The effects of oil shocks on government expenditures and government revenues nexus in Iran (as a developing oil-export based economy)

The main purpose of this study is to investigate the dynamic relationship between government revenues and government expenditures in Iran as a developing oil export based economy. Moreover, I want to know how government expenditures and revenues respond to oil price (revenue) shocks. I use two different groups of the variables with two different time periods (quarterly and annually) to investigate the robustness and reliability of the results and to provide a more comprehensive base for comparison against different methodologies. For the first group of the variables (including oil price, oil revenues to GDP ratio, government total expenditures to GDP ratio and a dummy variable for capturing the effects of war with Iraq) I apply an SVAR model using annual data for the period 1970-2008. The results of the impulse response functions and variance decomposition analysis indicate that the causality is running from oil revenues to GDP ratio to government total expenditures to GDP ratio. Moreover the contribution of oil revenue shocks in explaining the government expenditures to GDP ratio is stronger than the contribution of oil price shocks. For the second group of the variables (oil revenues, government total revenues, government current expenditures, government capital expenditures, money supply and CPI) unrestricted VAR and VEC models have been applied using quarterly data for the period 1990:2-2009:1. The results of the impulse response functions and variance decompositions analysis for both VAR and VEC models indicate that the strong causality is running from government revenues to government expenditures (both current and capital) in Iranian economy while the evidence for the reverse causality is very weak. The results show that in the VEC model which the long-run behavior of endogenous variables is restricted to converge to their co-integration relationships, oil revenue shocks can affect the other macroeconomic variables more directly while in the VAR model this changes and works through the total revenues channel. Moreover the findings indicate that government revenues, government expenditures and money supply are important determinants of domestic price level in Iranian economy. Overall my results support the revenue-spending hypothesis for Iran. In this context Iran should enhance the effectiveness of fiscal policy by making budget expenditure less driven by revenue availability. This policy can help to avoid the costs and instability that variations in public spending generate mostly due to the fluctuations in oil revenues.

Additional Metadata

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Iran, government expenditures, government revenues, oil shocks, sanctions, vector autoregression (VAR)

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The effects of oil shocks on government expenditures and government revenues nexus (with an application to Iran's sanctions). Economic Modelling, 40, 299–313. doi:10.1016/j.econmod.2014.04.012 [Google Scholar]. El Anshasy, A. A., & Bradley, M. D. (2012). Oil prices and the fiscal policy response in oil-exporting countries. Economic Modelling, 35, 118–125. doi:10.1016/j.econmod.2013.06.043 [Google Scholar]. Hemrit, W., & Benlagha, N. (2018). The impact of government spending on nonoil GDP in Saudi Arabia (multiplier analysis). The main purpose of this study is to investigate the dynamic relationship between government revenues and government expenditures in Iran as a developing oil-export based economy. Moreover, I want to know how oil price (revenue) shocks can affect this relationship. The results of the impulse response functions and variance decomposition analysis indicate that the contribution of oil revenue shocks in explaining the government expenditures is stronger than the contribution of oil price shocks. Moreover, the results of the vector The effects of the decrease in oil prices on the economy of oil exporting and oil importing countries is different. The paper studies the effects of decreasing oil prices on economic growth, exchange rate sustainability and fiscal stability of the oil exporting countries in Caucasus and Central Asia. He also identified the government's fiscal stimuli as the main determinant of domestic prices. Some economists claim that the indirect effect of oil price shocks on economic performance mostly depends on the size of the revenues from oil products. Oil exporting economies in turn gain higher revenues as a result of the oil price shocks, which increase investment opportunities, and they in turn stimulate output growth and decrease the unemployment.