

Strategic impact of investments on economic development of Ukraine

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Abstract. The article says about the sources of origin of the economic cycle. The main role of investment as a tool for the implementation of innovations that increases the growth rate of the economy on the upward trend of the economic cycle is grounded. Also, the role of investment as a tool for divestiture on the downward trend of the economic cycle is justified. The cyclical nature of

economic development due to the presence of an impetus at the stage of formation of a new economic cycle and the availability factor of inhibition, which defines the turning point from an upward to a downward trend. The source of economic growth is innovation (scientific discoveries) that reduce the cost of production and increase the return on invested capital. Investments are an instrument of implementation of scientific discoveries (which later become innovation), providing a multiplier effect at the stage of growth of the economy.

Keywords: economic cycle, investment, the causes and the factors of economic growth, the causes and the factors of economic downturn.

Introduction. The current stage of the global economy development is accompanied by the permanent transformation of economic relations, dislocation of the development centers and peripherals. Also accompanied by a reduction in labor costs and time to obtain information on financial transactions. All of this creates a huge opportunity, on the one hand and the enormous risks that are transformed into a negative impact on economy, on the other hand. The question of cyclical nature of economic development, identification sources of the economic cycle origin and the timely prediction of the probable direction of expansions has the particular relevance in the modern world for several reasons. Firstly, due to the fact that globalization has a huge impact on all levels of the global economic system. Thus, the questions raise whether it was a rational trend of development of the world economy when the global economy has stepped on the path of globalization? Whether the negative consequences from the effects of globalization are justified for the world economy? And what will be the further development of the world economy? Secondly, the issue gained particular relevance due to the fact that agents at all levels of the global economy have to develop under the influence of the factors of the economic environment, in which they operate. Thus, the cyclical nature of the global economy has an impact not only at the macroeconomic level, but also at the level of individual entities. A timely identification of the economic cycle origin, as well as the prediction of its further extension would allow to develop and implement the effective mechanisms of adaptation to the modern business cycle of the global economy. That will allow to overcome the period of crisis with the least losses and make it possible to use the impact factors on upward phases of economic revival with the greatest efficiency.

Brief Literature Review. The works of many scientists of the all over world are devoted to the study of the economy cycles. The most famous are the works of E. Atkinson, W. Jevons, J. Galbraith, K. Juglar, J. Keynes, N. Kondratyev, S. Smith, W. Leontief, K. Marx, W. Mitchell, Paul Samuelson, J. Stiglitz, M. Tugan-Baranovsky, E. Hansen, J. Hicks, J. Schumpeter, M. Friedman. Among modern Russian and Ukrainian scientists should highlight the work of A. Belchuk, S. Vygotsky, V. Kudrov G., J. Pevsner, M. Sazhin, Stolyarchuk J. etc.

The purpose. To explain the saltatory nature of the ups and downs of the economy based on one theory impossible. The existence of a set of theories that describe the cyclical nature of the economy points to a wide variety of reasons of the formation of the cyclical nature of the economy

and the unique environment in which these cycles formed and developed in particular period of time. Therefore, at the present stage of economic development and economic science development, there is a controversial question of the sources of economic cycle origin and of the mechanism of its development. Also the role of investment in the cyclical development of the economy is not defined.

The aim of this study is to determine the role of investment in the process of birth and development of the global economic cycles.

Result. The cyclical nature of the global economic system is not doubtful. The Leading Scientific Schools of the world recognize this fact and they are looking for the sources and dissemination of economic cycles on the permanent base. They develop methods of assessment and identification of economic cycles. Scientists improve the approaches to predict the further development of economic cycles, etc. Most researchers dated the first economic crisis due to the cyclical nature of the capitalist economy as of 1825. With the spread of the capitalist type of economic relations the European countries and the United States, which subsequently underwent crisis in 1847-1848, were involved in the cyclical type of economy. Scientists of the classical school of political economy have noticed certain regularity in the events described above. And for the first time in the history they have put forward the idea that crises are not accidental and they have certain causes. With the transformation of economic relations due to the changes in the mode of production of commodities and money circulation, the approaches of determining the root causes of economic cycles changed too.

Currently, there are three basic concepts that define the nature and causes of the cyclical development of the economy:

1. The Investment theory of economic cycles - the primary cause of economic cycles, according to scientists who hold to this theory (E. Hansen, etc.), is the dynamics of investment. Investments in a certain period of time become cumulative. The constantly increasing demand leads to increased investment. However, there comes a time when the ever-increasing volumes of production and sales are faced limited demand and the economic growth gives way to a phase of economic recession [1].

2. The «innovation wave» theory – the proponents of this theory (J. Schumpeter, etc) believe that using of innovations gives impetus to the long-term economic growth. But these innovations are faced with market saturation and the shortage of resources, which are used for this type of production. In this regard, the growth is gradually moving into a phase of recession. Search of the new technological ideas is started since the recession of the economy occurs. When a new kind of innovation will be invented (to offer the market), the new innovations will replace the previous, and it will give new impetus to the growth of the economy. That will determine transition to a new cycle of economic development [2].

3. The monetary theory of economic cycles - representatives of monetarist school (L. Mises, Hayek, K. Wicksell, etc.) believe that the economic cycle is based on expansion and

contraction of the money supply [3, 4, 5].

N.D. Kondratiev showed that since the industrial revolution in England, there are large economic cycles in the world economy, the duration of which is 40-60 years. N.D. Kondratiev laid the foundation for the theory of the big waves. According to the scientist, a powerful impetus to the development of the economic conjuncture and economic growth gives the revolution in technology, which leads to a radical change in the process of production [4].

Based on the theory of Nikolai Kondratieff, Joseph Schumpeter created a theory of innovation. According to his theory, the implementation of innovation in a particular area of the economy leads to a widening gap in the rate of profit in the hands of innovators and the rate of profit in the rest of the economy. This leads to an intense process of accumulation capital investment in economic areas where innovations are implemented [2].

B. Klinov has deepened the analysis of the effect of STP on the dynamics of economic growth. And he also justified the accumulation and disposal of scientific and technical potential as the underlying causes of the cyclical nature of economic development [6].

According to the scientist, accumulation of scientific and technical potential occurs from the time when the implemented innovations have already exhausted its potential. At this stage of development the productivity is rapidly declining, when economic growth is achieved due to increasing resources and labor. During this period the search for new technical solutions that will dramatically change and improve performance begins [7].

The consumption of scientific and technical potential is related to the rise in the rate of investment in fixed assets, i.e. it is increasing the share of GDP that goes to fixed capital formation.

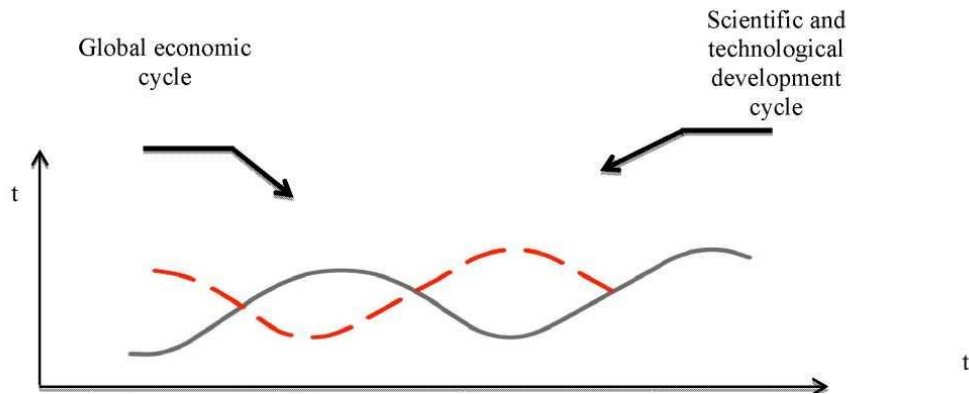


Chart. 1. The correlation of the economic cycle and the cycle of scientific and technological development

Thus, the GDP growth rate can be expressed as [6]:

$$\nabla GDP_t = \frac{VA_t}{CF_{t-1}} \times \frac{CF_{t-1}}{GDP_{t-1}} \times 100 \quad (1)$$

Δ – the rate of growth in percent; t – the reporting period;

$(t - 1)$ – the previous period;

GDP – the gross domestic product; VA – the added value;

CF – the capital investments;

$\frac{VA}{CP}$ – the return on capital investments;

$\frac{CF}{GDP}$ – the share of capital investments in GDP.

According to my point of view, the implementation of innovation or more global process, which is a change in the method of production, is the source or the momentum for further growth. However in order to realize this momentum in the real economy, there should be the tools that will be able to provide the introduction of innovative developments.

Most scientists that is studying the problem of economic dynamics believe that the core of the cycle is in a stage of crisis and they are working on the problem of mitigation of the crisis consequences. Moreover, the policy of counter-cyclical regulation aimed at reducing the phase of recession and elongation phase of economic growth, which is reflected in the dynamics of economic development over the past 60 years [8].

However if there wasn't a breaking moment from rising trend cycle to the down one, there wasn't the cycle itself.

Therefore, we believe that two key points determine the economic cycle:

- Factor of the momentum that causes the change of economy direction from the downward to upward trend;

– Factor of braking, which determines the change of economic development from the upward to downward trend.

This reasons, which cause these fractures in the trend of economic dynamics, determines the cyclical nature of the economy.

In my opinion, the process of accumulation and realization of scientific and technical potential (namely, global discovery, such as the steam engine, electricity, nuclear energy, information technology, and bioengineering) has a key influence on economic dynamics, creating a strong impetus for economic growth. First of all, because of the growth of labor productivity, cost reduction, etc. These innovations stimulate entrepreneurs (economic agents) to invest in the industries in which these innovations are being introduced and thereby generate a multiplier effect in the economy.

However, scientific discoveries were not always commercial in nature. Scientists that have developed new technologies have acted not as economic agents seeking to maximize profits, and they not sought to achieve the momentum in the economy [9].

To say that scientific discoveries are the sole cause of the cyclical development of the economy is not correct, for several reasons:

- the scientific discoveries may be spontaneous (non-commercial);
- the scientific discovery in itself does not create economic growth;
- scientific discovery should be implemented to life in order to create momentum in the economy;
- there also must be capital, which will cover the cost of implementation the scientific discovery.

The following conditions should be met in order to realize scientific discovery in the economy that will resulting in the impetus to the new economic cycle:

- the economic agents have to understand that these innovations provide a high rate of capital return on invested capital due to the increasing capacity of production, reducing production costs, etc.;
- the economy should contain the necessary amount of investment capital in order to ensure the implementation of innovations [10].

The first condition is fulfilled due to the selection of ideas and scientific research on the conformity of economic efficiency and capacity. On the first step the developed innovations put into operation on a small number of venture companies. And only innovations that really showed a high result of the economic effect could attract the attention of a large number of investors [11-13].

Thus, investments serve as a tool through which the innovations are implemented in the real economy. As a result the growth of investments leads to a multiplier effect in the economy, which causes movement of the economy on the upward trend (Chart 2).

Savings that are formed at all levels of economic systems (from the household level to the level of the global economic system) are the source of the investment capital. Savings generated

through allocation a portion of current income, which economic agents sent to the consumption in the current period and a portion that they save. Thus, postponing the consumption to the subsequent periods. This correlation can be expressed in such a way:

$$S_n = Y_n - P_n, \quad (2),$$

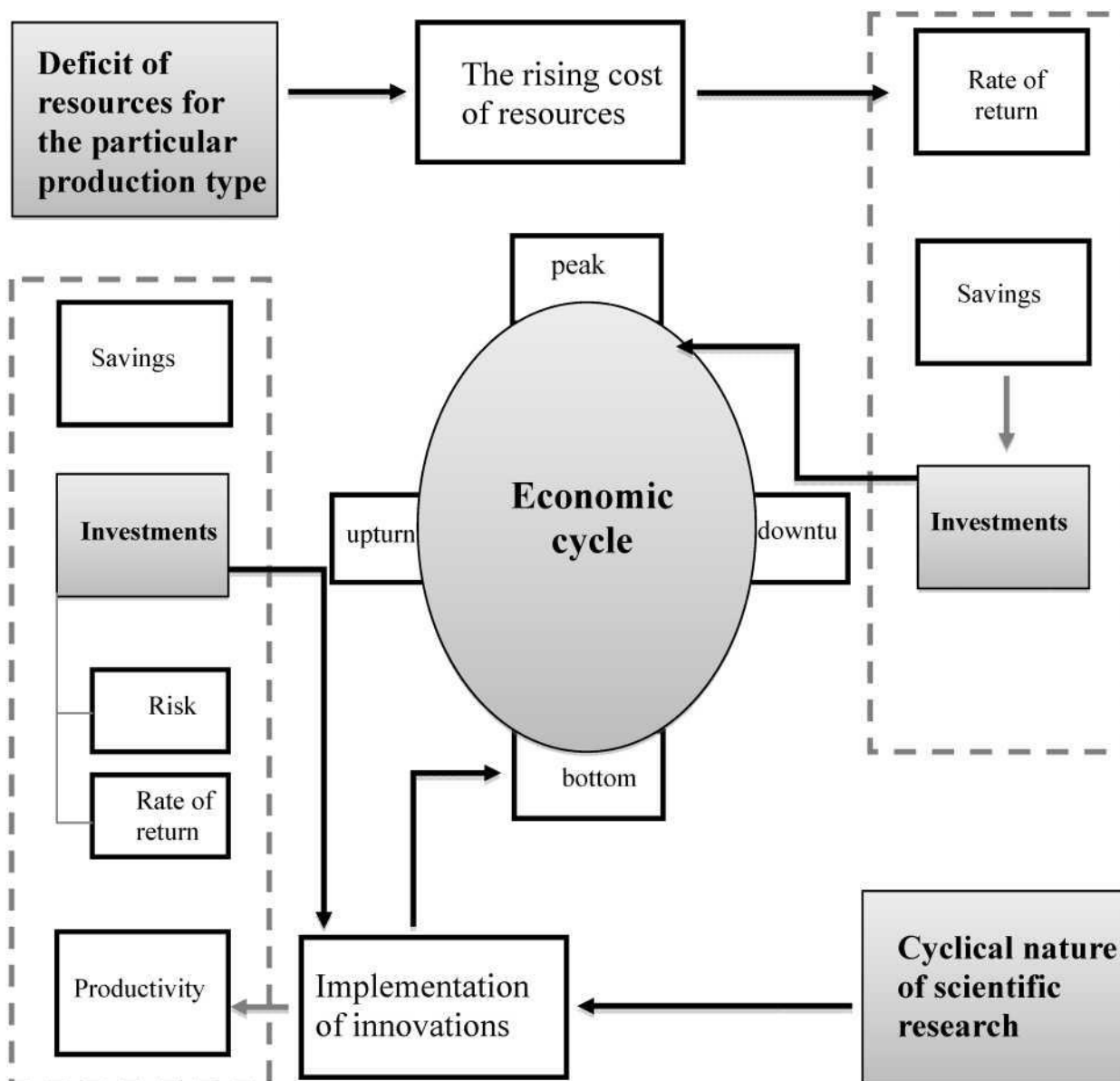


Chart. 2. The role of investment in the development of the economic cycle

S_n – amount of savings that have been generated in the n-th period;

Y_n – the total amount of revenue that has been received in the n-th period;

P_n - the amount of money that have been spent on consumption in the n-th period.

The most significant amount of savings generated in the period, when the income is much higher than the current needs of economic agents. That is, when the performance is maximum and production costs are minimum. The declining in income leads to a reduction in the amount of

savings. Thus, the investment capital that can be directed to the implementation of innovations is formed when the income of the current period is shared to consumption and saving [5].

J. Keynes substantiates correlation of growth of investments that are invested in the economy with an increase in total revenue. In turn, when the total revenue increases the aggregate savings increase too, which are the basis of investment capital for subsequent periods. J. Keynes described this correlation as a formula, which is known as the investment multiplier:

$$Q = \frac{\Delta Y}{\Delta Fk}, (3)$$

Q – investment multiplier;

ΔY – the national income increment;

ΔFk – the real investment increment.

Thus, the economy could be on the upward wave indefinitely if there were no factors which carry a braking effect. That factor is the rate of return on invested capital, which has steadily decreased with an increase in production costs. The largest share of production costs accounted for:

- material costs;
- labor costs.

At the initial stage of implementation of innovations, the resources that are used in this type of production, had not previously been involved in the production at all or had been involved in a small volume, that caused their cheapness [14]. When the production process is no longer an innovation but rather becomes a mass this type of resources are widely used, which leads to a high demand for these resources, and as a result leads to their scarcity. Ultimately, this leads to increase in the cost of resources and has an impact on the level of production costs and the rate of return on capital [15].

Considering the role of investment in the downward trend of the economic cycle, it should be noted that the economic agents, commensurate increased risk and a declining rate of return on invested capital are not willing to invest. Thus, reducing of investment in the economy lead to a reverse multiplier effect: rate of earnings reduction ahead of the reduction rate of investment in the economy.

Conclusion. The cyclical nature of economic development due to the presence of an impetus at the stage of formation of a new economic cycle and the availability factor of inhibition, which defines the turning point from an upward to a downward trend. The source of economic growth is innovation (scientific discoveries) that reduce the cost of production and increase the return on invested capital. Investments are an instrument of implementation of scientific discoveries (which later become innovation), providing a multiplier effect at the stage of growth of the economy. The factor of braking become apparent through deficit and the high cost of resources used in the production, that is typical for the particular economic cycle. This causes the growth of production costs, reduction of the rate of return on invested capital, and as a consequence of the outflow of investments.

In our opinion, investment plays a key role in the formation and development of the economic cycle, as in the stage of implementation of innovation the investment cause the acceleration of the growth rate, but on a downward wave - "feed" the decline in economic indicators. In this regard, there is interaction between investment and cyclical nature of the economy is especially important and requires further investigation to determine the level of correlation part in these processes.

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