,44	0,7	1,05	1,8	1,59	1,62	1,65	1,73
Russia	0,2	0,3	0,35	0,46	0,69	0,84	1,2	1,82	3,33	2,44	3,67	3,85

Fig. 5: Investment in capital assets of small businesses in million rubles counting upon 1,000 people.

Turnover of the organizations is a factor characterizing first of all the volume of products sold (Fig. 4). Its constant increase can be attributed not only to the growth of factors such as the increase in sales and the number of companies, but to inflationary development as well.

It is characteristic that the value of this factor in the Primorye Territory is comparable to the value of Russian national factor, subject to larger number of companies per thousand people. This may indirectly evidence the lower efficiency of small business enterprises in the Primorye Territory. This factor has significantly increased over the last periods that was related by increased demand for products manufactured by small business enterprises due to increasing of the purchasing power of the population, an increase of labor migrants coming to the Primorye Territory and the high demand for the products of small construction companies.

Therefore, in the long view, we can expect it to fall or stagnate due to inflation, if the regional government will not take certain actions by 2013.

The factor of "investments in capital assets" in Russia is in general at a very low level (Fig. 5) that may result further in the total decrease in production, reduction in manufacturing of various types of products and digression in a number of important statistical factors.

In general, its value for Primorye Territory is at a level lower than that for Russia and the Far East. This demonstrates the unwillingness of entrepreneurs in the Primorye Territory to invest in the renewal and replacement of capital assets. In general, given the large financial subsidies to the region in recent years, its level could be much higher, providing in future a sustainable business development in the region.

CONCLUSION

Thus, we can draw some conclusions concerning the status and development prospects of small business in the Primorye Territory. Despite the increase in entrepreneurial activity, the operation of enterprises is not always effective.

APEC Summit which in the long run may give a certain boost to the regional economy as a whole and to small businesses in particular, gave in fact just a short-term effect. Insignificant amount of investment in own capital assets and low turnover ratio can result in the long term in slowing the small business development.

Changing the legal framework in so far as it relates to tightening of anti-smoking and alcohol laws can have a negative impact on the further development of small business in the retail industry. Despite the fact that there is a certain reduction in customs tariffs conditioned by the Russia's entry into the WTO, that also could have led to a positive trend in the small business development, though imposition of additional taxes on imported goods negates the positive effect of the changes.

The availability of financing for startup and development of businesses, as well as personnel problem are the most significant factors influencing the development of small businesses.

But obtaining a loan is a fairly long procedure requiring a collection of many various documents. Besides, the lending rates on loans for small and medium-sized businesses are quite high, ranging from 17% to 24%. It is necessary to establish a system of state co-financing of loans both for startup of a new businesses and the development of existing ones, sharing risks between the entrepreneur, the state and the lending agency.

Personnel problem is largely a reflection of the existing Russian mentality; over the 20th century, most people were not able to work for themselves and to launch their own businesses. Those who have decided to launch their own business face a rigid staffing problem concluding in high deductibles to non-budget funds imposed on salaries of employees that makes it impossible to provide social security to hired workers in full. All this reduces the attractiveness of being employed by a small company in the eyes of the skilled workforce. It should also be noted that the potential for the launching and development of businesses exist throughout the region, while the entire population is concentrated in general only in major cities.

Primorye Territory, because of its geographical location and climatic conditions has significant potential for the development of small businesses.

Proximity to the border may contribute to the retail sector and services. Rich recreational resources might attract eco-tourists from abroad. The availability in the region of two major ports may facilitate the development of small transport companies. Climatic features allow brisk growth of agriculture in the central areas of the region and the availability of rich marine biological resources allows for the development of small fishing enterprises. To implement all of the above developments, it is necessary close interaction between the regional authorities and business.

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