

# Potential Pakistan-South Korea Free Trade Agreement – Options for Pakistan

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## I. Introduction

The Regional connectivity is an important element of the recently unveiled Vision 2025 of the government of Pakistan. Pakistan considers regional trade an important component for economic growth. After shifting from import substitution policies towards economic liberalism in the 1990s, Pakistan made a determined effort to diversify its trade and discover new markets and capital sources in the East Asian region. The prime objective of the country's core economic policy for East Asia namely, "Pakistan's Vision East Asia," is to strengthen mutual trade and investment relations with Southeast Asian countries. The Pakistan-South Korea FTA is a vital part of a series of trade agreements all stemming out of this East Asia outreach policy. A free trade agreement with South Korea would be of significance to Pakistan because South Korea is swiftly industrializing with comparatively higher economic growth and has accomplished rapid technological advancement in the region.

Pakistan and South Korea share somewhat similar historical backgrounds, both emerging on the map in the late 1940s as economically poor and agricultural-based countries depending heavily on foreign assistance. Both countries witnessed an autocratic

leadership in 1960s which paved the way towards economic development. Unfortunately, in Pakistan the progress failed to continue in the long run like it prevailed in South Korea, which achieved a tremendous increase in per capita income and a 9 percent annual economic growth on average throughout the next three decades. The sustained consistency in economic policies transformed South Korea from one of the poorest developing countries seeking foreign aids into a philanthropist nation. It is currently the 4<sup>th</sup> largest in Asia and 11<sup>th</sup> largest economy in the world.

## II. Overview of Pakistan and South Korea's Economy

Pakistan, being a semi-industrialized country, relies primarily on its agricultural and manufacturing sector for exports, while its major imports are heavy manufacturing and petroleum products.<sup>1</sup> The major export items from the agricultural sector account for approximately one-third of its total exports. Certain elements like high tariffs and non-tariff barriers, an energy crisis and less value addi-

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1 ITC calculations based on UN COMTRADE statistics.

tion or raw exports, collectively result in the country's low trade-to-GDP ratio when compared to other nations in the region. Pakistan's exports as percent of GDP stood at only 9 percent as of 2016, which is the lowest recorded value in the history of the country since 1971.<sup>2</sup> Its overall trade as percent of GDP averaged 31.5 percent during last 10 years.

On the contrary, South Korea is ranked among the world's most export-oriented large economies. Its exports are diversified and highly value added, produced from both the agricultural and industrial sectors. However, most of its exports are primarily

light and heavy manufacturing items. The nation's exports share in GDP is around 42 percent as of 2016, reaching an all-time high of 56.3 percent in 2012.<sup>3</sup> South Korea's average trade to GDP ratio stands at 94.25 percent since last decade, which is relatively very high among economies of comparable size. The country is ranked as the world's 6<sup>th</sup> and 12<sup>th</sup> largest exporter and importer respectively. Table 1 illustrates the major economic indicators, gross domestic product and its growth rate, per capita income, current account balance, and exchange rate as follows.

**Table 1. Pakistan and South Korea Major Economic Indicators**

INDICATORS	PAKISTAN		SOUTH KOREA	
	2010	2016	2010	2016
GDP (Billion USD)	177.4	278.9	1000.9	1411
GDP growth rate (Percent)	1.6	5.4	6.4	2.9
Per Capita Income (USD)	1040	1444	22087	27539
Current account balance (Billion USD)	-1.35	-6.89	28.85	98.67
Exchange rate (Per USD)	85.1	104.7	1156	1160

Source: World Bank national accounts data, and OECD National Accounts data files.

### III. Pakistan-South Korea Bilateral Trade

Historically, the bilateral trade between Pakistan and South Korea has a positive impact on South Korea's overall trade balance. Pakistan's exports to South Korea have decreased gradually after reaching an all-time high during 2010-11 while its imports have increased consistently. The consistent

decline in bilateral trade is also due to the continuous economic integration of South Korea with other regional economies such as free trade agreements with China and India. Arguing the consequences of bilateral agreements for the Pakistan's economy, Haque (2009) concludes that Pakistan is vulnerable to negative impacts of other regional bilateral RTAs which are soon to be signed because of already less trade integration and weak resilience against competition in the trade sector. The current trade volume between these two countries is 1.1 billion USD, after a significant decrease since 2012's 1.6 billion USD. Imports from South Korea have been more unpredictable and achieved their highest value of 847 million USD in 2012.

2 World Bank national accounts data, and OECD National Accounts data files.

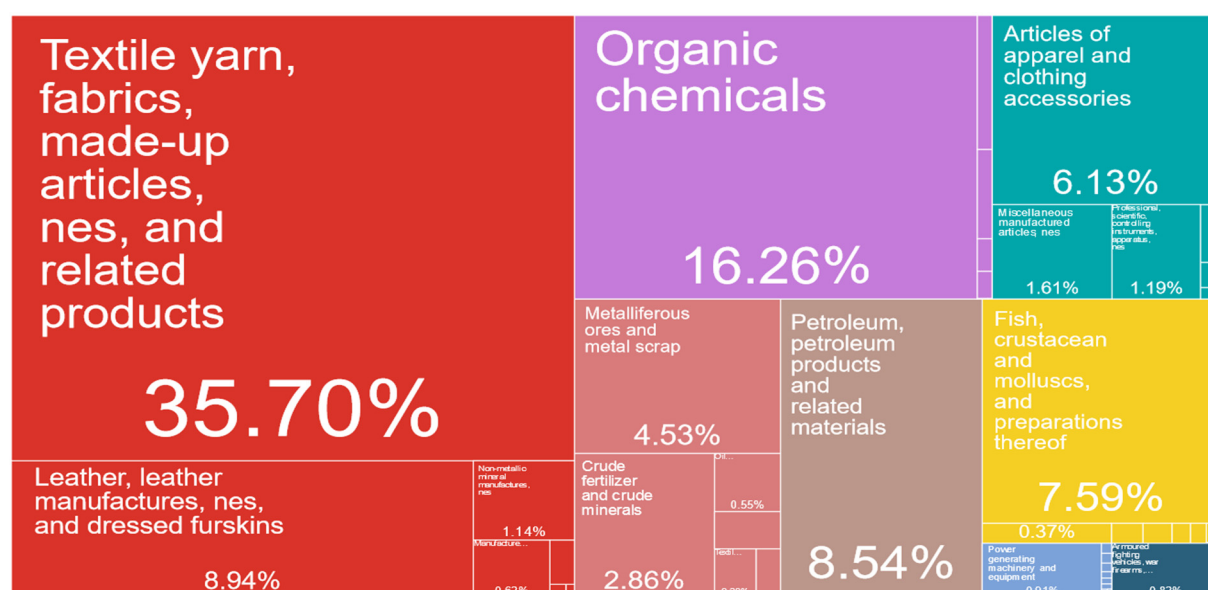
3 World Bank national accounts data, and OECD National Accounts data files.

Meanwhile, Pakistan's exports to South Korea have never crossed the mark of 500 million USD and the highest achieved exports value was 402 million USD in 2011. It has significant trade potential with South Korea in various sectors such as textile, wearing apparel, processed food, leather, and vegetables and fruits. South Korea has imposed relatively high tariff rates for Pakistan compared to other competitors, which is an important issue to address to improve mutual trade relations. Both countries have agreed to sign an FTA, the feasibility study of which has been concluded by both sides.

South Korea is destination to only 1.2 percent of Pakistan's exports. Generally, Pakistan has export-

ed agricultural and primary consumer products to South Korea. The textile sector has the largest share in Pakistani exports to South Korea accounting for up to 35.70 percent, of which cotton's share alone was around 72.6 million USD during 2016, followed by a wide range of organic chemicals (beverages, spirits and vinegars etc.) that collectively made up to 16.26 percent. Petroleum, petroleum products and related materials accounted for 8.54 percent. Similarly, leather and leather related products, fish, crustacean and other aquatic invertebrates, and apparel and clothing accessories accounted for up to 8.94, 7.59, and 6.13 percent respectively. Figure 1 illustrates shares of Pakistani major exports to Korea.

Figure 1. Pakistan's Major Exports to South Korea in Percent (2016)



Source: Growth Lab. Center for International Development at Harvard University. Available at <http://atlas.cid.harvard.edu/> (accessed April 29, 2019).

On the other hand, 1.7 percent of Pakistan's imports come from South Korea. South Korea exports highly value added and finished products to Pakistan. The major South Korean exports to Pakistan over the last decade are machinery and mechanical appliances etc., plastic and articles thereof, iron and steel, mineral fuels, mineral oil, and items

of their distillation, and pharmaceutical products. As of 2016, its major exports included articles like artificial resins and plastic material (12.10%), iron and steel (10.34%), machinery and mechanical appliances (8.29%), and textile fibers (8.21%). Figure 2 illustrates shares of Pakistan major imports from Korea.

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## IV. Methodological Framework

The extended version of the GTAP model, named MyGTAP, has multiple useful characteristics that are helpful in examining the behavior of multiple households (Walmsley and Minor, 2013). It allows more flexibility in the treatment of government

This research used two different types of datasets: the latest released GTAP Database 9a (Aguiar et.al, 2016) and latest available comprehensive Pakistani SAM 2011. The GTAP database 9a represents the world economy for three reference years, 2004, 2007 and 2011. We used the latest base year, 2011.

The database is composed of 140 regions, 119 countries and 21 aggregated regions and 57 sectors for every region. Keeping in view the structure of Pakistan and Korea's economy and to facilitate computation, the number of regions has been aggregated to 30 regions (Annex III) and the number of commodities/sectors to 9 (Annex II).

## V. Simulation Design

To investigate the potential economy-wide impact of a Pakistan-South Korea FTA, two different policy scenarios have been designed:

### 1) Simulation-I: Removal of Bilateral Tariff to Zero (0):

A potential scenario in which bilateral tariff is removed in all tradable commodities between Pakistan and South Korea.

### 2) Simulation-II: Sim-I + Trade Facilitation by 10 percent.

This can be implemented in the GTAP through the AMS variable (technological improvements), which would represent the change in import prices from a trade partner because of efficiency changes (Fugazza and Maur, 2006). An increase in the AMS indicates that the effective domestic price of good *i* exported from region *r* into region *s* falls

and thereby mirrors a reduction of real resource costs.

## VI. Results

Table 2 illustrates the impact of two simulations designed in this study on real GDP (changes in output measured at base prices), terms of trade and total exports and imports. Results show that removing bilateral tariff will have a modest but positive impact on both Pakistan and South Korea. Tariff reduction usually lowers the price of imported commodities, thereby reducing the cost of intermediate goods for domestic producers. This coupled with increased export demand induces an increase in the country's production. Pakistani exports will increase by 375 million US dollars and 821 million US dollars in simulation I and II respectively. The upsurge in exports is mainly due to the processed food and textile sectors in case of Pakistan, while in Korea it is due to increase in the exports of light and heavy manufacturing sectors. The terms-of-trade is generally defined as the ratio of prices a country receives for its exports and pays for its imports. It is an important idea in comprehending the effect of price changes on general welfare of a certain country. Results show a positive term of trade for both Pakistan and Korea in both simulations.

**Table 2. Percentage Change in Macroeconomic Variables of Pakistan and South Korea**

Macro-Economic Variables	Scenario I		Scenario II	
	% change (Value)	% change (Value)	% change (Value)	% change (Value)
	Pakistan	South Korea	Pakistan	South Korea
Real GDP	0.01 (17.89)	0.0011 (12.88)	0.1238 (228.76)	0.023 (198.62)
Real Exports	1.2 (375)	0.05 (337)	2.66 (821)	0.09 (580)
Real Imports	1.22 (699)	0.11 (644)	2.61 (1481)	0.22 (1331)
Terms of Trade	0.32	0.016	0.58	0.05

Source: Author's calculation

Table 3 illustrates the impact on sectoral exports

of Pakistan and Korea. Results show the Pakistan-Korea FTA via tariff liberalization will have a posi-



tive impact on all sectors with notable increase in processed food (US\$ 700 million) and Textile and wearing apparel (US\$ 445 million) in the case of Pakistan. The results of the 2nd simulation show the trade facilitation coupled with tariff liberaliza-

tion will boost Pakistan's exports to Korea. In the case of Korea, light and heavy manufacturing exports will increase by 383 and 1609 million US dollars.

**Table 3. Monetary Change in Sectoral Exports of Pakistan and Korea (Million US Dollars)**

	Pakistan Export to Korea		Korean Exports to Pakistan	
	Sim-I (Monetary Change)	Sim-II (Monetary Change)	Sim-I (Monetary Change)	Sim-II (Monetary Change)
Grain Crops	25.82	40.96	0.06	0.36
Meat Livestock	0.01	0.08	0.00	0.03
Extraction	4.23	27.33	0.31	1.42
Processed Food	700.30	947.87	6.64	10.83
Textile Wapp	158.01	444.64	133.56	324.82
Light Manufacturing	21.09	72.80	149.82	383.42
Heavy Manufacturing	34.76	230.16	630.93	1609.76

Source: Author's calculation

## VII. Conclusion and Policy Implications

Regional connectivity is an important element of the recently unveiled Vision 2025 of the government of Pakistan. Pakistan considers regional trade an important component for economic growth. A free trade agreement with South Korea is of significance to Pakistan because South Korea is swiftly industrializing with comparatively higher economic growth and has accomplished rapid technological advancement in the region. Upon this backdrop, this research quantifies the potential economy-wide impact of a Pakistan-South Korea Free Trade Agreement. In terms of real GDP, the outcomes show a modest but a positive impact on both Pakistan and South Korea. Pakistan's major exports to Korea after trade liberalization are processed food and textile and wearing apparels. Complete removal of bilateral tariffs across the board is highly unlikely, so Pakistan should negotiate for lower or at least similar tariff rates that are granted to its competitors by South Korea to acquire a ground of

non-discriminatory competition for its exporters. It is not obligatory to make a long list of export goods in the form of a product line offer list; instead Pakistan should include those sectors and its major articles in which it has significant potential to trade, such as processed food, textile articles, beverages, raw hides and leather, and extraction etc. Moreover, modern technology and manufacturing techniques need to be adopted in the domestic market to surge efficient resource allocation, production, and exports to mitigate the overall trade balance. Furthermore, those sectors which are performing well should be provided suitable protection from foreign competition to support it. Imports related to such sectors should be discouraged rigorously, which will ultimately result in the domestic industry's development over the time. This is just a feasibility study and can facilitate debate among legislators, think tanks, policy makers and researchers for a possible Pakistan Korea free trade agreement

## Annex I:

## Pakistan and South Korea Trade Agreements

COUNTRIES/REGIONS	PAK	S. KOREA	WTO NOTI.	ENFORCEMENT/NEGOTIATIONS DATE	
				PAKISTAN	SOUTH KOREA
SAFTA	✓		YES	2006	
PTA-D8	✓		NY	2011	
CHINA	✓	✓	YES/NY	2007	2015
UNITED STATES	✓	✓	NY/YES	2003	2012
SRI LANKA	✓		YES	2005	
IRAN-PTA	✓		NY	2006	
MERCOSUR	✓		NO	2009	
MAURITIUS	✓		YES	2007	
INDONESIA	✓		NY/NY	2013	2012
MALAYSIA	✓		YES	2008	
ECOTA	✓		YES	2008	
TPS-OIC	□		NY	2014	
TURKEY	○	✓	NY/YES	2004	2013
THAILAND	○		NY	2015	
SINGAPORE	○	✓	NY/YES	2005	2006
MOROCCO	○		NY	2005	
IRAN-FTA	○		NY	2016	
GCC	○	○	NY/NY	2006	2009
BANGLADESH	○		NY	2003	
VIET NAM		✓	YES		2015
PERU		✓	YES		2011
EU		✓	YES		2011
EFTA		✓	YES		2006
COLOMBIA		✓	YES		2016
CHILE		✓	YES		2004
CANADA		✓	YES		2015
NEW ZEALAND		✓	YES		2015
INDIA		✓	YES		2010
AUSTRALIA		✓	YES		2014
ASEAN		✓	YES		2007
APTA		✓	YES		1976
ISRAEL		○	NY		2016
CENTRAL AMERICA <sup>4</sup>		□	NY		2018
ECUADOR SECA		○	NY		2015
MEXICO		○	YES		2006
RCEP		○	NY		2013
CHINA-JAPAN-KOREA		○	NY		2013

Source: Author's own design based on ADB and WTO data.

Signed and enforced "✓" Under negotiations stage "○" Signed but not yet effective "□" NY "Not yet Notified"

4 The FTA includes six out of seven Central American countries, excluding Belize.

## Annex II: Sectoral Aggregation Used in This Study

Code	Comprising GTAP sectors (code)
Grain Crops	Pdr,wht,gro,osd,c_b,pfb,ocr,pcr,v_f,
Meat Livestock	Ctl, oap, rmk, wol, cmt, omt
Extraction	Frs,fsh,coa,oil,gas,omn
Proc Food	Vol mil sgr ofd b_t
TextWapp	Tex wap
Lightmnfc	Lea lump pp fmp mvh otn omf
HeavyMnfc	P_c crp nmm i_s nfm ele ome
Util_Con	Ely gdt wtr cns
TransComm	Trd otp wtp atp cmn
Services	Ofi ise obs ros osg dwe

Source: Author's own aggregation using GTAP 9a Data Base

## Annex III: Regional Aggregation Used in This Study

Region	Description
Pakistan	Pakistan
Korea	Korea
India	India
USA	USA
Bangladesh	Bangladesh
Sri Lanka	Sri Lanka
Indonesia	Indonesia
Malaysia	Malaysia
Singapore	Singapore
Thailand	Thailand
Turkey	Turkey
Australia	Australia
New Zealand	New Zealand
Japan	Japan
China	China
Chile	Chile
Canada	Canada
Peru	Peru
Iran	Iran
Brunei	Brunei
S.Arab	S.Arab
UAE	United Arab Emirates
Vietnam	Vietnam
Mexico	Mexico
Egypt	Egypt
Rest of S.Asian	Rest of South Asia
Other OECD	Australia, New Zealand, Japan, Korea, Canada, Mexico, Chile
Europe 27	Austria, Belgium, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Norway, Rest of EFTA, Turkey, Albania, Bulgaria, Belarus, Croatia, Romania, Ukraine, Rest of Eastern Europe, Rest of Europe
Rest of Asia	Hong Kong, Taiwan, Rest of East Asia, Cambodia, Lao People's Democratic Republic, Philippines, Rest of Southeast Asia
Rest of World	Morocco, Tunisia, Bahrain, Argentina, Colombia, Ecuador, Paraguay, , Uruguay, Venezuela, Rest of South America, Cost Rica, Guatemala, Nicaragua, Panama, Rest of Central America, Caribbean, Israel, Kuwait, Oman, Qatar, Rest of North Africa, Cameroon, Cote d'Ivoire, Ghana, Nigeria, Senegal, Rest of Western Africa, Central Africa, South Central Africa, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Tanzania, Uganda, Zambia, Zimbabwe, Rest of Eastern Africa, Botswana, Namibia, South Africa, Rest of South Africa Customs Union, Rest of North America, Rest of the World



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