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**THE CYCLICAL ADJUSTMENT OF PUBLIC FINANCE AND RELATED EXTERNALITIES IN
CONVERGED FINANCIAL SYSTEMS**

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The article deals with the theoretical approaches to the typology of economic cycles. Particular focus is given to the nature of the financial crisis and related considerations. The author arrived at the conclusion about the significance of external factors influencing the development of public finance in the age of globalizing national financial systems.

Keywords: financial system; globalization; public finance; economic cycles; phase of the cycle; countercyclical fiscal policy.

Introduction. The effective performance of the public finance depends on many factors. Given the increasing influence of globalization processes on the development of national economies and financial systems, currently the opportunity of governments to ensure sustainable public finance largely depends on the cyclicity of economic development – namely, the propensity of both national and global economies to the crisis processes.

On the one hand, such an approach could reasonably give rise to objections, due to the fact that the theory of economic crisis has a significantly long history. However, despite many approaches and interpretations of the nature of crises it remains understudied, as evidenced by the fact that crises continue to shake the economies of various countries. Inadequate government actions, incorrect estimates and forecasts of the rating agencies, as well as uncoordinated policies of international financial institutions are, in particular, the result of insufficient knowledge of the theory and practice of economic crises and means of their prevention. Recent economic crises often possess new or specific traits that influence the formation of theoretical, methodological and practical approaches to simulation of their causes and consequences. The study of problem appears to be of particular relevance in the context of cyclical development of public finance, since the public finance performance directly reflects the overall financial and economic situation of the country.

Literature Review. The problems of public finance system development under modern conditions of globalization are addressed in the works of such foreign researches: I. Kaul (considers the public finance in the context of formation of the state as a mediator), V.Tanzi (explores the relationship of public spending, social welfare and globalization), Peter S. Heller (analyses long-term fiscal challenges), P. Conceicao (evaluates the growth of diversification of financing vehicles in the public finance system) et al. Certainly, an increased impact of the cyclical changes forces governments to accelerate reforms in the field of public finance and target their fiscal policy not only on the current maintenance of public functions performance, but also on the sustainable development in the subsequent periods, considering the influence of exogenous factors. It determines the relevance for further research in this area.

Research Question. The article purposes to explore the impact of external factors on public finance in terms of cyclical changes and globalization enhancement in the global financial system.

Basic Results of the Research. In 1819, Jean Charles Leonard de Sismondi proposed the first systematic presentation of the periodic economic crises, as opposed to the existing theory of economic equilibrium [1]. Therefore, the classical economics denied the existence of business cycles. The Jean de Sismondi's theory of periodic crises was developed in the cycle theory of Charles Dunoyer and Johann Karl Rodbertus. The periodic crises in capitalism formed the basis of the Karl Marx's theory, who dedicated a considerable part of his "Capital: Critique of Political Economy" to them.

In related research literature, the following four basic types of economic cycles are distinguished:

1. Short-term Kitchin cycles [2] (period – 3-4 years), related to the inventory movement. At present, the mechanism of formation of these cycles is usually associated with delays in time (time lags) in the information flow that affect the decision-making by commercial structures (companies).

2. Mid-term Juglar cycles [3] (period – 7-11 years) are characterized by fluctuations not only of the capacity utilization rate (and, respectively, of commodity stocks volume), but also fluctuations of the capital investment volumes.

3. Kuznets swings [4] (period – 15-20 years), which he associated with the demographic processes, in particular, the influx of immigrants and changes in the construction industry.

4. Long-term Kondratiev wave [5] (K-cycles or K-waves) (period – 45-60 years). The research and conclusions of Nikolai D. Kondratiev were based on the empirical analysis of a large number of economic indicators of various countries on considerably long periods, covering 100-150 years. These indicators included price indices, government debt securities, the level of nominal wages, foreign trade performance, volumes of coal and gold extraction, lead and cast iron production, etc.

Nikolai D. Kondratiev [5; 6] observed that the cycles of the referred indicators dynamics coincide closely enough in time and are to some extent interconnected. Thus, the price trends reflect the capital stock replacement processes and the cyclical nature of investment. His activities in this area resolve into the following.

First, based on a large number of statistical data, he proved the existence of "long cycles" and traced two complete and one incomplete cycle from the end of the XVIII century and up to 1920. The first cycle covered the period of about 60 years, and then a gradual reduction in cycle time occurred.

Second, Nikolai D. Kondratiev identified what is referred to as "empirical regularities". He provided insight into phenomena statistically, but could not explain them theoretically:

- a) at the start of expansion phase an introduction of inventions takes place en masse;
- b) the expansion phases are characterized by a large number of social upheaval than the phases of recession;
- c) the recession phase most affects agriculture;
- d) the medium and small cycles are as though "strung" on the long cycles [6, p.87] that is observed in the following: in the expansion phase of the long cycle, the expansion phases are more apparent, vice versa, in the recession phase.

Third, Nikolai D. Kondratiev proposed some hypotheses about the mechanism "supercycles". He applied the cycle theory of Mikhail I. Tugan-Baranovsky [7] about the interaction of savings and investments. Further, applying the ideas of Alfred Marshall and L. Walras about equilibrium, Nikolai D. Kondratiev provides transition scheme from the "first-order equilibrium" to the "equilibrium" of the next orders during the cycle. He refers "first-order equilibrium" to the period, in which production conditions

and, consequently, the supply volume cannot change significantly and increased demand can only influence the commodity stocks and capacity utilization. The "second-order equilibrium", in turn, is established as a result of the expansion of production in industries producing consumer goods at the expense of existing stocks of basic capital goods. The production in the industries, producing the means of production, begins to expand, that influences the volume of consumer goods production and leads to the establishment of the "third-order equilibrium".

Currently all theories of economic cyclicity can be summarized as follows:

1. Marxist theory. K. Marx was the first to give the scientific credence of general methodological principle, according to which the economic crises were considered as a deviation from the equilibrium. Their main reason is intensification of contradictions between the social character of production and the private appropriation of its results. This contradiction expresses itself in the controversies between capital and labour, production and consumption, between the production organization in individual enterprise and in society in general. These views were developed in the works of J. Hicks, K. Arrow.

2. The Innovation Theory. The Austrian economist J. Schumpeter, who was among the first to adopt and apply the idea of Kondratiev cycles, developed this theory. In his opinion, the economic dynamics is based on the dissemination of various innovations, initiated by the acting economic agents (entrepreneurs). J. Schumpeter defined the long-wave fluctuations as one of the manifestation forms of economic dynamics, generated by the innovation process. According to him, the profit is an incentive for searching for and implementing new combinations, that becomes a reward for innovation [8, p.23].

The J. Schumpeter's theory was developed in the researches of S. Kuznets, G. Mensch, A. Kleinknecht, D. Van Dine, and S. Glaziyev et al.

3. The Theories of Over accumulation in the Capital Sector. This concept was developed in the mid-1970s under the supervision of D. Forrester. He developed a complex mathematical model, whose equations were derived from interviews of businessmen, financiers, politicians, and subsequently applied a computer simulation. It involved an analysis of the economy, consisting of two sectors: consumer goods and capital goods. With the growth in the consumption of the first sector, an increase is observed in consumption of the latter. However, these changes are irregular that leads to a deviation from the equilibrium point.

4. The Labour-Related Theories. These theories are based on the consideration of the long-wave theory in terms of the patterns of labour movement. Within the framework of this theory, K. Freeman combined the innovative ideas with the problems of employment and social aspects. According to this theory, the demand for highly skilled labour force emerges along with innovation. With production growth the demand for labour increases. However, with the market saturation both production of the new product and demand for its production factor decline.

5. The Price Theories. According to these theories, the prices of raw materials and goods exercise a decisive influence on the economic cyclicity. With their change, an allocation of certain industries and the corresponding change in the structure of the national economy occur. W. Rostow is among supporters of the price approach to the explanation of long waves. According to him, the changes in supply and demand of raw materials and consumer goods, and, therefore, their prices, influence the innovative activity that defines the list of leading industries and depends on them itself. Furthermore, the demographic factors, the pace of housing construction, and the change in the labour force render strong

influence. Depending on the decisive factor, he singled out three areas: innovation and investment, demographic and agro-price.

6. Keynesian and neo-Keynesian theories. According to these theories, a cyclic response, disappearing with time, occur because of the influence of random pulses on the economic system. However, the business cycles appear again because of new impulses, destabilizing the economic equilibrium. Thus, the cyclical development is observed in the economy, it is a result of the economic impact of series of sequentially emerging independent pulses. Each of such pulses or shocks later propagates in the economy; the mode of propagation depends on the structure of the economic system. The framework of the neo-Keynesian theories purposes to attempt to find a theoretical explanation of the inflexibility of nominal wages and prices. The theories deal with the impact of labour contracts, the role of trade unions, effective wages and other factors. The followers of these theories are E. Hansen, S. Fischer, J. Hicks, S. Harris, and Paul A. Samuelson et al.

At the present stage of world economy development, the maintenance of financial stability is among the priorities of economic policy. These tasks acquire particular relevance during the crisis shocks.

Crisis is a critical stage in the functioning of any system, where it is exposed to the outside or inside, that requires of it qualitatively new responses. The key feature of the crisis is the threat of the system destruction. The economic concept of crisis means undesirable and the most "painful" phase in the economic system, characterized by fluctuations, negative phenomena, and interferences.

Referring to the modern interpretation of the financial crisis, to be sure, in the researches of domestic and foreign authors there is no single approach to the demarcation of clear frames of emergence and behaviour of the financial crisis, characterized by a permanent financial and economic instability. Thus far, many approaches to the definition of financial crisis nature exist that confirms the universality of this category.

Many academic economists consider the financial crisis as a crisis of the financial system, in other words – a systemic financial crisis. Thus, A.G. Gryaznova means by financial system crisis a "deep frustration of functioning of the basic constituents of the country's financial system" [9, p.867]. The systemic financial crisis, in its view, is expressed in total financial insolvency of key financial institutions and is accompanied by a "financial panic". Such an institutional approach to understanding of the financial crisis, which is shared by many Western researches, leads to the fact that the financial crisis is often associated with the bankruptcy of financial institutions and identified with the banking crisis. This approach, in our opinion, is not quite correct, because limits the instability of the finance by the frames of the financial system.

If we consider the financial crisis as a broader concept than a systemic crisis, i.e., as destabilization of the finance, for this reason the financial crisis can be understood as a distribution process frustration of the object of financial relationships and the inability in this regard to form centralized and decentralized funds of funds. Accordingly, it turns out that the object of finance performs like an object of financial instability. The contentious views concerning the choice of the object of finance prevent from its precise determination. Therefore, in this case, following the chosen definition of the finances, the object is understood as the gross domestic product (GDP) or national income as part of the GDP at the state level and the profit at the level of economic entities.

Many researchers agree that the financial crisis is anyhow a crisis of public finance (A.A. Blagodatin, L.S. Lozovsky, B.A. Raizberg), therefore, when considering financial instability, the emphasis should be placed on the centralized funds and the national income should be explored as an object of the crisis.

In addition to the crisis phase, the following cycle phases are distinguished:

Depression (stagnation). Herewith, an adaptation of economic life to the new economic environment and requirements of a new equilibrium achievement occurs. Meanwhile, the behaviour of economic entities is characterized by uncertainty, lack of actions organization, adoption of risk-free solutions. The prices are stabilizing; the interest rate is reducing.

Recovery is a phase of renovation. The capital formation begins, the prices, production, employment, and interest rates are rising. The reproductive processes develop in production, increasing it to a totally new level.

Expansion or boom, in this phase the acceleration of economic development appears in the emergence of new products and companies, growth of capital investments. However, the increase of risk-related activities of production units (primarily refers to banks), growth of inventories, etc., are clearly observed that creates the preconditions for a new crisis.

Today the public finance development represents rather unmanageable luggish process than organized and supported by the government movement towards their utilization for economic growth purposes. This is related to the increasing influence of economic cycles and the lack of clear-cut strategy of public finance in the country.

The existing structure of the value added distribution in the sectors of national economy is the major cause of the next crisis development and the transition from the expansion phase to the phase of recession and depression. The effective public financial management is capable to halt the process and smooth out the future negative dynamics of the national economy development. Otherwise, the economy is transformed independently, through the influence of a future crisis. Thus, the public finances can be transformed immediately under the influence of cyclicity.

So far, there are different views on the causes of cyclical fluctuations, however, despite the considerable range of opinions and different variants of countercyclical policies, the two regulatory areas can be distinguished in general: neo-Keynesian theory and neoconservatism, developed based on the classical school of political economy. The first focuses on the regulation of aggregate demand, the second – on the regulation of aggregate supply. The public finance play a pivotal role in these areas.

In terms of the input parameters and benchmarks, the advocates of a particular school solve the problem of flattening of cyclical fluctuations in various ways, operate different instruments, which are at the disposal of the government and can be used in the implementation of anti-crisis financial policy.

E.g., the advocates of Keynesian prescriptions place greater focus on the budget policy (specifically due to the increase or decrease in government spending) and fiscal policy (manipulations with tax rates, depending on the performance of economy).

The adherents of neoconservative prescriptions place the utmost importance to the issue of monetary circulation. Basically, this is an issue of money supply regulation and its impact on the establishment of equilibrium on the monetary market.

Regardless the applied policy, there is a common understanding of what kind of government actions with respect to public finance management should be in order to overcome the cyclical fluctuations.

In the recession phase, the public finance instruments are applied for business activity stimulation. In the scope of application of tax policy instruments it means lower tax rates, tax incentives for new investments, adopting of accelerated depreciation policy. At the same time, the advocates of Keynesian views rely more on the growth of public expenditure, regarded as savings stimulant. The tax arrangements complement fiscal measures, taken together they lead to the stimulation of aggregate demand, and, ultimately, and production. What happens in the reverse case, i.e. during the recovery of the economic conjuncture? In order to prevent overheating of the economy and the related negative phenomena in economic life, the government implements a policy of containment, including opposite actions in the area of fiscal and monetary policies.

The fiscal policy of this period is characterized by an increase in tax rates, reduction in public spending, restrictions in the area of depreciation policy. The theorists of Keynesian regulation methods focus precisely on the fiscal policy. The fiscal measures lead to a smoothing of purchasing power, and, therefore, the demand that ultimately cause a certain slowdown in the economic activity. In general, arguably with respect to the usage patterns of public finance tools for cyclical fluctuations flattening, during recession the government pursues a policy of intensification of economic processes, and in the period of economic “overheating”– aims to restrain the economic activity by applying the tools of public finance.

The tools of countercyclical regulation by means of public finance are constituents of the state economic policy. The application of any particular mechanism is impossible without development of specific instruments of government influence on the economic processes. The specifics and quantity of instruments employed in this case may vary and depends the theory of macroeconomic regulation accepted as a basis for the government economic policy.

Conclusions. In the process of institutional reform of the public finance in Ukraine, the emergence of new, more efficient and adequate tools of state regulation of economic processes is possible and appropriate. However, at this stage of development of Ukrainian economy the internal factors and causes of cyclical fluctuations are actually ignored due to the current structure of the economy and value-added distribution system. Therefore, the exogenous (external) factors exercise a decisive influence on the dynamics of GDP fluctuations, the conjuncture of world gas, oil and other markets is the most determinative *inter se*. Such a situation complicates the detection and correct classification of the causes of endogenous economic processes cyclicity and defines the high degree of dependence of the national economy from the conjuncture of global primary commodity market.

Thus, in the context of globalization and increasing participation of the Ukrainian economy in the world economic relations, the cyclical economic development refers to the factors that influence the state of public finance most significantly. Despite the significant range of views and variants of countercyclical policy, in general, there are two directions of the public finance regulation: application of neo-Keynesian theory and neoconservatism tools. Depending on the government's policy decision, certain techniques and tools of regulation public finance are applied in each of the cycle periods. However, regardless the applied policy, there must be a common understanding of what kind of government actions with respect to public finance should be in order to overcome the negative effects of cyclical fluctuations.

References:

1. Sismondi J. C. *Nouveaux principes d'économie politique, ou de la Richesse dans ses rapports avec la population* / J. C. Sismondi. – Paris, 1819. – 449 p.
2. Kitchin J. *Cycles and Trends in Economic Factors* / J. Kitchin // *Review of Economics and Statistics*. – London, 1923. – 116 p.
3. Juglar C. *Des Crises commerciales et leur tour periodique en France, en Angleterre, et aux Etats-Unis* / C. Juglar. – Paris, 1862. – 276 p.
4. Kuznets S. *Secular Movements in Production and Prices. Their Nature and their Bearing upon Cyclical Fluctuations* / S. Kuznets. – Boston: Houghton Mifflin Company, 1930. – 362 p.
5. Kondratiev N.D. *Major Cycles of the Conjuncture (in Russian)* / Nikolai D. Kondratiev // *Proceedings and their Discussions at the Institute of Economics*. – Moscow: Financial Publishers of the People's Commissariat for Finance of the USSR, 1928.– Vol. 4. – 189 p.
6. Kondratiev N.D. *Selected Works (in Russian)* / Nikolai D. Kondratiev. – Moscow: Economics, 1993. – 543 p.
7. Tugan-Baranovsky M.I. *Industrial crises. Essays on the Social History of England (in Russian)* / Mikhail I. Tugan-Baranovsky. –St. Petersburg: O.N. Popov's Publishing house, 1900. – 354 p.
8. Schumpeter J.A. *The Theory of Economic Development (in Russian)* / Joseph A. Schumpeter. – Moscow: Progress, 1982. – 401 p.
9. Gryaznova A.G. *Financial and Credit Encyclopaedic Dictionary (in Russian)*/ Under the general editorship of A.G. Gryaznova.–Moscow: Finance and Statistics, 2004.- 1168 p.