

6.2 Financing fixed asset renewal: the strategic role of profit and depreciation

The process of renewal of fixed assets at the enterprise can be carried out only if there is a sufficient amount of financial resources. Capital investments are directed to the replacement of fixed assets, which have expired their service life, the purchase of new equipment and facilities, and the reconstruction and technical re-equipment of existing fixed assets. Thus, the development of the enterprise is ensured with a certain pace of renewal of fixed assets.

In general, there are three types of financing for the renewal of fixed assets: own sources for capital investments, financing from external sources, and a mixed financing option. It should be noted that the priority for the enterprise is to use its own sources of funds to ensure the process of renewal of fixed assets since attracting external sources (loans) is associated with additional costs for paying interest, which can be quite significant.

Let us consider profit and depreciation deductions as the main sources of financing for investments in renewal fixed assets. As is known, in a market economy, the goal of each business entity is to obtain maximum profit, which serves as the basis for its self-financing and reflects the efficiency of all activities of the enterprise.

Most often, profit is understood as the net income of an economic entity from its activities. The theory of profit has been reflected in the works of many economists since the formation of the classical school.

A review of the economic literature has shown that today, there is no single definition of the concept of "profit," and as economic thought developed, numerous attempts were made to find an unambiguous formulation of this concept.

Below are presented the scientific views of some authors on the essence of the concept of "profit," after analyzing which we can say that, despite different interpretations, most economists agree that profit is the difference between the income and expenses of an economic entity:

- profit – the final financial result of the activity. It is calculated as the difference between gross revenue (excluding value-added tax and excise duty) and the costs of production and sale of products (works, services); monetary expression of the difference between the cost of sold products and the costs of its production (Financial and Economic Dictionary) [118];

- profit – a converted form of added value, the difference between the price of the product and the total costs of its production (Fedorenko V.G.) [119];

- profit – is an economic category, the difference between gross revenue (excluding value-added tax and excise duty) and the costs of production and sale of products (Zavgorodniy V.P.) [120];

- profit of the enterprise – is the excess of income from its activities over the sum of expenses; it is the only form of its own accumulations (Bandurko O.M.) [121];

- profit is the amount of money by which the income of an enterprise exceeds its expenses (Mocherny S.V.) [122]. As an economic category, profit reveals its essence in the functions it performs. Based on the definition of the category of profit, in our opinion, five main functions of profit and their content should be distinguished:

1. Stimulating function of profit. Its essence is to stimulate such an allocation of resources that generally meets the needs of society and the requirements of consumers. Obtaining profit stimulates the introduction of innovations.

2. Evaluative function of profit. It characterizes the activities of the enterprise and the possibilities of its development prospects and is a criterion for the success of the activity

3. Reproductive function of profit - profit is a source of self-financing of the enterprise

4. Economic calculation - the income of the enterprise should provide a reserve, and not only cover costs.

5. Source of income of the budget of all levels - profit serves as a tax base and participates in the formation of the revenue part of the budget of all levels.

6. Profit acts as a source of reward - part of the profit goes to the owners.

As is known, profit is considered the main source of funds for the development of the enterprise. Profit can be reflected in the balance sheet in an explicit form as retained earnings, as well as in a veiled form - as funds and reserves created at the expense of profit.

For expanded reproduction and creation of savings for the renewal of fixed assets, it is advisable to use, along with depreciation deductions, a certain share of profit, which is due to the fact that the total current amount of investments for the reproduction of fixed assets at the enterprise must be greater than the total amount of initial costs. Otherwise, there will be no possibility of their renewal.

Using profit as financing for real investments aimed at the reconstruction and technical re-equipment of the enterprise is also advisable due to the fact that recently, in certain industries, there has been a tendency of some increase in the share of profit directed to investing in the renewal of fixed assets. This trend should be supported in every way since its positive aspect lies in the fact that the sources of renewal of fixed assets are directly related to the results of the enterprise's production and economic activity. Thus, the interest of enterprises in the results of their activities is increasing, because the completeness and timeliness of the formation of financial resources for the renewal of fixed assets significantly depend on them.

The advantages of profit as a source of financing are:

- the absence of additional costs that arise when raising borrowed funds;
- the owners retain full control over the enterprise;
- increased financial stability and independence.

There are also some disadvantages of this source of financing, namely:

- the amount of this resource is limited and can change;
- the complexity of planning and forecasting;
- dependence on a significant number of external factors that are poorly influenced by the management of the enterprise.

However, even the presence of the listed disadvantages does not reduce the effectiveness of profit as a source for investing in the development of the enterprise since this factor is simple, accessible, and effective.

A classic form of investment financing, in addition to the previously mentioned net profit, is the use of depreciation deductions, which, in conditions of decreasing profitability and profitability of production, as well as reduced availability of long-term lending, become almost the main source of financing for investments of economic entities.

Part of the cash after the sale of products goes to the so-called depreciation fund, in which the amount of money is accumulated to the amount corresponding to the original cost of fixed assets minus their depreciation. These accumulated funds are subsequently used to purchase new means of production instead of those that have been worn out; that is, the reproduction and renewal of fixed assets take place.

Thus, depreciation is a method of including in parts the cost of fixed assets during their service period in the cost of manufactured products and the subsequent use of these funds to reimburse the consumed means of production.

From Latin, literally, "Amortisatio" is translated as "repayment of debt," which characterizes its original nature as a gradual transfer to the costs of manufactured products of the accrued depreciation of depreciable property. Currently, in a number of works by domestic and foreign scientists, approaches have been developed to determine the essence of depreciation and the sources of its formation, and recommendations are given to improve the depreciation policy of enterprises [123-125, 128-130]. At the same time, the significant role of depreciation as an own source of investment for the reproduction of fixed assets of the enterprise is noted. Thus, it is proposed that depreciation from the position of creating real investment resources be considered sufficient for the successful renewal of production facilities. The worn-out part of the cost of fixed assets, transferred to finished products, gradually accumulates in cash in a special depreciation fund as the latter is sold. This fund is formed by annual or quarterly depreciation deductions and is used for simple and partially expanded reproduction of fixed assets. The direction of depreciation for the expanded reproduction of fixed assets is due to the specifics of its accrual and expenditure since it is accrued throughout the entire standard service life of the fixed assets, and the need for its expenditure arises only after their actual disposal. Therefore, until the

replacement of fixed assets that have been retired, the accrued depreciation is temporarily free and can be used as an additional source for expanded reproduction. In addition, the use of depreciation for extended reproduction is facilitated by scientific and technological progress, as a result of which some types of equipment can become cheaper, and more advanced and more productive fixed assets are put into operation.

The size of the depreciation fund is calculated annually, mainly by multiplying the book value of fixed assets by the depreciation rate. Economically justified depreciation rates are of great importance. They allow, on the one hand, to ensure full reimbursement of the cost of fixed assets that are being retired and, on the other hand, to justify the true cost of production, of which depreciation deductions are a component. From the point of view of economic calculation, both underestimated depreciation rates (because this can lead to a lack of financial resources necessary even for a simple reproduction of fixed assets) and unreasonably overestimated depreciation deduction rates are equally bad, which causes an increase in the price of products and a possible decrease in demand for them with a corresponding increase in prices. If the price is not increased, then the profitability of production will decrease, which is also undesirable. Depreciation rates are periodically revised as the service life of fixed assets changes, the process of transferring their value to the manufactured product accelerates under the influence of scientific and technological progress and other factors, etc.

In business practice, various methods of calculating the depreciation fund are used: linear, accelerated depreciation, and a number of others. In this case, depreciation rates are set either as a percentage of the book value of fixed assets or in fixed amounts per unit of output; sometimes, they depend on the volume of work performed. With the linear method, the calculation of the annual amount of depreciation occurs at fixed rates throughout the entire period of productive use of fixed assets. The use of a uniform method of calculating depreciation in conditions of stable prices for the main types of fixed assets was justified. But in conditions of rising prices, especially for new equipment, it is advisable to switch to the methods of so-called digressive depreciation, in which the highest depreciation rate is set at the beginning of the depreciation period

and then gradually decreases. In conditions of price liberalization, the transition to the digressive method of calculating depreciation could contribute to the timely accumulation of financial resources necessary for the renewal of fixed assets. The mechanism of formation and use of depreciation deductions, being an important link in the general system of reproduction of fixed assets, is simultaneously a tool for implementing the state structural policy in the field of investments in the development of production. Achieving structural changes is carried out primarily through depreciation norms.

Depreciation exclusively finance capital investments in the renewal of fixed assets. The funds of the depreciation fund, which are invested in the OC until their complete depreciation, create additional capital for the enterprise. Therefore, in order to reduce dependence on external sources of financing, it is important today to activate the internal factors of the formation of investment resources, for which special attention should be paid to increasing the role of depreciation deductions and their effective use.

To this end, each enterprise should pay special attention to the development and implementation of an effective depreciation policy. The depreciation policy of the enterprise includes the following stages: selection of appropriate depreciation methods, ensuring the targeted allocation of depreciation fund funds, monitoring, and, if necessary, correction of the depreciation policy.

When developing a depreciation policy at an enterprise, a number of factors should be taken into account. These are, first of all, the volume and real cost of existing fixed assets, their terms of use and service life, the structure of the fleet of machinery and equipment, and the ratio of active and passive parts of fixed assets. The legislative and regulatory framework regarding depreciation calculation methods, inflationary processes, the investment potential of the enterprise, etc. should also be taken into account. Taking into account these factors will allow the business entity to assess the possibilities of forming such a source of financial support for the renewal of fixed assets as depreciation deductions.

After considering all the factors that influence the formation of the enterprise's depreciation policy, depreciation calculation methods were selected. In domestic business practice, the following main depreciation calculation methods are used:

- straight-line (uniform) method;
- accelerated (digressive) depreciation methods, which include:
 - a) method of reducing residual value, b) method of accelerated reduction of residual value, c) cumulative method;
- production depreciation method.

Domestic enterprises can also apply depreciation rates provided for by tax legislation. Currently, according to the Tax Code, all fixed assets and non-current assets are divided into 16 groups depending on their production characteristics and service life, for which the minimum terms of their useful use (operation) are determined. Based on these terms and choosing a depreciation method, it is possible to calculate the amount of depreciation deductions for each group of fixed assets. These groups, currently established by accounting rules, are as follows:

1) land plots; 2) capital expenditures for land improvements not related to construction; 3) buildings, structures and transmission devices; 4) machinery and equipment; 5) vehicles; 6) tools, devices, inventory, furniture; 7) animals; 8) perennial plantings; 9) other fixed assets; 10) library funds, preservation of the National Archival Fund of Ukraine; 11) low-value non-current tangible assets; 12) temporary (non-title) structures; 13) natural resources; 14) inventory containers; 15) rental items; 16) long-term biological assets. Depreciation is not charged on such types of assets as land plots (group 1), library funds (group 10), low-value non-current tangible assets (group 11), and natural resources (group 13) (clause 138.3.3, clause 138.3 of article 138 of the Tax Code of Ukraine) [126]. From the point of view of this study, the fourth and fifth groups of fixed assets are of interest - machinery, equipment, and vehicles. In general, the minimum permissible operating terms for them are set at 5 years, which means that the annual depreciation rate can be within 20%. An appropriate depreciation method will allow you to quickly accumulate funds for the reproduction or renewal of these types of fixed assets. For certain types of equipment that can be quickly replaced with new

and more advanced ones due to rapid obsolescence (for example, personal computers, cell phones, etc.), very short useful lives are provided - only 2 years. In this case, the annual depreciation rate can reach 50%.

Accelerated depreciation methods have a number of undoubted advantages and should be more widely used when developing an enterprise's depreciation policy. The use of these depreciation methods allows the enterprise to accumulate funds to update its fixed assets more quickly. This, in turn, contributes to innovative activity and innovative development of the enterprise. Also, the use of this method allows you to significantly accelerate the formation of your own sources of financing; that is, it contributes to increasing cash flows in subsequent time periods. In addition, accelerated depreciation allows you to reduce the impact of inflation on the real value of the accumulated depreciation fund. Using the accelerated depreciation method also allows the enterprise to reduce income tax since depreciation is included in the cost of production and reduces the amount of gross profit.

The depreciation fund funds should be used for the following main purposes: the purchase of new fixed assets to replace worn-out fixed assets and expand the equipment fleet; modernization, reconstruction, and technical re-equipment of the production base; and major repairs of fixed assets. The effectiveness of the enterprise's depreciation policy can be assessed by comparing straight-line and accelerated depreciation in terms of their impact on the pace of renewal of fixed assets and the formation of investment potential. The emergence of new, innovative types of equipment plays an important role in directing depreciation deductions to the renewal of fixed assets, as this allows for greater production capacity to be concentrated in the same production areas.

Ukrainian legislation allows for the arbitrary use of accumulated depreciation funds. This leads to the fact that instead of renewing fixed assets, these financial resources can be used to cover the current expenses of the enterprise, replenish working capital, pay off wage arrears, repay loans, etc., which can hinder the timely renewal of the production base and innovative development. This state of affairs is a serious problem that needs to be resolved. In a market economy, the introduction of legislative

and administrative regulations in this area would violate one of the basic principles of entrepreneurial activity - the right of an enterprise to independently conduct its business and dispose of its own funds at its discretion. It should also be taken into account that the withdrawal of a significant amount of funds from the enterprise's circulation will worsen its financial condition. Perhaps an appropriate tax policy could promote the use of depreciation funds for their intended purpose - for the renewal of fixed assets. After all, the very nature of depreciation deductions provides for their use for the reproduction of fixed assets, which, in the process of their operation, transferred their value to products, and a fund was formed for the purchase of new fixed assets instead of worn-out ones. Depreciation deductions that are not directed to the renewal of fixed assets can be subject to a certain tax. Such a fiscal policy would reduce distortions in this area and promote the direction of depreciation funds for their intended purpose - for the renewal and expansion of production capacities. State economic policy has a significant impact on the ability of enterprises to carry out investment activities. State institutions have a number of tools at their disposal for this purpose - from tax and depreciation policy to budget financing of investment projects and price regulation for certain types of products (for example, material resources for capital construction, etc.). Thus, in the United States of America, the state provides investment support to firms that are in the formation stage - it fully or partially finances construction, provides production space and office equipment for a small fee, and centralizes various types of services. The state also takes on the protection of the interests of small businesses. By differentiating the amount of tax paid depending on the annual amount of profit in the USA, the state creates relatively greater investment opportunities for small enterprises. Benefits have been established for small research, including venture firms - accelerated depreciation and an investment discount on the amount of tax, as well as discounts for carrying out research and development work. The country has established a specialized Small Business Administration, which provides small private investment companies operating under its licenses and provides venture capital to small firms with loans of up to \$30 million and a repayment period of more than ten years. Through these and

other measures, the state is trying to actively stimulate the development of enterprises and investment activities.

Ukrainian tax legislation also provides certain benefits for taxation of profits of small and medium-sized enterprises (introduction of a single tax rate for certain groups of enterprises depending on their annual turnover (volumes of products produced), tax benefits for investors who direct large amounts of investment into construction, reconstruction and renovation of fixed assets, development of new equipment and technology, training and advanced training of personnel, creation of new jobs. However, in conditions of progressive inflation and sharp increases in the price of equipment and machinery, these measures are insufficient for enterprises to conduct an active investment and innovation policy. Statistics show that in recent years, there has been a variable trend towards an increase in the share of depreciation deductions in both production costs and investment costs in the form of capital investments. Table 1 presents the costs of production of domestic enterprises and the shares of depreciation and wages in them.

Table 1.

Production costs (goods, services) of enterprises in 2015-2023

Years	Costs for production, million UAH	Of which by cost components			
		Depreciation		Labor costs	
		Million UAH	% of total costs	Million UAH	% of total costs
1	2	3	4	5	6
2015	2434303,8	171416,2	7,0	295806,6	12,1
2016	2759942,9	224558,4	8,1	360831,3	13,1
2017	3525187,9	247062,4	7,0	472764,7	13,4
2018	4262963,9	287079,9	6,7	601661,2	14,1
2019	4675307,9	341595,3	7,3	746979,8	16,0
2020	4988651,3	402733,4	8,1	819958,0	16,4
2021	6282854,0	462417,7	7,4	965555,7	15,4
2022	5874388,7	516821,8	8,8	861199,3	14,7
2023	6239124,2	519365,2	8,3	998773,4	16,0

As the table data shows, there is a tendency to increase the share of depreciation deductions in production costs, which reflects the general trend of replacing living labor with materialized labor. At the same time, in recent years, many enterprises have seen an increase in the share of wages in production costs, which can be considered a positive trend. The share of depreciation deductions in capital investments can increase due to several reasons. Firstly, this is a change in depreciation rates, an increase in the share of their active part in the structure of fixed assets. Secondly, a decrease in the growth rate of fixed assets due to a slowdown in the growth of net capital investments resulted in a decrease in their share in gross capital investments. With a constant increase in the share of depreciation deductions in the composition of capital investments aimed at the reproduction of fixed assets, such issues of the theory of depreciation as:

- use of depreciation not only for simple but also for extended reproduction of fixed assets;
- the need to take into account both physical and moral depreciation of the equipment in the depreciation amount;
- the use of accelerated and regressive depreciation in the practical activities of domestic enterprises.

Analysis of the depreciation policy, as well as management practices regarding the reproduction of worn-out fixed assets, indicates that it does not provide optimal proportionality between the reproduction and accumulation of fixed assets. This disproportion is manifested in the incomplete renovation of equipment. To a large extent, the practice of insufficient satisfaction of the needs of enterprises in renovation is due to the current depreciation system and depreciation policy. The existing depreciation system is characterized by the following features: "split" of the flow of accrued depreciation for major repairs and renovation of equipment with a disproportionately large share of major repairs; lack of mechanisms for over-depreciation and under-depreciation (when depreciation is accrued throughout the entire period of operation of the equipment without complying with the standards); insufficient assessment in depreciation deductions of the decrease in the consumer

value of fixed assets as they wear out (i.e., the uniformity of depreciation charges); a high degree of differentiation of depreciation rates depending on the types of equipment, its operating conditions and industry specifics.

So, summing up the above, we can say that in the conditions of the modern market and taking into account possible financial risks, the most reliable option for any enterprise is to finance investments from its own sources. Such sources are the net profit of the enterprise and depreciation deductions. An important point is the fact that these funds always remain at the disposal of the enterprise. The purpose of such operations is, ultimately, the reconstruction and renewal of the enterprise.