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Original Paper

An Economic Philosophy towards the Axiological Good via Taxation

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Abstract

Using synthetic epistemological model with axiological framework, it is revealed that tax reduction is good policy when tax rate is lower than normal, and that tax increase is good policy when tax rate is higher than normal, during economic overheat. Meanwhile, it is found that tax reduction is good policy when tax rate is higher than normal and that tax increase is good policy when tax rate is lower than normal, during economic depression. Around two economic issues: 1) how to distribute social wealth between rich agents and poor ones, as well as nations and enterprises? 2) how to maintain social justice via making balance between equality and efficiency? It is suggested to apply elastic tax system towards the axiological good in social economy.

Keywords

Economic philosophy, economic axiology, economic epistemology, economic model, taxation

1. Introduction

Economics is not only a science on the goods production and consumption (Samuelson & Nordhaus, 2005), but also the epistemology and axiology on the wealth distribution, related to economic philosophy (Mäki, 2012). The good of rationality is a meaningful issue for understanding national economic policies and individuals' economic behaviors (Arrow, 1963; Davis, 2003; Sen, 2002, 2005), so that it is necessary to study the axiological good of wealth distribution and redistribution in economics.

Mostly, economists studied the macroeconomics via interest rate and exchange rate (Friedman & Hahn, 2000; Tobin, 1969; Floyd, 2010), also considered the welfare economy and wealth redistribution concerning efficiency and equality (Feldman & Serrano, 2005; Nicola, 2013). Actually, from both macroeconomic and microeconomic views (Arrow & Debreu, 1954; Samuelson & Nordhaus, 2005), taxation is also a key element in economic system as an interdisciplinary issue (Lamb et al., 2005),

though there is lack of a unified analytical model to probe into both the epistemological true and axiological good. In this article, based on current economics knowledge, around two economic issues: 1) how to distribute social wealth between rich agents and poor ones, as well as nations and enterprises? 2) how to maintain social justice via making balance between equality and efficiency? I combined an epistemological model with axiological framework to explore the solutions to explain national economic policies towards the axiological good, in which taxation plays a central role.

2. Methodology I: An Epistemological Model

In a proposed synthetic model (Ye, 2017), Mundell–Fleming model (Fleming, 1962; Mundell, 1963), money supply-demand model and Laffer curve (Laffer, 2004) are combined within the framework of interest, exchange and tax rates. The analytical model is illustrated in Figure 1. To avoid confusing with imaginary unit and time, I apply Greek alphabetic γ, π and τ to denote interest rate, exchange rate and tax rate respectively.

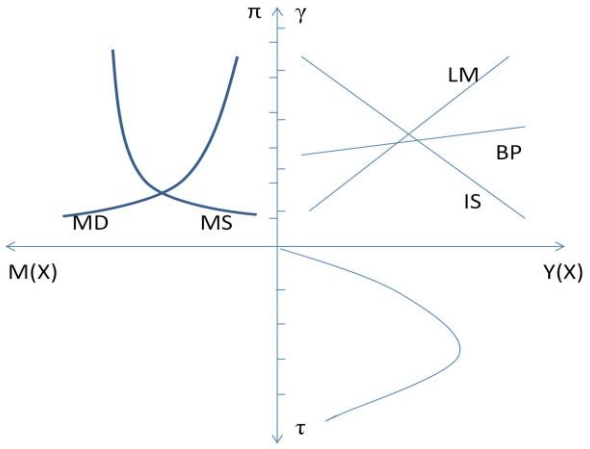

Figure 1. The Synthetic Model Integrating Interest Rate, Exchange Rate and Tax Rate

In the synthetic model, the three rates supply themselves as frame dimensions, replacing common price dimension, where nominal interest rate γ and exchange rate π are integrated in vertical coordinate within a quasi-linear relation, Dombusch's (1976) formula, as follows, in which γ* is real rate of interest and π' real exchange rate, linking γ and π.

$$\gamma - \gamma^* = \frac{\pi'}{\pi} - 1 \tag{1}$$

Meanwhile, when a steady-state economy is characterized by the inflation rate λ, the nominal rate of interest γ and the real rate of interest γ* are linked by linear relation $\gamma^* = \gamma - \lambda$ (Feldstein, 1976). If the elasticity of expectations σ is less than unity, there is

$$\frac{d\gamma}{d\pi} = \sigma - 1 < 0 \tag{2}$$

This synthetic model includes the following three parts:

The first part is Mundell–Fleming model, characterized by IS–LM-BP curves, described by the domestic interest rate plotted vertically and real GDP (Y) plotted horizontally, where IS curve represents the equilibrium of product market, LM curve means the equilibrium of money market, and BP addresses the balance of payments or international income-payment. Geometrically, the IS curve is downward sloped and the LM curve is upward sloped, while the BP curve is upward sloped unless there is perfect capital mobility, in which it is horizontal at the level of the world interest rate. In the IS-LM-BP graph, under less than perfect capital mobility, the positions of both the IS curve and the BP curve depend on the exchange rate, since the IS-LM graph is actually a two-dimensional cross-section of a three-dimensional space involving all of the interest rate, income, and the exchange rate. Under perfect capital mobility, the BP curve is simply horizontal when the level of the domestic interest rate is equal to the world interest rate level. In the pure IS-LM model, the domestic interest rate is a key component for keeping both the money market and the commodity market in equilibrium. However, unlike the pure IS-LM model, Mundell–Fleming model adds the international financial elements to fit to the open economy assumption.

The second part is the money demand and supply curve, where the demand curve of money illustrates the quantity of money demanded at a given interest rate. Generally, the demand curve of money is downward sloping, which means that people want to hold less of their wealth in the form of money when interest rates on bonds and other alternative investments are higher The supply curve of money illustrates the quantity of money supplied at a given interest rate. Unlike a typical supply curve in the commodity market, the supply curve of money could be vertical, because it might not depend on interest rates. In fact, it depends entirely on decisions made by the central bank, as the central bank controls the supply of money. However, the market mechanism could also introduce the demand-supply interaction into the money market to illustrate the money demand and supply with using normal demand-supply curves. The equilibrium in the money market takes place when the quantity of money demanded is equal to the quantity supplied. Since there are complex relations between interest and exchange rates (Sánchez, 2005; Floyd, 2010), for simplifying discussed issues, it is designated that real exchange rate and nominal interest rate are linked by $\gamma\uparrow\rightarrow\pi^*\uparrow$, characterized by national money vs. foreign money, in other words, interest and exchange rates keep changes in the same direction.

The third part is Laffer curve, which is one possible representation of the relationship between rates of taxation and the hypothetical resulting levels of government revenue. Because the government revenue is proportional to GDP, I translate the Laffer curve into the coordinate system with tax rate plotted down-vertically and real GDP (Y) plotted horizontally here. Following claims to illustrate the concept of taxable income elasticity, taxable income will change in response to changes in the rate of taxation.

Thus, the synthetic model integrates interest, exchange and tax rates, where interest and exchange are plotted up-vertically with different calibration in the same direction, while tax rate is plotted down-vertically. The Mundell–Fleming model (IS–LM-BP curves) is set in the first quadrant; the

money supply-demand model occupies the second quadrant; and the Laffer curve is arranged in the fourth quadrant. It is valuable to emphasize that interest rate can be changed by artificial operations via bank in a discontinuously way, while the exchange rate randomly changes following market, and tax rate is rigidly determined by laws, mostly.

3. Methodology II: An Axiological Framework

Suppose that there are three kinds of economic subjects in the society, i.e. nations (governments), enterprises and individuals (persons), where bank is also a special kind of enterprise. They construct following relations as shown in an axiological framework (see Figure 2).

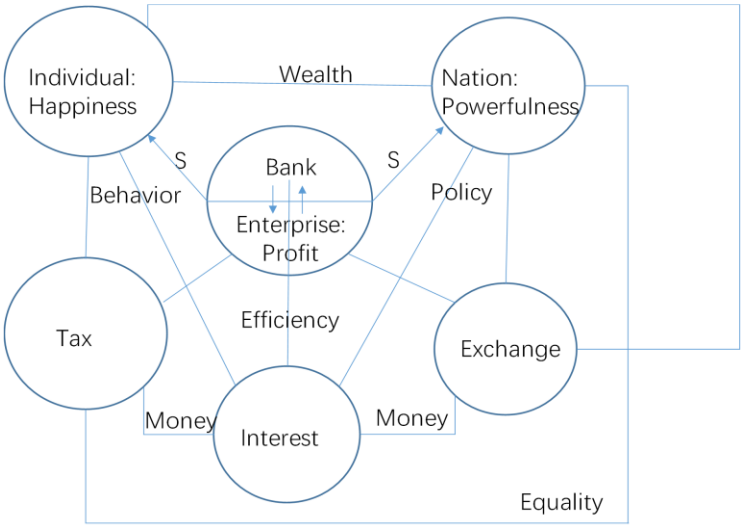

Figure 2. An Axiological Framework Supported by Tax, Interest and Exchange Ratios

In Figure 2, the nodes represent subjects and ratios, while the links denote relations with value views, where individuals work towards happiness, nations act towards powerfulness and enterprises want profit for supporting nation and individual (marked by S). In the economic system, both banks and enterprises need efficiency, and the nation or society needs equality, while individual behaviors are affected by national policies and goods-money supply as well as all ratios based on money. It is expected that the framework works towards the axiological good.

By combining Figure 1 and Figure 2, the good policies can keep balance between demand and supply, consumption and production, rich and poor, as well as the true and the good. At the level of nation, reducing tax is the good policy for raising social welfare, and increasing tax is also the good policy for balancing rich and poor. At the level of individual, stable consumption and tax payment are the good behaviors. At the level of bank/enterprise, interest/profit-increase is the good strategy during economic growth and inversely interest/profit-decrease is the good strategy during economic decline. At all levels, charitable donations are always welcome for benefiting society towards the good.

4. Analysis: Towards the Good as National Policy

In policy analysis, traditionally, macroeconomic policy is usually implemented through two sets of tools: monetary policy and fiscal policy. Both forms of the policy are used to stabilize the economy, which usually means boosting the economy to the level consistent with economic resources.

On monetary policy, central banks implement the policy by controlling the money supply through several mechanisms. Typically, central banks take action by issuing money to buy bonds (or other assets), which boosts the supply of money and lowers interest rates, called expansionary money policy; or in the case of contractionary monetary policy, banks sell bonds and take money out of circulation. Also, bank can continuously shift the money supply to maintain a fixed interest rate target. Some banks allow the interest rate to fluctuate and focus on targeting inflation rates instead. Central banks generally try to achieve high output without letting loose monetary policy to create large amounts of inflation.

On the other hand, fiscal policy is the use of government revenue and expenditure as instruments to influence the economy, including tools such as expenditure, taxes, and debt. However, the effects of fiscal policy may be limited by crowding out. When government adopts spending projects, it limits the amount of resources available for private sectors to use. Crowding out occurs when government spending simply replaces private sectors output instead of adding additional output to the economy. Crowding out also occurs when government spending raises interest rates with restricting investment. Defenders of fiscal stimulus argue that crowding out is not a concern when the economy is depressed, plenty of resources are left idle, and interest rates are low.

Economists usually favor monetary policy over fiscal policy because it has two major advantages. First, monetary policy is generally implemented by independent central banks instead of the political institutions that control fiscal policy, where independent central banks are less likely to make decisions based on political motives. Second, monetary policy could have quicker reflection than fiscal policy, as central banks can quickly make and implement decisions while discretionary fiscal policy may take time to pass and even longer to carry out.

Yet, actually, the economic effects of monetary or fiscal policy are restricted, as the changes of interest ratio will affect three rates.

Using the above synthetic model integrating interest, exchange and tax rates, when economy overheats or expands (Y↑↑), a policy analysis for the tax reduction and the tax increase is shown in Figure 3.

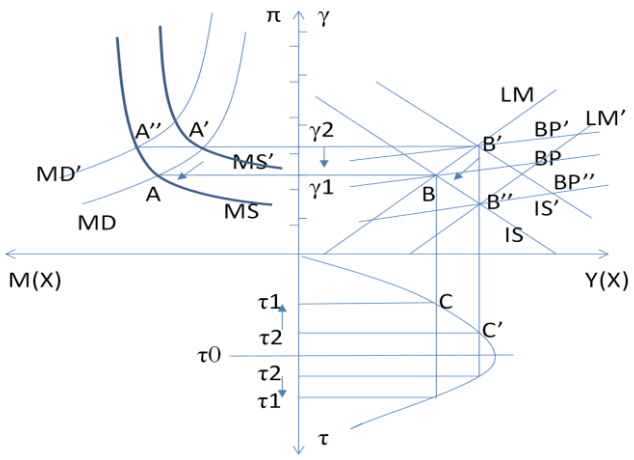

Figure 3. A Policy Analysis for the Tax Reduction and the Tax Increase during Economic Overheat

The policy of Figure 3 implies that the tax reduction should be good if tax rate is lower than normal ($\tau < \tau 0$) and tax increase should be good if tax rate is higher than normal ($\tau > \tau 0$), during the period of economic overheat or expansion (Y↑↑), which would benefit following items.

(1) At national level, decreasing official corruption (Y↑↑caused B -> B', policy τ2 -> τ1 would lead to IS' -> IS, or via LM' -> LM and B'' -> B for reaching optimal equilibrium A-B-C).

(2) At enterprise level, increasing R&D input (Y↑↑caused A -> A', policy τ2 -> τ1 would lead to MS'->MS, or via MD' ->MD and A''->A for reaching optimal equilibrium A-B-C).

(3) At individual level, stimulating consumption and charitable donation (Policy τ2 -> τ1 would lead to MS'->MS or MD'->MD for reaching optimal equilibrium A-B-C).

On the other hand, when economy depresses or contracts (Y↓↓), a policy analysis for the tax reduction and the tax increase is shown in Figure 4.

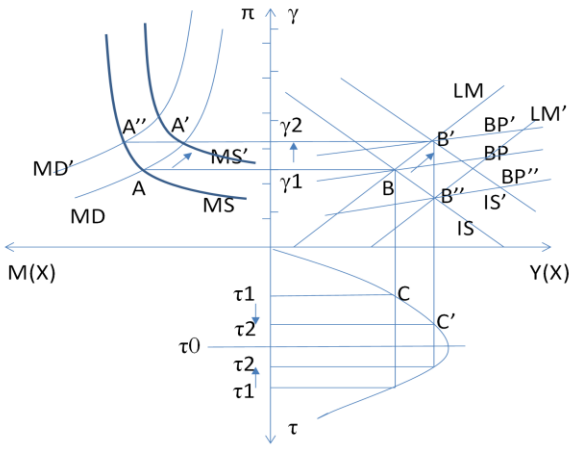

Figure 4. A Policy Analysis for the Tax Reduction and the Tax Increase during Economic Depression

The policy of Figure 4 implies that the tax reduction should be good if tax rate is higher than normal ($\tau > \tau 0$) and tax increase should be good if tax rate is lower than normal ($\tau < \tau 0$), during the period of economic depression or contraction (Y↓↓), which would benefit following items.

(1) At national level, balancing the rich and the poor (Y↓↓ caused B' -> B, and then policy $\tau 1$ -> $\tau 2$ would lead to IS -> IS', or via LM -> LM' and B'' -> B' for reaching optimal equilibrium A'-B'-C').

(2) At enterprise level, decreasing bank loan (Y↓↓ caused A' -> A, and then policy $\tau 1$ -> $\tau 2$ would lead to MS->MS', or via MD ->MD' and A''->A' for reaching optimal equilibrium A'-B'-C').

(3) At individual level, reducing consumption, particularly deleting luxury (Policy $\tau 1$ -> $\tau 2$ would lead to MS->MS' or MD->MD' for reaching optimal equilibrium A'-B'-C').

In both Figure 3 and Figure 4, the normal point of tax rate ($\tau 0$) can be defined as legal point in tax laws, or theoretical expected point.

Certainly, the tax policy look complicated, more than monetary policy, where the interest ratio is an effective tool for regulating economy by raising or reducing interest rates. However, the tax policy may be useful tool for balancing social wealth, particularly combining equality and efficiency. A good tax policy could reach axiological good. In considerations of political economics, the tax reduction on enterprises could benefit all enterprises, while the tax increase on rich persons could benefit poor people.

5. Discussion: The Good of Wealth Distribution

There are two economic issues concerned by economic philosophy: 1) How to distribute social wealth between rich agents and poor ones, as well as nations and enterprises? 2) How to maintain social justice combining equality and efficiency?

Taxation is not only a technical matter, but also preeminently a political and philosophical issue, perhaps the most important political economic issue. Without taxes, society has no common destiny, and collective action is impossible. It is certainly correct that progressive taxation plays a key role in wealth redistribution. A progressive tax is a crucial component for social equality, which plays a central role in its development and in the transformation of the structure of inequality in the world, and remains important for ensuring the viability of social equality in the future.

In political economics, wealth distribution and capital profit are always important issues for discussion, where the former concerns social equality and the latter represents economic efficiency. In some cases, if we pay attention to social equality of wealth redistribution, we might lose economic efficiency. For maintaining economic efficiency, we might lose partly social equality. Economic policy actually looks like an art for balancing equality and efficiency, where the social wealth redistribution (regulation via tax rate) and economic efficiency (realization via interest rate) become important factors for these applications.

Generally, tax, which is dominated by government and rigidly restricted by laws, is the key element to answer these questions. For social equity, it is better to set high tax rate for charging rich agents and

low tax rate to protect poor ones. Interest rate can be changed by the central bank, referring to economic level and situation. And exchange rate seems randomly changeable following international money market, though some nations could also exert impacts on its changes.

Politically, tax, interest, and exchange rates serve for national objects, so that a national government cannot abandon the domination of tax rate, interest rate, and exchange rate. In a national view, interest rate focuses on money efficiency, which could optimizes the money market and the liquidity. Exchange rate also expresses national finance policy, which could regulate international trade and is determined by international financial market. The tax rate marks national policy for the redistribution of social wealth, which pursues social equality.

Also, the tax rate may be affected by interest rate. In Figures 3 and 4, all policies of tax regulations are equivalent to reducing interest ($\gamma 2 \rightarrow \gamma 1$) when economy overheats or expands ($Y\uparrow\uparrow$), and all policies of tax regulations are equivalent to increasing interest ($\gamma 1 \rightarrow \gamma 2$) when economy depresses or contracts ($Y\downarrow\downarrow$). Therefore, it is better to keep reducing interest during economy expansion and keep increasing interest during economy depression when taxation policies are applied.

In any society, there are always rich and poor people. The government gets/collects tax revenues to support public affairs and to regulate rich-poor gaps, for realizing social equality via wealth redistribution. Both social and personal surplus money might cumulatively transfer to capital, and the capital demands effective reciprocation via interest or investment, in which taxation is a key element (Piketty et al., 2014).

Given that consumption and investment expenditure together account for a large percentage (about 80%) of GNP in major nations (Abel, 2000), taxation is a political economic consideration for approaching the axiological good to adjust rich and poor via tax. If we consider more factors, including wages, inflation, employment, welfare and so on (Phelps, 1967; Lucas & Rapping, 1970), we will meet a very complicated economic system, in which the taxation is also an important factor.

6. Conclusion and Suggestion

Tax, interest, and exchanges are three important control factors in both macroeconomic and microeconomic systems, where tax, interest, and exchange rates interact with each other. Tax expresses the economic policy of governance, which reflects social equality. Interest rate is a key parameter for regulating money supply, which determines the national finance. Exchange rate is a vital factor for international business, which determines the international economy.

In the previous economic system, tax rate had long-term stability, regulated by laws, while interest rates had short-term stability controlled by banks and the exchange rate changed randomly following market's change. As tax rate regulates wealth redistribution for approaching social equality, interest policy represents national finance policy for optimizing money market, and exchange rate describes international economic policy for realizing national benefits, tax rate possesses a key role and would regulate following national demands.

According to above research, during economic overheat, tax reduction is good policy when tax rate is lower than normal, and that tax increase is good policy when tax rate is higher than normal. Meanwhile, during economic depression, tax reduction is good policy when tax rate is higher than normal and that tax increase is good policy when tax rate is lower than normal. Therefore, it is suggested to change the rigid tax rate to a changeable tax rate, following economic demands. An elastic tax system or elastic taxation policy might benefit economic equilibrium and development towards the axiological good for balancing efficiency and equality, which is suggested to apply in policy design of national economy, for reaching maximum social welfare in future.

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