Challenges to the [Persian] Gulf Cooperation Council States and Their Northern Neighbors: An Integrated View of Empirical Indicators

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This article, based on the latest empirical data, examines the challenges the Persian Gulf states confront which hinder realization of sustainable development. The challenges include contradiction between the socio-economic needs of the growing population and decreasing oil revenues and also security dilemmas. The article maintains that the Persian Gulf states overemphasize military security at the expense of sustainable development.

The [Persian] Gulf Cooperation Council ([P]GCC) states — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) — are among the most affluent and militarized in the Global South, a reality that raises at least six questions: (1) Should policy makers and scholars consider these six states a homogeneous and monolithic bloc? (2) Are the Persian Gulf states pursuing effective strategies for sustainable development? (3) What socio-economic problems may provoke unrest in regional societies?

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(4) How have the [P]GCC states ensured their security in a vulnerable regional environment? (5) How has the evolving geo-strategic balance in the region affected the [P]GCC states? (6) In light of the security dilemmas facing regional states — particularly since the Persian Gulf Crisis of 1990-91 — is arms control possible?

Surveying the latest empirical data available,[1] we contend that the [P]GCC states as well as Iran and Iraq confront a contradiction among their dwindling oil revenues, the socio-economic needs of their growing populations, and their security dilemmas. This contradiction is more than merely the short-term choice between "guns" and "butter." Rather, we suggest that all states in the Persian Gulf region will have to formulate their domestic and foreign policies with a view to averting crises that may result from over-emphasizing military security at the expense of sustainable development.

In arguing that the [P]GCC states, Iran, and Iraq confront a contradiction between decreasing oil revenues, population growth, and the need for military preparedness, we offer twenty-six charts (appended in sections S, E, and M) to depict the Persian Gulf region's social, economic, and military characteristics.

REGIONAL SOCIAL REALITIES — THE PRELUDE TO INSTABILITY

The six charts presented in section S suggest that the social attributes of the regional states' populations may foreshadow political instability. As Chart S1 indicates, the total population for the [P]GCC members was approximately 25.7 million in 1995.[2] This gives Iran a 2.25 to 1 advantage over the [P]GCC states combined. Iran's population of almost 60 million is even larger than the [P]GCC states and Iraq together. The small size of the [P]GCC states' populations has a negative impact on their trade with each other and aggravates their security dilemmas[3] vis-à-vis Iran and Iraq.

Moreover, as Chart S2 shows, Oman, Qatar, and the UAE have confronted the dilemma of population control. Iran, by contrast, has succeeded in lowering its annual rate of population growth.

Recognizing that a high growth rate — an average of about 2.5% annually during 1986-91 — exacerbates poverty and increases the migration from rural to urban areas, the Islamic Republic has reversed its initial emphasis on *natalisme* and is now implementing comprehensive population control measures.[4] During 1991-96, Iran's annual population growth rate dropped to approximately 1.5%.[5] Kuwait, in contrast to its neighbors, is being de-populated — presumably, by the high casualty rate resulting from Iraq's occupation of 1990-91, by the choice of some Kuwaitis to remain outside the kingdom even after its liberation, and by the expulsion of foreign workers (particularly Palestinians, many of whom were suspected of collaborating with Baghdad).

The age structure of the [P]GCC states' population is disproportionately young. Chart S3 reveals that in 1995, an average of 37.6% of the total population was under the age of 15 — with Oman as high as 52.6%. While Oman may have more a vibrant labor force in the future, the sultanate will face tremendous socio-economic pressures in trying to meet educational, employment, and health care needs.

In fact, a comparison of the region's literacy rates (for those over six years of age), featured in Chart S4, indicates that Oman and Iraq have the least educated populations. Their literacy rates are 59.0% and 62.5%, respectively.[6] Bahrain and Qatar, by contrast, have the most educated populations with literacy rates of 79.0% for both. The region's relatively high literacy rates should have a long-term, positive impact on other socio-economic indicators — namely, life expectancy, population growth rates, and poverty. Yet the differential in male and female literacy rates may mitigate this potentially positive impact. Within the [P]GCC, males and females in the UAE enjoy the same literacy rate of almost 79.0%, whereas in Saudi Arabia, 72.0% of males are literate as contrasted with 50.0% of females. Outside, the [P]GCC, Iran showed a smaller gap; in 1991, 80.6% of males were literate as contrasted with 67.0% of females.[7]

Chart S5 — highlighting figures for 1980 and 1994 and projection for 2025 — suggests that all the societies of the Persian Gulf region have sizable urban populations. In 1994, the average percentage of urban population for the [P]GCC states was 75.8% as compared to 58.0% for Iran and 75.0% for Iraq. If we exclude Oman — with its urban population of merely 13.0% — from the regional picture, the average percentage of urban population for the [P]GCC states jumps to 88.5%. Estimates put the percentage of urban population at an average of 83.6% for all the [P]GCC states by the year 2025. This high population density will pose challenges for the maintenance of the regional environment. The rate of urbanization also has implications for employment and health care. In theory, moving to cities should enhance one's opportunities for employment and access to health care. However, in practice, this has not been the case, particularly for those in the region who lack basic education.

Ironically, a comparison of the average annual growth rates of the urban populations in all regional states — except Bahrain and Qatar, for which data is unavailable — between the periods 1980-90 and 1990-94, indicates a downward trend.[8] This decline, illustrated in Chart S6, may be attributed to the saturation of cities. In fact, capital cities have become mega-centers. In the case of Kuwait, the expulsion of foreign workers has contributed to the decreasing rate of urbanization.

In short, the social reality in the Persian Gulf region is complex and varied. The region's populations are disproportionately youthful, relatively educated, and primarily urban. The prospect of growing populations, more than a third of which are educated youths living in crowded cities, presages long-term political instability that should inspire regional governments to think twice about their development policies.

REGIONAL ECONOMIC REALITIES — THE PARADOX OF COMMERCIAL VITALITY AND UNDERDEVELOPMENT

The economic reality of the Persian Gulf region is equally nuanced. Despite the revenues deriving from their oil and natural gas exports, the eleven charts presented in section E reveal that neither the [P]GCC states nor Iran and Iraq have pursued effective strategies for sustainable development.[9]

As Chart E1 shows, during the period 1991-95, all regional states increased their oil production — except Bahrain and Saudi Arabia which reduced their production slightly. Saudi Arabia remains by far the leading producer and is, thus, able to keep oil prices at acceptable levels for importers. Saudi Arabia accounted for 54.3% of OPEC's entire production in 1991 and for 46.8% in 1995. Consequently, Iran has objected to what it views as Saudi over-production, advocating stiffer production quotas to ensure higher prices within the structure of OPEC. Yet the royal family has little incentive to curb production significantly, fearing that Iran and other producers would usurp its market share while prices remain low at Saudi Arabia's expense.[10] Total oil production by the Persian Gulf states has increased from 14.9 million barrels in 1991 to 17.1 million barrels in 1995. The impact of Iraq's re-entry into the export market since December 1996 remains to be seen.[11]

Charts E2 and E3 illustrate the explanatory power of the rentier state thesis.[12] Chart E2 indicates that during the 1990s, all the Persian Gulf states — except Qatar and the UAE, for which information is lacking — have earned more than 80.0% of their export revenues from oil. Iran, for example, earns almost 90.0% of its export revenues from oil. These statistics demonstrate the regional states' failure to diversify their socio-economic infrastructures. The figures for oil as a percentage of Gross Domestic Production during the 1990s, presented in Chart E3, underscore the one-dimensional nature of these states' economies. In Bahrain and Iraq, particularly, oil is responsible for more than 50.0% of GDP; even in Saudi Arabia, oil accounts for more than 40.0% of GDP.

Of equal importance, because oil is such a high percentage of GDP, the possibility of trade among the Persian Gulf states is low. The entire Arab world relies mostly on global markets with little inter-Arab commercial activity. Arab exports and imports were worth $195 billion in 1985 and $269 billion in 1993, but inter-Arab trade accounted for only 9.0% of total Arab foreign trade in 1993.[13] Arguably, inter-Arab trade among the Persian Gulf states is an even smaller portion of their total foreign trade.

Perhaps most significant is the correlation between these states' heavy reliance on oil revenues and their political fragility. According to the Arab Monetary Fund, the Arab states' reliance on oil revenues as a portion of total revenues rose from an average of 51.2% in 1989 to 58.7% in 1995, while their reliance on tax revenues diminished from 33.9% to 30.2%. Non-tax revenues stayed the same at an average of 10.5%, and other types of revenues declined from 4.6% to 0.4%.[14] Similarly, Iran's oil revenue as a portion of total revenue jumped from 31.0% in 1989 to 65.0% in 1993, while tax revenues decreased from 24.4% to 18.0% during the same period.[15]

Because the Persian Gulf states, especially the [P]GCC members, have allocated revenues without taxing the populace significantly, their roots within society are fragile. These rentier states suggest that without taxation, there is little representation. These states have not had to forge consensus around their socio-economic policies.[16] Yet "[a]s welfare functions become the norm, as services become legitimate claims on the state, they are seen less as examples of the rulers' largesse and more as rights that citizens, not subjects, can claim from the state..."[17] The contradiction between increasing claims on states that are not fully representative foreshadows political instability.

The Persian Gulf states' heavy reliance on oil revenues points to trade imbalances which at least seem to favor them in the world capitalist economy. Chart E4 reveals that all regional states — except Bahrain and Iran — experienced a trade surplus during 1994.[18] Notably, in the cases of Oman, Iraq, and Qatar this trade surplus is not

very high. Despite the surplus in export earnings, all of the [P]GCC states have experienced budget deficits since 1989, as Chart E5 indicates. In 1991, the Kuwaiti and Saudi budget deficits rose dramatically as a consequence of these states' financial contributions to Operation Desert Shield/Storm. And although by 1993, this deficit was reduced for both states, it is still substantially higher than in 1989. Qatar's budget deficit, by contrast, may be attributed to massive investment in the development of the kingdom's gas resources. With the third largest reserves after Russia and Iran, Qatar should be able to make up its deficit and double its revenues in the coming years.[19] Chart E6 shows that the value of Bahrain's, Oman's, and particularly Saudi Arabia's official reserves has decreased during 1989-93, whereas Kuwaiti, Qatari, and Emirati reserves have increased.[20]

The [Persian] Gulf states' trade surplus seems like a positive trend but, in fact, highlights the exhaustibility of their oil and natural gas reserves. Chart E7 reveals that Bahrain, Oman, and Qatar are running out of oil; whereas Iran, Iraq, Kuwait, the UAE, and, most of all, Saudi Arabia can continue to rely on oil production ad export as the basis of their economies. Oman's and Qatar's oil may run out in 20-25 years. By contrast, Iran, Kuwait, Saudi Arabia, and the UAE can count on oil production and exports for 60 to 100 years. Similarly, as Chart E8 suggests, the future of Bahrain's and Oman's natural gas proved reserves are rather bleak, although Qatar's prospects are much better for natural gas than oil. Iran has the option of tapping into natural gas reserves for a significant time to come and more so than Iraq, Saudi Arabia, and the UAE. Ironically, the long-term availability of oil and natural gas reserve is both an insurance policy of sorts and a disincentive for these states to diversify their economies.

With regard to Persian Gulf states' trading partner, Japan is the principal recipient of exports from six out of the eight. Also notable is Tehran's commercial ties in the region. Iran is among the top five trading partners of Oman and the UAE, which motivates the Islamic Republic to maintain cordial relations with these neighbors. The vibrant community of Iranian merchants and traders in the emirate of Dubai contributes to the high volume of trade between the Islamic

Republic and the UAE. Germany is among the top five importers to six out of eight of the Persian Gulf states, the exceptions being Oman and Qatar. Iran imports from the following states in descending order: Germany, the UAE, Japan, France, and Italy. European and Japanese commercial activism — or "constructive engagement" — in the Persian Gulf, particularly vis-à-vis Iran,[21] contrasts with the American policy of sanctions and "dual containment."[22] One trend which has developed in spite of dual containment is that while Japan is the UAE's most important trading partner, goods imported from the United States and elsewhere into the Emirates are in turn re-exported to Iran and Oman.

In sum, the charts presented in section E illustrate the paradox of the Persian Gulf region: commercial vitality coupled with underdevelopment. Regional states have cultivated trade with advanced, industrialized non-regional states. Yet, this commerce apparently has not inspired regional states — particularly the [P]GCC members — to diversify their economies, to emulate transferred knowledge and technology, or to enhance their human capital. In fact, because these states have enjoyed the ability to distribute oil revenues without taxing the populace heavily and have imported foreign labor, the indigenous work ethic required for sustainable development is largely absent within the [P]GCC societies. As regional states refuse to curb their military purchases yet continue to perform welfare functions, the shallowness of this work ethic will become more problematic. The citizens of the [P]GCC states will be disinclined to tighten their belts and to increase their own productivity as methods of eliminating budget deficits.

REGIONAL MILITARY REALITIES — A SPIRALING ARMS RACE

While the civilian infrastructures of the Persian Gulf states and especially the [P]GCC members are underdeveloped, their military sectors are bloated, as the twelve charts appended in section M show. Historical enmity among regional states, the hegemonic aspirations of

the "big three plus one" — Iran, Iraq, Saudi Arabia, and Egypt[23] — and great power rivalries have spurred an arms race particularly since the Persian Gulf crisis of 1990-91.

Ironically, Chart M1 indicates that security and defense spending in actual dollars has declined substantially during 1985-94 for three out of eight of these states — Saudi Arabia, Iran, and Iraq. In the case of Iran and Iraq, their 1988 cease-fire as well as international sanctions against both states explain the drops in spending. Arguably, the decrease in Saudi spending may be attributed to the kingdom's budget deficit as well as to its increased reliance on American military protection since Operation Desert Storm. Moreover, Chart M2 reveals that security and defense spending per capita has diminished for seven of the eight regional states during 1985-94. The notable exception is Kuwait; presumably, the city-state has compensated for its lack of preparedness on the eve of Iraq's invasion of 2 August 1990.

Similarly, as Chart M3 shows, during 1985-1994, six regional states have experienced a decrease in security and defense spending as a percentage of GDP — with the sharpest declines in Iran and Iraq. Only in Bahrain and Kuwait has security and defense spending as a portion of GDP risen. The case of Bahrain is most problematic — depleting oil reserves, persistent domestic unrest, and mounting defense expenditures as a portion of GDP. Bahrain officials will have increasingly difficult budgetary choices to make.

Chart M4 indicates that defense spending as a percentage of total government expenditures has declined in Bahrain, Oman, Iran, and the UAE during 1985-94; data is unavailable for Iraq. Iran has witnessed the most significant decrease in defense spending as a portion of total government expenditures — because of the 1988 cease-fire with Iraq, Tehran's emphasis on reconstruction, and international sanctions against the Islamic Republic. Kuwait, Qatar, Saudi Arabia, and the UAE, by contrast, have increased defense spending as a portion of total government expenditures.

Chart M5 suggests that the total number of armed forces has tended to rise in seven out of eight of the Persian Gulf states during

1973-94. Notably, Iraq's armed forces have shrunk by almost half between 1985 and 1994 — from just under 800,000 to just over 400,000. In a similar vein, Chart M6 shows that society has demilitarized; the total number of armed forces per 1,000 has tended to decrease during 1973-94, with fluctuations during this twenty-year period. Again, in Iraq, the total number of armed forces per 1,000 increased during 1973-85 and then dropped precipitously from 50 per 1,000 to about 22 per 1,000 during 1985-94. Iraq's shrinking armed forces and fluctuations in military mobilization may be attributed to the transition from the height of battle during the Iran-Iraq War to the aftermath of Operation Desert Storm.

Chart M7 reveals that Saudi Arabia has spent more than any other regional state by far on total military expenditures — about $131 billion as compared with approximately $55 billion for Kuwait and just over $24.25 billion for Iran. Data is unavailable for Iraq. Saudi Arabia's and Kuwait's high spending levels may reflect the kingdoms' efforts to compensate for their lack of preparedness before Iraq's 1990 invasion.

Perhaps the most interesting and disturbing sets of figures is a ten-year comparison of military spending between Latin America and the [P]GCC depicted in Chart M8. During 1984-94, spending levels for Latin America remained fairly consistent, hovering below $20 billion annually. During the same period, the [P]GCC states experienced fluctuations in military spending:

- a dip from about $25 billion during the mid-1980s to under $20 billion during the late 1980s and 1990, attributable to the Iran-Iraq cease-fire, and to the [P]GCC members' perception that their security dilemmas vis-à-vis their northern neighbors had subsequently diminished;
- followed by a sharp rise to about $60 billion during 1991-93, due to Iraq's invasion of Kuwait and the [P]GCC's enhanced sense of vulnerability;
- and, finally, in 1994, a plunge to almost the same spending as one decade earlier, ostensibly stimulated by these states' growing

budget deficits as well as their realization that the US military presence is no longer "over the horizon" but at their back door.

Charts M9 and M10 suggest that the value of arms transfer deliveries received by the Persian Gulf states and the suppliers for the periods 1975-79 and 1982-86 remained fairly consistent, especially for Iraq and Saudi Arabia. Iraq's principal suppliers were France and the Soviet Union during both periods. The United States and United Kingdom have consistently supplied the Saudi military, and during 1982-86, Riyadh diversified its suppliers to include more arms from China, France, and West Germany.

Significantly, the value of arms transfers to Iran remained consistent between these two four-year periods, but the diversity of major suppliers diminished. During the pre-revolutionary period, Iran received arms from all the suppliers listed — China, France, West Germany, the United Kingdom, the USSR, and, of course, the United States. Since the revolution of 1978-79 and particularly during the height of fighting between Iran and Iraq, the Islamic Republic's source of arms transfers among the major suppliers dwindled to China and the USSR. Because Iran confronted international sanctions, it received over 80.0% of its arms from twenty minor suppliers: Argentina, Brazil, Chile, Ethiopia, India, Italy, Japan, Libya, the Netherlands, North Korea, Pakistan, Portugal, South Africa, South Korea, Spain, Sweden, Syria, Taiwan, and Vietnam. This situation posed an integration nightmare for the Iranian military during hostilities with Iraq.[24]

Charts M11 and M12 illustrate the value of arms transfer deliveries received by the Persian Gulf states during 1987-91 and 1992-94. Iran experienced a decrease in transfers between these two periods — due to stiffened international sanctions against the Islamic Republic and to the Iranian leadership's perception that its security dilemma has dissipated somewhat since Iraq's defeat in Operation Desert Storm.

Also noteworthy is the dramatic increase in American military exports to Saudi Arabia during 1987-91. This may be attributed, first,

to the kingdom's heightened sense of vulnerability during the last two years of the Iran-Iraq War and the western reflagging of Kuwaiti tankers, and, then, to Iraq's invasion of Kuwait. American military exports to Saudi Arabia have remained substantially higher than to other regional states since 1991. The case of Iraq, by contrast, illustrates the effectiveness of American-led international sanctions, because between 1987-91 and 1992-94, arms transfers declined from some $16.3 billion to an insignificant amount.

Finally, we must highlight China's nascent role as a major arms supplier to the Persian Gulf region. Throughout the 1980s, China emerged as one of the largest arms exporters, selling to Iran, Iraq, Saudi Arabia, and the UAE. Arguably, Beijing has capitalized on these states' heightened sense of insecurity since the Iran-Iraq War to compete effectively with Washington and Moscow as an arms supplier to the region.[25] Although the great powers have pursued regional arms control measures as a hallmark of the post-cold war era, they have largely exempted the Middle East and especially the Persian Gulf sub-region from this trend. Arguably, the experiences of the Iran-Iraq War and Iraq's attack on Kuwait reaffirmed for American, Chinese, European, and Russian decision makers the need to cultivate their influence in the area. The Persian Gulf states, meanwhile, have acquired sophisticated military hardware in part to alleviate their security dilemmas — to avoid being caught by surprise in the event of attack. Yet, their spiraling arms race has increased the probability of war resulting from misperception and miscalculation.

AN INTEGRATED VIEW OF EMPIRICAL INDICATORS

The charts appended in sections S, E, and M should offer answers to the six questions posed at the outset: (1) Should observes consider the [P]GCC states a homogeneous and monolithic bloc? (2) Are the Persian Gulf states effectively pursuing sustainable development? (3) What socio-economic problems may provoke unrest in these societies? (4) What arrangements have the [P]GCC states made to ensure their security? (5) How has the evolving geo-strategic balance in the region

affected the [P]GCC states? (6) In light of the security dilemmas facing regional states, is arms control possible?

First, the [P]GCC states — with relatively small populations — are neither homogeneous nor monolithic. Perhaps most significant is the difference between those states which can afford to rely on oil and natural gas reserves in the future and those whose resources are running out. At least in theory, Kuwait, Saudi Arabia, and, to a lesser extent, the UAE can count on an influx of oil revenues to finance their developmental and military needs. Yet in practice, this long-term resource availability discourages economic diversification. Bahrain, Oman, and, to a lesser extent, Qatar, by contrast, lack the cushion of long-term oil and natural gas reserves; nor do they have large economies that facilitate economic diversification through a strategy of import substitution. Kuwait, Saudi Arabia, and the UAE may face economic crises some time in the future, whereas the predicaments of Bahrain, Oman, and Qatar are more immediate.

Regional states, particularly the [P]GCC members, have not implemented effective strategies for sustainable development as decreases in foreign reserves suggests. The ubiquity of inter-state conflict in the region complicates development planning, for the [P]GCC members have felt vulnerable and engaged in massive conventional military build-ups. While the [P]GCC members' intense security dilemma seems to justify relatively high levels of military spending, the question remains whether or not these small states can absorb and integrate sophisticated military hardware into their defense infrastructures. Arguably, if they cannot integrate this hardware, their defense expenditures are more difficult to explain in light of their unsatisfactory records on socio-economic development.

Presently, four trends raise doubts about the prospects for sustainable development: the region's difficulties with population control, migration from rural to urban areas, the relatively low standard of female education in some societies, and the shallowness of the indigenous work ethic in the [P]GCC states. Women must be integrated into every aspect of development planning, starting with

basic literacy and education. Although educating women may be costly in terms of short-term budgetary allocations, this is a long-term investment that will enable these societies to decelerate population growth and the rate of urbanization. Cultivating an indigenous work ethic may prove even more challenging than educating females. However, while oil prices stagnate[26] and foreign laborers have less financial incentive to work in the [P]GCC states, such an ethic may develop among university-educated youths out of sheer necessity. Continued reliance on foreign workers makes the [P]GCC states economically and politically vulnerable. In short, for domestic and external reasons, the Persian Gulf states have not fared well in the area of sustainable development.

These states' record on development has implications for social unrest. The present situation in Bahrain is instructive. Bahrain confronts depleting oil reserves, an intense security dilemma, and citizens who demand greater representation in their government. These contradictions as well as overlapping class, ethnic, and sectarian cleavages have sowed fertile grounds for the seeds of unrest.[27]

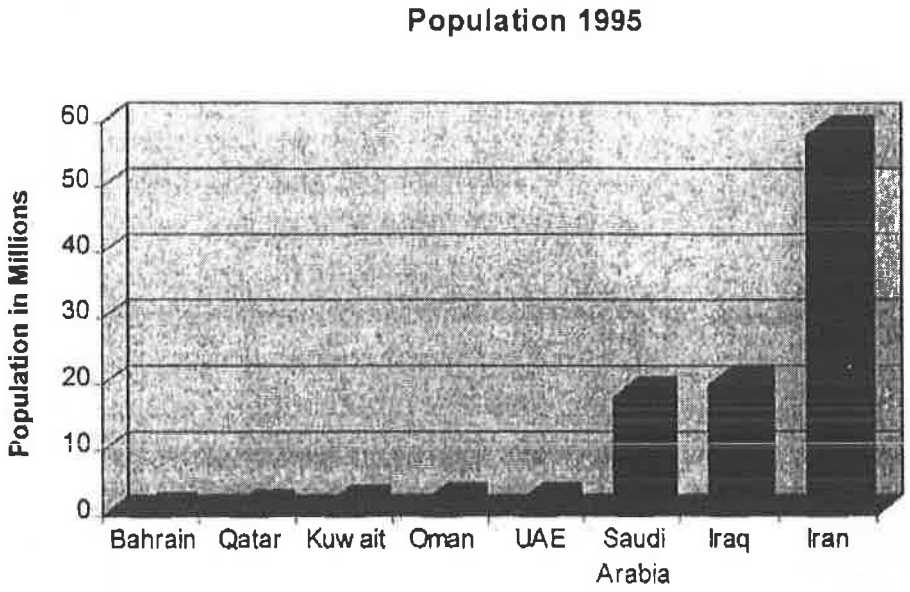
As for security arrangements, besides arms imports and military mobilization, these states have allied more closely with the United States since Operation Desert Storm. This alliance has advantages and disadvantages. Arguably, the United States — particularly during the Bush administration — proved itself a reliable ally in a crisis. Yet the American military presence in the [Persian] Gulf has provoked latent and blatant opposition by the domestic populations who resent foreign interference and question the competence of their own leaders in a crisis. During the last six years, Saudi Arabia in particular has experienced a rise in anti-American and dissident activities.[28]

Iraq's invasion of Kuwait and Operation Desert Storm was a watershed in the Persian Gulf region, altering the geo-strategic balance. Washington's policy of dual containment has weakened both Iran and Iraq while the smaller [P]GCC states have engaged in substantial military built-ups. Nevertheless, the latter still perceive potential threats from their northern neighbors and have, thus, been

willing to rely on the United States and her Western allies to ensure their security. Significantly, the smallest [P]GCC states have come to suspect the ambitions of the largest among them, Saudi Arabia, which has engaged in the most massive conventional build-up.

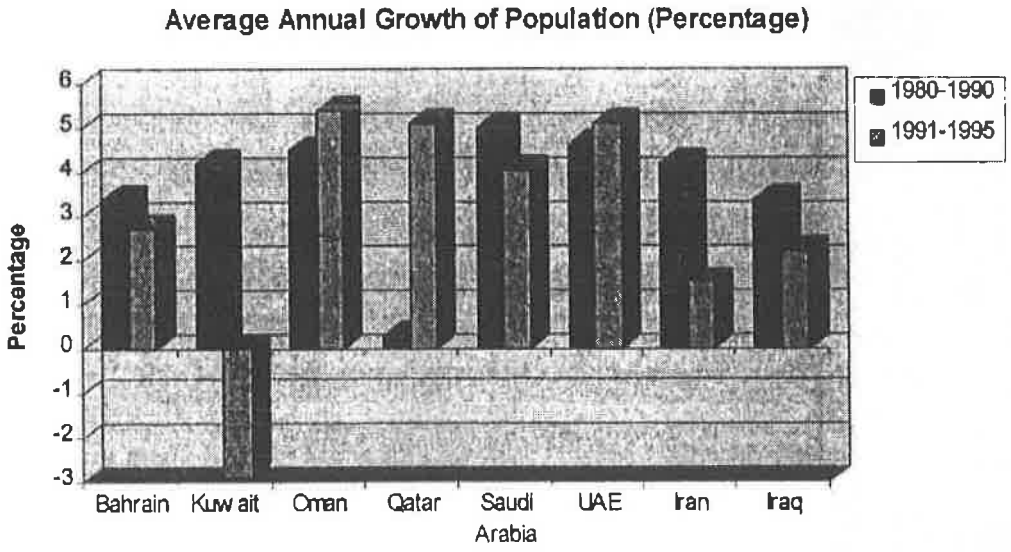
In light of the altered geo-strategic balance since Operation Desert Storm and the bitter memories of the eight-year Iran-Iraq War of attrition, the prospects for arms control are quite dim. Considering the intensity of the [P]GCC members' security dilemmas, no state has a long-term incentive to scale down its arms purchases — although short-term budgetary constraints, increased dependence on American military protection, and/or international sanctions has led to reductions in military spending. Moreover, the supplier states have every incentive to maintain a geo-strategic and financial foothold in this lucrative arms market, as the behavior of China since the 1980s illustrates. Over the long run, however, the arms race — which has explicitly included nuclear technology during the last five years — is costly for the region. As these states militarize their infrastructures, they are sacrificing their needs for sustainable development and creating conditions for instability on which external powers may capitalize.

Social 1



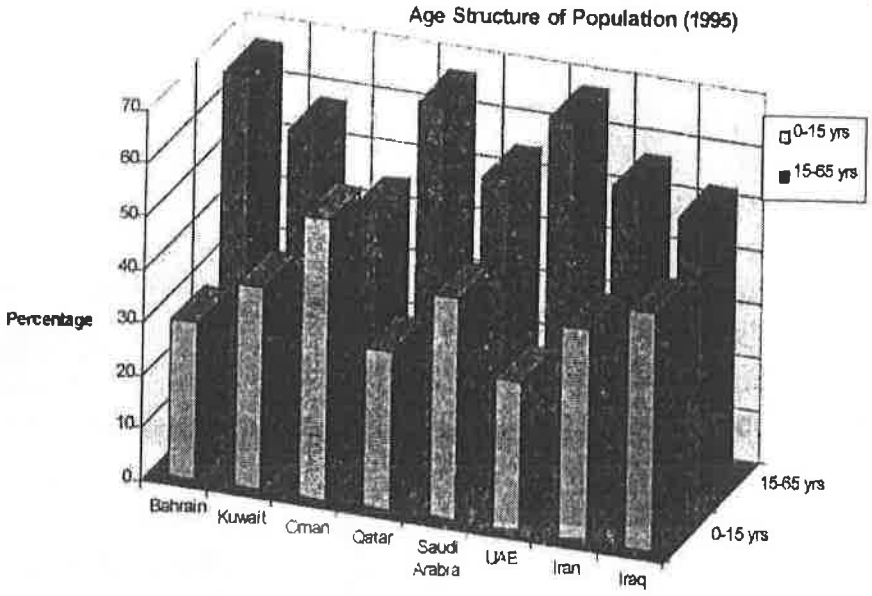
Source: Arab Monetary Fund (1996); Iran Statistical Yearbook (1996).

Socail 2



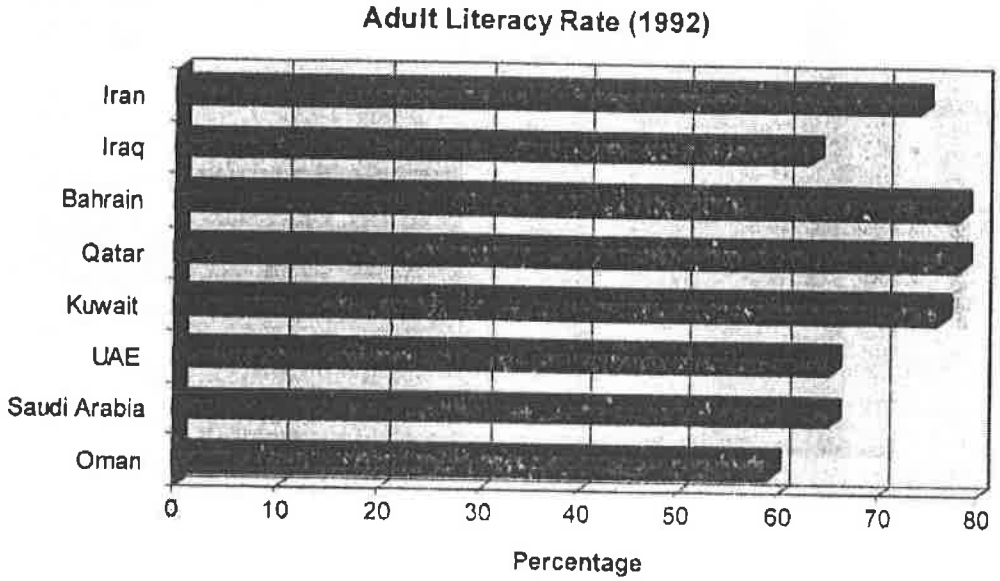
Source: World Development Report: From Plan to Market (Oxford: Oxford University Press, 1996); Arab Monetary Fund (1996); Iran Statistical Yearbooks (1983, 1996).

Social 3



Source: Arab Monetary Fund (1996); Iran Statistical Yearbook (1996); http://www.odci.gov/publications/95fact/html.

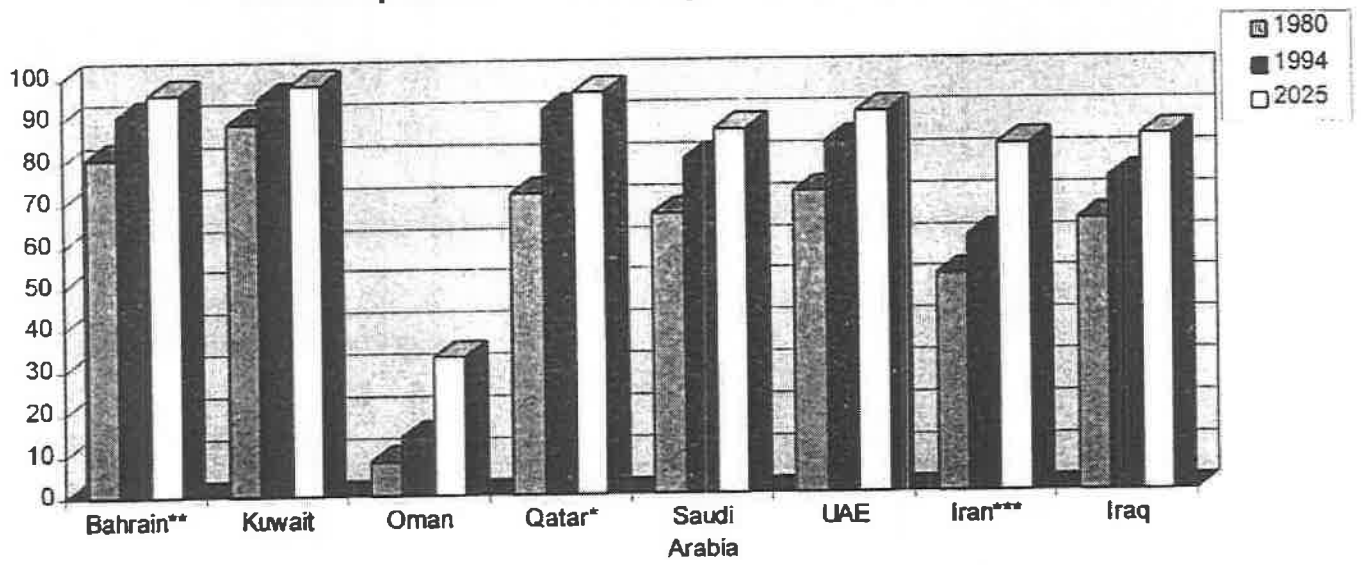
Social 4



Source: Arab Monetary Fund (1996); Iran Statistical Yearbook (1996); http://www.odci.gov/cia/publications/95fact/ir.html.

Social 5

Urban Population as Percentage of Total Population

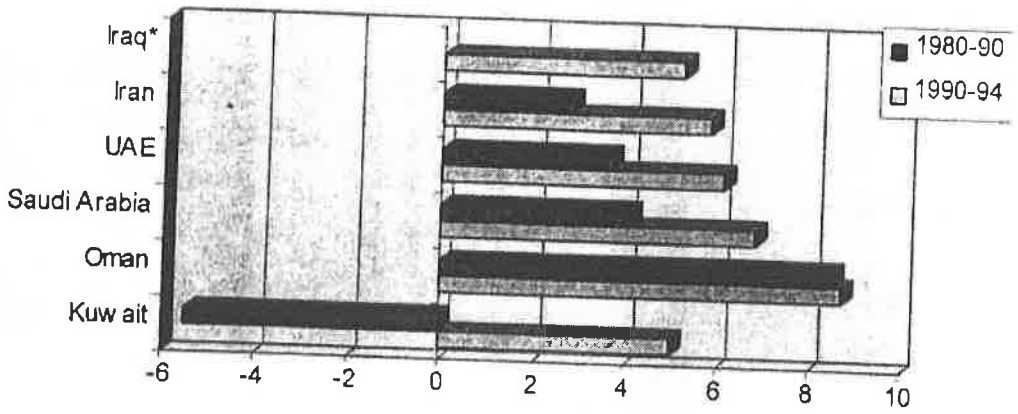


* Economic Intelligence Unit, Country Profiles, published separately for Bahrain (1996-7), Qatar (1996-7).
** Estimated by World Urbanization Prospects: The 1994 Revision (1995).
*** The figures for Iran are for 1976 and 1996 and estimates thereupon.

Source: World Development Report: From Plan to Market (Oxford: Oxford University Press, 1996); Arab Monetary Fund (1995); Iran Statistical Yearbook (1996).

Social 6

Average Annual Growth Rate (Percentage) of the Urban Population

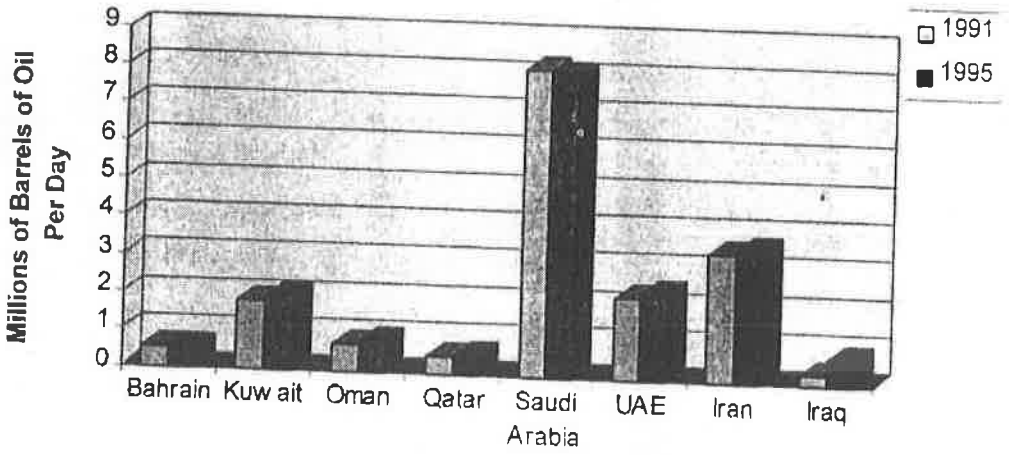


* Economist Intelligence Unit, Country Profile, Iraq (1993-4)

Source: World Development Report: From Plan to Market (Oxford: Oxford University Press, 1996); Iran Statistical Yearbook (1996).

Economic 1

Oil Production of Each State in Millions of Barrels Per Day (1991 and 1995)*

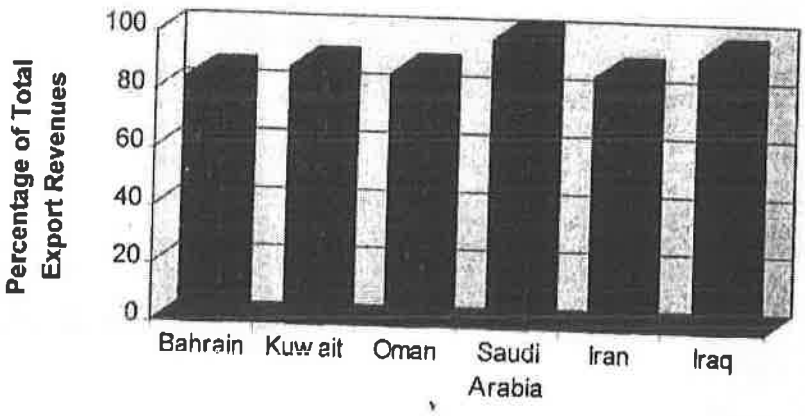


* Based on total OPEC production of 14.9 million barrels in 1991 and 17.1 million barrels in 1995

Source: Arab Monetary Fund (1996).

Economic 2

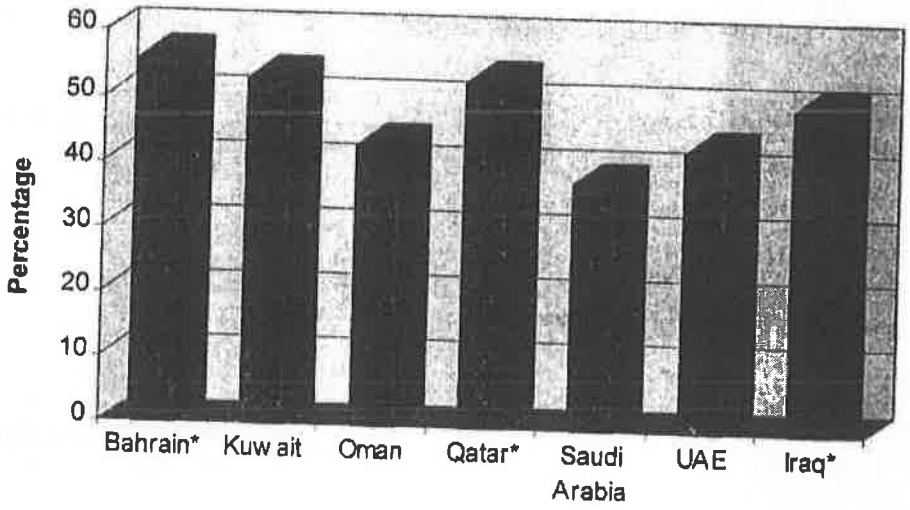
Earnings from Oil Exports as Percentage of Total Export Revenues (1990s)



Source: http/www.odci.gov/cia/publications/95fact/html.

Economic 3

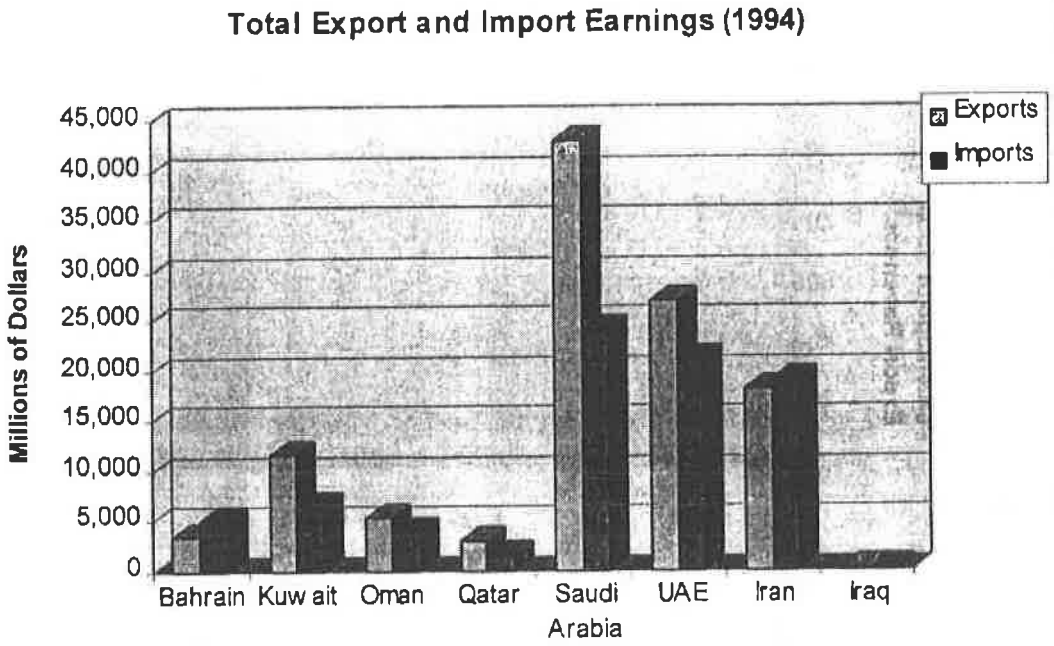
Oil as a Percentage of GDP (1990s)



* The Statesman's Yearbook (1995-96).

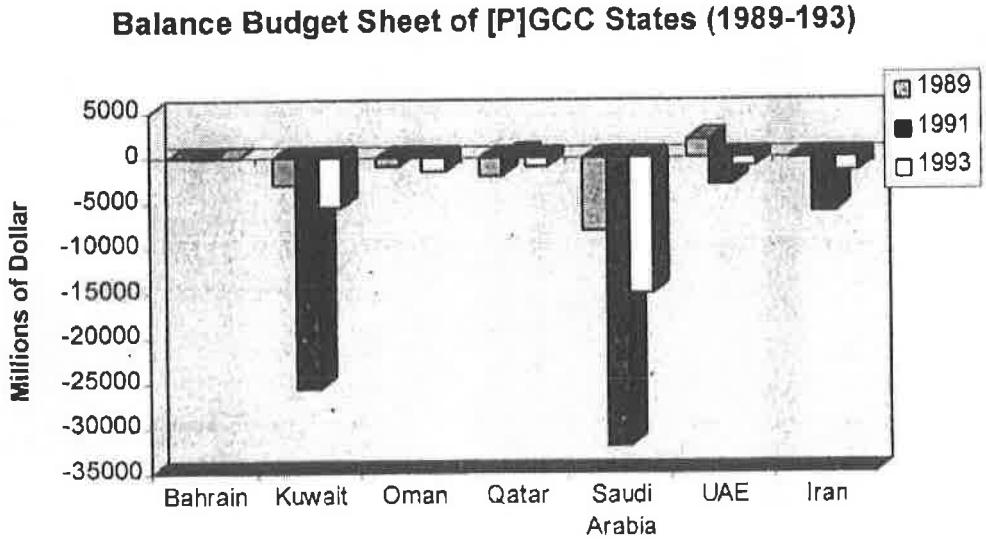
Source: http:/www.odci.gov/cia/publications/95fact/html.

Economic 4



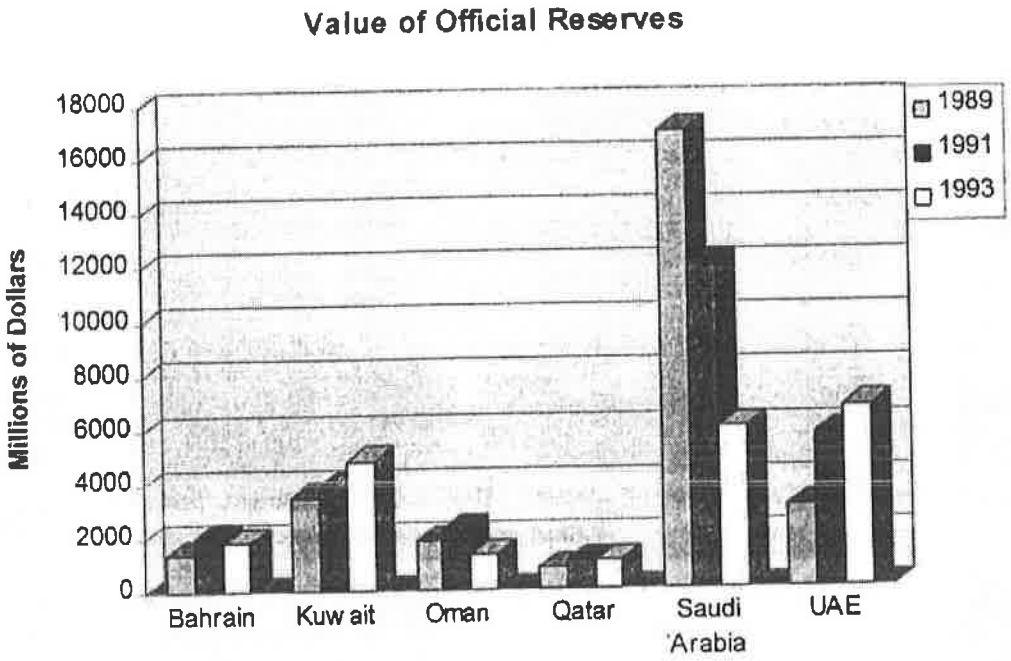
Source: Arab Monetary Fund (1996); Iran Statistical Yearbook (1996).

Economic 5



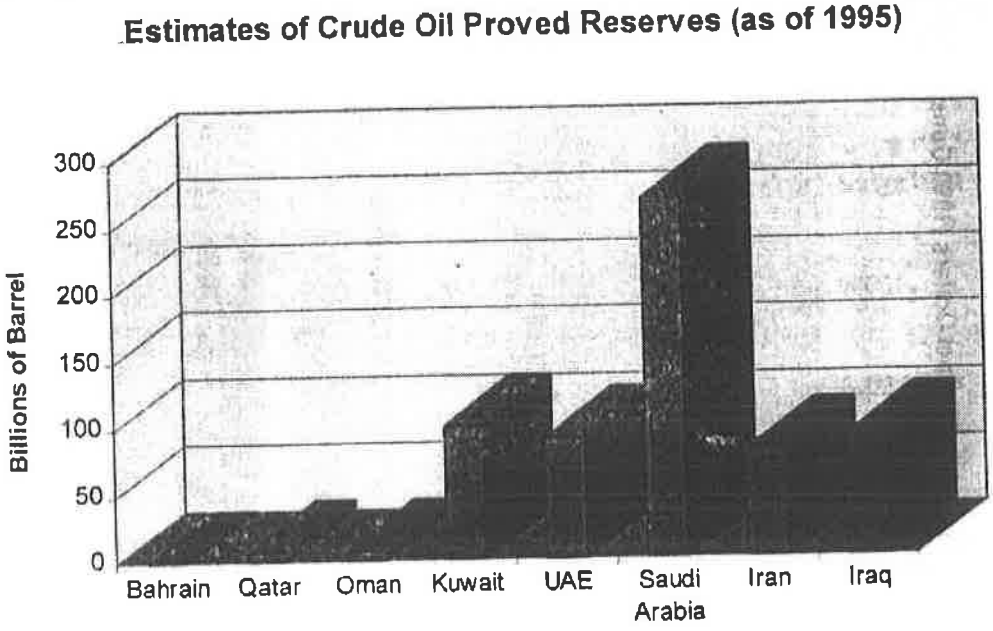
Source: Arab Monetary Fund (1995); Arab Monetary Fund (1996); Iran Statistical Yearbook (1996).

Economic 6



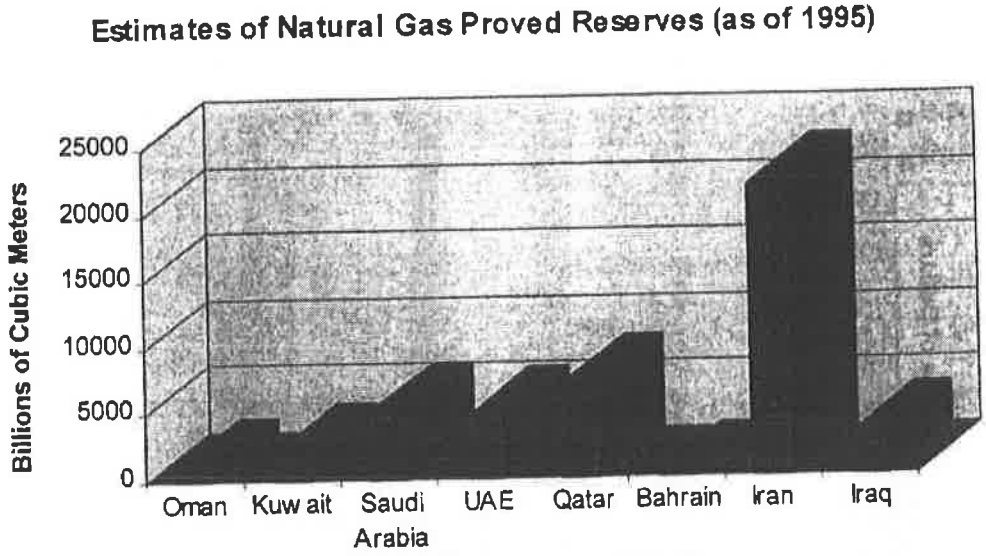
Source: Arab Monetary Fund (1996).

Economic 7



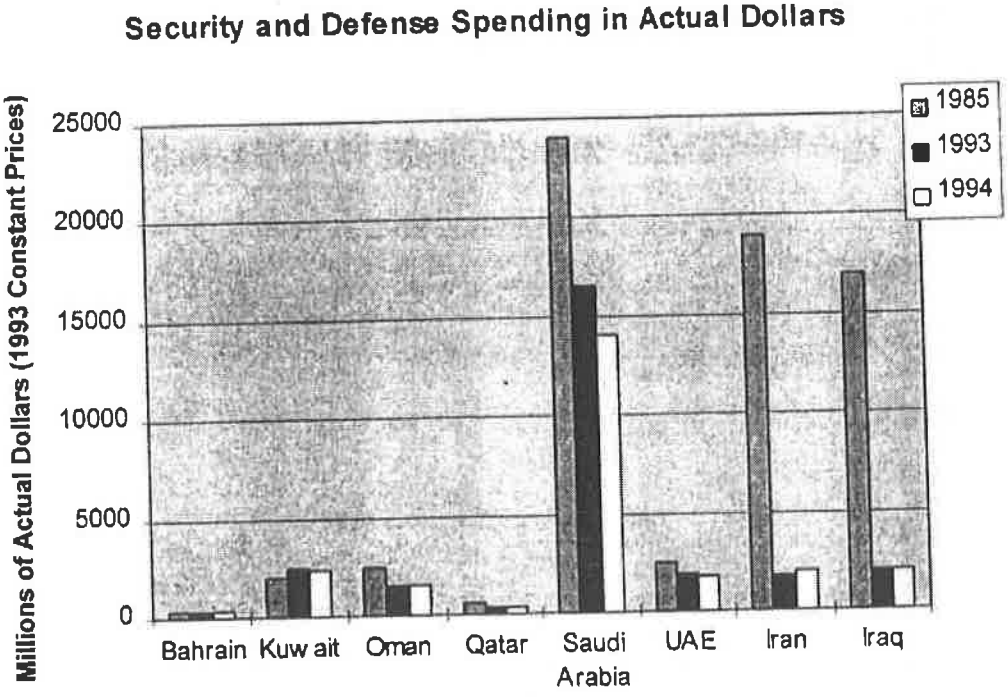
Source: Arab Monetary Fund (1996).

Economic 8



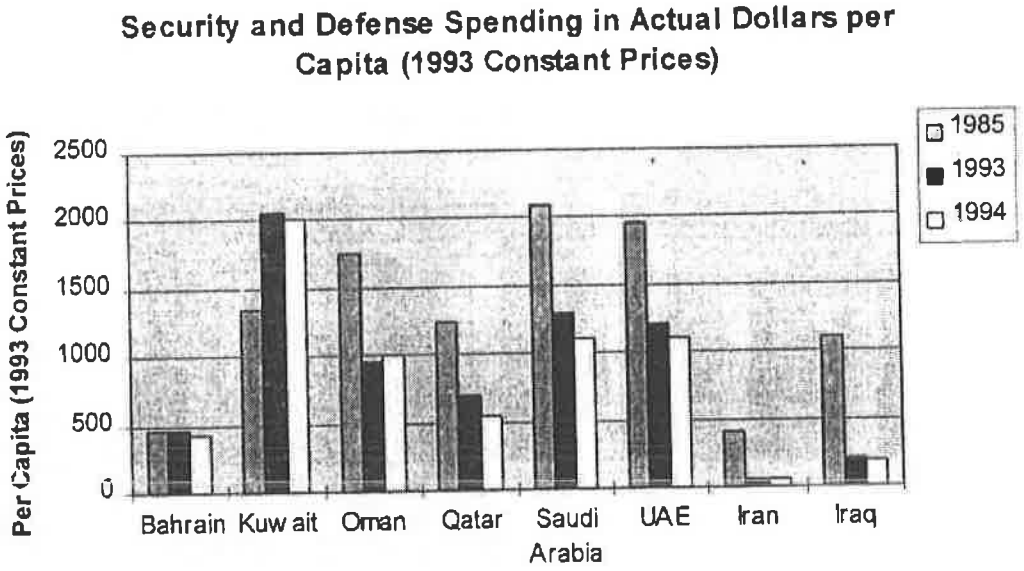
Source: Arab Monetary Fund (1996).

Military 1



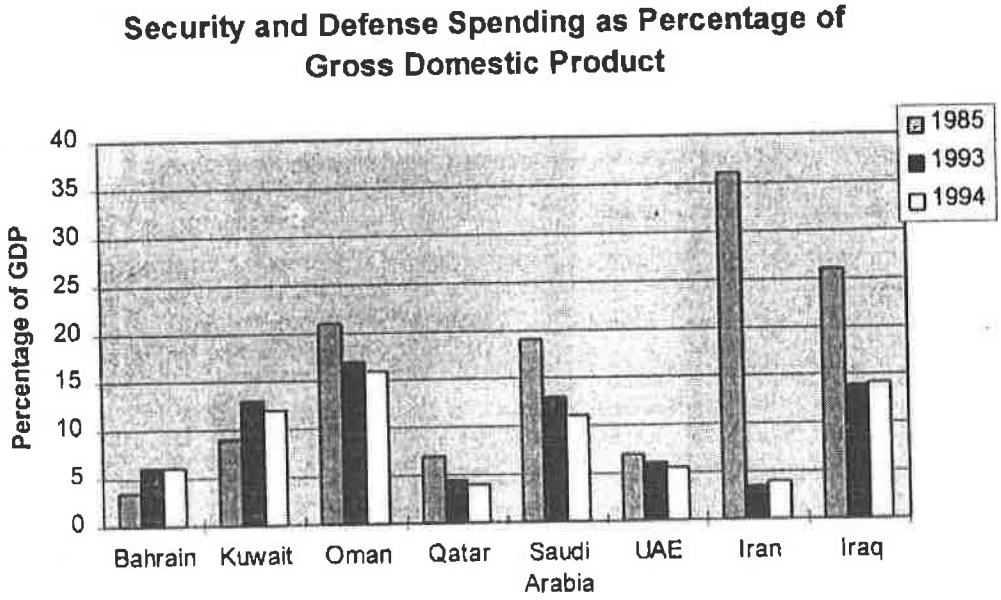
Source: The Military Balance (1995-1996). The International Institute for Strategic Studies (London: Oxford University Press, 1996).

Military 2



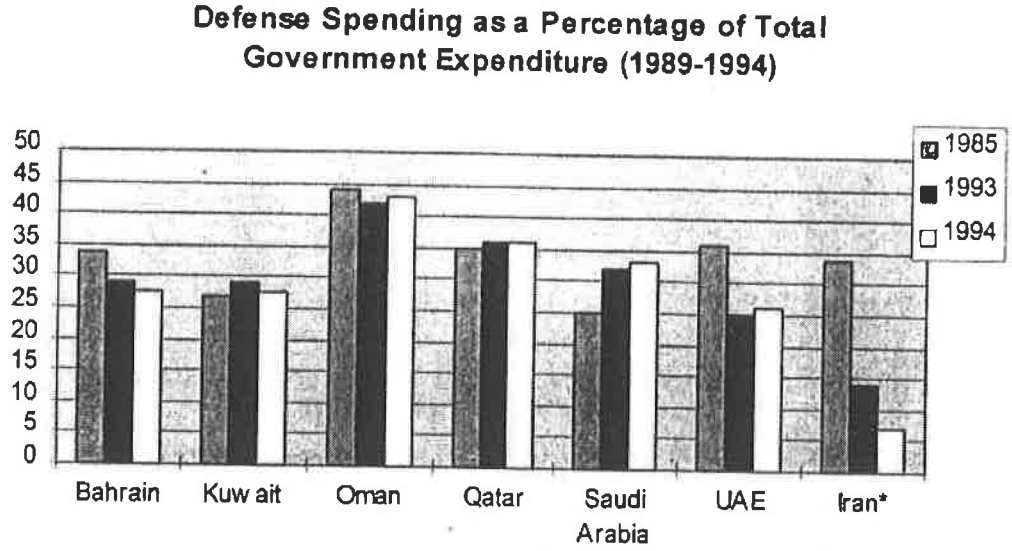
Source: The Military Balance (1995-1996). The International Institute for Strategic Studies (London: Oxford University Press, 1996).

Military 3



Source: The Military Balance (1995-1996). The International Institute for Strategic Studies (London: Oxford University Press, 1996).

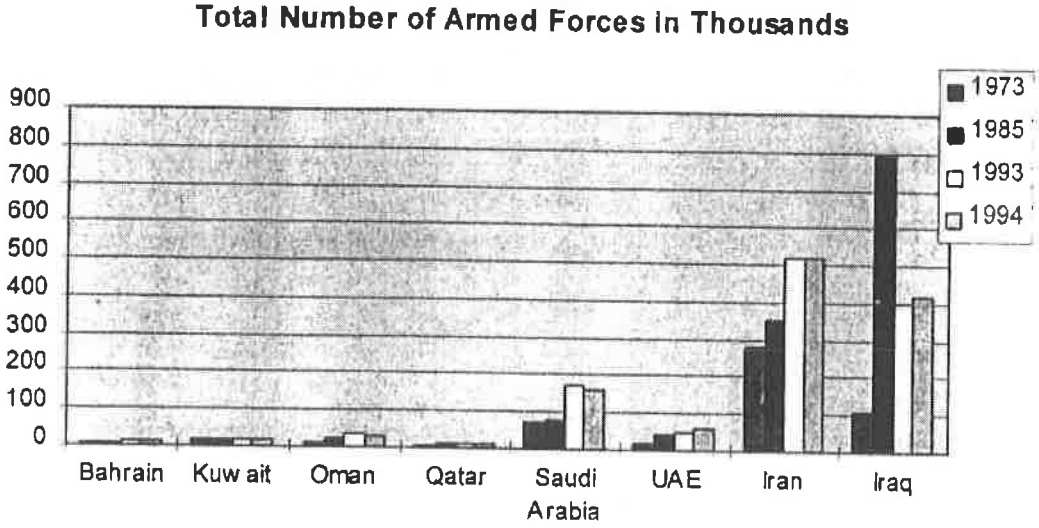
Military 4



* Rough estimate given by World Military Expenditures and Arms Transfers (1993).

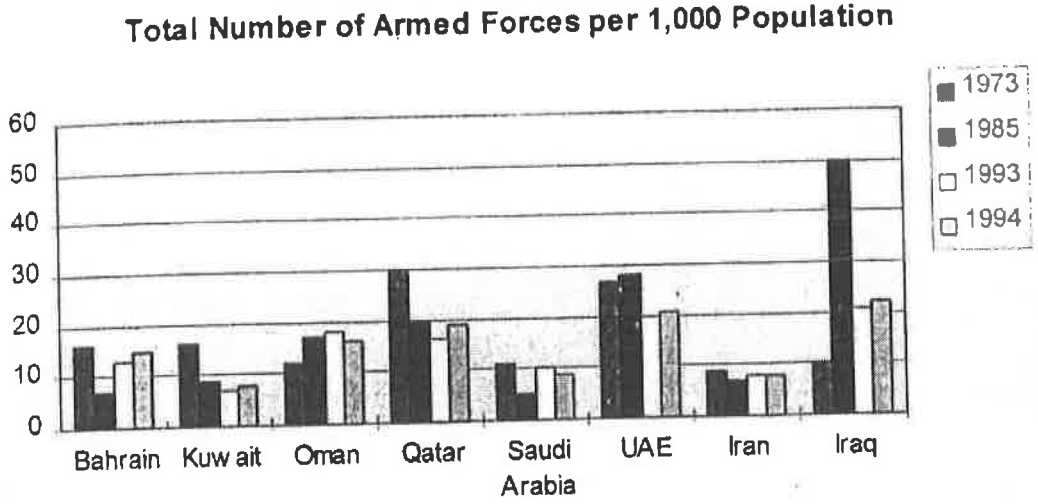
Source: Arab Monetary Fund (1995); World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1993).

Military 5



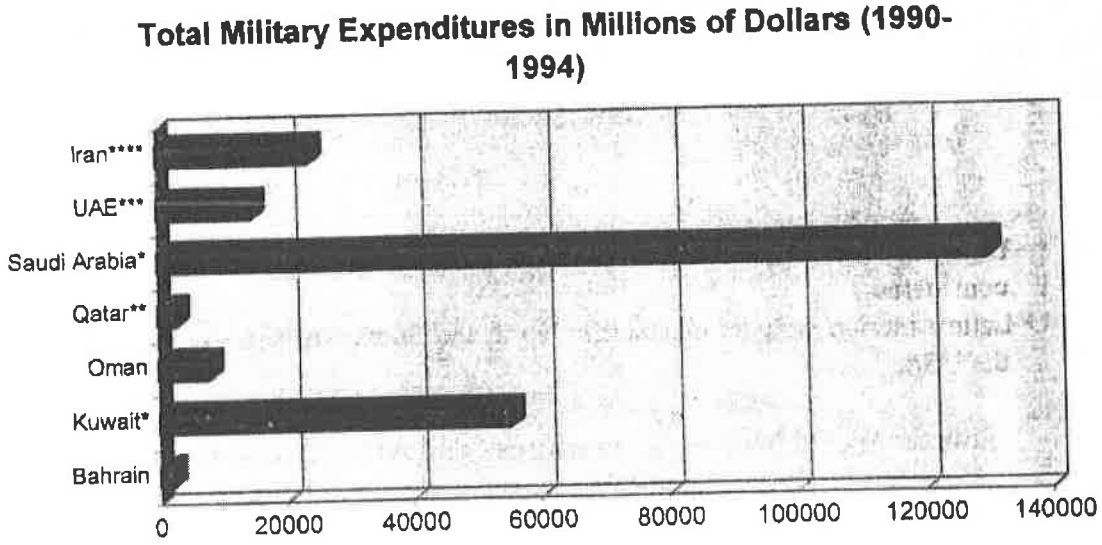
Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1995).

Military 6



Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1995).

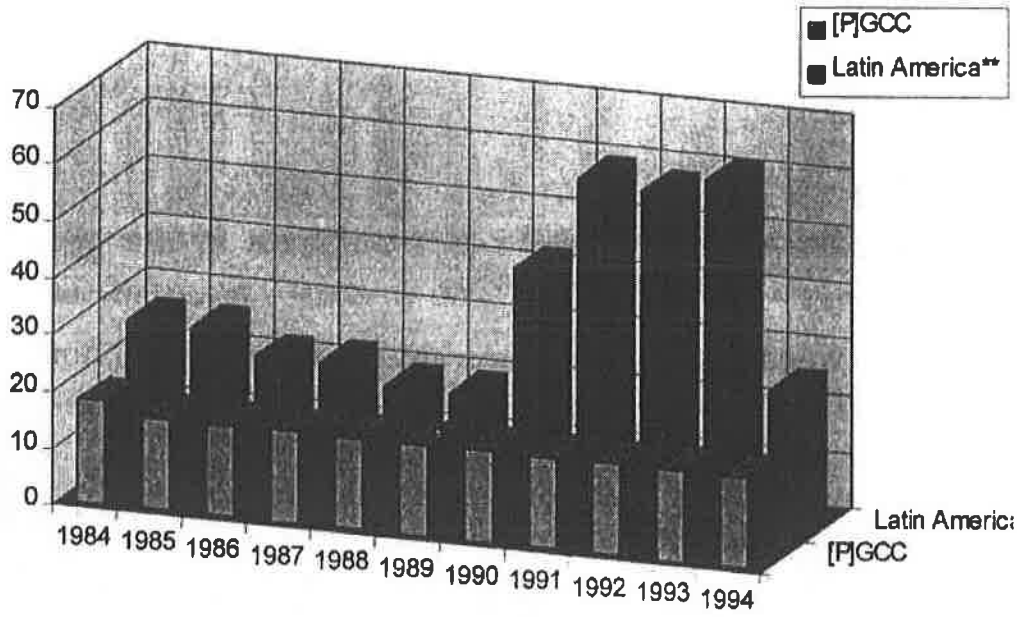
Military 7



* 1990-3 est. ** 1990 n/a, 1991-4 est. *** 1990-1 est. **** Rough est. by "adding arms imports to data on military expenditures," excluding arms purchases.
Source: World Military Expenditures (US Arms Control and Disarmament Agency, 1995).

Military 8

Ten-Year Comparison of Military Spending: Latin America and the [P]GCC



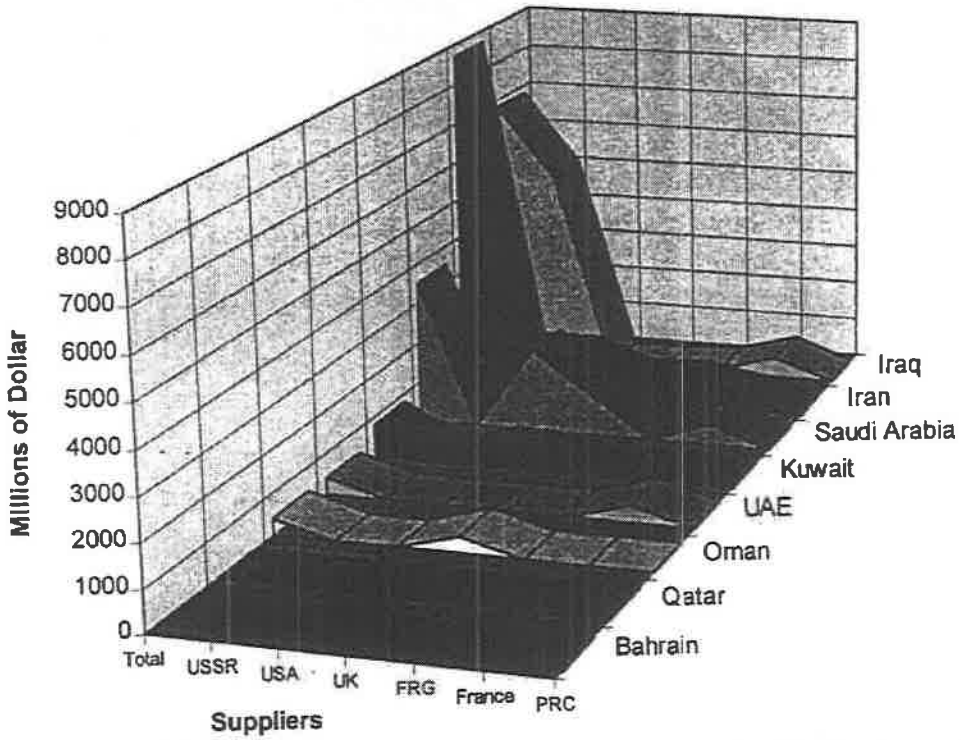
* Data based on figures cited by state ("estimate" concerns are therefore to be considered.)

** Latin America includes all states in North and South America except Canada and the USA.

Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1995).

Military 9

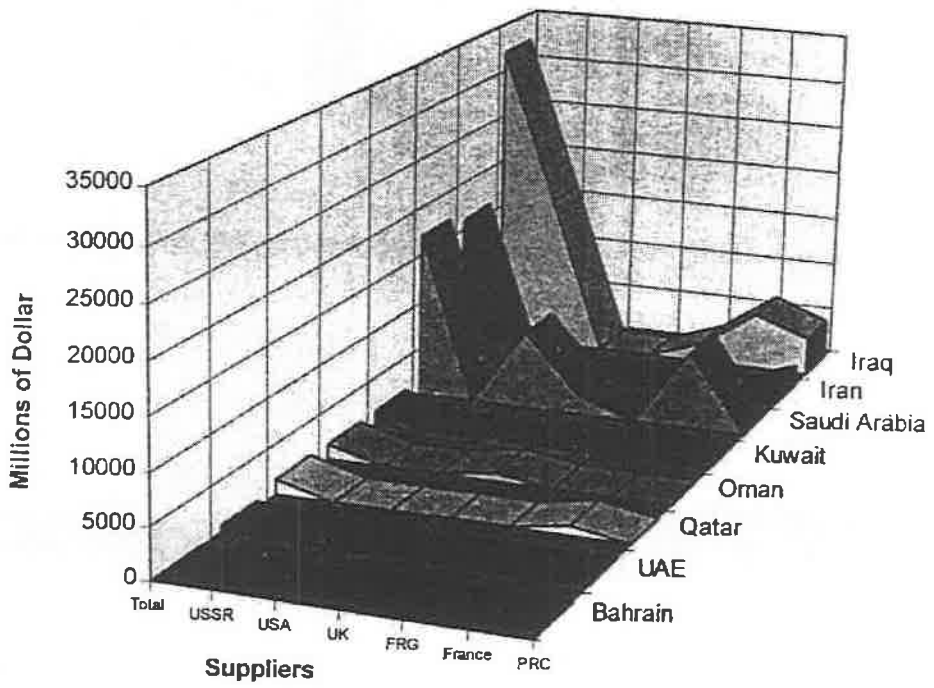
Value of Arms Transfer Deliveries Received by Nation and Supplier in Current Dollars (Cumulative 1975-1979)



Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1980, 1987, 1991/2 and 1995).

Military 10

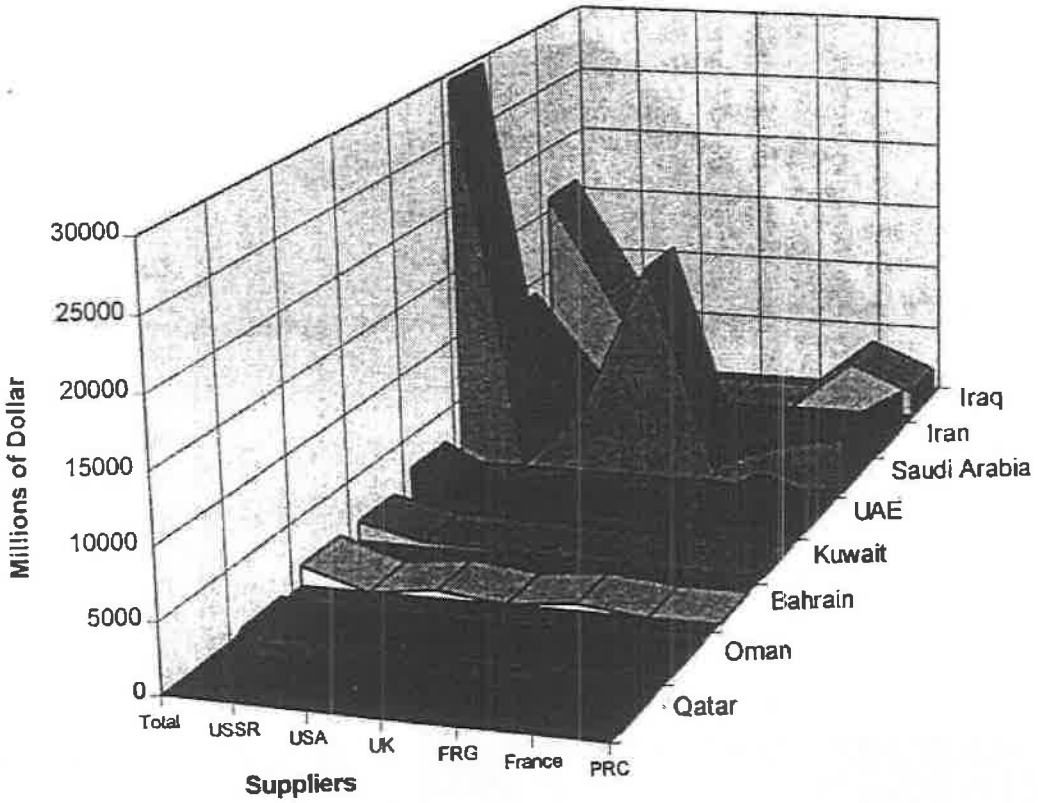
Value of Arms Transfer Deliveries Received in Current Dollars (Cumulative 1982-1986)



Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1980, 1987, 1991/2, and 1995).

Military 11

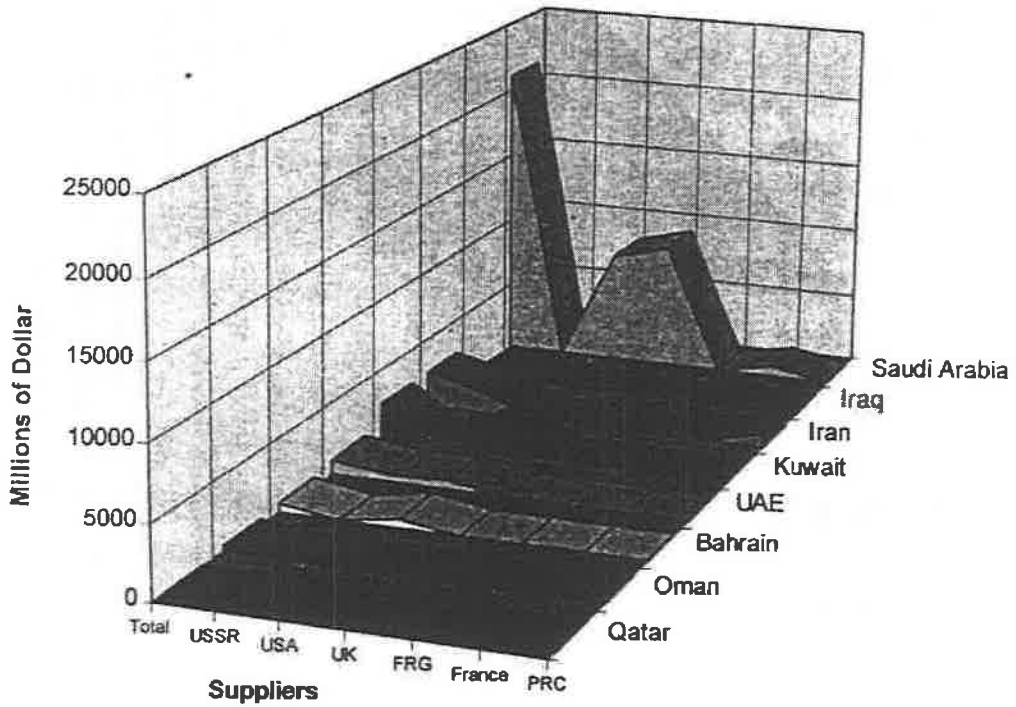
Value of Arms Transfer Deliveries Received in Current Dollars (Cumulative 1987-1991)



Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1980, 1987, 1991/2, and 1995).

Military 12

Value of Arms Transfer Deliveries Received in Current Dollars (Cumulative 1992-1994)



Source: World Military Expenditures and Arms Transfers (US Arms Control and Disarmament Agency, 1980, 1987, 1991/2, and 1995).

NOTES

1. We owe our gratitude to Margaret McPhee, Allison Riley, and Marian Paules for their assistance in collecting the data presented here.

2. Saudi Arabia is especially reluctant to publish census figures, because the kingdom is sensitive to Iran's and Iraq's human resource superiority, the growing Shi'a minority in the oil-rich Eastern Province, and the high percentage of non-Saudi residents. The 1974 census puts the total population at 7,012,642 of whom 5,128,665 (73.1 percent) were considered settled, and the rest migratory. Extrapolations from the 1974 figure put the current population at 15 million, and the Arab Monetary Fund puts the 1995 population as high as 18.3 million. By contrast, independent estimates put the current population at 10.5 million. See Arab Monetary Fund, *Al-Taqrir al-Iqtisadi al-'Arabi al-Muwahhid* [Unified Arab economic report] (Abu Dhabi:Al-Amanat al-'Ama li-Jama'at al-Duwal al-'Arabiyya," 1995); and *Saudi Arabia: Country Profile 1995-1996* (London: The Economist Intelligence Unit, Business International Limited, 1995).

3. The security dilemma is a condition that exists between states — particularly historical enemies — in which none can judge the other's intentions in the quasi-anarchical international system. Consequently, when one state acquires armaments, territory , wealth, etc. for the purposes of self-defense, another state may perceive the acquisition as offensive and feel compelled to respond in kind. The security dilemma may produce a spiraling arms race. For a classic conceptualization, see Glenn H. Snyder, "The Security Dilemma in Alliance Politics," *World Politics* 36, 4 (July 1984): 461-495.

4. The Islamic Republic's population control measures have even included a media campaign that features religious leaders advocating family planning with the slogan "Farzand-e kamtar, zendeghi-ye behtar!" ["Fewer children, a better life!"]. For instructive discussions of the Islamic Republic's population control policies, see Akbar Aghajanian, "A New Direction in Population Policy and Family Planning in Iran" (Paper presented at the Middle East Studies Association of North America, 28th Annual Meeting, 1994); and Neil MacFarquhar, "With Iran Population Boom, Vasectomy Receives Blessing," *The New York Times* (8 September 1996), A1.

5. See Markaz-e Amar-e Iran, *Salnameh-ye Amari, 1360* (Iran statistical yearbook, March 1981-March 1982) (Tehran: Statistical Center of Iran, 1983); and Markaz-e Amar-e Iran, *Salnameh-ye Amari-ye Keshvar, 1373* [Iran statistical yearbook, March 1994-March 1995] (Tehran: Statistical Center of Iran, 1996).

6. The low level of literacy in Iraq is most understandable in the region, considering the strains on this society resulting from the war with Iran (1980-88), Operation Desert Shield/Storm (1990-91), persistent international trade sanctions, and the flight of educated professionals since 1980. For thoughtful and detailed analyses of the political and socio-economic pressures on Iraq, see James Fine, "The Sanctions Catastrophe," *Middle East Report* 22, 1 (January-February 1992): 36; Sarah Graham-Brown, "Intervention, Sovereignty, and Responsibility," *Middle East Report* 25, 2 (March-April 1995): 2-12; and "Report to the Secretary-General on Humanitarian Needs in Kuwait and Iraq in the Immediate Post-Crisis Environment," United Nations S/22366 (20 March 1991).

7. Ruth Leger Sivard with Arlette Brauer (on the social deficit), Lora Lumpe (on the military burden), and Paul Walker (on weapons of mass destruction), *World Military and Social Expenditures* 1996, 16th ed. (Washington, D.C.: World Priorities, 1996), 37, 50.

8. Please note that the figures presented in Chart S6 for Iran correspond to the periods 1981-90 and 1991-96, and that the data for Iraq is incomplete.

9. Sustainable development is a process in which state officials and key social constituencies cooperate to formulate policies aimed at eliminating hunger, ignorance, illness, and poverty while protecting the natural resource base. Sustainable development entails expanding income opportunities, building private and public sector institutions, promoting local science and technology, and, most importantly, enhancing human capital. The enhancement of human capital requires extending educational opportunities to all members of society — particularly women and minorities, improving access to health care and nutrition, and reducing the population growth rate. See Marianne Marchand and Jane Parpart, *Feminism, Post-modernism, Development* (New York and London: Routledge, 1995); Naresh Singh and Vangile

Titi, eds., *Empowerment Towards Sustainable Development* (London: Zed Books, 1995); and United Nations Development Program, *Human Development Report* (New York: Oxford University Press and UNDP, 1993).

10. See David Byrd, "Iran's 'Noble' Warrior Leaves OPEC Legacy" (13 August 1997); posted at http://www.iranian.com/News/Aug97/aqazadeh.html; and Haleh Vaziri, "The Islamic Republic's Policy in the Persian [Persian] Gulf: Whose Containing Who, How, and Why?," *Middle East Insight* 11, 5 (July-August 1995): 76-79.

11. See Tody Ash, "Iraq on Probation as Oil Deal Agreed," *Middle East Economic Digest* (MEED) 40, 23 (7 June 1996): 2-3.

12. Hossein Mahdavy popularized this concept in 1970: "Rentier states are defined here as those countries that receive on a regular basis substantial amounts of external rent. External rents are in turn defined as rentals paid by foreign individuals, concerns, or governments to individuals, concerns, or governments of a given country." See Mahdavy, "The Patterns and Problems of Economic Development in Rentier States: The Case of Iran," in M.A. Cook, ed., *Studies in the Economic History of the Middle East from the Rise of Islam to the Present Day* (London, New York, Toronto: Oxford University Press, 1970), 428.

    Since Mahdavy coined the term, other scholars have refined the concept. Most notably, see Hazem Beblawi, "The Rentier State in the Arab World," Giacomo Luciani, "Allocation vs. Production States: A Theoretical Framework;" Mahmoud Abdel-Fadil, "The Macro-behavior of Oil Rentier States in the Arab Region," and Michel Chatelus, "Policies for Development: Attitudes Toward Industry and Services," all in Hazem Beblawi and Giacomo Luciani, eds., *The Rentier States,* vol. III, Giacomo Luciani, series ed., *Nation, State, and Integration in the Arab World* (London, New York, Sydney: Croon Helm, 1987), 49-62, 82-83-107, and 108-137. Like Mahdavy, Beblawi and Abdel-Fadil emphasize the rent-like character of the state's income; whereas Chatelus and Luciani underscore the rentier states' principal economic function — the allocation of revenues rather than the realization of productive efficiency.

13. *Al-Taqrir al-Iqtisadi al-'Arabi al-Muwahhid* [Unified Arab economic report] (Abu Dhabi: Al-Amanat al-'Ama li-Jama'at al-Duwal al-'Arabiyya, 1995), 98-100. See also, Rodney Wilson, "The Economic Relations of the Middle East: Toward Europe or Within the Region?" *The Middle East Journal* 48, 2 (Spring 1994): 276-282.

14. *Al-Taqrir al-Iqtisadi*, 278; and *Al-Taqrir al-Iqtisadi al-'Arabi al-Muwahhid* [Unified Arab economic report] (Abu Dhabi: Al-Amanat al-'Ama li-Jama'at al-Duwal al-'Arabiyya, 1996), 304. We expect that the [P]GCC members rely even more heavily on oil revenues than the other Arab states which are included in these figures.

15. *Salnameh-ye Amar-ye Keshvar, 1373*, 538-539.

16. For more on the relationship between taxation and representation throughout the Middle East, see Lisa Anderson, "Obligation and Accountability: Islamic Politics in North Africa," *Daedalus* 120 (Summer 1991): 95-112; John Waterbury, "Democracy Without Democrats?: The Potential for Political Liberalization in the Middle East;" and Giacomo Luciani, "The Oil Rent, the Fiscal Crisis of the State and Democratization," both in Ghassan Salame, ed., *Democracy without Democrats: The Renewal of Politics in the Muslim World* (London, New York: I.B. Tauris, 1994): 23-47, 130-155.

17. Jill Crystal, *Oil and Politics in the [Persian] Gulf: Rulers and Merchants in Kuwait and Qatar* (Cambridge: Cambridge University Press, 1991), 176. Crystal's comment applies not only to Kuwait and Qatar but to the other [P]GCC members as well.

18. Please note that the figure presented in Chart E4 for Iran is for 1993.

19. Douglas Jehl, "Qatar's Treasure-trove of Gas: Tiny [Persian] Gulf Emirate May Have a 200-year Supply," *The New York Times* (23 July 1997): D1.

20. For a concise analysis of the political and socio-economic implications of Saudi Arabia's budget deficit and reluctance to cut military spending, see Fareed Mohamedi, "The Saudi Economy: A Few Years Yet till Doomsday," *Middle East Report* 23, 6 (November-December 1993): 14-17.

21. For analyses of Europe's trade relations with the Persian Gulf states, see Fred Halliday, "An Elusive Normalization: Western Europe and Iran,"

The Middle East Journal 48, 2 (Spring 1994): 309-326; and Greg Nonneman, "The EC and the [Persian] Gulf: Issues of Integration, Security and Trade," *Journal of Arab Affairs* 12, 1 (1993): 101-112.

22. For a thoughtful critique of dual containment as applied to the Islamic Republic, see Anthony N. Cordesman and Ahmed S. Hashim, *Iran: Dilemmas of Dual Containment* (Boudler, Colorado: Westview Press, 1997).

23. For a useful survey of the numerous disputes between the Persian Gulf states, see David E. Long, "Prospects for Armed Conflict in the [Persian] Gulf," *Middle East Policy* III, 1 (1993): 113-125.

24. See Anthony Cordesman, "Arms to Iran: The Impact of US and Other Arms Sales on the Iran-Iraq War," *American-Arab Affairs* 2 (Spring 1987): 13-29; and Martha Wenger and Dick Anderson, "The [Persian] Gulf War," *MERIP: Middle East Report* 17, 5 (September-October 1987): 25-26.

25. For detailed analyses of China's nascent influence in the Middle East and Persian Gulf subregion, see John Calabrese, *China's Changing Relations with the Middle East* (London and New York: Pinter Publishers, 1991); and Fred Halliday, "China and the Middle East: An Enigmatic Involvement," *Arab Affairs* 12 (1990): 18-33.

26. See Peter Kemp, "Oil Prices in Peril," *MEED* 40, 16 (19 April 1996): 2-3.

27. See "Bahrain's Spreading Flames," *The Economist* (19 July 1997): 42; and Human Rights Watch, *Routine, Abuse, Routine Denial: Civil Rights and the Political Crisis in Bahrain* (New York: Human Rights Watch, July 1997).

28. See Joseph Kostiner, "State, Islam, and Opposition in Saudi Arabia: The Post-Desert Storm Phase," *The Middle East Review of International Affairs* (Begin-Sadat Center for Strategic Studies, Bar-Ilan University, 1997).