

Institute for Trade Studies and Research (ITSR)

## "A summary of Recent Changes in Economic, Industrial and Trade Performance in Iran"

"A report to the presenters and contributors at the Symposium on October 2015"



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## 1-Iran's Economic Position In The World

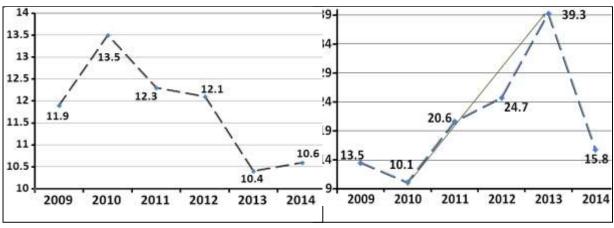
## 1-1- Macroeconomic Indicators

Iran, with an estimated Gross Domestic Product (GDP) of US\$ 406.3 billion in 2014, is the second largest economy in the Middle East and North Africa (MENA) region after Saudi Arabia. It also has the second largest population of the region after Egypt, with an estimated 80.8 million people in July 2014. Table 1 includes the share of Iran's GDP value in the world economy as well as the economic growth rates.

Table	1. Iran's GDP	and Its Glo	bal Position	(2009-201 <i>4</i>	4)	
	2009	2010	2011	2012	2013	2014
Share of World GDP	1.4	1.4	1.42	1.28	1.22	1.2
Economic Growth	3	6.5	4.3	-6.8	-1.9	3

Source: World Bank (row 1) and Central bank of Iran (row2)

According to the table, there was a decline in Iran's share of global GDP from 1.42 to 1.2 within a period of 4 years (2011-2014) as a result of considerable reductions in the quantity and the scale of production. More precisely, tightening economic sanctions on Iran made it hard for the economy to get through exchange rate shocks, increased transaction costs and so on, leaving little room to prevent the recessionary gap. Therefore, unemployment spread at a higher level compared with 2009. However, it rebounded slightly to 10.6 in 2014, with the positive economic growth of 3 percent (diagram 1)



Source: Statistical Center of Iran

Diagram 1. Unemployment Rate in Iran, 2009-2014

source: Central Bank of Iran

#### Diagram 2. Inflation Rate in Iran, 2009-2014

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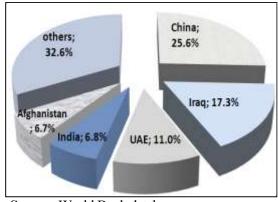
<sup>&</sup>lt;sup>1</sup>. The annual data reported by Iran's datacenters are based on solar calendar (12 months of time period ending to the March 21<sup>st</sup> of each year).

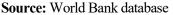
The impact of international sanctions on Iran's economy cannot be solely attributed to contraction in GDP and decreasing number of manufacturing business units, since it made prices skyrocket to a *galloping inflation* (diagram 2). More precisely, exchange rate shocks during 2010-12, caused a dramatic rise in import prices in local currency. The resulting rise in consumer prices, together with the cost push inflation of enforcing subsidy targeting plan (in 2011), made Iran as the second inflationary economy in the world in 2013 (39.3 percent in 2013 compared with 10.1 percent in 2010).

Despite increased economic vulnerability during 2010-2013, there emerged some sort of economic rebounding in 2014- 2015 as a result of nuclear agreements, dampening inflation down (to 15 percent), relative stability in exchange rate market, increased non-oil export revenues - particularly petrochemical products – as well as increased transactions with the European Union.

## **1-2-** International Trade

A look into Iran's trade position and its main partners in international markets shows high market concentration, i.e. the most part of its international transactions is made with Asian parties (contributing to approximately 90 percent of exports and 80 percent of imports in this economy). Considering the case by country shares, Iran's five top export markets in 2014 included China, Iraq, United Arab Emirates, India and Afghanistan, accounting for about 68 percent of Iran's total export







markets in that year. In other words, high degree of concentration has become to be the inherent feature of Iran's export markets. Putting the matter in more concrete terms, although Iran possesses an appropriate position in terms of the number of export partners (114 countries), it makes its transactions in concentrated export markets (the value of Iran's *Herfinal Hirschman Market Concentration Index* equaled 0.12 in 2011).<sup>2</sup> whereas, there are many other countries including Turkey (0.04%), Pakistan (0.07%) and the United Arab Emirates (0.09%) that are doing international transactions in more competitive conditions than that of Iran. The immediate impact of this issue is the increased economic vulnerability and a serious toll on Iran's current account.

<sup>&</sup>lt;sup>\*</sup>. The index is reported by World Bank and is between 0 and 1. The greater the value of the index, the higher the degree of concentration is.

Another issue which makes the situation even harder is the low share of high-tech and medium tech export commodities (34 percent in 2014), leaving little room for this economy to enjoy market power in export markets. Hence, it is not surprising that the unit price of Iran's export showed a decreasing trend from 0.51 dollar/kilogram to 0.45 dollar/kilogram during 2011-2014.

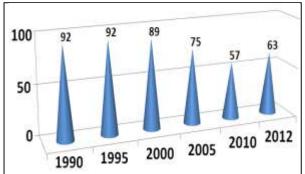
The other issue to be worth noting is the *Value Reach of Exports*, which offers a count of the number of product-partner relationships that were created, survived, or terminated during the period of sanctions in Iran. In this respect, the *index of export market penetration* suggests Iran's poorer performance (3.5) compared with Turkey (19.7), United Arab Emirates (12.8) and even Pakistan (7.2) in 2011<sup>3</sup>. Although it shows that low share of Iran's exports reach proven importers of those products worldwide, it could be regarded as a potential for expansion in Iran's export markets.

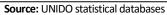
In the import sector, there also exists the problem of high market concentration. More precisely, United Arab Emirates and China have become to be the main sources of Iran's total imports (47.1 percent in 2014). Regarding high share of primary goods in Iran's total import (84 percent in 2014), high degree of concentration in import markets could be a potential source of import price increases and the resulting cost pressures it may cause in the production sector.<sup>4</sup>

Finally, it should be noted that concentrated structure of trade markets is not a new issue. It had been the inherent feature of Iran's trade sector, but it was tightening economic sanctions on Iran which aggravated the matter to become a *challenge*. Hence, it is anticipated that with the success of the nuclear agreements and extending relations with European and other former trade partners, it become more feasible to diversify trade markets.

## **1-3-** Industrial performance

Examining the way Iran has moved in the trend of global manufacturing indicates that its global position has worsen off since 2010 as a result of economic sanctions, after enjoying a dramatic improvement during 2000-2010.<sup>5</sup> Statistically, ranking 89 (out of competitive 144) for its Industrial performance (CIP) in 2000, Iran rose by 28 places to be ranked 57th in 2010; however, it began falling sharply in the ranking to get the 63<sup>th</sup> place in 2012 (diagram 4). The dropping down in position has, to a great







<sup>6</sup>. During 2010-2014, there had been a sharp increase in the unit price of Iran's imports from 1.07 to 1.61 in 2011 to 1.46 dollar/kilogram, i.e. approximately a 30 percent increase during 2009-2014.

<sup>&</sup>lt;sup>r</sup>. Some countries with lower export market penetration than that of Iran include Kazakhstan (2.1), Azerbaijan (1.6) as well as Afghanistan (1.6)

<sup>°.</sup> The improvement was linked to a shift towards high-tech industries in this economy.

extent, been affected by a decline in manufacturing investments during last decade especially during the period of tightening economic sanctions on Iran. This will be discussed in section 3-1.

Regarding the impact of Iran's economy on world manufacturing value added, its contribution rose from 0.28 percent in 2006 to 0.37 percent in 2010; however, it fell sharply to 0.28 percent in 2011. This, compared with the share of Turkey or even Saudi Arabia (1.27% and 0.45% respectively in 2011), is so little. It is noteworthy that there are countries like Kazakhstan (0.11%) in the central Asia region that Iran's performance is superior to. But regarding the considerable improvements of Kazakhstan in manufacturing performance within recent years, this country may change into one of Iran's industrial rivals in near future.<sup>6</sup>

For the case of *share in world manufactured exports*, again there had been a growing contribution from 0.11 percent in 2006 to 0.26 percent in 2010, and again a sharp fall to 0.21 percent in 2011. Compared with the contribution of Turkey (0.96%) and Saudi-Arabia (0.56%) to world manufactured exports in 2011, Iran records a much lower performance, however, in comparison with Pakistan (0.16%) and Kazakhstan (0.16%), it is somehow on a better position.

Other industrial performance indicators for Iran are summarized in table 2, and for the case of better understanding a comparison with corresponding figures in Turkey and Saudi Arabia is also included.

L. P. Atom		Iran		Turkey	Saudi Arabia
	Indicators	2006	2011	2011	2011
1	Manufacturing Value Added per capita (2005\$)	314	326	1503	1405
2	Manufactured Exports per capita (US\$)	132	344	1623	2476
3	Share of MT and $HT^{\gamma}$ exports in total exports (%)	25.15	31.69	41.19	36.89
4	Share of MT and HT activities (%)	41.82	40.7	30.04	41.12
5	Share of Manufacturing Value Added in GDP (%)	10.9	10.37	18.07	10.17
6	Share of Manufactured Exports in Total Exports (%)	14.78	19.69	88.6	19.41

Table 2. Selected Industrial Performance Indicators in Iran, Turkey and Saudi Arabia

Source: UNIDO, Industrial Development Report, 2013

According to the table, Iran records an acceptable performance regarding the share of mediumand high-tech activities and manufactured exports compared with Turkey and Saudi Arabia. However, it should be noted that it is through the high contribution of medium -tech activities and medium –tech exports that the resulting indicators for Iran (included in rows 3 and 4) show good records.

<sup>&</sup>lt;sup>1</sup>. Kazakhstan has recorded good industrial performance during recent years. Statistics for 2011-2012 shows it achieved a dramatic increase in its share of world manufacturing value added (from 0.07% to 0.11%) as well as its share in world manufacturing export (from 0.11% to 0.16%).

<sup>&</sup>lt;sup>v</sup>. Medium- and High-tech

## 2- Iran's Position Regarding Global Indices

To get a clear picture of Iran's performance regarding global indices, table 3 includes ranking results for Iran reported by selected international organization (World Economic Forum, Heritage Foundation and World Bank).

	Table 3. Iran's position regarding selected global indices, 2014				
	Index (year)	Iran's Rank	Major Sources of Problem		
1	Global Competitiveness Index (2015)	83 out of 144	low level of efficiency enhancers (labor market efficiency, goods market efficiency, financial market development), deficiencies in technology readiness, Business sophistication		
2	Global Enabling Trade Index (2014)	131 out of 138	Problems with foreign and domestic market access, efficiency and transparency of border administrations, availability and use of ICTs		
3	Index of Economic Freedom (2015)	171 out of 186	Weak rule of law and autarkic trade and investment policies <sup>A</sup> as well as rising business regulations, capital flight and increased inflation due to currency devaluation		
4	Ease of Doing Business Index (2015)	132 out of 189	Problems with: Protecting minority investors, resolving Insolvency, trade across borders, paying taxes, registering property, dealing with construction permits		
5	Logistics Performance Index (2014)	114 out of 166	Problems with: the frequency with which shipments reach consignees within scheduled or expected delivery times, the efficiency of customs and border clearance, the ease of arranging competitively priced shipments, the ability to track and trace consignments.		

Source: World Economic Forum (rows 1-2), Heritage Foundation (row 3) and World Bank (rows 4-5)

According to the table, it could be well understood what undermines manufacturing competitiveness in Iran, as a petroleum dependent economy. In fact, dominant share of oil revenues in Iran have long given rise to the Dutch Disease in this economy. This, accompanied by the dominant role of government in Iran (as a prime mover), left little room for the improvement of Industrial competitiveness in this economy. However, it is anticipated that with the loosening of economic sanctions on Iran, there happens an improvement in this economy regarding mentioned global indices.

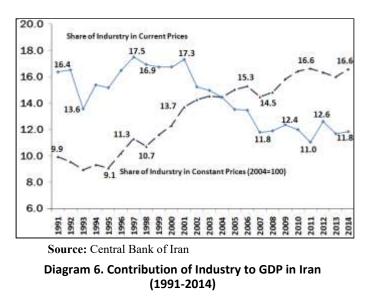
<sup>&</sup>lt;sup>^</sup>. These two problems have long undermined the foundations of economic freedom in Iran.

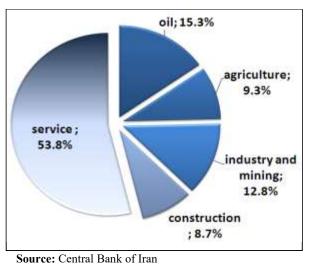
## 3- Iran's Economic Structure and the Role of Industry and Mining

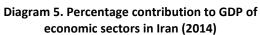
## 3-1- Sectoral Structure of Iran's Economy

Iran's economy is characterized by a large and expanding service sector, a noticeable large hydrocarbon sector, average agriculture and small scale mining sectors and finally a medium-sized industry sector (diagram 5).

To get more precise on the way industry sector has contributed to Iran's economy, in diagram 6 the share of industry in GDP is calculated in both current prices and constant prices. As depicted in the diagram, the two trends are totally different.







Statistically, the contribution of industry to Iran's GDP in constant prices has been increasing (from 10.7 percent in 1998 to 16.6 percent in 2014). But this doesn't mean that there had been industry expansion in Iran's economy. Because price controls in Industry sector has made price increases in this sector slower than that of some other economic sectors. Hence, when there is no price deflation and calculations are based on current prices, it ends up with a declining industry contribution (decreasing from 16.9 percent in 1998 to 11.8 percent in 2014).

Unlike the industry sector, mining sector has long moved on an upward trend; however, it still contributes inconsiderably to GDP (one percent in 2014). Regarding the fact that Iran ranks among 15 major mineral-rich countries, it suggests that mining in Iran is underdeveloped.<sup>9</sup> This is mainly due to the deficiencies in the mining sector and the unbalanced development of mining industry value chain in Iran. This will be discussed later in section 5-2 as one the structural challenges facing industrial development in Iran.

<sup>&</sup>lt;sup>4</sup>. Iran with roughly 1% of the world's population holds more than 7% of the world's total mineral reserves. The most important mines in Iran include coal, metallic minerals, sand and gravel, chemical minerals and salt.

To get a general picture of the long run movement in Iran's economic structure, table 4 compares sector wise growth rates in this economy within a period of 25 years.

Table 4. Changes in GDP Contribution by Economic Sectors, 1989-2014						
Sector	1989-94	1995-99	2000-2004	2005-2010	2011-2014	
Industry (manufacturing)	9.3	7.4	10.6	7	0.3	
Mining	13.9	5.7	6.2	13.4	7.1	
Trade, Restaurant, Hotel	5.5	3.6	9.3	4.9	-1.4	
Construction	7.5	2.4	8.2	5.6	-1.2	
Agriculture	6.4	2.2	4	1.9	3	
Oil	8.9	-1.6	3.5	0.2	-10.6	
Economic Growth	7.3	2.6	5.8	4.8	-0.3	
Economic Growth (without oil)	6.6	4.3	6.6	5.9	1.5	

Source: Central Bank of Iran

According to the table, there was a sharp decline in the growth rate of manufacturing value added and accordingly GDP growth in Iran during 2011-2014, happened as a result of a sharp decrease in industrial capital formation.<sup>10</sup> However, rebounding from recessionary condition in Iran has been triggered in 2014 by the considerable contribution of both services and manufacturing sectors.<sup>11</sup> It is noteworthy that the realized growth of manufacturing sector in 2014 was mainly due to the growth of resource based industries. It will be discussed in more details in section 4.

## 3-2- Investment, Employment and Export in Iran's Manufacturing Sector

## 3-2-1- Manufacturing Investment: Volatile and Concentrated

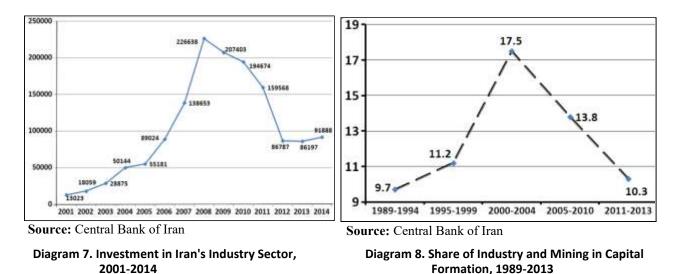
As depicted in diagrams 7 and 8, there had been a sharp decrease in manufacturing capital formation in Iran's economy within last decade. Statistically, manufacturing and mining sectors had been responsible for on average 17.5 percent of total investment in the economy in mid 2000s. However, it fell sharply to 10.3 percent in 2012, giving rise to the contribution of real estate sector to investment to reach 44 percent.

This happened as a result of different factors, the most important of which was the shift in investment preferences towards those of shorter payback periods, i.e. real estate sector, to compensate for accelerating inflation. But the story didn't end here. Less capital formation in manufacturing sector made it harder for the manufacturing production to meet domestic demand. So, it made it necessary to increase imports to keep the supply-demand balance in the economy. The increase in import, through limiting the demand for domestic production, discouraged investment in manufacturing sector to a greater extent.

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<sup>&</sup>quot;. Although in 2014, there was a positive economic growth equal to 3 percent in Iran; it is still lagging behind its position in 2010.

<sup>&</sup>quot;. Out of 3 percent growth of GDP in Iran in 2014, the contribution of service sector was 1.5 unit percent and that of manufacturing sector was 1.1 unit percent.



Despite of increasing in 2013-2014, capital formation in industry sector is still insufficient, lagging far behind where it was in 2006 (in current prices).

## 3-2-2- Manufacturing Employment: Volatile and Declining

The contribution of manufacturing to employment in Iran's economy is approximately 6 percent of total employment (1.279 million jobs in 2013). Comparing this figure with the number of *Production & manufacturing engineering* students in Iran (1.72 million in 2013) suggests underemployment of engineers in near future. It will not only be regarded as a structural problem in the economy, but also has directly to do with the low level of productivity in Iran's Industry. More precisely, there is less than 15 percent of total employment in manufacturing sector devoted to technicians and engineers (7.1% and 6.7%, respectively in 2013).

There is also another issue, concerned with the annual growth of manufacturing employment. It has been as low as 2.25 percent on average to meet the employment needs of the economy, which means it takes the sector 25 years to double the number of manufacturing job opportunities in Iran. Furthermore, as depicted in diagram 9, the average employment per manufacturing units is moving on a downward trend (16 employees in 2014 on average vs. 26 in 2004), which means the annual growth rate of manufacturing will be even less than 2.25 percent in near future.

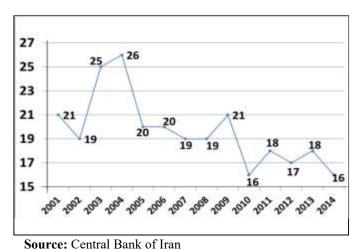


Diagram 9. Average Employment per Manufacturing Units

## 3-2-3- Manufactured Exports: Increasing but Concentrated

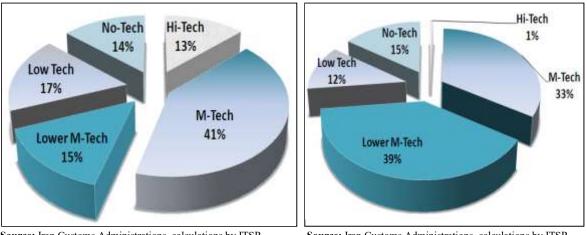
To get a general view on the importance of manufactured exports in Iran's economy, it is noteworthy that manufactured exports are responsible for the dramatic rise of Iran's non-oil exports (excluding gas condensates) from US\$ 10.4 billion to US\$ 35.5 billion during 2005-2014.

Also, regarding the matter from the viewpoint of import, it shows high level of dependence on manufactured imports. Table 5 includes more detailed information on the issue.

Table 5. Selected Indicator of Manufactured Exports and Imports in Iran (unit: percent)

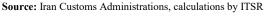
	2005	2010	2013
Share of Manufactured Exports to Total	74.7	79.3	80.6
Non-oil Exports			
Share of Manufactured Imports to Total Imports	87.4	73.6	79.2
Share of Manufactured Exports to Total Imports	0.2	0.4	0.6
Source: Central Bank of Iran			

Although manufactured exports in Iran contribute considerably to the non-oil exports, it cannot meet import expenditures; except for 60 percent of it. There is also another issue with manufacturing trade in Iran, which is the low contribution of Hi-tech commodities to manufactured exports compared with that of manufactured imports (diagrams 10 and 11).



Source: Iran Customs Administrations, calculations by ITSR





#### Diagram 11. Iran's Export Composition; 2014

## 4- Drivers of Industrial Development in Iran

To go through the main industrial drivers in Iran, there are three factors to be regarded:

- a. Economic growth
- b. Employment generation
- c. Export revenues

Table 6 lists top 3 manufacturing industries (based on ISIC two-digit numerical codes) regarding each of mentioned factors:

Table 6. muustnai Development Drivers in ran's Economy, 2015					
Factor	Industries with the Highest Contribution	Level of Contribution	Description		
Economic growth	<ul> <li>chemicals and chemical products</li> <li>basic metals</li> <li>coke, refined petroleum products and nuclear fuel</li> <li>Sum</li> </ul>	26.4% 17.7% 13.2% <b>57.3%</b>	All top 3 industries resource-based		
Employment generation	<ul> <li>food products and beverages</li> <li>other non-metallic mineral products</li> <li>motor vehicles, trailers and semi-trailers</li> <li>Sum</li> </ul>	16.7% 13.6% 10.2% <b>40%</b>	Mostly dependent on domestic market		
Export revenues	<ul> <li>chemicals and chemical products</li> <li>coke, refined petroleum products and nuclear fuel</li> <li>basic metals</li> <li>Sum</li> </ul>	43.8% 29.6% 9.1% <b>82.5%</b>	All top 3 industries resource-based		

Table 6. Industrial Development Drivers in Iran's Economy, 2013

Source: Statistical Center of Iran

According to the table, industrial growth and export in Iran is mainly nurtured by the resourcebased industries; however, for the case of job generation they have little contribution. This brings about a dilemma to select among industries, while trying to enforce industry targeting policies. This will be discussed in section 5-2 as an important challenge ahead of industrial development policies in Iran.

# 5- Opportunities and Challenges for Sustainable Industrial Development in Iran

## **5-1.Opportunities**

There is no doubt; Iran has a lot of potential. It is a country that owns 11% of the world's proven oil reserves, 15% of the world's proven gas reserves, 11 petrochemical complexes, and much more. Some of the most important opportunities are highlighted below:

**a.** Strategic Location: A unique geographical location at the heart of a cross-road connecting the Middle East, Asia and Europe, empowered by many inter- and trans-regional trade, customs, tax and investment arrangements.

**b. Market Potentials and Proximity:** Vast domestic market with a population of 80.8 million growing steadily as well as quick access to neighboring markets with approximately 500 million inhabitants.

**c.** Labor Privileges: Large pool of trained and efficient manpower at very competitive costs in a diversified economy with an extensive industrial base and service sector.

**d. Developed Infrastructure:** Territory developed networking in the area of telecommunication, roads and railways across the country.

**e.** Low Utility and Production Cost: Diversified range of energy, telecommunication, transportation, as well as public utilities.

**f.** Abundant Natural Resources: Varied and plentiful reserves of natural resources ranging from oil and gas to metallic and non-metallic species reflecting the country's accessibility to readily available raw materials.

## 5-2. Challenges

Major macroeconomic challenges ahead of industrial development in Iran can be summarized as *macroeconomic instability* as well as *the lack of integrated approach to address industrial, technological and trade policies* which is mainly a matter of macroeconomic policy concern. However, there are some challenges, confined to the inherent structural deficiencies in industries and need sector–specific policies. The most important of these challenges are listed below:

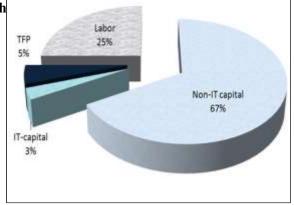
## a. High dependence of Manufacturing Production on Imported Primary Goods

High dependence on imported primary (intermediate and capital) goods in manufacturing sector suggests increased vulnerability to external economic forces especially exposure to exchange rate risks. It may harm manufacturing activities in both domestic and international markets, through increasing the production costs. In this respect, negative growth rates of manufacturing during 2012 and 2013 (equal to -8.1% and -3.6% respectively) and the high contribution of manufacturing inflation to producer inflation (75.6% in 2011, 54.8% and 48% in 2012 and 2013 respectively) shows how exchange rate shocks in 2011-2013 hurt manufacturing in Iran.

## b. Low contribution of Productivity to economic growth

According to APO (2014), labor and non-IT capital are the main drivers of economic growth in Iran (diagram 12).

Although raising productivity was the theme of *Economic Transforming Plan* (enacted in 2007), it is still regarded as one of the main challenges in manufacturing sector. A part of this problem can be explained through insufficient access to updated technology which is the subject of paragraph (e) in this section.





# Diagram 12 Contribution Shares of Economic Growth in Iran, 1970-2012

## c. Low share of Hi-tech activities and exports

A look into the composition of export suggests little share of hi-tech commodities (less than 5 percent); whereas, there are some countries like South Korea and Malaysia that enjoy a high contribution of hi-tech exports equal to 26 and 43 percent, respectively.

There is also another issue, which is concerned with the low level of technological specialization in Iran's economy. Statistically, the figure of *technological specialization Index* (TSI) in 2012 for Iran suggests much lower performance than that of Malaysia (4.43) and South Korea (1.57).

## d. Challenges with FDI: Insufficient and Concentrated in Resource-based Industries

FDI may be a good solution to experience industrial transforming, conditioned that it leads to technology transfer as well as helping targeted industries (not just resource-based industries). In Iran, there are two problems with the FDI. Firstly, it is very limited (attracting just 0.02% of total FDI in the world). Secondly, it is concentrated in some resource-based industries, the most important of which are chemicals and chemical products as wells as basic metals (30.3% and 23.9% respectively in 2012).

Putting the matter in concrete terms, this pattern of FDI absorption in Iran may not be a good source of technology transfer, employment generation or even structural transforming.

## e. Low capability to access updated technology

There are different channels to develop access to updated technology, the most important of which are FDI attraction, importing capital goods as well as raising R&D. For the case of FDI, the corresponding problems were discussed in paragraph (d). Also, under the pressure of economic sanctions, there had been a sharp decrease in the capital goods imports (from \$8.258 bn. to \$6.519 bn. during 2010-2012); suggesting less access to imported technology in Iran within recent years. Finally, for the case of R&D, there is a very little share of manufacturing units' budget devoted (0.08 percent in). All these mean less capability to access updated technology in Iran.

## f. Imperfect competition in manufacturing sector

In Iran's manufacturing sector, there are two types of important players: 1- micro and small enterprises which contributed to 70.1 percent of total enterprises in 2012 but were responsible for just 8.7 percent of total manufacturing value added; 2- big enterprises that were responsible for 15 percent of total enterprises (in 2012), but contributed to 85 percent of manufacturing total value added. Therefore, there is not only the risk of monopolistic practices increased in the market (like what in auto industry or cement industry happened), but also little room for the contribution of medium-size enterprises (as the potential candidates to become future big enterprises).

## g. Unbalanced development of manufacturing value chains towards forward industries

This has caused many problems, the most important of which is the low capabilities of the economy regarding value added of manufacturing products. This especially matters for resource-based industries, which contribute 39 percent to total manufacturing value added, but are concentrated mostly in forward industries.

To develop the situation into a balanced value chain, it needs cooperation between domestic companies and foreign companies as well as absorbing FDI, which is anticipated to get more feasible during post-sanction time.

Finally, all mentioned above have resulted in the **challenges to choose among industries** for policy maker. Because there exists the dominant share of resource-based industries in manufacturing value added activities and manufactured exports; however, when it comes to job generation they are not top priority anymore. This has put forward real challenges to policy

makers: which industry to choose (and protect) to meet employment needs as well as export objectives? Also, for the case of employment drivers (food products and beverages as well as motor vehicles, trailers and semi-trailers), there is a total dependence on domestic market with little contribution to export revenues. Therefore, if not protected, there will be the risk of unsustainability for these activities in case of not entering global markets!

Finally, as a result of structural challenges mentioned above, three sources of trouble have happened to industry sector in Iran, and in case of being ignored they may change into a real tragedy:

- Industry decline
- Decrease in the contribution of manufacturing to employment generation
- Low competiveness of Iran's manufactured exports in international markets.