The Impact of Oil on the Role of the State in Economic Development - A Case Study of the Arab World

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INTRODUCTION

This paper stems from an interest which developed following first hand observations of the attempts by the Arab oil producing countries to cope with the aftermath of the First Oil Shock of 1973-74. From these observations emerged the conclusion that somehow, the windfall oil revenues which accrued to the countries were having a negative effect on the process of economic development. This conclusion was very much against the conventional wisdom in development economics as embodied in 'capital fundamentalism' and the dual gap analysis which emphasised the lack of capital and/or foreign exchange as a key constraint upon development. In 1975 in a piece of journalism in an Arab magazine, this author wrote that the verdict from history would be that oil was to the Arabs in the twentieth century what the Mongols had been to the Arab world in the thirteenth century -an unmitigated disaster.

At the time, this view was based upon casual observation rather than any hard analysis, let alone empirical work. However, further reading about the experience of other OPEC countries (albeit rather superficial) seemed to lend support to the conclusion. A dominant oil sector appeared to threaten development prospects rather than enhance them.

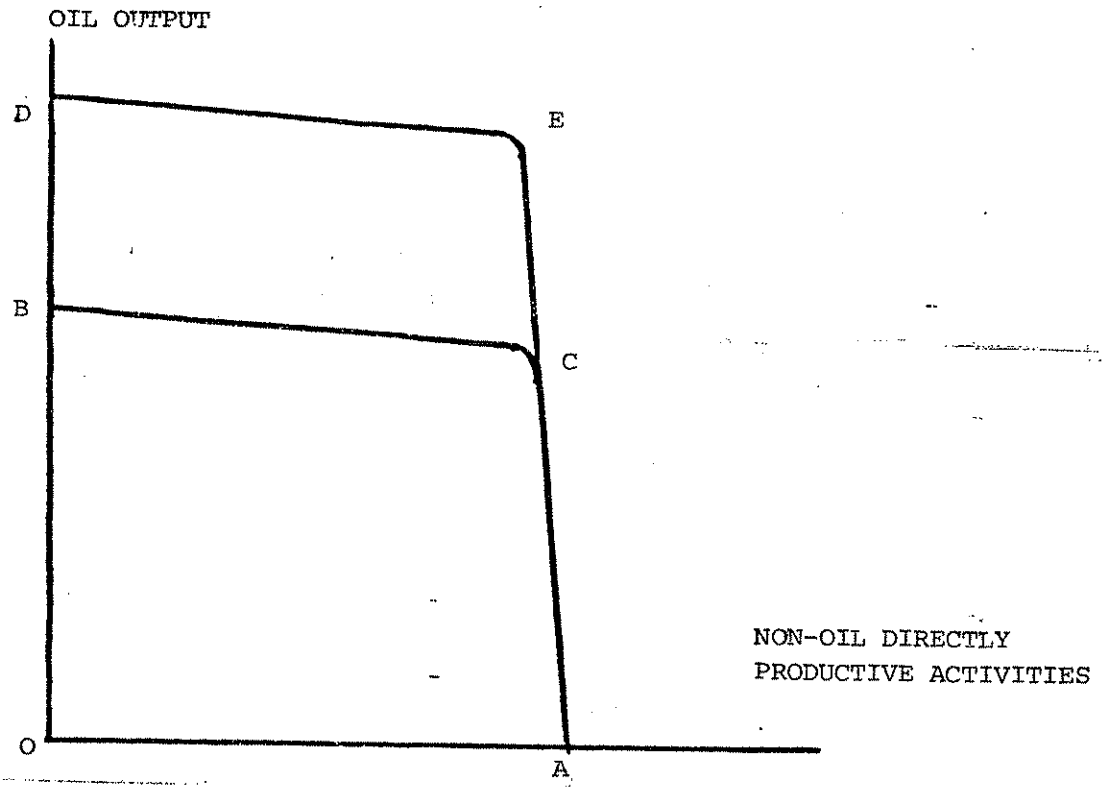
This paper reflects an attempt to articulate that view within an

analytical framework with the objective of setting up hypotheses which may be amenable to empirical verification. At this stage, the paper consists therefore of a series of unsubstantiated generalizations. Currently, research is underway to reduce the degree of generalization and provide empirical substantiation. However, in the early stages of research projects it is always invaluable for the researcher to expose the line of thinking in order to receive criticism. It is for this purpose that the paper has been written.

The paper consists of three sections. Section I provides the analytical framework within which the ideas can be examined. Section II tries to identify the transmission mechanism from dominant oil revenues to economic damage (referred to as 'bads'). Specifically identified as the main mechanism is that through processes to be described, the existence of a large economically dominating oil sector changes the way in which governments behave both in terms of what is maximized and the opportunities to pursue the maximization. The effect on the economy of this behavioural change is then outlined in general terms. Finally, section III examines the transmission mechanism and its effects in some specific areas of damage in order to provide specific hypotheses for testing.

I THE PROBLEM -AN ANALYTICAL FRAMEWORK

The simplest piece of economic analysis to help outline the argument is a variant on the production possiblity curve outlined below. Given the physical resources, social overhead capital



(SOC) and technology available in the economy, the curve BA which will be called the development possibility curve, shows in a fixed period of time (say one year), the maximum alternative combinations of output from oil and non-oil directly productive activities (DPA) available to the economy. SOC is defined as those intermediate inputs into the production process which are normally non-tradeable such as transport, communications,construction,health, education,public utilities etc. DPA is defined as the output (final or intermediate) which is tradeable. The outputs are measured in value terms representing their real purchasing power. The shape of the curve reflects the relatively narrow choice available within the time period to switch resources productively between oil and DPA. Over time of course the options expand and the future shape of the development possibility curve depends on the sectoral direction of investment in each time period. The object of the exercise within

the given time period is for the economy to operate at some point on the curve since operation below the curve suggests an inefficient use of resources. Given the limited flexibility expressed in the curve, the economy would probably try to operate at some point between C and A. At which point, would be determined by the government's oil depeletion policy . This reflects the low short term marginal cost of oil production. Thus moving from A to C (ie increasing oil production) can be achieved in the given time period with minimal resource input and hence minimal inpact on the output of DPA.

The reason for the emphasis on oil and DPA given by the development possibility curve is that these produce the output which provides directly or indirectly for consumption, direct investment in DPA and oil and in SOC. In this sense, Oil and DPA represent the basis for development since they indicate the current standard of living via consumption and existing SOC together with the ability (or otherwise) to sustain or expand that standard of living by means of resource availability for investment in DPA and oil and spending on SOC. The greater the area under the curve the higher the current level of consumption could be or the higher the future level of consumption could be. Which, depends on the choice over the extent of investment and spending on SOC in the current period which will shift the curve in the next period.

This approach immediately requires a qualification. From the above definition, economic development is de facto defined by the moving outwards of the curve. This omits two areas which could be

viewed as essential elements in the development process. First it says nothing about distributional issues. It is perfectly sensible to suggest that within a certain number of time periods, real economic development could take place with no outward movement of the curve but by means of a redistribution of the existing cake with respect to consumption. However, while this is acceptable in the short to medium term, if a longer time horizon is taken it is difficult not to conclude that eventually an outward movement of the curve is required. Secondly, it ignores social,cultural and political dimensions to the development process along the lines suggested by Goulet and others(1). In effect the analysis assumes that man does live by bread alone but this can be viewed as a simplifying assumption rather than an expression of desirability or reality.

With this analysis in mind it is possible to examine what happens if the oil sector becomes dominant. The rapid development of the oil sector via discovery and investment in field development or a step jump in oil price shifts the development possibility curve so that it now becomes DCA. At first sight this would imply good news for development prospects since the larger the area under the curve, the more output is available for consumption and/or investment. However, the argument of this paper is that the sudden expansion of the oil sector begins to undermine the DPA. Initially, this occurs via a mechansim to be described with a distortion of the resource input to DPA causing the economy to operate under the curve between A and E. Then in the extreme case, over time there is an actual destruction of the DPA base such that the development possibility curve begins to move towards

the origin. A weaker version of this would argue that the move of A away from the origin would slow down with the economy still operating under the curve between E and A.

Before continuing the analysis further, it is necessary to examine what evidence exists to show the decline of DPA postulated. Casual observation of the national accounts of the Arab oil producers would suggest the opposite, namely that DPA expands alongside the expansion in oil. This however, raises the issue of real DPA output versus subsidized DPA output. Much of the observed expansion in DPA has been the result of heavy subsidization of inputs (paid for by oil revenues). In a sense, within the national accounts there exists a strong element of double counting with the oil revenue effectively being counted twice, once in extractive and again as the revenue 'buys' output in other sectors. Thus if the oil revenues disappeared it is extremely doubtful if much of the observed expansion in DPA would remain for long.

Why is this move of A to the origin of importance given that the key to development is the total area under the curve. Indeed on the basis of some conventional development indicators, the oil producing Arab countries seem to be doing quite well vis a vis the non-oil producers as shown in Table 1 in the appendix. Although definitions of development are very contentious it would appear that there is a general consensus that whatever else it may be, development must be self sustaining. Herein lies the problem of asserting that Table 1 reflects development in the oil producers since the apparent development is being paid for by oil revenues.

Oil revenues can be viewed in one of two ways. First, they are derived from a depletable resource which means that the revenue is not income but part of the country's asset portfolio(2). Thus a barrel of oil below the ground is switched for x dollars above the ground while the country's total assets remain unchanged. Alternatively (or indeed additionally) a large element of the revenue derives from a monopoly rent element in the international price of oil(3). This monopoly rent accrues because of supply restrictions. Prior to the early seventies the supply restrictions arose because of the horizontally and vertically integrated structure of the international oil companies. During the seventies supply was restricted by the companies' vertical integration and the producing decisions of Saudi Arabia while during the eighties the restriction (albeit imperfect) has been provided by OPEC's production quotas (4).

Whichever view of revenues is taken, oil revenues must eventually fall. Either through a proces of depletion (5) or because monopoly rent is a quasi rent which at least theoretically should disappear in the longer term and indeed is showing signs of doing precisely that. Thus the development bought with oil revenues cannot be regarded as sustainable and is essentially an illusion because it is only temporary. Real development can only be bought out of DPA which is sustainable. If the argument that the oil sector somehow undermines the countries' ability to produce DPA is accepted then this has clear and serious implications for the long term development prospects of those countries where the oil sector currently dominates.

II THE CAUSE OF THE THREAT TO DPA

Why then does a dominant oil sector destroy the basis for DPA. There already exists one body of economic theory -dutch desease- which may provide a partial explanation.

In essence, dutch desease argues that a large oil/gas sector causes an overvaluation of the exchange rate (6). Thus the price of exports rise and the price of imports fall. Assuming the 'correct' Marshall- Lerner condition both the volume of exports other than oil and gas fall while those of imports rises significantly with the resulting damage to the balance of payments being disguised by the exchange earnings on oil and gas exports. However, within the economy this results in a contraction of the non-oil tradeable sector which is akin to the DPA used in this analysis. As the name implies, most of the work undertaken on dutch desease has been carried out in the context of developed countries. However, there is no reason why such anaylsis could not also be applied in the LDC oil producers (7). However, while dutch desease may provide a partial explanation for some of the 'bads' it does not go far enough.

Another explanation lies in the effect of the dominant oil sector on government behaviour. This can be outlined in terms of two effects. The impact of the size of the government's role in an economy and the impact in terms of the way it might change the government's behaviour.

A large oil sector increases government involvement in the

economy. Two a priori reasons can explain this. First, under most legal systems sub-soil minerals are the property of the state. Thus the revenues accrue to the state. At the same time large oil revenues raise the expectations of the local population forcing the governments to disseminate revenues, hence the large government role via the expenditure part of fiscal policy. Second, the history of the oil industry in the oil producing countries has been one of constant battle/negotiation between company and government (8). Thus the government has a history of heavy involvement in the key economic sector. This could be viewed as habit forming.

If one were to take the view that the 'dirigiste dogma' (9) was automatically bad, the issue of size could provide sufficient explanation for the damage done by the oil sector to the DPA. However, if that view is not accepted as a given then further explanation is required which leads to the second effect. This argues that the existence of an economically dominant oil sector somehow changes the way in which governments behave in terms of the nature and direction of decision making and it is this behavioural change which causes the damage.

In order to pursue this idea it is necessary to identify on a priori grounds what the transmission mechanism may be from the existence of an economically dominating oil sector to a change in government behaviour and then to examine what negative effect this change in behaviour may have on the economy. In this section of the paper, the effects on economic behaviour will be confined to general effects. The next section of the paper tries to suggest

how these general effects may produce specific 'bads.'

Most of the negative effects to be enumerated below can be found to one extent or another in most economies. However, the paper is arguing that large scale oil revenues greatly accentuates the size and importance of these negative effects. This occurs either directly because in the oil producers (for the reasons explained above) the government plays a greater role in decision making within the economy. Put simply, there is more of the negative effect. Or indirectly, the negative effects may be longer lasting in the oil producers because the existence of large scale oil revenues can simply disguise the negative effects either by throwing money at the problems created or by disguising the signals to the effect that a problem actually exists.

There already exists a body of economic theory which would provide a partial explanation of the transmission mechanism from oil to government behaviour -the economic theory of politics (10). Within that subject, considerable attention has been given to the way in which politicians and civil servants behave. Most of the work which addresses the politicians has been done in the context of developed countries and concerns their behaviour vis a vis voting patterns and so lacks relevance in this context. However, although the developed country orientation applies equally to the bureaucrats, some of the conclusions may have relevance in the Arab world (11). Specifically, the idea that bureaucrats seek to maximize their status. This can be achieved in a number of ways but two of particular importance for this paper concern the size of the bureau and the choice of projects.

Status is determined by the size of the office controlled by the bureaucrat which in turn is measured either by the size of budget or employment with the probability of a high correlation between the two. The effect of this on the economy is that the size of the public sector increases, sucking resources away from DPA. It also encourages an expansion in public services on offer. This is achieved by offering free or subsidized services which increases public demand above the level which may have been expected if economic prices had been charged. Of course, this is not to argue that the provision of public services is undesirable which is not the case when equity considerations enter as a policy objective. It merely points out that the bureaucrats have a vested interest in expanding the provision of services for other than objectives of redistribution.

The status of projects concerns what is regarded as chic in the community in which the bureaucrat operates. Frequently in the context of LDC'S this relates to size of project and its technical sophistication. Thus the status conscious bureaucrat would prefer to deal with large technically sophisticated projects. This has two effects. Smaller projects, which may have a greater productivity potential get neglected (financially and in other ways) and the relevance of the project to the economy is limited as technological dualism is aggravated.

In addition to the economic theory of politics, other transmission mechanisms from oil to behaviour can be identified.

The first is the idea that oil revenues buys time but breeds

impatience (12). Oil revenues on a large scale increases public expectations. One mechansim for this lies in the spread of communications. Because oil revenues represent foreign exchange, government can afford to expand rapidly the popular media (television etc.) perhaps seeing in this a means of political control. There is evidence based upon casual observation that this has in fact happened. One side effect of this media expansion is a very strong cultural demonstration effect raising consumption expectations. These expectations must be fulfilled if the government is to remain politically secure which means the government is forced into making quick spending decisions. Quick decisions are frequently bad decisions ie costly. However, oil revenues can disguise the costs of poor decision making which in turn means there is less pressure to revise either tactics or strategy. A clear example emerged after the Second Oil Shock of 1979-80 when many OPEC governments rapidly ditched their budgets replacing them with much higher spending levels. Given the short time in which this occurred, it is difficult to believe that the nature and direction of the increased spending was the result of careful consideration.

Another a priori explanation is that large scale oil revenues means that there is within the country the lack of a 'fiscal link'. A 'fiscal link' is defined as the relationship that develops between the rulers and the ruled when the ruled are to be taxed. 'No taxation without representation' as a demand is by no means confined to the American colonists. Large scale oil revenues means that other forms of taxation (in any case problematical in LDC's) are less necessary. Thus there is no

'fiscal link' and hence less pressure on government to consult. Governments rule either by consent or coercion (or some mixture). However coercion means 'to impel into quiet obedience' (13). While this is usually taken to mean force it may not automatically be the case. You can coerce by pointing a gun or offering a bun. In the absence of consultation, governments must coerce either by force or by spending thereby buying 'quiet obedience'. Oil revenues enable the state to buy a great deal of obedience and forces it to do so because there is less need or incentive to consult and it may be preferable to force. This would tend to influence the magnitude and direction of government spending in ways different from other LDC's. Thus it is almost certainly cheaper to point a gun than to buy a bun since the object of the exercise is that the bun is consumed and must be replaced. As an example of different spending patterns, in the oil producers under discussion there is a much greater provision of free or subsidized public services in one form or another. Of course, this may be viewed as beneficial from an equity point of view. However, it can also introduce severe distortions into the economic system damaging efficiency. This familiar trade off between equity and efficiency in the oil producers may be ignored as the government seeks to protect itself from the absence of a 'fiscal link'.

A fourth a priori explanation for the change in government behaviour is that in many LDC's, personal influence overrides collective decision and administrative rules. Of course this is true everywhere. The USA has its lobby system while Britain has the 'old boy network'. The result is that decisions are often unnecessarily ad hoc and random. This type of decision making can

be extremely costly because it injects a lack of coordination into the decision making process and can alter what is being maximized. It is precisely the costs which constrain the extent to which the system can allow personal influence to impinge. If the costs can be easily met (ie. the resulting distortions papered over with money) then the system is much less constrained to limit the behaviour. An example of the effects of such decision making would be the prevalence and scale of official corruption in the oil producers. Casual empiricism suggests that it is greater than in other countries.

A final a priori explanation is that large scale oil revenues change the perceptions of the decision makers in one of two ways. The pressure to optimize resource use is much less because of the feeling of having access to unlimited funds. This leads to a tendency to spend money without much thought, forgetting that this inolves other resource input costs besides mere dollars. Second, in any bureaucratic system,as outlined earlier, there is status associated with involvement in large projects which tends to lead to a neglect (financially and otherwise) of smaller (possibly more productive) projects. In oil producing countries, what is viewed as 'large' tends to be relatively larger than in other LDC's. For example, one only has to look at the industrial complexes littering the middle east. This means that the size of the neglected projects correspondingly rises and with it the neglected area of the economy.

Having provided some a priori explanations of how the existence of an economically dominating oil sector may affect the

government's relations with the rest of the economy, the next stage would be to seek some empirical justification. Thus the a priori explanations become hypotheses for testing. At this stage in the research, as will rapidly become apparent, the extent of the empirical work is extremely limited and indeed the purpose of the project is to carry it out. Nonetheless, some discussion of possible empirical directions for the work will serve to illustrate the sort of methodological problems which exist.

The use of the Arab world as the case study has the advantage that it provides a control group (ie the non Arab oil producing countries) against which hypotheses might be tested. Thus behaviour in the oil producers can be checked against the control group to provide evidence that it is indeed oil which changes the governments' behaviour rather than some other explanation. However this approach creates two problems. First, it assumes a degree of economic,political,social and cultural homogeneity which may be more illusory than real. However, I assume (rather heroically) that the similarities of the region are greater than the differences. Second, the oil producers tend to be dominated by the large oil producers in the Gulf Cooperation Council. The problem with these countries is that it is difficult to argue that there was much by way of DPA before the discovery of oil and hence little to be damaged (14). This explains the inclusion of Iran in the country sample.

The data is given in Table 2 in the Appendix and presents severe problems. First, official statistics in the Arab world (as in other LDC's) must be viewed with the greatest circumspection and

the data in Table 2 has been drawn from a great many sources some of which can only be called guesstimates (hence the absence of sources). Second, there are the familiar problems with the use of exchange rates through purchasing power parity (15) and multiple exchange rates which means that money units cannot be converted to a common measure. Thirdly, there is the problem of money versus real values. Price indexes in LDC'S are the statistical series most likely to be rigged by governments because of wage agreements. For these last two reasons the only data which can be used is either physical units which are invariable over time or percentages at a point in time. Since this paper is concerned with development this raises a major issue since development means changes over time and there is nothing more dubious that drawing inferences on changes from data on differences (16).

In addition to the raw data problems, there is also a problem over processing the data. The most obvious method is to use the data in pooled cross section analysis. However, there are only 24 sets of observations which is really far too few to undertake any serious econometric work. At this stage it is better to regard the figures as orders of magintude hence in Table 2 in the appendix, the data is characterized by measures of central tendency.

Turning to the empirical testing of the assertion that oil increases the size if the role of government in the economy, the condensed data appears to support the view with the close relationship between the size of the government index and the size of the oil index. The coefficient of correlation between the two

group averages .97.

As for empirical evidence of the way oil might change the behaviour of the government, as yet, none can be offered since this is the next stage in the research. In any case, far more specific hypotheses must be formulated. In order to do this, it is necessary to examine more specifically how a change in government behaviour and its subsequent effects might be bad for development. This in turn requires an identification and discussion of the 'bads' caused by the existence of an economically dominant oil sector.

III SOME SELECTIVE 'BADS'

This section covers three areas of 'bads' -Labour market distortions, neglect of agriculture and the 'unreal' expansion in public services. For each, it is necessary to examine the symptoms which identify the existence of the 'bads', the implications of their existence for development and finally to examine on a priori grounds how they may be explained by the assumed change in government behaviour outlined in the previous section together with other alternative explanations which may throw doubt on the government behaviour transmission mechanism as the explanation.

Several general points need to be made. First, the 'bads' to be discussed are present in all LDC's. However, this paper argues that in the oil producing countries the 'bads' are generally far worse for reasons already explained. Second, The identification

of 'bads' assumes that there exists some objective criteria which can be used to measure the degree of distortion. For example, if it is argued as it is below that the rural-urban population distribution in an oil producer is 'wrong', one is left with the question as to what is the 'correct' distribution. Of course, criteria of optimal (and by implication sub-optimal) resource use can be formulated through the use of theory, although empirical verification can often prove problematical. At this stage, all that can be offered is that on the basis of the author's experience it feels wrong. This is neither rigorous in an analytical or empirical sense and as such is unacceptable. Therefore what follows should be viewed as speculation for further study.

Labour market distortions

Labour market distortions arise in at least three areas -rural/urban population distribution, distortions between the tradeable and nontradeable sectors and finally skill mismatches in the labour force.

Rapid rural-urban migration has characterised most LDC's (17). However, in line with the thesis of this paper it is argued that in the oil producers it is much more serious. The urban index in Table 2 of the appendix suggests some empirical support for this. While the higher urban percentage in the oil producers may be the result of geography, the higher growth in urban population is more likely to be due to other factors.

The negative effects on development of a too rapid rural-urban migration are legion (18). It can lead to a shortage of labour in the agricultural sector, large scale urban unemployment/ underemployment, urban bias in the government's economic policy, large external diseconomies in urban areas etc.

Three aspects of the oil-government behaviour transmission mechanism outlined in section II could explain the additional migration observed in the oil producers. First, the oil producers have experienced a rapid growth in government employment (predominantly in the urabn areas) as discussed below. This might be explained in one of two ways. The economic theory of politics provides anaylsis of the way in which heads of bureaus seek to maximize the size of their bureaus by maximizing budget allocations and hence employment. This coincides with the public service expansion discussed below. Oil revenues accruing to the government increases the ability of all bureaus to maximize their size. In addition, government employment is often used as a mechanism to 'impel quiet obedience' by acting as an unemployment benefit substitute. Increased employment by governments would explain quite well faster migration within the context of migration models (19) either in terms of increasing the rural -urban wage differential or by increasing the probability of urban employment. A second cause attributable to the transmission mechanism is the neglect of agriculture (to be discussed below) which would increase the push factors in migration and further widen the rural-urban wage differential (20). Finally, the rapid migration may be encouraged by urban bias in the provision of government services making urban areas more attractive (21). Oil

gives larger revenues therefore greater public services for reasons already discussed which may make the distributional disparity in the provision of urban public services even greater.

An alternative or additional explanation outside of the government behaviour hypothesis concerns oil sector wages. There is considerable evidence that rural-urban wage differentials are an important determinant in the rate of migration (22). However, what is important is not the statistically verifiable differential but the perceived differential. The oil industry has normally paid relatively high wages in order to minimize turnover after training in an industry were wage costs are very small relative to capital inputs. It is possible that the rural peasant perceives the oil industry wage as the typical urban wage and acts accordingly. Of course oil sites are not necessarily urban but once the peasant begins to move, the evidence suggests he keeps moving and gravitates to larger and larger urban areas (23).

A second area of distortion is that too high a proportion of the labour force move into non-tradeables. In terms of damage to development, this arises as the move away from tradeables undermines the resource base to produce DPA with all that implies. As an empirical proxy for this distortion, labour in the service sector has been used on the grounds that in most of the countries under discussion the service sector tends to be dominated by government services which are generally non tradeable. Thus Table 2 in the appendix shows both a higher base and a higher growth rate of labour in services in the oil producers. However, more disaggragated labour data by sector would need to be consulted to

confirm this.

Several aspects of the government behaviour hypothesis could provide a transmission mechanism. The expansion in the public sector to 'impel quiet obedience' and the expansion of public sector employment as a result of government departments maximizing their budget sizes since public services are non-tradeables. It could also be explained by the general decline in DPA resulting from government behaviour which could be reflected in changing relative wage levels. Equally there are several non-government behaviour explanations. There could be an inbuilt cultural preference for white collar jobs which tend to be more common in non tradeables than tradeables. It could also reflect the decline in the DPA/tradeable sector postulated to result from dutch desease. Finally, it could reflect the rapid development of SOC. If the latter explanation is accepted then it could be argued that the resulting employment increase is actually beneficial for development in so far as SOC is regarded as a necessary precondition for development.

The final labour market distortion to be discussed is that of skill mismatches defined simply as too many Phd's and too few plumbers. The symptom of this would be relatively high levels of digsuised unemployment among the highly educated coupled with a shortage of artisans. At this stage the author can only cite evidence based upon casual empricism derived from observing business men and government officials in a nunber of countries. The damage arising from these skill mismatches lies in the way in which the various economic sectors are likely to expand faced by

labour constraints.

Two elements of the change in government behaviour may provide a transmission mechanism for skill mismatches. First, there has been in the field of education spending very rapid decision making as part of the general pressure on governments to spend quickly. This has resulted in a very rapid expansion in the tertiary education sector (including sending students abroad) with only limited consideration for the implications of this on the primary and secondary sectors, together with a neglect of technical education. In effect, education policy has developed as a by-product of spending decisions rather than as the result of any carefully laid out education policy (24). Second, once the mismatches have begun to appear, the government has been willing (via its revenue access) to absorb these mismatches by its employment policies. For example, it has been suggested that one of the attractions of the development of the Gulf Cooperation Council has been the potential to create a 'Brussels type bureaucracy' to provide employment for nationals returning from education abroad who would otherwise be employed below their desired status (25). This willingness to absorb the skill mismatches thus tends to diguise the appearance of signals warning against the development of even greater mismatches.

A non-government behaviour explanation would be the cultural preference to be a Phd rather than a plumber although even if this were the case, oil revenues provide the means to indulge the preference.

Neglect of Agriculture

The syptoms of neglect would range from a fall in the growth rates of physical output to a fall in the area under cultivation and possibly a change in the food balance of trade. At this stage, no empirical evidence can be offered on any of these because of a lack of data and the problems over the use of money values outlined earlier. However, one study shows that between 1960 and the 1970's sectoral product per agricultural worker in the six major oil producers fell by an average of 45 percent while in nine other non-oil arab countries the fall was only 10 percent (26).

The development consequences present a very contentious area. There is considerable debate and disagreement on the relative importance of agriculture in the development process (27). The paper starts from the premise that agricultural development is a necessary condition for general economic development. This applies whether one takes an 'instrumental' view of the role of agriculture which regards agriculture as a source of resource inputs and aggregate demand for the rest of the economy (28), or whether one takes an 'intrinsic' view of the role which regards agricultural development as development in its own right along the lines of the basic needs approach (29).

The effects of the government behaviour changes outlined above may provide several explanations for the neglect. First, there is the desire to 'impel quiet obedience' which encourages governments to keep food prices low by the provision of subsidized imports .

These imports then displace locally produced foodstuffs. Also this need to 'impel quiet obedience' which arises from the lack of a 'fiscal link' can lead to politically motivated land reforms to emasculate potential opposition. Such land refoms can often cause damage when governments fail to replace the functions formerly provided by the landlord (30). Second, disinterest in 'small' finance availability can have a serious effect in agriculture where because of the nature of the production cycle, credit is a key input. for reasons outlined earlier, because 'small' is relatively larger in the oil producers a larger proportion of the agricultural sector may be affected in the oil producers. Where agriculture is a peri-urban phenomenon, the real estate boom which tends to follow increased oil revenues often as a direct result of government policies causes land to move from the agricultural sector into urban building. Finally, the labour market distortions discussed earlier can lead to a labour shortage in agriculture.

There are other possible explanations. Certainly dutch disease could be relevant since in LDC's a large part of the tradeable sector is agriculture and therefore the postulated decline in the tradeable sector derived from the desease would hit agriculture most. There may be a change in food tastes away from traditional foodstuffs, although it could be argued that this is the result of a cultural demonstration effect which is enhanced by oil revenues expanding access to the mass media as outlined earlier. Finally, agriculture tends to be viewed as part of the old 'backward' sector of the economy and hence is viewed as distinctly non-chic. Thus governments may exhibit a positive neglect in areas other

than finance.

Unreal expansion in public services

The use of the term 'unreal' implies that the provision of public services is being paid for out of oil revenues rather than DPA which implies that the expansion is unsustainable over any medium to long term. Several symptoms of 'unreality' could be used. One is the size of government expenditure/consumption relative to the non-oil economy and Table 2 in the appendix provides support that such an overexpansion exists in the oil producers. Another sympton would be the actual provision of services derived from the national inocme accounts. If services are used as a proxy (with all the qualifications previously outlined in the labour example) then the data in Table 2 also supports the hypothesis although the growth rates for the group 1 countries are somewhat ambivalent.

An expansion in public services could of course be viewed as an enhancement of development- albeit short term if it is unsustainable- since it includes the provision of health, education and public utilities. However, public services also include defence expenditure which is considerably higher in the oil producers if the 'front line' states are excluded (31). Alternatively, the negative development implications of the overexpansion of public services lies in the fact that they absorb resources other than government revenue, in particular skilled labour. This then undermines the potential of the DPA sectors. One could also argue about the implications for the development of a rentier society which breaks the link between effort and reward

(32).

Most of the effects of the government behaviour changes discussed in section II can be used to provide an explanation of this 'unreal' expansion. Bureaucrats maximizing size tend to increase the level of public services which is reinforced by the ability to offer the services at very low costs thereby increasing the demand for the services. Public service provision also helps to 'impel quiet obedience'.

On the other hand, explanation of the expansion could come from the simple fact that development does need infrastructure and therefore the expansion has been caused by this realization in which case it could be argued that the causes lie in perceptive government policy. Equally, since development implies improving peoples' standard of living and the provision of free public services can help achieve this, it may be a legitimate target of development policy and the more the better.

CONCLUSION

This paper has attempted to argue that the existence of a large economically dominating oil sector can damage the development prospects of a country by means of its effect on government behaviour within the economy. Clearly, from the above analysis, no definite conclusions can be claimed since the analysis poses questions and hypotheses for testing without providing either answers or empirical tests. However, there does appear to be a sufficient a priori case to justify further work.

APPENDIX -STATISTICAL DATA

Table 1 presents three different proxies for economic development- life expectancy, infant mortality and adult literacy. These particular variables have been chosen for two reasons. First, they are reasonably free from distributional distortions. For example, no matter how rich an individual is it is difficult for the individual to squeeze more than his three score years and ten allotment. Secondly, they are also fairly free from cultural bias. It is important that one lives and lives long. Whether one does it reading Milton and drinking Coca Cola or reading Ibn Khaldun and drinking coffee is irrelevant.

Table 2 presents the data discussed and used in the text. The countries are split into four groups. Group 1 countries are countries where oil dominates and the potential for the developmnet of other sectors is limited due to a combination of geography and market size. Group 2 countries are countries where

oil dominates but where there does exist considerable potential for the expansion of other sectors. Group 3 countries are countries with some oil, but where the oil sector is not dominant. Finally, Group 4 countries have no oil as yet of any significance. The group averages, computed to allow assessment 'by eye' are simply mean averages rather than weighted averages. The rationale for this is that the paper is considering countries as institutions. Thus the effects discussed in the body of the paper are of equal importance whether they occur in a 'big' or a 'small' country, however defined.

The oil index is an attempt to proxy the sixe of the oil sector in the economy. It is composed of the average percentage in 1970 and 1980 of oil exports in total exports and oil revenue in total government revenue. The government index is an attempt to proxy the size of government involvement in the economy. It is composed of the average percentage in 1970 and 1980 of government expenditure in non-oil GDP and government consumption in non-oil GDP. The urban index is simply the average percentage of urban population in 1970 and 1980. Urban is defined as in the World Bank Development Reports.

As explained in the text, Table 2 is not sourced because much of the data has been derived from a great many official sources. The Urban and labour data however comes from the World Bank Development Report.

TABLE 1

	Life Expectancy at Birth Years		Infant Mortality		Adult Literacy		Daily per Capita Calorie Supply as % of Requirement
	1960	% Rise 1960-81	1960	% Fall 1960-81	1960	% Rise 1960-80	1980
Libya	47	21.3	158	38.6	22	-	147
Saudi	43	27.9	185	40.0	3	1733	120
Kuwait	60	16.7	89	62.9	47	28	-
UAE	47	34.0	135	61.5	-	-	-
GROUP 1 Average	49.3	25.0	142	101	24	881	134
Algeria	47	19.1	165	30.9	10	150	101
Iran	50	16.0	163	35.6	16	213	81
Iraq	46	23.9	139	45.3	18	-	111
GROUP 2 Average	47.7	19.7	156	37	15	121	98
Egypt	46	21.7	128	14.1	26	69	117
Syria	50	30.0	132	54.5	30	93	117
Tunisia	48	27.1	159	44.6	16	288	116
GROUP 3 Average	48.0	26.3	140	38	24	150	117
Yemen AR	36	19.4	212	10.4	3	600	76
Yemen PDR	36	27.8	209	31.6	-	-	84
Morocco	47	21.3	161	35.4	14	100	110
GROUP 4 Average	39.7	22.8	194	26	9	350	90

TABLE 2

	1	2	3	4	5	6	7	8	9	10
	Oil Index	Govt. Index	Urban Index		Labour Force in Services		Services in Non-Oil GDP		Agriculture in Non-Oil GDP	
	1970-80 Av.	1970-80 Av.	1970-80 Av.	1970-80 Change	1970-80 Av.	1970-80 Change	1970-80 Av.	1970-80 Change	1970-80 Av.	1970-80 Change
Libya	91.5	70.5	43.0	18.1	47	12	21.3	-0.7	5.4	-2
Saudi	97.0	71.6	59.5	15.1	23.5	3	25.7	-4.2	7.1	-7.7
Kuwait	89.9	57.4	79.3	17.4	64.5	-1	24.2	-4.3	0.7	0
Oman	95.3	94.1	32.0	10.0	18.6	17.2	12.5	9.1	26.8	-40.9
GROUP 1 Average	93.4	73.4	53.5	15.2	38.4	10.4	20.9	0	10.0	-12.7
Algeria	66.1	32.0	38.0	12.1	43	14	11.4	6.3	10.4	-2.7
Iran	79.1	37.0	45.0	10.3	26	2	18.0	6.4	17.4	-8.8
Iraq	84.9	74.9	64.7	14.7	31.5	1	20.4	1.2	18.5	-2.8
GROUP 2 Average	76.7	48.0	49.2	12.4	33.5	5.7	16.6	4.6	15.4	-4.8
Egypt	17.0	37.7	43.6	2.9	22.5	-5	9.5	1.7	24.1	-1.8
Syria	27.0	35.4	46.6	6.9	34.0	4	18.0	-7.8	22.2	3.2
Tunisia	23.7	21.2	47.2	9.6	57.2	-2.8	11.9	-4.6	16.7	-2.0
GROUP 3 Average	22.6	31.4	45.8	6.5	37.9	-1.3	13.1	-3.5	21.0	-0.2
Yemen AR	0	13.7	7.5	5	13.0	2	11.7	3.9	41.3	-21.3
Morocco	7.3	21.5	37.2	7.7	26.5	1	6.5	1.1	19.8	-1.7
GROUP 4 Average	3.7	17.6	22.4	6.4	19.8	1.5	9.1	2.5	30.6	-11.5

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