

# ROLE OF STATE PROTECTIONISM IN DEPRECIATION POLICY FORMATION

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**Abstract.** The *purpose* of the paper is a generalization of state protectionism measures concerning the depreciation policy formation, which has resulted in economic growth in countries with a stable economy and their adaptation to economic conditions of Ukraine. *Methodology.* For writing the paper, the grouping and comparison methods were used for the research of business peculiarities of foreign and national enterprises' operation and their impact on the enterprise depreciation policy formation; abstract-logic one was used during the examination of peculiarities of depreciation policy formation abroad; analysis and synthesis were used for the investigation of impact factors of different state regulation measures on efficiency of assets' renewal and enterprise depreciation fund use, as well as stimulation of investments in the science and technology progress. *Results.* State depreciation policy is the basis in investment and innovation process, as well as one of the most important mechanisms for promoting the self-financing policy. In the developed countries, the state policy concerning the accelerated depreciation has become the main tool for economic growth. Depreciation policy reforming has to be conducted within and out of an enterprise simultaneously. Under existing conditions, the enterprise's depreciation fund formation is impossible at the expense of its own resources. The changes of regulatory support for enterprise activity are necessary for depreciation fund forming. Tax protectionism has to be carried out in two directions: at the expense of profit redistribution before taxation as the special-purpose funding of fixed assets' renewal as far as enterprise profitability allows and under the condition of the document approved the renewal of manufacturing capacities after the end of operation period. The control over state protectionism implementation regarding the tax heaven and directing funds for innovative renewal of fixed assets has to be carried out with the help of obligatory state accounting statements. *Practical implications.* Forming their depreciation policy, enterprises need to have direct management concerning their self-sufficiency in forming and using the depreciation fund. The logical one will be the application of intensified control measures over those amounts available at an enterprise after tax exemption by any state protectionism programs on the depreciation fund use for assets' innovative renewal.

**Key words:** depreciation policy, accelerated depreciation, innovative development, state regulation.

**JEL Classification:** M4, M41, M48

## 1. Introduction

Innovation process management classically aimed at a change of priority system and analysis of business forms, which regulate the innovation activity and control of this process efficiency, is a strategically important element of the innovation process.

Such management aims to compare the determined parameters in the case if the business standing does not meet the requirements of acting economic system. This happens if this economic system does not provide any possibility for innovative stimulation of a renewal process and it is regulated by external factors.

The primary focus of this process is on the innovation strategy, which represents a set of rules and standards regulating the procedure of innovation selection and

fulfilment technologically, as well as managing the innovation process implementation into a socially-oriented model of society.

At this point of Ukraine's development, there is no innovation strategy for the development based on the efficient use of depreciation fund or own enterprise capital. Unfortunately, the present economic situation does not afford an opportunity for enterprises to raise big amounts of bank loans and investments. Thus, the depreciation fund and own profit is the only source of financing of innovation development for most national enterprises.

The global economy has developed a lot of ways for stimulating the enterprise's innovation development, state regulation and stimulation of innovation introduction into manufacturing.

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The purpose of the paper is the study and generalization of practical experience in the application of state protectionism measures on the depreciation policy carrying out concerning the stimulation of the use of depreciation fund resources for innovation renewal of manufacturing, as well as the determination of the most favourable combinations for our country.

During the research, general scientific and special research methods were used, in particular: grouping and comparison methods were used for research of business peculiarities of foreign and national enterprises' operation and their impact on the enterprise depreciation policy formation; abstract-logic one was used during the examination of peculiarities of depreciation policy formation abroad; analysis and synthesis were used for the investigation of impact factors of different state regulation measures on efficiency of assets' renewal and enterprise depreciation fund use, as well as stimulation of investments in science and technology progress.

The research theoretic-empiric basis were the best practices of foreign and country's scholars, statistic evidence data, laws and regulations on the issues of enterprise's accounting and depreciation policy formation.

## **2. Category "depreciation" essence transformation**

Nowadays one of the rapidly developing trends in economics is a self-financing theory, according to which the main source of investments is the net income retained in business and depreciation charges.

Studying depreciation essence transformation as an economic category, M. Sokolov determines that there is a principle difference of the approach to its content in the middle of the last century and the present time, in particular, the change of its functional essence. In the last century, depreciation was determined as the value of fixed assets, which could be included into production expenses gradually while nowadays due to the rapid paces of the progress in science and technology and evident shortening of actual terms for fixed assets' life, the volumes of charged depreciation per a time unit are getting bigger. Depreciation reforms taking place in most countries tend to shorten the terms of the useful life and thus growth rate of depreciation charging. In some countries, the value of accumulated depreciation is much higher than it is necessary for their renewal by undepreciated value.

Such a difference between actual historical cost and overcharged depreciation is used as net investments for extended renewal. The boundaries of net investments and investments for early fund depreciation were disappearing gradually. Now depreciation charges are replaced into investment activity income after taxation, bank loans, and other sources" (Sokolov, 2008).

In real life recently the accelerated methods have spread among depreciation charging methods as they allow increasing the proportion of depreciation savings in the capital investment financing sources, extending the renewal, and covering the depreciation of fixed assets simultaneously.

## **3. Depreciation accelerated methods' role increase**

Studying the practice of the countries, which had so-called "economic jumps" in development of production technologies, we have determined that the method of depreciation charging has two common components – application of accelerated methods of depreciation charging and the term-shortening for the useful life of assets.

The following statements are to be considered as positive aspects of accelerated depreciation methods:

- in economic terms, these methods can be compared with an interest-free loan for manufacturing capacity renewal as they are actual costs exempt from taxation during the first years of assets' useful life retained at an enterprise;
- increased rate of depreciation charges during the first years accelerates the process of fixed assets' renewal as it stimulates investments due to funds' raising;
- rapid paces of the progress in science and technology cause more drastic obsolescence of assets, so the availability of large amounts of funds for renewal during the first years of operation allows replacing the asset on time.

The first vivid example of the efficient application of accelerated depreciation methods was the USA during the World War II. Such a depreciation policy allowed improving equipment infrastructure of enterprises within a short time, as well as boosting their output dramatically.

The next years, the American authorities were applying the methods of accelerated depreciation that led the country to a leading position by workforce productivity and put it onto the higher technical, technological, and information level of the development.

In the USA since the second half of the XX century, the great depreciation reforms have been carried out about once a decade for the purposes of term-shortening for the renewal of fixed assets. The result of those reforms was the proportion increase in depreciation charges in general investments from 18% in 1950 to 70% in 2010. Depreciation reforms were implemented in the case of any cyclical slowdown in the economic growth or if it was necessary to remove the country's scientific-technological development lag from the other developed countries.

The latest boom of depreciation reforms concerning stimulating the accelerated depreciation methods was in 2009 in the form of a law on profit reinvestment.

Standards of the law enabled corporations to write-off the fixed assets as depreciating 50% of their value, while small- and medium-sized enterprises could write-off up to 100% of the fixed assets value during the first year of the fixed assets' putting into service. The result of the law of 2009 was the investment value increase into the fixed assets, which was equal to the accumulated depreciation value.

However, nowadays due to the reforms of a new country's government, the state depreciation policy is aimed at the reduction of tax benefits applying the accelerated depreciation methods for the purpose of the increase in taxable profit amounts.

Having studied the experience of US depreciation policy formation, scholars V. Fedorovych and A. Patron have concluded that "U.S. industrial corporations wrote-off the fixed assets of their plants, their facilities and equipment and science and technology infrastructure as depreciation charges a long time ago. Now they are actually operating free-of-charge equipment" (Fedorovych, Patron, 2007). It is the result of US economic policy aimed at creating the competitive advantages for its own industry and gaining the benefits in the sphere of science and technology with the help of the depreciation policy.

#### **4. Relationship of depreciation policy and Research & Development (R&D)**

Studying the practice of applying the accelerated depreciation methods has made it possible to state that besides gaining the investment sources in the countries, where such a depreciation policy was introduced, the research and development process has become more important. Therefore, having raised the funds for buying the assets, an enterprise is interested in manufacturing modernization and maximum application of innovations.

This depreciation policy encourages attracting investments as investors have the real terms of return on investments. Enterprises use tax benefits generated by the increase in accumulated depreciation amounts and reduction of profit sums before taxation while companies gain the real funds for the renewal of manufacturing capacity.

The allocated funds are used by entrepreneurs for the replacement of outdated machines and equipment for newer and more modern ones at the initial stage. Later when the technical infrastructure level of an enterprise complies with the latest achievements of science and technology, a business has to spend a tax benefit not only on the purchase of new assets but the creation of new and more efficient ones, i.e. on R&D.

This economic law explains why in industrially developed countries the expenses on R&D are ten times and even thousand times higher than those in the developing countries. Therefore, in the countries

with a developed economy, the methods of accelerated depreciation are applied to fixed assets used in the innovative activity.

For instance, in the USA, fixed assets used for R&D and having the useful life from 4 to 10 years are amortized within 5 years. Moreover, during the first two years, it is allowed to write-off up to 64% initial value as expenses.

Britain's practice demonstrates that companies are granted benefits: 100% depreciation rate for fixed assets used in innovative activity of such spheres as information-communication technologies (software, computers, mobile communications, Internet-technologies), for energy-saving equipment 40% depreciation rate is applied to fixed assets used in the innovative activity of plants and investments in technological equipment for small and medium-sized enterprises.

Methods of accelerated depreciation are actively used in Japan while the maximum writing-off rate is 50 and minimum one is 10. The application of accelerated depreciation of fixed assets' value is provided only for companies, which use energy-saving equipment or equipment, which encourage efficient use of resources or does not damage the environment.

France has legislated the accelerated depreciation methods since the 50s of XX century but they are only applied in some industries. Nowadays the practice of accelerated depreciation of fixed assets' value is applied only for companies' innovative activity. In this case, innovations have to lead to energy-saving, environment conservation or introduction of high information technologies.

France's depreciation policy also has the methods of degressive depreciation. They are applied for the purposes of encouraging the progressive structural changes in the economy. By degressive system, depreciation charges are applied to the fixed assets purchased after 1960 and having the useful life over 3 years. Regressive methods are applied to fixed assets from the date of putting a fixed asset into operation.

In Canada, accelerated depreciation is used within the restriction system, which is common for Ukraine's legislation. The peculiarity of the system is that enterprises determine the term of asset use by themselves but this term must not go beyond the legally established standards of depreciation. All fixed assets are divided into 17 groups; each group has its own standards varying from 4 to 100%.

Nowadays the methods of accelerated depreciation are used in such countries: in Germany, 40% value of fixed assets used for R&D may be written-off during the first year of operation; in Sweden, 100% value of a fixed asset is amortized during the first year of operation if the term of service life of a fixed asset is not more than 3 years; in Italy, the maximum depreciation rate by accelerated methods may not exceed 15%.

### 5. Present depreciation policy of Ukraine

The above examples of state depreciation policy affecting the depreciation policy of enterprises and stimulating the progress in science and technology could be referred to the countries with a developed and stable economy. Ukraine's legislation on the stimulating the increase in the proportion of depreciation charges in investment composition has not succeeded. For instance, the proportion of depreciation in general investments of the above countries varies within 65–70%.

In Ukraine, there are no overall statistic data on the composition of investments in fixed assets. Depreciation policy is implemented according to Canadian variant concerning the regulation of asset's useful life terms and their grouping. However, the depreciation rates in annual percentage are understated in Ukraine's legislation. Moreover, more radical inflation fluctuations influence the physical availability of funds in the country rather than in Canada.

Nevertheless, despite the imperfections of overall state depreciation policy, the mechanism of accelerated depreciation is in force, so entrepreneurs gain some benefits as profit tax saving. But there are two essential aspects, which have to be taken into account while forming the state depreciation policy and without which the formation of an enterprise's depreciation policy is rather nominal.

Firstly, depreciation charges are not the only source of fixed assets financing. For example, according to official statistic data in January-September, 2017, in Ukraine, 259545.0 million UAH was invested as capital investment out of which 72.7% is the own funds of enterprises and organizations. According to our own observations, there is a common trend for the composition of enterprise's investments – there are only about 3% of depreciation charges.

Secondly, the state does not have a precise control mechanism or a mechanism stimulating enterprises to use their depreciation charges in the investment activity. In other words, accumulated funds are spent by entrepreneurs not on improving material and technical resources but financial investments such as purchasing securities and granting loans and other operations.

We have examined and systemized the measures on state stimulation of investing the own funds with a great proportion of depreciation charges in scientific-technical developments and we have defined the effective mechanisms for stimulating:

- credit against tax – repayment of fixed interest on capital investments for production development and modernization in the form of enterprise's profit tax reduction for this amount (10-20% from the total value of capital investments or a fixed sum);
- reduction of taxable income amounting the expenses on research and developments;

- applying a coefficient, which mark-ups the depreciation rate (1.5 or 2);
- term-shortening of useful life by 30-40% (actual elimination of equipment rebuilding).

In order to implement these changes, it is necessary to take into account the main requirements of accounting – comparativeness, preciseness, and objectivity, clearness and accessibility, timeliness, cost-effectiveness, and rationality. They allow achieving the goal of accounting: to provide management, proper services, and specialists with reliable data on economic processes and financial standing of a company.

Thus, the application of the world practice on accelerated depreciation in forming the accounting system of Ukrainian enterprises will stimulate the technological revolution and transfer the economy of the country to a new level. An improved mechanism for forming the real funds for the renewal of fixed assets as the enterprise depreciation fund will allow achieving the main goal and tasks of accounting.

### 6. Findings

Thus, the state depreciation policy is the basis of investment innovative process, as well as one of the most important mechanisms of the self-financing policy promoting. In the developed countries, the state policy concerning the accelerated depreciation has become the main tool for the economic growth.

Depreciation policy reforming has to be conducted within and out of an enterprise simultaneously. Reform should include such elements:

1. Changing the legal framework. Under existing conditions, the enterprise's depreciation fund formation is impossible at the expense of its own resources. The changes of regulatory support for enterprise activity are necessary for depreciation fund forming.

2. Tax benefits. Tax protectionism has to be carried out in two directions: at the expense of profit redistribution before taxation as special-purpose funding for the renewal of fixed assets as far as enterprise profitability allows and under the condition of the document approved the renewal of manufacturing capacity after the end of operation period.

3. State control over the implementation of depreciation policy. The control over state protectionism implementation concerning the tax heaven and directing funds for innovative renewal of fixed assets has to be carried out with the help of obligatory state accounting statements.

### 7. Conclusions

Since the implementation of amortization reform should be initiated by the state, enterprises need clear norms and procedures. That is precisely why our future

researches are to develop the guidelines regulating the implementation of state and enterprise depreciation policy with control over depreciation funds' use for innovative renewal of manufacturing capacities at

national enterprises. Such a control will ensure a new standard of accounting "Amortization Policy" and a subsection of the tax code "Adjustment of the profit tax when using the depreciation fund".

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