Organization of Favorable Investment Climate in the Market of Development and Implementation of Investment Projects

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Abstract

Stable development of economy, as an open system, requires permanent support for reproductive process on a qualitatively new level. A key factor for progressive socio-economic development of society is investments. A system of measures for organizing favorable investment climate includes: economic stimulation, harmonization of law of business partners, increase of the role of insurance responsibility, decrease of terms of handling the domesticities, access to markets that used to belong to the state, and other economic levers and stimuli, which ensure the attraction of private and foreign investors. It should be noted that during recent years, the Government of the Russian Federation has been taking measures for attracting all types of investments by means of activation of development institutions. However, due to imperfection of legal and economic measures, including weak efficiency of tax preferences and custom privileges, it was impossible to provide a stable inflow of private and foreign investments into the Russian economy. The very topicality of this problem stipulated our interest for its systemic research and development of offers for attracting investments into development of economy, based on the development and realization of investment projects.

Keywords: *investment climate, investment project, development of process, realization of project.*

Forming favorable investment climate, implementing invest-ment standard, and removing administrative barriers – these are the most important tasks. Igor Slyunyaev [1]

1. Introduction

Investment climate is the environment in which investment processes take place. It is formed under the influence of interconnected complex of legal and normative, organizational and economic, socio-political, and other factors which determine the conditions of investment activity in a certain country, region, or city. Investment climate is a complex mechanism which is influenced by various factors of macro- and micro-economics, as well as socio-political situation. With a positive tendency in the development of legal and normative base of the country, there is an improvement of investment climate with corresponding inflow of investments and development of entrepreneurial activity. Considering our country, it is possible to say that for foreign investors the following positions of the Russian economy are positive: large scale of the Russian market, weak utilization of that market, unlimited raw possibilities of the country, chance of receiving

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large profit for investments (Sibirskaya, E.,Stroeva, O.,Serebryakova, N.,Petruchina, E., 2014). However, socio-political instability of the country and regions, low level of investment insurance, corrupted management, and underdevelopment of infrastructure decrease Russia's attraction for investors. Thus, activation of investment process and creation of investment climate are a very topical problem. It is related to such aspects of socio-economic development as increase of living standards of population and poverty reduction, ensuring stable development, safety of society, etc. Investments and dynamics of their changes are the most important indicator of development of national economy (Sibirskaya, Stroeva, Khokhlova & Oveshnikova, 2014).

2. Incorporated Materials

Theoretical and methodological basis of the research were the fundamental works of the Russian and foreign economists in the sphere of theory and practice of investment activity. The research was conducted with the use of economic statistics method and general scientific contrastive-comparative methods (analysis, synthesis, analogy, classification) on the basis of systemic approach. Informational basis is comprised of the data published in the statistical bulletins of Federal State Statistics Service, Ministry for Economic Development of the RF, and legal informational database "Konsultant Plus".

3. Describing the Domain

During aggravation of parameters of investment climate which lead to low profitability and high risk level (Selskov, 2009) of investment projects realization, there arise the conditions at which only one or several subjects of investment market leave its limits. The most vulnerable in this respect is "investor" investment system which supposes the presence of external investor that has the possibility to constantly change the directions of capital investments depending on the behavior of the characteristics of external environment. Under this severe shortage of external investment resources, the behavior and relationship of the remaining subjects if investment market are radically changed. The "resource" investment system, based on the use of internal reserves or investment potential of industrial corporation and effective use of internal finances (Brailey & Mayers, 1997), actively cooperates with the fund market in order to attract additional financial resources of the group of outside shareholders. "Stock" subject of investment market, based on attracting into economic activity the resources of mutual investment funds, certain legal entities and individuals, redistributes resources between the members of stock market in the direction of development of high-yielding innovative projects through direct and derivative products of the time market (Galanov, 2002). It is obvious that under these conditions, there is no seller's market of investment capital. Thus, the basis for analysis for choice of directions of investment activity or for determination of subjects of investment market is the analysis of parameters of demand for investment capital.

4. Tools and Procedures

Demand for investment capital is determined by vector of parameters of ψ - factor. If the profitability from alternative sources of investment is higher as compared to innovative process, then investing funds into innovative developments is not advisable. ψ - factor is manifested in the comparison of current parameters of innovative projects and characteristics of financial tools of stock market. The analysis is about determining the characteristic of capitalization, profitability, and capability for return of loan capital during the last stage of turnover of investment capital (Table 1).

Table 1. Contents of elements of ψ – factor determining the state of the market of demand for investment capital

Order	1st state	2nd state	3rd state
Task	Alternative capitalization	Even income	Payback
Elements of ψ - factor	Ψ_1	Ψ_2	Ψ_3
Barrier	$\mathbf{t_{b1}} = \frac{\ln(1/(1-\mathbf{Ka}\cdot\mathbf{i}))}{\ln(1+\mathbf{i})}$	$\mathbf{t_{b2}} = \frac{\ln(2+\mathbf{i})}{\ln(1+\mathbf{i})}$	$\mathbf{t_{b3}} = \frac{\ln(1/\mathbf{i})}{\ln(1+\mathbf{i})}$
Formula	$K_{INN} - K_{FIN}$ $t_T - t_{b1}$	$D_{INN} - D_{FIN}$ $t_T - t_{b2}$	$C_{ANN} - C_{LC}$ $t_{b3} - t_T$
Priorities	Orientation for the value of capitalization. Creating the alternative financial instrument as to the value (K).	Orientation for the value of income. да. Creating the alternative financial instrument as to profitability.	Orientation for capability for repayment of credit lines.

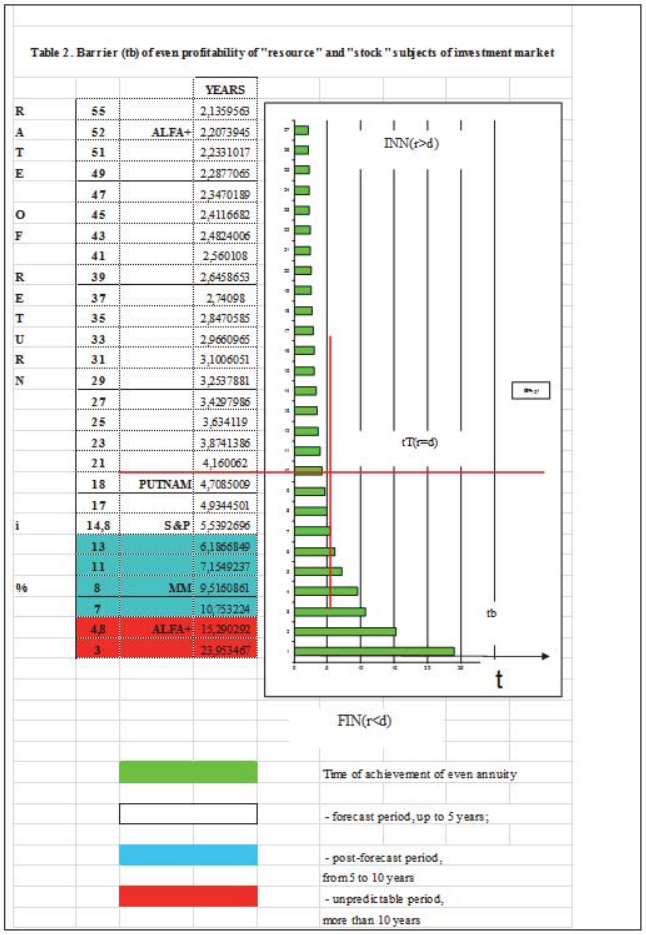
Investing funds is done by annuity payments of the main manufacturing company into the innovative projects and market financial instruments.

Investing funds into the financial instruments, the level of profitability of which (d) is lower that the profitability of manufacturing business (r) is economically inadvisable (r>d). It may be that profitability level of financial instrument may be higher than the profitability of manufacturing business, i.e. (r<d). We shall consider this thesis as probable for high-risk securities (Vyatkin, Vyatkin & Gamza, 2003]. In this study we shall dwell on the compromise variant, when (i=r=d) profitability level of the company and stock market coincide, where (i) – even rate of profitability, corresponding to the time barrier (t_b) (Table 2).

From economic and mathematical point of view, this condition is understood in a more strict way. In the zone, where (r>d) investing funds into financial instruments is not advisable, as the profitability of industrial production is higher. For zone (r<d), the financial market is preferable as an alternative sources of income. The limit, where (i=r=d), is a boundary between economically profitable (reasoned) investment of funds between manufacturing "resource" subject of investment market and "stock" member.

Then, financial analysis of the state of investment market requires the study of regularities of behavior of barrier (t_b), depending on various economic indicators. The presence of even rate of profitability in the current period of time (t_T) means that (t_T) is at the barrier (t_b), when the levels of capitalization, profitability, or capability for payback coincide. Logical-mathematical analysis of determination of barrier (t_b) depending on even rate of profitability (i) was performed in the work (Oleynik, 2002), the main results of which are shown in Table 1. Here the elements of ψ - factor are distributed as to the tasks of determining the alternative capitalization, income, and capabilities for payback of invested resources for "resource" and "financial" subjects of investment market.

Then, (t_{b1}, t_{b2} и t_{b3}) denote the barriers of even capitalizations, profitability, and payback of resources, correspondingly. Ka – ratio of initial value of capitalization of innovative project to the value of annual investment annuity, which an industrial corporation is capable to perform. Initial moment of time (t_H) is a moment of the start of realization of innovative project. It is obvious that barriers $t_{b1}=f_1(Ka;i)$, $t_{b2}=f_2(i)$, and $t_{b3}=f_3(i)$ have a logarithmic nature.



5. Results

Table 2 shows the function $t_{b2}=f_2(i)$ of the behavior of barrier (t_{b2}). Low rate of even return (i) makes the following stable financial instruments attractive: municipal papers (MM), instrument (DOW JONES) and (S&P). Financial and real investment projects reach even profitability in post-forecast period from 5 to 10 years and during unpredictable period of more than 10 years. With the increase of rate of even return, the period of its achievement reduces. However, high return of securities of stock market increases the risk level, which reduces the attractiveness of stock market. And vice versa, rates of even return expand the attractiveness area of real innovative projects due to increase of real material and technical basis of innovative projects and, consequently, the increase of their stability level.

Level of risk of high-yielding securities does not allow orienting for the attractive rate of return due to high level of volatility. Content of elements of ψ - factor is determined as difference between capitalization (C), profitability (P), and capability for payback (P) according to real innovative (INN) and stock (FIN) subjects of investment market, and is determined for the current period of time (t_T). $\psi_1>0$, when capitalization of innovative project is higher than capitalization of stock market. This condition is peculiar for the time period when (t_T) hasn't reached the value (t_{b1}). Similar situation takes place during analysis of profitability of subjects of investment market. The opposite situation is observed during the analysis of capability for payback, when passing the barrier (t_{b3}) can mean the cost overrun of credit line over the possibilities of manufacturing corporation for its repayment.

Let us perform the logical and theoretical analysis of relations between subjects of the market, which allow keeping the rate of profitability of investment market on a high level. Figure 1 shows the graph of economic value added of financial and real investment project for "stock" and "resource" subjects of investment markets. In the interval [t_0; t_H], the "resource" market member performs the accumulation of investment resources. Investment resources, in the form of annuity investments from manufacturing company, can go both in financial and innovative project. When these funds are allocated in bank depositories, the level of capitalization of the resource grows according to the value of deposit rate. Then, at the stage of accumulation, the growth curves of capitalization of financial innovative projects coincide. Interval [t_H; t_K], as cost-intensive, corresponds to the fourth stage of turn-round of investment capital for "resource" member of investment market. Dynamics of the growth of capitalization of "stock" subjects does not suffer any changes and corresponds to the value of stock rate (d).

Level of capitalization of innovative project depends on the market value of the production assets, already built by the current time, and may both lag behind the capitalization of financial project in case of low market value and surpass it in case of positive evaluation of perspective of the project by members and players of stock market. Time interval [t_K; $t_П$] is defined and profitable. When innovative project generates profit and corresponds to the last stage of turn-around of investment capital, the dynamics of the growth of financial projects capitalization does not change. The growth or profitability of the real project can both exceed ($r_2>d$) and lag behind the rate of economic value added ($r_1<d$) of financial project. Point (C) corresponds to the situation when, with obvious underestimate of innovative project by stock market, nevertheless, it generates a high level of profitability, exceeding the profitability of the financial project (Tsvetkova & Arlyukova, 2002).

When moving on the time axis (t), the factor of capitalization growth (ψ_1) is calculated as a difference between capitalizations of innovative and financial projects. Then, the stage of accumulation - ($\psi_1=0$); cost-intensive stage - ($\psi_1>0$); profitable stage for interval [t_K; t_{b1}] ($\psi_1>0$), and interval [t_{b1}; $t_П$] ($\psi_1<0$). It should be noted that growth of capitalization of industrial project increase with time due to end of payments for liabilities. Growth of capitalization of the financial project has a tendency for reduction with time, due to a high level of instability of domestic stock market. Consequently, under the influence of these factors, the barrier (t_{b1}) shift towards the right, thus increasing the area [t_K; t_{b1}] of priority choice of innovative project. Then it becomes obvious that one criterion of capitalization (t_{b1}) is not enough for objective evaluation of priority of "resource" and "stock" subjects of investment market.

Figure 2 shows the graph of return growth of financial and real investment projects. The starting point is the moment (t_K) of launching and receiving profit by the innovative project. With the course of time, profitability of innovative projects grows due to end of payments to creditors and continuation of investment activity, aimed at the increase of competitiveness of the final product. Profitability of financial institutions has various natures. It may possess stable nature with curve FIN(2) that reflects the state of global economy to the fullest extent. Unstable behavior of financial market, peculiar for Russian economy, is reflected by the curve FIN(1) that may have negative value as a result of, for example, default.

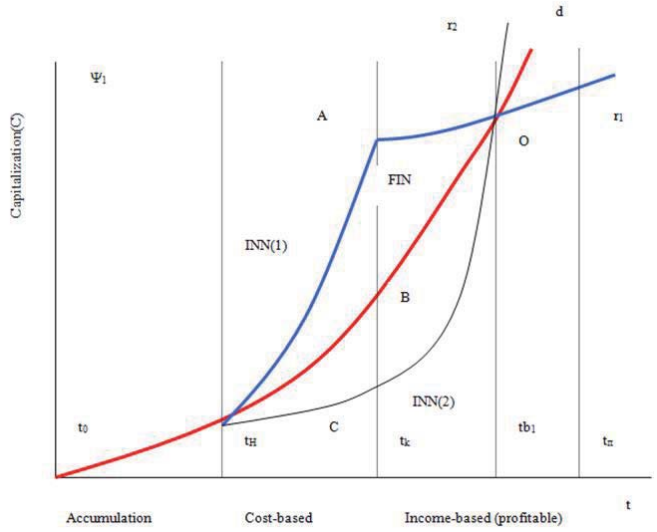


Figure 1. Level of capitalization of financial and real innovative project

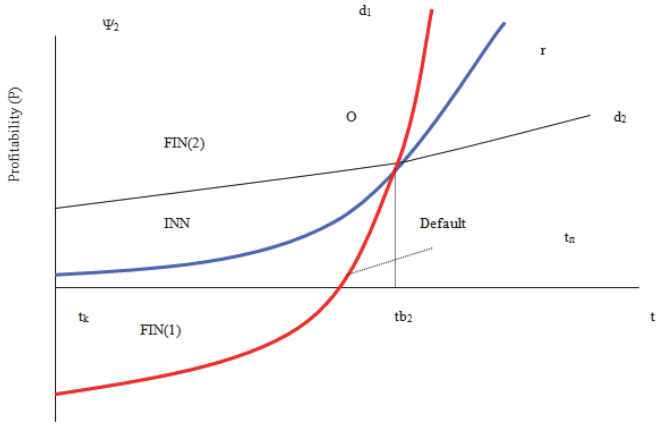


Figure 2. Analysis of profitability of financial and real innovative projects

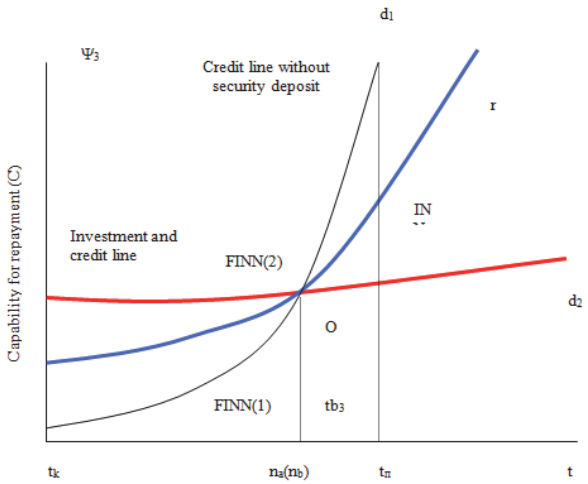


Figure 3. Analysis of capability for repayment of liabilities

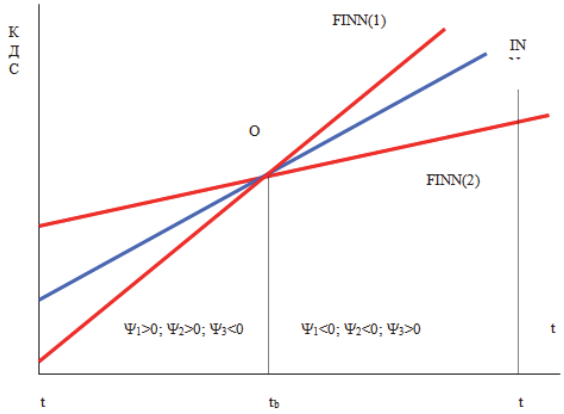


Figure 4. Analysis of behavior of Ψ - factor elements

The analysis will be based on the curve FIN(1) with high level of profitability (d_1>r) at high level of instability of stock market. This situation guarantees point (O) of crossing of the curves INN and FIN(1) in the moment (t_{b2}) of the barrier, to the left of which the innovative project is of top-priority, and to the left – the financial one is of top-priority. The factor of profitability growth is determined as difference between profitability of innovative and financial projects.

In the interval [t_K; t_{b2}] - (ψ_2>0); in the interval [t_{b2}; $t_П$] - (ψ_2<0). It is evident that instability of stock market expands the area [t_K; t_{b2}] of top-priority choice of innovative project. Stable nature of stock market at average rate of profitability of zero risk, for example, municipal securities (3.5% per annum) and curve FIN(2) influences the behavior of profitability factor (ψ_2) in the opposite way.

One of the most important criteria, determining the efficiency of investment project, is capability for return of investment resources. Capability for return of funds is largely determined by the profitability of innovative project, especially at the initial stages of its functioning. Figure 3 shows the curves of growth of profitability of innovative project INN with profitability rate (r) and various types of growth of credit lines value. Credit line FIN(1), which has no security deposit, at the initial moment (t_K) is less than capitalization of innovative project as to the total volume of credit, but the value of this credit line (d_1) exceeds the profitability of innovative project (r), i.e. (d_1>r). In this situation, the enterprise can repay the credit in the interval [t_K; t_{b3}] or [t_K; n_b]. In this research, under conditions of heavy deficit of external investment resources with the use of stages of accumulation of investment resources, the relations between external credit organizations have the form of investment and credit lines. This form means (supposes) the availability of deposit from among the unspent resources. This deposit reduces the cost of credit line by the value of deposit rate of security deposit.

Then, investment credit line at the initial moment of time can exceed the possibilities of innovative project in the interval [t_K; n_a] or [t_K; t_{b3}]. The curve FIN(2) has a low-angle character, as (d_2<r). After passing the barrier (t_{b3}), the enterprise can fully repay the liabilities of investment and credit line. If time interval [t_K; t_{b3}] is preconditioned with bank organization as a period of credit granting, then the industrial corporation does not lose financial stability during this period. Then, the character of relations of curves INN and FIN(2) is a basis for analysis of capability of innovational project for return of invested resources. The factor of payback (ψ_3) should be viewed as difference between capitalization of enterprise and cost of credit, and for interval [t_K; t_{b3}] - (ψ_3<0), and for interval [t_{b3}; $t_П$] - (ψ_3>0).

Figure 4 shows combined scheme of behavior of elements of ψ - factor as to criteria of capitalization (C), profitability (P), and capability for payback (P). Factor (ψ_1) is viewed for positioning the curves FIN(1) and INN, where for interval [t_K; t_b] (ψ_1>0), and for interval [t_b; $t_П$] - (ψ_1<0). Factor (ψ_2) is also viewed for positioning the curves FIN(1) and INN, where for interval [t_K; t_b] - (ψ_2>0), and for interval [t_b; $t_П$] - (ψ_2<0). Factor (ψ_3) is viewed for positioning the curves INN and FIN(2), where for interval [t_K; t_b] - (ψ_3<0), and for interval [t_b; $t_П$] - (ψ_3>0). Such behavior of elements of ψ - factor as to the barrier (t_b) shall be taken as a basis for analysis of perspectives of investing funds into the “resource” or “stock” subject of investment market (Egorov, Merkulina, Safronova & Selskov, 2014).

It is easy to see that parameters determining the values of elements of ψ – factor have a rather general character and cannot individually make a decisive influence on the decision making during the investment activity. However, their totality gives a more comprehensive picture for choosing the type of investment market member, which is the most attractive for allocation of funds, free of liabilities. Analysis of combinations of elements of ψ – factor leads to the reasoned decision-making for provision of investment activity.

Vector of values of ψ – factor $\Psi(\psi_1;\psi_2;\psi_3)$ determines the state of financial market as to demand for investment capital. If the profitability rates of stock market are rather high, there is a real alternative for investing into financial sector. And vice versa, low profitability rates of financial market determine the priority of investing into innovational production of real sector of economy.

With similar levels of attractiveness of financial and innovative markets, the analysis of combinations of values of elements of Ψ – factor as to capitalization, profitability, and capability for payback of invested funds. Table 3 shows various combinations of elements of Ψ – factor. Elements of ψ – factor are compared with zero value (<; >).

Table 3. Algorithm of management decision making in investment activity based on three values of elements of ψ – factor.

N/N	Factor			Priority		Basis
	Ψ_1	Ψ_2	Ψ_3	INN	FINN	
1	>	>	>	+	-	Innovational activity is preferable as to all parameters
2	>	>	<	+	-	High level of profitability of the innovational project
3	>	<	>	+	-	Volatility (instability) of financial market
4	>	<	<	-	+	Low level of profitability does not allow disbursement of loans
5	<	>	>	+	-	Main characteristics of innovational projects can be reached
6	<	>	<	+	-	High level of profitability and restructuring of credit lines give a positive effect
7	<	<	>	-	+	Small share of loaned capital does not permit choosing the innovational project
8	<	<	<	-	+	Financial instruments of stock market are preferable as to all parameters

Based on the analysis, the priority (+) of the investment activity is given to innovational or financial subjects of investment markets.

1. $\psi_1>0$; $\psi_2>0$; $\psi_3>0$ – investment activity is aimed at the industrial innovative project.
2. $\psi_1>0$; $\psi_2>0$; $\psi_3<0$ – innovational project is of top-priority as to the value of capitalization and level of profitability, but it is overloaded with loans. In order to continue innovational activity, it is necessary to reconsider the parameters of credit lines and relations with credit organizations. Otherwise, another project should be preferred.
3. $\psi_1>0$; $\psi_2<0$; $\psi_3>0$ – capitalization of the project and capability for reimbursement of loans are positive, but the level of profitability of financial market is higher. In this case, it is not advisable to refuse the innovational project, as the required level of profitability of the project is achieved, and the value of profitability of stock market is characterized by a high level of instability.
4. $\psi_1>0$; $\psi_2<0$; $\psi_3<0$ – innovational projects is more preferable as to the value of capitalization, but low level of profitability does not allow disbursement of loans. In this case, the project should be refused, and the financial instrument of stock market should be preferred.
5. $\psi_1<0$; $\psi_2>0$; $\psi_3>0$ – with low capitalization, the level of profitability and terms of reimbursement of loans are realizable. The priority is given to innovational project, as the level of profitability and possibility for payback are essential for the investment project.
6. $\psi_1<0$; $\psi_2>0$; $\psi_3<0$ – with low level of capitalization, the reimbursement of loans is impossible, but the level of profitability is higher than that of financial instrument. In this case, refusing the innovational project is not advisable, as the high stable level of profitability together with restructuring of credit lines give a positive effect. The main argument is the fact that credit organization is interested in the loan repayment, knowing of the high level of profitability of the innovational project.
7. $\psi_1<0$; $\psi_2<0$; $\psi_3>0$ – with weak capitalization and low profitability, it is possible to settle with creditors. This means that the innovational project is not overloaded with credits, and it is less preferred as to all other parameters. In this situation, the choice should be in the favor of financial instruments.
8. $\psi_1<0$; $\psi_2<0$; $\psi_3<0$ – investment activity should be directed into financial instruments of stock market, and the innovational project should be refused.

Analysis of Table 3 shows that the priority of investment activity in the favor of innovational project is determined under two positive values of elements of Ψ – factor out of three. The exception is the sixth combination, when the high level of profitability of innovational project allows speaking of the debt restructuring.

Average level of profitability of innovational project means that it could be compared with the profitability of financial instrument. Financial instrument is available for everyone, including credit organizations. Therefore, average profitability

of innovational projects is not the reason for credit organization to provide subsidies for credit lines. Then the factor ψ_3 is decisive for determining the top-priority directions of investment activity. The second important item is income ψ_2. Capitalization of instruments is determined by factor ψ_1 and is the last one in the ranking of elements of Ψ – factor.

When there is no possibility for leading the main type of activity (change of state policy in the sphere of private business), it can be easily closed, and the center of corporation's profitability will be switched to the newly created financial structure, up to going beyond the Russian Federation (Kleiner, Tambovtsev & Kachalov, 1997). Here, the investment flows could be directed at the reconstruction of the lost main production, for example, in the countries of the new abroad, in case of the same demand for the product, organization of other types of production, or stop at receiving income from allocation of capital in financial stock or commodity market. Figure 5 shows the combined scheme of the three elements of Ψ-factor.

Time interval $[t_1; t_5]$ is divided into four zones, determined by points of crossing of growth functions of efficiency of financial (FIN) and innovational (INN) project. It is obvious that each of these points corresponds to a certain moment of time: t_2, t_3, and t_4. At the same time, the points of crossing of the curves (INN) and (FIN) for each element of Ψ-factor may be on any of the time verticals: $(t_2\text{-}t_2)$, $(t_3\text{-}t_3)$, and $(t_4\text{-}t_4)$. If one time vertical may contain only one intersection point, the management apparatus still has six possible combinations of intersection points at its disposal.

For example, Figure 5 shows the combination No. 1, when for factor ψ_1, the points of crossing are located on the time axis $(t_2\text{-}t_2)$, for factor ψ_2 – on axis $(t_4\text{-}t_4)$, and for factor ψ_3 – on axis $(t_3\text{-}t_3)$. For the second combination or No. 2: ψ_1 - $(t_3\text{-}t_3)$, ψ_2 – $(t_4\text{-}t_4)$, and for ψ_3 – $(t_2\text{-}t_2)$. All six possible combinations are listed in Table 4.

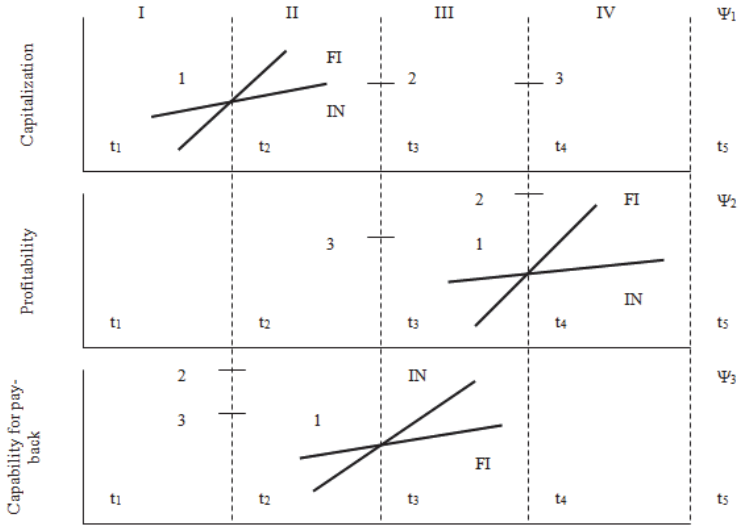


Figure 5. Analysis of ratio of Ψ - factor parameters

Table 4. Possible combinations of Ψ - factor parameters

Ψ - factor	Combinations	Time vertical axes		
Vertical	No.	$t_2 - t_2$	$t_3 - t_3$	$t_4 - t_4$
Ψ_1	1	1	2	3
	2	4	5	6
Ψ_2	3	5	3	1
	4	6	4	2
Ψ_3	5	2	1	4
	6	3	6	5

Possibility of performing investment activity in alternative innovational and financial projects hedges the main group of risks of industrial enterprise (Selskov, 2009; Moskvin, 2004). This group of risks corresponds to the circumstances when the company cannot influence them at all (Kachalov, 2002; Egorov & Valinurova, 2004). They are especially dangerous at the initial stages of the enterprise's life cycle. When the company has the possibility to perform external investment

activity, it is possible to create alternative financial and innovational structures with the same value of own capital and profitability as of innovational production (Figure 5 and Table 5).

Let us conduct the analysis of values of elements of Ψ-factor for various combinations of intersection points of the curves of capitalization, profitability, and capability for reimbursements of loans. For the first combination on the graph of capitalization ψ_1 in Figure 5, the intersection point of the curves (INN) and (FIN) is located in point (1) on the time axis (t_2-t_2). Then, for time interval [t_1; t_2] – factor $\psi_1>0$, according to Figure 1. For all other intervals: [t_2; t_3], [t_3; t_4], and [t_4; t_5] - $\psi_1<0$. On the graph of profitability ψ_2, the intersection point (1) lies on the time axis (t_4-t_4). Then, for intervals: [t_1; t_2], [t_2; t_3], and [t_3; t_4] - $\psi_2>0$, and for interval [t_4; t_5] - $\psi_2<0$. For the graph of reimbursement of loans ψ_3, the point (1) is located on the axis (t_3-t_3), then according to Figure 3, for intervals: [t_1; t_2] and [t_2; t_3] - $\psi_3<0$, and for intervals: [t_3; t_4] and [t_4; t_5] - $\psi_3>0$.

The same analysis is conducted for the five remaining combinations, the results of which are shown in Table 5. For each of the six combinations, the values of elements of Ψ-factor are determined for each of the four time zones. The elements of Ψ-factor are compared to zero level. The sign (>) denotes the priority of innovational project from the point of view of economic efficiency. Sign (<) denotes the priority of financial instrument of stock market. For each combination of intersection points (INN) and (FIN) and for each time interval, the set of values for elements of Ψ-factor is determined, on the basis of which, according to Table 3, the priority of starting investment or financial project is determined for current moment of time.

Table 5. Managing perspective directions of investment activity, depending on the state of elements of Ψ - factor

Ψ - factor		Time zones I - IV			
No. of combination of elements of Ψ - factor	Elements of Ψ - factor	t_1-t_2	t_2-t_3	t_3-t_4	t_4-t_5
1	Ψ_1	>	<	<	<
	Ψ_2	>	>	>	<
	Ψ_3	<	<	>	>
	Project	I	I	I	F
2	Ψ_1	>	>	<	<
	Ψ_2	>	>	>	<
	Ψ_3	<	>	>	>
	Project	I	I	I	F
3	Ψ_1	>	>	>	<
	Ψ_2	>	>	<	<
	Ψ_3	<	>	>	>
	Project	I	И	I	F
4	Ψ_1	>	<	<	<
	Ψ_2	>	>	<	<
	Ψ_3	<	<	<	>
	Project	I	I	F	F
5	Ψ_1	>	>	<	<
	Ψ_2	>	<	<	<
	Ψ_3	<	<	<	>
	Project	I	F	F	F
6	Ψ_1	>	>	>	<
	Ψ_2	>	<	<	<
	Ψ_3	<	<	>	>
	Project	I	F	I	F

For example, for the combination of intersection points (INN) and (FIN) No. 1 and for time interval [t_1; t_2] - $\psi_1>0$, $\psi_2>0$, $\psi_3<0$. According to Table 3, line 2, the priority is given to innovational project of real sector of economy. The similar analysis is conducted for all combinations and time intervals.

It is obvious that during movement from (1) to (6) combinations, parameters of Ψ-factor are worsened from the point of view of innovational project. It is mainly the worsening of characteristics of profitability and capability for reimbursement of loans in comparison with financial project.

For time interval [t_3; t_4], the innovational project is of top-priority, despite the low profitability. Both of these decisions possess a high level of risk and can be equally substituted by alternative financial instruments. Then we shall consider the sixth combination to be of top-priority for financial activity. Then, based on the data of Table 5, it is possible to determine the position of barrier (t_b) that divides the priority of investments into real and financial spheres of economy. To the left of the barrier there is the area of high economic efficiency of innovational project. To the right – the area of high efficiency of financial project.

Then the algorithm of choosing the direction of investment activity consists in choosing the current combination of intersections of the curves (INN) and (FIN) for all elements of Ψ-factor: ψ_1, ψ_2, and ψ_3. Then there goes determining the position of barrier value (t_b), which divides the priority of investment between the real and financial directions. If the corporation's management chooses interval [t_1; t_b], then the investments should be directed into innovational project; if it chooses [t_b; t_5], then – into financial sphere of economy. Thus, if the industrial corporation has innovational developments, which are ready to be made material, this should be done in the period [t_1; t_b]. After the moment (t_b), the innovational project becomes ineffective or risky as compared to financial instrument of stock market [Sibirskaya, Stroeva, Serebryakova & Petruchina, 2014).

It should be noted that the barrier (t_b) belongs to the specific innovational project. During the movement from time axis (t_0-t_0) to (t_1-t_1), Fig. 6, the variants of priority start of the real projects are brought down to minimum at the approach to the time axis (t_2-t_2). At the approach to the axis (t_2-t_2), the level (O;O*) rises, reducing the area of priority choice of innovational project or "resource" subjects of investment market. This is primarily due to moral aging of technical solution of innovational project. However, development of scientific and technical progress and permanent innovational activity within industrial corporation lead to development of new innovational ideas and solutions.

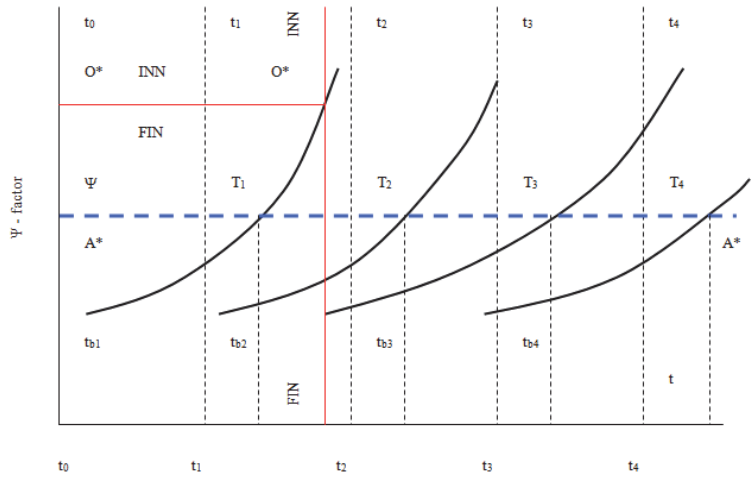


Figure 6. Behavior of the barrier (t_{bi}) in time

The last, the sixth, combination, according to the logic of table 3, contains priority of innovational project. However, for time interval [t_1; t_2], innovational project does not have the capability for reimbursement of loans, despite the high capitalization and profitability. Thus, for the time axis (t_1-t_1) we have a new innovational decision, which corresponds to the barrier (t_{b2}), for the axis (t_2-t_2) – the barrier (t_{b3}). If the combination of parameters of Ψ - factor for all innovational decisions coincide (A; A*), the priority start of innovational project for the time axis (t_0-t_0) lies in the interval [t_0;T_1]; for the axis (t_1-t_1) – in the interval [t_1;T_2]; for the axis (t_2-t_2) – in the interval [t_2;T_3], etc.

Therefore, the permanent process of conducting the innovational activity expands the possibilities of priority performance of high-tech innovational projects from the point of view of economic efficiency, in comparison with financial instruments. A high level of risk of operations in stock market urges the investor to pay attention to the real sector of economy. Then the process of innovational activity within self-financing or heavy deficit of external investment resources significantly increases the level of investment attractiveness of industrial innovational projects. Effective conduct of investment activity under regime of self-financing will inevitable attract an external investor into the real sector of Russian economy.

The conducted logical and theoretical analysis shows that the barrier (t_b) of division between conduct of investment

activity in real innovational and financial directions possesses a character which is similar to the logarithmic. If during the movement from the 6th combination of elements of ψ - factor to the 1st, the even rate of profitability (i) increases, the efficiency of real investment projects rises, and the efficiency of financial projects reduces due to low level of stability of stock market.

The above mentioned tendencies of behavior of characteristics of capitalization, profitability, and capability for reimbursement of loans are peculiar for national economy that possesses a high level of instability. At that, the factors of capitalization and profitability have the similar character of behavior, unlike the factor of reimbursement of loans. Let us determine the tendencies of behavior of elements Ψ -factor for stable economic systems. Factor ψ_1 is unchanged, as it adequately considers the growth of capitalization and perspective of innovational projects by members of stock market. Logic of factor ψ_2 will change to the opposite, Fig. 2; the curve FIN(2), which doesn't take into account the defaults and falls of stock market. Logic of factor ψ_3 will also change to the opposite, Fig. 3, the curve FIN (1), as in stable economies, the use of investment and credit lines is not so popular due to accessibility of external credit resources.

Due to the fact that factors ψ_2 and ψ_3 are determined as ones dominating over factor ψ_1 and they have opposite values, unlike the analysis of investment tendencies of national economy, the results of logical and theoretical analysis, reflected in Table 5, denote the priority of "stock" system over the "resource" system at the beginning of time axis. If for stable economic systems in the logic of Table 3, the factor of reimbursement of loans is of higher priority than profitability, the position of the barrier (tb) will change in the way, shown by dashed line, Table 5. In this situation, the results of research are similar to results of logical and mathematical analysis, Table 2, which shows that mathematical analysis is oriented at the parameters of stable economy and does not take into account the uncertainty and variations of macro-economic indicators of developing countries.

For the stable economy, dashed line in Table 5, the beginning of time axis corresponds to the priority of "stock" subject of investment market, especially under low rates of profitability, Table 2. This fact is explained by reliability and stability of financial systems of developed economies of the world. The growth of profitability rate implies the increase of the risk coefficient, and the priority of stock market decreases with approach of the start of real investment projects. Then the time interval of the priority of "stock" subject of investment market is relatively small, which reflects the increased interest of investors in the real innovational projects [Selskov, 2005; Selskov, 2009; Egorov Safronova & Selskov, 2007).

For the national economy, the industrial innovational projects are of top-priority due to high level of instability of financial system. Analysis of figures (A,B,C,D) and (A*,B*,C*,D*), Table 5, shows that with the growth of profitability rate, the area of priority choice of industrial innovational projects expands for the stable economy according to the logic (C*,D*), and for the economy that develops upwards3 (C,D) – on the basis of similar tendencies or laws. (In this case, close to logarithmic). This implies the unity of the laws of development of investment activity for various types of economic systems (Safronova, 2008).

6. Conclusions

The research shows that the priority of investment activity currently belongs to the subject of investment market, the expected profitability of which is higher that of other members. This condition stabilizes the investment market under permanent growth of its profitability rate. Under these conditions, the profitability rate is a decisive factor which positively influences the improvement of characteristics of investment climate. High profitability rate of the market means that the "investor" investment systems, having gone beyond the limits of investment market as a result of aggravation of investment climate, has to return as its subject die to necessity for allocation of free resources under profitable conditions. Thus, the investment market is self-sufficing, as under conditions of aggravation of investment climate and subjects' going beyond its limits, the remaining members organize their relationships so their investment attractiveness would permanently grow, which would inevitably lead to the return of the lost subjects into the investment market.

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