An Analysis of the Effects of Economic Policies on Economic Development

by

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Abstract. The differences in economic performance and welfare between countries were both a major source of tensions in the world and a leading topic of discussion for the economic science. The diachronic perspective on the issue of discrepancies between the wealth of different nations highlighted the importance of economic growth in creating and supporting these discrepancies. By being a major macroeconomic theme, the economic growth is very often in the forefront of policy makers’ concerns. This makes the policies supporting economic growth a frequent subject of the programs and projects elaborated by political parties. The momentum gathered by growth policies and strategies determined the development of certain specialized models used to test their effects on the dynamics of different economies. This paper tests the effects of economic policies on economic growth performances using various instruments, means and methods.

Keywords: economic growth, development, economic policies, welfare
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1 Introduction

The proliferation of economic growth policies that followed the development of a new economic growth theory needs to be evaluated. Thus, resorting to macroeconomic modeling becomes absolutely necessary. The models can test both the value of the assertions of certain economic theories and the practical application of these theories. Moreover, economic models can simulate the possible effects of economic policy measures before these measures are applied.

2 Brief literature review

The literature studying the effects of economic policies on growth is very broad: from openness (Ailenei, Dobre, Marinas, 2011), geographic concentration (Dan, 2012) and international trade (Frankel and Romer, 1999), to fiscal policies (Altăr, Necula, and Bobeică, 2012), financial development (Levine, Loayza and Beck, 2000) and macroeconomic policies (Fischer, 1993). All these papers share at least one trait: all of them find at least one element of national policies that is strongly correlated with economic growth, even though it is hard to say which policies matter for growth (Levine and Renelt, 1992). The phenomena that received most of the attention are the fiscal policies, inflation, and black market exchange premium, financial repression versus financial development, exchange rate overvaluation and commercial openness. The recommendation for countries to adopt sound policies in all these dimensions was called by John Williamson “The Washington Consensus”.

3 Testing the effects of economic growth policies

Depending on the instruments and parameters that were used in this respect, the scientists found that economic growth policies have either significant or minor effects. Therefore, Rebelo (1991) considers that the output depends to a large extent on the capital stock $K$, which includes both the human and physical capital. The tests carried out by him showed that the economic growth policies have major effects. Easterly (2005) indicates that increasing the tax rate from zero to 30 percents would result in a reduction of the growth rhythm with 3.5 percentage points. Such a policy, if carried out for 30 years, would make
the income be 65% lower than it would have been in the absence of this tax. Consequently, we can have a possible explanation for the poverty of some nations. Policies effects are even stronger in growth models with externalities and increasing returns of capital. Easterly (2005) assumes the existence of a large and fixed group of individuals where the capital owned by each individual has non-pecuniary externalities for the rest of the members. If the capital stock per unit of effective labor includes knowledge or technology, it is plausible that these goods are non-rival and partially non-exclusive. For instance, the people in almost every field engage in discussions concerning their activities, discussions that could not be understood by the others, but that lead to an accumulation of productive knowledge for those in that field.

In the case of multiple equilibria, the return of capital is even higher as the initial capital stock is larger. Figure 1 shows the possible effects. When the tax rate is lower, the capital return is the left line with increasing slope (line 1). If the initial capital stock is on the left of point $A$ (where the return after taxing is lower than $\delta + \rho$; where $\delta$ is the depreciation rate of capital and $\rho$ is the discount rate), we will be entering a vicious circle with negative growth of consumption and a reduction of capital stock. Any point to the right of $A$ means a virtuous circle of accelerated consumption growth and capital accumulation. If tax rates are increased, the return line will move to the left (line 2), meaning that any point to the left of $C$ will enter the vicious circle of decline. An economy with the capital stock $B$, which was in the area of expansion when the tax rates were lower, will now be in the area of decline due to the high rates of taxation. A change in the economic policy has an even more abrupt impact upon national prosperity – a fact that could even represent the difference between subsistence consumption and industrialization. As in the models with multiple equilibria, the initial conditions are important and small changes can have enormous consequences.

![Figure 1](image.png)

Figure 1 Multiple equilibria with increasing returns of capital and different tax regimes. Source: Easterly (2005)

Figure 1 anticipates the instability of growth rates if an economy is in the middle region ($B$) and is subject to continuous fluctuations of policies. The economy would be swinging between positive and negative growth depending on how the policies are changed. This hypothesis may account for the spectacular changes observed in the growth rhythms encountered in countries such as Jamaica, Cote d’Ivoire, Guyana and Nigeria.

The accumulation of human and physical capital cannot support long term growth in the
absence of technological progress. As the policies can have effects only through the incentives that stimulate capital accumulation, it means that they cannot support growth by themselves in this model. The tax rate on capital goods does not have any effect on the growth rate in steady state. However, the policies have significant potential effects on the level of per capita income. Thus, an increase in the tax rate must always be compensated by a relative decrease in the capital stock. A high tax on investment inhibits capital accumulation, therefore leading to a decrease in the relative income to the level of technological endowment. If the capital contribution were 2/3 – taking into consideration both the human and physical capital – then a reduction in the tax rate from 50% to zero would increase the income by 2.25 times. If the capital contribution were 0.8 – as suggested by some studies – then the reduction of income would increase the income by 5 times. Despite the fact that, in a steady state, changing the tax rate would not have any effects, there will be major changes in growth when moving from one policy to another. Figure 2 simulates the decreasement of the tax rate from 50% to zero.

If this were correlated with the empirical evidence, then the anticipated difference in growth rates before and after lowering the tax rate could be applied to the differences in growth that are observed between countries with high tax rate and countries with low tax rate. This difference was analyzed in practice by testing the effects of current policies on growth, depending on the initial income. The initial income can be considered as being the policy regime that exists before the analysis. If the current policy anticipates an income steady state which is superior compared to the previous steady state – the one corresponding to the initial income, then it will take place a transition similar to the one depicted in Figure 2.

4 Concluding remarks

The momentum gathered by growth policies and strategies determined the development of certain specialized models used to test their effects on the dynamics of different economies. These tests were made by using various instruments, means and methods of economic growth policy.
In conclusion, the way in which certain economic growth policies are implemented is related to the capacity of simulating the previsible effects of some specific measures ante factum, respectively to the ingenuity of the decision makers in combining traditional factors with the neofactors which are fundamental for economic growth.

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References


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