

Will Nationals and Asians Replace Arab Workers in the GCC?

Maurice Girgis Working Paper No. 74 November 2002

Abstract

This paper starts by reviewing the population and labor migration record of the GCC. It then outlines four scenarios concerning the prospects of Arab worker migration to the region, and examines the factors that will shape the direction of the migration trends in the near to medium runs. It concludes that slow Arab out-migration over the next five years is the most probable scenario and is likely to displace 485,400 Arab workers in the GCC countries.

Finally, the paper points out that unless major strides are made to invigorate economic growth and introduce major macroeconomic and labor market reforms, neighboring Arab countries are well-advised to anticipate fewer remittances, more workers returning home and possibly increasing unemployment rates.

ملخص

تبدأ هذه الورقة باستعراض تطور الأوضاع السكانية وهجرة العمالة في دول مجلس التعاون الخليجي، ثم تطرح أربعة سيناريوهات لمستقبل هجرة العمالة العربية إلي دول مجلس التعاون، مع تحليل العوامل التي ستؤثر على اتجاه هذه الهجرة في الأجلين القصير والمتوسط. وتخلص الدراسة إلى أن السيناريو الأكثر احتمالا هو حدوث هجرة عكسية بطيئة للعمالة العربية من دول مجلس التعاون خلال الخمس سنوات القادمة، الأمر الذي قد يؤدي إلى ترحيل حوالي ٤٨٥.٤٠٠ عاملا عربيا.

وفي النهاية، تؤكد الدراسة على أنه إذا ما لم تبذل الدول العربية المصدرة للعمالة جهودا ملموسة لتحفيز النمو و لإصلاح الأوضاع الاقتصادية الكلية وكذلك لإصلاح سوق العمل بها، فقد يترتب على ذلك ارتفاع معدلات البطالة كنتيجة لزيادة العائدين إلى الوطن.

I. Introduction

In the wake of the first oil price adjustment of 1973, the Gulf Cooperation Council (GCC) countries¹ faced a multitude of challenges in response to the sudden and substantial inflows of oil revenue. The most pressing economic challenge centered on building a modern infrastructure, a labor-intensive process by nature. In the years that followed, similar impressive quantitative growth in other sectors of the economy took place. Due to severe qualitative and quantitative national manpower shortages, foreign labor had to be imported in large numbers. Arabs outnumbered Asians by a ratio of 2 to 1 during the 1970s. Arab expatriates took jobs in which they had a comparative advantage such as teachers, judges, journalists, university professors, administrators and construction workers. Asians occupied jobs that required both high technical skills and fluency in English and/or low skill jobs in the service and household sectors. Foreign labor, which quickly outnumbered the national labor force (LF), complemented nationals in the work place.

From 1965-2000, the overall level of education in both the indigenous population and the national LF increased appreciably. However, instead of fostering economic growth through productivity improvements, as is usually the case in other countries, education efforts were dissipated due to two major factors. First, the choice of major studies was distorted by government hiring and promotion policies and, consequently, deviated sharply from the skill mix and basic knowledge required by the private sector. Second, hiring nationals in the public sector as a means of distributing oil dividends led to overstaffing, underemployment and underutilization of this important resource. It also discouraged nationals from working in the private sector and diminished returns to education.² In time, free labor market forces were exacerbated with the appearance of dualities where, typically and for the same skills, nationals received higher pay than

¹ The GCC countries consist of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE). Among them, they established a free trade area in May 1981, which was ratified in 1983. They are currently preparing to enter into a customs union.

² According to a paper presented by the Minister of Social Development (known formerly as the Ministry of Social Affairs, Labor and Vocational Training) at a conference in Oman entitled "Employing National Manpower," in October 2001, 71.6 percent of male Omanis seeking jobs for the first time during 1998-2000 held only a primary school education or lower. Central Bank of Oman (2001), *ElMarkazy*, November/December, p.7.

foreign workers and public sector wages stayed generally higher than in the private sector.

Since the mid-1980s, several major issues have created an unprecedented situation; a few hundred thousand GCC nationals became unemployed while millions of foreign workers were meaningfully employed in all sectors of the economy. First, demographically, larger numbers were entering the labor market each year. Second, oil price instability continued, causing frequent and in some countries chronic budget deficits, which rendered unsustainable the past open policy of hiring practically all nationals in the government sector. In fact, in some countries, the government wage bill alone exceeded oil revenue when oil prices fell. Thus, government demand for labor began to dry up. Third, the private sector could not act as a 'swing' employer by picking up the slack because a) nationals were reluctant to join it, and b) employers were reluctant to hire them on account of their higher wages and inadequate skills vis-à-vis their foreign counterparts. As a result, the supply of national LF rose while demand fell and open unemployment surfaced. This phenomenon is currently heavily influencing government policies in the GCC, but it largely remains unresolved.

Current forecasts indicate that the supply of new national workers will increase even faster and will exceed the economy's capacity to generate new jobs. Pressure to hire nationals in the private sector will inevitably become stronger, especially since the public sector in most GCC countries has already slashed employment of foreigners to the bare minimum.

There is sufficient evidence to indicate that Arab workers can, and will be, replaced by both nationals and Asian workers. Nationals can replace them in jobs where language requirements are readily met (e.g., teachers, journalists, clerks and management). Asians would do likewise because they are less expensive and more skilled in maintenance and high-tech occupations. Thus, nationals and Asians will squeeze Arab workers simultaneously. Arab workers, however, will continue to find jobs in low to medium-skill occupations, albeit at a much reduced scale than in the past.³

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³ Many GCC countries have already banned the importation of workers in certain occupations that until recently were mostly filled by Arab workers.

This paper begins by reviewing the population and labor migration record to the GCC. Next, a set of four alternative scenarios are developed regarding the prospects of Arab labor migration to the region. A review and an analysis of the forces that impact the future outcome of each scenario are carried out. The paper concludes with an analysis of future national demand and supply balances, with an attempt at projecting the magnitude of out-migration of Arabs versus Asians in the next five years.

II. The Migration Record

It is worthwhile to note from the start that many similarities exist among the six GCC countries, particularly in regard to labor and employment policies. Collectively, one may characterize the labor market in the GCC region as having gone through three major transitional stages. The first, *the Major Influx*, occurred between the early 1970s and early 1980s when the flow of oil revenues provided the financial backing required to build a modern infrastructure. The process of building on such a large scale required highly skilled manpower in order to design national strategic plans, coordinate these plans and put them into effect. Thus, a massive inflow of foreign workers ensued with each GCC country competing with the others to attract American, European, Arab and some Asian workers.⁴ The inflow was so massive that the number of expatriates doubled from 1975-1980. Expatriates represented only 29.2 percent of nationals in 1975 and rose to 49 percent only five years later (see Table 1). Due to strong cultural, religious and language linkages with neighboring Arab countries, GCC states relied heavily on Arab workers, especially those from Egypt, Yemen and Palestine.

The second stage, the Asian Presence, began a decade later and lasted until the mid-1990s. An atmosphere of austerity followed the sharp decline in oil prices and government spending in the mid-1980s, forcing public and private employers to cut costs and labor. This was reinforced by a fundamental shift in the demand for labor since most of the required infrastructure projects had been completed and emphasis was placed on maintenance rather than on building new projects. Given Asian workers' lower wages, their skills and availability, a substitution of less skilled Asian workers for Arab workers

⁴ For an example of the competition with each other for expatriate workers see Planning Council (1975), *A Strategy for the Flow of Manpower in Kuwait*, Kuwait (in Arabic).

started to take effect.⁵ Until the end of this stage, nationals routinely picked top jobs in the expanding government sector.

The third stage, *the Open Unemployment of Nationals*, is currently going on. It occurred as the result of external shocks that affected the region such as the two Gulf wars as well as internal disturbances including persistently weak oil prices, unprecedented financial constraints and depleted foreign assets. The public sector is no longer able to hire nationals due to financial exigencies and the private sector is reluctant to hire them since they often demand higher wages and lack the required basic skills. Because of anemic growth rates in the region, fewer new job opportunities were generated and, in order to employ nationals, foreign workers had to be laid off. ⁶ Currently, the demand for nationals in both the public and the private sectors falls short of the supply of national labor, most of whom are first time job seekers.

This current stage is particularly difficult for all concerned. For new national entrants in the labor force, it is disappointing not to be able to join the civil service cadre with its higher salaries and generous fringe benefits. For the private sector, it is difficult to respond positively to government pressure to hire nationals at higher wages with less work experience compared to expatriate workers. Governments, too, are quite concerned due to i) an unwritten rule that the public sector is responsible for securing job opportunities for *all* national workers; ii) most of the unemployed are young secondary and intermediate school graduates; and iii) existing training institutions, private and public, have largely been ineffective. In order to fully understand the forces that will influence the GCC factor in future regional Arab labor movements, one must take a closer look at past migration trends.

⁵ As we shall argue shortly, the second transition resulted in lower productivity levels.

⁶ During its 2020 Vision Conference (1995), Oman's 2020 targets compared with 1995 data were revealed. The Omanization of public sector jobs increased from 68 percent to 95 percent and private sector jobs increased from 15 percent to 75 percent.

Table 1: National and Expatriate Population Growth, 1975-2000

	Bahrain	Kuwait	Oman	Qatar	KSA	UAE	Total
1975							
Nationals	201.6	307.8	666.0	63.7	6,089.3	194.3	7,522.7
Expatriates	60.0	687.1	100.0	84.0	937.0	330.8	2,198.9
Total	261.6	994.9	766.0	147.7	7,026.3	525.1	9,721.6
Percent of Expats/Total	22.9%	69.1%	13.1%	56.9%	13.3%	63.0%	22.6%
1980							
Nationals	233.3	386.7	805.0	84.6	7,306.0	280.1	9,095.7
Expatriates	103.4	971.3	179.0	122.0	2,382.0	697.3	4,455.0
Total	336.7	1,358.0	984.0	206.6	9,688.0	977.4	13,550.7
Percent of Expats/Total	30.7%	71.5%	18.2%	59.1%	24.6%	71.3%	32.9%
1985							
Nationals	276.1	470.5	973.0	115.0	8,764.2	403.8	11,002.6
Expatriates	158.6	1,226.8	220.0	126.0	3,878.0	713.0	6,322.4
Total	434.7	1,697.3	1,193.0	241.0	12,642.2	1,116.8	17,325.0
Percent of Expats/Total	36.5%	72.3%	18.4%	52.3%	30.7%	63.8%	36.5%
1995							
Nationals	362.2	708.1	1,563.0	162.0	13,272.0	597.0	16,664.3
Expatriates	223.9	1,250.7	586.0	385.0	6,262.0	1,781.0	10,488.6
Total	586.1	1,958.8	2,149.0	547.0	19,534.0	2,378.0	27,152.9
Percent of Expats/Total	38.2%	63.9%	27.3%	70.4%	32.1%	74.9%	38.6%
1999/2000							
Nationals		812.2			15,658.5		
Expatriates		1442.7			5,675.7		
Total	690.0	2,254.9	2,400.0	565.0	21,334.2	2,900.0	30,144.1
Percent of Expats/Total	070.0	64.0%	2,400.0	303.0	26.6%	2,700.0	30,144.1
Ann. Rates of Growth							
Nationals							
1975-1985	3.2%	4.3%	3.9%	6.1%	3.7%	7.6%	3.9%
1985-1995	2.8%	4.2%	4.9%	3.5%	4.2%	4.0%	4.2%
1975-1995	3.0%	4.3%	4.4%	4.8%	4.0%	5.8%	4.1%
Expatriates	2.570		/0		, 0	2.570	, 0
1975-1985	10.2%	6.0%	8.2%	4.1%	15.3%	8.0%	11.1%
1985-1995	3.5%	0.2%	10.3%	11.8%	4.9%	9.6%	5.2%
1975-1995	6.8%	3.0%	9.2%	7.9%	10.0%	8.8%	8.1%

Note: Population data are in (000).

Sources: Bahrain data are from the 1994 Statistical Abstract; Kuwait data are from the 1994 Annual Stat. Abstract and the Public Org. for Civil Information (1996), Population and Manpower; Data for Oman, Saudi Arabia and the UAE for 1975-1985 are estimates made by ESCWA (1985), National Manpower in the GCC, and data for 1995 are from Gulf Business Books (1996), The GCC Economic Data Book.

Population

Nationals versus Expatriates

In 1975, GCC nationals numbered only about 7.5 million. Two decades later, they increased to 16.7 million, 80 percent of whom are Saudis. From 1975-1985, indigenous population growth for the region as a whole was 3.9 percent, ranging from 3.2 percent in Bahrain to 7.6 percent in the UAE.⁷ These rates are quite high by international standards,⁸ and although they declined somewhat during the following decade, except in Oman and Saudi Arabia,⁹ they still remained significantly higher than in countries with comparable income levels. This factor will continue to exert substantial pressure on the prospects of Arab labor movements to the region.

In absolute terms, the increase in the number of non-nationals that migrated to the region during 1975-1995 totaled 7.5 million people. By far the largest increase took place during the first half of the first transition, 1975-1980, when the non-national share rose appreciably from 23 percent to 33 percent. Thereafter, the rate of growth slowed down considerably; from 11 percent per year during 1975-1985 to only 4 percent during 1985-1995, while their share increased marginally. Expatriates in Saudi Arabia made up about 72 percent of all non-nationals in the region in 1975, falling to 56.4 percent by 1995 due to the relatively large influx of expatriates to Oman, which more than doubled during 1985-1995, as well as Qatar and the UAE. All together, total GCC population rose from slightly less than 10 million in 1975 to about 26.4 million in 1995. During the next 30 years, the UN projects the population will double, reaching 52.5 million. ¹¹

One of the major demographic characteristics of the GCC is that the population is quite young. Measured by the number of people age 14 years or younger as a percent in

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⁷ Some of the growth during this particular period can be partially explained by naturalization.

⁸ In 1972, population growth rates for high, medium and low income groups were 1.01, 2.05 and 2.47 percent, respectively. In 1995, they fell to 0.61, 1.35 and 1.62 percent, respectively. See World Bank (1997), *World Development Indicators*.

⁹ Fertility rates are markedly higher in these two countries than in the other GCC countries. For example, during the period 1985-1990, total fertility rates per thousand were estimated by the UN as follows: Kuwait, 3.90; Bahrain, 4.08; Qatar, 4.80; UAE, 4.82; Saudi Arabia, 6.80; and Oman, 7.17. See UN (1992), *World Population Projections* (revised), New York.

¹⁰ The GCC countries are surrounded by nations with relatively large population sizes (2000; in million): 18.3 in Yemen; 23 in Iraq; 67.9 in Egypt; 66.7 in Turkey; and 70.3 in Iran; see UN Population Division.

¹¹ UN, World Population Projections, op. cit.

total population, excluding the UAE and Qatar where there is a large foreign population of working age (19-39), the ratio for the GCC is about 39 percent.¹² With the oil baby boomers of the mid-1970s entering the labor market in the late 1990s, the share of the young in the population will fall and the supply of national LF will grow faster than the population.¹³

More specifically, according to the UN population projections, the unweighted GCC average of the relative share of the 14 years or younger group will decline gradually and steadily from 39.7 percent in 1975 to 33.7 percent in 2005 and to 28.8 percent in 2025. Therefore, the share of the labor force in the population will increase from 58 percent in 1975 to 63 percent in 2005, and so will the number of nationals searching for jobs.

Clearly, the relatively large proportion of young people represents a demographic time bomb of considerable force. When they eventually enter the labor market, suitable employment must be found. Given recent history, however, many – if not most – of these young people expect employment in high-paying government jobs, as did their parents before them. While there are many government positions that are now filled by foreigners, the available youth may not have the skills necessary to replace them without loss of productivity. Hence, a policy of providing government employment may simply result in the growth of the government sector rather than substituting foreigners with nationals.

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¹² For 2000 in percentages, it is 44.1 in Oman; 42.9 in Saudi Arabia; 31.3 in Kuwait; 26.7 in Qatar; and 26 percent in the UAE. Comparable figures for neighboring developing countries are (2000; in percent): Yemen, 50.1; Iraq, 41.6; Iran, 37.4; Egypt, 35.4; and Turkey, 30. In developed countries, the ratios are much lower: Singapore, 21.9; U.S., 21.7; and UK, 19. See UN Population Division database.

¹³ World Bank (1995), Will Arab Workers Prosper or be Left Out in the Twenty-First Century?, p.7.

Arabs versus Asians

Data on foreign population classified by ethnic composition is scarce in the GCC, making it difficult to accurately trace developments in, say, Asian versus Arab populations over time and across countries. In the absence of extraordinary developments such as the second Gulf war, ethnic composition normally changes quite slowly over time.

Recent evidence from Kuwait and Saudi Arabia may help shed some light on this issue, however. In Saudi Arabia, foreign population in 1995 amounted to 6.26 million, ¹⁴ of which 2.38 million (38%) were Arab migrants and 3.34 million (53.4%) were Asians. The most represented countries are delineated in Table 2.

Table 2: Saudi Arabia: Foreign Population by Nationality, 1995

Country	Number	As % in sub-group	As % in foreign population
Egypt	1,195.2	50.2	19.1
Yemen	424.4	17.8	6.8
Jordan & Palestine	266.0	11.2	4.3
Sudan	242.5	10.2	3.9
Syria	168.4	7.1	2.7
All Arabs	2,378.8	97.0	38.0
India	1,228.7	36.8	19.6
Pakistan	778.7	23.3	12.4
Philippines	451.0	13.5	7.2
Bangladesh	446.3	13.4	7.1
Indonesia	249.5	7.5	4.0
All Asians	3,342.6	94.0	53.4

Note: All data are in (000). Source: Ministry of Interior.

The data indicate that the Asian population outnumbered Arab migrants by about one million. The highest concentrations of foreigners are migrants from (in descending order) India, Egypt, Pakistan, Philippines, Bangladesh and Yemen. For every Arab resident, there were 1.4 Asians.

The situation in Kuwait is somewhat unusual in that the Iraqi invasion brought about discernible changes in the national composition of both labor and population. As Table 3 shows, there was a major shift toward substituting Arabs with Asian workers in

¹⁴ According to a recent statement made by the Minister of Labor and Social Affairs, this number increased to about 7 million in 2000.

the aftermath of the 1991 war. Prior to the invasion, Kuwait was known to have been one of the GCC nations with a strong Arab presence. After the war, however, the situation changed, exhibiting a profile similar to the one observed in Saudi Arabia (Table 2). In fact, the Asian population represented 52.8 percent in Kuwait in 2000 and they represented 53.4 percent in Saudi Arabia in 1995. In contrast, the percentage of Arabs in total foreign population in Kuwait is still somewhat higher than in Saudi Arabia, 45.7 percent versus 38 percent, respectively. The difference is attributed to the strong presence of non-Arabs and non-Asians in Saudi Arabia. *During the 1990s, the number of Arabs in Kuwait dropped by 33.6 percent while the number of Asians rose by about 50 percent.* The migration profile of Arabs and Asians based on Kuwaiti and Saudi Arabian experiences, which together constitute 78.5 percent of the GCC region as a whole, indicates that, generally, one can assume that *the foreign population in the GCC is split about 40-60 in favor of Asians*.

Table 3: Kuwait: Arab versus Asian Population, 1989 and 2000

Year	Arabs	Asians	Others	Total
Total number:				
December 1989	994.5	508.3	16.8	1,519.6
January 2000	659.9	761.1	21.6	1,442.7
As % in total:				
December 1989	65.4	33.5	1.1	100.0
January 2000	45.7	52.8	1.5	100.0
Growth rate 1989-2000	-33.6%	49.7%	28.6%	-5.1%

Note: All data are in (000).

Source: Public Authority for Civil Information (December 1989 and January 2000), Population and Labor Force, Kuwait.

Labor Force

Nationals versus Expatriates

By 1995, total employment in the GCC had increased to 9.6 million from 2.9 million, or by about 6 percent annually. The speed and volume of labor importation were so large, as shown in Table 4 that nationals as a percent of total employment fell from 61 percent in 1975 to 26 percent in 1995 despite the increase in the employment of nationals from 1.7

to 2.5 million during the same period. ¹⁵ This implies that *the employment of expatriates* has increased at a faster rate than the employment of nationals – 6.2 percent annually compared to 1.9 percent, respectively. ¹⁶ This partially reflects the increase in the demand for labor skills that are not available at home, more men and women enrolling and staying in school longer, lower rates of participation in the labor force especially among women, and an apparent redundancy of foreign labor at the lowest skill levels due to their relative affordable pay, notably in household occupations such as maids, cooks, drivers and the like. *All in all, some 5 million foreign workers migrated to the region over the period* 1975-1995. The increase has since been marginal across the GCC. *Currently, there are about 7.5 million expatriates working in the region*.

The annual growth rates of foreign labor fell sharply from 8 percent during 1975-1985 to 4.5 percent during the following decade. This notwithstanding, there was a steady increase in their numbers in absolute terms, from 2.9 million in 1975, to 4.1 million in 1985 and to 7.1 million in 1995.

Arabs versus Asians

Major distinctive features between Arab and Asian skill distributions can be seen from the data reported in Tables 5 and 6. The data pertain to Kuwait and compare the situation in 1989 with that in 2000. The findings are summarized below:

- □ From 1989-2000, Arabs dominated the upper echelons of skill categories (technical, managerial and clerical) while Asians dominated services, agriculture and production-related jobs. They both split the 68,000 mid-skill sales jobs about evenly.
- ☐ The strong skill distinction between the two groups can be seen further from the fact that in spite of the large decline in the number of Arab workers in 2000 and the simultaneous substantial increase in the number of Asians, Arabs

¹⁵ It should be emphasized that data regarding expatriate workers and population are sparse in some GCC countries while they are available in greater detail in others. Where they are sparse, estimates are made as indicated.

¹⁶ To the extent that the reported GCC-wide growth rates are weighted averages, they are greatly influenced by Saudi Arabia.

- still held the majority of high-skill occupations while Asians held the bottom three categories. Jobs in sales seem to have swung toward Arabs in 2000.
- □ Female Asians dominated employment of females in general in 1989 and 2000. For instance, they represented 62.9 percent of all jobs held by females compared to 26.5 percent for Kuwaiti women and 9.5 percent for Arab women. Note that 94.5 percent of Kuwaiti women hold government jobs
- ☐ The majority of Europeans and North and South Americans are employed in technical, scientific and managerial jobs only.
- Because of the presence of Arab families with high dependency ratios, the Arab population outweighed that of Asians, but Asian workers outweighed Arab workers.

Table 4: National and Foreign Manpower Growth, 1975-2000

	Bahrain*	Kuwait	Oman	Qatar	KSA	UAE	Total
1975							
Nationals	38.0	55.4	155.0	11.7	1,438.9	44.6	1,743.7
Expatriates	22.0	249.2	70.0	57.0	484.8	234.2	1,117.1
Total	60.0	304.6	225.0	68.7	1,923.7	278.8	2,860.8
Percent of Nationals/Total	18.2%	18.2%	68.9%	17.0%	74.8%	16.0%	61.0%
1980							
Nationals	61.2	74.2	168.0	16.6	1,519.6	53.9	1893.6
Expatriates	81.2	417.3	112.0	79.0	1,693.1	652.4	3034.9
Total	142.4	491.5	280.0	95.6	3212.7	706.3	4928.5
Percent of Nationals/Total	43.0%	15.1%	60.0%	17.4%	47.3%	7.6%	38.4%
4005							
1985 Nationals	71.8	95.9	177.9	23.5	1,619.6	81.1	2,069.8
Expatriates	98.8	574.5	191.1	76.7	2,722.5	784.2	4,447.8
Total	170.6	670.4	369.0	100.2	4,342.1	865.3	6,517.6
Percent of Nationals/Total	42.1%	14.3%	48.2%	23.5%	37.3%	9.4%	31.8%
Terecit of ivationals/ fotal	72.170	17.5/0	40.270	23.370	37.370	7.470	31.070
1995							
Nationals	90.7	174.9	240.0	39.0	1,869.0	111.2	2,524.8
Expatriates	135.8	876.6	430.3	179.0	4,581.0	977.0	7,179.7
Total	226.5	1,051.5	670.3	218.0	6,450.0	1,088.2	9,704.5
Percent of Nationals/Total	40.0%	16.6%	35.8%	17.9%	36.5%	10.2%	26.0%
2000							
Nationals		221.4	306.2		3,172.9	138.2	
Expatriates		1,004.8	552.5		4,003.4	1,217.5	
Total		1,226.2	858.7		7,176.3	1,355.7	
Percent of Nationals/Total		18.1%	35.7%		44.2%	10.2%	
Ann. Rates of Growth							
Nationals							
1975-1985	6.6%	5.6%	1.4%	7.3%	1.2%	6.2%	1.7%
1985-1995	2.4%	6.2%	3.0%	5.2%	1.4%	3.2%	2.0%
1975-1995	4.4%	5.9%	2.2%	6.2%	1.3%	4.7%	1.9%
Expatriates							
1975-1985	11.0%	8.2%	5.1%	3.8%	8.5%	12.0%	8.6%
1985-1995	2.9%	4.6%	6.2%	8.1%	4.0%	2.3%	4.1%
1975-1995	6.9%	6.4%	5.6%	5.9%	6.2%	7.0%	6.3%

Notes: All data are in 000; * Bahrain data are for census years 1971, 1981, 1985 (estimate) and 1991.

Sources: Girgis, Maurice (2002), "National versus Migrant Workers in the GCC: Coping with Change," in Handoussa, H. and Zafiris Tzannatos (eds.), Employment Creation & Social Protection in the Middle East and North Africa, an Economic Research Forum Edition, The American University in Cairo Press, p. 98.

Table 5: Kuwait: Distribution of Arab and Asian Foreign Labor, 1989

Occupation	Arabs	Asians	Total	% Arabs	% Asians
Technical & scientific	66,980	20,377	91,246	73.4	22.3
Managerial	7,540	2,105	10,236	73.7	20.6
Clerical & government	60,976	16,679	78,198	78.0	21.3
Sales	38,521	29,467	68,359	56.4	43.1
Services	50,750	197,678	249,523	20.3	79.2
Agriculture	7,092	12,004	19,112	37.1	62.8
Production	109,390	142,569	252,959	43.2	56.4
Total	352,198	423,128	783,094	45.0	54.0

Note: Numbers may not add up to totals across rows because other nationalities are excluded. Likewise, columns may not add up due to the exclusion of the "unclassified" group.

Source: Public Authority for Civil Information (1989), Population and Labor Force, December, Kuwait.

The picture that emerges, assuming that in 2000 Kuwait is representative of the Gulf region, is that Asian migrant workers are hired in all occupations but with a distinct bias toward low-skill categories. The opposite is true for Arabs. As far as total employment is concerned, Asians outnumber Arabs even if the Arab population exceeds theirs. Clearly, this implies that Asians tend to migrate without their families in contrast to Arabs.

Table 6: Kuwait: Distribution of Arab and Asian Foreign Labor, 2000

Occupation	Arabs	Asians	Total	% Arabs	% Asians
Technical & scientific	50,568	31,431	87,716	57.6	35.8
Managerial	12,040	5,977	19,710	61.1	30.3
Clerical & government	44,505	22,773	68,251	65.2	33.4
Sales	36,792	34,511	71,638	51.4	48.2
Services	26,573	277,159	304,712	8.7	91.0
Agriculture	4,050	11,159	15,227	26.6	73.3
Production	137,544	288,766	427,581	32.2	67.5
Total	319,852	673,740	1,004,721	31.8	67.1

Note: Numbers may not add up to totals across rows because other nationalities are excluded. Likewise, columns may not add up due to the exclusion of the "unclassified" group.

Source: Public Authority for Civil Information (1989), Population and Labor Force, December, Kuwait.

III. Determinants of Future Arab Labor Migration Trends

An analysis of the forces that might shape the future trend of Arab labor migration in the region is undertaken in order to evaluate their directional and magnitudenal impacts. Will Arab LF continue to migrate to GCC nations, would the flow stagnate, or will there be a trend reversal?

Setting Up a Modality to Predict the Direction of Arab Labor Movement

The demand for Arab workers in general is a function of four major economic and demographic determinants.¹⁷ The first is the *supply of nationals*, which includes, among other things, their wages, productivity levels and perceived degree of commitment to work. The greater the number of national entrants in the LF, all things equal, the lesser the demand for expatriates, both Arabs and non-Arabs alike, and vice verse. This rests on the assumption made here that new jobs will be filled by GCC nationals before they are offered to expatriates

The second is the *economy's capacity to generate new jobs*. Generally speaking, if there are more new job opportunities created than there are new national entrants, the demand for expatriate workers will rise. Job creation, however, is sector-sensitive. Thus, the construction boom precipitated a very large demand for expatriates because it is highly labor-intensive, among other things. The oil sector, on the other hand, is capital and technology-intensive and, as a result, its growth had a marginal effect on labor migration. Thus, *not only is the overall growth important, but also the pattern of sectoral growth*.

The third factor is the *compatibility of national LF with the demand for labor*. It is not enough to match demand and supply of national labor. National labor must also possess the skills, talents and knowledge needed to fill new job openings. In the short run, incompatibility would lead to open unemployment of nationals and to a continued rise in foreign labor migration. In the medium to long terms, this impediment can be resolved through training and re-tooling of national manpower.

The fourth factor is the *Asian influence*. Whenever the demand exceeds the supply of nationals, employers resort to the use of foreign workers. Excluding Europeans and

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¹⁷ Economic considerations aside, the Arab League adopted an agreement that seeks to coordinate Arab labor migration (Number 4, modified 1975). The agreement stipulates a) facilitating the movement of Arab workers across borders of League members; b) granting priority to Arab workers; and c) exchanging information on respective labor markets. Moreover, the UAE government stipulated that until the mid-1980s a minimum of 30 percent of all foreign workers must be of Arab origin. Neither of these conditions, however, was enforced. Moreover, even though all requests for importing foreign labor must be approved by government authorities (i.e., the Ministry of Social Affairs and Labor), no special considerations or priorities were given to Arab workers. Thus, we conclude that the choice has generally been unconstrained.

North Americans, the choice in effect has always been between Asians and Arab workers. There are four scenarios concerning the prospects of Arab worker migration to the region:

Scenario 1: Greater Arab in-migration will occur if the demand is greater than the supply of national manpower and if Arab workers, rather than Asians, match the required skills. This would apply to the demand for such occupations as teachers, journalists, lawyers, judges, Islamic clerks, engineers, clerical jobs, etc. Here, there is no pressure to replace Arabs and the wage differential factor between Arabs and Asians is marginalized due to the language/experience requirement.

Scenario 2: *Moderate Arab in-migration* will take place if the demand is greater than the supply of national manpower and the required skills are better matched by Asian workers than by Arab workers. This scenario is similar to Scenario 1 except that the skills required favor Asians. In-migration of Arabs will continue but at lower rates due to the Asian influence.

Scenario 3: Slow Arab out-migration is likely to occur if the demand is less than the supply of the national manpower and if the required skills are not matched by national workers but are matched by Arabs and Asians. This scenario is similar to the present stage where national entrants outstrip the number of new jobs created in the economy. Though the mismatch may delay laying off expatriates, government pressure and incentives will most likely outweigh the tendency to delay and the net outcome will be an absolute decline in the number of foreign workers, both Arabs and Asians.

Scenario 4: Moderate to substantial Arab out-migration is likely to occur if the demand is less than the supply of national manpower and if national workers rather than Arabs match the required skills. GCC governments have exerted substantial pressure to coerce private sector employers to increase the employment ratio of nationals in their firms by using either incentives (positive) or bans (negative). This strategy has paid off in almost all of the GCC countries. Prompted by positive financial incentives, training and re-tooling programs, practically all large local firms, especially state-owned enterprises (SOEs), have redressed their imbalanced ethnic composition of the LF. It should be noted, however, that there is a greater likelihood that nationals and Asians will

replace Arabs; for nationals are generally attracted to the same academic training as Arabs and they also possess the same language advantage, and because Asians command lower wages, among other attributes.

Qualitative Projections of the Determinants of Regional Arab Labor Migration

We now turn to an examination of the factors that will shape the direction of the migration trends in the near to medium runs. By so doing, one is able to select the most likely scenario and, therefore, project the future of Arab worker migration prospects with some degree of rationality and certainty.

The Economic Outlook of the GCC Countries

It has been frequently argued in economic literature that the GCC lacked robust rates of economic growth since the bottom fell off the oil price in 1986. In Table 7, the World Bank reports anemic growth rates during the 1980-1990 decade, ranging from –2.1 to 1.3 percent. The exception is in Oman where growth has been fueled largely by growth in the natural gas sector. The next decade's performance was influenced by periodic rebounds in oil prices, some of which were of marked magnitude. As a result, growth rates ranged from 4.1-5.9 percent, except in Saudi Arabia and the UAE, the two largest economies, where they remained weak (1.6-2.9 percent).

Table 7: Average Annual Growth Rates of GDP and GDP per capita

	Bahrain	Kuwait	Oman	KSA	UAE
GDP 1980-90	1.2	1.3	8.4	0.0	-2.1
GDP 1990-00	4.1	5.5	5.9	1.6	2.9
Per capita 1980-90	-2.8	-2.9	4.4	-5.1	-7.0
Per capita 1990-00	0.8	6.0	0.3	-1.1	-1.6

Source: World Bank (2002), Development Economics Central Database.

Looking at the structure of the economy and sectoral growth in Table 8, the evidence suggests the existence of a biased structure toward non-traded goods sectors as

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¹⁸ Based on CDS national income accounts for the three periods 1969-1979, 1979-1989 and 1989-1999, Saudi annual GDP growth rates in constant prices were as follows: 1) for oil, 9.7 percent, -6.3 percent and 4.7 percent; for non-oil GDP, 11.5 percent, 4.2 percent and 1.3 percent; for government spending, 12.1 percent, 1.9 percent and 2.6 percent; and for GDP, 10.5 percent, -0.5 percent and 2.8 percent.

compared to the traded goods sectors. ¹⁹ Not only that, the growth of the manufacturing sector has been quite modest despite the relative ease with which economies, such as that of the GCC, could establish import-substituting industries, exploit the abundance of energy sources and their comparative advantages in energy-intensive industries, and expand non-oil exports based on viable petrochemical industries. This is especially true when one considers the wide array of incentives made available to manufacturers. These two factors combined reveal a fundamental weakness; namely, the lack of international exposure and, consequently, the inability to compete internationally. Turning this weakness around will be both difficult and time-consuming in that it would require fundamental economic reforms at both the macro and micro levels.

There are other negative growth trends during the last two decades that can be observed in Table 8 a) lower government spending on development projects; b) higher government wage bills; c) lower national savings ratios; d) higher government spending on goods and services; and e) a high military spending compared to the Middle East and North African region (MENA) and high income countries. All together, economic indicators do not bode well for an economic record that deviates appreciably from the past record of the 1980s and 1990s. Additionally, the fact that none of the GCC countries had undertaken structural reforms led to slow growth in the demand for labor, and "while new jobs are expected to be more labor intensive, they have tended to become excessively so." This trend will bias future demand for labor toward more Asian and fewer Arab workers.

The bias in the demand for labor toward low-wage skills is inherent in the GCC economies and it stems essentially from their adoption of a long-term, low value added development strategy. Instead of relying on imports to obtain products that do not have a comparative advantage locally, which would have resulted in fewer foreign workers, the availability of a generous package of industrial incentives made it possible to profitably establish inefficient import substitution activities. These activities relied on cheap labor to

¹⁹ The construction sector alone employed 31.3 percent of all non-Saudi LF in 2000 and the social services sector employed 42.8 percent of all non-Kuwaiti LF in 2000.

For a more in-depth discussion of these issues, see World Bank (1995), op. cit., p.7.

²¹ World Bank (1995), op. cit., p.7.

compete with foreign competitors who are typically supported with substantial economies of scale and important marketing presence worldwide.

Table 8: Structure of the GCC Economies, 1980-1998

	Bahrain	Kuwait	Oman	KSA	UAE	MENA	High
							Income
% Mfg in GDP, 1990	16.7	11.6	3.8	7.6	7.7		
% Services in GDP, 1980		25.0		18.0	22.0	37.0	59.0
% Services in GDP, 1990	53.3	47.0	39.0	43.3	34.7		
% Services in GDP, 1998				45.0		43.0	65.0
Ann. growth of mfg, 1980-90	2.7	2.3	20.3	7.5	3.1		
Ann. growth of mfg, 1990-98				2.7		3.1	2.5
Govt. consump. % GDP, 1980		11		16	11	18	16
Govt. consump. % GDP, 1998		31		32		22	15
Govt. capital spending, 1980		32	21		8	29	7
Govt. capital spending, 1989		14	12		3	20	4
Nat. savings % GDP, 1980		58		62	72	38	24
Nat. savings % GDP, 1998		13		26		19	22
Military spending % GDP, 1997		7.5	26.1	14.5	6.9	7.0	2.4

Source: World Bank (2002), Development Economics Central Database; and the 2000 World Development Report.

Moreover, factor and commodity price distortions artificially lowered the cost of foreign labor, primarily as a result of the prevailing welfare system and subsidized public utilities. In response, imported technologies became biased toward low capital/labor ratios. This partially explains why the demand for labor continued to grow even during economic downturns, resulting in a larger number of low-skill/low-wage Asian workers.

Estimates of Current Open Unemployment Among Nationals

Currently, the six GCC countries are faced with both *structural* and *cyclical* unemployment. According to published information, Omani unemployment in 1999 represented 4.9 percent of total employment or 11.9 percent of the Omani LF.²² For Kuwait, a total of 10,836 Kuwaitis registered as unemployed and sought government jobs in April 2000. Of those, 18 percent held secondary school degrees and 35.6 percent were primary and intermediate school graduates. This number represents about 5 percent of the total Kuwaiti LF.²³ In Saudi Arabia, a recent publication issued by the Saudi American Bank suggests that open unemployment amounts to about 360,000 or 14 percent of the

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²² Central Bank of Oman (2000), *Elmarkazi*, Vol. 5, No. 25.

²³ Civil Service Administration, Kuwait.

national LF.²⁴ We estimate that the *current structural unemployment is about 500,000* national workers in the GCC as a whole.²⁵ This represents about 6.5 percent of the expatriate LF, 5 percent of total manpower and about 15 percent of the national LF.

Based on a detailed breakdown of the structural unemployment in Bahrain in 1991,²⁶ and assuming that the profile is somewhat congruent to that prevailing in the other GCC countries, it is instructive for public policy considerations to consider some of its specific features:²⁷

- □ Of those unemployed, 97.3 percent are graduates of secondary schools or lower levels; 50.9 percent are high school graduates and 40.7 percent are primary level or lower. Thus, the rate of unemployment among the 15-19 year group is typically the highest, followed by the 20-24 year group. This applies to males and, more so for females.
- □ Unemployment rates among females are much higher than among males.
- □ Those that are concentrated at the lower end of the educational scale (illiterates, read and write and elementary school graduates) are 40-50 years old. As one moves up the educational ladder, the average age declines.
- □ The overall level of education among females is higher than among males.
- □ Most of the job seekers have been in the labor market for less than three years.

²⁴ In this context, it should be emphasized that an unknown percentage of those considered unemployed are first time job seekers and, hence, should not be included according to the ILO definition of "unemployment."

²⁵ In Saudi Arabia, Oman and Kuwait, recent surveys let respondents determine their own employment status, unlike the ILO definition, which counts a person as unemployed only if no work was done during a specific period and the person was actively seeking job opportunities. Consequently, the results of such surveys tend to over-estimate the magnitude of actual open unemployment.

²⁶ Central Statistical Organization (CSO) (1993), *The Population, Housing, Buildings and Establishment Census* - 1991; summary results.

²⁷ It is interesting to note that Bahrain, in a sense, has led the GCC in terms of having the highest education levels among its national manpower, nationalizing a much higher percentage of the economy's jobs, encountering the unemployment problem and then addressing it.

Magnitude of National Entrants Flows into the LF

The number of new entrants into the labor force depends on a host of variables including sex and age composition, participation rates of males and females, the types of educational venues from which workers graduate, social values and government programs. In Kuwait, the number of new national job seekers, based on published data regarding the size of the national LF during the last six years, is estimated at about 15,000 in 1999, rising to 17,000 in 2002 and to more than 23,500 by 2010. In Saudi Arabia, the comparable figure is about 165,000 in 1999, most of whom (63%) are secondary school graduates. In Oman, new national job seekers are estimated at 18,000, and in Bahrain the number is estimated at about 5,000.

For the GCC as a whole, the number exceeds 210,000 annually. This group exemplifies the core of the structural unemployment at the present time, for they are increasing at faster rates and are having difficulty getting hired in the public sector as well as in the private sector. Furthermore, of the many educational levels shown in Table 10, special attention should be paid to the intermediary and secondary levels since they represent the general skill level of the new entrants. The sum of expatriates in these two categories varies slightly among the GCC countries – from 31.3 percent to 33.5 percent. Given that there were about 7.5 million expatriates in the Gulf in 2000, this implies that there are about 2.1 million jobs that can possibly be held by nationals, provided that they are trained properly and their cost to the employer is competitive.

Education, the 'Gender' Factor, and the Cost of the Replacement Strategy

A substitution strategy of expatriates with nationals is more feasible now than it was a generation ago. Whereas the overwhelming proportion of school enrollees in the 1970s were in primary grades, the proportion of students now in the intermediate and secondary grades has risen substantially. Moreover, the GCC region has greatly improved educational efficiency. To wit, the percentage of cohorts that reached grade 5 from 1980-1997 increased and the percentage of repeaters in total enrollment has fallen, as can be seen from Table 9.²⁸

²⁸The number of students out of school, however, did increase in all GCC countries except in the case of secondary education in Oman.

Table 9: Education Efficiency Parameters in Selected Countries

Country	% of c	ohorts ro	eaching g	grade 5	Re		s % in to lment	otal	Children out of school (000)		
	M	ale	Fen	nale	Prin	nary	Seco	ndary	Prim.	Sec.	
	1980	1996	1980	1996	1980	1996	1980	1996	1997	1997	
KSA	82	87	86	92	15.7	7.6	14.8	9.2	1,222	1,077	
UAE	100	98	100	98	9	4.2		7.8	52	54	
Kuwait					6.2	3.4	7	5.4	64	128	
Oman	96	96	87	96	12.4	9.2			133	108	
Malaysia	97	98	97	100					9	1,090	
Egypt	92		88		7.5	6.5			378	2,297	
France							9.3	8.1			
Italy					1.2	0.4					
Netherlands	97		97		3.5		2.7	0.8			
Middle East	88		84		12.2	8.1			4,791	12,882	
High Income									213	506	

Source: World Bank (2000), World Development Report, Table 2.11.

Recent studies show that under "proper" conditions, an extra year of education in the LF could produce a 10 percent growth in GDP. One of the major quantitative growth areas has been in education. Table 10 gives a general overview of the level of schooling among the national manpower. The average years of education is used as the benchmark. Based on a standard grading system and comparing GCC countries for which we have data, the education levels of males increased by 49.3 percent in Bahrain over 1981-1991, by 42.7 percent in Kuwait during 1983-1996 and by 83.7 percent in Saudi Arabia from 1981-1999. Moreover, Kuwait's education level of males aged 11.7 years in 1996, Bahraini males aged 10 years in 1990 and, Saudi Arabian males aged 7.9 years in 1999 are comparable with the OECD males aged 10.4 years in 1990. These rates are likely to accelerate at even faster rates in the foreseeable future.

Arab workers typically possess skills that require higher educational degrees compared to Asian workers who rely on hands-on experience. Since GCC nationals are entering the LF with higher and higher levels of academic education, it is not difficult to predict that nationals are more likely to replace Arabs than Asians.

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²⁹ In Kuwait and over the 30-year period 1965-1996, accomplishments have been made in the educational system as evidenced from the decline in the illiteracy rate from 49.3 percent in 1965 to only 3.2 percent in 1996 and the percentage of those in the "read and write" category from 43 percent to 4.5 percent, respectively. In Bahrain, the combined share of the same two categories fell from 74.8 percent in 1965 to 24.2 percent in 1991.

On the gender front, female LF presents an important dimension in the future regional migration trends as their educational profile is much higher than those of male workers (Table 10). In fact, in some cases the level is twice that of the males, and the increase in their levels of education over time is more pronounced. This clearly indicates that the female labor force is over-educated and underemployed. Female participation is expected to rise due to a number of reasons: i) the heavy reliance on expatriate maids and household support will help reduce fertility rates and create the environment to join the LF; ii) the continued rise in education levels among females; iii) economic slowdowns, uncertainty and negative per capita income growth are likely to force young families to rely on two incomes; and iv) constantly changing social conditions exist in most Gulf states where women are demanding greater recognition and are accorded receptive responses from key government leaders and policymakers.

Table 10: Average Years of Education Among GCC National Manpower

	I	Bahrai	n		Ku	wait		Qa	tar		KSA		UAE	
	1965	1981	1991	1965	1975	1983	1996	1981	1987	1981	1992	1999	1975	1980
		Males (%)												
Illiterate	74.8	37.3	11.2	49.3	38.3	15.6	3.2	24.8	56.7	35.0	10.9	5.1	56.4	44.7
Read & write	X	31.1	13.0	43.0	25.3	16.2	4.5	32.7	X	33.6	25.5	18.7	27.8	27.2
Primary	16.3	14.4	15.4	3.5	14.8	15.7	12.1	17.0	8.4	13.7	28.3	28.6	6.5	11.3
Preparatory	X	11.7	15.5	3.0	11.1	26.4	33.1	11.0	8.5	6.3	17.6	21.8	4.4	7.7
Secondary	6.9	16.9	29.9	1.5	7.4	17.5	20.5	13.4	10.2	7.7	10.6	14.5	3.8	6.5
Univ. & higher	3.0	8.6	14.9	0.8	3.1	8.6	24.8	11.1	16.1	3.7	7.1	11.3	1.1	3.6
Avg. yrs. of ed.	3.4	6.7	10.0	2.1	4.4	8.2	11.7	6.8	6.6	4.3	6.5	7.9	3.4	3.7
							Femal	es (%)					_	
Illiterate	61.6	17.9	3.5	48.0	10.1	2.2	1.8	10.5	16.5	45.5	36.1	24.0	52.8	29.5
Read & write	X	8.7	2.1	17.8	3.2	2.5	1.2	4.9	X	34.9	22.8	19.3	6.0	6.8
Primary	14.0	7.8	3.2	7.7	7.9	2.5	3.7	4.2	1.9	1.3	19.2	21.3	4.5	6.3
Preparatory	X	8.6	5.1	9.9	20.2	20.5	20.7	4.2	3.7	3.5	10.5	15.5	5.6	7.7
Secondary	22.4	35.6	40.3	14.9	44.7	48.1	16.5	38.4	11.4	13.3	7.9	12.1	26.8	39.9
Univ. & higher	2.1	21.4	50.1	1.7	13.9	34.2	55.1	37.8	66.5	3.6	3.5	7.7	4.3	9.8
Avg. yrs. of ed.	4.6	10.8	15.8	4.5	11.8	13.8	14.7	13.4	14.4	3.8	4.3	6.0	5.8	9.1

Notes: x) included in the preceding cell; Data pertain to economically active population 15 years and older; Relative weights are: 0 years for illiterate; 3 years for read & write; 6 years for primary; 10 years for preparatory; 15 years for secondary and 18 years for university and higher.

Sources: Girgis, Maurice (1999), Labor Market Reforms in the GCC, MDF 3 meeting, Cairo.

As female participation rates rise, their supply will proportionately limit the number of available jobs for expatriates, if all other things are equal. This trend is tempered by the fact that the vast majority of GCC females are currently employed in the government sector. If this trend continues, the "educated females" factor will **not** be of major consequence to future Arab migration. On the other hand, if they seek employment in the private sector, then they will also crowd out male Arab workers since there are very few female Arabs currently working in the GCC.

One may ask at this juncture, what are the financial ramifications of such a replacement strategy? The answer is that expatriate workers would reduce the financial burdens of the wage bills of both the private and public sectors. For illustrative purposes, we select Saudi Arabia as an example. Using 1997 wage differentials in the private sector between Saudis and non-Saudis and applying them to the number of employees in the civil service during 1999 yields the following results:

- The government had realized savings of about SR 12 billion as a result of employing non-Saudis instead of Saudis, assuming that there are no productivity trade offs between the two groups.³⁰ The savings represented 29.8 percent of total government wages and salaries.
- Extending the analysis to the much larger private sector and employing the same methodology and by combining the two sectors together yields larger savings: SR 226 billion (and SR 260.5 billion assuming there is a 15 percent productivity trade off), which made up 50 percent of the GDP during 1999.

In a dynamic sense, these savings represent only a micro view of their contribution to the economy. Without them, the private sector may lose its comparative cost advantage and may therefore encounter difficulties surviving in the marketplace, locally and internationally. Thus, the benefits extend far beyond money wages. It is perhaps for this reason that private sector employers are reluctant to replace expatriates with more costly nationals. This proposition, however, requires further empirical research.

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³⁰ Ministry of Planning (1417H), *Employment and Wages Report*, Riyadh; and Civil Service Administration (1999), *Annual Report*, Riyadh.

Do Foreign Workers Complement or Compete with Nationals?

Do expatriates play the role of the 'residual' or the 'swing LF' by picking up jobs that could not be filled by nationals, or do they compete with them? The data presented in Table 11 corroborate the view that they complement each other since expatriates exhibit lower educational levels than nationals.³¹ Expatriates with primary school or lower levels constituted about 50 percent of all expatriates working in Bahrain in 1991, 55 percent in Kuwait in 1996, 58 percent in the UAE in 1985, and 51 percent in Oman in 1993. These ratios are quite high and indicate a distribution skewed toward the lower end of the education ladder among expatriate workers. Having so many foreigners at the lower end of the skill ladder serves the needs of the GCC economies because they take up jobs that are either "unacceptable" to GCC nationals or because, for certain skills, the supply of nationals falls short of the demand, or both. For instance, the situation in Kuwait in 2000 shown in Graph 1, confirms the view that occupations with a relatively high percentage of Kuwaitis are associated with a lower percentage of expatriates, and vice verse. The situation in Saudi Arabia is similar in general terms to that in Kuwait. The data provided in Table 12 show that in management (2.9 percent of Saudis vs. 0.7 percent of non-Saudis), clerical (12.1 percent vs. 3.2 percent, respectively), services (46.9 percent vs. 19.3 percent, respectively) and production (11.9 percent vs. 48.4 percent, respectively), complementarities exist between Saudi and non-Saudi workers.

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³¹ Lacking comparable data on skills in many GCC countries with regard to both national and expatriate labor, the table employs educational levels as a proxy for skills so that it can be compared with the data on national manpower.

Table 11: Educational Levels of the Expatriate Workforce in Selected GCC Countries

	Illiterate	Read & Write	Primary	Interm.	Secondary	Diploma & Univ.	Higher Ed.	NEC	Total
Bahrain, 1991				•			•		
Number (000)	13.0	32.9	21.5	20.3	24.9	17.5	4.0	0.8	134.8
% of total expats	9.6%	24.4%	15.9%	15.1%	18.4%	13.0%	2.9%	0.6%	100.0%
Cumulative Total	9.6%	34.0%	49.9%	65.0%	83.5%	96.4%	99.4%	100.0%	
Kuwait, 1996									
Number (000)	122.8	268.7	93.3	148.8	127.8	105.2	4.4	0.3	871.3
% in total	14.1%	30.8%	10.7%	17.1%	14.7%	12.1%	0.5%	0.0%	100.0%
Cumulative Total	14.1%	44.9%	55.6%	72.7%	87.4%	99.5%	100.0%	100.0%	
1. Expats in Govt.									
Number	7,235	11,745	7,943	12,242	1,501	39,209	2,834	64	82,773
% in total	8.7%	14.2%	9.6%	14.8%	1.8%	47.4%	3.4%	0.1%	100.0%
2. Expats in									
Private Sector									
Number	115.6	256.9	85.4	136.6	112.8	66.0	1.6	0.2	775.0
% in total	14.9%	33.1%	11.0%	17.6%	14.6%	8.5%	0.2%	0.0%	100.0%
3. Unemployed	739	807	1,049	1,889	598	177	6	1	5,266
Qatar, 1994									
1. Employed in govt.	3,478	543	390	463	3,465	8,089	919	7,906	25,253
% in total	13.8%	2.2%	1.5%	1.8%	13.7%	32.0%	3.6%	31.3%	100.0%
Cumulative Total	13.8%	15.9%	17.5%	19.3%	33.0%	65.1%	68.7%	100.0%	
2. Empl. in Mixed									
sector	127	326	199	302	1,199	1,441	115	10	3,719
% in total	3.4%	8.8%	5.4%	8.1%	32.2%	38.7%	3.1%	0.3%	100.0%
Cumulative Total	3.4%	12.2%	17.5%	25.7%	57.9%	96.6%	99.7%	100.0%	
UAE, 1985 *									
Number (000)	156.1	149.0	51.5	70.2	121.5	62.2	3.3	0.2	613.9
% in total	25.4%	24.3%	8.4%	11.4%	19.8%	10.1%	0.5%	0.0%	100.0%
Cumulative Total	25.4%	49.7%	58.1%	69.5%	89.3%	99.4%	100.0%	100.0%	
Oman, 1993	Low-Skil	l Sem	i-Skilled	Skilled	Diplo	oma	University +	То	tal
Number (000)	220		103	47	17	•	43	43	30
% in total	51.2%	2	4.0%	10.9%	4.0°	%	10.0%	100.0%	
Cumulative Total	51.2%	7	5.1%	86.0%	90.0	1%	100.0%		

Note: * Data for the UAE were estimated by first projecting the growth from 1980-1985 of national manpower across educational levels assuming a similar growth pattern to that from 1975-1980, and then subtracting the results from the data pertaining to total manpower for 1985.

Sources: Girgis, Maurice (1999), Labor Market Reforms in the GCC, MDF 3 meeting, Cairo.

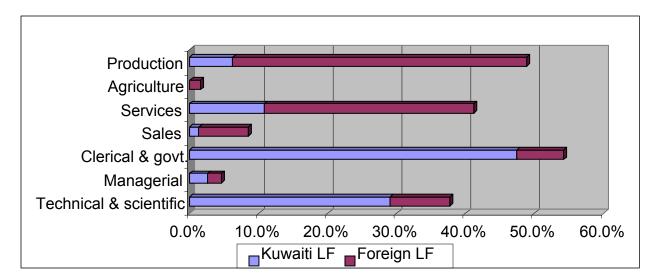


Figure 1: Complementarity of National and Foreign LF, Kuwait 2000

Table 12: KSA Manpower Structure by Major Occupation Groups and Nationality, 1999

	Saudis	Non-Saudis
Technical & scientific professions	11.5	12.0
Administrative management	2.9	0.7
Clerical	12.1	3.2
Sales persons	5.8	8.2
Services workers	46.9	19.3
Agriculture and fisheries	8.8	8.1
Production and similar workers	11.9	48.4
IDIDD (2001) II D D		

UNDP (2001), Human Resources Report.

Divergence of Education Skills from Market Needs

Despite impressive quantitative growth in educational institutions, schools, training centers, universities, vocational education and the number of school graduates,³² there remains the problem of national graduates who are "unemployable" due to the lack of basic skills and/or not having the "right" educational background.

Two basic factors contributed to this outcome. First, governments provided some of the most attractive job opportunities without due discrimination based on scholastic performance, the choice of major studies and grade point averages. As a result, students selected "easy" majors and earned any grades, knowing that they would eventually join

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³² Public spending on education as a percentage of GNP in 1997 was as follows: Saudi Arabia, 7.5; Kuwait, 5; Oman, 4.5; Egypt, 4.8; Malaysia, 4.9; USA, 5.4; and Japan, 3.6. World Bank (2001), *World Development Report*, Table 2.9.

the ranks of government employees as all others had before them. This paradigm contributed to the overall distortion of the skill mix of school graduates. The second factor relates to the lack of discrimination according to remunerations. Government salary scales are usually fixed and do not distinguish between majors or GPAs, except in the case of engineers. But even in these cases, no distinction is made among different engineering majors even though some are in excess supply while others are relatively scarce.

Other more circumstantial factors relate to the impact of the GCC's generous welfare system, extended family, social values and high per capita income on work attitude, self-discipline and personal commitment to work and professional growth. In a recent survey of private establishments in Saudi Arabia, participating firms (232 establishments) were asked why they wouldn't hire Saudis for the following year (Table 13). The private sector views on hiring nationals clearly substantiate conventional wisdom; i.e. that available nationals are not interested/committed, not qualified, not experienced and/or command higher wages compared to their non-national counterparts.

Table 13: Reasons for Hiring Non-Saudis

Reason	%
Saudis are not available	14.2
Available Saudis are not qualified	25.4
Non-Saudis require lower wages	47.4
Non-Saudis are more experienced/skilled	34.5
Saudis are not interested in these jobs	48.3
Lack of employment agencies	3.4
Saudis insist on management positions	0.4
Saudis are not committed to work	1.3
Other	3.9

Source: Ministry of Planning (1999), Private Establishment Survey, Table 3.16.

The Expanded Role of the Government

Growth in civil service employment since the early 1970s is reported in Table A1 in the Annex. The major observations that relate to this issue may be summarized as follows:³³

- The rate of expansion of the civil service cadre varies among the GCC countries. By grouping them together under similar patterns of growth, it appears that the UAE and Oman experienced faster growth rates (18-21%) than Qatar and Saudi Arabia (about 9%) followed by Bahrain and Kuwait (about 5%).
- National manpower as a percentage of total government employment is vastly higher than in the rest of the economy. In Bahrain and Saudi Arabia, the ratio averaged about 87 percent in 1994 and 1998, respectively. Similarly, it was 72 percent in Kuwait (2000); 46 percent in Qatar (1994) and 35 percent in the UAE (1989).
- With few exceptions, there are more and more government employees serving the same number of people, as shown in Table A2. The (unweighted) average number of government employees per 100 people is 8.7. In comparison with other countries, the GCC states emerge much closer to OECD countries than to developing countries.
- In terms of the government wage bill in relation to oil dividends, government wages and salaries in 1995 represented 110 percent of the oil revenue in Bahrain, 48 percent to 53 percent in Kuwait and Saudi Arabia, respectively, 36 percent in the UAE and 24 percent in Qatar. In terms of total government spending (recurrent and capital expenditures), this single item consumes somewhere between 20-50 percent of total government outlays.

This analysis points to an important fact: that the past open policy of hiring all nationals regardless of needs, qualifications and the fiscal burdens of wages on government budgets is no longer sustainable.

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³³ The results reported in this section should be interpreted with care since the published data do not often detail the range of the institutions covered under the government in each country.

The Decline in Labor Productivity

Total labor productivity indicates the strength of an economy and measures its ability to provide high standards of living for the population. One measure of total labor productivity is real GDP per employee. That measure indicates that the Gulf states have been facing and will likely continue to face serious adjustment problems. Sufficient data exist for Kuwait, Saudi Arabia and the UAE to calculate a proxy index of aggregate labor productivity for the region from 1975-1993. The estimated index, shown in Table A3, indicates that real GDP per employee (in 1980; US\$) rose sharply from 1975 to the late 1970s and early 1980s, no doubt reflecting the buoyant oil market. After 1981, total labor productivity fell sharply until it leveled off at the time of the Gulf War at roughly 50 percent of its 1975 level. In 1980, the data show a fall from a high of about \$45,000 per employee to less than \$20,000 in recent years.

While that finding is not unexpected given our knowledge of changes in oil prices, a more detailed examination of the index and its components shows that real GDP rose in ten of the 18 years from 1975-1993 and fell in eight.

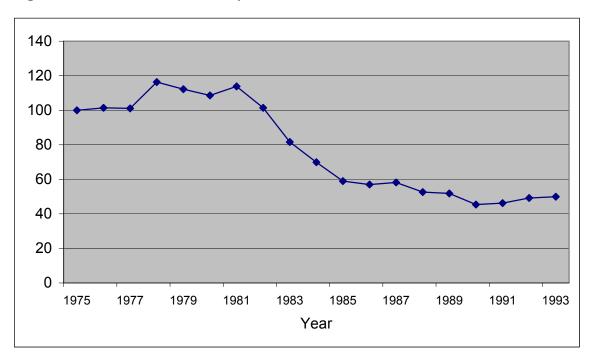


Figure 2: Total Labor Productivity

In the ten years of growth, employment increased in all but one of those years, a result that is to be expected since output and employment are usually positively correlated, often with a slight lag in employment. Such a procyclical pattern is consistent with economic theory in market economies. This is not the case in the GCC, however, as *employment also increased in all but two of the years in which real GDP was declining.* In particular, employment in the region continued to grow absolutely in 1982, 1983, 1984, and 1985 while real gross domestic product was plummeting. Employment also increased in 1988 and 1990, years in which the real value of output decreased. Thus, *while the region was able to support greater employment figures during economic booms, employment seldom fell when real GDP did.*

Why doesn't employment fall when total output falls? There are several possible explanations for this anomaly:

- 1. Although reductions in the real price of oil may appear, in principle, to limit the demand for foreign labor, that linkage is weak since both the government and the private sectors are relatively immune to such economic signals. Guaranteed employment and wages for nationals, plus the substantial availability of social services do not diminish the demand of the national population for services, which are often the determining factor in the demand for foreign workers.
- 2. To the degree that foreigners provide essential services in the government sector (services that cannot be readily duplicated by nationals), it would be imprudent for the government to reduce its employment or wages.
- 3. The private sector has been substituting high-skill manpower with low-price/low-skill foreign labor. By its nature, the substitution implies a larger number of foreign workers.
- 4. Under existing arrangements for social services, private profit-maximizing companies do not pay the full cost of the labor used in their activities and are led to employ more workers than they would under full-cost pricing. Therefore, while privately profitable, continued use of low cost foreign labor may be socially costly and continued use is reflected in the secularly declining value of output per employee.

The employment anomaly can be explained by the prevailing economic policies and by the inherent institutional and economic rigidities that effectively decouple employment from downward changes in the value of output. In a market system where prices serve as both the signals and the stimuli for amelioratory action, reductions in the value of output would be followed by reductions in employment. In the GCC, those mechanisms are truncated. Hence, when called for by declining productivity, necessary economic adjustments are forced in areas other than employment. One of the most important of these is in the level of international currency reserves. Such reserves, of course, are limited, but they can be used in the short run to provide the time necessary to restructure the labor market. Looking ahead, if this phenomenon is allowed to continue, it will result in a continuum of rising demand for expatriate workers, especially those in the lower-skill occupations.

The Substitution of Arabs with Asian Workers

It was reported earlier that during the 1990s, the number of Arabs in the GCC dropped by about one-third while the number of Asians rose by about 50 percent. Official data comparing the number of Asian versus Arab LF in Kuwait from 1989-2000 show that while the number of employed Arabs declined by 9.4 percent employed Asians increased by 59.1 percent. In Oman, recent (1998) labor employment data show that there were 482,527 foreign workers in the private sector from the following countries: 275,926 from India (57.1%); 116,000 from Bangladesh (24%); 63,570 from Pakistan (13%); 18,437 from Sri Lanka (3.8%); and 7,861 from the Philippines (1.6%). For Arabs, the total was 11,494 (only 2.38%), with Egyptians accounting for 6,236.

Due to its need for staff with knowledge of the Arabic language, Arabs usually outnumber Asians in government jobs. For example, there were 80,968 civilian government employees in Oman in 1998: 55,858 Omanis and 25,110 non-Omanis. The latter was comprised of 13,353 Arabs (8,806 of whom were Egyptians) and 11,752 Asians (9,073 of whom were Indians).³⁴

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³⁴ Central Bank of Oman (2000), *Elmarkazi*, Vol. 5, No. 25.

The fact that Asians have been replacing Arab workers in the GCC during the last two decades is a phenomenon that requires further examination, since it will have important implications on the prospects of future regional Arab migration. Based on past literature, questionnaires and interviews, the following are reasons private employers tend to give for substituting Arab workers with Asians.

- Asians command lower wages, work longer hours and do not expect promotions over time. Moreover, it is not unusual to find highly-skilled Asians willing to accept lowskill jobs at low pay.
- 2) Asians' command of the English language is generally superior to that of an average Arab worker.
- 3) Asians selected to work in the private sector are more experienced than Arabs. In most cases, private employers hire Asians who possess the specific specializations required in the GCC. In some countries, industrial technologies are imported from Asian labor-exporting countries, in which case it is possible to hire Asian workers familiar with the technologies and imported machinery.
- 4) Asians tend to be more advanced in their technical knowledge than the average Arab worker, reflecting the comparative development stage and technological know-how from which they came.
- 5) Asians who join the LF on contracts with fixed durations normally return to their homes at end of the contract period. They also tend to prefer to live without their immediate families in order to maximize their savings. Arabs, on the other hand, tend to bring their families with them, if they are so allowed, which complicates the return process from the viewpoint of private employers.
- 6) Asians are more self-disciplined and compliant.
- 7) Menial jobs are not taken up by Arabs nor are sales jobs that require women. Asians readily fill these positions.
- 8) Recent research in labor economics corroborates the view that workers' networks play a critical role in the selection of new employees. The fact that most workers in a factory or trading establishments are in a position to be the first to know about new

job openings allows them to influence the list of candidates by pushing for relatives and friends. Moreover, the absence of efficient labor placement services in the GCC, other than those specialized in importing household staff, contributes to the effective role played by networks. This mechanism partially explains the dominance of expatriates from Asia since they perpetuate the heavy reliance on Asians. The Egyptians, Palestinians and Yemenis played a similar role in Kuwait and Saudi Arabia during the 1980s and 1990s.

The combination of these factors has been, and will continue to be, instrumental in the substitution of Arab workers by Asians.

Institutional Labor Policies to Stem the Flow of Expatriates

A historical review and assessment of past labor policies is outside the scope of this study. It is interesting, however, to highlight the major policy tools the GCC employed during the last decade to stem the tide of foreign workers to the region. The major instruments are briefly outlined below:

- 1. *Work Permits*: Except in free zone areas such as Jabal Ali in the UAE, business employers must obtain a work permit for each foreign worker prior to his arrival.
- 2. *Sponsorship Permits*: For individual and household employers, a no-objection permit is required.
- 3. *Quotas*: Some GCC countries restrict the number of work permits to potential business employers and households. Some are imposed at the national level (Saudi Arabia) and some are imposed at the firm level (Oman).
- 4. *Bans*: Most GCC countries publish a list of jobs and/or skills that are banned due to the availability of national labor or expatriate workers already working in the local economy. The lists are usually expanded and updated periodically. The degree to which these bans are adhered to varies from one country to another.
- 5. *Fees*: There are several types of fees that governments have instituted over the years including a work permit fee, which is paid at the time the application for hiring a foreign worker is submitted, and a residency fee, which is paid annually.

- 6. *Job Nationalization*: This policy aims at substituting foreign workers with nationals. The civil service sector was the first to put it into effect, followed by SOEs in the oil sector as well as all others that are partially or wholly owned by the public sector. The private sector has been under pressure to do likewise.
- 7. *Employment Subsidies*: There are several programs designed to subsidize the cost of hiring nationals in the private sector as a means of replacing expatriate workers and minimizing the wage gap between the two groups.
- 8. Active Persuasion: Some GCC governments have made access to industrial incentives (e.g., soft industrial loans, import duty exemptions, tariff protection) subject to private sector industries that maintain minimal levels of national manpower participation in total employment. Countries differ greatly in the methods applied to administer this policy. For example, in Saudi Arabia a law was passed in 1389H (1996) stipulating that Saudis should not total less than 75 percent of all workers, that wages should not be not less than 50 percent of total wages and that at least 50 percent of training expenses be directed toward Saudis to help qualify them for technical jobs. This law has not been effective, but the 5 percent annual increment in the number of Saudis employed (the Saudization Law) in a firm has been reasonably effective.
- 9. *Job Transfers*: All GCC countries prohibit the unrestricted transfer of expatriate workers between jobs. Some require approval from employers, minimum stays, etc. Where it is prohibited outright, expatriates usually resort to leaving the country and returning again. Adherence to the restrictions varies among countries, across job classifications and among individuals within the same country.
- 10. *Residency Permit for Families*: The issuance of such permits is restricted. It is normally limited to only high-skill/high-pay expatriates.
- 11. *Signing Bonus*: Saudi firms are encouraged to offer new Saudi recruits a signing bonus of about SR 2,000.

As a result of these policies, there has been noticeable progress made regarding on-going campaigns to "nationalize" jobs in both private and public sectors. Available

evidence from Oman, Saudi Arabia and Kuwait suggest that the Omanization, Saudization and Kuwaitization drives have yielded positive results. The private sector employed 50,923 more Omanis during the period 1996-2000 as compared to only 10,846, indicating a strong reversal of past trends. As a result, Omanis now constitute 21.7 percent of total employment in the private sector, up from only 15.2 percent in 1996. Likewise, the share of Saudis in both public and private sectors increased during 1992-1999 from 72 to 87 percent and from 32 to 38 percent, respectively. The percentage of Kuwaitis in total government employment rose from 42.3 percent in 1989 to 70.2 percent in 2000. This impressive change was not matched, however, in the private sector where the percentage of Kuwaitis increased insignificantly over the same period; from 1.3 percent to 1.5 percent, respectively.

IV. Estimating Future Arab Labor Movements

Demand and Supply Balances of National LF

Aggregate data for the GCC, excluding Qatar, show that during the 1980s, domestic investment/GDP (I/Y) was about 22.5 percent, GDP growth was 0.33 percent and the LF grew at 3.1 percent. This implies that a domestic investment ratio of 7.8 percent of GDP would generate 1 percent economic growth, indicating a low marginal productivity of capital by international standards. During the 1990s, the ratios changed as follows: 20.2 percent, 2.9 percent and 3.1 percent, respectively. Extrapolating the I/Y relation, it is expected to decrease to 18 percent, which would bring about an average growth rate in GDP of about 2.3 percent.³⁷ If the elasticity of employment in regard to output is 1.0-1.25, employment will rise at 1.8-2.3 percent. Against an expected rise in national LF of about 4 percent, this will not be sufficient to absorb new entrants and will exacerbate the existing unemployment problem.

To absorb the new entrants and start reducing existing unemployment, the demand for labor must be around 6 percent. To realize this, however, GDP must grow at 7.5 percent per annum and I/Y must rise to 58.5 percent, holding other things equal. Both of these conditions, especially in the absence of economic reforms, are not plausible.

³⁶ UNDP (2001), Human Resource Report.

³⁵ Central Bank of Oman, op cit., p 2.

³⁷ Similar analysis is presented for the MENA region in World Bank (1995), op. cit., p. 7.

Therefore, one would expect greater levels of unemployment among nationals and, concomitantly, greater pressures on the private sector to replace expatriates with nationals. Without compensatory financing, private sector employers are likely to lay off employees with higher wages and replace them with less skilled/lower wage individuals. This would imply more out-migration of Arabs from the GCC and lower productivity levels.

That the expected growth in the economy will not generate sufficient jobs to meet the number of new entrants in the labor market can be seen from official government pronouncements as well. For example, the employment of nationals in Oman was about 240,000 in 1993 and increased to 306,000 in 1998. By 2020, it is expected to rise to 892,000 or by about 5 percent per annum. Of that number, 270,000 will be in the public sector (up from 193,000 in 1998) and 622,000 in the private sector (up from 113,000 in 1998). During the sixth five-year plan (2001-2005), the government estimates that only about 108,000 jobs will be created, a number that falls about 25,000 short of the total anticipated number of new entrants. Most of the additional demand for labor (92 percent) is expected to come from the private sector.³⁸

The situation in Saudi Arabia is no different since job creation during the current seventh five-year plan (2000-2004) is expected to fall short of the number of new Saudi entrants in the LF. According to the seventh national plan, shown in Table 14, job creation during the period 2000-2020 is projected to be 3.47 million, while the Saudi LF will simultaneously increase by 5.09 million. The anticipated deficit is to be filled by jobs currently held by expatriates, numbering about 1.62 million jobs.

Table 14: Saudi Arabia: Manpower Demand and Supply Projections

		Thousand	Avg. Annual growth rate (%)			
	1999	2004	2020	2000-2004	2000-2020	
Demand	7,176.3	7,504.9	10,746.0	0.90	1.94	
Public sector	1,015.1	1,023.7	1,111.0	0.36	0.35	
Private sector	6,161.2	6,472.2	9,635.0	0.99	2.15	
Supply						
Saudis	3,172.9	3,990.2	8,263.0	4.69	4.66	
Balance/ Non-						
Saudis	4,003.4	3,514.7	2,483.0	-2.57	-2.25	

Source: Ministry of Planning, Seventh Five-Year Plan.

³⁸ Central Bank of Oman (2001), *ElMarkazi*, proceedings of the conference on "Employing National Manpower," pp.1-7.

In order to assess the impact on Arab migration regarding the GCC's inability to generate sufficient jobs that will accommodate new national entrants to the labor market in the next 5-10 years, it is important to ask: which skills will be impacted the most? And who is employed in the majority of these occupations?

Qualitative information and statistical data on the distribution of the national and expatriate work force (classified by type of occupation) clearly suggest that open unemployment of nationals is skill sensitive; that is, some occupations can be readily filled by nationals while others can not. We also know the structure of new entrants by education levels (a proxy for skills) and the relative distribution of employed Arabs versus Asians by skill category. Based on this information, one may suggest the following three scenarios:

- 1. Gulf **nationals with higher education or specific skills** that are demanded by the private or public sectors/SOEs face no problems finding a job. In fact, they normally receive multiple job offers. This group is indeed immune to the current open unemployment problem. *Some substitution of expatriates, especially Arabs who outnumber Asians in this category, will take place.*
- 2. **Nationals do not seek low-skill jobs** because 1) the offered wages are far below their reservation wages, and 2) these jobs are stigmatized as socially unacceptable. Consequently, *expatriate Arabs and Asians, but mostly the latter, who occupy these jobs, will have a relatively safer employment than others*, at least for the foreseeable future. At some point down the line, however, the range of "unacceptable occupations" will begin to shrink, giving way to new realities. Nationals in view of the anticipated job shortages will inevitably take some of these jobs. The dynamics of this stage have already been unfolding in some GCC countries.
- 3. **Medium-skill occupations** are likely to become the "contested area" between nationals and expatriates during the next 10-20 years. These include a wide range of occupations such as clerical jobs, accountants, cashiers, mail sorters and distributors, teachers, religious imams, sales supervisors, pharmacists, engineers, lawyers and paralegal assistants, business intermediaries, telephone operators, drivers of heavy machinery. Government support in the form of direct employment subsidies to

employers, training programs and small business loans,³⁹ among others, will ameliorate the wage differential factor. Moreover, shutting the government job gates will go a long way toward directing new entrants to the private sector. This category of skills will largely depend on long-term government policies to institute needed reforms in the labor market, economic policies, education system, investment promotion and private sector development. In the absence of these reforms, the inability of the economy to create jobs may fall more on nationals than on expatriates, thus, worsening the current unemployment situation. But if these reforms are introduced, *nationals would replace expatriates in large numbers, more so for Arabs than Asians*.

Projections of Arab Out-Migration: a Simplified Deterministic Model

This section attempts to determine the magnitude of the expected Arab labor outmigration. The projection period will be limited to only the next five years to avoid large margins of error beyond that. The model is deterministic due to the lack of data for estimating behavioral equations. The model simulates the situation in the GCC countries as a whole in 2000 and relies mostly on the facts and figures presented throughout the paper. The projection period is from 2003-2007. Because the model is deterministic, some coefficients are assumed based on previous studies and well-known stylized facts about the GCC region. The deterministic model that was developed for this purpose is described below:

1. Total employment consists of national and foreign workers.

$$E = E_n + E_f$$

2. Foreign workers are divided into three groups: Arabs, Asians and "others."

$$E_f = E_r + E_s + E_o$$

-

³⁹ The latest example is the Omani National Fund for the Development of Small Businesses, with initial capital of OR 2 million.

3. The total national wage bill is made up of wages earned by nationals and foreign workers, where the average wage rate for expatriates represents the weighted average of the three groups mentioned above, using employment as weights. Thus,

$$W = W_n * E_n + W_f * E_f$$

4. The wage bill of the foreign LF is estimated as follows:

$$W_f = W_r * E_r + W_s * E_s + W_o * E_o$$

- 5. Wages in the Gulf region rise quite gingerly over time. Consequently, it is assumed that they will increase uniformly and across ethnic groupings by only .5 percent annually, starting in 2000.
- 6. New entrants, T, in 2000 were estimated earlier at 210,000. They are projected to increase at a constant 3.15 percent annual rate. By 2003, they would have increased to 230,500 and to 261,000 by 2007. Over the period 2003-2007, it is estimated that 1.228 million new GCC nationals will enter the labor market.

$$T_t = T_t(t_{-1}) * (1.0315)$$
, and

 $\sum T_t$ = additional national labor force that entered the market from year t to k.

7. Existing unemployment (U_0) was previously estimated at about 500,000 in 2000. It will be targeted for total elimination during the next five years at an annual rate of 20 percent or by about 100,000 per year. This implies that in addition to the new entrants, the economy must generate about 100,000 additional jobs annually to absorb currently unemployed nationals (UR).

$$\Delta UR = a * U_0$$
 where $a = 0.20$

8. The annual growth in the demand for labor in the public sector (GE) is estimated to grow at a rate of 0.35 percent of the existing labor force, which reflects a marginal GDP growth of only 1.5 percent annually.

$$\Delta GE = b * GE_{(t-1)}$$
 where $b = 0.0035$

 $\sum GE_t$ = net increase in government size over the period t to k.

9. In addition to the new growth, the government experiences annual attrition (GAE) that is assumed at 2.6 percent of total government civilian jobs (GCE). Thus, part of the government demand for labor in year t is due to attrition and is dependent on the size of the civilian government in t-1.

$$\Delta GAE = 0.026 * GCE_{(t-1)}$$

10. The private sector's demand for labor (PE) will grow at 1 percent annually based on a projected growth rate of 5 percent in the private sector's GDP,

$$\Delta PE = c * PE_{(t-1)}$$
 where $c = 0.05$

11. Annual aggregate demand for labor is comprised of three sources: the growth in the government sector, the growth in the private sector and attrition in civilian government LF. Thus,

$$\Delta GE + \Delta PE + \Delta GAE = 0.0035 * GE_{(t-1)} + 0.01 * PE_{(t-1)} + 0.026 * GCE_{(t-1)}$$

12. Aggregate supply of national labor consists of two sources: new annual entrants and the planned annual gradual draw down of the stock of existing unemployment:

$$T_t + \Delta UR = 0.0315 * T_(t_{-1}) + 0.20 * U_0$$

13. The deficit in, or the surplus of, the national LF would be eliminated through changes in foreign LF. In the case of deficits, more expatriates will be imported. In the case of surpluses, replacements of expatriates will close the gap. This analysis is based on the assumption that, with very few exceptions, the demand for labor is met by nationals before expatriates are considered. Clearly, this assumption is not realistic since there will always be shortages of national LF in certain skills but it is made for the sake of expediency; it can be readily modified at a later stage. Withdrawing expatriates from the LF will address the anticipated surplus. Annual deficits are estimated as follows:

$$Dt = (T_t + \Delta UR) - (\Delta GE + \Delta PE + \Delta GAE)$$

14. In the absence of detailed analysis that will match qualifications of national entrants with new labor demand in order to assess how many Asians versus Arabs will be withdrawn, we assume that this process will be in line with the main thesis of this

paper. That is, Arabs will be replaced in larger proportions than their current relative weight in total foreign labor force. In other words, the Arab workers will be hit harder (55%) than their Asian counterparts (41%). Hence, displaced Arabs and Asians (out-migration) are estimated as follows:

$$D_r = 0.55 * D_t$$

$$D_s = 0.41 * D_t$$

$$D_0 = 0.04 * D_t$$

15. Loss of income of foreign workers (Arabs and Asians) as a result of displacement is

$$Y_f = D_r * w_r + D_s * w_s$$

16. Cost to the economy in terms of substituting the more expensive nationals for less expensive expatriates:

$$C_t = (w_n - w_r) * D_r + (w_n - w_s) * D_S$$

17. Loss of annual remittances to labor sending countries (RM t): It is estimated that Asians remit, on average, about 60-70 percent of their income while Arabs remit 40-50 percent. A large number of Asians work in low-skill jobs such as in household services or small to medium trade, agricultural, industrial and construction establishments where, typically, room and board are provided at no cost. Arabs, on the other hand, work in mostly medium to high-skill jobs where such benefits are not offered. Thus, lost remittances are estimated as follows:

RM
$$_{s,t}$$
 = 0.65 * w_s * D_s for displaced Asian workers

RM
$$_{r,t}$$
 = 0.45 * w_r * D_r for displaced Arab workers

RM
$$_t~$$
 = 0.65 * w_s * $D_s~$ + 0.45 * w_r * $D_r~$ for displaced Asian and Arab LF

The results, which are reported in Table 15, are summarized below:

1) There were 12.93 million persons employed in the GCC in 2000, about 8.94 million of whom were foreigners and about 4 millions were nationals.

- 2) Expatriates are divided into the following categories: Arabs, 3 million; Asians, 5.4 million; and the balance, 0.54 million, are other nationalities.
- 3) The national wage bill of all civilian employees amounted to \$124.7 billion in 2000, of which \$70.3 billion was earned by nationals; \$20.9 billion by Arabs, \$21.5 billion by Asians and \$12 billion by "others."
- 4) The average annual money wage of nationals in establishments with = > 10 workers is \$17,638. The comparable figures are \$6,083 for expatriates as a whole; \$22,400 for "others," \$6,880 for Arabs and \$4,000 for Asians.
- 5) Incremental supply of national work force increases from about 210,000 in 2000 to 230,000 in 2003, reaching 261,000 in 2007. If the planned 20 percent annual reductions in the current stock of unemployed nationals are added to the new entrants, the national LF would rise by 303,500 in 2003 and gradually increase to 261,000 in 2007. Cumulatively, the GCC economies must absorb about 1.73 million nationals during the 5-year period 2003-2007.
- 6) Demand projections fall short of the supply in that government jobs will increase by some 35,000 jobs, attrition will take up 270,000 and private sector development will generate 540,000 jobs, all of which add up to 845,000 jobs.
- 7) The expected deficit starts at 160,000 in 2003 and continues to rise to 190,000 in 2007. By the end of the five-year period, the deficit amounts to more than 882,000 persons.
- 8) In line with the model's assumptions and methodology, these individuals will replace expatriates on a one-to-one basis. It is estimated that of the 882,000, about 485,000 will be from among Arab workers and about 362,000 from the Asian community. This is in line with the main thesis presented in the paper.
- 9) Remittances in the form of foreign exchange will also drop by about \$2.6 billion. Of this, \$1.6 billion will be lost to Arab countries and the remaining \$1.0 billion will be lost to Asian countries. The annual losses range from \$0.5 billion in 2003 to \$0.55 billion in 2007.

Table 15: Projections of Arab and Asian Labor Displacement in the GCC, 2003-2007

•	T .	1		I		T	T	
	Unit	2000	2003	2004	2005	2006	2007	2003-07
Annual money wages								
Arab workers	USD	6,880	7,019	7,054	7,089	7,124	7,160	
Asian workers	USD	4,000	4,081	4,101	4,122	4,142	4,163	
Others	USD	22,400	22,851	22,966	23,080	23,196	23,312	
National LF	USD	17,638	17,994	18,084	18,174	18,265	18,356	
Labor Supply								
New entrants	(000)	210.0	230.5	237.8	245.3	253.1	261.1	1,227.9
Unemployment reductions	(000)	0.0	100.0	100.0	100.0	100.0	100.0	500.0
Total new jobs required	(000)	210.0	330.5	337.8	345.3	353.1	361.1	1,727.9
Labor Demand								
Government sector	(000)	7.11	7.18	7.20	7.23	7.26	7.28	36.15
Private sector	(000)	102.69	105.80	106.86	107.92	109.00	110.09	539.68
Govt. attrition replacements	(000)	52.96	53.52	53.71	53.90	54.09	54.28	269.49
Aggregate demand for labor	(000)	162.76	166.50	167.77	169.05	170.35	171.65	845.32
Surplus/(Deficit)								
Excess supply	(000)	47.24	164.04	170.06	176.29	182.75	189.44	882.59
Out-Migration	, , ,							
Arab workers		25,984	90,224	93,532	96,960	100,513	104,194	485,423
Asian workers		19,370	67,258	69,724	72,279	74,928	77,672	361,861
Total, incl. others		47,244	164,043	170,058	176,291	182,751	189,444	882,587
Employment								
Arab workers	(000)	3,014	2,862	2,769	2,672	2,571	2,467	(485)
Asian workers	(000)	5,345	5,232	5,162	5,090	5,015	4,937	(362)
Others	(000)	535	524	517	510	502	495	(35)
Total	(000)	8,893	8,618	8,448	8,271	8,089	7,899	(883)
Loss of Remittances								
Arab workers	\$ Million	80	285	297	309	322	336	1,549
Asian workers	\$ Million	50	178	186	194	202	210	1,020
Total	\$ Million	131	463	483	503	524	546	2,569
Loss of Income								
Arab workers	\$ Million	179	633	660	687	716	746	3,621.25
Asian workers	\$ Million	77	274	286	298	310	323	1,569.46
Total	\$ Million	256	908	946	985	1,026	1,069	5,190.71
Economic Loss								
Arab workers	\$ Million	280	990	1,032	1,075	1,120	1,167	5,383
Asian workers	\$ Million	264	936	975	1,016	1,058	1,102	5,087
Total	\$ Million	546	1,797	1,818	1,835	1,848	1,856	10,470

- 10) The loss in income that results from foreign labor displacement, as shown in Table 15, adds up to \$5.2 billion over the projected period.
- 11) The economic cost arising from replacing less expensive foreign labor with more expensive nationals amounts to \$10.5 billion, rising from \$1.8 billion in 2003 to about \$1.9 billion in 2007.
- 12) Finally, if Saudi Arabia is a representative country of the other five GCC nations and if all followed the same strategy and adopted the same remedies, and based on the relative weight of the Saudi economy in the overall GCC labor market, expected displacement will total more than 1.1 million workers; loss of remittances, SR 12 billion; loss of income, SR 23.5 billion and the economic loss will reach approximately SR 50 billion.

VI. Concluding Remarks

The massive inflows of foreign workers to the GCC region have dwindled down to a trickle and there are signs of reversals in both population and manpower migration. Currently, there are about 500,000 GCC nationals who are unemployed while millions of foreign workers are meaningfully employed throughout the region. More are expected to enter the market each year, estimated at about 210,000 in 2002 and rising to 261,000 in 2007. Government expansion, which proceeded at impressive rates during the 1970s and 1980s, has come to a halt. Fiscal exigencies have made it, and will continue to make it, difficult to hire more nationals except when replacing retirees or adding a few more each year. Economic projections clearly indicate that growth, which still relies on oil revenue, will continue to be anemic. Weak economic performance implies an inability to sufficiently create new jobs each year that will accommodate all new entrants, not to mention finding jobs outside the public sector for those who are currently unemployed. Cognizant of these structural changes in the past, public labor employment policies tended to favor short-term remedies for what is basically a long-term problem. Restrictions, bans, fees and incentives have been instituted and so have government job creation programs. This package, though sub-optimal from an allocative efficiency viewpoint, has been effective in some GCC states that put some teeth to their policies.

Consequently, the ratio of nationals in total employment is rising, most notably in Bahrain, Oman and Saudi Arabia.

Nationals that enter the labor market do exhibit higher levels of education and females are generally more educated than males. Higher education levels always lead to higher labor productivity and, hence, to higher growth rates. In fact, research shows that a one year increase in education levels generates a 10 percent growth in GDP, provided that the labor market is free, educational choices match market needs, there is an absence of market segmentation and presence of investment projects to stimulate the demand for labor. In the Gulf, the oil baby boom of the mid-1970s has already started to reflect itself in larger inflows of nationals into the labor market. The quality of education, however, seems to have produced skill mismatches between national graduates and private sector needs. Other barriers also exerted a negative impact on labor market dynamics. National entrants are disadvantaged by their high reservation wages and lack of relevant experience and basic skills. There is sufficient evidence to support the hypothesis that GCC employers in the private, as well as the public sector, hire expatriates to complement the skills of nationals rather than to compete with them.

Among expatriates, there has been a discernible substitution of Arabs with Asian workers. Asians command lower wages, work longer hours and are perceived by employers as more technically-skilled and more compliant than their Arab counterparts. The Arab/Asian replacement phenomenon was supported by the import substitution strategy that was biased toward low value-added activities and also by factor price distortions, which artificially lowered Asian wages in particular. More specifically, employers tended to substitute high-skilled Arab workers with low-skilled Asians, culminating in a disproportionate increase in the number of expatriates. Available evidence shows that this strategy led to a 50 percent reduction in labor productivity. This trend has accentuated existing skill distinctions between Arab and Asian workers in general. Empirically, Arabs typically constitute a higher percentage of the top three high-skill categories (in a 7-way classification), while Asians typically constitute a higher percentage of the bottom three low-skill categories.

The combination of marginal growth, more national entrants, open unemployment, chronic government budget deficits and 'unfair' competitive environments between nationals and expatriates in the private labor market will inevitably result in the lay off expatriate workers to make room for nationals. Having set the trend, the relevant question now is which group is likely to be hit harder: Asians or Arabs? Given that Arabs and nationals are more congruent than nationals and Asians, we suggest that Arabs will be the group most affected. This will be particularly felt not by low skilled laborers but by high and medium-skilled workers, notably on medium skilled jobs. Our estimates indicate that during the next five years, GCC economies must accommodate 1.7 million nationals (new entrants and current unemployment). Growth and attritions will generate only 845,300 jobs. The remaining balance will have to be filled by replacements: we estimate that 485,400 Arabs will be replaced versus 361,900 Asians.

Of the four scenarios outlined in the paper, the future, as presented by the stylized facts mentioned above, resembles scenario 3, which predicts slow Arab out-migration. The repercussions of such an event are multifaceted. First, the return of these workers to their homeland will deprive their economies of foregone remittances: the loss to the Arab countries will amount to \$1.55 billion and \$1.02 billion to Asian countries, totaling 2.56 billion over the period 2003-2007. Second, the foregone income as a result of out-migration is estimated at \$3.6 billion from Arab workers and \$1.6 billion from Asians, totaling \$5.2 billion. Third, substituting low-wage expatriates with high-wage nationals will be costly. Assuming zero productivity trade offs, employers will pay some \$5.4 billion in the case of replaced Arabs and an additional \$5.1 billion in the case of replaced Asian workers, the sum of which exceeds \$10.5 billion.

Finally, unless major strides are made to invigorate economic growth, introduce major macroeconomic and labor market reforms, enhance labor productivity through upgrading national manpower and eliminate the distortion caused by government employment policies, neighboring Arab countries are well-advised to anticipate fewer remittances, more workers returning home and perhaps increasing unemployment rates.

Annex

Table A1

Growth in GCC Civil Service Employment Since the Early Seventies

	Bahrain					Kuwait				Oman			
	1966	1975	1985	1994	1966	1976	1989	1996	1970	1980	1990	1994	
Employees (000) % of nationals	8.0	14.1	25.0	30.0 86%	51.9 48%	116.5 40%	272.9 42%	258.1 63%	1.8 93%	38.8 60%	80.5 63%		
Growth rate 1 Growth rate 2 Growth rate 3 Growth rate 4	6.5%	5.9%	2.1%	4.8%	8.4%	8.9%	-0.4%	5.5%	36.3%	7.6%	5.9%	18.4%	
Wages & salaries % of tot spending % of oil revenue	na na	22% 19%	42% 55%	48% 110%	na na	25% na	28% 43%	28% 47%	na na	13%	22%	22% 34%	
	Qatar				Saudi Arabia					Unite	d Arab Em	irates	
	1971	1974	1985	1994	1975	1980	1988	1994	1999	1974	1980	1990	
Employees (000) % of nationals	6.2 23%	10.319 64%	32.832 43%	46.86 46%	60.945 na	244.613 na	386.701 na	313.552 na	918.5 81.8	12.072 46%	172.904 na	256.653 na	
Growth rate 1 Growth rate 2 Growth rate 3 Growth rate 4	18.5%	11.1%	4.0%	9.2%	32.0%	5.9%	-3.4%	9.0%		55.8%	4.0%	21.1%	
Wages & salaries % of tot spending % of revenue	na na	na na	18% 20%	19% 24%	29% 12%	na na	39% 70%	35% 53%	12.0% 52.30% 44.20%	na na	na na	33% 36%	

Notes: Growth rate 1:annual cumulative rate between first year and second; Rate 2 for the following period;

Rate 3 for the next period and Rate 4 &5 cover the entire period from the intial year to the terminal year.

Wages and salaries are those of govt. employees, excluding SOCs. Total spending includes both

recurrent spending as well as investment spending.

Sources: Maurice Girgis, 1999, Labor Market Reforms in the GCC, MDF 3, Cairo.

Table A2: Number of Government Employees in Relation to Population (per 100)

	Bahrain			Kuwait		Oman			
1975	1985	1994	1976	1989	1996	1970	1980	1994	
5.1	5.8	5.3	10.6	13.0	13.6	0.3	3.9	5.6	
	Qatar		Sa	udi Arabia		UAE			
1974	1985	1994	1975	1988	1994	1974	1980	1990	
6.4	9.2	9.6	0.8	3.0	1.8	2.4	17.0	16.2	

US	UK	Norway	France	Germany	Japan	Sweden	Denmark	Average*
1988	1988	1988	1988	1988	1988	1988	1988	1988
6.8	9.6	12.9	7.0	6.9	3.1	16.4	15.4	8.5

Egypt	India	Indonesia	Philippines	Thailand	Chile	Mexico	Peru	Average**
1985	1985	1985	1985	1985	1985	1985	1985	1985
7.2	1.5	1.8	3.4	3.4	1.8	2.4	3.1	4.1

Note: *) For a total of 19 OECD countries. **) For 18 developing countries. Sources: Girgis, Maurice (1999), Labor Market Reforms in the GCC, MDF 3 meeting, Cairo.

Table A3: Estimated Total Labor Productivity, 1975-1993 (1975 = 100)*

1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
100.0	101.4	101.1	116.3	112.2	108.6	113.8	101.4	81.6	69.9
1985	1986	1987	1988	1989	1990	1991	1992	199	93
59.0	57.0	58.2	52.6	51.8	45.4	46.2	49.2	49.9	

Notes: *) Real GDP in 1980 US\$ per employee.

Sources: Girgis, Maurice (1999), Labor Market Reforms in the GCC, MDF 3 meeting, Cairo.