

AN ECONOMIC ANALYSIS OF SAUDI ARABIA

J.T. LeCompte*

I. Economic, Social and Political Background

The kingdom of Saudi Arabia lies between the Red Sea and the Persian Gulf and occupies eighty percent of the Arabian Peninsula. The kingdom contains approximately 860,000 square miles of territory. It is one third the size of the continental United States and the same size as the European Community but is mostly inhospitable desert with little or no rainfall. There are no lakes or rivers, but large amounts of groundwater have been discovered.¹ However, these underground aquifers are a depletable resource.

Saudi Arabia lies at the crossroads of Europe, Asia, and Africa. The Egyptian Suez canal, which links the Red Sea to the Mediterranean Sea, is only one hundred and twenty-five miles from the country's northwestern border. The close proximity of major shipping routes on Saudi Arabia's east and west coasts combined with modern port facilities has provided a significant location advantage for international trade.

Saudi Arabia's most abundant natural resource is petroleum. Twenty-five percent of the world's known reserves lie under its sands, and further oil discoveries are increasing this percentage. Other natural resources include bauxite, gold, silver, nickel, zinc, pyrite (used in producing sulfur), molybdenum (an element used to strengthen steel), phosphate, and gypsum. In the last five years, the Saudi government has begun a more concentrated effort to exploit its non-oil mineral assets.²

The population of Saudi Arabia is estimated to be 12 to 14 million, including 2 to 4 million foreign workers from Islamic and third world countries, and an estimated 200,000 American and European workers.³ Saudi Arabia faces serious manpower shortages, but its high population growth of 5.0 percent may help lessen future dependence on foreigners employed throughout the kingdom.⁴

The capital city of Riyadh is the political and business headquarters of the country. Riyadh's growth in population from 8,000 in 1920 to over 1.8 million in the late 1980s is reflective of the rural to urban migration that has occurred in most cities as oil revenues provide new employment opportunities.⁵ The Islamic capital of Mecca and the sacred city of Medina are also important cities. Each year almost 2.5 million religious pilgrims converge on these cities as they make their Haj, the holy pilgrimage of Islam. The pilgrims provide an important source of income for the cities' residents whose combined population is about 800,000.⁶

An Islamic monarchy has ruled Saudi Arabia since 1932. The country was unified by King Abd al-Aziz al Saud who governed by the rules of the Koran. The Koran is the holy scripture of Islam and provides the countries legal system and constitution.⁷ Executive and legislative authority are exercised by the king who has ultimate power in almost every

*J.T. LeCompte is an undergraduate at Towson State University. He spent several months in Saudi Arabia in 1991.

1 Richard Nyrop, *Saudi Arabia: A Country Study* (Washington, DC: The American University, 1985), 157.

2 Gretchen Bratvold, *The Geography of Saudi Arabia* (Minneapolis: Lerner Publications, 1989), 17.

3 Demos Menegakis and Greg Gerard, "Saudi Arabia: Growth and Opportunity," *Business Week*, 8 July 1991, 86.

4 The World Bank, *World Tables* (Baltimore, MD: Johns Hopkins University Press, 1991), 257.

5 Bratvold 26-27.

6 Fouad Al-Farsy, *Saudi Arabia: A Case Study in Development* (London: Routledge, Chapman and Hall, 1988), 39-43.

7 Nyrop, 72.

aspect of government.⁸ The Council of Ministers, composed of prominent businessmen, religious leaders, and Saud family members, advise the king on economic and social policy. The Saudi monarchy has passed through five male descendants since Abd al-Aziz's death in 1953. The current ruler of the House of Saud is King Fahd, a Princeton educated, pro-Western monarch who took the throne in 1982. King Fahd is a close ally of the U.S. and is considered more liberal compared to his predecessors, but his rule has not produced any notable reform from the strict Islamic governing policies outlined in the Koran.

II. Petroleum and Rapid Growth in Saudi Arabia

The changes that brought the isolated herding society of Saudi Arabia into the modern world began in 1938 with the discovery of oil.

Slow but steady growth occurred through the 1950s and 1960s as the government struggled for more control of the foreign owned oil companies.⁹ The year 1970 marked the starting point for incredible growth in Saudi Arabia. The economic transformation of the Kingdom in only a few decades is unprecedented in world history. The gains in ownership of oil companies and the efficient control of world prices allowed Saudi Arabia to earn huge profits through petroleum exports into the 1980s.

Table 2.— Saudi Arabia's Oil Revenues 1950-1987 (in U.S. Dollars)

1950	56.7 million	1977	36.5 billion
1955	340.8 million	1978	32.2 billion
1960	333.7 million	1979	48.4 billion
1965	662.7 million	1980	84.4 billion
1970	1.2 billion	1981	109.7 billion
1971	1.9 billion	1982	70.0 billion
1972	2.8 billion	1983	30.6 billion
1973	4.3 billion	1984	35.1 billion
1974	22.6 billion	1985	22.0 billion
1975	25.7 billion	1986	18.3 billion
1976	30.8 billion	1987	17.4 billion

Source: Gene Lindsey, *Saudi Arabia* (New York: Hippocrane, 1991), 351.

A. OPEC and the Flood of Revenues 1974-1981

In 1960, five oil producing nations formed an alliance to gain more control over the foreign owned oil companies. Saudi Arabia, Kuwait, Venezuela, Iran, and Iraq established the Organization of Petroleum Exporting Countries to force foreign oil companies to increase production and stabilize prices at profitable levels.¹⁰ Significant increases in oil revenues followed, and by 1970 OPEC countries had gained enough strength to implement the purchase of controlling interest and nationalization of the foreign oil

⁸ Sandra Mackey, *Inside The Desert Kingdom* (Boston: Houghton Mifflin, 1987), 32.

⁹ Al-Farsy, 33.

¹⁰ Bratvold, 40.

companies.

Saudi Arabia took steps to gain twenty percent ownership of U.S. owned ARAMCO oil company in 1972.¹¹ The ownership of ARAMCO and increasing oil royalties overwhelmed the underdeveloped economy of the kingdom. Its inability to absorb the excess revenues resulted in the investment of foreign reserves and gold.

In October 1973, OPEC voted to raise the price of oil and placed an embargo against the nations who had supported Israel in its war with Syria and Egypt. The resulting five times increase in revenues from \$4,340.0 billion in 1973 to \$22,573.5 billion in 1974 marked the beginning of the oil boom. The price per barrel of oil climbed rapidly until 1982 when it saw its first decline. Table 3 shows the increase OPEC established on the price per barrel of crude oil. OPEC justified its price increases by comparing the costs of other energy sources and by the realization of oil's finite existence.¹²

Table 3.— OPEC Price Increases Per Barrel of Crude Oil
(in U.S. Dollars)

1973	5.12 per/barrel	1980	30.87 per/barrel
1974	11.25 per/barrel	1981	34.50 per/barrel
1975	12.38 per/barrel	1983	29.00 per/barrel
1978	12.93 per/barrel	1985	26.00 per/barrel
		March 1990	20.00 per/barrel

Source: Todd Vogel, John Rossant, and Sarah Miller, "Oil's Rude Awakening," *Business Week* 26 September 1988:44.

The huge increases of money enabled the Saudi government to embark on a massive plan for modernization of the country and diversification of the economy.

B. Decreasing Dependence on Oil and Increasing Economic Diversity

In 1968, King Faisal created the Central Planning Organization. The CPO, aided by a group of Western economists, developed the first of a series of Five-Year Plans to expand and modernize Saudi Arabia. The First Five-Year Plan lasted from September 1970 to January 1975. The resources of the plan were directed to urban development. The total expenditures for the 1970-1975 period equaled 27 billion U.S. dollars with higher percentages of funds allocated to the construction industries and the transport and communications industries.

The growth rate of GDP for Saudi Arabia from 1970 to 1975 was 13.2 percent.¹³ However, this figure does not indicate the actual rate of growth for the non-oil sectors. Non-oil real GDP increased by 11.6 percent a year.¹⁴ Between 1970 and 1975, the construction industry achieved an 18.6 percent growth rate of GDP in the non-oil sector and received 15.2 percent of total budget appropriations. Transportation and communications also achieved a significant growth rate of 17.0 percent of non-oil GDP,

¹¹ Nyrop, 344.

¹² Al-Farsey, 171.

¹³ Jeffery B. Johnson, "Saudi Arabia's Prospects Are Encouraging Despite Financial Strains," *Business America* 22 April 1991, 21-22 (Johnson's article provides March 1990 figure)

¹⁴ Nyrop, 168.

receiving 20.8 percent of budget appropriations.¹⁵ Significant rates of growth were achieved in these sectors in the First Five-Year Plan due to their association with the government sector. Also, the absence of fiscal restraints after the tremendous 1973-1974 revenue increase ushered in the construction boom and freer government spending.

The private sector of the Saudi economy did not achieve the growth rates of the public sector in the first Five-Year Plan. Agriculture had a 3 percent growth rate of non-oil GDP but received 5.8 percent of budget allocations.¹⁶ The government provided free land, financial grants, and no interest loans, but many formerly subsistence level farmers used the assistance for personal consumption.¹⁷ Also, primitive farming methods were still being practiced by Saudi cultivators, and the government sponsored few programs for agricultural reform.

Manufacturing achieved an 11 percent growth rate of non-oil GDP but received only 0.4 percent of budget allocations. Saudi manufacturers lacked an efficient productive base in agriculture and food processing, but the construction boom after 1973 provided a good market for the manufacture of cement and related construction materials. The government's reliance on the private sector in agriculture and manufacturing is a negative aspect of the first Five-Year Plan.

Another negative aspect of the first Five-Year Plan was the government emphasis on urban areas. Allocations for social services totaled 6.2 percent of the budget for 1970 to 1975.¹⁸ Although the foundations of an educational system had been laid in the major cities, the rural areas remained untouched. Illiteracy in Saudi Arabia for 1974 was 70 percent and only 13 percent of the Kingdom's citizens were considered "educated."¹⁹

The rate of inflation in Saudi Arabia increased from 0.2 percent in 1970 to 34.6 percent in 1975.²⁰ The Kingdom's underdeveloped economy was not capable of absorbing the huge amount of revenue pouring into the country. In addition, the physical constraints of poor infrastructure and inefficient port facilities caused long lasting bottlenecks that further increased prices. The demand for imports increased with the increase in Saudi incomes, but the poor distribution system prevented it from being met.

The increased revenues from 1970 to 1975 provided the Saudis with a high amount of capital accumulation. The government invested the money not capable of being absorbed into off-shore securities and into gold reserves.²¹ Substantial investment in the U.S. and other Western economies gave the Saudis the potential to weaken Western economic stability by manipulating their holdings.²²

Saudi Arabia embarked on its second Five-Year Plan in July 1975 facing the obstacles created by their new found wealth. The distribution bottlenecks, increasing prices, a serious housing shortage, and a growing manpower shortage all posed problems which had to be remedied.

Total government expenditures for the second Five-Year Plan were \$200 billion.

¹⁵ Ragnai El Mallakh, *Saudi Arabia: Rush to Development* (Baltimore MD.: The Johns Hopkins University Press, 1982), 140.

¹⁶ El Mallakh, 174-175.

¹⁷ *Ibid.*, 177.

¹⁸ Mackey, 46-47.

¹⁹ El Mallakh, 179.

²⁰ Mackey, 52.

²¹ Ali D. Johany, Michel Berne, and J. Wilson Mixon, *The Saudi Arabian Economy* (Baltimore, MD.: The Johns Hopkins University Press, 1986), 150.

²² Nyrop, 172.

Annual growth rates in the oil sector accounted for 4.8 percent of GDP. Non-oil GDP had a 15.1 percent average annual growth rate.²³ Oil revenues continued to increase through 1980 and allowed government planners to invest in the most important sectors of the economy. The development of non-oil sectors was the goal of the second Five-Year Plan. Production increases in these sectors would decrease Saudi Arabia's dependence on oil revenues and provide diversification for the economy.

Table 4.— Development of the Non-Oil Sector

Percentage of Development Expenditures Under the 1st and 2nd Five Year Plans:

	Total expenditures 1st plan (U.S. \$27 billion)	Total expenditures 2nd plan (U.S. \$200 billion)
Economic Resource Development	18.4%	36.6%
Human Resource Development	31.1%	15.1%
Social Development	7.5%	6.3%
Physical Infrastructure Development	43.0%	42.0%

Subtotal of 36% expenditure on Economic Resources Development in Second Year Plan

Water	37.0%
Manufacturing	48.1%
Agriculture	5.1%
Electricity	6.7%
Others	3.1%

Source: Ragaei El Mallakh, *Saudi Arabia: Rush to Development* (Baltimore, MD: The Johns Hopkins University Press, 1982), 175.

The non-oil sector, receiving the largest percentage of budget allocations, was physical infrastructure development (42%). The Central Planning Agency understood the dependency of industrialization on effective physical infrastructure. The second Five-Year Plan produced the construction of over 21,000 miles of paved main and secondary roads and 16,000 miles of unpaved rural roads.²⁴ The roads linked the major populations centers and provided transport connections to industrial centers.

The housing shortage was addressed in the infrastructure development plan by government provisions of interest free loans and large scale construction of housing projects. By 1980 over 200,000 quality housing units had been built.²⁵ Most construction

²³ Mackey, 48.

²⁴ El Mallakh, 163-166.

²⁵ Mackey, 40.

took place in urban areas to accommodate the continuing influx of rural citizens.

The development of infrastructure accounted for a 17 percent annual growth rate for construction in the Kingdom. The bottlenecks that had contributed to high prices were removed by 1980. The second Five-Year Plan accomplished the construction of new ports, rail lines, storage facilities, and airports. Saudi shipping facilities had achieved a handling capacity of 22.7 million tons of cargo per year.²⁶

Economic resource development received the second largest percentage of allocations in the second Five-Year Plan. The 36.6 percent of the 200 billion dollars awarded the Saudi economy with various benefits. The capacity to provide over 4 million people with electricity was attained, and the construction of seawater desalinization plants produced over 73 million gallons of drinking water per day.²⁷

The government planners allocated 37 percent of economic resource development funds to water resources. In addition to providing water for human consumption, water desalinizing plants benefited the Saudi agricultural sector. Agriculture contributed 5.4 percent of non-oil GDP annually from 1975 to 1980.²⁸ Considerable progress was made by commercial farming operations while areas employing traditional methods showed no progress. Saudi Arabian commercial farms had made gains in the production of poultry, wheat, barley, and fruits. The continued development of the agricultural sector reduced dependence on food imports and helped decrease the Kingdom's vulnerability to food embargoes by foreign countries.

Manufacturing in the second Five-Year Plan embodied expansion of petrochemical production. The petrochemical industries would be able to utilize the great volumes of natural gas that had previously been flared into the atmosphere. Construction of the large industrial cities of Jubail in the East and Yanbu in the West was begun in 1979. The cities would provide the country with petrochemicals and steel in the third Five-Year Plan.

Manufacturing received 48.1 percent of the allocations for economic resource development and achieved a 15.4 percent annual growth rate in the non-oil sector. Areas serving the construction industry showed the most expansion. The manufacture and supply of fabricated metal products, chemicals, plastics and rubber helped serve the needs of the booming construction sector.²⁹

The Saudi Arabian second Five-Year Plan was successful. Social aspects of success included the construction of 7,000 elementary and secondary schools. Over 1.1 million Saudi boys and girls received free education, and no cost health and welfare programs were provided for all Saudi citizens. By 1980, the average Saudi family had an income ranging from \$588 to \$2,059 per month.³⁰

The second development plan had produced some negative elements. The rural populations did not receive many of the benefits provided to urban residents, and many citizens who did grow rich were Saud family members or friends. Also, most sectors of the economy still employed a large percentage of foreign workers.³¹ The Saudi government remained extremely dependent on low wage labor from foreign countries and the technical expertise provided by Western workers.

²⁶ Ibid, 51.

²⁷ Ibid, 53.

²⁸ El Mallakh, 211.

²⁹ Al-Farsy, 187.

³⁰ El Mallakh, 183.

³¹ Mackey, 59.

III. The Effects of OPEC's Decreasing Influence in World Markets

The second development plan had provided Saudi Arabia with a modern infrastructure. The role of the third development plan (1980 to 1985) was to implement the infrastructure and increase production in the non-oil sectors.

The third development plan had a promising start. Government planners were provided with almost unrestrained funds for continuing improvements. In 1980, oil revenues reached almost 85 billion dollars, and in 1981 revenues peaked at 109 billion dollars.

The decade of the 1980s marked an end to the skyrocketing revenues the Saudi government had become accustomed to. The Iran-Iraq war increased amounts of petroleum on world markets as the two countries overproduced to fund war efforts. Other OPEC countries followed with increased production to make up for falling world prices of petroleum. The impending oil glut was complicated by falling world demand of petroleum as countries grew more aware of energy conservation and the undercutting of world oil prices by non-OPEC nations. The decreasing dependence by Western countries on petroleum affected oil sectors as well as non-oil sectors of the Saudi Arabian economy.

Growth rates for Saudi Arabia in the 1980s showed drastic decreases. The average annual growth rate for GDP from 1980 to 1989 fell to -1.8 percent. Per capita growth of GDP was reduced to 4.2 percent and the -11.3 percent decrease in exports was rivaled by a -9.9 percent fall in imports. The kingdom has yet to recover from the economic slowdown prompted by the factors which reduced the price of oil on world markets.

The infant Saudi Arabian petrochemical industry was especially dependent on the continued world demand for oil. Access to world petrochemical markets is limited and the Saudis had planned to use oil as a bargaining tool to gain entry into the world markets. Petroleum by-products such as petrochemicals, fertilizers, refined petroleum, distillates and liquid petroleum gas formed the backbone of the entire industrialization program.³²

The continuing decrease in world petroleum demand has reduced growth rates in the industrial sector. From 1980 to 1989, industry had a -4.4 percent annual growth rate.³³ The effort by Saudi Arabian petrochemical producers was derailed by steadily declining petroleum prices and the 1981-82 world-wide recession. But Saudi Arabia has begun to make small gains in the petrochemical market. The industrial plants of Jubail and Yanbu began operating in 1987. The estimated costs to build the ultra-modern facilities were 50 billion dollars each. Twelve other complexes produced a combined output of 8 million tons of chemicals per year and added revenues of 3.5 billion dollars to the Saudi economy in 1988.³⁴

The services sector of the Saudi economy had a 2.4 percent average annual growth rate from 1980 to 1989.³⁵ Both the industrial and service sectors are run by the Saudi Arabian government. The low and negative growth rates in industry and services resulted from the decrease in government spending. The dependency on shrinking oil revenues was beginning to hurt the Kingdom's economy. In 1988, for the first time in its modern history, the Saudi Arabian government received an 8 billion dollar loan to balance its budget.³⁶

Although Saudi Arabia had invested heavily in off-shore reserves in the 1970s,

³² Mordechai Abir, *Saudi Arabia in the Oil Era* (Boulder: Westview Press 1988), 126.

³³ Jeffery Flint, "Part of the Club," *Forbes* 25 July 1988, 199.

³⁴ World Bank, 209.

³⁵ Flint, 199.

³⁶ World Bank, 209.

immediate liquidations of their assets proved to be difficult. Capital reserves steadily decreased through the eighties, and remaining capital holdings were not immediately available. The spending policies that provided citizens with consumer subsidies, free education, health care, and no interest loans have also played a role in the Saudi cash shortage.

The government's heavy investment in the private sector has produced some positive results for the economy. Opportunistic Saudi businessmen have provided steady growth in manufacturing, and government reforms have stimulated significant growth in the agricultural sector.

The average annual growth rate for the agricultural sector from 1980 to 1989 was 14.6 percent.³⁷ Government programs have provided every incentive for growth. In the third Five-Year Plan, private capital financed the operation of large commercial farms with the government providing infrastructure and subsidies. Free land was provided for wheat farming while other operations received long term interest-free loans. In addition, the government provided up to 50 percent of the costs for equipment and seed purchases, free pesticides and spraying equipment, and free veterinary costs.

Agricultural produce received high subsidies which helped stimulate growth. By 1985, Saudi Arabia had achieved self-sufficiency in the production of poultry, wheat, and eggs. In 1987, the dairy industry was capable of providing the needs of the domestic market.

The continued growth of the farming industry is partially dependent on the efficient use of depletable water resources. The agricultural sector is expected to be using almost all the water available from deep aquifers by 1997. By the year 2000, current farming methods will consume an estimated 73.9 percent of all available water in the Kingdom. The current irrigation methods require sprinklers which use 1000 to 1250 gallons of water per minute.³⁸ Alternative water resources are expensive. The desalination plants constructed since 1969 have cost the government 5.29 billion dollars but supply only 1 percent of the kingdom's needs. Additional expenses are required to transform the seawater to fresh water.³⁹

The Saudi Arabian manufacturing sector maintained an 8.8 percent average annual growth rate from 1980 to 1989.⁴⁰ Although government spending was significantly decreased through the decade as oil revenues plummeted, construction projects did not come to a complete halt. The manufacturing sectors continued to supply the building industries with supplies, enabling its steady progress through the eighties. The government reliance on the private sector in industry and agriculture had seemingly paid off. However, further investigation of the growth rates in the private enterprises reveals evidence of their dependence on the public sector for success. The diversification achieved in agriculture and manufacturing was due mainly to government subsidies. The kingdom is still heavily dependent on oil revenues to pay for the output of domestic producers. The actual diversification of the Saudi economy will not be achieved until the private sectors decrease their reliance on government assistance.

³⁷ Lindsey, 147.

³⁸ World Bank, 209.

³⁹ Abir, 227.

⁴⁰ World Bank, 209.

A. The Oil Glut and Declining Revenues

The economy of Saudi Arabia faced serious repercussions from falling revenues in the 1980s. Overproduction by world oil producers had increased supply to petroleum importers, producing an international oil glut. Until the glut subsides, oil prices are unlikely to increase.

The economic slowdown has also had a substantial impact on Saudi Arabia's society. The government's desire for modernizing the kingdom has been restrained by its requirements to conform to the strictures of Islam. The constrictions fostered by Islam have negatively affected domestic capital formation by prohibiting interest on loans and deposits. Cash shortages have resulted from the prohibition as Saudi depositors seeking higher interest yields deposit borrowed funds in other countries. In addition, Islamic discrimination against women has limited their contributions to society. In Saudi Arabia it is illegal for women to drive, their employment opportunities are limited to teaching and nursing, and every marriage is still arranged by elders.

The government of Saudi Arabia performs a delicate balancing act between appeasing the population's desires for reform and preserving the Islamic traditions of the country. The kingdom is divided by which path to choose for continued modernization. Educated moderates have voiced their concerns for a more representative government, ending the harsh discrimination imposed on women and decreasing the influence of Islam in society. Islamic fundamentalists adamantly denounce the need for reforms and continue support for the monarchy's traditional rule. The growing social discontent has been aggravated by the economic slump, but predictions for reforms seem unlikely.

IV. Security in Saudi Arabia's Future

Saudi Arabia's future is dependent on the continued demand for petroleum. The years of the oil price boom provided the kingdom's government with the opportunity to build a modern infrastructure and implement diversification for the non-oil sectors of the economy. Wise investment by the government has helped reduce the impact of declining world oil prices on the economy.

The government's efforts for social welfare improvement have provided free education and health care for every citizen; however, the Saudi educational system has failed to promote significant gains in literacy rates. Attendance is not compulsory and has bypassed the rural areas of the country. The poor effort in education seriously undermines economic self-reliance in Saudi Arabia. The country remains overdependent on foreign workers to provide the technical expertise required to operate much of its infrastructure. Females may attend segregated primary and secondary schools but are typically underrepresented in higher education.

Geographically, Saudi Arabia lies in an area of political instability. The recent United Nations intervention in the Persian Gulf was prompted largely by Western nations fearful of an invasion of the kingdom. OPEC exemplified the effectiveness of petroleum as a weapon in the 1970s; thus, oil importing nations were not prepared to let a tyrant gain control of Saudi Arabia's abundant reserves. Even the kingdom's large amount of expenditures on defense have not eliminated its potential for occupation by foreign invaders.

Saudi Arabia's internal stability faces potential threats from Islamic fundamentalists who express opposition to the Saudi monarchy's close ties with the West. King Fahd currently employs an elite fighting force to quell internal disruptions, but his National Guard has yet to clash with Saudi citizens.

The investment in the private sector supported by the government in the first and second Five-Year Development Plans will play an important role in the future of Saudi Arabia. The effective base for diversification has been developed, but its success is dependent upon the private sector's entry into broader markets. Saudi Arabian agriculture has potential for continued growth. The large numbers of Middle East countries that import food offer an export market for Saudi commercial farming operations. However, until farming operations can reduce costs and wean themselves from government subsidies and assistance, their success will be limited.

The manufacturing sector also remains heavily reliant on the Saudi domestic economy to purchase its output. Expansion into wider markets will determine its future success if the current economic situation does not improve.

The finite nature of petroleum reserves and the possibilities of alternative energy sources have motivated Saudi Arabia to invest in plans for diversifying their economy. However, the continued reliance on oil revenues by non-oil sectors of the economy decreases their chance for independent success.

STATISTICAL TABLE FOR SAUDI ARABIA(*)

I. Economic Variables

REAL AVERAGE ANNUAL GROWTH PER CAPITA

	<u>1965-1980</u>	<u>1980-1989</u>
AGRICULTURE PER CAPITA	-0.5%	9.6%
INDUSTRY PER CAPITA	7.0%	0.6%
GDP PER CAPITA	6.0%	4.2%
INFLATION PER CAPITA	17.9%	-4.4%
GROSS DOMESTIC INVESTMENT	27.6 %	-
PRIVATE CONSUMPTION	20.0%	-
EXPORTS	8.8 %	-11.3%
IMPORTS	25.9%	-9.9%

II. Social Variables

POPULATION (AVERAGE ANNUAL GROWTH RATE)	4.6%	5.0%
NURSING PERSONS (PER POPULATION)	6,060	340
PHYSICIANS (PER POPULATION)	9400	740
LIFE EXPECTANCY	-	64

ADULT LITERACY

	<u>1965-1980</u>		<u>1980-1989</u>	
	TOTAL	FEMALE	TOTAL	FEMALE
PRIMARY SCHOOL	24%	11%	71%	65%
SECONDARY SCHOOL	4%	1%	44%	35%
INFANT MORTALITY (PER 1000 LIVE BIRTHS)	<u>1965</u>		<u>1989</u>	
DAILY CALORIC SUPPLY PER CAPITA	1,842		2,832	
FERTILIZER CONSUMPTION (hundreds of grams of plant nutrient per hectare of land)	1970-71		1987-88	
	54		3,678	

Source: The World Bank, *World Tables* (Baltimore, MD: Johns Hopkins University Press, 1991): 205-257.