International Migration

QUARTERLY REVIEW
VOL. XXX No. 2 JUNE 1992

Manpower Options in a Small Labour-Importing State: The Influence of Ethnic Composition on Kuwait's Development

R. E. Looney

IOM International Organization for Migration

Reprint 30 (1992), 175-200

Manpower Options in a Small Labour-Importing State: The Influence of Ethnic Composition on Kuwait's Development

R. E. Looney *

INTRODUCTION

In the years preceding the invasion of Kuwait by Iraq, declining oil revenues led the GCC states - Kuwait, Bahrain, Oman, Qatar, Saudi Arabia, and the United Arab Emirates - to diversify their economies away from oil. Often this strategy entailed simultaneously diversifying from highly skilled, high cost foreign labor (most often Americans, Europeans, and Arabs) in favor of less skilled, lower cost Asian workers.[1]

In the case of Kuwait, this process was known as the "Kuwaitization" of the workforce and took on a particularly high priority. This shift in emphasis was due to the increasing feasibility of the programme, the completion of many infrastructure projects manned predominantly with foreign workers, and in part to address first signs of an unemployment problem among Kuwaiti graduates.[2]

At the time of the invasion approximately sixty per cent of Kuwait's population of just under two million were foreigners, and the non-

* Professor, National Security Affairs, Naval Postgraduate School, Monterey, California,U.S.A.

Kuwaitis made up around eighty-three per cent of the total workforce. In some sectors, such as construction and manufacturing, virtually all workers were foreign.

Clearly, the invasion and subsequent liberation of the country have interrupted this process. However, the expulsion of many of the country's Palestinians have made it imperative that the process of Kuwaitization be resumed, and there are indications this is occurring.[3]

Many experts feel, however, that, despite public assertions to the contrary, large scale reductions in the size of the foreign workforce are not feasible at the present time.[4] Given the exodus of Palestinians and Jordanians[5] the initial trend is likely to be a shift towards cheaper Asian workers. The purpose of this paper is to assess whether this is a realistic alternative towards reducing the overall cost of the expatriate labour force. Which areas of the economy would be most promising in this regard? What are the economic costs? The implicit assumption throughout the analysis below is that the country will quickly restore[6] its economy to the structure existing at the time of the invasion.[7]

DISTRIBUTION BY ECONOMIC SECTOR

With regard to shifts in the Kuwaiti/non-Kuwaiti sectoral composition of the workforce, several interesting patterns developed over the years prior to invasion (Tables 1 and 2, pages 191 and 192):

1. Despite stepped-up investment in industry following the 1973/74 oil price increases, few jobs had been created for Kuwaitis in manufacturing. In fact, by 1985, there were considerably fewer (4,692) Kuwaiti workers in manufacturing than before the oil price increases (6,109). At the same time, the number of foreign workers in manufacturing nearly doubled, increasing from 25,982 in 1970 to 46,397 in 1985.

2. The well-publicized expansion of the financial sector created additional jobs for Kuwaitis. Over the decade 1975-85, Kuwaiti employment in this sector increased at an annual average rate of 13.3 per cent per annum (non-Kuwaiti employment in the sector increased at 15.8 per cent per annum during the same period).

3. By far the highest proportion of the labour force was employed in the social services. This sector accounted for 43.9 per cent of the workforce in 1970. By 1975, this figure had risen to 53.7 per cent.

While the ratio fell to 44 per cent in 1980, it had increased to nearly 49 per cent by 1985.

These trends have continued into the late 1980s. As of early 1988 (Table 3, page 193):

1. Over 77 per cent of Kuwaitis worked in the social and personal services sector. The corresponding percentage of non-Kuwaitis was 53.8 per cent.

2. No other sector of the economy employed over 10 per cent of the Kuwaiti population - the highest being transport and communications which employed 6.7 per cent of the Kuwaitis that year.

3. In contrast, the non-Kuwaiti population was fairly well diversified by sector, with 15.6 per cent of the population in construction, 11.6 per cent in wholesale and retail trade and 7.3 per cent in manufacturing.

COMPOSITION OF THE FOREIGN WORKFORCE

Simultaneously with the sectoral shifts in the ethnic composition of the total workforce, the non-Kuwaiti workforce underwent a dramatic change in the years immediately preceding the invasion (Table 4, page 194).

Initially, immigration was encouraged from countries which shared common characteristics with Kuwait, emphasis being placed on Arab integration and co-operation. Arab ministers in employment conferences in 1965 and 1975 attempted to conclude agreements of labour transfer between Kuwait and other Arab countries, including Egypt and Tunisia, but without success. In fact, from 1975, Asian manpower, particularly from Korea and the Philippines, added a new element to the country's demographic pattern.[8]

The gradual departure of skilled Arabs increased the proportion of Asians in the population and at the time of the invasion they made up more than half the foreign labour force.[9] Specifically, the share of Arab workers has declined from 68.3 per cent in 1970 to 46.5 per cent in 1985. Asian workers have taken most of this share, increasing their share from 28.8 per cent in 1970 to 52 per cent by 1985. In 1984, 81

per cent of new work permits went to Asian nationalities, and less that 15 per cent to Arabs (mainly Egyptians). Within this general pattern, there are several noteworthy trends. The three main Asian nationalities in the late 1970s (Indians, Pakistanis and South Koreans) have all had their shares reduced, while Bangladeshis and other Asians (in particular Thais, Filipinos and Sri Lankans) have increased rapidly.

While post-invasion patterns of new labour inflows to Kuwait were characterized by a trend towards an increasing Asian share, analysis by nationality has shown that work permit renewals accounted for a very high and growing share of all work permits issued to Arabs.

1. In 1977, 47 per cent of work permits were renewals. By 1987, this percentage had risen to 66.3 per cent.

2. Historically, several sectors relied more on renewals rather than on first-time workers. These were manufacturing and wholesale/ retail trade and the financial area. This suggests a quasi-permanent foreign workforce was manning these sectors.

Clearly, these trends tended to undermine the country's policy of localization ("Kuwaitization") of the workforce.

LOCALIZATION OF THE WORKFORCE

In fact, in the mid-1970s, Kuwaiti officials frequently asserted that foreign labour inflows were a temporary expedient. The anticipated decline in construction combined with a qualitative and quantitative growth in the indigenous workforce would, it was claimed, lead to a downturn in the demand for further immigrant labour inflows and would result in the rapid "localization" - an increase in the share of nationals - of the labour force.

For several reasons this didn't happen. For one thing, only piecemeal measures were taken to encourage the private sector to move towards localization. For example, the April 1985 Employment Bill proposed that contractors must employ a minimum share of Kuwaitis on government contracts. The proposed quotas were 15 per cent at the managerial/technical level and 30 per cent in all other positions.

The fact that employers were able to reduce their labour costs by renewing contracts of non-nationals on less favourable terms, reduced

incentives for localization of the private sector, since most non-nationals were downwardly flexible in their wage expectations. Falling real incomes in the private sector acted as a further deterrent to nationals.

Clearly, the assumption that workforce localization could be achieved easily and naturally was unrealistic. In particular, it failed to account for the need to re-orient nationals' job preferences away from administrative and managerial positions in the public sector, oil and financial services.

ARABIZATION OF THE WORKFORCE

One way the Kuwaiti government could have dealt with the problem of a quasi-permanent foreign workforce is through efforts at increased "Arabization" of the country's labour market. The principle of Arabization - giving priority to non-national Arabs over potential immigrant workers of other ethnic groups - had considerable local popular support before the invasion. Arabization appeared to offer a number of advantages, chief of which was the minimization of cultural, religious and linguistic differences. To this extent, Arabization was seen by many as a step towards creating an "indigenous" workforce.

However, even before the mass expulsion of Palestinians and Jordanians, the principle of labour force Arabization posed a number of actual and potential problems for the country:

1. Arab migrant workers had a greater propensity to bring dependents to settle in the country of employment (thus increasing social costs).

2. Certain types of Arab labour were and still are in short supply, have relatively high cost and are less experienced than labour from alternative sources.

3. Potential Arab labour suppliers have increasingly sought to restrict the emigration of manpower with scarce skills.

4. There are clear political implications for the conservative Gulf countries in housing a more radical Arab workforce.[10]

5. Finally, there is clearly a potential conflict between Arabization and localization. The better qualified non-national Arabs tend to hold those jobs which attract nationals. Arabization may, therefore, have to slow down in order to facilitate localization.

PRODUCTIVITY OF THE LABOUR FORCE

Despite these limitations, Arabization would make considerable economic sense if, in fact, the productivity of Arab workers were high, relative to the wage differential over Asian workers. Unfortunately, little data exists as to productivity differences by ethnic group. What information we have is aggregate, indicating that there was a tendency of the Kuwaiti market to use foreign labour in a fairly inefficient, general purpose way. The result was fairly low overall levels of productivity.[11]

Before the invasion, many observers noted a considerable element of disguised unemployment in so far as an appreciable number of foreign workers were engaged in marginal activities such as newspaper selling and minor services of the same type.[12] The productivity of such operations must have been low by any measure, and made little economic sense in a capital-rich economy such as Kuwait's.

In addition, the undertaking of menial tasks by foreigners in Kuwaiti homes and in general services did not appear to release Kuwaitis for more demanding occupations. Despite the extensive use of foreigners in households as housemaids, drivers and child caretakers, Kuwaiti participation in the labour force remained extremely low (males 32.2 per cent, females 4.8 per cent and the average 19.1 per cent). In effect, foreign labour was used in menial tasks to substitute for Kuwaiti inputs which were then consumed in leisure activities.[13]

A further aspect of productivity that received little attention was the depressing influence of a large and often ill-trained foreign workforce in Kuwait on the adoption of labour-saving technologies. Construction, one of the largest consumers of labour in the country, often adopted labour-intensive methods, using primitive wooden scaffolding, manual setting of concrete frames and walling, and laborious means of putting floors or secondary fixings in place. Low-budget housing areas were particularly notable for their labour-intensive approach to building. Road construction, administration of the civil service and other aspects of the economy showed features that appeared to be at

odds with the real needs of a sparsely populated country that incurred heavy financial and social costs for its import of foreign labour.[14]

It might be argued that easy access to cheap, albeit under-qualified labour deterred the country from looking for more appropriate capital-intensive methods for expanding its economy and making it more efficient. With the passage of time, the state had become tied into the cheap labour syndrome and planned its future activities on the basis of the availability of cheap imported labour.[15]

Yet the real interests of Kuwaitis might be better served through improving internal efficiency. This could be achieved by merchandising activities designed to raise Kuwaiti productivity per indigenous inhabitant and by mobilizing Kuwaitis rather more thoroughly than at present, for participation in economic activities by making access to foreign labour more difficult or more expensive. Such a move would automatically tend also to force up levels of productivity among the expatriate workforce itself.[16]

Politically, however, the Kuwaiti private sector is likely to resist any constraints on their option of mobilizing large numbers of relatively cheap (Asian) foreign workers. In addition, Kuwaiti merchants and traders favour the arrival of (Arab) non-national dependents, to bolster local consumption and trade. Given these constraints, one compromise option open to the government might be to pursue a general strategy replacing Asian workers with (presumably Egyptian) Arab expatriates. For this strategy to be ultimately successful, Arab workers would have to make a greater contribution to output than their Asian counterparts.

A FRAMEWORK FOR ANALYSIS

Despite the fact that data do not exist for the ethnic composition of the labour force by major sector of output, some inferences can be drawn as to those areas where non-Kuwaiti Arab workers made proportionately higher contributions to output than their Asian counterparts. As noted in Tables 1, 2 and 3, except for government services, the expatriate labor force dominated each of the major areas of output. Also, over the 1970-85 period, there had been considerable movement in the expatriate labour forces by ethnic groups (Table 4) making identification of output impacts much easier than if these trends had been flat.

Clearly, output patterns in Kuwait will be affected by elements other than movements in the labour force, and these factors must be systematically accounted for. In particular, the possible existence of the phenomenon sometimes known as the "Dutch Disease," whereby a booming oil sector impacts in such a way as to create an expanding non-traded goods (and services) sector and a declining or stagnating non-oil (externally) traded goods sector, may be a more accurate cause of the country's post-invasion industrial difficulties.

The Dutch Disease model is based upon a three-factor, two-commodity full employment model of production and trade.[17] Specifically, the economy is assumed to produce two commodities: one traded internationally (either exported or imported or both), the other traded only domestically since either transported costs or import restrictions prevent the commodity from being internationally traded. The two sectors producing traded and non-traded goods are assumed to have capital in a fixed amount that is given and non-shiftable in the short run. The labour force is fixed in the aggregate, but mobile between the two sectors.

To sum up, the model assumes two specific factors, one mobile factor and two commodities, one internationally traded and the other not. Based on these assumptions, significantly increased oil-financed public sector expenditures produce a change in relative sectoral prices. The resultant price/wage movements determine factor incomes and sectoral output.[18]

Based on the above assumptions, petroleum-financed expenditures impact in a predictable manner: imports expand and there is a decline in the relative price of traded goods. This is a direct result of the fact that the initial excess demand increases the price of non-traded goods (which are realistically assumed to be in limited supply in the short-run). In short, higher disposable income, the relative price advantage of traded goods after the boom, plus lower production of traded goods at home, (due to their lower relative price and resulting fall in profitability), increase the demand for imports causing the trade balance to deteriorate. However, the country's ability to maintain a fixed exchange rate supported by dollar-dominated oil revenues, together with rising prices for non-tradeables results in an appreciation of the real exchange rate.

Given the fixed capital stock and perfectly competitive markets, the demand for labour in each sector depends on the wage/price

relationship in that sector. The demand for labour depends negatively on the sectoral real product wage (ratio of the wage to sectoral output price). This means that a rise in the relative price of one sector by more than the wage would increase employment and thereby output in that sector.

Increased output would involve higher cost per unit since it would come about through an increase in the sector's use of labour per unit of capital, implying a falling sectoral marginal physical product of labour, because the capital stock is fixed.

The mobility of labour and the immobility of capital means that a change in the relative price of traded to non-traded goods would have an uneven impact on factor incomes. Labour mobility allows labour to shift out of the traded sector and thereby maintain or raise its real income, while capital immobility means that the returns to capital fall sharply in the sector with a lower relative price and returns to capital in the sector with a higher relative price rise sharply.

It is clear that the traditional Dutch Disease-oriented approach to the analysis of oil booms stresses the factors associated with the appreciation of the real exchange rate, driven by a rise in the relative price of non-traded goods. The relative price shift causes a reallocation of labour towards the non-traded sector, a rise in the output of non-traded goods and a fall in the output of traded goods. Returns to capital in non-traded activities increase, while returns in traded activities fall. However, there is an ambiguous impact on the real wage rate since the wage in terms of non-traded goods falls, but rises in terms of traded goods. Clearly, the net welfare impact on workers depends upon the composition of the wage basket in terms of traded and non-traded goods.

The Dutch Disease model appears to be an appropriate starting point for examining the country's pattern of output:

1. While manufacturing increased at a respectable rate following the oil price boom, its expansion was less than one half the rate experienced by the non-traded sectors.

2. The differential rate of expansion between manufacturing and non-traded activities was considerably greater in Kuwait than in a number of other oil- exporting countries over this period (Table 5, page 195).

3. An examination[19] of the Kuwaiti economy during the period immediately following the 1973/74 period, found a number of trends consistent with the Dutch Disease model outlined above.

In terms of the structure of the model used for estimation, recent research[20] has shown that oil economies tend to experience adjustments over time to shocks stemming from injections of oil revenues and the resulting increases in government expenditures and Gross Domestic Product (GDP).

For example, it can be demonstrated that an equation of the Koyck[21] form:

(a) $y = aGDP + byL + z$

implies an exponential decay scheme, whereby the effect of a once and for all increase in oil-dominated GDP would not only influence the demand for sector y's output during that period, but would also have (in declining terms) an impact on their level in future years. This result stems directly from the inclusion of the sectoral output lagged one year (byL) on the right hand side of the equation.[22]

Impact patterns along these lines are easy to imagine in Kuwait's case, where oil-supported government expenditures are a large component of GDP.[23] Their increase would be felt heavily during the first few years subsequent to an increase in oil revenues, decaying gradually thereafter.

The final form of the estimated equation was of the type:

(b) $y = aGDP(E) + byL + cARAB + dASIAN + eDUTCH$

where:

y = sectoral output
yL = sectoral output lagged one year
GDP(E) = Gross Domestic Product and expected GDP
ARAB = the Arab expatriate workforce
ASIAN = the Asian expatriate workforce
DUTCH = the Dutch Disease.[24]

To determine the relative contribution of the ethnic contribution of the labour force, the equations were estimated in step-wise fashion with the labour force term introduced after GDP. To verify that the

sectoral output changes were due to increased labour and not (particularly in the case of services) to movements in the relative exchange rate, the Dutch Disease term was introduced to control for this factor.

It should be noted that a positive sign on either of the workforce terms could conceivably arise from factors other than their direct contribution to output. Logically this could come about from: (a) demand effects whereby the increased size of the domestic market associated with expanded numbers of expatriate workers and their families stimulated domestic production. This might occur in some consumer good sectors where excess capacity existed at the time of rapid increases in the expatriate workforce, and would be more likely to occur with Arab rather than Asian workers, and (b) substitution effects whereby an expanded expatriate workforce simply frees Kuwaitis to enter that sector's output structure. As noted above, this effect is probably small and, in any case, would be most likely confined to the public services (not examined here).

RESULTS

The results of the regression analysis of sectoral output reveal several interesting patterns:

1. In the case of primary output (Table 6, page 196) Asian workers appear to have made a positive contribution to agricultural output, whereas their Arab counterparts have not. The effect of Asian workers, however, was fairly weak, when controlling for Dutch Disease effects (equation 4, Table 6).

2. Neither Asian nor Arab workers appear to have critically affected the pattern of mining in the country.

3. The other primary activity, fishing, as in the case of agriculture, was only slightly influenced (equation 8, Table 6) with increased levels of Asian workers, but not Arab expatriates.

4. Interestingly enough, in all the primary activities, GDP does not appear to have affected output levels through a distributed lag type mechanism. This indicates that output from these sectors

was quite sensitive to short run factors, rather than the longer run gradual adjustment processes assumed by the distributed lag mechanisms.

5. Movements in the real exchange rate do not appear to have played a major role in affecting primary output (after controlling for GDP and the labour force).[25]

In terms of the manufacturing sector, a somewhat different picture emerged (Table 7, page 197):

1. Food production showed considerable effects stemming from movements in the Arab expatriate workforce, but not the Asian component. Dutch Disease factors, however, reduced the growth in this sector somewhat below what it would have been in the absence of the appreciating exchange rate.

2. The same pattern was present in textiles, where again the increases in the non-Kuwaiti Arab workforce were associated with expanded levels of production. Again, this expansion was dampened by the appreciation of the real dollar/dinar exchange rate.

3. Finally, paper products and petroleum-refining followed the patterns identified in food production and textiles.

In general, therefore, Arab workers have made a positive contribution to the expansion of Kuwaiti manufacturing, whereas increases in their Asian counterparts do not appear to have been particularly productive in this regard.

With regard to private services (Table 8, page 198) it appears that:

1. Arab workers made a positive contribution to the expansion of hotels and restaurants, whereas their Asian counterparts did not.

2. The same was also true for transport and storage. In both cases the appreciation of the real exchange rate was a stimulus to output, in addition to the increased number of Arab expatriates in the workforce.

3. Communications also experienced a positive contribution from Arab expatriate workers, but this effect was only slight when the Dutch Disease variable was introduced.

4. Finance followed the same pattern as the previous private services, with the exception that the Dutch Disease did not appear to be particularly significant when the Arab workforce was included in the regression equation. This result probably stemmed from the fact that finance faced more intense international competition than the other service sectors.

5. Insurance followed the pattern of the finance sector fairly closely, and one must assume for essentially the same reasons.

6. Real estate, however, did not follow the pattern of other private sectors. Here increases in the Asian workforce, but not non-Kuwaiti Arab workers, were associated with expanded output.

7. Finally, private household services were more affected by economic prosperity (as reflected in the expected level of GDP) than movements in the workforce *per se*.

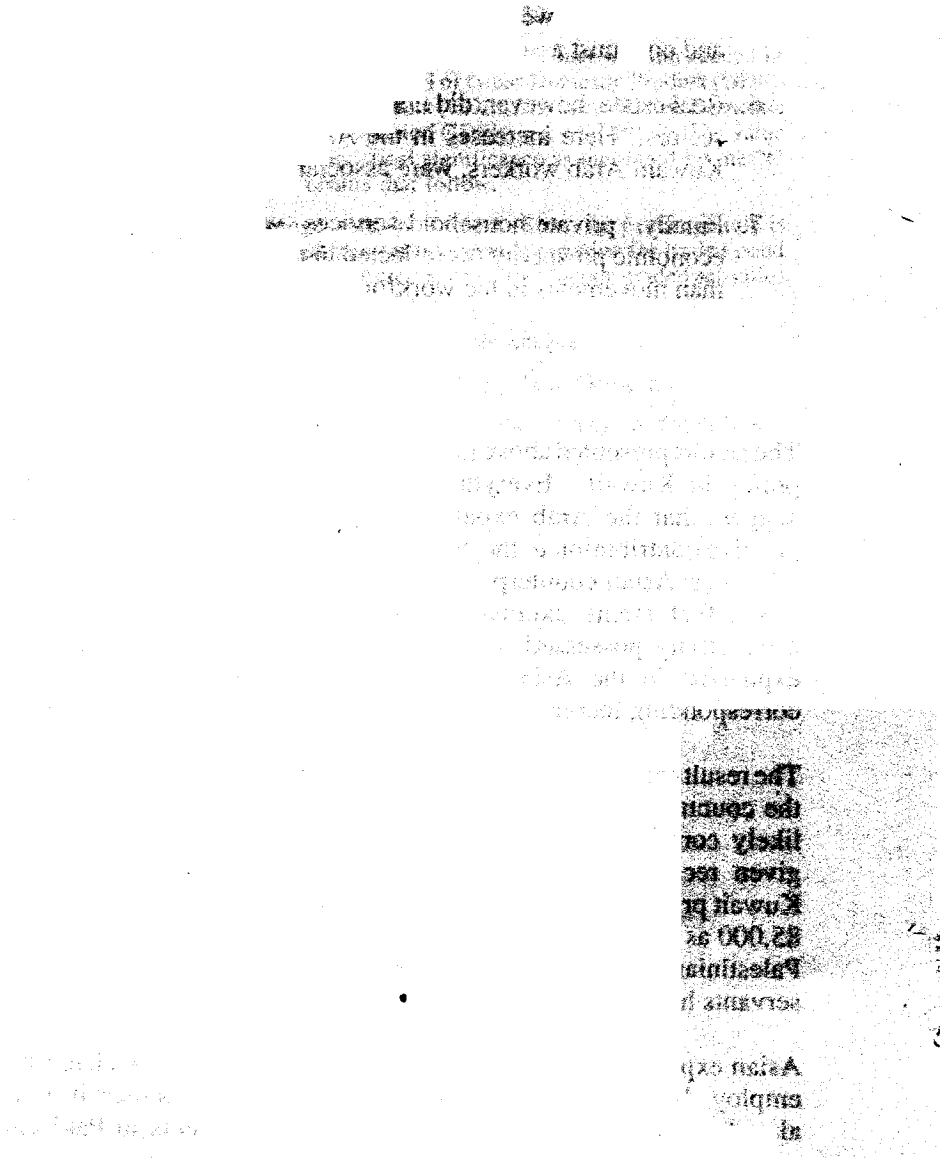
CONCLUSIONS

The results presented above have several implications for government policy in Kuwait. Everything else remaining equal, the results suggest that the Arab expatriate workforce made a much more positive contribution to the country's expansion than that associated with their Asian counterparts. While it is not completely clear that this effect stems exclusively from relatively high degrees of productivity possessed by expatriate Arabs, the fact remains that expansion in the Asian workforce has not really produced the corresponding increases in economic output one might imagine.

The results certainly suggest that Arabization would not conflict with the country's major economic objectives and, in fact, would most likely contribute to them. This conclusion has some importance given recent developments. From over 350,000 Palestinians in Kuwait prior to the invasion, there are now (early 1992) only around 85,000 as a result of the government's decision to lay-off as many Palestinian professionals as possible. Over 110,000 expatriate civil servants have lost their jobs.

Asian expatriates are returning steadily to the Emirate, which in 1990 employed 500,000 Asian Workers. About 30,000 new recruits have already started work in Kuwait and recruiting agents in Pakistan,

Thailand and Bangladesh report brisk applications for jobs in the country.[26] However, the results here suggest that the government should also carefully study the Saudi policy of relying on Egyptian expatriates as a means of replacing unwanted Arab workers.[27]



REFERENCES

1. For an initial analysis of the impact of the Gulf War see: J. Addleton, "The Impact of the Gulf War on Migration and Remittances in Asia and the Middle East", *International Migration*, December 1991, pp. 509-526.
2. Victor Mallet, "Foreigners feel the Pinch," *Financial Times*, February 23, 1989, p. 14.
3. William Dullforce, "More Kuwaiti Nationals to Fill Key Positions", *Financial Times*, February 28, 1991, p. 4, *Wall Street Journal*, May 16, 1991, p. 1.
5. Mark Nicholson, "Kuwait Initiates Tough Policy on Expatriates", *Financial Times*, May 28, 1991, p. 6.
6. David Owen and Stephen Fidler, "Kuwait May Borrow $20 Billion to Repair Invasion Damage", *Financial Times*, March 8, 1991, p. 1.
7. "Quick Kuwaiti Recovery is Predicted", *New York Times*, March 18, 1991, p.1.
8. Abdulrasool Al-Moosa and Keith McLachlan, *Immigrant Labor in Kuwait*, London: Croom Helm, 1985, p. 7.
9. Victor Mallet, "Foreigners feel the Pinch," *Financial Times*, February 23, 1989, p. 14.
10. Michael Field, "Kuwaitis Ponder Problems of Liberation", *Financial Times*, October 30, 1990, p. 4.
11. Al-Moosa and McLachlan, *op cit.*, p. 112.
12. *Ibid.*
13. Al-Moosa and McLachlan, *op. cit.*, pp. 112, 113.
14. Al-Moosa and McLachlan, *op. cit.*, p. 113.
15. *Ibid.*
16. *Ibid.*
17. For an excellent summary of the assumptions underlying this approach, see Alan Gelb and Associates, *Oil Windfalls: Blessing or Curse?*, Oxford University Press, New York, 1988, chapter 2.
18. The analysis here draws extensively on Ahead Gauzier, "Prices and Output in Two Oil-Based Economies: The Dutch Disease in Iran and Nigeria," *ID Bulletin*, October 1986, pp. 14-20.
19. Mohammad Al-Sabah, "The Dutch Disease in an Oil Exporting Country: Kuwait," *OPEC Review*, Summer 1988, pp. 129-144.
20. See, for example, Robert E. Looney, "The Impact of Petroleum Exports on the Saudi Arabian Economy," in Robert W. Stookey (Ed.) *The Arabian Peninsula,* Hoover Institution Press, Stanford, California, 1984, pp. 37-64; and Robert E. Looney, "The Impact of Defense Expenditures on the Saudi Arabian Private Sector," *Journal of Arab Affairs*, Fall 1987, pp. 198-229.
21. Cf. L.M. Koyck, *Distributed Lags and Investment Analysis*, Amsterdam: North Holland, 1954.

TABLE 1

KUWAIT: LABOUR FORCE BY ECONOMIC ACTIVITY, 1970–1975

Occupation		1970 Kuwaiti	1970 %	1970 Non-Kuwaiti	1975 Kuwaiti	1975 %	1975 Non-Kuwaiti
Agriculture, Fishing	M	798	19.7	3,253	3,970	53.0	3,522
	F	4	44.4	5	13	59.1	9
	T	802	19.8	3,258	3,983	53.0	3,531
Mining and Quarrying	M	1,627	25.2	4,828	1,767	37.3	2,953
	F	48	6.7	668	12	8.6	127
	T	1,675	23.4	5,497	1,779	36.6	3,080
Manu-facturing Industries	M	6,100	19.1	25,876	2,237	9.3	21,889
	F	9	7.8	106	21	6.2	320
	T	6,109	19.0	25,982	2,258	9.2	22,209
Construction	M	2,186	6.5	31,418	1,755	5.5	130,357
	F	2	2.9	66	1	0.7	143
	T	2,188	6.5	31,484	1,756	5.4	130,500
Electricity/ gas/water	M	2,130	29.4	5,106	2,029	27.9	5,230
	F	39	18.8	13	5	41.7	7
	T	2,133	29.4	5,119	2,034	28.0	5,237
Wholesale Retail Trade	M	6,250	21.6	22,704	6,297	16.3	32,364
	F	25	7.6	304	30	3.3	868
	T	6,275	21.4	23,008	6,327	16.0	33,232
Trans-portation Commun	M	2,357	19.6	9,640	4,305	28.4	10,853
	F	5	3.5	136	262	49.7	265
	T	2,362	19.5	9,776	4,567	29.1	11,118
Finance Real Estate	M	1,092	23.7	3,507	1,295	22.2	4,548
	F	13	4.3	289	82	12.1	598
	T	1,105	22.5	3,796	1,377	21.1	5,146
Social Services	M	34,838	39.5	53,371	56,011	43.7	72,203
	F	1,906	12.9	12,850	6,877	21.4	25,188
	T	36,744	34.7	66,221	62,888	38.9	97,391
Total Labour Force	M	57,614	26.4	160,262	79,666	30.2	183,919
	F	2,020	12.3	14,458	7,305	21.0	27,525
	T	59,634	25.4	174,720[a]	86,971	29.1	211,444

Source: State of Kuwait, *Annual Statistical Abstract, 1988* (Ministry of Planning, Central Statistical Office, 1988), p. 117.

TABLE 2

KUWAIT: LABOUR FORCE BY ECONOMIC ACTIVITY, 1980–1985

Occupation		1980 Kuwaiti	1980 %	1980 Non-Kuwaiti	1985 Kuwaiti	1985 %	1985 Non-Kuwaiti
Agriculture, Fishing	M	3,886	42.3	5,184	2,715	21.7	9,799
	F	52	65,0	28	66	55.9	52
	T	3,938	43.0	5,212	2,781	22.0	9,851
Mining and Quarrying	M	2,364	36.7	4,075	2,468	36.8	4,233
	F	33	15.0	187	43	13.0	289
	T	2,397	36.0	4,262	2,511	35.7	4,522
Manu-facturing Industries	M	3,107	7.7	37,432	4,552	9.1	45,262
	F	72	10.0	649	140	4.2	1,135
	T	3,179	7.7	38,081	4,692	9.2	46,397
Construction	M	1,194	1.2	95,331	1,435	1.2	121,543
	F	12	2.1	562	27	2.3	1,160
	T	1,206	1.2	95,893	1,462	1.2	122,694
Electricity/ gas/water	M	2,039	25.1	6,076	1,510	20.4	5,877
	F	29	55.8	23	54	78.3	15
	T	2,068	25.3	6,099	1,564	20.9	5,902
Wholesale Retail Trade	M	4,513	8.0	52,027	5,932	8.2	66,524
	F	64	3.5	1,813	144	4.1	3,331
	T	4,577	7.8	53,840	6,076	8.0	69,855
Trans-portation Commun	M	7,180	25.0	21,491	6,812	19.4	28,224
	F	652	44.0	830	849	39.1	1,320
	T	7,832	25.9	22,321	7,661	20.6	29,544
Finance Real Estate	M	2,466	22.7	8,413	3,175	18.6	13,868
	F	350	19.4	1,457	693	21.1	2,611
	T	2,816	22.2	9,870	38,680	19.0	16,479
Social Services	M	62,896	38.1	102,271	70,504	33.8	138,371
	F	12,565	22.7	42,721	22,441	19.0	95,413
	T	75,461	34.2	144,992	92,945	28.4	233,784
Total Labour Force	M	93,588	21.9	334,644	101,607	18.9	436,650
	F	14,172	22.4	49,105	24,803	18.8	107,325
	T	107,760	21.9	383,749	126,410	18.9	543,975

Source: State of Kuwait, *Annual Statistical Abstract, 1988* (Ministry of Planning, Central Statistical Office, 1988), p. 117.

TABLE 3

KUWAIT: DISTRIBUTION OF LABOUR FORCE
BY ECONOMIC ACTIVITY AND NATIONALITY, MARCH 1988

Economic Activities	Kuwaiti	%	Non-Kuwaiti	%	Total	%
Agriculture/ Fishing	946	0.6	7,810	1.4	8,756	1.3
Mining/ Quarrying	3,212	2.2	2,816	0.5	6,028	0.9
Manufacturing	5,302	3.6	44,858	8.3	50,160	7.3
Electricity/ Gas, Water	1,738	1.2	5,170	1.0	6,908	1.0
Construction	1,716	1.2	105,688	19.5	107,404	15.6
Wholesale/ Retail Trade	5,016	3.4	74,866	13.9	79,882	11.6
Transport/ Communications	9,834	6.7	27,104	5.0	36,938	5.3
Finance/ Real Estate	5,390	3.6	16,742	3.1	22,132	3.2
Social/ Personal Services	114,598	77.5	255,640	47.3	370,238	53.8
Total	**147,752**	**100.0**	**540,694**	**100.0**	**688,446**	**100.0**

Source: State of Kuwait, *Annual Statistical Abstract, 1988* (Ministry of Planning, Central Statistical Office, 1989).

TABLE 4

NON-KUWAITI LABOUR FORCE, 1970–85

(thousands)

Groups	1970	%	1975	%	1980	%	1985	%
Arabian								
Male	109.2	67.3	128.8	69.6	201.4	60.6	219.9	50.4
Female	11.6	79.6	18.0	64.8	27.1	56.1	33.0	30.7
Total	120.8	68.3	146.7	69.0	228.5	60.1	252.9	46.5
Asian								
Male	48.4	29.8	53.4	28.9	125.8	37.9	210.3	48.2
Female	2.5	17.5	9.2	31.2	19.9	41.3	72.5	67.6
Total	50.9	28.8	62.5	29.4	145.7	38.3	282.8	52.0
African								
Male	0.3	0.2	0.1	0.1	0.4	0.1	0.4	0.1
Female	ins	0.1	ins	0.1	0.4	0.9	0.6	0.6
Total	0.3	0.2	0.1	0.1	0.8	0.2	1.0	0.2
American/ European								
Male	2.2	1.3	1.7	0.9	4.6	1.4	6.0	1.4
Female	0.3	2.1	0.3	1.2	0.8	1.7	1.2	1.1
Total	2.5	1.4	2.0	1.0	5.5	1.5	7.2	1.3
Unemployed								
Male	2.2	1.4	1.1	0.6	na	na	na	na
Female	0.1	0.7	0.2	0.7	na	na	na	na
Total	2.3	1.3	1.3	0.6	na	na	na	na
Total								
Male	162.3	100.0	185.0	100.0	332.3	100.0	436.7	100.0
Female	14.5	100.0	27.7	100.0	48.3	100.0	107.3	100.0
Total	176.8	100.0	212.7	100.0	380.6	100.0	544.0	100.0

Source: State of Kuwait, *Annual Statistical Abstract, 1988* (Ministry of Planning, Central Statistical Office, 1988), p. 117.

TABLE 5

DUTCH DISEASE INDICATORS

	Oil Shock (%)		Real Exchange Rate (1975=100)			Sector Growth (1970–81) (% per annum)		
	1970–1975	1975–1980	1970	1978	1981	Agr	Man	Non-Trad
Kuwait	544	168	292	104	69	5.3	6.7	15.8
Saudi Arabia	183	71	167	119	86	6.1	9.5	9.7
Nigeria	73	46	117	121	89	−0.3	11.7	9.1
Mexico	146	20	83	124	89	3.7	7.1	6.8
Indonesia	1	60	118	117	106	4.0	1 3.4	10.1
Venezuela	48	34	97	103	76	2.7	4.7	5.5

Notes: *Oil Shock* = investment in nominal value of petroleum exports divided by Gross Domestic Product at the beginning of each period.
Real Exchange Rate = Index of local currency-to-dollar rate divided by the implicit GDP deflator and multiplied by an index of import prices (a decrease in the index represents a real appreciation).
Non-Tradeables = construction, utilities, transport and communication, public administration and defense and other services.

Source: Based on Table 11.3 of Michael Roemer, "Dutch Disease in Developing Countries: Swallowing Bitter Medicine," in Mats Lundahl Ed., *The Primary Sector in Economic Development: Proceedings of the Seventh Arne Ryde Symposium, Frostavallen, August 29–30, 1983* (London: Croom Helm, 1985), p. 243.

TABLE 6

KUWAIT, INFLUENCE OF THE ETHNIC COMPOSITION OF THE LABOUR FORCE: PRIMARY OUTPUT, 1970–85

(ordinary least squares estimates)

Agriculture (AGP)

(1) AGP = 1.14 AGPL – 0.06 GDP
(20.96) (–2.17)
RHO = – 0.16, t = – 0.62 r2 = 0.991; F = 668.45; DW = 2.05

(2) AGP = 1.12 AGPL – 0.04 GDP + 0.01 ARAB
(17.55) (–1.32) (0.83)
RHO = – 0.17, t = – 0.66 r2 = 0.993; F = 439.4; DW = 2.10

(3) AGP = 0.36 AGPL – 0.06 GDP – 0.08 ARAB + 0.13 ASIAN
(2.22) (–3.69) (–4.12) (4.82)
RHO = – 0.54, t = –2.42 r2 = 0. 999; F = 1520.02; DW = 2.70

(4) AGP = 0.71 AGPL – 0.018 GDP + 0.06 ASIAN – 1.44 DUTCH
(2.79) (–1.45) (1.74) (–1.02)
RHO = – 0.18, t = 0.72 r2 = 0.995; F = 416.07; DW = 2.10

Mining (MINP)

(5) MINP = 0.74 MINPL – 0.04 GDP – 0.03 ARAB
(3.37) (–0.93) (–1.65)
RHO = – 0.23, t = 0.90 r2 = 0.591; F = 4.83; DW = 2.19

(6) MINP = 0.48 MINPL – 0.05 GDP – 0.02 ASIAN
(2.11) (–1.08) (–1.94)
RHO = –0.08, t = – 0.31 r2 = 0.566; F = 4.34; DW = 2.07

Fishing (FISHP)

(7) FISHP = – 0.50 FISHPL – 0.09 GDP – 0.04 ARAB
(–1.14) (–1.60) (–1.57)
RHO = 0.52, t = 2.30 r2 = 0.146; F = 1.74; DW = 2.62

(8) FISHP = – 0.21 FISHPL – 0.02 GDP – 0.06 ARAB + 0.02 ASIAN
(–0.89) (–0.77) (–3.15) (1.86)
RHO = 0.18, t = 0.71; r2 = 0.667; F = 4.54; DW = 2.73

Notes: Estimations performed with a Cochrane-Orcutt iterative estimation procedure to correct for serial correlation. RHO = coefficient of serial correlation term. L = variable lagged one year. GDP = Gross Domestic Product, GDPE = Expected Gross Domestic Product, ARAB = number of foreign workers who are Arab, ASIAN = number of foreign workers who are Asian, DUTCH = appreciation of the real exchange rate (dollar/dinar).

TABLE 7

KUWAIT, INFLUENCE OF THE ETHNIC COMPOSITION OF THE LABOUR FORCE: MANUFACTURING, 1970–85

(ordinary least squares estimates)

Food (FOODP)

(1) FOODP = 0.83 FOODPL – 0.01 GDPE
(7.82) (–1.87)
RHO = – 0.48; t = – 2.05 r2 = 0.963; F = 143.94; DW = 2.28

(2) FOODP = – 0.24 FOODPL – 0.01 GDPE + 0.22 ARAB
(–0.72) (–0.96) (3.22)
RHO = – 0.11, t = – 0.43; r2 = 0.963; F = 87.88; DW = 1.94

(3) FOODP = – 0.42 FOODPL – 0.01 GDPE + 0.23 ARAB + 0.02 ASIAN
(–1.14) (–0.51) (3.36) (0.68)
RHO = – 0.02, t = – 0.05 r2 = 0.958; F = 51.75; DW = 1.97

(4) FOODP = – 0.52 FOODPL – 0.01 GDPE + 0.34 ARAB – 3.88 DUTCH
(–2.44) (–1.74) (6.83) (–3.84)
RHO = 0.06, t = 0.21 r2 = 0.981; F = 115.61; DW = 1.93

Textiles (TEXTP)

(5) TEXTP = 0.95 TEXTPL + 0.01 GDP
(6.37) (0.57)
RHO = – 0.15, t = – 0.62 r2 = 0.892; F = 45.59; DW = 2.03

(6) TEXTP = – 0.49 TEXTPL + 0.14 GDP + 0.21 ARAB
(–2.41) (3.91) (6.72)
RHO = 0.41, t = 1.66 r2 = 0.919; F = 37.82; DW = 2.81

(7) TEXTP = 0.48 TEXTPL + 0.13 GDP + 0.24 ARAB – 0.02 ASIAN
(–2.25) (3.67) (5.90) (–1.27)
RHO = 0.27, t = 1.07 r2 = 0.949; F = 42.11; DW = 2.64

(8) TEXTP = – 0.30 TEXTPL + 0.04 GDP + 0.20 ARAB – 2.16 DUTCH
(–1.52) (1.82) (7.40) (–2.12)
RHO = 0.56, t = 2.51; r2 = 0.914; F = 23.87; DW 2.58

Paper (PAPERP)

(1) PAPERP = 0.76 PAPERPL – 0.01 GDPE
(4.34) (–0.99)
RHO = – 0.05, t = – 0.20; r2 = 0.876; F = 39.00; DW = 1.99

(2) PAPERP = 0.05 PAPERPL – 0.01 GDPE + 0.11 ARAB
(0.14) (–0.50) (2.14)
RHO = 0.29, t = 1.15 r2 = 0.808; F = 14.00; DW = 1.86

(3) PAPERP = 0.06 PAPERPL – 0.01 GDPE + 0.16 ARAB – 0.04 ASIAN
(0.14) (–1.3) (2.49) (–1.86)
RHO = – 0.07, t = – 0.28 r2 = 0.930; F = 29.67; DW = 1.91

Petroleum Refining (PRP)

(4) PRP = 0.87 PRPL – 0.04 GDP
(3.46) (–1.82)
RHO = – 0.21, t = – 0.82 r2 = 0.610; F = 8.59; DW = 2.15

(5) PRP = 0.67 PRPL – 0.01 GDP + 0.18 ARAB
(2.18) (–0.08) (0.88)
RHO = – 0.05, t = – 0.19 r2 = 0.565; F = 4.33; DW = 1.91

(6) PRP = – 0.38 PRPL + 0.10 GDP + 0.77 ASIAN – 0.50 ARAB
(–1.28) (2.62) (4.40) (–2.42)
RHO = 0.02, t = 0.06; r2 = 0.853; F = 13.04; DW = 1.84

(7) PRP = – 0.25; PRPL + 0.11 GDP – 23.39 DUTCH + 0.55 ASIAN
(–0.91) (0.28) (–3.35) (4.81)
RHO = – 0.27; t = –1.06 r2 = 0.900; F = 20.45; DW = 2.18

Notes: See Table 6.

TABLE 8

KUWAIT, INFLUENCE OF THE ETHNIC COMPOSITION OF THE LABOUR FORCE: PRIVATE SERVICES, 1970–85

(ordinary least squares estimates)

Hotels and Restaurants (HOTELP)

(1) HOTELP = 0.60 HOTELPL + 0.06 GDPE
(2.20) (1.73)
RHO = 0.80, t = 5.03 r2 = 0.330; F = 2.72; DW = 1.54

(2) HOTELP = 0.63 HOTELPL + 0.06 GDPE + 0.26 ARAB
(2.38) (1.95) (2.15)
RHO = 0.42, t = 1.75 r2 = 0.706; F = 8.04; DW = 1.42

(3) HOTELP = 0.48 HOTELPL + 0.03 GDPE + 0.50 ARAB – 0.14 ASIAN
(1.69) (1.23) (2.29) (–1.33)
RHO = 0.29, t = 1.13 r2 = 0.813; F = 9.75; DW = 1.49

(4) HOTELP = 0.50 HOTELPL + 0.06 GDPE + 0.09 ARAB + 10.87 DUTCH
(2.09) (2.25) (0.75) (2.04)
RHO = 0.25, t = 0.97 r2 = 0.857; F = 13.51; DW = 1.71

Transport and Storage (TSP)

(5) TSP = 0.98 TSPL + 0.05 GDPE
(3.89) (0.49)
RHO = 0.03, t = 0.09 r2 = 0.821; F = 25.34; DW = 1.98

(6) TSP = 0.57 TSPL + 0.08 GDPE + 0.76 ARAB
(1.99) (0.92) (2.22)
RHO = – 0.04, t = – 0.16 r2 = 0.895; F = 28.33; DW = 1.78

(7) TSP = 1.13 TSPL + 0.11 GDPE + 1.02 ARAB – 0.60 ASIAN
(6.05) (2.32) (5.13) (–3.66)
RHO = – 0.65, t = –3.22 r2 = 0.979; F = 105.75; DW = 2.36

(8) TSP = 0.63 TSPL + 0.11 GDPE + 0.25 ARAB + 25.30 DUTCH
(2.89) (1.67) (0.76) (2.00)
RHO = – 0.34, t = – 1.37 r2 = 0.954; F = 46.23; DW = 1.83

(9) TSP = 0.92 TSPL + 0.11 GDPE – 0.19 ASIAN + 31.52 DUTCH
(3.62) (1.82) (–1.07) (3.61)
RHO = – 0.46, t = – 1.99 r2 = 0.963; F = 58.23; DW = 1.99

Communications (COMMUNP)

(1) COMMUNP = 0.85 COMMUNPL + 0.05 GDPE
(4.91) (0.33)
RHO = 0.80, t = 5.09 r2 = 0.741; F = 15.71; DW = 1.64

(2) COMMUNP = 0.64 COMMUNPL + 0.01 GDPE + 0.19 ARAB
(3.88) (0.01) (2.62)
RHO = 0.48, t = 2.05 r2 = 0.953; F = 66.85; DW = 1.54

(3) COMMUNP = 1.34 COMMUNPL + 0.21 GDPE + 0.26 ARAB – 0.20 ASIAN
(7.24) (2.44) (6.61) (–3.42)
RHO = – 0.23, t = – 0.88 r2 = 0.994; F = 376.81; DW = 2.17

(4) COMMUNP = 0.69 COMMUNPL + 0.01 GDPE + 0.12 ARAB + 3.11 DUTCH
(5.05) (0.42) (1.67) (1.40)
RHO = 0.32, t = 1.28 r2 = 0.975; F = 86.85; DW = 1.90

(5) COMMUNP = 0.95 COMMUNPL + 0.10 GDPE – 0.03 ASIAN + 5.85 DUTCH
(3.26) (0.73) (–0.37) (3.05)
RHO = 0.20, t = 0.75 r2 =0.976; F = 92.11; DW = 1.97

TABLE 8 (Cont'd)

(ordinary least squares estimates)

Finance (FINP)

(6) FINP = 0.86 FINPL – 0.03 GDPE
(5.94) (–0.60)
RHO = 0.56, t = 2.54 r2 = 0.879; F = 39.88; DW = 1.82

(7) FINP = 0.31 FINPL – 0.06 GDPE + 1.09 ARAB
(1.73) (–1.44) (3.92)
RHO = 0.15, t = 0.59 r2 = 0.979; F = 202.53; DW = 1.77

(8) FINP = 0.54 FINPL – 0.04 GDPE + 0.98 ARAB – 0.15 ASIAN
(1.94) (–0.97) (3.84) (–0.75)
RHO = – 0.28, t = – 0.10 r2 = 0.989; F = 209.16; DW = 1.91

(9) FINP = 0.44 FINPL – 0.03 GINPE + 0.72 ARAB + 11.25 DUTCH
(3.12) (–0.79) (2.63) (1.71)
RHO = – 0.09, t = – 0.35 r2 = 0.992; F = 289.04; DW = 2.04

(10) FINP = 1.01 FINPL + 0.02 GINPE – 0.23 ASIAN + 20.67 DUTCH
(4.36) (0.40) (–1.31) (3.33)
RHO = – 0.20, t = – 0.77 r2 = 0.985; F = 219.74; DW = 2.03

Insurance (INSP)

(1) INSP = 0.85 INSPL – 0.05 GDP
(8.93) (–1.62)
RHO = – 0.86, t = – 6.53 r2 = 0.966; F = 157.12; DW = 1.52

(2) INSP = – 0.65 INSPL + 0.03 GDP + 0.19 ARAB
(–2.14) (0.41) (3.70)
RHO = 0.53, t = 2.33 r2 = 0.62; F = 6.99; DW = 1.53

(3) INSP = – 0.69 INSPL + 0.03 GDP + 0.18 ARAB + 0.01 ASIAN
(–1.98) (0.44) (2.74) (0.20)
RHO = 0.54, t = 2.45 r2 = 0.66; F = 4.45, DW = 1.52

Real Estate (REALP)

(4) REALP = 1.10 REALPL + 0.02 GDPE
(5.99) (0.42)
RHO = – 0.35, t = – 1.42 r2 = 0.951; F = 106.39; DW = 2.15

(5) REALP = 0.84 REALPL + 0.01 GDPE + 0.17 ARAB
(3.42) (0.28) (1.45)
RHO = – 0.30, t = – 1.16 r2 = 0.956; F = 71.92; DW = 2.09

(6) REALP = – 0.09 REALPL – 0.04 GDPE + 0.05 ARAB + 0.35 ASIAN
(–0.26) (–1.21) (0.29) (2.28)
RHO = 0.24, t = 0.94; r2 = 0.921; F = 26.05; DW = 1.91

(7) REALP = 0.01 REALPL – 0.03 GDPE + 0.30 ASIAN + 6.95 DUTCH
(0.16) (–0.83) (2.91) (1.69)
RHO = – 0.08, t = – 0.29 r2 = 0.965; F = 61.63; DW = 2.09

Private Household Services (PHSP)

(8) PHSP = 0.63 PHSPL + 0.06 GDPE + 0.20 ARAB
(2.03) (1.45) (1.58)
RHO = 0.07, t = 0.26 r2 = 0.482; F = 3.10; DW = 1.94

(9) PHSP = 0.47 PHSPL + 0.04 GDPE + 0.35 ARAB – 0.11 ASIAN
(0.47) (0.80) (1.44) (–0.75)
RHO = 0.14, t = 0.53 r2 = 0.493; F = 1.94; DW = 1.89

(10) PHSP = 0.37 PHSPL + 0.06 GDPE – 0.13 ARAB + 18.42 DUTCH
(1.31) (1.78) (–0.87) (2.58)
RHO = – 0.29; t = – 1.14 r2 = 0.805; F = 9.31; DW = 2.28

Notes: See Table 6.

LE CHOIX DE LA MAIN-D'OEUVRE DANS UN PETIT ETAT IMPORTATEUR DE MAIN-D'OEUVRE : L'INFLUENCE DE LA COMPOSITION ETHNIQUE SUR LE DEVELOPPEMENT DU KOWEIT

Suite à la libération du Koweït, le Gouvernement a accéleré son remplacement des travailleurs arabes (la plupart Palestiniens et Jordaniens) par des travailleurs d'origine asiatique. Le but de cet ouvrage est d'évaluer si ce choix peut être considéré comme réaliste dans la perspective d'une réduction du coût général de la main-d'oeuvre expatriée. Quels secteurs de l'économie seraient les plus prometteurs à cet égard? Quels seront les coûts pour l'économie?

En se fondant sur une analyse de l'économie du Koweït avant l'invasion, l'auteur aboutit à la conclusion principale selon laquelle les travailleurs arabes expatriés contribuaient à l'expansion du pays de façon nettement plus positive que leurs homologues asiatiques. Si l'on ne peut pas attribuer ce constat de façon indéniable au niveau de productivité relativement élevé des Arabes expatriés, le fait est que l'accroissement de la main-d'oeuvre asiatique n'a pas réellement donné lieu à l'augmentation de production que l'on aurait pu croire.

LAS OPCIONES DE MANO DE OBRA EN UN PEQUEÑO PAIS DE INMIGRACION LABORAL: LA INFLUENCIA DE LA COMPOSICION ETNICA EN EL DESARROLLO DE KUWAIT

Como consecuencia de su liberación, el Gobierno de Kuwait aceleró el reemplazamiento de los trabajadores árabes (en su mayoría palestinos y jordanos) por otros de origen asiático. El objetivo de este artículo es evaluar si ésta es una alternativa realística con miras a reducir el costo total de la fuerza laboral expatriada ¿En qué áreas la economía sería más prometedora a este respecto? ¿Cuáles son los costos económicos?

Basándose en un análisis de la economía previa a la invasión, los principales resultados de este estudio señalan que la fuerza laboral expatriada árabe contribuyó de manera mucho más positiva a la expansión del país que su contraparte asiática. Si bien aún no está completamente claro que esto resulte exclusivamente de los grados relativamente elevados de productividad que poseen los expatriados árabes, es un hecho que la expansión de la fuerza laboral asiática no produjo los incrementos correspondientes esperados en la producción económica.