

## Factors Affecting Investment Activity of Fisheries in the Region

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**Abstract:** The relevance of the study is determined by the objective need for the formation of a well-thought-out and efficient state policy in the context of a low renewal rate of the Russian fish industry. The fish economy of Primorsky Krai is an effective level of the economic system for activating investments. A comprehensive study of investment activity factors of fisheries enterprises in the region will provide an opportunity to better understand the patterns underlying modern economic processes as well as to develop recommendations on state support for fishery enterprises. In the domestic literature there is a clear deficit of research in this problem field caused by the limited capabilities of existing databases. The methodological basis of the study was heuristic as well as traditional methods of scientific analysis, technical, economic and logical analysis, economic statistics, etc. This study confirms the low and unstable nature of investment activity in Primorsky Krai fisheries. Questioning and in-depth interviewing fishery-specialized entrepreneurs from Primorsky Krai allowed to rank the factors of investment activity in terms of their significance for business entities. It is established that “external” determinants are more important today than “internal” ones. Thus, unfavorable external conditions caused by unstable economy, sanctions against Russia, ineffective exchange rate policy are the main factors that do not allow seriously changing the material and technical potential in the industry, preserving the qualitative and quantitative characteristics of reproduction. Mechanisms for correcting the current investment trend in the fisheries economy are proposed.

**Key words:** Primorsky Krai, questioning, interviewing fishery-specialized, entrepreneurs, unfavorable, proposed

### INTRODUCTION

Fisheries in the Soviet period were of primary importance in the economy of Primorsky Krai being not only an important source of income in the region but also a significant producer of vital food products of agricultural origin. During the period of economic reforms, the industry receded from its previous positions, relocating the fishery by 80% to the exclusive economic zone of Russia and reducing production from 1945.6 thous.ton in 1988 to 762.5 thous.ton in 2017. The share of fisheries in the GRP of Primorsky Krai in 2014 was only 4.4% (Anonymous, 2018).

One of the reasons for this situation is the anti-investment nature of the ongoing market reforms in the fisheries economy. The result of such reforms is the reduction of the production, scientific, technical and intellectual potential accumulated in the pre-reform period

with considerable physical and moral depreciation of fixed production assets. Lagging in investment and innovation development led to a reduction in the number of fishing fleets which replenishment is mainly due to the acquisition abroad of obsolete long-life ships. For example in 1990 there were 499 vessels in the Primorsky Krai in 2008-474 and in 2015-already 314 (Korneyko, 2016). Investment pause in the fisheries complex also led to unsatisfactory technical condition of port facilities and equipment, shortage of the providing fleet and low processing speed of fish cargo. The unresolved issue of lifting sanctions from the Russian economy only complicates the situation. Therefore, Foreign channels for financing investments in renewal of fixed capital still remain closed.

Obviously, following the established trend of the investment process is not strategically promising. Therefore, there is no doubt that researching the problem

of activating the investment activity of fishery enterprises in the region is very important and relevant. Restitution of the fish sector of Primorsky Krai is impossible without the growth of innovative and investment activity without the prospect of technical re-equipment of the fishing fleet and without modernizing the fish processing industry.

## **MATERIALS AND METHODS**

Since, investments are the main parameter determining the economic development of the company, the problem of various factors influence on the investment activity of companies is extremely significant. Consequently, investment as an object of research has been sufficiently studied by many not only domestic but also Foreign researchers. Here in the investment activity of companies engaged in different types of activities and functioning in different countries is analyzed, various factors of investment activity are considered and different methods of research are used. For example, many studies consider the stock market and the normalized indicator of the company's market capitalization-the Q-Tobin coefficient as possible indicators of the investment programs being implemented (Barro, 1990; Chan *et al.*, 2001).

In a number of works, emphasis is placed on external factors of investment, therefore, factors of uncertainty in the market environment are investigated on the basis of risk indicators calculation (Bulan, 2005; Jeon *et al.*, 2004).

Other works analyze the influence of internal factors on investment activity, therefore, the dependence between the investment strategy chosen by the company and its financial indicators is revealed (Alex *et al.*, 2012; Nguyen and Dong, 2013).

However, to date there exists no single theory that could fully explain not only the investment behavior of companies but also the dynamics of investment activity in general. As a rule, the results of different studies significantly contradict each other. Perhaps, the low explanatory level of the existing models is due to the lack of attention to the influence of various specific factors (country, industry, etc.,) that have a significant impact on companies' investments. At present, there is a clear deficit of comprehensive studies of such factors with respect to fisheries. This is due to the fact that the study of the factors of investment activity of regional fisheries enterprises entails numerous methodological and statistical problems that limit the use of common methods. (Korneiko, 2017a, b). First of all, this refers to the quality of the data (no data or the data are inaccurate). In the

fisheries sector of the region, a large proportion (about 80%) is made up of non-public companies many of which are small or medium-sized enterprises. As is known, small businesses have simplified requirements for financial reporting, so, information on them is not freely accessible. Often they have non-transparent accounting or work in the informal economy to evade taxes. Moreover, financial reporting in Russia is based, first of all on the accounting indicators of the company's activities. However, the analysis of the company's investment behavior requires a financial way of assessing performance indicators, since, the accounting approach controls only current operations and does not assess the investment or financial prospects of the company's development. Furthermore, most Russian companies prefer not to publish data on cash flows from investing activities which can also distort results, especially in the case of accelerated rates of fixed assets disposal. All this leads to the fact that many of the investment activity determinants are directly unobservable or misrepresented. These circumstances have largely determined both the methodology and the procedure for data collection. In particular in order to identify and rank investment activity factors of fisheries enterprises in Primorsky Krai, heuristic analysis methods were used based on expert assessments received during visits to fisheries enterprises in the region, questionnaires and in-depth interviewing of 53 respondents including managers, owners and specialists of the enterprises considered.

The purpose of the study is to analyze the nature and extent of the influence of factors determining the investment activity of fishery enterprises in the region. Achieving this goal is of great importance for the formation of an effective state policy in the fisheries sector aimed at creating a favorable investment climate in the region and industry, stimulating investment flows and achieving sustainable development rates.

## **RESULTS AND DISCUSSION**

Investment activity is the intensity of the company's investment processes. This interpretation is close to such concepts as investment attractiveness or business activity of an economic entity. At the same time, investment activity includes a number of parameters such as the volume, structure, growth rates and efficiency of the investment resources use.

Investment activity is one of the most important factors determining the development path of Russian fisheries economy. Thus, the growth of capital investments with amplitude of 30.9% in 2006 was interrupted by the global financial and economic crisis: in

Table 1: Indicators of investment activity and the state of fixed capital in fisheries and aquaculture of the Russian Federation for 2005-2016. in comparable prices in % to the previous year

Indicators	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Dynamics of investments in comparable prices; into the previous year (%)	89.4	130.9	95.7	88.1	88.1	108.8	150.4	135.9	114.9	103.0	78.8	125.5
Wear-out rate (%)	54.1	56.1	61.1	62.7	65.3	64.7	65.9	65.1	64.4	58.9	52.4	50.8
Coefficient of renewal (%)	1.5	1.8	2.0	1.8	1.5	2.0	2.2	3.2	3.2	3.9	2.8	3.2
Completely worn-out share (excluding small enterprises) (%)	12.1	11.3	18.8	17.2	21.0	21.8	19.3	17.4	18.5	11.7	9.5	8.7

Calculations made by the researchers on the basis of data of the Federal Service of State Statistics and Federal Fishery Agency (20.01.2018)

Table 2: Dynamics of investment in the fixed capital of the fishing industry of Primorsky Krai for 2012 -2016

Indicators	Unit of measurement	2012 year	2013 year	2014 year	2015 year	2016 year	Relative change 2016/15 (%)
Fish and non-fish species capture	(thous.ton)	831.9	798.0	778.0	739.3	836.9	113.20
Production of fish products including canned food	(thous.ton)	669.2	667.3	646.6	646.7	688.4	106.30
Domestic market supplies	(thous.ton)	263.0	232.0	215.5	307.5	120.1	039.05
Share of domestic market supplies in total production output	(%)	039.3	031.2	030.6	044.9	026.8	059.69
Export supplies	(thous. ton)	452.1	568.4	523.2	486.14	568.3	116.9
Share of exports in total production output	(%)	067.7	076.5	080.5	077.4	073.2	094.82
Investments in fixed assets in fisheries and aquaculture	(mln.rub.)	N/A	467.8	838.1	2068.0	1437.2	069.49

Calculations made by the researchers on the basis of data of the Department of Fisheries and Aquatic Biological Resources of Primorsky Krai (23.02.2018)

3 years they fell by almost 30% (Table 1). Overcoming the crisis and increasing investment demand which reached the highest level of 50.4% in 2011, ensured sustainable economic growth in the industry. It was followed by an investment pause, observed in 2014 and 2015. Table 1 also shows high fixed assets depreciation rates and low rates of their renewal which clearly does not create the conditions for the formation of investment activities in the industry.

The investment process in the fishery activity of Primorsky Krai actually has the same characteristics: high level of depreciation, low reproduction rates. Although, the dynamics of investment in fixed assets follows its own, distinct from the all-Russian path: growth until 2016 and a sharp decline of 40% in 2016 (Table 2). This is due to a noticeable improvement in the financial performance of regional fisheries enterprises, especially in 2014 due to the sharp devaluation of the ruble and as a result, increased profitability of fish exports. Although, the devaluation of the ruble itself with other things being equal, i.e., in the absence of volatility of the exchange rate and high inflation, opens up new opportunities for investors. These are the opportunities that the fishery enterprises of Primorsky Krai used increasing their investments in 2014-15 (Korneiko and Zyan, 2016).

Only fish-producing companies and aqua and mariculture enterprises earned an average of 17% of the total profit received by the enterprises of the region in all types of activities (excluding small businesses, banks, insurance organizations and budget institutions) in 2015.

However, as early as 2016, the effect of devaluation is offset by a radical increase in the cost of imports and sanctions for investment goods. Import dependency of fishery companies is caused as already noted by the need to carry out material and technical supply, repair and replenishment of the maritime fleet in the ports of the APR countries. The devaluation of the ruble has launched a difficult, albeit deferred, period of adaptation to expensive financial resources, imported intermediate and investment goods. The volatility of the exchange rate also has a negative impact on investment activity. The investor knows at what rate the money is going to be invested into the industry's economy but has no idea at what rate the money is going to return back. Another major determinant of the decline in investment was the departure of large companies from the Primorsky Krai fishery complex (Dalintorg, JSC, "ROLIZ", LLC and fishing collective farm "Ogni Vostoka") because of their reorganization and departure to another region. The impact of these factors leads to a reduction in investment in 2016 by 30%. The situation is aggravated by the reluctance of state bodies and banks to grant entrepreneurship access to external financing that can bear the costs of investment. In this regard, fishery managers of companies based in Primorsky Krai have to rely on their own resources which are clearly insufficient to solve the tasks of innovative development of regional fisheries. So, according to the statistics service of Primorsky Krai, the structure by sources of funding in 2016 was as follows: 80% of capital investments were financed from own funds, 14% attracted and 6% budgetary.

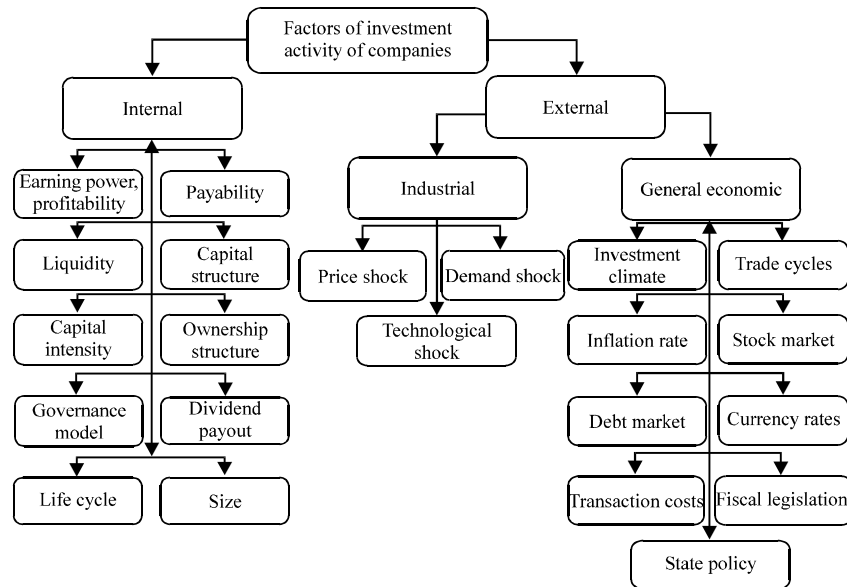


Fig. 1: Different factors of investment activity of enterprises

The nature of the investment processes that took place in the observed sector is also conditioned by the patterns of the commodity-export model of reproduction. Table 2 shows the share of exports in total production is 70-80%. Its basis is the production of shallow processing which firstly is not competitive in the world market and secondly, does not require the use of fish processing equipment. The creation of unified technological processes along the entire production route in which the fishing company simultaneously performs both functions for the extraction and processing of fish in the areas of the sea fishery and for its sale through a specialized trading network, would require the company to invest in advanced technologies that include more than simply the acquisition of new fishing gear and fishing vessels. This is not necessarily a simple process and requires substantial investment resources (Korneiko, 2017a, b).

The export orientation fish producers based in Primorsky Krai creates a deficit of some fish products in certain regions of the Russian Federation. The ability of producers to supply fish products in the central regions of Russia is constrained by the inadequacy of railroad refrigerator facilities, the high cost of services and the duration of transportation (Korneiko and Dubovik, 2017). Export-oriented production is also increasing supplies to the world fish market under the influence of differences in the demand trajectory the growing external and falling internal. A different situation is typical for Primorye fish-processing enterprises working exclusively on the domestic market. In most manufacturing industries, there is a decrease in capacity utilization. None of the enterprises realized the potential associated with the

devaluation of the ruble and the reduction of competition in the domestic fish market due to the introduction of counter-sanctions (a ban on the import of fish from a number of countries in Europe, America, Australia).

As a result in Russia the consumption of fish per capita is reduced from 25 kg/year in 2011 to 15 kg in 2016, despite the large number of data confirming the health benefits from eating fish for food. The consumer price index for fish and seafood is growing much more intensively than for alternative sources of animal protein. We have to state that the availability of fish products on the Russian market is declining and the food traditions and habits of Russians in compulsory fish consumption at least once a week (“Fish Thursday”) recede into the past (Korneiko and Dubovik, 2017).

Obviously, there are a lot of different factors of investment activity of enterprises (Fig. 1). Taking into account the above analysis, we will identify the most relevant determinants and rank them by the importance for business entities with the help of questionnaires and in-depth interviewing of 53 people represented by managers, owners, specialists working in the industry (Table 3).

External factors of investment activity (turbulent economy and unstable government policy in the industry) received high ranks (1, 2). The internal factor of the lack of own funds for investment realization is somewhat inferior to them in importance (rank 3). Another internal factor (capital intensity) is located in the 8th place. All other significant determinants are exclusively external in nature and therefore, are beyond the responsibility of fisheries managers of Primorsky Krai.

Table 3: Estimation of the factors limiting investment activity in (%) to the total number of respondents

Group No.	Name of the problems	Share of respondents (%)
1	Uncertainty of the economic situation in the country	63.0
2	Parameters of the exchange rate policy in the country (there is no confidence in obtaining quotas for catching aquatic biological resources; changing the rules of the game for business)	52.6
3	Lack of own funds	48.4
4	Sanctions (access to Foreign financial resources and investment dual-use goods is blocked)	40.5
5	High rate of commercial loan	36.9
6	Inefficiency in the implementation of government support measures (investment quotas and quotas under the keel. The abolition of regional subsidies for processing fish)	18.1
7	A complex mechanism for obtaining loans for the implementation of investment projects (the unwillingness of banks to participate in lending to secure the fleet)	15.8
8	Capital intensity of fish business	10.1
9	Existing taxation regime for investment activities	10
10	Exchange rate volatility	9.3
11	Price fluctuations in the world energy market	5.4
12	Others	5.2

Created by the researcher on the basis of expert assessment

### CONCLUSION

This study confirms the low and unstable nature of investment activity in fisheries in Primorsky Krai. The processes of technological re-equipment of fishery enterprises are developing with a delay and not in the same extent as in advanced and dynamically developing countries. According to experts of the industry, the main reasons for this situation are exogenous factors that do not depend on the effectiveness of the enterprise management and its management model. In fact, fisheries managers of companies located in Primorsky Krai do not recognize personal responsibility for the intensity of investment and reproduction processes in their production. Indeed, the realities are such that entrepreneurial structures in fisheries cannot solve the strategic tasks of innovative development independently in conditions of insufficient financial resources and an unfavorable economic climate. In order to channel the investment process towards a strategically correct direction, it is necessary to use the entire set of state instruments, the most effective of which are financial support and institutional reforms. Expanding access to credit resources, especially long-term ones, compensating for part of the costs of upgrading the old and purchasing a new fleet as well as improving the business climate and reducing administrative barriers will help increase the efficiency of investment activities of enterprises based in Primorsky Krai. Entrepreneurs themselves should abandon the commodity-export model of reproduction and focus on the development of linked value chains from extraction to the production of high-value products.

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