

Structural Trade Deficits, Import Content of Exports, and Middle Income Trap: The Case of Turkey

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Abstract: Turkey has a structural trade deficit. The amount of Turkey's trade deficit is mainly driven by movements in the exchange rate. Turkey must either increase its exports or decrease its imports or carry out both policies to narrow its trade policy. At this point import dependency of exports (import content of exports) is important issue. Import content of exports is defined as the share of imported inputs in the overall exports of a country and reflects the extent to which a country is a user of foreign inputs. If one country's degree of import dependency is high, efforts to increase exports leads to surge up in imports, too. Hence, trade deficit will not narrow as much as desired.

Moreover, with the existing export structure, Turkey's exports cannot make a jump. The leap in exports can be achieved by changing this structure. Turkey must alter its export structure to include a greater percentage of high-tech, innovation-driven products with more domestic value-added content. Recently, Turkey adopted "Technology-Oriented Industry Initiative" to change its export structure. This attempt will help not only reduce current account deficit but also escape from middle-income trap.

Key Words: Structural Trade Deficits, Import Content of Exports, Middle Income Trap, Turkey

1. INTRODUCTION

Turkey has permanently trade deficit. The amount of Turkey's trade deficit is driven by exchange rate. Turkey's trade deficit expands as the Turkish lira appreciates while Turkey's trade deficit increases as the Turkish lira depreciates. Sharp decreases in Turkey's trade deficit happens in the years when the Turkish lira depreciate sharply. When we analyze the time trend of Turkey's trade deficit during the period between 2001 and 2020, we can observe that Turkey's trade moves in conjunction with the exchange rate movements. Turkey's trade deficit

fell to USD 10 billion in 2001 with the depreciation of TL. It gradually increased to USD 69.9 billion in 2008 with the appreciation of TL. It dropped to USD 38.7 billion in 2009 with the depreciation of TL. It surged up to USD 105.9 billion in 2011 and then gradually narrowed and fell to USD 29.5 billion in 2019 with the depreciation of TL. It can also be asserted that decreased in trade deficit was due to efforts of increasing exports. As a result of efforts of increasing exports, exports increased to USD 134.9 billion in 2011 and to USD 167.9 billion in 2018 from USD 152.4 billion in 2012 (see Table 1).

Table 1: Foreign Trade Figures of Turkey (thousand dollar)

	Import	Export	Trade Balance
2001	41.399.079	31.333.944	-10.065.135
2002	51.270.196	35.761.981	-15.508.215
2003	69.339.692	47.252.836	-22.086.856
2004	97.539.766	63.120.949	-34.418.817
2005	116.774.151	73.476.408	-43.297.743
2006	139.576.174	85.534.676	-54.041.498
2007	170.062.715	107.271.750	-62.790.965
2008	201.963.574	132.027.196	-69.936.378
2009	140.928.421	102.142.613	-38.785.808
2010	185.544.332	113.883.219	-71.661.113
2011	240.841.676	134.906.869	-105.934.807

2012	236.545.141	152.461.737	-84.083.404
2013	251.661.250	151.802.637	-99.858.613
2014	242.177.117	157.610.158	-84.566.959
2015	207.235.628	143.844.066	-63.391.562
2016	198.601.934	142.606.247	-55.995.687
2017	233.799.651	156.992.940	-76.806.711
2018	223.046.879	167.923.862	-55.123.017
2019	200.658.596	171.098.411	-29.560.185
2020	219.397.191	169.481.945	-49.915.246

Source: <https://www.trademap.org>

2. IMPORT DEPENDENCY OF EXPORTS

Since the trade deficit is the difference between exports and imports, efforts and policies to decrease trade deficit can focus on exports, imports or both of them. Accordingly, trade deficit can be decreased by decreasing imports as well as increasing exports. At this point import dependency of exports (import content of exports) is important issue. Import content of exports is defined as the share of imported inputs in the overall exports of a country and reflects the extent to which a country is a user of foreign inputs (OECD, 2021). If one country's degree of import dependency is high, efforts to increase exports leads to surge up in imports, too. Hence, trade deficit will not narrow as much as desired.

Study by Erduran et al. (2019) indicate that imported intermediate goods constitute roughly three fourths of Turkey's total imports and import dependency for exports have increased during the period between 2002 and 2017. It is reported that the average import content is around 18 percent for production and 31 percent for exports in the examined period. It is also argued that the sectors with the largest import dependency become even more reliant on imported intermediate goods over time. This result indicates that import dependency has become a structural characteristic of the Turkish

economy. Results of the study suggest that sectors with higher capital and technology intensity such as coke and refined petroleum products, basic metals and motor vehicles have the highest import requirements while agriculture, forestry, and fishery; service and mining sectors have the lowest import requirements.

High import dependency of Turkish economy can be due to the globalization and integration trends to the global value chains in the recent decades and insufficient domestic input production because of either price and quality disadvantages and/or lack of certain skills and technologies. It is argued that import dependency results in higher current account deficits especially during high growth periods, limits the price gains from currency depreciation and lengthens out the rebalancing of the current account during depreciation of national currency periods (Erduran et al., 2019).

However, when we look at the import content of exports of world economies, it can be observed that Turkey is among the countries with low import content of exports ratio. According to OECD indicators, Turkey's import content of exports is 16.5% in 2020. Turkey ranks 20 in the import content of exports ratio in the world. Among the 27 OECD Countries, Turkey is among the top 10 countries with the lowest import content of exports. Turkey ranks 6 in the import content of exports ratio among OECD countries (see Table 2).

Table 2: Import Content of Exports (OECD Countries-2020)

Rank	Country	Import Content of Exports (%)
1	United States	9.0
2	Japan	11.4
3	New Zealand	12.8
4	Norway	13.7
5	United Kingdom	15.4
6	Turkey	16.5

7	Israel	17.2
8	Sweden	19.7
9	Germany	20.3
10	Iceland	20.3
11	Latvia	20.7
12	Greece	21.5
13	Spain	21.6
14	Italy	22.0
15	France	22.1
16	Switzerland	25.8
17	Poland	26.9
18	Netherlands	27.0
19	Portugal	28.0
20	Lithuania	29.4
21	Korea	30.4
22	Slovenia	31.6
23	Mexico	36.4
24	Ireland	41.7
25	Hungary	44.1
26	Slovak Republic	44.5
27	Luxembourg	67.4

Source: <https://data.oecd.org/trade/import-content-of-exports.htm>

3. TECHNOLOGY PATTERN OF TURKEY'S MANUFACTURED EXPORTS

As of 2018, the share of high-tech exports in manufactured exports is 2,33 percent while the share of medium-tech exports is 42,13 percent and the share of low-tech exports is 55,54 percent.

During the years between 2007 and 2019, the structure of Turkey's manufactured exports almost stayed the same although there was a slight shift towards high-tech products. As such, the share of high-tech exports in manufactured exports increased from 2,17 percent in 2007 to 3,04 percent in 2019 (see Table 3).

Table 3: Technology Pattern of Turkey's Manufactured Exports

Year	High-technology exports (% of manufactured exports)	Medium-tech exports (% manufactured exports)	Low-tech exports(% manufactured exports)
2007	2,17	41,26	56,57
2008	1,86	40,35	57,79
2009	2,02	40,26	57,72
2010	2,20	40,3	57,5
2011	2,12	39,07	58,81
2012	2,16	38,14	59,7
2013	2,29	38,31	59,4
2014	2,33	38,19	59,48
2015	2,58	39,21	58,21
2016	2,51	40,86	56,63
2017	2,90	41,83	55,27
2018	2,33	42,13	55,54
2019	3,04

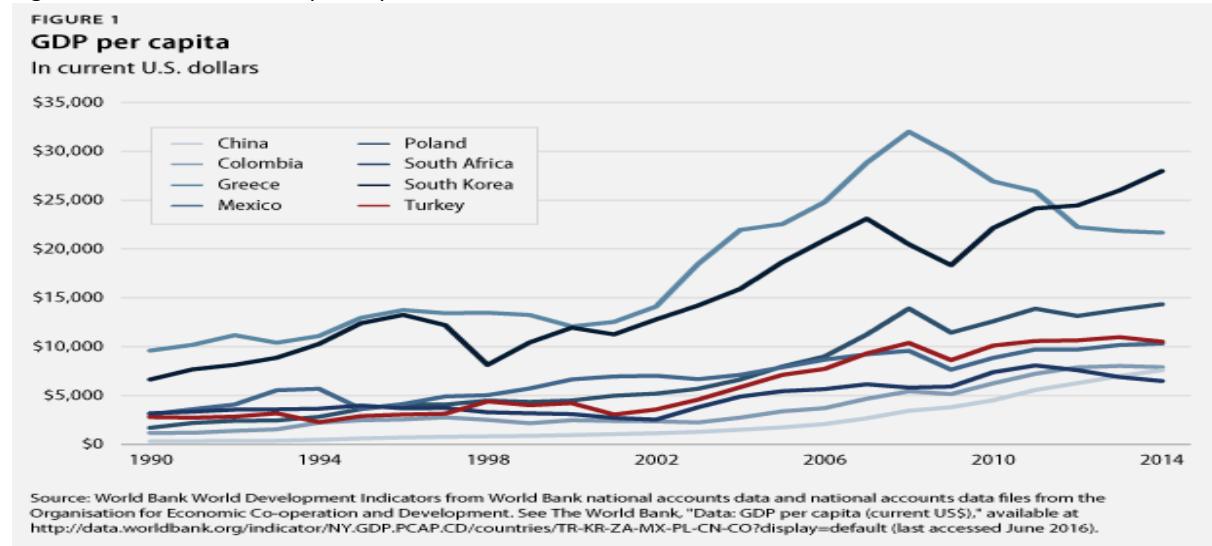
Source: <https://databank.worldbank.org/source/world-development-indicators#>

4. TECHNOLOGY-ORIENTED INDUSTRY INITIATIVE

With the existing export structure, Turkey's exports cannot make a jump. The leap in exports can be achieved by changing this structure. Turkey must alter its export structure to include a greater percentage of high-tech, innovation-driven products with more domestic value-added content. Recently, Turkey adopted "Technology-Oriented Industry Initiative" to change its export structure. This attempt will help not only reduce current account deficit but also escape from middle-income trap.

Turkey reached lower-middle income country status in 1995 from low-income country status. In 2005, Turkey reached upper-middle income status. Turkey is at the upper end of the middle income level and the threshold of a high income economy (see Figure 1). Many countries are trapped at this level of income and are not able to reach high income country level for a long time. This phenomenon is called the middle income trap. The difficulty of moving from being a middle-income country to a high income country is illustrated by the fact that only 13 of 101 countries that qualified as middle-income country in 1960 have emerged/transferred into as high income countries within 60 years (Center for American Progress, 2016).

Figure 1: The Trend of GDP per Capita for Selected Countries



Source: <https://cdn.americanprogress.org/wp-content/uploads/2016/07/20020037/Turkey2023EconomicGrowth-report.pdf>

The policy aims to both reduce the import of strategic goods by USD 30 billion each year and enhance gross domestic product (GDP) growth through technologic exports as well as escaping middle-income trap. Initially, the program targeted some specified products in the machinery industry which are high-tech and/or Turkey has high trade deficits with. Recently, the scope of program has extended to 1219 products with medium-high and high technology from 8 sectors such as chemistry, pharmacy, medical and dental equipment production, computer, electronics, optics, electrical equipment, machinery, and transportation vehicles.

5. CONCLUSION

Turkey has a structural trade deficit. The amount of Turkey's trade deficit is mainly driven by movements in the exchange rate. Turkey must either increase its exports or decrease its imports or

carry out both policies to narrow its trade policy. At this point import dependency of exports (import content of exports) is an important issue. Import content of exports is defined as the share of imported inputs in the overall exports of a country and reflects the extent to which a country is a user of foreign inputs. If one country's degree of import dependency is high, efforts to increase exports leads to surge up in imports, too. Hence, trade deficit will not narrow as much as desired.

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