Bilateral engagement amid geopolitics: A case of India and Iran

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India's engagement with West Asia including Iran has always been a balancing act hovering between economic necessities and strategic pursuits. The paper briefly traces the evolution of Indo-Iran engagements and also analyses their respective macroeconomic parameters. It also outlines and discusses three major geopolitical and geo-economic influences including sanctions on Iran, payment mechanism, and Iran's business environment. Moreover, the issues pertaining to access to oil, transit route through Afghanistan and other trade facilitation measures have also been discussed. The paper also uses the revealed comparative advantage index to identify some potential areas of cooperation. Also, it argues that India needs to be more cautious and pragmatic in its strategic endeavours.

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Introduction

India and Iran share strong civilisational ties. During the pre-historic times, the Indus Valley Civilization as well as the Proto-Elamite and Elamite Civilisations of Iran have evidence of economic interactions. Even trade linkages existed between the two civilizations through the ocean routes. Later, the cultural and diplomatic relations also existed between Iran's Safavid dynasty and the Mughal dynasty in India.

However, with the continuing geopolitical vibrancy of West Asia since the post-World War-II era, both India and Iran have been adopting cautious approach in engaging at bilateral and multilateral level. India and Iran share strong bilateral ties and India established diplomatic relations with Iran soon after Iran's independence in March 1950.[3] After the Iranian Revolution of 1979, Iran withdrew from the Baghdad Pact and started looking toward South Asia and East Asia for fulfilling its economic and strategic necessities.[4] The Tehran Declaration signed in 2001 laid the foundation of strategic relations between India and Iran, the Delhi Declaration of 2003 galvanised the bilateral military relations in the areas of sea-lane control and joint naval exercises, among others (Mousavi, 2011).

Both India and Iran have focused on economic liberalisation promoting market participation in their economies. Whereas India liberalized in 1991, the process of economic change in Iran started in the last few years. Gradually, India emerged one of the fastest growing countries in the world. India became tenth-largest economy by market exchange rates and the third-largest by purchasing power parity (PPP).

[3] Government of India, Ministry of External Affairs, Document on Indo-Iran Bilateral Relations accessed in January, 2012

[4] Baghdad Pact, also known as the Central Treaty Organization (CENTO) was established in 1955 by Iran, Iraq, Pakistan, Turkey, and the United Kingdom. It was dissolved in 1979. Though it aimed for mutual protection and non-intervention in each other's affairs, but carried a more strategic agenda of containing the Soviet Union

According to the International Monetary Fund (IMF), as of 2011, the Indian economy is nominally worth US$1.84 trillion.[5] The economic indicators show that the economy grew at more than 7 per cent per annum.
Further, the growth continued and the economy grew at an average of close to 9 per cent in the few years preceding the global financial crisis. The turbulence affected the external sector. Resultantly, overall economic growth declined to 7.1 per cent during 2008-09. However, Indian economy remained resilient because of the strength of its macroeconomic fundamentals. This is evident from the recent economic performance that during 2010-11, India's economy has grown at the rate of 8.6 per cent.[6] Sectoral analysis of the country's GDP shows that the services sector makes the highest contribution to GDP (55.2 per cent), while the share of industry is 30.2 per cent (including 8 per cent of construction sector) and that of agricultural sector is 14.6 per cent.[7]
Similarly, Iran is characterized as a state-controlled mixed and transition economy with a large public sector with some 50 per cent of the economy centrally planned.[8] In fact, the state controlled economic system was the main objective of the Islamic Revolution of 1979 and in the post-revolution period the Islamisation of economy was strongly advocated in Iran (Valibeigi, 1993). Also, the Five Year Plans had been instrumental in Iran's economic development. Under Khatemi administration, Iran experienced trade liberalisation and diversification of the economic structure (Illias, 2010). Economic diversification has been taking place in Iran with over 40 industries directly involved in the Tehran Stock Exchange. The formulation of new policy has resulted in the increased role of services sector in the economy.

5 World Economic Outlook, 2011, IMF
6 Government of India, CSO has estimated the real GDP growth at 8.6 per cent during 2010-11
7 Economic Survey of India, 2010-11, Ministry of Finance, Government of India
8 ssTV, November 29, 2009. http://previous.presstv.com/ErrorPage.htm?aspxerrorpath=/detail.aspx

During the early 21st century, the services sector constituted the major chunk of GDP, followed by industry and agriculture in Iran. In 2008, Iran's GDP was estimated at US$382.3 billion (US$ 842 billion by PPP) and US$ 5,470 per capita (US$12,800 by PPP). After severe draught in the country and cuts in oil production, the economic growth slowed down to 0.6 per cent in 2008-09. However, due to strong performance of agriculture in 2009-10, Iran's economy grew at 3.5 per cent which slightly slowed down to 3.2 per cent in 2010-11.[9]
The changing dynamism of the economic structure of Iran shows that the coming years could replicate the changes occurred in India after liberalisation. Eventually, the role of services and manufacturing sectors will increase in Iran.
As far as direction of international trade of India is concerned, in 2011-12 total merchandise exports accounted for US$305964 million of which UAE (US$35.9 billion), USA (US$34.74 billion) and China (US$18.08 billion) are the top three export destinations with share of 11.7 per cent, 11.35 per cent and 5.9 per cent respectively. Whereas, its global imports accounted for US$489.32 billion of which its top three sources of imports viz. China, United Arab Emirates (UAE) and Switzerland accounted for US$57.52 billion, US$35.79 billion, and US$32.40 billion which comprises of a share of 11.8 per cent, 7.3 per cent and 6.6 per cent respectively of India's global imports.[10]
Keeping the importance of oil in the development process of a country into consideration, the role of Iran has been significant. Even the developing economies became dependent of Iranian oil to meet their hydrocarbon requirements, and the rise in consumption level of crude oil in India and China contributed largely to it. China has dramatically expanded its oil imports from Iran during 1990s and also gained direct access to Iranian oil (Leverett and Badery, 2005).

[9] World Economic Outlook, 2011, and IMF Country Report No. 11/241
[10] Export-Import Data Bank, Department of Commerce, Government of India, Accessed on 3rd December, 2012

Iranian exports predominantly constitutes of oil and gas, which has been its major export revenue earner in 2010 (Jbili *et al.*, 2007). Further, Iran is a founder member of OPEC and the Gas Exporting Countries Forum (GECF). Petroleum constitutes 85.4 per cent of Iran's exports with a value of US$71.57 billion in 2010 out of the total exports of US$83.79 billion.[11] Iran's non-oil exports stood at US$15.2 billion in 2007, an increase of 47.2 per cent over the previous year, and US$25.8 billion in 2010.[12] Such trends showing growth rate in the non-oil sector of Iran actually reflects Iran's urge for diversification of its trade portfolio. The value of Iran's non-oil exports is further expected to reach the value of imports at US$ 43 billion in 2011 and US$ 50.5 billion a year later.

Also, Iran's imports have grown at the rate of 10 per cent during 2005-2010. In 2010, its total imports were US$65.02 billion, which constituted 14.5 per cent share of agricultural products and 58.8 per cent of manufacturing goods.[13] Moreover, unfavourable or complex operating requirements and international sanctions have hindered foreign investments in the country despite liberalization of relevant regulations by the Iranian government in the early 2000s. However, it is believed by the Iranian political figures that the Iran is benefitted by the ongoing sanctions by improving its indigenous capabilities (Maloney, 2010).

Indo-Iran relation continues to be influenced by the contentions between India and the United States (US), despite India's best efforts in playing a balancing role. Striking a balance has, of course, been strenuous as at least three divergent orientations exist in the region – Iran, Israel and the Arab world – and the United States envelopes them all. This is also reflected in the fact that India has thrice

[11] As per Annual Statistics published by OPEC, Annual Statistics, (2010-11) Available at http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2010_2011.pdf

[12] Iran's Non-Oil Exports Statistics, Iran's Customs Administration (IRICA) Statistics, 2008, http://en.tpo.ir/UserFiles/3-IranNonoilExportStatistics.pdf

[13] Trade Profile of Islamic Republic of Iran, 2011, WTO http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Country=IR&Language=F

voted against Iran's nuclear programme in the International Atomic Energy Agency (IAEA). Later, India's stand that it shall not look to Iran through Iran-Israel prism could have given a new dimension to the bilateral engagements. With the Arab region, and especially the Gulf, significantly contributing India's energy requirements, India has always favoured a broad-based engagement with the West Asian countries to foster both economic and strategic interests.

In a situation where financial blockages have been imposed by US as well as the European Union (EU) on Iran, the paper outlines some critical global issues pertaining to Iran which have implications for India as well. The paper also explores possibilities of India's engagements with Iran as well as the modalities for economic cooperation.

Major issues and geopolitical concerns

Some of the major issues for consideration related to engaging with Iran include:

a) Iran and Sanctions: The US and the European Union (EU) have continued economic sanctions on Iran. Sanctions on Iran have been an important instrument of the US foreign policy. In a recent move, the US senate approved new sanctions against Iran energy sector. Such sanctions and embargoes have marked a new phase of economic and commercial exclusion for Iran. This has gone to the extent that the sanctions even provided for penalties for energy companies that set up joint ventures with Iranian companies. This has proved to be a deterrent for major oil companies to invest in Iran. Earlier, comprehensive trade and investment embargoes were also imposed on Iran during the Clinton administration (Torbat, 2005). In the most recent development, Iran hosted the 16th Ministerial Conference of the Non- Aligned Movement (NAM). Through this platform, Iran also challenged such attempts made by the US and EU countries to isolate it through sanctions.

For India, there are several diplomatic challenges in West Asia in the evolving geopolitical scenario. Though India has been playing a significant role in global power balancing, yet there are several impediments to it. During the recent visit of US Secretary of State Hillary Clinton, India was persuaded to cut imports of oil from Iran and to collaborate with the US in preventing Iran's ongoing nuclear programme, which Iran says is for constructive purposes only. In the month of May, it was decided that the state-run refiners in India will import 11 per cent less oil from Iran.[14] This has led to India's oil imports from Iran fall by around 40 per cent in July 2012 as compared to the previous month.[15] The EU also imposed sanctions which banned several insurance companies from covering Iranian oil shipments.[16]

It is noteworthy that India maintains that the Iran's nuclear programme issue should be resolved through dialogues and negotiations and that Iran also has right to pursue such programme if they are civilian in nature and does not violate the obligations under the Non-Proliferation Treaty (NPT). Sagar (2009) has explained the scenario as a dilemma arguing that whereas on one hand India favours developing its nuclear weapons programme outside the purview of NPT, it opposes the moves of countries like Iran, Syria and North Korea, on the other. However, since the issue involves the 'strategic' good and that too amidst the West Asian geopolitics, India need to have a cautious approach as there lies a thin line between India's economic stakes on the one hand, and strategic stakes, on the other. Such a balancing act has been India's pursuance of economic advantages with Iran, covering energy requirements, transcontinental transit and a market for India's products, depicts India's interests in Iran.

The current engagement with Iran and the future policy strategies with Iran (the country has Arabian Sea on the one side and Caspian Sea on the other), connotes that India would continue to be engaged with Iran. It is in this context, the Prime Minister reportedly told Secretary Clinton during on May 7 that though India supports the non-proliferation objectives of the international community vis-à-vis

[14] "India bows to US pressure, cuts Iran oil import by 11%", The Times of India, 16 May 2012

[15] "India cuts July Iran oil imports by over 40 pct y/y-trade data", by Nidhi Verma, 21 Aug 2012, Available:http://in.reuters.com/article/2012/08/21/india-irna-imports-idINL4E8JL37120120821

[16] *Ibid.*

the Iranian nuclear issue, it will be guided solely by its national interests on issues of energy security.[17]

b) Payment Mechanism: Payment mechanism is another pertinent issue as the US sanctions on Iranian Central Bank for carrying out transactions in US dollar and Euro have made it difficult for India to make payments directly. The actual problem started when Reserve Bank of India withdrew Asian Clearing Union in 2010 under which payment to Iran was being made by India. For a short span, the third country banking mechanism was also followed in Euro particularly using Turkish Bank.

Since December 2010, refiners in India are using Turkey's Halkbank to pay their annual oil import bill of more than US$10 billion.[18] However, after sanction by EU, the possibility of payment mechanism through third country was also negatively affected. Still the payment issue is affecting imports of Iranian oil by India. Another problem that would come under the mechanism is the increasing volatility of currencies in global market.

There is another model that India and Iran are following which provides for partial payment in local currency, meaning thereby that India would pay 45 per cent of the transaction through Rupee and the rest will be paid in Euro through a Turkish Bank. Recently, Bharat Petroleum Corporation Limited (BPCL), an Indian company has made its payment in rupees of Rupees 27 billion (equivalent to US$ 482.19 million) for import of Iranian oil.[19] Also, to facilitate import of crude oil

[17] As cited in "India and the US: Squaring the Circle on Iran" by S. Samuel C. Rajiv, 10 May 2012, New Delhi: IDSA,
Available:
http://www.idsa.in/idsacomments/IndiaandtheUSSquaringtheCircleonIran_sscrajiv_100512

[18] India's BPCL starts rupee payments for Iran oil –sources", by Nidhi Verma, 19 Jun 2012, Available: http://www.reuters.com/article/2012/06/19/india-iran-bpcl-idUSL3E8HJ3E520120619

[19] *Ibid.*

from Iran, the Finance Ministry has exempted payments made in Indian Rupees for such imports from any local tax.[20]

c) Business Environment in Iran: Business environment in Iran is not so favourable. As per Doing Business Report of the World Bank, Iran ranked 140 out of 183 countries in 2011, and still lower at 144 in 2012 which further slipped to 145 in 2013 (out of 185 countries). Also, as per this report, on the parameter of 'ease of doing business', Iran is only better than Iraq, in the whole of Middle East region. The study clearly indicates that Iran's business climate has not been conducive to external trade and investment as most of the indicators of Doing Business have experienced deterioration, though it should largely been seen as a result of the economic sanctions.

The internal economic reforms in Iran depicts that the economy is in transition wherein, measures have been taken to improve the condition for private sector participation. The current Five Year Plan (2010-15) of the Iranian government envisaged around 8 per cent annual growth of the economy. The government during the period targeted to remove almost all the government subsidies on food and energy through its new policy 'Iranian Targeted Subsidy Plan'.[21] Moreover, several steps are being undertaken by the government to reduce the tariff and non-tariff barriers on imports from other countries. The current ongoing structural changes will generate opportunities for economic engagement in future particularly, in the areas of trade and investment. Such reforms would lead to better economic outcome if Iran and US issue is resolved, of course, through negotiations.

Also, within the pursuit of the business environment, and to develop a broader bilateral engagement, some of the India's major concerns need to be looked into.

These include:

[20] "Rupee payments for Iran oil exempted from local taxes: Finance Ministry", The Economic Times, 18 June 2012

[21] Iran Chamber of Commerce and Industry (2011), Business Guide

i) Access to oil: Since China has developed relations with Iran on account of energy sector collaborations, it is important for India to have an interrupted supplier for meeting its domestic needs. Chinese access to Iranian gas and oil reserve through Central Asian routes has potential to meet Chinese needs even during war. Such case can only evolve with India if it receives oil from the route of Strait of Hormuz.

ii) Afghanistan: The relations between India and Iran have been deepening with respect to most issues especially security, energy, and the North-South Transportation Corridor (Balooch, 2009). Also, India's outreach in Afghanistan and Central Asia needs transit facilitation from Iran. As India helped build Chahbahar Port in Iran, Iran would facilitate transit through the port to Afghanistan and Central Asia. India has also built Daleram-Zarang highway connecting Chahbahar Port with Afghanistan. The economic and geo-political interest of India in both Afghanistan and Central Asia largely depends upon Iranian facilitation as Pakistan has denied transit for Indian consignment to reach Afghanistan. More importantly, in a situation of transit facilitation through Pakistan, the route via Chahbahar port would be better to be chosen by shippers from India to avoid the conflict-ridden Af-Pak region.

iii) Trade Facilitation: India's interest in transcontinental transport facilitation through Iran is another important aspect of determinant of the geopolitical and economic interest of India with Iran. India with Iran and Russia has already signed the agreement on North-South Transport corridor which has potential to decrease travel time drastically for India products to reach Eastern Europe. Furthermore, it would help diversify the market of Indian exports in future.

In pursuits of its economic diplomacy, it is, therefore, imperative that India develops a clear-cut *modus vivendi* with the West on the Iranian issue.

Bilateral Trade between India and Iran

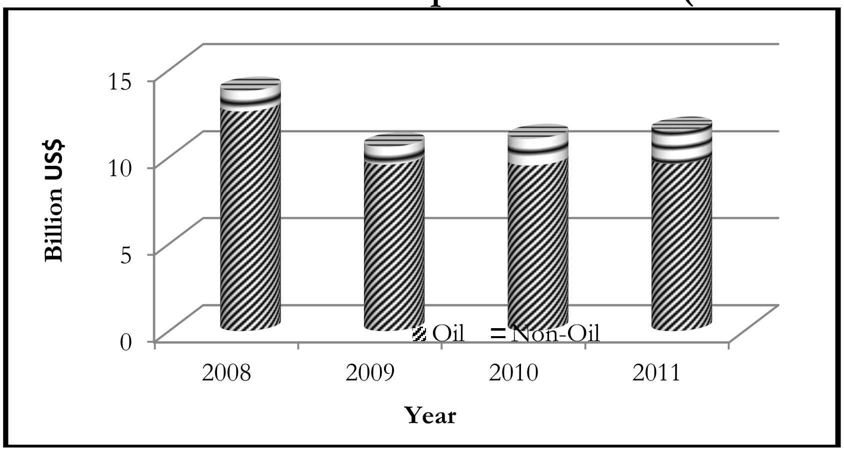
India-Iran trade and commercial relations continue to be dominated by Indian import of Iranian crude oil (figure 1). The bilateral trade between the two countries accounted for US$15.97 billion in 2011-12 as compared to US$14.91 billion during

2008-09. It was US$13.42 billion in 2010-11 owing to the issues pertaining to sanctions. Of the total trade during 2011-12, exports from India accounted for US$2.41 billion, whereas the imports were worth US$13.56 billion (figure 2). The exports from India to Iran constitute only 15.10 percent of total India-Iran bilateral trade. As per the Export-Import Data Bank, Department of Commerce, Government of India, the share of imports from Iran was 84.9 per cent during 2011-12.

In addition, the imports of commodities other than crude oil from Iran need to be analysed. Major commodities of imports under this category are, fertilisers, organic and inorganic chemicals, ores, minerals and earth and plastic and its products, etc. (as given in Appendix 1). Commodities which accounted for almost 98 per cent during 2011 have been delineated and the remaining are clubbed into others. Further, figure 3 shows the changing share of top six commodities which were imported from Iran to India. It is important to mention here that India has already continued with negative balance of trade due to its heavy imports of oil. Therefore, increasing its exports to Iran shall help normalise the balance of trade to a large extent.

Figure 1

India's imports from Iran (oil and non-oil)

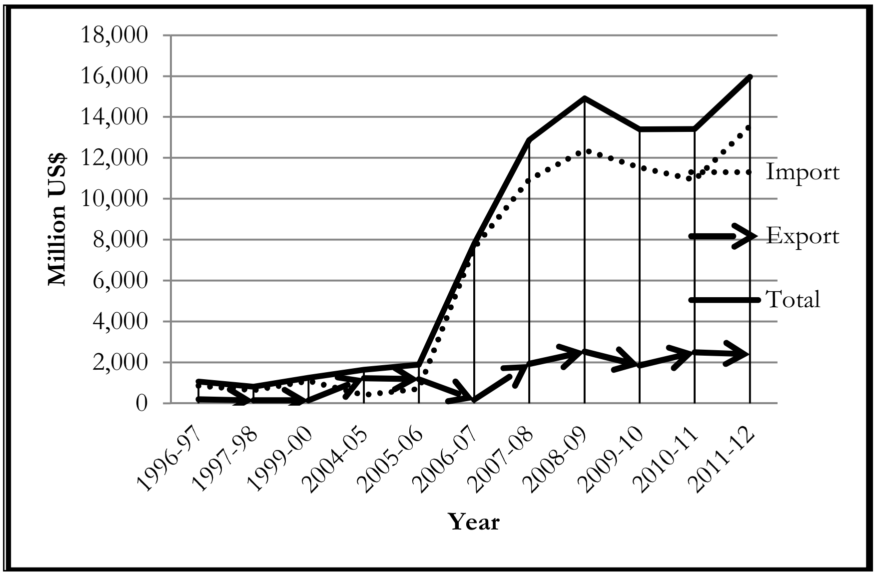


Source: Trade Map, ITC Geneva

India's export to Iran shows that the share of inorganic chemical, articles of Iron and Steel and Pharmaceutical has increased during recent past. Pharmaceuticals emerged as one of the important constituent of the commodities exported by India to Iran. The share of cereals has also been significant.

Figure 2

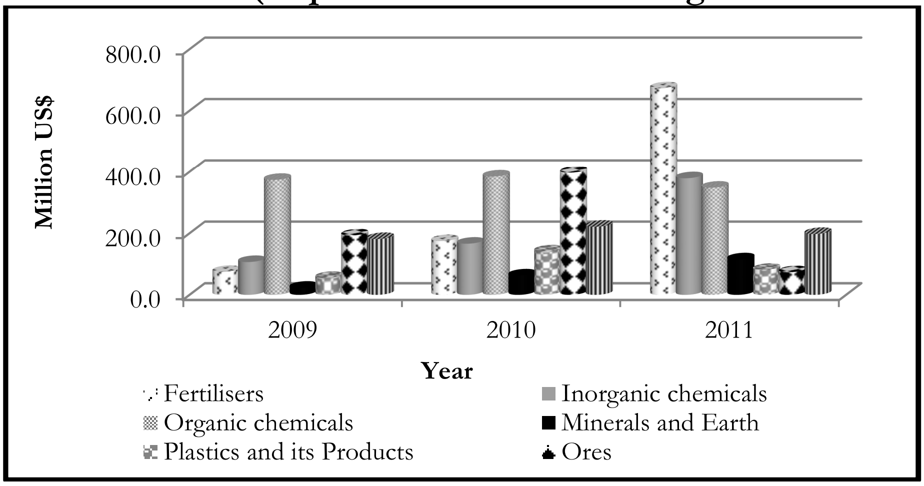
Trend of India's Bilateral Trade with Iran



Source: Export-Import Data Bank, Govt. of India

Figure 3

Changing Composition of India's imports from Iran other than Crude Oil (Top 6 Commodities at 2 digit classification)



Source: Trade Map, ITC Geneva

The share of inorganic chemicals was 2.0 per cent during 2009. The same was recorded around 7.6 per cent during 2008. However, in the year 2011, export of inorganic chemical and related products accounted for around 7 per cent of India's total export to Iran. Export of inorganic chemical was US$86.7 million in 2008 with 3.7 per cent share witnessed a trajectory growth in 2010 increasing its share to 18.6 per cent amounting to US$465.7 million which was recorded to be US$ 168.1 million in 2011 a decrease of around 64 per cent during the two years.

It is important to note that the increase was more than five-fold during the three years from 2008 to 2010. More importantly, India is still exporting US$ 1409.3

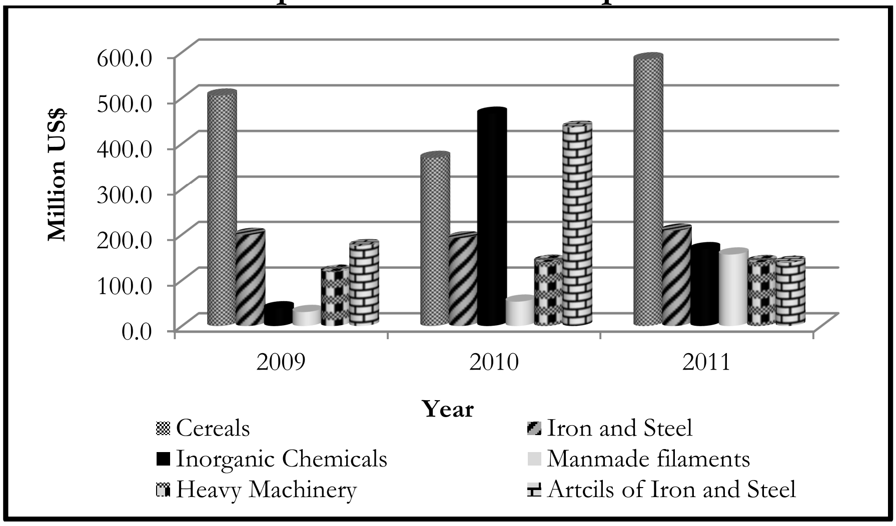
million of inorganic chemicals and related products which can easily fulfill the demand for the same in Iran. Iran's demand for the product is around 31 per cent of India's total export of the same items. Organic chemicals are also an important item exported by India to Iran. Its share however decreased from around 4 per cent in 2008 to 3.6 per cent in 2010 with value of US$91.9 million and US$90.9 million during 2008 and 2010 respectively. In 2011, the same item recorded slight increase in its export from India to Iran accounting for around 3.9 per cent.

Similarly, exports of cereal was 4 per cent in 2008 with a value of US$95.2 million which has grown by more than three and a half-fold increase during 2010. Interestingly, the commodity's share was recorded as 15 per cent in India's total exports to Iran, which in terms of value, accounted for US$ 369.0 million. However, in comparison to the year 2009, export of Cereals from India to Iran decreased in 2010. But the demand for the same in Iran increased in 2011 which accounted for 24 per cent of India's total export to Iran amounting for around US$ 584 million. Iron and Steel has maintained a share of around 8 per cent of India's export basket to Iran in 2008 and 2011. Figure 4 depicts the top six commodities which were exported to Iran from India. The share of other commodities has been decreasing over time as is evident in Appendix 2.[22]

[22] The classification in this appendix includes identification of major commodities which had share around 80 per cent during 2010. The remaining commodities have accordingly been clubbed into others. Interestingly, the other commodities (excluding major commodities) decreased by almost three-fold from 2008 to 2010. Other commodities mainly constitutes of meat and meat products, tea, fodder, vehicles other than railways, fiber products and electrical and electronic equipments etc. For further detail, a major commodity-wise value and share of exports from India to Iran has also been given in Appendix 2

Figure 4

Top 5 Commodities Exports from India to Iran



Source: Based on data from Trade Map, ITC Geneva

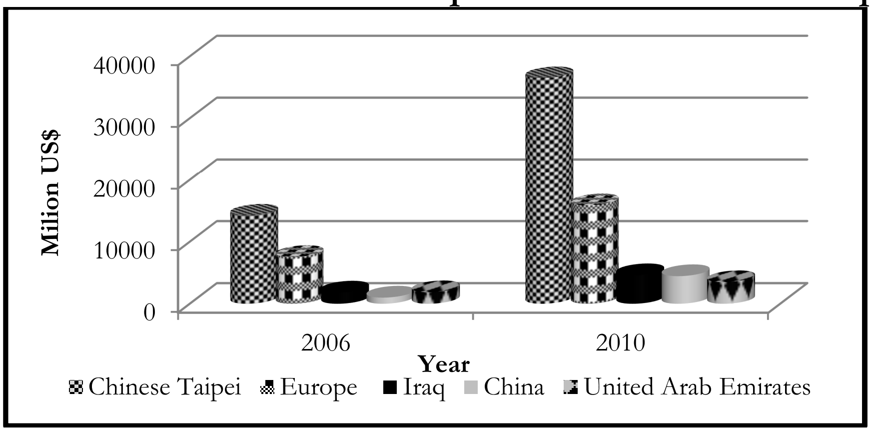
Changing direction of Iran's international trade

Iran's direction of trade for both export and import has witnessed considerable changes in recent years partly because of the US sanctions and partly due to the policy framework of the country. From 2002 to 2006, Iran mainly imported from Japan, China, Italy, France and other parts of Europe and the UAE, which accounted for more than 80 per cent of the total imports in 2002. Japan's share has increased from 18 per cent in 2002 to 28.4 per cent in 2005. This share for Japan has substantially decreased during the recent period. In 2010, Japan's share in Iran's import was 1 per cent of its global imports.

An increase in the share of Chinese Taipei (Taiwan) reflects its increasing proximity to Iran. During 2006-10, exports from Taiwan to Iran have witnessed unprecedented growth of 27 per cent (figure 5). Iran's total import from Taiwan accounted for US$14,199.23 million in 2006 and US$36,469.01 million as of 2010. Similarly, Chinese share has also increased from 1.6 per cent in 2006 to 5 per cent in 2010 accounting for US$992.6 million in 2006 to US$4,450.4 million in 2010 depicting more than four-fold increase in four years.
Also, Iran's imports from the UAE have been approximately 3 per cent per year from 2002 to 2006 with annual growth rate of around 23 per cent, and it increased to 4 per cent in 2010. Resultantly, this region has also emerged as one of the important trading partner of Iran. The sanction is expected to affect Iran's imports drastically and it will also further lead to change in the direction of its imports.

Figure 5

Share of Top 5 Locations in Iran's Imports



Source: Based on data from Trade Map, ITC Geneva

At present under the scenario of sanctions, European countries would not be able expand its bilateral trade. As a result, Europe's share which increased from 12 per cent in 2006 to 19 per cent 2010 may tend to decrease in the near future.

Under this scenario where Iran's foreign policy is looking forward to strengthen its relations with the East, countries like India and China can play a role in strengthening its international trading position.

3.2 Revealed Comparative Advantages of India and Iran

In order to determine the global outreach and sectoral potential of India and Iran, Revealed Comparative Advantage (RCA) index for merchandise trade has been calculated.[23] RCA is a tool to assess the comparative advantage of an economy in international trade. It was developed by Balassa in 1965 'to analyse the relative trade performance of individual countries in particular commodities' (Balassa, 1977) which was later used to analyse global trade as well (Volrath, 1991). Also, some researches used the analysis to understand bilateral trade of two trading partners (Dimelis & Gatsios, 1995).

Here, RCA index has been calculated for both countries for two years – 2005 and 2010 in case of goods for all 99 sectors at two-digit HS code. Table 1 shows the top 10 sectors in which India has global comparative advantages, as calculated through the RCA index (for goods), while Table 2 shows same for Iran (see Appendix 3 for RCA index of all 99 sectors for both countries).

A comparative analysis of RCA index for India and Iran shows that at two-digit level, there are some commodities in which both the countries have global comparative advantage. These are carpets and other textile floor coverings (HS Code 57), vegetable plaiting materials, vegetable products n.e.s. (HS Code 14), and,

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[23] *RCA index has been calculated using the following formula:* $RCA_{ij} = (X_{ij}/X_{wj})/(X_i/X_w)$*; Where,* X_{ij} = i_{th} *country's export of commodity j;* X_{wj} *= world exports of commodity j;* X_i *= total exports of country i; and,* X_w *= total world exports. An RCA index value of more than one reveals that the country has a comparative advantage. The data for calculation of RCA has been taken from Trade Map database of International Trade Centre, Geneva*

coffee, tea, mate and spices (HS code 09), in which the two countries compete globally.
In addition, Iran is in transforming stage and its economy is in need of commodities like iron and steel, chemical, pharmaceuticals and machinery etc. in which India has global comparative advantages. Therefore, it is important for India to enhance its outreach in the changing direction of Iran's market.

Table 1
Top 10 sectors of India's Revealed Comparative Advantage (Goods)

HS Code	Sectors	2005	2010
'52	Cotton	5.70	8.09
'13	Lac, gums, resins, vegetable saps and extracts nes	11.82	7.88
'50	Silk	12.97	7.02
'57	Carpets and other textile floor coverings	9.29	6.48
'53	Vegetable textile fibres nes, paper yarn, woven fabric	4.93	6.48
'71	Pearls, precious stones, metals, coins, etc	8.50	5.32
'14	Vegetable plaiting materials, vegetable products nes	5.23	4.95
'63	Other made textile articles, sets, worn clothing etc	7.29	4.10
'09	Coffee, tea, mate and spices	4.87	3.69
'54	Manmade filaments	2.64	3.63

Source: Author's calculations based on data from ITC Geneva

Table 2
Top 10 sectors of Iran's Revealed Comparative Advantage (Goods)

HS Code	Sectors	2005	2010

'57	Carpets and other textile floor coverings	9.43	11.24
08	Edible fruit, nuts, peel of citrus fruit, melons	4.38	5.48
'27	Mineral fuels, oils, distillation products, etc	6.32	4.87
'25	Salt, sulphur, earth, stone, plaster, lime and cement	1.11	3.80
'07	Edible vegetables and certain roots and tubers	0.65	2.33
'78	Lead and articles thereof	0.33	2.14
'09	Coffee, tea, mate and spices	1.10	1.78
'69	Ceramic products	0.51	1.77
'14	Vegetable plaiting materials, vegetable products nes	0.90	1.58

Source: Author's calculations based on data from ITC Geneva

Thus, studying carefully the RCA index of India, potential sectors for India's export to Iran may be determined under the ambit of current foreign trade policy. The major commodities which are likely to play vital role to boost India's export capability in Iran are Cotton, Chemical, Pharmaceuticals, Iron and Steel, Food grains, Vegetables and articles of iron and steel, among others.

In 2010, Iran imported cotton from India valued at US$113.92 million (which was around 1.7 per cent of India's total cotton exports to the world). Pertinently, as per Trade Map data, India has exported Iran around 17 per cent of its total cotton imports accounting for US$19.39 million; which clearly makes up for a huge market for India in Iran.

Likewise, India's potential to export Chemicals and Pharmaceuticals is huge in Iran. 36 per cent of total chemicals requirement of Iran was exported by India constituting both inorganic as well as organic chemicals worth US$556.53 million in 2010. While, Iran's global import of these items was around US$3,405.34 million in 2010 depicting a huge requirement by Iran, which India can look forward to cater to. Another important item is Pharmaceutical which has a huge market in

Iran. Iran's imports of pharmaceuticals accounted for around 20.5 per cent of India's total exports of the item during 2010. Commodities including articles of iron and steel, food grains as well as vegetables also have substantial export potential. India's export of articles of iron and steel accounted for around 23.7 per cent to Iran's total requirements. Cereal has also emerged as one of the important item of exports from India to Iran given the issue of food security which Iran faces.

Conclusion and the way ahead

India and Iran need to deepen their bilateral engagement through a well-defined policy framework which helps them mutually leverage their economic and strategic necessities. India has some pertinent interest in Iran which can play an important role in transforming its outreach.

Moreover, Iran also sees a tremendous complimentarity of interest with India. In fact, Iran and Sudan have built their railways' system which can easily be served for transit purposes of global freight movement particularly from South Asia to Central Asia as well as Eastern Europe and even to Central Europe. The transit facilitation of India's international freight traffic can be used via Bandar Abbas to Iran's ports in Caspian Sea which can easily provide connectivity to Russia, Kazakhstan and Europe as a part of North South Corridor. In addition, transit facility at Chabahar port in Iran is a necessity for India to strengthen its presence in Afghanistan and Central Asia.

Another important perspective for India to further develop economic engagement with Iran lies in the emerging market of Iran which is evolving through larger private sector participation. Therefore, Iran would need services support in many areas like telecommunication, IT and IT-enabled services as well as transport sector development particularly railways. Therefore, managing the transition to market in Iran in the midst of international sanctions would be an important concern.

In a situation where the actual imports of Iran from India is very low, Iran needs to explore its new sectors where it can provide impetus. To expedite such measures, a competitive market needs to be created in Iran to boost its growing industry. Presence of India goods along with Chinese commodities as well as investors would benefit the country in the long-run. With observer status in the WTO, Iran is looking forward to its membership. Also, the new payment mechanism pertaining to Rupee-Rial arrangement would boost India's export to Iran and traders from both sides are likely to gain incentives.

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APPENDIX 1

Composition of commodities other than crude oil imported by India from Iran (% share)

Commodities	2009	2010	2011
Fertilisers	7.4	11.3	36.0
Inorganic chemicals	10.6	10.7	20.3
Organic chemicals	37.1	24.8	18.6
Minerals and Earth	2.3	4.1	6.2
Plastics and its Products	5.5	9.1	4.3
Ores	19.2	25.7	3.9
Other Chemicals	2.8	2.0	3.6
Edible Fruits	3.1	2.9	2.7
Heavy Machinery	0.0	0.9	0.7
Rubber and its Products	0.5	0.6	0.7
Spices	0.5	0.5	0.4
Skins and Raw Leather	1.0	0.4	0.3
Electrical and Electronics Equipment	0.0	0.0	0.3
Others	10.1	7.1	1.8

Source: Author's Calculations based on data from ITC Geneva

APPENDIX 2

Composition of Export of India to Iran (% share)

Commodity	2009	2010	2011
Cereals	25.9	18.9	30.0
Iron and Steel	10.2	9.9	10.7
Inorganic Chemicals	2.0	23.9	8.6
Manmade filaments	1.6	2.7	8.0
Heavy Machinery	6.1	7.2	7.2
Articles of Iron and Steel	9.0	22.4	7.1
Manmade staple fibres	2.0	3.4	5.3
Organic chemicals	4.5	4.7	5.0
Others	38.8	6.9	18.1

Source: Author's Calculations based on data from ITC Geneva

APPENDIX 3

RCA index of India and Iran (Goods)-99 sectors

HS Code	Sectors	India		Iran	
		2005	2010	2005	2010
'01	Live animals	0.04	0.05	1.81	0.09
'02	Meat and edible meat offal	0.94	1.26	0.03	0.05
'03	Fish, crustaceans, molluscs, aquatic invertebrates nes	2.63	1.81	0.09	0.30
'04	Dairy products, eggs, honey, edible animal product nes	0.55	0.23	0.14	0.80
'05	Products of animal origin, nes	0.82	0.70	2.06	1.39
'06	Live trees, plants, bulbs, roots, cut flowers etc	0.51	0.24	0.28	0.31
'07	Edible vegetables and certain roots and tubers	1.66	1.17	0.65	2.33
'08	Edible fruit, nuts, peel of citrus fruit, melons	1.81	0.98	4.38	5.48
'09	Coffee, tea, mate and spices	4.87	3.69	1.10	1.78
'10	Cereals	4.45	2.40	0.00	0.30
'11	Milling products, malt, starches, inulin, wheat gluten	0.40	0.37	0.07	0.30
'12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	1.39	1.09	0.09	0.05
'13	Lac, gums, resins, vegetable saps and extracts nes	11.82	7.88	0.60	1.37
'14	Vegetable plaiting materials, vegetable products nes	5.23	4.95	0.90	1.58
'15	Animal,vegetable fats and oils, cleavage products, etc	0.85	0.60	0.22	0.19
'16	Meat, fish and seafood food preparations nes	0.64	0.52	0.13	0.09
'17	Sugars and sugar confectionery	0.33	1.60	0.36	0.63
'18	Cocoa and cocoa preparations	0.03	0.05	0.10	0.33
'19	Cereal, flour, starch, milk preparations and	0.40	0.35	0.54	1.30

	products				
'20	Vegetable, fruit, nut, etc food preparations	0.45	0.40	0.36	1.06
'21	Miscellaneous edible preparations	0.58	0.45	0.11	0.51
'22	Beverages, spirits and vinegar	0.09	0.13	0.17	0.04
'23	Residues, wastes of food industry, animal fodder	2.85	2.52	0.04	0.02
'24	Tobacco and manufactured tobacco substitutes	1.23	1.73	0.04	0.02
'25	Salt, sulphur, earth, stone, plaster, lime and cement	3.59	2.03	1.11	3.80
'26	Ores, slag and ash	7.08	2.46	0.39	1.16
'27	Mineral fuels, oils, distillation products, etc	0.76	1.12	6.32	4.87
'28	Inorganic chemicals, precious metal compound, isotopes	1.08	1.36	0.50	0.89
'29	Organic chemicals	1.69	1.57	0.47	1.43
'30	Pharmaceutical products	0.97	0.94	0.03	0.04
'31	Fertilizers	0.05	0.05	0.04	0.92
'32	Tanning, dyeing extracts, tannins, derivs,pigments etc	1.64	1.57	0.15	0.24
'33	Essential oils, perfumes, cosmetics, toileteries	0.67	0.69	0.06	0.08
'34	Soaps, lubricants, waxes, candles, modelling pastes	0.35	0.47	0.46	0.60
'35	Albuminoids, modified starches, glues, enzymes	0.90	0.71	0.38	0.31
'36	Explosives, pyrotechnics, matches, pyrophorics, etc	1.24	1.32	0.00	0.00
'37	Photographic or cinematographic goods	0.15	0.14	0.00	0.00
'38	Miscellaneous chemical products	1.17	0.93	0.30	0.40
'39	Plastics and articles thereof	0.68	0.51	0.19	1.05
'40	Rubber and articles thereof	1.00	0.68	0.10	0.08
'41	Raw hides and skins (other than furskins) and leather	2.49	1.78	0.58	0.94
'42	Articles of leather, animal gut, harness, travel goods	3.49	1.90	0.02	0.02

'43	Furskins and artificial fur, manufactures thereof	0.00	0.00	0.00	0.00
'44	Wood and articles of wood, wood charcoal	0.10	0.10	0.03	0.04
'45	Cork and articles of cork	0.05	0.09	0.01	0.00
'46	Manufactures of plaiting material, basketwork, etc.	0.16	0.07	0.14	0.19
'47	Pulp of wood, fibrous cellulosic material, waste etc	0.01	0.00	0.07	0.07
'48	Paper & paperboard, articles of pulp, paper and board	0.32	0.31	0.02	0.02
'49	Printed books, newspapers, pictures etc	0.39	0.33	0.05	0.08
'50	Silk	12.97	7.02	0.01	0.03
'51	Wool, animal hair, horsehair yarn and fabric thereof	0.65	0.76	0.36	0.57
'52	Cotton	5.70	8.09	0.02	0.02
'53	Vegetable textile fibres nes, paper yarn, woven fabric	4.93	6.48	0.01	0.07
'54	Manmade filaments	2.64	3.63	0.07	0.02
'55	Manmade staple fibres	3.05	3.27	0.10	0.10
'56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	0.56	0.81	0.11	0.24
'57	Carpets and other textile floor coverings	9.29	6.48	9.43	11.24
'58	Special woven or tufted fabric, lace, tapestry etc	1.28	1.42	0.45	0.40
'59	Impregnated, coated or laminated textile fabric	0.51	0.44	0.04	0.06
'60	Knitted or crocheted fabric	0.23	0.37	0.00	0.00
'61	Articles of apparel, accessories, knit or crochet	2.59	1.70	0.14	0.07
'62	Articles of apparel, accessories, not knit or crochet	3.60	2.41	0.07	0.05
'63	Other made textile articles, sets, worn clothing etc	7.29	4.10	0.31	0.21
'64	Footwear, gaiters and the like, parts thereof	1.63	1.13	0.17	0.23

'65	Headgear and parts thereof	0.17	0.21	0.05	0.04
'66	Umbrellas, walking-sticks, seat-sticks, whips, etc	0.11	0.03	0.00	0.00
'67	Bird skin, feathers, artificial flowers, human hair	3.55	2.97	0.02	0.00
'68	Stone, plaster, cement, asbestos, mica, etc articles	2.20	1.80	0.81	0.58
'69	Ceramic products	0.40	0.52	0.51	1.77
'70	Glass and glassware	0.51	0.41	0.33	0.41
'71	Pearls, precious stones, metals, coins, etc	8.50	5.32	0.08	0.11
'72	Iron and steel	1.58	1.23	0.60	0.30
'73	Articles of iron or steel	1.65	1.76	0.15	0.26
'74	Copper and articles thereof	1.76	2.32	0.26	0.65
'75	Nickel and articles thereof	0.10	0.08	0.00	0.00
'76	Aluminium and articles thereof	0.65	0.62	0.42	0.45
'78	Lead and articles thereof	0.53	1.28	0.33	2.14
'79	Zinc and articles thereof	0.40	3.28	1.31	1.67
'80	Tin and articles thereof	0.30	0.10	0.01	0.00
'81	Other base metals, cermets, articles thereof	0.18	0.15	0.01	0.00
'82	Tools, implements, cutlery, etc of base metal	1.26	0.77	0.01	0.02
'83	Miscellaneous articles of base metal	0.57	0.50	0.07	0.04
'84	Machinery, nuclear reactors, boilers, etc	0.30	0.31	0.02	0.06
'85	Electrical, electronic equipment	0.19	0.30	0.01	0.02
'86	Railway, tramway locomotives, rolling stock, equipment	0.12	0.12	0.00	0.00
'87	Vehicles other than railway, tramway	0.36	0.58	0.04	0.10
'88	Aircraft, spacecraft, and parts thereof	0.05	0.47	0.00	0.00
'89	Ships, boats and other floating structures	0.94	1.68	0.00	0.07
'90	Optical, photo, technical, medical, etc apparatus	0.22	0.21	0.00	0.01
'91	Clocks and watches and parts thereof	0.24	0.09	0.01	0.00
'92	Musical instruments, parts and accessories	0.22	0.15	0.01	0.02

'93	Arms and ammunition, parts and accessories thereof	0.01	0.06	0.00	0.00
'94	Furniture, lighting, signs, prefabricated buildings	0.24	0.29	0.03	0.05
'95	Toys, games, sports requisites	0.21	0.13	0.03	0.01
'96	Miscellaneous manufactured articles	0.92	0.81	0.02	0.01
'97	Works of art, collectors pieces and antiques	3.11	0.85	0.00	0.02
'99	Commodities not elsewhere specified	0.43	1.00	0.00	0.01

Sourc ce: Author's Calculations based on data from ITC Geneva