Chapter 63

Tunisian Fiscal Policy Effects in a New Keynesian Model With Price Rigidity and Monopolistic Competition

Slah Slimani
https://orcid.org/0000-0003-3568-3019
University of Tunis El Manar, Tunisia

ABSTRACT

This paper applies a multivariate neo-Keynesian DSGE model to study the effects of changes in Tunisian public spending on the business cycle, private consumption, wages, interest rate, and inflation rate in the presence of monopolistic competition and price nominal short-term rigidity. The main finding of this paper shows a Tunisian pro-cyclical fiscal policy. Expansionary public spending has two initial effects. The output increases due to the usual increase in labor supply, and aggregate demand increases due to an incomplete crowding out of private consumption. By increasing aggregate demand, the central bank increases the nominal interest rate, which moves in concert with inflation in order to counteract inflationary pressures. Households reduce their consumer spending at the same time as the real interest rate increases. Some companies are responding to the change in the interest rate by reducing their expenses, their employment demands, and their capital utilization rates.

INTRODUCTION

The Great Recession of 2008 marked the revival of fiscal activism as an instrument of cyclical stabilization. Consequently, the use of this tool for purposes of stimulating growth has revived the debates on the effectiveness of this choice, by reinvesting in the theme of the level of short and long-run fiscal multipliers. The majority of studies assumed that the value of the short-run multiplier is positive and close to unity, while the long-run effect of a budget shock depends on economic cyclical situation. Thus the effects of fiscal policy are likely to be sustainable if the central bank cannot react to fiscal policy

DOI: 10.4018/978-1-6684-7460-0.ch063

and if there are financially constrained private agents. Hence the dynamic effects of this policy depend on economic context. In standard models assuming the rationality of agents by maximizing their intertemporal utility, Ricardian equivalence results in the neutrality of long-term effects. Also, if goods and factor markets are flexible, the short-run effects are neutral. However, these results are called into question in the presence of hypothesis of rigidity in the formation of prices and wages. The heterogeneity and the divergences of results relative to the level of short and long-term multipliers are strongly dependent on theoretical framework used. According to Gechert and Will (2012), the average cumulative fiscal multiplier from neo-Keynesian DSGE models and VAR models is 0.8. These authors suggest that even in the short term, the impact is positive on GDP.

For these reasons, the author analyze, through this paper, the effects and transmission mechanisms of public expenditure shocks on the macroeconomic variables of Tunisian economy, using a dynamic and stochastic general equilibrium model (DSGE) with government action. This model will allow us to analyze the macroeconomic dynamics of budgetary fluctuations in Tunisia resulting from aggregate macroeconomic variables, such as production, private consumption, inflation and interest rate.

This paper proceeds as follows: section 1 discusses fiscal policy in Tunisia and relative stylized facts. Section 2 reviews the literature on neo-Keynesian DSGE models. Section 3 presents the theoretical model and section 4 simulates the impact of public expenditure shocks on the dynamic of Tunisian economy.

FISCAL POLICY IN TUNISIA: CYCLICAL CHARACTERISTICS AND STYLIZED FACTS

Post-revolution Tunisia continues to face a significant deterioration in its public finances. Since 2011, policies have been followed to cope with changes in the economic environment, unforeseen expenses, and often overly optimistic assumptions when preparing the budget. The composition of public spending favors current spending to the detriment of investment spending and is therefore not geared towards supporting the long-run growth. The main component of current expenditure, civil service wage bill represented 41.5% of the budget and 14% of the GDP in 2017, while public investment, although slightly increasing since 2015, respectively represented only 16% and 6.4%.

The deterioration of public finances is also linked to the maintenance of the policy of subsidizing certain basic products and energy, as well as to significant social transfers which represented, in 2017, about 16% of the budget. The increase in oil prices combined with the sudden depreciation of the dinar in April 2017 led to a significant slippage of the budget, of some 900 million dinars intended for energy compensation. Consolidation of public finances should however take place within the framework of the 2018 finance law, which provides for an increase in tax revenue of 10% compared to 2017, representing around 2.2 billion dinars, thanks to the increase in value added tax (VAT) and a scheduled quarterly increase in fuel prices, in order to align them with international market prices and limit the cost to public finances. The budget is expected to grow only 4% in 2018 compared to 11% in 2017, half as fast as inflation, which is expected to rise to 7.1%. This slowdown combined with control of current expenditure should allow a significant decrease in the level of budget deficit during the period 2018-2019. The creation of additional budgetary space, through a large-scale tax reform allowing the collection of new revenues, and a restructuring of the composition of public expenditure in favor of productive investment, remain essential to raise the level of growth.

Related Content