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Accumulation Rate as a Determining Factor of Allocation Efficiency of the Yugoslav Economy

1. Introduction

Yugoslav economic writings present two basic models of generating and utilising accumulation, and each of them is equally praised for certain advantages as well as blamed for certain shortcomings. The first method determines accumulation on the basis of the cost of production, whereas the second method forecasts the level of accumulation from the economic and industrial angle (i.e. adopting the microeconomic approach and the division into the sectors of economy). The basic parameter of generating and utilising accumulation for the first model is the percentage of financial resources allocated to the labour fund, which becomes an instrument of setting the minimum accumulation rate for particular economic entities. In the case of the second model it is the revenue, i.e. the difference between the total income and the material costs (including depreciation) per one worker.

Both approaches were subject to criticism in Yugoslav economic writings. The concept of determining accumulation on the basis of resources allocated to the labour fund has been criticised for many years not only due to its economic outcome, but also for ideological motives. Decreasing resources allocated to the labour fund so that to decrease the financial burden of economic entities, in line with the excessive redemption from accumulation obligation caused that the concept ceased to be an instrument for determining such accumulation level
which would be conducive to the efficient use of the means of production, and would determine the point of profitability for the investment projects.

At the beginning of the 1980s a new concept of programmed accumulation was created. Following the implementation of the “Long-term programme of economic stabilisation” the concept gained importance, mainly owing to the outcome of the work of the Commission on Economic Reform of the Socialist Republic of Serbia.

Despite their certain practical deficiencies, uniform obligations related to the accumulation determined in the way of more extensive and more concrete elaboration of its parameters against averagely used production means may be applied with very good results and on permanent basis as:

a) a basic parameter of social regulation of the distribution of income,
b) a significant parameter of investment projects efficiency,
c) one of the main criteria of credit policy of the commercial banks.

2. Uniform obligation of accumulation as a parameter of social regulation of the distribution of income

The concept of accumulation pertaining to averagely utilised means of production, following its further improvement and implementation, might become one of the basic obligatory parameters of distribution. The implementation of the concept would improve the efficiency of the system of generation and utilisation of accumulation within particular economic entities (especially those belonging to the public sector). New methods of raising finance for funding economic entities (among others, by issuing shares) would increase their liquidity, and by the same token, the efficiency of use of resources earmarked for the reproduction.

Bringing the rate of accumulation closer to the set priorities of development (including the desired level of investment) would result in tying in the cost of production with the forecast level of accumulation. Nevertheless, this method would not solve the problem of setting the scope of accumulation so that it corresponded to the optimum rate of economic growth. Hence, right are those economists who point out that the uniform obligation of accumulation, enforced by social forces, is targeted on solving problems related to its minimum level, and not on defining the necessary scope of development investment.

The combination of the above theoretical concepts by joining the obligation to accumulate *ex ante* with the set priorities for development (including the desired level of investment projects) would harmonise the latter with the real volume of accumulation (i.e. *ex post*). This would eliminate one of the basic factors of economic instability.
The enforcement of the uniform obligation of accumulation would help to overcome some weaknesses of the current system of its generation. It must not be forgotten, however, that setting the rate of accumulation irrespective of the financial outcome of an economic entity would negatively influence the functioning of some entities, especially those in capital-consuming industries with low accumulation potential. It also raises the questions of value of the means of production (the book value or the market value) as the basis for calculating the rate of accumulation so that to achieve its proper level.

Another problem that has arisen is the application of the obligatory rate of accumulation, uniform or differentiated relative to various sectors of the economy. It depends on the real conditions of generating and distributing income and the accepted development priorities. Socially set rate of accumulation – according to some economists – should be established with regard to the conditions of functioning of certain branches of industry, to the cost of capital (or the market interest rate) as well as the accepted development priorities. That is why those economists suggest the introduction of differentiated rates of accumulation in those branches of industry where a uniform rate were not feasible, even at its minimum level. It should be brought to mind, however, that the obligatory rate of accumulation for all the enterprises of the public sector is a prerequisite for a lasting and stable growth of social resources.

The above mentioned shortcomings of the accumulation generation system, particularly regarding its scope, regardless of the economic conditions of functioning and the performance of separate entities, could be overcome with the application of an appropriate economic policy (fiscal policy in particular). The state should be guided within that area by the financial standing of a certain economic entity. Due to the influence of the state economic policy there would be no room for automatic accumulation based on a socially set uniform accumulation rate, under various conditions for economic activity, in various branches of economy. That is why intervention and corrections will be necessary within the primary and secondary distribution of national income in capital consuming branches of economy with low accumulation potential. On the contrary, within the sectors and branches of industry with high accumulation potential the enterprises should be given a free hand in setting accumulation at the level higher than required by the obligatory uniform rate. Hence, that parameter would determine the minimal accumulation rate.

Due to the fact that uniform, socially set accumulation rate should not be lower than the market cost of lending capital (expressed by the average market interest rate), it should be determined mainly with the application of the market criteria. In this way the investment risk should be minimised, or even totally eliminated.
Accumulation generated in this way should not be allocated to the enterprise labour fund, but partially support social funds of the economy to finance infrastructure facilities satisfying the needs of the whole society.

3. Uniform obligation of accumulation as an assessment criterion of economic efficiency of investment projects and selective credit policy of commercial banks

The obligatory minimum accumulation rate may be applied for the assessment and comparison of the economic efficiency of investment projects regardless of the sources of their financing, which may be either their own, or external resources, i.e. the resources of other entities (e.g. through the issuance of shares). The minimum accumulation rate may be also applied as one of the basic parameters of commercial banks’ credit policy.

In Yugoslav methodology dynamic microeconomic indicators are used for the assessment of economic efficiency of planned and implemented investment projects (the method of internal rate of return and updated net worth of an investment project). Those indicators are based on the comparison of forecast revenues and investment implementation costs reduced to their current value.

The internal rate of return is defined as the discount rate reducing the updated net worth of a project to zero. Such level of the rate balances the updated value of future total revenues with the capital invested in the project. Hence, in the case of financing investment by credit, the internal rate of return determines maximum interest rate to be borne by the investor. In the case of financing through the issuance of shares it equals the expected dividend for the shareholders.

The method of current net worth of investment in the relative approach (the current value of future revenues divided by the current cost of implementation) expresses the volume of the current value of future revenues generated by a certain economic venture allocated to one unit cost borne in the implementation process.

Tying in the rate of accumulation with the investment outlays (regardless of the source of their financing) would allow to select investment projects relative to the expected rate of return and to choose the most appropriate investment variant. This method would create the conditions for the effective allocation of resources earmarked for reproduction.

Yugoslav economic writings commonly state that financing of investment solely with one’s own resources is a gratuitous form of investment. This leads to overriding monitoring of the use of accumulation fund with the application of objective economic criteria (i.e. market valuation of capital). Such an approach
results in erroneous investment decisions, which leads to inefficient allocation of resources earmarked for the reproduction. With such a line of reasoning economic entities are not sufficiently stimulated to increase the profitability of use of their own resources. Under such circumstances there is a possibility of implementation of investment projects whose internal rate of return falls either below the market rate of return, or below the rate of return of other, alternative investment opportunities. This refers both to an individual economic entity as well as to the whole national economy (which would lead to the inefficient use of the accumulation fund resources, the loss of additional profits, and decreasing the level of potential national income).

However, in market economy conditions self-financing is not understood as a gratuitous source of financing of investment outlays. The implementation of investment projects with either one’s own resources or with the external resources involves certain costs which by no means can be identified with the booked costs. While the cost of acquisition of external resources is easily identifiable (e.g. the interest on loans, or the cost of issuing securities), there are some difficulties in the valuation of internal resources since they constitute the so-called alternative costs (whose assessment is far more difficult). As the latter costs are secret, they are frequently omitted in the economic calculations, which is not the case of the external sources of financing of the investment projects, even though both are measured with the use of the market interest rate.

The above presented dynamic methods of assessment of the economic efficiency of investment projects would allow the elimination of the projects characterised by negligible, or zero efficiency (the ventures below profitability rate). This would allow the selection of the best variant among the potential investment solutions expected to yield the highest rate of return. In the case of self-financing projects it would minimise the possibility of ineffective investment.

The introduction of a uniform obligation of accumulation would increase the efficiency of use of one’s own resources investment. The rate of accumulation would in fact define the cost of self-financing, which would force economic entities to consider the viability of certain projects, since that cost would designate the minimum profitability rate of investment projects. Launching projects whose profitability rate would fall below the cost of self-financing would lead to the negative balance of such ventures. By this token enterprises would be forced to eliminate all those investment projects which cannot guarantee the minimum profitability rate (equal to the socially set accumulation rate). From the social perspective, including self-financing costs in the designing of investment projects would contribute to improving the economic efficiency for the whole country, which would translate into improving the social well-being.

Uniform obligation of accumulation might also become one of the criteria of the selective credit policy of the commercial banks. This would prevent the im-
plementation of projects whose profitability would be lower than the total costs of self-financing (both from the internal and the external resources). Extending investment credits, the banks would have to examine the creditworthiness of borrowers. Granting credit to the projects with the highest rate of return expressed by the volume of accumulation relative to the used resources would mean more efficient use of the internal means of financing. This would facilitate increasing the accumulation potential of an economic entity, gradual change of the range of production, and lowering the external debt. In this way, the problem of efficient allocation of the resources earmarked for reproduction would be solved for the whole economy.

The basic problem hindering the increase in the accumulation potential for the whole economy is the unprofitable internal financing of accumulation by the economic entities. The negative impact of this process is even greater due to the fact that the procedures involved in setting up new enterprises have not been properly established in Yugoslavia (owing to the lack of adequate legal and economic solutions). The solution of the problem would be facilitated with the introduction of a uniform obligation of accumulation as one of the basic and most important criteria of extended reproduction. That envisages social regulation of income distribution, assessment of the economic efficiency of investment projects, and criteria for the selective credit policy of commercial banks supported by the development of the financial market.

The propensity of economic entities to invest internally in their own accumulation, apart from hindering the establishment of new enterprises, results in consolidating the existing economic structure of the country. The development of Yugoslav economy has been largely dependent on extending and modernising production carried out in the already functioning enterprises. In this way a significant part of the public sector accumulation was allocated to the reproduction of the already functioning economic entities, and, to a lesser degree, to the creation of new production facilities and the implementation of new production technologies. As a result, the economy was to a small degree “enriched” with new enterprises, and even less with new branches of industry. It should be noted that the economic structure of Yugoslavia, which does not correspond to current development requirements and is technologically obsolete (mainly in the industrial sector), is one of the main reasons of low economic efficiency and long-lasting stagnation. What is more, the high concentration level of production within Yugoslav economy has led to a relatively high percentage of medium-size and large enterprises sluggishly reacting to the ups and downs of economy and the signals from the market.

The enforcement of a uniform obligation of accumulation would make economic entities accumulate a part of their income according to the rate expressing the cost of production. This would limit their propensity to internal investing in
their own accumulation while disregarding the rate of return on investment. With the low rate of return from their own resources, below the required minimum rate of accumulation, enterprises would be forced to look for more attractive opportunities of investment for their resources. One of the alternative methods of investment are joint ventures focused on setting up new enterprises and buying up shares in the already functioning entities (to extend their production). Hence, the obligation of accumulation may be implemented in the way of participation in profits generated by a joint venture, the purchase of securities, or bank deposits. The choice of investment would depend both on the income generated by the available financial instruments and the amount of the obligatory rate of accumulation.

It should be noted that a prerequisite for initiating the establishment of new enterprises is not solely the growth of the financial market, but also the availability of various forms of ownership (private ownership in particular). Then the transformation of the economic structure of the country would be much easier and faster.

The basic conditions for the development of the system of extended reproduction based on the efficient use of domestic sources of accumulation would be created by making the system of generating and utilizing accumulation resources more objective as well as by introducing market mechanisms and financing instruments. That is because the most desirable and the only socially acceptable vision of socio-economic development of the country is based on self-reliance. This does not exclude the use of foreign capital as a supplementary source of financing Yugoslav economy.

4. Conclusions

The above presented mechanism of generating and utilising accumulation will not bring the expected results unless the economic relationships between the economic entities are based on unambiguous and economically objective price calculations. By unambiguous price calculations we understand including the cost of all production factors in the cost of manufactured goods and rendered services. Economically objective price calculations denote treating the costs of production as real market categories. At the same time it is assumed that the accounting system of an enterprise includes the category of profit as the basic factor verifying its functioning. Bearing that in mind, the established level of depreciation should allow efficient use of social resources earmarked for the reproduction. That is to say, it will prevent the consumption of an excessive – from the angle of development needs of economy – part of the national income.
Yugoslav economy has been hindered by a high rate of inflation. The functioning of the above solutions requires stable conditions of the market, and particularly the rate of inflation below 10%. It should be remembered that at the time of high inflation negative real interest rate is an additional hindrance discouraging households from saving. Consequently, the volume of funds available for loans is depleted (including investment purposes). Hence, a high rate of inflation is one of the basic factors hindering the accumulation potential of economy.

To sum up: the acceptance of a wider concept of generating and utilising accumulation, stipulating obligatory accumulation expressed by the accumulation rate set on the basis of averagely used means of production, supported by the potential variety of economically efficient forms of accumulating the means of reproduction, would increase the accumulation level, financial liquidity of enterprises, and would ensure conditions for the effective allocation of investment resources.

About the Author

Milan Ilić engages in research and teaching at the University of Kragujevac. In 1964 he graduated from the University of Economics in Belgrade. In 1975 he completed his PhD on “Self-financing of Extended Reproduction in Yugoslavia”. He has been Professor of Economic Science since 1981. Between 1989 and 1998 he was Director of the Institute for Economic Research at the University of Kragujevac. He is a member of the Serbian Economic Society. For many years he has worked closely with the School of Entrepreneurship and Management of the Cracow University of Economics.

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