

ATTITUDES OF THE PRIVATE SECTOR TOWARDS EMPLOYING KUWAITIS CITIZENS

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This paper uses the techniques of factor analysis and multiple discriminant analysis to find out the main factors that discourage the private sector to employ Kuwaitis citizens and to test if firms of different sizes react the same way to these factors. The analysis is based on data collected from a sample of 385 private employers during the months of June-September 2007. The results suggest that demand for high wages, lack of commitment to work, preference of Kuwaitis to occupy certain positions, lack of necessary qualifications and experience, request for fringe benefits and absence of job satisfaction are the main factors that discourage private firms operating in the State of Kuwait to employ Kuwaiti nationals. Results of multiple discriminant analysis of factor scores suggest that lack of qualifications and experience is of special concern to large companies, while the demand for higher wages and fringe benefits are of special concern to small employers. Medium-sized employers are large companies give special attention to the job satisfaction factor. The results also suggest that employers of various sizes do not differ significantly over their views regarding lack of work commitments and preference of Kuwaiti nationals to occupy particular positions.

INTRODUCTION

Well-over 90 per cent of Kuwaiti citizens are employed in the Government sector of most GCC countries. Some of these employees have zero or negative marginal productivity (i.e. disguised unemployed). The Government of Kuwait, like most other GCC governments, is paying serious attention to this problem. This paper tries to cast some light on the issue by examining the attitudes of the private sector towards employing nationals in the State of Kuwait as a case study.

The labor market in GCC countries has some peculiar characteristics. There is no wage policy of any form or minimum wage imposed by Law and there are virtually no restrictions on importing labor (as long as the expatriate has no criminal or political record and passes the set health test). Some states impose quotas on the number of imported employees from various countries to keep a balance in the population structure. Also, some other states require government departments and firms operating in the mixed sector to employ a minimum proportion of nationals. However, this restriction does not apply to firms operating in the private sector. Moreover, there is a significant difference between wages paid in the Government sector and those paid in the private sector and between the wage level paid to nationals and expatriates in the same occupation. Furthermore, while tenure, superannuation and other matters related to employment in the Government and mixed sector are subject to the terms and conditions set by the Civil Service Laws, these laws do not seem to apply to the vast majority of firms operating in the private sector.

The main objective of the paper is to find out why firms operating in the private sector in the State of Kuwait prefer to employ expatriates rather than Kuwaiti citizens. The paper is

divided into four sections. Section one discusses the main characteristics of the sample.. The results of factor analysis are given in section two while section three reports the results of multiple discriminant analysis. Finally, section four summarizes the main conclusions of the study.

I. MAIN SAMPLE CHARACTERISTICS

This study is based on a survey conducted during the three months of October-December 2007. 385 employers of different sizes representing various sectors in the Kuwaiti economy were interviewed personally to give their views on employing Kuwaiti nationals. The sample size was determined using 95 per cent confidence level, 0.05 level of precision and 0.5-population proportion. This sample size reflects the maximum possible variation in the population. The respondents were selected at random using the table of random numbers and the telephone directory. The respondents were asked to indicate their line of business, size of their firms in terms of capital and numbers of employees, age of their business, type of ownership, nationality of employees, sex of employees and wage levels of employees of different nationalities.

The respondents were also asked to indicate their agreement or disagreement regarding the following reasons for not employing Kuwaiti nationals:

- V1: Kuwaitis ask for much higher wages than expatriates
- V2: Kuwaitis like to obtain frequent leaves
- V3: Kuwaitis like to occupy leading positions
- V4: Kuwaitis like to occupy more than one job
- V5: Kuwaitis refuse to work for two shifts
- V6: The Kuwaiti employee is not committed to official work timing
- V7: The Kuwaiti employee has a relatively low productivity
- V8: The Kuwaiti employee is not serious about his/her work
- V9: A Kuwaiti employee always seeks excuses to escape duties
- V10: There is fear that the Kuwaiti employee may not settle down in his work
- V11: Most Kuwaiti who seek employment lack necessary experience
- V12: Most Kuwaitis who apply for the job lack necessary qualifications
- V13: Most Kuwaitis who seek employment lack knowledge of English Language and computer work
- V14: The Kuwaiti may favor his/her relatives when performing his/her duties
- V15: The Kuwaiti desires to occupy positions that require higher qualifications and richer experience than that he/she possesses
- V16: Kuwaitis like to occupy managerial positions
- V17: The Kuwaitis reject to work in most activities in the private sector
- V18: It is difficult to create a position that meets Kuwaitis' desires
- V19: Kuwaitis ask for fringe benefits that the private sector cannot afford
- V20: Kuwaitis seek to obtain early retirement at lucrative terms
- V21: Female Kuwaitis ask for special arrangements at work (e.g. separation)
- V22: It is difficult to rehabilitate and train Kuwaiti to perform certain tasks

Table 1 gives the means and standard deviations of the score for each variable: The data in this table would seem to suggest that the variable representing the wage level requested by the Kuwaiti citizens compared to that offered to expatriates, scores relatively higher than other variables. Other variables that score relatively high are preferences of Kuwaitis to occupy leading and managerial positions, lack of commitment to official work timing, the desire to occupy positions that require higher qualifications and experience than possessed and refusal to work for two shifts. On the other hand, the mean score of the variables representing the desire to occupy more than one job, favoritism in performing duties and difficulty to rehabilitate and train Kuwaiti citizens to perform certain tasks were not too high.

Table 1
Descriptive Statistics

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Analysis N</i>
V1	9.1714	.6745	385
V2	7.5636	1.2645	385
V3	8.0078	1.3325	385
V4	7.1844	1.4970	385
V5	8.0000	1.3097	385
V6	8.0104	1.3258	385
V7	7.5636	1.3150	385
V8	7.7870	1.3024	385
V9	7.3740	1.3277	385
V10	6.8857	1.6287	385
V11	7.7688	1.6373	385
V12	7.4416	1.3105	385
V13	7.4234	1.4864	385
V14	7.1117	1.5761	385
V15	8.1610	1.5911	385
V16	7.9792	1.6290	385
V17	7.4909	1.3280	385
V18	7.6519	1.5975	385
V19	7.8494	1.2076	385
V20	7.6052	1.6865	385
V21	8.1299	1.5681	385
V22	7.4026	1.1592	385

II. RESULTS OF FACTOR ANALYSIS

The survey contained a large number of variables, most of which are correlated. This section tries to examine the relationships among the interrelated variables and represent them in terms of a few underlying factors. This is done through the use of the technique of "Factor Analysis".

Respondents were asked to indicate their degree of agreement with 22 statements relating to their reasons for not employing Kuwaiti citizens using a five-point scale. The survey results were analyzed using the SPSS program (Coakes and Steed, 1999).

The main results of factor analysis are given in Tables 2 to 6. An investigation of these results suggests that the coefficients on the diagonals of the Anti-image correlation matrix are greater than 0.5 for each variable. Therefore, we need not eliminate any of the variables (Basilevsky, 1994).

The correlation matrix shows that well-over 50% of the coefficients are statistically significant at the 5 per cent level of significance. Also, all variables have a large correlation with more than one of the other variables. This suggests adequacy of the factor model (Bartholomew and Knott, 1999).

Bartlett's test of sphericity was used to test the null hypothesis that the variables are non-correlated in the population. Table 2 reveals that the test gave a value of 5421.954 which is highly significant favoring a rejection of the null hypothesis [Ding, 1999]. Also, the Kaiser-Meyer-Olkin [KMO] measure of sampling adequacy was calculated. A value of 0.820 was obtained which indicate that correlation's between pairs of variables can be explained by other variables and hence factor analysis is appropriate [Hair. *et al.*, 2004]. Actually, a KMO value of 0.884 is considered "meritorious".

Table 2
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.884
Bartlett's Test of Sphericity	Approx. Chi-Square	5421.954
	df	231
	Sig.	.000

Table 3 labelled "Total variance explained" shows the "final statistics" which give relevant information after the desired number of factors have been extracted (Dunteman, 1989). The table gives the commonalties for the variables, along with the variance accounted for by each factor that is retained. It can be seen that the 22 explanatory variables are reduced to only six factors with an eigenvalue greater than one. The six factors account for approximately 72 per cent of the total variance.

The component matrix in Table 4 gives factor loadings. For example the rating for variable V1 (Kuwaiti citizens ask for much higher wages than expatriates) can be expressed as:

$$V1 = .126 F_1 + .029 F_2 + .0703 F_3 - .031 F_4 + .154 F_5 + .858 F_6$$

The upper right triangle in the reproduced correlation matrix represents the residuals i.e. the difference between the observed correlation coefficient and that estimated from the mode (Goldstein, 1984 and Dunteman, 1989). The magnitudes of the residuals indicate how well the fitted model reproduces the observed correlations. The results reveal that only 29% of the residuals are greater than 0.05 (in absolute value). This suggests goodness of fit.

Although the component matrix indicates the relationship between the factors and individual variables, it does not result in factors that can be interpreted. Therefore, through rotation, the factor matrix is transformed into a simpler one that is easier to interpret. The rotated factor matrix obtained by the varimax procedure, given in Table 5 suggests that:

- Factor 1 has high coefficients for the following variables:
 - V3: Kuwaitis like to occupy leading positions
 - V5: Kuwaitis refuse to work for two shifts
 - V15: The Kuwaiti desires to occupy positions which require higher qualifications and richer experience than he/she possesses

Table 3
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% Variance	Cumulative %
1	5.348	24.308	24.308	5.348	24.308	24.308	4.493	20.421	20.421
2	4.241	19.278	43.586	4.241	19.278	43.586	3.210	14.591	35.011
3	1.918	8.717	52.303	1.918	8.717	52.303	2.392	10.873	45.885
4	1.784	8.109	60.412	1.784	8.109	60.412	2.359	10.721	56.606
5	1.435	6.522	66.934	1.435	6.522	66.934	2.209	10.039	66.645
6	1.053	4.787	71.721	1.053	4.787	71.721	1.117	5.076	71.721
7	.969	4.405	76.127						
8	.878	3.992	80.119						
9	.662	3.008	83.128						
10	.618	2.810	85.938						
11	.438	1.991	87.928						
12	.416	1.893	89.821						
13	.373	1.696	91.517						
14	.329	1.495	93.012						
15	.320	1.456	94.468						
16	.297	1.349	95.817						
17	.214	.974	96.792						
18	.207	.941	97.733						
19	.202	.917	98.650						
20	.159	.721	99.371						
21	8.884E-02	.404	99.775						
22	4.947E-02	.225	100.000						

Extraction Method: Principal Component Analysis.

- V16: Kuwaitis like to occupy managerial positions
 - V17: The Kuwaitis reject to work in most activities of the private sector
Therefore, this factor may be labeled "*work preference*"
2. Factor 2 has high coefficients on the following variables:
- V2: Kuwaitis like to obtain frequent leaves
 - V6: The Kuwaiti employee is not committed to official work timing
 - V7: The Kuwaiti employee has a relatively low productivity
 - V8: The Kuwaiti employee is not serious about his/her work
 - V9: A Kuwaiti employee always seeks excuses to escape duties
 - V18: It is difficult to create a position that meets Kuwaitis' desires
Therefore, this factor may be labeled "*work committment*"
3. Factor 3 is highly correlated with the following variables:
- V4: Kuwaitis like to occupy more than one job
 - V10: There is fear that the Kuwaiti employee may not settle down in his work

Table 4
Component Matrix

Component	Component Matrix					
	1	2	3	4	5	6
V1	.128	2.907E-02	-3.105E-02	6.499E-02	-.154	.858
V2	.578	.225	-.410	.331	-.376	-9.940E-02
V3	.581	6.719E-02	-.496	-.129	.296	-.143
V4	.378	.381	2.001E-02	.219	-9.604E-02	1.495E-02
V5	.595	.156	.450	-.274	.536	-1.518E-02
V6	.634	.157	-.401	.152	.408	.107
V7	.228	.647	.437	-4.168E-02	.158	-3.834E-02
V8	.749	.234	8.618E-02	-.242	-.296	.119
V9	.493	.383	-.134	-.570	-6.343E-02	-1.002E-02
V10	.537	.333	8.253E-02	-.310	-.141	-7.220E-02
V11	.544	.426	.228	2.495E-02	8.815E-02	.186
V12	.489	.391	.308	8.206E-02	-.130	-.184
V13	.270	.650	.256	-.246	5.458E-02	.182
V14	.477	.345	9.900E-02	-2.306E-02	-.147	-.175
V15	.562	.135	-7.011E-02	.515	.145	.201
V16	.502	-.431	.123	.486	.163	-.165
V17	.302	.666	.317	-1.679E-02	.211	-.140
V18	.604	.518	.226	5.422E-02	4.826E-02	9.608E-02
V19	.606	.216	-5.082E-02	-.336	-.385	-4.592E-02
V20	.508	-.634	3.708E-02	-.326	1.479E-02	-1.962E-02
V21	.526	.105	.441	.297	.215	-4.106E-02
V22	.316	.314	-.401	.383	-.494	-.145

Extraction Method: Principal Component Analysis.

Table 5
Rotated Component Matrix

Component	Rotated Component Matrix					
	1	2	3	4	5	6
V1	2.255E-02	-3.954E-02	6.129E-02	-2.732E-02	8.439E-02	.877
V2	.238	.851	8.933E-02	6.773E-02	.168	3.175E-02
V3	.782	4.195E-03	.238	.175	.208	-.114
V4	.111	.394	.651	-4.701E-02	7.780E-02	.102
V5	.840	V5	-6.689E-02	-1.762E-03	.183	-3.625E-02
V6	.150	.783	.301	.182	-2.922E-02	.167
V7	-.231	.779	-4.621E-02	4.299E-02	.158	1.153E-03
V8	.315	.607	.328	.127	.391	.197
V9	-8.106E-03	.743	5.323E-02	.354	.235	-4.937E-03
V10	-3.527E-02	-.151	.832	3.776E-02	.307	-6.839E-02
V11	8.187E-02	3.002E-02	-6.408E-02	.850	-6.561E-02	.211
V12	.120	-.151	.205	.736	.176	-9.817E-02
V13	-.256	.118	-4.722E-02	.611	.401	.205
V14	.111	-.124	.809	-3.498E-02	5.413E-02	-.143
V15	.466	.351	.208	.344	-.259	.312
V16	.655	.162	.272	.147	-.430	-8.251E-02
V17	.764	-.228	3.667E-02	.178	.150	-9.136E-02
V18	6.063E-02	.883	1.411E-02	7.811E-02	-5.299E-02	.136
V19	.215	.210	.341	8.925E-02	.681	1.265E-02
V20	.246	-.166	-.130	.159	.798	-3.185E-02
V21	.351	-.184	.118	.101	.660	4.199E-02
V22	-.131	1.477E-03	.859	2.544E-02	.119	-2.288E-02

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

- V14: The Kuwaiti may favor his/her relatives and friends while performing his duties
 - V22: It is difficult to rehabilitate and train Kuwaitis to perform certain tasks
- Hence this variable may be labeled “*job satisfaction*”.
4. Factor 4 has high coefficients on the following variables:
 - V11: Most Kuwaitis who seek employment lack necessary experience
 - V12: Most Kuwaitis who apply for the job lack necessary qualifications
 - V13: Most Kuwaitis lack knowledge of English and computer work.

Since these variables refer to qualifications and experience, factor 4 may be labeled “*Qualifications and experience*”.
 5. Factor 5 is highly correlated with the following variables:
 - V19: Kuwaitis ask for fringe benefits that the private sector can not afford
 - V20: Kuwaitis seek to obtain early retirement at lucrative terms
 - V21: Female Kuwaitis ask for special arrangements at work (e.g. separation)

Therefore, this factor may be labeled “*Fringe benefits*”.
 6. Factor 6 is highly related to the variable V1 which represents the level of wages of Kuwaitis vis-à-vis expatriates. Hence, this factor may be labeled “*wages*”.
- Thus, using the principal component method and varimax rotation, the 22 explanatory variables for the tendency of the private sector to offer positions to expatriates rather than Kuwaiti citizens have been reduced to the following six factors:
- F1: Work Preference
 F2: Work Commitment
 F3: Job Satisfaction
 F4: Qualifications and Experience
 F5: Fringe Benefits
 F6: Wages

RESULTS OF MULTIPLE DISCRIMINANT ANALYSIS OF FACTOR SCORES

The factor scores for the six factors were introduced in multiple discriminant analysis as explanatory variables. The size of employer, in terms of capital, represents the dependent variable. Employers were divided into three groups: Group 1 comprises *small* firms whose capital is less than 1.5 million Kuwaiti Dinars (five million US dollars).

Group 2 refers to *medium-sized* firms whose capital is more than 1.5 million Kuwaiti Dinars (five million US dollars) but less than 6 million Kuwaiti Dinars (20 million US dollars). Group 3 consists of *large* firms whose capital exceeds 6 million Kuwaiti Dinars (20 million US dollars).

Since we have three groups and six predictors, we can estimate **two** discriminant functions (Klecka, 1980). Tables 6 to 20 present the results of estimating three-group discriminant analysis. The following comments can be made about these results:

1. An examination of group means indicates that factors 3, 4, 5 and 6 separate the groups more widely than the other two factors.
2. The pooled within-groups correlation matrix that is computed by averaging the

separate covariance matrices for all groups (Lachenbruch, 1975) indicates low correlation coefficients between predictors. Hence there is no serious problem of multi-collinearity.

3. The significance attached to the univariate F ratios indicates that when the predictors are considered individually, all predictors are significant in discriminating between the three groups, with the exception of factor 1 (work preference) and factor 2 (work commitment).
4. The level of significance of Box's M suggests that we should not reject the null hypothesis that the covariance matrices are equal (Metwally, 2000).
5. The eigenvalue for function 1 is 7.672. For function 2, it is 3.622. The first function has the largest between-groups variability (as is usually the case). This function accounts for 67.9% of the variability while function 2 accounts for the remaining 32.1% of the between-groups variability.
6. The Wilks' lambda associated with function 1 is .025. This transforms to a chi-square value of 1400.691 which is statistically significant at .000 level. The Wilks' lambda of function 2 after function 1 has been removed is 0.216. This transforms to a chi-square value of 580.920 which is also statistically significant at .000 level, indicating that the function does contribute significantly to group differences (Johnson and Wichern, 2002). These results suggest a simultaneous Wilks' lambda = .0054.
7. Since the value of Chi-square of each function is statistically significant beyond the 5% level, we reject the null hypothesis that the means of both functions are equal. Hence, both functions contribute to group separation.
8. The canonical correlation for function 1 is .941; while for function 2, the correlation is .885. Hence, the proportion of total variability explained by differences between groups is 88.5% for function 1 and 78.3% for function 2.
9. Function 1 in the standardized canonical discriminant function coefficients indicate large positive coefficients for factor 6 (wages) and a large negative coefficient for factor 2 (qualifications and experience), whereas function 2 has a relatively larger positive coefficient for factor 3 (job satisfaction) and a relatively large negative coefficient for factor 3 (qualifications and experience). A similar conclusion is reached by an examination of the structure matrix.
10. The unstandardized canonical discriminant function coefficients give the following two discriminant functions:

$$Z_1 = .666 + .011 F_1 + .063 F_2 - 596 F_3 - .164 F_4 + .010 F_5 + 1.408 F_6$$

$$Z_2 = -.691 - .028 F_1 - .034 F_2 - .262 F_3 + .770 F_4 + .202 F_5 + .260 F_6$$
11. Canonical discriminant functions evaluated at group means (group centroid) suggest that group 1, small employers, has a large positive value on function 1 and also a positive value on function 2. Since the "wage" factor has a large positive sign on function 1 and also a positive sign on function 2, this suggests that small firms who do not employ Kuwaiti nationals are concerned mainly about the wage levels. These firms believe that Kuwaiti citizens ask for much higher wages than expatriates.
12. Medium-sized employers, on the other hand, have a large positive value on function 2 and a negative value on function 1. Since the "job satisfaction" factor has a large

positive coefficient on function 2 and a large negative coefficient on function 2, this suggests that medium-sized employers are not too eager to employ Kuwaiti nationals believing that for fear that those employees would not be satisfied with the offered positions and may not stay in employment for long periods.

13. Group 3 which represent large employers has a large negative value on function 1 and also a negative value on function 2. Since the “qualifications and experience”

Table 6
Group Statistics

GROUPS		Mean	Std. Deviation	Valid N	
				(listwise)	Unweighted
Small companies	Work Preference	4.232417E-03	.9706140	118	118.000
	Work Commitment	-4.8274246E-03	1.0044843	118	118.000
	Qualifications and Experience	-.4144587	1.1598690	118	118.000
	Job Satisfaction	-2.6414341E-02	1.1398435	118	118.000
	Fringe Benefits	.1387378	1.1366153	118	118.000
	Wages	1.1618162	.4458284	118	118.000
	Medium-Sized Companies	Work Preference	8.125002E-0	1.0041095	192
Work Commitment		-2.5693459E-02	.9890174	192	192.000
Qualifications and Experience		2.7816260	.8837643	192	192.000
Job Satisfaction		3.016520E-02	.3381720	192	192.000
Large Companies	Fringe Benefits	-.1349577	.5802977	192	192.000
	Wages	0.2146873	.3283891	192	192.000
	Work Preference	5.911625E-02	1.0450092	75	75.000
	Work Commitment	-.2236844	1.0304785	75	75.000
	Qualifications and Experience	-6.9628E-02	.2080908	75	75.000
	Job Satisfaction	-.4824323	.9779859	75	75.000
	Fringe Benefits	2.3279479	.6067194	75	75.000
Total	Wages	-2.3571E-02	.4118448	75	75.000
	Work Preference	-2.3069E-17	1.0000000	385	385.000
	Work Commitment	2.2839E-16	1.0000000	385	385.000
	Qualifications and Experience	.5979396	1.3365053	385	385.000
	Job Satisfaction	.3669869	1.3650740	385	385.000
	Fringe Benefits	-5.536E-16	1.4616894	385	385.000
	Wages	1.5700670	1.0000000	385	385.000

Table 7
Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Work Preference	.999	.195	2	382	.823
Work Commitment	.999	.270	2	382	.764
Qualifications and Experience	.452	231.911	2	382	.000
Job Satisfaction	.342	367.681	2	382	.000
Fringe Benefits	.296	454.635	2	382	.000
Wages	.147	1109.329	2	382	.000

Table 8
Pooled Within-Groups Matrices

		<i>Work Preference</i>	<i>Work Commitment</i>	<i>Qualifications and Experience</i>	<i>Job Satisfaction</i>	<i>Fringe Benefits</i>	<i>Wages</i>
Covariance	Work Preference	1.004	1.204E-03	.202	7.991E-03	-2.492E-02	1.394E-02
	Work Commitment	1.204E-03	1.004	3.111E-04	-4.937E-02	3.200E-02	-1.649E-02
	Qualifications and Experience	.202	3.111E-04	.811	-4.145E-02	-1.926E-02	1.425E-02
	Job Satisfaction	7.991E-03	-4.937E-02	-4.145E-02	.640	.107	-4.008E-02
	Fringe Benefits	-2.492E-02	3.200E-02	-1.926E-02	.107	.635	2.756E-02
	Wages	1.394E-02	-1.649E-02	1.425E-02	-4.008E-02	2.756E-02	.148
Correlation	Work Preference	1.000	.001	.224	.010	-.031	.036
	Work Commitment	.001	1.000	.000	-.062	.040	-.043
	Qualifications and Experience	.224	.000	1.000	-.058	-.027	.041
	Job Satisfaction	.010	-.062	-.058	1.000	.168	-.130
	Fringe Benefits	-.031	.040	-.027	.168	1.000	.090
	Wages	.036	-.043	.041	-.130	.090	1.000

The covariance matrix has 382 degrees of freedom.

Table 9
Covariance Matrices

GROUPS		<i>Work Preference</i>	<i>Work Commitment</i>	<i>Qualifications and Experience</i>	<i>Job Satisfaction</i>	<i>Fringe Benefits</i>	<i>Wages</i>
1.00	Work Preference	.942	-.153	.437	3.049E-02	7.365E-03	8.884E-03
	Work Commitment	-.153	1.009	-.103	-5.690E-02	5.105E-03	-1.272E-02
	Qualifications and Experience	.437	-.103	1.345	-.136	-5.757E-02	9.990E-02
	Job Satisfaction	3.049E-02	-5.690E-02	-.136	1.299	.299	-.142
	Fringe Benefits	7.365E-03	5.105E-03	-5.757E-02	.299	1.292	4.035E-02
	Wages	8.884E-03	-1.272E-02	9.990E-02	-.142	4.035E-02	.199
2.00	Work Preference	1.008	-1.457E-02	.134	9.700E-03	5.815E-02	4.091E-02
	Work Commitment	-1.457E-02	.978	7.482E-02	5.181E-03	4.316E-02	-1.526E-02
	Qualifications and Experience	.134	7.482E-02	.781	1.231E-02	5.987E-03	-2.856E-02
	Job Satisfaction	9.700E-03	5.181E-03	1.231E-02	.114	-4.297E-03	-6.666E-03
	Fringe Benefits	5.815E-02	4.316E-02	5.987E-03	-4.297E-03	.337	1.526E-02
	Wages	4.091E-02	-1.526E-02	-2.856E-02	-6.666E-03	1.526E-02	.108
3.00	Work Preference	1.092	.286	8.608E-03	-3.199E-02	-.290	-4.765E-02
	Work Commitment	.286	1.062	-2.840E-02	-.178	4.574E-02	-2.561E-02
	Qualifications and Experience	8.608E-03	-2.840E-02	4.330E-02	-3.130E-02	-2.386E-02	-1.067E-02
	Job Satisfaction	-3.199E-02	-.178	-3.130E-02	.956	9.026E-02	3.548E-02
	Fringe Benefits	-.290	4.574E-02	-2.386E-02	9.026E-02	.368	3.907E-02
	Wages	-4.765E-02	-2.561E-02	-1.067E-02	3.548E-02	3.907E-02	.170
Total	Work Preference	1.000	-8.512E-16	.227	-2.171E-02	-5.203E-02	-2.591E-16
	Work Commitment	-8.512E-16	1.000	-2.951E-02	-1.429E-02	6.379E-02	3.238E-17
	Qualifications and Experience	.227	-2.951E-02	1.786	-.421	-.174	-.813
	Job Satisfaction	-2.171E-02	-1.429E-02	-.421	1.863	1.430	-.127
	Fringe Benefits	-5.203E-02	6.379E-02	-.174	1.430	2.137	-.319
	Wages	-2.591E-16	3.238E-17	-.813	-.127	-.319	1.000

Table 10
Log Determinants

<i>GROUPS</i>	<i>Rank</i>	<i>Log Determinant</i>
Small Companies	6	-1.256
Medium-Sized Companies	6	-5.835
Large Companies	6	-6.365
Pooled within-groups	6	-3.141

The ranks and natural logarithms of determinants printed are those of the group covariance matrices.

Table 11
Test Results

Box's M		532.419
F	Approx.	12.342
	df1	42
	df2	185598.886
	Sig.	.000

Tests null hypothesis of equal population covariance matrices.

Table 12
Eigenvalues

<i>Function</i>	<i>Eigenvalue</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Canonical Correlation</i>
1	7.672	67.9	67.9	.941
2	3.622	32.1	100.0	.885

Table 13
Wilks' Lambda

<i>Test of Function(s)</i>	<i>Wilks' Lambda</i>	<i>Chi-square</i>	<i>Df</i>	<i>Sig.</i>
1 through 2	.025	1400.691	12	.000
2	.216	580.920	5	.000

Table 14
Standardized Canonical Discriminant
Function Coefficients

	<i>Function</i>	
	<i>1</i>	<i>2</i>
Work Preference	.041	-.148
Work Commitment	.063	-.134
Qualifications and Experience	-.741	-.436
Job Satisfaction	-.214	.716
Fringe Benefits	.018	-.263
Wages	.925	.365

Table 15
Structure Matrix

	<i>Function</i>	
	1	2
Work Preference	.005	-.015
Work Commitment	.051	-.024
Qualifications and Experience	-.538	-.306
Job Satisfaction	-.209	.632
Fringe Benefits	.006	-.218
Wages	.869	.297

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions Variables ordered by absolute size of correlation within function.

Table 16
Canonical Discriminant Function Coefficients

	<i>Function</i>	
	1	2
Work Preference	.011	-.028
Work Commitment	.063	-.034
Qualifications and Experience	-.596	-.262
Job Satisfaction	-.164	.770
Fringe Benefits	.010	-.202
Wages	1.408	.260
(Constant)	.666	-.691

Unstandardized coefficients

Table 17
Functions at Group Centroids

GROUPS	<i>Function</i>	
	1	2
Small Companies	3.591	1.430
Medium-sized Companies	-.549	1.863
Large Companies	-4.245	-2.520

Unstandardized canonical discriminant functions evaluated at group means

Table 18
Prior Probabilities for Groups

GROUPS	<i>Prior</i>	<i>Cases Used in Analysis</i>	
		<i>Unweighted</i>	<i>Weighted</i>
Small Companies	.306	118	118.000
Medium-sized Companies	.499	192	192.000
Large Companies	.195	75	75.000
Total	1.000	385	385.000

Table 19
Classification Function Coefficients

	GROUPS		
	Small Companies	Medium-Sized Companies	Large Companies
Work Preference	9.887E-03	-2.704E-03	-.363
Work Commitment	.160	1.317E-02	-.370
Qualifications and Experience	-.638	.345	3.140
Job Satisfaction	.478	2.580	-1.179
Fringe Benefits	-.241	3.996	1.910
Wages	8.122	-.991	-11.027
(Constant)	-6.009	-9.050	-14.286

Fisher's linear discriminant functions

Table 20
Classification Results

		Predicted Group Membership	GROUPS			Total
			Small Companies	Medium-sized Companies	Large Companies	
Original	Count	Small Companies	116	1	1	118
		Medium-sized Companies	3	189	0	192
		Large Companies	0	0	75	75
	%	Small Companies	98.3	.8	.8	100.0
		Medium-sized Companies	1.6	98.4	.0	100.0
		Large Companies	.0	.0	100.0	100.0

98.7% of original grouped cases correctly classified

factor carries a large negative sign in both functions, this suggests that large employers who elect to employ expatriates rather than Kuwaiti citizens do so because they believe that Kuwaiti citizens do not possess the necessary qualifications and experience for the kind of positions these employees wish to occupy.

14. The classification results based on the analysis sample suggest a hit ratio equal to 98.7%. This suggests that 98.7% of the cases are correctly classified. Since we have three groups of equal size, a chance hit ratio would be

$$C_{PRO} = P_1^2 + P_2^2 + P_3^2 = (118/385)^2 + (192/385)^2 + (95/385)^2 = 0.404$$

The improvement over chance is more than 40.4% indicating at least satisfactory validity (Lattin, Carroll and Green, 2003).

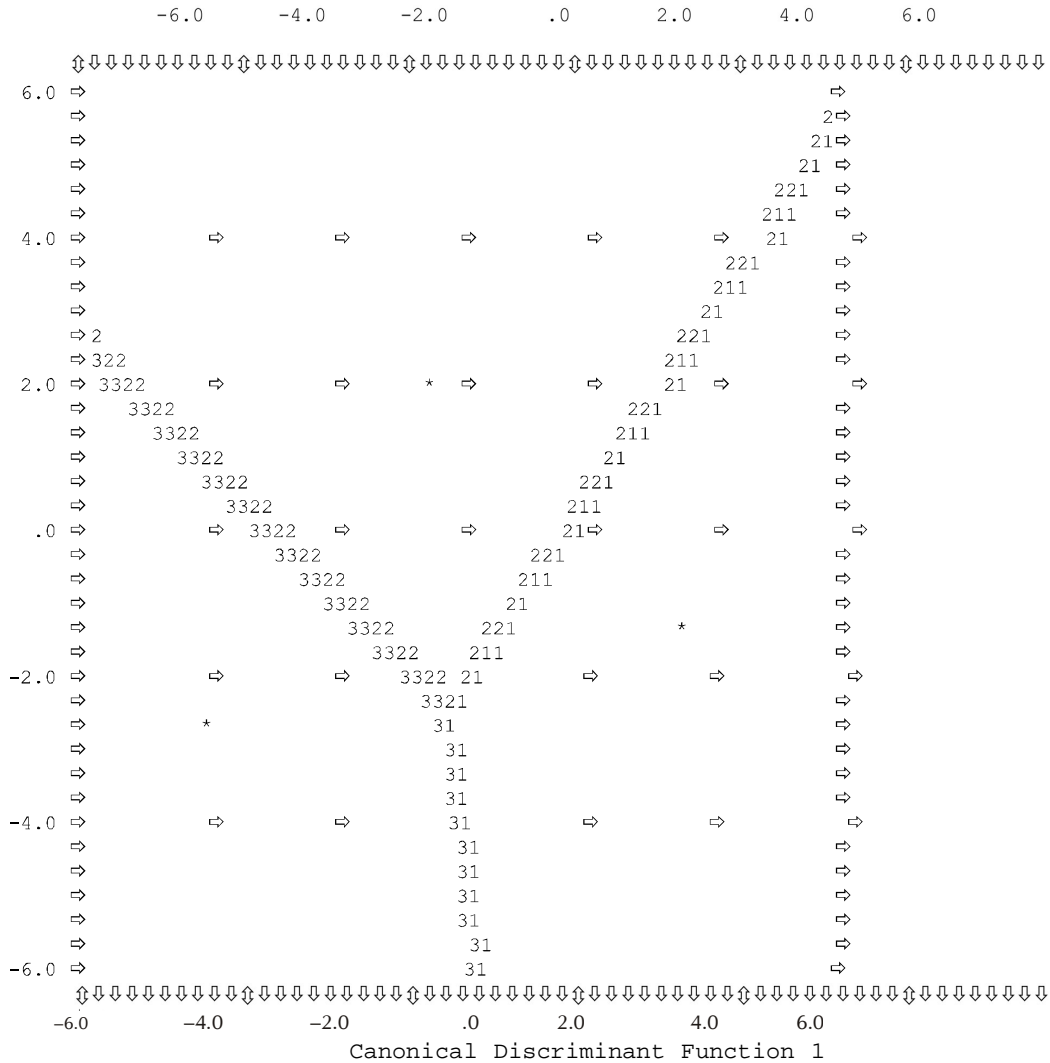
The Press's Q statistic is given by:

$$Press's Q = \{385 - (380)(3)\}^2 / \{385(2)\} = 740.3$$

This value exceeds by far the critical value at a significance level of .01 which is 6.63, suggesting that the predictions are significantly better than chance.

15. The territorial map can be used to predict the demand by employers of different sizes for labor services of Kuwaiti citizens. This map is shown in Figure 6.1.

Figure 1: Territorial Map



CONCLUSIONS

The main conclusions of this paper may be summarized in the following:

1. Bartlett’s test of sphericity, Kaiser-Meyer-Olkin [KMO] measure of sampling adequacy and the magnitudes of the residuals suggest goodness of fit of the factor model to the analysis of the attitudes of the private sector towards employing Kuwaiti citizens.
2. Using the principal component method and varimax rotation, it was possible to extract six factors which can explain the tendency of the private sector to offer positions to expatriates rather than nationals. These factors are: the level of wages, fringe benefits,

- qualifications and experience, work preference , work commitment and job satisfaction.
3. The factor scores were used as predictors in multiple discriminant analysis. Two discriminant functions were obtained. The eigenvalue for both functions were greater than 1. The first function accounts for 67.9% of the variability while the second function accounts for the remaining 32.1% of the between-groups variability. The Wilks' lambda associated with both functions transformed to a chi-square value which is statistically significant at .000 level. This suggests that both functions contribute to group separation.
 4. The canonical discriminant functions evaluated at group means (group centroid) suggest that small firms who do not employ nationals are concerned mainly about the wage levels these employees would want to obtain. These firms believe that nationals ask for much higher wages than expatriates. Medium-sized employers are not too eager to employ nationals for fear that those employees would not be satisfied with the offered positions and may not stay in employment for long periods. Large employers who elect to employ expatriates rather than nationals do so because they believe that nationals do not possess the necessary qualifications and experience for the kind of positions these employees wish to occupy.

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