INVESTIGATION OF FISCAL AND BUDGETARY POLICIES BASED ON ECONOMIC THEORIES

EMILIA CÂMPEANU*

Abstract
Empirical analysis of fiscal and budgetary policies cannot be achieved without first knowing how they are viewed in the economic theories. This approach is important to indicate the position and implications of fiscal and budgetary policy tools in the economic theory considering their major differences. Therefore, the paper aims is to investigate the fiscal and budgetary policies based on economic theories such as neoclassical, Keynesian and neo-Keynesian theory in order to indicate their divergent points. Once known these approaches at the economic theory level is easier to establish the appropriate measures taking into consideration the framing of a country economy in a certain pattern. *This work was supported from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 „Performance and excellence in postdoctoral research in Romanian economics science domain" (contract no. 0501/01.11.2010).*

***Keywords:** fiscal and budgetary policy; economic theory; neoclassical theory; Keynesian theory; neo-Keynesian theory.*

1. Introduction

Knowledge of economic theories is the first step in deepening the effects of fiscal and budgetary policies on the economy based on empirical analysis. This approach is especially important as they are major differences between the economic theories. These differences should be known so that it can be established a national economy diagnosis through a proper framing in a specific pattern corresponding to the economic economic theories.

In general, there are three main theories in the economic doctrine, namely: classical and neoclassical theory, Keynesian theory and neo-Keynesian theory. Classical theories, neoclassical and Keynesian is also known as conventional theories because they are well known and accepted by theorists. Before proceeding to an analysis is useful to highlight the basic structure and implications of each theoretical paradigm.

If classical economic theory is argued that the state must have a limited role imposing some rationality on government fiscal operations, the neoclassical theory emphasizes the effects of enlargement the government's activities and the state's intervention for assessing economic growth which led to the shaping of a neoclassical growth model that is currently used in recent studies.

This extension is intended to support public financial decisions by both the income tax levy and by state loans. It also continues the idea that classics finance budget deficits by borrowing may adversely affect the economy by using them for purposes in order to stimulate consumption and less productive capital. More specifically, the emphasis is on stimulating the supply of state interventions that do not lead to persistent budget deficits wich have negative effects on private capital accumulation.

It was subsequently developed the Keynesian theory based on increasing aggregate demand. This led to the development of neo-Keynesian theory.

The Keynesian approach considered that a large proportion of the population has a high propensity for consumption over current available income. A temporary reduction of taxes has a

* Associate Professor PhD, Bucharest Academy of Economic Studies (e-mail:emilia.campeanu@fin.ase ro).

quantitatively significant and immediate impact on aggregate demand. If the economy's resources are initially underutilized than national income increases lead to negative effects. Since the public financial imbalance stimulate both consumption and national income than saving and capital accumulation are not adversely affected. So, on short-term deficits have beneficial consequences.

In the Ricardian approach, successive generations are linked by voluntary transfers, and altruistic resources. Under certain conditions, they imply that consumption is determined as a function of state's resources (total resources of both taxpayers and their progeny). Since the deficit involves a postponement of taxes that will be supported by future generations, then it does not affect the resources. As a result the deficit is a matter of indifference.

Given the neoclassical and Keynesian paradigms we can say that the Keynesian approach refers to short term variations, while neoclassical is concerned by the long term challegnes. So the public should be split and the gap into two components, namely: a permanent component (long-term average) and a temporary component (deviation from long-term average). Thus, the neoclassical theory studies the effects of permanent deficit, and the Keynesian is concerned about the impact of temporary deficits.

The paper aims to investigate the fiscal and budgetary policies based on neoclassical, Keynesian and neo-Keynesian economic theories in order to indicate their divergent points. Once known this approaches is easier to establish the appropriate policy measures taking into account the countries' classification according to a certain pattern. To achieve this scientific approach, the paper is divided into six sections. Section two indicates general aspects of the classical economic theory, meanwhile section three is devoted to neoclassical economic theory. The basic characteristics of Keynesian and neo-Keynesian economic theories are presented in sections four and five, while section six points the conclusions.

2. Fiscal and budgetary policies in classical economic theory

Classical representatives argue that the state economic role must be limited by requiring some rationality on government fiscal operations. They, including Adam Smith, were first interested by the economic order and then developed the theories regarding the state's role in the economy.

The general peculiarities of classical economic theory of fiscal and budgetary policies are:

– The state economic role must be limited by requiring some rationality on government fiscal operations;

– Government borrowing reduces the disposable income in the economy that could be used productively in the private sector;

– Government deficits contributing to extend the work of public sector growth irresponsible government action;

– Government borrowing creates difficulties in securing future funding through the allocation of part of the increasingly large tax revenues to honor the obligations as debt amortization and interest on debt;

– Increases in taxes;

– Unbalanced budgets lead to monetary depreciation (inflation);

– Balanced budgets are a guide to transfer resources from the private to the public sector.

In view of Adam Smith (1930), the state was wasteful in the sense that he was removing a part of the revenue funds of economic entities, which then redistributed. The budget balance is achieved based on public debt as a result of state loans. These loans were intended to finance the current consumption expenditure and not the production activities that are able to generate added value to ensure the payment of public debt service. Therefore, the public debt extends the political power of the state because there will not be a dependence on the tax revenues collected from taxpayers.

According to Adam Smith (1930), important is the moment when creating public debt and not, specifically, its growth. Also, the existing debt burden is not important. The most important „loss" is recorded when economic agents accepted to borrow the state. In fact, it could not be considered a "loss of interest due to the annual transfer from taxpayers to state creditors. Jean-Baptiste Say (1853) warns that the waste of public money was spent. In this context, the author expresses his disagreement with the promotion of fiscal and budgetary policies that led to budget deficits and hence public debt. In order to balance the budget, Say recommend limiting consumption to ensure industry and trade capital. Public loans were not only unproductive because they were consumed and wasted, but also because the nation was burdened by annual interest payments. He also argued that a moderate level of public debt, which was used wisely in the interest of public investment, could generate positive effects on investment and, therefore, on the gross domestic product.

David Ricardo (1951) argued that fiscal and budgetary policies applied by the state led to increased borrowing that can be perceived as a burden because it is not reflected in the annual transfers from taxpayers to creditors as interest on the state of public credit, but by reducing the country's productive capital. On the other hand, government debt does not affect the country's ability to pay taxes because taxable material was the same with or without public credit. However, the absence of public credit could create problems in the sense that they were satisfied with the general needs of society based solely on tax revenue. The increase in public debt lead to a series of long-term effects include: i) increase tax revenues, the price of labor, ii) no changes to the nation's real capital. As a result, Ricardo has proposed the government to adopt a financial plan as "pay-as-you-go" in order to encourage a high level of current savings. This new level of saving will be able to cope with a temporary higher tax pressure.

Thomas Robert Malthus (1836) believes that additional taxation to finance the interest on state debt would cause some negative effects as the population believes that the loan would be repaid in full for no longer incur additional costs later. Debt also influences the value of money. This disadvantage should be considered in conjunction with the advantages of maintaining unproductive consumer welfare by encouraging the maintenance of balance between production and consumption.

John Stuart Mill (1929) argued that iresponsable fiscal and budgetary comportament had serious economic consequences, and proposed an index to determine such effects. If debt generates an interest rate increase it can be concluded that it would be available in the economy to attract capital to meet the general needs of society and not for productive use. But, if interest rates remain unchanged then these consequences are not obvious.

C.F. Bastable (1922) has made the distinction between debt and debt contracted for non productive loans. If there is not an equivalent income derived from loan contracted than it comes inevitably to a reduction in public spending.

3. Fiscal and budgetary policies in neoclassical economic theory

Neoclassical paradigm aimed at individual consumption plans during its life. In this timeframe the imbalance in fiscal and budgetary policies increased total consumption by shifting the burden of taxes in future generations. If resources are fully utilized than the consumption growth necessarily implies reducing savings which will increase the interest rates in order to restore equilibrium in the capital market. Thus, persistent deficits restrict private capital accumulation.

The standard neoclassical model has three main features, namely:

1.Consumption of each individual is determined as a solution of intertemporal optimization problems where both resources raised through loans and those granted in the form of loans involving interest rates set by the market;

2. Individuals have a limited lifetime, each consumer belongs to a certain generation, and related life overlaps successive generations;

3. Market freedom is assumed in all periods.

Diamond (1965) was the first economist who had studied the effects of budget deficits in the formal context of these models. He argued that a permanent increase in the rate of domestic debt to national income would result from reduced capital-labor ratio. The initial interest rate, consumers are not interested to hold capital and government securities, including new titles. Stimulate additional saving growth rate and reduce investment capital until market equilibrium is restored. Thus, persistent deficits reduce private capital accumulation.

Diamond's analysis focuses on permanent changes to the deficits and not on their temporary effects.

Auerbach and Kotlikoff (1986) were conducted policy simulations in a more complex neoclassical model. Their analysis showed that the impact of a temporary deficit may be very small, but significant negative effect (a temporary deficit may boost short-term savings). This result reflects some consideration. Economic life is relatively high so that the impact of increased wealth on current consumption (wealth effect) is reduced. In addition, if public spending is kept constant then the temporary budget deficits reflect a reduction in tax rates which implies lower marginal tax. Reducing income tax rates for capital directly stimulate saving by increasing profitability after tax. Also, lower rates of income tax wage induce a temporary replacement by increasing current revenue. As a result, neoclassical theories argue that temporary deficits have little or negative effect on short-term economic variables.

4. Fiscal and budgetary policies Keynesian economics

Fiscal and budgetary policy is the result of the election of the state for economic and social porposes. This involves, on the one hand, revenue mobilization, and on the other hand, public expense. By the mid-30s, economic theory has treated more the resource allocation problems than the the juncture regulation through public finances. Keynes view is different from those of the neoclassical analysis because it emphasis on unemployment, its causes and remedies that may apply to public authorities. Keynesian approach rejects the hypothesis of price flexibility in a market economy, the neutrality of money, and the market economy and optimality theorems of welfare redistribution before the exchange economy. Also, they do not disqualify the public financial imbalances.

The redistributive and stability policies result from market imperfections. Two cases allow the demonstration on the fact that in the event of unemployment, government intervention is needed to cover insufficient aggregate demand. For this purpose, first use a simple model and then a complete one.

Keynesian analysis has been improved over time through new models of which stands the model of Bernanke and Blinder (1988) that explains how to coordinate monetary and fiscal policies to alleviate unemployment and budget in a market economy.

From studies conducted by economists it cand be found that economic cycles could increase budget deficits or seizures crises if the state would meet the budget constraint. In addition, public spending will grow faster than sustainable economic activity due to exogenous shocks (war) as revealed Wagner (1911) and Peacock and Weiseman (1967). As a result, the authors recommended, with Myrdall (1933), achieving cyclical budgets based on automatic stabilizers; so the theory of fiscal relaxation. Insufficient findings of these approaches led to the formulation of its argument Keynes deficit through spending resulted in a sustained optimism, between 1950 and 1975, by fine-tuning of economic activity in order to alleviate or eliminate the business cycles.

To summarize, the Keynesian theory can identify the following concerns vis-à-vis the fiscal and budgetary policies:

– it is considered that a large proportion of the population has a high propensity for consumption over current revenue available;

– national income increases if the economy is initially under-utilized resources leading to side effects;

– deficit is caused by maintaining a constant level of expenditure and reducing tax revenues; in this case the household income increases lead to the improvement of the living standards. Thus, the growth of consumers' income increases demand for goods and services;

– temporary reduction of taxes is quantitatively significant and has immediate impact on aggregate demand;

– since the financial imbalance stimulates both consumption and national income then saving and capital accumulation are not adversely affected;

– so short-term deficits have beneficial consequences.

5. Fiscal and budgetary policies in neo-Keynesian economic theory

Unlike the Keynesian theory, David Ricardo suggested that fiscal and budgetary policies do not exert any effect on the national economy. According to Ricardian equivalence government spending on goods and services, and marginal rates of taxation are what counts, while the mix of debt and tax revenues is irrelevant. The reason given was related to the fact that the debt leads to higher taxes in the future while the rational agents known it

Impact on consumer mix - investment alternative methods of financing a given amount of government spending was the subject of debate since Smith (1962) and Ricardo (1962). Currently, debt neutrality conducted to an important debats such as Barro (1974), David and Scadding (1974), Lewis (1974), Carlson and Spencer (1975), Buchanan (1976), Feldstein (1976), Buiter (1977).

Macroeconomic approach provides dramatic new answers to these questions. The effect of government policies is fully measured the size and content of real government spending by way of funding.

Thus, the Modigliani-Miller (1958) theorem from the corporate finance is extended in the households sector (corporate sector) in the public sector. This establishes the conditions, in a firm's case, when the choice between borrowing and financing by issuing new shares is irrelevant. Similarly, Ricardian equivalence argues that the choice between loans and financing the public spending by increasing taxes is irrelevant. An important form of this theorem was issued by Robert Barro (1974).

James Buchanan (1976) referred to the neutrality of public sector funding as a Ricardian equivalence theorem.

David Ricardo first formulated this conclusion considering that the neutrality of public debt, given the volume and content of what today we call exhaustive public spending, reduce taxes, primarily current consumption while domestic loans to lower savings and private capital formation. So, the method of financing public expenditure is irrelevant because there are similar effects. In fact, after he made this proposition, he proceeded to outright denial of its validity. Expresses its reason on the one hand, what we call today "debt illusion" and, on the other hand, fear that expectations of future taxes induce evasive behavior, including even emigration.

Ricardian equivalence theorem is one the neutrality which requires that the state cut taxes without, however, reducing the public spending, which involve, according to conventional analysis, reducing national saving and capital accumulation and long term, restricting the economic activity. However, Ricardian equivalence argues that this policy does not affect consumption or capital accumulation.

Ricardian argument is based on the fact that lower taxes now, and record budget deficits, public expenditure remains unchanged as the level of lead in future to an increase in taxation. Consumers with a forward looking will not reacte to the reduction of taxes and increasing consumption, they will save the surplus. It is recorded an increase in private savings, an amount

equal to the reduction of taxes, that will not change national saving and other macroeconomic variables.

Barro (1974) reformulated the Ricardo's theorem in the sense that intergenerational redistribution of income associated with a shift from financing through taxes and loans can be neutralized by offsetting changes of gifts and legacies between generations.

Barro (1974) found that altruism between generations may extend the time horizon of individuals proposed as a new form for the Ricardian equivalence theorem. Thus, the modern paradigm aimed at families that drive decisions.

The strict irrelevance of fiscal and budgetary policies (Ricardian equivalence) depend on a number of assumptions, namely:

• successive generations are linked by altruistically motivated transfers;

• Capital markets are either perfect or imperfect in certain specific circumstances;

• consumers are rational and seers;

• postponed taxes do not redistribute resources between families with different marginal rates of consumption;

• taxes are not distortionary;

• deficit can not create value;

• deficit financing does not influence political processes.

So, Barro has proposed a different interpretation of the Ricardian argument, namely: for the holders, the government securities are an asset and an obligation to taxpayers that will covereit by taxes. Thus, because the population has not experienced an increase in income, it should not alter the structure of consumption in response to a temporary reduction of duties.

It is important to note that the Ricardian argument does not show all aspects of fiscal and budgetary policy irrelevant. Thus, if the government reduces taxes today, and people expect that this measure is accompanied, in the future, with spending cuts, then increases the permanent income of the population which stimulates consumption and reduces national saving. But it should be noted that expectations for reducing public spending rather than reducing tax revenues are those that stimulate consumption. Reducing public expenditure in the future affect permanent income and consumption because it implies lower tax revenue in a given period, even if current taxes are not changed.

Since Ricardian equivalence considers irrelevant aspects of fiscal and budgetary policy and others as important, testing this approach is doable. Also, most economists, though, believes that Ricardian equivalence does not describe the consumer behavior, however, this approach was particularly important in the debate about the imbalance in public for two reasons:

- Ricardian equivalence actually describes the world or at least it gives a first approximation;

- Ricardian equivalence provides a theoretical basis for many other tests.

In essence, the Ricardian equivalence combines two basic ideas, namely:

– budget constraint that lower taxes today imply its future growth, given that public spending does not change;

– permanent income hypothesis, which concerns the fact that people base their consumption decisions on permanent income, which depends on the present value of income left after paying taxes.

6. Conclusions

Classical theories of fiscal and budgetary policy are based on a series of interrelated economic statements or policy that reflects attitudes toward the role and responsibilities of the sovereign state. These can be summarized as follows:

- government loans used to ensure balance in the fiscal and budgetary policies reduces the disposable income that could be used productively in the private sector;

- deficits extend the government's activities, thus contributing to increased public sector, and lead to irresponsible government action;

- government borrowing creates difficulties in ensuring future funding through the allocation of part of the increasingly large tax revenues to honor the obligations as debt amortization and interest on public debt. Thus, it appears finally to increases in taxes;

- unbalanced budgets lead to monetary depreciation (inflation);

- balanced budgets are a guide to transfer resources from the private to the public sector.

Each of the main characteristics of neoclassical theory has an important role in determining the impact of fiscal and budgetary policies. Thus, if consumers are rational, clairvoyants, and have access to perfect capital markets where capital accumulation, there will be a reduction of the permanent deficit while the temporary deficits will have a negligible effect on economic variables (consumption, savings, interest rates, etc..) If consumers are subject to the liquidity constraints then the impact of permanent deficits remain the same. However, temporary deficits should reduce savings and increase short-term interest rates.

Unlike the Keynesian theory, David Ricardo suggested that tax and fiscal policies do not exert any effect on the national economy. According to Ricardian equivalence government spending on goods and services, and marginal rates of taxation are what counts, while the mix of debt and tax revenues is irrelevant. This reason is related to the fact that the debt lead to higher taxes in the future. We can therefore speak of a theorem of fiscal and budgetary policy of neutrality.

These differences between the economic theories should be known so that it can be established a national economy diagnosis through a proper framing in a specific pattern corresponding to the economic economic theories.

Acknowledgement

This work was supported from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 „Performance and excellence in postdoctoral research in Romanian economics science domain" (contract no. 0501/01.11.2010).

References

- Alesina A. and Tabellini G., *External Debt, Capital Flight and Political Risk*, Journal of International Economics, vol. 27, november 1989.
- Auerbach Alan J. and Laurence J. Kotlikoff, *Dynamic Fiscal Policy*, manuscript, 1986.
- Barro Robert J., *Are Government Bonds Net Wealth?*, Journal of Political Economy, no. 82, november/december 1974, p. 1095-1117.
- Barro Robert J., *Reply to Feldstein and Buchanan*, Journal of Political Economy, 84, april 1976, p. 343-349.
- Barro Robert J., *The Impact of Social Security an Private Saving, Evidence from U.S. Time Series*, American Enterprise Institute, Washington, 1978.
- Bastable C.F., *Public Finance*, Macmillan and Co., Ltd., London, 1922, p. 611-657.
- Bernanke B. and Blinder A.S., *Credit, Money and Agregate Demand*, American Economic Review, Papers and Proceedings, 1988.
- Buchanan James, *Barro on the Ricardian Equivalence Theorem*, Journal of Political Economy, no. 84, april 1976, p. 337-342.
- Buiter Willem H., *Crowding Out and the Effectiveness of Fiscal Policy*, Journal of Public Economics, no. 7, june 1977, p. 309-328.
- Carlson Keith M and Roger W. Spencer, *Crowding Out and Its Critics*, Federal Reserve Bank of St Louis review, no. 57, december 1975, p. 2-17.
- Câmpeanu, Emilia, "Importance of fiscal and budgetary policies in the economy", paper present at the international conference "Financial and Monetary Stability in Emerging Countries", published in Theoretical and Applied Economics (supplement)

- David Paul A. and John L. Scadding, *Private Savings: "Ultrarationality" Aggregation and Denison's Law*, Journal of Political Economy, no. 82, march-april, 1974, p. 225-249.
- Diamond Peter A., *National Debt and Neoclassical Economic Growth*, American Economic Review, no. 55, 1965, p. 1125-1150.
- Feldstein Martin S., *Perceived Wealth in Bonds and Social Security: a Comment*, Journal of Political Economy, no. 84, april 1976, p. 331-336.
- Feldstein Martin S., *Social Security and Saving: the Extended Life Cycle Theory*, American Economic Review, no. 66, may 1976, p. 77-86.
- Greffe X., *L'approche contemporaine de la valeur*, Économica, Paris, 1972.
- Kochin Lewis A.. *Are Future Taxes Anticipated by Consumers?*, Journal of Money, Credit and Banking, no. 6, august 1974, p. 385-394.
- Malthus Thomas R., *Principles of Political Economy*, 2d ed., William Pickering, London, 1836, p. 409-412.
- Mill John Stuart, *Principles of Political Economy*, Ashley edition, Longmans, Green and Co., London, 1929, p. 874-877.
- Modigliani Franco and Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, American Economic Review, no. 48, june 1958, p. 261-297.
- Peacock A.T. and Weismann J., *The growth of Public Expenditure in the United Kingdom*, Allen and Unwin, London, 1967.
- Ricardo David, *Despre principiile economiei politice şi impunerii*, vol. I, II, Editura Academiei, Bucureşti, 1959, 1962.
- Ricardo David, *Funding System*, *The Works and Correspondence of David Ricardo*, vol. IV, ed. Piero Sraffa and M.H. Dobb, 1951, Cambridge, p. 149-200.
- Ricardo David, Principles of Political Economy and Taxation, The Works and Correspondence of David Ricardo, vol. I, ed. Piero Sraffa and M.H. Dobb, 1951, England, p. 243-249.
- Say Jean-Baptiste, *A Treatise on Political Economy*, translated from the 4th edition by C.R. Prinseo, Philadelphia: Lippincott, Grambo & Co., 1853, p. 428-483.
- Smith Adam, *Avuția națiunilor, cercetare asupra naturii şi cauzelor ei*, vol. I, Editura Academiei Române, Bucureşti, 1962.
- Smith Adam, *The Wealth of Nations*, Cannan edition Methuen & Co., Ltd., II, London, 1930, p. 409-411.
- Stiglitz Joseph E., *A Re-Examination of the Modigliani-Miller Theorem*, American Economic Review, no. 59, december, 1969, p. 784-793.
- Stiglitz Joseph E., *On the Irrelevance of Corporate Financial Policy*, American Economic Review, no. 64, december 1974, p. 851-866.
- Vickrey William, *The Burden of the Public Debt: Comment*, American Economic Review, no. 51, march 1961, p. 132-137.