

Input-Output Analysis of Turkish Construction Industry by using World Input-Output Database for 2002-2012 Period

Topic: Impact analysis: multipliers

Author: Zafer Baran; Gül

Co-Authors: Celal Tasdogan, Reyhan Ozes, Selim Cagatay

In the academic literature the construction industry is considered to be one of main drivers of the overall economy due to its strong inter-sectoral linkages. Its backward and forward linkages are ranked to be among the first four out of twenty industries. In the demand side, the construction activity induces growth through use of large amounts of intermediate inputs from other industries while on the supply side it provides basic infrastructure that is required for production of any goods and services. On the other hand, the construction industry also has a significant impact on level of employment, particularly unskilled labour force, as it is a highly labour-intensive industry. In many of developing countries, the growth of the construction industry is used as an instrument to accelerate the overall growth in the economy. For instance, governments are inclined to implement policies that enhance and support construction investments to achieve a more stable economy.

Like in many developing countries, especially after the neoliberal transformation in 1980s, Turkish economy witnessed the growth of construction industry as well. Two main growth periods in construction industry have been observed since 1980. One of these is the 1982-1988 period. The share of construction investment in GNP rose up to 7.3 percent in 1987 from 5.2 percent in 1982. The second growth period began in 2002 and continued until 2008. The growth process was interrupted by the global economic crisis in 2008 and 2009, but growth inclination in construction industry in Turkey maintained its position in the economy. Between 2002 and 2012, on the average the growth rate of construction industry was about 11.1 percent per year, except for 2008 and 2009, which is almost twice as much of the growth rate of national economy. Furthermore, there was a high positive correlation between GDP growth and construction investment during the period. The other important feature of the construction industry for both periods is that governments support the growth of construction industry both by making investments directly and implementing policies for the development of infrastructure sector using legal arrangements. Especially for the 2002-2012 period, it can be obviously stated that basic capital accumulation strategy of the state was based on the growth of construction industry in Turkey.

The aim of this study is to explore the structure of construction industry in the input-output framework and to reveal the changing trend in construction based inter-sectoral linkages over the period of 2002-2012, in Turkey. Some common shortcomings of the construction industry based input-output studies in the academic literature in Turkey are such that input-output tables used in the analyses are not homogeneous and the most recent one belongs to the input-output table of year 2002. In this study, we are going to employ the input-output tables constructed and updated in the WIOD Project from 2002 to 2011. We are also going to update 2011 input-output table to 2012 by using RAS technique and decompose value-added on the input-output tables into the labour and capital. We are going to calculate backward and forward linkages, input and output multipliers by using 11 input-output tables. We aim to discuss whether construction industry, which is considered as the key driver of the economy, might solve structural problems of Turkey such as current account deficit and unemployment in the near future.