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THE BUDGETARY IMPACT OF DEFENCE EXPENDITURES IN THE MIDDLE EAST

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ABSTRACT

This paper attempts to examine the relationship between defence spending and budgetary allocation in twelve Middle Eastern and North African/Mediterranean countries. The impact of increases in defence spending on the budget deficit is analysed to find if there is any trade-off between spending on defence and other spending categories. The paper also tests if budgetary patterns involving defence vary by country group.

1. Introduction

In the aftermath of the Kuwaiti conflict, there is likely to be an increase in defence spending in many of the Middle Eastern and North African countries. This expansion may occur even though a number of these countries face growing fiscal problems and pressing social and economic difficulties. Depending on the relative impact of defence spending, shifts in resources may significantly affect the economic performance as well as the democratization in these countries.

The purpose of this study is to examine the relationship between defence spending and budgetary allocations in twelve Middle Eastern and North African/Mediterranean countries: Malta, Cyprus, Morocco, Tunisia, Egypt, Syria, Jordan, Israel, Bahrain, Iran, Pakistan, and Oman.[1]

In recent years, many of these countries have been forced to introduce austerity programs.

However despite its importance, little is known about how these governments set priorities for their shrinking revenues between major expenditure categories. Do expenditures on certain categories vary systematically with unanticipated changes in the budgetary deficit? Military expenditures? If so, which sectors gained? Lost? Do these patterns provide insights as to the manner in which the government established budgetary priorities during this period?

Specifically, the study addresses the following questions:

1. Does a causal budgetary trade-off exist between defence spending and non-defence categories? If so, what are the magnitudes of this trade-off? Is the trade-off modified by budgetary conditions-deficits?

2. Do the trade-offs vary over time -- are the patterns found in the long run significantly different from those experienced in the short term?

3. Do the budgetary patterns involving defence vary by country group -- countries with high

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1   An earlier version of this paper was presented at the International Conference on Business and Economic Development in Middle Eastern and Mediterranean Countries, Malta, May 25-27. The author is indebted to Professor M. M. Metwally and other conference participants for their constructive comments.

versus low defence burdens (the share of Gross National Product devoted to military expenditures)?

2. Trade-off Literature

On the surface, budgetary tradeoffs between defense and allocations to socio-economic programs would seem to be straightforward. That is a given budgetary increase in military expenditure will crowd out an equivalent amount of all other spending, and these programs will be reduced according to their proportion of the total. However recent research has shown that this view of the budgetary process is simplistic and does not conform with the manner in which governments often chose to prioritize expenditures.[2]

A related issue, and one of significant relevance for the many of the Middle Eastern countries facing austerity programs is the manner in which austerity-driven budgetary cuts are allocated. Anecdotal evidence suggests that officials often follow rather ad hoc rules for making large contractions in a short time - cutting new rather than ongoing projects, new rather than present employment, and materials and travel expenses rather than personal; and favoring Ministries that are politically powerful, or reducing those that expanded most rapidly in the past.[3]

Operationally, several methods have been used to establish whether trade-offs exist.[4] First, using cross-section data it should be possible to discern whether relatively big spenders on the military are relatively small spenders in areas such as education and health (and vice versa). Recently a study by Harris, Kelly and Pranowo[5] found:

1. Based on one year's data (1983), countries that allocate relatively high proportions of their central government expenditure (CGE) to defence do not commonly allocate relatively low proportions to education and health (and the converse applies);

2. Defence expenditure has a low vulnerability during times of overall CGE cuts, but so do health and education expenditures. If anything, defence is more vulnerable than the other two, particularly in low income countries;

3. During times of CGE expansion, defense expenditure in low income countries expands at a rate comparable with education and somewhat more than health. In middle income countries, health expenditures increase more proportionally than defence and education; and

4. For 12 Asian countries between 1967 and 1983, multiple regression analysis confirmed that trade-offs between defence expenditure and education/health were rare.

Second, and again following Harris, the effect of central government expenditure increases or cutbacks on, say, defence, health, and education allocations may be examined. If a trade-off existed, it might be expected that defense expenditure would gain relative to other expenditure categories during years of CGE cutbacks.

As to the choice of which sectors to cut back, it is often felt that some sectors are more "vulnerable" than others. The defence sector, particularly, is usually considered difficult to reduce, while social sectors, such as health, education and rural development, are considered vulnerable.

In the first comprehensive study of relative vulnerability Hicks and Kubisch examined 37 cases of budgetary reduction. These were defined as occurring in countries where real expenditure declined in one or more years.

Hicks and Kubisch's main findings indicated that the countries examined experienced an average decline of 13 percent in real Government expenditure. Associated with this decline was a contraction of only five percent in the social sectors (producing a vulnerability index of 0.4). By contrast, the index was 0.6 for the administrative/defense sectors and

2   See for example Saadet Deger, "Human Resources, Government Education Expenditure and the Military Burden in Less Developed Countries," *Journal of Developing Areas* (October 1985), pp. 37-48.

3   Cf. the discussion in N. Caiden and A. Wildavsky, *Planning and Budgeting in Poor Countries* (New York: John Wiley, 1974).

4   The following draws heavily on G. T. Harris, "Economic Aspects of Military Expenditures in Developing Countries: A Survey Article." *Contemporary Southeast Asia* (June 1988), pp. 95-96.

5   Goeffrey Harris, Mark Kelly and Pranowo, "Trade-offs Between Defense and Education/Health Expenditures in Developing Countries." *Journal of Peace Research* (1988), pp. 1-14.

over one percent for production and infrastructure. In short, the various social sectors were less vulnerable to cuts than defence and administration, which in turn were considerably less vulnerably than production and infrastructure contrary to the generally accepted view.

The fact that social sectors and defense were both relatively protected suggests that there were high political costs associated with reducing them. On the other hand, countries appeared to have been more willing to cut spending on infrastructure and production which, of course, are likely to have adverse implications for longer term growth, but few early direct and immediate costs.

Summing up these recent studies, Hicks and Kubisch found that when faced with difficult choices in reducing public expenditures, governments consider a wide range of factors, including political and economic costs, present versus future consumption and the potential impact on employment, distribution and welfare. Their empirical results suggest that when governments in developing countries implement austerity programs, they do not apply across-the-board reductions in expenditures. Generally, capital expenditures are reduced more than recurrent expenditure. Within both capital and current budgets, the social and administrative/defence sectors appear to be relatively protected, while infrastructure and production absorb disproportionately larger reductions. That social sectors do not appear to be highly vulnerable to expenditure reductions in times of austerity was the novel finding of that study.

Subsequent to Hicks and Kubisch's study several additional patterns have been identified. Without necessarily making a distinction as to current versus capital expenditures, these studies suggest that these countries tend to make selective cuts in non-defence categories, focusing either on social or economic programs. These patterns are further modified by the manner in which countries choose to selectively fund high priority sectors through running larger fiscal deficits.

This pattern was found to be present in several arms producing countries where a fairly close link exists between the government budget deficit, public consumption and military expenditures. These countries show defence expenditures linked to

budgetary deficits, i.e., defence expenditures rise with government deficits. Other expenditures may be cut back during periods of high deficits. With surpluses, defense expenditures, everything else equal, tend to decline in percentage terms.[6]

3. The Role of Economic Environment

While the trade-off literature provides valuable insights as to the budgetary decision process, this view is incomplete in that it does not systematically take into account the overall state of the economy and the impact of defence expenditures may have on economic growth.

Logically the willingness of countries to cut or expand defense expenditures will also be affected by these macro-economic considerations. To gauge the differential impact defense expenditures may have had on growth in the high and low groups a model of the general form:

$$GY = f\,[GI,\ GYL,\ MEY,\ MEGE,\ MEGEL]$$
$$\quad\quad\quad + \quad + \quad ? \quad\quad ? \quad\quad ?$$

Where:

GY   =   the rate of GDP growth, 1980-1989;

GI   =   the rate of growth in investment, 1980-89;

GYL   =   the rate of growth in GDP 1970-1979;

MEGE =   the average share of defense expenditures in the central government budget 1980-1989; and

MEGEL =   the average share of defense expenditure in the central government budget 1972-1979.

This formulation is based on the normal developing country assumption that investment is the

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6   Robert E. Looney, "Military Expenditures in Latin America: Patterns of Budgetary Trade-offs" op. cit., p. 101.

key element in growth.[7] It also draws an empirical pattern first noted by Nugent " ... for the aggregate growth rates of individual countries to be rather similar from one decade to the next."[8] This pattern was observed above whereby the high military expenditure countries achieved higher rates of growth in both the 1970s and 1980s.

While a detailed description of the results obtained from this analysis is beyond the scope of this paper,[9] several major findings are of relevance for the current study:

1. Developing countries are far from homogeneous with regard to the manner in which defence expenditures impact on their economies. Countries with high defence burdens appear to have an environment that while generating higher rates of overall growth do so in a manner independent of the defence burden. On the other hand there is some evidence these countries experience negative effects stemming from high budgetary shares allocated to the military; and

2. In contrast countries, with a low defense burden tend to experience relatively depressed rates of growth. Within this group however countries with higher defence burdens experience more rapid rates of growth. For extreme cases (countries with very low defence burdens)

increased shares of the budget allocated to the military are also associated with higher rates of growth in Gross Domestic Product.

The picture that emerges from these comparisons is one whereby the high defence group appears more dynamic economically--they have greater rates of growth, higher investment and savings rates, together with similar debt servicing burdens. This is not to say that the high defense countries spend more on defence simply because they can afford this type of allocation. It simply suggests that these countries have been able to sustain their high rates of economic expansion despite their relatively high defence burdens.

4. Budgetary Trade-offs Time Series Analysis

While these patterns are clear, their explanation is not. It would be easy to argue that military expenditures do have a net positive impact on these economies (the result from the total sample) and that the countries with high defence burdens are simply experiencing diminishing returns from this source. Similarly, countries with a low defense burden have not reached this point of diminishing returns. Regarding budgetary shares, these arguments could be extended: countries with high proportions of their budget allocated to defence may derive some stimulative effects in the short run but over time the deterioration in economic services and human capital offsets any positive stimulus derived from expenditures of this type.

While the defence burden patterns are beyond the scope of this paper,[10] it may be possible to shed some light on the budgetary effects on growth. Returning to our sample of Middle Eastern countries, and as starting poin a model similar to

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7   Obviously this is a simplification, but investment has traditionally been introduced as the starting point in models of this sort. See for example: Riccardo Faini, Patricia Annez and Lance Taylor "Defence Spending, Economic Structure, and Growth: Evidence Among Countries and Over Time". *Economic Development and Cultural Change* (April 1984), pp. 487-498.

8   Jeffrey Nugent, "Momentum for Development and Development Disequilibria" *Journal of Economic Development* (July 1977), p. 35.

9   A complete presentation can be found in Robert E. Looney "The Budgetary Impact of Defence Expenditures in the Middle East". Paper presented at the International Conference on Business and Economic Development in Middle Eastern and Mediterranean Countries, Malta: May 25-27, 1992. Copies of this paper are available from the author upon request.

10   Previous research suggests that countries that are relatively unconstrained in terms of foreign exchange and/or savings/investment tend to have a net positive impact from defence expenditures. Often, however, in resource scarce countries this impact becomes negative. The speed of defence mobilization may also be very important in this regard with a gradual expansion in the defence burden neutral or stimulative but a surge in defence expenditures producing negative impacts on the economy. See for example Robert E. Looney "The Role of Military Expenditures in Pre-Revolutionary Iran's Economic Decline". Iranian Studies (1988), pp. 52-81.

that used in a recent analysis[11] of Saudi Arabian budgetary patterns was estimated:

$$SHARE = f\ [GDEFEX,\ GDEFUX,\ MILXU,\ MILXE]$$

Where[12·]

GDEFEX = the expected government budgetary position (− = deficit, + = surplus);

GDEFUX = the unexpected government budgetary position;

MILXU = Unexpected defense expenditures; and

MILXE = Expected defense expenditures.

All the variables are defined in terms of their share of government expenditures.

In this formulation, we assume the expected deficit reflects a structural imbalance between revenue and expenditure. Similarly, transitory government deficits are assumed to be depicted by that component of the public deficit that was unanticipated. Admittedly, this may occur because of a revenue shortfall. In those circumstances, however, the expected deficit could be attained simply by cutting expenditures accordingly. If an unanticipated deficit occurs, therefore it is assumed that it reflects the decision to fund priority sectors. Similarly, if a sector's budgetary share falls with an increase in the unanticipated deficit, it is assumed that that sector's funding was reduced to support other programs of a higher priority.

This form of prioritizing is consistent with (although not proof of) some form of lexicographic[13] ordering of budgetary priorities. That is, the Government tries to maintain certain budgetary categories at pre-defined levels. When these levels are met, the authorities are then willing to provide additional funding for categories and programs of lower priority. The expected and unexpected military expenditure terms can be interpreted in a similar manner.

Two sets of regressions were estimated: The first of the form noted above, reflects short run budgetary adjustment to changes in the deficit and defense expenditures. The second set examines longer term budgetary adjustment to year-to year changes in the deficit position and military shares. These longer term adjustments are assumed to follow a distributed lag and thus were estimated by including the lagged value of the dependent variable as one of the regressors.[14]

Because of space limitations the main findings are presented in summary form.[15] Here several patterns are clearer if countries are grouped according to whether they support high or low levels of defense expenditures (Tables 1 and 2). For the short run (Table 1):

1. Public services appear to have fairly high priority in the high defence group, but not in the low defense group. For all of the high defence countries other than Israel increases in the expected deficit were used to fund expanded levels of public services;

2. Expanded defence shares (particularly unexpected increases) also appear to support public services in the high defense group;

11   Robert E. Looney "Deducing Budgetary Priorities in Saudi Arabia: The Impact of Defence Expenditures on Allocations to Socio-Economic Programs". Public Budgeting and Financial Management 9(1992), pp. 311-326. See also Robert E. Looney "Budgetary Priorities in Saudi Arabia: The Impact of Relative Austerity Measures on Human Capital Formation." OPEC Review (Summer 1991), pp. 133-152.

12   Expected values were estimated by regressing each year's actual figure on that of the previous year. The predicted value for each year was assumed to be that expected. Unexpected values were calculated as the difference between what actually occurred in a given year and that which was expected. See Robert Looney "Budgetary Priorities in Saudi Arabia: The Impact of Relative Austerity Measures on Human Capital Formation" OPEC Review (Summer 1991), pp. 133-152 for a more detailed explanation of this method.

13   Cf. J. Encarnacion. "Some Implications of Lexicographic Utility in Development Planning". The Philippine Economic Journal (Second Semester, 1970), pp. 231-240.

14   First formulated in L. M. Koyc. Distributed Lags and Investment Analysis (Amsterdam: North Holland, 1954). See M. Nerlove. "Lags in Economic Behavior". Econometrica (1972, pp.. 221-251 for the economic interpretation of this phenomenon.

15   A complete set of detailed results are available from the author upon request.

Table 1
Patterns of Short-Run Budgetary Impact and Trade-off
(Nature of impact)

Country	Budgetary Position		Defence Expenditures	
	Expected	Unexpected	Expected	Unexpected
Public Services-High Defense Countries				
Egypt	+	+	ins	+
Syria	+	ins	-	ins
Jordan	+	+	ins	+
Israel	ins	ins	+	+
Pakistan	+	ins	ins	ins
Morocco	+	+	-	ins
Public Services-Low Defense Countries				
Iran	ins	ins	-	ins
Oman	ins	ins	ins	ins
Malta	ins	-	'-	ins
Tunisia	ins	ins	ins	ins
Cyprus	ins	ins	ins	ins
Bahrain	ins	ins	ins	ins
Education				
Egypt	+	ins	+	-
Syria	-	ins	+	+
Jordan	+	+	+	+
Morocco	ins	-	+	-
Israel	ins	ins	ins	ins
Pakistan	ins	-	+	-
Iran	+	+	ins	ins
Oman	ins	ins	ins	ins
Malta	ins	ins	ins	-
Tunisia	+	+	ins	-
Cyprus	-	-	ins	ins
Bahrain	ins	ins	ins	-
Health				
Egypt	-	+	ins	ins
Syria	-	-	ins	+
Jordan	-	ins	+	ins
Morocco	ins	ins	ins	ins
Israel	ins	ins	ins	+
Pakistan	-	ins	+	-
Iran	ins	ins	-	ins
Oman	ins	ins	-	-
Malta	ins	ins	-	-
Tunisia	ins	ins	ins	-
Cyprus	ins	ins	ins	ins
Bahrain	ins	ins	ins	ins

Table 1 (Contd.)
Patterns of Short-Run Budgetary Impact and Trade-off
(Nature of impact)

Country	Budgetary Position		Defence Expenditures	
	Expected	Unexpected	Expected	Unexpected
Social Security, Welfare				
Egypt	-	-	ins	ins
Syria	+	ins	ins	-
Jordan	+	-	ins	-
Israel	ins	-	-	-
Pakistan	-	ins	+	+
Morocco	ins	-	ins	-
Iran	+	ins	ins	ins
Malta	ins	ins	ins	ins
Oman	ins	ins	ins	ins
Tunisia	ins	-	-	-
Cyprus	ins	ins	ins	ins
Bahrain	ins	ins	ins	ins
Housing, Community Activities				
Egypt	ins	-	+	-
Syria	+	ins	-	-
Morocco	+	+	-	ins
Jordan	+	+	ins	-
Israel	-	ins	ins	ins
Pakistan	-	ins	+	+
Iran	-	-	ins	ins
Oman	ins	+	--	
Malta	+	+	ins	ins
Tunisia	ins	+	ins	+
Cyprus	ins	+	ins	+
Bahrain	-	ins	-	-
Economic Services				
Egypt	-	-	+	-
Syria	-	-	-	-
Morocco	-	-	+	ins
Jordan	+	ins	ins	-
Israel	+	-	-	-
Pakistan	+	ins	-	-
Iran	ins	ins	ins	+
Malta	+	ins	-	-
Oman	+	+	+	+
Tunisia	ins	ins	+	ins
Cyprus	+	+	ins	-
Bahrain	ins	ins	ins	+

Table 2
Patterns of Long-Run Budgetary Impact and Trade-off
(Nature of impact)

Country	Budgetary Position	Defence Expenditures	
		Expected	Unexpected
Public Services			
Egypt	+	ins	+
Syria	+	ins	ins
Jordan	ins	ins	ins
Morocco	+	-	ins
Pakistan	ins	ins	ins
Israel	ins	ins	ins
Iran	ins	ins	ins
Malta	ins	ins	ins
Oman	ins	ins	ins
Tunisia	+	ins	ins
Cyprus	ins	ins	ins
Bahrain	+	+	-
Education			
Egypt	+.	+	-
Syria	+	+	+
Jordan	ins	ins	-
Pakistan	ins	+	ins
Israel	-	ins	+
Morocco	-	+	ins
Iran	+	ins	ins
Malta	+	ins	-
Oman	ins	ins	ins
Tunisia	ins	ins	.
Cyprus	ins	ins	ins
Bahrain	+	ins	+
Health			
Egypt	ins	ins	ins
Syria	ins	+	ins
Jordan	ins	ins	ins
Morocco	-	ins	+
Israel	ins	ins	ins
Pakistan	+	+	.
Iran	ins	ins	ins
Malta	+	-	-
Oman	+	ins	ins
Tunisia	ins	ins	-
Cyprus	ins	ins	ins
Bahrain	ins	ins	ins

Table 2 (contd.)
Patterns of Long-Run Budgetary Impact and Trade-off
(Nature of impact)

Country	Budgetary Position	Defence Expenditures	
		Expected	Unexpected
Social Security, Welfare			
Egypt	-	ins	ins
Syria	+	ins	-
Jordan	ins	ins	-
Israel	-	ins	-
Pakistan	-	ins	+
Morocco	-	ins	-
Iran	+	-	ins
Malta	-	ins	ins
Oman	ins	ins	ins
Tunisia	ins	-	ins
Cyprus	ins	-	-
Bahrain	ins	ins	ins
Housing, Community Activities			
Egypt	ins	ins	ins
Syria	+	ins	-
Jordan	ins	ins	ins
Israel	+	+	+
Morocco	ins	ins	ins
Pakistan	ins	ins	ins
Iran	ins	ins	ins
Malta	+	ins	+
Oman	-	-	-
Tunisia	ins	ins	ins
Cyprus	-	-	-
Bahrain	ins	ins	-
Economic Services			
Egypt	+	+	ins
Syria	-	-	-
Jordan	-	+	-
Morocco	ins	+	ins
Israel	-	-	-
Pakistan	ins	ins	-
Iran	ins	ins	-
Malta	ins	ins	ins
Oman	ins	+	ins
Tunisia	ins	ins	ins
Cyprus	ins	ins	ins
Bahrain	ins	+	ins

3. In contrast, with the exception of Malta, public services in the low defense group are not affected one way or another with changing deficit and defence shares;

4. Education presents an interesting contrast with the high defence countries usually increasing its share along with expansion in the expected defence share. On the other hand several countries reduce its share along with unexpected increases in defence. This pattern was also found in the low defence countries;

5. Health expenditures appear to be a major casualty of expected deficits in the high defense group, although in several cases this is offset by increased defence expenditures (either expected or unexpected, but usually not both). While this category does not get hurt by budgetary strategies in the low defence group, it is an area likely to be cut by any increase in defence expenditures;

6. As with health, social security and welfare in the high defence group does receive some budgetary support from increases in the indented deficit. However, this sector suffers cuts with increases in the unintended deficit. With the exception of Pakistan it is also susceptible to lost shares when defence increases.

7. Housing and community activities receive considerable budgetary support in both the high and low defence countries. This is particularly true of unexpected deficits in the low defense group. This sector's budgetary shares are affected in most countries by developments in defense, but there are no appreciable differences in patterns between the high and low defence groups;

8. Economic services provide some interesting contrasts. In the high defence countries, shares to this activity are almost certain to

be cut with expanded defence expenditures, particularly if these expenditures are unanticipated. This group of countries also reduces allocations to this budgetary category when unanticipated deficits appear;

9. Still, several of the high defence countries Jordan, Israel and Pakistan increase the share of the budget for these activities with increases in the budget deficit. However, this effect may be offset by developments in defence and the existence of unexpected deficits; and

10. In contrast, economic services fare considerably better in the low defence countries with many of these countries supporting expanded economic activities with budgetary deficits. In addition, a number of countries expanded economic services along with military expenditures.

Roughly the same pattern emerges over time (Table 2) with several notable exceptions:

1. Public services benefit over time from expanded deficits, in several of the high and low defence countries. However, their expansion with military expenditures observed in the short term in high defence countries does not appear to carry over into the longer term;

2. The negative impacts on health in the low defence group produced by defence expenditures largely disappear in the longer term. They do however still occur with increases in defence expenditures in Pakistan and several of the low defence countries;

3. Reductions in allocations to social security and welfare programs seem to be more vulnerable to budgetary cuts sin the high defence countries. For these countries, increases in the unintended share of defence

expenditures, as in the short run, also reduce the relative allocations to these programs. These programs are also more vulnerable over time to increases in expected defence expenditures in the low defence group; and

4. Economic services are still quite vulnerable to unexpected increases in military expenditures in the high defence group. However, several of the low defence countries no longer expand these allocations with increases in the deficit.

5. Conclusions

The main findings of the study are:

1. Defence budgetary trade-offs in the Third World are complex. In part, this simply reflects differences in budgetary priorities across countries. However, this complexity also stems from the fact that increased levels of government deficits can offset or reinforce the impacts that expanded defence expenditures have on other budgetary shares;

2. The above analysis indicated that defence socio-economic trade-offs also vary considerably depending on whether the country has an environment characterized by high or low level of military expenditures. This usually occurs in both the central government budget and in relation to the overall size of the economy;

3. During the 1980s, defence expenditures in these two environments also had a differential impact on economic growth. In the high defence expenditure countries, increases in the share of resources allocated to defence did not provide any appreciable positive stimulus to the economy. For these countries, increases in defence in the central government budget actually tended to reduce the overall rate of growth. In the low defence countries, however, increases in the

defence burden did provide a positive stimulus to economic growth. Furthermore, increases in the share of defence in the central government budget did not retard that growth.

4. At least in the Middle East, there is a partial explanation for these patterns. For these countries (with several exceptions) the high defence countries appear to cut economic expenditures to free up resources for further expansions in the military. This may occur because of the political costs in cutting non-defence expenditure, particularly over long periods of time. Again, with several exceptions, the low defence countries seem to have more flexibility on accommodating increased levels of military expenditure. Perhaps as a result, economic programs are not as susceptible to cuts in these economies.

5. Most likely there are long run costs associated with the manner in which Middle Eastern countries alter budgetary shares to accommodate increased military expenditures. For high defence countries as a whole, increased budgetary shares allocated to defence in the 1970s had a positive impact on growth in the 1980s. Increased budgetary shares to defence in the 1980s however impacted negatively. Given the observed lagged nature of many of negative impacts in these countries on economic services, this may indicate the neglect of economic services, infrastructure and the like. If that is the case this group of country's high defence burdens are starting to take a heavy toll on economic growth. If these lagged impacts are stable, we can expect growth in these economies in the 1990s will expand at rates somewhat below their long run growth paths. For these countries, a reorientation of budgetary priorities may not provide an immediate stimulus to their economies.

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