

EARNINGS DIFFERENCES IN THE LABOR MARKET OF THE ARAB GULF STATES

The Case of Kuwait

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The Arab Gulf states of Kuwait, Bahrain, the United Arab Emirates, Saudi Arabia and Qatar have been experiencing common trends of growth and development. The shared features include a large and expanding government sector, ambitious development programs, high standards of welfare and income and high dependence on migrant workers. Without the expatriate manpower it would have been virtually impossible for the economies of these countries to implement their development programs. Yet the presence of expatriates has a direct impact on the size distribution of labor income. Using the rich data of the 1972/73 budget survey this paper shows that the distribution of labor income is more equitable within the indigenous labor force, i.e., Kuwaitis, than within the migrant workers who come from different environments and have varied experiences and educational attainments. The institutional rules prevailing in Kuwait, as well as other Arab Gulf States, discriminate against migrant workers. The paper shows that about 50% of the wage difference between Kuwaiti and non-Kuwaiti workers is due to discriminatory practices in the labor market. In view of the projected increase in demand for foreign workers in the Arab Gulf States, policy makers are in urgent need of manpower planning and a reconsideration of their discriminatory policies against foreign workers.

1. Introduction

The labor markets of the Arab Gulf states (AGS) have some common features which include (1) low participation rates, (2) high dependence on foreign workers, and (3) differentiation in wages and remunerations between the indigenous and foreign labor. The overall participation rates of the AGS vary between 19.5% in the case of Kuwait to 23% in the case of Saudi Arabia. These rates are considered low in comparison with the rates that prevailed in 1970; for the world 42.0%, the industrialized countries 44.8% and developing countries 40.7%.¹ Small and young populations, low participation by women, the aversion of many Bedouins to manual labor, the expansion of the welfare and the educational systems meant that the supply of labor from

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¹ECWA (1980).

the indigenous populations fell short of the drastic increase in labor demand which ensued following the oil boom of the 1960's and 1970's.

While imported labor is indeed the cornerstone of the development programs in the AGS; its presence was bound to have some bearing on two factors that S. Kuznets identified as crucial features of successful small nations: the society's internal homogeneity, and the degree of egalitarianism in the distribution of income.² This paper examines the labor markets in these countries with emphasis on Kuwait. It is organized in five parts: the second overviews the labor markets in the AGS. The third examines imbalances in Kuwait's labor market within the framework of a human capital model. And the fourth uses the results of the human capital model to test for a segmented labor market in Kuwait. The last part presents the conclusions.

2. Labor market structure

There are currently about 2.75 million migrant workers in the Arab Gulf states. Recent estimates place Saudi Arabia's migrant population at 1.5 million, the United Arab Emirates at 400,000, Kuwait at 350,000, with smaller numbers in Qatar and Bahrain.³ Until 1970 Arabs formed the majority of the migrant workforce. However, a discernable transformation has been occurring in the labor markets of Kuwait, Saudi Arabia, the United Arab Emirates, Qatar and Bahrain. While indigenous and expatriate Arabs together in 1970 held two out of three jobs, their share had dropped to 58% by 1975, as table 1 shows, and preliminary estimates show that it had dropped to 40% in 1979.⁴

Table 1
Workforce in Bahrain, Kuwait, Qatar, and United Arab Emirates by ethnic origin, 1970 and 1975.^a

Ethnic origin	1970		1975	
	Number	%	Number	%
Arab (non-nationals)	166,000	51.0	226,400	41.7
Asian	84,000	25.8	247,700	45.7
Iranian, European and others	73,300	23.2	68,400	12.6
Subtotal	323,300	100.0	542,500	100.0
National	147,600	31.0	195,100	26.5
Grand total	470,900	100.0	737,600	100.0

^aSource: Birks and Sinclair (1980).

²Kuznets (1960).

³Richard and Martin (1983).

⁴Azzam (1980).

Governmental officials in these countries are becoming increasingly concerned with the duality of their labor markets. Whereas the majority of expatriates are in the modern sector of the economy in professional, technical, construction and service jobs, very few are found in the agricultural, fishing and other traditional sectors, as table 2 shows. The nationals, on the other hand, are mostly employed in the government sector and traditional occupations as farmers, fishermen, part-time taxi drivers, landlords, guards or as informal participants in the modern sector in some other way.

Table 2

Foreign workers in the Gulf by sectors of economic activity and by countries of employment: 1975 (percent).^a

	Saudi Arabia	Kuwait	Bahrain	U. A. E.	Qatar	Total	Percent skilled of total
Agriculture	14.6	1.7	3.7	2.9	2.4	9.2	16.0
Mining	1.5	1.5	0.7	2.4	4.0	1.9	62.0
Manufacturing	4.5	10.5	16.7	6.7	12.0	6.5	58.0
Utilities	0.9	2.5	2.4	1.9	2.7	1.5	59.0
Construction	32.2	14.5	21.1	36.9	24.3	33.5	40.0
Commerce	19.1	18.2	13.9	15.4	16.7	15.7	67.0
Transport and communications	9.6	5.3	10.9	7.9	5.2	7.5	43.0
Services	17.6	45.8	30.6	25.9	32.7	24.2	45.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	45.3

^aSource: ENI (1981, tables 20 and 21).

The governments of the Arab Gulf states play a major role in wage determination and adjustment as owner's of the oil wealth and as major employers of the labor force. Wage policies of these governments are designed to reflect the declared objective of increasing the participation of indigenous labor force. They favor nationals to encourage them to become active members of the labor force and to replace foreign workers as their levels of job training improve. In Kuwait, for example, expatriates can be appointed in the civil service only on a temporary basis. Their salaries are fixed in accordance with a separate salary scale. The discrepancies between Kuwaitis' and non-Kuwaitis' salary scales are substantial, the former's pay exceeding, in many cases, double that of the latter. In Saudi Arabia non-Saudis could be appointed in the civil service on a temporary basis provided there are no Saudis available. The wage differentials between nationals and migrant workers in Saudi Arabia and Kuwait are portrayed in table 3.

Table 3

Average monthly wage differentials for nationals and migrant workers in Saudi Arabia and Kuwait, 1972–1973 (in US\$).^a

Saudi (S)	114
Non Saudi (NS)	94
S/NS	1.21
Kuwaiti (K)	544
Non-Kuwaiti (NK)	460
K/NK	1.18

^aSource: Data for Saudi Arabia from ECWA (1980), Kuwait's data from Ministry of Planning (1974).

Another tool of the governments' wage policies is 'job-entry': nationals can enter specific pursuits in the urban informal sector (such as taxi driving and certain banking positions) which are denied to expatriates. These, often part-time-employment opportunities, offer high return.⁵

While wages are high in the AGS, inter-country wage variations are detectable. The level of average wages that prevailed in two Gulf markets, Kuwait and the UAE, during the 1970's was relatively higher than the average wage level in other Gulf countries, such as Saudi Arabia. In 1973 average wages were — using current dollar equivalents at constant 1970 prices — in Kuwait \$253.4, in Saudi Arabia \$112.5 and in Iraq \$80.9.⁶ The highest paid workers are those in the administrative and managerial jobs with monthly salaries ranging from \$512 in Saudi Arabia (1972) to \$1732 in UAE (1977) and \$1825 in Kuwait (1976). Agricultural workers are typically the lowest paid workers in the labor markets of the gulf region — the salary level was \$72 in Saudi Arabia, \$240 in Kuwait and \$269 in the UAE. The differential between highest and lowest paid workers were (1972) eight-fold in Saudi Arabia, 6.4-fold in Kuwait and UAE, as table 4 illustrates.

Wage differentials by educational levels are apparent in the prevailing wage and salary levels. In general university educated employees receive about 1.7 times the monthly salary of workers who hold secondary education, as table 5 indicates.

In summary, labor flows in AGS (1) make up the bulk of their labor markets, (2) comprise both highly skilled and unskilled labor, (3) work predominantly in construction and modern industrial activities, (4) move from poor to rich countries but not from structurally less developed to more industrialized nations, and (5) generally receive lower wages and salaries than the indigenous workers.

⁵Birks and Sinclair (1980).

⁶ECWA (1980, p. 116).

Table 4

Average monthly wages and wage differentials by occupational groups in Kuwait, Saudi Arabia and the U. A. E., 1972, 1976 and 1977 (in US\$).^a

	Kuwait 1972	Kuwait 1976	Saudi Arabia 1972	U. A. E. 1977
Professional, technical and related workers	480	607	372	857
Administrative and managerial workers	1419	1825	512	1732
Clerical and related workers	460	613	160	593
Service workers	222	350	64	372
Agricultural, animal husbandry, forestry and fishermen	240	287	72	269
Production workers	290	452	110	416
Wages of highest paid workers/wage level of lowest paid workers	6.4	6.36	7.96	6.4

^aSources: ECWA (1980) and Ministry of Planning (1980, table 28).

Table 5

Monthly salary and salary differentials for civil servants by selected education levels in Kuwait, Saudi Arabia and the U. A. E. (US\$).^a

	Kuwait				Saudi Arabia		U. A. E.
	1977		1980		1972	1977	1977
	K ^b	NK ^c	K ^b	NK ^c			
Secondary education	477	349	864	645	235	455	649
First university degree	839	647	1260	1020	400	770	1119
University degree/ secondary education	1.76	1.85	1.46	1.58	1.70	1.69	1.72

^aSources: ECWA (1980), Ministry of Planning (1981) and Ministry of Planning (1980, table 27).

^bKuwaiti.

^cNon-Kuwaiti.

3. Imbalances in Kuwait's labor market

Kuwait's labor market has various imbalances which include (1) the inordinately high percentage of non-Kuwaitis — 70% in 1975, (2) the concentration of employment in the government service sector — roughly 56%, as table 6 shows, and (3) the wide labor market earnings disparity. To identify earnings disparity we use two measures: the Gini coefficient and the variance of the logarithm of income.⁷

⁷Sen (1973).

Table 6
 Percentage distribution of working population, 1965, 1970 and 1975 (percent).^a

Type of activity	Kuwaitis			Non-Kuwaitis			Total		
	1965	1970	1975	1965	1970	1975	1965	1970	1975
Agriculture & fishing	1.4	1.3	4.5	1.6	1.9	1.7	1.6	1.7	2.5
Mining & quarrying	3.4	2.8	2.0	4.0	3.2	1.5	3.9	3.1	1.6
Manufacturing	4.6	10.2	2.6	11.0	14.4	9.4	9.5	13.7	8.2
Building & construction	3.1	3.7	2.2	18.8	18.0	14.4	16.1	14.4	10.8
Electricity, gas & water	4.1	3.6	2.3	3.9	2.9	2.5	3.9	3.1	2.4
Commerce	12.8	12.2	7.3	12.9	14.7	15.7	12.9	14.1	13.3
Transport, storage & communication	6.5	4.0	5.3	5.3	5.6	5.3	5.6	5.2	5.3
Miscellaneous services (including government)	64.1	61.8	73.8	41.5	38.5	48.5	46.5	44.5	55.9
Labor force (in thousands)	40,166	59,634	86,971	139,118	174,720	211,444	179,284	234,354	298,415

^aSource: Ministry of Planning (1976, table 35).

These are reported in table 7 along with the mean educational levels of Kuwaitis and non-Kuwaitis and the shares of wages and salaries that accrue to each decile group. The table reveals that (i) the wage and salary income share of the highest decile is more than ten-fold that of the poorest decile, (ii) the Kuwaiti worker's average wage rate is higher than the non-Kuwaiti average rate, even though the educational attainment of the non-Kuwaiti worker is more than double that of his Kuwaiti counterpart, and (iii) the distribution of wage and salary income is more equitable among Kuwaitis than among non-Kuwaitis.⁸

Table 7
Labor market's distributional pattern.^a

Labor decile	Distribution of wages and salaries, Kuwait 1972/73		
	Total	Kuwaitis	Non-Kuwaitis
Poorest	2.3	3.3	2.5
2nd	3.7	4.7	3.5
3rd	4.9	7.0	4.5
4th	6.7	7.5	5.5
5th	8.3	9.6	7.0
6th	9.2	10.4	9.1
7th	11.2	11.5	10.5
8th	12.3	12.5	12.0
9th	19.0	15.0	15.0
Richest	22.3	18.5	30.4
Mean wage & salary income in (KD) ^b	1766	1920	1622
Mean educational level	5.7	3	7
Index of inequality			
Gini coefficient	0.34	0.24	0.39
Variance of the logarithm	0.65	0.31	0.47

^aSource: computed from the micro data for Ministry of Planning (1974).

^b1 KD (1972)=\$3.04.

To identify the sources of inequality in labor earnings we follow Mincer, by employing below an earnings function that contains schooling, experience, schooling squared, experience squared and an interactional term between schooling and experience to estimate the earnings derived from human

⁸The data base used in this and the next part is the 1972-73 demographic and budget survey kindly provided to the author in its computerized raw and micro form by the Planning Board of Kuwait. The survey was well planned and carefully executed, and the data collected are extremely detailed. A stratified sampling procedure was used to draw a sample of 1,188 households, representing 1.12% of the total households living in the country during the survey period. A sample of 721 persons (448 non-Kuwaitis and 273 Kuwaitis) whose sole source of livelihood was labor earnings, i.e., wage and/or salary income, was scrutinized.

capital.⁹ Our dependent variable is the log of wage and salary income which allows us to look at the dispersion of the wage and salary income.

$$\log \gamma_i = \alpha_0 + \alpha_1 S_i + \alpha_2 S_i^2 + \alpha_3 X_i + \alpha_4 X_i^2 + \alpha_5 S_i X_i + e_i, \quad (1)$$

where γ_i = wage and salary income of the i th individual in 1972, S_i = educational level of the i th individual (S takes values of 0, 1, 2, 3, 4, 5, ..., 16), X_i = years of experience,¹⁰ e_i = error term.

We ran our regression using various functional forms, but the semilog specification proved to fit the data best. Regression results are summarized in table 8.

Table 8
Human capital regression results.^a

	Kuwaitis	Non-Kuwaitis
Schooling	0.0903413 (3.6)	0.04551 (3.1)
Schooling squared	-0.00321979 (-2)	0.00208744 (2.96)
Experience	0.0309736 (3.1)	0.030270 (2.52)
Experienced squared	-0.000461938 (-2.6)	-0.00037806 (-1.46)
Experience × schooling	0.00084571 (0.1)	0.000282584 (0.59)
Constant	6.80311	6.22419
R^2	0.26	0.53
Variance of log of wages	0.31	0.47
Sample size	273	448

^at-values in parentheses.

A Chow¹¹ test revealed that the two sets of coefficients are significantly different. The results indicate that: (i) The explanatory power of the human capital model for non-Kuwaitis is twice as much as that for Kuwaitis (the unexplained variation in the case of Kuwaitis is about 74% and less than 50% for non-Kuwaitis). This in turn might suggest that the labor market is

⁹Mincer (1974).

¹⁰The 'experience' variable was approximated using the formula.

$$\text{experience} = \min \left[\begin{array}{l} \text{age} - \text{years of schooling} - 5 \\ \text{age} - 12 \end{array} \right].$$

See Mincer (1974, p. 18).

¹¹Chow (1960).

more competitive for non-Kuwaitis than for Kuwaitis. (ii) The regression coefficients for schooling and experience are larger for Kuwaitis than for non-Kuwaitis (as a matter of fact the schooling coefficient for Kuwaitis is almost twice as large as that for non-Kuwaitis). (iii) The average wage and salary income for Kuwaitis is about 30% higher than that for non-Kuwaitis despite the fact that the mean level of schooling for Kuwaitis is about three years while that for non-Kuwaitis is seven years. However, Kuwaitis have a higher mean level of experience (21 years compared to 19.2 for non-Kuwaitis).

The sign of schooling squared is positive for non-Kuwaitis and negative for Kuwaitis. This might be explained by the fact that a high proportion of the educated non-Kuwaitis in our sample are young and only a small percentage of them are older people. Thus, our sample does not contain enough observations on the older people who are highly educated, and the coefficient for (S^2) doesn't fully capture the impact of this variable over the life cycle. However, some recent empirical studies came up with positive sign for S^2 also.¹²

4. Sources of within- and between-group inequality

To arrive at the variation in income inequality that is attributable to variations in education and experience within each group, human capital theorists employ the following relationship:¹³

$$\begin{aligned} \text{var}(\log \text{ income}) = & \alpha_1^2 V(S) + \alpha_2^2 V(S^2) + \alpha_3^2 V(X) + \alpha_4^2 V(X^2) \\ & + \alpha_5^2 V(SX) + \sum_{\substack{i,j \\ i \neq j}} 2\alpha_i \alpha_j \text{cov}_{ij} + V(\hat{\epsilon}). \end{aligned} \quad (2)$$

Dividing both sides of the equation by $\text{var}(\log \text{ income})$ we get on the right-hand side the variation in each variable (and the error term) as a ratio of the total variation. The problem with this method is that it contains many covariances (nine in our case) between the different variables. The question that would arise then is: should the covariance between (S) and (X), for example, be added (subtracted) to (from) X ? The same question arises with respect to other covariance terms. To get around this problem, we partitioned the set of coefficients in each of the regressions (for Kuwaitis and non-Kuwaitis) into two parts. The interaction term (SX) was attached to each part, one at a time (but not to both parts simultaneously). For example, the

¹²Rosenzweig (1976) and Smith (1976).

¹³Chiswick (1974).

partition of the set of coefficients for Kuwaitis takes the following form:

$$\log \gamma_k = \left[\begin{array}{c|c} \alpha_{0k} + \alpha_1 S_k + \alpha_2 S_k^2 & + \alpha_3 X_k + \alpha_4 X_k^2 + \alpha_5 S X_k \\ \gamma_1 & \gamma_2 \end{array} \right] \quad (3)$$

in the first partition. Alternatively in the second partition we have

$$\log \gamma_k = \left[\begin{array}{c|c} \alpha_{0k} + \alpha_1 S_k + \alpha_2 S_k^2 + \alpha_5 S X_k & + \alpha_3 X_k + \alpha_4 X_k^2 \\ \gamma_1 & \gamma_2 \end{array} \right], \quad (4)$$

where $\log \gamma_k = \gamma_1 + \gamma_2$ in (3) and (4) above. The subscript (k) refers to Kuwaitis, and values of (γ_1) and (γ_2) for the i th individual in each sample were generated using the partitioned set of coefficients. By attaching (SX) one time to (γ_1) and another time to (γ_2) , we were able to determine the value of the covariance between this term and the other terms that (γ_1) and (γ_2) include. We then ran a regression between (γ) and (γ_1, γ_2) and obtained the variance-covariance matrix.

This solution to the covariance problem is a second-best solution in the sense that the variation of income explained by the variation in each of the explanatory variables would be expressed as an interval instead of as a point estimate. This is, however, the best we are able to achieve, given the present state of the art. Our interval estimates would be small as the covariance term (between γ_1 and γ_2) is small. Table 9 reports the estimates of the variation in the dependent variable explained by the schooling and experience components, using (3) above for both Kuwaitis and non-Kuwaitis.¹⁴ The results of the technique employed in table (9) allow us to draw the following conclusions:

(1) The unexplained variation in income among Kuwaitis is higher than that among non-Kuwaitis suggesting that variables, other than education and experience, are important in explaining the dispersion of income among Kuwaitis.

This is not to say that the human capital approach to income inequality among Kuwaiti workers is inappropriate or irrelevant. Advocates of this approach have been content with an explanatory power of the model as low as 15 percent.¹⁵ But, what our results imply is that in the labor market of Kuwait, this approach is less successful in explaining inequality among natives than among foreign labor. We postulate that this result is due, in part at least, to the government's employment policy that has sought to

¹⁴Eq. (4) yielded slightly higher interval estimates of the variance terms, for example, for Kuwaitis $VS/\text{var}(\log Y)$ was (17% to 21%) and $VX/\text{var}(\log Y)$ was (7% to 11%).

¹⁵Mincer (1974).

Table 9
Variation in within-group inequality explained by variations in (S), (X) and (e).

	$\sigma_S^2/\sigma^2(\log \gamma)$ interval ^a	$\sigma_X^2/\sigma^2(\log \gamma)$ interval ^a	$\sigma_e^2/\sigma^2(\log \gamma)$
Kuwaitis	23% to 24%	1.6% to 3.5% ^b	74%
Non-Kuwaitis	50% to 52%	2.5% to 1.0% ^c	47%

^aFigures might not add to 100 due to rounding.

^bNegative covariance between (γ_1) and (γ_2).

^cPositive covariance between (γ_1) and (γ_2).

employ every Kuwaiti, who may so desire, at very attractive wage or salary irrespective of his/her qualifications. This policy would presumably tend to weaken the relationship between effort and reward on the one hand and overstaff public sector with employees the majority of whom are illiterates¹⁶ being paid wages that are frequently marginally different from more educated employees (especially at the elementary levels of schooling).

(2) Variations in the educational attainment among non-Kuwaitis explain about 50% of the income inequality within that group. The corresponding figure for Kuwaitis is about 23%.

(3) Variations in experience explain a very modest part of the variation in income within the Kuwaiti group as well as within the non-Kuwaiti group. Low variability of experience might be due to the fact that those in the labor market are the young among Kuwaitis and non-Kuwaitis, leading to a relatively heavy concentration of this variable's observations around their mean. The government's generous retirement programs for Kuwaitis might have led to early retirement¹⁷ thus decreasing the age (and experience) variations of employed members.

The remainder of this paper applies Blinder's method to wage dispersion between Kuwaitis and non-Kuwaitis.¹⁸ For this purpose, our eq. (1) may be rewritten as follows:

$$\gamma_i^K = \beta_0^K + \sum_i \beta_i^K \bar{X}_i^K + U_i^K, \quad (5)$$

$$\gamma_i^N = \beta_0^N + \sum_i \beta_i^N \bar{X}_i^N + U_i^N, \quad (6)$$

¹⁶El-Sheikh (1973).

¹⁷For example, during the late 1960's and early 70's the law granted any Kuwaiti the opportunity to retire at attractive stipulations: ten years of service were added to his years of actual employment plus 25% of his last salary minus transportation allowances. By the end of 1972, 569 employees chose to take advantage of this generous retirement law.

¹⁸Blinder (1973).

where γ_i is the wage and salary income, \bar{X}_i is the mean value of characteristics (schooling, schooling squared, education, education squared and education times experience), U_i is the error term and the subscripts K, N refer to Kuwaitis and non-Kuwaitis, respectively. If we subtract (6) from (5), we get

$$\bar{\gamma}_i^K - \bar{\gamma}_i^N = \beta_0^K + \Sigma \beta_i^K X_i^K - (\beta_0^N + \Sigma \beta_i^N \bar{X}_i) = R, \quad (7)$$

where the bars over the variables indicate mean values. R is the raw differential which would be broken down into:

- (i) E = portion of differential attributable to different endowments = $\Sigma_i \beta_i^K (\bar{X}_i^K - \bar{X}_i^N)$. This portion is 'the value of the advantage in endowments possessed by the high-wage group as evaluated by the high-wage group's wage equation'.¹⁹ In our model, the high-wage group is always the Kuwaitis.
- (ii) C = portion of differential attributable to different coefficients = $\Sigma_i \bar{X}_i^N (\beta_i^K - \beta_i^N)$. This sum is the 'difference between how the high-wage equation would value the characteristics of the low-wage group and how the low-wage equation actually values them'.²⁰
- (iii) U = unexplained portion of the differential = $\beta_0^K - \beta_0^N$.
- (iv) D = portion of the differential possibly attributable to discrimination = $C + U$.

The results of this breakdown are shown in table 10. The table reveals the following results. If non-Kuwaitis kept their current human capital traits and

Table 10
Analysis of the Kuwaiti non-Kuwaiti wage dispersion.^a

Causal factor	Amt. attributable $\Sigma_i \beta_i^K \bar{X}_i^K - \beta_i^N \bar{X}_i^N$	Amt. attributable to endowments $\beta_i^K \bar{X}_i^K - \beta_i^N \bar{X}_i^N$	Amt. attributable to coefficient $\bar{X}_i^N \beta_i^K - \bar{X}_i^N \beta_i^N$
Education	-0.0404	-0.3632	0.3227
Education squared	-0.2598	0.2057	-0.4655
Experience	0.07128	0.0579	0.01336
Experience squared	-0.0998	-0.0636	-0.03573
Education \times experience	0.00815	-0.0644	0.07254
Subtotal	-0.321	$E = -23$	$C = -9.3$
Shift coefficient	$U = 58\%$		
Total		$R = C + E + U = 26\%$	$D = C + U = 49\%$

^aA positive sign indicates advantage for Kuwaitis whereas a negative sign indicates advantage for non-Kuwaitis. Components may not add to totals due to rounding.

¹⁹Blinder (1973).

²⁰Blinder (1973).

they could earn 32% more than Kuwaitis. Endowments differential is an obvious cause of this result. Differences in preferences for leisure between the two groups might be another: non-Kuwaiti labor is a migrant labor whose aim is presumably to maximize the stream of income that accrues to it from migration. Consequently, they may choose to work more hours a week than the Kuwaitis who are secure in their permanent jobs. This explanation is in harmony with some reports that have indicated that 'the 45,000 Kuwaitis in government services (in 1970-71) had a per capita output of 15 minutes for every six hours worked'.²¹ Still another possible reason for this result is that non-Kuwaitis' schooling quality and/or ability is higher than Kuwaitis. On the other hand, the table shows that Kuwaitis earn 23% less than they could have had they not had inferior endowments vis-à-vis non-Kuwaitis. In other words, non-Kuwaitis' higher level of endowments mitigates the wage dispersion by about 23%. The part of wage dispersion due to discrimination accounts for an astonishing 49% of the total. In other words, Kuwaitis earn on the average 49% more than non-Kuwaitis strictly because of their identity as Kuwaitis.

5. Conclusions

From a political and developmental point of view, the above analysis points to the risks that Kuwait and other oil-producing countries of the

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