Box 7.1

Interaction of Monetary and Fiscal Policies

This box presents a number of interaction channels and improvement areas to enhance the coordination between monetary and fiscal policies. While fiscal policy has recently provided a short-term contribution to disinflation through administered prices and tax adjustments (Box 3.1), additional accommodative fiscal measures introduced since the end of 2017, when economic activity was robust, put upward pressure on inflation through other channels. The introduction of additional accommodative fiscal measures since the end of 2017 when economic activity was robust has affected inflation through various channels even though administered prices have been set by the government in an attempt to control inflation. The first channel is where expansionary fiscal policies boost aggregate demand through the government expenditure multiplier. With the output gap remaining in positive territory recently, the increase in aggregate demand seems to have pushed inflation higher. The risk premium is another channel through which expansionary fiscal policy influences inflation. Maintaining an expansionary fiscal policy stance when monetary policy tightens causes the country's risk premium to rise and creates more pressure on exchange rates in an environment of tight global financial conditions along with elevated inflation and widened current account deficit (Box 5.1). To contain these risks and bring inflation back on a downward path, it is critical to strengthen the ongoing coordination between monetary and fiscal policies with a view to macro balancing and to openly communicate the relevant steps to be taken.

On the whole, the coordination between public policies seems to play a determining role in the country's internal and external imbalances through economic activity and inflation. In Turkey, the challenges of high inflation and a wide current account deficit call for attention to the effects of any domestic demand-boosting fiscal measures on inflation and the external balance. Regarding disinflation, the coordination between monetary and fiscal policies does not just mean aligning the inflationary impact of administered prices with the inflation target. The size of the fiscal policy effect on aggregate demand and the stage of the economic cycle also play an important role in this context.

Some of the government's economic policies are more structural in nature, aimed at increasing the country's long-term potential growth rate, whereas others are more conjunctural, aimed at minimizing cyclical fluctuations in the economy. Fiscal policy can serve both purposes while monetary policy only helps reduce fluctuations around the long-term trend. Thus, to minimize macroeconomic fluctuations, monetary policy and fiscal policy have to be coordinated.

Cyclical fiscal policies and monetary policy aim to maximize household welfare by affecting macroeconomic fluctuations.[1] Among observed variables, both the levels of inflation and output gap and their volatility (fluctuations) are influenced by these policies. The economic literature has studied how the objectives for which fiscal policy operates can also affect economic performance. For example, Büyükbaşaran, Çebi and Küçük Yeşil (2017) have found that incorporating inflation and output gap volatility into the design of fiscal policy delivers more successful results for the reduction of inflation and output gap volatility, relative to when only debt stability or output gap volatility is factored in. If both monetary and fiscal policies address the volatility in inflation and economic activity, two of the most fundamental indicators of macroeconomic stability, the costs associated with tradeoffs can be smaller and the policies in

[1] Examples of studies that have explored the optimal monetary and fiscal policy combination to maximize social welfare include Chari and Kehoe (1999), Schmitt-Grohe and Uribe (2004) and Benigno and Woodford (2003).

place can be more effective.

The first and most direct channel by which fiscal policy affects inflation is where expansionary fiscal policies boost aggregate demand through the government expenditure multiplier. Studies in the academic literature indicate that there are many determinants of an effective fiscal policy, and the state of the business cycle, the exchange rate regime, trade openness, the type of fiscal shocks, the size of automatic stabilizers, public fiscal stance, monetary policy actions, the soundness of the financial system and uncertainty can play a major role in determining the sign and size of the fiscal multiplier (Batini et al., 2014). There are also studies showing that the fiscal multiplier might be higher in countries with a lower debt level (Huidrom et al., 2016).

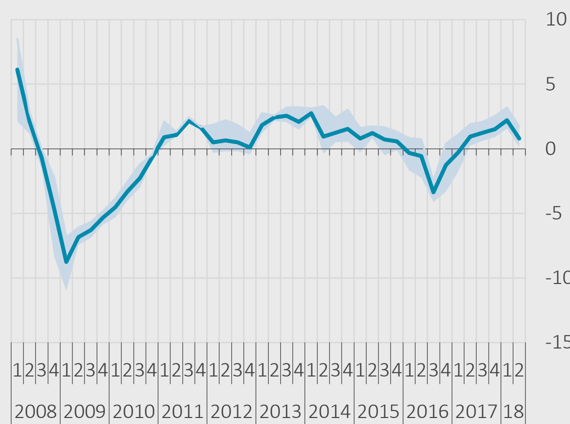
Thus, a conjunctural fiscal policy should be designed bearing in mind that fiscal multipliers may change in high or low growth episodes. Some studies in the academic literature have concluded that increased public spending might have a more substantial effect on GDP, particularly during periods of low growth/recession (Auerbach and Gorodnichenko, 2012, 2013; Baum and Koester, 2011; Çebi and Özdemir, 2016). Accordingly, in high growth episodes with a positive output gap and an economy showing signs of heating up, increased public spending will have smaller effects on growth but the resulting incurred cost (tax hike or debt increase) will rise. Therefore, it is important to use the existing fiscal space to revive economic activity and reduce unemployment rates in low growth episodes, and to curb government spending and restore budgetary discipline in high growth episodes. The fiscal discipline to be secured by cutting back on government spending is also believed to contribute to increasing domestic savings in countries with wide current account deficits.

The risk premium is another channel through which expansionary fiscal policy has a more indirect but a bigger potential impact on inflation. Charts 1 and 2 illustrate that despite the strong momentum achieved in the economy, the primary balance adjusted for the economic cycle that represents the discretionary component of the fiscal policy has been on the decline since 2016. In other words, in 2017, when the output gap was in positive territory (when the economic growth outperformed its potential), the fiscal policy remained accommodative. This situation pushed the country's risk premium to high levels by causing investors to question the coordination between public institutions in charge of achieving macroeconomic stability as it hampered the fight against inflation. In addition to such concerns, the onset of the deterioration in the current account deficit, budget deficits that started to present an unfavorable outlook despite being at manageable levels compared to peer economies, and exchange rate depreciation led by increasing risk premium have also been instrumental in pushing inflation up. As a matter of fact, Box 5.1 reveals that in times of tight financial conditions, deteriorations in components such as the current account balance, international reserves and budget balance cause Turkey's risk premium to diverge negatively from those of peer economies. Therefore, in addition to improving these components, communicating these developments in a more transparent and comparable fashion is considered important for management of expectations and control of risk perceptions.

There remain significant to-be-improved aspects in tax and spending policies to achieve fiscal policy implementation overseeing macroeconomic imbalances as well as debt stabilization, and to strengthen the coordination between monetary and fiscal policies. Regarding tax policies, a simpler and more efficient tax system, a more effective fight against unregistered economy and expansion of the tax base will substantially increase the income generation capacity of the government and will help increase the share of direct taxes in total tax revenues. Furthermore, consideration of predictability in the design of tax policies will affect spending and saving decisions of both public and private sectors positively.

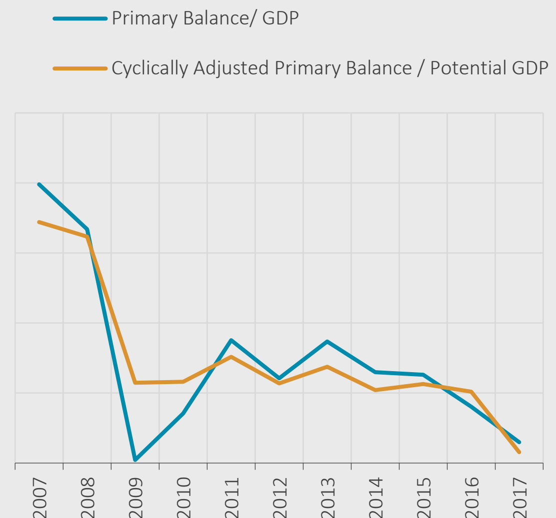
Given that tax revenues play an important role in funding government spending, it is essential to draw up an effective spending policy in addition to an effective tax policy. Besides, as the composition of government spending is also one of the determinants of macroeconomic equilibrium, increasing the efficiency in government spending and channeling public investments towards sectors that will boost the potential production capacity in the long run will contribute to social welfare. Finally, communication of the fiscal policy implementation to the public is important due to its effects on expectations management and the country's risk premium.

Chart 1: Output Gap (Average and Minimum/Maximum Band)



Source: CBRT calculations.

Chart 2: Cyclically-Adjusted Primary Budget Balance (Percentage of Potential GDP, %)



Sources: Ministry of Finance, CBRT calculations.

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