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## From 'Dutch Disease' to 'Resource Curse', Iran's Case Study

efore the outbreak of the 1st and 2nd 'Oil Shocks' of 1970s, no appropriate and comprehensive understanding was available about the repercussions of the sharp rise in the prices of crude oil.

Later on, the contracting economic diseases emerging out of absolute dependence of economy on oil, or any other natural resource, became increasingly clear. Problems that were thus created for the exporters of raw materials, especially for oil-dependent economies, finally gave rise to

a much wider notion in the world economic terminology called 'Resource Curse'.

The term 'Resource Curse' was first used in 1993 by the renowned British economist "Richard Auty", in which he presented a long list of economic ailments that oil rich countries suffer from. Ironically enough, high oil price has created more problems for oil-dependent economies than low oil price!

Following is a list of such ailments with emphasis on Iran's conditions in this regard:



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- Oil Revenues and Economic Instability: Iran's crude oil export revenues are a direct follower of the price of oil in international markets. The global nature of oil price means it is set by factors beyond the control of any specific country and is considered to be an 'Exogenous' economic factor. History of oil market developments shows that the price oil has a fluctuating character and has been subjected to constant turmoil and oscillations since early 70s. All countries try to control the impact of exogenous factors on their economies. In other words, they put a cushion on the way to stabilize those fluctuations. The industrial countries, which are the major oil importers, are faced with the same phenomena too. That is why most of them levy suitable taxes on their imported oil and oil products, so that their economies are not subjected to instability. If an oil exporting country, with a budget mostly dependent on oil revenues, finds no way for controlling the spread of oil price fluctuations into its economy, will effectively be setting its economic vessel on top of turbulent weaves, a single one of which has the potential of even destroy the vessel. Dependence of the earnings of a budget on proceeds from oil, prone to fluctuation will cause financial indiscipline, which will in turn give rise to economic instability. An obvious obligation of governments is to bring about discipline and stability in their economies. Stability in economy does not mean halting the growth; it means the economic trends should be predictable. By adjusting their budgets' earnings and expenditures, governments can manipulate the financial flow of the entire economy. However, in a country like Iran, nonrealization of oil revenues, inability of the government to convert the revenues into local currency (Rial) and oil price fluctuations can all lead to instability in the country's economy. There is a powerful relationship between the economic stability of a country and the financial discipline of its government. No investment, especially long-term, will be attracted to a country with an unpredictable and instable economy, simply because
- such investments run very high risks. On the other hand, without investment no sustainable growth and economic development can be expected.
- Rentier Economy: Economic Rent is any revenue born 2) out of an advantage and not out of creation of real or added value in the involved parameters. Accordingly, oil export income is an economic rent and its exporting government is a Rentier government that is practically in charge of distributing that rent. Beblavi (1987) believes; Rentier governments have the following four features: a) at least 42% of the government revenues are earned through rent, b) no structural relationship exists between the provider of rent (oil sector) and other sectors of the economy (duality), c) few people are involved in creating the rent while most of the population are engaged in distributing or receiving the rent, d) main role of Rentier government is to spend most of the earned rent. On this basis, clearly Iran's government can be identified as a Rentier one. In fact, the studies carried out by the World Bank in 1996 show that, at least since 1973, the share of oil revenue in Iran's budget has never been below 54%, but has even reached 70% or more.
  - Economic rent is a very damaging phenomenon because it is anti-production in nature. The more the Rentier an economy (especially if it is coupled with the said instability), the more the people trying to get a chunk of that rent and the lesser the people taking risk in pursuing normal business.
- 3) Hardware Culture and Productivity Crisis: The studies carried out by the late Professor Abdossalaam, known as the father of technology transfer, showed that one of the problems faced by lesser developed economies is the imbalance between the soft and hard wares at the national level, which intensifies the said duality. Such a dilemma is aggravated much further in oil dependent economies. This is because such countries tend to import high-tech machineries and equipments without meeting the relevant software requisites, which gradually leads to the onset of a hardware culture amongst the

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decision makers and managers of those nations. Hence, they attempt to resolve all problems through physical investment, which is not possible. Such an imbalance results in low productivity, whether at national level or at the level of each element of production. Low productivity in turn cancels out the effect of investments. Any further investment coupled with further reduction of productivity only means the investment is ineffective. Department of 'Marco Economy' of Iran's Management & Planning Organization reported in 2006 that the index of overall productivity of all elements of production as well as the productivity index of each element of labor and capital have been falling constantly. The index of overall productivity has dropped from 121.1 in 1983 to 89.9 in 2004. Interestingly enough, those indices were at better levels during the Iran-Iraq war (1980-88) or when the oil revenues were lower.

- 4) Depreciation of Human & Social Assets: The most important national assets of a country are its human and social possessions. However, when oil takes center stage the real assets get overshadowed by it, which is actually another outcome of spread of hardware culture. An exceptional report of the World Bank in 1997 showed that human assets had a 76% share in the production of national wealth of North American nations and 74% in those of West Europe. The figure was 43% in the Middle-East, the lowest in the world. While natural assets (resources) had 5% and 3% shares in the wealth created in North America and West Europe respectively, the figure was 39% in the Middle-East. The studies carried out by the late Professor Abdossalaam proved that transfer of technology in any field would require balanced, synchronized and harmonized growth in four elements of Human-ware, Info-Ware, Orga-Ware and Techno-Ware. The first three are software in nature and are directly or indirectly based on human and social assets.
- Phenomenon of Dutch Disease: This is the oldest known disease caused by the rise in the price of resources. The term originated in 1950s and 60s

in Holland when the value of Dutch currency rose steeply because of discovery of few gas fields in North Sea. The phenomenon gave rise to concerns by the Dutch economist about the deindustrialization of that nation's economy, which made manufacturing goods in Holland less competitive with other nations, increased imports and decreased exports. Soon, the Dutch economist Lord Kaan wrote an article about the phenomenon in the Economist called 'Dutch Disease'. The economy of an oil exporting country can mostly contract Dutch Disease when the price of oil increases, like what is being seen in Iran in recent years. In the case of countries like Iran, the phenomenon explains that; if the economy is divided into three sectors of oil, manufacture of products exchangeable at international level and manufacture of products not exchangeable at international level (mainly Real Estate & Property), a while after the price of oil rises, the exchangeable products will be hurt and the country's investments will be shifted towards the not exchangeable sector, raising its prices. As the result of the rise in oil prices in recent years, Iran's currency was strengthened, but various attempts of its government to convert its accumulated Petrodollars into local Rial mostly raised the inflation. The reports published by the Central Bank of Iran (CBI) show that after 2005, when oil price started rising, the rate of liquidity and the volume of basic money in the country rose too. In order to convert the earned foreign currency into Rial, Iran's government embarked on massive import of goods and, to facilitate the imports, reduced the tariffs and duties. The inflation that followed the pumping of cash into Iran's economy raised the cost of production for the local manufacturers. The strengthening of the Rial against the dollar decreased the compatibility of Iran's exporters, which consequently hurt the national output. The situation was further exacerbated with the help of massive imports of goods, many of which could be produced locally. When the domestic production was harmed, leading to bankruptcies of



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local corporations and manufacturers, investment in that sector became uneconomical and the capital flew to Iran's property market where it created a huge price bubble. And when that bubble exploded, the entire economy of the country was thrown into recession. Under such circumstances, capital flight out of the country is quite probable, the amount of which could be a subject for separate studies. However, since the economic recession coincided with the global economic meltdown and since even the country's neighbors were in no position to absorb great amounts of investments, the capital flight out of Iran must have been more limited than otherwise. The statistics produced by the CBI show that Iran's imports of \$ 17.5 Bln worth of goods in 2001 jumped to \$42 Bln worth in 2006, a trend that was observed in the following years too. The assortment of the imported goods in the said period was in favor of consumer goods and against intermediary and capital goods, which makes the situation even worse. The final outcome of Dutch Disease is a combination of 'Stagnation' and 'Inflation' (Stagflation), which is by far the worst condition that an economy can face. Iran has once before faced Dutch Disease when oil price rose steeply in the early 70s, after the 1st oil shock. That experience could have been used to avert its recurrence in recent years.

5) The Loss caused by 'Terms of Trade': In international economics and international trade, terms of trade or TOT is defined; as the price of a country's exports relative to the price of its imports. Many studies carried out by economists, including 'Purbish', show that TOT has always been against the interests of exporters of raw materials, which are mainly developing countries. That means the 'real' values of their raw materials have constantly been falling and that of their imported goods have been rising. A survey conducted between 1976 and 1996 for comparing the shares of various tradable groups of goods in the global commerce, on the basis of the level of technology involved in their production, showed that the share of raw material in int'l trade

- (exported mainly by developing states) dropped from 34% in 1976 to 13% in 1996. On the other hand, the share of products of high-tech nature (exported mostly by developed states) rose from 11% to 22% during the same period. This shows that in today's world, the winners in int'l trade are the ones that can export their know-how and software and not raw material.
- 6) Imbalance between National Production & Consumption: Experience shows that striking a balance between national production and consumption in the process of development of a country is of utmost importance. And countries that have managed to reach a developed state have not only attained that balance over a certain period of time, but have even succeeded in increasing their national production well beyond their consumption. More recent surveys about 'poverty' show that it is more due to the imbalance between the poor's production and their consumption rather than other factors such as unjust distribution of wealth. That means, the only practical way of definite removal of poverty is nothing but to help bolster the poor's capability to produce more.
  - Oil is a recovered wealth and not a manufactured commodity. When most of the consumption needs of a country are met by a recovered product, it means there is no balance between the national production & consumption of that country. The wider such an imbalance in a country, the further it moves away from development. Statistics published by the CBI show that Iran's non-oil trade balance decreased from \$12 Bln in 1996 to -\$29 Bln in 2006, and got even worse in the following years.
- 8) Enlargement of Government: Experience shows that any change in the size of Iran's govt. follows the change in the price of oil, after a short while though.

  Despite the rhetoric by officials of Iran about favoring 'Privatization' and reducing the govt.'s size, in practice however, the govt. is busy investing ever more in all sectors, effectively enlarging the govt.'s size even further!

  Under the said circumstances, where the private

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investors are unable and unwilling to invest in long term plans of the country, it's only natural for the govt. to use the oil revenues to keep investing. An over-enlarged government can harm the economy of a country through the following ways:

- A) Enlargement of the govt. will allow the domination of its management and administrative obligations over its ruler-ship duties (the basic responsibility of a functional govt.), and will force the govt. to neglect its main obligations of setting policies and macro-economic plans and supervising over their implementation.
- B) Large government-run corporations tend to monopolize sectors of the economy and reduce domestic compatibility, which not only reduces the competence and productivity of those very corporations, but also lessens the incentive of the private sector for investment. Besides, low efficiency in such large entities always necessitates allocation of funds, which means nothing but wasting money in parts of the economy.
- C) Normally it takes the state-run corporations much longer than the private sector to adjust to new conditions. The private sector is much quicker than the public sector in obtaining the needed information and in being innovative. Usually, the ratio of entire expenditures of the govt. over Gross Domestic Product (GDP), at nominal prices, is taken as an index of the size of the govt. The CBI statistics show that the said index has been growing in recent years in Iran.
- 9) Expansion of Rift between Govt. & Public: There is a difference between a govt. that runs on taxpayers' money and the one that has an independent source of income. The fate of the tax collecting govt. is dependent on the economic conditions of the public. Here, any economic crisis in the whole or part of the economy mitigates the taxpaying capability of the public or a group of people, which is quickly felt by the sensors of the govt. and attempts will be made to remedy the economic condition. On the other hand, the govt. with an independent source of income remains ignorant of the economic conditions of the people and hence the

- reality about the condition of the national production, especially when the said source of income produces greater revenues. Awakening of such a govt. may come too late and that will be when the source of its income dries up and the public is unable to pay tax either. In the case of oil rich countries, when the price of oil increases the govt. will be able to use the revenue to cover its incompetence. This naturally further expands the 'rift' between the govt. and the public. This independent revenue is usually spent much more negligently than the tax money, for which the govt. is held accountable. Such a govt. effectively puts its hand in parts of the public wealth without people knowing much about it. This also contributes to the govt.-public rift.
- 10) Crisis of Expectations: The gap between the expectations of a society from its govt. and the level of realization of those expectations is called 'Crisis of Expectation'. When unable to accomplish those expectations, clever governments try not to raise the level of expectations and in fact try to lower their level. In oil rich countries, the higher the price of oil, the higher the expectations of their people. On the other hand, as explained earlier, the higher the price of oil, the lower the competence of the oil-rich govt. The natural outcome of such a situation would be the ever rise of crisis of expectations.
- 11) Foreign Intervention: Another important point in the case of undeveloped weak countries that possess some natural resources is the reality of foreign interference in their country. All weak countries could be exposed to colonization, but countries with limited depleteable resources, like crude oil, are more appetizing to powerful countries. Taking their oil for money, which would create good markets for the manufactured goods of those countries, is an added incentive for interfering in the affairs of oil rich countries. The geographical distance between the main regions of oil production and those of its consumption, has turned oil into a 'geopolitical' issue. Apart from taking measures to ensure that their energy needs are supplied, world

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powers usually tend to exercise some control over oil reserves and its production, either for ensuring the security of supply or for competing with their rivals. Besides, dependence of the economy of a country on the export of a single commodity, coupled with extensive imports, is always a potential conducive to the use of weapon of sanctions against that country. After listing the said diseases, it is now time to ask the all important question of whether contracting such ailments is totally natural, inevitable and unavoidable. In which case writing about them would be useless. Or, are most of such problems preventable and knowing about them would help identify and avoid them? Answering this question may not be as easy as it seems. Besides, pragmatists may say 'that is the reality and it should be taken as it is'! Some may even argue that there are many developed countries that possess huge resources that have not only avoided falling victim to 'Resource Curse' but have used those resources for their initial drive towards development!! To answer this, following two points should be taken note of: The first point is to observe the character of the natural resource in question and see whether it is 'labor-intensive' or 'capital-intensive'. Exploiting some natural resources like a fertile land or a mine is 'labor-intensive' and creates job opportunities. Exploiting other resources like oil is very 'capital-intensive'.

The second point, and perhaps a more important one, concerns the issue of time and conditions. When the present developed countries came to identify and exploit their resources, they had to rely on their own power and naturally developed the relevant suitable software and hardware. There were no dominant powers to push them in the direction of a 'single commodity' development. The oil industries of most oil-dependent economies of the world were developed by foreign countries and on the basis of colonial relationships. Even if colonial relationships are overlooked, the said phenomenon of 'duality' has changed the natural destiny of undeveloped countries. After the industrial revolution and when some countries took advancing leaps ahead

of others, the backward countries were caught by the phenomenon of 'duality' and were deprived of their natural destiny. That means, one could differentiate between the ways of developing natural resources of undeveloped and those of developed countries. Both the theoretical aspects and practical experiences prove that many of the mentioned ailments can be avoided. Management of oil revenues on the basis of national interests could be the way out. If oil is seen as a 'wealth', then it is only wise that the 'wealth' is not consumed but replaced by another form of 'wealth'. In other words, an unproductive underground 'wealth' is converted into a productive 'wealth' on the surface. Using mechanisms like 'foreign exchange reserve fund', to put aside some of the oil revenues, especially when oil prices are high, could control many of the said problems. Many such mechanisms have successfully been used in different countries, but they have all been based on a national will power and also made accessing the reserve fund quite difficult.

Iran's economy could have been 'based' on its oil wealth, instead of being 'dependent' on it. Words don't really matter, what matters is that Iran's oil revenues of the past one hundred years could have been used for carrying out the country's development plans. Clearly, that did not take place. It was about to take place in 1952, when Iran's oil industry was taken away from British Petroleum (BP) and nationalized by the late Prime Minister Dr. Mossadegh. Then all educated classes and manufacturers of Iran backed the move and joined hands to fill the vacuum created by the departure of BP. At the time, the technological gap between Iran and the advanced world was not much and if that trend had continued, Iran could today be generating income through export of goods and technical know-how of oil sector, instead of being so heavily dependent on revenues generated by selling crude oil.

The best way of expressing Iran's gratitude to God for its oil wealth is to use such a gift rationally and wisely.

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## Commissioning of ESPO Pipeline, A Long Stride Towards Diversifying Russia's Oil Market



final months of 2009, implies Russia's firm resolve for gaining access to crude oil markets in East Asia. The pipeline which is 4800 kilometers long transfers a daily 300 thousand barrels of Russian crude from western Siberia to Kosmino port on the eastern coasts of the country in the neighborhood of East Asian nations such as China, South Korea and Japan. The capacity of this pipeline can be doubled as soon as the required pumping stations have been set up. Phase one of

this pipeline has been commissioned to transfer the crude oil produced in a number of oil fields in eastern Siberia to Skovorodino region. Phase two of this pipeline is expected to be commissioned in 2013. When completed, the pipeline will be able to transfer crude oil to final destination i.e. Kosmino port. For this purpose, loading capacity in the Kosmino port should be doubled to reach 600 thousand barrels per day. Before completion of phase two of the pipeline project, crude oil shall be shipped to Kosmino port via railway. Additionally, a 64 kilometer long oil pipeline with a capacity of 300 thousand barrels is under construction



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by the Russian Transneft Company that transfers oil from Skovorodino to the Amor river banks along the borders of Russia and China. Another pipeline which is 992 kilometers in length and crosses the Chinese territory shall be constructed by the Chinese CNPC Company to transfer the Russian crude to Daqing refinery. These phases are expected to be commissioned by the winter of 2010.

Russia plans to diversify oil and gas markets and Russian officials firmly pursue this policy. Although the current volume of oil transferred to Kosmino port via this pipeline constitutes only ten percent of Russia's crude transfers to the ports located in high seas, this is the total amount of crude that finds its way into the Eastern markets via Russia. That is why Russia has invested heavily in the construction of this pipeline. The Russian government has foreseen 50% discount in export taxes and shipping charges in order to have a bigger share of the growing Eastern markets.

Russia's tendency towards the East and putting into operation of ESPO pipeline will seriously impact oil markets. Traditional purchasers of Russia's oil will no longer have access to part of Russia's oil exports. In the first five months



of this year, despite upward trend of Russian oil exports, the average daily oil exports of that country to the western markets fell by 126 thousand barrels per day. With the commissioning of ESPO pipeline, less crude is expected to be supplied to the satellites of Russia.

Other players in this scenario are the Middle East suppliers of crude oil to East Asia which cannot remain indifferent in the face of Russia's oil policies. They are likely to lose their share of the Eastern market. In the recent months, there have been released certain news linking Iran's storage of crude at sea and sale of ESPO's crude. Such news are illustrative of the fact that Russia is making the situation tighter for exporters of oil such as Iran. The market is currently suffering from surplus crude production capacity and at the same time major consumers of oil are experiencing economic downturn. That is synonymous with less demand for crude oil.

Under such hopeless circumstances, Russia is switching to the rewarding Eastern markets. The officials in charge of the Russian oil industry have attached priority to the oil market diversification policy and are prepared to follow up on that policy no matter what the cost may be. In fact, they plan to portray a bright perspective of their oil industry. Without a doubt, ESPO is viewed to be Russian's biggest stride in diversifying oil market.

China attaches similar degrees of significance to the construction of ESPO pipeline. Secure flow of energy is

vital in China's economic growth. Under conditions when the Americans maintain their control over the Persian Gulf as well as southern China waterways, any alternative for the supply of oil will be given a warm welcome by the Chinese.

Moreover, emergence of an oil supply market in East Asia is a golden opportunity for the major importers of oil they cannot afford to miss. For many years, China, Japan and South Korea have nagged about higher crude prices in East Asia complaining they have been somehow discriminated. These states, in

coordination with one another have expressed interest in defining an independent market and crude index in East Asia in an attempt to bring under their control the price of crude oil destined for East, hence boosting their power to maneuver in the market.