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Globalism and Regional Security in the Middle East

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Terms like “globalism” are dangerous for political science, economic planning, and area studies. They take valid trends sloganize them. Inevitably, academics turn them into intellectual cults, seek to find a few dominant trends to explain a complex world, and then try to fit nations into common molds. Economics divide as they always do. Some see globalism as a rising tide of economic growth that lifts all boats in the direction of development. Others as another version of the “north-south” conspiracy theories that explain why developing nations are the victim of developed countries, neoimperialists, and multinationals. Security analysts long for common threats in terms of threats and risks – often replacing the Cold War with new threats that are half real, but only half. In short, in a world that already tries to deal with complexity with gross oversimplification, the world would clear be better off if notions like globalism had never been invented.

That said, no one can ignore the latest buzzword, not matter how pointless it may be. There also are enough global and regional trends that do affect the Middle East so it is at least worth examining some of the projections currently being made about the region and how they affect its security. Moreover, it is possible that at times we ignore the forest for the tress and see Middle East security issues in terms that are too parochial. We round up the usual suspects – Iran, Iraq, and Libya, look at the odd border crisis, and then go through the tensions in the Arab-Israeli conflict. These remain real issues, but there are other issues that are equally important.

“Globalism,” Economic Growth, Demographics, and Stability: A Rising Tide Does not Lift All Boats

One such issue is the role of the Middle East in global economic development, and whether globalism will lift all boats and bring a major new movement towards development. There is no clear answer to that question, although development is ultimately a key aspect of regional security.

- First, the 23-odd nations of the Middle East are scarcely driven by the same economic conditions.
- Second, almost every nation in every region has the option of developing or failing to develop for internal reasons. In the case of the Middle East, the tendency has been to lag badly behind other regions, but there is no lack of valid reform plans. In fact, some Middle Eastern nations now have two or three decades of goods plans, and some are even beginning to take them seriously enough to act upon them.

A Regional Global Non-Competitor

The most recent reports and projections of the World Bank describe the Middle East as a major non-competitor in economic “globalism.” During the last 35 years (1965-1998) the Middle East and North Africa averaged 3.1% annual growth in their total GNP, but per capita income rose by only 0.2%. This was the lowest figure in the world except for Sub-Saharan Africa, where per capita income dropped by 0.3%. In contrast, Asia’s per capita income rose by an average of 5.7%. The next increase in the per capita income of the Middle East was 5.6%. The net increase

in the developing nations of East Asia and the Pacific was 159.6%.¹ When we talk about security, we should keep these trends in mind.

Things have not gotten better in recent years. The region experienced negative real economic growth during much of the 1980s, and economic growth only averaged about one-third of population growth during the 1990s – before the collapse of oil prices in 1997. The region's average per capita income rose by only 1.6% during the oil crash of 1997-1998. Although it recovered substantially in 1999 and the first half of 2000, it still seems likely that it lagged behind recovery in Asia, and in its rate of increase in real per capita income.² As for the north-south aspects of “globalism,” the average per capita income of the Middle East is now about \$2,030 using the World Bank method, and compares with \$22,350 for high-income states.

One key reason for this failure to develop was the some countries failed to plan with any economic realism. An even more important factor, however, was that many did develop the right plans and reform priorities but were unwilling to act decisively to implement the plans they made.

The World Bank also projects only modest near-term improvement. It estimates real GNP growth will be 3.2% in 2001, 3.5% in 2001, and 3.4% in 1999-2008. However, the growth in per capita income will be only 1.1% in 2001, 1.5% in 2001, and 1.4% in 1999-2008.³ Things are projected to be better for the more diversified exporters than do not depend too heavily on oil – with 4.4% estimated GNP growth during 1999-2008, but the oil exporting economies are only projected to grow by an average of 2.9% in spite of high oil revenues. The end result will be a net decline in real per capita income.⁴ These projections also compare with an average increase in real per capita income of over 5% annually in East Asia.⁵

The Problem of Demographics: Globalizing a Desert

When we talk about globalism and regional threats in the Middle East, economic mismanagement is only one side of the equation. Population growth is another key factor. This growth is not a part of “globalism” in the Western sense. In fact, most fully industrialized, high-income countries are near zero population growth, have aging populations, and face a need for immigration. Like much of the developing world, however, the Middle East averaged 2.8% population growth during the last 35 years (1965-1998), and many individual countries exceeded 3%. This population growth offset much of the growth in GNP.

Demographic pressure also has a special meaning in the Middle East. Modern cities and hotels, and gardens and irrigation do not affect the reality that the region is largely a desert. It is also a desert in which the population rose from 174 million people in 1980 to 286 million in 1998. While its population growth rate is projected to drop sharply from 2.8% during 1980-1998 to 1.8% during 1998-2010, it is also a desert in which the total population of the Middle East is still projected to grow to 390 million in 2010, and 475 million in 2030.⁶

It is interesting to consider a few tangible examples of what this population growth really means:

- Morocco grew from 19.4 million in 1980 to 27.8 million in 1998. It is projected to grow to 35.3 million in 2015, and 41 million in 2030.
- Algeria grew from 18.7 million in 1980 to 29.9 million in 1998. It is projected to grow to 39.8 million in 2015, and 48 million in 2030.
- Egypt grew from 40.9 million in 1980 to 61.4 million in 1998. It is projected to grow to 78.7 million in 2015, and 92 million in 2030.
- Iran grew from 39.1 million in 1980 to 61.9 million in 1998. It is projected to grow to 82.1 million in 2015, and 98 million in 2030.
- Iraq grew from 13 million in 1980 to 22.3 million in 1998. It is projected to grow to 31.3 million in 2015, and 38 million in 2030.
- Saudi Arabia grew from 9.4 million in 1980 to 20.7 million in 1998. It is projected to grow to 33.7 million in 2015, and 46 million in 2030.
- Yemen grew from 8.5 million in 1980 to 16.6 million in 1998. It is projected to grow to 26.6 million in 2015, and 36 million in 2030.

The Non-Globalization of “Water Wars”

Population growth and the failure of economic reform combine to compound the region’s agricultural and water problems. Far too often water is often described as a global problem in its own right, and one with special meaning for the Middle East. Water, however, is the symptom and not the disease. The region’s water resources are stretched to the breaking point by three interactive factors.

- First, the failure to modernize the economy in ways that take a much larger portion of the labor force off of the land and to modernize agriculture in ways that reduce water consumption.
- Second, the failure to price water and many other commodities and services at a market price and force efficiency.
- And third, trying to divide finite amounts of water – some of it fossil and unrenewable – among a population projected to increase by 2.7 times between 1980 and 2030.

The end result is already alarming. The arable hectares per capita have dropped from 0.29 in 1979-81 to 0.21 in 1995-1997, a drop of nearly 30% in about 15 years. At the same time, water consumption rose as the amount of irrigated land rose from 26% of cropland to 36%. The average annual rate of growth in Middle Eastern and North African agricultural output dropped from 5.5% during 1980-1990 to 2.5% during 1990-1998.⁷

The problem the Middle East faces is “water wars”. No series of fights over aquifers could solve even the victor’s problems for more than a few years to half a decade. The problem is a lack of economic diversification, market pricing, and agricultural restructuring -- all of which

are critical to reduce water consumption as well as to creating modern agriculture and reallocating the labor force.

“Regional Youthening” versus “Global Aging”

The combination of economic problems and population growth threatens the region in many other ways. One is a regional “youth explosion” at a time when developed nations like US, EU states, and Japan are worrying about “global aging.” Roughly 40% of the region’s population is now under 15 years of age. The region’s educational system is under extreme stress, and real and disguised unemployment for males between 18 and 25 years probably averages over 30%.⁸

This is a potentially explosive situation at any time, and it is compounded by weaknesses in the education system, and gross over-employment in meaningless or low productivity jobs in the state sector. In most countries it is compounded by a lack of housing, the high cost of marriage, and education which is not focused on producing men and women trained to be productive enough to be globally competitive. This youth explosion places a major burden on the extended family in the Middle East, and makes youth a natural target for extremism of all kinds.⁹

In a number of countries, these problems are still further compounded by a complex mix of labor migration problems. In the case of the poorer states, young men and women emigrate. In the case of many of the richer oil states, they cannot compete with low cost imported labor and have no desire to do so.

These pressures are contributing to the slow breakdown of the region’s traditional family, clan, and tribal system, which is based on villages and the extended family, in ways which have nothing to do with the Internet and bad Western television and movies. They are also linked to the ways in which population growth, a lack of agricultural modernization, and a lack of development planning push people of all ages into cities.

. The percent of urbanization in the total population of the Middle East rose from 37% in 1970 to 57% in 1996, and will probably rise to well over 70% by 2020.¹⁰ Hyperurbanization in areas with a population of over one million has risen from 17% of the total population in 1980 to 21% in 1998, and is projected to reach 24% in 2015.¹¹ An average of more than 25% of the population of each Middle Eastern country lives in its single largest city.¹² Urbanization has many advantages as a global trend, but in far too many cases in the Middle East, it is occurring without enough development to guarantee urban jobs, and a lack of proper infrastructure and housing intensifies the region’s problems.

The Global Decapitalization of the Middle East

Structural economic problems also keep the Middle East from being competitive in attracting global capital. It is fine to talk about the new global efficiency of capital flows, but one aspect of this efficiency is that Middle Eastern capital goes where it is safe and gets the maximum yield. There is some \$500-800 billion in private regional capital holdings outside the Middle East, and many wealthier governments invest in the West.

This does not mean that some foreign capital has not flowed into the Middle East. The World Bank estimates that net foreign direct investment rose from \$300 million in 1970, and \$2.5 billion in 1990, to \$8.1 billion in 1999. However, this figure scarcely compares with the outflow of direct investment, however, and the comparative total for net foreign direct investment in Latin America was \$89.4 billion in 1999, and \$61.5 billion in East Asia and the Pacific.¹³

If one looks at total net resource flows domestic and foreign private and government capital to the Middle East during 1997 – before the oil crash hit – the total was less than \$7 billion because of official outflows like debt payments. In contrast, the total inflow to East Asia was \$122 billion. It was \$116 billion for Latin America, and \$14.6 billion for South Asia.¹⁴

The Declining Global Trade Share of the Middle East

Pan Arabism is by definition a non-“globalist” slogan. It also has little or no meaning in terms of “regionalism.” Every major Middle Eastern state now trades largely with states outside the region, and has done so for decades. Intraregional trade has declined as a share of total trade for nearly a quarter of a century.¹⁵

If one looks at the most recent year for which directly comparable statistics are available, the Middle East and North Africa accounted for only 2.3% of world trade, including oil. Only 8.6% of this trade was with other Middle Eastern states.¹⁶ Put differently, Middle Eastern exports totaled \$205.7 billion in current dollars in 1980, and \$192.4 billion in 1999. East Asia exports grew from \$252.8 billion in the much shorter period from 1990 to \$698.7 billion during 1990 to 1999, or by a factor of 2.8.¹⁷

The Middle East has lagged badly in terms of export growth during the last decade (1987-1997). Its exports grew at an average annual rate of only 5.3% during 1987-1997. This compared with 13.2% for East Asia, 10% for South Asia, and 6.4% for Latin America.¹⁸ This is scarcely surprising given its agricultural problems and the fact that its growth in manufacturing output and industry was only about one-fifth to one-third that of East Asia.¹⁹

The Middle East has also lagged badly behind other developing regions in terms of export volume as a percent of total goods and services, and this is unlikely to change in the future. The World Bank projects growth rates of around 4% during 1999-2000, versus 8.0% for East Asia, 6.5% for Latin America, 7.7% for South Asia,²⁰

The grim fact about globalism and Middle Eastern trade is that the Middle East had steadily shrunk as a percent of total world trade for nearly forty years, except for brief bursts during periods of very high oil revenues. If increase in trade is a key measure of globalism, then the Middle East is outpacing Sub-Saharan Africa – the only of low-performing region in the world – in the race to become the least important region.²¹

The Impact of Globalism on These Security Problems

Another grim fact about globalism and the Middle East is that the region's economic and demographic problems are a self-inflicted wound. They are not the product of colonialism or occupation. Nations in other region's which faced far more serious burdens, and which had a far less well-developed economic base, have prospered. They are not the product of regional tensions and war. Taiwan and South Korea are two examples of nations shaped by war and that developed in spite of having to maintain massive levels of defense spending. They are not the product of a lack of democracy and the failure to impose foreign values. Each of Asia's "tigers" achieved high levels of development before any major political liberalization took place. They are not the result of discriminatory policies or conspiracies, regardless of how fashionable they may be in the region.

The Middle East has failed to compete globally as a region almost solely because of the failure of its own governing and intellectual elites. Where valid economic policies have been pursued, the results have been just as effective as in other parts of the world. Where unworkable concepts of Arab socialism, industrial development, and "green books" have been applied, they have failed – sometimes in spite of massive initial oil wealth. Corruption, nepotism, political squabble, and civil conflict cannot be blamed on anyone else. Economic aid, debt forgiveness, and heavy state borrowing have largely been wasted, and often been wasted by using the money to defer reform and effective action. With the exception of a few nations – including an Islamic Iran – population control has been ignored or dealt with through ineffective lip service.

These are scarcely points that any regional leader can claim to be unaware of, or which are raised only from the outside by Western scholars. The region is filled with highly competent analysts and economists who have raised these issues for decades, and which have written one competent economic reform plan after another. It should be clear, however, that there is nothing about "globalism" per se that will change this situation. The internet, global financial networks, and multinationals act to reward success, not failure. No one can compel even the region's citizens, much less outsiders, to misinvest their money in spite of the return on investment and the risk.

These are hard and unpopular truths, particularly in region where foreign aid is sometimes a necessary bribe for strategic influence and where there is a constant outside competition to export. The fact remains, however, that the most useful thing that outside governments, corporations, and experts can do is to tell the region the truth. Above all, it should be made clear that foreign aid and debt relief may buy time, but will solve nothing. The same is true about grandiose conferences on regional development. Regional development is a meaningless concept in a world of open global competition unless the region offers unique comparative advantage in trade. In the case of the Middle East this is true in some minor areas like tourism and some services industries. It can have no major macroeconomic impact. The Middle East must learn to compete on its own or continue to wither.

Globalism and Energy Exports: The Area Where the Middle East Does Matter

The one major exception to the Middle East's failure to compete on a global level has been its energy exports, almost solely because its vast energy reserves have given it a massive natural advantage. As will be discussed shortly, this is also an area where the global economy is projected to become massively more dependent on the Middle East in the future.

The Importance of Oil Reserves

The Middle East and North Africa have roughly 715 billion barrels of proven oil reserves, or a little over 68% of all the world oil reserves.²² According to estimates by the U.S. Department of Energy (DOE), MENA exported an average of 18.5 million barrels of oil a day (MMBD) in 1997. This was 35% of the world total of 53.2 MMBD. The DOE projects that total MENA oil exports will reach 39.1 MMBD by 2020. This will be 75.85% of the estimated world total of 51.6 MMBD.²³ It will also be an increase of more than 110% over the average current level of exports, and a near doubling of the Gulf's share of total world exports.

The Gulf dominates the Middle East's role in world energy exports. It has about 675 billion barrels of oil and two-thirds of the world's proven oil reserves.²⁴ According to estimates by the U.S. Department of Energy (DOE), it exported an average of 16.3 million barrels of oil a day (MMBD) in 1997. This was 31% of the world total of 53.2 MMBD. The DOE projects that Gulf oil exports will reach 36.4 MMBD by 2020. This will be 70.5% of the estimated world total of 51.6 MMBD.²⁵ It will also be an increase of more than 120% over the average current level of exports, and a near doubling of the Gulf's share of total world exports.

The key to the Middle East and North Africa's sharply expanding strategic importance lies in two factors.

- First, oil will retain its importance as a critical energy supply well beyond the period where energy analysts feel it is possible to make meaningful predictions. While the Energy Information Agency (EIA) of the DOE projects that natural gas will be the fast growing source of energy during 1998-2020, rising at an annual rate of 3.2%, oil consumption will rise by 1.9% a year during this period. Oil will dominate transportation use of energy and will provide 38% of all energy use in quadrillions of British thermal units (Quads) in 2020. This compares with 39% in 1998. The reason that oil's share remains so high as a percent of total world energy consumption is a lower growth in coal, a decline in nuclear energy, and limited increases in renewables and other new sources of energy.²⁶
- Second, it lies in the sheer size of the region's oil reserves, particularly those in the Gulf. In spite of nearly three decades of intensive exploration outside MENA since the oil embargo of 1974, the region now has a larger share of proven world reserves than it did in 1973. Its share of potential world reserves is even higher.²⁷ It is these oil reserves that give MENA the capability to make major increases in its oil production capacity and exports over the coming two decades.

Projected Increases in Oil Production

In fact, the reference case estimates of the EIA calls for total MENA oil production capacity to increase from 27.1 MMBD in 1998 to 48.1 MMBD. This is a rise from 34% of total world capacity in 1998 to 42% in 2020.²⁸

The key to this rise will be a rise in Gulf production capacity from 18.7 million barrels per day (MMBD) in 1990 and 24.0 MMBD in 1998, to 28.0 MMBD in 2005, 31.4 MMBD in 2010, 36.9 MMBD in 2015, and 44.8 MMBD in 2020. This is a rise of 87% between 1998 and 2020. It also means that Gulf oil production capacity rises from 30% of total world capacity in 1998 to 39% in 2020, and that the Gulf is projected to be virtually the only region in the world which will be able to keep oil production capacity substantially above actual production.²⁹

The shift in production capacity in other MENA states will be very different. There is a projected rise from 2.8 million barrels per day (MMBD) in 1990 and 2.9 MMBD in 1998, to 3.6 MMBD in 2005, and 3.9 MMBD in 2010. Production capacity will then drop to 3.7 MMBD in 2015, and 3.5 MMBD in 2020,³⁰

As part of this increase, the EIA projects striking increases in the oil production capacity of key Middle East and North Africa states.

- Saudi Arabia is the lynch pin of world oil production. Its capacity is estimated to increase from 11.4 MMBD in 1998 to 22.1 MMBD in 2020, a 94% increase. Kuwait's capacity is estimated to increase from 2.6 MMBD in 1998 to 5.2 MMBD in 2020, a 100% increase. The UAE's capacity is estimated to increase from 2.7 MMBD in 1998 to 5.1 MMBD in 2020, a 89% increase..
- Two potentially hostile and sanctioned Gulf states are also projected to make major increases. Iran's capacity is estimated to increase from 3.9 MMBD in 1998 to 5.5 MMBD in 2020, an 40% increase. Iraq's capacity is estimated to increase from 2.8 MMBD in 1998 to 6.2 MMBD in 2020, an 120% increase.³¹
- Developments outside the Gulf are far less important. Algeria's capacity is estimated to increase from 1.3 MMBD in 1998 to 2.2 MMBD in 2010, but drop to 2.0 MMBD in 2020. Libya's capacity is estimated to increase from 1.5 MMBD in 1998 to 1.7 MMBD in 2010, but drop back to 1.5 MMBD in 2020.³²

“Globalism” and the Flow of Oil Exports

Gulf oil exports are measured in different ways, and estimates differ according to source. According to BP Amoco, they increased from a recent annual average low of 13.4 million barrels a day in 1989 to 18.3 million barrels a day in 1999. These totals included 15.9 million barrels a day worth of crude and 2.4 million barrels worth of product.³³ The DOE uses somewhat lower figures, and estimates total Gulf oil product at around 17.4 million barrels in 1999.³⁴

US imports from the Gulf totaled less than 1.1 MMBD of crude and product in 1974, when the oil embargo began. They reach a high of 2.0 MMBD in 1977, then dropped to an average low of only 311,000 barrels per day in 1985. Since that time, they have risen from around 1.6 MMBD in 1997 to 2.1 MMBD in 1998 and 2.4 MMBD in 1999.³⁵ To put these totals in

perspective, total US imports were 6.3 MMBD in 1973, 6.9 MMBD in 1980, 8.0 MMBD in 1990, 8.8 MMBD in 1995, and 10.6 MMBD in 1999. As a result, the Gulf provides roughly one-quarter of the steadily increasing level of US oil imports, which have a total annual cost well in excess of 700 million dollars.³⁶ In contrast, domestic US crude oil production has recently ranged between 5.8 and 6.2 MMBD, down from averages of well over 9 million barrels in 1973, with an additional 1.6-19 million barrels per day of natural gas plant liquids.³⁷

The percentage of oil that flows directly to the United States from the Middle East and North Africa at any given time, however, has little or no strategic and economic importance. Oil is a global commodity and the U.S. must pay the same globally-determined price as any other nation. In a crisis, the U.S. is required to share all available imports in a crisis under the monitoring of the International Energy Agency.

Furthermore, the U.S. economy is dependent on the overall health of the global economy and on energy-intensive imports from Asia and other regions. One of the many problems in US energy policy is that the US does not officially recognize the importance of its indirect imports, although Gulf oil is already critical to US's main sources of manufactured goods in Europe and Asia. All US data on energy imports is totally obsolete and misleading for this reason, but no recent Administration has cared enough to correct this critical omission in the basic data it uses for planning.

The EIA does, however, project the trends in oil exports, and total Middle East and North Africa exports to North America are projected to rise from 2.3 MMBD in 1997 to 4.4 MMBD in 2020. Equally important, exports to Western Europe are projected to rise from 5.4 MMBD to 5.8 MMBD, while exports to Asia are projected to rise from 9.5 MMBD to 19.9 MMBD. MENA oil exports will maintain Europe's trading economy and be the key to Asia growth.³⁸

Furthermore, the Middle East and North Africa will be even more important if problems occur in the exports of other troubled regions. The exports of the FSU are projected to rise from 2.8 MMBD in 1997 to 8.3 MMBD in 2020, North Africa is projected to rise from 2.3 MMBD to 2.7 MMBD, and West Africa from 1.8 MMBD to 2.0 MMBD.³⁹ The risk of some event in one country in these three regions resulting in a significant interruption in oil production is almost certainly as high as in the Middle East and North Africa. In this case, what comes round literally means that oil must go round.

Gas Reserves and Exports

The story concerning gas is less dramatic, but still important. Total global consumption of natural gas is projected to rise from 83.9 Quads in 1998 to 173.3 Quads in 2020, an increase of 106%.⁴⁰ The Gulf has some 49.5 trillion cubic meters of reserves, or roughly 34% of the world total. If other Middle Eastern states like Egypt, Algeria, and Libya are added to this total, they provide another 241.3 trillion cubic meters of gas, or 4.7% of the world's proven gas reserves, raising the total to 38.7%.⁴¹

At present, the Gulf and the Middle East are relatively small gas exporters. Oman is the only Gulf nation with significant pipeline out and ships only 1.5 billion cubic meters out of the world's pipeline capacity of 360.51 billion cubic meters. Algeria is a much bigger pipeline shipper, but still ships only 33.7 billion cubic meters, about 9% of world supply.⁴²

The world LNG trade totals around 124 billion cubic meters. Qatar and the UAE are the only major Gulf shippers. Qatar now ships 8.13 billion cubic meters – roughly 7% of the world total – and the UAE ships 7.1 billion cubic meters – roughly 6% of the world total. Algeria and Libya are more significant. Algeria now ships 25.76 billion cubic meters – roughly 21% of the world total – and the Libya ships 0.96 billion cubic meters – less than 1% of the world total. Taken as a whole, the Gulf accounts for 16.73, or 3.5% of the total world gas exports of 484.71 trillion cubic meters. The Middle East accounts for 76.1 trillion cubic meters or 15.7% of world exports.⁴³

The future, however, is likely to be a very different story. Gulf gas reserves are so large that nations like Iran, with the world's second largest reserves of 812.3 TCM, are major potential exporters. Qatar as at least 300 TCM and already plans to be a major exporter. The UAE has 212 TCM and Saudi Arabia has 204.5 TCM and both plan to steadily increase their exports in the form of petrochemicals and feedstocks. Oman plans to expand its exports although it has only 26.4 TCM of proven reserves. Algeria has 159.7 TCM, Egypt has 35.2 TCM, and Libya has 46.4 TCM. All plan to increase their gas exports.⁴⁴

Energy Exports and Oil Wealth

Direct and indirect Energy exports account for about 40% of the total export earnings of the Middle East, and vast amounts of money are involved. However, oil wealth is as relative as any other form of wealth. In the case of the Middle East, oil wealth must be measured in terms of both total national needs and per capita income, and a combination of fluctuation in oil prices, high population growth rates, and a failure to modernize and diversify the overall economy threatens to turn oil wealth into oil poverty.

Even with today's high oil prices, even the wealthy Southern Gulf states have only about 40% of the real per capita income they had at the peak of the oil boom in the early 1980s, and there is little prospect for anything other than a slow decline in per capita oil wealth even if oil remains at \$30 per barrel in constant dollars. There are important exceptions. Kuwait (\$22,300), Qatar (\$10,300), and the UAE (\$17,870) maintain high per capita incomes, but Saudi Arabia's "wealth" (\$6,900) is becoming increasingly marginal, Iran has a per capita income of \$1,650, Algeria has \$1,520 dollars, Libya has \$6,700 and Iraq's per capita income is unlikely to be higher.⁴⁵

Many states, including virtually all Southern Gulf states, are also heavily dependent on foreign labor at a time when many of their own younger citizens lack not only jobs but also the training and work ethic to get them. In many cases, these problems are reinforced by poor immigration policies that are routinely violated by the toleration of illegal immigrants, the issue of

visas for money, and the existence of laws that require major benefit packages for native labor, thus making it difficult to hire or fire native labor. Some countries are trying to solve the problem with erratic purges of foreign labor, but most still lack consistent policies.

Massive swings in oil revenues have contributed to the problems the Middle East has faced. Total OPEC oil revenues were worth around \$77 billion in constant 1990 dollars in 1972. After the October War and the 1974 oil embargo, they leapt to levels of around \$340 billion and then dropped back to less than \$300 billion during 1975-1978. The fall of the Shah of Iran and the start of the Iran-Iraq War drove them to a new peak in 1980, when they were worth \$438.8 billion. An oil price collapse began in 1985, and revenues dropped to \$83 billion in 1986. They gradually rose back to levels of around \$150 billion a year in early 1997, but a new "oil crash" began late that year. Oil revenues dropped to \$80 billion in 1990 dollars in 1998, and then rose to \$162 billion in 2000 (\$132.8 billion in current dollars in 1999 and \$211.5 billion in 2000.)

From the Middle East's perspective, the price increase is a major blessing. Total OPEC revenues in 2000 are estimated to be 59% higher in 1999, which was a 34% rise over 1998. They will be the highest levels in real terms since 1984, and in current dollars since 1981. The problem is that such revenues will still be only 37% of their peak in 1980.⁴⁶ Since that time, the population of the Middle East has more than double, reducing oil wealth per capita to less than one-fifth of their 1980 level.

Oil wealth is also relative in other ways. A total of \$211.5 billion in oil exports is scarcely small change, but this includes all OPEC states. In contrast, total world exports are worth well over \$6.7 trillion dollars, and over \$5.2 trillion come from high income developed states. Exports from East Asian developing countries average well over \$614 billion dollars, and Latin America exports \$336 billion. It is also interesting to analyzing the trend in total exports as estimated by the World Bank. Total exports by developing countries in East Asia increased by 484% during 1980-1998, by 309% in South Asia, and by 194% in Latin America and the Caribbean. They *dropped* by 26% in the case of the Middle East and North Africa. Oil wealth simply does not compete with balanced regional economic development by the standards of "globalism."⁴⁷

The Impact of Low Oil and Gas Revenues on Regional Energy Supply

The most serious issue affecting the Middle Eastern energy exporters is the impact of relatively low to moderate oil revenues on nations with high population growth and economies with limited diversification. The "oil crash that began in 1997 led to a series of unexpected cuts in oil prices that reached lows of \$10 a barrel and cuts in annual oil revenues that approached 30-40%. The resulting cuts in oil revenues affected every major oil and gas producer in the Middle East and reduced the region's ability to maintain both welfare payments and entitlements, and short-term investment.

Ironically, low prices then turned to high prices with equal alacrity. In March 1999, however, OPEC's member countries, together with some important outside producers, settled on a program

of stringent oil production cuts. Following the implementation of cutbacks, the price of crude oil soared back upward over the course of 1999 and eventually reached levels not seen since the 1991 Persian Gulf crisis. The resurgence of oil revenues and oil dependent state budgets eased the region's short-term economic problems – at least through the summer of 2000.

Nonetheless, the upswing in oil prices has not wiped away the economic difficulties facing Middle East oil producers. Average oil export revenues still have not climbed back to 1997 levels in constant dollars, as the current high oil prices were achieved at the cost of lower production. Meanwhile, the fundamental dependence of these economies on oil revenues remains unchanged. The 1997-1998 crash serves as an unpleasant reminder of what may happen if oil prices take another unexpected dive in the future.

The increasing limits on oil revenues relative to national budgets and population growth has had a dire impact on economies that have failed to modernize and diversify. These revenue problems interact with such issues as the impact of sanctions on several critical suppliers, the size of future demand for exports, national policies to increase production and export capacity, and the ability to obtain the investment necessary to implement those policies. Limited oil resources affect political stability and influence a wide range of social problems, most importantly the impact of high rates of population growth, the inability to sustain past welfare and entitlement programs, and the need to create new economic structures which offer suitable employment and incentives for investment.

As has been discussed earlier, most of these pressures posed problems for the region's oil exporters long before the "oil crash" of 1997-1998. They are the result of years of over-reliance on oil wealth, economic mismanagement, and the failure of regional governments to realistically plan and budget for the future. Some key Middle Eastern governments are entering their 10th year of budget deficits. Saudi Arabia and Iraq are key cases in point.

Other countries are at least at the beginning a major structural crisis in which they cannot afford to implement their five year plans, and cannot fund both their present levels of entitlements and investment. Cases in point include Algeria, Syria, Bahrain, Iran, Oman, and Yemen. Most Middle Eastern governments now face a major short-term budget crisis, and this seems to include even states with relatively high ratios of exports to population: Kuwait, Qatar, and the emirates other than Abu Dhabi and possibly Dubai.

These growing budget problems have already led to under-investment in infrastructure, economic diversification, and state industries as well as the petroleum sector. Governments no longer has all the money they need to maintain entitlement and welfare, and most energy exporting economies cannot attract enough outside or internal investment to meet national needs. Most of the budgets in the Middle Eastern energy exporting states undergo consistent turbulence, as states scramble to cut expenditures, raise revenues, and minimize budget deficits. Signs of the seriousness of this issue are the fact that Saudi Arabia still faces a multi-billion dollar deficit in 2000, and Crown Prince Abdullah's speech in November 1998, warning that the state would have

to cut social services. If low or low-to-moderate oil revenues occur again, the resulting cuts in government revenues could force many Middle Eastern countries to cut their budgets and development plans in ways that result in significant economic, social, and political tradeoffs..

Energy Exports and Security

The basic forces driving Middle Eastern energy exports will be the policies of the individual exporting nations, and market forces. In this sense, “globalism” will shape most of the decision making by exporting states in terms of maintaining and expanding production capacity, the actual volume of exports, and price. There will be a natural division of interest between those nations desperate to maximize their own revenues and those interested in creating a stable, high level of demand for oil. In general, states will invest only to maximize oil revenues, not out of any theoretical considerations about the global need for energy.

The practical problems for both regional and global security are the following:

- Not every exporting state will be willing to let the market decide. Iraq’s invasions of Iran and Kuwait are the most blatant examples of sheer greed transformed into aggression, but states desperate to maximize revenue will also seek political ways to limit the production of other states. The need for outside and regional efforts to protect those moderate states willing to rely on market forces from political pressure and aggression will be just as great in the future as in the past.
- Violent swings in oil prices and revenues of the kind that took place between 1997 and 2000 serve no one’s interest. Very low prices mean the region’s chronic economic problems encourage instability and prevent adequate investment in meeting future demand. Very high prices encourage importers to turn to other sources of energy and reduce demand, and have a backlash effect in slowing economic and budget reform in the exporting nations. The idea of seeking a stable spread of prices without gross interference in the market benefits producer and consumer alike. It also allows the region to move towards a more stable form of economic development.
- The sheer scale of increase in exports and production capacity projected by the EIA -- and projected in near identical form by OPEC and the International Energy Agency – raises serious questions about the effectiveness of market forces without a clear consensus between the exporting and importing nations, and new arrangements to provide the necessary investment. It is impossible to see how the region’s exporting nations can now finance both their energy and other investments over the period between now and 2020 without (a) major efforts to repatriate domestic capital, and (b) massive transfers of foreign capital far larger than those that have taken place in the past. Major structural economic reform is a partial answer, but governments must consider a much broader form of dialogue of the kind Crown Prince Abdullah started in 1998. Developed nations must encourage investment and make it clear that they are willing to support regional exporters with the necessary capital to increase their production and export capacity.
- The massive increases in oil and gas production and exports just outlined present another case for economic reform. Subsidized domestic oil and gas prices are a strong incentive for high levels of inefficient demand that reduces the levels available for export.
- These same massive increases greatly increase the security problem. Not only does nearly twice the oil and gas have to move with constant on-time predictability, most of the increase will have to move

by sea and out of the Persian Gulf towards Asia. Barring the development of massive new oil ports in Iran, on the coast of Oman, or in the Red Sea, the problem of vulnerability and chokepoints will increase radically as a result of globalization.

Globalism, Security, and Middle Eastern Stability

The most critical, single geopolitical issue affecting the region is whether the Middle East and North Africa will act as a stable supplier of oil and gas exports at market-driven prices. The secure flow of such energy exports is the key measure of security by the standards of “globalism,” and war and internal conflict present a continuing threat. The Middle East is so heavily dependent on the income from energy exports that few nations will voluntarily limit their export revenues. However, war has already had a major impact on energy exports in the past, and sanctions affect key exporters like Iran, Iraq, and Libya.

Not Every War has a Global Impact

In several cases, Middle Eastern states are either already at war, or there is a serious risk of future conflict, but the risks involved are unlikely to have any global impact. Mauritania is the scene of a low-level race war between Arab and Black African ethnicities. Morocco is still in the process of a long war with the Polisario for control of the Western Sahara. Algeria is involved in a bitter civil war between its ruling military junta and Islamic extremists. Tensions have grown between Libya’s leader, Muammar Qadhafi and Libya’s Islamists, and there is low-level fighting in a number of areas. The Egyptian government is also still fighting a low-level campaign against Islamic terrorists.

The Southern Gulf states are relatively stable, but low-level tensions remain between Bahrain and Qatar, there is some civil violence in Bahrain, and it is not clear that Saudi Arabia and Yemen have reached a stable settlement over their common border.

The Red Sea area is the scene of several conflicts. The Sudanese civil war threatens to enter its second decade, and the death toll from fighting and starvation will probably exceed well over one million. Yemen still faces tensions between its government and key tribal groups in the South, and Ethiopia continues to clash with Eritrea over the control of their border area.

The Arab-Israeli Conflict is a Different Case

The Arab-Israeli conflict is a different case. It not only affects the hearts and minds of the entire region, it creates a linkage between the Arab-Israeli confrontation states, Israel’s nuclear and missile forces, and proliferation in Iran and Iraq. It undermines the ties between the moderate Southern Gulf states and the West, and it tends to fracture three of the world’s great religions.

In spite of the Arab-Israeli peace process, the relations between Israeli and Palestinians can still take the form of conflict. Israel is still formally at war with Syria and Lebanon, and faces a serious rejectionist threat from terrorists, Iran, and Iraq. Following the Israeli withdrawal from South Lebanon, Israel still faces a security threat from Hezbollah— a Shi’ite Islamic movement

with strong Iranian and Syrian sponsorship. Lebanon remains under Syrian and Israeli occupation, and its factions still present the threat of another round of civil war.

Finding a solution, and a peace that all parties can agree to, is more than a regional issue. It is a global one.

Iran and Iraq and the New Great Game

Iran and Iraq are two very different nations, although both are projected to play a critical role in energy supply. As has been described earlier, Iran's production capacity is estimated to increase from 3.9 MMBD in 1998 to 5.5 MMBD in 2020, an 40% increase. Iraq's capacity is estimated to increase from 2.8 MMBD in 1998 to 6.2 MMBD in 2020, an 120% increase.⁴⁸

Both nations continue to provide a risk to the region's stability that could have a major impact on the global economy. While Iran may be becoming more moderate, there is still a serious risk of internal clashes between its "moderates" and "traditionalists," and it presents a major problem in terms of proliferation, continued hostility to any U.S. presence in the Gulf, and rigid opposition to any compromise that could lead to an Arab-Israeli peace. Iraq remains an aggressive opportunist and serious potential threat to Kuwait and Saudi Arabia, and is almost certain to resume its military build-up and efforts to proliferate the moment UN sanctions are lifted.

Some answer has to be found to dealing with each nation that can deal with problem of both regional and energy security. At one level this means continuing every effort to halt and limit proliferation, and reduce the military build up in Iran and Iraq. At another level, it means focusing on those aspects of Iranian and Iraqi behavior that pose a threat, rather than maintaining broad economic sanctions

In the case of Iran, the US has good reasons to question its present sanctions policy, and to consider whether an economic opening to Iran could encourage both Iran's moderates and the development of adequate energy supplies. At the same time, it is far from clear that any such action by the US can eliminate the threat posed by Iran's proliferation, hostility to Israel, and support of violent extremist movements. The US will have to find a way to establish correct, if not friendly relations, but both the US and its regional allies will also have to maintain a high degree of military deterrence as well.

The world has far fewer incentives to change its policy towards Iraq, but it may well be forced to do so. Economic sanctions have already eroded badly because of the hardships they have imposed on the Iraqi people, and the massive increases in Iraqi oil revenues under the UN oil-for-food program. There is little real point in preventing the development and expansion of Iraq's oil and gas industry and oil exports. At the same time, Iraq remains a major conventional military threat. The UN effort to eliminate Iraq's weapons of mass destruction has been effectively paralyzed since the spring of 1998, when UNSCOM was first expelled from the country,

Putting an End to the “New Great Game”

At the margins of the region, the US has become over-engaged in the Caspian and Central Asia. The Clinton Administration involved the US in this “new Great Game” to obtain access to what were perceived as massive oil reserves, limit Russian influence, and prevent Iran from profiting from Caspian oil. In practice, Caspian and Central Asian energy reserves seem to be the size of a new North Sea at most, and will develop slowly. There is no reason to challenge Russia in its own backyard, particularly since Chechnya has shown Russia that it has little reason to reabsorb Islamic and non-Russian minorities.

“Pipeline politics” seem unlikely to hurt Iran’s military efforts in any way, but they already interfere with the operations of US companies in the Caspian and Central Asia, create pointless political antagonism in Iran and Russia, and attempt to legislate energy development in Turkey. US interests in the Caspian and Central Asia at most require the US to seek a level playing field for US companies in developing the region’s energy resources. The best way for the US and the world to win this particular “new great game” in terms of globalism is not to play it.

“Globalism” and Regional Militarism

It may seem strange to come to the military dimension of Middle East security last, and largely in passing. The fact is, however, that “globalism” – to the extent it exists – should look beyond the immediate and very real security concerns of the region and focus on its global importance. By that standard, only the Arab-Israeli confrontation and Iran and Iraq represent conventional military threats that could effect enough of the world economy to really matter.

These are powerful reasons to push ahead with the Arab-Israeli peace process and to ensure the security of the Gulf and of the transit of oil. They are good reasons to ensure that any nation that is not part of the Arab-Israeli peace process is deterred from major military action, to build-up the military capabilities of the Southern Gulf states, and to maintain strong US and British power projection forces. These military issues do have global importance.

Most other major regional military and security concerns pale when they are examined in global terms. Some classic problems have, in fact, declined. Middle Eastern military expenditures declined from 6.8% of all world expenditures in 1987 to 6.2% in 1997, largely because of the sanctioning of Iran, Iraq, and Libya and because the FSU ceased to provide massive arms transfers at little or no cost. This latter development has largely crippled Syria’s conventional military forces and helped to secure the Arab-Israeli balance.⁴⁹

In fact, Middle Eastern military expenditures dropped by 6.7% in real terms during the decade from 1987-1997, in spite of the Gulf War. Middle Eastern military expenditures also dropped from 17.6% of the region’s total Gross National Product in 1987 to only 7.6% in 1997, and they dropped from 45.1% of all central government expenditures to only 22.7% during the same period. This was the first sustained drop in the regional military effort since 1948, although

total military expenditures still totaled \$52.4 billion in 1997, plus another \$5.5 billion for North Africa.⁵⁰

Arms sales showed similar trends. Measured in constant 1997 US dollars, they dropped from \$30.0 billion in 1987 to \$19.9 billion in 1997. They also dropped from an extraordinarily high 27% of all regional imports to only 12.3%.⁵¹ These are not good figures, and arms imports have rebounded in North Africa. Military expenditures and arms transfers still add to the region's economic problems. A total of 11.1 men are under arms in the Middle East for every 1,000 people in the population – the highest percentage in the world.⁵²

At the same time, these figures are not the kind of “tragedy of arms” that burdened the region in the 1970s, 1980s, and first half of the 1990s. Whatever harm sanctions may have done, they have had a major impact in limiting the efforts of some of the region's most aggressive states. In fact, this movement away from militarism is one of the few areas where the Middle East has kept pace with the positive trends in “globalism.”

Transnational Threats: Terrorism, Narcotics, and Cybercrime.

The Middle East has done less well in some of the less attractive areas of “globalism.” It has become a major net importer of drugs, and while no statistics are available, it has joined other regions in seeing an increase in organized and cybercrime – particularly in the Southern Gulf, Israel, and Egypt. The Middle East does share a common global concern with dealing with such transnational threats, and in this sense, “globalism” is an issue. At the same time, it is not clear what conclusions can be drawn from this fact. Narcotics are a tragedy but they are also a global fact of life. So is the growing globalization of organized and cyber crime.

The patterns in terrorism are more mixed. The US State Department and US intelligence report that Middle Eastern terrorist groups and their state sponsors continue to plan, train for, and carry out acts of terrorism at levels comparable to those in recent years. There is good news. The State Department reports that recent casualty levels have been relatively low, and there have been few major incidents that might have caused high numbers of fatalities. Nonetheless, important international terrorist groups remained active and continued to try to mount lethal attacks. These included Usama Bin Ladin's multinational al-Qaida organization as well as The Islamic Resistance Movement (HAMAS) and Palestinian Islamic Jihad (PIJ), both of which receive support from Iran.⁵³

There has been real progress in Egypt. The State Department reports that, there were no terrorism-related deaths in 1999 -- for the first time in years -- due in large measure to successful counterterrorist efforts by the Egyptian Government and a cease-fire declared by the Gama'at al-Islamiyya, Egypt's largest terrorist group. The Algerian Government has also made progress in combating domestic terrorism during the year, undertaking aggressive counterinsurgency operations against the Armed Islamic Group (GIA), weakening the GIA's campaign of indiscriminate violence against civilians. The pace of killings has slowed, although suspected GIA militants still carry out massacres.

Palestinians and Israeli Arabs opposed to the peace process mounted small-scale terrorist attacks in Israel. However, the State Department reports that both Israel and the Palestinian Authority (PA) scored successes in their efforts to disrupt these groups' operation. Jordanian authorities in December arrested a group of terrorists associated with Usama Bin Ladin's al-Qaida organization, and overall security conditions in Lebanon continued to improve.

Four nations do remain a potential problem in terms of global and regional terrorism. Iran, Syria, and Iraq all persisted in their direct or indirect state sponsorship of terrorism, although this rarely had global effects or implications. In most cases, this support has been limited. It has mainly included providing assistance, training, or safehaven to terrorist groups opposed to the Middle East peace process. In some cases, particularly Iran, it also included targeting regime dissidents and opponents for assassination or harassment. The State Department reports that Libyan support for terrorism has declined significantly in recent years, but Libya has continued to have residual contacts and relationships with terrorist organizations.

It is also important to note, however, that global aspects of terrorism extend into the region from outside it. Europe and the US are important sources of funding for extremist and terrorist movements inside the region. Afghanistan and Pakistan have become sanctuaries or sources of funding for movements like Usama Bin Ladin's al-Qaida. Afghanistan has also become a massive source of narcotics and narcoterrorism inside Iran. The sometime stereotype of the Middle East as the major source of terrorism does not fit the current patterns in terrorism in terms of either the number of terrorist incidents in various regions of the world or total casualties from terrorism, and at this moment in time, more violent terrorism from Islamic extremists occurs outside the Middle East than within it.

Asymmetric Warfare

There is another aspect of military "globalism" that affects the Middle East and North Africa. Every reaction produces an equal and opposition reaction, and hostile states have found two major counters to the kind of technological advantages that moderate regional states and US power projection forces can now exploit in conventional warfare. One is the use of asymmetric warfare and the other proliferation of weapons of mass destruction.

There is nothing new about asymmetric warfare per se, or about the fact it poses a global threat. China posed a major asymmetric threat to the US in Korea by using deception, surprise, and human wave tactics. The US was decisively defeated in Vietnam by asymmetric warfare although it won virtually every conventional battle. The US was driven out of Lebanon and Somalia by such methods of warfare, and faced a major threat in Kosovo.

The Department of Defense report on the lessons of the war in Kosovo notes that,⁵⁴

"military ground forces in Operation Allied Force. Milosevic was unable to challenge superior allied military capabilities directly. His fielded forces were compelled to hide throughout most of the campaign,

staying in caves and tunnels and under the cover of forest, village, or weather. He was forced to husband his anti-aircraft missile defenses to sustain his challenge to our air campaign. Therefore, he chose to fight chiefly through asymmetric means: terror tactics and repression directed against Kosovar civilians; attempts to exploit the premium the alliance placed on minimizing civilian casualties and collateral damage; creation of enormous refugee flows to create a humanitarian crisis, including in neighboring countries; and the conduct of disinformation and propaganda campaigns.

“These tactics created several serious challenges for our forces, all of which we were able to overcome thanks to excellent training, leadership, equipment and motivation. Nevertheless, these challenges underscored the continued need to develop new operational concepts and capabilities to anticipate and counter similar asymmetric challenges in the future. Simply put, adversaries will use unconventional approaches to circumvent or undermine U.S. and allied strengths and exploit vulnerabilities. Milosevic illustrated very clearly his propensity for pursuing asymmetric approaches. He chose his tactics in the hope of exploiting the NATO nations’ legitimate political concerns about target selection, collateral damage, and conducting military operations against enemy forces that are intentionally intermingled with civilian refugees.

“In the case of refugee flow, the time-scale was so rapid and the numbers so great that it initially overwhelmed the neighboring countries, particularly the Former Yugoslav Republic of Macedonia (FYROM) and Albania. The humanitarian crisis created by Milosevic appeared to be an attempt to end NATO’s operation by “cleansing” Kosovo of ethnic Albanians, overtaxing bordering nations’ infrastructures, and fracturing alliance cohesion. He failed, despite all these efforts, principally because NATO adapted to the changing circumstances. One general lesson learned is that similar attempts at asymmetric challenges should be anticipated in future conflicts as well.”

It is important to note that Serbia had at least some aid from Iraq in planning asymmetric operations during the Kosovo conflict, and while there have been no major uses of asymmetric warfare from within the Middle East, there are numerous other examples of a shift toward asymmetric threats. For example, Chinese military literature shows a new interest in asymmetric warfare, and Iran has shown considerable originality in using submarines, mines, unconventional forces, and anti-ship missiles to create a tailored asymmetric threat to naval movement through the lower Gulf.

As a result, the Middle East is vulnerable to asymmetric forms of warfare in many ways:

- *Sudden or surprise attack*: Power projection is dependent on strategic warning, timely decision making, and effective mobilization and redeployment for much of its military effectiveness..
- *Saturation*: There is no precise way to determine the point at which mass, or force quantity, overcomes superior effectiveness, or force quality -- historically, efforts to emphasize mass have been far less successful than military experts predicted at the time. Even the best force, however, reaches the point where it cannot maintain its “edge” in C⁴I/battle management, air combat, or maneuver warfare in the face of superior numbers or multiple threats. Further, saturation may produce a sudden catalytic collapse of effectiveness, rather than a gradual degeneration from which the Israeli Defense Force could recover. This affects forward deployment, reliance on mobilization and reliance on defensive land tactics versus preemption and “offensive defense.”

- *Taking casualties:* War fighting is not measured simply in terms of whether a given side can win a battle or conflict, but how well it can absorb the damage inflicted upon it. Many powers are highly sensitive to casualties and losses. This sensitivity may limit its operational flexibility in taking risks, and in sustaining some kinds of combat if casualties become serious relative to the apparent value of the immediate objective.
- *Inflicting casualties:* Dependence on world opinion and outside support means some nations increasingly must plan to fight at least low and mid-intensity conflicts in ways that limit enemy casualties and collateral damage to its opponents, and show that Israel is actively attempting to fight a “humanitarian” style of combat.
- *Low-intensity combat:* Low-intensity conflict makes it much harder to cannot most technical advantages in combat -- because low-intensity wars are largely fought against people, not things. Low-intensity wars are also highly political. The battle for public opinion is as much a condition of victory as killing the enemy. The outcome of such a battle will be highly dependent on the specific political conditions under which it is fought, rather than RMA-like capabilities.
- *Hostage taking and terrorism:* Like low-intensity warfare, hostage-taking and terrorism present the problem that advanced technology powers cannot exploit their conventional strengths, and must fight a low-level battle primarily on the basis of infantry combat. HUMINT is more important than conventional military intelligence, and much of the fight against terrorism may take place in urban or heavily populated areas.
- *Urban and Built-Up Area Warfare:* Advanced military powers are still challenged the problem of urban warfare. They did not perform particularly well in urban warfare. Most western forces are not trained or equipped to deal with sustained urban warfare in populated areas during regional combat -- particularly when the fighting may affect large civilian populations on friendly soil.
- *Extended conflict and occupation warfare:* Not all wars can be quickly terminated, and many forms of warfare -- particularly those involving peace-keeping and peace- enforcement -- require prolonged military occupations.
- *Weapons of mass destruction:* The threat or actual use of such weapons can compensate for conventional weakness in some cases and deter military action in others.

Asymmetric warfare is not a one-way street. For example, the US use of carbon fiber weapons against power grids in Kosovo illustrates the fact that moderate states in the Middle East and North Africa, and US and Western power projection forces, can introduce new asymmetric warfare techniques as well as radical states and extremist movements. However, it is clear that the moderate states in the region need to recognize and reduce their vulnerabilities in such forms of conflict, which include protracted conflict, urban warfare, guerrilla warfare, use of human shields, casualties, collateral damage, and the failure to plan effectively for conflict termination.

Proliferation is the Most Dangerous form of Military “Globalization”

The US and Israeli focus on proliferation in Iran, Iraq, and Libya, and the Arab focus on Israeli nuclear weapons, sometimes disguises the fact that proliferation is becoming both globalized and regionalized. In terms of globalization, Russia, China, and North Korea continue to be major sources of weapons, equipment, and technology that can be used to create and deliver chemical, biological, radiological, and nuclear weapons. The latest unclassified publications of the CIA trade a major and continuing transfer of such technology into the Middle East, and it is supplemented by major transfers of dual use and smuggled technology out of the West and the rest of Asia.⁵⁵

While the West often blames Middle Eastern states for being buyers, it is interesting to consider what the CIA says about global sellers:⁵⁶

“...Russian entities during the reporting period continued to supply a variety of ballistic missile-related goods and technical know-how to countries such as Iran, India, and Libya. Iran’s earlier success in gaining technology and materials from Russian entities accelerated Iranian development of the Shahab-3 MRBM, which was first flight-tested in July 1998. Russian entities during the second six months of 1999 have provided substantial missile-related technology, training, and expertise to Iran that almost certainly will continue to accelerate Iranian efforts to develop new ballistic missile systems.

“During the second half of 1999, Russia also remained a key supplier for civilian nuclear programs in Iran, primarily focused on the Bushehr Nuclear Power Plant project. With respect to Iran’s nuclear infrastructure, Russian assistance enhances Iran’s ability to support a nuclear weapons development effort. By its very nature, even the transfer of civilian technology may be of use in Iran’s nuclear weapons program. We remain concerned that Tehran is seeking more than a buildup of its civilian infrastructure, and the IC will be closely monitoring the relationship with Moscow for any direct assistance in support of a military program. In addition, Russia supplied India with material for its civilian nuclear program during this reporting period.

“Russian entities remain a significant source of biotechnology and chemicals for Iran. Russia’s world-leading expertise in biological and chemical weapons would make it an attractive target for Iranians seeking technical information and training on BW and CW agent production processes.

“Russia (along with its sister republics in the FSU) also remains an important source of conventional weapons and spare parts for Iran, which is seeking to upgrade and replace its existing conventional weapons inventories.

“... the Russian government’s commitment, willingness, and ability to curb proliferation-related transfers remain uncertain. Moreover, economic conditions in Russia continued to deteriorate, putting more pressure on Russian entities to circumvent export controls. Despite some examples of restraint, Russian businesses continue to be major suppliers of WMD equipment, materials, and technology to Iran. Specifically, Russia continues to provide Iran with nuclear technology that could be applied to Iran’s weapons program. Monitoring Russian proliferation behavior, therefore, will remain a very high priority.

“...Throughout the second half of 1999, North Korea continued to export significant ballistic missile-related equipment and missile components, materials, and technical expertise to countries in the Middle East, South Asia, and North Africa. P’yongyang attaches a high priority to the development and sale of ballistic missiles, equipment, and related technology. Exports of ballistic missiles and related technology are one of the North’s major sources of hard currency, which fuel continued missile development and production.

“...Chinese missile-related technical assistance to Pakistan increased during this reporting period. In addition, firms in China provided missile-related items, raw materials, and/or assistance to several countries of proliferation concern—such as Iran, North Korea, and Libya.

“...China’s 1997 pledge not to engage in any new nuclear cooperation with Iran has apparently held, but work associated with two remaining nuclear projects—a small research reactor and a zirconium production facility—continues. The Intelligence Community will continue to monitor carefully Chinese nuclear cooperation with Iran.

“Prior to the reporting period, Chinese firms had supplied CW-related production equipment and technology to Iran. The US sanctions imposed in May 1997 on seven Chinese entities for knowingly and materially contributing to Iran’s CW program remain in effect. Evidence during the current reporting period suggests Iran continues to seek such assistance from Chinese entities, but it is unclear to what extent these efforts have succeeded. In June 1998, China announced that it had expanded its chemical export controls to include 10 of the 20 Australia Group chemicals not listed on the CWC schedules.

“...As was the case in 1998, entities in Western countries in 1999 were not as important as sources for WMD-related goods and materials as in past years—with the exceptions of Iran and Libya, where entities in Western European countries in particular remain significant suppliers for their WMD programs..

Middle Eastern proliferators are heavily influenced by the actions of proliferators outside the region and they scarcely need to look as far as North Korea. India and Pakistan clearly gain influence, prestige, and leverage from testing nuclear weapons and long-range missiles. Iranian officials have often used Pakistani proliferation as an example of the “legitimacy” of proliferation and has less publicly cited Pakistan as a potential threat. Missile rattling across the Taiwan Straits also scarcely goes unnoticed in the region, and the US focus on NMD and covert or terrorist CBRN attacks has had the side effect of dramatizing the impact of proliferating.

The regionalization of proliferation is now a process that arguably begins in Algeria and sweep east through Libya, Egypt, Israel, Syria, Iran, and Iraq. Yemen may have vestigial missile delivery capabilities and some minor stocks of mustard gas, and the Sudan is increasingly cited as a possible producer of chemical weapons. Proliferation also extends far beyond missiles and nuclear weapons. Libya, Egypt, Israel, Syria, Iran, and Iraq all possess chemical weapons. Iraq is known to possess significant remaining stocks of biological weapons, Libya continues with a development effort, and Egypt, Israel, Syria, and Iran, either possess biological weapons or could begin mass production in a matter of months.

There is little present prospect of the effective globalization or regionalization of arms control, and there is a near certain prospect that current regional proliferators will acquire more sophisticated and lethal weapons of mass destruction and long range delivery systems. In the process, they will weapons that they can use to strike with precision at critical strategic targets like oil shipments, desalination plants, etc. At the same time, the spread of biotechnology, petrochemical technology, food processing technology, fermenters, and pharmaceutical technology will steadily increase regional capabilities to produce advanced biological weapons that are storable, resistant to heat and light, and have nuclear lethalties.

In many cases, the regional power that proliferate face international sanctions, or are signatories to arms control agreements that have such sanctions. The irony is that the “globalism”

of arms control provides a strong incentive to keep their efforts covert. The good news is that such constraints have often reduced their rate of activity and success, and have sharply increased the cost of acquiring and deploying key threats like nuclear weapons. The bad news is that nations like India and Pakistan have shown such barriers do not block military change, and nations like Iran and Iraq, continue to acquire new technology necessary to improve their capabilities.⁵⁷

In practice, this means that the Middle East may have to face the following problems in “globalization.”:

- *Making weapons of mass destruction an international norm:* As the Iran-Iraq War has shown, the present political barriers to the use of weapons of mass destruction are tenuous and can vanish under the pressure of war. The Gulf War showed that missile attacks against population centers and “horizontal escalation” are very real threats, and the course of the Gulf War might well have led to the widespread use of weapons of mass destruction if it had occurred several years later. There is a serious risk that a new conflict using weapons of mass destruction – such as a nuclear conflict between India and Pakistan – could suddenly “legitimize” both proliferation and the use of weapons of mass destruction in the sense that it could become a new “norm” for many developing countries.
- *Proliferating global “breakout capabilities:* Proliferation has been slowed down in the past by the difficulties in acquiring nuclear weapons, and in weaponizing chemical and biological weapons with real effectiveness. Some of these trends may continue. While most powers can now design fission and boosted weapons, there has been only limited progress in the technology needed to develop fissile material. This situation seems likely to continue, although the acquisition of high speed centrifuge technology, the technology needed to build small reactors designed to produce plutonium, or fissile material from the FSU present continuing risks. It would take the collapse of the political restraints enforced by the NNPT, and a major increase in supplier willingness to sell relevant technologies to radically change the present mix of risks the US faces.
- *Similar constraints do not apply, however, to chemical and biological weapons.* The global spread of biotechnology, more food processing facilities, fertilizer plants, and petrochemical plants is slowly giving a wide range of nations the ability to manufacture advanced chemical and biological weapons. In fact, far more countries have already begun research efforts than are shown in Table Seven. The US intelligence community estimates a total of some 25-35 countries, although any list is classified. Moreover, the spread of missile warhead, cluster munition, sprayer, and UAV technology is simplifying the weaponization of such weapons.
- *The risk posed by biotechnology:* Modern biological weapons can easily be as lethal as fission and boosted weapons. They can also be used to attack in ways that incapacitate or threaten the agricultural sector, or modified – with or without genetic engineering – to defeat current vaccines and medical treatment. Globalization is making such weapons steadily cheaper and more accessible, and is creating a wide range of national research and production capabilities that can mass produce such weapons with only a limited chance of detection. There is a high probability that the threat of nuclear proliferation, which dominated the “globalism” of the last half of the 20th Century will be matched or surpassed by the threat posed by the globalization of biotechnology.
- *Long-range strike systems:* Nations like North Korea, Iran, and Iraq are demonstrating that developing states can acquire the technology to produce missile boosters capable of launching weapons of mass destruction with enough accuracy to hit city-sized targets at ranges of more than 1,000 miles, and

eventually to intercontinental ranges. At the same time, the proliferation of GPS guidance systems and specialized commercial jet engines is greatly reducing the cost of developing and producing cruise missiles with ranges in excess of 600 miles.⁵⁸

- *Weapons of mass destruction and asymmetric warfare:* The technologies and weapons necessary to carry out covert and proxy attacks using weapons of mass destruction are far cheaper than those required to use ballistic and cruise missiles. They are also becoming available to non-state actors like terrorists and extremists, and such attacks offer the potential ability to attack without attribution.
- *Homeland and allied defense:* All of these risks combine to create a need for homeland defense that most states have not seriously contemplated since the early days of the thermonuclear era. It is far from clear that emerging proliferators will have the kind of political leadership that is as subject to rationale deterrence as Russia. Certainly, Iraq and North Korea have been erratic enough in the past to create serious concerns about their conduct, and even a “rational” developing state might become involved in a process of escalation that ended in little restraint. The practical problem is that there are many forms of attack that could be used that do not require an overt declaration of war or clearly identify the attacker, and that the most costly form of defense – national and theater missile defenses – deal with only the most costly and overt form of attack. As a result, effective counterproliferation may require a global shift to a broad mix of costly homeland defense measures ranging from missile defense and counterproliferation to response measures designed to limit damage and deal with its effects.

There are no certainties involved in any of these threats. It is impossible to assign reliable probabilities to their nature, timing, or effectiveness, and it is at least possible that diplomacy, political change, and economic development may reduce them, roll them back, or at least prevent the emergence of major paradigm shifts. It is equally possible, however, that they will interact to create the same broad changes in the global military environment as asymmetric warfare.⁵⁹

It is also a grim fact of life that this particular form of “globalism” can interact disastrously with the world’s dependence on Middle Eastern energy exports, and with the growth of far more lethal forms of asymmetric warfare and terrorism. The energy facilities of the Middle East are already often highly lucrative targets. The hyperurbanization of the Middle East, usually with one key urban area that defines the political structure of each country, makes most nations “one-bomb states.” The use of such weapons would also force the near or total collapse of most regional economies. The end result that proliferating states may be able to conduct “wars of intimidation” against those states that cannot retaliate or which are not supported by defenses and outside deterrents. If such weapons are ever actually used, the result may be a form of “globalization” that sinks all boats rather than raising them.

¹ World Bank, *World Development Indicators, 2000*, Washington, World Bank, 2000, p. 24.

² World Bank, *World Development Indicators, 2000*, Washington, World Bank, pp. 11-13.

³ World Bank, *Global Economic Prospects, 2000*, Washington, World Bank, 2000. pp. 143-145.

⁴ World Bank, *Global Economic Prospects, 2000*, Washington, World Bank, 2000. pp. 143-145.

⁵ World Bank, *Global Economic Prospects, 2000*, Washington, World Bank, 2000. p 134.

⁶ World Bank, World Development Indicators, 2000, Washington, World Bank, 2000, pp.38-44.

⁷ World Bank, World Development Indicators, 2000, Washington, World Bank, 2000, p. 184.

⁸ There are considerable uncertainties in this estimate. The figures shown are the author's estimate, based on various editions of the CIA, World Factbook, World Bank, World Development Indicators, IISS, Military Balance, and IMF, World Economic Outlook.

⁹ World Bank, World Development Indicators, 2000, Washington, World Bank, p. 12

¹⁰ World Bank, World Development Indicators, 2000, Washington, World Bank.

¹¹ World Bank, World Development Indicators, 2000, Washington, World Bank, 2000, p. 182.

¹² World Bank, World Development Indicators, 2000, Washington, World Bank, 2000, p. 182

¹³ World Bank, Global Development Finance, 2000, Washington, World Bank, 2000, pp. 240-246.

¹⁴ World Bank, Global Economic Prospects, 2000, Washington, World Bank, 2000. pp. 164-165.

¹⁵ There are many different sources of figures on these trends. The author has used the constant and current dollar trend data in the various editions of "World Military Expenditures and Arms Imports" dating back to 1972. See the Bureau of Arms Control, US State Department, for these data.

¹⁶ World Bank, Global Economic Prospects, 2000, Washington, World Bank, 2000. P. 160.

¹⁷ World Bank, Global Development Finance, 2000, Washington, World Bank, p. 240-247.

¹⁸ World Bank, Global Economic Prospects, 2000, Washington, World Bank, 2000. p. 156.

¹⁹ World Bank, World Development Indicators, 2000, Washington, World Bank, p. 184.

²⁰ World Bank, Global Economic Prospects, 2000, Washington, World Bank, 2000. pp. 134-145.

²¹ World Bank, Global Development Finance, 2000, Washington, World Bank, p. 240-247.

²² BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, pp. 4-6.

²³ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(00), March 2000, p. 38.

²⁴ BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, pp. 4-6.

²⁵ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(00), March 2000, p. 38.

²⁶ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(00), March 2000, p. 38.

²⁷ BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, pp. 4-6 and www.bpamoco.com/wrld energy/oil.

²⁸ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 229.

²⁹ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 229.

³⁰ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 229.

³¹ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 229.

³² Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 229.

³³ BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, pp. 18-19 and www.bpamoco.com/wrld energy/oil.

³⁴ DOE/EIA, Monthly Energy Review, February 2000, pp. 136-137.

³⁵ DOE/EIA, Monthly Energy Review, February 2000, pp. 48-49.

³⁶ DOE/EIA, Monthly Energy Review, February 2000, p. 11.

³⁷ DOE/EIA, Monthly Energy Review, February 2000, p. 42.

³⁸ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 38.

³⁹ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 38.

⁴⁰ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 171

⁴¹ BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, pp. 20-21.

⁴² BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, p. 28.

⁴³ BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, p. 28.

⁴⁴ BP Amoco, "BP Amoco Statistical Review of World Energy 2000," London, BP Amoco, 2000, pp. 20-21.

⁴⁵ World Bank, World Development Indicators, 2000, Washington, World Bank, pp. 10-12 and CIA World Factbook, 1999. Directly comparable data are not available.

⁴⁶ EIA Fact Sheet, "OPEC Revenues", September 4, 1998 and March 2000 editions. www.eia.doe.gov/emeu/cabs/opecrev.html.

⁴⁷ Based on the data in the CIA World Factbook for 2000; the 1998 edition of "World Military Expenditures and Arms Imports," Bureau of Arms Control, US State Department, Table II; and World Bank, World Development Indicators, 2000, pp. 243-246.

⁴⁸ Energy Information Agency, International Energy Outlook, 2000, Washington, DOE/EIA-0484(2000), March, 2000, p. 229.

⁴⁹ Bureau of Arms Control, World Military Expenditures and Arms Transfers, 1998, Washington, State Department, 2000, pp. 2 and 64.

⁵⁰ Bureau of Arms Control, World Military Expenditures and Arms Transfers, 1998, Washington, State Department, 2000, pp. 2 and 64.

⁵¹ Bureau of Arms Control, World Military Expenditures and Arms Transfers, 1998, Washington, State Department, 2000, pp. 2 and 116.

⁵² Bureau of Arms Control, World Military Expenditures and Arms Transfers, 1998, Washington, State Department, 2000, pp. 23 and 64.

⁵³ This assessment is adapted from US State Department, Patterns of Global Terrorism: 1999, Department of State Publication 10687, Office of the Secretary of State, Office of the Coordinator for Counterterrorism, 2000, pp. 15 and 51-58.

⁵⁴ Department of Defense, Report to Congress: Kosovo/Operation Allied Forces After Action Report, Washington, Department of Defense, January 31, 2000, pp. 6-7.

⁵⁵ Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 July Through 31 December 1999, submitted by the Director of Central Intelligence (DCI) hereby submits this report in response to a Congressionally directed action in Section 721 of the FY 97 Intelligence Authorization Act, August 2000. Internet edition.

⁵⁶ Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 July Through 31 December 1999, submitted by the Director of Central Intelligence (DCI) hereby submits this report in response to a Congressionally directed action in Section 721 of the FY 97 Intelligence Authorization Act, August 2000. Internet edition.

⁵⁷ For recent reporting, see National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015, (September 1999 (www.cia.gov/cia/publications/nie/nie99); Non-Proliferation Center, Director of Central Intelligence, "Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions 1 January Through 30 June 1999," ODCI/CIA, January 2000;

National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015, (September 1999 (www.cia.gov/cia/publications/nie/nie99)).

⁵⁸ National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015, (September 1999 (www.cia.gov/cia/publications/nie/nie99)).

⁵⁹ For an interesting discussion of some of these issues, see Michael O'Hanlon, Technological Change and the Future of Warfare, Washington, Brookings, 2000, pp. 160-166.