
“Young people [in Gaza] are ready to explode. They go to college, they graduate with no opportunity of any job at the end...”

In the last decade, the West Bank and Gaza economy has witnessed some of the highest unemployment rates in the world, peaking at 41 percent in Gaza in 2008. Even in 2009, overall unemployment rates were above 20 percent and well above 35 percent in Gaza. The youth and less educated continue to be especially vulnerable, suffering disproportionate increases in unemployment. In response to widespread male unemployment, both labor force participation and unemployment among women have increased from very low levels since 2003. In addition, there is strong evidence of a fall in labor earnings, with real wages falling at all education levels. There has been a secular decline in the private sector growth, and marked de-industrialization in manufacturing and agriculture. These growth and labor market trends have translated into large increases in poverty rates, particularly for the unemployed and those out of the labor force. In response, the share of the public sector in employment, particularly in Gaza, has been increasing, boosted by an expansion of international aid. Compared to the West Bank, Gaza has done markedly worse along all measurable labor market dimensions - with higher unemployment, lower labor force participation rates, lower wages, fewer private sector jobs and higher rates of discouragement in the labor market. This underlies the stark regional divergence in poverty.

1. Introduction

3.1 Chapter 2 provided an overview of the main trends and drivers of poverty, highlighting the widening regional divergence in poverty between the West Bank and Gaza and the strong association between labor force status and poverty. This chapter takes a detailed look at the role of labor market factors in explaining the trends in poverty by exploring a number of specific questions. To what extent do changes in labor market participation, employment, unemployment, and the returns to labor and human capital explain the time trends in poverty? Which sectors contributed the most to income growth and poverty, and were the changes in poverty due to changes within sectors or as a result of employment shifts across sectors? How do these trends vary by region?

3.2 Addressing these questions requires combining micro and macro data from various sources, which can potentially be problematic. As in most countries, there is no single consistent data source that contains all the necessary data for analyzing the links between growth, employment, and poverty. Information on economic growth is derived from the System of National Accounts, estimates of poverty from the consumption data in the Palestinian Expenditure and Consumption Survey (PECS), while employment and labor income information is contained in the Palestinian

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Labor Force Survey (PLFS). For the analysis to tell a consistent story, it is important that data from different sources are comparable and compatible, and each survey is comparable over time. In the case of the West Bank and Gaza, the data sets are not perfectly compatible, which is to be expected. However, each survey is comparable over time. On balance, the surveys provide a relatively good basis for analysis.

3.3 The rest of the chapter is structured as follows: the next section presents an overview of the labor market, including the broad trends in labor force participation and employment, with special attention to women and to the situation in Gaza. This analysis is followed by a description of the structure of economic activity, linking it to the employment patterns observed across occupations and job types, followed by an account of the determinants of earnings and wages. The links between poverty and labor market outcomes are then discussed, with particular focus on interregional differences as well as on differences between public and private sector employment. Finally, the chapter presents a summary and conclusions.

2. Overview of the Labor Market

3.4 Unemployment in the West Bank and Gaza has been amongst the highest in the world this past decade as a consequence of the severe economic crisis that began after the ‘Second Intifada’ in 2000 and subsequent Israeli countermeasures. Peaking above 30 percent in 2002, the rate of unemployment was still well above 20 percent in 2009 (Figure 34). However, these unemployment rates understate the true degree to which Palestinians lack work, since those who have jobs increasingly report underemployment among being underemployed during the work week. The incidence of those employed rose from 15 percent in 1998 to above 25 percent in 2009.\(^\text{32}\)

\(^{32}\) An employed person is defined as under-employed if reported hours worked per week are less than 35, and expressed as percentage of those who are currently employed.
3.5 Another worrying trend is a disproportionate and continuous decline in youth employment. In 2000, youth unemployment rate was 4 percentage points higher than the overall unemployment rate. By 2009, this gap had increased to 10 percentage points. Moreover, youth labor force participation rate has fallen in the last 11 years. It reached a low of 32 percent in 2002, and even though the decline appears to have been arrested, it was still 3 percent points below its 1998 level (of 37 percent) in 2009.33

Trends in Labor Force Participation and Employment

3.6 Broad trends in key indicators such as labor force participation, unemployment and the composition of employment suggest that conflict and the closure regime have had a deep impact on the labor market. In particular, economic contractions resulting from conflict have been accompanied by increases in unemployment, and a continuous decline in labor force participation rates. The labor market experienced a rapid worsening following the second “Intifada”, and then again following the formation of the Hamas-led government in early-2006 as shown by the large rise in unemployment and underemployment in 2001 and 2007.

3.7 In this difficult climate, what are the characteristics of those who are able to find employment? Analysis of the PECS shows that the employed population in general is more likely to be male, live close to a government center (proxied by distance to the governorate capital), and tends to be older and slightly more educated than their unemployed counterparts. In addition, the employed workforce is less likely to be a refugee.

3.8 To study the transitions in to and out of employment during this turbulent period, panel data in the labor force survey was used to calculate an individual’s probability of transitioning between unemployment, employment or exit from the labor force during a year.34 The analysis focuses on the transition between the second quarters of 2000 and 2001 and then between 2007 and 2008, periods that correspond best to the immediate ‘before’ and ‘after’ of important periods of conflict, and compares it to more normal transitions in periods without conflict.

3.9 During the 2000-2001 conflict, a striking 23 percent of those who were employed in mid-2000 had lost their jobs by mid-2001. A further 8 percent had left the labor force. Thus, only 68 percent were still employed in mid-2001. Similarly, flows from unemployment to employment were stalled, with a mere 30 percent of those unemployed in 2000 finding a job by 2001. Similarly, of those employed in 2007, 80 percent still held jobs in 2008, while 12 percent were unemployed. The corresponding numbers for the pre-Intifada period were markedly better at 88 and 6 percent, respectively. Of those unemployed in 2007, 44 percent had found jobs by mid-2008. This is better than the immediate Intifada aftermath, but still appreciably worse than the 1999-2000 figures, and suggests that the ranks of the chronically unemployed have swelled.

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33 There are minor differences between the PCBS official estimates and our calculations of youth unemployment and labor force participation of males and females from PLFS 2009. For official numbers please refer to the PCBS website (www.pcbs.gov.ps).

34 See Vishwanath and Sharma, 2010, “Mobility Restrictions and Unemployment in Conflict Affected West Bank and Gaza” World Bank Report, MNSED.
3.10 One key feature of the labor market in the West Bank and Gaza is the severity with which conflict has affected the employment prospects of the youth. As in many other countries in the Middle East and North Africa region, youth unemployment is higher than that of the rest of the population. What is noteworthy is that youth unemployment peaked at 38 percent in 2002, but then labor force participation rates started to decline, possibly as the youth became discouraged. By 2009 educated young adults were more likely to leave the labor force, while labor force participation increased for educated adults who were older than 35 (Figure 35).

3.11 Another key feature is the location where individuals live and work. Given the regimes of checkpoints and closures, labor force participation increases for adults with at least 12 years of schooling when moving closer to the Government Center. However, the opposite holds true for the youth with the same level of education (Figure 36).

**Women and the Labor Force**

3.12 Marked gender differences are another key feature of the West Bank and Gaza labor market. As shown in Figure 37, labor force participation increases with education for both young and older women. However, as shown in Figure 38, it has been below 16 percent throughout this period. This is remarkably low even when compared to the Middle East and North African (MENA) average of 26%, one of the lowest regional rates in the developing world. It is likely that Palestinian women face the same constraints on working outside home as women in other MENA

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**Figure 35: Men Out of the Labor Force by Age**


**Figure 36: Educated Men Out of the Labor Force, by Age and Distance to Government Center**


**Figure 37: Women Out of the Labor Force by Age**

countries, such as social restrictions on work outside home, a societal preference for women confining themselves to an often dwindling public sector, constrained mobility in both looking for jobs and commuting to work, and a perception among employers that women are less productive (World Bank, 2010c). But it would appear that in the West Bank and Gaza, concerns of safety and mobility have made it even more difficult for women to participate in the labor force.\textsuperscript{35}

3.13 There are also sharp gender differences in the type and location of work. Women, for instance, are more likely to work within their governorate of residence. In fact, 20 percent of employed women worked from home in 2000. It is not surprising then that female unemployment did not rise as sharply as male unemployment in the Intifada period (Figure 38). Interestingly, both labor force participation and female unemployment have been on the rise since 2003, suggesting that widespread male unemployment is pushing women into work. Indeed, estimates of a model that corrects for labor market participation and worker characteristics show that female workers and the youth are more likely to be employed when the head of household is unemployed.\textsuperscript{36} In addition, the data suggest women were more likely to be employed in 2009 when compared with earlier in the decade. Worryingly, less educated women increasingly report working as ‘unpaid family members’, primarily in the agricultural sector. College educated women, on the other hand, are overwhelmingly employed in government jobs in clerical or similar occupations. These trends suggest that opportunities for finding productive work with potential for growth have dwindled for women.

\textbf{Figure 38: Labor Force Participation and Unemployment by Gender}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure_38.png}
\caption{Labor Force Participation and Unemployment by Gender}
\end{figure}

\textit{Source: PLFS, 1998-2009. Figures are for West Bank and Gaza.}

\textsuperscript{35} See for example, World Bank (2010). “Checkpoints and Barriers: Searching for Livelihoods in the West Bank and Gaza.”

\textsuperscript{36} The results are from a two step Heckman correction model that estimates the relationship between being employed and worker characteristics using PECS data. The covariates in the regression are a dummy for female, educational status, a dummy for being at youth age (15-34), a dummy for refugee status, a dummy for unemployment status of the head of the household, an interaction between female status with unemployment of the head of the household, and an interaction between youth status with unemployment of the head of the household. The selection equation includes aid, age, age squared, marital status, and educational status.
The Labor Market in Gaza

3.14 Labor market indicators suggest that conditions in Gaza have been consistently worse than those in the West Bank during the last ten years. They also reveal a marked worsening in recent years, which is not surprising given the political turmoil and total external closure of Gaza after 2006. Recent press reports suggest that the blockade and a persistent and pervasive lack of productive work are a major cause of despair.\(^\text{37}\)

3.15 Pessimism about employment prospects is reflected in the low and falling labor force participation rates—male labor force participation in Gaza has hovered around 66 percent since 2003 and was as low as 64.5 percent in 2009 (Figure 39). Although labor force participation rates have been lower in Gaza than in the West Bank for all age groups over the past decade, the marked decline in labor force participation rates in Gaza after the closures began in 2006 has continued. In contrast, labor force participation in the West Bank in 2009 was close to participation rates observed in 2004. Labor force participation rates across all ages were virtually unchanged in the West Bank, while in Gaza there was movement out of the labor force for all ages, with greatest declines among the younger and older workers (Figure 40). This is perhaps one of the most striking indications of the sheer lack of job opportunities in Gaza.

![Figure 39: The West Bank versus Gaza Strip](source: PLFS, 1998-2009)

\(^{37}\) http://www.bbc.co.uk/news/world-middle-east-12398354
Visible unemployment too has risen in recent years. Having declined to 31 percent in 2006 from a high of 38 percent in 2002, the rate of unemployment shot back to 41 percent in 2008. Moreover, among those employed, almost 30 percent reported working less than 35 hours in a week in 2009. Unemployment rates have been higher in Gaza than in the West Bank for practically all ages (Figure 41). However, while unemployment rates have generally fallen for all age groups in the West Bank between 2004 and 2009, the same is not true in Gaza. In particular, unemployment rates increased substantially for younger and older workers during the same period, while workers between 30 and 55 had lower unemployment rates in 2009 than in 2004. Another striking signal of lack of work is the sharp rise in the rate of absence from work in recent years. In 2005, on average fewer than 5 percent of PLFS Gaza respondents with a job reported having missed a day of work in the past week. In 2009, the incidence of absence was higher than 30 percent.

Figure 40: Average Labor Force Participation by Age

Figure 41: Average Unemployment Rate by Age

3. The Structure of Economic Activity and Employment

3.17 How has the structure of economic growth translated into employment opportunities in the West Bank and Gaza? Chapter 1 mentioned the volatility of economic growth, which is partly mirrored in the large increase in unemployment rates and declines in labor-force participation rates described above. This volatility has also been accompanied by volatility within sectors as well as substantial shifts in economic activity across sectors. How are these inter-sectoral changes in growth reflected in the labor market? This section aims to address these questions, beginning with a description of the structure of the economic activity at the macro level, which will be useful to establish the links to the employment patterns observed in the labor market.

3.18 Between 1994 and 2008, there has been a substantial shift in economic activity away from the agricultural, manufacturing and construction sectors towards public sector services (Table 6). Figure 42 depicts the evolution of the sectoral shares in GDP relative to their 1994 levels when trade between the West Bank and Gaza and Israel was largely unhindered. Especially worrisome is the decline in the share of agriculture in total output from 13 percent in 1994 to 5 percent in 2009, as well as that of manufacturing from 20 percent to 11 percent over the same period. The manufacturing sector has been especially adversely affected by higher production costs owing to controls on imported capital goods and raw materials, as well as constrained revenue due to restrictions on access to outside markets. In contrast, sectors producing non-tradables and those that are less vulnerable to physical controls, notably in construction-related activities and services, have fared much better. In particular, the share of private sector services, traded mostly

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**Figure 42: Changes in the Sectoral Shares in GDP (Index; 1994=100)**

![Graph showing changes in sectoral shares in GDP from 1994 to 2009](source.png)

within the West Bank and Gaza and therefore less vulnerable to border restrictions, has fallen by much less than the shares of agriculture and manufacturing. In 2009, while private sector services and construction surged, the share of manufacturing was unchanged, and that of agriculture declined. Notably, the share of public services rose markedly after 2000.

As described in Chapter 1, this aggregate picture masks profound differences in economic activity between West Bank and Gaza. Following the end of financial sanctions in 2007, the macroeconomic situation improved in the West Bank due to bolstered private sector confidence, generous donor budgetary aid, and the relaxation of some restrictions on movement and access, especially on movement of goods and people between major urban centers in the West Bank. As a result, the West Bank experienced growth across all sectors during 2008 and 2009 (Table 6).

| 3.19 | However, this economic growth has not been shared in Gaza. The post-conflict private sector recovery and the reconstruction efforts have been severely hampered by continuing restrictions on |

| Table 6: West Bank and Gaza: Structure of Economic Activity and Growth |
|---|---|---|---|---|---|---|---|---|---|
| West Bank | (shares of GDP) | | | | | | | | | |
| Agriculture | 14.4 | 10.0 | 8.5 | 7.3 | 7.8 | 6.5 | 5.0 | 5.0 | 5.0 | 5.3 |
| Manufacturing | 21.6 | 15.1 | 14.5 | 12.8 | 14.3 | 15.7 | 16.2 | 14.1 | 14.9 | 13.8 |
| Construction | 7.6 | 8.5 | 5.0 | 3.8 | 5.2 | 5.3 | 6.3 | 7.3 | 6.8 | 7.4 |
| Private sector services 1/ | 37.1 | 34.6 | 31.3 | 34.7 | 31.8 | 32.9 | 31.9 | 30.4 | 32.7 | 33.8 |
| Public sector services 2/ | 16.4 | 22.1 | 25.6 | 28.9 | 29.8 | 26.0 | 25.3 | 25.9 | 24.7 | 23.2 |
| Other 3/ | 2.8 | 9.6 | 15.0 | 12.4 | 11.2 | 13.6 | 15.4 | 17.2 | 15.9 | 16.5 |
| GDP | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| West Bank | (annual growth rate) | | | | | | | | | |
| Agriculture | -20.0 | -24.2 | -26.1 | 16.4 | -3.2 | -21.2 | 5.1 | 9.7 | 19.5 | 3.4 |
| Manufacturing | -77.8 | 171.9 | 2.0 | 22.7 | -11.2 | 10.9 | -32.5 | -60.9 | -15.6 | 3.4 |
| Construction | -44.1 | -47.7 | -34.2 | 46.9 | 21.1 | 20.2 | 20.8 | 4.1 | 20.9 | 3.4 |
| Private sector services 1/ | 3.6 | -19.8 | -4.7 | 0.3 | 21.2 | -0.7 | 1.2 | 19.7 | 15.5 | 3.4 |
| Public sector services 2/ | 5.2 | 2.5 | -3.1 | 13.3 | 2.1 | -0.3 | 5.8 | 6.3 | 4.9 | 3.4 |
| Other 3/ | 21.9 | 37.8 | -28.7 | -1.2 | 41.8 | 15.8 | 15.8 | 2.9 | 15.9 | 3.4 |
| GDP | -7.7 | -11.4 | -14.0 | 9.6 | 16.9 | 2.5 | 3.5 | 11.4 | 11.7 | 3.4 |
| Gaza | | | | | | | | | | |
| Agriculture | 4.0 | 5.7 | -26.5 | 21.9 | 4.5 | -19.1 | -3.4 | -3.0 | 2.1 | 3.4 |
| Manufacturing | 7.8 | 17.9 | 2.0 | 22.7 | -11.2 | 10.9 | -32.5 | -60.9 | -15.6 | 3.4 |
| Construction | -32.2 | -36.3 | -43.8 | 46.0 | 39.5 | 46.8 | -27.2 | -23.3 | -44.2 | 3.4 |
| Private sector services 1/ | -0.8 | -19.4 | -0.5 | 7.7 | 6.7 | 31.1 | -32.5 | 5.9 | -21.0 | 3.4 |
| Public sector services 2/ | -2.5 | 14.7 | -17.2 | 24.6 | -5.5 | 20.4 | -0.5 | 4.7 | 8.8 | 3.4 |
| Other 3/ | 66.9 | -37.0 | 15.0 | 98.9 | 20.0 | 21.4 | -41.6 | -15.3 | 54.9 | 3.4 |
| GDP | -11.1 | -2.0 | -11.9 | 25.7 | 3.1 | 21.0 | -20.1 | -8.0 | -9.8 | 3.4 |

Source: Palestinian Central Bureau of Statistics

1/ Private sector services include: wholesale and retail trade, transport, storage and communications, financial intermediation, real estate, renting and business services, hotels and restaurants and households with employed persons.

2/ Public sector services include: Community, social and personal services, education, health and social work, public administration and defense, and public enterprises.

3/ Other includes mining and quarrying, electricity, water supply, and customs and VAT on imports.
capital inputs, raw and building materials. Gaza has experienced double-digit contractions every year since 2006 across most sectors, as shown in Table 6. Indeed, the only sector that has experienced any growth in Gaza since 2005 has been the public sector beginning in 2008. As a result, the share of public sector services in economic activity had more than doubled in Gaza, from 25 percent of GDP in 1994 to nearly 57 percent of GDP in 2008. In contrast, private sector services had declined from 35 percent of GDP to 24 percent during the same time period.

**Occupation Types and Characteristics**

3.21 How have these developments in the structure of the economy impacted the labor market? Among the employed population in the West Bank and Gaza, the share of workers in the private sector increased from 73 percent of the total employed population in 2004 to 75 percent in 2009, while the share of self-employed workers declined from 26 percent in 2004 to 20 percent in 2009. Most of this private sector increase was among salaried workers, which constituted 50 percent of total employment by 2009. However, self-employed workers also increased from 15.4 percent of the total in 2004 to 20.4 percent in 2009 (Figure 43). These national trends mask the large increases in the share of public sector and NGO workers in Gaza, which together constituted nearly 50 percent of total employment in Gaza in 2009. In contrast, the share of workers in the private sector is much higher in the West Bank than in Gaza, and has been increasing since 2006. Note that the share of salaried private sector employment in Gaza is much lower than that in the West Bank, and it is the public sector where the largest share of workers is now employed.

**Figure 43: Composition of Workforce (Percentage of Total Employed Workers)**

![Composition of Workforce](image)

Source: PECS, 2004-2009

3.22 Although among the employed youth, the share of the private sector is falling and that of the government sector is rising, regular private sector employment has consistently been more common among the youth. Young workers are also less likely to be in government employment. Whether this is out of choice or not, this concentration of youth in the private sector could be
a reason for the disproportionate increase in youth unemployment in the last decade. Another
worrying pattern is the large and increasing incidence of youth who work as an ‘unpaid family
members’, with the share of such work in youth employment rising from 11 percent in 1999 to
15 percent in 2009.

3.23 As expected from the discussion on sectoral growth above, within the private sector there has
been a marked shift away from manufacturing and construction towards the service sectors. This
is reflected in a sharp reduction in the share of manufacturing and construction in total
employment, which fell from 37 percent in 1998 to 24 percent in 2009, while the services sector
(other than commerce) expanded from 28 to 41 percent of total employment in the last ten years
(Figure 44).

Figure 44: Employment by Industry in the West Bank and Gaza

![Pie charts showing employment by industry in 1998 and 2009.]


3.24 The isolation of the Gaza strip, with its attendant economic
distress, is also reflected in the
absence of employment sources for individuals living in Gaza
who formerly commuted to
Israel. Following Israel’s
unilateral disengagement in
2005 and its response to the
Hamas takeover in 2007, the
Gaza strip has been effectively
cut off from the rest of the
world. Figure 45 shows that no
one from Gaza works outside
the territory any more.

Figure 45: Percent Employed who Work within the West
Bank and Gaza

![Graph showing percent employed who work within the West Bank and Gaza from 1998 to 2009.]

4. Trends and Patterns in Earnings and Wages

3.25 Given the contraction in GDP per capita between 2004 and 2007, it is not surprising that in addition to the job losses and rising unemployment documented earlier, there is also strong evidence of labor earnings having fallen during this period. Moreover, despite mild GDP recovery in recent years, there is no evidence in PLFS data that mean wages rose between 2008 and 2009. Figure 46 uses PLFS data on individual education levels and real wages (among those in public and private sector wage paying jobs) to summarize how the empirical relationship between wages (in logarithms) and years of schooling has changed between 1999 and 2009. Real wages have fallen at all education levels, but much more so among the least educated. The mean wage earned by illiterate workers fell by as much as 45 percent, while that earned by those with secondary school education fell by 25 percent. Among those with 5 years of schooling, real wages were about 30 percent lower in 2009 compared to 1999. Workers with a college degree experienced a decline of about 10 percent.

3.26 Why did wages fall between 1999 and 2009? Part of the answer lies in the fact that the incidence of job loss after the Second Intifada was the highest among Palestinians who worked in Israel. The share of Palestinians who worked in Israel fell from 22 percent of the workforce in 1999 to 10 percent in 2009. In particular, the share of Palestinians working in Israel coming from Gaza fell from a high of 17 percent in 1998 (about 27 thousand workers) to zero in 2005 and beyond. Past studies have documented that Palestinians working in Israel earned a wage premium relative to their counterparts working in Gaza (Miaari and Saur, 2006). This wage premium implies that the compositional change in employment – namely, the drop in the share of Israeli jobs among all jobs held by Palestinians – would have reduced mean wages.

3.27 The loss of Israeli jobs can also explain why the post-Intifada wage decline was lower among the more educated. This is because Palestinians working in Israel are on average less educated than those working within the West Bank and Gaza. In 1999, the gap in mean wages between workers with elementary school education and those with college degrees was a mere 10 percent, which is consistent with a greater incidence of Israeli jobs with wage premiums among the less educated. By 2003, as jobs with wage premiums disappeared, the college educated group was earning 26 percent higher wages than those with elementary school education.
Is the loss of Israeli jobs alone sufficient to explain the wage decline after the Intifada? Regressions which estimate the relationship between mean wages and education after taking differences in the sector and location of work into account suggest otherwise.\textsuperscript{38} Once location is held constant, the 1999 wage gaps between uneducated and educated workers are significantly larger than the unadjusted gaps. This is as expected, since the regressions have ‘corrected’ for the effect of Israeli wage premiums by allowing wages to differ by location. Adjusting for the Israeli wage premium does not affect the 2003 wage gaps between uneducated and educated workers to the same extent, and this too is as expected, since by 2003 Israeli jobs accounted for a much smaller fraction of wage jobs held by Palestinians. However, even after accounting for the reduced incidence of Israeli wage premiums, the estimated wage gap between those with college degrees and elementary school education rises by 13 percentage points between 1999 and 2003.

One explanation for why the biggest wage declines were experienced by the least educated is the increased competition for low-skilled domestic jobs due to the loss of Israeli jobs after 2001. Most Palestinians working in Israel held low-skilled jobs. Moreover, there is evidence that even highly educated Palestinians who lost their Israeli jobs ended up competing for low-paying domestic jobs (Mansour, 2010).\textsuperscript{39}

Another possibility is that the disruptions caused by internal closures and conflict also reduced domestic labor demand, and to a greater extent in sectors or occupations where the less educated tend to concentrate. This is suggested by the pattern of changes in the sectoral/industry composition of employment. Industries such as construction, which are more likely to employ the less educated, shrank. Health, education and public administration, which are more likely to employ the more educated, expanded. A related explanation is the rising share of the government sector, which disproportionally employs the more educated.

Worryingly, PLFS data indicate that even in recent years mean real wages have not returned to pre-Intifada levels. Instead, they appear to have stagnated between 2003 and 2009. This is true for all levels of education, and as a result, differences in mean wages between educated and uneducated workers have largely stayed at their 2003 levels. Even after accounting for differences in the sector and location of jobs, these wage gaps have persisted into 2009. Thus, the relative wages of less educated workers are still considerably worse than they were at the start of the decade.

\textsuperscript{38} Vishwanath and Sharma (2010) regressed the log of the wage on age, age squared (as proxies for experience), dummies for educational level, sector and location of work. The default category is a regular private job in the West Bank. The estimates reported in the text assume the age is 21 years.

\textsuperscript{39} From Mansour (2010): “The most conservative results in the paper suggest that a 10 percent increase in the supply of low skilled workers reduces low skilled wages by about 1 percent. Interestingly, an increase of 10 percent in the supply of high skilled workers also reduces low skilled wages by about 1.5-2 percent. This suggests that high skilled workers who could not commute to Israel anymore compete over low skilled jobs, pushing the low skilled into unemployment.”
When looking at either wages or consumption by region, it is the least educated who have fared the worst (Figure 47). In Gaza, this is partly because access to external labor markets – which mattered most to the least educated – has been completely cut off. Another reason for this is that the less educated have fewer opportunities for working in the government, a sector which appears to have been relatively shielded from the worsening economy. Indeed, the government accounts for more than half of all jobs in Gaza now. The private sector has fared poorly in recent years, with its share in employment falling from 28 percent in 2003 to 15 percent in 2008. There are now more self-employed individuals than those holding private sector jobs in Gaza.

There is also evidence that wages have fallen to a greater extent in the private sector, with the public-private wage differential having risen after the Intifada. This public sector wage premium had increased more at the low-end of the income distribution, particularly in Gaza, suggesting that public sector employment has increasingly become a safety net. While there is a clear trend of an increase in government wages relative to private sector wages in the West Bank between 2003 and 2008, at no point during this period were government wages higher than private wages, after accounting for age, tenure, education, occupation and other characteristics. In sharp contrast, the public sector wage premium was positive throughout this period in Gaza, rising from 16 percent in 2003 to above 50 percent in 2008. Indeed, as shown in Figure 48 below, as of 2009 the returns to education are higher in the public than in the private sector in Gaza -- the only exception being for workers with relatively little education. In contrast, in the West Bank the returns to education are slightly higher in the private sector.
3.34 It has been suggested that high public sector wages are partly responsible for constraining employment growth in the private sector. Indeed employment, in the public sector is closely related to educational attainments. Figure 49 illustrates that the relatively more educated are more likely to be employed in the public sector. In Gaza, this relationship is stark: almost two-thirds of the population with more than secondary level education is employed in the public sector. Even more surprisingly, a significant proportion of those with elementary education or less are employed in the public sector.

3.35 While the existence of a public sector premium may be true for Gaza, the only indication of a public sector premium in the West Bank is in UN and related jobs, which account for no more than 5 percent of total employment. Thus, falling private sector wages (relative to public sector wages) are probably more indicative of falling labor productivity, and it might be better to focus on policies that raise productivity – and hence labor demand – in the private sector.

3.36 In summary, these results show that the labor market in Gaza is effectively severed from the rest of the world. This is corroborated in PLFS data: Gaza has done markedly worse than the West Bank.
Bank along nearly all measurable dimensions in recent years. Unemployment is much higher in Gaza than in the West Bank. Gaza also has markedly lower labor force participation rates. Earnings are low, regular private sector jobs are scarcer than in the West Bank and pay less than the government, and those with jobs report very high rates of absence from work (mostly due to “temporary stoppages”) in recent years. Another indicator of labor market despair is that in 2009, nearly 20 percent of jobless PLFS Gaza respondents who said that they were available for work also reported that they had not actively sought work in the past week, largely because they were “discouraged to find a job” or were still awaiting the result of past job applications.

5. Poverty and the Labor Market

3.37 How have rising unemployment, increased discouraged workers, and declining earnings affected poverty rates? Typically the poor depend on labor income for their livelihood. As shown below, lack of employment is associated with high risk of poverty in the West Bank and Gaza. As can be expected from the discussion above, the type of employment and the region of residence are important determinants of the incidence of poverty among the employed population.

**Poverty and Labor Force Status**

3.38 Not surprisingly, the unemployed have higher poverty rates than those who are employed or out of the labor force, particularly among the youth (see Box 4). The poverty rates among the unemployed increased from 32 percent in 2004 to 45 percent in 2007; and have yet to come down to their 2004 levels (Figure 50). By 2009 poverty among the unemployed was still at 36 percent. In contrast, poverty rates among the employed increased only slightly from 21 percent to 25 percent between 2004 and 2007 and then declined to 17 percent in 2009, well below their 2004 levels. Poverty rates among those out of the labor force increased from 26 to 31 percent between 2004 and 2007 and were at 23 percent in 2009.

![Figure 50: Poverty Rate by Labor Force Status](source: PECS 2009)
3.39 However, the nationwide picture masks important differences across West Bank and Gaza. In Gaza, poverty rates reached a staggering 70 percent among the unemployed and 50 percent among those out of the labor force in 2007 (Figure 51). Although these rates have since come down, they are still well above the 2004 levels. In contrast, poverty declined for the unemployed and those out of the labor force in the West Bank between 2007 and 2009, declining further by 2009.
Like many other countries in the Middle East and North Africa region, the West Bank and Gaza has a substantial ‘youth bulge’ with about 30 percent of its population between the ages of 15 and 29 (PECS 2009). Moreover, young people in the West Bank and Gaza face major challenges in the labor market. Based on calculations from the Palestinian Labor Force Survey (PLFS), in 2009, the unemployment rate among the youth stood at a staggering 35 percent in the West Bank and Gaza. These limited economic opportunities for the youth pose a huge challenge, especially because they appear to be strongly associated with higher poverty. Data from the PECS illustrates this link between youth unemployment and household poverty. In both the West Bank and in Gaza, across the years 2004 to 2009, households with at least one unemployed youth member have considerably higher poverty incidence than households that have no unemployed youth members (see below). While the overall incidence of poverty in both groups isdeclining over time in the West Bank, in Gaza, the trend is an upward one for both categories, especially between 2004 and 2007. Even more telling is the huge spike in poverty rates in 2007 amongst households with at least one youth member unemployed, a whopping 70 percent.

Poverty and Sector of Employment

3.40 Which sectors contributed the most to income growth and poverty reduction? Were the changes in poverty due to changes within sectors or as a result of employment shifts across sectors? These questions are potentially important, given the policy debates on the effectiveness of government and donor resources, and potential trade-offs between public sector employment and the provision of a safety net for the poor.

3.41 Poverty rates in the agricultural sector are the highest among private sector workers, reflecting its declining contribution to GDP growth (Figure 52). In fact, the decline in economic activity in the sector has implied that the share of poor workers in agriculture has increased from 29 percent in 2004 to about 31 percent in 2009. In contrast, poverty rates in the services sector, and in particular in the public sector were the lowest in 2009. Note that while poverty rates in agriculture and manufacturing fell between 2004 and 2009, there were large increases in the
incidence of poverty in services in 2007, partly reflecting the lower availability of donor financing, particularly to the government.

![Figure 52: Poverty Rates by Sector of Employment in the West Bank and Gaza](image)


3.42 These aggregate figures hide sharp differences between West Bank and Gaza. When looking across types of workers, it is clear that poverty rates in Gaza are higher for all types of workers, when compared to the West Bank (Figure 53). In general poverty incidence is much lower among households with heads working as employers versus households whose heads are salaried workers or self-employed in both West Bank and Gaza (Table 32). However there are also interesting differences. For example, beginning in 2006, private sector salaried workers were just as likely to be poor than self-employed workers in Gaza, while in the West Bank self-employed workers are relatively poorer. This may be due to the greater isolation of Gaza following the election of Hamas, which deteriorated labor market conditions in the private sector considerably. In the West Bank, on the other hand, conditions for workers with jobs in the private sector remained relatively stable, while self-employment might have been used as a coping mechanism for workers who would have otherwise been unemployed. It would be particularly interesting to see how individuals working in the informal economy fared. Unfortunately, PECS data does not afford the opportunity to measure informality.
The population in Gaza living in households whose heads was working in the public sector increased from about 31 percent in 2004 to 43 percent by 2009. At the same time, the percentage of heads working in the public sector rose from 33.8 percent 45.6 percent between 2004 and 2009. The evidence is suggestive of public sector employment playing a safety net role.

Despite the privileged position of public sector workers, notice that in 2007, the poverty incidence among households in Gaza with heads who had public sector employment increased to 33.3 percent, suggesting that even this type of employment had its limits in removing the vulnerability of households to severe economic shocks. Indeed, as described in more detail in Chapter 6, following the election of Hamas, both domestic and international sources of financing were severely limited for the public sector during the second half of 2006 and early 2007, leading the government to incur in large public sector wage arrears: public sector workers effectively went without wages for months at a time.

The poverty rate in the private sector in the West Bank was remarkably stable between 2004 and 2009, while in Gaza there was a large increase. This is reflective of the continued economic growth in the private sector in the West Bank mentioned earlier, which despite the overall downturn in 2006, led to increases in consumption for all private sector workers in the West Bank. The same does not hold for Gaza, where households with heads working in the private sector experienced large declines in consumption in 2007 relative to 2004.

Among private sector workers, poverty appears correlated with the sector of employment of household heads. In the West Bank, the incidence of poverty appears lower among households whose heads were working in the services sector compared with other groups, while the agriculture sector appears to be the poorest (Table 33). In Gaza, although services are the main generator of jobs in the private sector, the incidence of poverty among households with heads working in the services sector was 30 percent in 2009 --20 points higher than in West Bank. While in 2009 the poverty incidence among those in the services sector was lower than those not
in the services sector (i.e., those in agriculture, manufacturing and construction)\(^40\), in 2007 households with heads working in the services sector faced greater risks of being poor. This suggests that the private sector in Gaza is inherently volatile, with no sector immune from economic uncertainties.

If we examine the trends in growth in adult equivalent expenditures by sector of employment of the household head, it gives us some additional insights into the workings of the labor market and the links to poverty (Table 34). Clearly, households with heads working in the private sector were the most vulnerable in Gaza during 2007. Recovery in the private sector in Gaza has been modest since 2007 and the little recovery there has been was limited to the services sector (Table 7). On average, the adult equivalent per capita expenditures of households with heads who are employed in the services sector are higher than those in other private sectors in both the West Bank and in Gaza. The growth diagnostics point to the vulnerabilities of those households with heads working in the private sector. At the same time, it also shows that no part of the population in Gaza was insulated from the economic crisis in 2007. Since then, however, growth in Gaza has been driven not by the private sector, rather by public sector and NGO / aid-based employment.

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<td>12.4</td>
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<tr>
<td>Services</td>
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<td>613.9</td>
<td>786.7</td>
<td>-35.6</td>
<td>28.1</td>
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<td>653.1</td>
<td>639.6</td>
<td>-17.5</td>
<td>-2.1</td>
<td>-19.3</td>
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Source: PECS 2004-2009

**Contributions to Poverty Reduction**

3.48 How far have the poor benefited from the expansion of public sector employment? This question is potentially important, given the policy debates on the effectiveness of government expenditure and donor resources, and potential trade-offs between public sector employment and the provision of a safety net for the poor.

3.49 An indirect way to examine this is by decomposing overall poverty changes during 2004 - 2007 into changes in poverty within specific types of employment, and changes in the share of workers

\(^{40}\) Due to small sample size we break down Gaza’s private sector jobs by service / non-service, unlike the West Bank where greater disaggregation is possible.
attached to each type of employment. The analysis shows that between 2004 and 2007, the large increase in poverty in Gaza was mostly due to changes within each type of employment (Figure 54). Only a small share of the population was able to mitigate the shock by moving across types of employment (to the public sector). Similarly, the reduction in poverty in Gaza between 2007 and 2009 was due to changes within each type of employment. In the West Bank, on the other hand, there were no large increases in poverty between 2004 and 2007 for those employed. In 2009, both changes within types of work and across public/private sector helped to reduce poverty in the West Bank.

![Figure 54: Poverty Changes by Employment Type](image)


3.50 A more complete way of looking at this is by looking at the entire distribution of household expenditures in the PECS, rather than simply concentrating on the poor. The results show that households have had increases in overall household consumption every year in the West Bank, while there was a strong contraction in Gaza in 2007, with household consumption in 2009 still below their 2004 levels for all households (Figure 55). In the both in the public and in the private sector (Figure 3.22). In Gaza, however, there was a sharp reduction in consumption in 2007 in all households, although by 2009 most of this shock had been reversed. Interestingly, workers in the lower deciles in Gaza experienced improvements in their consumption relative to 2004, while those in the higher levels of consumption have yet to catch up to their 2004 levels of consumption. This effect is more pronounced in the public sector, reflecting some pro-poor growth between 2007-2009 and potentially a growing wage premium in the public sector for low-income individuals in Gaza.
6. Conclusions and Summary of Main Findings

3.51 Growth and labor market trends in the West Bank and Gaza closely mirror periods of conflict and instability, reflecting the heavy reliance of the Palestinian economy on Israel, and the adverse economic impacts of the regime of closures and restrictions. There is little evidence of sustained per capita GDP growth during this period, with a secular decline in the private sector, and marked contraction in manufacturing and agriculture. In particular, the large decline in agriculture and manufacturing has been a function of greater controls on imported capital goods and raw materials, as well as constrained revenue due to restrictions on access to outside markets. In contrast, sectors producing non-tradables and those that are less vulnerable to physical controls, notably in construction-related activities and services, have fared much better. The public sector accounts for an increasingly large share of employment, much of which reflects an aid driven expansion in administration, health, education and other social sectors. In the case of Gaza, the only sector that has seen any growth over the last few years has been the public sector. In this sense, public sector employment in Gaza has become a form of a safety net. The West Bank and Gaza economy remains highly dependent on external assistance and crippled by political
uncertainty and restrictions on the movements of goods and people. The next chapter of this Poverty Assessment further explores these spatial dimensions of poverty and its determinants within the context of the regime of internal closures, checkpoints and barriers in the West Bank, while the role of international aid is explored in Chapter 6.

3.52 The most visible reflection of this regime of internal and external closures and the accompanying volatility in growth has been the sheer lack of employment opportunities. By all measures, the West Bank and Gaza labor market has fared badly in the last decade, with Gaza doing markedly worse. Unemployment is chronically high, and real wages have fallen. The unemployment rate, amongst the highest in the world, has directly reflected the severity of the recessions experienced in 2000-2002 while growing underemployment and declining participation rates have reflected the escalation of tensions in 2006. Especially worrisome is the large and continuous decline in youth employment and falling participation rates, particularly in Gaza. Women are another vulnerable group, with one of the lowest labor force participation rates in the world. Educated women are increasingly confined to government employment, while less educated women appear to have little access to such jobs. There is also evidence that the decline in household incomes has forced women to help in informal activities as unpaid family members.

3.53 At the same time, there has been a decline in real wages at all levels of education. Real wages have declined as a result of the loss of sources of work in Israel, particularly for the unskilled who have had to find jobs within the West Bank and Gaza in a context of declining domestic demand. While there is some sign of a turnaround in recent years, with unemployment having fallen between 2008 and 2009, it is unclear if this portends a robust recovery. Even in 2009, there is no evidence of an increase in real wages, which suggests that labor productivity had not yet begun to recover.

3.54 The impact on the labor market in terms of loss of employment and falling wages has translated into large increases in poverty rates, particularly for the unemployed and those out of the labor force. This effect has been the strongest in Gaza, which was effectively cut off from access to markets in 2007. For individuals who managed to stay employed, poverty rates also increased. In the West Bank, the self employed seem to be the most vulnerable, while in Gaza private sector employees are more vulnerable. Public sector workers were relatively more protected from falling into poverty, particularly in Gaza.

3.55 The expansion of public sector employment partly reflects its role as a safety net compensating for the inability of other sectors to grow. The growth in sectors producing non-tradables and those that are less vulnerable to physical controls such as the services sector, are also natural responses to the mobility restriction induced constraints on other sectors. Ideally, private sector development should be the source of employment and wage growth in the West Bank and Gaza going forward.

3.56 However, unlike most countries in the world, creating an appropriate business climate goes beyond the control of the Palestinian Authority. The analysis in this chapter suggests that the real imperative for poverty reduction lies in sustained and substantial job creation, driven by the private sector. The current regime of internal and external closures and prevailing climate of political and economic uncertainty are the most visible constraints to private sector growth.
Moreover, these have created unique economic conditions, resulting in distorted labor market conditions and a skewed composition of employment in the West Bank and Gaza. Unless this regime of closures is addressed squarely, it will be difficult to expect radical improvements in poverty. Until such a change is achieved, policy makers can look to supporting growth in sectors that are best placed for providing productive employment growth in an environment of movement and access restrictions. Our analysis suggests that not all jobs are equally vulnerable to closures, so there may be large returns to investigating which private sector activities are least vulnerable to those closures. The analysis in this chapter points to the construction and service-related sectors. The next chapter focuses on the impacts of checkpoints and closures on economic activity in the West Bank.