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The Possible Effects of Trans-Pacific Partnership on Turkish Economy

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Abstract. Due to the World Trade Organization's (WTO) deadlocked multilateral trade negotiations, many countries have started to establish Free Trade Agreements (FTA). In this context, twelve countries including Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States (US) and Vietnam have decided to establish Trans-Pacific Partnership (TPP). This study focuses on the impacts of this partnership on Turkish economy. By using Global Trade Analysis Project (GTAP) database and a general equilibrium model, the effects of various scenarios on GDP and exports are studied. Obtained results show that Turkey could be in a loss up to 1% of GDP if present 12 countries establish the TPP. Otherwise, potential countries' inclusions in TPP could cause higher losses – up to 2.4% of GDP for Turkey.

Keywords: Free Trade Agreements, Trans-Pacific Partnership, Turkey.

JEL Classification: F13, F14, F15

1. Introduction

As well as political, social and cultural integration, important economic integration steps have been observed especially in trade liberalization which goes back to the World War II and gains popularity in the 1980s (Şanlı, 2004). It is argued that as trade barriers in the world trade are eliminated, international trade has commenced to play an important role in development and industrialization of countries. Also, in order to gain superiority in international trade, countries have started to focus on some issues like productivity, technological progress, R&D and scale economies; at the same time, they have tend towards the elimination of trade barriers with the aim of reaching to new markets. Despite these developments in international trade, there are still many trade barriers between countries as a result of WTO Doha Round's deadlocked multilateral trade negotiations. Therefore, countries have attempted to establish FTAs in order to create trade opportunities in advance of partner countries by eliminating tariffs and non-tariff barriers. In this context, twelve countries including Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States (US) and Vietnam have decided to establish a comprehensive trade partnership to enhance trade and investment, promote innovation, economic growth and development, and support the creation and retention of jobs. On November 9, 2013, the leaders of the TPP member countries announced that the negotiations had been still in progress but the great distances had covered ambitiously about the draft agreement. However, given that during the negotiations a common vision about some issues have not been gained and the negotiating countries have great diversities on especially demographic structure, level of development, trade and investment, it is estimated that the negotiation process will take a long time more than expected. On the other hand, given the unanimity and consistency of TPP member countries on resolution of outstanding issues and fully sharing of benefits and responsibilities, it is assumed the deadlocks on negotiations will be resolved through joint effort in the near future.

It is a widely known fact that this initiative, involves the leaders of world economy like the US and Japan, will cause a world-wide spill-over effect because of the dominance of negotiating countries on world trade and the willingness to expand the scope of TPP by adding new members. Therefore, it is reasonable to analyze the possible impacts on not only negotiating countries but also other countries. In this paper, the potential impacts of TPP on Turkish economy are analyzed by differentiating scenarios according to the assumptions of exclusion and inclusion of new participations. Obtained results show that Turkey could be in a loss up to 1% of GDP if present 12 countries establish the TPP. In addition, potential countries' inclusions in TPP cause higher losses – up to 2.4% of GDP- for Turkey.

The remainder of the paper is organized as follows. The next section presents the brief review of the literature. Section 3 summarizes the nature of the TPP and trade relations between negotiating countries and Turkey. Section 4 gives details about the methodology and empirical results. Section 5 concludes the paper.

2. Literature Review

GTAP network and its related models are widely used in studies which present impacts of FTAs on partner countries and third countries since it is useful for conducting quantitative analysis of change in international trade as a result of policy changes. Among analyses which utilize GTAP, Petri, Plummer and Zhai (2011) find that the GDP increases are in the range of 2.2% to 6.0% for the negotiating countries after TPP agreement comes into force till 2025. In

another study, Breuss and Francois (2011) argue that there is an increase in the EU and South Korea real GDP by 0.05% and 1.56%, respectively, as a result of the FTA between the EU and South Korea. Similarly, Estrada and et al. (2013) show increments in the real GDP of China and ASEAN¹ by 0.57% and 0.65% through the China-ASEAN FTA. In the same paper, it is argued that China and Japan may have 0.03% and 0.98% real GDP gains by means of the China-Japan FTA; and also, it is estimated that the real GDPs of China and South Korea increase by 0.32% and 2.70%, respectively, through the China-South Korea FTA. Kinnman and Hagberg (2012) analyze the EU-US FTA and they calculate that there are increases in national incomes in the range of 0.01% to 0.18% in Sweden, 0.02% to 0.22% in the EU, 0.02% to 0.51% in the US. Francois and Pindyuk (2013) examine the impacts of EU-US FTA on Austrian economy and find that there is a 5.5 billion US Dollar increase in Austrian GDP. Moreover, growth in GDPs in the range of 0.10% to 0.48% for the EU and 0.04% and 0.39% for the US are calculated by Francois et al. (2013) in different scenarios to assess the effects of the EU-US FTA.

3. Trans-Pacific Partnership and Turkey

3.1. Trans-Pacific Partnership

Considering the evolution of the TPP, this initiative has been originated from an agreement called the Pacific Three Closer Economic Partnership being established by Singapore, New Zealand and Chile in 2003. By 2005, it has been turned into Trans-Pacific Strategic Economic Partnership (TPSEP) - its purported aims are to further liberalize the economies of the Asia-Pacific region - with the participation of Brunei. Since 2010, negotiations have been taking place for the TPP, a proposal for a significantly expanded version of TPSEP. As of 2013, the TPP is a proposed trade agreement under negotiation by twelve countries which are the crucial agents of Trans-Pacific trade network. Regarding negotiating countries, it is widely known fact that these countries have been establishing various FTAs with many countries but initially prefer the TPP's countries to eliminate trade barriers. Especially in recent decades, the efforts of trade agreements among the TPP countries have intensified aggressively. To give a salient example, the US currently has the FTAs with six negotiating countries of the TPP. All TPP negotiating countries are members of the Asia Pacific Economic Cooperation (APEC) which has currently twenty one member countries. As a matter of fact, the general framework of the TPP agreement was announced at APEC meeting in November 2011.

At the TPP summits, 29 chapters are under negotiations and the discussions have specially focused on intellectual property rights, trade of services, government procurements, investments, and the rule of origin, competition, labor and environment standards. In the framework of these chapters, the five main qualifications of TPP, which have been determined in parallel with the intensity of trade relations between TPP countries and the aim of a comprehensive agreement beyond tariffs, are as follows (Fergusson, Cooper, Jurenas, & Williams, 2013).

- Comprehensive Market Access—Removal of both tariff and non-tariff barriers is “comprehensive and ambitious in all areas.”
- Regional Agreement—Fully regional agreement that facilitates trade and the development of production and supply chains among TPP members.

¹ASEAN: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.

- Cross-Cutting Trade Issues—Holistic, agreement-wide approach to specific areas: regulatory coherence, competitiveness and business facilitation, small- and medium-sized enterprises, and development.
- New Trade Challenges—Addresses emerging trade issues such as those caused by new technology (e.g., cloud-computing).
- Living Agreement—Agreement will “evolve in response to developments in trade, technology or other emerging issues” and expand “to include other economies from across the Asia-Pacific region.”

3.2. Trade Relations between the TPP Countries and Turkey

It is estimated that the TPP could cause significant impacts on third countries in addition to negotiating countries when considering its comprehensive scale and potential enlargement capacity. Because the TPP represents approximately 40% of world population and 60% of global GDP and at the same time it includes the fast growing emerging countries. In conjunction with its members’ wide sphere of influence on global trade, the members of TPP are among the Turkey’s main trade partners (Table 1). Therefore, it is highly likely that this initiative will also create vital outcomes on Turkish economy.

Table.1: Trade Statistics of Turkey between TPP Countries

	Export shares of related regions in Turkey’s total export (%)		Import shares of related regions in Turkey’s total import (%)	
	2004	2005-2012	2004	2005-2012
TPP	9.51	6.14	9.58	10.14

As mentioned above, the leaderships of the TPP economies expressed their joint vision to expand the scope of this agreement through new participations and with regard to this; they decided to consider the membership of any APEC members if and when they are ready to meet the high standards of the agreement. That new accession clause is so crucial for all economic agents given that the trade between TPP countries and non-TPP but APEC countries is so extensive and the participation of non-TPP but APEC countries will raise the potential impacts on world economy. Besides, it is expected the enlargement of TPP through non-TPP but APEC countries will reach to some regions like the European Union and Latin America. Considering its enlargement potential, trade statistics of Turkey will show significant raises (Table 2).

Table.1: Trade Statistics of Turkey between Non-TPP but APEC members

	Export shares of related regions in Turkey’s total export (% change)		Import shares of related regions in Turkey’s total import (% change)	
	2004	2005-2012	2004	2005-2012
Non-TPP but APEC members	4.52	6.21	19.12	25.53

Elaborating the changes on exports and imports of Turkey - derived from the inclusion of non-TPP but APEC members in TPP, it is observed that the main factors behind changes are Russia and China. As a matter of fact, almost half of the total change on import shares of Turkey is arisen from Russia given that it is one of the major energy importers for Turkey. (Table 3)

Table.3: Trade Statistics of Turkey in the case of other APEC Countries' Inclusion in TPP, Country Basis

	Export shares of related regions in Turkey's total export (Average %)		Import shares of related regions in Turkey's total import (Average %)	
	2004	2005-2012	2004	2005-2012
Russia	2.94	4.09	9.26	12.87
Thailand	0.20	0.10	0.51	0.66
Indonesia	0.09	0.18	0.64	0.72
The Philippines	0.06	0.07	0.12	0.08
China	0.62	1.28	4.59	7.76
South Korea	0.13	0.22	2.64	2.37
Taiwan	0.26	0.10	1.24	0.99
Hong Kong	0.23	0.18	0.13	0.08
Papua New Guinea	0.00	0.00	0.00	0.00

4. Methodology and Empirical Results

In order to analyze the impacts of the TPP on Turkey, GTAP network and Standard GTAP General Equilibrium Model set under the assumptions of perfect competition and constant returns to scale have been used. The dataset for the general equilibrium model has been obtained by GTAP-7 data base covering 113 regions and 57 sectors and also related bilateral trade information, transport and protection linkages with reference year of 2004. For that purpose, two main scenarios have been analyzed and deepened by using various shocks.

These two main scenarios are based on the present TPP members and the inclusions of non-TPP but APEC countries in TPP. Four shocks, which are shown below, are applied to these two scenarios.

- Removal of tariffs,
- Removal of tariffs and limited reduction in non-tariff barriers,

- Removal of tariffs and reduction in non-tariff barriers,
- Removal of tariffs, reduction in non-tariff barriers, and direct spill-over effects.

In the first scenario, the relations between Turkey and the present TPP countries have been investigated by using four shocks. At first, whole custom tariffs including tariff equivalents and quotas between TPP countries have been removed. It is found that the GDP and exports of Turkey could decrease by 0.30% and 0.13%, respectively. On the grounds that the TPP negotiating countries have been trying to form this agreement beyond the elimination of tariff barriers, it is considered that this new generation FTA will not cover only removal of custom tariffs but also will cover reduction in non-tariff barriers in the sectors of food, manufacture and services. Furthermore, the method of reduction in trade costs between the TPP countries is adopted since it is expected that there would be easing in international trade due to cuts in non-tariff barriers and so reduction in costs would be observed in international trade. Secondly, non-tariff barriers have been reduced by 5% in services and 2% in other sectors similar to the study of Breuss and Francois (2011). Thirdly, a 5% reduction of non-tariff barriers in all sectors has also been applied. According to the results of the second shock based on the removal of custom tariffs between two countries and limited cuts in non-tariff barriers, it is found that Turkey could face decreases on both GDP and exports by 0.59% and 0.35%, respectively. In the third case, higher decreases in GDP (1.03%) and exports (0.64%) have been obtained. Finally, non-tariff barriers in exports of third countries to the FTA partners have been reduced according to the approach of direct spill-over effect of Francois et al., 2013 which introduces a cost reduction in exports to these countries as a result of harmonization of regulations. Given 5% cost reduction in all sectors to cut non-tariff barriers and 20% of direct spill-over effect, it is assumed that 1% cost reduction would arise in the exports of third countries to the TPP countries. The results, in the event of removal of tariffs and reduction in non-tariff barriers between two countries by taking into account of direct-spillover effects, point out that in this most comprehensive case, 0.91% GDP loss and 0.49% exports decrease could be occurred. The possible impacts of the TPP on Turkish economy are summarized in Table 4.

Table 4: The impacts on Turkey if present 12 TPP countries establish TPP

Applied Shock	GDP (% change)	Export (% change)
Removal of tariffs	-0.30	-0.13
Removal of tariffs and limited reduction in non-tariff barriers	-0.59	-0.35
Removal of tariffs and reduction in non-tariff barriers	-1.03	-0.64
Removal of tariffs, reduction in non-tariff barriers, and direct spill-over effects	-0.91	-0.49

The second scenario is based on the enlargement potential of TPP with non-TPP but APEC countries because of the willingness of present TPP members about new participations from APEC and the close trade relationships between them. The economic results which represent the expansion potential of the TPP by applying the same shocks in the first scenario are shown in Table 5.

Table 5: The impacts on Turkey if all 21 APEC countries establish the TPP

Applied Shock	GDP (% change)	Export (% change)
Removal of tariffs	-0.92	-0.63
Removal of tariffs and limited reduction in non-tariff barriers	-1.62	-1.14
Removal of tariffs and reduction in non-tariff barriers	-2.43	-1.79
Removal of tariffs, reduction in non-tariff barriers, and direct spill-over effects	-2.21	-1.52

According to obtained results, higher and negative GDP changes -in the range of 0.917% to 2.434%- have been observed for Turkey. Similarly, the export values of Turkey have decreased in the range of -0.625% to -1.787%. On the other words, it is projected that the contractionary effects of the TPP on Turkish economy could be up to two-fold in conjunction with the enlargement of the FTA with other APEC members.

5. Conclusion

The world liberalization target concentrated after the end of 20th century has caused an increase in the popularity of economic integration among countries as well as a rise in the phenomena of free market economy and competitiveness. This economic integration process is expected to gain new dimensions by the TPP covering twelve countries namely Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States (US) and Vietnam.

Considering trade capacities of these negotiating countries and its enlargement potential, it is estimated that this agreement will create worldwide spill-over effects. Similarly, it is highly likely that this initiative will cause considerable impacts on Turkish economy and this study focuses on the impacts of this FTA on GDP and exports of Turkey. To analyze these effects, two main scenarios have been formed based on present TPP members and the inclusions of non-TPP but APEC countries in TPP. In addition, the study has been deepened by using various shocks. Obtained results show that Turkey could be face losses on GDP up to 1% if the TPP covers only current twelve countries. However, supposing that this FTA is widened by potential countries, Turkey's losses could reach to 2.4% of GDP.

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