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Tradable and non-tradable expenditure and aggregate demand for imports in an emerging market economy

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ABSTRACT

Using an assumption of non-separability of non-tradable expenditure from imports, this paper examines the impact of the structural transformation undertaken after 2001 on imports and, in turn, the current account stance of Turkey. In this regard, an import demand function is derived under the assumption of *non-separability*, and is estimated using quarterly time series data from Turkey. The empirical results show that the assumption of non-separability cannot be rejected in the case of Turkey and the relative prices of non-tradable and tradable goods must be among the determinants of import demand in addition to the relative price of imports and real GDP. This result accordingly implies that recent increases in import expenditure are, to some extent, due to changes in the relative price structure in favour of non-tradable goods.

1. Introduction

After the 2001 economic crisis, Turkey embarked on a type of macroeconomic governance that produced very high growth rates at the expense of persistent and high currency account deficits. This was to a great extent a consequence of increased dependency on imports and the poor export performance of the economy (Günçavdı and Kayam, 2017). Despite a recent slowdown in economic growth, the current account deficits have remained unavoidably high and have raised particular concerns about how to curb import expenditure. In such cases, the conventional approach to developing policy measures is based on empirical findings of a standard import demand function and the estimates of its price and income elasticities. However, using this standard approach would fail to recognise the recent structural changes in the Turkish economy or take account of their likely effects on import behaviour. In addition, the balance of payments constraint has become non-binding due to high levels of easily accessible international liquidity, and relative prices have become a detrimental factor in both the demand behaviour of imports and the sectoral changes affecting GDP.

Changes in the nature of economic growth have lately become a source of concern not only in Turkey, but also in other emerging market economies (EMs). Most recently, Rodrik (2016) made arguments based on empirical observations on the declining share of manufacturing in both employment and economic value that occur before any proper experience of industrialisation. He implicitly indicates that developing countries overwhelmingly become dependent on service economies to generate economic growth, and terms this “premature de-industrialisation”.

We use the same term when noting both a fall in the share of tradable and a rise in the share of non-tradable components of

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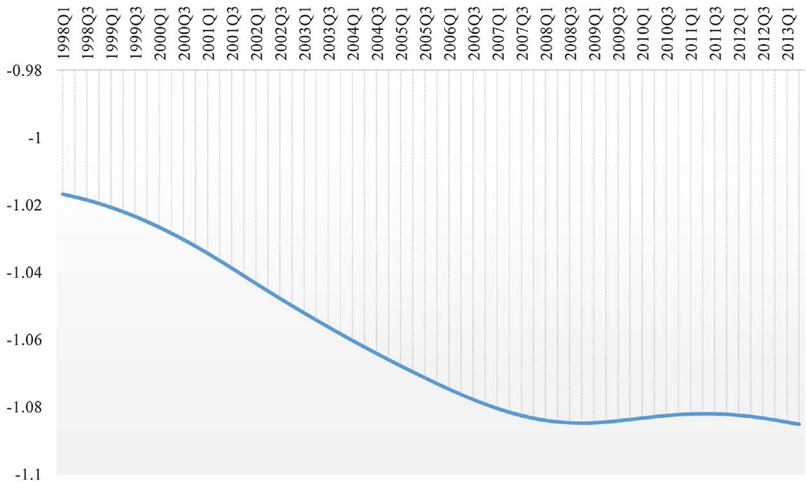

Fig. 1. Trend of the tradable component of GDP.
(Source: Authors' calculation from the data obtained from www.tcmb.gov.tr).

Turkey's GDP.[1] Even if globalisation, which started in the early 1980s, features when accounting for the prevalence of this process in emerging market economies, an excessively high level of international liquidity and low interest rates have recently encouraged these countries to expand their economic activities *further* into sectors producing non-tradable goods, rather than those producing tradable ones. Hence, this has accelerated the rise of non-tradable activities and de-industrialisation processes in emerging market economies, and, most importantly, has accounted for changes in the relative prices of non-tradable goods compared to tradable ones (overwhelmingly in favour of the former). In this regard, Turkey has not been an exception to this trend, and the economic growth that occurred after 2001 gradually became driven by the non-tradable goods sector. As a consequence of this transformation, Turkey has increased its dependence on capital flows in order to finance both domestic demand (which has predominantly become non-tradable in nature) and imports.

Turkey's impressive growth performance at the beginning of the 2000s was initially the result of economic reforms.[2] Following a 7.5% contraction due to the economic crisis in 2001, the economy grew at an average of 7.1% across the 2002–2007 period. In addition, the share of tradable components in the country's GDP, as noted by Rodrik (2016), appears to have declined drastically (see Fig. 1). This, however, constitutes a serious concern when it is examined together with the increased dependence on imports and the high current account deficits of the country.[3] This concern is based on the belief that an expansion in domestic demand is a crucial determinant of demand for aggregate imports and current account deficits.[4] Previous studies for Turkey have consistently shown that Turkish import demand is highly responsive to changes in domestic expenditure and has an elasticity that is stronger than its unity (see Tansel and Olgun, 1987; Günçavdı and Ülengin, 2006; Günçavdı et al., 2008). However, all of these studies follow the traditional literature of import demand functions and implicitly ignore the very important distinction between the tradable and non-tradable components of real income, and again implicitly assume that both income components are *separable*.[5] In the standard approach to modelling, the import demand function becomes a component of tradable expenditure and is assumed to be independent of other components of domestic expenditure.[6] This separability issue is particularly important and must be empirically tested, especially if

[1] Günçavdı et al. (2003) was an ealier study drawing attention to a fall in the share of manufacturing in employment in Turkey.

[2] According to international observers, there were a number of factors at both national and international levels that played an important role in this success. The first was the high international liquidity during this period, which enabled Turkey to have easy access to international financial sources at a relatively low cost. The second is the presence of a single-party government, which provided political as well as economic stability and reduced uncertainty in macroeconomic policies for international lenders and investors. The beginning of accession talks with the EU in 2005 constituted the third factor that helped Turkey to access international capital markets more easily. Sound macroeconomic policies and a fiscal stance that has been guided by a number of standby agreements with the IMF are the final factors that play an important role in explaining the exceptional performance of the Turkish economy over recent years. All these favourable conditions have allowed Turkey to access international liquidity more easily, and also to expand its domestic expenditures.

[3] This concern is usual for a country experiencing expansion in its expenditure, and as expected arises in the case of Turkey from the fact that exports have increasingly become dependent on imported inputs (see Günçavdı and Küçükçifçi, 2001; Günçavdı et al., 2008). This, along with an increase in exports, leads to a rise in imports and consequently causes a deterioration in the current account balance of the Turkish economy. This concern has recently found echoes among the business community in Turkey, and some prominent Turkish businessmen have advised the current government to take some appropriate measures to increase the value added of Turkish exports and to correct current account imbalances by doing so.

[4] As a developing country, Turkey has occasionally experienced a number of economic crises, all of which were initiated by payment difficulties that the economy encountered during attempts to finance its unsustainable current account deficits (see Celasun and Rodrik, 1989).

[5] The assumption of separability in this context means that tradable and non-tradable expenditures in consumers' budgets are independent of each other. According to this assumption, expenditure in the preferences of a representative consumer can be partitioned into groups (such as tradable and non-tradable expenditures) so that preferences (or demands) within groups can be described independently of the quantities in other groups (Deaton and Muellbauer, 1980).

[6] To the knowledge of the authors, in the traditional import demand literature this distinction between tradable and non-tradable expenditure components has drawn very little attention. The only exception is Goldstein et al. (1980), which examined the role of prices of tradable and non-tradable goods in import demand. However, that paper, like those in the traditional literature, also ignores the distinction between the elasticities of tradable and non-tradable expenditures.