Can Saudi Arabia Reform its Economy in Time to Head Off Disaster?

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by Robert Looney

"The problem in Saudi Arabia is that the middle class is shrinking, and the more poverty you have, the more fundamentalism you have."

Turki Hamad

Introduction

For an increasing number of its citizens, the Saudi Arabia of the heady years following the 1973-1974 oil price revolution is a land of fable and memory. Yet to many outside the Kingdom, the country's economic statistics may come as a shock. Population growth (about 3.3 percent per year) has exceeded Gross Domestic Product (GDP) growth for several decades. The result has been a decline in per capita GDP from more than U.S. $15,000 in 1980 to about U.S. $9,000 in 2003 (adjusted for inflation). There is high unemployment (20 to 30 percent by some measures), while up to 20-30 percent of the population falls below the poverty line.

Translating these figures into more tangible signs of trouble for the Saudi Government, Kim Murphy has observed:

The dozen years since the Persian Gulf War have seen slums grow up on the outskirts of Jeddah and Riyadh, the capital. Beggars hawk bottles of water at intersections. Penniless women huddle in strips of shade outside their crumbling mud-brick houses, begging for money. Many families in the capital are so poor they can't afford electricity. Raw sewage runs through parts of Jeddah… The increasingly perilous economic situation that all in Saudi Arabia but the royalty face today may be a big factor in recruiting young Saudis to terrorist groups such as Al Qaeda. Chronic joblessness, diminished incomes and difficulty in collecting enough money to marry and start families are all issues that can evoke anger.[1]

The deteriorating economic situation is manifesting itself in new and troubling ways. Virtually free of crime since its founding, the country's deeply conservative Islamic society is grappling with a rapid increase in crime. Crime among young jobless Saudis rose by 320 percent between 1990 and 1996, and was expected to go up by another 136 percent by 2005.[2]

To counter these trends, Crown Prince Abdullah, the kingdom's de-facto leader, has announced plans for sweeping reforms including privatization, liberalization and diversification of the economy.[3] However, implementing them will not be easy. Conservative opposition within the ruling family is strong and limits the pace of reform.[4] Barring major reforms, the financial cost of state-lead economic diversification may reach upwards of U.S. $100 billion over the next twenty years. And the country's national debt is already over 100 percent of GDP. Even with an improved oil picture, the Saudi government may simply not be able to finance the diversification of the economy without extensive private sector participation.

On the other hand, the international scene provides no quick fixes either; and bringing in private foreign investors is not without its own problems. The increased presence of foreign businessmen will further strain relations between the government and the kingdom's more traditional groups. The Saudi government also has to convince the foreign investment community that the kingdom is a secure place to do business, and not a battleground between the royal family-dominated government and international terrorists.

Saudi Arabia's problems have been decades in the making and certainly will not be solved quickly. This essay identifies the main factors responsible for Saudi Arabia's economic deterioration. Have fundamental changes taken place in the economy, perhaps since 1980, to cause the decline in non-oil economic growth? If so, what are they? And what are their implications for the future?

Trends in the Economy

The inability of the Saudi non-oil economy to sustain high rates of growth is evident in the historical record (Table 1). The overall rate of real non-oil GDP growth has averaged 7.4 percent from 1960-2002 (7.1 from 1970 to 2002). However, expansion since 1980 (2.3 percent) has not even kept up with the growing population. While one might argue the -0.9 percent average annual decline in oil GDP (1980-2002) is responsible for this sub-par performance, government expenditure, the means through which oil revenues are actually spread through the economy, grew at the higher rate of 3.0 percent per annum. Several important patterns, mainly evolving since the early 1980s, help to explain this deterioration in Saudi non-oil economic growth.

Public/Private Composition of Gross Domestic Product

The Saudi Arabian Monetary Agency breaks the country's GDP into three main categories: public sector output, private sector output and the oil sector's contribution to GDP.[5] The relative growth of private sector output as a percentage of total GDP is the main pattern of interest (Figure 1). In the pre-1973-1974 period, private sector activity accounted for around 30 percent of the country's output. This fell slightly following the 1973-1974 oil price increases, only to increase to 60 percent by 1985. Since then, private sector output has declined gradually, leveling off at around 48 percent of output.

In contrast, the public sector's output averaged around 12 percent before 1973-1974. Thereafter, the public sector's share increased steadily to slightly over 20 percent (1983), leveling off at around 18 percent through 2002.

Finally, the oil sector averaged approximately 55 percent of GDP prior to the 1973-1974 oil price jump. The sector's share of output then declined sharply to around 20 percent in 1985 before increasing through the rest of the 1980s, leveling off at around 35 percent of output starting in the early 1990s.

If an oil country's success is depicted by its ability to diversify away from a dependence on oil revenues, then the Saudi picture is mixed. The private sector has been able to expand its share of output to the point that it now accounts for around half of the kingdom's GDP. But this is actually 10 percent lower than the peak attained in the mid-1980s. While the sector appears capable of sustaining this percentage of output through much different periods of oil prices and revenues, indicating some independence from year to year oil market fluctuations, the sector has not shown it is capable of high rates of sustained growth. Interestingly, the public sector's share of output has been quite stable since the early 1980s.

Composition of Output by Sectors

Among the more striking features of Saudi economic growth since the mid-1960s are the sharp changes in composition of non-oil output (Figure 2). The 1973-1974 oil price increases caused steep increases in the construction, trade and housing sectors. Since then, construction dropped precipitously before leveling off at around 12 percent of private sector output while housing fell off as well to around 8 percent. Trade (retail and wholesale) was least affected and has averaged around 27 percent of private sector expenditures since the late 1980s.

Another feature of interest is the agricultural sector, which, after declining in relative importance up to the early 1980s, has increased its share of non-oil private output from around 8 percent at that time to 17-18 percent and has held that figure stable since the late 1980s. The most stable activity, however, appears to be the non-oil manufacturing sector. This sector's share in private sector output was not affected by the 1973-1974 oil boom. Instead, it has gradually increased its share of private sector output from about 5 percent in 1968 to around 14 percent in 2002.

While great strides have been made in increasing total private sector output, the sectors contributing to overall output have all returned to their pre-oil boom pattern. The main exception is the non-refining private manufacturing sector.

Public/Private Composition of Expenditures

The composition of output between public/private consumption and investment has produced several interesting patterns over time (Figure 3). The most stable series is private investment, averaging slightly above 10 percent of total expenditures. Interestingly, the share of private sector investment was not significantly affected by the 1973-1974 oil price increases; nor did it expand while private sector activity grew as a share of GDP from 1973-1974 to 1985.

In contrast, private consumption's share of expenditures dropped from a high of 70 percent in 1960 to around 30 percent in 1973-1974. Since that time, private consumption, while fluctuating a bit, has moved back up to approximately half of total expenditures. Public consumption gradually increased from less than 20 percent of expenditures in 1960 to around 30 percent at the time of the oil price increases. Since then, the public sector's consumption has fluctuated in the low 30s, with no particular trend.

Of the four expenditure variables, public investment has shown the most notable trends, gradually increasing its share from near zero in 1960 to around 25 percent in 1975. Since then, public expenditures gradually trended down, closing at near 5 percent by 2002.

These patterns and trends suggest that the kingdom is living on borrowed time: falling public and stagnant private investment rates in the context of a rapidly growing population mean increased domestic bottlenecks and capacity constraints that reduce the country's sustainable growth potential. Many of these constraints, such as power shortages, are reported on a regular basis in the popular press.

Patterns of Public-Private Expenditure/Non-Oil Output

Another way of looking at the problem of the kingdom's rather low rates of investment is to compare the various expenditure items to non-oil GDP. Again there are several relatively stable patterns and several that depict longer-term trends (Figure 4). Private expenditures have been relatively stable with respect to non-oil GDP, generally fluctuating within a range of 80 and 100 percent of output. The early 1990s brought an increase in this ratio, followed by a fairly sharp contraction from 1996 to 2002. Overall consumption (public plus private) also reflects this pattern, albeit at a higher level, averaging around 120 percent of non-oil GDP, with imports balancing supply and demand.

On the other hand, public expenditures alone increased fairly steadily over the twenty-year period leading up to 1980, only to decline fairly steadily before leveling off at around 55 percent of non-oil GDP. Investment follows a similar pattern, rising fairly steadily to over 60 percent of non-oil GDP in the late 1970s then declining to around 22 percent throughout the 1990s.

While investment is not the only important factor in determining future rates of growth in non-oil GDP, a country of Saudi Arabia's vast resources should be able to mobilize larger amounts of capital. Investment as a share of non-oil GDP has essentially returned to the levels found in the 1960s. Again the inability of the country to devote more funds to capital formation will limit the economy's ability to just keep up with the rapidly expanding population.

Public Expenditures

The kingdom has experienced on-going budget difficulties since the mid-1980s. Growing deficits have been the norm, with non-oil revenues unable to pick up the slack during periods of falling oil revenues. Less well known is that the composition of public expenditures has undergone profound changes during this period. Aggregating the main budgetary items into four main groups, several patterns stand out (Figure 5).

Corresponding to the declines in investment noted above, economic expenditures (economic services, transport and communications, and infrastructure) have declined steadily since 1980, ending at a little over 7 percent by 2003. Social expenditures (human resource development and health) have been the major beneficiaries of this decline, more than doubling their share of the budget over the period 1979-2003 (from 13 percent to nearly 32 percent of total expenditures). Defense remains the largest budgetary item, fluctuating in the 35-40 percent range in the period after 1988.

Finally, public expenditures (administration, loans, and subsidies) have been especially erratic. After fluctuating around 35 percent of the budget between 1979 and 1994, they fell to less than 20 percent in 1999, then increased to 27 percent in 2003. The sharp decline in public expenditures in the early-mid 1990s stemmed in part from a sharp cut-back in the government's loan programs.

Key Economic Linkages

These patterns suggest that the public sector is contracting in many areas.[6] This is especially true for economic expenditures and other activities directly supportive of the private sector. Budgetary shifts away from economic categories are the most obvious manifestation of this phenomenon. Falling shares of investment relative to non-oil output also indicate that the kingdom's capital stock and productive expenditures are playing much less of a simulative role as in the unbalanced growth strategy implicit in the early oil boom years.[7]

More subtle shifts in policy or policy effectiveness can only be inferred from a statistical analysis of the patterns noted above. Of particular importance are the linkages between public and private sector expenditures on non-oil production and investment. If a connection exists between these variables, how much can we attribute this to short-run effects (oil shocks and the like) and how much represents longer-term affinities? For example, private sector investment is likely to be stimulated with an oil boom-led expansion of public infrastructure investment. But is it dependent on ongoing government investment, or could it be sustained by non-public induced investment opportunities? Have these patterns changed over time? Resolving issues of this type is a critical first step in designing a reform strategy for the country.

To identify the main policy-relevant linkages in the Saudi economy a co-integration/error-correction analysis was undertaken. While fairly technical mathematically, this technique has a straightforward intuitive appeal. Cointegration/error-correction can determine whether two series (such as private expenditures and private sector output) move together over long periods of time due to some real interconnection.[8] For example, if in the case of Saudi Arabia we find that this relationship exists between, say, government expenditure and private sector output, then it would be safe to conclude that private sector output could not be sustained without a steady infusion of government expenditures.

More precisely, the analysis accepts the fact that short run shocks can occur whereby rapid increases (public sector investment) in one variable influence the other (construction). However, if the two variables have developed a long-run linkage whereby an ongoing-stable set of links have been established, then equilibrium will be restored with the speed of adjustment affected by the deviation from that long run pattern. Specifically the speed of the longer-term adjustment will be dependent on the magnitude of the deviation from the long run equilibrium pattern as well as the strength of the linkage between the two variables. The year-to-year growth over time of a sector such as non-oil manufacturing can be decomposed into two parts: the first associated with a short run shock (say, increased public sector consumption) and the second drawing on the longer-term linkages established with the causal (here, public sector consumption) variable. This technique can yield insights not often captured by more conventional regression methods.

Relative Efficacy of Public Private Expenditures

A common theme in development literature is that economic processes in oil-based countries become more complex as these economies mature and begin to diversify away from a complete reliance on oil revenues and associated public sector expenditures. Using cointegration analysis, there is clear evidence that this process is well advanced in Saudi Arabia. With regard to the economy's leading sectors (Table 1):

1. Growth in the agricultural and mining sectors became more dependent on private expenditures and less dependent on public expenditures, especially during the period 1975-2001.
2. The non-oil manufacturing sector has become almost completely dependent on private sector expenditures, with strong linkages to these expenditures in both the short- and long-term. In contrast, public sector expenditures now have little simulative effects on the sector.
3. Traditionally the wholesale and retail trade sectors have been dependent on both public and private sector expenditures. While this remains the case for private sector expenditures, public sector expenditures currently have only a short-run transitory effect on the trade sector's output.
4. In a major change from earlier periods, output in the construction sector is no longer dependent on public expenditures. Instead, output in this sector now depends primarily on the long-term pattern of private sector expenditures.
5. Private expenditures have strengthened their linkages to the housing sector as well as the transport, storage and communications sectors. While output in this sector is still responsive to public sector expenditures, this linkage has weakened over time.
6. Other financial activities are dependent on private expenditures. However, with regard to public expenditures, this effect is confined to the longer-term effects of governmental expenditures.
7. Finally, linkages between private expenditures and the service sector (community, social and personal services) have strengthened considerably in recent years. This sector's links to public sector expenditures have also weakened.

In sum, the pattern found here is one of strengthening linkages between private sector expenditures and sectoral output. At the same time the ability of public sector expenditures to provide a positive stimulus to output has weakened considerably. In two key sectors—non-oil manufacturing and construction—public sector expenditures no longer play a role in affecting output growth. In others—agriculture, mining, trade and services—public expenditures may only play a minor role in the overall growth of these areas of activity.

The Impact of Public Expenditures on Private Expenditures

Of course, one could always argue the unlikelihood of private sector expenditures being sustained without a steady infusion of government expenditures. If that is the case, the links between public sector expenditures and sectoral output still exist, but have only become more indirect with time. To test this hypothesis, a statistical analysis similar to that between public/private expenditures and sectoral output was undertaken. Is private expenditure dependent on government expenditures, and has this pattern changed with time? The main findings (Table 2) suggest that over time there has been a weakening of the linkage between public and private expenditures similar to that occurring between public sector expenditures and real output. In fact, the only statistically significant link between public expenditure and private expenditure in the period from 1980-2001 occurred with an expansion in public infrastructure providing a short-term stimulus to private investment. However, the longer-term effects present between these two variables in the period 1964-1980 are apparently no longer present.

The question immediately arises as to the factors responsible for the deterioration in links between government expenditures and, for all practical purposes, the rest of the economy. Given the fall in the relative share of government expenditures in such areas as non-oil GDP, diminishing returns can no doubt be ruled out. A more likely source of the decline in the strength of public sector linkages appears to be the major changes in the composition of the government's budget noted above (Figure 5).

Expenditure Categories and Revenues

Again, aggregating the various sections of the government's budget into four main categories (social expenditures, economic expenditures, public expenditures and defense) several interesting statistical patterns emerge to explain the falling simulative effect of public expenditures on the non-oil private sector. First, looking at the links between government revenues and expenditures (Table 3), economic expenditures, public expenditures and defense follow a similar pattern: each expands in the short-run with increased government revenues (they would contract with falling revenues). This pattern carries over into the longer term with each category of expenditure maintaining a stable relationship with revenues.

Yet there appear to be no links between revenues and social expenditures. As noted, this has been the fastest growing category of expenditures. More importantly, it now dominates the government budget alongside defense. The fact that the expansion in social expenditures appears to be independent of the government's revenue position suggests that either these allocations receive a much higher priority over other expenditures and/or that the government is willing to run large deficits to fund these programs. Their rather steady increase until the last several years means that they have played a limited role in fiscal macroeconomic stabilization.

Social Expenditures and Budgetary Tradeoffs

A closer look at social expenditures finds that their budgetary share has grown largely at the expense of several economic sections of the budget (Table 4), namely transport and communications and direct economic allocations. In both cases, short run increases in social expenditures had a negligible impact on their budgetary shares. However, the more fundamental long-term impact was negative. The only economic category not adversely affected was infrastructure, where social expenditures did not affect this category's budgetary share.

The dramatic decline in the budgetary share of subsidies may be attributed in part to the growth of social expenditures. Both the short- and long-term impacts of expanded social expenditures reduced the proportion of the budget allocated to subsidies.

Interestingly, defense allocations did not suffer at the hands of social expenditures.[9] Short-run increases in the budgetary share going to social categories actually increased the share of the budget controlled by defense. The same was true for allocations to municipalities. Governmental loans were the only budgetary sub-category unaffected by the expansion of social expenditures. The contraction of this category apparently was due in part to a shift in governmental priorities rather than a direct allocation conflict with social expenditures.

Fiscal Linkages: Government Expenditures and Revenues

The high priority given to social expenditures, followed by defense, together with limited oil revenues during most of this period, resulted in a tremendous contraction in the public sector's allocation to economic services of various types. This is verified by a final statistical analysis of the relationship between government revenues and public consumption and investment.

As one might imagine, in a country as resource-constrained as Saudi Arabia has become, a strong link exists between revenues and expenditures (Table 5). However, this pattern does not hold for the sub-categories of total expenditures (national accounts measure). In the case of public consumption, changes in revenues do not have a significant impact on year-to-year allocations. One interpretation is that much of this expenditure represents salaries or the high priority social programs that cannot or will not be altered by the authorities: they are relatively immune from short-run revenue fluctuations. Over time, however, these categories form a strong long-term relationship with revenues.

In contrast, public investment appears much more discretionary in the short term, expanding and contracting with similar movements in revenues. On the other hand, public capital formation is not assured a growing budget in line with revenues (as is the case with consumption). Despite the long-term implementation of capital projects, they have no corresponding link with the government's available revenues. Public capital formation is treated as a low priority, discretionary section of the budget.

All and all, it is surprising that Saudi Arabia has not taken steps to establish an oil stabilization fund, which would receive windfall revenues when oil prices are high and disperse funds for government operations when they are low.[10] Given the country's huge reserve base and relatively small population, there appears to be no perceived need to save some current oil revenues and invest them for future generations.

Assessment

Sooner or later, government expenditures will have to be refocused on activities that directly support private sector investment. The welfare state will have to be scaled back and economic allocations given a higher priority. More emphasis must be placed on efficiency and productivity in government activities. There is tremendous waste in government ministries that will have to be dealt with. A recent study found that 69 percent of civil servants in the Kingdom stay away from work without a good reason while 54 percent come to work late.[11] An environment that encourages investment and provides better incentives for risk taking and job creation must be created. While recently coming under criticism in many quarters, the neo-liberal model is still a good medium-term target.[12]

A model of growth and terrorism developed by Bremer and Kasarda has great relevance for Saudi Arabia.[13] They see countries moving through three distinct stages as their economies evolve, becoming more sophisticated and market-driven. By their criterion, Saudi Arabia falls in the first stage (along with Egypt, Iran and Pakistan [Figure 6]). This group has failed to move forward to the middle stage largely because of growth-limiting policies and institutional rigidities. As Bremer and Kasarda note, "History suggests that failure to make steady progress through the New Second World transition's early phase to the middle period is extremely dangerous. If the transition stalls here—as it did in post-World War I Russia, and as it has now in much of the Middle East—failure can lead to revolution and Al Qaeda-style international violence." The one thing that the nations stuck in the early phase have in common is slowness in adopting choice-based systems. Bremer and Kasarda define "choice-based" systems as encompassing both market-based economies and democratic political institutions and organizations.

None of this bodes particularly well for the Saudis. Ten or fifteen years ago when many of the economy's problems were becoming apparent,[14] the government had time on its side. A well-thought-out neoliberal reform program stressing free markets, access to capital, and integration into the world economy could have been undertaken at a safe pace, laying the foundation for the transition to a higher growth path (and the middle stage of development discussed by Bremer and Kasarda). Instead, Riyadh postponed hard decisions, hoping that a new oil boom would solve its problems. None was forthcoming or will likely be in the foreseeable future. Instead Saudi authorities find an economy still mired in the first stage and facing an unemployment rate approaching 30 percent.[15] Poverty is on the rise and, even more ominous, more and more Saudis complain that corrupt members of the royal family are plundering their national wealth. Increasingly one hears commentaries like this:

[T]here's a lot of frustration and anxiety among young Saudi men. Almost half of them have lost hope for the future. And they are ripe for recruitment by Islamic extremists… Adding to the frustration are the lack of outlets for discussion and debate. Trade unions are barred as are all other professional associations… Saudi society has few political tools to counter the extremism that has taken root here and the results are actions like the recent bombings in Riyadh.[16]

In this charged environment, reform has taken on an urgency never seen before in Saudi Arabia. Hopefully it is effective and not too late.

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