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#### THE PERIOD OF THE GLOBAL CYCLE OF THE FINANCIALIZED ECONOMY

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В статті досліджується взаємозв'язок між фінансіалізацією економік провідних країн світу і характером сучасного глобального економічного циклу. Внаслідок фінансіалізації сучасної економіки генераторами ділового циклу стали фінансові ринки. Саме нестабільність фінансових ринків провокує діловий цикл. Автори статті припускають, що в силу певних закономірностей функціонування фондового ринку можна прогнозувати період глобального економічного циклу, що дозволить запобігати його руйнівному впливу на світову економіку

**Ключові слова:** глобалізація економіки, транснаціоналізація, фінансіалізація, фінансова криза, глобальні економічні цикли, період економічного циклу

#### 1. Introduction

Cyclicity is one of the main features of a market economy and an integral part of functioning and development of national economies of all countries of the world. The global financial crisis of 2008-2009 which began with the collapse of mortgage lending and securities market in the United States has become a real challenge for the world community and has led to the largest economic recession since the Great Depression of 1928-1933. The losses of the global economy due to falling of global GDP, reducing world exports and imports of goods and services as well as falling of investment activity are estimated in trillions of dollars. The global financial crisis has shown that the basis of the modern business cycle lies in the rapidly growing gap between real and financial capital in conditions of globalization which leads to financialization of economies of the leading countries of the world and makes them internally fragile economic systems.

## 2. Literature review

The theory of economic cycles dates back to the middle of the nineteenth century and is associated with the French economist Clement Jules, who first began to study the cycles and not the individual crises in economy. This scientist identified medium-term economic cycles of 7–11 years (9 years on average), and linked them with the renewal of an active part of fixed capital. Beginning with the 20<sup>th</sup> century economists have been actively

explored cyclical fluctuations in economy, have described new types of cycles, identifying their causes and have developed recommendations concerning reducing (softening) the impact of these cycles on the economy (Table 1).

Having analyzed Table 1 one can notice that in the process of evolution of the world economy (as an aggregate of national economies), the very nature of economic cycles has evolved. That is, economic cycles changed simultaneously with the change in the structure of economy. Thus, for example, industrial cycles (with domination of industrial capital) have changed into cycles associated with the growth of speculative operations in commodity and money markets (with the growth of the role of financial capital), etc.

The globalization of economy has only accelerated this process, and financial crises have become the basis of cyclicality of the modern world economy. The essence, causes, mechanism and consequences of financial crises [2–4], essence, causes and mechanisms of business cycles [5], virtualization of economy and financial markets [1, 6] are described in modern scientific literature sufficiently in detail as by domestic and foreign economists. In scientific works today are actively analyzed the lessons and consequences of the global financial crisis of 2008 [7, 8], the synchronicity of global cycles in economies of different countries [9] is investigated, the possibilities of cyclical fluctuations in the future [10–13] are estimated.

Table 1

The basic approaches to causes of cyclic fluctuations [1]

The authors	The reasons for cyclical oscillations
U. S. Jevons, H. M. Mor, S. Ozdi	influence of solar activity
J. Sismondi, T. Malthus, D. Hobson, J. Keynes, M. Tugan-Baranowski	reduction of consumption costs; growth of savings; lowering of investments
K. Marx, F. Engels	time lag between production and consumption
L. Mizes, F. Hayek, L. Robbins, K. Wicksell	disproportion between higher and lower stages of production is caused by the volume of money supply in circulation
M. Tugan-Baranovsky, J. Schumpeter, G. Kassel	disproportions in the structure of overcapitalization; decrease in the volume of production of fixed capital as a result of depletion of loan capital

At the same time, the authors of the research analyze the possibility of deployment of future financial crisis in the world, referring to certain causes and preconditions but do not try to estimate the probability of this phenomenon in time. What determines the duration of the current economic cycle (the period of the economic cycle) in the modern global economy is it possible to determine in time the probability of the onset of another recession? These issues remain poorly researched and that is why are very actual taking into account the destructive nature and the planetary scale of the social and economic consequences of the modern global cycle.

### 3. The aim and objectives of research

The aim of the research is estimation of possibilities of forecasting the period of the modern economic cycle.

To achieve this aim, the following objectives were set:

- 1. Describe the phenomenon of "financialization of economy" and its impact on behaviour of real economy;
- 2. Analyze the mutual dynamics of the indicators of economic growth and the development of stock markets of the leading countries the main players of the modern global stock market.
- 3. Characterize modern business cycle of global economy, its stages and reasons.

# 4. Modern global economic cycle: description, period and causes

Globalization is the mainstream of the modern civilization development. No modern theoretical concept (including economic ones) can't take into account this factor, because it substantially changes both the causes and consequences of all economic phenomena and processes. Globalization has been leading humanity for over 40 years (the beginning of globalization is the last quarter of the twentieth century). However, the processes of globalization have been particularly intensive since the 1990s, when most countries began to "open" their economies on the basis of the "Washington Consensus" and an explosion step in the field of information technology was made – the material basis of globalization (including

the emergence of the Internet). Thus, we can speak (in the context of globalization) about the formation (beginning with the 1990s) of a qualitatively new state of the world economy – the global economy.

What are interesting, the global economy gains new features and characteristics that were not inherent in any national economy before. In particular, over the past 25–30 years there has been a rapid growth of the financial part of economy. This phenomenon was called "financialization of economy". That is, today the global economy functions in such a way that the financial sector of economy is developing detached from the real sector of economy. If we analyze the ratio of volume of securities trading to the value of the aggregate global GDP during the period of globalization, while at the same time binding to the growth rates of the world GDP then it is possible to see a certain regularity (cyclicity) in functioning of the global economy (Fig. 1).

Fig. 1 shows that:

1) since 1999 the phenomenon of "financialization of economy" has been observed in the global economy since exactly in that year for the first time in history the volume of securities trading on a global scale exceeded the world GDP. This ratio was 103.537 %;

2) taking into account the fact that in 2000 the ratio of securities trading volume to the volume of world GDP was 145.653 %, in 2007 - 162.251 %, and in 2015 - 163.454 %, that is, each next peak of this ratio was nominally larger than the previous one, we can conclude that the financial market continues to grow at a higher pace than the world GDP;

3) the global financial crisis of 2008–2009 as well as fluctuations of business activity in 2001 and 2016 was connected with separation of the financial sector of economy from the real sector and the emergence of "bubbles" in the stock markets. So, after the boom in 2000 when the GDP growth rate was 4.389 % compared to 1999, in 2001 this indicator was 1.914 %; in 2007 the GDP growth rate was 4.228 %, and in 2008 – 1.819 %, in 2009 - 1.734 %; in 2015 - 2,857 %, in 2016 - 2,506 %. That is, after the boom in stock markets which is accompanied by a crisis, there is always a downturn in business activity.

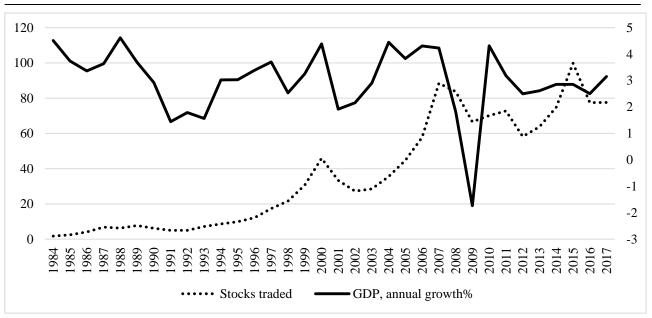


Fig. 1. The ratio of volumes of securities trading to GDP in the world scale (per cent, left scale) and tempos of the world GDP growth rates (per cent, right scale) for 1984–2017 [14]

In particular this assumption is confirmed by a correlation and regression analysis between the growth rate of the volume of securities trading on a global scale and the rate of growth of the world GDP for the period of 1997–2017. The correlation index between these two variables is 0.62, which is confirmed by the fact that the financial sector's impact on the real sector of economy is quite tangible.

4) The period of time from one boom in the stock market to another is 7—8 years.

It is connected with the time which is needed for the stock market in order to:

- a) stop the fall;
- b) start growing again.

After all, as a rule, after a boom in stock markets and a drop in business activity there is a period of business silence in which investors, brokers, dealers and other stock market participants assess their losses, change the structure of their investment portfolios, get rid of troubled assets and, which is most important, watch how economy will overcome the crisis, in particular, which companies will survive and which will fall. This is reflected in a fall of stocks of companies, a decrease in stock market capitalization, and a decrease in trading volume of securities. This, according to Fig. 1, takes 3–4 years.

Then, there comes a period of growth of the stock market, which also lasts 3-4 years. However, what is interesting is that the stock market in this period is growing at an unbeatable pace – an average of 20 % annually.

There are several reasons for this. In particular, one of the reasons is rational expectations of players in the stock market regarding the future rise of securities prices, the so-called "game for increase". In fact, expecting that the market will continue to grow further, the players try to take full advantage of the moment and get speculative profits, and that way causing further increase of the market growth and the formation of a bubble.

Another reason for such a rapid growth is the socalled "effect of possession" first described by behavioral economist Richard Thaler [15]. That is, losses are considered to be almost twice as painful to us as winnings (when it comes to one and the same amount of loss or benefit). Accordingly, people are more likely to take risks when it comes to potential losses, and when, after a loss there is an opportunity to return to the previous level of well-being. That is why, after a crisis in stock markets, when participants suffer losses they are ready to go at greater risk in order to return lost profits. And this, in turn, promotes the creation of high-risk investment assets and the formation of steady demand for them which turns into a financial bubble. The bubble cracks over time, the players in the stock market suffer losses. And then again, in the process of returning the lost, they go to bigger risks, a bubble is formed, and the cycle repeats again. Thus, in fact, one crisis is partly the cause of another crisis, when it comes to crises caused by the financial sector of economy.

Also, our analysis would not be complete if we did not analyze all prerequisites which led the global economy to such a state of affairs.

In our opinion, one of the main preconditions for the formation of such a character of business activity in the global economy is the observance of the principles of the "Washington Consensus" concerning functioning of national economies by the majority of countries. That is, according to this policy, most countries of the world (both highly developed and developing countries) have radically liberalized their economies, particularly in moments related to the movement of capital. This led to the fact that real capital (foreign direct investments) began to move towards developing countries (due to cheap labor, proximity of commodity markets and sales markets), while financial (fictitious, speculative) capital, on the contrary, began to move to highly developed countries. Accordingly, due to the first type of movement, the transnationalization of economy took place, which resulted in the growth of stock prices of corporations which are quoted on stock exchanges and the growth of capitalization of the entire stock market in general; and due to

the second type of movement, the number of participants in stock exchanges and the number of transactions increased. These two consequences of the capital movement have made it possible for stock exchanges to grow to the extent that we have today.

Another prerequisite for this kind of cyclicality is rapid development of information technologies, in particular the emergence of the Internet. After all, just thanks to the progress in the field of telecommunications, the time for which it is possible to transfer a certain amount of financial capital from one country to another has been reduced to only a few seconds. Accordingly trading on a stock exchange has become much easier, because now the possibility to trade even from home arised. Also due to rapid increase of the number of Internet users, the number of potential players on stock exchanges has increased too. Also, an important precondition is the "game for increase": positive expectations of stock brokers, dealers, investors and citizens concerning the future rise in prices for certain financial or fixed assets (if the story goes about derivative financial instrument). And this, in its turn, leads to a rise in the rate of securities and creation of "financial bubbles" at stock exchanges which, when cracking, cause financial crises that affect not only individual countries today, but also generate business cycles throughout the global economy.

Other important prerequisites for this state of affairs are:

a) the so-called "historical cause of inequality" – capital income is always growing at a faster pace than the

economy as a whole – which can be written in the form of an equation:

where r – average annual growth rate of capital;

g – average annual growth rate of economy;

b) low investment education of citizens, which at the peak of the boom at stock markets invest into those assets that are just forming a "financial bubble".

It is also important to note that the recent major financial crises (the collapse of the dotcoms in 2000 and the global financial crisis of 2008–2009) originated precisely from the collapse of stock markets in the United States. In fact, for such a state of affairs there is an objective reason which lies in the fact that today the given country accounts for more than 50 % of the total volume of trading in securities (Fig. 2), and also the ratio of the volume of securities trading to GDP exceeds 200 % as of 2017 (Fig. 3).

In this regard, it is worth pointing out China's growing role in the global economy, as the fall in business activity in 2016 is primarily due to a decline in volumes of securities trading in that country, which in 2015 accounted for 355.42 % of China's GDP, and dropped to 140.317 % in 2017 (Fig. 3).

Also, it is necessary to pay special attention to the increasing dynamics of China's share in the world securities trading over the last quarter of the century: 22.13% in 2017 compared to 0.8% as of 1995 (peak -39.4% in 2015 (Fig. 2).

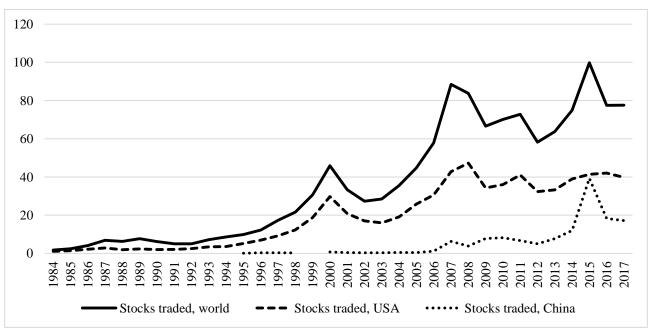


Fig. 2. Comparative dynamics of the world volume of securities trading, and the volume of trading in securities in the USA and China for 1984–2017, billion USD [14]

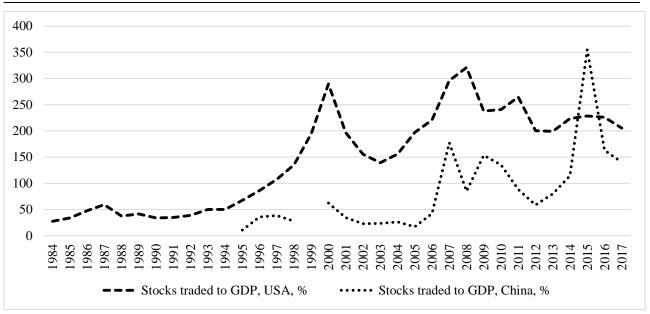


Fig. 3. The ratio of securities trading volume to GDP in the United States and China in 1984–2017 (%) [14]

### 5. Research results and their discussion

Since 1999, the phenomenon of "financialization of the economy" has been observed in the global economy. This, in our opinion, opens the opportunity to make predictions of fluctuations in business activity (global economic cycle), based on the well-known and analyzed by us features of the stock market development. According to our estimates the period of the global economic cycle is 7–8 years. The analysis of the dynamics of economic growth and stock markets of the leading countries of the world gives us a reason to expect that the next financial crisis may start from China, and taking into account the model of our business cycle this can happen already in 2022–2023.

### 6. Conclusions

1) Since 1999 the phenomenon of "financialization of economy" has been observed in the global economy. Exactly in that year for the first time in history the volume of securities trading on a global scale exceeded the world GDP. The global financial market continues to grow at a higher pace than the world GDP, making itself

very volatitive and becoming a generator of instability in world's economy;

- 2) What is more important, there is a correlation between growth rate of stock market and growth rate of real GDP. It means, that if the stock market is falling, growth rate of GDP is decreasing too and vice versa. Moreover, the leading players in the global economy today are becoming global business cycle generators because more than 60 % of world's financial market is situated in USA and China (in 2015 this rate was over 80 %);
- 3) The period of time from one boom in the stock market to another is 7–8 years (3–4 years to stop the fall and start growing again; 3–4 years to grow with a very high growth rate  $-20\,\%$  annually). Main reasons for this «so high» growth rate are:
- rational expectations of players in the stock market regarding the future rise of securities prices, the so-called "game for increase";
- people are more likely to take risks when it comes to potential losses, and when, after a loss there is an opportunity to return to the previous level of wellbeing.

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# ШЛЯХИ ТРАНСФОРМАЦІЇ СИСТЕМИ БОРОТЬБИ З ЕКОНОМІЧНИМИ ЗЛОЧИНАМИ В УКРАЇНІ З УРАХУВАННЯМ ДОСВІДУ КРАЇН €ВРОПЕЙСЬКОГО СОЮЗУ

# © Д. В. Долбнєва

Досліджено необхідність формування нової системи боротьби з економічними злочинами в Україні, яка об'єднає однією метою, вчасне виявлення і справедливе покарання порушників законодавства, як правоохоронні органи та органи державної влади, так і приватних суб'єктів господарювання. Проаналізовано зарубіжний досвід, який доцільно використати у процесі трансформації методики проведення фінансових розслідувань економічних злочинів в Україні. Окреслено перспективи створення і діяльності служби фінансових розслідувань в Україні, а також використання форензіку як сучасного методу проведення фінансових розслідувань корпоративних шахрайств

**Ключові слова:** економічні злочини, корпоративні шахрайства, служба фінансових розслідувань, фінансові розслідування, форензік

#### 1. Вступ

Аналіз процесів, що відбуваються в економіці України на сучасному етапі розвитку фінансовоекономічних відносин, свідчить про проникнення інтересів криміналітету в сферу економіки як на рівні держави, так і приватних бізнесових структур. Поряд з цим розширюється і діапазон економічних злочинів від звичайного розкрадання майна в межах конкретного суб'єкта господарювання і допущення дрібних схем корпоративного шахрайства до вчинення незаконних дій з державним майном, здійснення великомасштабних афер з коштами, несанкціонованого та незаконного встановлення контролю за цілими галузями національної економіки (бюджетна сфера, нерухомість, експортні операції, паливно-енергетичний комплекс тощо). Через це особливо актуальним і нагальним є пошук шляхів трансформації системи боротьби з економічними злочинами, яка склалася на сьогодні і функціонує в Україні, що потребує комплексного вивчення досвіду провідних країн Європейського Союзу з даного питання.

Забезпечення безпеки у фінансово-економічній сфері як для кожного конкретного підприємства, так і держави в цілому неможливе без належного рівня організації та координації діяльності фіскальних і контролюючих органів на відомчому (міжвідомчому) та загальнодержавному рівнях, використання послуги «фінансових розслідувань» консалтингових та аутсорсингових фірм. Динаміка реальних і потенційних загроз економічній безпеці суб'єктів господарювання (приватного бізнесу і держави) зумовлюють нові під-