

Multiplier and Accelerator Effects of Investments in the Russian Economy (Facts, Trends and Prospects)

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Abstract

Background/Objectives: The article describes the peculiarities of multiplier and accelerator effects in the Russian economy at different stages of its historical development. **Methods/Statistical Analysis:** The research of the specifics of multiplier and accelerator effects of investments in the Russian economy is based on the historical and genetic approach. The methodological base of the research consists mainly of dialectical principles. During studies, the authors used a regression analysis as a main tool for studying relations between economic variables and an indicative analysis enabling to estimate the potential danger, to make quantitative assessment of the crisis. **Findings:** The authors have built a regression model which reflects both: Changes occurred in the investment mechanism in the 1990s and their impact on the cumulative process in the post-Soviet economy. The causes and negative consequences of low investment activity in Russia have been identified. The well-founded conclusion has been made about the futility and harmfulness of raw materials export model for the further development of the country due to its inability to utilize the potential of the stimulating effect of the “cumulative demand” (consumer and investment one) factor. **Application/Improvements:** Proposals have been made regarding the intensification of the investment activity in the Russian economy, as well as the activation of hyper-cumulative process combining the accelerator and multiplier effects.

Keywords: Acceleration Effect, Investments, Multiplier

1. Introduction

1.1 Introduce the Problem

Entering of the world economy in the 21st century was marked by its aspiration to ambitious changes and focusing on the improvement of the quality of life of society and reproducible wealth, on the improvement of the structure of the economy, on the acceleration in the rate of the accumulation of highly intellectual human capital assets through the innovative activity growth and so on¹. According to² the main instrument for achieving the designated targets of socio-economic development is a new investment policy, the implementation of which has been started by the advanced nations of the world. The methodological basis of this policy consists in the “...creation of economic rationale and achievement of rational (limit

safety criteria of sustainable investment and economic activity”³.

This means that the national economy, consistent with the modern global challenges, is incompatible “... with degeneration of innovative activity, degradation of the material and technical base, deformation of the economic environment and potential for development”⁴ observed in Russia in 2000-2015 as part of the implementation of the raw materials export model of the national economy development.

We share the position of prominent Russian authors⁵⁻⁷, according to which the expert and feedstock model refers to low-order economic systems in historical terms and therefore it hinders economic and social development by rigid system constraints. As long as it remains unchanged, we should not expect the Russia's economic recovery, no

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matter how much dollar and oil will cost and whether the economic sanctions against the country will be lifted.

Autonomous recession experienced today by the economy of the Russian Federation confirms once again the impossibility of reproduction of the raw materials export growth and clearly points to the futility and destructiveness of raw materials export model of the national economy development due to its inability to use (in the true sense) the potential of stimulatory effect of the factor of “cumulative domestic demand: Investment and consumer”. The consequence of such a model was not multiplication but consumption of wealth.

Under these circumstances, Russia’s vital task consists in the implementation of a new, high-tech and knowledge-intensive industrialization, which represents inherently nothing more than a new model of the national economy development, corresponding to the global challenges of the modern era. This model contains and includes the fundamental sources of economic growth and development, being a model of progressive structural diversification of the national economy and high value added multiplier, increasing productivity of labor and enhancing competitiveness of products, increasing share of domestic fund accumulation and activation of investment and innovation activity⁵.

1.2 Explore Importance of the Problem

The current crisis of the Russian economy requires the prompt development of a new economic model, strategy and economic development policies, just like the President of the Russian Federation insists. On the one hand, this necessitates consolidation of positions and efforts of scientists-economists of different fields; on the other hand, it requires specification of the assessment of the economy of Russia as a subject to revival. Against this background, it seems appropriate and urgent to study the effect produced in the Russian economy by the acceleration and multiplier principles within the operating investment mechanism. This is important not only for the assessment of the real results of investment activity, but also for the subsequent formation of the state economic policy.

1.3 Background/Literature Review

It should be remarked that that the issue of the nature of investments is debatable to date. There have been various approaches to the studied definition. Thus, in⁸ the investment is treated as part of the income that has not

been used for consumption in the current period and particular attention is paid to the investment multiplier effect (impact of investment on consumption and its relationship with the savings).

A detailed analysis of the “investment” category was given in⁹ where it is defined as a highly dynamic “component of the national income”. The author identifies the component parts of this value, namely: 1. New construction; 2. Production of long-use equipment; 3. Change of volume of product and material reserves and 4. Net foreign investments. The first three terms form what is referred to as a “sum of gross private domestic investment”¹⁰. The Hansen’s work is remarkable by the fact that it studies the so-called hyper-cumulative process based on the interaction of the multiplier and the accelerator.

As is known, in the business system, fluctuations in the long term investments are under the influence of the principle of acceleration, according to which, over a long period, regardless of how high the current level of earnings is, the fixed capital stock will come into line with this value and the new net investments will be reduced to zero, unless there are: 1. Income (production) growth; 2. Interest rate lowering and 3. Further improvement of the technology.

Consequently, the principle of acceleration along with a marginal rate of consumption is a powerful factor of economic instability and the cyclical fluctuations of its main macroeconomic parameters. If the generated revenue increases or decreases, the acceleration principle intensifies these fluctuations.

In the most popular in American colleges and universities textbook¹⁰ investments are defined as the costs of production, accumulation of the means of production and augmentation of material assets. Particular attention is given to investment in human capital, which interpreted as any measure taken to improve the productivity of workers (by improving their skills and developing their abilities); expenditures on the improvement of education and health of workers or rise of labor mobility.

In¹¹ mainly financial investment is studied, while underlying that “in primitive economies most investments is of the real variety; in a modern economy such investments is the financial variety”, since well-developed institute of financial investments promotes the growth of real investments.

Summarizing the above, it can be concluded that the distinctive characteristics of the studied categories include multivariance of choice, the risk and the full

range of conditions for reproduction. In this regard, the authors define the investment as a hereditary category of reproduction and accumulation of capital, as a condition for expanded reproduction with regard to the new qualitative trends in the development and increase in the role of the person. In this sense, investments play the role of one of the key categories of genetic (hereditary) core of the industrial, neo-industrial and post-industrial development paradigm¹².

Therefore, as applied to the neo-industrial stage of development, which is characterized by research intensity, highly sophisticated technetronic production and its focus on innovation, the issue should refer to a different type of investments, being adequate to the content and driving forces of the new model of industrialization of Russia. This viewpoint was actively developed by Russian economists^{5,13-15}. Thus, neo-industrial type of investment can be defined as long-term investments in the innovative spheres of the national economy, providing reindustrialization of the productive forces and the replacement of labor-intensive production with capital-intensive one based on creation and use of advanced machinery and technologies, comprehensive development and efficient use of human and intellectual capital¹⁶. Neo-industrial investments are able to ensure the hyper-cumulative process, when the accelerator effect is combined with the multiplier effect in economics.

While the economic paradigm is changing, the key role should be given to the establishment of economic and institutional conditions to boost sustainable and safe investment and innovation activity required to ensure the active deployment of hyper-cumulative process in the economy. This standpoint is shared by the famous Hungarian scientist¹⁷ who believes that the size of the investment depends on expectations, risk and confidence in the feasibility of the investment. According to¹⁷, self-restraint and caution of investors are likely to be one of the main reasons for the lack of sufficient demand to ensure full employment in general. It is therefore necessary to encourage potential investors to make investments.

V. K. Senchagov, Professor at the Institute of Economics of the Russian Academy of Sciences, relates the cumulative process to the achievement of thresholds of investment security indicators, which, in his opinion, at the same time may become the criteria of achievement of the strategic objectives of socio-economic development when the economic model of the national economy gets shifted. As such indicators, the scientist specifies a share of

accumulation of gross investment in GDP, reproduction rates and capital consumption, a fundamental macro-financial condition for investment security³.

1.4 State Hypotheses and their Correspondence to Research Design

Peculiarities of the principles of acceleration and investment multiplier are the main reason for the constricted renewal of capital assets and autonomous recession experienced by the Russian economy.

2. Method

2.1 Historical and Genetic Approach

The framework of studying the specifics of a multiplier and accelerator effects of investments in the Russian economy is formed by the historical and genetic approach¹⁸. Its essence lies in the analysis of historical trends, reproduction of historical and social logic of development of economic processes and economic systems. This methodology combines the principle of diversity of theoretical and methodological approaches with the principle of systematicity. "Different theoretical models, reflecting diversely multifaceted economic reality, never absorb each other completely without any reserve. Their possible integral unity, relatively closed structure is always rather a process than a finished result"¹⁹.

2.2 Dialectical Principles

The methodological base of the research consists mainly of dialectical principles, which allowed identifying the essential characteristics of the studied phenomena and processes, to define their development trends, to correlate the form of their manifestation in the economic area and to highlight the causes of conflict between them.

2.3 Regression Analysis

This method enables rather to build econometric models for monitoring the economic parameters and values rather than simply to state the functional relationship between the variables of economic values. Such models make it possible to establish the nature of the relationship between the variables (strong, weak, etc.), to give an economic interpretation of the obtained results and to use these results to predict the specific economic processes.

2.4 Indicative Analysis

This method presupposes comparison of the real (actual) values of economic security indicators in the investment field with their threshold values, which are assumed to be not lower than the world average ones. Such a comparison is supplemented by ranking indicators according to the zones of remoteness from the recommended thresholds to identify the severity of the crisis situation in the area under study.

3. Results

Today the necessity to carry out a new industrialization of modern Russian economy is once again confirmed by the downward trajectory of the economy. Among the reasons, mainly subjective factors are often indicated (insufficient use of incentives and possibilities of market relations, weak management and others). So, the science should provide the results of a more thorough analysis of this problem, to which this article is devoted. The authors believe that the downward trajectory of the Russian economy is primarily due to the poor functioning of its investment mechanism and specificity of manifestation of the principles of acceleration and multiplier.

The irrationality of the manifestation of the multiplier and accelerator can be found yet in the USSR economy. It is noteworthy that the lack of an internal economic mechanism built in the command planning system that would automatically predetermine decisions regarding the investment based only on economic criteria, leads to the fact that such decisions are not necessarily determined by the existence of excess capacity and reserves of labor and other resources. Capital investments in the planned economy may be at the expense of other sectors, personal consumption, social services and so on. In these conditions, the multiplier effect and the principle of acceleration being in irreconcilable conflict, as though are standing in opposition to each other, which results in a quasi-steady state of the central planning economy.

To determine the characteristics of a multiplier and acceleration mechanism of the planned economy period, ²⁰used a so-called product critical consumption coefficient²¹ which is essentially the same as the accelerator. With regard to the macro level, this coefficient ($e_{\bar{n}}$) can be represented as follows:

$$e_{\bar{n}} = \frac{1 - \frac{S_A}{\Delta Y_A^H}}{1 - \frac{S_A}{\Delta Y_A^I}}, \tag{1}$$

$1 - \frac{S_A}{\Delta Y_A^H}$ Where S – nominal volume of the accumulation of the industry (society) in the production of income (ΔY);

– national economy sector’s propensity to consume;

$$1 - \frac{S_A}{\Delta Y_A^I}$$

– propensity to consume in the society.

It follows from this formula that the sectoral consumption without being motivated by the ownership on their capital (funds), with an increase in the e_c is able to “siphon” to the cost the maximum possible (under the given conditions of reproduction of the company’s employees) part of the consumption fund. In other words, in this case, the accelerator brings a multiplier effect to a senseless in terms of welfare increase in national income as “investment for the sake of investment”. There is an illusion of economic growth, but in fact there is a decline in the most significant part of the national income: In the production of the consumption fund. In a market economy, from the perspective of the multiplier the situation is the opposite: The consumption fund fluctuates but is stable enough and the accumulation fund in the form of net investments becomes negative. Thus, there is a paradox in the central planning economy: More the economy produces, the higher the rate of capital investment is and the poorer population gets.

In the 1990s in Russia, due to the transformational recession there was a significant decrease in production volumes (approximately 43-45 %) ²⁰ and in investment in fixed assets (up to 21.1%) in relation to the level of 1990 ²².

In terms of the principle of acceleration, such a sharp drop in capital investment in this period was due to radical changes in the investment mechanism related to the transition from the financing of investments in fixed capital at

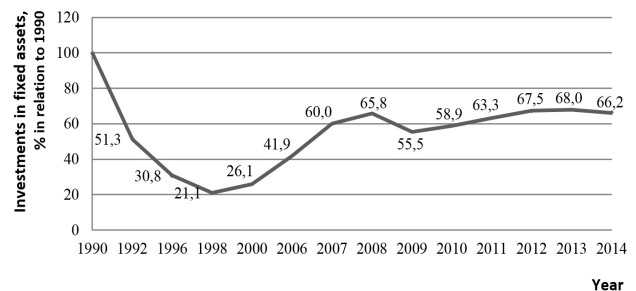


Figure 1. Dynamics of investments in fixed assets in 1990-2014 (in comparable prices).

the expense of the state budget to the investment mostly at the companies' own expense (amortization allowances and profit). This transition took place when a high proportion of loss-making enterprises were still existing in the real sector of the economy (44.4% in 1999) and the use of finances of new capital investments was critical. The country's economy was in a vicious circle, where the interaction of the principles of acceleration and multiplier generated a cumulative deflationary spiral.

In the process of the investment mechanism transformation, accompanied by changes in the structure of the used GDP, the share of gross capital formation reduced significantly (from 38.7% in 1990 to 20.3% in 2014) (Figure 2). During the entire time interval of the study it was below the threshold value (25.0%) according to this generalizing comprehensive indicator of economic and investment security.

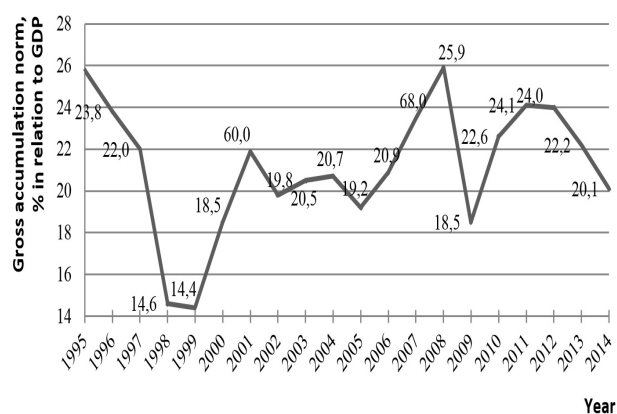


Figure 2. Dynamics of the share of gross accumulation in GDP in Russia in 1995-2014, %²²

It should be noted that in a situation when capital-intensive industries dominate in the structure of Russian national economy, the values of this indicator are clearly not sufficient to overcome the autonomous recession and re-industrialization of the economy. As an example, one can refer to the situation in the countries undergoing restructuring of their economies. During this period, for a long time the investments in fixed assets were maintained at a rather high level. Thus, in China in the period of maximum investment activity in 1987-1996 the share of accumulation in GDP reached 32-34 % with the rate of GDP growth of 6-10 % per year³. Currently, in the Russian economy the share of gross investments into GDP is lower than in the new industrialized countries and the CIS countries (Table 1).

It is worth mentioning that up to 2004 the issue of intensification of investment activity was practically not raised in the country. The situation has changed dramatically since 2005 due to the growth of foreign exchange reserves and the creation of the Stabilization Fund. The state got a free capital, part of which had to be (and it was) reserved for a negative (crisis) economic situation and another part had to be allocated for the innovative renovation and development of production. Unfortunately, this has not happened yet.

Regarding the structure of the financing of investments in fixed capital based on the source of funds in the modern Russian Federation, it has not undergone fundamental changes comparing to the 1990s. Although due to the rapid development of the banking sector and other financial institutions, the share of equity funds decreased from 53% in 1998 to 48% in 2014 (Figure 3). The authors

Table 1. Gross accumulation in different countries and regions of the world (in % in relation to GDP)²⁴

	Average of 1989–1996	Average of 1997–2004	2005	2006	2007	2008	2009	2010	2011*	2012*	Average of 2013–2016*
Developed countries	22.5	21.2	21.2	21.6	21.6	20.9	17.8	18.6	19.0	19.6	20.5
including the newly industrialized Asian countries**	32.5	27.3	26.1	26.4	26.1	27.7	23.4	26.2	26.7	26.8	26.7
CIS countries	...	20.3	21.2	23.0	26.7	25.2	19.0	21.7	24.9	25.9	26.9

* Prognosis.

** South Korea, Singapore, Hong Kong, Taiwan.

analyzed the dynamics and the ratio of sources of investment in fixed assets during 2009-2014 that indicates the rising trend in terms of the share of own funds and the descending trend with regard to the borrowed funds.

The identified trend is of great importance for reduction of investment risks. This trend was confirmed in the course of statistical measurement of the closeness in the relationship of fixed capital investment and gross profit. It can be represented in two different aspects.

- In the form of the constructed regression model that characterizes the relationship between the sectoral distribution of gross profit in the Russian economy in 2014, which is as follows:

$$I = 231,8876 + 0,0002P + \varepsilon \quad P = 6,425, \quad (2)$$

(1,125) (2,534)

The resulting equation is statistically significant in terms of the Fisher test at a significance level of $\alpha = 0.03$; it confirms a moderate dependence of investments in fixed assets (I) on the gross profit (X) ($R = 0.54$). In this case regression coefficient $a_1 0.0002$ is reliable and valid at a significance level $\alpha = 0.03$.

- In the second option of calculation we built econometric models of fixed assets investment dependence on profit in terms of residual values of dI (gross domestic private investment) and dP (gross profit) after excluding the trend (trend component) established in the Russian economy in 2000-2014 (Table 2). In more detail the principle of constructing this model was described by the authors in¹⁶ (see Table 2).

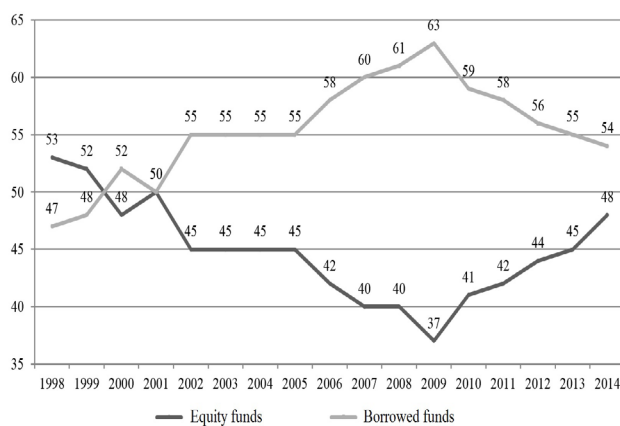


Figure 3. Dynamics of the structural composition of investments in fixed assets based on the source of funds in 1998-2014, %.

The obtained model confirms the strong influence of profit on the amount of investment in fixed assets in such sectors of the Russian economy as agriculture, textile and clothing industry, wood processing and woodware manufacturing, pulp and paper industry, publishing and printing, chemical industry, production of other non-metallic mineral products, machinery and equipment, coke and petroleum products, electrical equipment, electronica and optics.

The above allows drawing a conclusion about the need to create a favorable economic and institutional environment (taxation stimulating the intensification of the investment process and human potential development; availability of credit; investment risk reduction, etc.) for achieving the criteria of investment activity safety and sustainability in the transition to the new model of the Russian economy development.

Under the influence of the formed investment mechanism, Russia for the period of 1998-2014 managed to climb from the bottom of the investment “pit” reached in 1998 21.1% of the amount of capital funding financing from the 1990 level to 66.2% in 2014 (Figure 1). Thus, the decline in production of the 1990s was replaced in 1999-2008 by a more severe crisis in the form of narrowed reproduction. Within the latter, input of the active part of fixed assets either lags behind their retirement, or does not contribute to a real improvement of material and technical base. Harmfulness of the narrowed renewal of fixed assets lies in the fact that it leads to inefficient use of accumulated human capital, strengthening of negative trends in education, health, science, etc. as well as the population decline.

The rightness of the conclusion regarding the process of assets reproduction in Russia is confirmed by the data given in Table 3.

Even “at sunset” of the Soviet economy in 1990, reproduction rates were higher than in the entire period of market reforms. The coefficient of renewal in the post-Soviet economy (since 1992) characterizes to a greater extent the equipment restoration during the repair process and not its renewal⁴.

Disposal of 0.7% indicates a completely insufficient flow of fixed assets in terms of the economic security indicators and economic focus on modernization of production capacities and workplaces. It is obvious that with this dynamic of renewal of fixed assets, there is a tendency for their high wear and tear. At average, the degree of depreciation of fixed assets (at the end of the

Table 2. Regression models of the dependence of investment volumes in fixed assets on the profit after exclusion of the trend (trend component)

No.	Industry sector	Regression equation based on dP and dI residues	Determination coefficient R ²	F-test
1	Agriculture, hunting and forestry	$dI = 0.00000 + 0.00015dP$ (0.00) (2.41)	0.42	5.83
2	Fishing, fish farming	$dI = 0.00000 + 0.00026dP$ (0.00) (1.19)	0.15	1.42
3	Mineral production	$dI = 0.00000 + 0.00001dP$ (0.00) (0.09)	0.01	0.01
4	Manufacturing	$dI = 0.00000 + 0.00037dP$ (0.00) (0.68)	0.06	0.47
5	Manufacture of food products, beverages and tobacco	$dI = 0.00000 + 0.00004dP$ (0.00) (0.09)	0.001	0.01
6	Textile and clothing manufacture	$dY = 0.00000 + 0.00056dX$ (0.00) (7.446)	0.54	9.25
7	Manufacture of leather, leather products and footwear	$dY = 0.00000 + 0.00016dX$ (0.00) (0.62)	0.05	0.38
8	Processing of wood and manufacture of wood products	$dY = 0.00000 + 0.00016dX$ (0.00) (2.34)	0.41	5.49
9	Pulp and paper production; publishing and printing	$dY = 0.00000 + 0.00065dX$ (0.00) (3.04)	0.54	9.25
10	Manufacture of coke and refined petroleum products	$dY = 0.00000 + 0.00009dX$ (0.00) (3.96)	0.66	15.72
11	Chemical production	$dY = 0.00000 + 0.00018dX$ (0.00) (2.02)	0.34	4.08
12	Manufacture of rubber and plastic products	$dY = 0.00000 + 0.00016dX$ (0.00) (0.62)	0.05	0.38
13	Manufacture of other non-metallic mineral products	$dY = 0.00000 + 0.00026dX$ (0.00) (2.34)	0.41	5.49
14	Manufacture of basic metals and fabricated metal products	$dY = 0.00000 + 0.00015dX$ (0.00) (1.97)	0.33	3.88
15	Manufacture of machinery and equipment	$dY = 0.00000 + 0.00071dX$ (0.00) (3.69)	0.63	13.61
16	Manufacture of electrical and optical equipment	$dY = 0.00000 + 0.00032dX$ (0.00) (3.21)	0.56	10.28
17	Manufacture of transport and transport equipment	$dY = 0.00000 + 0.00010dX$ (0.00) (1.32)	0.18	1.75
18	Production and distribution of electricity, gas and water	$dY = 0.00000 + 0.00002dX$ (0.00) (0.12)	0.00	0.02
19	Construction	$dY = 0.00000 - 0.00008dX$ (0.00) (-0.93)	0.10	0.86
20	Transport and communications	$dY = 0.00000 + 0.00126dX$ (0.00) (1.47)	0.21	2.15

year) increased from 39.3% in 2000 to 48.6% in 2014²² and got close to the critical value of this indicator of economic security. The observed situation is complicated by the considerable relative weight (15.0% in 2013) of fully depreciated fixed assets in the Russian economy.

Intensification of the scientific and technical progress in the 20th century led to the introduction of a new concept used to evaluate the useful lives of equipment – obsolescence. Today, around the world the limit value of this indicator is restricted to the terms of not more than 8-10 years. In this regard, it is interesting to consider the information about the age structure of industrial equipment in the Russian economy in 1970-2014 (Table 4).

Thus, for the analyzed period the obsolescence worsened and the situation was aggravated by a significant physical deterioration of fixed assets. This evidences not only the degradation of the material and technical base of the Russian Federation, but also a systemic crisis of its economy exacerbated by the unserviceability of the investment mechanism, its inability to ensure effective reproduction process with due account for the acceleration and multiplier effects.

4. Discussion

It is impossible to overcome the economic recession in the country and the degradation of the material and technical

base of its enterprises without activating cumulative process and increasing the value of the added value multiplier based on the intensification of investment activity. According to the authors, the solution to this complex problem requires the observance of the following conditions:

- Dynamic and large-scale increase of such a synthesis and complex indicator of economic and investment security as a share of gross domestic investment accumulation in the Russian GDP. As noted above, this is due to the current predominance in the economics of the country of capital intensive sectors (fuel and raw materials) on the one hand and the prospects for the development of high-tech industries including mechanical engineering and implementation of nanotechnology on the other hand. With the increase in the capital intensity of production, it seems appropriate to increase the proportion of GDP accumulation spent on investments from today's 20.3% (Figure 2) to 28-30 % of GDP, "... allocating them through the Russian Development Bank to target-oriented innovation investment and credit financing of venture business"²³.

To increase the share of accumulation in GDP, it is also necessary to create a reliable mechanism for the transformation of the population's savings into investments

Table 3. Coefficients of reproduction of fixed assets in Russia²³

Indicator	Year																
	1970	1980	1990	1995	1997	1998	1999	2000	2002	2004	2006	2007	2008	2009	2011	2013	2014
Coefficient of renewal, %	10.2	8.2	5.8	1.6	1.1	1.1	1.2	1.4	1.7	2.0	3.3	4.0	4.4	4.1	3.9	4.6	4.3
Retirement rate, %	1.7	1.5	1.8	1.5	1.2	1.1	0.9	1.0	1.1	1.1	1.0	1.0	1.0	1.0	0.8	0.7	0.7

Table 4. Age structure of industrial equipment in Russia in 1970-2014, % of total²⁵

Age group	Year									
	1970	1980	1990	1998	2007	2010	2011	2012	2013	
All equipment thereof aged	100	100	100	100	100	100	100	100	100	
under 5 years	40.8	35.5	29.4	4.1	13.0	15.0	14.0	15.0	15.0	
6-10 years	30.3	28.7	28.3	20.1	21.0	22.0	24.0	25.0	24.0	
11-15 years	14.0	15.6	16.5	25.6	26.0	26.0	26.0	22.0	24.0	
16-20 years	6.9	9.5	10.8	18.6	18.0	14.0	13.0	14.0	16.0	
older than 20 years	8.3	10.7	15.0	31.6	17.0	19.0	19.0	20.0	17.0	
average age, years	8.42	9.47	10.8	10.1	19.0	14.0	13.0	13.0	13.0	

through the guarantee of a full refund of deposits in case of any defaults and interest rates raise when investing in securities financing the investment projects of development of the real sector of the Russian economy.

In addition, it is hoped that the transition for the use of the program-target principle of distribution of the expenditure funds of the federal budget starting from 2014 will finally allow to intensify investment activity and to re-industrialize the Russian economy.

- Creation of a favorable macro environment for the radical transformation of the Russian enterprises' investment policy facilitating the increase of the technical and technological level of production. This refers first of all to the tax burden optimization and reduction for manufacturers. Today Russian enterprises manufacturing tangible products and goods are experiencing severe real tax burden totaling to 40%. This undoubtedly limits the investment activity intensification and economic growth.²⁶For reference, the overall tax burden makes 25-30 % in the USA, Canada, Switzerland and Japan. The rate of income tax is 20% (5% less than in Lithuania and Latvia). And in foreign countries the rate of this tax is differentiated and depends on the corporate income. In the US, VAT is not provided for businesses (in Russia its rate amounts to 18%) and there is no property tax (which makes 2.2% in Russia) and purchased equipment worth up to USD 2 million per year is written off for the cost price; social contributions account for 13.3% (while in Russia they amount to 30%).

In the context of the studied problem, the authors of the article are in doubts as to the RF Government proposals to implement the "tax maneuver" associated with the shift of the channel of budget revenues inflow from the raw materials export sector by replacing export duties with the increase in MET in 2015-2017. These measures, in our view, are virtually identical to the increase in the tax burden in this sector of the economy, which undoubtedly will lead to an inevitable increase in costs in the production of finished products and will restrict the formation of a positive effect of acceleration.

In this context, particular attention should be given to the amortization policy (when the depreciation is used for the purpose intended: Renovation and development). Increasing wear and tear of equipment and technologies, the using up of an amortization fund, compensated by

not physical but virtual renewal of fixed assets (through accounting procedures of their revaluation) lead to a reduction of working capital and its forced replacement by expensive borrowed funds, causing an artificial investment famine.

We believe that an important condition for withstanding a harmful inflation and for switch of the reproduction process onto a normal track is the facility presently absent of medium- and long-term lending to investment business demand at reasonable rates, while maintaining the well-known macro-financial ratio of profitability, interest rates and inflation. Failure to observe this principle can explain numerous currently existing problems of under-investment in economy and the transition of the financial capital into speculative operations, as well as its 'illegal' outflow abroad;

- Creation of the investment risk insurance system. Such risks inevitably occur in the sphere of economic activity investing in the process of capitalization of financial assets and borrowed funds, which is determined by the necessity to reproduce and accrue stock capital. They make it difficult to implement projects and inhibit investment activity. The authors of the article associate the way out of the situation with the need for involvement and participation in the implementation of such projects of specialized insurance companies, which are able to ease the consequences of the investment risks.

5. Conclusion

These are the considerations that lead to the conclusion that due to the drop in the investment activity in the post-reform Russia, the effect of the principles of multiplier and acceleration was actually transformed into the maintenance of efficiency of fixed assets by means of a feasible modernization. Unprecedented costly characteristic of obsolete equipment and technologies, due to non-compliance with the rational (limit) values of criterial indicators of economic security of investment and the lack of favorable macro-sphere were accompanied by a decrease in the country's competitiveness. The above determines the reasonability of the presidential order regarding the development of a new economic model: A model of implementation of long-term strategy of the new industrialization of Russia, which does not reject the concept of investment, but is based on the intensification

of the internal cumulative demand: consumption and investment.

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