# ON THE QUESTION OF ECONOMIC GROWTH NECESSITY: EVALUATION OF EFFICIENT RATES AND MAINTENANCE OF STABLE DYNAMICS

Boris Kabylinskii, PhD.<sup>1</sup> Andrey Dmitriev, PhD.<sup>2</sup>

#### Abstract

This article analyzes the causes of economic growth. The authors revise social influences on the maintenance of economic expansion rates as a cause and effect together with maintaining the balance between aggregate demand and supply. They also give the main factors which give an impulse to a breach, as well as to a recovery of dynamic balance, including overseas trade factors. The main objective of the paper is to explore the possibilities of changing the approach to a consideration of a problem and define what a pressing need for economic growth is. The authors find out that profit should be considered as the "negative" factor of economic growth, i.e. the growth serves as feedback on the response of the total profit increasing, or as a method of negotiation of its destabilizing influence. Another main idea of the paper is that continuous development of labor productivity (achievable through scientific and technical progress, business activity) together with a balanced policy on money supply is an inviolable factor for a sustainable economic growth. In conclusion, the authors suggest that the expansion of products export facilitates the stabilization of a country's economic situation and decreases the dependency on domestic demand, which is not always sufficient to cover the supply in a long-run equilibrium. At the same time, the possibilities for export expansion are limited, and one of the most significant constraints is determined by competitive and differently directed interests of countries entered in international trade flows as participations of a "zero-sum play".

**Keywords:** economic growth, consumption, savings, investment, external trade balance, aggregate profit, financial reserves.

JEL Classification: A11; B17; B40

<sup>1</sup> Assistant Professor, Faculty of Customs Administration and Security, Saint Petersburg, Russia. E-mail: boris\_kabylinskiy@mail.ru

<sup>2</sup> Assistant Professor, Head of the Customs Administration Department, Saint Petersburg, Russia. E-mail: dmitriev-aar@sziu.ranepa.ru

#### Introduction

A variety of conditions that underpin sustainable economic growth are the subject matter of many discussions between representatives of many economic schools. However, the existing diversity of approaches can be restricted to two principal directions (Agapova, Seregina, 2001), (Lavrov, 2006). The Keynesian demand theory's assumption, complemented by factors determining the dynamics of supply, can be taken as a basis for the first trend (Keynes, 2012). The second trend is based on neoclassical models, including the particularly noteworthy economic growth model of R. Solow.

At the same time, it should be noted that according to the authors' opinion, none of the theories forming the above mentioned directions pays sufficient attention to the issue of "the economic growth necessity". Taking the things which "need no extra proof" out of the brackets, the theories emphasize the factors promoting some positive economic dynamics, as well as the obstacles faced in the efforts to achieve an acceptable growth rate.

# Methodology

The authors propose to change the approach to the consideration of the problem and wonder: what is a pressing need for economic growth? It is generally accepted that economic growth is a means to meet the growing population consumption (Lavrov, 2006). Indeed, if study findings by Minnesota University that by 2050, the world's population growth rate will outstrip the food growth rate are taken into account, the problem of increase in agro-based industries' output will certainly become burning. However, this problem, despite its critical importance in terms of people's physical survival, has also an industrial character, while aggregate growth data of all industries, regardless of their involvement in the process of public consumption, are the subject of the modern economic growth theory.

What other increasing people's needs can be satisfied by enterprises? Let's take the wireless phone market, for instance. It will be reasonable to suppose that nowadays, the technology and industrial bases can provide everyone who has enough funds with this devise. But there is growing evidence (still not confirmed in formal records, though) that manufacturers which have the possibilities to ensure a trouble-free service of these devices for at least 5 years of operation, voluntarily cut their real useful life to one to two years. After that, cell phones break down and the consumer is forced to buy another model. So, with regard to this industry, the explanation of the economic growth purpose from the viewpoint of needs satisfaction seems at least absurd: the purchasing needs are satisfied, while the production turnover growth (achieved by also including the above mentioned method) of the corresponding industries serves to achieve a certain purpose.

It is reasonable to ask how far this purpose meets public interests, considering the amount of resources involved in the process of achieving it.

Let us try to study this purpose by transcending the boundaries of the above mentioned industry and take the macroeconomic approach.

We will start with the quotation from the work of J.M. Keynes "The General Theory of Employment, Interest and Money": "Consumption is satisfied partly by objects produced currently and partly by objects produced previously, i.e. by disinvestment. To the extent that consumption is satisfied by the latter, there is a contraction of current demand, since to that extent a part of current expenditure fails to find its way back as a part of net income... Now all capital-investment is destined to result, sooner or later, in capital-disinvestment. Thus, the problem of providing that new capital-investment shall always outrun capital-disinvestment sufficiently to fill the gap between net income and consumption, presents a problem which is increasingly difficult as capital increases" (Keynes, 2012, p.107).

Thus, the great scientist connects the following two issues: the pace of investment growth, which is, as you know, the main factor for economic growth in the Keynesian approach, with a temporary gap between demand and supply.

We shall consider this connection into more detail by using an abstract model of the national economy without external commercial relations. To simplify the model we will also suppose that there are no government expenditures and dues in the system. In the economy, some industries operate producing final products in the amount of Y. These industries consume the production, which is manufactured by intermediate fields, in the amount of X. Wages paid to employees of all industries w are formed by means of the aggregate income Y+X. Under certain conditions, all enterprises get profit, which is calculated by subtraction of material expenditures and wages from their income. Material expenses of end industries are equal to the sum of production expenditures of intermediate industries X, while material expenses of intermediate industries are equal to the sum of all other production expenditures.

Taking into account the basic assumption of import absence, we draw attention to the fact that a wage has to be the source of payment for the total output (Y). In such a way, the payment passes directly to end industries, while to the interim ones, it is indirect - through purchasing of their products, i.e. raw materials, components etc., by end industries. However, under these given conditions, Y>w, since wages are formed as part of the aggregate income. Then, what will be a payment source for that part of the output the next time, which will remain after the salary payment? For instance, the output is equal to RUB 15 trillion. Of this amount, RUB 12 trillion are spent for wages (also indirectly via the financing of interim industries, which pay wages to their employees). And, assuming an absence of savings, the same amount of wages has to be spent on products purchases. But the aggregate cost of purchased production is equal to RUB 15 trillion. Where is the missing RUB 3 trillion then? And if it is assumed that savings are involved, then the problem will appear in other terms: now the wages fund, which could be spent on consumption, is decreased even more: for example, to RUB 10 trillion. Now, there is underconsumption in the sum of 5, but not 3 trillion as before!

Further, the part of the aggregate income that was not allocated to the wages fund (RUB 5 trillion) would have to be channeled to an investment financing. Thus, the

following question arises: Will companies be able to finance investments in the total amount of RUB 5 trillion, if their production at the same value of RUB 5 trillion is not purchased?

On the other hand, in an equilibrium, the RUB 2 trillion of savings are fully converted into investments via the financial market mechanisms. By this financial injection, the companies will cover RUB 2 trillion of investment costs. But we still have RUB 3 trillion, which is not compensated either by consumption of wages earners or by their savings.

Consequently, part of investments (both long-term and for current expenses) just cannot be financed. A reasonable solution arises: investments can be financed through a loan. But the loan has to have its source. Savings accumulated by the banking system are the main source. But the savings amount in our example is part of the wages paid by companies to their employees: RUB 2 trillion. This is the part of money that was withdrawn from current consumption and returns to the economic turnover through a crediting system. In other words, RUB 12 trillion from RUB 15 trillion of final output is spent on wages. RUB 2 trillion from this amount is directed for savings. RUB 10 trillion of wages, in turn, is spent for production payment. Businesses receive another RUB 2 trillion from loans derived from savings. Again RUB 3 trillion of production is not recovered! In addition, it will be necessary to pay for a credit. The real value of this payment is a differential in the credit interest rate and the deposit rate. And this value just decreases the total amount that remains available for enterprises: say, this time only RUB 11.5 trillion of production will be covered instead of RUB 12 trillion.

# Results

Thus, it may be concluded that the propensity to costs reduction by reducing the wages creates a condition for reducing the aggregate income. Plus, income reduction will have to be speeded up. The last conclusion can be easily proved by elementary arithmetic.

The following question will be quite reasonable: how has this system been in existence for nearly two hundred years, if the principle resulting in a cascade (cumulative) decrease of aggregate income has been accepted as a basis? The doubt can be removed if attention is paid to the fact that the situation has been considered from a static aspect: a momentary interaction between enterprises, wages earners and banks. But real economic processes develop within a period of time, even more, we so not speak only about change stages, but about a process development. In order to forestall the consideration of economics as a dynamic process we will specify two conditions: the first one was mentioned above referring to J.M. Keynes and the point is that there is a time gap between consumption and products sale, and the second one includes an admission of the technological progress existence as a fundamental condition for economic growth. Now, let us consider the interaction of supply and demand implemented in several steps.

The part of income received in stage 1 (denoted by  $Y_{t1}$ ) is spent on investments (improvement of manufacturing processes, creation and updating of new production methods). As a consequence, an output is increased up to  $Y_{t2}$  in the next stage. But, a wage  $W_{t2}$  has to be grown together with the output, i.e. by the amount that will enable to buy the production volume of the previous stage, which is equal to the profit amount received also in the previous stage -  $i_{t1}$ .

Wages paid to employees in the second stage is the only means to pay in full the production output produced in the previous stage. For instance, in the given example above, the new amount of output is RUB 18 trillion. 15 trillion from this amount is total wages. Some part of these wages is spent for financing the output produced in the previous stage (i.e. those RUB 3 trillion which formed the profit). But a new contradiction emerges. Profit is also generated in the second stage - the same RUB 3 trillion (18 trillion minus 15 trillion). This amount, in its turn, can be financed by part of the wages that will be formed in the next stage.

It seems evident that if at any stage the investment efficiency turns out to be insufficient for creating the wages-fund as needed, then part of the output produced in the previous stage will stay stored at warehouses. As a result, the income from sales of these products that companies hoped for will not be fully received. Further, to avoid decreasing the profit rate (due to losses in the previous period), companies can make a decision to reduce salaries. But in accordance with the scheme given above, the reduction of wages will undermine the aggregate demand even more. And the economic growth process, powered by investments in technological development in each stage, will give room to a falling process that will also have a self-spiraling accelerated behavior. Let us compare this conclusion with the conclusion of J.M. Keynes given on page 3 of this article, that amounts of new investments always have to be sufficient enough to fill up the gap between the net income and consumption.

Thus, a modern market economy can be compared with a two-wheeler, which is required to gain a certain speed continuously in order not to fall sideways. Back to the issue of economic growth necessity stated in the beginning of this article we will formulate the following hypothesis: the fact of profit existence by itself inevitably pushes owners and management of companies to an output expansion and products sale without regard to whether they meet public needs or not. And the higher the profit rate, which companies count on, the more investment efficiency in economic growth is required. And it is quite in tune with the conclusion of J.M. Keynes that "financial reserves, which are not spent on current investment, affect adversely the level of consumption and employment, and stimulate the increase of new investments" (Keynes, 2012, p.101).

#### **Discussion of results**

Before moving to the next point, it is necessary to touch on one more problem aspect of no small importance.

Namely, the increased amount of output in each stage (or in each period) has to be provided by sufficient volume of financial resources. Thus, the growth rate of economic money supply has to be adequate to the expected growth rate of gain in production that is quite corresponding with the monetarism doctrine (Fisher, 2001). And it turns out that such a brittle system of aggregate product reproduction is kept from downfall only because of the possibility of continuous increase in labor and capital productivity together with a balanced policy of money supply. But will there always be a possibility to successfully combine these two factors of economic growth? It is obvious that the answer will be negative, because scientific and technological development acting as the primary instrument of labor productivity is not a properly predictable unit.

Consequently, there must be another mechanism, which allow to recover possible losses upon occurrence of unfavorable circumstances. To reveal the nature of these mechanisms, let us assume the existence of foreign trade relations in the system taken. Then, it turns out that the gap between the aggregate output and aggregate demand (in the amount of RUB 3 trillion as shown on page 4 of this article) can be filled in by export income. And if earnings from sales of products abroad are at least not less than the total profit, then there will be no necessity to increase the output of products for domestic sales so significantly. However, it seems that such an attractive way to avoid the problem of domestic demand has its restrictions. In particular, the expansion of production capacity delivered abroad can lead to conflict of interests between the countries which are competitors in some fields on the international market: export incomes of one country are formed by withdrawal of money resources from circulation of an importing country, which in other cases could be spent on domestic demand.

In the end, we would like to summarize the conclusions formulated in the article, which reflect the authors' point of view regarding the issue discussed:

- 1. It is proposed to consider the profit as a "negative" factor of economic growth, i.e. the growth serves as feedback response to the total profit increase, or as a method of negotiation related to its destabilizing influence;
- 2. By closing the gap between aggregate demand and aggregate supply resulting from the profit by production capacity expanding, companies get an incentive to continuously increase their production output without regard to whether their products are really demanded by the society or not. In this case, the motive of economic growth such as job creation just amends this conclusion, since salaries will not be fully paid to new employees because of the profit-maximizing reason;
- Continuous development of labor productivity (achievable through scientific and technical progress, business activity) together with a balanced policy of money supply is an inviolable factor for sustainable economic growth;
- 4. Expansion of products export facilitates the stabilization a country's economic

situation and decreases the dependency on domestic demand, which is not always sufficient to cover the supply during a long-run equilibrium. At the same time, the possibilities for export expansion are limited, and one of the most significant constraints is determined by competitive and differently directed interests of countries entered in international trade flows as participations of a "zero-sum play".

At the same time, the authors of the article accept that the suggested approach requires further amendments by taking in consideration the following factors: taxation and government expenditures, functioning of securities and currency markets, government debt, exchange rate, etc. The authors express their thanks in advance for the constructive comments on this thesis.

# **References:**

Agapova, T. and Seregina, A.C. (2001) "Macroeconomics". Delo and Service

Dornbusch, R., Fischer, S.C. (2002) "Macroeconomics". Infra-M

Fisher, I.C. (2001) "The Purchasing Power of Money". Delo

Keynes, J., C. (2012) *"The General Theory of Employment, Interest and Money"*. London: Macmillan

Lavrov, E.C. (2006) *"Economic Growth, Theories and Problems: education guidance"*. Publishing house of OmGU