

Handbook of Defence Politics

International and Comparative Perspectives

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15 **Politics, Economics and the Governance Environments Shaping Middle East Defence Expenditures and Their Impact on Growth**

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The size of a country's military and its budgetary allocations to defence are influenced by a wide range of factors—political, strategic and economic. Clearly, while ongoing conflicts, arms races and assorted security concerns are major considerations, the balance between technology and manpower varies as a result of financial resources, population size and societal preference. Unemployment concerns also impact the decisions made about the number of armed forces personnel needed, and access to military aid plays an important role in defence budgets in some states.¹

Within the Middle East and North Africa (MENA) region, all of these forces are present to one degree or another. As a result, the region is the most militarized in the developing world. While there has been a world-wide decline in defence expenditures in recent years, the Middle East has seen an expansion. Since 1989 and the end of the Cold War, the fear of intra-national conflict has been reduced somewhat only to be partially replaced by the fear of non-national combative organizations.² While conflicts and security concerns have increased the demand for defence expenditures throughout the region, the recent oil boom has provided many countries with means to expand their allocations to the military.

The challenge facing Middle Eastern countries is how to reform existing economic and governance institutions to promote economic development in the long run while fostering, in light of increasingly violent opposition groups, improved domestic security and stability in the short run. While various military and security-oriented approaches are being used to combat new and perceived threats throughout the region, as the situations in Iraq and Afghanistan demonstrate,³ a long-term commitment to economic growth and the alleviation of poverty is increasingly seen as an effective tool in combating such pervasive threats as the pull of terrorism.⁴ The critical question therefore is whether allocations to defence and security support or counter the economic and governance initiatives necessary for higher rates of sustained economic expansion.

In this chapter we survey the patterns of Middle Eastern defence expenditures and explore the linkages between them and other components of the economy, attempting to discern whether military expenditures positively or negatively influence economic liberalization and growth. Next we assess whether there is a nexus between existing economic and governance structures and military expenditures that explains why countries with similar levels of military expenditures grow at dissimilar rates. Based on our main findings, a final section draws some policy implications for the region's major countries. Specifically, and in keeping with one of the main themes of this volume, we ask whether the pattern of Middle East defence expenditures is consistent with the Second Image Reversed theory⁵ of international relations, and if so what we might expect in terms of future developments? What can the regional countries do to modify this outcome?

Trends in Middle Eastern Defence Expenditures

In 2006 the MENA states allocated roughly US\$ 75,000m. for defence.⁶ Saudi Arabia is by far the leading spender on the military with a defence budget of roughly \$25,000m., almost

triple that of the next largest spender, Turkey. Israel rounds out the top three for the MENA region, with a 2006 defence budget in excess of US\$ 7,000m. One other MENA state—Iran—had a 2006 budget in excess of US\$ 5,000m., and another nine planned to spend at least US\$ 1,000m.⁷

The Gulf States generally spend more per capita on defence than their neighbours. The six Gulf Co-operation Council member states are among the top seven spenders on defence per capita. The other is Israel, which, like the Gulf States, sees technology as a counterbalance to the disadvantage stemming from a smaller population (and thus a smaller pool for its fighting force) than many of its neighbours.

In addition to weaponry, the defence budgets go to salaries and living expenses. Within the MENA region, there are about 3.4m. active duty military personnel. The largest military force is in Iran, where some 545,000 individuals are in the armed forces. Turkey also has a military force in excess of half a million, and Egypt is not far behind at 468,500. These countries are, not by coincidence, also the largest in the region in population terms and therefore able to field relatively large forces. Nevertheless, more than half of the states in the region have armed forces in excess of 100,000 personnel.

The commitment to a large-scale military force can also be seen through the proportion of the population which is in active military service. By this measure, the most militarized state in the region is Israel, where 2.6 per cent of the population is in uniform. Lebanon and the UAE tie for second place, with 1.9 per cent of the population listed in the military. Overall, ten states have more than 1 per cent of their population in one of the armed services.⁸ Within this environment of generally high levels of expenditures on defence and security, country patterns show great diversity across the region. In the Northern Africa region, several patterns stand out (Figure 15.1):

- The general trend has been for a decline in the military burden (defence expenditures as a percentage of Gross Domestic Product, GDP) to fall in recent years.
- The highest reduction in the defence burden has occurred in Libya, where current defence spending is far below the levels seen in the 1980s. After some modernization of equipment following the suspension of UN sanctions, expenditure now appears to have stabilized

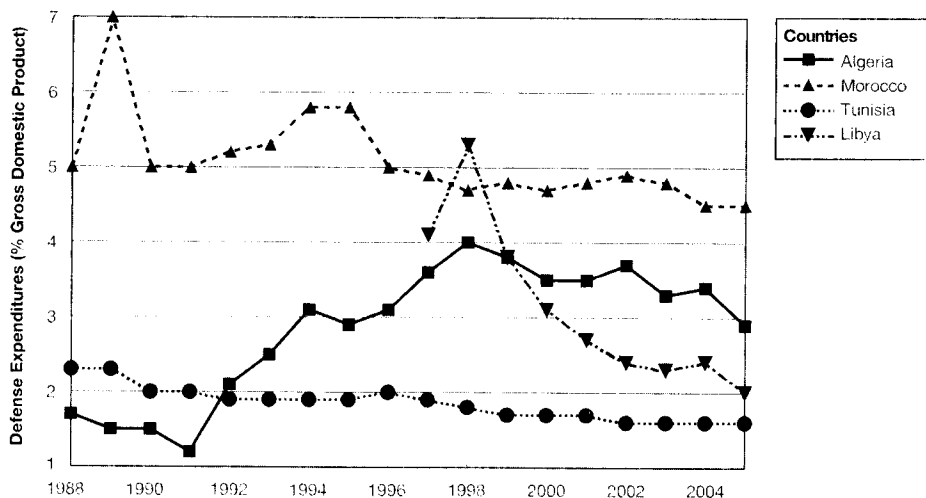


Figure 15.1 Trends in defence expenditures (1988–2005): Algeria, Morocco, Tunisia and Libya.

Note: Data compiled from: World Armaments and Disarmament, SIPRI Yearbook (Stockholm: Stockholm International Peace Research Institute), various issues.

somewhat. However, there is a good chance for an increase in defence budgets in lieu of the massive increase in oil revenues received in recent years.

- Algeria has experienced remarkable success in its struggle against terrorism and internal strife. The Algerian military, having fought a decade-long insurgency, intends to increase expenditures in an effort to modernize and return to a more traditional defensive role. Clearly the army is extremely sensitive to criticisms at home and abroad caused by its murky involvement in the politics and the bloody civil strife of the 1990s. The military's response has been to concentrate increasingly on traditional defence, technical modernization and professionalization, while taking additional initiatives to restore its image in the eyes of Algerian public opinion.⁹
- Morocco's defence burden is the highest in the region and is likely to stay there, given that country's increasing domestic terrorist threats¹⁰ and the smouldering situation in Western Sahara which currently occupies the majority of Morocco's troops.
- The Algerian and Moroccan situations are in sharp contrast to Tunisia where relative domestic stability has permitted the lowest defence burden in this sub-region.

As expected, the conflict countries—Egypt, Syria and Israel (Figure 15.2)—have experienced some of the highest levels of defence expenditure in the Middle East region, a pattern that is not likely to change in the foreseeable future. While these countries had reduced defence burdens throughout most of the 1990s, there has been a reversal in the last several years, especially in the case of Israel and Syria. Several additional patterns stand out:

- Despite the 1978 peace treaty with Israel, Egypt has undertaken serious efforts to achieve conventional military parity with Israel. Egypt, relying on \$2,100m. of financial aid from the US—\$1,300m. in the form of military assistance—is in the process of transforming its forces into a modern, Western-based military.
- This transformation has been undermined to some extent by the country's 'attempt to maintain a far larger inventory of its aging Soviet bloc and non-US equipment than it can afford to maintain, modernize and sustain. Roughly one third of its force posture is an obsolete and largely hollow shell that wastes resources that would be better spend on force quality than on force quantity.'¹¹

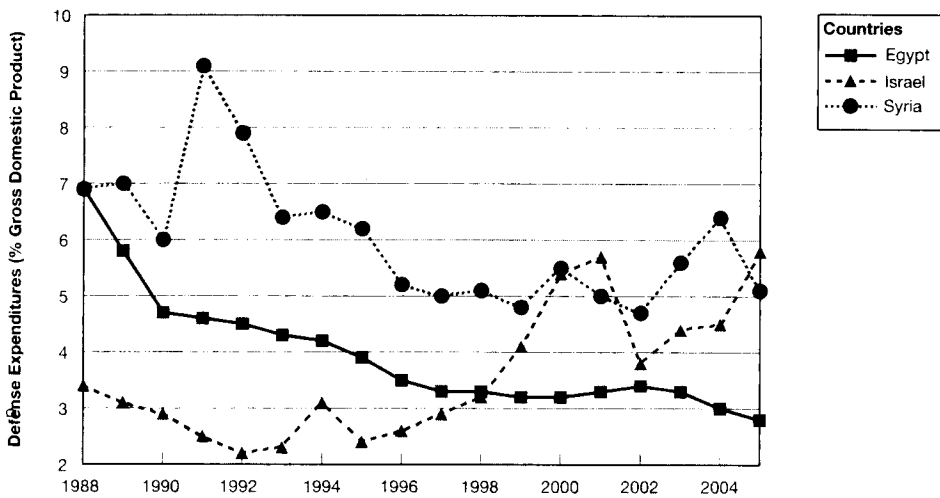


Figure 15.2 Trends in defence expenditures (1988-2005): Egypt, Israel and Syria.

Note: Data compiled from: World Armaments and Disarmament, SIPRI Yearbook (Stockholm: Stockholm International Peace Research Institute), various issues.

- The break-up of the Soviet Union—long the principal source of training, materiel and credit for the Syrian forces—dramatically slowed, especially in the 1990s, Syria's ability to acquire modern military equipment.
- Syria's pattern of military expenditures reflects the fact that the country still treats Israel as an enemy power, but has had to abandon its search for conventional parity. As a result it had to minimize the risk of a future military clash with Israel and make shifts in its strategy and procurement effort which included a new focus on asymmetric warfare.¹²
- Nevertheless, its military remains one of the largest and most capable in the region. Syria received significant financial aid from Gulf Arab states as a result of its participation in the Gulf War, with a sizable portion of these funds earmarked for military spending. This pattern is likely to continue if the oil bonanza holds up.
- Ever since Israel's establishment in 1948 the country has faced unremitting and overwhelming hostility from its neighbours. Repeated wars, perpetual hostilities at lower levels, the failed peace process with the Palestinians and Syria, and often the 'cold' peace with Egypt and Jordan have reinforced this image.¹³ Without much of a let-up defence budgets have remained high for six decades.
- Increased security concerns brought on by the instability in Lebanon and Gaza have caused Israel's defence expenditures to increase rapidly in recent years. Since 2000 real defence expenditure (exclusive of war costs) has risen by 3 per cent to over 50,000m. shekels despite the firing of thousands of career soldiers and civilian workers.
- The high priority afforded Israeli defence expenditures is evidenced by the fact that these increases were funded through deep cuts in social spending—dropping from 55 per cent of the budget in 2000 to 51.1 per cent in 2006.¹⁴

In sum, Israel's forces are better modernized than those of Egypt or Syria but budget constraints still force the country to 'maintain a 'high-low' force mix with substantial numbers of obsolete systems. It also is still heavily reliant on conscript and reserve manpower to free resources for arms imports and its heavily subsidized military industries, and it is unclear that this gives it the manpower quality and readiness it needs to take maximum advantage of its high technology systems.¹⁵

Saudi Arabia, the other Gulf Co-operation Countries (GCC) and Yemen comprise another cluster of countries where defence burdens are beginning to increase after a decade of falling or relatively stable levels (Figure 15.3 and 15.4):

- As noted above, Saudi Arabia clearly dominates defence spending in the region. For the future the country is likely to play a key role in the US's plan to counter Iran's influence in the region. Towards that end the US, pending congressional approval, has offered Saudi Arabia and other Gulf Co-operation Countries a package of \$20,000m. in arms.
- The package also includes \$13,000m. to Egypt and \$30,000m. to Egypt over the next ten years. Items include advanced fighter jets, smart bombs, computer systems and missile boats.¹⁶
- If they follow through on deals announced since mid-2006, it is estimated that countries like the United Arab Emirates, Kuwait, Oman and Saudi Arabia will spend up to \$60,000m. in 2007.¹⁷
- In addition to Saudi Arabia's massive build-up, Kuwait reportedly bought 24 Apache Longbow helicopters, while the United Arab Emirates has continued to take delivery of 80 F-16 Block 60 fighters, with plans to buy air tankers, missile defence batteries and airborne early warning systems.
- Bahrain ordered nine UH-60M Black Hawk helicopters in an estimated \$252m. deal, while Oman reportedly bought 30 anti-tank rocket launchers in a \$48m. purchase and is planning a naval overhaul.

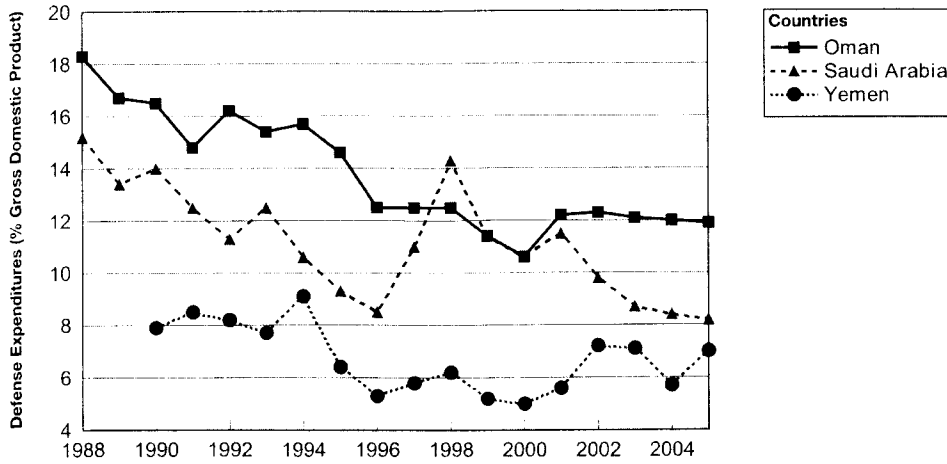


Figure 15.3 Trends in defence expenditures (1988-2005): Saudi Arabia, Oman and Yemen.
 Note: Data compiled from: World Armaments and Disarmament, SIPRI Yearbook (Stockholm: Stockholm International Peace Research Institute), various issues.

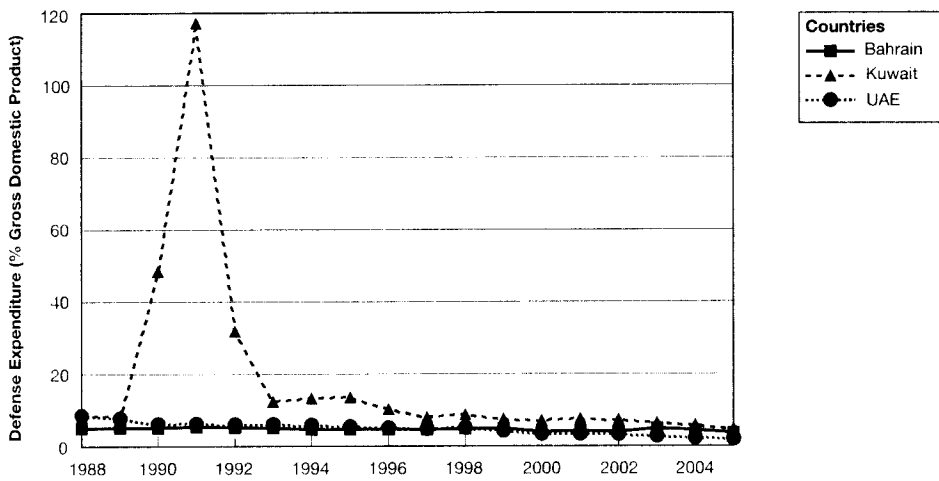


Figure 15.4 Trends in defence expenditures (1988-2005): Bahrain, Kuwait and the UAE.
 Note: Data compiled from: World Armaments and Disarmament, SIPRI Yearbook (Stockholm: Stockholm International Peace Research Institute), various issues.

If as expected oil prices remain strong for the next few years, the Gulf States will find it harder to resist the temptation of much higher military spending. The result could be the start of a major arms race with Iran and possibly Israel. Though in recent years the GCC has managed to insulate itself from the surrounding turbulence, political instability brought on by the corruption, waste and economic distortions often associated with the massive purchase of weapons could yet derail the current economic resurgence.¹³

In contrast to the GCC Yemen is not a major oil producer. This severely limits what the country can spend on security and military forces. At the same time, 'the country has not been able to benefit from the free or low-cost arms imports it received from the US and FSU during the Cold War for over a decade'.¹⁹ Yemen's military budget has been steadily increasing over the past few years from \$482m. in 2001 to \$942m. in 2005. This represents a

96 per cent increase in Yemen's military spending in five years, and is much higher than the \$374m.–\$539m. a year that Yemen spent in the 1990s. It represents a major burden on the country's economy.

The final cluster of countries, Iran, Turkey and Jordan (Figure 15.5) has historically maintained relatively high military burdens. In recent years rising regional tensions appear to be contributing to the reversal of the slight downward trends in defence burdens experienced in the 1990s. For similar reasons, Jordan may also follow in this direction.

- Iran's conventional forces rely on quantity rather than quality. This strategy was evident in the Iran–Iraq War when they relied on vast numbers of poorly trained and equipped troops to beat back the better-equipped but smaller invading Iraqi forces.
- With nearly half a million men under arms, and another 100,000 in reserve, Iran maintains one of the largest forces in the region.²⁰
- Rising oil revenues led to a defence budget of \$6,200m. in 2006. In addition the country provided at least \$100m. a year to Hezbollah.
- Having taken in over \$300,000m. in oil revenues since 1999 the country is easily positioned to sustain an expansion in defence expenditures and terrorist support over the next decade.

After years of falling military burdens Turkey is on a new defence acquisition spree:

- In addition to bolstering its air defence and command and control capabilities, the country wants its increased military expenditures to provide a stimulus to its defence industrial complex.
- While the domestic arms industry is important, a big proportion of Turkey's procurement funding was recently committed to the purchase of 30 F-16 50+ fighters, at a cost of \$1,780m.—\$2,500m.²¹ to offset high attrition losses in the Turkish air force.²²
- Military expenditures in these ranges have led to questions of whether Turkey's major acquisition campaign can be sustained by long-term budgets.

Jordan has spent much of its modern history caught up in the pressures of various Arab–Israeli conflicts. Its peace agreement with Israel in 1994 greatly eased the most serious pressure on its

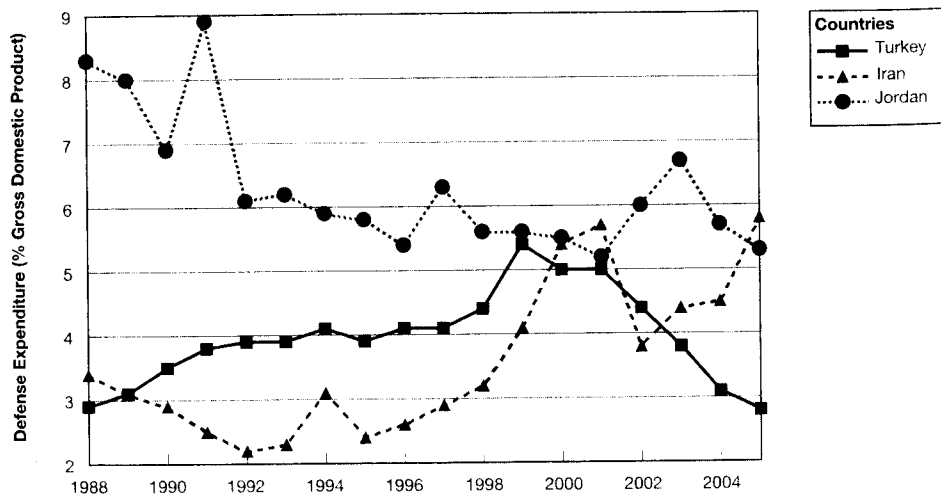


Figure 15.5 Trends in defence expenditures (1988–2005): Iran, Turkey and Jordan.

Note: Data compiled from: World Armaments and Disarmament, SIPRI Yearbook (Stockholm: Stockholm International Peace Research Institute), various issues.

security and military development, and the end of Saddam Hussein's regime in Iraq in 2003 removed the threat on its eastern border.

Currently the country's major security concerns are securing its border with Israel in the face of the Israel-Palestinian War, a low-level risk of some crisis with Syria, and the internal instability growing out of its largely Palestinian population and the resulting internal security problems. As a result, Jordan is also undergoing a defence modernization phase, albeit not nearly the scope of that in Iran and Turkey. Still, for a country Jordan's size the expenditures are bound to reverse the longer decline in defence burdens:²⁵

- In particular the country intends to spend upward of \$450m. for a Commercial Off the Shelf (COTS) Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) and \$60m. for two Sikorsky [U'TX] UH-60L VIP Black Hawk helicopters as well as associated equipment.
- It should be noted that these expenditures are coming at a time when the country is suffering severe budgetary stress due to high oil prices and a fall off in foreign assistance.²⁴

In sum, there is every indication that Middle East defence budgets will continue their rapid expansion over the next several years. With several exceptions, the countries have both the perceived need for added security (ongoing domestic terrorist threats as well as internal instability) and the financial and political means (high oil revenues, together with a willingness of the major arms producers to supply massive increases in equipment (for example, the proposed \$20,000m. US/Saudi arms deal announced in mid-2007)²⁵ for sustaining military expenditures and arms imports. The consequences of this upward trend in military spending is examined in the following section.

Effects of Middle East Defence Spending

Because the Middle East stands out in its preponderance of resources allocated to the military, it is logical that several unique factors other than those noted above may be contributing to the region's bloated defence budgets. In this regard, a cursory examination of indices of development shows that the region in relation to other parts of the world has significantly lower levels of attainment in all dimensions of the World Bank's indexes of governance:²⁶ (a) voice/accountability; (b) political stability; (c) government effectiveness; (d) regulatory quality; (e) rule of law; and (f) control of corruption. Put differently, the region exhibits a governance gap. Without exception, governance is weaker than would be predicted by income and standard explanatory variables. For the Arab Middle East, the increasing authoritarian nature of many regimes lies at the centre of the governance gap. Successful economic performance in the 1960s and 1970s helped cement an 'authoritarian bargain' with citizens effectively trading restrictions on political participation in exchange for economic security and the public provision of social services and welfare. Since the 1970s the governance gap, while varying somewhat across the region,²⁷ has been affected by such factors as oil, conflict and geopolitics.²⁸ For example, in the oil countries, while vast oil revenues lessened the need for taxation and permitted redistribution, such revenues also supported large internal security apparatuses protecting authoritarian governments and preventing popular mobilization.²⁹ The strength of this coercive apparatus has been further reinforced by exceptionally high levels of defence expenditures. Added to these is the role of external powers that have consistently supported authoritarian governments in the region, historically as part of superpower rivalry and concern for oil security.³⁰

Since the strength of this coercive apparatus has been further reinforced by the region's exceptionally high levels of military expenditures, a link exists between defence allocations and governance. Added to these is the role of external powers that have consistently supported

authoritarian governments in the region, historically as part of superpower rivalry and concern for oil security.³¹

Ultimately, links between governance and defence expenditures are an empirical matter. In the sections that follow, we attempt to establish some key linkages between these variables. Because defence expenditures and governance dimensions interact in complex ways with the economy, the economic dimension provides a good framework for this examination. In particular, are there certain environments where defence expenditures interact either positively or negatively with the economy? Are these environments associated with certain patterns of governance? If so, where do the various Middle Eastern countries stand in this regard?

Phase I: Initial Country Groupings

Our initial findings suggest that for countries as a whole defence expenditures as a share of GDP have a negative (albeit) weak impact on growth.

While this result is consistent with a number of previous studies, one of the main conclusions coming out of the empirical work on the impact of defence expenditures on economic growth is that statistical studies of large samples of countries often reach inconclusive results because distinct sub-grouping of countries often have markedly different environments. As a result many studies have found negative linkages between defence and growth, while several empirical studies³² have suggested that defence expenditures taking place in environments of plentiful savings or foreign exchange often produced positive impacts on growth. Similarly, when these factors were relatively scarce defence expenditures often had a negative effect on economic growth.

In today's rapidly evolving and liberalizing world economy, might not the relative progress made in economic liberalization and governance reforms act in a similar manner? Are countries achieving relatively high levels of economic liberalization and governance more likely to have removed institutional constraints on growth, thus enabling the positive impacts of defence on the economy to predominate? These issues are examined below.

First, a more intuitive grouping is examined. For the task at hand one compelling difference between countries is their defence burden (measured in terms of the share of the defence budget in Gross Domestic Product). The mean of the average share of defence in GDP over the 2000–03 period is 2.66 per cent with the countries below this level averaging 1.49 per cent while those above the mean average 5.49 per cent. For the Middle Eastern countries in our sample, only Sudan and Tunisia are in the low defence expenditure group. As a basis of comparison, the four South Asian countries, Bangladesh, India, Sri Lanka and Pakistan, were also examined. These were evenly split between the two groups with Pakistan and Sri Lanka in the high defence expenditure group and India and Bangladesh in the low group.

In addition to the defence burden other significant differences exist between the low defence countries and those with higher defence burdens:

- 1 Even greater differences in budgetary shares allocated to defence exist between the low defence and high defence countries with allocations to the military in low defence countries averaging 6.3 per cent of the budget as opposed to 18.35 per cent in the high defence countries. In the Middle East, Iran (21.6 per cent) and Oman (42.8 per cent) were above the mean, while in South Asia Pakistan is somewhat above the mean with an average defence budgetary share of 24.29 per cent.
- 2 In the mid to late 1990s both groups of countries had higher defence burdens and shares of the budget allocated to defence than in the early 2000s. As expected, many of the Middle Eastern countries had burdens above the mean for high defence expenditures. These included Jordan (8.6 per cent), Kuwait (9.9 per cent), Oman (11.7 per cent), Saudi Arabia (10.2 per cent), Syria (6.3 per cent), Yemen 5.7 per cent and Israel (8.4 per cent). Both

Sudan (2.5 per cent) and Tunisia (1.6 per cent) had values above the mean for the low defence spending group of countries.

- 3 Interestingly, despite the great differences in defence budgetary shares between the two groups, both groups allocated roughly the same shares of their budgets to education (6.0 per cent) and health (4.5 per cent). In the mid to late 1990s, the high defence countries as a group actually had higher budgetary shares allocated to education and health.

With regard to the key macroeconomic aggregates, several additional differences characterize the high and low defence countries:

- The most striking difference occurs in the area of foreign direct investment (FDI as a share of GDP), with the low defence countries able to attract a significantly higher amount (18.29 per cent as opposed to 5.43 per cent). In the earlier period (1995–99) these differences were considerably less (5.43 per cent v. 4.93 per cent).
- The low defence countries also exhibit slightly better macro performance in several key areas: government consumption, where they have considerably lower shares (14.98 per cent v. 18.42 per cent) and gross domestic savings where their share is somewhat above that (17.73 per cent v. 14.98 per cent) of the high defence countries. These differences between the two groups were similar to those found in the mid to late 1990s.
- Despite the higher rate of government consumption and lower savings rates, the investment rates of the high defence countries was only marginally lower (19.23 per cent v. 20.91 per cent) and had actually been above (21.83 per cent v. 20.70 per cent) the low defence countries in the mid to late 1990s.
- In part, these investment rates translate into slightly superior per capita growth rates for the low defence countries in the early 2000s (2.32 per cent v. 1.88 per cent) and the high defence countries (2.99 per cent v. 2.17 per cent) in the mid to late 1990s.
- Other macroeconomic indicators show a varied pattern of difference between the two groups with the low defence countries having considerably higher per capita incomes. However, the high defence countries experienced higher investment growth in the 1990s, but not in the early 2000s. Similarly, the high defence countries had greater growth in government consumption in the 1990s, but not in the 2000s.

With regard to economic liberalization,³³ the Fraser Institute's measures suggest that the low defence countries have generally made better progress (in the Fraser Index, larger numbers signify more freedom). Yet the differences are not as great as one might imagine. Clearly, the Middle East countries have made considerable progress in recent years in liberalizing their economies

As noted above, the main area of deference between the high and low defence expenditure countries is their governance structures. In all six areas of governance compiled by the World Bank, the low defence countries have made considerably more progress (reflected in higher scores) than their high defence counterparts. The differences are especially great in the area of voice and accountability, where the gap has widened somewhat over that in the mid to late 1990s. Specifically, all the Middle Eastern countries with the exception of Jordan, Kuwait, Morocco, Turkey and Israel were below the mean for voice and accountability in the high defence group. In the low defence group both Sudan and Tunisia were considerably below the group mean.

In sum, high military expenditure countries lag considerably behind low military expenditure countries in progress towards improved governance. Significantly, within each group the Middle Eastern countries are for the most part considerably below the group mean in all the dimensions of governance, especially the important area of voice and accountability.

Examining the high and low groups of military expenditures separately, military expenditures retain their negative impact on growth for the high defence countries, while the low

defence countries' military expenditures do not appear to dampen growth (the military expenditure term is positive, but statistically insignificant). These results are consistent with the theory that defence expenditures have positive and negative impacts on the economy. Specifically, in some situations the positive impacts will prevail and the overall net impact of expanded defence budgets will be higher growth. Conversely, in other situations the negative aspects prevail, with increased allocations to the military dampening economic growth.

This hypothesis is further tested with several additional country groupings. In the first group, countries are subdivided based on their relative governance. Here, a main governance dimension, voice and accountability, is used to proxy overall governance with those countries above the mean classified as high voice and accountability and those below the mean, placed in the low group.

Next, high and low defence countries are further subdivided, first on the basis of their progress in improved governance and second on their relative attainment of economic freedom. Several interesting patterns emerge:

- Countries with relative high levels of economic freedom and governance do not appear to experience negative effects from increased defence expenditures.
- On the other hand, defence expenditures impact negatively on growth in those countries lagging in governance and or economic freedom. Significantly, most of the Middle Eastern countries fall into this group.

While these findings are suggestive of the ways in which defence expenditures may impact in the Middle East and South Asia, the results need to be taken with great caution. Most importantly, the correlations are very low in nearly all cases. Also, several of the country groupings contain a limited number of countries (low economic freedom/high defence spending group and the high economic freedom/high defence group) causing the degrees of freedom to be below normally acceptable ranges.

Phase II: Groupings Based on Profiles of Relative Military Burden

While the general pattern noted above is one in which high defence countries tend to have made limited progress in governance and economic freedom (and the opposite for the low

Table 15.1 Predictions of the impact of increased defence expenditures on growth

(I) Increased defence negative impact on economic growth
Algeria, Iran, Jordan, Morocco, Oman, Saudi Arabia, Syria, Turkey, Yemen, Israel
Pakistan, Sri Lanka
(II) Increased defence neutral or possibly weakly positive on growth
Bahrain, Egypt, Libya, Sudan, Tunisia
(III) Increased defence neutral on growth
India
(IV) Defence positive on growth
Bangladesh

Note: Grouping profiles

- (I) High defence/low governance profile countries with defence expenditures higher than anticipated given the level of governance.
- (II) High defence/low governance profile countries with defence expenditures lower than anticipated given the level of governance.
- (III) Low defence/high governance profile countries with defence expenditures higher than anticipated given the level of governance.
- (IV) Low defence/high governance profile countries with defence expenditures lower than anticipated given the level of governance.

defence countries), there are notable exceptions. Also, while voice and accountability served well as a proxy for governance, a more refined measure is called for.

With these considerations in mind, further analysis was undertaken in an attempt to profile the high and low defence countries on the basis of their relative progress in governance and economic freedom. Basically this type of analysis is used in profiling: what characteristics do groups of countries have in common and can be used to distinguish one group from another? Using the six major dimensions of economic freedom compiled by the Fraser Institute for the early 2000s and the five dimensions of governance developed by the World Bank for the same period, the analysis assesses the extent to which high and low defence countries could be uniquely profiled simply in terms of these variables. The analysis produced several clear patterns:

- Of the economic freedom and governance variables, only three governance variables were statistically significant in profiling high and low defence spending countries. In order of importance these were: (a) voice and accountability; (b) political stability; and (c) rule of law.
- These three variables correctly predicted 77 per cent of the high and low defence countries as being in a corresponding high/low governance grouping.
- With regard to the Middle Eastern countries, given their low levels of governance, Sudan and Tunisia were reclassified as being more similar to those countries in the high defence group—i.e. in their low attainment of governance they fit more closely the profile of the high defence countries.

With these new country groupings, an analysis similar to that performed in the first phase was undertaken. In general, the patterns were much sharper than those obtained in Phase I of the analysis:

- Countries in the high defence spending (low governance) group were broken into two sub-groupings: (a) those originally classified as high defence spenders and (b) those originally placed in the low defence spending category. For the high defence spenders (Group I, Table 15.1), military expenditures have a strong and negative impact on economic growth, while for the low defence spenders the effect is negative.
- Countries now in the low defence profile (high governance) continued to experience no adverse effects from defence expenditures—this included those countries originally classified as high defence spending countries and those falling in the original low defence spending categories.
- A similar pattern was found for those countries in the high defence (low governance) grouping that had rates of economic growth higher than predicted (over-achievers) and lower than predicted (under-achievers). Defence expenditures in both the over- and under-achievers impacted negatively on economic growth. Again, negative growth effects were absent in the low defence profile group (high governance).
- A third grouping of countries was formulated based on the expected level of military expenditures given the progress made in improved governance. Two governance variables: (a) voice and accountability and (b) the rule of law were deemed particularly significant in affecting the percentage of national resources allocated to military expenditures. Those countries with defence burdens higher than predicted by these variables were placed in a high group and those with defence expenditures lower than those predicted by the equation were placed in a low group.
- In the case of high defence profile (low levels of governance) countries, those countries with defence expenditures higher than those predicted by their progress in governance experienced negative growth effects from expanded defence expenditures. The significant difference from the previous two groupings is that countries whose defence expenditures were relatively low, given their pattern of governance, did not experience these negative growth effects even though they belonged to the high defence profile group of countries.

- Again, in the case of the low defence profile countries there were no statistically significant links between defence expenditures, either in countries with higher than anticipated defence to governance patterns or in those whose defence expenditures were low relative to that normally associated with their progress in governance.

From the analysis in Phase II it is clear that for the purpose of assessing the economic impact of defence expenditures, a key consideration is the level of these defence expenditures relative to the progress made in improved governance. High defence expenditures themselves are not necessarily harmful to the economy provided they are undertaken in environments with relatively good governance structures.

Phase III: Groupings Based on Profiles of Relative Governance Burden

To explore the generality of this last finding, additional analysis was undertaken in a Phase III of the analysis. Specifically, to gauge the extent to which defence expenditures relative to governance significantly affects economic growth, two new independent variables were introduced in place of the defence share of GDP: (a) the level of expected defence expenditures (again as a share of GDP), given governance structures; and (b) the difference between the expected level of defence expenditures and the actual level of defence expenditures. These new formulations of the defence term allow for the identification of more subtle linkages with the underlying governance structures. The results of this analysis again produced a series of interesting patterns:

- Using the groupings of high defence (low governance), and low defence (high governance), derived from the profiling exercise, the level of expected defence expenditures (given governance) does not have a statistically adverse impact on economic growth. On the other hand, if the low defence profile countries keep their levels of defence expenditure within the range normally associated with their governance structures, a positive impact occurs.
- For the high defence profile countries, those countries with defence expenditures high relative to their governance found the expected level of defence expenditure impacted negatively on growth, while for those countries with defence expenditures below that anticipated by governance, expected defence expenditures had no adverse impact.
- Those countries in the low defence profile group avoided any adverse effects stemming from their expected levels of defence expenditure (relatively low defence expenditures to governance) and actually obtained an economic stimulus from an expected level of defence expenditures.

If it is their level relative to governance attainment that is the key link between defence expenditures and economic performance, then positive differences between the actual level and that expected (given governance) can be expected to be statistically significant. Is the reverse the case—can countries obtain a positive stimulus from defence expenditures by reducing them below the levels normally found with their governance structures?

For the high defence spending profile countries, defence expenditures are consistently detrimental for economic growth—that is, if they are relatively high given levels of governance or just plain high, as in the original high/low defence groups examined initially, no positive relationships to the economy exist.

On the other hand, low defence spending countries can obtain positive benefits from defence by cutting back their allocations to the military further than would be normally associated with governance structures. Unfortunately for the high defence spending countries, as is the case with the Middle East countries, just cutting defence expenditures back below the norm for their level of governance may eliminate their negative impact on growth but is unlikely to produce a positive stimulus.

Conclusions/Implications

The main findings confirm earlier work and suggest that for nearly all of the countries in the Middle East the current environment is such that increased defence expenditures are quite likely to strain their economies, resulting in lower overall rates of economic growth (Table 15.1). This occurs because the region's defence expenditures are relatively large given intuitional foundations, especially those associated with the main areas of governance. In contrast, a country like India appears to be at the stage where these effects are likely to be neutral and possibly even positive if the current trends in improved governance are continued.

As the Second Image Reversed theory might predict, developments in the international economy appear to be contributing to the defence/governance imbalance found across the Middle East. A global arms bazaar is fuelling a regional arms race set off in part by the post-Iraq power void. Here oil revenues play a dual role in not only financing massive influxes of weaponry, but also inducing the major powers to structure attractive armament packages to assist in maintaining some degree of influence over regional decision-making. Furthermore, increased concern over terrorism and potential regional instability has caused the major Western powers, especially the US, to reduce pressures for improved governance and increased democracy. While these forces are gaining momentum, the situation is becoming one which the Western countries, especially the US, can control.³⁴

Yet unlike during the Cold War, when the US and Soviet Union could regulate the quantity and lethality of weapons they sold their client states, there is little the world's sole superpower can do to control this build-up. Not only is Washington bogged down militarily and diplomatically in Iraq, American arms makers no longer enjoy unchecked commercial clout. Since the Cold War ended, their share of global arms exports has nearly halved thanks to challenges from rival producers in Western Europe, Russia and Asia.

In this regard the prospects for the future of the Middle East do not look good. While country differences exist due to initial defence expenditure governance imbalances and the volume and extent of oil revenues, increased instability is the likely outcome for many. Specifically, given the current climate of uncertainty and tension, major governance reforms are not likely. Many of the major countries may also be in a vicious circle whereby the link between the military and military industries retards reforms, thus creating more domestic instability, which in turn calls for increased defence expenditures and a postponement of economic/governance reforms.

Ironically, if it is ever politically possible to implement improved governance in many of the key Middle East countries, this may be one of the more effective means of assuring long-run security, stability and growth. On the other hand, the only politically acceptable option to achieve increased stability in the current climate may be an increased allocation for security expenditures. Sadly, the results presented above suggest this action may well be self-defeating, producing greater instability and a further reduction in security.

Notes

- 1 'Middle East Politics: Overview of Defense Spending', *EIU Views Wire*, 28 June 2007, p. 1.
- 2 Eamonn Gearon, 'Middle East Military Spending Soars', *Middle East* (August/September 2006), p. 21.
- 3 Kenneth Pollack, 'The Seven Deadly Sins of Failure in Iraq: A Retrospective Analysis of the Reconstruction', *Middle East Review of International Affairs*, www.brookings.edu/views/articles/pollack/20061214.htm, December 2006.
- 4 Jennifer Bremer and John Kasarda, 'The Origins of Terror: Implications for US Foreign Policy', *Milken Institute Review* (Fourth Quarter 2002), pp. 34-43.
- 5 By 'Second Image Reversed' we are referring to Waltz's models of international relations theories. How are changes in international factors transmitted into domestic life? How do changes in the international economy affect domestic actors? Do the same changes produce the same results in national policies everywhere? See K. Waltz, *Man, the State, and War* (New York: Columbia University Press, 1959).
- 6 *The Military Balance 2007* (London: Institute for Strategic Studies, 2007).
- 7 'Middle East Politics: Overview of Defense Spending', *EIU Views Wire*, 28 June 2007, p. 1.
- 8 *Ibid.*

- 9 'Algeria: Has the Army Returned to the Barracks?' *Oxford Analytica*, 24 February 2004, p. 1.
- 10 'Morocco: Kingdom Faces Threats from Military Islamism', *Oxford Analytica*, 9 November 2004, p. 1.
- 11 Anthony H. Cordesman, 'The Arab-Israeli States Military Balance: National Forces Developments and Trends', CSIS, Washington, DC, Working Draft 29 March 2005, p. 6.
- 12 *Ibid.*
- 13 Charles Freilich, 'National Security Decision Making in Israel: Processes, Pathologies, and Struggles', *Middle East Journal* 60, no. 4 (Autumn 2006), p. 635.
- 14 'Benign Budget Masks Longer-Term Threats', *Oxford Analytica*, 10 November 2006, p. 1.
- 15 Cordesman, 'The Arab-Israeli States Military Balance', p. 6.
- 16 'US Proposed Sale to Saudi Arabia Could Trigger Arms Race', *Global Information Network*, 8 August 2007, p. 1.
- 17 Hassan M. Fattah, 'Arab States, Wary of Iran, Add to Their Arsenals but Still Lean on the US', *New York Times*, 23 February 2007, p. A10.
- 18 'Gulf States Ride the Petrodollar Boom: Oil Producers Must Act to Turn it into a Lasting Opportunity', *Financial Times*, 28 December 2006, p. 12.
- 19 Anthony H. Cordesman and Khalid R. Al-Radhian, 'The Gulf Military Forces in an Era of Asymmetric War: Yemen', CSIS, Washington, DC, Working Draft 28 June 2006, p. 4.
- 20 'Iran: Conventional Military Forces Rely on Deterrence', *Oxford Analytica*, 24 August 2007, p. 1.
- 21 'Turkey to Spend \$2.5 Billion for F-16 Block 50 Aircraft', *Defense Daily International* 7, no. 39 (6 October 2006), p. 1.
- 22 Andy Nativi, 'Turkish Bazaar: Turkey Continues to Invest in Defense Modernization', *Aviation Week and Space Technology* 166, no. 20 (28 May 2007), p. 48.
- 23 'Jordan to Spend \$450 Million on C4ISR Upgrades, \$60 Million on Helicopters', *Defense Daily International* 7, no. 39 (6 October 2006), p. 1.
- 24 'Jordan: Oil Prices Create Budgetary Pressures', *Oxford Analytica*, 4 September 2006, p. 1.
- 25 F. Gregory Gause III, 'Saudi Arabia and the Proposed Arms Sale', Testimony before House Committee on Foreign Affairs, 18 September 2007.
- 26 Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi, *Governance Matters IV: Governance Indicators for 1996-2004* (Washington: World Bank, June 2005).
- 27 More precisely the governance gap appears to vary depending on the stage of development. For a detailed discussion see Robert Looney, 'Middle East Reform Initiatives: A Stage-Theory Perspective', *International Journal on World Peace* 22, no. 1 (March 2005), pp. 13-38.
- 28 *Better Governance for Development in the Middle East and North Africa: Enhancing Inclusiveness and Accountability* (Washington, DC: World Bank, 2003).
- 29 Joel Beinin, 'Labor, the State, and the Social Contract in Non-Oil Exporting Countries of the Middle East and North Africa', unpublished paper, Stanford University, 2003.
- 30 Tarik Yousef, 'Development, Growth and Policy Reform in the Middle East and North Africa Since 1950', *Journal of Economic Perspectives* 18, no. 3 (Summer 2004), p. 96.
- 31 Rashid Khalidi, *Resurrecting Empire: Western Footprints and America's Perilous Path in the Middle East* (Boston, MA: Beacon Press, 2004).
- 32 See, for example, P. C. Frederiksen and R. E. Looney, 'Another Look at the Defense Spending and Development Hypothesis', *Defense Analysis* (September 1985), pp. 205-10; R. E. Looney and P. C. Frederiksen, 'Profiles of Latin American Military Producers', *International Organization* (Summer 1986), pp. 745-52.
- 33 A description of the different dimensions of economic freedom, together with an earlier application to Pakistan can be found in Robert Looney, 'Pakistan's Progress Towards Economic Freedom', *Contemporary South Asia* 6, no. 1 (1997), pp. 79-98.
- 34 Stephen Glain, 'Locked and Loaded: Wall Street is Hot on Weapons Makers as Developing Nations Bolster their Defenses', *Newsweek International*, 20-27 August 2007.