ТЕОРЕТИЧНІ АСПЕКТИ УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ

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УДОСКОНАЛЕННЯ ФІСКАЛЬНОЇ ПОЛІТИКИ ПІДТРИМКИ ІННОВАЦІЙНОГО РОЗВИТКУ

УСОВЕРШЕНСТВОВАНИЕ ФИСКАЛЬНОЙ ПОЛИТИКИ ПОДДЕРЖКИ ИННОВАЦИОННОГО РАЗВИТИЯ

IMPROVING FISCAL POLICY TO SUPPORT INNOVATION DEVELOPMENT

Серед факторів економічного зростання України визначено оптимізацію розподілу національного доходу засобами фіскальної політики та інвестиції у технологічний розвиток реального сектору економіки. Проаналізовано реакції галузей на «слабкі» та «сильні» податкові стимули інноваційного розвитку. Одним із суттєвих стимулів з боку державної фіскальної політики визначено прогресивне за часом зниження ставки податку на додану вартість. Наведено теоретичні підходи до аналізу ефективності фіскальної політики.

Ключові слова: *фіскальна політика, економічний ріст, інноваційний розвиток.*

Среди факторов экономического роста Украины определены оптимизация распределения национального дохода средствами фискальной политики и инвестиции в технологическое развитие реального сектора экономики. Проанализированы реакции отраслей на «слабые» и «сильные» налоговые

стимулы инновационного развития. Одним из существенных стимулов со стороны государственной фискальной политики определено прогрессивное со временем снижение ставки налога на добавленную стоимость. Приведены теоретические подходы к анализу эффективности фискальной политики.

Ключевые слова: *фискальная политика, экономический рост, инновационное развитие.*

Among the factors of economic growth of Ukraine stipulates optimizing the distribution of national income by means of fiscal policy and investment in technological development of the real economy. Sectors analyzed reactions to the «weak» and «strong» tax incentives for innovation. One of the significant incentives from the state fiscal policy is progressive over time reduced rates of VAT. Theoretical approaches to analyzing the effectiveness of fiscal policy.

Keywords: *fiscal policy, economic growth, innovative development.*

Formulation of the problem. The main features of the global information economy were formulating in the second half of the twentieth century. Its general characteristics – a competition of individual countries and geopolitical blocs allocation of resources and global GDP share based on the competitiveness of national economies in the world market. Modern global competition depends on factors specific to the new financial economy, which is the network structure, based on information technology. Four common factors determine the shape and outcome of this competition:

1) technological capacity;

2) access to a large, integrated and rich markets;

3) the difference between production costs and prices in target markets;

4) political capabilities of national and international institutions to manage the growth strategies of countries or regions that are in their jurisdiction.

The aim of the study. To approach new fiscal mechanism initiating economic growth that is focused on supporting the targets of development, and become a real tool for initiating innovative economic activity.

Analysis of the research. Technological capacity includes scientific basis of production and management processes, potential research and human resources needed to create innovation, adequate use of new technologies and the degree of distribution in the middle of the entire system of economic interactions. Competitiveness certain industrial sectors in significant degree determined by the technological level of each sector, as well as the ability of individual countries to compete in the global market depends on existing technological capacity. Access to these attractive markets in the world, the European Union, the United States or North American Free Trade Agreement depends on the degree of integration of the national economy to a single economic area, particularly through joint ventures or multinational corporations. The difference between production costs and domestic prices of targeted global markets determines the competitiveness of the economy provided that labor costs, taxes, rent, maintenance of environmental standards, so causing potential revenue associated with lower production costs, only the exit on large producers and rich market. But according to prevalence of new technologies on the world competitive strategy of low production costs must work under information technology paradigm [1]. That is the difference between price and cost is not a substitute technological capacity. The winning formula consists in combining high technology, highly qualified management with lower than competitor's production costs, excluding the possibility of competing solely on the basis of low production costs. Finally, the political opportunities of national institutions determine competitive advantage in the global market as individual companies and the economy as a whole. In this regard, government activity is not limited to protectionism in international trade and technological development. Public markets (e.g. in the field of defense industry and telecommunications), subsidies, preferential loans (the development of research, training, and support for exports), preferential tax treatment of export industries are important

for positioning companies and sectors in the global market.

For Ukraine, European integration is identified as a priority direction of its foreign policy, it is important not only to get out of the economic crisis, but move to a new innovative type of production. In light of these intentions fiscal mechanism initiating economic growth should be focused not only on the replenishment of the state budget but identify focus on supporting the targets of development, that is to become a real tool for initiating sustainable economic activity. Exit of Ukrainian firms in the developed world market on the basis of existing technologies is impossible without substantial government spending aimed, on the one hand, to cover the share of production costs in order to reduce the cost of production of low value–added support competitive positions in commodity manufacturer of low technology products. In addition, there should be government spending to improve the technological capacity of the economy that must be supported by an increase in tax revenue. So for the time being the present level of technology economy should operate in a closed (or half–open) mode to increase domestic business activity and the economy out of the shadows [2 – 4]. In this process, a significant role played by rules for income taxes, which should be linked to the non–linear growth of net profit respectively. Providing the foundation of growth economy requires technological capacity to provide incentives to expand production with high added value. One of the major incentives on the other side may be a progressive reduction in time added tax. Another source of technological renovation of production can serve as accelerated depreciation of fixed production assets.

The limited and ineffective use of foreign investment in innovative purposes of economic development of Ukraine requires finding internal resources to modernize the production sector and economic growth in general. Among the factors of economic growth in Ukraine should note optimizing the distribution of national income by means of fiscal policy and the key role of investment in technological development of the real economy with consistent growth of exports of manufacturing industries [5, 6]. The role of fiscal policy in protecting the national interests of sustainable development overemphasized especially in circumstances where the Ukrainian economy has signs of recovery in terms of redistribution of global resources through financial debt for the world's financial centers and the «G7».

The modern world economy characterized contest not only individual countries but to a greater extent on geopolitical blocs share of world gross domestic product based on the competitiveness of certain sectors (TNC national origin) on the world market. The global economy, which emerged from the integration of economic processes, information production and competition have characterized by interdependence, asymmetry, and regionalization of its growing diversification in each region. Individual countries differ in their manufacturing sector involvement and segmentation that excludes some regions and nations of the world economic circulation. Global competition depends on factors specific to the new financial economy, which is the network structure, based on information technologies and expansion of virtual flows of financial capital.

Prospects for integration of the Ukrainian economy in any international integration potential formation determined individual sectors to resist the external impact of the imports. From exports, it should be noted that the output of domestic firms in the developed world market on the basis of existing technologies is only possible from the extractive industries and agricultural products, but with significant government spending aimed at reducing manufacturing costs of products of low added value, on the other hand – greater costs to increase competitive technological capacities final product sectors – aircraft, military and space technology. Features conditioned public expenditure broadening of the tax base that emphasizes the importance of extracting the shadow income individuals and legal entities. In this process, a significant role played by the concept of tax revenue, which is advisable not associate with exponential (1) or (2) increasing the rate of linear rate tax, with parabolic and eventually regressive (3) growth standards in accordance with the increase in net profit (Figure . 1). However, there is some value T * tax rate at which under current economic conditions not covered earnings. This part of the profits to upset economic space with more favorable tax treatment outside the state or even eliminated from the circulation of money (dead money stock often individuals), that is, to

bring the economy out of the shadow sector, it is necessary to set the tax rate at T *.

According to the Institute of World Economy (ICECB) RAS [5], reduction of income tax by 5 percentage points (pp) may increase output by an average of 3%, a similar reduction in rates of VAT and the total contributions to extra–budgetary funds may make more expressive reaction manufacturers – increase production by 5 and 4% respectively.

The model of conduct tax producers considering the potential size of the state fiscal loss in case of reduction rates in percentage points as n equation:

$$A = \Pi - \Pi(T - n) = n\Pi/T \qquad (1)$$

where A – state fiscal losses; P – tax rate; n – reducing the tax rate, percentage points

Compensation for these losses by expanding the tax base is calculated on the assumption of proportional increase relative to the increase in output $(1 + q)$ times:

$$B = q\Pi(T - n)/T, \qquad (2)$$

where B – the size of direct fiscal loss compensation state; P $(t - n)$ / T – the amount of payments that would have implemented a company subject to reduced tax rates n times and the same volume of production.

If the formula (1) and (2) are valid for each type of tax and tax base extends to each of them, while the total value of compensation while reducing the corporate tax rate will be determined by the formula:

$$C = q\Pi_1(T - n)/T + q\Pi_2 + q\Pi_3. \qquad (3)$$

Because it is a relatively small change in the tax rate, the authors, despite some simplification proceeded from the assumption that the proportion between performance (profit–sharing, value added and wages in total output) fixed and do not vary with changes in tax rates and production volumes. Thus, the total balance of tax revenue can be calculated using the formula:

$$D\Pi = C - A. \qquad (4)$$

If the difference is negative, the state revenues by reducing tax rates reduced and vice versa. Further model calculations determined that the reduced rates of income (30%) by 5 percentage points States are to win: expansion of production leads to an increase in revenues of 0.5% of annual output. As for manipulation with reduced rates of VAT (20%) and revenues of the budget funds (36%), there is growth in production does not compensate for the direct fiscal losses from reduced tax rate by 5 percentage points The final reduction of the treasury is 1.3% (VAT) and 0.6% (from extra budgetary funds) of annual production.

However, the response of manufacturers to strengthen the tax burden is more expressive than weakening it. With increasing rates by 5 percentage points income the state receives an absolute loss of 1.3% of annual output and increase government revenue from VAT by 0.6% and non–budget funds 0.5% of annual production. But if you take into account that many factors can affect the amount of revenue, remained out of sight analysis, we can conclude that lowering the tax burden could provide incentives for long–term expansion of economic activity and, consequently, a larger increase in output, significantly reduce direct fiscal loss state. In addition, easing the tax burden ceteris paribus able to withdraw from the shadow of a significant share of economic
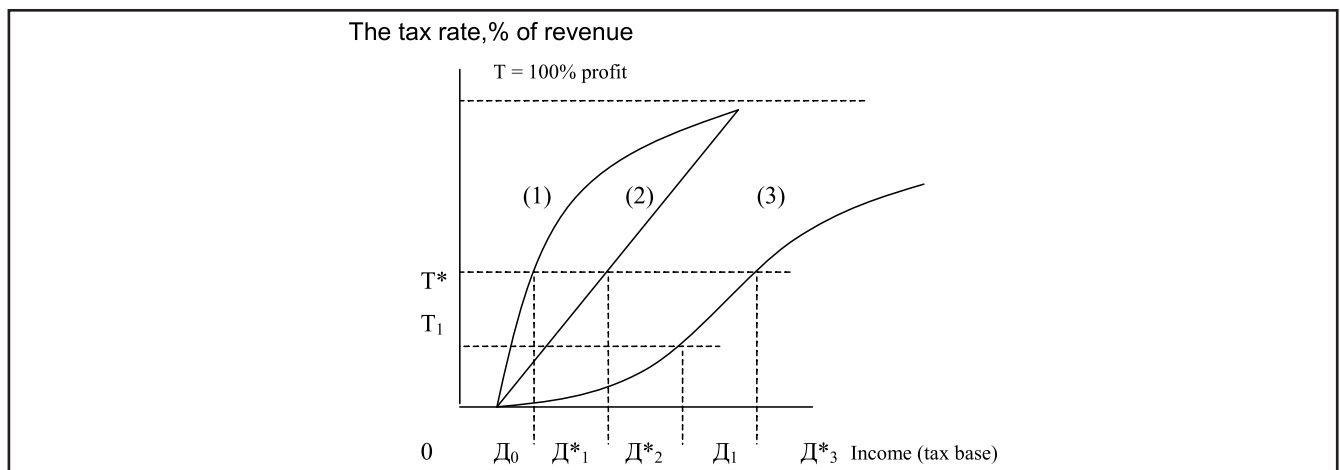

Fig. 1. Concept of tax revenue

activity, also will expand the tax base and will provide compensation in the form of additional revenues to the treasury. Changing the tax [3, 5] may also affect the tax discipline companies regarding regular and complete fulfillment of tax obligations to the state.

The degrees of change in tax rate on investment volumes significantly increase its impact on volumes. Ac– requests producers showed that the reduction of corporate tax rate by 5 percentage points, capital investments will increase by 5% (2 percentage point increase in output) and subject to increase rates – reduced by 12%. The different strategy management companies, some of which operates an active strategy of short–term growth, for others – reducing the tax rate is a signal for expanding innovation expenditures not only by reducing taxes derived from financial resources, but also due to non–payment of debts, including and interest on unpaid taxes for the tax liabilities. Others hold to the medium– and long–term growth prospects, only about 1/3 of the withdrawn funds to facilitate the tax burden would be used for innovation. It is alleged [4] that this behavior is due to the financial condition of companies that are insufficient to meet the current requirements of the state, i.e. the accumulation of debt is part of a special type of rational behavior of enterprises. Most of the penalties in the tax debt accounts for sectors that have the greatest fiscal burden, which leads to significant difficulties in paying taxes. Out of this circle of defaults may be to limit the size of fine discount rate of bank interest, which is quite reasonable economic theory loan.

The behavior of businesses within the sector in a radical reduction of the tax burden (option – two–year holidays) indicates that most of the industries that produce final products, preferred vacation VAT and demonstrates high sensitivity to changes in the investment decisions of income tax. However, the changes on contributions to social funds would lead to a substantial increase in wages.

In manufacturing, financial, investment, innovation and enterprise personnel policy significantly affects the structure of ownership and control system of tax revenue. The nature of government fiscal responses, joint stock company and managerial significantly are different. Favorable changes in the economic environment of state enterprises used to further increase production even if the product is flawed and getting paid for it is not guaranteed. In this technological investments are growing slowly. Most private (managerial) of enterprises has a different strategy. On the positive impulses tax they meet the rapid activation of the investment process, which may be associated with a particularly severe contraction in capital markets. Joint–stock company less prone to extensive development than government, but did not reach a level of dynamism that inherent to private enterprises.

In terms of export orientation response to tax changes reveals clear leaders and outsiders. The greatest sensitivity to lower tax rates often are companies with zero or weak export orientation. Export–oriented industries and companies that are exposed to harsh competition in foreign markets, hardly react to small (up 5 percentage points) reduction in the tax rate. Perhaps that the tax benefits available export industries, a reduction in tax rates is not sufficient to push the company to radical technological change. Generally, in reaction to weak areas of fiscal incentives found a stable pattern: increase output in response to a slight decrease (5 percentage points) certain tax rate appears higher, the heavier the burden of payment of this tax. However, variant of strong tax incentives is not typical. High tax reactivity associated with managerial or private–owned enterprises, tightening competitive environment in the domestic market and tax uncomfortable feeling. For businesses that are close to exhaustion of reserves of extensive development, radical restructuring and technological innovation require significant tax incentives.

Expanding technological capacities of Ukraine's economy requires motivation on products with high added value. One of the significant incentives from the state fiscal policy may be progressive over time reduced rates of VAT. This type of tax is one of the common economic instruments division of labor in the global economic environment as a result of promotion tax pyramid that promotes the development of high technologies in powerful countries and worsen the conditions of technological innovation and other countries. IMF recommends that countries implement indirect taxes such universal excise respect to their global hierarchical position: VAT – in Ukraine and other post–socialist countries, IVA – in Latin America, VAT – in

the EU, Japan, China, MWST – German, GST – Australia, New Zealand, HST, PST – Canada. Reciprocal trade concessions on payment of these taxes is a practical manifestation of the liberalization of world trade and national experts perceived as punishment for trying to domestic manufacturers to produce their own finished products and make direct bank payments. In the space of a hard competitive domestic producer are constantly faced with protectionist barriers, anti–dumping procedures, certification barriers. However, the main types of external tax [7] practiced in today's global economy are:

– VAT (sales tax) – value added tax, sales tax actually;

– CON (consumption tax) – added tax fraction of the cost price of goods with compensation for the consumption of raw materials;

– MPP (Malaysian sales tax) – a one–time tax on the declared import price is not raw and final domestic products;

– City (commercial tax) – commercial tax to 30% introduced in Burma in order to encourage production of finished complex high–tech products.

Taxes VAT type most common in the CIS, Africa, Latin America and Central Asia. In some countries (French Guiana, Tunisia, Tanzania), their rate reaches 29–50%. Countries with the highest rates of VAT are able to export raw materials and energy, with less – partly exported or consumed raw materials and exporting manufactured semi–finished products from them. Taxes such KOH (25%) encourage the production of components through a redistribution of Technology, brake components and some raw materials production (through a redistribution of Technology) and the production of finished products. They lead to the loss of national control over the technological chain and becoming a quasi public entities EC type global market. Countries with relatively higher rates of KOH (Denmark, Ireland, Belgium) produce components beginning of the process chain, and with relatively lower rates (Germany, France, the Netherlands) are close to the final product. Low tax rates KOH (14%) mastered as China, Thailand (10%) and Croatia. South Korea, Turkey, Ukraine are attracts to this tax. It should be noted that the US taxes or VAT type KOH absent. Taxes IPL types (10%) are stimulate production of components, brake primary sector, leading to dependence on foreign partners. City taxes such finished goods production encouraged a high

degree of recycling, saving energy and materials (for them to set a higher tax rate), innovation and implementation of technological breakthroughs in the last reallotments with the greatest profit. These taxes are hindering the production of raw materials and semi–finished products contribute to the saturation of domestic markets in goods, services, and provide jobs and high competitive position in foreign markets. This type of tax practice independent, fast growing South Asian Tigers countries – Singapore, Hong Kong, Malaysia).

The introductions of tax on the producer (or the payment of subsidies) affect the equilibrium competitive firm only in the case where such tax directly affects the marginal cost of the firm. With the introduction of excise duty or value added tax marginal cost curve shifts up by the amount of tax, respectively, all sector firms cut production, supply branch line shifts to the left, thus increasing the price of products on the market. The degree of increase in the price in this case is caused by the elasticity of industry demand and supply.

Tax policy influences the consumption and causes changes in government spending multiplier Keynes [1 / (1 – b)] under the new model multiplier:

$$\begin{cases} Y = C + I + G \\ C = a + b(1-t)Y \end{cases} \Rightarrow Y = \frac{1}{1-b(1-t)}(a+I+G) \quad (5)$$

In this model, $Y = C + I + G$ – basic macroeconomic identity of a closed economy, claiming that the issue is caused by consumption, investment and government spending, and $C = a + bY$ – consumption function, where b – marginal propensity to consume. Progressive taxation is a factor that contributes to the weakening of the multiplier effect of government spending and stabilizing the levels of employment and output. Lower tax rates on other equal conditions lead to an increase in the multiplier effect.

In an open economic system multiplier effect of government spending is relatively lower than in closed, her identity macroeconomic includes export operations: Xn = g – m'Y, so equilibrium output is determined by the equation:

$$Y = \frac{1}{1-b(1-t)+m'}(a+I+G+g) \quad (6)$$

Where $\frac{1}{1-b(1-t)+m'}$ multiplier of government spending;

m' – marginal propensity to export

The current type of management, accompanied by depletion of natural raw materials production and deterioration of the environment due to the disposal of waste production and consumption of natural objects, it is useful to reflect on the basic macroeconomic identity by endogenous inclusion of positive and negative externalities (achievements expenses):

$$Y = C + I + G + X_n \pm GExC \qquad (7)$$

where $GExC$ (Gross External Cost) – gross positive and negative externalities, it is. eq.

A similar government spending multiplier effect on the equilibrium level of income and render lower tax rates when taxes are reduced by $T\Delta$ income $Yd = Y - T$ increases by value $T\Delta$. Consumer spending increased accordingly, and planned cost curve moves up, which increases the equilibrium value for output $\Delta Y = -\Delta T \frac{b}{1-b}$ where $\frac{\Delta Y}{\Delta T} = \frac{-b}{1-b}$ – multiplier taxes. Taxes' multiplier mechanism associated with frequent consumption reaction on single shift taxes: taxes are reduced by $T\Delta \rightarrow$ income increased by $T\Delta \rightarrow$ consumption $\rightarrow$ increased by $T\Delta b \rightarrow$ total revenue increased by $\Delta b\, T \rightarrow$ consumption increases by $b\,(T\Delta b) \rightarrow$ total costs increased by $T\Delta b2 \rightarrow$ etc. $\rightarrow$ consumption increases by $T\Delta b3 \rightarrow$ etc.

If government spending and autonomous tax deductions are increased by the same amount, then the equilibrium output increases – in this case there is a multiplier balanced budget, which by the way does not imply avoid $\Delta T = \Delta G$ – identity changes revenue and expenditure budget.

It should be noted that the multiplier effect of the tax cuts are less than the increase of public expenditure resulting from a stronger influence on the value of public expenditure and revenue volume of total consumption. This difference in effects is decisive in choosing the instruments of fiscal policy if it focused on the expansion of the public sector, is to overcome the cyclical downturn increased government spending (strong stimulating effect) and to contain inflationary effect of increased taxes (which are relatively soft limiting measure). Where a fiscal policy aimed at limiting public sector is in a phase of cyclical downturn reduced taxes, giving a relatively small incentive effect, and the cyclical recovery phase, reduced government spending, allowing relatively quickly reduce inflation.

Climate change employment, output and inflation as a consequence of cyclical fluctuations in total income provided no discretionary fiscal policy, which involves automatic increase (decrease) in net tax revenues the state budget, which stabilizes the impact on the economy. When discretionary fiscal policy to stimulate aggregate demand during the recession created budget deficit due to increased government spending or tax cuts, respectively, in the period of recovery deliberately created a budget surplus. The economic mechanism, the so-called built-in (automatic) stabilizers, reduces the amplitude of cyclical fluctuations without recourse to changes in government policy. In developed countries such as stabilizers advocate progressive taxation, public transfers (including unemployment insurance) scheme and participation in profits. Built-enable alleviate the problem of time lags discretionary fiscal policy. The degree of internal stability of the economy depends on the magnitudes of cyclical budget deficits and surpluses, acting as automatic dampers fluctuations in aggregate demand. At the same time, increasing the degree of internal stability of the economy contradicts the long-term objectives of fiscal policy – strengthening incentives for enhanced supply of factors of production and growth of economic potential. Incentives to investment, entrepreneurial risk and impact of labor relatively stronger in the more gentle curve tax function that can wake achieved by reducing marginal tax rates. However, this reduction is accompanied by a reduction in the quantities of cyclical budget deficits and surpluses, ie a decrease of internal economic stability.

Decrease the issue can connect the stimulating monetary policy. The relative effectiveness of fiscal and monetary policy is determined by the following factors:

a) the sensitivity functions of investment and net exports to the dynamics of market interest rate;

b) the sensitivity of demand for money to the dynamics of market interest rate.

The effectiveness of fiscal policy stimulative effect caused by magnitude of displacement if the latter is less than the effect of output growth, the other equal conditions of effective fiscal policy. The effect of displacement, in turn, is relatively small in two cases:

1) if investment and net exports desensitized to higher interest rates in the money market;

2) if the demand for money is highly sensitive to higher interest rates and a slight increase rate sufficient to balance the money market.
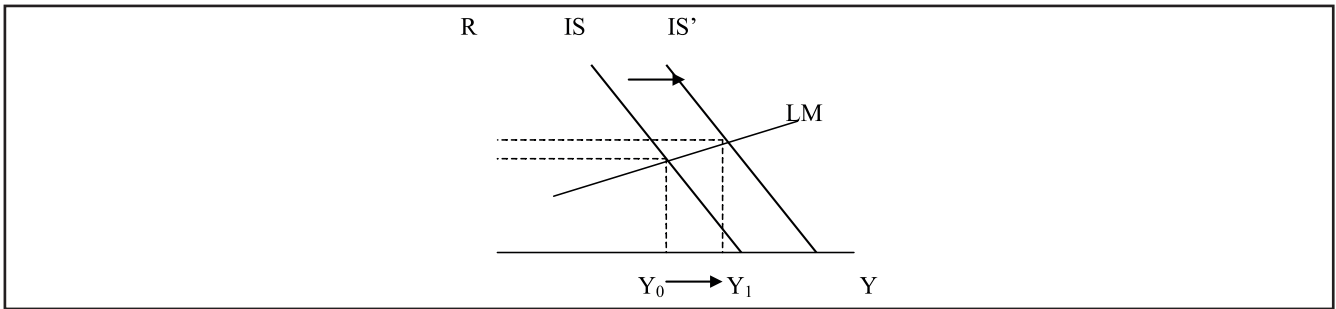
Fig. 2. Effective stimulating fiscal policy

Expansionary fiscal policy is more effective when combined relatively steep line «investment–savings» and relatively shallow lines «liquidity–money» (Fig. 2). In this case, the crowding–out effect is very small, since small increase in interest rates, and sensitivity coefficients investment and net exports to the dynamics of the market interest rate is also low.

The effect of the displacement of a significant, if investment and net exports are highly sensitive to the dynamics of interest rates and the demand for money is insensitive to the dynamics of interest rates.

Expansionary fiscal policy appears less effective when there is a combination of relatively shallow straight and steep IS LM (Figure 3). In this case, the increase in income (Y0Y1) is negligible, since raising interest rates, and sensitivity coefficients investment and net exports to the dynamics of the market interest rate is very significant.

The effectiveness of stimulating monetary policy is determined by the stimulating effect of increasing the money supply and lower interest rates on the dynamics of investment and net exports. This effect is the opposite effect of displacement; it is relatively large in two cases:

1) if investment and exports are highly sensitive to the dynamics of interest rates (IS curve is relatively flat): in this case, even a slight decrease in interest rates in response

to the growth of the money supply leads to a significant increase in investment and exports, which significantly increases output;

2) If money demand is insensitive to the dynamics of interest rates (the LM curve is relatively steep): in this case, money supply growth accompanied by a reduction in interest rates, which strongly stimulate investment and exports.

Expansionary monetary policy is most effective for the combination of relatively steep LM and shallow IS (Fig. 4). In this case and lower interest rates very significantly, and sensitivity coefficients investment and net exports to the dynamics percent larger because output growth (Y0Y1) relatively significant.

Expansionary monetary policy is relatively ineffective, provided you high sensitivity of demand for money to the dynamics of interest rates and low sensitivity of investment and net exports to percentage. It is the least effective, while the combination of steep and shallow IS LM. In this case, the interest rate is reduced rather slow reaction to lower percentage of the investment and net exports is very weak, so the total increase in production of small (Fig. 5). Maternity LM curve means that money market comes to equilibrium at a very slight decrease in interest rates in response to the growth of the money supply. So if investment and exports is very sensitive to the dynamics of interest, such slight decrease in rates is
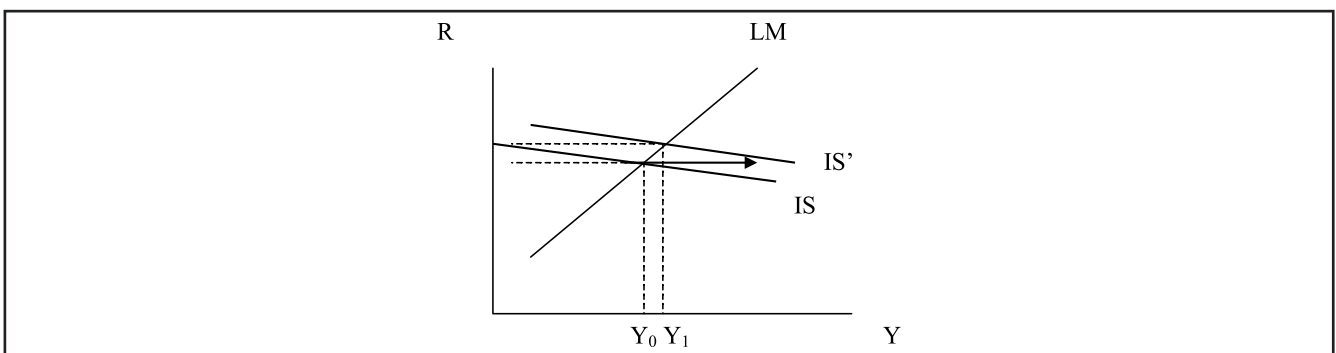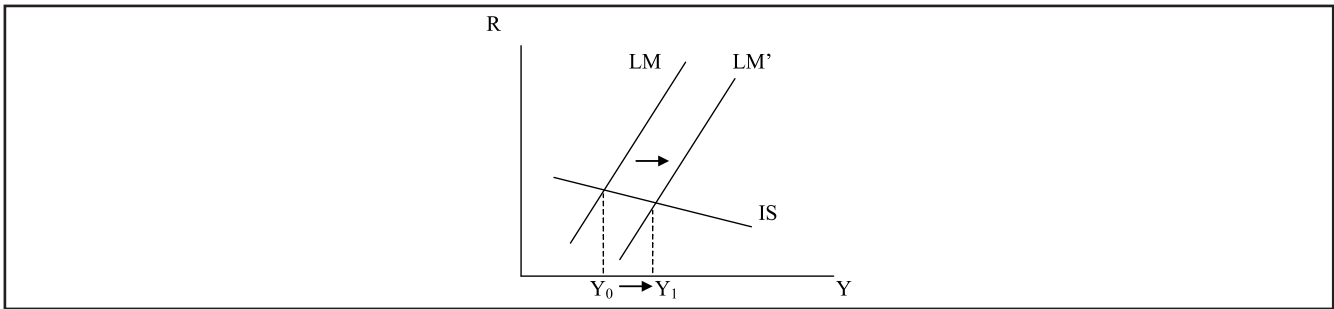

Fig. 3. Poor stimulating fiscal policy

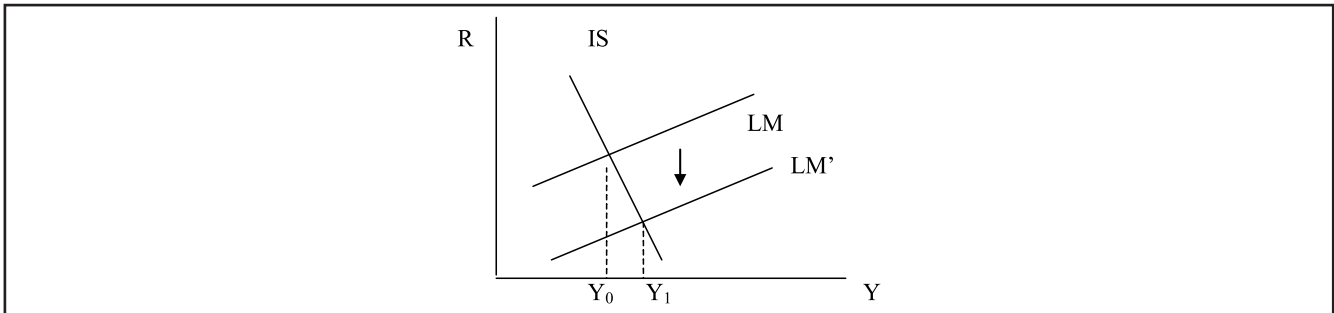**Fig. 4. Effective stimulating monetary policy**

Fig. 5. Poor stimulating monetary policy

insufficient to substantially increase investment and net exports. Cool IS means that even with a significant decrease in percentage of investment and net exports will rise very little, because the sensitivity coefficients investment and net exports were to the interest greatly. Therefore, the total increase in output in both cases will be negligible even if significant money supply and interest rates decline essential.

Single dose and unexpected increase in the money supply in the short term and reduced real and nominal interest rates in the long term – both rates remain unchanged. But in the long change rate of growth of the money supply, the nominal rate increases due to expected inflation, except that the short–term nominal rate reductions due to current measures of monetary policy. However, and fiscal and monetary expansion is only a short–term effect of increasing employment and output without contributing to the growth of economic potential. Incentives to economic growth is due not only to the policy of expanding aggregate demand, but also with providing aggregate supply of goods and services, due to the potential upgrade of production and its raw materials.

Conclusions. Accelerated depreciation of fixed assets is one of the most important sources of technological renovation of production. It has the features to install the duration of amortization period economically rational lifetime of labor, its value revaluation procedure

taking into account inflation In the absence of timely and full indexation of assets under conditions of high inflation (over 15%) even accelerated depreciation methods can not provide the processes of reproduction of capital. Investment climate and economy can be formed by means of «green» fiscal policy aimed at the development and implementation of clean technologies, i.e. innovation for conservation of natural raw materials, reducing resource input and production of waste. Accumulation of environmental taxes can offset the direct fiscal loss by reducing the basic state income taxes and VAT, as mentioned above. In addition, they are real tools for stimulating technological innovation manufacturer to maintain global standards of product quality (ISO 9000), which usually prevents the release of domestic producers to markets of developed countries.

However, the main financial instruments of innovation policy is to use the state budget to support applied and fundamental scientific research based on the identification and ranking of priorities for scientific and technological development and decision–making on financing large government programs. To this end, the following tools are used fiscal policy:

• bring spending on research of the cost of production;

• cancellation of a significant proportion of the norms of scientific equipment accelerated depreciation;

• preferential loans scientific and technological development and partial funding of major innovation projects;

• establishment of institutional framework for venture capital projects.

• specified events are all, without exception, developed and newly industrialized countries and complemented by actions of local and central authorities in antitrust regulation, customs policy, protection of intellectual property rights in the interests of innovation.

The difference between states is determined only by the scale of benefits, priority of support certain industries and timing adjustments listed instruments.

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