



# The Assessment of the Investment Potential of the Insurance Sector of the Region in the Conditions of Risk and Uncertainty

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## Abstract

Krai; the problems of its development are revealed as well. It is proved that in the conditions of risk and uncertainty it is especially important to distinctively define the role of the insurance sector of the financial market, to determine its interaction with the real sector branches of the regional economy by means of using the industrial, social and investment potential. Modern insurance relations are formed under the influence of the transformation processes in the development of the financial system, institutions and instruments of the insurance sector; they are determined by the methods of state regulation as well. Underestimating the problems of the insurance market in the reproduction process of the regional economy negatively affects its development. In this regard it is essential to develop and implement a qualitatively new strategy of the development of the insurance market and its infrastructure that could be oriented towards modern achievements. At the same time the reproductive, investment approach to the insurance strategy should be implemented. The authors have developed a factorial model of the assessment of the investment potential of the regional insurance market in the context of socio-economic transformation of the development institutions. The main vectors of the development of the regional insurance market on the basis of the economic potential of the region are suggested.

**Keywords:** *insurance sector, investment potential, region, transformation, risk, uncertainty.*

## 1. Introduction

The peculiar character of the evolution of the regional insurance market is due to the historical prerequisites.

The process of the formation of the regional insurance markets has been comparatively balanced since 1990s. The regional insurance institutions were established not only in Moscow and Saint Petersburg but also in other Russian regional economic centres. Nevertheless, in the process of its sustained evolution the insurance market of the region underwent significant changes which were interconnected with the decreasing number of insurance institutions in general and with their diminishing market capitalisation. The catagenesis of capital outflow from the region and its concentration in the centres became the basis of the above-mentioned changes; they were also due to the process of increasing competitiveness between the branches of global and major insurance companies from other regions.

## 2. The Methodology of the Research

Is extremely hard to determine the investment and economic potential of a region specifically; in the context of traditional debates it is a systematic indicator that is formed under the influence of

particular factors of political, economic, socio-demographic nature as well as technogenic and many other factors.

The following negative factors contribute to the increasing imbalance in the insurers' deployment: the lack of highly qualified personnel, difficulties in forming authorised capital due to the increasing requirements for its amount, the decreasing production potential of the regional economy.

Insurance companies that act at the regional level are mainly faced with the issues of interaction at the level of regional administration.

Authorities try to attract insurance companies to participation in investment processes in different ways. In some cases, the attempts to use administrative methods though the prism of legal regulation can be noticed.

In the context of presented circumstances, it is worth remembering that insurance companies must be responsible for the commitments made to preserve and strengthen the positions on the market as well as guarantee safety of financial resources entrusted to insurers.

### 3. The Results of the Research

The investment policy of the branches of insurance companies from other regions is formed and implemented in the main offices of companies.

In certain periods the outflow of funds from the branches is possible, whereas the inflow of funds into a region via insurance channels is possible at the other ones. In any case, the regulation of investment activity of insurance institutions at the regional level is achievable by means of normative requirements for depositing insurance resources.

Among immanent institutions which contribute to the inflow of investment resources we can single out the transferring of new financial assets and their elements into the equity market; observance of business transparency; improvement and adaptation of international standards of accounting.

Specific features of insurance markets of a region can include a significant proportion of medium-sized and small institutions and, consequently, a problem of low insurance resources sufficiency, capitalisation of regional insurers and their provision with insurance resources in comparison with Russia in general is much lower.

Before the introduction of the mechanism of mandatory liability insurance regional insurance markets did not experience a significant need in establishing and developing additional insurance institutions.

Based on the insurance potential of the investment sector, essential peculiarities of productive and investment development of the region, the authors systemised the factorial structure of the resource potential of the insurance sector of the region.

Proceeding from the factorial analysis of the composition of productive and investment potential of the region, it is advisable to consider the further development of the regional insurance sector.

The guarantee of safety and stability in improvement of entrepreneurship on the basis of implementing innovative mechanisms of insurance protection is becoming a critical requirement for effective functioning of national economy.

Presently the active evolution of the insurance services market can be noted in the regions, which allows forming a system of protecting property interests of economic entities and citizens from technogenic, natural, economic and other risks that ensures socio-economic stability and security of regional economic systems.

In the works of the following Russian and foreign scientists the consideration of new economic models of problems in forming and developing insurance regional markets can be traced: N.V. Kirillova, T.P. Mevdedeva, A.V. Penyugalova, L.A. Rusetskaya, A.K. Sembekov, Yu. E. Slepukhina, S.E. Shipitsina and others.

However, the problems of developing investment and insurance potential of insurance market institutions, the issues of forming effective models of their influence in terms of the specifics of functioning of regional economy have not been studied enough.

Krasnodar Krai can be characterised as a dynamically developing region. According to ranking assessments, an investment attractiveness of Krasnodar Krai occupies the eighth place in the Russian Federation. In 2016 there was a growth in economic opportunities in terms of the amount of gross regional product up to 2 134 billion Russian roubles that characterises an increased scope in the economic development of the region from the standpoint of the volumes of goods and services production (Table 1) [12, 13].

**Table 1.** The investment opportunities of forming insurance sector in Krasnodar Krai [12, 13].

Indicators	2009	2010	2011	2012	2013	2014	2015	2016
The amount of gross regional product (billions of Russian roubles)	874	998	1 008	1 552	1 600	1 500	1 947	2 134
Gross regional product per capita (thousands of Russian roubles)	169	193	226	310	320	308	355	383
The amount of fixed assets (billions of Russian roubles)	1 870	2 139	2 138	2 821	3 639	4 208	4 770	5 481
Cost of shipped goods of own production, completed works in industry (billions of Russian roubles)	330	442.7	527.3	602.4	670.4	781.1	919.3	940.2
The amount of investments into fixed assets (billions of Russian roubles)	358	589	651	798	955	750	586	429
The amount of retail trade (billions of Russian roubles)	552	646	753	816	916	1069	1160	1248
Region's population (thousands)	5 161	5 225	5 284	5 284	5 284	5 286	5 514	5 571
The amount of average annual employment in the regional economy (thousands)	2 627	2 658	2 860	2 860	2 862	2 864	3 106	3 111
Average amount of income/expense per capita of the region's population (thousands)	166/162	166/138	189/146	190/146	191/147	192/148	386/310	340/356
The amount of loans granted to households (millions of Russian roubles)	106 223	108 224	108 330	108 400	108 500	108 540	103 878	179 100
Total area of residential premises put into operation (thousands of square metres)	3 412	3 606	3 758	4 371	3 949	4 759	4 644	4 502

The formation of regional economy in the investment-innovative direction aggravates the instability of the given system that makes it necessary to develop insurance institutions and requires the sufficient level of insurance protection.

The insurance market of Krasnodar Krai can be characterised by excellent development opportunities which are due to the indicators of the development of the economic system of the region.

The persistent tendencies in the insurance market formation in Krasnodar Krai are determined by a high concentration of insurance institutions and their effectiveness in the volumes of collect-

ed insurance premiums that contributes to the eighth place of Krasnodar Krai among Russian regions.

The insurance activity on the territory of Krasnodar Krai in 2016 was carried out by 107 insurance institutions.

Among them 2 institutions possess a status of independent regional insurance institutions, 105 are institutions' branches, 30 organisations acted as insurance agents (Table 2) [13-15, 18].

**Table 2.** The formation of insurance sector in Krasnodar Krai

Indicators	2009	2010	2011	2012	2013	2014	2015	2016
Total number of insurance institutions	137	132	121	130	130	109	107	107
Regional insurance institutions	5	5	4	3	3	2	2	2
Branches of insurance institutions	132	127	121	110	91	91	105	105
The amount of insurance reserves (millions of Russian roubles)	767	962	967	978	982	998	1 002	1 012
The amount of insurance assets (millions of Russian roubles)	884	1 050	1 052	1 056	1 062	1 072	1 098	1 099
The amount of expenses on a single insurance case	58	58	58	56	42	41	39,0	38,0
The amount of tax payments of insurance institutions (millions of Russian roubles)	305	283	330	350	365	530	171.0	540.8

There is a continuing capitalisation of the regional insurance market which is manifested in the increasing authorised capital per a single insurance institution from 85 million Russian roubles in 2009 to 240 million Russian roubles in 2014.

The volume of the regional insurance market increased by 2.2 times. At the same time there is a certain instability of indicators which is dependent on the instruments implemented in insurance activities (Table 3) [16].

**Table 3.** The dynamics and the composition of the insurance portfolio in terms of insurance instruments in Krasnodar Krai (millions of Russian roubles)

Indicators	2009	2010	2011	2012	2013	2014	2015	2016
The total number of insurance premiums	9 421	10 582	13 281	16 952	18 354	20 917	23 047	26 250
On voluntary insurance instruments	6 288	7 236	9 403	11 783	12 518	13 715	10 803	14 049
On life insurance instruments	270	369	539	861	1 170	1 524	2 418	3 930
On personal insurance instruments	1 579	1 775	2 609	2 872	3 223	2 866	2 947	3 433
On property insurance instruments	4 393	4 981	6 084	7 077	7 341	8 520	2 748	6 686
On mandatory insurance instruments	3 133	3 346	3 878	5 169	5 833	7 086	10 642	10 524
MTPL insurance	3 083	3 298	3 835	4 881	5 501	6 918	10 447	10 333
Mandatory insurance of dangerous manufacturing facilities	X	X	X	272	226	167	164	103

In Krasnodar Krai in 2016 the amount of insurance premiums on voluntary insurance segment totalled 14 049 million Russian roubles, on life insurance instruments – 3 930 million Russian roubles, on personal insurance instruments – 3 433 million Russian roubles, on property insurance instruments – 6 686 million Rus-

sian roubles including MTPL insurance instruments which made 10 333 million Russian roubles.

The tendency of insurance payments demonstrates 1.9 times growth and differentiation of the indicator in terms of insurance instruments (Table 4) [17-19].

**Table 4.** The dynamics and structure of insurance payments on contract commitments of insurance institutions in Krasnodar Krai (millions of Russian roubles)

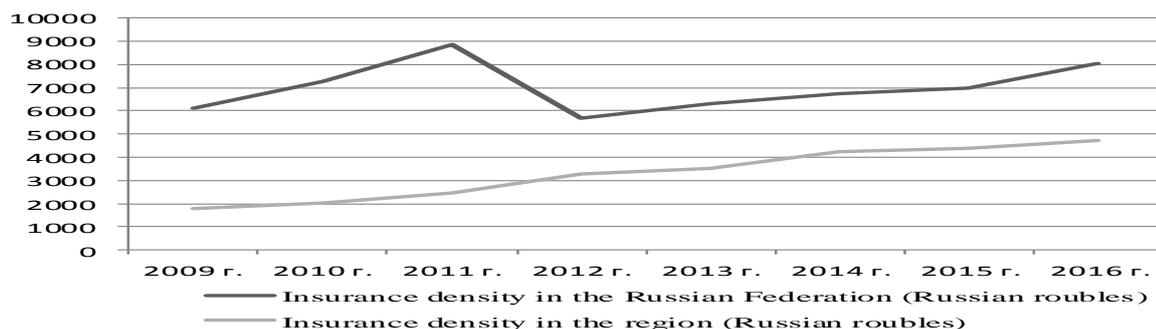
Indicators	2009	2010	2011	2012	2013	2014	2015	2016
The total number of insurance payments	5 193	5 244	5 341	8 037	8 746	10 169	11 629	16 676
On voluntary types of insurance:	2 788	3 150	3 350	6 729	5 505	5 811	5 180	3 325
life insurance	57	81	107	147	169	288	352	376
personal insurance	730	718	830	921	979	739	675	573
property insurance	2 400	2 348	2 434	4 237	4 116	4 536	4 153	2 376
On mandatory types of insurance:	2 405	2 094	1 991	1 308	3 241	4 358	6 421	13 246
MTPL insurance	1 958	2 039	1 920	1 299	3 203	4 347	6 418	13 231
Mandatory insurance of dangerous manufacturing facilities	X	X	X	0.2	5	1	6.0	4.3

The amount of insurance payments on the insurance instruments in 2016 is presented in the following form: MTPL insurance – 13 231 million Russian roubles (6.7 times increase), life insurance – 376 million Russian roubles (6.5 times increase), personal insurance – 573 million Russian roubles (0.7% increase), property insurance – 2 376 million Russian roubles (0.9 times increase).

The conducted research showed that recently there has been a persistent growth in the amount of insurance premiums per capita in Krasnodar Krai.

In the Russian Federation in 2016 the expenses of the population on the insurance products increased up to 8 058.70 Russian roubles, however, the given indicator is lower in Krasnodar Krai than the average level in Russia (4 712 Russian roubles in 2016); it is lower than the indicator in the industrial countries of the world insurance market (Figure 1).

A significant increase in the insurance density (insurance premium per capita) in the investigated period is due to the growth in the amount of insurance premium against the background of minor population growth in Russian and in Krasnodar Krai.

**Fig. 1.** The dynamic series of the amount of insurance premiums per capita in the Russian Federation and Krasnodar Krai [13, 18]

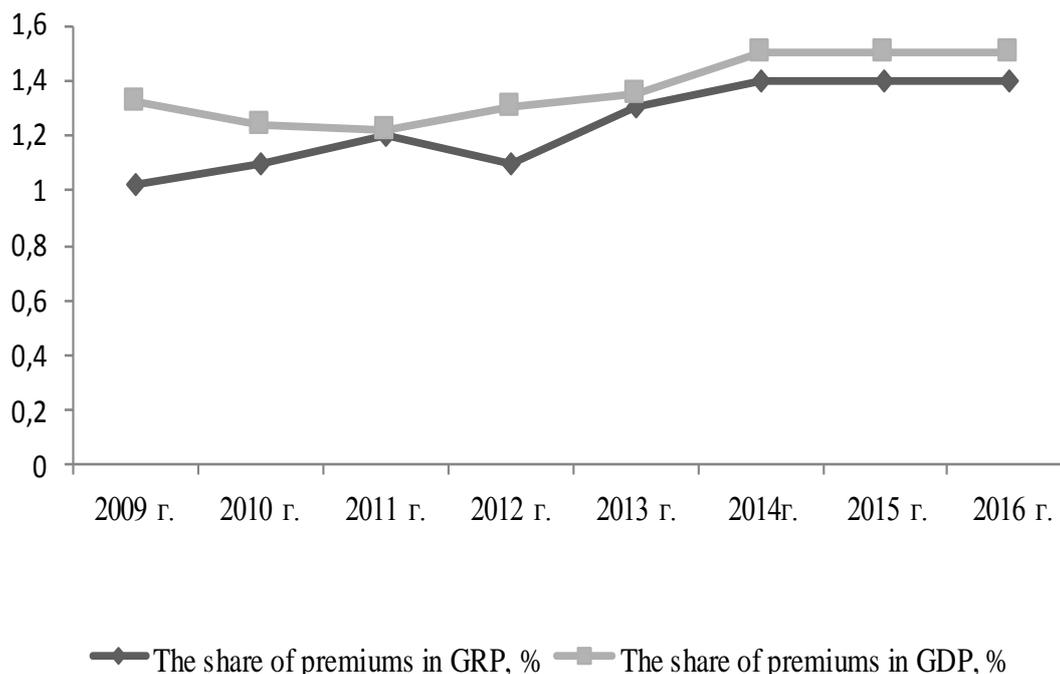


Fig. 2. The dynamic series of the ratio of insurance premiums in GDP and GRP [13, 18].

There is an increase in the proportion of insurance premiums in the gross regional product (GRP) from 1.02% in 2009 to 1.4% in 2016 (Figure 2).

Such a decrease is due to the crisis phenomena in the economy, declining volume of production and, consequently, decline in the income of the population.

The process of introduction of long-term kinds of personal insurance services to the insurance services market is rather slow including missed and combined life insurance (old age and death), pension insurance, annuity, rents, etc. The coverage of insurance protection of such a group of the population as children, who are vulnerable to injuries, is not wide enough.

The complex instruments of home insurance, property insurance, household civil liability insurance, KASKO insurance (insurance against damage or carjacking) are not developed well enough.

The programme instruments of the responsibility for the quality of goods, works and services of producers and sellers are not demanded as well as the responsibility of professional private practitioners such as doctors, lawyers, notaries, realtors and architects.

The insurance companies are slowly developing the sphere of insurance for citizens who arrive in Krasnodar Krai for recreation, medical treatment, sports and tourism.

Agricultural insurance is one of the most important segments of the insurance market. The assessment of tendencies of the development of the given sector showed that the amount of collected insurance premiums in 2016 in Krasnodar Krai increased by 3 times compared to 2009 and with state support – by 3.8 times. The volume of the agricultural insurance market in the region totalled 1 592 million Russian roubles in 2016 including 1 529 million Russian roubles that were received with state support and 63 million Russian roubles were received without state support. The expenses on the subsidising of agricultural risks in the region ranged from 107 to 638 million Russian roubles including allocations from the federal budget ranging from 84.5 to 538 million Russian roubles and from the regional budget ranging from 3 to 100 million Russian roubles (USA – 10 billion US dollars, China – 5 billion US dollars) (Table 5) [5, 8, 9, 10].

Table 5. The development of the agricultural insurance segment in Krasnodar Krai

Year	Insurance premiums, (millions of Russian roubles)		Number of insurance contracts concluded with state support	Expenses on the subsidising of agricultural insurance in the region (millions of Russian roubles)		
	Total	with state support		Total	Budget level	
					Federal	Regional
2009	539.0	400.0	153.0	213.0	161.0	52.0
2010	574.0	216.0	46.0	107.6	84.5	23.4
2011	939.0	539.0	120.0	524.0	472.0	52.0
2012	1 312	110.0	624.0	493.0	443.0	50.0
2013	1 433	1 350.0	376.0	553.0	497.0	56.0
2014	1 817	1 637.0	374.0	638.0	538.0	100.0
2015	1 167.3	1 068.8	144.0	358.0	297.6	60.4
2016	1 592	1 529.0	193.0	575.8	515.4	60.4

The market share of agricultural insurance in the Krasnodar Krai totalled 10.1% (USA – 90%, China – 45%) (Glauber 2015, Agro-insurance international 2013).

The level of payments made 16.3% (USA – 52% of losses) [1, 2, 3, 11] with the agricultural production growth 104.5% (Table 6).

**Table 6.** The main indicators of the agricultural insurance market in terms of the subjects of the Russian Federation in 2016 [13]

RF subjects	Insurance premiums (millions of Russian roubles)	Market share (%)	The amount of subsidies from the federal budget (millions of Russian roubles)	The share of subsidies from the federal budget (%)	The level of insurance payments (%)	Insurance payments (millions of Russian roubles)
The Russian Federation	9 822.0	100.0	2 270	100.0	20.0	1 964
Krasnodar Krai	1 529.0	15.6	515.4	22.7	34.5	528
Stavropol Krai	1 427.0	14.5	394.5	17.4	37.9	541
Rostov Oblast	120.0	1.2	31.4	1.4	22.9	27.5
Volgograd Oblast	6.5	0.06	3.3	0.14	–	–
The Adyghe Republic	3.8	0.04	–	–	–	–

The assessment of the tendencies of the development of agro-industrial complex in Krasnodar Krai showed that during the recent years there have been systematic risks of insufficient harvesting due to emergencies [4, 6, 7, 20].

The conducted analysis of the situation in the agricultural insurance market showed that the current system of agricultural insurance with state support is not effective and for the further development it is necessary to change significantly the existing mechanisms of agricultural risks insurance as well as the main approaches and principles of providing state support within the given direction.

The dynamic coordination of economic interests of participants of the regional market is realised in the course of optimising the relationship within the regional institutional environment, during the development of institutions and mechanisms, in the sphere of interaction of interests and criteria for stabilising the social and economic processes in the region as well as in developing industries, minimising insurance risks and increasing investment activity.

The aggregate index of the factorial model of the resource potential of the regional insurance market proposed by the authors is calculated using the following formula:

$$I_{\text{prim}} = (I_{\text{fs}} \times I_{\text{cs}} \times I_{\text{pi}} \times I_{\text{ic}} \times I_{\text{ip}})^{1/5},$$

where  $I_{\text{fs}}$  is the index of financial stability of insurers;

$I_{\text{cs}}$  — index of capital sufficiency;

$I_{\text{pi}}$  — index of population income;

$I_{\text{ic}}$  — index of insurance capacity;

$I_{\text{ip}}$  — index of investment potential.

The evolution of the insurance market in Krasnodar Krai will contribute to achieving the following goals:

— The increasing capitalisation of the regional insurance institutions;

— The participation of authorities of Krasnodar Krai in improving the legal base regulating the activities of subjects on the insurance services market in accordance with federal legislation and within their competence.

— Revalorisation of insurance culture of economic entities and citizens with the use of mass media, insurance propaganda;

— A major review of the positions of the Association of Insurance Institutions of Krasnodar Krai aimed at forming and developing of the regional insurance market.

## 4. Conclusion

In the context of traditional debates, the expansion of the sector of services that are provided to the policyholders is one of the essential objectives of the development of the regional insurance system. A regulator's action is a driving force of the development in the process of providing the improving quality of insurance services.

The increasing revenue of the insurance companies' budgets must result in enhancing of insurance reserves of insurance companies which make the basis for insurance contracts obligations fulfillment.

The authorities of the region must ensure that the free reserves of the insurers in the conditions of risk and uncertainty could be used on the territory of Krasnodar Krai as investment and credit resources.

In order to improve the investment policy that includes forming and implementing criteria for the creation of convenient investment space in the region it is necessary to coordinate the insurers' investments.

Thus, the order of placement of funds accepted as a result of selling mandatory types of insurance, especially personal households insurance, can minimise risks of their investment.

To promote the effective functioning of the insurance services market it is necessary to establish equal conditions on the territory of the region for implementation of activities for all the insurance companies that employ competent professionals in the insurance sphere.

## Conflict of Interest

The authors confirm that the data do not contain any conflict of interest.

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