

**ADJUSTMENT AND DEVELOPMENT STRATEGIES IN THE  
MIDST OF FALLING OIL REVENUE: THE CASE OF THE  
UNITED ARAB EMIRATES**

by

**Khalid Rasheed Osman Khalid  
(# 454331)**

**Major paper presented to the Department of Economics of the University of  
Ottawa in partial fulfillment of the requirements of the M.A. Degree.**

**Supervisor: Michel Chossudovsky  
Eco 7997**

**Ottawa, Ontario  
June 1989**

## TABLE OF CONTENT

	<u>Page No.</u>
(i) Acknowledgements	
(ii) Abstract	
I <u>Introduction</u>	1
II <u>Pricing and Production Policies in the International Oil Arena</u>	6
A) OPEC's Past Policies	6
B) An Appropriate GCC Oil Policy	15
III <u>The Development of the U.A.E.</u>	31
A) Introduction	31
B) History of the Federation	32
C) Political Economy	40
D) The Oil Sector	48
a) Agricultural Sector	54
b) Industry and Infrastructure	55
c) Business Sector	58
E) Lack of Development Strategy	62
IV <u>Adjustment and Development Strategy</u>	65
A) Current Status of the Economy	65
B) Oil and Investment Policy	70
V <u>Conclusion</u>	79
iii) Footnotes	84
iv) Bibliography	92
v) Appendix (Tables I-VI)	96
vi) Maps	102

**Acknowledgements**

I would especially like to thank Professor Michel Chossudovsky for his helpful insight and useful comments as well as Professor John Kuiper and Professor Pierre Abou-Ezzé for their additional helpful remarks. I also wish to thank the staff of the Economics Department of the University of Ottawa which has made my tenure here very fulfilling. In addition I wish to thank Marie-Anne Richard for her tiredless efforts in typing the draft. Last but not least I give thanks to God and my family Rasheed, Myrna, Zina and Hisham for continued support throughout my studies.

Khalid R.O. Khalid

**Abstract**

The oil glut of the 80's has hampered the development of the oil surplus countries. In this paper I present the problems that lie ahead of these countries with particular reference to the United Arab Emirates (U.A.E.). With its limited population and arable land there are few opportunities for diversification of the U.A.E. economy. It is for this reason that appropriate oil and investment policies are essential to ensure further development. The United Arab Emirates is a unique country which does not have the opportunity to follow the footsteps of others and hence must devise policies that are appropriate for its own situation. The world oil glut has forced the U.A.E. to reevaluate its policies with the following questions in mind. Are they maximizing discounted long run revenue from oil? Is diversification within the economy taking place? Are there proper channels for the surplus revenue to be invested efficiently. These questions and more will be examined in this paper.

## I INTRODUCTION

It is now a new era for the Gulf Cooperation Council (the GCC countries are comprised of six nations of the Arab peninsula - Bahrain, Kuwait, Qatar, Oman, Saudi Arabia and the United Arab Emirates, which was formed in 1981)<sup>1</sup> countries in that they no longer can depend on high oil revenues to propel their economies. Although these countries are not in a devastating situation because of accumulated foreign revenues they now must consider appropriate adjustment and development strategies. One may argue that falling oil revenues are not wholly a bad thing on these grounds.

Since oil is the predominant economic base of all the GCC countries and is indeed an exhaustible resource, the GCC countries must now reevaluate current development programs. The GCC countries can not rely on oil revenues as a permanent base and hence must make appropriate adjustments in order to diversify their economies to a more sustainable economic base. As Dr. Abdulla El-Kuwaiz has stated:

"lower revenues throughout the area have precipitated a thorough reappraisal of development programs and spending plans, such that the countries in question are now much better placed for the next stage in their development towards self-sustaining growth."<sup>2</sup>

Also because of the volatile nature of the oil market in the past, falling oil revenues were initially seen as only a temporary situation, thus rather than being overly concerned with the revenue generated one must be more careful with where the revenue is invested so as to generate

alternative sources of income. Therefore, lower oil revenues do not have only a negative impact; for instance it has meant downward pressure on national currencies, a degree of deflation, a drop in imports and increased emphasis on tradables in the region.<sup>3</sup>

The United Arab Emirates, Saudi Arabia and Kuwait all have huge reserves of oil that will last them well into the next century at the current level of production. The shock of the decline in revenue has in essence awaked these countries from a dream of prosperity and will now enable them to consider the long run ramifications of a drop in oil revenues. Economic policies in these countries must be reassessed in order to use their resources in a more efficient manner. The slowdown in these economies were expected after the abnormal growth in the 70's, it is time for these countries to look at more moderate rates of growth by transforming their oil revenues to other productive and reproducible assets.

It is true indeed that the GCC countries have lopsided economies in that their resource base is extremely unbalanced with large reserves of petroleum but limited in other natural resources. However, diversification is constrained due to the low absorptive capacities of these countries. Because of their geographic location (mostly desert regions and scarcity of water), the agricultural base of these economies is limited even for domestic consumption. Mineral resources are limited (excluding hydrocarbons) as well as an indigeneous labor force for most of the GCC

countries (Saudi Arabia has the largest population of the GCC countries). Both of these limitations set immediate constraints on the industrial capacity of these countries.<sup>4</sup>

Thus with the limited capacity to diversify their internal economy for the smaller GCC countries such as Kuwait and the United Arab Emirates oil receipts have been used for investment in productive assets and real estate abroad. While larger economies, such as Saudi Arabia have emphasized more on a broader industrial base at home such as export promotion or import substitution. Kuwait has taken the strongest stance of the GCC countries on its investment strategy and has definitely reaped the rewards as stated "By the early 1980's Kuwait earned as much revenue from its foreign investment as from its oil exports"<sup>5</sup> This is a very important policy in that it will enable Kuwait and the United Arab Emirates to sustain long term prosperity.

The GCC economies are indeed of a rentier nature. These countries are rentier states in that

"a dominant or significant proportion of the national income is derived from rents rather than from the productive (mainly commodity) sectors of the economy; these revenues mostly go to the state, which takes charge of their allocation and distribution".<sup>6</sup>

It is important to distinguish that a rentier state is one that relies substantially on external rent and not internal rent. If it were indeed internal rent that would indicate that one has a strong productive sector within the economy.<sup>7</sup> In the case of the United Arab Emirates, the state is synonymous with the ruling family. As we will examine later the ruling families are reluctant to relinquish any autonomy, for the result of unity. Thus the rentier nature of these economies has placed the state in a pivotal role as an intermediary between the oil sector and the rest of the economy. It is very important that the U.A.E. like Kuwait rely more on foreign investment in their rentier scheme. Oil is indeed exhaustible and can not be counted on for future "unearned income".

After the oil booms of 1973 and 79, an oil glut has emerged in the market. Many analysts have argued that this was brought about by inappropriate OPEC oil prices which kept prices artificially high resulting in an international oil glut. The high price of oil induced alternative forms of energy and conservation of existing oil. Another problem was the increasing exploration of oil outside of OPEC. OPEC production and pricing policies have been adopted in the past as one policy which benefits all, however there are two main groups with divergent interests. One group opts for short run revenue maximization while the other group would opt for a policy of long run revenue maximization. The United Arab Emirates (U.A.E), Saudi Arabia and Kuwait fall in the latter category of long run revenue maximization. Although this is in their best interest we will later see how past and present policies have neglected such a policy.

It is clear that the United Arab Emirates need to reevaluate current oil and investment strategies since this is its backbone to long term economic prosperity. Through appropriate adjustment procedures in the midst of falling oil revenues, the U.A.E. can make the transition to its next stage of development. The United Arab Emirates, established in 1971, is a federation of seven largely autonomous emirates which are: Abu Dhabi, Ajman, Dubai, Fujairah, Ras al Khaimah, Sharjah and Umm al Qaiwain. Abu Dhabi being the most prosperous of the emirates with the largest oil capacity and Dubai the second most prosperous one. The U.A.E. relies almost exclusively on oil as an engine of growth where it accounts for approximately 90% of U.A.E. income and 95% of trade earnings.<sup>8</sup> During the oil boom of the 70's, the large oil receipts of the U.A.E. allowed for large government expenditure on physical infrastructure, health and educational facilities, social welfare programs, and development of gas and petroleum processing industries. This led to a spill over in the private sector with the construction, service, banking and trade sectors growing considerably. The U.A.E. has adjusted well to the drop in oil revenue by cutting its government expenditure, however other policies (oil and investment) must be adopted in order to maximize long run discounted revenue generating from oil production. This is a very important point which will be stressed in the following section.

## II PRICING AND PRODUCTION POLICIES IN THE INTERNATIONAL OIL ARENA

### A) OPEC's Past Policies

The International Oil Market has gone through a great deal of fluctuation since the early 70's due to the short run policy objectives of the oil producing exporting countries (OPEC). These policies have hurt the long run interest of those oil exporting countries such as the U.A.E with large excess capacity of oil. The policy objectives I am speaking of are those of keeping production quotas down and hence allowing prices to be artificially high through the aid of a cartel. As we will see this was detrimental to the OPEC cartel and particularly to those with large excess oil capacity.

OPEC was established in 1960 to provide the oil producing countries with greater control over the production and pricing of their oil. Prior to 1960 it was the international oil monopolies which dictated the price and production of oil so as to fuel the neo colonialist and industrial nations with cheap oil. The industrial nations had a tight hold on OPEC nations prior to 1960, under the old oil agreements it was the oil monopolies which had control over the territories of the host government and exploited it to the fullest by offering low royalties for the production of oil.

If any country was to deviate from its predetermined role it was

challenged by the industrial nations through indirect interventions such as economic and/or political boycott or direct intervention such as a coup d'etat through CIA covert operations. For example, in 1938 Mexico experienced the first measures when it attempted to nationalize her oil assets from the Anglo American Oil Companies. In response the international oil cartel boycotted Mexican oil and Mexico suffered severely as a result. The Mexicans however were able to rebound from the boycott due to the outbreak of the Second World War which ceased oil supplies from the eastern hemisphere thereby creating a demand for their oil.<sup>9</sup> Likewise, Iran in 1951 (under Prime Minister Mossadegh) attempted to nationalize its oil from the Anglo-Iranian oil company. Consequently Iran was boycotted by the international oil cartel which brought production to a halt. In 1953, through CIA covert operations, a coup d'etat broke out replacing Mossadegh with the exiled royal family of the Shah.<sup>10</sup> By 1954 the international oil monopolies once again gained control over the pricing and production of Iranian oil. The oil monopolies (often referred to as the 7 majors) would therefore unilaterally set the price and production of oil, unchallenged by both the producing and consuming nations. Since the early 19th century the majors controlled the majority of production, shipping, refining and marketing of oil. The British were the enforcer of peace in the Gulf region so as to protect their oil interest.<sup>11</sup> The dominance of the 7 majors was quite apparent. Alone the oil producing nations were too weak to combat them (Mexico and Iran being a case in point) however together they were a force to be reckoned with.

The oil producing nations of the world realized that earlier oil concessions had put them at a grave disadvantage economically. The oil monopolies had simply exploited the oil producing nations by continuing to depress the price of oil on the world market. The August 1960 price reduction of crude oil by the international oil cartel greatly intensified the situation.

"The action understandably intensified the anxiety the latter countries have been feeling for some years ... taking middle eastern producer countries together, the price reduction effected in August 1960, caused them a loss of \$93 million for the year".<sup>12</sup> As a result of their displeasure on OPEC was formed on September 14, 1960. "It was established to stabilize oil prices against any future price reduction by the oil monopolies without prior consultation with the host countries. It is also a safeguard of its members common interest against any future sanctions employed by members of the international oil cartel toward one or more of the member states."<sup>13</sup> The seven majors were now to assume the role of middle man between the producing and consuming nations.<sup>14</sup>

OPEC's true strength was apparent by its first oil embargo as a result of the Arab Israeli war in October 1973. The price of oil had been

suppressed for a long period of time (for 16 years they were frozen) and a higher and stable price level was a necessity to indicate the true value of oil. However, the tremendous price rise can be seen as detrimental to the long term revenue maximization of oil. Oil simply cannot be under or over priced but rather dictated by the appropriate market which has yet to be the case. At first it was the international oil cartel that determined the price level and now it is OPEC.

Oil prices in the period between 1973 and 1974 increased dramatically by 400 percent to send an external shock worldwide. At this time the demand for oil was tremendous, and OPEC producing nations could produce more or less at desired levels. In 1975 OPEC oil demand fell by 11% due to a worldwide recession, however it was a short lived recession, in 1976 GDP rebounded and so did OPEC oil demand.<sup>15</sup> In the period between 1979 and 1981, oil prices rose once again by 161 percent mainly due to limited oil supplies partially caused by the outbreak of the Iran-Iraqi war. Saudi Arabia (which is the designated swing producer of OPEC) did increase its production so that prices would not soar further, however greater measures could have been taken. OPEC could have taken further measures to increase supplies of oil and maintain a lower price level during that period (1979-81), this would have made the current difficulties more moderate. However, OPEC stuck to its policy of having a high fixed price structure and maintaining it through the allocations of quotas to the member countries. Market forces ought to play a greater role in determining the price. In 1981 demand for oil declined by 7 percent but

unlike the situation in 1975 GDP was growing, thus the fall in oil demand could not be explained by a slow down in economic growth but rather by a structural change.<sup>16</sup> The structural change is believed by many to be deep rooted and there may not be a rebound in oil demand. This has left many to criticize past policies adopted by OPEC in that it did not take into consideration long run revenue maximization. The oil ministers of Saudi Arabia and the United Arab Emirates (Ahmad Yamani and Mana Said Al Otaiba respectively) were well aware of this but nonetheless could not gain greater support within OPEC. These two oil ministers repeatedly tried to keep prices down through price freezes in the 70's. They used all sorts of tactics such as stating that OPEC was not empowered to set prices but rather to keep them stable, and that the economies in the west were suffering as a result.<sup>17</sup> Initially Yamani and Otaiba were reluctant to admit that it was in their countries self interest to reduce the price of oil. In January 1977 Yamani finally spoke of the true nature of why he wanted to keep prices down.

"The Arabs who possess gigantic quantities of proven oil reserves, we will be the ones to lose heavily if the world finds new sources of energy for its factories. We will become economically weak, and worst of all, politically weak as well. If we reach such a position we the Arabs would be finished politically, most definitely. Where would be the Palestinian cause?, that would fade away as a result ... it is painful to realize

that such an elementary fact regarding oil policy continues to be ignored or unknown to the Arab public".<sup>18</sup>

As a result Saudi Arabia and the U.A.E. increased production and reduced their price creating a two tier price structure in OPEC. This created an uproar: as the official Iranian newspaper was quoted as saying

"The Third World and all the anti colonialist elements of the world express their hatred toward Yamani for selling the interest of his nation to the imperialists". In turn the Iraqi oil minister charged Yamani with "acting in the service of imperialism and zionism".<sup>19</sup>

The two tier price structure of February 1977, was in place for six months until OPEC agreed to bring prices in line with a price increase of 5% by Saudi Arabia and the U.A.E., in turn the other OPEC members were to forego the agreed upon 5% increase in prices.<sup>20</sup> Thus an internal conflict was readily apparent within OPEC but was not exasperated until the oil glut emerged.

According to the World Bank it takes 15 to 20 years in order for the long run price elasticity of oil to be realized.<sup>21</sup> Hence a rise in the price of oil will effect demand after a considerable lag, as there are not many substitutes for oil. Structural adjustments do indeed take time. If that is the case then we are now experiencing the decline in demand caused by the first oil shock of 1973 and will be in for a further decline in demand in the late 1990's unless the income effect (increases in world GDP)

neutralizes the price effect, with prices falling from \$34 a barrel in 1981 to \$14 a barrel, growing skepticism emerged with respect to OPEC's oil policies. Namely from Saudi Arabia who, as a swing producer, had to cut back production due to the fall in demand of oil during the period between 1981 to 1985. In 1985 Saudi Arabia then decided to abandon its role as a swing producer and produce up to its OPEC quota, as a result oil prices dropped to below \$10 a barrel.<sup>22</sup> Dr. El-Kuwaiz believed the price collapse was caused by the following reasons,

"The decline in spot prices as dictated by the market, the rapid decline in production levels in some OPEC countries, and the decline in the exchange value of the dollar, made it difficult for member countries to meet their financial requirements, and they could see no end in sight, in these prevailing difficulties. Given a reduced and relatively small share of OPEC output, it was in a countries financial interest to increase output and its revenues would still increase even though prices would decline".<sup>23</sup>

Hence it was in Saudi Arabia's best interest to increase output. Because Saudi Arabia is the swing producer, the impact was tremendous. This resulted in increased panic for oil exporters, (without large excess capacities of oil) both OPEC and non OPEC countries agreed to share the burden of production cutbacks with Saudi Arabia in an effort to revitalize

the price of oil. As a result, Saudi Arabia returned to its position as a swing producer by September 1986 and prices rose once again to \$16 a barrel.<sup>24</sup> Thus instead of letting market forces determine price once again, OPEC went to a fixed price system which creates a huge incentive to cheat for OPEC producers and also provides huge profits for non-OPEC producers who gain at the expense of OPEC members. If market prices prevailed then non-OPEC producers could only produce their market share which would be minimal. As Al Chabri puts it

"by re-adopting the fixed price system, it has practically absolved non-OPEC producers from any responsibility for price defence and it has automatically become the residual supplier".<sup>25</sup>

In essence OPEC has weakened its own capacity to control price and production. By allowing the price of oil to remain artificially high, OPEC has been contracting their own share of the market by producing the incentive for non-OPEC members to have a larger share of the market. As OPEC found out one can only defend an artificially high price for so long until the system falls into a price collapse which was the case in 1986. The question then remains: is it in the best interest of the GCC countries to adopt OPEC's high fixed pricing and production policies of the past? As we will see the answer is clearly no; it simply does not result in long-run revenue maximization.

As we have seen, OPEC's production and pricing policies have been in great error. As Dr. El Kuwaiz has argued

"A concise description of OPEC's shortcomings in its 25 year history would be that it has not acted as a market realist - it has not fully appreciated the diverse force of the market. This has been manifested in a variety of ways. Low production and artificially high prices set in motion forces which in time were to the detriment of most member countries. From an academic point of view, OPEC cannot set both production levels and prices. Instead, it can choose a level of production and then let market forces determine prices and vice versa. Recognition of these simple facts of life will be essential to the organization's survival and success."<sup>26</sup>

Dr. El Kuwaiz has brought up a very valid point in that OPEC is creating a distortionary impact which is appropriate in the short run but detrimental in the long run.

OPEC kept production low in the past which favored conservation, the development of alternative forms of energy and increased exploration and production of oil outside of OPEC (for instance North Sea oils). The impact of all these developments resulted in a continual reduction in OPEC's share of world oil output leading to the price collapse of 1985-86. As OPEC's share continues to shrink, the less control it has over production and price of oil as there are now new entrants into the market.

OPEC should not price their oil in dollars as this also adds instability to the oil market as shifts in exchange will also affect demand for oil.<sup>27</sup>

**B) An Appropriate GCC Oil Policy**

The type of policy which GCC countries are interested in is a long run production and pricing policies. A delicate balance is needed in determining the optimal price of oil as Ali Jaidah states

"It would be foolish to deplete our hydrocarbon reserves before we have had time to build our non-oil economy on a sound and permanent basis. It would likewise be unwise to produce so little oil as to drive the price sky high, thus inducing a process of fuel substitution that might leave us in say, 20 years with large physical reserves and very few customers for our precious hydrocarbons. The correct conservationist philosophy avoids both extremes. The correct approach is to optimize extraction rates in order to obtain the maximum possible value from every drop of oil and every cubic foot of gas in our natural endowment. This means that we should not, on the one hand through our profligancy deprive future generations of an asset which belongs to them as rightfully as to us, nor on the other, should we tighten our fist to such an extent as to leave them with

large stocks of a physical resource that has become devalued as an economic asset."<sup>28</sup> The latter has been the policy which has been adopted by OPEC.

The appropriate extraction rate of oil has many variables and therefore requires a great deal of speculation. The theoretical rational for the appropriate extraction rate for a depletable resource has been quite extensive. Economics has in essence built its pillars on scarcity, so this is indeed not a new issue to be confronted. Ever since the writing of Malthus has economics been coined the "dismal science". The optimal extraction rate of oil is therefore not a new concept, however the identification of the type of market structure that OPEC is faced with (pure competition, monopoly or oligopoly) is, as we will see. Among some of the variables are the absorptive capacity of the nation and the cost of extraction of oil. In the U.A.E. the cost of extraction is negligible where as the absorptive capacity (domestic) is low.

"Consequently there is a trade off between extracting oil and leaving in the ground, depending upon expected rate of return on investment of oil revenues and expected evolution of oil prices".<sup>29</sup>

Hence the question of how much to produce is of paramount importance from both a theoretical and analytical perspective.

Hossen Askari believes that GCC OPEC countries now ought to pick a production level that will result in a price which would maximize

discounted long run revenues.<sup>30</sup> Although the goal is easily stated, the implementation of an oil policy of revenue maximization requires a great deal of future information and hence uncertainty, such as the long run demand function for oil, oil production policies of all oil producers, the reaction of other OPEC countries to Saudi production policies (since Saudi is the swing producer), exchange rate developments and other uncertainties in such a highly volatile market. What will be seen from the following example put forth by Hossein Askari and Barbak Dastmaltschi is that if one has even a reasonable price elasticity of demand for oil then those countries with an excess capacity of oil (GCC countries) are better off producing more.

### The Example <sup>31</sup>

The example examines two extreme scenarios which the OPEC nations are faced with:

- a) The first scenario is one in which OPEC increases output at a constant pace to satisfy demand, whereby price remains constant at \$17 per barrel relative to 1985 (see row 3, table 1).
- b) The second scenario is one in which OPEC maintains a constant output of 16 million per day and allows prices to rise (similar to past policy of OPEC, see row 5 table 1).

Hence adjustments for inflation have been made for both scenarios.

Since the demand for oil depends to a large extent on world economic growth, price and income elasticity of oil, and supply of oil and alternative sources of energy. The example has accommodated by the following simplified assumptions which they obtained from IMF forecasting:

- a) Average income growth of 2.8% for the world economy between 1986-1995.
- b) Constant world oil prices.
- c) An average long-term income elasticity of 1.
- d) An average price elasticity of  $-.3$ .

With these assumptions world oil demand has been calculated from 1985-1995 in row 1 of table 1 (see table 1 in appendix). All additional output of oil will be supplied by OPEC since in this example OPEC is the sole supplier of oil, (a highly unrealistic assumption particularly in the second scenario where prices may rise inducing others to explore). The second row show OPEC production which increases by the same amount as world oil demand since OPEC is the sole supplier.

The third row gives us the first scenario which shows the extra revenue accumulated by OPEC with prices fixed at \$17 a barrel and production rising. This can be calculated by taking the increase in production (relative to 1985) of OPEC and multiplying it by the constant price of \$17 a barrel. The fourth row estimates what the price would have been if output did not increase. The fifth row gives us the second scenario where production is held at a constant level and prices are

rising. This can be calculated by taking the difference between multiplying the constant production of 16 mbpd by the price increment in row 4 and the constant price of \$17 per barrel multiplied by \$16 mbpd. As Askari and Dastmatchi sum up:

"Taking rough production figures available for the end of 1985, one can see that roughly 11.5 million bpd, or around 70 percent of the extra capacity was in three OPEC countries - Kuwait, Saudi Arabia and the United Arab Emirates - while about 35 percent of OPEC exports at that time (a low of two mbd for Saudi Arabia) was in the same countries. The issue then becomes, is it to the advantages of these countries to get 70 percent of the scenario presented in row 3 or 35 percent of the scenario presented in row 5? Clearly prior to 1988 revenues in row 3 are higher than in row 5, so that GCC countries in OPEC are better off with exporting more oil; as opposed to letting prices go up, even if the percentages were 50-50. However, given their low level of exports (resulting in a total share of 35 percent of OPEC exports), they would be better off in every year getting 70 percent of row 3, as opposed to 35 percent of row 5 "(see table 1)". Additionally it should be noted that the scenario represented in row 5 is a much larger overestimate than that of row 3 because in the scenario

for row 5 substantial extra energy output should be forthcoming from non-OPEC sources, thus moderating price increases and OPEC revenues. This further supports the likelihood of the scenario represented in row 3. In reality, if the first scenario is pursued, prices will also rise somewhat as excess capacity is reduced. All of this would indicate less volatility in oil prices, with prices increasing gradually but at an increasing rate as excess capacity is reduced."<sup>32</sup>

Thus with any reasonable price elasticity of demand for oil the countries with the lions share of excess capacity (GCC countries) are better off increasing output even if price falls they would be maximizing discounted long run revenue. It is obvious that those members of the GCC would opt for the first scenario given in row 3 (see table 1). Whereas those OPEC countries with limited reserves would opt for the second scenario given in row 5 were the price can remain high in the short run which is all these countries are concerned about. However, the long run interest of the GCC countries would entice them to the first scenario. Hence we have OPEC comprised of two groups with diverged interest. Yet policies in the past have been adopted to favor only the group which gains in the short run. It is time that the GCC countries come to realize this and reevaluate current policy. Although most of the damage has already been done (policies of 73 and 79) there is no use in inflicting greater damage. Prices were too high in relation to the long run equilibrium

price. Saudi Arabia and other GCC countries have recently been exposed to this new realism; Saudi Arabia has even threatened to leave OPEC because the policies have been detrimental to them. Expanding output makes sense for the GCC countries for the following reasons:

- a) in the medium term it will increase GCC revenue despite the drop in price.
- b) lower oil prices will make production less feasible for new entrance (resulting in a higher share for GCC countries), and development of alternative sources of energy will be reduced.
- c) demand will be stimulated in medium and long run.
- d) with the end of Iran - Iraq war greater share of production must be allocated to these countries.<sup>33</sup>

The policy of a high price has resulted in the following negative impact for GCC countries:

- a) "a dramatic and disproportionate decline in oil output after 1981.
- b) a dramatic and disproportionate decline in market shares.
- c) a dramatic and disproportionate decline in oil revenues.
- d) a dramatic and disproportionate increase in GCC excess capacity."<sup>34</sup>

Thus a sound oil policy for the GCC countries is not that of scenerio 2 but rather closer to that of scenario 1. Askari and Dastmaltchi propose that the GCC should adopt an oil policy in line with scenario 1 and

have an individual quota system between member countries of the GCC. They should still continue to expand oil production in efforts to prevent another oil shock as experienced in the 70's. Also instead of allowing the price of oil to be fixed to the U.S. dollars it ought to be denominated to a basket of currencies in order to reduce the volatility of oil prices.

A similar example put forth by Dr. Kuwaiz reaches the same conclusion.<sup>35</sup> In that it is optimal for GCC countries to increase their production of oil, thereby meeting market demand for oil. Dr. Kuwaiz has shown that the increase in production would take place until 1996, when the market will tighten up once again and moderate decreases in production will begin to take place so as to reach a long run equilibrium price. It is important to understand that fluctuation in price and production of oil will take place, but one ought to adopt a policy that will moderate these fluctuations taking into account long run revenue maximization. Asarki and Dastmalchi are well aware that they are proposing two extreme scenarios, and that OPEC would pick a policy between these two extremes, the question then remains is the optimal policy closer to scenario 1 or 2. Kuwaiz, Asarki and Dastmalchi believe that it is closer to 1. This is beginning to be the mainstream view in light of the OPEC's decreasing market share and an ever decreasing demand for oil resulting from inappropriate high prices.

However, Asarki and Dastmalchi have ignored some very important considerations in their example. For instance OPEC is a monopoly in the example, in that any additional increase in production will be supplied by

OPEC. Although Asarki and Dastmaltchi point out that this is an unrealistic assumption and hence row 5 is overestimated (enhancing their argument), this has important implications with respect to the optimal pricing policy. As was indicated earlier the optimal extraction of an exhaustible resources has been dealt with extensively (Harold Hotelling, Charles Howe, Dasgupta and Heal ect.) however, they have dealt mainly with two market conditions, that of a monopoly and perfect competition. Little attention has been paid to imperfect competition which is what OPEC is faced with. Dr. Kuwaiz brought up a very valid point when he said that OPEC ought to act as a market realist and set production and prices accordingly. Thus OPEC can not set prices as a monopoly as Askari and Dastmaltchi have allowed for in their assumptions. It must optimize price and production as an oligopoly. Dr. Samii has a very interesting and relevant article in this regard entitled "optimum price and production of an exhaustible resource in an imperfectly competitive market"<sup>36</sup> which is one of the few articles to explore this issue.

Another consideration which Asarki and Dastmaltchi overlook which could also strengthen their argument is that they should have incorporated cost (implicit and explicit) into their model and not simply revenue. This along with taking into consideration non-Opec producers would indeed make their argument more robust. For instance Dr. Samii comes up with the same conclusions but uses a more robust argument. By not incorporating cost into the model one presents an underlying assumption that the price of oil

remaining in the ground is negligible. One may argue that this underestimates row 5 (which would weaken their argument). The price of oil in the ground would be zero only if the resource was infinite or a complete substitute for oil was found; neither of these are the case for oil. However, Dr. Samii has shown that those countries with large excess reserves (U.A.E.) have a lower "users cost" associated with them. Social cost of production can be divided into explicit cost (capital and labor) and implicit cost (also called users cost). As Dr. Samii indicates

"The user's cost in natural resource economics is defined as the sacrifice imposed on future generations as a result of the consumption of a unit of exhaustible resource in the current period".<sup>37</sup>

The production cost is known to be very low with countries with large excess capacity and as indicated by Dr. Samii the users cost is also very low. This may have been one reason that Asarki and Dastmaltchi ignored cost in their example. However, this could have been used to strengthen their argument.

Although the users cost may be quite low for these countries now, with large excess capacities of oil, the users cost will begin to increase as excess capacity dwindles, this is one reason that the market will tighten in 1996 or thereabouts. By this time the price of oil in the ground will no longer be negligible and production will slowly taper off. Karim Pakrvan reaches the same conclusion through an empirical model of users cost.<sup>38</sup> Those countries with large excess capacities have negligible user cost and hence currently would optimally prefer a lower price and

higher production of their oil. Hence the "users cost" can be seen as the main divergent force within OPEC. Those with low reserves and high "users cost" opt for an optimal policy closer to scenario 2 (a monopoly optimality), and those with large reserves and low "users cost" opt for an optimal policy closer to 1 (perfect competition optimality). There is large room for compatibility when considering the oligopoly market that OPEC and non-Opec producers are faced with. I will not explain how Dr. Samii derives his model but rather reiterate his final conclusions. As he refers to OPEC

"the organization would require a production and pricing policy such that its marginal revenue would be equal to the sum of the marginal private cost and the user's cost,...the optimum price would be lower than in the case of a monopoly but above the level of perfect competition".<sup>39</sup>

Therefore, price is not set equal to the marginal social cost (optimal price of an exhaustible resource under perfect competition), nor is marginal revenue set equal to the marginal social cost (optimal price of an exhaustible resource under a monopoly); but rather the organizations marginal revenue is set equal to the summation of the marginal social cost.

OPEC has been able to sort out these diverged interest in the past, however has stuck to a policy closer to scenario 2 prior to 1987.

Dr. Samii envisions a consensus being reached because of the unique nature of the oligopoly market. This unique nature is brought about through a kinked demand curve caused by a certain price where non-Opec supply will reach its threshold (due to its limited capacity) and thus becomes inelastic. Hence if marginal social cost (explicit + users cost) intersects marginal revenue anywhere along this kink, optimal price and production for OPEC will not fluctuate.

"it was observed that the possibility of reaching a common view on the optimum price and output level is greater than in other market conditions, even with the differences in the marginal social cost of individual member countries. The reason is the kink in the demand curve at the point corresponding to where the supply from outside the organization becomes infinitely inelastic. Therefore, there is a range within which the marginal social cost could fluctuate without affecting optimal conditions. The problem of instability would emerge if, at any point in time a large number of its members had radically different social cost".<sup>40</sup>

Instability is now emerging due to the radically different social cost within OPEC. Therefore, the appropriate GCC oil policy is not necessarily OPEC's appropriate policy. The GCC countries possess a lower marginal social cost hence, prefer to maintain a lower price and greater

production for the short run. Whereas OPEC countries with small reserves would prefer a higher price scenario and lower output in the same time frame. Thus the appropriate oligopoly solution for OPEC would be a price somewhere in the middle. This is consistent with Dr. Timothy Morgans findings as well. Dr. Morgan has found that structural change has most definitely occurred and that the industrial countries of the world have become more energy efficient. These structural adjustments had been made for political and economic reasons. He believes that the market will indeed tighten again, the question is when and by what drastic amount. This is to be determined by the type of oil policy which OPEC sets now. If OPEC adopts the oligopolistic optimal pricing, policy it will keep fluctuations moderate when the market tightens. In 1987 OPEC had begun to keep prices stable at \$18 barrel and increased production, this is inbetween Asarki and Dastmaltchi two scenarios but is indeed closer to scenario 1. As Dr. Morgan concludes

"longer term, it is believed that a constant \$18/b price will see OPEC's objectives by prolonging the low price stimulus to demand, while limiting the development of non OPEC source of supply. As a result, OPEC's share will gradually increase, with petroleum revenues growing as a result of increased volumes rather than of higher prices. In effect, a policy of stable real prices around an \$18/b reference represents a form of "low

case" policy leading; OPEC hopes, to the strong uptrend which can be anticipated".<sup>41</sup>

It may be in the interest of GCC countries (the U.A.E.) to increase production and lower its price however, there is large room for consensus among an oligopoly market as we have found. Since the GCC countries possess the largest reserves it does indeed make sense that the optimal pricing and production policy of OPEC ought to be closer to scenario 1 than 2. Dr. Morgan is arguing that this is exactly what OPEC intends to do. Past OPEC policies were indeed detrimental however, in its new era changes are appearing in OPEC. Hence in my opinion Asarki and Dastmaltchi conclusions are correct however, they could have built a more robust argument by considering the nature of the market, as well as incorporating both explicit and implicit cost to the example.

There are those who disagree with Asarki and Dastmaltchi findings in that those countries with excess reserves have limited absorptive capacity and hence would prefer higher prices and lower production as Ali Ezzati stated

"For many OPEC member countries, oil revenue for domestic investment are preferable to foreign investment. They believe that oil revenues in excess of domestic development needs will be exposed to devaluation, inflation, expropriation

and giveaways in terms of free loans and grants; that they will induce excessive military expenditures and downward pressure on world crude oil prices ...

countries with limited absorptive capacity can exert an upward pressure on crude oil prices by cutting back production and those with higher absorptive capacity can exert downward pressure on prices by increasing their crude oil production to satisfy their oil needs".<sup>42</sup>

Although this is partially true foreign investment can be extremely feasible as well. Ezzati however, reaches the same conclusion in that prices ought to remain stable (at \$11 US relative to 1973 prices). GCC OPEC countries are more concerned with maximizing long run revenue. Dr. Banks has also mentioned that OPEC's past policies make sense from the point of view of theoretical development economics, in that:

"third world countries with large supplies of energy resources or non fuel minerals, and serious development ambitions, is to finance as rapidly as possible the education of a working force and the establishment of an industry that can transform its primary resources into various intermediate goods and/or finished products.... Thus it is possible that in theory the higher oil prices of 1979-81 favored some of the OPEC countries and it may be the case that it favored some of these countries in

both theory and practice".<sup>43</sup>

It did indeed favor some of these countries in the short run. However, it did not favor the GCC countries in the long run. So although there are some critical remarks, in my opinion the appropriate pricing and production policy is closer to that presented in scenario 1. Due to the large number of variables it is difficult to reach the optimal pricing and production policies. One must devise a robust model in order to strengthen ones argument however, there will always be uncertainties associated with these models. Fortunately, the oligopoly market structure allows for some variations.

Because of the huge excess capacity of oil that this region has, it is in the best interest of all countries that the GCC develop a sound oil policy which can moderate price fluctuation. It is of course of great interest to the GCC countries, given the overriding importance of oil in their economies. The development of these nations depend extensively on adjustments to declining oil revenues, and most importantly to the reevaluation of current oil and investment policies. The United Arab Emirates is one of these countries in question in which we will examine closely recent efforts for adjustment and development. The U.A.E. and Kuwait have made strides to increase their production quota. Although steps have been taken in the right direction in forming an appropriate oil policy, the GCC countries must ban together to comprise a sound and coordinated GCC international oil policy. OPEC has lead the way in trying

to sustain the price level at \$18/b.

### III THE DEVELOPMENT OF THE U.A.E.

#### A) Introduction

The United Arab Emirates being one of the Gulf Cooperation Council countries, which all have similar characteristics, must now adapt to their falling oil revenues and carry out effective oil and investment policies. However, a precondition for this is a greater unification of the Federation. This will be the true test of the U.A.E. since being formed in 1971. Each of the emirates still have retained a high degree of political and financial autonomy which may be to their detriment in the midst of a dramatic fall in their oil revenue.

The federal government which is responsible for defense, education, health, internal security and justice has no revenue base of its own, rather it relies on revenue transfers from the emirates. Hence one has a very loose federal structure which creates two major problems. The first being that there is great difficulty in reaching decisions concerning funding federal budgetary expenditures. Secondly the apportioning of oil production among the different emirates with different oil endowments in the contexts of OPEC's quota system becomes difficult without the aid of a strong federal government.<sup>44</sup> In order to have a better understanding of

how such a loose federal structure emerged one must consider the historical background of this region and examine how such a federation emerged.

**B) History of the U.A.E. Federation**

The region known today as the United Arab Emirates is known to be one of the earliest spots of civilization in the Middle East. It was a highly developed civilization which existed before the first Egyptian United Kingdom came into being.<sup>45</sup> However, there is a great void in the history of this region (1000 BC to 1600 AD) because its remoteness preserved its secrets from historical exploration. Also it was not acceptable in the Islamic doctrine to investigate into the Pre Islamic past; thus only recently have archaeological explorations of this era taken place.

The death of Prophet Mohammad in 632 AD had the effect of uniting the Arabs in the region for the first time and enabled them to resurrect a flourishing merchant fleet that dominated the Indian Ocean and hence trade with India and China.<sup>46</sup>

The Arab merchants continued to dominate the waters of the Gulf and Indian Ocean until the Portuguese made their appearance in these waters in the early sixteenth century. The Arab fleets of dhows were simply no match for the Portuguese ships. The Portuguese under military leadership of Affonso de Albuquerque took control of key strategic positions in the

Gulf such as the island of Hormuz (see map) which enabled them to regulate trade between the Gulf and the East Indies. Other strategic positions were those of Ras Al Khamiah (one of the seven emirates) and Khor Fakkan (Khorfakkan is an enclave of the emirate Sharjah, see map). Although the Portuguese had come to conquer the region their stay was short lived and left no impact on the Arab region. As Makom Peck states about the legacy of the Portuguese in the region "domineering, exploitative and aggressively hostile to the Islamic culture of the Gulfs population, they barely disturbed the rhythm of the regions life and left its institutions intact. It would be another three centuries before the outside world would intrude sufficiently to bring basic changes to the economic, social and political modes of Arab life in the lower Gulf".<sup>47</sup>

In the early 17th century, the British and Dutch merchants took the reigns of merchant power from the Portuguese in the region. The British became the sole merchant power in the region with the withdrawal of the Dutch merchants by the middle of the 18th century. The British presence in the Gulf was not that of a state or government but rather of a powerful merchant trading company called the British East India Company. This trading company was equipped with its own army and navy. The British presence in the Gulf led to numerous attacks on their vessels in the middle of the 18th century. The Qawasim Tribe were responsible for these attacks of piracy, the Qawasim felt as though these were not acts of piracy but rather retaliation for British intrusion in the region and such acts were merely a local war.<sup>48</sup> By the beginning of the 19th century the Qawasim

Tribe (which was the ruling clan of the northern emirates Sharjah and Ras Al Khaimah), had built strong alliances with other tribes such as the Wahhabi, which enabled them to construct a strong and well organized naval fleet to wage war against the British and other nonfundamentalists. In 1820, the British could no longer sit idle and attacked the Qawasim fleet and fort in Ras Al Khaimah. The fear of such reprisal lead the Shaikhs of Dubai, Abu Dhabi, Ajman, Ras Al Khaimah, Sharjah, Umm Al Qaiwain, Fujairah, Bahrain and Oman to sign a treaty with the British. In 1835, another treaty was signed by the Shaikhs so as not to engage in maritime warfare during the pearling season (which lasts 6 months). This treaty was signed in order to let the conflict between the Bani Yas (ruling clan of Abu Dhabi) and Qawaism de-escalate. The treaty worked so well that it was renewed indefinitely in 1853 and referred to as the "Treaty of Maritime Peace in Perpetuity", the British were to enforce this treaty and hence these Shaikhdoms were referred to as the "Trucial States".<sup>49</sup>

Through such ties with the trucial states, the British had established their presence in the region. Although the British had adopted a protective status over the states and managed their external affairs, the British left the tribes of the Trucial states to meddle in their own domestic affairs. The great autonomy that the Qawaism and Bani Yas Tribes had over their domestic affairs can definitely be seen as one of the disintegrative factors that the United Arab Emirates is now faced with. It was not until 1892 that the British government engaged in formal ties with the Trucial States. The treaty in March of 1892 had two main stipulations,

one being "not to enter into any agreement or correspondence with any power other than the British government" and "not to grant residence to the agent of any other government without the prior approval of the British, and under no circumstances to "cede, sell, mortgage or otherwise give for occupation any part of (his) territory, save to the British Government".<sup>50</sup>

As Malcom Peck puts it

"this treaty definitely marking Britains shift from commercial to strategic concerns in the Gulf, became the principal legal/diplomatic pillar of British authority in the Trucial States".<sup>51</sup>

Once again the Trucial States were left alone to deal with domestic affairs, and hence may have suffered from a delay in both political and economic development.

The United Arab Emirates was in essence isolated from the outside world for centuries. Thus the economic, social and political mode of the region remained unchanged for centuries. Only recently (1960's) with the discovery of oil did economic transformations begin to take place along with a dramatic social and political change. It was not until the "Buraimi dispute" of 1952 that the British intervened in the domestic affairs of the region. The "Buraimi dispute" was a territorial dispute between Saudi Arabia and the U.A.E. over the region of Buraimi, an enclave of Abu Dhabi (also referred to as Al Ain, see map). The British infiltrated and established troops in the area to protect the interest of the Trucial States. These troops were called the Trucial Oman Scouts which were later

to be the bulk of the U.A.E. military. After the initial intervention in internal affairs Britain upgraded their political presence in the region by appointing British representatives in each of the Trucial States. The British had now started to build up institutional settings to help aid in the now changing economic, political, and social structures of the region. In 1952 the Trucial State council was formed which was comprised of the rulers of each of the seven Trucial States.<sup>52</sup> This was an important establishment because for the first time the rulers of each of the states could discuss common problems and interest, a sense of unity amongst the rulers was being established. Although this body had no power it enabled the rulers to collectively organize themselves.

Although the British had set up integrative forces, they also created tension between the emirates by forming territorial rights for each of the emirates. In 1955 the British were empowered to set demarcate frontiers between the trucial states.<sup>53</sup> This enabled the British to "divide and rule" for example, Sharjah which was once a large emirate was stripped of part of its territory in order to weaken it. These type of tactics have created animosities between certain rulers to this day.<sup>54</sup> Territorial rights were not strickly enforced by the bedouin before the advent of oil, however with the discovery of oil territory was synonomous with wealth and created great disputes. Hence the emirates were hampered not only by external threats but internal as well, guided by the hand of the British who had their own interest in mind (oil interest included).

At this time Dubai was the wealthiest emirate, while the other emirates relied heavily on the pearling industry and other subsistence activity such as date, vegetables and fruits cultivation as well as fishing and the raising of camel livestock;<sup>55</sup> Dubai had developed itself as one of the major Gulf ports. It had been a major port for centuries but Shaikh Rashid promoted the modernization of the ports in the 1950's which attracted the business community.<sup>56</sup> It was not until the discovery of oil in the 1960's that Abu Dhabi surpassed Dubai as the wealthiest of the emirates. In the 1960's the modernization era had begun, the British had helped to establish a development office in which major infrastructural projects aided health services, communication, education and agricultural programs in all of the Trucial States. The "lions share" of this development program was provided by Abu Dhabi.<sup>57</sup>

Although the Trucial States were on the road to a new era of modernization, as change was being inflicted both exogenously and endogenously, the states were still quite comfortable with the external protection the British provided. It was not until 1967, that the British announced that they intended to withdraw from the Gulf region in 1971 due to economic difficulties back home.<sup>58</sup> In other words it was becoming costly for the British to remain in the region and in the age of neo colonialism economic consideration replaced imperial expansion.<sup>59</sup> This came as a concern to the Trucial States. It was important that without the British presence they would unify for the common interest of security. The British also wanted to see the unification of the region and initially

proposed forming a federation of nine emirates which was to include the seven Trucial States (currently the U.A.E.) along with Bahrain and Qatar. Shaikh Zayid Bin Sultan of Abu Dhabi was the driving force behind these talks in that he realized that unification was crucial. Shaikh Zayid took over the reigns on August 5, 1966 from his brother Shaikh Shakhbut who had ruled since 1928 but could simply not adapt to rapid modernization. Shaikh Zayid was surprisingly ready for rapid modernization and set the pace for the emirates as a whole, he was very much liked for his generosity with the other emirates. As Abdullah Taryam (who was minister of education in 1975) states

"Zayids accession represented a new point of departure in the region by opening the way for an era of vigorous development which changed the economic face of the region within less than a month of his assumption of authority, several government departments were created and a planning council was established. Moreover Abu Dhabi's contribution to the other emirates through the development office was increased. As a whole it can be said that the change of regime in Abu Dhabi heralded the region's emergence as a new economic and political force in the world".<sup>60</sup>

When the British announced that their departure from the Gulf region would take place in 1971 Shaikh Zayid and Shaikh Rashid of Dubai played important roles in persuading the other emirates to join together as

a federation. As a federation they would obtain greater security for their territorial boundaries, alone they were small nations defenseless and extremely vulnerable to Iran and Saudi Arabia who still believe that Buraimi is rightfully theirs. It was believed that the abrupt pull out of the British in the region could lead to a mad scramble for territorial rights. Iran was already staking a claim on Bahrain and other islands belonging to Ras Al Khaimah. It was for this reason that Shaikh Zayid and Shaikh Rashid both offered to pay the British for their military presence, an offer that was refused. The time had come to depend solely on themselves, and Zayid and the other eight rulers were to establish a federation on October 21, 1969. However, the meeting broke up as the rulers of Qatar, Bahrain and Ras Al Khaimah had major differences. Shaikh Zayid realized that the need was urgent to establish a federation quickly, and this could only be done by giving each emirate a great deal of financial and political autonomy. Bahrain had gone ahead and claimed its own independence on August 15, 1971, followed by Qatar on August 30, 1971. Finally a resolution had been reached with the remaining six emirates excluding Ras Al Khamiah. On December 2, 1971, the United Arab Emirates was established, and Shaikh Zayid was elected as the president and Shaikh Rashid the vice president of the federation. Three months later Ras Al Khamiah joined the federation to bring the total to seven emirates under one flag.<sup>61</sup>

C) Political Economy

One can see that the need to quickly establish the federation led to a loose federal structure as each of the rulers were reluctant to relinquish any of their autonomy. Although economic, political and social change was indeed taking place rapidly it did not develop in a cohesive manner. It is quite evident that the federation is now forced with its true test of strength and cohesiveness in the midst of falling oil revenue. Policies must be carried out now at the federal level in order to ensure cohesiveness amongst the emirates in a time of great concern.

Economic change taking place in the emirates with the discovery of oil in the 1960's did indeed pave the way for political and social change in the region (which will be discussed in greater depth in the next section). It was the emirates acceptance of the changes that enabled them to develop so rapidly. This can be largely attributed to the basic elements of the Arab society which is Islam, the tribe and the family.<sup>62</sup> Although this may act as an integrative factor in accepting and promoting change, the loyalty to ones tribe and family may be more of a disintegrative factor in the unification of the federation as a whole, as ones loyalty to his tribe/family is greater than to its federation. However the rapid change has taken place and the U.A.E. has transformed itself from one of the poorest regions in the world to the region with the highest per capita income (per capita income of \$28,000 for total population and \$100,000 for U.A.E. citizens in 1980).<sup>63</sup> The family and

Islam allow the individuals to welcome change as one scholar put it "The centrality of the revelation of Islam puts all subsequent 'facts' of social change into a very subordinate position so that when changes do appear, they are seen as divine manifestations of God's will and are thus accommodated into the existing pattern".<sup>64</sup> Changes are thus permitted as ones allegiance to the family, tribe and Islam are intact.

The political authority in each of the emirates is conducted in a traditional way whereby the ruling families of each of the emirates have the power to carry out any policy it see's fit. The rulers are still very close to their subjects, as advisors to the rulers keep the rulers informed about the public needs.<sup>65</sup> Twenty years ago it was not uncommon for any subject to meet with the Shaikh over matters that concerned him, although this is not practiced now, the alliance to the tribe allows the Shaikh to be in close contact with his subjects.

The ruling families are the state as they represent each of the emirates. The problem lies in how much autonomy each of the ruling families are willing to relinquish for the cause of unification. As Giacomo Luciani indicates:

"One may propose examples of forms of integration that have developed between states that are not democratic, and indeed the GCC is an example of this. However, there is always neccessarily a limit to such integrative

process since eventually the evolution toward unity would entail a loss of power for all except whoever would rule the unified entity. The difficulties of the federal government in the U.A.E. are a clear proof of this".<sup>66</sup>

The ruling families of each of the emirates come from the most influential tribal grouping in their region, and in all but one of the cases that happens to be the largest tribe (Ras Al-Khaimah is the exception). As was mentioned earlier the rulers of Abu Dhabi and Dubai come from the Bani Yas Tribe, and from the families of the Al Nuhayyan and Maktum respectively. The rulers of Sharjah and Ras Al Khaimah come from the Qawasim Tribe (rivals of the Bani Yas at one time); and finally the rulers of Fujairah, Umm Al Qaiwain and Ajman come from the tribes of Sharqi, Mualla and Nu.aimi which are much smaller tribes than either the Bani Yas (largest tribe) or the Qawasim.<sup>67</sup> It is of great importance to each of the ruling families to balance power among the different families of the tribe. Although the ruler basically inherits his position he may be removed from that position if he does not fulfill the needs of his subjects. Shaikh Shakhbut is a prime example who was not a man of his time and was therefore succeeded by his brother Zayid who had a greater understanding of modernization and the outside world. Therefore as Peck has stated

"To earn and retain his position, a traditional ruler

thus requires more than inherited position, wealth and other advantages. Generally speaking, like Shaikh Zayid, the other emirate rulers have been perceived as embodying the important values of their society and polity and as being fair and capable; as a result they have generally enjoyed legitimacy and popularity".<sup>68</sup>

The ruling families are in essence enforcing their political power through the rentier nature of the state. The surplus appropriations are redistributed through the bedouin society in a manner which avoids conflict as Nazih Ayubi puts it:

"Through the creation of a bureaucracy, the rulers of the oil states are paying the citizens - by way of lucrative government employment - in return for a cessation of the old tribal wars, for tacit acceptance of the political supremacy of one tribe or faction of a tribe (the royal or princely family) over the others ... The taxation function is thus reversed in the oil state instead of the usual situation, where the state taxes the citizen in return for services, hence the citizen taxes the state - by acquiring a government payment - in return for staying quiet, for not invoking tribal rivalries and for not challenging the ruling families position".<sup>69</sup>

Hence the ruling families win over the acceptance of the population but not through a democratic manner, as "the history of democracy owes its beginnings, it is well known, to some fiscal association (no taxation without representation)".<sup>70</sup> The reverse taxation allows the monarchies to buy allegiance as is common practice in a bedouin society. This of course altered development plans in that oil revenue was directed to elaborate infrastructure "public works yield immediate political results and the results are visible for all to see".<sup>71</sup> Consequently in rentier states such as the U.A.E., instead of the usual development progression from agriculture to industry to service; the process is reversed with the services sector growing at colossal proportions.<sup>72</sup>

The federal government of the U.A.E. is made of the following branches, The Federal Supreme Council, The President and Vice President of the Federation, The Federal Council of Ministers, The Federal National Assembly and The Federal Judiciary. The Federal Supreme Council is comprised of all seven rulers of the emirates, two of which are the President and Vice President of the union. The Supreme Council is the highest authority of the Federation yet it plays a dual role in that it enforces regional autonomy as each of the emirates are extremely reluctant to relinquish any of their power to the federal government. The Council of Ministers are in turn appointed by the President and the Prime Minister of the federation. The Federal National Council (FNC) is then controlled by the Council of Ministers and has no power to implement legislation; thus it merely acts as a consultative branch which gives proposals to the Council

of Ministers.

The constitution of the U.A.E. had been drawn up by the Supreme Council so as to be "the fundamental law regulating political, economic and social affairs of the federal states and its central bodies".<sup>73</sup> The constitution that was originally drawn up in 1970 was to be for the nine member union thus giving most power to the individual emirates and leaving very little authority to the federal government. As A.O. Tayan former minister of education expresses the constitution

"It was conceived on the basis that the individual emirates constituted 'the rule' and the federal authority 'the exception'. This emanated from the rulers fear of federal authority as a structure which might adversely influence their original power".<sup>74</sup>

The Supreme Council realized that the Constitution did not give enough power to the federal government and thus called it a provisional constitution which was to be reviewed after its tenure expired in 1976. It was president Shaikh Zayid who made several efforts to build a strong federal government. Although Shaikh Zayid attempted to implement a permanent constitution in 1976 to strengthen the federal government power to exercise control over the federation, the other rulers failed to ratify the draft.<sup>75</sup> This outraged Zayid as he felt the other emirates were concerned with their self interest and not the unions. It was Zayid and Abu Dhabi who had the most to lose from a federation as they were independently wealthy, yet Zayid was concerned with the well being of the

entire federation. The permanent constitution was not ratified in 1981 nor in 1986 although some changes were made to the provisional constitution. Dubai, being the second most powerful emirate, enjoy their political and financial autonomy and wants the reign of their own economy so that it can govern its "laissez-faire" economy without obstructions from the federation; since the economy of Dubai is heavily intertwined with the trade and business community.<sup>76</sup> For instance Dubai and Sharjah have taken it upon themselves to pursue friendly relations with Iran for commercial reasons, this is opposed to the federal governments position.<sup>77</sup> These type of policies must be addressed. Although the U.A.E. is considered a state which has sovereignty over its territory, it continues to act as seven autonomous entities. It is of vital importance that Dubai and the other emirates must now give up some of their autonomy in order to bring about a more effective federal government which will not engage in conflicting policies with each of the emirate municipalities. In light of the falling oil revenue of the U.A.E. the federal budget must be carried out in an efficient manner.

The federal budget of the U.A.E. consists mainly of transfer payments from each of the emirates. The Supreme Council decided in 1984 that the federal budget would consist of a consolidated oil revenue base. Each emirate was to contribute one half of its oil revenue to the federal government. However, this has not materialized as of yet. It is Abu Dhabi which contributes 90% of the federal budget. Other sources of revenue are administrative fees, returns on investments and profit from the central

bank. There is no federal income tax, although income tax do exist in the individual emirates for business entities.<sup>78</sup> Thus the emirates (excluding Abu Dhabi) have contributed very little to the federal budget but have received the benefits. The budgets at both the emirate and government level are extremely hard to trace. For instance data on Abu Dhabi oil revenue excludes revenue retained by Shaikh Zayid or transfers of the revenue directly to the Abu Dhabi Investment Authority (ADIA) and the Abu Dhabi National Oil Company (ADNOC). Dubais oil receipts are simply the transfer of funds from the ruler (Shaikh Rashid) to the federal government and his municipality.<sup>79</sup> It is the rulers which redistribute part of their wealth to the population through the bureaucracy.

Therefore the contributions to the federal and local budget is from the rulers themselves. Federal budgets have been delayed for up to three fourths of a year due to a lack of compliance on behalf of the emirates. The federal budget must be derived in a more efficient manner. As Peck states in a nutshell:

"The severe reduction of revenues as a result of the worldwide oil glut has made the issue of an effective federal government all the more critical. In the days of plenty, the generosity of Shaikh Zayid sufficed to carry the economic and social benefits through the federal system to all parts of the country. With reduced financial resources, the inadequacies of the

federal machinery are more painfully apparent, and the smaller, poorer emirates are hurting".<sup>80</sup>

No longer can there be a loose federal structure in light of the true test the emirates have before them. It was thought that such a federation would not continue to exist up to now, the U.A.E. has proved these critiques wrong, however that is not sufficient. Although the relationship between the emirates and federal governments is still evolving, time is a crucial factor. In 1991 (when the provisional constitution expires once again) the U.A.E. must adopt a permanent constitution which will provide the federal government with substantial power; this will greatly determine the U.A.E's prospects for adjustment and development strategies. Although this is primarily a political problem, the repercussions extend to social and economic development. Let us now turn our attention to where all of this surplus appropriation is derived from, namely the oil sector.

#### D) The Oil Sector

The oil sector can indeed be seen as the driving force behind rapid economic, political and social change in the emirates. The U.A.E. like the other GCC countries relies on a single non renewable resource: oil. With the discovery of oil in the early 60's, Abu Dhabi emerged as the new focal point of the emirates which took the spotlight from Dubai. With the advent of oil income, the emirates were able to prosper economically, which gave the ruling families of the emirates enormous influential power.

The U.A.E. surely had the means to carry out an overall development strategy with the newly acquired oil wealth, however the great amount of political and financial autonomy given to each emirate was counter productive to such a strategy. As each emirate formed its own development strategy, (this is discussed in the next section).

Oil accounts for approximately 90 percent of the U.A.E.'s income and 95 percent of trade earnings. The U.A.E. with a population of 1.5 million (80% which are foreign) accounts for more than 6% of total OPEC production, and has huge excess reserves that make it possible to produce oil at the current rate of production (OPEC quota of 988,000 BPD for first half of 1989) for the next 70 to 100 years.<sup>81</sup> Current exploration is still taking place in which new oil reserves are being found. Thus oil has been and will continue to be the main impetus of the U.A.E. economy. As was discussed in the previous section the sharp increase in international oil prices in 1973 and 1979 did help the U.A.E. economy in the short run by generating the revenue needed to build up the infrastructure, however it is detrimental to the U.A.E. in the long run as structural adjustments have been made as stated:

"It is clear that the imposition of relatively high oil prices on the world economy between 1973-1981 taught the oil importing countries one lesson - energy conservation. Now that these economies have shifted onto a lower energy intensity curve, the likelihood of

oil prices reverting to their previous peak levels is slim. For the past five years OPEC has been trying to adjust to this scenario which has resulted in previously unimagined strains on the cartel."<sup>82</sup>

Hence the repercussions of such a policy are indeed being felt now, and it is Abu Dhabi which is bearing the brunt of the cutbacks since it possesses the lions share of excess capacity (98%).

It is Abu Dhabi which is considered the swing producer of the U.A.E., (see table III), while the other emirates remain rather stagnant over the years. Abu Dhabi has experienced heavy fluctuation in production. This is due to the fact that Abu Dhabi perceives itself as a member of OPEC and hence adopts its pricing and production policies whereas Dubai feels that they do not have to comply with OPEC demands. Thus in the midst of the oil glut Abu Dhabi is the only emirate subject to OPEC quotas were Dubai produces at its desired level which is about 400,000 barrels per day (bpd). Abu Dhabi has the capacity to produce 3,000,000 bpd but is restrained to about 1,000,000 bpd. The U.A.E. feels that a fair quota is 1.5 mbpd but has been allocated only 988,000 bpd in the November 88 Vienna accord for the first half of 1989. As Sheikh Khalifah (Shaikh Zayid's son) reported to Reuter

"The U.A.E. while faithfully working to find better opportunities for cooperation and coordination amongst

OPEC's 13 members,.. was still looking forward for just output quota, he said the U.A.E. hoped for a positive response to this just demand and that OPEC ministers will look at it with consideration at their next meeting scheduled in Vienna next June".<sup>83</sup>

The appropriate oil policy for the U.A.E., as discussed in Section II, would be one in which it would currently increase its oil production along with the other GCC countries with large excess capacity of oil, this would indeed maximize their long run oil revenue. The quota allocated to the U.A.E. may be effective in the short run as the trade minister stated on January 13, 1989

"A mood of optimism is pervading the government and the private sector on the prospects of the economy; a better horizon is visible because oil prices have touched \$16 a barrel and further appreciation is on the cards".<sup>84</sup>

What is being ignored here is the long run ramifications of such a policy. If prices are to remain stable around \$16 a barrel this would be appropriate, however, further appreciation in the price would delay the tightening of the market and wide fluctuations in the price would appear when it did occur, as Dr. Morgan has observed.

Since oil is indeed the main engine of growth, the U.A.E. must be committed to carrying out the policy mentioned in the second section even if it results in a falling price of oil. The U.A.E. continues to argue for

a fair quota of production and believes that their oil is overpriced. Dr. Mana Said Al Otaiba, the U.A.E.'s Minister of Petroleum Affairs, has repeatedly said that the price of heavier oil blends ought to be reflective of the high demand placed on them. The U.A.E. produces a light blend of crude which is not as desirable as the heavier blend. Abu Dhabi and Dubai have been in dispute with OPEC pricing policy for this reason as has been stated:

"both feel that the kind of light crudes which they produce have lost some of their market attraction in recent years to heavier blends, due to changing refinery techniques which make better use of the latter. But they maintain, OPEC's price list makes no allowance for this change and hence attaches unjustifiably high prices to their crude products, making it unnecessarily difficult to export their output".<sup>85</sup>

Hence the U.A.E. ought to be committed to increasing its production quota and stabilizing the price of its oil in order to maximize its long run revenue. This type of "low case" (closer to scenario 1) policy is one in which all GCC countries ought to favor. This seems to be the trend OPEC is taking since 1987.

The surplus appropriation from the oil revenue has allowed government spending (both federal and local) to be the largest stimulant factor in the U.A.E. economy (which is true for all GCC countries), with the private sector expanding from the spillover of government

expenditure.<sup>86</sup>

The problem is that the surplus oil revenue has been recycled into the economy through government spending, but has yet to create self sustained growth on behalf of the non oil sector. Hence the non oil sector is greatly effected by the growth of the oil sector. This can be partly attributed to the heavy investment in non productive infrastructure. The limited absorptive capacity of the U.A.E., constrains its productive capacity. It is for this reason that the GCC in general and the U.A.E. in particular ought to be committed to a more coordinated approach to development. With limited opportunities in each of the small markets, the pooling of markets, resources and investments will allow the U.A.E. and the GCC countries to expand their economic potential.<sup>87</sup> The existing oil glut gives the U.A.E. and the GCC countries time to consider such policies. Although the industrial countries were effected by the oil price increase of the 70's it was ambiguous as to the impact of the rise on real income in these countries.<sup>88</sup> A great deal of the income transfer from the industrial countries to OPEC was recovered through increased imports on behalf of the GCC countries. In other words, the oil glut is even more detrimental to the GCC countries than the price rise was to the industrial countries and therefore, must be given careful consideration. The surplus oil revenue of the U.A.E. has fueled development in the agricultural, industrial, and business sectors of the country at a remarkable rate. Although these sectors do show remarkable expansion they currently contribute very little to GDP, as will be seen in the following subsections.

a) Agricultural Sector

The agricultural sector of the U.A.E. has expanded and improved considerably with the advent of oil revenue. Although it contributes to only 2% of GDP and employs 6% of the workforce, it is supplying the U.A.E. with major food crops.<sup>89</sup> In the decade following Independence, the U.A.E. has quadrupled food output and increased cultivated land by 500 percent, backed by a allotted federal government budget of 50 million dollars annually for agriculture.<sup>90</sup> The federal government is committed to continued support of agriculture. The surplus oil revenue has been channelled into modern irrigation systems which are capable of extracting underground water. Since water conservation is of primary importance the U.A.E. has used highly capital intensive irrigation systems. The government has also provided a program to assist farmers both financially (through extended credit) and technically (machinery, fertilizer, etc.). This is provided to farmers which adhere to proper government guidelines, such as diversification of crops so as to become more self sufficient.

Although agricultural development is not viewed as an alternative form of income for the emirates it is seen as a redistribution of wealth to the northern emirates where most of the arable land is located (Ras Al Khamah, Fujairah, Umm Al Qaiwan, Ajman). Agricultural projects have also taken place on numerous oases such as Buraimi (Al Ain). The government (local and federal) have assisted in infrastructure and subsidies to

farmers on projects such as the Dig daga scheme, however one can not ignore the problems agriculture faces in the U.A.E. The climatic conditions and lack of water are the greatest barriers to agricultural development, along with the lack of indigenous labor. The scarcity of water has induced the federal government to modernize the irrigation system through aid of underground water which is extremely costly.<sup>91</sup>

The Ministry of Agriculture and Fisheries have also supported the raising of livestock and fishing. Fishing has grown considerably in the past few years mostly in Ajman and Umm Al Qaiwan. Less than thirty years ago, agriculture, fishing and pearling were the main economic activity of the emirates aside from Dubai. It is of great importance to the nationals not to lose touch with their traditional past. This is evident in the government's attempt to revitalize agricultural growth and development. However, one can not combat nature's limitations, as is the case now the agricultural sector uses three fourths of the U.A.E.'s total water resources!<sup>92</sup> The recycling of oil revenue has allowed the U.A.E. to modernize and expand its agricultural sector to levels never imagined. The limitations of nature, however, still prevail.

#### b) Industry and Infrastructure

Although industry has contributed little to GDP in the past (less than 1% in 1975) it is growing at a rapid rate (contributing up to 10% to GDP in 1986). The manufacturing sector can be divided into the large scale

capital intensive public enterprise on the one hand and the small and medium scale private enterprise on the other. The former is largely export oriented. The public enterprise sector have launched many successful projects such as fertilizer plants, grain silos, flour mills, aluminum plants, etc. The private sector has been very successful with producing cement, bricks, steel pipes, asbestos, tires, etc.<sup>93</sup>

The development of the public enterprise sector is pursued mainly by the individual emirates. Whereas it is the federal government's responsibility to encourage the small and medium size private enterprise through the Emirates Industrial Bank (EIB). Stated accordingly by the I.M.F.:

"The objectives of the bank are to finance the growth of industry by providing equity, working capital, and medium and long term loans on concessional terms, as well as to research and identify potential areas for new projects and industries".<sup>94</sup>

U.A.E. officials are aware that it is of vital concern that the private sector play a larger role in the economy. Although most of the industries that we have mentioned (both private and public) are indeed saturated with investment opportunities, other industries are beginning to blossom which may be the future source of revenue for the U.A.E. These industries are petrochemicals, natural gas and petroleum processing

industries (also known as downstream operations). This will be discussed further in the next section.

The need for physical infrastructure provided a link for industry in the economy. Due to the influx of oil revenues in the mid 70's and early 80's construction increased dramatically. Industries were built to accommodate the construction boom, so that imported material was no longer a necessity.

Roads were built linking up each of the emirates, along with airports, seaports, telecommunications, offices, hotels, etc. Workers were brought in primarily from the Philippines, Pakistan, India, other Arab nations and Europe as there was a lack of skilled and unskilled labor. The skilled labor was primarily from the other Arab Nations and Europe and the unskilled a combination of other ethnic backgrounds. Foreigners comprise 90% of the work force and 80% of the total population! The majority are employed in total services (government and other services) with construction being the single greatest employer (see table IV).<sup>95</sup> U.A.E. officials realize that foreigner workers are needed to promote industry and infrastructure and hence overall development in the productive sector of the economy. With the influx of foreign labor the U.A.E. has experienced rapid development: areas that were desert regions are now cities with skyscrapers and parks. However, the fall in oil revenue has also created a slowdown in construction which is hurting the small scale industries, the large scale hydrocarbon industries are performing satisfactorily.

Social infrastructure has also played an important role in development. Free education and health care is provided as is housing and other services for U.A.E. citizens. All emirians have been provided with jobs as they constitute a minority in their own country. The problem, however is that U.A.E. citizens are becoming complacent as the need to work and achieve is not prevalent as one analyst puts it "The message is clear: without effort or self denial one can simply accept a world made by others".<sup>96</sup> Sheikh Zayid is well aware of this situation as are the other rulers and have stressed the importance of education among the emirians in order to enhance development prospects for the U.A.E.

The complacency of individuals can be partly attributed to the rentier nature of the state, which has in essence transformed the U.A.E. into a welfare state without the taxes. The work ethic in the U.A.E., has begun to disintegrate as income is no longer a reward for hard work. It is the expatriates who perform the productive activities of the state and the Nationals which earn the windfall gains of their rentier economy.<sup>97</sup>

**c) Business Sector**

The business and financial sector was also fueled by the enormous oil revenue of the U.A.E. Although Dubai had a strong business and financial community before oil, the other emirates are starting to catch up

with the advent of oil. The U.A.E. welcomes trade with a liberal trade system which is free of restrictions. Foreign Investment and Foreign exchange controls are also free from restriction providing a strong base for business activity. The U.A.E. is aware that they rely totally on foreign trade and business as the main impetus for growth of their economy, and have therefore always promoted a very open economy. In fact the U.A.E. and Nigeria are the only two OPEC countries that allow western oil companies to be equity holders in a concession.<sup>98</sup> In turn these companies must share in the investment of the operation. Each of the emirates deal autonomously with the western oil companies as each emirate retains control over their hydrocarbon (oil, gas, ect.) resources. For instance the two main oil companies of Abu Dhabi the Abu Dhabi Company for Onshore Oil Operations (ADCO) and the Abu Dhabi Marine Areas Operating Company (ADMA-OPCO) are owned 60% by the Abu Dhabi National Oil Company and 40% by private U.S. and European Companies. The U.A.E. has not fully nationalized any of her oil. One of the reasons for joint ventures in oil production can be seen in the following statement

"The basic goal of developing eventual self-reliance in managing the country's oil and gas operations argues for continuing good relations with the companies from which technical and managerial expertise can be learned. The outlook, then, is for a moderate and generally friendly policy toward outside private oil interest that also carefully safeguards the nation's single great resource

and promotes its optimum development".<sup>99</sup>

The federal government wants to play a greater role in promoting business activity. In April of 1984, Shaikh Zayid signed the federal company laws which regulates the conduct of how foreign business in the U.A.E.. It stipulates that the individual emirate alone can not conduct business without federal approval. Another stipulation is that at least 51% of the equity capital must be held by U.A.E. citizens.<sup>100</sup> However, this law has not been fully implemented as of yet. The government hopes that as oil revenues begin to fall, the business sector will pick up some of the slack which has been the case up to now.

In recent years the balance of payments has remained in surplus with the exception of 1983 with a deficit of .4 billion dollars, the depreciation of the dollar in 1985 (which is pegged to the dirham at 3.671 since November 1980) partly aided in the surplus (see table V).<sup>101</sup> The open business sector has allowed the appropriation of surplus oil revenues to be used in the most efficient manner.

The financial sector was also very free of restrictions. In the early 70's, increased domestic economic activity in the U.A.E. attracted numerous foreign banks. By 1980 there was a total of 347 bank branches of which 222 were foreign banks.<sup>102</sup> This resulted in an overextension of credit which had resulted in a banking crisis. Reforms were a must in the banking system. As a result a central bank was established in 1981 which

in turn put forth a moratorium to limit the number of foreign banks in the U.A.E. The number of branches of a foreign bank could not exceed 8. This resulted in the closing of 89 branches up to 1985.<sup>103</sup>

The main objective of the central bank since its inception has been "to maintain adequate liquidity for the banking system and to strengthen the commercial banks financial position".<sup>104</sup> This has been accommodated for through a number of mergers. The commercial banks are now under rigorous supervision and auditing by the central bank. Regulations were also put forth to improve banking practices and to tighten credit. These provisions by the central bank have revitalized the U.A.E.'s financial sector, this progress that has been made in the banking sector since 1980 has indeed been quite remarkable.

Oil revenue has indeed acted as a catalysis to the sectors of the U.A.E. economy. The U.A.E. is a very unique country and this has been reflected in its development process. Not only does the U.A.E. have large quantities of hydrocarbons and a small indigenous work force (which is similar to other GCC countries Kuwait, Qatar, Bahrain), but also has a very unique political dimension in that each emirate retains a great deal of autonomy. This is an important point in that an overall development strategy was not implemented and as a result development took place in an inefficient manner.

E) Lack of Development Strategy

Upon the inception of the United Arab Emirates in 1971, each of the rulers of the emirates realized the need to carry out development projects. However, this was not undertaken in a cohesive manner. For the first few years this was understandable since each of the emirates were lacking every basic amenities. The need to provide education, health, electricity, water, housing, roads, services ect. was the priority of each of the emirates at the time. Yet even after all of these basic needs were provided, an overall development strategy was never adopted.<sup>105</sup> Each of the emirates wanted autonomy concerning development strategies.

The result is that each of the emirates developed as separate entities. Their development took place on a trial and error type approach. The lack of a central body to coordinate an overall development strategy for the union, resulted in inefficiencies in projects. Each of the emirates were in essence competing with one another instead of collaborating. Prestigious projects were built in each of the emirates such as palaces, airports, skyscrapers, hospitals, seaports, ect., but were not built in a orderly fashion of priorities and resources of each of the emirates. The cost of projects were as high as

"30 to 60 percent more than similar projects in developed countries. This is attributed to the inadequacy of the essential base for projects, lack of

technical and managerial expertise, and the absence of co-ordination at the emirate or gulf level".<sup>105</sup>

The lack of coordination has led to overlapping projects: for instance similar petrochemical plants are being built in Abu Dhabi and Dubai at the same time; also aluminum smelters, fertilizer plants and dry docks have been duplicated. Furthermore, seven elaborate international airports were built in six of the emirates (within a hundred mile range),<sup>106</sup> including in Sharjah and Dubai which are a fifteen minute drive from one another! There are numerous instances of this as A.O. Tayran puts it "Obviously this reflects unplanned development of economic resources and a wasteful use of oil revenue"<sup>107</sup> (which indeed it is). The wealth of each of the individual emirates has added fuel to the fire by allowing each emirate to implement development strategies unilaterally. The diversification of the economy has suffered from this unilateral approach to development as well. A cohesive investment and oil policy for the emirates is of utmost importance, these policies must be carried out by a central body capable of administering such programs. Although the emirates established a ministry of planning in 1977, the latter acts merely as an advisory board to each of the emirates as it has no power of its own to implement or abolish projects. This situation once again is related to the loose federal structure developed through the U.A.E.'s Provisional Constitution; as indicated in the following statement

"The ministry's task has become confined to study and

evaluation (financially, economically and socially) of projects initiated by other ministries, ..... the ministry could not check the authority of regional institutions in the individual emirates to initiate and carry out projects. Obviously, this poses a serious threat to sound overall development, and the situation will not change until the nature of the relation between the federal authority and the individual emirates is first changed".<sup>108</sup>

The need to implement a coordinated overall development strategy does not limit itself to physical infrastructure but to social infrastructure as well. The number of non nationals is increasing at an alarming rate (in 1968 foreigners comprised only 37% of total population in 1979 this figure expanded to 78%)<sup>109</sup>. This has threatened the sovereignty of the U.A.E., however the need for foreign manpower is prevalent. Although the foreign population up to now has only been incorporated into the economic structure and excluded from the social and political structure, U.A.E. Nationals are concerned that this trend is only temporary, and that the supposed 'guest workers' may take up permanent status in the U.A.E. thereby upsetting the balance of power in the region.<sup>110</sup> Also the ever growing foreign population is draining the federal budget through increased cost in, education, health care, social welfare etc., and now must be treated as a serious matter. The need to coordinate policies so as to shift from a labor intensive development

strategy to a capital intensive development strategy (so as to meet prevailing conditions) is more apparent than ever.<sup>111</sup> The lack of an overall development strategy is a challenge that now must be met by first granting the federal government greater autonomy with the adoption of a permanent constitution in 1991.

#### IV ADJUSTMENT AND DEVELOPMENT STRATEGY

The U.A.E. with its limited domestic absorptive capacity and rentier nature must continue to rely on the external conditions of the world economy (such as demand for oil). Its main resource has been and will continue to be hydrocarbons exports. The U.A.E. cannot have control over external conditions but will remain less vulnerable if it can carry out policies that are favorable to its long run economic prosperity. These policies, oil and investment, are crucial to future development.

##### A) Current Status of the Economy

The U.A.E. overall has adjusted well to the drop in oil revenue. This can be attributed to the cushion provided by the large foreign reserves. With the drop in oil revenue, the government was aware that aggregate demand had to be reduced.<sup>112</sup> The U.A.E. was fortunate that as cut backs were a necessity major infrastructural projects had been completed and no other major projects were started. Foreign grants and

loans had also been cut from very generous levels and still are above 1% of GDP. The government has still provided for the maintenance of infrastructure, adequate services, defense expenditures, and a cushion to the non oil sector from the oil recession; with its excessive foreign assets.<sup>113</sup> Although the U.A.E. can withstand such a reduction in its oil revenue in the short run by drawing on accumulated foreign reserves it must now adopt appropriate policies for long term stability. The poorer northern emirates are feeling the burden of the fall in oil revenue which may induce them to give up some autonomy. Although there have been recent findings of oil reserves in the northern region, these emirates do not have the benefits of accumulated foreign reserves as Abu Dhabi, Dubai and Sharjah do, as The Middle East Economic Digest reports:

"The failure of the U.A.E. to develop a coherent national identity weighs heavily on the four most northern, and poorest, of the emirates. Lacking the hydrocarbons reserve of Abu Dhabi and Dubai, they would benefit from the evolution of a unitary government, with the authority to spread resources more evenly among the seven Shaikdoms".<sup>114</sup>

Hence it is the northern emirates who have first felt the impact of the recession. There is indeed a silver lining around the black clouds of the oil glut in that it has forced U.A.E. officials to reevaluate past policies; also it has created a deflationary process. The U.A.E. was

fortunate to escape the "Dutch Disease" or more appropriately the "Kuwait effect". Kuwait which is another small oil exporter of the GCC, allowed its currency to appreciate due to the large availability of foreign exchange from its oil exports. A free market rate of foreign exchange allowed Kuwait to appreciate its currency to the point where nothing could be exported profitably from Kuwait.<sup>115</sup> The U.A.E. was fortunate in that its currency was tied to the U.S. dollar so that substantial appreciations did not occur. During the oil glut, government spending was reduced in the U.A.E. which resulted in a decline of prices at an annual rate of 2 to 4% between 1982-86.<sup>116</sup> Because of oil's weak linkage with the rest of the economy (oil production uses little domestic material or labor), if inflation is running high in an oil producing country and exceeds world inflation then the exchange rate will not adjust itself because oil can still be produced profitably even while high rates of domestic inflation are present. Oil is unique in this circumstance.<sup>117</sup> This is why there is a great debate as to whether one can export both oil and industrial products. Does the exportation of oil or natural gas necessarily have to result in higher inflation (domestic cost) and less profitable exports as the Netherlands, Nigeria, Indonesia, Mexico and Kuwait have found? The answer is clearly no, as Norway and the U.A.E. have proved through appropriate exchange rate policy. If the currency is depreciated then other industries will not be hurt by continued oil exportation. Hence as Gillis puts it

"a systematic policy of forced depreciation of the

exchange rate, in the fashion of a "crawling peg" so that inflows of oil revenues and subsequent spending by government are not allowed to maim or destroy other export sectors, or to artificially cheapen imports".<sup>118</sup>

The 1985 recession, has permitted the U.A.E. to reevaluate the current political, social and economic development so as to utilize resources more efficiently with the rapid pace of development in the 70's and early 80's the inefficiencies were not so apparent. For instance, contracts for construction projects are now rebid until a reasonable price is offered as one contractor puts it "The blank cheque years are over. Now its just a rich market, rather than a ridiculously rich one".<sup>119</sup> Prior to the recession, projects were completed at incredibly high cost. Prices for different projects are falling steadily as U.A.E. officials are becoming more prudent. In fact a few contractors feel that the margins of profit are so tight that bidding is no longer worth while. Due to the recession a great deal of projects have been on hold. However, contractors are optimistic that projects will be carried out even if not until the 1990's but for now only necessary projects will be started as one analyst puts it

"Future spending is likely to be dedicated to projects for which the need is undisputable. These include expansions of the Taweelah power and water plants, and provision of schools for a growing and youthful population".<sup>120</sup>

The Taweelah power and water plant is one of few major projects which has been underway since January 1, 1987 in Buraimi (or AlAin, the home of Shaikh Zayid an enclave of Abu Dhabi). At a cost of 762 million U.S. dollars, it is the prime example of a project which is a necessity given the amount of water demanded in the Al Ain oasis. Each project which is carried out must be approved by that emirate executive council, even the Al Ain University which was to be a federal scheme had to be approved by the Abu Dhabi Executive Council and then 85% financed by Abu Dhabi.<sup>121</sup>

The recent development of the Gulf war ceasefire has contributed to growing optimism in the U.A.E.'s business community. As a result, Abu Dhabi, Dubai, Sharjah and Fujairah have increased exports and reexports remarkably with the development of sea to air shipment of cargo. Furthermore, the ceasefire has reduced the cost of shipments through lower insurance cost. The U.A.E. has developed a prosperous transshipment trade as goods from the Far East are shipped to the U.A.E. and then flown to Europe, Africa and the U.S.. Although the U.A.E. is uncertain where they will stand as regards to reexports to Iran (Iran was the top reexport market throughout the Iran-Iraq war for the U.A.E.), U.A.E. business men feel that the trading pattern between the two countries will not change rapidly as they have developed close ties. Dubai remains to be the leading trade and transshipment port in the gulf region. This is due to its elaborate trade and communications network.<sup>122</sup> It seems likely that this trend will continue in light of the Gulf ceasefire as trade finances will increase. As MEED reports "U.A.E. banks stand to gain more from the gulf

war ceasefire than any other group of financial institutions in the region".<sup>123</sup> Thus the U.A.E. overall has adjusted well to the oil glut but sound and timely adjustments are a necessity so as not to draw excessively from foreign reserve earnings. The U.A.E. has been fortunate in that it has accumulated foreign capital and has been able to draw on that during a slow down in its economy, however sound and timely adjustment must be implemented in order to revitalize the economy. Adjustment in oil policy and in investment of the surplus revenue obtained is of primary importance to the U.A.E. economy.

#### **B) Oil and Investment Policy**

U.A.E. officials are claiming to have excess reserves of oil of one hundred billion barrels (currently user's cost would be minimal). If these claims are true at current rates of production they can produce oil for at least 150 years! This would make the U.A.E. only second to Saudi Arabia and Iraq in proven reserves of oil, possessing one seventh of proven world reserves.<sup>124</sup> The U.A.E. petroleum minister has repeatedly stressed that the last drops of oil will be extracted from U.A.E. oil fields. The huge reserves can act as a great resource of wealth (especially for such a small population) if the proper oil policy is carried out so as to obtain the maximum revenue from every drop of oil. As presented in the second section the U.A.E. must maximize discontinued long run revenue. Our conclusion was that with any reasonable price elasticity of demand for oil, countries with large excess capacity such as the U.A.E. are better off

increasing production and allowing prices to increase moderately. The OPEC quota for the first half of 1989 is 988,000 bd for the U.A.E., Abu Dhabi alone can produce this amount excluding Dubai and Sharjah. It is clear that the U.A.E. wants to increase output as oil minister Otaibah states

"Let it be clear to everyone that this quota (1.5 b/d) is the minimum accepted level under the present ceiling and if the ceiling is moved higher, the U.A.E. reserves its right to adjust to a quota that conforms with its petroleum potential, especially in regard to its oil reserves".<sup>125</sup>

OPEC simply has two groups with diverged interest, the U.A.E. belongs to the group that is interested in the long run revenue of oil. The Gulf Cooperation Council is now acutely aware of this problem, and since its inception in 1981 is becoming more involved with rectifying the GCC oil policy. The allegiance to OPEC and the GCC have left member of both in a great conflict for many years. If amends are not made, Dr. El Kuwaiz and Dr. Al Chalabi among others have noted that the break up of OPEC may be forthcoming and replaced with a GCC oil policy.

The marginal social cost is lower for the U.A.E. and those countries with larger excess capacities of oil (GCC countries) than for the members of OPEC with low excess capacity. However, there is room for compromise due to the unique nature of the oligopoly (as discussed in section II (B)). This compromise has been forthcoming in the last couple of years as can be seen by the policy which is currently adopted by OPEC

(closer to scenario 1). OPEC has seen their past mistakes and now must make appropriate amendments.

The U.A.E. has made recent adjustments in the management of its oil industry. Besides, the merging of two large companies (the Zakum Development Company and the Umm Al Dalk Company) to contain cost. The oil industry's main objective was to make decisions easier to implement by reducing the bureaucracy. In Abu Dhabi the department of petroleum was abolished and replaced with an 11 member council headed by Shaikh Khalifah Bin Zayid (Shaikh Zayid's son) which greatly reduced the bureaucracy of the system. As one oil industry manager put it "It is far easier to get a speedy decision on a day to day task".<sup>125</sup> However, work still remains to be done to integrate the oil policies of each of the emirates.

After one has decided upon the appropriate oil policy then how is the revenue to be invested? Infrastructure, institutional arrangements, and agriculture, etc. are important foundations for investment, however, the U.A.E. with a limited population, scarcity of arable land, and few natural resources (besides hydrocarbons), is limited to the types of domestic investment for diversification. Greater attention ought to be placed on regional cooperation for the GCC countries due to their limited absorptive capacities. It is for these reasons that capital intensive downstream operations tend to be the wave of the future for the U.A.E. in particular and the GCC countries in general. The U.A.E. has been involved

with both the establishment of its own petrochemical industry as well as buying into foreign petrochemical plants. The World Bank believes that investment in the U.A.E. should be in the following order of importance "infrastructure, capital intensive industry, supporting industry and productive services (trade, transport, banking, hotels etc.)".<sup>126</sup> A great deal has already been invested in the infrastructure and supporting industries, it is the capital intensive industries that must become the focal sector of importance as alternative sources of income are extremely limited. The U.A.E. in essence is adopting a mixed policy of investment between that of Saudi Arabia, which is intensifying domestic expansion of petrochemicals and refineries plants and Kuwait, which is committed to investing in foreign petrochemical and refinery plants. The three industries of interest are the petroleum processing industry (refineries), natural gas industry and petrochemical plants.

The petroleum processing industry is on the rise in the U.A.E.. Whereas before when the U.A.E. had to export their crude oil only to then turn around to import it in refined form; the tables have turned so that refined oil is now being exported on a more stable market. It is indeed a competitive market that the U.A.E. is joining but is worth their while. As The Economist recently stated about refineries

"Because of falling oil prices, these firms will make slim profits from their exploration and production (upstream) activities this year - but will make a

killing downstream because refined oil products price have remained firm. This ability to counter upstream woes with downstream profits has bedazzled oil producers resigned to a decade of cheap oil".<sup>127</sup>

The U.A.E. has increased production of its refineries from 15,000 b/d to 135,000 b/d in 1981 (two refineries are located in Ruweis and one in Umm Al Nar). The most common refined products exported from the U.A.E. are gas oil, kerosene, gasoline, gas oil, and fuel oil (see table VI).<sup>128</sup> The problem with exporting the refined products has been the cost and the nonrealization of economies of scale. As The Economist has reported

"The cost of transporting refined products from the gulf to Europe or the Far East are about \$2.60 a barrel and they are even higher to the United States. The cost of transporting crude is only about \$1 a barrel ...

(excluding the insurance premiums now charged on ships entering the gulf war zones) while crude travels in ships of 200,000-300,000 deadweight tonnes (dwt a measure of cargo carrying capacity), products are usually shipped in vessels of only 30,000-60,000 dwt - so offering less room for economies of scale".<sup>129</sup>

This is the downside to the refineries but relative low financing cost for the U.A.E. refineries give it a competitive edge. The U.A.E. has

borrowed very little from its markets for oil refineries, and at low levels of interest taking into account inflation this usually results in a negative rate of interest. As Feredun Fesharki (a renowned observer of GCC downstream oil production) points out

"At market interest rates, products from the GCC should cost 70% more to produce and ship than those from existing, partially amortised western european refineries, and nearly 40% more than the products of Japanese refineries, but that calculation is not entirely relevant ..... the GCC refineries start to become competitive at low (2-3%) interest rates local governments are charging on the loans provided to build them. At those rates, the products of GCC refineries cost slightly less than those of a partially amortised European or even a fully amortised Japanese refinery".<sup>130</sup>

The GCC countries also have the upgrading advantages in refineries that most old european and Japanese refineries do not have. However, the Americans will continue to lead the way in refinery production which will provide the refineries of the U.A.E. with tough competition. It is the acceptance of the U.A.E. and other GCC countries into the competitive market that will determine the future gains of the refineries.

The U.A.E. has recently tried to acquire greater refineries abroad

through its International Petroleum Investment Company (IPIC) which recently bought 10% of Compania Espanola de Petroleos (Cepsa) for \$124 million and is considering increasing its share to 15%. Likewise the Abu Dhabi Investment Authority is increasing its share of Compagnie Francise des Petroles from 5 to 9%. Oil observers see greater moves in downstream acquisition in 1989. IPIC has confirmed that up to 10 schemes are now being considered for downstream operations in 1989. These schemes are to include marketing, refineries and petrochemical plants, with possibilities in Europe and Japan and the Soviet Union.<sup>131</sup>

Natural gas industries are also making their appearance in the U.A.E. Natural gas reserves are estimated to be an incredible 180 trillion cubic feet.<sup>132</sup> Natural gas is used as a feedstock for petrochemical plants. The U.A.E. and Qatar are the only two GCC countries which export liquified natural gas (LNG).<sup>133</sup> The liquified gas plants of Das Island and Saaja Field and other gas plants in the U.A.E. have provided the U.A.E. with proven gas reserves equivalent to 3% of world reserves which is rather substantial.<sup>134</sup> The natural gas can be found in two forms associated and nonassociated. The associated natural gas comes directly from the recovery of crude oil; the nonassociated natural gas is more valuable in that it can be stored and retrieved when the price of the natural gas is favorable for production. This not only will be a valuable export but will provide the growing petrochemical plants in the U.A.E. with cheap fuel.

The Petrochemical Plants provide the U.A.E. and other GCC member

countries with the greatest form of diversification. Petrochemical plants are used to produce products such as dyes, drugs, plastics, fibers, rubber, etc.<sup>135</sup> It is hoped that secondary industries can be built up around these highly capital intensive petrochemical plants. With cheaper fuel and utility prices the petrochemical plants of the U.A.E. are able to compete with world markets. However, there is a growing tendency to implement trade barriers against these products from the Gulf. The GCC countries no longer receive a generalized system of preference (GSP) as the oil boom of the 70's remain in the minds of Western leaders. However, the GCC countries are not developed countries since they continue to rely on a single exhaustable resource.<sup>136</sup> Although the petrochemical industries are highly saturated world wide, gulf producers feel as though they can compete effectively on world markets if given the chance. As The Middle East reports,

"U.A.E. officials continue to argue that the older less efficient european plants should shut down to make way for the more efficient plants of the gulf region".<sup>137</sup>

However, many European nations do not want to be reliant for petrochemicals. This could indeed be a damaging blow to Gulf petrochemical producers since overcapacity of petrochemicals will continue to devalue their products. However, the U.A.E. has continued to invest in petrochemical plants with the availability of cheap energy. Continued expansion of petrochemical plant is taking place in the Jebel Ali Free Zone Authority (JAFZA which is the highest concentration of petrochemical plants in the U.A.E.). A \$85 million phosphoric acid plant is underway in the

JAFZA,<sup>138</sup> and in Umm Al Qawain a huge smelter plant is on the way expected to begin in 1990.<sup>139</sup>

Hence the investments in petroleum processing industries, natural gas industry and petrochemical plants will provide the U.A.E. with alternative sources of income. Although these markets tend to be saturated, the U.A.E. along with other Gulf countries feel as though they will be more efficient in production and therefore will make their impact. The U.A.E. is doing nothing more than tapping their resources of comparative advantage in that they are able to produce petrochemicals at a lower cost than industrial nations. The Industrial nation must reduce the barrier to trade to ensure an efficient allocation of resources. The industrialized nations as a whole can work with the GCC to promote efficient capital intensive industry for both of their interest. The U.A.E. must continue to invest in such industry and may begin to invest in real estate abroad as Kuwait has done in the past. Although real estate may be another form of rent it is one which is sustainable unlike oil revenue. It is the rent accruing from the oil sector which enables a rentier economy like the U.A.E. to continue to extract rent, as Hazem Beblawi indicates

"Oil rent thus give rise in turn, to a secondary wave of rent generation: second order rents. Two areas seem to distinguish themselves as rent centres: real estate and stock market speculation".<sup>140</sup>

Therefore in order to sustain growth and development the U.A.E. must be

committed to a mixed policy of productive activities at home (industry) and nonproductive investment abroad (real estate). With an economy which is greatly limited the choice of an appropriate development strategy becomes quite apparent.

## V CONCLUSION

In its new era, the United Arab Emirates has many challenges before them. Prior to the advent of oil the federation did not exist and therefore, neither did the challenges. When the federation was formed they enjoyed vast oil wealth and problems did not seem readily apparent. It was not until recently when the oil glut emerged and the dust settled, did the situation become more visible. As long as each emirate was financially wealthy, structural problems could easily be hidden. Although the U.A.E. is considered a state it does not act as a state. This can be partly attributed to the British system of "divide and rule" along with the quick establishment of the federation. Long term planning is called for in the emirates, self interest must be set aside for the interest of the nation as a whole. Waste and inefficiency within the emirates can no longer be permitted, such as duplications of projects etc. Plain and simply the emirates must relinquish part of their political and financial autonomy thereby creating a strong more cohesive political core which will be empowered to carry out appropriate adjustment and development strategies. If the emirates ratify a permanent constitution in 1991 this would indeed

be a step in the right direction.

The rentier nature of the U.A.E. economy is of vital concern, because the U.A.E. is so vulnerable to world conditions. It is primarily for this reason that appropriate oil and investment policies must be carried out in a coordinated pattern so as to ensure efficiency. With regards to the oil policy, it is in the interest of the U.A.E. to increase its production of oil in order to maintain a long run equilibrium price for its excess reserves. This will ensure long run revenue maximization for the U.A.E.. Appropriate market forces must play a larger role in determining the price of oil. Initially it was the International Oil Monopolies which dictated price and now it is OPEC. Whether artificially keeping the price down (as was the case for the International monopolies) or artificially raising the price (as is the case with OPEC) the long run result is detrimental (as both have found). Although OPEC has priced its oil as though it were monopoly in the past (through higher prices), they have rudely discovered that this was not an appropriate policy, (although it did benefit some members), as their market share and demand for oil have both decreased since 1981. OPEC must derive its optimal pricing and production of oil according to the oligopoly market which it faces. As we have discovered this would result in a policy closer to that of scenario 1, which would increase its production level so as to keep prices stabilized so that when the market tighten once again an increase in users cost (Kuwaiz feels it will be in 1996 and Morgan in the mid 1990's) fluctuations in prices will not be as grand. Banks also feels that this will benefit

not only OPEC nations but oil importers as well as one will have a more stable oil market.<sup>141</sup> The diverge interest between the two groups of OPEC can indeed find middle ground, especially due to the kink in the demand curve of the oligopoly market. A consensus seems to be somewhat visible in the recent pricing policies adopted by OPEC which are closer to scenario 1. With oil accounting for 95% of total exports in the U.A.E. it is fair to say that an appropriate oil policy is of paramount importance and has therefore been stressed in this paper.

Oil is indeed the primary source of rent for the U.A.E. economy however, it is important that the surplus revenue extracted by oil is invested properly into secondary rents (real estate and stock market) and the productive sector of the economy (industry) which are more sustainable basis of income.

As regards to the productive sector the U.A.E. is extremely constrained due to limited arable land and population: investing in capital intensive downstream operations so as to provide an alternative source of income is a good option open to the U.A.E.. They possess a comparative advantage in downstream operation and ought to exploit it. Granted that this comparative advantage is derived from oil itself, the U.A.E. with its large reserves can sustain this comparative advantage and build backward and forward linkages around the industries. The U.A.E. has invested in some downstream operations but must now consider this one of their priorities. The U.A.E. should also follow in the steps of Kuwait since

their economies are very similar and invest heavily in foreign markets. This is the type of mixed investment that will benefit the U.A.E. in the long run.

Although the U.A.E. has many challenges ahead of them, they have so far surprised all of their critics who thought the federation would disintegrate very shortly after its inception. I have stressed the disintegrative factors, however the emirates do indeed realize the need for one another, and when challenged with a problem have risen to the occasion. Sheikh Zayid is the driving force behind the federation and in years to come will continue to strive for total unification of the federation. One must realize that economic development is concerned with the political, social and economic elements of a country. One must be careful when trying to uproot these structures, the situation must be dealt with in a delicate manner. It is remarkable how well the U.A.E. has adjusted to rapid change (social, political, and economic) this can partly be explained by the role Islam plays in society. Due to such factors economic development takes time, the problem is that time is of the essence in the case of the U.A.E.. It was only recently that problems became readily apparent and the U.A.E. accommodated for the slow down by drawing on excess reserves coupled with cutting government expenditure. Generally the problems are why the oil glut emerged? (past oil policy), where future income is to be derived from? (both oil and investment policy) and finally how can these policies be implemented in a coordinated and efficient manner? (a stronger federal government). The U.A.E. has made rapid adjustments in the past and is

definitely capable of making the appropriate sound and timely adjustments in the future, as each of the emirates is dedicated to the federation as there is no better alternative to promote development.

FOOTNOTES

1. John A. Sandwick, The Gulf Cooperation Council, (Washington, D.C., Westview Press, 1987) p. 7.
2. Dr. Abdullah El-Kuwaiz, "Oil Exports and Public Finance in Arab Countries", (Abu Dhabi, Arab Monetary Fund Press, 1988) p. 2.
3. Ibid., p. 18.
4. M.S. El Azhary, The Impact of Oil Reveue on Arab Gulf Development, (Colorado, Westview Press, 1984) p. 17.
5. Malcolm C. Peck, The United Arab Emirates a Venture in Unity, (Colorado, Westview Press, 1986) p. 118.
6. Adel Dawisha, Beyond Coercion the Durability of the Arab State, (London, Croom Helm, 1988) p. 21.
7. Hazem Beblawi, The Rentier State, (London, Croom Helm, 1987) p. 51.
8. Malcolm C. Peck, The United Arab Emirates a Venture in Unity, (Colorado, Westview Press, 1986) p. 93.
9. Ali M. Salafy, The Nature of the Arab Oil Industry: A Historical Perspective, (New York, State University of New York Press, 1974) p. 20.
10. Ibid., p. 22.
11. Ibid., p. 9.
12. Ibid., p. 26.
13. Ibid., p. 27.
14. Ibid., p. 40.
15. Fereidum Fesharaki, OPEC, the Gulf, and the World Petroleum Market, (Colorado, Westview Press, 1983) p. 8.
16. Ibid., p. 9.
17. Benjamin Shwadran, Middle East Oil Crises Since 1973, (Colorado, Westview Press, 1986) p. 121.

18. Ibid., p. 129.
19. Ibid., p. 122.
20. Ibid., p. 125.
21. Fereidum Fesharaki, OPEC, the Gulf, and the World Petroleum Market, (Colorado, Westview Press, 1983) p. 9.
22. Dr. Abdullah El-Kuwaiz, "OPEC and the International Oil Market: The Age of Realism", (OPEC Review, Winter 1986) p. 400.
23. Ibid., p. 40.
24. Dr. Fadhil J. Al-Chalabi, "OPEC and the Present Structural Limitations on its Oil Price Control", (OPEC Review, Summer 1988) p. 117.
25. Ibid., p. 118.
26. Dr. Abdullah El-Kuwaiz, "OPEC and the International Oil Market: The Age of Realism", (OPEC Review, Winter 1986) p. 402.
27. Ibid., p. 402.
28. M.S. El Azhary, The Impact of Oil Reveue on Arab Gulf Development, (Colorado, Westview Press, 1984) p. 17.
29. Terry Barker, Oil or Industry?, (London, Academic Press, 1981) p. 23.
30. Hossein Asarki and Barbak DastMaltschi, "Evolution of a GCC Oil Policy" in The Gulf Cooperation Council (Washington, D.C., Westview Press, 1987) p. 98.
31. Ibid., 98-105 Draws heavily from this model.
32. Ibid., p. 101.
33. William B. Quandt, "Saudi Arabia's Oil Policy" Staff Papers Brookings Institute (Washington, D.C., 1982) p. 32.
34. Hossein Asarki and Barbak Datmaltschi, "Evolution of a GCC Oil Policy" in The Gulf Cooperation Council (Washington, D.C., Westview Press, 1987) p. 103.
35. Dr. Abdullah El-Kuwaiz, "OPEC and the International Oil Market: The Age of Realism", (OPEC Review, Winter 1986) p. 406.

36. Dr. Masood Vajed Samii, "Optimum Price and Production of an Exhaustible Resource in an Imperfectly Competitive Market", (OPEC Review, Spring 1986) p. 87.
37. Ibid., p. 88.
38. Karim Pakravan, "Estimation of User's Cost for a Depletable Resource Such as Oil", (Energy Economics, January 1984, Vol. 6) p. 35.
39. Dr. Masood Vajed Samii, "Optimum price and Production of an Exhaustible Resource in an Imperfectly Competitive Market", (OPEC Review, Spring 1986) p. 92.
40. Ibid., p. 96.
41. Dr. Timothy Morgan, "Oil Prices - A Long Term Perspective", (OPEC Review, Winter 1987) p. 345.
42. Ali Ezzati, "Future OPEC Price and Production Strategies as Affected by its Capacity to Absorb Oil Revenues", (European Economic Review (8), 1976) p. 108.
43. Dr. Ferdinand E. Banks, "Economic Theory and the Price of Oil", (OPEC Review, Autumn 1986) p. 323.
44. International Monetary Fund, The United Arab Emirates Recent Economic Developments, (Washington, D.C., I.M.F. Publication, 1988) p. 1.
45. Malcom C. Peck, The United Arab Emirates a Venture in Unity, (Colorado, Westview Press, 1986) p. 21.
46. Ibid., p. 25.
47. Ibid., p. 27.
48. K.G. Fenelon, The United Arab Emirates an Economic and Social Survey, (London, Longman Ltd., 1976) p. 16.
49. Ibid., p. 10.
50. Ali Mohammed Khalifa, The United Arab Emirates: Unity in Fragmentation, (Colorado, Westview Press, 1979) p. 21.
51. Malcom C. Peck, The United Arab Emirate A Venture in Unity, (Colorado, Westview Press, 1986) p. 36.
52. Ibid., p. 45.

53. Abdullah Omaran Taryam, The Establishment of the United Arab Emirates 1950-85, (New York, Croomhelm, 1987) p. 229.
54. Ibid., p. 228.
55. Ibid., p. 92.
56. Ibid., p. 47
57. Ibid., p. 45.
58. Ibid., p. 48.
59. Ali M. Salafy, The Nature of the Arab Oil Industry: A Historical Perspective, (New York, State University of New York Press, 1974) p. 2.
60. Abdullah Omaran Taryam, The Establishment of the United Arab Emirates 1950-85, (New York, Croomhelm, 1987) p. 56.
61. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 51.
62. Ibid., p. 59.
63. Ibid., p. 93.
64. Ibid., p. 68.
65. Ibid., p. 125.
66. Giacomo Luciani, The Politics of Arab Integration, (London, Croom Helm, 1988) p. 29.
67. Ibid., p. 125.
68. Ibid., p. 127.
69. Adel Dawisha, Beynd Coercion the Durability of the Arab State, (London, Croom Helm, 1988) p. 29.
70. Hazem Beblawi, The Rentier State, (London, Croom Helm, 1987) p. 53.
71. Ibid., p. 84.
72. Ibid., p. 85.

73. Abdullah Omaran Taryam, The Establishment of the United Arab Emirates 1950-85, (New York, Croom Helm, 1987) p. 202.
74. Ibid., p. 197.
75. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 131.
76. Ibid., p. 130.
77. Ibid., p. 133.
78. International Monetary Fund, The United Arab Emirates Recent Economic Developments, (Washington, D.C., I.M.F. Publication, 1988) p. 20.
79. Ibid., p. 20
80. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 132.
81. Ibid., p. 93.
82. Middle East Economic Handbook, (London, Euromonitor Publications Ltd., 1986) p. 431.
83. Reuter Press International, Reuter Monitor 1124, January 16, 1989.
84. Ibid., Monitor 1020, January 13, 1989.
85. Middle East Economic Handbook, (London, Euromonitor Publication Ltd., 1989) p. 431.
86. Ibid., p. 414.
87. ATIF A Kubursi, Oil Industrialization and Development in the Arab Gulf States, (London, Croom Helm Ltd., 1984). p. 73.
88. Jaime R. Marquez, Oil Price and OPEC's Pricing Policy, (Lexington, Lexington Books, 1984) p. 14.
89. International Monetary Fund, The United Arab Emirates Recent Economic Developments, (Washington, D.C., I.M.F. Publication, 1988) p. 14.
90. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 104.

91. International Monetary Fund, The United Arab Emirates Recent Economic Developments, (Washington, D.C., I.M.F. Publication, 1988) p. 14.
92. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 104.
93. International Monetary Fund, The United Arab Emirates, Recent Economic Developments, (Washington, D.C., I.M.F. Publication, 1988) p. 14.
94. Ibid., p. 16.
95. Ibid., p. 17.
96. Yves Schemeil, "From Cadi to Caddie: Attitudes Toward Modernization in the Countries of the Gulf" in Paul Bonnenfant The Arabian Peninsula Today, (Paris: Centre National de la Recherche Scientifique, 1982) p. 265.
97. Hazem Beblawi, The Rentier State, (London, Croom Helm, 1987) p. 58.
98. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 96.
99. Ibid., p. 97.
100. Ibid., p. 110.
101. International Monetary Fund, The United Arab Emirates (Washington, D.C., I.M.F. Publication, 1988) p. 4.
102. Malcom C. Peck, The United Arab Emirates A Venture in Unity, (Colorado, Westview Press, 1986) p. 111.
103. Ibid., p. 112.
104. International Monetary Fund, The United Arab Emirates Recent Economic Development (Washington, D.C., I.M.F. Publication, 1988) p. 29.
105. Abdullah Omeran Taryam, The Establishment of the United Arab Emirates 1950-85, (New York, Croomhelm, 1987) p. 255.
106. Hazem Beblawi, The Rentier State, (London, Croom Helm, 1987) p. 121.

107. Abdullah Omaran Taryam, The Establishment of the United Arab Emirates 1950-85, (New York, Croomhelm, 1987) p. 255.
108. Ibid., p. 257.
109. Ibid., p. 259.
110. Giacomo Luciani, The Politics of Arab Integration, (London, Croom Helm, 1988) p. 164.
111. Abdullah Omaran Taryam, The Establishment of the United Arab Emirates 1950-85, (New York, Croomhelm, 1987) p. 275.
112. Said El-Nagger, Adjustment Policies and Development Strategies in the Arab World, (Washington, D.C., Library of Congress Cataloging Publication, 1987) p. 28.
113. International Monetary Fund, The United Arab Emirates Recent Economic Development (Washington, D.C., I.M.F. Publication, 1988) p. 1.
114. Middle East Economic Digest Special Report: U.A.E., (London, November 1987) p. 21.
115. Malcolm Gills, Economics of Development, (New York, W.W. Norton Company, 1983) p. 532.
116. International Monetary Fund, The United Arab Emirates Recent Economic Development, (Washington, D.C., I.M.F. Publication, 1988) p. 18.
117. Malcom Gills, Economics of Development, (New York, W.W. Norton Company, 1983) p. 531.
118. Ibid., p. 534.
119. Middle East Economic Digest Special Report: U.A.E., (London, November 1987) p. 10.
120. Ibid., p. 13.
121. Ibid., p. 16.
122. Ibid., p. 27.
123. Middle East Economic Digest Special Report: U.A.E., (London, December 1988) p. 19.
124. Ibid., p. 5.

125. Ibid., p. 6.
126. World Bank, Development Prospects of Capital Surplus Oil Exporting Countries, (Washington, D.C., World Bank Publication, 1981) p. 5.
127. The Economist, "Oil Producers Drowning Downstream" (December 10, 1988) p. 73.
128. International Monetary Fund, The United Arab Emirates Recent Economic Development (Washington, D.C., I.M.F. Publication, 1988) p. 12.
129. The Economist, "Oil and the Gulf" (July 28, 1984) p. 29.
130. Ibid., p. 30.
131. Middle East Economic Digest Special Report: U.A.E. (London, December 1988) p. 6.
132. The Washington Post Magazine, "United Arab Emirates, Where Black Oil Turns the Desert Green", (Washington, D.C., June 11, 1989) p. 2.
133. The Economist, "Oil and the Gulf", (July 28, 1984) p. 39.
134. International Monetary Fund, The United Arab Emirates Recent Economic Development (Washington, D.C., I.M.F. Publication, 1988) p. 12.
135. Fereidum Fesharaki, OPEC, the Gulf and the World Petroleum Market, (Colorado, Westview Press, 1983) p. 185.
136. The Economist, "Oil and the Gulf", (July 28, 1984) p. 40.
137. The Middle East, "The Gulf Gambles on Industry", (December 1988) p. 8.
138. Middle East Economic Digest Special Report: U.A.E., London, December 1988) p. 19.
139. The Middle East, "The Gulf Gambles on Industry", (December 1988) p. 8.
140. Hazem Beblawi, The Rentier State, (London, Croom Helm, 1987) p56.
141. Dr. Ferdinand E. Banks, "Economic Theory and the Price of Oil", (OPEC Review, Autumn 1986) p. 331.

BIBLIOGRAPHY

1. Al-Chalabi, Dr. Fadhil J., "OPEC and the Present Structural Limitations on its Oil Price Control", OPEC Review Summer 1988.
2. Al-Chalabi, Dr. Fadhil J., OPEC and the International Oil Industry a Changing Structure, Oxford: Oxford University Press, 1980.
3. Amuzegar, J. "Oil Exporters Economic Development in an Interdependent World, Occasional Paper #18, International Monetary Fund, Washington, D.C., 1983.
4. Asarki, Hossein and Datmaltschi, "Evolution of a GCC Oil Policy" in The Gulf Cooperation Council, Washington, D.C., Westview Press, 1987.
5. Aperjis, Dimitri, The Oil Market in the 1980's, OPEC's Oil Policy and Economic Development, Cambridge: Ballinger Publishing Company, 1982.
6. Banks, Dr. Ferdinand E., "Economic Theory and the Price of Oil", OPEC Review, Autumn 1986.
7. Barker, Terry, Oil or Industry?, London: Academic Press, 1978.
8. Beblawi, Hazem, The Rentier State, London: Croom Helm, 1987.
9. Bina, Cyrus, The Economics of the Oil Crisis, Washington, D.C.: Library of Congress Cataloging, 1985.
10. Cobban, Alfred, The Nation State and National Self Determination, Oxford: Oxford University Press, 1969.
11. Dasgupta and Heal, Economic Theory of Exhaustible Resources, Oxford: Oxford University Press, 1979.
12. Dawisha, Adel, Beyond Coercion the Durability of the Arab State, London: Croom Helm, 1988.
13. El-Kuwaiz, Dr. Abdullah, "Oil Exports and Public Finance in Arab Countries" Abu Dhabi: Arab Monetary Fund Press, 1988.
14. El-Kuwaiz, Dr. Abdullah, "OPEC and the International Oil Market: the Age of Realism", OPEC Review Winter 1986.
15. El-Azhary, M.S., The Impact of Oil Revenue on Arab Gulf Development, Colorado: Westview Press, 1984.
16. Ezzati, Ali, "Future OPEC Price and Production Strategies as Affected by its Capacity to Absorb Oil Revenue", European Economic Review 8, 1976.

17. Fesharaki, Ferediun, OPEC the Gulf and the World Petroleum Market, Colorado: Westview Press, 1983.
18. Fenelon, K.G., The United Arab Emirates on Economic and Social Survey, London: Longman Ltd., 1976.
19. Gillis, Malcom, Economics of Development, New York: W.W. Norton Company, 1983.
20. Hotelling, Harold, "The Economics of Exhaustible Resources", Journal of Political Economy, April 1931.
21. Howe, Charles W., Natural Resource Economics, New York, John Wiley and Sons, 1979.
22. International Monetary Fund, The United Arab Emirates, Washington, D.C.: I.M.F. Publication, May 1988.
23. International Monetary Fund, The United Arab Emirates Recent Economic Development, Washington, D.C.: I.M.F. Publication, June 1988.
24. Kubursi, Atifa, Oil, Industrialization and Development in the Arab Gulf States, London: Croomhelm, 1984.
25. Khalifa, Ali Mohammed, The United Arab Emirates Unity in Fragmentation, Colorado, Westview Press, 1979.
26. Luciani, Giacomo, The Politics of Arab Integration, London: Croom Helm, 1988.
27. Marquez, Jaime R., Oil Price Effects and OPEC's Pricing Policy, Washington, D.C.: Library of Congress Cataloging Publication, 1984.
28. Meir, Shermuel, Strategic Implications of the New Oil Reality, Westview Press, 1986.
29. Middle East Economic Handbook, London: Euromonitor Publications Ltd., 1986.
30. Middle East Economic Digest Special Report: U.A.E., London, November 1987.
31. Middle East Economic Digest Special Report: U.A.E., London, December 1988.
32. Mallakh, Ragaei, The Economic Development of the United Arab Emirates, New York: St. Martin Press, 1981.
33. Morgan, Dr. Timothy, "Oil Prices-A Long Term Perspective", OPEC Review, Winter 1987.

34. Middle East Economic Survey, "Measuring Oil Addiction" Cyprus, September 7, 1981.
35. Naggar, Said El, Adjustment Policies and Development Strategies in the Arab World, Washington, D.C.: Library fo Congress Cataloging Publication, 1987).
36. Otaiba, Mana Saeed Al, Essays on Petroleum, London, Croom Helm, 1982.
37. Peck, Malcom C., The United Arab Emirates a Venture in Unity, Colorado: Westview Press, 1986.
38. Pakravan, Karim, "Estimation of Users Cost for a Depletable Resource Such as Oil", Energy Economics, January 1984 Vol. 6.
39. Pachauri, R.K., The Political Economy of Global Energy, Baltimore: John Hopkins University Press, 1985.
40. Petroleum Intelligence Weekly: Various Issues.
41. Petroleum Economist.
42. Peterson, J.E., The Politics of Middle Eastern Oil, Washington, D.C.: Middle East Institute, 1983.
43. Quandt, William B., "Saudi Arabias Oil Policy", Staff Papers Brookings Institute, Washington, D.C.: 1982.
44. Reuter Press International.
45. Salafy, Ali M., The Nature of the Arab Oil Industry: A Historical Perspective, New York: State University of New York Press, 1974.
46. Salant, Stephen W., "Exhaustible Resources and Industrial Structure: A Nash-Cournot Approach to the World Oil Market", The Journal of Political Economy, 1976 Vol. 84.
47. Samii, Dr. Masood Vajed, "Optimum Price and Production of an Exhaustible Resource in an Imperfectly Competitive Market", OPEC Review, Spring 1986.
48. Sandwick, John A., The Gulf Cooperation Council, Washington, D.C., Westview Press, 1987.
49. Shwadran, Benjamin, Middle East Oil Crises Since 1973, Colorado: Westview Press, 1986.

50. Schemeil, Yves, "From Cadi to Caddie: Attitudes Toward Modernization in the Countries of the Gulf" in Paul Bonenfant The Arabian Peninsula Today, Paris: Centre National de la Recherche Scientifique, 1982.
51. Schmalensee, Richard and Lewis, Tracy, "On Oligopolistic Markets for Nonrenewable Natural Resources, The Quarterly Journal of Economics, November 1980.
52. Taryam, Abdullah Omeran, The Establishment of the United Arab Emirates 1950-85, New York, Croomhelm: 1987.
53. The Economist, "Oil Producers Drowning Downstream" December 10, 1988.
54. The Economist, "Oil and the Gulf" January 28, 1984.
55. The Middle East, "The Gulf Gambles on Industry", December 1988.
56. The Washington Post Magazine, "United Arab Emirates Where Black Oil Turns the Desert Green", Washington, D.C., June 11, 1989.
57. World Bank, Development Prospects of Capital Surplus Oil Exporting Countries, Washington, D.C. World Bank Publication, 1981.
58. Youke Valerie, European Interest and Gulf Oil, New York: Grower Publishing Company 1986.

APPENDIX

TABLE I  
OPEC OIL OUTPUT AND REVENUES-TWO SIMPLE SCENARIOS TO THE YEAR 1995

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
1) World Oil Demand (million barrels per day)	57.6	59.2	60.9	62.6	64.3	66.1	68.0	69.9	71.8	73.9	75.9
2) OPEC Production (million barrels per day)	16.0	17.6	19.3	21.0	22.7	24.5	26.4	28.3	30.2	32.3	34.3
3) Increase in OPEC Oil-Revenues relative to 1985 at constant price of \$17.00 per barrel (million \$/day)	--	27.4	55.6	84.6	114.4	145.0	176.5	208.8	242.1	276.3	311.4
4) Oil Prices if OPEC does not increase output but allows prices to rise (\$/barrel)	--	18.6	20.3	22.2	24.3	26.6	29.0	31.7	34.7	38.0	41.5
5) Increase in OPEC Oil Revenues relative to 1985 at constant level of production but with rising prices (million \$/day)	--	25.4	53.1	83.5	116.7	152.9	192.6	236.0	283.4	335.2	391.9
6) Difference in Revenue Increase; Scenario Row 5 Less Scenario Row 3 (million \$/day)	--	-2.0	-2.5	-1.1	2.3	9.0	16.1	27.2	41.3	58.9	80.5
70% of row 3	--	19.18	38.92	59.22	80.08	101.5	123.55	146.16	169.47	193.41	217.98
35% of row 5	--	8.89	18.59	29.23	40.86	53.52	67.41	82.6	99.19	117.32	137.17

Source: Sandwick, John A, The Gulf Corporation Council,  
Washington, D.C., Westview Press, 1987, p. 100.

TABLE II  
MAXIMUM SUSTAINABLE CRUDE OIL PRODUCTION CAPACITY  
(MILLIONS OF BARRELS PER DAY)

	<u>1985</u>	<u>1990</u>	<u>2000</u>
OPEC	31.6-33.0	29.1-34.3	27.8-33.5
Mideast-OPEC	22.6-24.0	22.1-25.4	21.4-25.2
GCC-OPEC	15.1-16.4	14.5-16.9	14.4-16.7

SOURCE: Sandwick, John A, The Gulf Corporation Council,  
Washington, D.C., Westview Press, 1987, p99.

TABLE III

U.A.E.: Production and Exports of Crude Oil  
and Condensates, 1977-87

(In millions of barrels) 1/

	Abu Dhabi					Total	Dubai	Sharjah	Ras al Khaimah	Total U.A.E.	Total Daily Average
	ADCO 2/	ADMA 3/	4/	Other	Total						
Production											
1977	374.0	190.4	38.4	602.8	116.4	10.3	--	729.5	2.00		
1978	312.3	181.0	34.7	528.0	132.2	8.1	--	668.3	1.83		
1979	315.4	180.0	38.8	534.2	129.3	4.9	--	668.4	1.83		
1980	267.3	187.4	39.5	494.2	127.8	4.0	--	626.0	1.71		
1981	211.1	170.0	32.6	413.7	130.9	3.6	--	548.2	1.50		
1982	184.2	111.5	33.6	329.3	130.6	2.5	--	462.4	1.27		
1983	184.0	95.3	31.9	311.2	121.9	13.6	--	446.7	1.22		
1984	169.8	111.7	32.9	314.4	127.0	22.3	2.9	466.6	1.27		
1985	160.0	110.0	39.0	309.0	127.0	22.3	5.0	463.3	1.27		
1986 5/	189.3	143.3	38.7	371.3	127.0	24.0	5.0	527.3	1.44		
1987 6/	...	...	...	390.9	127.8	22.3	5.0	546.0	1.50		
Export											
1978	305.7	184.1	32.8	522.6	134.3	8.0	--	664.9	1.82		
1979	308.5	178.6	37.6	524.7	129.4	4.9	--	659.0	1.81		
1980	258.7	188.7	42.3	489.7	127.7	3.8	--	621.2	1.70		
1981	184.7	169.0	31.5	385.2	130.3	3.6	--	519.1	1.42		
1982	153.1	114.0	31.7	298.8	126.2	2.5	--	427.5	1.17		
1983	142.0	88.3	31.2	261.5	121.0	13.0	--	395.5	1.08		
1984	112.4	108.4	32.9	253.7	127.0	22.3	2.9	405.9	1.11		
1985	102.2	113.0	39.0	254.2	127.0	22.3	5.0	408.5	1.12		
1986 5/	124.1	142.8	39.5	306.4	127.0	24.0	5.0	462.4	1.27		
1987 6/	...	...	...	322.6	127.3	22.3	5.0	477.2	1.31		

Sources: Abu Dhabi National Oil Company, Abu Dhabi Department of Petroleum, various oil publications, and staff estimates.

1/ Includes condensates.

2/ The Abu Dhabi Company for Onshore Operations.

3/ The Abu Dhabi Marine Operating Company

4/ Offshore fields including Upper Zakum.

5/ Preliminary estimates.

6/ Based on oil industry publications

Source: International Monetary Fund, The United Arab Emirates Recent Economic Development, Washington, D.C., I.M.F. Publication, June 1988, p 7.

TABLE IV

	1975	1980	1982	1983	1984	1985
Civilian employment	<u>288.4</u>	<u>541.0</u>	<u>594.5</u>	<u>578.8</u>	<u>566.6</u>	<u>568.0</u>
Crude oil production	3.4	4.6	7.6	7.6	7.7	7.3
Agriculture	23.2	31.3	35.2	33.3	35.1	35.2
Mining and quarrying	0.8	1.8	1.9	1.9	1.9	1.9
Manufacturing <sup>1/</sup>	17.2	39.2	51.3	49.5	49.0	49.1
Electricity and water	6.2	16.2	16.1	19.2	20.1	20.4
Construction	73.9	142.7	138.5	126.0	120.4	116.5
Trade	50.8	90.3	91.5	89.8	89.3	89.1
Transportation, storage, and communications	31.0	73.9	76.8	72.8	69.3	62.3
Finance and insurance	6.9	10.5	11.4	13.5	12.6	12.5
Real estate	0.2	0.9	1.0	1.1	1.2	1.3
Government services	43.6	72.0	85.3	86.5	87.7	88.7
Other services	31.3	36.9	53.9	52.4	54.5	57.2
Domestic services of households	...	20.7	24.1	25.2	25.2	26.5

Source: Ministry of Planning.

<sup>1/</sup> Includes natural gas and petroleum processing industries.

Source: International Monetary Fund, The United Arab Emirates Recent Economic Development, Washington, D.S., I.M.F. Publication, June 1988, p. 17.

Table V. U.A.E.: Balance of Payments, 1981-87  
(In billions of U.S. dollars)

	1981	1982	1983	1984	1985	1986	Pre1. 1987
Exports, f.o.b., of which:							
Oil and gas	21.8 (19.5)	18.2 (16.0)	15.4 (12.8)	16.0 (13.2)	14.8 (12.3)	10.3 (8.1)	12.0 (9.0)
Imports, f.o.b.	-8.6	-8.1	-7.2	-6.2	-5.7	-5.7	-6.2
Private transfers	-2.3	-2.2	-1.6	-1.5	-1.6	-1.3	-1.2
Services, net	-0.6	-0.2	-0.9	-0.6	-0.4	-0.5	-0.6
Official grants 1/	-1.1	-0.7	-0.4	-0.2	-0.2	-0.4	-0.1
Current account 1/	<u>9.2</u>	<u>7.0</u>	<u>5.3</u>	<u>7.5</u>	<u>6.9</u>	<u>2.4</u>	<u>0.8</u>
Official loans, net 1/	-1.6	-1.0	-0.8	-0.2	-0.3	-0.2	-0.1
Other official capital 1/	-1.3	-0.7	-0.7	0.8	0.6	0.8	-1.0
Errors and omissions 2/	-4.0	-4.3	-4.2	-6.9	-5.9	-0.9	-2.0
Capital account balance (including errors and omissions)	-6.9	-6.0	-5.7	-6.3	-5.6	-0.3	-3.1
Overall balance	<u>2.3</u>	<u>1.0</u>	<u>-0.4</u>	<u>1.2</u>	<u>1.3</u>	<u>2.1</u>	<u>0.7</u>
Change in net foreign assets (increase -)	-2.3	-1.0	0.4	-1.2	-1.3	-2.1	-0.7
Central Bank 3/	-1.3	-0.7	0.8	-0.7	-1.0	0.7	-1.7
Commercial banks	-1.0	-0.8	-0.4	-1.0	-0.3	-2.3	0.5

Source: U.A.E. Central Bank.

1/ Including Emirate Governments and their agencies.

2/ Including private capital flows.

3/ Including IMF position.

Source: International Monetary Fund, The United Arab Emirates,  
Washington, D.C., I.M.F. Publication, May 1988, p5.

TABLE VI

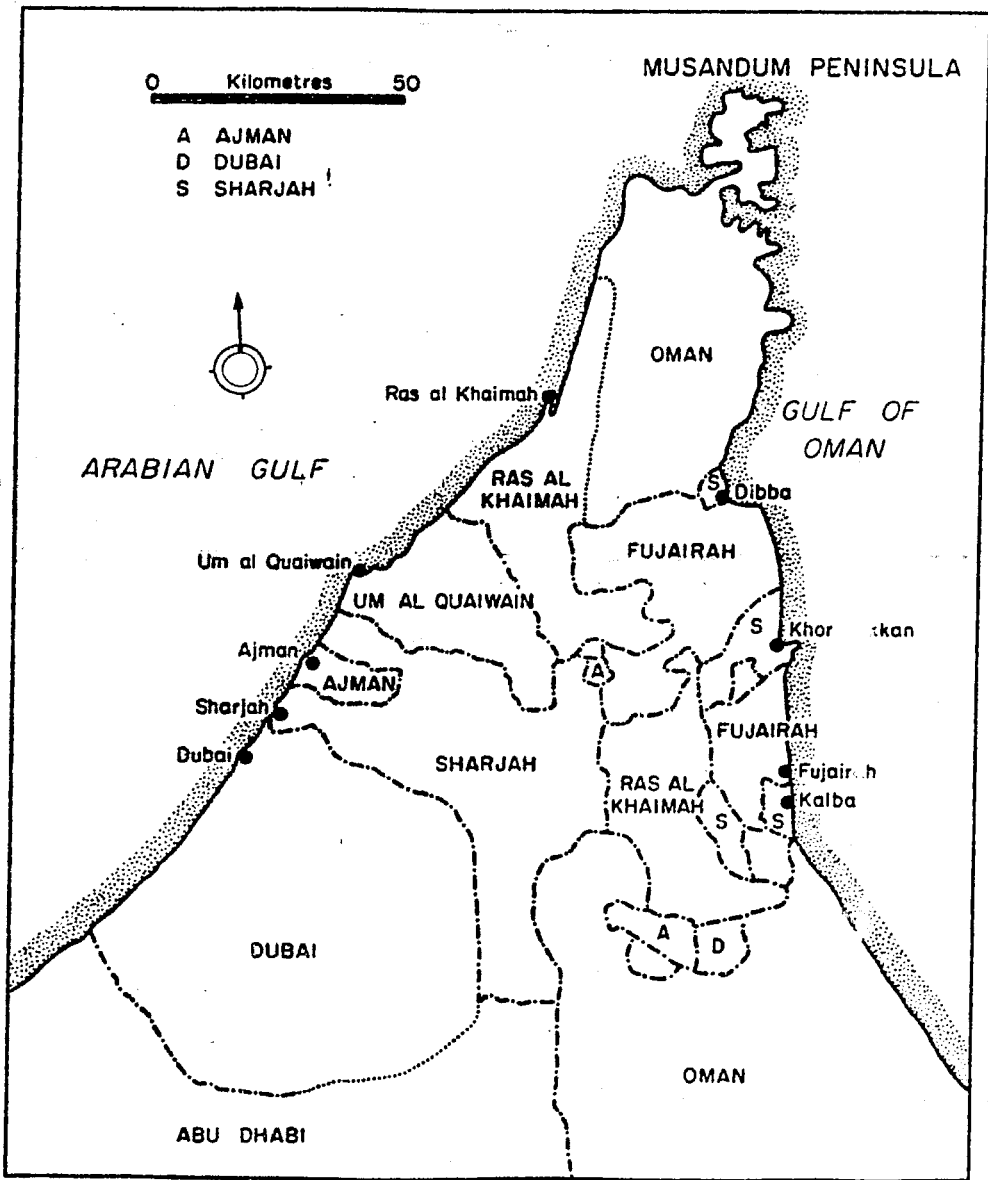
U.A.E.: ADNOC Refineries Production,  
1983-85

(In thousands of metric tons)

	1983	1984	1985
NGLs	130	145	197
Naphtha	235	524	672
Gasoline	864	943	996
Jet fuel/kerosene	665	1,098	1,315
Gas-oil	1,777	2,058	1,993
Fuel oil/residue	1,608	2,189	1,692
Bunker "C"	--	--	288
Total	<u>5,279</u>	<u>6,957</u>	<u>7,153</u>

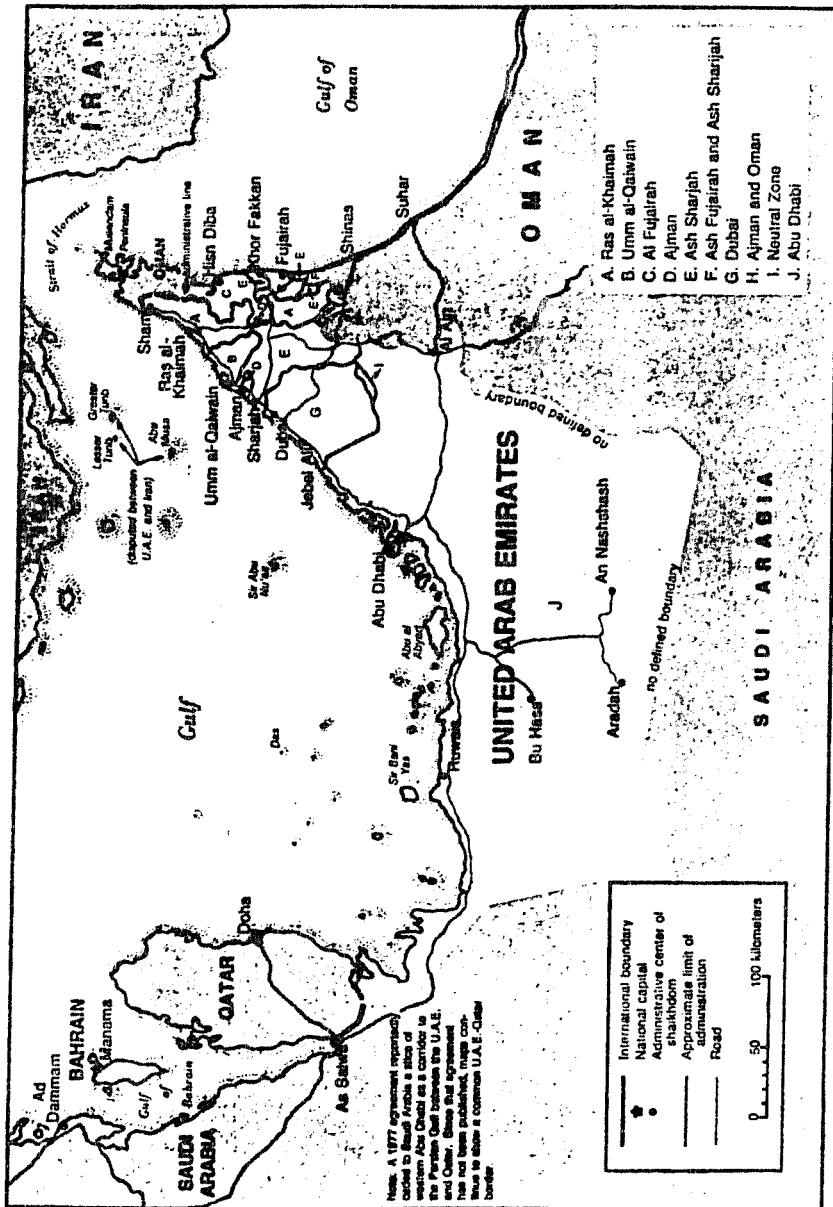
Source: Abu Dhabi National Oil Company.

Source: International Monetary Fund, The United Arab Emirates  
Recent Economic Development, Washington, D.C., I.M.F.  
Publication, June 1988, p55.



3 The Northern Emirates: Approximate Boundaries

Source: Fenelon, K.G., The United Arab Emirates an Economic and Social Survey, London: Longman Ltd., 1976, p. 129.



MAP 1.1 Political boundaries of the United Arab Emirates and the lower Gulf

Source: Peck, Malcom C., The United Arab Emirates a Venture in Unity, Colorado, Westview Press, 1986, p. 5.