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Manpower dilemmas in Kuwait

Scope for indigenous job creation through attrition of the foreign workforce

Introduction

At the time of the Iraqi invasion, Kuwait was facing a number of complex decisions concerning its development strategy. Clearly economic adjustment to lower oil revenues and the uncertainties created by the Gulf war had been the main constraints to growth in the 1980s. By time of the invasion, however, economic diversification and the generation of productive employment opportunities for a growing population had become the country's major challenges. In fact, deficieny in the quantity and quality of indigenous human resources was perceived[1] to be the most important bottleneck to progress throughout the entire Gulf region.

For industrialization and economic diversification to succeed (and in order to reduce the region's over-dependence on expatriate labor), a higher percentage of nationals needed to be trained in managerial, technical and operational skills. At the time of the invasion, the task facing policy makers in Kuwait and the other Gulf countries was upgrading the capacity of the national workforce to the point where they could play a more active role in the productive sectors of their economies. Perhaps as important, workers themselves had to develop new attitudes towards technical and blue-collar jobs.

Problems of mobilizing human resources in the region were not only limited to training and acquisition of new skills and attitudes towards certain jobs, they also included reforming the wage structure by skill and occupation, upgrading the educational infrastructure, as well as integrating women into the labor force. A major problem facing planners in Kuwait was the increasing unemployment problem among Kuwaiti graduates.[2]

In fact, attrition of the foreign workforce, and/or changing its ethnic composition from Arab to cheaper Asian workers was originally conceived as a means of reducing the country's foreign exchange outflow. Increasingly, however, foreign workforce reduction was being seen as necessary in order to provide jobs for Kuwait nationals. Here the main issues were: What was the scope for reducing the size of the foreign workforce? In what areas would this be most advantageous in terms of opening up positions for Kuwaitis? Which foreign ethnic groups would be affected?

Analyses of manpower planning issues in the Gulf region have been limited in the past by the unavailability of relevant data. Kuwait was an ideal country for examination because it was the one exception to this general rule. A number of detailed census and surveys were available in the country, providing an in-depth picture of the labor force, by occupation and, in the case of foreign workers, by national origin.

1 Gulf Economic and Financial Report (Manama, Bahrain: Gulf International Bank), May 1988, p. 1.
2 Victor Mallet, „Foreigners feel the Pinch," Financial Times (February 23, 1989), p. 14.

Distribution of the workforce

Clearly, had there been no invasion, human resource constraints would likely have determined how effectively Kuwait would be able to deal with its development in the years ahead. At the time of the invasion, 60 percent of Kuwait's population of just under two million were foreigners, and the non-Kuwaitis made up around 83 percent of the total workforce. In some sectors, such as construction and manufacturing, virtually all workers were foreign.

With regard to shifts in the Kuwaiti/non-Kuwaiti sectoral composition of the workforce, several interesting patterns had developed over the years:[3]

— 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 had nearly doubled, increasing from 25,982 in 1970 to 46, 397 in 1985.

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

— By far the highest proportion of the labor force was employed in the social services. This sector accounted for 43.9 percent of the workforce in 1970. By 1975, this figure had risen to 53.7 percent. While the ratio fell to 44.0 percent in 1980, it had increased to nearly 49 percent by 1985.

These trends have continued into the late 1980s. As of March 1988:

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

— No other sector of the economy employed over 10 percent of the Kuwaiti population — the highest being transport and communications which employed 6.7 percent of the Kuwaitis that year.

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

Composition of the foreign workforce

Simultaneously with the sectoral shifts in the ethnic composition of the total workforce, the non-Kuwaiti workforce had undergone a dramatic change in recent years. 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 labor 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.[4]

3 Unless otherwise indicated, data are from: State of Kuwait, Annual Statistical Abstract, 1988 (Ministry of Planning, Central Statistical Office, 1989).

4 Abdulrasool Al-Moosa and Keith McLachlan, Immigrant Labor in Kuwait (London: Croom Helm, 1985), p. 7.

The gradual departure of skilled Arabs had increased the proportion of Asians in the population and at the time of the invasion they made up more than half the foreign labor force.[5] Specifically, the share of Arab workers had declined from 68.3 percent in 1970, to 46.5 percent in 1985. Asian workers had taken most of this share, increasing from 28.8 percent in 1970, to 52 percent by 1985. In 1984, 81 percent of new work permits went to Asian nationalities, and less than 15 percent to Arabs (mainly Egyptians). Within this general pattern, there were several noteworthy trends. The three main Asian nationalities in the late 1970s (Indians, Pakistanis and South Koreans) all had their share reduced, while Bangladeshis and other Asians (in particular Thais, Filipinos and Sri Lankans) had increased rapidly.

While recent patterns of new labor inflows to Kuwait had been characterized by a trend towards an increasing Asian share, analysis by nationality had shown that work permit renewals accounted for a very high and growing share of all work permits issued to Arabs.

- In 1977, 47.0 percent of work permits were renewals. By 1987, this percentage had risen to 66.3 percent.
- Historically, several sectors have relied more on renewals rather than 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.

These trends have tended to undermine the country's policy of localization („Kuwaitization") of the workforce.

Productivity of the labor force

In lieu of the invasion, the costs of Kuwaitization would have been largely determined by the productivity of the foreign workforce. Unfortunately, little data existed as to productivity differences by ethnic group. Most of the available information was aggregate. These figures indicated that there had been a tendency of the Kuwaiti market to use foreign labor in a fairly inefficient, general purpose way. The result had been fairly low overall levels of productivity.[6]

Most observers noted a considerable visible 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.[7] The productivity of such operations must have been low by any measure, which 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 labor force remained extremely low (males 32.2 percent, females 4.8 percent and the average 19.1 percent). In effect, foreign labor was used in menial tasks to substitute for Kuwaiti inputs which were then consumed in leisure activities.[8]

5 Victor Mallet, „Foreigners feel the Pinch," Financial Times (February 23, 1989), p. 14.
6 Abdulrasool Al-Moosa and Keith McLachlan, Immigrant Labor in Kuwait (London: Croom Helm, 1985), p. 112.
7 Ibid.
8 Al-Moosa and McLachlan, Immigrant Labor in Kuwait (London: Croom Helm, 1985), pp. 112, 113.

A further aspect of productivity that had received little attention was the depressing influence of a large and often ill-trained foreign workforce in Kuwait on the adoption of labor-saving technologies. Systems of construction, one of the largest consumers of labor in the country, were often labor-intensive, 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 labor-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.[9]

It might be argued that easy access to cheap, albeit underqualified labor had 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 labor syndrome and now operated and planned its future activities on the basis of the availability of cheap imported labor.[10]

Yet the real interests of Kuwaitis might be better served through improving internal efficiency, first by merchandising activities to enable rising Kuwaiti productivity per indigenous inhabitant and second by mobilizing rather more thoroughly than at the present Kuwaitis for participation in economic activities by making access to foreign labor more difficult or more expensive. Such a move would automatically tend also to force up levels of productivity among the expatriate workforce itself.[11]

Politically, however, the Kuwaiti private sector would resist any constraints on their option of mobilizing large numbers of relatively cheap (Asian) foreign workers. In addition, Kuwaiti merchants and traders favored the arrival of (Arab) non-national dependants, to bolster local consumption and trade. Given these constraints, one compromise option open to the government might have been to pursue a general strategy replacing Asian workers with Arab expatriates in addition to Kuwaitis. Ultimately for this strategy to have been successful, Arab workers and Kuwaitis would have had to make a greater contribution to output than their Asian counterparts.

Affects associated with the Dutch Disease

The ethnic composition of the workforce undoubtedly played an important role in affecting productivity in Kuwait. However, changes in productivity over time associated with this source were likely to have been masked by another factor, the impact of an appreciating exchange rate on the relative growth of traded and non-traded goods. In particular, Kuwaiti industry may have been experiencing problems ultimately stemming from price distortions associated with the oil boom, or the so-called „Dutch Disease".

In discussing the impact of the oil boom on the Kuwaiti economy one can distinguish between resource movement and spending effects.[12] Resource movement effects occur if the booming sector directly draws inputs away from the rest of the economy — a situation unlikely to have been of major significance in the Kuwaiti context. The spending ef-

9 Al-Moosa and McLachlan, op. cit., p. 113.
10 Ibid.
11 Al-Moosa and McLachlan, op. cit., p. 113.
12 Cf. J.P. Neary, „Real and Monetary Aspects of the Dutch Disease," in K. Jungenfeld and D. Hague eds., Structural Adjustment in Developed Economies (London: Macmillan, 1985); and W.M. Corden and J.P. Neary, „Booming Sector and De-industrialisation in a Small Open Economy," Economic Journal (1982), pp. 825-848.

fect involves a variety of issues but essentially results in a relative decline of the traded goods sector in favor of the non-traded goods sector. This occurs in combination with an increase in the price of non-traded relative to that of traded goods, or a real appreciation of the currency. It hinges on the presumption that the energy boom results in an improvement of the energy balance of trade, and that at least part of the oil revenues are spent on non-traded goods.

In fact, a recent study[13] found considerable evidence that these patterns have evolved over time in Kuwait:

— The real share of the tradeable sector in non-oil GDP increased from 9.97 percent in 1966 to more than 14.5 percent in 1974, but then declined to only 12.4 percent in 1978. In contrast the private non-tradeable sector behaved in an opposite manner — its share continued to decline in the 1960s and early 1970s (it reached 44.7 percent of non-oil GDP in 1974), but after 1974 it recovered strongly to contribute more than half of the non-oil real GDP in 1978. The public non-tradeable sector, on the other hand behaved in a fluctuating manner, with a downward trend.

— Not only did the real growth rate of the private non-tradeable sector surpass those of the tradeable and public non-tradeable sectors, but it also emerged in the 1978-80 period as the fastest employer. Employment in the private non-tradeable sector increased from 24.46 percent of the total labor force in 1975 to more than 32 percent in 1980.

— Even though tradeable and public non-tradeable sectors managed to increase their absolute numbers of labor employment (due to the large influx to foreign labor), they were not able to increase their relative shares in total employment.

— Government expenditure on wages and salaries, which represents more than 80 percent of current expenditure, increased by about 130 percent during the period 1972-78, although the increase in the size of Government employment was no more than 48 percent in the same period, reflecting the fact that nominal wages in the Government sector increased by more than 80 percent during the six year period.

— Government expenditure increased by more than 250 percent during the 1973/74-1977/78 period. Given the scarcity of indigenous labor, the huge increase in Government expenditure resulted in a large increase in the cost of labor, and also in intense real estate speculation which made real estate transactions more profitable than building new housing. As a result a severe housing shortage developed, which was reflected by the more than 80 percent increase in the rental index of housing during 1975-78.

— In terms of relative rates of inflation, the price indices for the tradeable goods sector relative to the GDP price index was continually decreasing throughout the 1974-78 period. In other words, price inflation in the tradeable sector was decreasing relative to general domestic price inflation, whereas price inflation in private non-tradeables outpaced domestic inflation. Price responses of the public non-tradeable sector, on the other hand were less regular — possibly because of their largely administered prices and the dominance of the Government sector.

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13 Mohammad Al-Sabah, „The 'Dutch Disease' in an Oil-Exporting Country: Kuwait," OPEC Review (Summer, 1988), pp. 129-144.

- The appreciation of the real exchange rate, (the GDP deflator for tradeable goods relative to the GDP deflator for private non-tradeable goods sectors), was a clear signal for private resources to be reallocated towards non-tradeable activities (like real estate speculations), while profitability in the tradeable sector tended to be squeezed between rising domestic costs and import competition.
- During this period the importance of trade to the Kuwaiti economy increased considerably. The trade balance was only about 11.5 percent of the GDP in 1970, but after the oil price increase of 1973/74, it increased tremendously with a value more than half the 1974 GDP.
- The movements of the nominal exchange rate, however, in the period 1974-78 appear to have had a very weak linkage with particular components of the balance of payments. The Kuwaiti dinar's exchange rate was not very sensitive to changes in the current or capital account, perhaps because it was heavily influenced by the authorities' desire to curtail imported inflation.
- There is a remarkable association between the real exchange rate, share of tradeable goods in non-oil GDP and non-oil trade deficits relative to GDP. Up to 1974, the real exchange rate was depreciating, with inflation in the tradeable sector far exceeding inflation in non- tradeables. The rise in the relative price of tradeable goods had presumably reduced the growth rate and demand for tradeables relative to non-tradeables. This factor may go a long way in explaining the 28 percent reduction in the ratio of the non-oil trade deficit in GDP during the 1971-74 period. On the other hand, real depreciation, among other things had apparently stimulated growth in the tradeable sector and led to more than a 10 percent increase in the share of tradeables in non-oil real GDP.
- The picture for 1974-78 is very consistent with the „Dutch Disease" model in that in the case of the real appreciation of the exchange rate, one would expect the growth in domestic demand for tradeables to increase relative to non-tradeables, which leads to an increase in the trade deficit and hence a squeeze in profitability of the tradeable sector relative to non-tradeables. In fact, real appreciation was associated with a substantial increase in the non-oil trade deficit, and a noticeable reduction in the share of the tradeable sector in non- oil real GDP. Interestingly enough the private non-tradeable sector, which was a major loser during the period of real depreciation made a remarkable recovery after the price shock of 1973/74.

In sum, there was a convincing case for the existence of the Dutch Disease in Kuwait. On the other hand, a comparative analysis[14] of the major oil producers indicates that Kuwait's overall growth in manufacturing was not much less than that of non-tradeables, suggesting that the Dutch Disease effects while significant overall, may have varied considerably by subsector. A complete analysis of the impact of the Dutch Disease on the Kuwaiti economy therefore should be undertaken at the sectoral level rather than on the basis of traded versus non-traded goods.

14 Michael Roemer, „Dutch Disease in Developing Countries: Swallowing Bitter Medicine," in Mats Lundahl, The Primary Sector in Economic Development: Proceedings of the Seventh Arne Ryde Symposium, Frostavallen, August 29-30 1983 (London: Croom Helm, 1985), pp. 234-252.

Despite the fact that data did not exist for the ethnic composition of the labor force by major sector of output, some inferences could be drawn as to those areas where non-Kuwaiti Arab workers had made proportionately higher contributions to output than their Asian counterparts. As noted above, 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 labor forces by ethnic groups, making identification of output impacts much easier than if these trends had been flat.

In terms of the structure of the model used for estimation, recent research[15] 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[16] form:

(a) y = aGDP + byL + z

implies an exponential decay scheme, whereby the effects 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.[17]

Impact patterns along these lines are easy to imagine in Kuwait's case, where oil-supported government expenditures are a large component of GDP.[18] 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[19]

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

15 See for example Robert E. Looney, „The Impact of Petroleum Exports on the Saudi Arabian Economy," in Robert W. Stookey ed., The Arabian Peninsula (Stanford, California: Hoover Institution Press, 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.
16 Cf. L.M. Koyck, Distributed Lags and Investment Analysis (Amsterdam: North Holland, 1954).
17 P. Rao and Roger Miller, Applied Econometrics (Belmont, California, 1970), chapter 7.
18 In the regressions that follow Gross Domestic Product was introduced as a control variable in two alternative forms: (a) the actual level of Gross Domestic Product (GDP), and (b) expected Gross Domestic Product (GDPE). Expected Gross Domestic Product was estimated from the equation GDP(t) = a + GDP(t-1).
19 Defined as the real exchange rate. Since the exchange rate is Dollars / Dinar the anticipated sign for this term is negative for traded good sectors (manufacturing, agriculture etc.) and positive for non-traded activities (services etc.).

sectoral output changes were due to increased labor and not (particularly in the case of services) 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 the direct contribution to output. Logically this could come 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 analysis of the ethnic composition of the foreign labor force on sectoral output reveal several interesting patterns[20] (see Table 1).

Table 1: Kuwait: Impact of the foreign workforce on Sectoral output (t test for statistical significance)

Sector	Distributed Lag Term	Arab Workers	Asian Workers	Dutch Disease
Agriculture	2.79	- 4.12	4.82	insignificant
Mining	2.11	- 1.65	- 1.94	insignificant
Fishing	insignificant	- 3.15	1.86	insignificant
Food	insignificant	6.83	insignificant	- 3.84
Textiles	insignificant	7.40	insignificant	- 2.12
Paper	insignificant	2.49	- 1.84	insignificant
Refining	insignificant	- 2.42	- 2.42	- 3.35
Hotels	2.09	insignificant	insignificant	2.04
Transport	6.05	5.13	insignificant	3.61
Communications	5.05	1.67	insignificant	1.40
Finance	3.12	2.63	insignificant	1.71
Insurance	insignificant	2.74	insignificant	insignificant
Real Estate	insignificant	insignificant	2.91	1.69
Private Services	insignificant	insignificant	insignificant	2.58

— In the case of primary output, Asian workers appear to have made a positive contribution to agricultural output, whereas their Arab counterparts did not. The effect of Asian workers, however, was fairly weak, when controlling for Dutch Disease effects.

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

— The other primary activity, fishing, as in the case of agriculture, appears to have been only slightly influenced with increased levels of Asian workers, but not Arab expatriates.

20 Regressions were performed using ordinary least squares estimation technique incorporating a Cochrane-Orcutt iterative estimation procedure to correct for serial correlation. The full results are too extensive to be presented here. However, a copy of the complete analysis together with the underlying data base is available from the author upon request.

— Interestingly enough, in a number of activities a distributed lag-type mechanism does not appear to have existed. This indicates that output from these sectors was quite sensitive to short run factors, rather than the longer run gradual adjustment processes.

— 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 labor force).

In terms of the manufacturing sector, a somewhat different picture emerged:

— 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.

— The same pattern was present in textiles, where 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.

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

In general, therefore, Arab workers had 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 it appears that:

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

— 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.

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

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

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

— 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.

— Finally, private household services were more affected by economic prosperity (as reflected in the appreciation of the real exchange rate) than movements in the workforce per se.

Conclusions

In lieu of the Iraqi invasion, the results presented above had several implications for the country's employment programs. First a policy of Arabization would not have conflicted with output, and if anything would probably have increased overall production. This is particularly the case with regard to the rapidly growing services and maintenance sectors, together with the emerging industrial sector.

The share of nationals in the productive sectors of the economy was expected to drift gradually upwards. A large number of national workforce entrants, denied their first choice of public sector employment (due to more or less constant levels of oil revenues), would have sought other opportunities in the private sector. This would represent a possible conflict with output and efficiency stemming from the fact that there were many types of manual jobs that Kuwaitis preferred not to perform either for cultural reasons or because pay levels were too low. These were largely the jobs held by the Asian workforce.

While education at all levels in Kuwait had undergone remarkable improvements during the preceding fifteen years, its capacity to accommodate future demands for certain skills and high level manpower remained limited. Most likely these deficiencies would have remained for some time until increasingly more students graduated from the expanded school, university and vocational training system. Until enough nationals had been trained the country would most likely have continued depending on expatriates (largely Arabs) to undertake certain technical and managerial functions. This was particularly the case for jobs where experience and managerial expertise can only be achieved over decades. A process of Kuwaitization at too rapid pace and at the expense of Arab workers would most likely have resulted in falling productivity, output and national income.