

FEMISE RESEARCH PROGRAMME

The Expected Impact of Absorbing Returning Palestinians on the West Bank and Gaza Strip Labor Markets

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Abstract

In this study, a detailed model is presented to incorporate the labor markets in the WBGS with the macroeconomic variables such as private investments and capital government expenditures. The estimated model will be utilized to conduct macroeconomic simulations to trace out the evolution of unemployment, the allocation of labor between local markets and Israel. According to Oslo Accords, the returning population is assumed at 1.5 million at a minimum, representing the resident of refugee camps in Jordan, Syria and Lebanon and refugees located in the low income areas in these countries. It is anticipated that applying intensive investment programs with external transfers under free trade conditions are promising mechanisms to absorb over-supply of labor originating from Palestinian workers in Israel and returning Palestinian workers from abroad in the local economic sectors.

1. Introduction

Dependence on outside jobs, mostly in Israel, is the main feature of the Palestinian economy. Since 1968, most of the growth in employment of Palestinian workers resulted from increased employment in Israel. Between 1975-1992, the proportion of the labor force employed in Israel compared to the total labor force in the West Bank was 35 percent. Due to blockades imposed by Israel, the West Bank labor force employed in Israel averaged 46 thousand annually during 1993-1996, approximating 19 percent of the total labor force. The total labor supply in the West Bank increased from 83 thousand in 1968 to 255 thousand in 1996. In the Gaza Strip, the total labor force employed domestically and in Israel doubled between 1968 and 1992. It increased from 55,000 in 1968 to 119,000 in 1992. Between 1988-1992, labor exports from Gaza to Israel accounted for more than 40 percent of its total labor force. In the following period, 1993-1996, labor exports to Israel from Gaza tended to decline. They dropped from 30,000 in 1993 to 16,000 in 1996, approximating 17 percent of the total labor force [Statistical Abstract of Israel, 1996]. However, after 1997, this trend reversed and by 1998 Palestinian workers in Israel were up to 130 thousands [Labor surreys, Palestinian Statistics]

The persistence of high unemployment in the West Bank and Gaza Strip has become a challenge to the Palestinian National Authority (PNA). In particular, over the period 1993-1996, unemployment rates have doubled. Due to blockades imposed by the Israeli Military Authorities on the West Bank and Gaza, direct unemployment rates exceed 25% in the West Bank and in the Gaza Strip. Restrictions imposed on labor mobility from Palestinian Territories (PTs) to Israel have caused a significant decline in labor exports. In 1996, the levels of Palestinian labor exports to Israel were 70% lower than those in 1992. In 1998, the number of the Palestinian workers in Israel reached the peak of 130 thousand approximating 30 percent of total Palestinian labor force in the West Bank and Gaza Strip.

According to the Israeli Central Bureau of Statistics, 14 thousand Palestinians out of 333.4 thousand participants of the total labor force in the West Bank and Gaza Strip were unemployed in 1992. However, in the following years, workers who were actively seeking jobs but who reported not having worked for even one day have increased over time. They increased from 21 thousand in 1993 to 40 thousand in 1996. These indicators did not reflect the whole unemployment picture in the West Bank and Gaza Strip. Various adjustments could be made to the figures in order to get a more accurate picture of the unemployment situation. Since 1991, unemployment in the PTs has become the critical issue for the Palestinian economy. Between 1968 and 1990, most of the surpluses in the labor supply of the West Bank and Gaza Strip were channeled to Israel. Therefore, one would expect to find unemployment rates ranging between 5 percent to 40 percent. Under security closures practiced heavily by Israel since 1993, restrictions imposed on Palestinian labor mobility to Israel have increased unemployment rates in the PTs directly and indirectly. Since the imposition of security closures, unemployment rates in the PTs reflect both unemployed persons in the West Bank and Gaza Strip and the surplus of Palestinian labor which used to work in Israel. In the years 1998, and 1999, the level of unemployment went down to 11.8 percent. Since 1998, restrictions, blockades and closures imposed by Israel were significantly reduced. On the other hand, due to the importance of labor exports to the Palestinian gross national disposable income, the decreases in the remittances of labor employed in Israel have slowed down demand for national products. Consequently, any reduction in industrial, agricultural and construction production would lead to a downturn in the demand for labor in these sectors. However, the increases remittances in 1997 and

1998 have direct effects on the demand for labor in the local service sectors in the West Bank and Gaza Strip [Palestinian Central Bureau of statistics, National Accounts, various issues].

Structural unemployment is considered a major obstacle facing the West Bank and Gaza Strip economies. While unemployed persons are mainly university and community college graduates, job vacancies exist only in a few sectors, particularly in construction. The lack of investment in the past, led to a slowdown in the growth of domestic employment. It is expected that domestic unemployment will gradually rise to 13 percent if the Israeli labor market continues to employ Palestinian workers. Heavy investment is required to deal with the unemployment problem and to decrease dependency of the Palestinian economy on Israel. Such investment is necessary to allow a rapid growth of labor productivity in the major sectors such as agriculture, industry, housing, infrastructure including sewage, running water systems, electricity, roads, airports, hospitals, education, transportation, and communication.

1.1 Domestic Demand for labor in the West Bank and Gaza Strip

Public services and construction are the leading growth sectors in the West Bank, absorbing over 65 percent of the total employed labor force. In the Gaza Strip, for more than 85 percent of total labor force employed are absorbed in three sectors: agriculture, public services, and construction. While employment in the agricultural sector tended to decrease with some variations, it showed sharp increases in the construction and public sectors, particularly in the years 1997 and 1998. The increase in labor employed in those sectors could be attributed to increased needs of employees in the PNA, and in the housing sector. Since 1994, demand for housing has substantially increased to meet needs for returnees (see Table 3).

Investments in construction and housing sectors have created only forward linkages between the Palestinian economy and Israel. Increased demand for housing in the West Bank and the Gaza Strip has only increased the demand for labor in this sector. In fact, investments in housing and construction have increased demand for building materials, equipment's and raw materials imported from or through Israel. Yet, the construction and industrial sectors are not totally integrated into the Palestinian market, they are interdependent with the Israeli economy.

Commerce, restaurants, hotels, transport, storage, communication and other sectors hire only 25 percent of the total labor force in the

West Bank and Gaza Strip. Based on 1993-1996 statistics, it appears that there are insignificant differences between economic sectors in employing labor in the Gaza Strip. The single exception is in the construction sector which absorbs more than 20 percent of the total labor force in the local markets (see Table 4).

1.2 Labor Exports to Israel from the West Bank and Gaza Strip

Around 60 percent of the Palestinian labor force is directed to Israeli works in the construction sector. On the other hand, Palestinian labor force employed in the Israeli industrial and other sectors has been decreasing over time. For example, the Palestinian labor force employed in the industrial sector fell from 16.8 thousand in 1988 to 5.1 thousand in 1996, a decrease of 10 percent annually. Similarly, Palestinian labor employed in the Israeli agricultural and other sectors tended to decrease over time. Most recently, Israel has succeeded in replacing Palestinian labors with labors from other origins (see tables 5 and 6).

1.3 The Significance of Labor Exports to Palestinian Economy

Since 1993, security closures have caused shocks to the Palestinian economy due the fact that the value of labor exports to Israel approximated 35% of GNP during the 1980s. Over the period 1994-1996, proportions of remittances to GNP in the West Bank and Gaza Strip showed a declining trends ,they averaged 10 percent of the GNP.

By 1996, they reached only 5-7%, for more details see table (7). As a result, the gap between the actual GNP and GDP has narrowed. It shrunked from 26 percent in 1991 to only 12 percent in 1996 in the West Bank. However, the gap between GNP and GDP in the Gaza Strip has continued to be relatively greater than that of the West Bank. It ranged between 36 percent in 1991 to 25 percent in 1996. However, proportions of labor exports to total exports has tended to be constant, particularly since 1991. The percentages of labor exports total exports were greater in the West Bank compared to those in Gaza Strip particularly in 1997 and 1998. In those years, Palestinian workers were granted more access to enter Israeli labor markets. Restrictions and blockades imposed on labor mobility to Israel were relatively reduced. They indicate the significance of labor exports in the one hand and the dependence of the economy on Israel on the other However, remittances of the Palestinian workers in Israel account for more than 25 percent of the GNP during 1998.

1.4 Refugees and the labor Market

Around 50 percent of the total Palestinian labor force in the West Bank and Gaza Strip are originally refugees. While refugees in the West Bank account for 30 percent of the total population, in the Gaza Strip they comprise for more than 60 percent of the total population. In 1948 most of the Palestinian people had been driven out of their homeland and had become refugees. Table (8) indicates that refugee camps are virtually stocks of labor primarily for Israel. More than 60 percent of the labor force in the West Bank originate from refugee camps. However, in the Gaza Strip, 87 percent of the labor force employed in the local market and exported to Israel comes from refugee camps. In fact, workers in the camps of the West Bank and Gaza Strip have only access to labor markets.

It is obvious that any change in Palestinian labor markets will have direct and significant effects on refugees. Data available on the standard of living in the Palestinian society in the refugee camps are much lower than those in the cities and villages. Security closures imposed by Israel since 1993 have prevented Palestinian workers from reaching their jobs. The number of workers in Israel has tended to decline over time. As a result, labor export revenues have been shrinking, and consequently the levels of GNP and GDP have gone down. Despite the increases in the Palestinian workers employed in Israel since 1997, standard of living in the Camps is still lower than that in the cities and villages. Per capita consumption expenditures in the camps of the West Bank and Gaza have been lower than those in the cities and villages by 26 and 18 percent, respectively [Palestinian Central Bureau of Statistics, Expenditures and Consumption levels, various issues].

1.5 Objectives

The main purpose of this study is to evaluate the expected impact of absorbing returning Palestinians on the West Bank and Gaza Strip labor markets. To accomplish that, macroeconomic simulations are conducted to trace out the evolution of unemployment, the allocation of labor between local markets and Israel, and the demand for labor by each economic sector. Macroeconomic simulations are conducted with the following unknowns:

1. How many returning Palestinians will be absorbed in the West Bank and Gaza Strip,

2. How much access the returning Palestinians will have to the local and Israeli labor markets,
3. In the presence of restrictions imposed by Israel on Palestinian labor mobility, labor exports will be replaced by merchandise, i.e., by absorbing more labor in the local markets.
4. The level of investments and capital expenditures sufficient to create jobs for the over-supply of labor in the local economic sectors.

2. Specification of the Model

Specification of the model in this study is based on the economic theory of labor demand. Palestinian laborers are allocated into various economic sectors in the local markets (the West Bank and Gaza Strip) and the export market (Israel).

Since the objective of the local firms and those in Israel is to minimize costs subject to certain output when they utilize labor and other factors of production, the mathematical formulation the labor demand can be derived by taking the standards as:

$$C_{hit} = \sum W_{hit} \cdot L_{hit} + \sum R_{hit} \cdot K_{hit} \quad \text{Cost Function (1)}$$

Subject:

$$Q_{hit} = F(L_{hit}, K_{hit}, D_t) \quad \text{Production Function (2)}$$

$$Q_{hit} = F(P_{hit}, \dots) \quad \text{Demand for Output (3)}$$

$$P_{hit} = F(W_{hit}, R_{hit}) \quad \text{Output Price Equation (4)}$$

where:

$h=1,2,3$, 1=West Bank; 2=Gaza Strip; 3=Israel

$I=1, \dots, n$; 1=agriculture; 2=industry; 3=construction; 4=other sectors.

W_{hit} = Wage rate of the i^{th} sector in the h^{th} region.

L_{hit} = Labor demanded by the h^{th} region to be employed in the i^{th} sector.

Q_{hit} = Gross domestic product of the i^{th} sector in the h^{th} region.

P_{hit} = Output price level of the i^{th} sector in the h^{th} region.

R_{hit} = Cost of capital of the i^{th} sector in the h^{th} region.

K_{hit} = Capital demanded by the h^{th} region to be utilized in the i^{th} sector.

D_t = Dummy variable included in the model to represent the influences of the blockades imposed by Israel to restrict Palestinian labor flows to the Israeli markets between 1993-1997.

Based on the objective of the firms in the i^{th} sector of the h^{th} region, minimizing cost, equations of local and export demand for labor

in the i^{th} sector of the h^{th} region could be derived straightforwardly by applying the duality of costs and production functions [Silberberg, 1979]. As a result, demand functions can be presented as follows.

$$L_{hit} = F(W_{hit} ; GDP_{hit} ; D_t ; L_{hit-1}) \quad (5)$$

Equation (5) formulates the expected behavior of the demand for Palestinian labor in the economic sectors of Gaza Strip, Israel and the West Bank. Equation (5) indicates that a negative relationship is expected to be associated between labor demanded in the h^{th} region in the i^{th} sector and the wage rates which prevail in i^{th} sector of the h^{th} region. In contrast, demand for labor is expected to be related positively with gross domestic product of the i^{th} sector in h^{th} region. An increase in the output utilized in producing output in the i^{th} sector. The impact of blockades is expected to affect directly the flow of Palestinian workers into the Israeli market. Consequently, the reduction in the GNP of the West Bank and Gaza will decrease the demand for output produced locally in the i^{th} sector and then labor employed in this sector will fall. Also, a lagged adjustment, and thus, enables to estimate the employment-wage elasticity in the short-run.

The model is a system of equations which could be solved simultaneously at disaggregate and aggregate levels. The equations of labor demand at the aggregate level can be expressed as:

$$L_{ht} = F(W_{ht} ; GDP_{ht} ; D_t ; L_{ht-1}) \quad (6)$$

where:

L_{ht} = Total Palestinian labor demanded by the h^{th} region

GDP_{ht} = Gross domestic product of h^{th} region

W_{ht} = Wage rates prevail in the h^{th} region

Equations (5) and (6) have been treated as a system of equations for each region, the local demand for labor in the West Bank and Gaza Strip, and their export demand for labor in Israel. Therefore, there are reasons to believe that the allocations of Palestinian labors between local markets and Israel are contemporaneously related. Consequently, seemingly unrelated regressions (SUR) technique has been utilized to estimate the model [Greene, 1993]. Time series data for the period 1968-1998 were used to estimate the model. Data utilized to estimate the model such as Palestinian labors employed in the economic sectors in the West Bank, Gaza and Israel were measured in numbers, daily wage rates and GDP in current US dollars, were gathered from Israeli sources for the period 1968-1994 Statistical Abstract of Israel; Judea Samara and

Gaza Area Statistics; Labor Forces Statistics in the West Bank and Gaza Strip; and Quarterly Statistics. Data for the period 1995-1998, were obtained from Palestinian sources such as, Palestinian National Accounts 1995-1998; Palestinian Labor Surveys.

3.The Estimated Results

The implications of the empirical results are presented here. The estimated results are presented in the appendices A.1 to A.3. This study shows that wage policies are effective in allocating Palestinian labor into the local economic sectors and Israel. The estimated results reported in Tables A.1 - A.3, indicate that local demand for Palestinian labors with respect to wage rates in the West Bank and Gaza Strip has been found to be less sensitive than the demand for Palestinian labors with respect to wage rates in Israel.

The impact of blockades on Palestinian employment in Israel is likely to be highly significant. However, local employments in the agricultural and industrial sectors in the West Bank and Gaza are highly affected by blockades indirectly. These results have come as expected. The reduction in labor export revenues will slowdown growth rates in GNP and consequently the demand for final goods produced in those sectors will decline. Also, blockades restrict merchandise exports from the West Bank and Gaza to Israel. As a result, reduction in merchandise exports will decrease local production and then demand for labors.

Estimated coefficients of the local demand for labor in the West Bank and Gaza Strip, presented in Table A.1, signify that construction sector has potentials to create jobs. In fact, demand for labor in construction was highly sensitive to changes in GDP compared to the demand for labor with respects to GDP in other sectors. Although investment in construction sector will create more jobs than other sectors, investment should be intensified in the industrial, agricultural and tourism sectors to produce tradable goods. As a result, producing tradable goods will replace labor exports by merchandise exports on one hand and substituting merchandise imports particularly of building materials such as cement and iron by local production.

As well, the estimated coefficients of the lagged dependent variables indicate that there have been continuous shifts in the habit formation structure. Proportions of labors employed in the local economic sectors of the West Bank and Gaza to the labor force have tended to increase over time from 60 percent in 1988 to 80 percent in 1995. In contrast, proportions of total labor exports to total employed labor force were declining during that period.

4. Simulation of the Performance of the Palestinian Labor Markets

For the purpose of this study, the estimated model is utilized to project the anticipated future impact of returning Palestinians on the West Bank and Gaza Strip labor markets. Conceptually, it is possible to link the Palestinian labor market with the Israeli labor market to understand the full dimensions of the interdependent relationship between the two markets. The new economic developments between Israel and Palestine may have a significant impacts on employment, in particular, on agricultural, industrial, construction and public sectors. But, since the Israeli economy is much larger than that of Palestine, the feedback from Palestine to Israel is not likely to be perceptible. This is therefore disregarded in this study.

From 1967 till now, a unilateral customs union existed between Palestine and Israel. While Israeli goods enjoy free entry to Palestinian markets (with no restrictions on quantity and quality), several non-tariff trade barriers (NTBs) were imposed by Israel to restrict Palestinian trade. Also, since 1994, more NTBs were included in the Palestinian - Israeli Economic Protocol (PIEP), to regulate trade relationships between Israel and the Palestinian National Authority (PNA) [El-Jafari 1991; 1995]. The open bridge policy adopted and practiced by Israel has restricted trade between Palestine and abroad, mainly in one direction. As a result, Palestinian economy has been annexed with that of Israel. Consequently, the Palestinian economy was influenced by exogenous variables, mainly by Israeli economic and trade policies which altered the structure of trade in Palestine, causing labor exports to increase drastically compared with merchandise exports. This is coupled with increasing dependence on Israel for merchandise imports. Thus, it is prudent that future Palestinian trade policy be applied in the context of restructuring the local economy to achieve the following objectives:

1. Expand merchandise exports through decreasing labor exports, which will eventually narrow the gap between the GNP and GDP, and create jobs to ease unemployment.
2. Increase the industrial, construction and commercial sectors' share of GDP. Expanding production of those sectors will eventually demand more labor.
3. Eliminate all NTBs' and security closures which hindering Palestinian trade.
4. Encourage foreign investments that will contribute potential growth sectors.

5. Match the supply of and demand for human capital.
6. Decrease the dependency of the Palestinian people on external sources of labor recruitment.

In fact, adopting these objectives through applying particular policies and measures would bring about a better performance of the Palestinian economy in creating jobs. Responses of those measures and policies and the scale of transformations are considered as necessary conditions for the Palestinian economy in order to successfully absorb returnees in the local labor markets on one hand, and to provide jobs for the over-supply of labor which already exists in the PTs on the other.

To overcome the problem of estimation, this study assumes the lower estimate of around 1.5 million returnees. This assumption indicates that most of the Palestinian refugees located in the camps in Jordan, Syria and Lebanon will return to the PTs. Also, Palestinian refugees located in the West Bank and Gaza Strip will be resettled. The outcome simulation results could be reapplied when the number of Palestinian returnees will be lower or greater than 1.5 million over the period 2000-2010. In fact, the number of refugees located in the camps and in low income urban areas around cities will exceed 1.5 million after 10 years from now, where population growth rate averages 3.5 percent. Over the period 2000-2010, the number of registered refugees in the camps in Jordan, Syria and Lebanon will approximate one million. The estimation of the refugees located in low income areas around cities is based on statistics available from the host countries. There are around 20 percent of the registered refugees located in the cities and in the low income areas who rent housing. Therefore, refugees in camps and those who do not own houses will return to the West Bank and Gaza when economic and housing conditions are improved.

The simulation model projects for the years 2000, 2005, 2010 the evolution of the current employment unemployment rates under several policy scenarios. The following scenarios are used in these projections:

- (i) Absorbing returning Palestinians with intensified investments and external transfers under free and regulated trade.
- (ii) Absorbing returning Palestinians with modest investments and external transfer under regulated and free trade.

Under the first combined scenario, it is expected that restructuring the Palestinian economy is a necessary condition to absorb labor surplus in the local market. Under this condition, export promotion and import

substitution strategies should be applied, but subject to appropriate economic policies to the West Bank and Gaza. This will cause certain import items, particularly final goods, to be replaced by local production. Under the second combined scenario, because of free trade, it is expected that Palestinians will apply export promotion policy. This is expected to replace labor exports by merchandise exports. Furthermore, the performance of the economy under scenario (I) will lead to increased wages prevailing in Palestine. This is due to the fact that expected increases in aggregate output will lead to lower costs. The trend of productivity is an important variable in the wage determination process since higher labor productivity will lead to an increase in wages.

Even though intensified investments and free trade will influence some sectors more heavily than others, their impact will extend to macroeconomic aggregates. Labor demand models that reflect the structural interrelationships in the economy and provide some sectoral breakdowns and policy options are useful instruments for modeling the impact of free trade and intensifying investments. This study utilizes domestic and export demand of the Palestinian labor model specified and estimated in this study. These models have some advantages in being able to capture the status of the labor market once free labor mobility and investment equilibrium have been attained. The simulation results will only show changes for the years 2000, 2005, 2010.

5. Simulation and Evaluation

This section presents the simulation results of the Palestinian labor markets in the years 2000, 2005 and 2010 under several scenarios. The results summarized in tables 9, 10, 11, 12 are discussed for both following scenarios.

- (i) Supply of the Palestinian labor force to the Israeli market under restrictions (security closures) on the one hand and under free labor mobility on the other. Under this scenario, the indirect effects of Israeli policy on the supply of the Palestinian labor forces to the local market are estimated.
- (ii) Supply of the Palestinian labor forces to the local markets will be projected under the following scenarios.

1. Intensive investments with security restrictions.
2. Intensive investments with free labor mobility to Israel.
3. Modest investments with security restrictions.

4. Modest investments with free labor mobility to Israel.

Under these scenarios, labor surpluses originating from the Palestinian people in the West Bank and Gaza Strip and the returning laborers on are projected. In this study, external transfers and intensified investments will be directed to utilize labor surplus to activate Palestinian economy. Yet, the impacts of exporting skilled and trained labor on the Palestinian economy are similar to those have been concluded in other studies about labor exporting countries such as Jordan and Egypt [Keely and Saket, 1994]. Industrial development was sometimes retarded because the value of labor exports was mostly directed toward consumption. Thus, absorbing labor surplus requires appropriate and sufficient conditions to serve as an engine of growth. In fact, when those conditions are fulfilled, it can easily be seen that the primary beneficiaries would have been the economies of the West Bank and Gaza Strip. Surplus workers would go in search of employment primarily in the West Bank and Gaza Strip markets.

Under free labor mobility and intensive investments in domestic production capacity, the wage gap between Israel and the PTs will be narrowed. Consequently, Palestinian labor will become less responsive to wages prevailing in Israel. Applying these policies and measures will encourage Palestinian workers to seek employment opportunities within the West Bank and Gaza Strip. Encouraging investments in productive activities is necessary to apply a combination of export promotion and import substitution strategy. While export promotion will replace labor exports by merchandise exports, import substitution strategy will replace local merchandise imports by local production. In other words, local consumption financing will be maintained through incomes generated locally but not from incomes generated abroad. Applying these trade and economic policies will result the following:

- (a) Maintaining (improving) the competitiveness of the labor markets in the West Bank and Gaza Strip.
- (b) Improving the equilibrium between the demand for and supply of skill labor required in domestic production.

5.1 Simulation Results of the Supply of the Palestinian Labor Force in the Local Markets: When Returning Palestinians are absorbed with and Without Intensive Investment and External Transfer.

Simulation results presented in Table 9 are conducted under the following assumptions:

- 1- The returnees (1.5 million at a minimum) will have the same age structure, fertility and mortality behavior as the resident population of the West Bank and Gaza Strip. Also, Palestinian returnees will have skills, and qualifications similar to those of the current residents in the West Bank and Gaza Strip.
- 2- The proportion of investment (public and private) to the GDP will approximate 35 percent. Investment is expected to grow at 10 percent per annum. Therefore, while potential investment was US\$ 1169 million in 1998, actual investment did not exceed US\$ 500 million.
- 3- By the year 2010, 70 percent of the Palestinians would return to the West Bank and 30 percent to the Gaza Strip. In other words, 1.05 million people will return to the West Bank and 0.495 million people to Gaza. In the year 2010, Palestinian returnees will account for 2 million people due to natural increase in population and consequently the total Palestinian population in the West Bank and Gaza will approximate 6.2 million. The proportion of the labor force to the total population will average 22%, approximating 1.36 million people.

Table (9) shows that the expected impact of intensive investments and external transfers on the domestic labor market in the West Bank and Gaza Strip will be highly significant. On the whole, labor demand in the local markets will increase when intensive investments and external transfers are carried out and allocated to the economic sectors such as industry, construction and tourism. These sectors are expected to receive more than 70 percent of the investments and external transfers to restructure the economy on one hand, and to create most jobs on the other hand, particularly when there are no restrictions on investment. While the public service sector will continue playing an important role in providing employment in Gaza, it is less important to the West Bank economy. Due to the land and water problems, the agricultural sector in the West Bank and Gaza will create few jobs, compared with other sectors. Intensive investments should be allocated to develop the existing poor infrastructure and service facilities to create jobs. Incorporating returning laborers into the economy would increase average growth rate from (3.5%) for the Palestinian population of the West Bank and Gaza to 4.6% . As a result, domestic employment will increase from 303 thousand workers in 1995 to 1.128 million workers in 2010 when intensive investment programs are carried out over the period 2000-2010. In contrast, total workers employed in the West Bank and Gaza will approximate 771 thousand workers in 2010 when modest

investment programs without external transfers will continue. Under intensive investment with external transfers 89 percent of the Palestinian labor force should be able to find work in the domestic market.

5.2 Simulation Results of the Export Demand for Palestinian Laborers in Israel

Predictions of labor export demand are presented in Table (10). Labor exports from the West Bank and Gaza Strip to Israel will double two times by the year 2010 compared to their level in 2000 under restricted labor mobility to Israel. In contrast Palestinian labor exports to Israel will double at least three times between 2000 to 2010 under the scenario “free labor mobility”.

Labor exports to the Israeli construction sector will not be affected significantly under the scenario “restrictions” and “without restrictions”, since more than 75 percent of Palestinian labor exports are allocated to the Israeli construction sector.

5.3 Simulation Results of the Employment and Unemployment

The simulation results presented in tables (11) and (12) combine the results reported in tables (9) and (10). It is clear that the best scenario for the Palestinian economy is to operate under the scenario “intensive investments with external transfers and free labor mobility to Israel”. Under this scenario, the Palestinian National Authority will succeed in re-absorbing Palestinian workers in Israel and returning Palestinian workers from abroad. Under this scenario, Palestinian dependency on the Israeli economy will be narrowed. At any rate, intensive investments with external transfers are required to absorb the continued surplus in the labor market which originates from:

1. Net growth rate in the population and consequently in the labor force;
2. Returning Palestinian workers; and
3. Workers in Israel.

However, the worst situation will be under the combined scenario “modest investments with restrictions on labor mobility to Israel”. These policies have been practiced by Israel since 1967. Critics of Israeli policy within the PTs have agreed that Israeli Occupation Authorities regularly use security claims to justify the imposition of policies that disregard and neglect the interests of the Palestinian people. Therefore, it should be emphasized that absorbing process to returning Palestinian requires

political solution to be implemented, and this could be considered as necessary conditions. However, the sufficient condition centralized on creating the economic environment to attract returnees. Therefore, any settlement to the refugee question should be linked with economic settlement between Palestine and Israel to avoid any unexpected determination and retaliation from Israel against the Palestinian economy.

Improving the performance of the economy through intensive investments with external transfers will avoid the possibility that other scenarios will prevail. Unemployment rates are expected to exceed 20% if modest investments are sustained without external transfers and restricted trade.

6. Concluding Remarks

This study has simulated the expected impact of absorbing returning Palestinians on the West Bank and Gaza Strip labor markets. Restrictions imposed by the Israelis on Palestinian labor mobility directly and indirectly affect absorbing labors in the local market. Carrying out investments with external transfer has the anticipated effect of absorbing oversupply of Palestinian laborers and returnees. Also, by the year 2010, Palestinian labor exports to Israel will be re-absorbed into the local sector.

In fact, intensive investments and external transfers are required to create jobs for returning Palestinians and to re-absorb returning workers from Israel. The economic development in exporting labor countries is some times retarded because the most skilled and trained labors are exported. As well, the values of labor exports were mostly directed toward consumption. This is the reason why the economies of the West Bank and Gaza have not benefited from their labor surplus. Therefore, applying intensive investment programs with external transfer are the only mechanisms to absorb over supply of laborers originating from Palestinian workers in Israel and returning Palestinian workers from abroad.

The key message coming from this paper is the centrality of investment in tradable sectors (both exportable and import-substitutes) is needed to absorb the growing labor supply. That in turn requires a policy environment, which fosters private investment. However, it should be clarified that this paper provides background information to Palestinian decision-makers to deal with refugee problem. In fact, the refugee

problem requires political solution to be settled. Nevertheless, economic and social adjustments that will occur when the absorbing process for Palestinian returnees will take place. Therefore, this paper deals only with the economic necessary conditions required to absorb Palestinian returnees in the economies of the WBGS. Although refugee problem is a political problem, it has been influenced and effected by the Israeli measures and practices, which deteriorated the Palestinian economy over the past five decades.

Table (1)
Employment, Unemployment and Participation of
the Labor Force in the West Bank

| Year | Employed Persons work in the West Bank (1000) | Employed persons work in Israel (1000) | Total labor force employed (1000) | Total labor supply (1000) | Unemployed | | Unemployed under security closures | |
|------|---|--|-----------------------------------|---------------------------|------------|------|------------------------------------|-------|
| | | | | | 1000 | % | 1000 | % |
| 1988 | 119.0 | 64.0 | 183.0 | 199.1 | 5.1 | 2.7 | 69.1 | 37 |
| 1989 | 115.0 | 65.0 | 180.8 | 189.1 | 8.3 | 4.4 | 73.7 | 39 |
| 1990 | 128.0 | 64.6 | 192.6 | 199.7 | 7.1 | 3.6 | 71.7 | 37 |
| 1991 | 123.8 | 55.9 | 179.7 | 200.3 | 20.6 | 10.3 | 765 | 38 |
| 1992 | 132.1 | 72.5 | 204.6 | 214.8 | 10.2 | 4.7 | 82.7 | 38 |
| 1993 | 148.0 | 54.0 | 202.0 | 218.4 | 16.4 | 7.9 | 70.4 | 32 |
| 1994 | 172.0 | 47.0 | 219.0 | 237.2 | 18.2 | 7.8 | 65.2 | 28 |
| 1995 | 190.0 | 40.0 | 230.0 | 255.0 | 25.0 | 8.0 | 65.0 | 26 |
| 1996 | 200.0 | 57.0 | 257.0 | 310.0 | 53.0 | 17.0 | 110.0 | 35 |
| 1997 | 249 | 62 | 311 | 338 | 27 | 7.9 | 89 | 26.33 |
| 1998 | 270 | 85 | 355 | 388 | 33 | 8.5 | 118 | 30.4 |

Source: Israeli Central Bureau of Statistics (IBCS), Statistical if Abstract.

ICBS , Judea, Samaria and Gaza Statistics, various issues

Palestinian Central Burcan of Statistics (PCBS) Labor Force Statistics in the West Bank and Gaza

Palestinian Ministry of Planning and International Cooperation (MOPIC), Quarterly Statistics, various issues.

Table (2)
Employment, Unemployment and Labor Force in the Gaza Strip

| Year | Employed Persons work in the West Bank (1000) | Employed persons work in Israel (1000) | Total labor force employed (1000) | Total labor supply (1000) | Unemployed | | Unemployed under security closures | |
|------|---|--|-----------------------------------|---------------------------|------------|-----|------------------------------------|------|
| | | | | | 1000 | % | 1000 | % |
| 1988 | 53.5 | 45.4 | 98.9 | 101.2 | 2.4 | 2.3 | 46.8 | 47.2 |
| 1989 | 59.2 | 39.5 | 98.7 | 101.2 | 2.5 | 2.5 | 42 | 42.2 |
| 1990 | 60.8 | 43.1 | 103.9 | 108.0 | 4.1 | 3.8 | 47.2 | 40.0 |
| 1991 | 65.9 | 41.8 | 107.1 | 111.8 | 4.1 | 3.7 | 45.9 | 42.6 |
| 1992 | 71.6 | 43.1 | 114.7 | 118.6 | 3.9 | 3.3 | 47.0 | 39.6 |
| 1993 | 85.0 | 30.0 | 115.0 | 120.0 | 5.0 | 4.1 | 35.0 | 29.0 |
| 1994 | 108.9 | 20.0 | 128.9 | 136.0 | 7.07 | 5.2 | 27.1 | 20.0 |
| 1995 | 113.0 | 16.0 | 129.0 | 140.0 | 11.0 | 7.8 | 27.0 | 19.0 |
| 1996 | 130.0 | 15.0 | 145.0 | 160.0 | 15.0 | 9.0 | 30.0 | 18.0 |
| 1997 | 154 | 20 | 174 | 190 | 16 | 8.4 | 36 | 19 |
| 1998 | 172 | 36 | 208 | 223 | 15 | 6.7 | 51 | 23 |

Source: See Table (1).

Table (3)
The Allocation of the West Bank Labor Force Employed in Local Economic Sectors in (1000's)

| Year | Agriculture | Industry | Construction | Commerce Restaurants and Hotels | Transport, Storage & Communication | Public Community Services | Others | Total |
|-------------|------------------|-----------------|------------------|---------------------------------------|---|---------------------------------|---------------|-----------------|
| 1988 | 37.3 (31.2) | 18.92 (15.9) | 12.73 (10.6) | 15.71 (13.2) | 6.66 (5.6) | 21.70 (18.23) | 6.20 (5.2) | 119.0 (100) |
| 1989 | 30.5 (26.42) | 19.84 (17.2) | 12.70 (11.02) | 16.5 (14.3) | 6.12 (5.3) | 23.54 (20.4) | 6.23 (5.4) | 115.4 (100) |
| 1990 | 37.8 (29.53) | 20.00 (15.7) | 13.95 (10.9) | 17.53 (13.7) | 6.70 (5.2) | 24.60 (19.2) | 6.65 (5.2) | 128.0 (100) |
| 1991 | 34.81 (28.1) | 20.92 (16.9) | 13.0 (10.5) | 15.60 (12.6) | 7.20 (5.9) | 26.50 (21.4) | 5.82 (4.7) | 123.8 (100) |
| 1992 | 38.44 (29.03) | 22.50 (17) | 14.13 (10.7) | 16.30 (12.31) | 6.62 (5.0) | 28.73 (21.6) | 5.56 (4.2) | 132.4 (100) |
| 1993 | 38.00 (25.3) | 24.75 (16.5) | 22.00 (14.7) | 18.3 (12.2) | 7.28 (4.8) | 35.92 (23.9) | 3.5 (2.3) | 150.0 (100) |
| 1994 | 42.95 (24.5) | 29.2 (16.7) | 30.24 (17.3) | 18.4 (10.5) | 7.41 (4.23) | 40.95 (23.4) | 5.9 (3.4) | 175 (100) |
| 1995 | 41.34 (21.6) | 31.55 (16.5) | 40.92 (21.4) | 19.0 (9.9) | 8.0 (4.2) | 45.00 (23.5) | 5.2 (2.7) | 190.00 (100) |
| 1996 | 40.0 (20) | 34 (17) | 40.0 (22) | 20 (10) | 10 (5) | 50 (25) | 2 (1) | 200 (100) |
| 1997 | 40 (16) | 45 (18) | 45 (18) | 37 (15) | 12 (5) | 67 (27) | 2.5 (1) | 249 (100) |
| 1998 | 38 (14) | 48 (18) | 38 (140) | 51 (19) | 16 (6) | 75 (28) | 2.7 (1) | 270 (100) |

Source: see table 1

Table (4)
The Allocation of the Gaza Strip Labor Force Employed in Local Economic Sectors in (1000's)

| Year | Agriculture | Industry | Construction | Commerce Restaurants and Hotels | Transport, Storage & Communication | Public Community Services | Others | Total |
|------|-----------------|-----------------|----------------|---------------------------------------|--|---------------------------------|-----------------|----------------|
| 1988 | 9.95 (18.5) | 8.7 (16.4) | 4.5 (8.5) | 8.03 (15.01) | 2.7 (5.04) | 5.9 (11.03) | 13.4 (25.05) | 53.5 (100) |
| 1989 | 10.89 (18.4) | 8.0 (32) | 7.5 (12) | 10.6 (18) | 3.0 (5) | 6.5 (11) | 15.0 (25) | 59.2 (100) |
| 1990 | 12.4 (20) | 6.9 (11) | 6.75 (11) | 11.0 (18) | 3.0 (5) | 6.7 (11) | 15.0 (24) | 60.8 (100) |
| 1991 | 14.23 (20) | 8.4 (13) | 6.6 (10) | 10.0 (15) | 3.3 (5) | 6.6 (10) | 17.0 (26) | 65.9 (100) |
| 1992 | 15 (21) | 9.3 (13) | 8.9 (12) | 10.7 (15) | 4.3 (6) | 7.2 (10) | 16.5 (23) | 71.6 (100) |
| 1993 | 16.5 (19.41) | 11.15 (13.1) | 13.5 (15.9) | 13.4 (15.8) | 8.8 (10.4) | 13.22 (15.6) | 8.24 (9.6) | 85 (100) |
| 1994 | 20.0 (18.5) | 11.0 (10.2) | 22.0 (20.3) | 17.0 (15.7) | 11.2 (10.4) | 16.8 (15.6) | 10.0 (9.2) | 108 (100) |
| 1995 | 19 (16.7) | 11.1 (9.8) | 23.3 (20.5) | 16.8 (14.8) | 11.6 (10.22) | 18.20 (16.05) | 13.4 (11.8) | 113.4 (100) |
| 1996 | 20.8 (16) | 3 (10) | 26 (20) | 40.3 (15) | 14.3 (11) | 20.8 (16) | 15.6 (12) | 130 (100) |
| 1997 | 9.5 (12.7) | 2.5 (1.6) | 23 (15) | 22 (14) | 17 (11) | 54 (35) | 17 (11) | 154 (100) |
| 1998 | 19 (11) | 2 (1.2) | 22 (13) | 22.36 (13) | 17.5 (10) | 72 (42) | 17.2 (10) | 172 (100) |

Source: see Table 1 and 3.

Table (5)
The Allocation of the West Bank Labor Force Employed in Israel (1000's)

| Year | Agriculture | Industry | Construction | Others | Total |
|------|---------------|----------------|-----------------|-----------------|----------------|
| 1988 | 6.6 (10.3) | 10.3 (16.1) | 32.5 (50.7) | 14.7 (22.9) | 64.0 (100) |
| 1989 | 6.1 (10.2) | 4.1 (13.9) | 35.0 (53.5) | 14.65 (22.4) | 65.4 (100) |
| 1990 | 5.62 (8.7) | 7.4 (11.4) | 37.6 (58.4) | 14.02 (21.7) | 64.6 (100) |
| 1991 | 4.41 (7.9) | 5.03 (9.0) | 37.62 (67.3) | 8.83 (15.8) | 55.9 (100) |
| 1992 | 4.1 (5.6) | 5.1 (7.0) | 53.43 (73.7) | 10.1 (13.8) | 72.5 (100) |
| 1993 | 4.0 (7.6) | 3.6 (7.1) | 36.9 (70.1) | 6.7 (15.2) | 51.00 (100) |
| 1994 | 4.9 (10.6) | 3.3 (7.6) | 29.0 (63.8) | 6.9 (18.0) | 44.2 (100) |
| 1995 | 3.7 (9.1) | 3.1 (8.2) | 26.3 (66) | 5.7 (16.7) | 39.0 (100) |
| 1996 | 5.7 (10) | 5.7 (10) | 40 (70) | 5.7 (10) | 57 (100) |
| 1997 | 6.2 (10) | 8.1 (13.0) | 41 (67) | 6.2 (10) | 62 (100) |
| 1998 | 8.5 (10.0) | 11 (13) | 57.0 (67) | 8.5 (10) | 85 (100) |

Table (6)
The Allocation of the Gaza Strip Labor Force Employed
in Israel (1000's)

| Year | Agriculture | Industry | Construction | Others | Total |
|------|----------------|---------------|----------------|----------------|----------------|
| 1988 | 10.0 (22.3) | 6.5 (14.3) | 21.8 (47.9) | 7 (15.5) | 45.4 (100) |
| 1989 | 7.6 (19.1) | 4.5 (11.3) | 21.1 (53.4) | 6.4 (16.2) | 39.5 (100) |
| 1990 | 7.02 (16.3) | 3.9 (9) | 26.5 (61.6) | 5.64 (13.1) | 43.1 (100) |
| 1991 | 7.40 (17.5) | 2.5 (5.9) | 29.3 (70) | 2.8 (6.6) | 41.8 (100) |
| 1992 | 6.4 (14.4) | 1.9 (4.3) | 32.5 (75.4) | 2.3 (5.4) | 43.10 (100) |
| 1993 | 4.6 (15.5) | 1 (3.3) | 22.9 (77.4) | 1.2 (4.1) | 29.6 (100) |
| 1994 | 5.2 (26.0) | 2 (10) | 12.8 (64.0) | --- --- | 20.0 (100) |
| 1995 | 3.8 (24) | 2.1 (13.3) | 9.8 (62) | --- --- | 15.7 (100) |
| 1996 | 2 (12) | 2.25 (15) | 11 (73) | --- --- | 5 (100) |
| 1997 | 2.8 (14) | 3 (15) | 14.2 (71) | - | 20 (100) |
| 1998 | 5.4 (15) | 5.4 (15) | 25.2 (70) | - | 36 (100) |

Table (7)
The Importance of Labor Export Revenues and Macroeconomic
Variables of the West Bank and Gaza Strip

| Item | West Bank | | | | | | | | |
|--|------------|--------|-------|------|------|------|------|------|------|
| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| Labor Export Revenues (US\$ million) | 470.4 | 399.6 | 573.9 | 377 | 280 | 286 | 162 | 700 | 873 |
| % of Total Exports | 70 | 67 | 69 | 62 | 63 | 62 | 37 | 62 | 63 |
| % of Gross National Product (GNP) | 13 | 10 | 16 | 7 | 6 | 10 | 6 | 19 | 23 |
| % of Gross Domestic Product (GDP) to GNP | 74 | 78 | 78 | 76 | 85 | 87 | 85 | 83 | 80 |
| Item | Gaza Strip | | | | | | | | |
| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| Labor Export Revenues (US\$ million) | 313.6 | 301.43 | 337.1 | 209 | 119 | 114 | 43 | 256 | 326 |
| % of Total Exports | 81 | 76 | 75 | 72 | 62 | 53 | 35 | 55 | 60 |
| % of Gross National Product (GNP) | 18 | 17 | 17 | 10 | 5 | 9 | 4 | 17 | 20 |
| % of Gross Domestic Product (GDP) to GNP | 64 | 66 | 69 | 82 | 81 | 84 | 80 | 89 | 85 |

Source: See Table (1).

Table (8)
Population and Labor Supply of the Palestinians
in the West Bank and Gaza Strip in 1997

| Item | West Bank | Gaza Strip |
|--|-----------|------------|
| Population (million) | 1.938 | 1.057 |
| Palestinian Refugees (million) | 0.590 | 0.750 |
| Palestinian Refugees in the Camps (million) | 0.156 | 0.412 |
| % Refugees to Population | 40 | 75 |
| % of Refugees in the Camps to Population | 10.4 | 41 |
| % of Refugees in the Camps to total Refugees | 26 | 55 |
| Palestinian Labor Force (1000s) | 388 | 223 |
| Labor Force from Palestinian Refugees. (skilled + unskilled) in (1000s) | 131 | 128 |
| Labor Force (skilled + unskilled) originally not Refugees in (1000s) | 257 | 100 |
| % of Labor force from Refugees to the total Labor Force | 34 | 57 |

Source: See Table (1), Jarrar (1995), Palestinian Central Bureau of Statistics, population, Housing and Establishment Census-1998

Table (9)
Projections of the Demand for Palestinian Laborers
in the Local Markets (1000s) with and without Intensive
Investments and External Transfers

| Economic Sectors | Intensive investment with External Transfers | | | Modest Investment without External Transfers | | |
|---|--|------|------|--|------|------|
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| West Bank | | | | | | |
| Total | 273 | 438 | 693 | 228 | 375 | 496 |
| Agriculture | 49 | 61 | 73 | 44 | 72 | 75 |
| Industry | 55 | 89 | 173 | 40 | 65 | 99 |
| Construction | 68 | 111 | 175 | 44 | 72 | 110 |
| Commerce, Restaurants and Hotels | 27 | 44 | 69.3 | 23.0 | 38 | 49 |
| Transport, storage and Communication | 11 | 18 | 30 | 9.6 | 16 | 20 |
| Public Services | 58.0 | 109 | 138 | 57 | 93 | 123 |
| Other Sectors | 5.0 | 10 | 15 | 5.5 | 19 | 20 |
| Gaza Strip | | | | | | |
| Total | 163 | 267 | 425 | 139 | 212 | 275 |
| Agriculture | 22 | 27 | 34 | 20.6 | 25 | 28 |
| Industry | 25 | 48 | 85 | 18 | 36 | 46 |
| Construction | 40 | 48 | 86 | 32 | 50 | 65 |
| Commerce, Restaurants and Hotels | 25 | 49 | 90 | 20 | 30 | 40 |
| Transport, storage and Communication | 15 | 24 | 30 | 14 | 22 | 30 |
| Public Services | 22 | 55 | 113 | 20 | 30 | 42 |
| Other Sectors | 14.0 | 16 | 17 | 14 | 20 | 24 |

Table (10)
Projections of the Demand for Palestinian Labor
in the Israeli Market (1000s)

| Economic Sectors | Restrictions | | | No. Restrictions | | |
|-------------------|--------------|------|------|------------------|------|------|
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| West Bank | | | | | | |
| Total | 56 | 60 | 70 | 142 | 162 | 172 |
| Agriculture | 5.3 | 6.0 | 8 | 11 | 16 | 17 |
| Industry | 4.5 | 6.0 | 7.0 | 14.0 | 24 | 25 |
| Construction | 37 | 40.0 | 45.0 | 85.0 | 90 | 95 |
| Other | 8 | 8.0 | 10 | 32 | 32 | 35 |
| Gaza Strip | | | | | | |
| Total | 24 | 30 | 40 | 89 | 97 | 98 |
| Agriculture | 6 | 7 | 10 | 14 | 16 | 16 |
| Industry | 4 | 5 | 10 | 5 | 6 | 7 |
| Construction | 14.0 | 18 | 20 | 70 | 75 | 75 |

Table (11)
Projection of Employment and Unemployment rates in the West
Bank and Gaza Strip (1000s) in the years 2000, 2005 and 2010:
Intensive Investment and External Transfers with Restrictions
and no Restrictions on Labor Mobility to Israel

| Economic Sectors | Intensive investment with Restrictions on Labor Mobility to Israel | | | Intensive Investment with Free Labor Mobility to Israel | | |
|--------------------------------------|--|-------------|-------------|---|-------------|-------------|
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| West Bank | | | | | | |
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| Agriculture | 54.3 | 67 | 81 | 60 | 76 | 90 |
| Industry | 59.5 | 95 | 180 | 69 | 113 | 198 |
| Construction | 105 | 151 | 220 | 153 | 201 | 270 |
| Commerce, Restaurants and Hotels | 27 | 4 | 69.3 | 27 | 44 | 69.3 |
| Transport, storage and Communication | 11 | 18 | 30 | 11 | 18 | 30 |
| Public Services | 58 | 109 | 138 | 58 | 109 | 138 |
| Total Labor Force Employed | 329 | 498 | 763 | 415 | 600 | 865 |
| Labor Force Supply | 476 | 665 | 860 | 476 | 651 | 860 |
| Unemployment (1000) | 147 | 153 | 97 | 61 | 51 | 000 |
| Unemployment % | 21 | 23 | 11.3 | 13 | 8 | 000 |
| Gaza Strip | | | | | | |
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| Agriculture | 28 | 34 | 54 | 33 | 38 | 43 |
| Industry | 31 | 55 | 95 | 30 | 54 | 92 |
| Construction | 54 | 64 | 106 | 110 | 123 | 161 |
| Commerce, Restaurants and Hotels | 25 | 49 | 90 | 25 | 49 | 90 |
| Transport, storage and Communication | 15 | 24 | 30 | 15 | 24 | 30 |
| Public Services | 22 | 55 | 113 | 22 | 55 | 113 |
| Total Labor Force Employed | 186 | 297 | 565 | 252 | 364 | 523 |
| Labor Force Supply | 297 | 390 | 492 | 297 | 390 | 492 |
| Unemployment (1000) | 110 | 93 | 27 | 45 | 26 | -31 |
| Unemployment % | 37 | 24 | 6 | 15 | 6.6 | -6.3 |

Table (12)
Projection of Employment and Unemployment rates in the West Bank and Gaza Strip (1000s) in the years 2000, 2005 and 2010: Modest Investment with Restrictions and no Restrictions on Labor Mobility to Israel

| Economic Sectors | Intensive investment with Restrictions on Labor Mobility to Israel | | | Modest Investment with Free Labor Mobility to Israel | | |
|--------------------------------------|--|------|------|--|------|------|
| | 2000 | 2005 | 2010 | 2000 | 2005 | 2010 |
| West Bank | | | | | | |
| Agriculture | 49.3 | 78 | 83 | 55 | 88 | 92 |
| Industry | 44.5 | 71 | 106 | 54 | 89 | 124 |
| Construction | 81 | 112 | 155 | 129 | 162 | 205 |
| Commerce, Restaurants and Hotels | 23 | 38 | 49 | 23 | 18 | 49 |
| Transport, storage and Communication | 9.6 | 16 | 20 | 9.6 | 16 | 20 |
| Public Services | 57 | 93 | 133 | 57 | 93 | 133 |
| Total Labor Force Employed | 284 | 435 | 566 | 370 | 537 | 668 |
| Labor Force Supply | 476 | 651 | 860 | 476 | 651 | 860 |
| Unemployment (1000) | 192 | 216 | 294 | 106 | 114 | 192 |
| Unemployment % | 40 | 33 | 34 | 22 | 17 | 22 |
| Gaza Strip | | | | | | |
| Agriculture | 26.6 | 32 | 38 | 34.4 | 41 | 44 |
| Industry | 20 | 40 | 51 | 23 | 42 | 53 |
| Construction | 46 | 68 | 85 | 92 | 125 | 140 |
| Commerce, Restaurants and Hotels | 20 | 30 | 40 | 20 | 30 | 40 |
| Transport, storage and Communication | 14 | 22 | 30 | 14 | 22 | 30 |
| Public Services | 20 | 30 | 42 | 20 | 30 | 42 |
| Total Labor Force Employed | 163 | 242 | 315 | 228 | 305 | 373 |
| Labor Force Supply | 297 | 390 | 492 | 297 | 390 | 492 |
| Unemployment (1000) | 134 | 148 | 177 | 69 | 85 | 119 |
| Unemployment % | 45 | 38 | 36 | 23 | 22 | 24 |

Table A.1
The Estimated Equations of the West Bank
and Gaza Strip Demand for Labor

| Economic Sector | Constant | Wage Rates | Gross Domestic product (4) | Dummy variable: Security Closures | Lag Coefficient | R ² |
|------------------------|-----------------|---|----------------------------|-----------------------------------|-----------------|----------------|
| West Bank | | | | | | |
| Agriculture | 21.5 (5.5) | -4.75 (2.77) ¹ [-0.093] ² | 0.002 (2.28) [0.04] | -11.709 (-1.41) | 0.75 (2.74) | 0.76 |
| Industry | 6.67 (5.2) | -0.96 (2.3) [-0.081] | 0.006 (2.12) [0.42] | -1.0311 (-2.39) | 0.65 (4.04) | 0.83 |
| Construction | 3.6 (2.4) | -0.43 (1.78) [-0.05] | 0.0075 (405) [0.61] | -3.112 (1.99) | 0.76 (2.44) | 0.89 |
| Other Economic sectors | 14.52 (4.96) | -0.51 (2.22) [-0.19] | 0.014 (2.850) [0.38] | -2.4 (-1.38) | 0.57 (6.11) | 0.76 |
| Gaza Strip | | | | | | |
| Agriculture | 7.76 (3.95) | -1.47 (2.52) [-0.133] | 0.01 (2.34) [0.43] | 1.76 (0.46) | 0.65 (3.63) | 0.76 |
| Industry | 2.65 (3.5) | -0.64 (2.970) [-0.12] | 0.0045 (2.33) [0.25] | -2.07 (1.45) | 0.62 (3.41) | 0.76 |
| Construction | 1.99 (1.95) | -0.17 (1.65) [-0.143] | 0.007 (2.5) [0.61] | 0.45 (0.33) | 1.00 (2.0) | 0.56 |
| Other Economic sectors | 10.7 (2.1) | -0.52 (2.42) [-0.131] | 0.006 (3.45) [0.10] | -0.74 (0.13) | 0.48 (6.62) | 0.86 |

Note:

- (1) Numbers in parentheses T-ratio Statistics
- (2) Numbers in brackets are estimated elasticities at the mean
- (3) R² is the coefficient of determination
- (4) Gross domestic product of each sector

Table A.2
The Estimated Equations of the Israeli Import Demand for Labors
from the West Bank and Gaza Strip

| Economic Sector | Constant | Wage Rates | Gross Domestic product | Dummy variable: Security Closures | Lag Coefficient | R ² |
|-------------------|----------------|-----------------------------|----------------------------|-----------------------------------|-----------------|----------------|
| West Bank | | | | | | |
| Agriculture | 1.54 (3.75) | 0.022 (1.96) [-0.146] | 0.0016 (1.7) [0.035] | -1.01 [1.97] | 0.62 (3.44) | 0.78 |
| Industry | 1.78 (3.6) | -0.3 (2.2) [-0.187] | 0.001 (2.25) [0.033] | -3.3 (3.4) | 0.26 (11.7) | 0.92 |
| Construction | 3.65 (2.87) | 0.66 (1.45) [-0.283] | 0.0028 (1.1) [0.027] | -0.52 (0.2) | 0.29 (9.1) | 0.91 |
| Gaza Strip | | | | | | |
| Agriculture | 3.75 (4.52) | -2.05 (2.97) [-0.16] | 0.0051 (1.19) [0.04] | -4.4 (2.6) | 0.5 (4.3) | 0.84 |
| Industry | 2.19 (7.43) | -1.62 (7.51) [-0.25] | 0.011 (4.5) [0.06] | -3.4 (5.53) | 0.12 (1.3) | 0.96 |
| Construction | 6.27 (4.55) | -1.65 (2.40) [-0.2] | 0.012 (1.53) [0.05] | 9.73 (3.7) | 0.43 (4.84) | 0.88 |

Table A.3
Allocation of Palestinian Labor Force Employed Locally in Israel

| Market | Constant | Wage Rates | Gross Domestic Product | Dummy variable: Security Closures | Lag Coefficient | R ² |
|-----------------------------------|------------------|-----------------------------|----------------------------|-----------------------------------|-----------------|----------------|
| The West Bank Labor force: | | | | | | |
| 1-West Bank | 76.88 (15.5) | -1.15 (3.04) [0.09] | 0.01 (3.03) [0.1] | -0.91 (1.11) | 0.9 (2.3) | 0.73 |
| 2-Israel | 3.52 (5.1) | -2.3 (3.44) [-0.17] | 0.0041 (2.15) [0.24] | -13.91 (3.34) | 0.25 (1.2) | 0.96 |
| Gaza Labor Force: | | | | | | |
| 1-Gaza Strip | 36.51 (13.42) | -2.54 (1.88) [-0.042] | 0.006 (1.7) [0.03] | -5.71 (2.3) | 0.86 (1.8) | 0.85 |
| 2-Israel | 2.82 (1.42) | -0.61 (2.8) [-0.5] | 0.0127 (2.3) [0.15] | -6.94 (2.84) | 0.14 (8.94) | 0.97 |

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