

REVENUE FROM EXPORTING OIL, INCOME DISTRIBUTION, AND ECONOMIC PROGRESS IN THE MIDDLE EAST

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-Abstract-

The increases in petrodollars received by oil producing countries of the Middle East in the past few years can become a reality again when the world economy recovers from this recession. The access to so much hard currency in the past could have potentially improved the economies of these nations beyond imagination. Economic development specialists regard reaching some goals such as higher growth rate of real output, less chronic inflation, Improvements in education and healthcare services, greater diversity in the economy and in exports, greater equality in the distribution of income, and lower unemployment rate as indication of economic progress or socio-economic improvements in a developing country. The purpose of this paper is to evaluate the relative success of the Oil-Producing Countries of the Middle East in achieving the above socio-economic goals within the context of huge inflows of petrodollars into their countries every year. Through analysis of data from the region the author of this paper has obtained convincing evidence in support of the view that the oil-exporting nations have, for the most part, wasted the abundant and extremely valuable foreign currencies that they have received every year for the past several decades.

Key Words: *Economic Development, Trade liberalization and economic progress, Free trade*

JEL Classification: 011, P 27, Q 32, Q 43, 047,

1. INTRODUCTION

The objective of this paper is twofold. First, it investigates whether the availability of “Petrodollars” has been instrumental in reduction of income gap between the oil-exporting countries of the Middle East and the industrialized nations. Secondly, the economic developments of oil-exporting and non-oil-exporting countries of the Middle East have been compared and contrasted to understand whether the access to petrodollars has led to greater social and economic development in the former than later group of Middle Eastern nations. This paper also identifies a number of barriers to socio-economic development with which the oil-exporting countries of the Middle East are uniquely encountered.

2. INCOME INEQUALITY BETWEEN THE INDUSTRIALIZED WORLD AND THE NATIONS OF GREATER MIDDLE EAST

Research indicates that population growth and technological changes in agriculture balanced each other out all the way through the beginning of the 19th century. This led to a stable, equitable, and relatively constant output per capita in all countries (Keith Still, 2008). The industrial revolution and capital accumulation in Great Britain and other western nations led to divergence in per capita incomes across nation states. Since about 1820, the income distribution in the world became more and more unequal as some countries began industrializing their economies and others remained stagnant. As countries industrialize, technological changes allow for continuous increases in productivity, income, and savings. These, in turn, lead to greater investments and capital formation. Composition of national output changes from predominantly agricultural products to industrial output. Fertility gradually decreases and population grows at a slower rate. Since early nineteenth century, the path to industrialization has started in every country, although, different nations entered into this path at different points in time. The Middle Eastern countries did not start modernizing and industrializing their economies until the later part of the 20th century. This delay combined with many barriers to economic development caused by, political, cultural, and religious issues and rigid traditions has made the industrialization process in these countries to move rather slowly and unsystematically. The nations of the Middle East have generally experienced high rates of population growth and urbanization. These demographic problems have occurred due to far reaching and rapid improvement in health-care services in these societies. Rapid urbanization

combined with low saving rate, political and economic instability are the major factors that have slowed down the industrialization and economic development of almost all the countries in the greater Middle East. The slow rate of economic growth is, then, responsible for the existence and continuation of the income gap between most of these countries and the industrialized nations. Among the Middle Eastern countries, there are some fortunate ones that have access to sizable amount of oil reserves. The petrodollars from exporting oil should have eased the shortage of savings in these nations and facilitated the process of capital formation and industrialization. These countries could have easily imported technology, human and physical capital that, in turn, could facilitate and shorten the process of capital accumulation and industrialization of their economies. One should have expected that the oil-rich countries of the greater Middle East would have closed or reduced their income gap with the industrialized nations long time ago. One can also expect that these nations would be much more economically developed and modern in comparison to their non-oil exporting counterparts that are located in the same geographical region. To investigate the validity of these two expectations, the author of this paper divided the countries of the greater Middle East into two groups. The first group includes the nations that a great percentage of their export is dependent on selling oil in the international market. The second group is composed of those nations that lack the sizable amounts of oil reserves and cannot have access to a considerable inflow of hard currency every year. These two groups, however, share the same cultural and religious heritage and are located in a geographical location with strenuous climate. Table one shows the GDP and exports of these two groups of Middle Eastern nations for 2007.

Table 1: Middle- East Countries by Access to Oil reserves, GDP and Exports

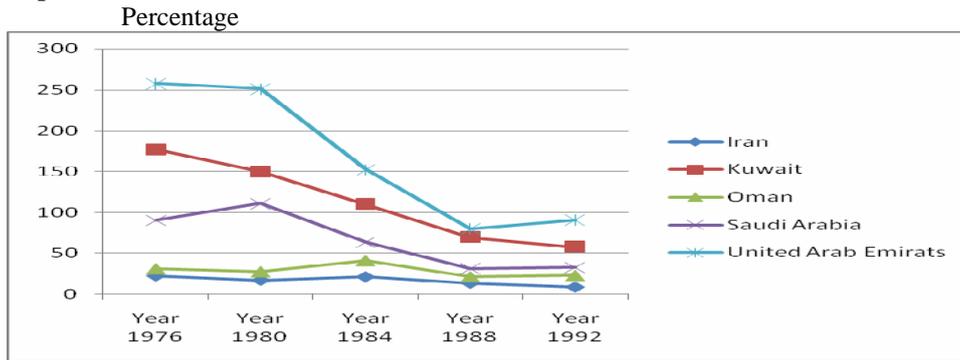
Group I	GDP (PPP) Billions of US \$	Exports, Billions of US \$	Group II	GDP (PPP) Billions of US \$	Exports, Billions of US \$
Algeria	222.3	60.51	Egypt	405.7	24.45
Iran	762.9	88.26	Jordan	28.45	5.70
Kuwait	140.0	63.72	Morocco	125.0	12.75
Oman	60.89	23.10	Syria	90.37	11.14
Saudi Arabia	534.80	226.70	Tunisia	76.07	15.50
United Arab Emirates	198.4	178.90	Turkey	853.90	115.30

Source: World Development Report, World Bank, 2008

Data for some of the other countries in the region either did not exist or were not adequate. Such countries were not included in this study. The first question that this research project tends to answer is: "Have the countries in the first group that are rich with petrodollars been in a unique position to push their economies over the threshold and to a sustained growth and state of modernity?" In other words, have these countries been able to use their petrodollars to diversify their economies and achieve a rate of growth high enough to enable them to close the income gap between their economies and the economy of an industrialized nation such as the United States? A simple model was adopted to find the answer to this question. The model simply measures the ratio of Per Capita Income of each of the Middle Eastern countries to the Per Capita Income of the US for selected years from 1976 to 1992. The availability of good cross-country GNP data since the early 1970s made the comparison of income levels between these countries and the U.S. quite possible. Figure 1 shows the ratio of the Per Capita GNP of five countries of the Persian Gulf area of the Middle East to the Per Capita GNP of the U.S. for several years from 1976 to 1992. The U.S. was selected to provide the standard for economic progress and modernity because of its prominence in the industrialized world.

The oil price hikes, and much smaller population size resulted in Per Capita incomes for city states such as Kuwait and United Arab Emirates (U.A.E.) and also Saudi Arabia to exceed the Per Capita income of the U.S. in 1970s. By the beginning of 1980s, however, the price of oil dropped significantly and the relative underdevelopment of these countries indicated by the shortfall of their Per Capita GNP relative to Per Capita GNP of the U.S. became obvious again. Of course, these countries are traditional societies that still have a long way to reach the state of modernity despite the fact that compared to other developing countries their GDP per Capita is much closer to the GDP Per Capita of the U. S.

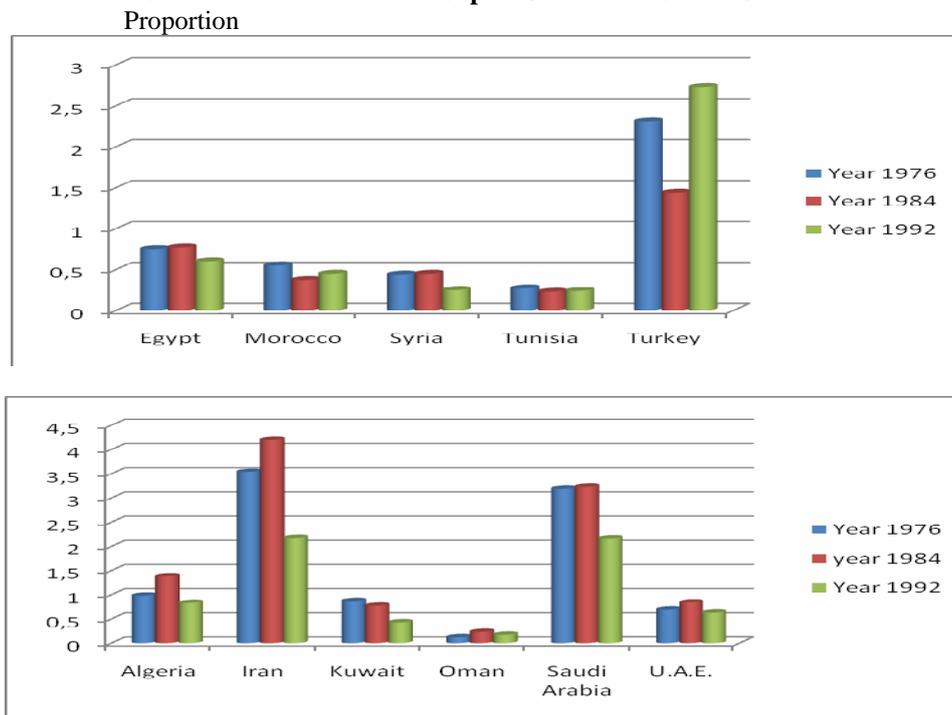
Figure-1: Ratio of the Per Capita GNP of the Oil-rich Countries of the Persian Gulf Basin to Per Capita GNP of the U.S.



Source: World Tables, United Nations, 1995/1996.

Figure 2 plots the Per Capita GNP of the two groups of the Middle Eastern Countries relative to Per Capita GNP of the U.S. for selected years from 1976 to 1992. The ratios were weighted by the size of population of each country divided by the US population. This adjustment was necessary to avoid the effect of population size on the countries' efforts to close their income gap with the US. So if United Arab Emirates or Tunisia with very small populations improved their GNP ratios by 1 percent, it would not have the same effect as 1 percent improvement in the GNP ratio of large countries such as Iran or Egypt with populations of over 60 million. As it was mentioned before, the GNP data were used to reveal the income disparity between the U.S. and the Middle Eastern countries because for the period from 1976 to 1992 most countries were estimating and reporting their GNPs rather than the purchasing power parity (PPP) GDP. The GDP data will be used subsequently in this paper to perform the same analysis for the most recent years.

Figure-2: Population-adjusted GNP Per Capita of the Oil-exporting and Non-oil exporting Middle-Eastern Countries Relative to Per Capita GNP of the United States



Source: World Tables, United nations, 1995/96.

The above diagrams reveal the following interesting facts about the relative income changes in the countries of the Middle East:

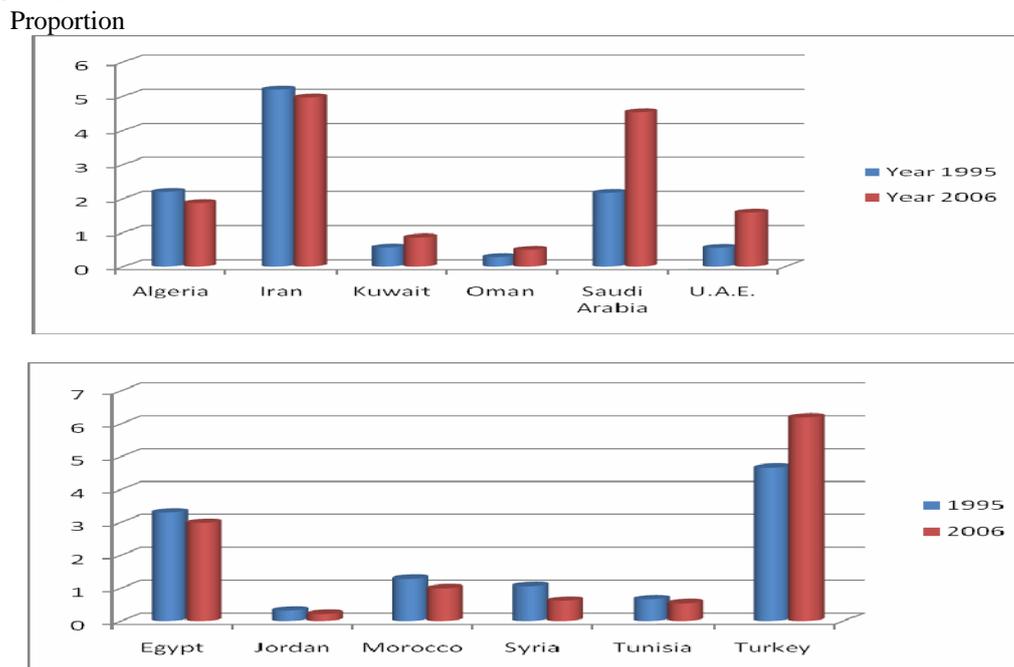
- a) By 1992, based on population adjusted Per capita GNPs, All of the Middle Eastern Countries specially the non-oil exporting nations still had a long way to go to industrialize their

economies and close the gap between their incomes and the income of a leading industrialized nation such as the U.S.

- b) Over the period from 1976 to 1992 the income gap between each of these countries except for Turkey (a non-oil exporting country in the region) and the United States expanded. The diagram shows that even the oil-rich countries of Persian Gulf Basin with access to billions of petro dollars could not reduce their income gap with the U.S. The oil industry in all of these countries is nationalized and the revenue from oil is appropriated by their governments. One can argue, then, that the governments of these countries used the petrodollars in programs and projects that did not lead to a rate of growth in GNP of these countries that would exceed the rate of growth of GNP of the U.S. Consequently the gap between per capita incomes of these nations and per capita income of the U.S. either remained or even expanded. The diagrams also show that the GNPs of the economies of oil-exporting countries were much more volatile than those of the non-oil exporting nations of the region. This is obviously the outcome of too much dependency on oil as the primary source of foreign currency for these countries.

Next, the data on Purchasing Power Parity (PPP) Per Capita GDP were used to evaluate the success of the Middle Eastern Countries in achieving economic development and modernity in their societies over the most recent decade. The specific objective was to see if Per Capita GDP of the Middle Eastern Nations in general and that of the oil rich countries of the region in particular moved closer to the Per Capita GDP of the United States in the past decade or so. The selection of past decade is important in our study because in such a period the price of oil was fairly stable or was rising gradually and the countries in this study were not engaged in any major military conflicts. Lack of these destabilizing events could help these countries to focus on advancing their economies rather than dealing with fluctuations in their foreign-currency reserves or having conflicts and fighting wars with their neighbors.

Figure-3: Population-adjusted GDP Per Capita (PPP) of the Oil-exporting and Non-oil-exporting Countries of the Middle-East Relative to Per Capita GDP (PPP) of the United States.



Source: World Development Report, Various Issues, World Bank, Oxford University Press.

A quick reference to the above diagrams leads to the following observations:

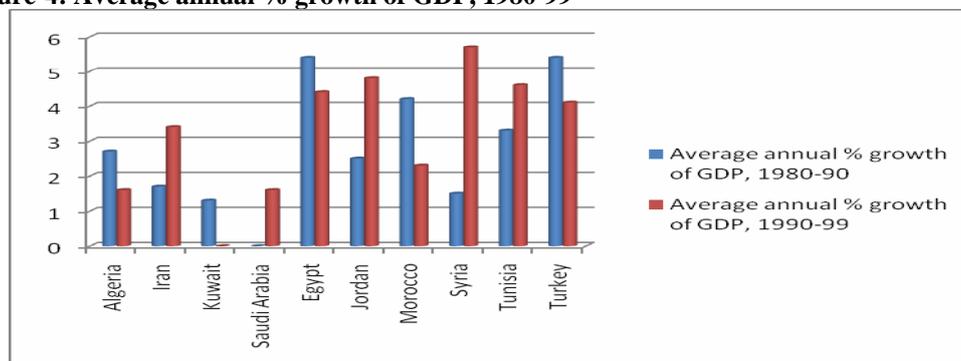
- a) Among the oil-rich countries of Persian Gulf, Saudi Arabia, Kuwait, Oman, and U.A.E. have, to some extent, reduced their income gap with the United States.
- b) Iran and Algeria not only have not reduced their income gaps with the U.S., but, by the end of 2006 experienced a slight increase in the gap between their GDP Per Capita and the GDP of the United States.

- c) Among the non-oil exporting countries of the Middle East, Turkey is the only country that experienced industrialization and economic growth fast enough to be able to reduce its income gap with the United States. Tunisia, however, avoided the significant deterioration of the income gap with the U.S. that other countries in this group experienced.
- d) When we study the performance of the countries in the first group in regard to closing their income gap with the industrialized nations we do not observe a drastic reduction in their income gap with the U.S. There is no doubt that compared to more densely populated and less politically stable countries of Iran and Algeria the Arab states of Persian Gulf performed better in reducing their income gap with the U.S. It seems that these countries (Saudi Arabia, Oman, and U.A.E.) were generally more politically and economically stable and provided a business environment that offered greater opportunities for investments from within and without.
- e) Among the non-oil exporting countries, Turkey and Tunisia followed certain economic policies that encouraged greater openness and diversity. (CIA – The World Fact book, 2007). The success of Turkey in reducing its income gap with the U.S. is a clear indication that greater openness and trade liberalization combined with creation of a stable political environment conducive to foreign direct investment can be more effective in achieving industrialization and economic development than having access to a sizable amount of foreign currency through exporting oil.

3. PETRODOLLARS AND ECONOMIC DEVELOPMENT

Oil extraction has been known as an economic activity with few backward and forward linkage effects. As such it has not placed the oil producing countries of the Middle East on a speed path to industrialization. But the revenue from oil can potentially be used to stimulate capital formation and industrial development in a shorter period of time. To investigate such a possibility, the economic development of the two groups of Middle Eastern countries over the past two decades were compared and contrasted. Figure four presents the average annual growth of GDP of four countries from group one and all the countries in group two for the two decades of 1980s and 1990s.

Figure-4: Average annual % growth of GDP, 1980-99

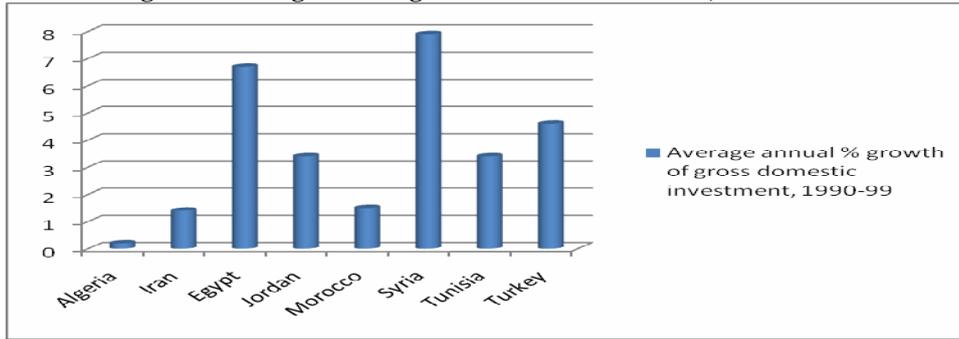


Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

As can be seen in the above diagrams, the non-oil producing countries had generally experienced higher annual percentage growth in their GDPs during both decades. This is an indication of how access to a significant amount of foreign currency, although important, cannot be a major factor in achieving economic progress.

The next diagram was developed to compare the average annual percent growth of domestic investment for Iran and Algeria (the data for other oil-producing nations were not available) with that of the non-oil producing countries in 1990s. We can see again that the availability of foreign currency from oil did not necessarily lead to greater investments and capital formation in Algeria and Iran. In fact all the non-oil exporting countries but morocco experienced greater annual percent growth in their domestic investments.

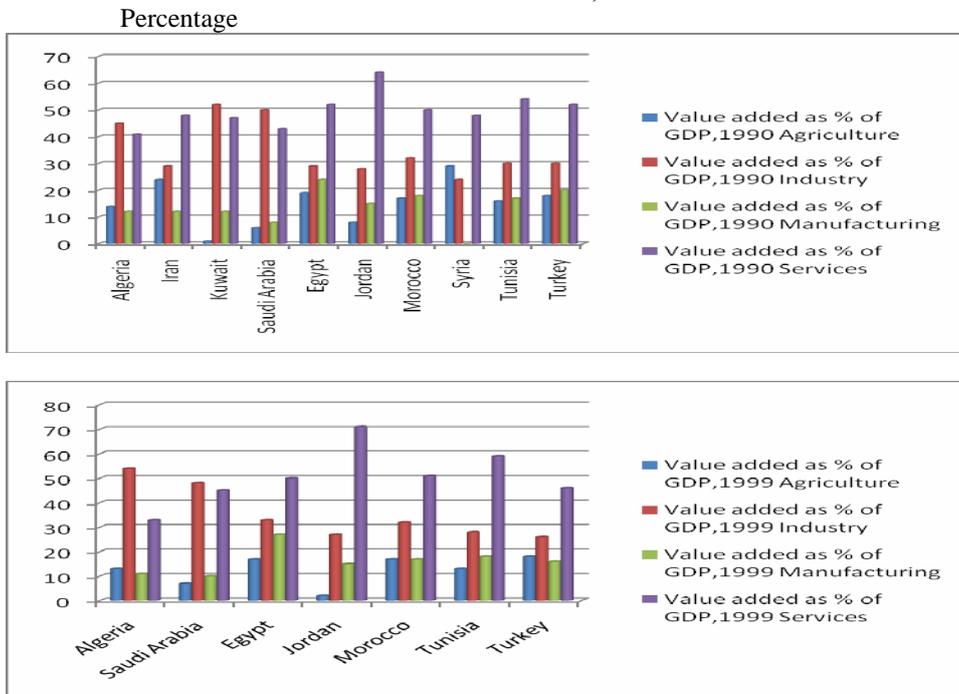
Figure-5: Average annual % growth of gross domestic investment, 1990-99



Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

Figure six was used to compare the success of the two groups of Middle Eastern countries in diversifying their economies in the period from 1990 to 1999. Greater diversity is expected to occur if the manufacturing value added becomes a larger percentage of a country's GDP over time. Using this criterion and as can be seen in the following diagram, the non-oil exporting countries had greater success in diversifying their economies during the past decade.

Figure-6: Value added of different sectors as % of GDP, 1990



Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

So far, the analysis in this paper has led to the conclusion that non-oil exporting countries of the Middle East have done equally well if not more successful than the oil-exporting nations in achieving economic development. As the above diagrams revealed, the non-oil exporting countries have generally achieved higher growth rates in GDP, in domestic investment, and in manufacturing value added as percentage of GDP. Another important economic inquiry being addressed in the next section of this paper is whether the availability of petrodollars in a Middle Eastern country can lead to a greater equality in the distribution of income in that society.

4. "PETRODOLLARS" AND INCOME DISTRIBUTION IN COUNTRIES OF THE MIDDLE-EAST

This section explores the possibility that the availability of petrodollars in the oil-exporting nations has led to greater equality in the distribution of income in these nations compared to the distribution of income in non-oil exporting countries of the region. Lack of data for all countries in this study made it difficult to conduct a cross country study of the distribution of income for the

entire region of the Middle East for the past 30 years. I could, however, find the Gini Index for Algeria and Iran from group I and for all the countries except Syria from group II of countries in this study for the period from 2003 to 2007. The Gini index and the population of urban dwellers as percentage of total population for these six countries are presented in table 2.

Table 2: The Population and Gini Index for Selected Countries of the Greater Middle East

Country	Population 2008	Urban Population % of total		Gini Index 2003-2007
		1980	1999	
Algeria	33.8	44	60	35.3
Iran	65.9	50	61	44.5
Egypt	81.7	44	45	34.4
Jordan	6.23	60	74	38.8
Morocco	34.3	41	55	40
Tunisia	10.4	52	65	40
Turkey	71.9	44	74	43.6

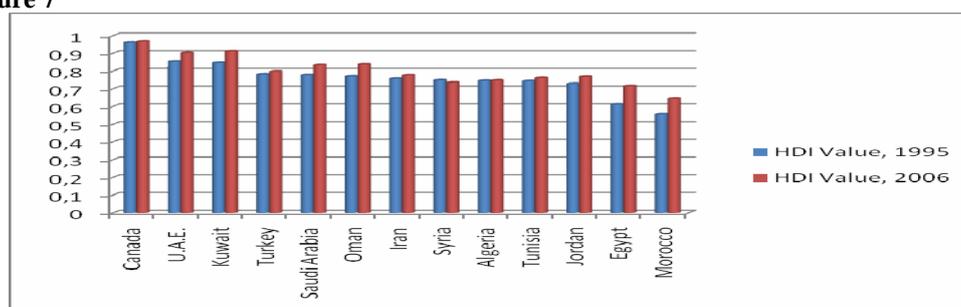
Source: World Development Report (2000/2001); The WORLD Fact Book, Central Intelligence Agency, 2008.

The observations in Table 2 indicate that the distribution of income in these countries is not necessarily dependent on whether the country is an oil exporting nation with access to a significant amount of foreign currency (i.e. Iran and Algeria) or a traditional Middle Eastern Nation without much revenue from exporting oil. The Income distribution, however, seems to be more equal either in countries with small populations (i.e. Algeria, Jordan, and Tunisia) or in large nations with less urbanized population (i.e. Egypt). Countries such as Iran and Turkey with sizable populations and higher degree of urbanization had the highest Gini Indexes. One can conclude, then, that the distribution of income in larger countries of the Middle East that have experienced rapid rural-urban migration has become more unequal regardless of whether the country is an oil exporting or a non-oil exporting nation. Achieving greater equality in the distribution of income and providing equal opportunities for citizens can also be investigated by using a series of human development indicators prepared and published regularly by the United Nations. Next the two groups of countries in this study will be compared and contrasted based on their Human Development Indexes.

4.1. HDI, HPI-1, and GDI Indexes and the Middle East Nations

The history, justification, and definition of “HDI” appear in the Human Development Report of the United Nations as follows: “Each year since 1990, the Human Development Report Office of the United Nation publishes the human development index (HDI) which looks beyond GDP to a broader definition of well-being. The HDI provides a composite measure of three dimensions of human development: living a long and healthy life (measured by life expectancy), being educated (measured by adult literacy and enrolment at the primary, secondary and tertiary level) and having a decent standard of living (measured by purchasing power parity, PPP, income). The index is not a comprehensive measure of human development. It does not, for example, include important indicators such as gender or income inequality and more difficult to measure indicators like respect for human rights and political freedoms. What it provides is a broadened prism for viewing human progress and the complex relationship between income and well-being.” Figure seven provide a cross comparison of HDI index for the two groups of the Middle Eastern countries. HDI Index for Canada has also been presented to provide a benchmark.

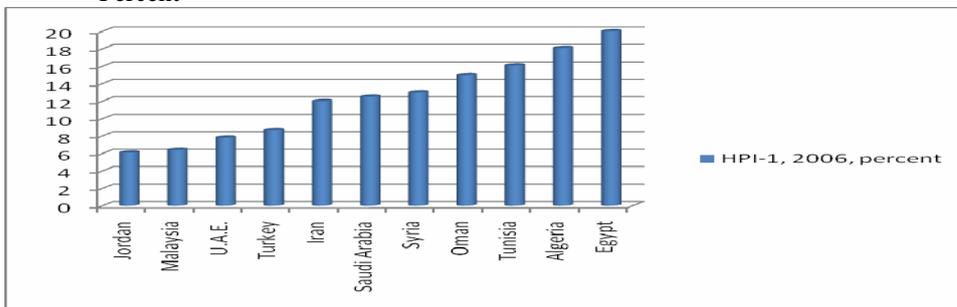
Figure 7



Source: Human Development Report, UNDP, Oxford, Various Issues

The above diagram shows that the City States of Persian Gulf such as U.A.E., Kuwait, and Oman experienced greater progress in human development than other Middle Eastern countries but their HDI was not as high as that of Canada which achieved the highest HDI in the world in 2006. It is also interesting to note that the non-oil exporting countries except for Egypt and Morocco had HDI values that were almost as high as those achieved by oil exporting nations. This is another indication of the fact that the availability of greater amount of foreign currency has not significantly improved the lives of citizens of the oil-exporting countries compared to those living in non-oil exporting nations. Human Development Report (1998) also gives a definition for HPI-1 as "... an Index that measures poverty in developing countries. The variables used are the percentage of people expected to die before age 40, the percentage of adults who are illiterate, and deprivation in overall economic provisioning—public and private—reflected by the percentage of people without access to health services and safe water and percentage of underweight children under five." Figure eight gives a cross-comparison of the two groups of countries in the Middle East based on HPI-1 index. The diagram reveals that, astoundingly, non-oil rich countries like Jordan and Turkey have lower HPI-1 (poverty indexes) compared to some of the major oil producing countries such as Iran, Oman, Saudi Arabia, and Algeria.

Figure 8: HPI-1, 2006
Percent

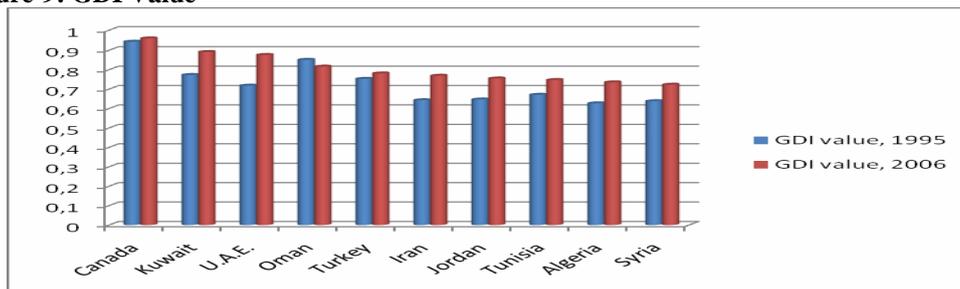


Source: Human Development Report, UNDP, Oxford, Various Issues.

The Gender-related development index (GDI) which is regularly issued by Human Development Office, measures achievements in the same dimensions and variables as HDI, but captures inequalities in achievement between women and men. It is simply the HDI adjusted downward for gender inequality. The greater the gender disparity in basic human development, the lower will be a country's GDI in comparison to its HDI.

Figure 9 shows the GDI values for those nations in this study that their GDI Indexes for both 1995 and 2006 were available.

Figure-9: GDI Value



Source: Human Development Report, UNDP, Oxford, Various Issues

From 1995 to 2006, the GDI values for the small countries of Persian Gulf (Kuwait and U.A.E.) and also for Iran improved significantly. Turkey also did well in reducing gender inequality in different dimensions of human development embedded in its HDI. A closer look at the diagram reveals that all the other non-oil exporting countries have done fairly well in reducing gender inequality in their societies as represented by their GDI values that are not much lower than those estimated for the oil exporting countries. Again, there is not much difference in the magnitude and growth rate of a Socio-economic index such as GDI for the two groups of the Middle Eastern countries. In the next section, we'll use some evidence in support of factors that the author of this paper sees as the main barriers to Socio-economic development of the oil-exporting countries of

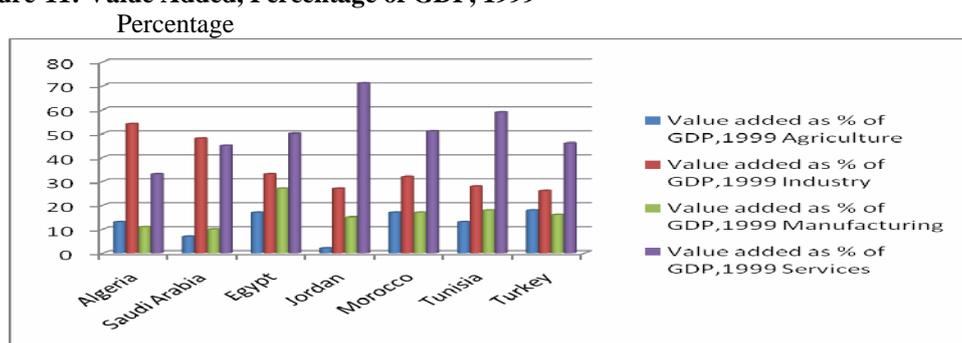
the Middle East. These barriers offset the positive impact that the availability of petrodollars has on economic development of these countries. These barriers are many and some of them such as lack of democracy and political stability do not lend themselves to quantitative analysis.

5. BARRIERS TO ECONOMIC/HUMAN DEVELOPMENT: OIL EXPORTING VERSUS NON-OIL EXPORTING COUNTRIES

The evidence presented so far did not indicate that the oil exporting countries have succeeded in reducing their income gap with the industrialized nations represented by the United States. The data also showed that these countries have not even achieved an economic rate of growth that would significantly exceed the growth rate that non-oil producing countries of the Middle East have generally experienced. In fact, some of the data used in this study reveal that industrialization and economic growth/ diversification in the two countries of Turkey and Tunisia have exceeded the ones experienced by the oil- exporting countries of the Middle East. The outcome of this research is a clear indication that the anemic progress in economic development in a country cannot be attributed merely to unavailability of a sizable amount of foreign currency. Some economists believe now that investments in healthcare and education combined with institutional development, good public policies, political stability, and engaging in international trade will all play roles in creation of a stable macroeconomic environment that encourages productive investments and efficient use of a countries resources and savings. Perkins, Radelet, and Lindauer (2006) state that “ Establishing an environment for productive investment not only helps a country gets more bangs for the buck from its saving but also help encourage more overall savings. Only when societies are able to maintain saving and investment at a sizable proportion of GDP and assure reasonably productive investment can they sustain even mildly robust growth rates over long period of time.” Figure 2 presented earlier in this paper showed the average annual percentage growth of domestic investment for two of the oil exporting countries and for all the non-oil exporting countries. A quick reference to figure 2 reveals that while Iran and Algeria (the only countries in group I that the data for them was available) had very low investment growth rate, majority of the non-oil exporting nations maintained a high and sustained investment growth rate in the previous decade.

Next, the available data for some of the nations in this study was used to compare and contrast the success of the two groups of greater Middle East Region in diversifying their economies, participating in international trade, and attracting foreign direct investment. Figure 11 shows that the value added in agriculture and manufacturing sectors accounted for a larger percentage of GDP in Egypt, Turkey, Morocco, Tunisia, and even Jordan compared to Saudi Arabia and Algeria. This indicates that the second group of the Middle-Eastern countries have been more successful in growing their manufacturing sector and achieving greater diversity in their economies.

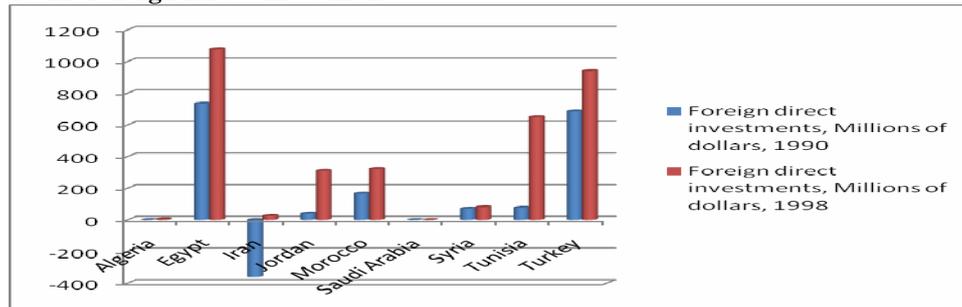
Figure-11: Value Added, Percentage of GDP, 1999



Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

Figure 12 shows the success of Algeria, Iran and Saudi Arabia in attracting foreign direct investment in comparison to all the countries in group II. The diagram clearly reveals that in 1999 almost all the countries in group II had much greater success in attracting foreign direct investments than the three oil-exporting nations of Algeria, Iran, and Saudi Arabia. Of course it is this type of investment rather the inflow of short-term or even longer-term financial capital that enhances the transfer of technology from industrialized nations into the developing countries.

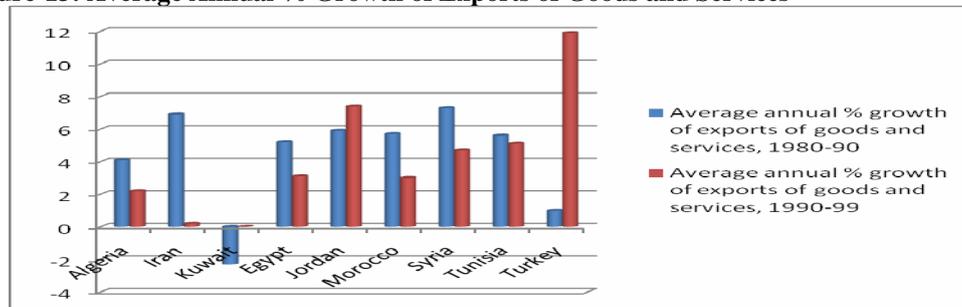
Figure-12: Foreign Direct Investment



Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

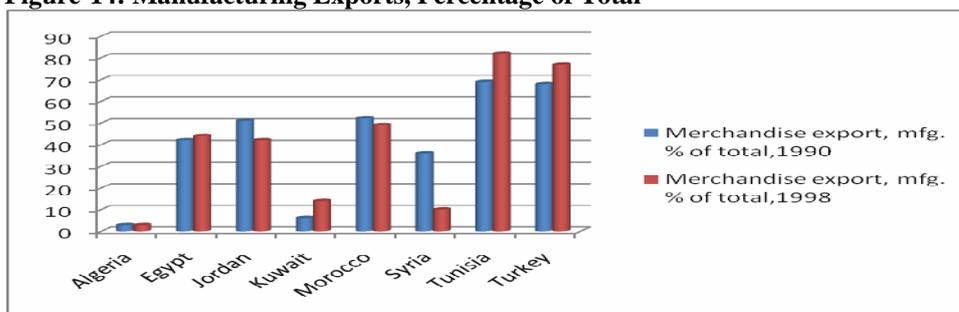
Figures 13 and 14 reveal the average annual percentage growth of exports of goods and services and export of manufactured products as a percentage of total export respectively. These data were used to evaluate the success of the two groups of Middle Eastern countries in relying on international trade to achieve economic development. The diagrams indicate that the non-oil exporting countries have experienced rates of growth in their merchandise export that exceeded the ones experienced by each of the oil exporting countries of Iran, Algeria, and Kuwait. This reinforces the proposition that the oil exporting countries have not been as successful as their non-oil exporting counterparts in achieving greater diversity in their economies and their exports.

Figure-13: Average Annual % Growth of Exports of Goods and Services



Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

Figure-14: Manufacturing Exports, Percentage of Total



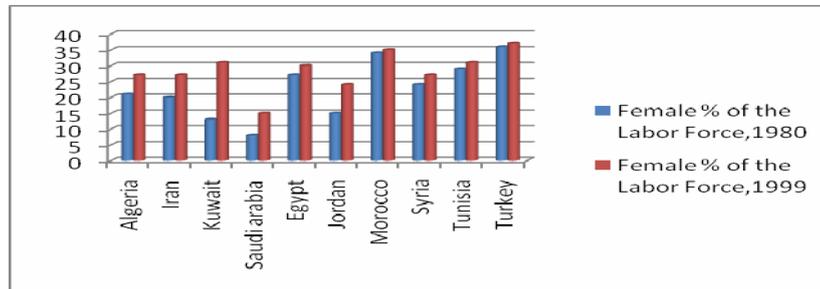
Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002

Oil exporting countries have also been slow in getting more of their female population to enter into the labor force (Figure 15). In non-oil exporting countries such as Morocco, Egypt, Tunisia, and Turkey the female workers constituted a larger percentage of their labor force both in 1980 and 1999. Of course a greater number of female workers will not only increase the size of the labor force but it will also enlarge the market for manufactured products that a growing manufacturing sector places in the market.

Another difference between the oil-exporting and non-oil exporting countries of the Middle East has been the relatively higher level of defense expenditures that oil-exporting countries have always had and the greater involvement of these nations in military campaigns. The excessive use of resources for national defense and greater engagement in destructive wars have reduced the ability of oil-exporting countries to grow and modernize their economies as fast as possible. As

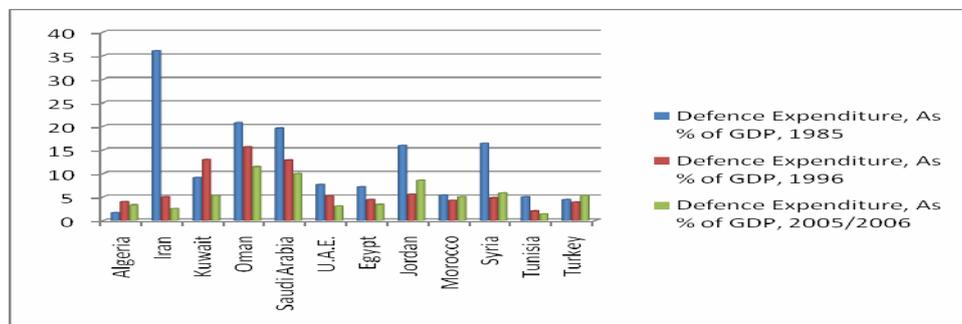
one can see in figure 16, Iran, Kuwait, Oman, and Saudi Arabia have constantly spent a greater percentage of their higher GDPs on defense than the non-oil producing countries such as Egypt, Morocco, Tunisia, and Turkey.

Figure-15: Female Workers, % of Total



Source: World Development Report, Attacking Poverty, the World Bank, 2001/2002.

Figure-16: Defense Expenditures, As % of GDP



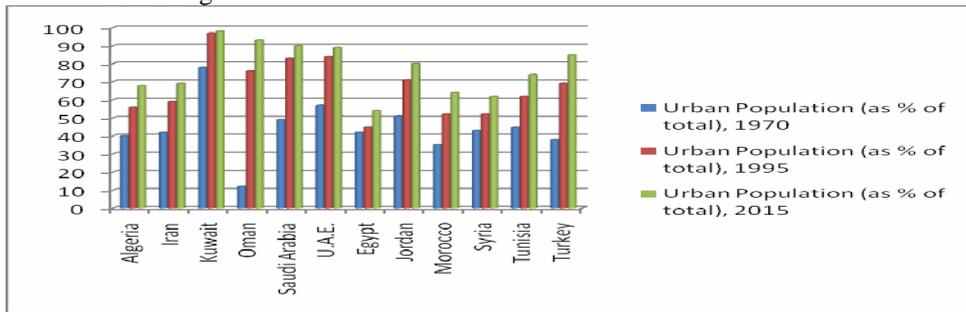
Source: World Development Report, Attacking Poverty, the World Bank, Various issues

6. RAPID URBANIZATION AND QUALITY OF LIFE AND ENVIRONMENT IN OIL-EXPORTING NATIONS VERSUS NON-OIL EXPORTING COUNTRIES OF THE MIDDLE EAST

As can be seen in figure 17, the oil exporting countries of the Middle East have generally experienced a much higher rate of rural-urban migration over the past several decades. As a result, all of these countries have a greater percentage of their populations living in major urban centers. Rapid urbanization exerts a drain on the resources that these countries can invest in productive activities to achieve a higher rate of economic growth. This low rate of economic growth as Meier (1995) explains "... increases the total number in poverty for two reasons : there is not only a weak "trickle down" effect, but even worse, when a country's growth is slow, its politicians need to gain political support. They then do so by in effect "buying" support through the granting of favors such as foreign exchange allocations, import quotas, or subsidies. These rent producing favors go to the non-poor: businessmen, large farmers, trade unions, and the army. These inappropriate policies, in turn, tend to perpetuate a slow rate of growth. A vicious circle of slow growth and political favoritism then intensifies inequality and perpetuate poverty."

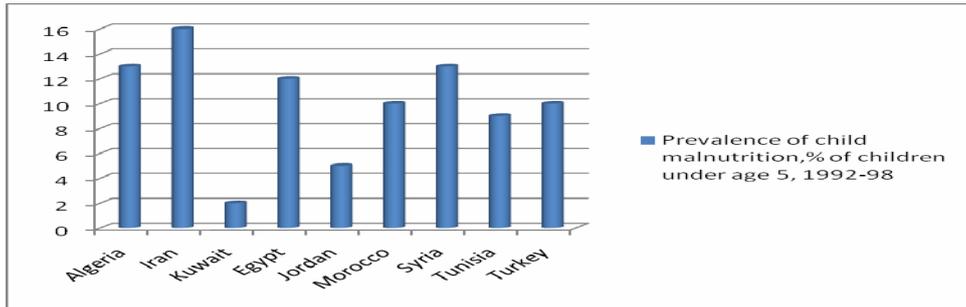
One element of poverty caused by rapid urbanization is seen in figure 18 where oil-exporting countries such as Algeria and Iran have prevalence of child malnutrition in 1992-98 which is higher than that existed in Non-oil exporting countries such as Jordan, Morocco, Tunisia, and Turkey.

Figure-17: Urban Population, As % of Total Percentage



Source: World Development Report, Attacking Poverty, the World Bank, Various issues.

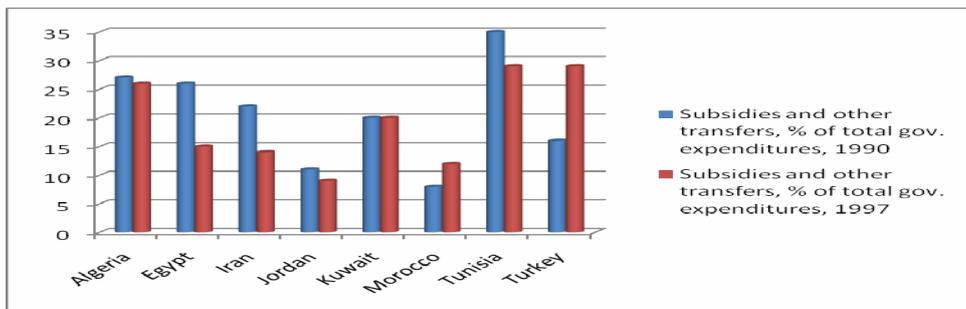
Figure-18: Child Malnutrition



Source: Human Development Report, UNDP, Oxford, Various Issues.

Figure 19 sheds light on Krueger’s proposition (Meier, 1995) that the governments of developing countries perpetuate anemic growth and poverty in their countries by providing subsidies for certain groups of their population to gain their political support. These subsidies and economic policies based on favoritism can distort the domestic prices and curtail international trade and ultimately reduce the rate of economic progress. Figure 19 clearly shows that Iran, Algeria, and Kuwait were among the countries with higher subsidies and transfer payments as percentage of government expenditures both in 1990 and 1997.

Figure-19: Subsidies and Other Transfers, % of Total Budget



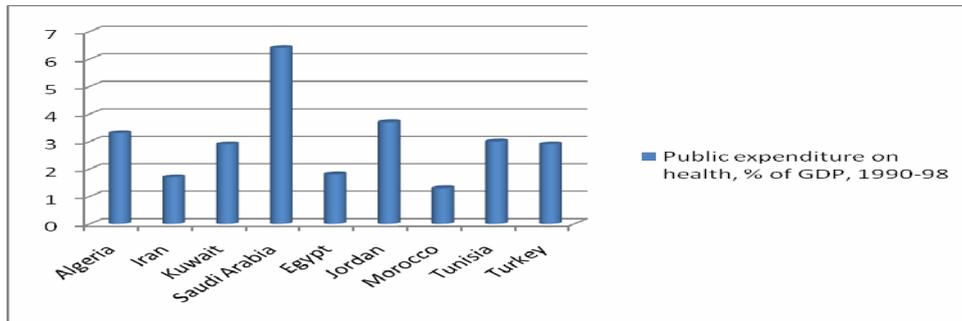
Source: Human Development Report, UNDP, Oxford, Various Issues

Figures 20 to 28 help us understand whether the governments of oil exporting countries used the foreign exchange they received from exporting oil to improve the quality of life for their citizens by providing public services.

Figure 20 shows that except for Saudi Arabia the rest of oil exporting countries spent more or less the same percentage of their GDP on public health care. But one needs to remember that these countries generally have greater GDP and the same percentage of a higher GDP amounts to more funds that can be spent on health care given the population size. Were, then, the countries that spent more funds on public health had greater success in reducing child mortality in their societies and did these countries improve the quality of life for their citizens to a greater extent? Figures 21, 22 and 23 show that except for Morocco and Egypt the rest of the countries whether Oil-exporting

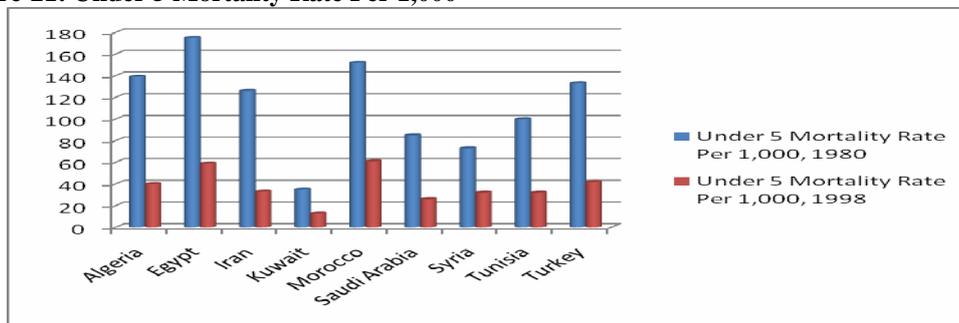
or Non oil-exporting had more or less equal success in reducing both the under 5 mortality rate in their countries and providing sanitation. The Oil-rich nations, however, had greater success in providing improved water source for their populations than Non-oil exporting countries.

Figure-20: Public Expenditures on Health, % of GDP



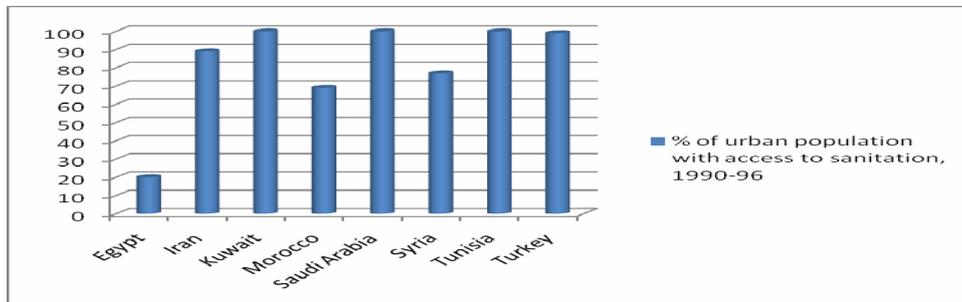
Source: Human Development Report, UNDP, Oxford, Various Issues

Figure-21: Under 5 Mortality Rate Per 1,000



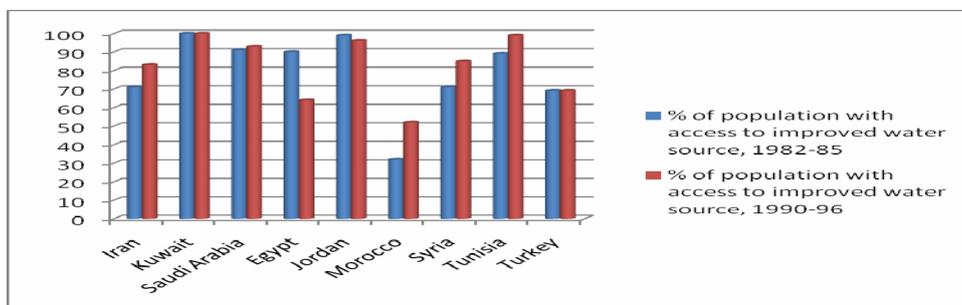
Source: Human Development Report, UNDP, Oxford, Various Issues

Figure-22: Percentage of Urban Population with Access to Sanitation



Source: Human Development Report, UNDP, Oxford, Various Issues

Figure-23: % of Population with Access to Improved Water Source

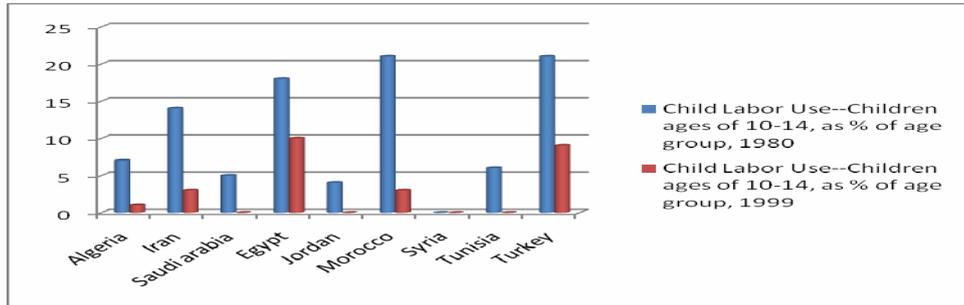


Source: Human Development Report, UNDP, Oxford, Various Issues

Figure 24 reveals that Algeria, Iran, and Saudi Arabia had greater success than Egypt and Turkey in reducing the child labor use in their countries. This should be expected as these three countries

were more urbanized by 1999 and the agricultural industry which is a major user of child labor had already shrunk significantly in these nations.

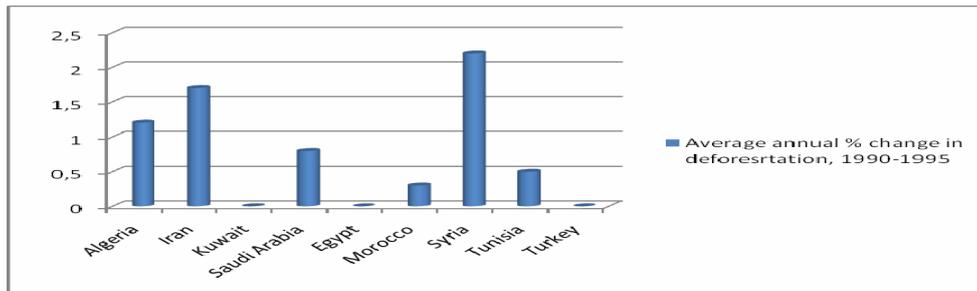
Figure-24:



Source: Human Development Report, UNDP, Oxford, Various Issues

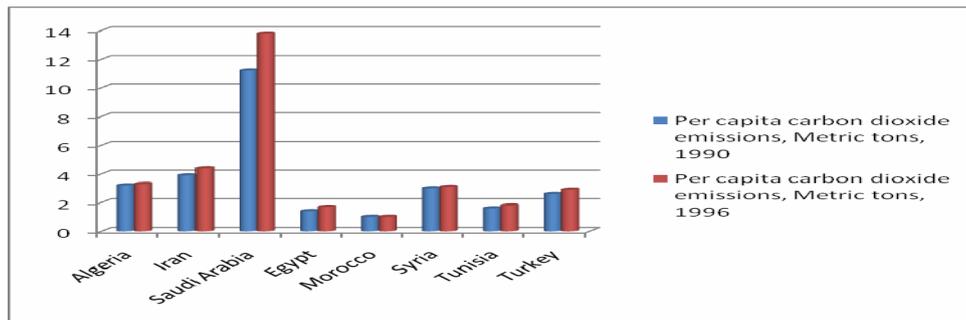
Finally, a quick reference to figures 25 and 26 reveal that deforestation and carbon dioxide emissions have been more severe in Algeria, Iran, and Saudi Arabia than in all the non-oil exporting countries except for Syria that has undergone a higher rate of deforestation than any other country in this study. Based on this limited study we may conclude, then, that during the previous decade the oil exporting countries of the Middle East generally caused greater damage to the environment than their non-oil exporting counterparts.

Figure-25: Deforestation



Source: Human Development Report, UNDP, Oxford, Various Issues.

Figure-26: Carbon Dioxide Emission



Source: Human Development Report, UNDP, Oxford, Various Issues.

7. CONCLUSION

Through comparing and contrasting the many socio-economic indicators published by UN and the World Bank, this paper reveals that over the last several decades the oil-exporting countries of the Middle East have not been adequately successful in 1) Closing their income gap with the industrialized nations, 2) attracting foreign direct investment, 3) promoting greater foreign trade and 4) encouraging or allowing greater participation of women in their labor force, and 5) diversifying their economies. These countries have, for the most part, engaged in armament and military campaigns that have reduced their ability to grow and modernize their economies as fast as possible. In the meanwhile, each of these nations has experienced a rapid process of rural-urban migration that has led to a number of social ills such as higher child malnutrition and mortality

rates, rapid deforestation and environment degradation. The Income distribution seems to be more equal either in countries with small populations (i.e. Algeria, Jordan, and Tunisia) or in large nations with less urbanized population (i.e. Egypt). Countries such as Iran and Turkey with sizable populations and higher degree of urbanization had the highest Gini Indexes- a sign of greater inequality in the distribution of income in these countries.

Another finding in this paper was that except for Morocco and Egypt the rest of the countries whether Oil-exporting or Non oil-exporting had more or less equal success in reducing both the less than 5 mortality rate in their countries and providing sanitation. The Oil-rich nations, however, had greater success in providing improved water source for their populations than Non-oil exporting countries. The final conclusion from the analyses in this paper is that the Oil-exporting countries have not used the foreign exchange they receive from selling oil in the international market to develop their economies and improve the standard of living of their people in an effective and timely manner.

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