

China's Trade Relations with Saudi Arabia: Performance and Prospects

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Abstract

From the past era, China and Saudi Arabia have entered into the trade relationship. Trade is at the heart of the growing links between China and Saudi Arabia, which centre on the crude oil and petrochemical industries. The significance of a strong relationship between China and Saudi Arabia is founded on energy but also extending to other commodities. China, a communist state with the world's largest population and Saudi Arabia, a monarchy whose constitutions is the Islamic Shari' a. Time period is taken from 2001 to 2010. Liberalization process has lead to significant increase in quantity of China-Saudi Arabia trade. Both countries play dominant role in their own regions. China is a major country in the East Asia while Saudi Arabia plays a dominant role in Gulf region. Saudi Arabia plays a major role in exporting petroleum in the World while China is the second largest destination for Saudi oil. The fact that China imports oil from Saudi Arabia is the core issue of the China-Saudi Arabia trade structure. In addition, China also imports energy and raw materials including natural gas, plastic and steel products from Saudi Arabia. Saudi Arabia's imports from China are garments, textiles, and mechanical and electrical products. The trade volume between Saudi Arabia and China grow up many times. Now a day's Saudi Arabia remain China's top trade partner in the Middle East and North Africa (MENA) region, for eleven consecutive years. The bilateral trade has achieved a steady growth since the establishment of diplomatic relations between China and Saudi Arabia. Two-way trade between China and Saudi Arabia promotes the cooperation and coordination. China is the second largest economy in the world while Saudi Arabian economy is the world largest exporter. The trade relationship has resulted in strong ties for both economies.

Keywords: crude oil, East Asia, Gulf region, MENA, China, Saudi Arabia, Trade

Introduction

The two primitive civilizations, China and Saudi Arabia have coexisted in Trade relationship China and Saudi Arabia are the two dominant member countries of their respective regions. China is second largest economy in the world and first in the Asia while Saudi Arabia play a major role in Gulf Cooperation Council (GCC). Saudi Arabia has an oil based economy, it having large amount of the World petroleum reserves and also plays a leading role in organization of petroleum exporting countries (OPEC). The bilateral relationship between the China Saudi Arabia improves continuously, which promotes the development. Both two Countries are the permanent members of the World trade Organization (WTO), both countries are in the process of transforming their economies in the WTO framework. China became the member of WTO in 11 Dec 2001¹ while Saudi Arabia applied for the membership of the General Agreement on Tariff and Trade (GATT) in 1993. And after 12 years of long negotiation and implementation of sustained reforms of the Saudi economy, Saudi Arabia became the 149th member of the GATT's successor World Trade Organization in December 2005.² China is the world's most populous country, having a population growth of 0.45 percent in 2015.³ the size of its population and labor force are world champion. China maintained a steady annual economic growth rate at an average of 10 percent from 1990 to 2007.⁴ From the past decades, China's GDP has jumped by more than 5.5 times from \$1.32 trillion in 2001 to \$7.29 trillion in 2011⁵ and oil consumption capacity has been increased by more than doubled.⁶ As far as Saudi Arabia is concerned is the energy based economy, a stable source for the time being. Saudi Arabia is a dominant country in the Arab World and characterize as an emerging power because its influence is spread in the World. With the Saudi Arabia's accession to WTO adopted liberal reforms and open the way for the private sectors in trade and investment policies. The kingdom is the leader of the organization of the petroleum Exporting Countries (OPEC) and has a huge impact on the global energy supply. Saudi Arabia has indigenous supply of natural gas and oil. Saudi Arabia is the largest producer and top supplier of the petroleum oil in the entire world. Saudi Arabia's oil reserve since last 70 years, the depletion of oil supplies elsewhere could increase pressure on Saudi's oil resources.⁷ Saudi government decentralized the economy and frames a planning to cut the dependence on oil for the future and also initiate a plan to develop a petrochemical sector, with a huge investment into optional energy projects.⁸ Saudi leader wants to transform the oil-based economy into a modern economy that is set a place its position in the world economy.

ENERGY BOND BETWEEN THE CHINA AND SAUDI ARABIA

China and Saudi Arabia trade relationship increased continuously with passage of time. Saudi Arabia is the largest supplier of crude oil to China. Saudi crude oil exports to china have steadily risen from 2007 to 2010. China-Saudi Arabia energy trade relationship because China values the reliability of supply. The China Saudi Arabia relationship is mutually beneficial and strong ties-up through support of both governments. China and Saudi Arabia

negotiations are fundamentally based on economic interest. China and Saudi Arabia trade relationship mainly focus on the energy. Trade is the heart of the growing links between China and Saudi Arabia which concentrates on the crude oil and petrochemical commodities. China is concentrates its attention on the Saudi Arabia, while Kingdom looked China as a huge Market for energy. China imports oil 20% from the Saudi Arabia it is huge amount in absolute terms.⁹ In 2002, China became the first market of Saudi oil.¹⁰ According to international Energy Agency (IEA), in 2012 the country China overtakes the United States in terms of oil imports shortly after 2020 and becomes the largest oil consumer in the world around 2030, consuming 15 mb/d by 2035, nearly double the level of 2009.¹¹

Saudi Arabia is adopting a “Look East” policy and open the way towards China for marketing its oil exports. The World’s energy demand/supply, is directed towards Asia. China-Saudi Arabia is close to each other when Saudi King visited China it was the first trip by Saudi King to China since relations were established in 1990.

Reviews

1. Muhammad Azhar (2008),¹² “Economic cooperation between India and Saudi Arabia: performance and prospects”. This article examines the impact of liberalization and reforms on the trade between India and Saudi Arabia. India and Saudi Arabia Economic cooperation consists of bilateral trade inclusive of the energy imports, Indian expatriates’ workers in Saudi Arabia, the inflow of remittances, Saudi aid and prospective Saudi investments. It has been shown that trade relationship between these two countries has improved annually. But not mention the energy contribution in the total trade while the India’s balance of trade is deficit during the whole period due to large amount of import of energy from Saudi Arabia.

2. Rusko, j.Christopher et al (2007),¹³ “India and China from trade to peace”. This article shows the economic factors are helpful for the ties up between the two countries. Economist finds out some findings to reach the subject. The trade relationship between these two countries may be beneficial for the peace between India and China. They also Shows the share of two in world economy are responsible for growth in two-way relations. The authors mainly focus on trade relations for peace. These factors are needed but not enough in this matter.

3. Muhammad Azhar (1996),¹⁴ “India and Oil Exporting Countries: Scope of Energy Cooperation”, in this article discuss the scenario of present and future energy consumption and liberalization in India’s oil sector. It examines the energy cooperation of India with oil exporting countries. Energy cooperation is helpful for India because demand for fuel is fulfilling by oil exporting countries as well as India is a market for oil. This cooperation may be helpful in present and future arena. But no other traded commodities are focused in this article.

4. Najma Khan (2000)¹⁵ in her book “Cooperation and Trade with India and Middle East”, 2000 relates to cooperation of Middle East Countries with India. Performance and pattern of Trade and cooperation and major problems faced to the Trade relationship and cooperation are mentioned in this book. To find the way for growth the export commodities from India to Maghreb countries was the primary aim of this book. The limitation of this book is the not emphasis on the Middle East countries.

Objectives

1. To analysis the trends and pattern of growth of China’s trade with the China.
2. To study China’s Trade relationship with the Saudi Arabia between the period from 2001 to 2010.
3. To Study the Share of petroleum oil in Chinese imports from Saudi Arabia.
4. To know the share of major commodities in the balance of trade of the two countries.
5. Estimates of the intensity of trade relations between China and Saudi Arabia.

Methodology

The current study would be based on the secondary data and information collected from the official websites, books, and various journals on foreign trade, etc.

Models applied for the Study

- Revealed Comparative Advantage index
- Revealed Import Dependency index
- Trade intensity index

Revealed Comparative Advantage index

This article finds out the performance of revealed comparative advantage index. This index was used by the Balassa (1965) for export performance. Index identified the capacity of a country’s export potential. RCA index calculated at the 4-digit HS code of the commodity. Revealed comparative advantage indices (RCA) use the trade pattern to identify the sectors in which an economy has a comparative advantage, by comparing the country of interests’ trade profile with the world average.

Definition: The RCA index is defined as the ratio of two shares. The numerator is the share of a country’s total

exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports. ¹⁶

$$RCA_{ij} = (X_{ij} / X_{it}) / (X_{wj} / X_{wt})$$

Where,

X_{ij} Country's export of product j

X_{it} Country's total export

X_{wj} World's export of product j

X_{wt} World's total exports.

Range of values: Takes a value between 0 and $+\infty$. If the value of RCA is less than 1 i.e. that the country has a revealed comparative disadvantage. Similarly, A country is said to have a revealed comparative advantage in the commodity if the value exceeds unity.

Table 1
Commodities with RCA Index of China with Saudi Arabia

S.No.	HS Code	Products Name	RCA 2010	RCA 2009	Average
1	8415	Air conditioning machine with motor	0.07	0.08	0.11
2	8429	Self propelled bulldozer, angle dozer	0.01	0.01	0.02
3	8471	Automatic data processing Machine	0.01	0.01	0.02
4	8481	Tap, Cock, Valve for pipe tank	0.02	0.02	0.03
5	8517	Electric appliances for line telephoning	0.01	0.02	0.02
6	8528	Television receivers	0.01	0.01	0.02
7	9401	Seat & their parts	0.03	0.03	0.04
8	9405	Lamps lightings fittingness, Signs,	0.02	0.03	0.04
9	9403	Furniture & their parts	0.12	0.16	0.20
10	6104	Women's suits jackets, dresses	0.16	0.17	0.25

Source: Author's Calculations based on the data from ITC Trade Map.

This RCA table shows the China's Revealed Comparative Advantage with Saudi Arabia for the year 2009 and 2010 and the averages of the two years. RCA of China's export to Saudi Arabia is less than one in whole table. When the RCA index was calculated for the commodity HS code wise.

Revealed Import Dependency Index

The index selects the items which have import dependence on the partner countries. RID index is also known as Revealed Comparative Disadvantage index. The RID show the item-wise structures of imports in the countries. The RID is defined as share in country's total imports vis-à-vis its share in total world imports. The Revealed Import Dependence index is follows: ¹⁷

$$RID\ index = (M_{ia} / M_a) / (M_{iw} / M_w)$$

Where,

M_{ia} Imports of commodity i from country a

M_a Total imports of country

M_{iw} Total value of the world imports of commodity i

M_w Total world imports.

If the value of RID is greater than one it means a commodity has a strong export demand in a country.

Table 2 Commodities with RID Index of China with Saudi Arabia

S. No.	HS Code	Products Name	RID 2009	RID 2010	Average
1	2709	Crude petroleum oils	0.26	0.23	0.37
2	2710	Petroleum oils not crude oils	0.00	0.00	0.00
3	2711	Petroleum gases	0.01	0.01	0.02
4	2905	Acyclic alcohol & their derivatives	1.06	0.89	1.50
5	2902	Cyclic hydrocarbons	0.22	0.20	0.32
6	2909	Ethers, ether-alcohol	0.23	0.28	0.37
7	3901	Polymers of ethylene, primary	0.23	0.25	0.35
8	3902	Polymers of propylene	0.20	0.27	0.34
9	2503	Sulphur other than sublimed	0.82	0.99	1.31
10	7404	Copper waste & Scrap	0.02	0.03	0.04

Source: Author's Calculations based on the data from ITC Trade Map.

The major import of China from Saudi Arabia is crude and petroleum oils, Acyclic alcohol, Cyclic hydrocarbons, Ethers& ether alcohol, polymers of ethylene and propylene, sulphur other than sublimed, Copper waste & Scrap. This table presents the Revealed Import Dependence of China's import from Saudi Arabia. The commodities having RID value less than 1 are presented as the strong export demand of Saudi Arabia products to China.

TRADE INTENSITIES INDICES

Trade intensity indices can be divided into Export intensity index (EII) and Import Intensity index (III) are the measures of pattern of exports and imports. Kojima (1964) and Drysdale (1969) they can be defined as follows:

Export Intensity Index

This index is defined as the ratio of two export shares. The numerator is the share of the destination of interest in the exports of the region under study. The denominator is the share of the destination of interest in the exports of the world as a whole.

The commodity intensity indices of China's export trade with Saudi Arabia will reveal the extent to which China's exports had met the pattern of Saudi Arabia import demand for the given period. The export is measured with help of export intensity index is measured with help of following formula:¹⁸

$$EX_{CS} = (X_{CS} / X_C) / (M_S / M_W)$$

Where,

EX_{CS} - China's export intensity index to Saudi Arabia

X_{CS} - China's export to Saudi Arabia.

X_C - China's total export to World.

M_S - Saudi Arabia's total imports from whole world

M_W - Total imports of world

If the value of index is lower than one it shows that the bilateral export flow is smaller than expected, given the partner country's importance in world export. In case, value of index is greater than one it shows that a bilateral trade flow is greater than expected, given the partner countries in world export.

Range of values: Takes a value between 0 and +∞. Values greater than 1 indicate an 'intense' trade relationship.

Table 3 Export Intensity Index of China with Saudi Arabia

Year	china's export to Saudi Arabia	China's export to world	Saudi Arabia import from world	Total import of world	XII
2001	1354115	266098209	31222981	6321096021	1.03
2002	1671544	325595970	32333209	6583352918	1.05
2003	2146803	438227767	36916031	7678635458	1.02
2004	2775458	59332558	44744965	9388461250	9.82
2005	3824415	761953410	59510254	10613992430	0.90
2006	5055834	968935601	69800240	12243448946	0.92
2007	7839959	1220059668	90214040	14094884587	1.00
2008	10823468	1430693100	115133874	16353748703	1.07
2009	8977852	1201646800	95552181	12587639030	0.98
2010	10366445	157776300	106862965	15241896183	9.37

Sources: ITC, TRADE MAP, Trade Statistics for International Business Development.

Import intensity index

This index is also useful to demonstrate the relative importance of these two countries in their respective exports and imports. Import Intensity Index of China with Saudi Arabia is measured with the help of the following formula:

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$$III_{CS} = (M_{CS} / M_{CW}) / (M_{SW} / M_W)$$

Where,

III China's import intensity index with Saudi Arabia

M_{CS} China's import from trading partner Saudi Arabia

M_{CW} China's total import from World

M_{SW} Saudi Arabia's total import from World

M_{WS} world's total import

If the value of index is less than one shows that import flow is smaller than expected, given the partner country's importance in the world import and vice versa.

Table 4 Import Intensity Index of China with Saudi Arabia

Year	China's import from Saudi Arabia	China import from World	Saudi Arabia's import from world	world's Import	III
2001	2715895	243552881	31222981	6321096021	2.26
2002	3435351	295170104	32333209	6583352918	2.37
2003	5172322	412759796	36916031	7678635458	2.61
2004	7522645	561228748	44744965	9388461250	2.81
2005	12245715	659952762	59510254	10613992430	3.31
2006	15084532	791460868	69800240	12243448946	3.34
2007	17560476	956115448	90214040	14094884587	2.87
2008	31022698	1132562200	115133874	16353748703	3.89
2009	23620244	1005555200	95552181	12587639030	3.09
2010	32829048	1396001600	106862965	15241896183	3.35

Sources: ITC, TRADE MAP, Trade Statistics for International Business Development.

Conclusion

Nowadays the trade relationship between China and Saudi Arabia is frame in strong ties. World is looking towards the relationship between china and Saudi Arabia as the china became top most partner for the supply of oil. It is the beneficial for their population and Economies. The trends in the growth rate of their trade reflect a strong potential. The system show mutual benefit and common development, which will make the strengthen the oil-exporting and importing countries. The fact that oil is the heart of the trade relationship between the china and Saudi Arabia. Saudi Arabia is the largest exporter of oil in the world while China is the largest importer of oil from Saudi Arabia. We found that during 2001-2010, China-Saudi Arabia trade increased by many times. We estimate the import and export intensities of China's trade with Saudi Arabia. On the other hand, China's export intensity index was near to expected during the whole period but China's import intensity form Saudi Arabia was high to expectations.

Two more concepts are used to assess a country's export and import potential. The Revealed Comparative Advantage Index to assess a China export potential and Revealed Import Dependence Index used to know the import potential.

References

1. World Trade Organization, Members and Observers
2. M. Azhar, Economic Cooperation between India Saudi Arabia: Performance and Prospects, Middle Eastern Studies. Vol 44, No. 2, 2008, pp.323-334.
3. The World Facts Book, Central Intelligence Agency (CIA), USA.
4. M. Moniruzzaman, Rise of China and Its Implications for the Muslim World, Journal of Economic Cooperation and Development, Vol.34, No.1, 2013, pp. 1-32.
5. International Monetary Fund, World Economic Outlook 2011. Washington DC: IMF
6. "Oil Market Report," International Energy Agency, 12 May 2012.
7. Niblock T, The Political Economy of Saudi Arabia, Routledge, London, 2007, P.1

8. Mckinsey Global Institute, The New Power Brokers: How Oil, Asia, Hedge funds, and Private Equity are Faring in the Financial Crisis, July 2009.
9. Bo Zhiyue, China's Middle East Policy: Strategic Concerns and Economic interests," MEI Insight no.61 Middle East Institute, National University of Singapore, April19, 2012,p.2
10. Lei Wu, "China's Oil Safety: Challenges and Counter Measures" West Asia & Africa, No. 4, 2003, pp.17-21.
11. International Energy Agency, World Energy Outlook 2011.Paris: IEA, November 2011, P.80.
12. M. Azhar, Economic Cooperation between India Saudi Arabia: Performance and Prospects, Middle Eastern Studies. Vol 44, No. 2, 2008, pp.323-334.
13. Rusko, J.Christopher, et al., "India and China: From Trade to Peace" Asian Perspective, Vol.31, No.4, 2007, pp.99-123.
14. M.Azhar, India and Oil Exporting Countries: Scope of Energy Cooperation", OPEC Bulletin, Vol.27 No.3 , 1996 pp 4-6.
15. Khan. Najma, "Cooperation and Trade with India and Middle East", Rajesh Publication, New Delhi, 2000.
16. Bhat, T.P., et al. (2008), "India and China: Trade Complementarities and Competitiveness", Book Well Publication, New Delhi.
17. R.Radha, China and India: "Economic performance, Competition and Cooperation", Foreign Trade Review, by IIFT, New Delhi, Vol. XLVI, No. 4, 2012.
18. M.Azhar, "Indo-Jordanian Trade: Performance and Prospects", Middle Eastern Studies, Vol. 36, No. 3, 2000, pp. 191-208.
19. R.Radha, China and India: "Economic performance, Competition and Cooperation", Foreign Trade Review, by IIFT, New Delhi, Vol. XLVI, No. 4, 2012.