10MC - Lib. 1/1/249

# LABOR MARKETS AND PEACE: THE CASE OF JORDAN

Nemat Shafik

**Working Paper 9416** 

This report is presented as received by IDRC from project recipient(s). It has not been subjected to peer review or other review processes.

This work is used with the permission of Economic Research Forum.

© 1994, Economic Research Forum.

ARCHIV 330.001.5(5-011 E4 WP 9416

Please address correspondence to: Nemat Shafik, Senior Economist, Middle East and North Africa Region, The World Bank, 1818 H Street, N.W., Washington D.C. 20433, U.SA. Fax: (202) 477 0810.

# LABOR MARKETS AND PEACE: THE CASE OF JORDAN \*

# Nemat Shafik

Middle East and North Africa Region The World Bank

November 1994

<sup>\*</sup> This paper was presented at a symposium sponsored by the Centre d'Etudes et de Documentation Economique, Juridique et Sociale on "The Middle Eastern Economy in a Prospect of Peace" in Strasbourg, France from June 29-30, 1994. Comments from John Page and from participants at the symposium are gratefully acknowledged. The views expressed here are those of the author and not necessarily those of the World Bank.

### **Abstract**

This paper analyzes the impact of the peace process on Jordanian labor markets in light of the lessons from past shocks, such as the oil boom and the Gulf war. Scenario results indicate that the impact on unemployment and output in Jordan depends on the numbers that choose to return to the West Bank and Gaza and the extent to which Jordanians and returnees are substitutes. Gradualism is in the interest of all parties -- sudden disruptions to the supply of labor would result in serious adjustment costs and output losses for Jordan while absorptive capacity for migrants will be initially limited in the West Bank and Gaza

## ملخص

تقوم هذة الورقة بتحليل آثار عملية السلام على سوق العمل فى الاردن فى ضوءالدروس المستفادة من الصدمات الماضية، مثل الطفرة النفطية وحرب الخليج . واظهرت نتائج الاحتمالات المختلفة ان التاثير على عدم التشغيل والانتاج في الاردن يعتمد على عدد العاملين الذين قرروا العودة الى الضفة الغربية وغزة ، والى اى حد يمكن للاردنيين الاحلال محل العائدين .ويعتبر التدريج فى صالح جميع الاطراف. وسيؤدى الاضطراب المفاجئ فى عرض العمل الى تكاليف عالية لاعادة الترتيب ، بالاضافة الى انخفاض الانتاج فى الاردن ، بينما الطاقة الاستعابية للمهاجرين مبدئيا ستكون محدودة فى كل من الضفة الغربية وغزة .

# **Table of Contents**

																Page								
Labor Markets and Peace: The Cas	e of	Jo	rda	n	• •			· •									•		•			 	, <b>.</b>	1
Jordan's Labor Force Labor Exports and Imports			• •	•••	• •			•			•	•			• •			· •			•	 •		2 2
The Possible Impact of Peace  Determinants of Migration  Wage Differentials  Skills Demanded  The Labor Supply Response		• •	• •			 			• • • •		•		•	•	 					· •		  	. 1	7 9 1
Labor Market Scenarios				• •				•			•		•					•				 	1	3
Policy Options For Jordan			•																			 	1	7

#### LABOR MARKETS AND PEACE: THE CASE OF JORDAN

Although the Jordanian economy has experienced numerous shocks in recent years, the impact of peace in the Middle East is likely to have more complex effects on the functioning of domestic labor markets than previous changes in the external environment. The impact of positive shocks, such as the oil price increases of the 1970s, was fairly predictable with higher levels of migration, inflows of remittances, and a domestic boom, particularly in nontradable sectors. Negative shocks such as the Gulf war have resulted in the return of Jordanian migrant labor and, at least temporarily, higher levels of domestic unemployment. The impact of peace is likely to be a shock of a different character — with elements of a positive shock associated with the inflow of capital and emergence of employment opportunities in the West Bank and Gaza, but raising the possibility of permanent resettlement of parts of the Jordanian labor force of Palestinian origin.

There are many uncertainties that complicate an analysis of the impact of peace on Jordan's labor market, particularly with respect to the details of the agreements between the Palestinians and the Israelis and the policy response of the Jordanian Government to these agreements. The analysis that follows starts with a brief description of the Jordanian labor market, identifies elements of the population most likely to be directly affected by the peace agreement, and then analyzes the possible effects of peace for labor supply and demand in Jordan. Illustrative scenarios of the impact of labor force movements for output and employment in Jordan are then presented and the final section explores the policy options.

#### JORDAN'S LABOR FORCE

Only 22 percent of Jordan's population of 4 million participate in the labor force, reflecting the age structure of the population and the low participation of women (14 percent). Almost half of Jordanians work in the government sector and the terms of public sector employment play an important role in wage determination in the economy. The labor force is educated and skilled with almost universal basic education. Thirty-four percent of men and 28 percent of women complete secondary school and 17 percent of men and 13 percent of women complete post-secondary education (Tables 1 and 2).

# **Labor Exports and Imports**

Jordan is one of the few countries in the world that is both a major exporter and importer of labor (Table 3). About one-third of the workforce is employed outside Jordan, largely in skilled occupations. Half of those employed abroad were production and unclassified workers, one-quarter had less than secondary education and one-half had secondary school certificates<sup>1</sup>. Eighty-five percent of those working abroad were employed in Saudi Arabia and Kuwait before the Gulf war in August 1990. While the number of Jordanians in Kuwait has fallen dramatically since the Gulf war, the vast majority of migrant workers from Jordan are still employed in the Gulf region.

<sup>1/</sup> El-Khasawneh, S. (1992), "Labor Migration in Jordan - Policies, Flows, Organization," UNDP/ILO Seminar on Migration Policies in Arab Labor-Sending Countries.

Table 1: Distribution of the Jordanian Labor Force by Educational Status in 1991 (%)							
Educational Status	<u>Men</u>	Women					
Unclassified	0.1	0.2					
Illiterate	6.8	22.0					
Literate	11.4	10.1					
Elementary	17.8	15.3					
Preparatory	28.1	24.7					
Vocational Training	1.7	0.4					

College Diploma 7.6 9.1
University Degree 7.8 3.1
Higher Education 1.1 0.2

17.6

14.9

Secondary

Source: Department of Statistics (1991), "Survey of Employment, Unemployment, Returnees and Poverty," Amman, Jordan.

Table 2: Distribution of the Jordanian Lal Force by Primary Occupation in 1991 (%	
Primary Occupation	<u>%</u>
Manager	2.2
Specialist	42.2
Technician	12.2
Clerical	14.6
Skilled Service Workers	8.5
Skilled Agricultural Workers	4.0
Skilled Retail Workers	6.5
Machine Operators and Maintenance Workers	0.5
Unskilled	8.1
Unclassified	1.0
Source: Department of Statistics (1991), "Survey of Employment, Unemployment, Returnees and Poverty Jordan	

Table 3: Number of Immigrant Workers and Jordanian Workers Abroad, 1985-1992							
Year	Work Permits	Immigrant Workers	Jordanians Abroad				
		(estimate)					
1985	101484	143000	280200				
1986	97885	130000	343300				
1987	79761	120000	339000				
1988	63050	148000	n.a.				
1989	47632	200000	n.a.				
1990	37626	200000-250000	n.a.				
1991	30069	200000-250000	n.a.				
1992	89912	200000-250000	n.a.				
Source: Wor	ld Bank, Jordan: Count	ry Economic Memorand	um, December 1993.				

Jordan also imports unskilled or semi-skilled labor primarily from Egypt and Syria<sup>2</sup>. The number of guest workers has remained at about 200,000-250,000 since 1989. These migrant workers are employed primarily in agriculture (40 percent) and, to a lesser extent, in social services (26 percent) and construction (9 percent). While there have been attempts to reduce the dependence on foreign workers in Jordan, they have not been successful because Jordan's unemployed, who are largely skilled and often college-educated, are unlikely substitutes for low-skilled guest workers.

El-Khasawneh (1992) estimates that 58 percent of guest workers are Egyptians, 15 percent other Arabs, 26 percent Asians, and 1 percent Europeans in 1989. Because these estimates are based on work permits, they may understate the proportion of Arabs from neighboring countries (El-Khasawaneh, S. (1992), "Labor Migration in Jordan - Policies Flows, Organization," UNDP/ILO Seminar on Migration Policies in Arab Labor-Sending Countries). In 1993, the Government estimated that there were 120,000 guest workers in Jordan 70,000 of whom had official work permits. Unofficial estimates are the number of guest workers may be as high as twice the official number.

# Unemployment

Unemployment in Jordan peaked at 18.8 percent in 1991 in the wake of the Gulf war, but has since fallen to 13 percent at the end of 1993. The causes of unemployment in Jordan are both external and internal. The external causes relate to the Gulf war, the recession in the Gulf countries and consequent fall in demand for Jordanian workers, and falling Arab aid for Jordan. The 250,000-300,000 individuals (of which 60,000-70,000 were workers) who returned to Jordan from the Gulf, many of whom brought capital and substantial skills and experience, were gradually absorbed into the labor force, albeit at lower wages than those they had been previously earning. A survey of returnees found that while 48 percent of Gulf returnees' last annual income in the Gulf was between JD5000-JD15,000, only 7.3 percent of returnees maintained their income at these levels in Jordan.<sup>3</sup>

The internal causes of unemployment are the rapid rate of population growth (2.8 percent), the lack of appropriate skills of new entrants in the labor force, inflexibility in wage-setting and the capital-intensity of production. The most recent survey results indicate that the typical unemployed individual in Jordan is a single male between the ages of 20-29 with a general diploma from a community college who is entering the labor force for the first time

<sup>3/</sup> H. Ahmed and M. Williams (1993), "Consequences of Displacement After the Gulf Crisis: A Study of the Responses of 207 Displaced Palestinian and Jordanian Workers," <u>Digest of Middle East Studies</u>, winter. For more details on the Gulf returnees, see N. van Hear (1992), "Consequences of the Forced Mass Repatriation of Migrant Communities: Recent Cases from West Africa and the Middle East," Discussion Paper 38, United Nations Research Institute for Social Development, November; N. van Hear (1992), "Mass Flight in the Middle East: Involuntary Migration and the Gulf Conflict," in R. Black and V. Robinson, editors, <u>Geography and Refugees: Patterns and Processes of Change</u>, London: Belhaven; and United Nation's Economic and Social Commission for West Asia (1992), "The Return of Jordanian/Palestinian Nationals from Kuwait: Economic and Social Implications for Jordan," mimeograph; National Center for Educational Research and Development (1991), "The Socio-Economic Characteristics of Jordanian Returnees," Amman, Jordan, July.

and is supported by his family.<sup>4</sup> Whether the presence of foreign workers is a major cause of unemployment in Jordan has been much debated. With the bulk of guest workers in the agricultural sector and the majority of the unemployed with post-secondary education, the scope for substitution seems limited. Nevertheless there may be some possibilities for Jordan workers to replace guest workers in areas such as services.

#### THE POSSIBLE IMPACT OF PEACE

Peace in the region is likely to be associated with the normalization of borders between the West Bank and Gaza and Jordan and substantial investment in the West Bank and Gaza. This increase in labor demand is likely to increase further the substantial wage differentials between the West Bank and Gaza and Jordan and create strong economic incentives to migrate in the medium term. While economic incentives will be only one, although important, determinant of labor movements, peace is likely to generate a reduction in the supply of labor in Jordan over the medium term.

<sup>4/</sup> Of the total unemployed, the following are the predominant characteristics: single (60 percent), male (58 percent), age 20-29 years (68 percent), community college degree/lower diploma (33 percent), no specialization (53 percent) or social sciences or humanities (33 percent), been unemployed for more than one year (53 percent), new entrants to the labor market (54 percent), supported by their families (74 percent). Based on survey results presented in Amerah, M. M. Khasawneh, N. Nabhani and F. Sadeq (1993), <u>Unemployment in Jordan:</u> <u>Dimensions and Prospects</u>, Center for International Studies, Royal Scientific Society, Amman, Jordan.

## **Determinants of Migration**

Migration decisions must take into account a variety of economic, political and social variables. Expected earnings, based on individual wages, the cost of living and unemployment rates in different labor markets, continue to be major determinants of migration decisions. However, it is necessary to take into account that migrant's decisions are also contingent on factors such as household welfare maximization and life cycle considerations. In the case of international labor migration, which is typical of the Middle East, additional variables, such as the higher transaction costs of international mobility and the regulations governing guest workers in both labor sending and labor receiving countries must also be assessed.

There are likely to be three stages of labor migration from Jordan to the West Bank and Gaza. The first stage will be the "pioneers", including officials of the PLO, whose numbers are likely to be small in the initial period because of rationing. The second phase will depend to a large extent on "push" factors that result from policies of countries hosting Palestinian refugees. In the case of Jordan, the number of returnees will depend very much on the Government's policy vis a vis those residing in Jordan with temporary status.

Secondments of personnel from the Jordanian government to the new Palestinian state as well as commuting may also be important in this second stage. The third stage will be dominated by "pull" factors as the economy in the West Bank and Gaza begins to recover, creating new opportunities for returnees, and as the quality of infrastructure and services improve. There are also a large number of individual characteristics that will determine whether people will have a high propensity to resettle. Those with close family ties in the West Bank and Gaza

and those who own property are more likely to return. Those with weak ties in Jordan -- such as temporary legal status, a lack of work and limited assets -- are also more likely to resettle.

In addition to the local market, Jordanian workers face opportunities in two important external markets: (1) the Gulf labor market which had been absorbing between 3000-5000 new entrants from Jordan per year, and (2) an additional new market with the possible opening of the West Bank and Gaza market for Jordanians of Palestinian descent. However, access to both these external markets is highly rationed and the rules governing the entrance of Jordanian workers will be critical for future labor market developments. Conditions in the Gulf market are likely to remain stable and possibly weaken further with the recent falls in the price of oil. However, improved relations with Kuwait could result in a small recovery in migration levels from the current low level.

The most rapidly growing market for Jordanian labor is likely to be in the West Bank and Gaza. The influx of investment, particularly public capital to build needed infrastructure in the West Bank and Gaza, is likely to spur a sharp increase in the demand for labor, particularly in nontradables sectors such as construction and services. Much of this demand will be met by local labor, about 7 percent of which is unemployed, particularly in the initial years.<sup>5</sup> Nevertheless, demand is likely to exceed local supply in the medium term and that supply could be augmented by returnees. The ultimate size of the increase in demand for

It is important to note that there are significant definitional problems in measuring unemployment in the West Bank and Gaza associated with the prevalence of daily labor and the high turnover of workers. The most recent survey conducted in 1992 reports an unemployment rate of 7 percent for the West Bank and Gaza, 12 percent for Gaza, and 3 percent for West Bank. Heiberg, M. and G. Ovensen (1993), Palestinian Society in Gaza, West Bank, and Arab Jerusalem: A Survey of Living Conditions, FAFO report 151, Oslo, Norway. This seems fairly low, especially in periods when access to the Israeli labor market is restricted.

Jordanian labor will depend on the expected returns to labor migration and the rationing of returnees. The size and skill composition of the labor demand shock will also determine the degree to which there is upward pressure on wages in Jordan.

#### Wage Differentials

Wage differentials in the markets for Jordanian labor reveal a clear ranking of expected returns -- wages less costs -- with the highest returns in the Gulf labor market followed by the West Bank and Gaza, and then by the local Jordanian market. Average monthly wages in Jordan are about \$150, while those in the West Bank and Gaza (which are affected by the higher wages in the neighboring Israeli market where many West Bank and Gaza residents work for close to the minimum wage) are about \$300-400 per month.<sup>6</sup> A survey of Jordanians that had worked in the Gulf found median wages were between \$600-\$1200 per month.<sup>7</sup> The very high wage levels in the Gulf labor market are likely to mean that it will continue to be attractive for Jordanian workers, but weak demand will remain the binding constraint.

Wages of West Bank and Gaza residents working in Israel are about \$450 per month, which is near the Israeli minimum wage. Although wages in Israel are higher for Palestinian workers than those in the West Bank and Gaza, the differences can be accounted for mainly by transport costs and taxes. The long run trend has been convergence of net earnings between Palestinians working in the West Bank and Gaza and those working in the Israeli economy. Nevertheless, compared to Israeli workers in the same occupation and at similar skill levels, there is clear negative premium of about 20 percent for Palestinian labor in the Israeli market (Kleinman, E. (1992), "The Flow of Labor Services from the West Bank and Gaza," Working Paper 260, Hebrew University). Because wages in Israel exceed wages in the West Bank and Gaza, there has been excess supply of Palestinian labor at these higher wage levels and consequent rationing with employment in the West Bank and Gaza as the residual.

<sup>7/</sup> H. Ahmed and M. Williams (1993), "Consequences of Displacement after the Gulf Crisis: A Study of the Responses of 207 Displaced Palestinian and Jordanian Workers," <u>Digest of Middle East Studies</u>, winter.

The wage differentials between Jordan and the West Bank and Gaza are significant enough to generate labor migration, but the net impact must be assessed in light of the higher cost of living in the West Bank and Gaza, the unemployment rate, and the likely restrictions on mobility. Unemployment in Jordan, which stood at 13 percent of the labor force at the end of 1993, is above that in the West Bank and Gaza when there is secure access to the Israeli labor market. Although the construction boom associated with international aid flows is likely to create jobs in the West Bank and Gaza, the reduction in local unemployment will take some time, especially since reducing the dependance of about 70,000 Palestinian workers on the Israeli labor market will be a political priority. Nevertheless, one would expect strong economic incentives for labor to move to the West Bank and Gaza in the medium term once economic activity recovers and uncertainty is reduced.

It is also necessary to take differences in the cost of living in the Gulf, the West Bank and Gaza, and Jordan into account when assessing the expected returns to labor mobility. Comparative household expenditure data are not available. However, revealed preferences of migrant workers indicate that the higher wages more than offset the higher cost of living in the case of the Gulf. The differences in costs of living between the West Bank and Gaza and Jordan are more difficult to assess. It is widely believed that the costs of most goods and services is higher in the West Bank and Gaza (again, a reflection of the high degree of openness to Israeli prices) and that the quality of infrastructure and the level of social services is higher in Jordan. However, the empirical evidence is weak and contradictory. If there are large differences in the cost of living between the West Bank and Gaza and Jordan,

commuting (thereby earning West Bank and Gaza wages but incurring Jordanian living costs) could become an attractive alternative if border procedures facilitate labor mobility.

#### Skills Demanded

Investments in the West Bank and Gaza brought about by peace are likely to generate significant demand for large numbers of construction workers and selected categories of professionals such as engineers, managers and civil servants. Jordan, which imports construction workers, will not benefit from the immediate increase in demand for such workers brought by the expected building boom in the West Bank and Gaza. A significant portion of professionals are likely to come from the residents of the West Bank and Gaza, many of whom are unemployed or underpaid. However, Jordanian workers with specialized skills that are lacking in the West Bank and Gaza are also likely to be demanded. This is likely to generate higher wages for workers with those skills in the Jordanian labor market.

Another determinant of labor demand in the West Bank and Gaza is the relationship between skills and wages. Although average wages in the West Bank and Gaza are higher than those in Jordan, this may not be the case for professionals. Higher wages accrue to Palestinians who work in sectors demanded by the Israeli economy, such as construction and agriculture. Palestinian professionals are rarely employed in Israel, where they experience wage discrimination, thereby resulting in very low returns to education and training for residents of the West Bank and Gaza. Skilled professionals (who constitute the bulk of the unemployed in Jordan and are the most likely migrants) may find that job opportunities are

<sup>8/</sup> Angrist, J. (1992), "Wages and Employment in the West Bank and the Gaza Strip, 1981-1990," The Maurice Falk Institute for Economic Research in Israel, Discussion Paper number 92/02.

more attractive in Jordan in the near term. This anomaly of the labor market is likely to diminish as opportunities for skilled professionals expand in the West Bank and Gaza.

# The Labor Supply Response

The possible movement of labor from Jordan to the West Bank and Gaza will be unlike migration elsewhere in the region because the majority of migrants will be refugees returning for permanent settlement with their families. Therefore the standard model of labor migration which focuses on expected returns to labor mobility must be adjusted to take into account the special features of labor movements that might result from peace. For Jordan, movement of labor toward the West Bank and Gaza would be equivalent to a reduction in the supply of labor which would result in upward pressure on wages, particularly in those occupations where there is short supply and considerable demand in the West Bank and Gaza.

In the near term, the most binding constraint to labor mobility will be the agreement between the PLO and the Israeli government on the number of Palestinians who will be permitted to return to the West Bank and Gaza. The Declaration of Principles signed by the PLO and the Israeli government refers to the right to return of persons displaced by the 1967 Israeli occupation of the West Bank and Gaza. While all Palestinians displaced by the 1967 war will have the right to return, there are likely to be restrictions on how many will be able to exercise that right at any one time.

The potential population of returnees is concentrated in Jordan, Syria, and Lebanon. About 300,000 residents of Jordan are Palestinians displaced by the 1967 war. With population growth and the additional 121,000 people who left the West Bank and Gaza

between 1967-84, the total number of potential returnees in Jordan is about 800,000. Those displaced from the West Bank were given Jordanian nationality since the West Bank had been under Jordanian rule. Those from Gaza received temporary Jordanian papers since Gaza was formerly Egyptian territory. After 1984, Palestinians were given "green cards" which only entitled them to temporary residency in Jordan. Two categories -- those from Gaza with temporary papers and those who came to Jordan after 1984 and received "green cards" (many as students) -- will have no legal basis for remaining in Jordan once a Palestinian homeland exists. Jordan's policy vis a vis these individuals with temporary status will have an important impact on the number of returnees.

#### LABOR MARKET SCENARIOS

To illustrate the possible impact of peace, four scenarios of labor movements up to the year 2000 are presented in Table 3. The scenarios reflect the impact of returnees on unemployment and output in Jordan depending on the number of returnees and the extent to which Jordanians and returnees are substitutes. These scenarios are not predictive and only serve to show some of the consequences for the Jordanian economy of labor mobility caused by peace. The scenarios are predicated on two different assumptions about the substitutability of returnees and Jordanian laborers. The column labeled "unemployment" assumes that unemployed Jordanians are perfect substitutes for returnees, thus increased numbers returning

<sup>2/</sup> The PLO is registering these individuals in hopes of placing them in jobs in the West Bank and Gaza as soon as possible.

to the West Bank and Gaza results directly in lower unemployment in Jordan. This can be considered the upside case for Jordanian labor markets. The column labeled "output" is the downside case, reflecting the assumption of no substitutability between Jordanian unemployed and returnees. Under that assumption, higher levels of returnees result in lower output for Jordan with no offsetting reductions in unemployment. Therefore, depending on assumptions about the substitutability of Jordanians and returnees, the final columns of Table 4 define the outer bounds, both favorable and unfavorable, of the impact on Jordan's economy.

The first "no impact" scenario assumes that there is no movement of labor, either because of regulatory restrictions or lack of incentives and/or infrastructure to support returnees in the West Bank and Gaza. This scenario has no additional implications for the Jordanian economy — output and unemployment remain at predicted levels. The second scenario posits that 25 percent of potential returnees migrate to the West Bank and Gaza by the year 2000, implying a total population movement of 200,000 people. Assuming that the rate of unemployment of returnees is similar to that in the Jordanian economy and there is no substitutability, this loss of human capital will imply lost output for Jordan of about 1 percent of GDP annually. The size of the labor supply shock will be muted by the degree to which the unemployed in Jordan or guest workers are close substitutes for the returnees that leave vacancies behind in Jordan. Perfect substitutability would result in a fall in Jordan's unemployment rate from 13 percent at the end of 1993 to 9 percent in 2000. The third and fourth scenarios explore more extreme versions of this case — with 50 percent (400,000 people) and 75 percent (600,000 people) of potential migrants returning to the West Bank and Gaza over the period. The implications for output are substantially larger — with 1-2 percent

of GDP lost annually in the third scenario and 2-3 percent in the fourth under the assumption of no substitutability. Assuming that the Jordanian unemployed can substitute for the returnees, unemployment is virtually eliminated in the scenario where 75 percent of potential returnees move to the West Bank and Gaza.

The scenarios in Table 4 indicate that the impact on Jordanian labor markets depend critically on two factors — the number of returnees and the degree to which returnees' jobs can be filled by Jordanians. In the most favorable case, unemployment in Jordan could fall to negligible levels. In the most unfavorable case, Jordan could experience output losses on the order of 1-3% annually by the year 2000. But clearly, these scenarios do not capture the whole story, such as the dynamic gains from peace that may result from higher investment and trade opportunities in the region. These are likely to expand employment opportunities for Jordanian workers, contribute to productivity gains and to higher growth. Moreover, output losses associated with resettlement may be offset by remittance flows if returnees maintain economic and social links to Jordan. The assumption that the Jordanian unemployed can substitute for workers that migrate is not likely to be valid in all cases. As a consequence, there may be considerable upward pressure on wages in certain skill categories. The scenarios also do not include the adjustment costs (both economic and social) associated with labor mobility and the displacement of employed workers.

Year	Returns to OT	of which Labor	Returnees as % of labor Force	Unemployment (Perfect Substitution)	Output Loss as % of GDP (No Substitutio
			SCENARIO 1		
1995	0	0	0.00	0.13	0
1966	0	0	0.00	0.13	0
1997	0	0	0.00	0.13	0
1998	0	0	0.00	0.13	0
1999	0	0	0.00	0.13	0
2000	0	0	0.00	0.13	0
			SCENARIO 2		
1995	15000	3300	0.00	0.13	0.00
1996	25000	5500	0.01	0.12	0.01
1997	25000	5500	0.01	0.12	0.01
1998	35000	7700	0.01	0.11	0.01
1999	50000	11000	0.01	0.10	0.01
2000	50000	11000	0.01	0.09	0.01
			SCENARIO 3		
1995	25000	5500	0.01	0.13	0.01
1996	35000	7700	0.01	0.12	0.01
1997	50000	11000	0.01	0.11	0.01
1998	75000	16500	0.02	0.09	0.02
1999	95000	20900	0.02	0.07	0.02
2000	120000	26400	0.03	0.04	0.02
			SCENARIO 4		
1995	50000	11000	0.01	0.13	0.01
1996	75000	16500	0.02	0.11	0.02
1997	90000	19800	0.02	0.09	0.02
1998	105000	23100	0.02	0.06	0.02
1999	130000	28600	0.03	0.03	0.03
2000	150000	23000	0.03	0.00	0.03

# Assumptions:

- Labor productivity is constant.
  GDP grows at 5% from 1995-2000
  Output loss is adjusted assuming that unemployment of returnees is same as rest of labor force.

#### POLICY OPTIONS FOR JORDAN

Unlike the resettlement of refugees in other parts of the world, Jordan faces the potential return to the West Bank and Gaza of a fairly large proportion of its population, much of which has become well-integrated into the local labor market. What is the best strategy for Jordan to take advantage of the opportunities presented by peace while reducing the risks and costs? Although the impact on Jordanian labor markets depends to some extent on decisions taken elsewhere (such as the quota on returnees agreed between the Palestinians and the Israelis), many factors that determine the level of mobility will depend on policies adopted by Jordan. For example, the treatment of those with temporary status in Jordan and the rules governing dual citizenship will influence locational decisions, especially in the initial period.

Because of the array of factors that will influence decisions about labor mobility and the issues described above, there are strong incentives for the movement of labor from Jordan to the West Bank and Gaza to be very gradual. The numbers that can return will be rationed. Employment opportunities for Jordanian workers will emerge gradually and will be initially filled by residents of the West Bank and Gaza. The unemployed that remain in Jordan will not be perfect substitutes for those that migrate. There will be important macroeconomic reasons to avoid the upward pressure on wages that might result from a reduction in the supply of labor alongside an increase in demand from a neighboring country. There will continue to be considerable uncertainty as the details of the peace are finalized and eligible returnees are likely to proceed cautiously. Gradualism

is in the interest of all parties -- sudden disruptions to the supply of labor would result in serious adjustment costs and output losses for Jordan while absorptive capacity for migrants will be initially limited in the West Bank and Gaza. Simple border procedures that facilitate shorter trips and commuting would encourage such a gradual transition.

An analysis of the impact of peace also raises more fundamental questions about Jordan's human resource strategy. Jordan's current emphasis on post-secondary education has produced educated workers faster than the economy can generate jobs for them. The consequent skill mismatch — with an oversupply of educated workers and an undersupply of manual workers — has increased Jordan's dependence on external labor markets — both to employ its educated workers and to fill its need for manual workers. Peace will only exacerbate this phenomenon. But peace will also mean that Jordanian labor will need to become more flexible. Policies that encourage the substitutability of Jordanian labor for returnees to the West Bank and Gaza will be crucial for reducing the output losses associated with labor mobility while simultaneously reducing unemployment in Jordan. A first step will need to be data collection to identify the skills of likely returnees to the West Bank and Gaza and to assess areas in which there is likely to upward pressure on wages in Jordan. The government can also play a catalytic role in encouraging private sector provision of training in response to private demand for certain skills to insure that Jordanian workers are able to substitute effectively for returnees to the West Bank and Gaza.

While close integration with regional labor markets is efficient, given Jordan's endowment of human capital, there are potential externalities associated with employing skilled workers at home that are being lost under the current strategy. Jordan must decide

whether it will continue to be an economy that relies on transfers from labor exports or whether it will become an exporter of domestically-produced goods and services.

However, employing skilled Jordanians at home efficiently requires higher levels of investment -- which would depend on policies that affect the investment climate, the trade regime and the labor-intensity of production. Until such policies are in place, efforts at self-sufficiency in labor markets are likely to lead to inefficiency of labor use.

The Economic Research Forum for the Arab Countries, Iran and Turkey (ERF) was established in June 1993 as an independent, non-profit regional networking organization. Its mission is to promote policy-relevant economic research with a broad representation of views to help activate the policy-formulation debate in the region, by encouraging and funding quality research, and by disseminating results of research activities to economists and policy-makers.

The ERF Working Papers Series disseminates the findings of research work in progress to promote the exchange of ideas and encourage discussion and comment among researchers for timely revision by the authors.

The Working Papers are intended to make preliminary research results available with the least possible delay. They have therefore not been edited nor made subject to formal peer review by ERF staff and ERF accepts no responsibility for errors.

The views expressed in the *Working Papers* are those of the author(s) and not those of ERF. Unless otherwise stated, copyright is held by the author(s). Requests for permission to quote their contents should be addressed directly to the author(s).

