The Role of Tax Regulation in Counter-Cyclical Regulation of Banking in Ukraine

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Abstract
The purpose of the article is to determine the role of tax regulation of banking activity and countercyclical regulation of banking activity (on the basis of formalizing the influence of the banking system on the development of the Ukrainian economy). It is more expedient to introduce a system of counter-cyclical tax regulation of banking activities whose purpose is: on the one hand, the containment of the development of factors of crisis phenomena in the banking system; on the other hand – accumulation of funds at the stage of economic recovery for the formation of financial support reserves for banks during the crisis and depression.

Key words: tax regulation, countercyclical regulation of banking activities.
JEL Classification: G21.

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Introduction
The financial crisis of 2008-2009 has made it necessary to apply rather rigid methods of tax regulation to fulfill the task of stabilizing the banking sector. Thus, with the aim of strengthening control over banks’ assets in the context of the state tax policy, such methods as withdrawal of bank capital from offshore zones, extension of tax amnesty to savings in offshore, forced closure of branches of banks engaged in shadow activity were used. However, at the same time, tax incentives were also used, among which the following could be distinguished: providing tax incentives for capital investment from abroad, imposing a moratorium on tax audits, and reducing the tax burden by adjusting corporate tax rates. It is worth noting that the subject of anti-crisis economic regulation through the use of tax instruments is the economic cycle. Thus, the application of tax regulation at a certain stage of the economic cycle has a specific objective (overcoming the crisis, stimulating demand and supply, increasing investment activity, etc.), provides for the use of a well-formed set of tax levers of influence (adjustment of tax rates, tax bases, privileges), based on monitoring and an analysis of the effectiveness of the applicable tax regulators. More detailed use of tax levers of anticyclic regulation is shown in Figure 1.

Anti-cyclical tax regulation involves lowering tax rates, providing tax privileges that helps reduce tax burden during the crisis, and envisages raising or returning pre-crisis tax rates at the stage of economic growth, which in turn contributes to equalization of business activity of economic actors and smoothing imbalances that arise in the process of changing economic cycles. These methods are embedded in fiscal stabilizers and are used in conjunction with monetary policy instruments that have a shorter lag of achievement. Based on the fact that within the economic system, the effect of the built-in tax regulators is automatic, they usually have the largest lag among counter-cyclical regulators. This, first of all, is explained by the considerable length of legislative adoption of these methods, the difficulty in constructing an economic forecast of their impact and the ambiguous reaction of economic actors to their implementation. During a recession, tax revenues are shrinking and government spending is on the rise. The volumes of taxes are reduced due to the decline in business activity of economic entities and, consequently, the decrease in demand for products. The growth of government expenditures is due to the need to implement programs of support and subsidization of the population (for example, the payment of unemployment benefits), enterprises (bankruptcy insurance).

Methods and results
The impact of tax instruments in this area is not decisive since the use of monetary policy leverage by the National Bank of Ukraine is more effective. The implementation of monetary policy by the National Bank of Ukraine is aimed at activating the activity and increasing the efficiency of the banking sector, while the Ministry of Income and Fees (in particular, the State Tax Service of Ukraine in its composition), on behalf of the state, has an impact on the activities of economic entities, which allows you to use tax regulation as the only tool to get the effect of the operation of the entire economic system.
Figure 1. Application of embedded stabilizers (tax levers) in anti-cyclical regulation of the economy.
Therefore, in the context of the banking system, anti-cyclical tax regulation is carried out to maintain the financial stability of banks. For example, during periods of crisis in the economy, the tax authorities of the countries combined with the central bank weaken the tax burden on banking institutions by reducing tax rates and providing tax incentives. However, at the same time, the National Bank adjusts the rules of mandatory redundancy and controls the financial operations of banks more strictly.

The regulation of the banking sector with the help of state tax policy instruments should be carried out considering the phase of the economic cycle, the stage of development of the banking system, and other methods of state regulation, which are used for a certain period. Applying the basic provisions of Figure 1 to the banking sector, it can be noted that the use of tax regulation tools during the downturns in this segment is eclipsed by the restraint of the outflow of capital from banks due to the introduction of various restrictions, as well as the stimulation of exit from the shadow sector, support of the financial stability of banking institutions through the mechanism of reduction of corporate rates taxes.

On the other hand, tax regulators during the recovery period can effectively allocate tax burden between economic entities, increase their investment activity, stimulate business development and self-employment, increase demand for loans, etc. That is why tax regulators are used by the governments of the countries with the aim of equalizing the rates of economic growth and anti-cyclical regulation of supply and demand: their stimulation during the recession and restrictions at the stage of economic recovery. However, account should be taken of the fact that tax payments vary in line with the increase (decrease) in volumes and the rate of growth of production with some lags, and therefore automatic tax increases can lead to a reduction in the supply and sale of banking products and services.

In the context of this study, it should be noted that anti-cyclical state regulation in Ukraine historically was based on the use of monetary policy methods. The adoption of the Tax Code in the post-crisis period was intended to reduce the tax burden on individual economic entities, to create incentives to ensure expanded reproduction, withdraw from the shadow sector of business entities. The main objective of a series of transformational transformations in the post-crisis period was to minimize the effects of the crisis in the real sector, in particular in the energy sector, the agro-industrial complex, transport and construction sectors, while the responsibility for maintaining the stability of the banking sector belonged to the National Bank of Ukraine. The support of banks with the help of tax regulators was not implemented, and tax breaks combined with large-scale state subsidies during the period received unprofitable state-owned enterprises.

Over the past two decades problems in the banking sector in most countries of the world were closely linked to the economic downturn. For example, in the United States between only 1945 and 1980 bankrupted only a few banks; in the 1980s and early 1990s bankruptcies of banks became more widespread, in particular, 221 American banks collapsed only in 1988. One of the reasons for the increase in the number of bank failures was the increase in competition in the industry, which led to a reduction of regulatory barriers to entry in the industry and created the prerequisites for manipulating banks to increase return on capital. The reasons that also somehow provoked the destabilization of the banking sector include the aggravation of destructive processes in the economy, which manifested itself in rising oil prices, agricultural products, rising prices for commercial real estate, etc. The financial crisis of 2008-2009 intensified the fundamental transformations of the tax regime in the financial sector, the realization of which was a means of leveling out the effects of destructive factors caused by inconsistencies in tax regulation. The issue of the possibility of new types of tax instruments used in the financial sector is rather problematic and controversial, purposefully reducing the likelihood of financial crises and their socio-economic consequences.

It is worth noting that some countries have attempted to introduce new tax regulation tools without proper study of their prospects. Thus, in particular, in the United Kingdom, in January 2011, a special collection of 7.5 basis points of unsecured debt obligations was imposed on banks in order to stimulate banking institutions to abandon the implementation of risky financing models that could provoke destabilization of the financial sector and national economy in general. At the same time, ten EU members, including France, Germany, Sweden and others, have introduced a special fee from financial institutions.

In the context of this study, it should be noted that regulation is a traditionally dominant approach to combating the destructive effects of external factors that cause the collapse of financial institutions. However, the obvious shortcomings of existing regulatory microprudential measures undoubtedly underline the potential effectiveness of other instruments.

Before evaluating the effectiveness of certain tax regulation instruments in countering the cyclical nature of the economic development of the banking system and the economy, it is advisable to study the key
macroeconomic indicators of the development of countries close to the level of socio-economic development in Ukraine. Such countries include Bosnia and Herzegovina, Czech Republic, Hungary, Lithuania, Romania, South Africa, Bulgaria, Egypt, Kazakhstan, Morocco, Serbia, Turkey, Croatia, Estonia, Latvia, Poland and Slovenia.

The dynamics of GDP of the listed countries, since 1960, is presented in Figure 2.

![Figure 2](image)

**Figure 2. Dynamics of GDP of developing countries and countries with a marginal level of development (according to the Morgan Stanley classification) from 1960 to 2010, bn USD.**

There is a unidirectional dynamic of development of the represented group of countries. Thus, by 1980, the dynamics of GDP countries, and, accordingly, their level of development was stable and even. However, during 1980-1990 there was a slight increase in GDP volatility. In the period of 1990-2000, the destabilization processes are worsening, which, quite naturally, leads to a significant reduction of GDP in 2000-2001 in virtually all countries. Since 2001, a period of rapid recovery has begun, with the leaders of Turkey, Poland and South Africa. In 2008, GDP growth stopped due to the global financial crisis, but the consequences of the crisis did not cause a deep recession, and so by the end of 2010, most countries have resumed pre-crisis figures. The determined stages of development of the analyzed countries are confirmed by the dynamics of GDP per capita.

![Figure 3](image)

**Figure 3. Dynamics of per capita GDP per capita in developing countries and countries with marginal levels of development (Morgan Stanley classification) from 1960 to 2010, USD.**

The data presented in Figure 3, it is noteworthy that the leaders among the analyzed group of countries per GDP per capita are Slovenia, the Czech Republic and Estonia, which does not coincide with the positions of these countries in the gradation on the total GDP, however, if the assumption on the allocation of these cycles in the development of the analyzed countries is true, this should be confirmed by relatively low indicators of GDP and GDP per capita variation within the allocated time intervals (Table 1).
Table 1. Coefficients of the variation of GDP and GDP per capita of countries with marginal economies and developing economies

<table>
<thead>
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<tr>
<td></td>
<td>GDP</td>
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<td></td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>66</td>
<td>64</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>55</td>
<td>61</td>
<td>per capita</td>
<td>per capita</td>
<td>16</td>
</tr>
<tr>
<td>Croatia</td>
<td>55</td>
<td>57</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>65</td>
<td>64</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
</tr>
<tr>
<td>Egypt</td>
<td>104</td>
<td>81</td>
<td>per capita</td>
<td>43</td>
<td>20</td>
</tr>
<tr>
<td>Estonia</td>
<td>61</td>
<td>62</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
</tr>
<tr>
<td>Hungary</td>
<td>91</td>
<td>93</td>
<td>52</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>88</td>
<td>86</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
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<tr>
<td>Latvia</td>
<td>73</td>
<td>79</td>
<td>per capita</td>
<td>per capita</td>
<td>13</td>
</tr>
<tr>
<td>Lithuania</td>
<td>82</td>
<td>71</td>
<td>per capita</td>
<td>per capita</td>
<td>200</td>
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<tr>
<td>Morocco</td>
<td>96</td>
<td>75</td>
<td>77</td>
<td>61</td>
<td>26</td>
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<tr>
<td>Poland</td>
<td>70</td>
<td>70</td>
<td>per capita</td>
<td>per capita</td>
<td>10</td>
</tr>
<tr>
<td>Romania</td>
<td>79</td>
<td>82</td>
<td>per capita</td>
<td>per capita</td>
<td>4</td>
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<tr>
<td>Serbia</td>
<td>49</td>
<td>50</td>
<td>per capita</td>
<td>per capita</td>
<td>43</td>
</tr>
<tr>
<td>Slovenia</td>
<td>48</td>
<td>47</td>
<td>per capita</td>
<td>per capita</td>
<td>per capita</td>
</tr>
<tr>
<td>South Africa</td>
<td>86</td>
<td>64</td>
<td>76</td>
<td>62</td>
<td>20</td>
</tr>
<tr>
<td>Turkey</td>
<td>120</td>
<td>100</td>
<td>80</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>Ukraine</td>
<td>51</td>
<td>56</td>
<td>per capita</td>
<td>per capita</td>
<td>11</td>
</tr>
</tbody>
</table>

Based on data Table 1, all countries except Turkey and Egypt have a coefficient of variation over the last 50 years of the analyzed indicators below 100%, which suggests that the variation within the timeframe allocated to the study should be lower than the aggregate.

The lack of a sufficient array of statistical information for most of the studied countries in the period from 1960 to 1980 does not allow a high degree of certainty to conclude that the existence of the economic cycle in this period, but it is quite clearly possible to follow the cycles of economic development over the past 20 years. Thus, two economic cycles can be distinguished, namely: 1991–2000 and 2001–2007.

In the context of the study of the cyclical development of the economy, it is also advisable to analyze in more detail the indicators of the development of the domestic banking system in recent years (Figure 4).

Table 2. The asets of banks in Ukraine for 2014-2017, mln. UAH (Analytical Review of the Banking System of Ukraine)

<table>
<thead>
<tr>
<th>Net assets</th>
<th>01.01.2014</th>
<th>01.01.2015</th>
<th>01.01.2016</th>
<th>01.01.2016</th>
<th>01.01.2016</th>
<th>01.01.2016</th>
<th>01.01.2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit portfolio</td>
<td>1278.10</td>
<td>1316.85</td>
<td>1254.39</td>
<td>1299.06</td>
<td>1260.62</td>
<td>1275.94</td>
<td>1256.30</td>
</tr>
<tr>
<td>Investments in securities</td>
<td>911.40</td>
<td>1006.36</td>
<td>965.09</td>
<td>983.94</td>
<td>907.96</td>
<td>943.06</td>
<td>1005.92</td>
</tr>
<tr>
<td>W HOLD OVD</td>
<td>138.29</td>
<td>168.93</td>
<td>198.84</td>
<td>197.67</td>
<td>210.09</td>
<td>215.68</td>
<td>332.27</td>
</tr>
<tr>
<td>Highly liquid assets</td>
<td>81.05</td>
<td>93.43</td>
<td>81.58</td>
<td>107.26</td>
<td>133.13</td>
<td>156.22</td>
<td>255.47</td>
</tr>
<tr>
<td>Official exchange rate, USD</td>
<td>152.90</td>
<td>155.64</td>
<td>191.26</td>
<td>223.05</td>
<td>224.21</td>
<td>212.19</td>
<td>199.50</td>
</tr>
<tr>
<td>Average interest rate on loans in national currency, %</td>
<td>7.99</td>
<td>15.77</td>
<td>24.00</td>
<td>26.22</td>
<td>24.85</td>
<td>25.91</td>
<td>27.19</td>
</tr>
<tr>
<td>Average interest rate on loans in foreign currency, %</td>
<td>17.20</td>
<td>18.80</td>
<td>21.47</td>
<td>21.10</td>
<td>18.10</td>
<td>16.50</td>
<td>17.70</td>
</tr>
<tr>
<td>Average interest rate on loans in foreign currency, %</td>
<td>8.20</td>
<td>8.30</td>
<td>6.88</td>
<td>8.50</td>
<td>9.20</td>
<td>7.90</td>
<td>8.20</td>
</tr>
</tbody>
</table>
In the context of this study, it should be noted that there is a rather close link between the indicators of the development of the Ukrainian banking system and key indicators of economic growth, such as GDP and GDP per capita (Figure 5).

![Graph showing the relationship between GDP and GDP per capita in Ukraine and the volume of bank assets for 2014-2017](image)

**Figure 4.** Dependence of GDP and GDP per capita of Ukraine on the volume of bank assets for 2014-2017 (calculated by the author on the basis of data of the National Bank of Ukraine)

The linear regression dependence has a fairly high level of reliability (the determination coefficients make up more than 0.94), while the correlation coefficients make up 97%. Such a close link indicates the significant impact of the domestic banking system on the development of the economy, and, consequently, all the problems that arise in the banking system and the development cycles it experiences with a small time lag are reflected in the nationwide processes in the economy, which can be explained the lack of development of the non-banking financial sector and, consequently, the lack of alternatives to bank lending. This fact is also confirmed by the theory of financial instability H. F. Minski, the essence of which is that the capitalist economy forms a financial structure (market relations between lenders and borrowers, as well as balances of non-financial corporations, intermediaries and households that reflect these relationships), which is characterized by a high degree of sensitivity to financial crises. According to the theory of financial instability, economic dynamics is determined by how companies finance expansion of fixed assets. In the beginning of the stage of the business cycle (the stage of recovery), predominantly secured funding, in which current cash receipts firms are sufficient to make payments on loans, including interest payments on them. Such a regime directs companies to self-financing, rather than the use of credit resources.

![Graph showing interest rates on loans and deposits in banks of Ukraine](image)

**Figure 5.** Weighted average interest rates on loans and deposits in banks of Ukraine (calculated according to the National Bank of Ukraine)

In Figure 6 reflects the dynamics of interest rates of Ukrainian banks from 2005 to 2017. As we see, at the beginning of this cycle there are quite high rates on loans, with interest rates on deposits also kept at a high level, which is an indirect confirmation of the Minski thesis.

At the next stage, there was a reduction in the risks of the borrower and the creditor, which is related to the intensification of economic activity. The shortage of own funds of business entities for self-financing has led to the intensification of the search for additional financial resources, the supplier of which has become the banking sector.

It is worth noting that the reduction of lending risks is accompanied by a reduction in the general level of rates for banking services, and therefore, banks are beginning to experience a lack of financial resources to expand lending, which prompts them to seek additional sources of funds. This was reflected in Ukraine's significant increase in external borrowing by the banking system (Figure 7).
Based on the data in Figure 7 it can be noted that since 2005 there has been an active increase in external debt of domestic banks, especially long-term ones. The growth of short-term debt slowed significantly in 2007, which may be due to the beginning of crisis developments in the world, and mainly in countries that have been key foreign investors in the Ukrainian banking sector. The state of banks was significantly worse due to the fact that a significant part of bank lending was aimed at financing imports, which, taking into account the chronic shortage of the Ukrainian trade balance, quite naturally led to the devaluation of the Ukrainian hryvnia.

The long period of stability of the exchange rate in Ukraine has caused the banks and borrowers to underestimate their own currency risks. This thesis is particularly true for lenders that are limited in risk management tools. As a result, there was a sharp deterioration in the creditworthiness of domestic households in crisis and post-crisis periods (Figure 8).

According to Figure 8 it is possible to note a sharp increase in problem loans in Ukrainian banks and an appropriate increase in reserves, which adversely affected the profitability of banks in 2008-2011, and only by the end of 2012 the Ukrainian banking system has begun to show positive values of return on assets and capital.

Thus, it can be concluded that inefficiency of regulation of banking activity has led to destabilization of the development of the Ukrainian economy and deepening of the consequences of the financial and economic crisis, the overcoming of which continues to the present day.

In view of the above, it is quite objective to introduce measures of anti-cyclical regulation of banking activities, the nature of which must be determined, based on the nature of such regulation and its expected impact on the development of Ukrainian banks.

In the scientific literature, anti-cyclical regulation of the economy is understood as a complex of conscious and purposeful actions of the state and, in part, large corporations and supranational supervisory bodies for industrial cycles, in order to reduce the depth of periodic recessions and depressions, stabilize the economic situation and economic growth rates. A key role in the regulation process is played by the state.

Modern anti-cyclical regulation is based on anti-crisis regulation, the necessity of which was theoretically substantiated by JM Keynes.

After the end of World War II, most of the industrialized countries of the world expanded the country's anti-crisis measures, in particular, they actively used instruments aimed at leveling cyclical fluctuations. For example, among the measures of anti-crisis regulation, such instruments as the growth of public procurements of goods and services, stimulation of housing construction (the state represented by the authorized bodies acted as the guarantor of obtaining loans for housing construction, the regulator of maturity of loans, interest rates on loans, etc.) the implementation of a policy of accelerated depreciation, the application of tax rebates in the
event of the installation of new production equipment, lowering the basic rate of income tax enterprises and others. It should be noted that the generalized indicator of the state's influence on economic cycles is the share of public expenditures on GDP and, above all, the volume of public procurement of goods and services. In the mid-90's of the twentieth century, the share of government spending on GDP was about 34% in Japan, and more than 70% in Sweden.

In Ukraine, the share of public expenditures is considerably lower (Figure 9). It should be noted that in the structure of state expenditures of Ukraine the largest share is spent on education (about 30%) and health care (about 25%). Financing of economic activity is only 4% in the structure of public expenditures.

![Figure 8. The share of final consumption expenditure of the general government in the GDP of Ukraine for 2005-2016, %](image)

The features of anti-cyclical regulation are largely due to the dominance of monopolies in the national economy. E. Chamberlain convincingly substantiated the fact that even in the absence of agreements (written or oral), prices would be higher in the oligopolistic market than in the competitive one, and production volumes, respectively, were lower. E. Chamberlain, as well as other European and American scholars, rightly noted the lack of price elasticity, their dynamism in conditions of imperfect competition. So, if in previous periods characterized by the dominance of the competitive environment, at the stage of intensifying the economic crisis, prices significantly decreased, then in the conditions of dominance of collective monopolies, they continue to remain unchanged or even to grow. This is due to the fact that in conditions of oligopoly enterprises reduce production with the goals of preventing overproduction of goods and lower prices.

The destructive impact of this negative tendency can be partly or completely offset by the state's efforts to stimulate monetary demand through the implementation of an appropriate monetary policy. This method was actively used by governments in the postwar period and helped to reduce the depth and duration of economic downturns. The growth rates of the money supply, more often than not, exceeded the limits set by the monetarist. At the same time, a significant increase in money supply, in parallel with the effects of other factors, for example, a sharp rise in oil prices during the fuel and energy crisis, led in the late 60's - at the beginning. 70s. XX centuries. to the intensification of inflationary processes, and, as a consequence, the pace of price increases in ser. 70th pp. amounted to over 10%.

In the 80's of the XX century, the governments of the world began to limit the growth rates of the money supply and pursue a policy of so-called "expensive money". The main means to achieve this goal was tough monetary policy. In particular, in times of high economic activity, the government (the central bank) significantly increased the rate of interest, which led to a rise in price of the loan. During the depression and the economic crisis, the state increased the reserve requirement (the norm of compulsory deduction of commercial banks into obligatory reserves), lowered the interest rate and cheapened the loan. Thus, in the United States, commercial banks are required to keep about 20% of their assets in the Federal Reserve's cash reserves. Therefore, the expansion of lending entirely depends on the growth of bank liabilities, and the commercial interest on which banks lend to customers - from the discount rate, which in fact is the lower limit of the cost of providing loans to banks of the Federal Reserve of the United States).

In Germany, the Federal Bank determines for each financial institution the limits of registered bills, which limits the volume of lending subject to bills issued to each bank, which, in turn, has an impact on the volumes of money supply in circulation.
Figure 9. Dynamics of NBU interest rates for 2012-2016 (compiled according to the National Bank of Ukraine)

The advantage of the anti-cyclical regulation method is that it can be used very quickly without developing the relevant law. In the process of securing this tool, it is important to accurately determine the term for raising or lowering the interest rate.

In order to expand aggregate consumer demand in the crisis and depression phases, the government (the central bank) can implement the policy of “cheap money”, reduce the rate of tax on profit, payroll, grant benefits to enterprises in the context of accelerated depreciation (depreciation) of fixed assets, thus stimulating investments in the non-state sector of the economy. During the crisis, the government should increase the volume of direct investments in state enterprises, especially in the field of economic and social infrastructure (transport and transport construction, gas, electricity and water supply, housing construction, nuclear power, etc.). In particular, in the USA about 56 thousand km of the federal system of highways annually become unusable about 3 thousand km, which should be repaired at the expense of the state (or federal) budget. In order to reduce the negative effects of the economic crisis in 1948-1949, the US has doubled its investments (compared with 1946). However, in the next period, the volume of public investment in most industrialized countries of the world gradually decreased. In particular, their share in GNP for the period 1970-1985 has decreased: in Germany - from 6.2% to 3.8%, in France - from 4.3% to 3.1%, in the UK - 5%, 1% to 2.5%, in the countries of the European Union - from 5.1% to 4.1%.

At the stage of recovery, the state increases its tax rates, interest rates, reduces tax privileges, reduces the amount of direct investment, which holds back the processes of overheating of the economy, weakens the contradictions between production and consumption, and alleviates sharp fluctuations during the transition from one stage of the economic cycle to another. It should be noted that between the application of measures in the field of monetary policy and achievement of a certain result it is quite a long period of time. According to Western scientists, such a time lag during the cyclical recession is 5-20 months, while during the ascent it is 10-24 months. With the greatest delay, the effect of tax regulation methods is given, which is largely due to the length of the law-making process, which is why it is extremely important to have the most accurate economic forecast of the process of the economic cycle.

In the context of this study, it should be noted that anti-crisis and anti-cyclical regulation is carried out through economic, legal and administrative methods.

In oligopoly, counter-cyclical regulation is carried out through the development of a coherent policy, the full and timely implementation of state programs, etc. At the same time, the actions of participants in economic relations often contradict the policy of the state in this area. Supranational regulatory bodies in the EU countries implement unified structural, tax, industrial, depreciation and other forms of policy, which are an important factor in counter-cyclical regulation and synchronization of economic cycles.

Under current conditions, counter-cyclical regulation is also conditioned by significant differences between the current economic crises and crises of the 19th century. The main essence of the differences between these crises is as follows: in contrast to past crises, when there was overproduction of goods, modern crises are characterized by excessive capital stock (in the form of a simple overwhelming portion of production capacity); modern crises are less profound, but occur more often; current crises are characterized by the absence of a sharp decrease, unlike the crust of the nineteenth century; modern economic cycles are characterized by a shorter duration of periods of passage of certain stages, in particular crises and depression, but the increase in the duration of the stages of recovery and recovery; contrary to the spontaneous nature of crises in the past, the mechanism of current economic crises is increasingly subject to state regulation; in modern conditions there is synchronization of economic cycles, first of all, financial crises.

A key element of countercyclical economic policy is the solution to the problem of structural degradation of the Ukrainian economy, which manifests itself in the permanent reduction of production of high-level goods
processing and curtailing industries, which are the basis of modern economic development of the country, which, in turn, determines the necessity of state incentives for innovation and investment activity.

In this context, it is worth pointing out that the provision of innovative and investment activity involves the need for significant investments, and therefore measures should be taken to facilitate the access of enterprises and households to medium and long-term loans, including for the financing of capital investments; provision of state support and state guarantees in the process of realization of perspective innovative-investment and modernization projects; the formation of a specialized market segment and the activation of the activities of special financial institutions specializing in the generation of significant financial resources and their subsequent transformation into large-scale capital investments, etc. Thus, the creation of a network of investment banks and funds that will provide relatively affordable loans for production development, venture capital financing for promising projects, as well as the development of new technologies should be the object of state support by providing guarantees, subsidies on interest rates, insurance, equity participation, use of various mechanisms for stimulating private investment. Additionally, an effective system of timely indexation of depreciation deductions and their use for the specified purposes should be provided.

However, it should be noted that the above measures require a significant time lag to implement the reform of the country's economy, especially domestic, and therefore the decision of the operational tasks of countercyclical regulation of the economy is proposed to use more operational methods of state regulation. In order to determine the optimal direction of counter-cyclical regulation it is advisable to consider the peculiarities of the flow of each of the phases of the cycle in their traditional interpretation. Characteristic features of depression: reduction of investments in production; a decrease in the demand for labor; stock build-up; reduction of sales volumes; a sharp decrease in net profit rates; reduce the number of new orders; lower demand for loans. Characteristic features of the revival: growth of demand for means of production (especially active elements); stabilization of expanded production; increase in demand for raw materials (first of all, metal, fuel, electricity); increasing demand for labor; an increase in the demand for consumer goods due to the increase in wages. Features of the economic boom: increase of investments in production; reduction of production stocks; a sharp increase in the number of new jobs; an increase in the level of consumer and industrial prices.

It is advisable to focus the attention of the state regulation bodies on the measures being implemented at the stages of depression and economic boom, which is systematized in Figure 11.

Figure 10. The main directions of countercyclical regulation of the economy (compiled by the authors)
Described in Figure 11 directions and methods of countercyclical regulation of the economy, allow us to formulate a general idea of the specifics of the use of certain instruments, taking into account the peculiarities of the stage of the economic cycle, however, it is fair to note that there are certain differences in the approaches to the implementation of counter-cyclical regulation of various sectors of the economy and, accordingly, somewhat different mechanism and consequences of the application of generally accepted anti-crisis regulators in various spheres of economic activity.

Thus, in the process of countercyclical regulation of the economy, it is advisable to focus on maintaining high performance indicators of the banking sector, since it indirectly acts as a producer of value added (one of the main characteristics of economic entities in the recession and post-crisis period is the lack of financial resources to finance production needs and Enhanced reproduction, and the banking system, in its turn, is a sector that allows to partially offset the problems of enterprises with the illy of temporarily free cash from lending, which is why banks, by providing loans to business entities, allow them to improve their financial performance and create additional value, which manifests itself in the growth of GDP), and can also contribute to deepening destructive manifestations of the crisis (if enterprises have limited access to credit resources due to their high cost) or accelerated recovery of the country's economy (if the entities can fully cover the financial gap resources at the expense of cheap bank loans).

Given that in the process of implementing monetary policy in Ukraine, which is mainly aimed at stabilizing the exchange rate, liquidity management of the banking system, regulation of wages, there may be a problem associated with shadow revenues, regardless of the stage of the economic cycle, and for implementation of effective state investment policy a significant problem is the deficit of budget funds for the financing of fundamental projects, the most expedient and effective will be the activation of the very fiscal banking system, which in Ukraine is the force of economic development.

The tax regulation of economic activity permits the state, in the person of authorized bodies, to concentrate financial resources in its own hands in any economic situation, which, in turn, makes it possible for a significant adjustment of the stage and dynamics of the country's economic development. It is with the help of tax regulation that the subjective activity of the state is implemented in relation to the use of objective possibilities of taxes to promote the development of individual and social production.

The measures of fiscal regulation of banking activities should be aimed at: strengthening the responsibility of banks for the quality of the assets formed; synchronization of dynamics of volumes of credit and deposit portfolios; reduction of interest margin with the stability of the level of commissions; an increase in the capitalization of banks, including through the creation of a certain capital stock to cover possible losses and outflows of capital; restrictions on the growth of external debt; minimization of risks (primarily currency and interest).

The introduction of banking regulation instruments that are tax-based and aimed at achieving the stated goals will enable: first, to reduce the sensitivity of the banking sector to the cyclical development of the economy through the automatic application of them, and, secondly, to ensure their steady performance at the expense of control by the NBU, which has the full range of instruments of influence on Ukrainian banks.

Taking into account the results of the conducted research, the author argues that the directions of counter-cyclical tax regulation of banking activities should be clearly aligned with the directions of such regulation for the whole economy as a whole and quasi-fiscal regulation of banking activities (Table 2).

Thus, the instruments of counter-cyclical tax regulation of banking activities can be divided into two groups: general economic, that is, those that can be applied to any economic entities and banks, including those specific, that is such use of which is conditioned by the specifics of banking activity. In addition, the tools used in the quasi-fiscal regulation system, which do not act as an independent tax control unit, can be singled out, however, given the fiscal nature of such activity, they can be indirectly attributed to it.

Thus, the first group of methods can include the variation of rates and tax base, the establishment (cancellation) of preferential tax regimes and tax holidays, increase (decrease) in the tax period, etc. It should be noted that such instruments of tax regulation do not take into account the specifics of the functioning of enterprises, and their main objective is to equalize the dynamics of business activity of economic entities.

The second group of instruments, on the contrary, is aimed at stimulating (disinhibiting) the activation of the banking sector, and therefore involves the application of such measures within the framework of tax regulation,
which will have a targeted effect on this group of financial market participants, without directly affecting the performance of the other participants in economic relations.

Table 3. Differentiation (according to the stages of the economic cycle) of countercyclical regulation directions at the level of the country’s economy, tax regulation and quasi-fiscal regulation of banking activities

<table>
<thead>
<tr>
<th>Directions of regulation</th>
<th>Stages of the Economic Cycle</th>
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<td></td>
<td>Recession</td>
<td>Depression</td>
<td>Reactivation</td>
<td>Ascension</td>
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<tr>
<td>Countercyclical regulation at the level of the country’s economy as a whole</td>
<td>Stimulation of investments, granting of privileges in the conditions of accelerated write-off (depreciation) of fixed assets’ value, reduction of wages, increase of direct investments in state enterprises, first of all - in the field of economic and social infrastructure, introduction of a moratorium on tax audits, reduction of tax rates for profit for all economic entities.</td>
<td>The minimum application by the state of regulatory measures, the policy of non-interference of the state in economic processes</td>
<td>Constrain regulation in order to avoid imbalances in the economy, increase in tax rates, interest rates, reduction of tax privileges, reduction of direct investments</td>
<td></td>
</tr>
<tr>
<td>Countercycle tax regulation of banking activities</td>
<td>Stimulating tax regulation of banking activities: providing tax incentives for banks to attract foreign investment, etc.</td>
<td>Anti-crisis tax regulation of banking activities:</td>
<td>Sustained tax regulation of banking activities: refusal of tax privileges, normalization of tax burden, etc.</td>
<td>Containing tax regulation of banking activities: increase of rates for &quot;special taxes&quot;, increase of tax burden, fines for transferring capital of banks to offshore zones, etc.</td>
</tr>
<tr>
<td>Countercyclical quasi-fiscal regulation of banking activity</td>
<td>Continuation of the tax amnesty for the return of banks from offshore zones, the imposition of fines on the preservation of bank capital in offshore, etc.</td>
<td>Reduced loan impairment requirements. Refusal of benefits provided through quasi-fiscal operations, etc.</td>
<td>Increase of mandatory reserve requirements for borrowed funds, refusal from quasi-fiscal support of banks, forced closure of bank branches in shadow areas</td>
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</table>

Such instruments include: targeted (sectoral) application of general economic tax regulators (use of general tax levers and preferences, but solely to banking entities), special taxation, which is a deduction in the form of taxes to a centralized fund whose main purpose is leveling and smoothing of cyclical imbalances in the functioning of the banking sector, etc.

**Conclusion**

As a conclusion in the context of this study, it should be noted that the banking sector serves as a unique benchmark and tool in the context of the implementation of the state policy, which allows to balance the imbalances of economic development of the enterprises of the real sector of the economy, and therefore should be the primary and primary object of counter-cyclical regulation. The tax system in each country is a key component of the economic system. It, on the one hand, provides the financial base of the state, and on the other hand, is the main instrument of its economic policy.

Taxes are a system of mandatory payments of enterprises, organizations and the population, which are one of the sources of state budget revenues.

Under conditions of a market economy, budget revenues are determined by the results of entrepreneurial structures, economic functions of the state, the state of internal and foreign policy, traditions and other factors. Therefore, the composition of the tax system, the structural ratios of individual taxes, the order of their calculation, the forms of calculations, the organization of tax service in different countries, at different stages of socio-economic development may vary significantly.

Anti-cyclical regulation of the economy - conscious and purposeful actions of the state and supranational bodies, as well as powerful corporations and partly market levers for the industrial cycle in order to reduce the depth of cyclical crises, stabilize the economic situation and increase the rates of economic growth.

In turn, in the framework of the anti-cyclical policy of banking regulation, it is important, along with monetary instruments, to apply tax regulators, which are often more effective, and within the framework of counter-cyclical tax regulation of banking activities, use both general economic and specific tax instruments, taking into account the specificity and scale of quasi-fiscal activities.
Anti-cyclical regulation has become an important factor in easing the depth of economic crises, extending the phase of rise, reducing the crisis and depression, and other forms of modification of the economic cycle. However, it can not overcome the cyclical nature of production, eliminate the contradictions of social reproduction.

References