1. The Context: The Palestinian Territory

The nature of poverty in the West Bank and Gaza is intrinsically tied to and must be understood within the historical and political context of this region. Over the last five decades, political developments in the West Bank and Gaza have had a significant impact on the social and economic wellbeing of Palestinians. Changes in domestic, Israeli and international policies have affected the Palestinian economy throughout this period, both in terms of growth trends and the volatility of growth. This has a natural consequence on indicators of wellbeing at the household and individual level. Following the Second Intifada of 2000, the Palestinian economy began to resemble no other in the world. Limited say over economic policies and trade, the extent of dependence on Israel and international aid and a regime of internal and external closures has created an economy characterized by extreme fluctuations in growth and employment and an increasing divergence between the two territories: the West Bank a fragmented archipelago; and Gaza an increasingly isolated island.⁷Despite stringent Israeli restrictions, the West Bank and Gaza outperforms countries with similar per capita incomes on many dimensions of development, and is in fact on par with much richer countries such as Turkey and Jordan. This suggests that within its limited ambit of influence, the Palestinian Authority has implemented effective policies and ensured service delivery, which bodes well for the formation of a future Palestinian state.

1. The First Intifada to the Second

- 1.1 With the conclusion of the 1967 war between Israel and the neighboring Arab states, the West Bank and the Gaza Strip came under the control of the Israeli army. A subordinate of the Israeli Ministry of Defense called the "Civil Administration" managed day-to-day affairs of Palestinians living in the West Bank and Gaza. The Civil Administration functioned in close collaboration with the Israeli Defense Forces who managed security and political matters in the territory. Thus, many aspects of Palestinian daily life such as mobility, employment, and business development were determined by the Israeli Army and the Civil Administration, frequently resulting in intermittent rounds of politically driven confrontations, ranging from unarmed civil resistance to the use of lethal force.
- 1.2 Most prominent of these confrontations was the First Intifada, a term which means "public uprising". Starting in the Gaza Strip during 1987, the uprising rapidly spread to the West Bank. The violence associated with the Intifada persisted until direct peace talks were held between the Palestinians and the Government of Israel (GoI) in Oslo in 1993. This extended period of conflict subsided by 1994. The successful resolution of the conflict and the establishment of the Palestinian Authority as a *prospective* sovereign entity to govern a future Palestinian State created a sense of optimism. Despite the fact that the complete transfer of power from the Government of Israel to the Palestinian Authority never materialized, the prospects of peace initiated a short-lived period of political stability and economic revival in the years following the Oslo Accord.
- 1.3 As part of the piecemeal plan for the establishment of a Palestinian State, localities in the West Bank and Gaza were divided into 3 areas: A, B, and C (see Map 3). The Palestinian Authority

⁷ http://thelede.blogs.nytimes.com/2009/05/07/the-west-bank-archipelago/



possessed semi-complete autonomy in area A (composed of heavily populated Palestinian cities and towns); civil autonomy but no security control in area B, and no control whatsoever in area C – the largest of the three, encompassing more than half of the West Bank and Gaza. As a part of civil control over areas A and B, a publicly elected parliament⁸ was established and ministries were created to regulate education, health, labor, and finance in the territory, creating a vehicle for domestic policy

⁸ Palestinian Legislative Council (PLC)

formulation and implementation. Despite original plans of progressively increasing Palestinian sovereignty over areas B and C through negotiated withdrawals, little progress took place in subsequent years, leading up to a second round of violence.

- 1.4 Seven years after the Oslo peace talks, the Palestinian Authority remained far from achieving sovereignty in the West Bank and the Gaza Strip. With no control over the territory's borders, it had little say over its economic policies with other counties. Additionally, border closures by Israel reduced Palestinian employment opportunities in Israel considerably. With limited trade options, and fewer employment opportunities, as discussed in more detail in Chapter 3, the Palestinian Authority dramatically increased public employment as a means of social assistance.
- 1.5 On the political front, continued Israeli settlement expansion in the West Bank and Gaza created further strain. In late 2000, a clash between Palestinians and Israeli security forces erupted in Jerusalem and rapidly spread to the rest of the Palestinian territory. This became the Second Intifada. In an attempt to contain and dampen the escalation of violence, the Israeli government rescinded the Palestinian Authority's limited autonomy in areas A and B, imposing restrictions on the movement of people and goods in, out, and within the West Bank and Gaza. Over the next 10 years, the level of violence and closures varied, as did their impact on social and economic welfare. In particular, the West Bank and Gaza experienced different forms of violence, mobility restrictions and political changes. This created a divergence between the two territories, which had important implications for growth, employment, and poverty.

Economic Consequences of a Volatile Political Situation

1.6 While the pre-Intifada years were generally characterized by high GDP growth, there was a significant slowdown in growth in 1995 and 1996, as of the a result frequent border closures imposed by the GoI during that time. As the restrictions were gradually eased in 1997 and 1998, the economy was able recover to and resume growing at a



fairly high rate through 1999 and the first half of 2000. Beginning with the outbreak of violence in September 2000, economic activity fell dramatically (Figure 12).

- 1.7 It is difficult to underestimate the dependency of the Palestinian economy on Israel at the time of the Second Intifada for various reasons. First, the Israeli labor market had been a very important source of employment and income for many Palestinians. Second, Israel was the most important trading partner for the West Bank and Gaza. Prior to the second Intifada, Israel accounted for more than 90 percent of Palestinian exports. While some imports into the West Bank and Gaza originated from outside Israel, virtually all imports came through or from Israel. Third, Israel collects taxes on behalf of the Palestinian Authority, which at the time of the Second Intifada normally made up about two-thirds of total government revenues. By affecting these channels, the conflict had an economic impact on the West Bank and Gaza far beyond the physical destruction of infrastructure. As a result of the dependency of the West Bank and Gaza on the Israeli economy, the fluctuations in economic activity over the past twenty years have been closely related to the varying levels of restrictions imposed by the Government of Israel (GoI). The most important of these restrictions have been the periodic border closures, but since the Intifada began in late 2000, the internal blockades and curfews have also played an increasingly important role.
- 1.8 The regime of closures is especially harsh given the high dependence of the Palestinian economy on imports. Total domestic expenditure surpassed domestic production by a large margin throughout 1994–2000, ranging between 150 to 165 percent of GDP. With exports typically equal to only 20 percent of GDP during this period, imports ran between 70–85 percent of GDP. The high levels of imports were partially explained by the high levels of private consumption and investment. Private consumption remained close to 100 percent of GDP throughout the 1994–2000 periods, fueled by worker's remittances and transfers from abroad. Public consumption also increased over these years, reflecting the growth of the Palestinian Authority (PA). Fixed investment was over 30 percent of GDP in every year during 1994–2000, mostly undertaken by the private sector, with a large proportion of this investment being directed to residential housing, rather than productive investment.
- 1.9 The dependency on imports led to a large deficit in the Palestinian trade balance, which ranged from 50 to 65 percent of GDP during 1994–2000; this trade deficit was offset to a considerable degree by net factor income and net current transfers, which include aid and remittances. As noted earlier, employment in Israel and the settlements played a very important role as a source of income. Net factor income from abroad rose fairly steadily during 1996–99, after the dip that followed the closures of 1995–96, reaching 21 percent of GDP before subsiding in 2000. That source of income was complemented by large current transfers, in form of aid flows as well as private remittances from the large Palestinian expatriate population.⁹
- 1.10 Despite this high level of factor income and current transfers from abroad, the Palestinian economy ran current account deficits in the order of 20 to 35 percent of GDP from 1994 to 2000.

⁹ IMF, 2003 Staff Report available at http://www.imf.org/external/pubs/ft/med/2003/eng/wbg.pdf

Donor assistance for capital projects to the West Bank and Gaza was very high on a per capita basis and has played a crucial role toward financing the large current account deficits.¹⁰

- 1.11 On the fiscal front, the PA succeeded in steadily increasing revenue from about 8 percent of GDP in 1994 to around 21 percent by 1999, bringing the share of revenue to GDP in the West Bank and Gaza substantially above the average for other Arab countries in the region. This was largely the result of the PA's efforts in strengthening its tax administration capabilities, the establishment of the revenue clearance system with Israel¹¹ and the setting up of mechanisms to mobilize domestic tax revenue. It had more difficulties in managing and controlling public expenditure, especially with regard to the wage bill. The high and increasing wage bill began to crowd out other expenditures, and the PA had to rely on donors and NGOs to provide some public services and finance public investment. The PA nevertheless achieved an impressive turnaround in the current budget balance from a deficit of 4 percent of GDP in 1996 to a surplus of 1 percent in 1999.¹²
- 1.12 The renewed violence, closures, and blockades at the end of September 2000 put an end to these favorable trends, and since then, the budget of the PA was challenged by a collapse of revenues while expenditure needs continued to grow due to the growing population, rising poverty and the destruction of essential infrastructure.

2. The Second Intifada and its Ramifications

2000 - 2006

- 1.13 The first few years of the second Intifada were particularly violent, resulting in significant collateral damage and the targeting of civilians on both sides. In an attempt to contain the escalation of violence, the Israeli army frequently relied on curfews, limiting the movement of hundreds of thousands of people for weeks. Curfews, along with the system of closure, resulted in limited internal mobility within the West Bank and Gaza, coupled with complete isolation of movement between the two areas.
- 1.14 These curfews limited economic activities and restricted the income-generating potential of entire communities in the West Bank and Gaza. Consequently, the demand for daily wage workers diminished and regular wage workers were unable to reach their place of business. This was particularly true of low skilled laborers working in Israel. The result of the post-2000 closure system was critical to the Palestinian economy leading to huge employment losses for Palestinians previously working in Israel.
- 1.15 The West Bank, in particular, experienced a sharp rise in unemployment during this period, as a greater proportion of its labor force worked for Israeli employers relative to Gaza. In areas heavily dependent on Israeli employment in the West Bank, such as Hebron and Bethlehem, the

¹⁰ Ibid.

¹¹ From the first year of operation, the Government of Israel and the PA jointly operated a unified invoice system and closely collaborated to ensure the smooth operation of the revenue clearance system. This system provided a significant and stable source of revenue to the PA, equivalent to about 60 percent of the PA's total budgetary revenue, remitted on a monthly basis.

¹² IMF, 2003 Staff Report available at http://www.imf.org/external/pubs/ft/med/2003/eng/wbg.pdf

effects were particularly severe. Once tensions eased, the economy rebounded strongly between 2003 and 2005.

- 1.16 In 2005, the Israeli government unilaterally withdrew from the Gaza Strip. By reallocating its military presence, and some Israeli settlers away from Gaza, there was no need to maintain a network of roadblocks within the Strip. While the withdrawal resulted in greater internal mobility for the residents of Gaza, the Israeli government imposed a more stringent policy of external closure. This development is critical to understanding the divergence in economic outcomes between the West Bank and Gaza.
- 1.17 This new policy of external closure of the Gaza Strip transformed daily life in Gaza. Border crossings with Egypt were closed for goods and people, as well as movement of Gazans to the West Bank. The only functional crossing (the Karni border crossing) was controlled by Israel, and it only allowed the passage of goods.
- 1.18 Meanwhile, the Palestinian Authority (with a Fatah party majority) was losing popularity in Gaza and when parliamentary elections were held in 2006, its rival party, Hamas, came to power in Gaza. Since presidential elections had taken place only a one year earlier, the executive branch of the Palestinian Authority remained under the control of Fatah. As a result of the consequent international boycott of the Palestinian Authority, and Israel's freeze on clearance revenues, the PA was put under severe fiscal stress. The situation was exacerbated by the destruction of physical infrastructure during the Israeli incursion into Gaza and increased uncertainty about the Palestinian territories' prospects. GDP fell by 5.2 percent in real terms in 2006, leaving average real GDP per capita 22 percent below its 1999 level.

2007 – Present

- 1.19 After a failed attempt at forming a unity government, Hamas took over control of Government and security positions in the Gaza Strip. Meanwhile the President of the Palestinian Authority assigned a temporary caretaker government to manage public institutions in the West Bank. Israel and the international community endorsed the Caretaker Government and began to reinstate financial and technical assistance. By the end of 2007, two de facto governments existed concurrently, both claiming legitimacy in their respective territories. These developments were fundamental changes in institutional structure, with important ramifications for the scope of policy making, flow of international assistance, delivery of public services and social assistance in the two territories.
- 1.20 The Israeli government's response to Hamas's takeover was instituting a complete embargo on the Gaza Strip. With very few exceptions, movement of people and goods was severed by the summer of 2007. A fuel and electricity shortage paralyzed the basic necessities of life in Gaza. For example, a 60 percent 70 percent shortage in fuel needed to generate electricity resulted in hospital power outages exceeding 8 hours per day. Throughout the Intifada, the Israeli Army only occasionally issued permits allowing individuals to cross checkpoints for urgent medical needs. This was even further reduced in this period: according to the World Health Organization, the proportion of critical patients given permits to cross the border decreased from 89 percent to 64 percent between January and December of 2007.



Minister Fayyad's government led to some rebound in growth beginning in June 2007. However, the recovery was confined to the West Bank, as Gaza's borders were virtually sealed following continued civil strife. As a result, Gaza's economic and humanitarian situation deteriorated markedly due to the war and its increased isolation. The decline in economic activity in Gaza amounted to a 20 percent contraction in economic activity in 2006 followed by an 8 percent contraction in 2007 and a further 9.8 percent contraction in 2008 (see Figure 13). At end-2008, real per capita consumption in Gaza was 40 percent below its 1999 level.

- 1.22 These continued contractions in Gaza's GDP are almost without precedent. For example, the Asian crisis led to contractions of 6.9 percent in South Korea and 10.5 percent in Thailand in 1998 with subsequent sharp increases in growth the following year. Similarly, the Russian crisis led to a contraction of 5.3 percent in 1998; the Argentine crisis led to a contraction of 10.9 percent in 2002 with sharp increases in growth the following years. More recently, the financial crisis led to an 18 percent contraction in Latvia, the hardest hit country in 2009, with growth expected to have resumed in the second semester of 2010. These cases of extreme economic distress pale in comparison to the recurring high negative growth rates in Gaza.
- 1.23 More generally, the volatility in GDP observed over the past two decades has been unparalleled; only a few countries have had higher volatility in their GDP growth than the West Bank and Gaza (Figure 14). Excluding small island nations, the volatility of the economy's GDP growth between 1995 and 2009 is only comparable to that of Qatar and Chad (which had episodes of double digit growth due to oil wealth) and those of Rwanda, Guinea Bissau and Sierra Leone (which had double digit recessions as a result of internal conflicts). The outbreak of the second "Intifada" in 2000, combined with the violence and the regime of closures and curfews that followed marked a turning point.



- 1.24 Beyond the physical and economic ramifications of Gaza's embargo, the last three years were damaging on a psychological level, especially for women. Media and humanitarian organizations report a rise in domestic violence, driven by a sense of frustration due to rampant unemployment and very limited access to running water or electricity.¹³
- 1.25 The West Bank and Gaza's exports to Israel have been heavily constrained by Gaza's blockade as well as the steady tightening of the Separation Barrier between the West Bank and Israel. Trade restrictions have adversely affected the private sector in general and in particular the sectors producing tradable goods. While the majority of Gaza's industries remain stifled by the closure policy, one business branded the "tunnel industry" is thriving. With basic household and construction supplies barred from entering Gaza, several hundred tunnels have been constructed underneath the 7 mile border with Egypt to smuggle goods at a premium to Gaza's markets. Though goods smuggled though the tunnels do not meet the needs of Gaza's 1.5 million people, and are more expensive than locally or Israeli produced goods, the "tunnel industry" may represent an important source of both goods and jobs in an otherwise closed economy.
- 1.26 On the other hand, in the West Bank, Israel somewhat eased movement restrictions and closures, replacing the majority of over 400 roadblocks with many permanent checkpoints. However, Israel's presence in the West Bank continues to be manifested in areas labeled "Security Zones",

¹³ http://www.nytimes.com/2010/07/14/world/middleeast/14gaza.html

with very different ramifications compared to the external closure of Gaza. Security zones are composed of checkpoints, military compounds, settlement blocks, and a separation barrier, in total encompassing approximately 40 percent of the West Bank.¹⁴ Over the span of the second intifada, security zones in the West Bank expanded at the expense of several Palestinian population centers. The construction of the separation wall, which cuts through several Palestinian rural and urban communities, resulted in a seam-zone east of the green line¹⁵ and west of the wall, forcing most of its inhabitants to relocate.

1.27 In the meantime, the international community resumed its financial assistance to the West Bank government, which invested heavily in developing effective public institutions. Towards the end of 2007, stability and easing of movement in the West Bank began to have a positive effect on the economy. By 2009, the combined annual growth rate of the two territories reached 6.8 percent, though most of this growth was driven by the West Bank (8.5 percent) while Gaza remained sluggish under Israel's strict closure (1 percent growth).¹⁶ This dichotomy of the macroeconomic performance reflects the disparities in the determinants of poverty and vulnerability across the West Bank and Gaza at the microeconomic level. While the two territories are part of the same political entity and are often studied at the aggregate level, several inherent and recently developed differences exist between the two territories provides the conflict in these territories and the recent divergence between the two territories provides the context as well as the lens through which the insights presented in this report should be interpreted.

3. Coping with Conflict?

- 1.28 The prevailing reality in the West Bank and Gaza is unique in the world. The economy is profoundly influenced by its dependence on international aid and on Israel, the regime of manmade internal and external barriers to mobility and its limited say over economic policies and trade. With this in mind, this report provides a detailed assessment of poverty and inclusion in the two territories. Its overarching purpose is to examine poverty, labor market and human development outcomes and trends at the individual and household levels in the context of the ongoing conflict.
- 1.29 Analytical studies on the West Bank and Gaza have focused largely at the level of the macro economy. The World Bank last conducted a poverty assessment of the West Bank and Gaza in 2001, relying on data from years prior to the second Intifada. Given the fundamental developments since then, this poverty assessment is an attempt to present a cohesive picture of the economic and social well being of the people of the West Bank and Gaza. The analysis is based on a long series of household and labor force survey data and is the result of a close collaboration with the Palestinian Central Bureau of Statistics.
- 1.30 The report will demonstrate that poverty in the West Bank and Gaza, unlike in many other countries, is not correlated with poor human development outcomes. In fact, the West Bank and Gaza is a stellar performer on many dimensions of human development, especially in terms of measured indicators of early childhood nutrition. The Palestinian territories outperform other

¹⁴ http://www.ochaopt.org/documents/TheHumanitarianImpactOfIsraeliInfrastructureTheWestBank_full.pdf

¹⁵ The border separating Israel from the West Bank. Currently, both sides of the green line are controlled by Israel.

¹⁶ IMF Staff Report. See http://www.imf.org/external/country/wbg/RR/2010/041310.pdf

countries with similar GNI per capita (US\$, Atlas method) as well as its neighbors in the Middle East and North Africa region in terms of health and education outcomes.

- 1.31 Life expectancy and literacy rates in the West Bank and Gaza are much higher than in countries with similar per capita incomes such as India, Egypt, Nigeria, Cameroon and Ghana (Figure 15). In fact. Palestinian measures are on par with its much richer neighbors in the region, Turkey and Jordan, which have seven and three times the per capita income of the West Bank and Gaza.
- 1.32 Even more striking is the remarkable performance of the Palestinian territories on measures of early childhood development. Countries with similar per capita GNIs perform far worse in terms of measures of stunting and wasting (Figure 16). India, Pakistan and Nigeria have stunting rates more than three and a half times that of the West Bank and Gaza. The comparison is even starker in wasting incidence, with rates more than seven times higher than in the Palestinian territories. Again, the performance of the West Bank and Gaza on





Source: WHO Global Database on Child Growth and Malnutrition, latest available years

these measures of long term investments in human capital dimensions is in line with middle income countries such as Jordan and Turkey rather than countries with similar per capita incomes. 1.33 This preliminary evidence suggests that poverty in the West Bank and Gaza is not driven by deprivations in human capital, as one might find in India, Nigeria and Yemen for instance. It also suggests that the Palestinian Authority has invested in human capital in a sustained and effective manner. Rather, as this report will demonstrate, poverty in the West Bank and Gaza is strongly linked to labor market outcomes. This is evident in the high rates of unemployment in the West Bank and Gaza, which are the highest not only compared to countries with similar per



capita incomes, but also in comparison to other countries in the MNA region, where unemployment rates are much higher than in the rest of the world (Figure 17).

1.34 Within its limited ambit of influence in sectors such as health and education, it appears that the Palestinian Authority has implemented effective policies and ensured service delivery, which bodes well for the formation of a future Palestinian state. However, labor market outcomes, which depend far more on the ability to trade freely within and outside the Palestinian territories, the free mobility of labor, and the competitiveness and dynamism of the private sector, reflect the limitations under which the Palestinian Authority continues to operate. Ultimately, sustainable economic growth and job creation, essential for poverty reduction, will require a significant easing of the numerous restrictions that currently distort the Palestinian economy. Nevertheless, the human development record of the Palestinian Authority bodes well for the creation of a future Palestinian state.

2. Poverty in the West Bank and Gaza: A Fragile Recovery?

Based on the Palestinian Expenditure and Consumption Surveys, this chapter examines overall and regional levels and trends in poverty and identifies drivers of poverty in the period covering 2004 to 2009. The findings demonstrate the strong links between political and economic shocks and household and individual wellbeing in the West Bank and Gaza. The principle poverty narrative of this period is of the prevailing and widening poverty divide across the regions of the West Bank and Gaza. Starting from a pre-existing divergence in poverty rates in 2004, poverty in the West Bank has been steadily declining, while Gaza is yet to recover to its 2004 level. Poverty in Gaza increased substantially, peaking at close to 50 percent in 2007 following a severe economic downturn. Poverty rates have since declined, attributable to an increase in social assistance and returns to public sector employment. However, the recovery of poverty in Gaza remains fragile, as structural factors in the economy have not improved. Multiple drivers of poverty continue to be important: being unemployed or inactive poses the highest poverty risks, public sector employment and higher education lower poverty risks.

1. Introduction

- 2.1 The last decade has been a period of important political, economic, and social changes for the West Bank and Gaza. These are reflected in the setbacks as well as successes across the Palestinian territory in terms of poverty reduction and overall wellbeing. This chapter describes levels, trends, and drivers of poverty, focusing on the period from 2004 to 2009.
- 2.2 Recent analytical work on the West Bank and Gaza has primarily focused on impacts at the level of the macro economy (the World Bank's Investment Climate Assessment Report of 2007, the World Bank's Economic Update of West Bank and Gaza of 2009). The World Bank last conducted a poverty assessment of the West Bank and Gaza in 2001, using data that pre-dated the Second Intifada. Since then, some analytical work has focused on trying to understand the impact of the Second Intifada in 2000 on poverty and vulnerability in the West Bank and Gaza. An indepth World Bank study in 2003 titled "Deep Palestinian Poverty in the Midst of Economic Crisis" assessed the poverty impact of the Second Intifada using micro data from the National Poverty Survey (NPS) of 2003.¹⁷ In the meantime, numerous 'rapid' household surveys were conducted to study the significance of the conflict on the day-to-day wellbeing of Palestinians following the events of 2006. Studies based on these surveys illustrate that households were increasingly vulnerable in terms of critical welfare indicators such as food security. A 2007 joint FAO-WFP (Food and Agricultural Organization - World Food Program) study concluded that while a third of Palestinian households were food insecure, another third were highly vulnerable to food insecurity. Another rapid survey of 2,020 households administered by the Fafo Institute for Labor and Social Research and the UNFPA in the Gaza Strip in the aftermath of the 23-day

¹⁷ The National Poverty Survey was a nationally representative survey of about 3,100 households conducted during December 2003 with the aim of getting a quick picture of expenditure and consumption poverty following the second Intifada. The consumption module of this survey was different from that in the PECS, and hence not comparable to it.

Israeli incursion into Gaza in 2008-09 covered a range of proxy indicators of household welfare. Based on this survey, Fafo also reports acute levels of food insecurity.

- 2.3 This work points to the importance and need for a systematic microeconomic analysis of poverty and vulnerability in the West Bank and Gaza, a gap that this assessment seeks to fill. This poverty assessment draws on several data sources. The analysis in this chapter is based on a unique series of annual, regionally and nationally representative surveys, the Palestinian Expenditure and Consumption Surveys (PECS). Conducted by the Palestinian Central Bureau of Statistics (PCBS), PECS is the only survey in the West Bank and Gaza linking poverty with household attributes. The PCBS has been conducting this survey every year since 2004,¹⁸ and it is a hitherto underutilized source for understanding the determinants of household and individual wellbeing in the West Bank and Gaza.
- 2.4 This chapter begins with an examination of the overall and regional trends in poverty over the period 2004-2009. It then discusses how consumption expenditure growth and its distribution affected poverty. This discussion emphasizes the growth-inequality linkage with poverty in Gaza between 2006 and 2009, a period of high economic volatility. The chapter then develops a profile of the poor in the West Bank and Gaza, linking household level micro-factors such as household demographics, employment and education status to poverty. While the analysis points to multiple drivers of poverty, certain characteristics labor force participation status, employment type and education levels have clear and enduring links to poverty (Box 1).

Box 1: Key Findings

- There is a stark regional divergence in poverty between the West Bank and Gaza. Moreover, this
 divergence is increasing over time.
- While the West Bank's overall poverty levels are better than in Gaza, a significant proportion of the population in both regions remains at risk of falling into poverty.
- Poverty in the West Bank has been steadily declining in the last few years.
- Poverty in Gaza increased substantially in 2007 following a severe economic shock. Since then, a
 recovery has taken place but poverty levels remain higher than in 2004. This recovery has been
 fragile and has been accompanied by an increase in the public sector jobs and in social assistance.
- Changes in poverty in both regions were driven by changes in average consumption expenditure growth rather than by a change in its distribution
- There are multiple drivers of poverty in the West Bank and Gaza, with education and employment status being particularly important.
- Being unemployed or out of the labor force presents significant poverty risk
- Public sector jobs appear to offer greater economic stability and are associated with lower poverty levels in both regions, especially in Gaza.
- Poverty risk declines substantially with higher levels of education. Those with higher education are more likely to work in the public sector, especially in Gaza.

¹⁸ In 2008, the PCBS could not complete data collection work in Gaza, and hence this year has not been used in the analysis for this assessment.

2. Trends and Patterns in Poverty: An Overall Decline with Stark Regional Disparities

Poverty over Time: 2004 to 2009

2.5 In 2009, a little over a fifth of the Palestinian population lived in poverty. This represents an encouraging 4 percentage point reduction compared to 5 years earlier. However, the West Bank and Gaza witnessed large fluctuations in poverty between 2006 and 2009. After a steep increase in the poverty rate by 7 percentage points between 2006 and 2007, poverty fell by 9 points in the two-year period between 2007 and 2009 (Figure 18). Other poverty indicators, such as the poverty gap and poverty severity, exhibit a similar time trend. The PCBS also uses a 'deep' poverty line, which includes household expenditures on food, clothing and housing only, covering a subset of items from the main poverty line (Box 2). It is about 20 percent lower than the poverty line. ¹⁹ Table 1 presents the overall and regional trends between 2004 and 2009 based on the poverty line. Table 2 presents the trends in 'deep' poverty in the West Bank and Gaza.



2.6 These national levels and trends, however, mask a stark regional contrast. The principal poverty narrative of this period is of the prevailing and widening poverty divide across the regions of Gaza and the West Bank. In 2009, poverty incidence in Gaza was twice as high as that in the West Bank (33.7 vis-à-vis 16 percent). In fact, since 2004, disparities in poverty incidence between the two regions have increased. Between 2004 and 2009, poverty in the West Bank fell from 23 percent to 16 percent. Conversely, during that time, Gaza witnessed an increase in poverty from 30 to 33.7 percent. Furthermore, this increase in Gaza conceals considerable volatility in the interim years.

¹⁹ For a reference household of 2 adults and 4 children, the poverty line in 1997 was set at 1390 NIS or about US\$404 per month and the deep poverty line was set at 1141 NIS or about US\$334 per month.

2.7 This stark regional divergence is driven by the severe economic shock that began in 2006. Gaza experienced a dramatic 20 percentage point poverty increase in Gaza in 2007, with one in two Gazans living below the poverty line. The *depth* of poverty or the poverty gap, which measures how far below the poverty line the poor are on average, doubled in Gaza between 2006 and 2007;²⁰ the *severity* of poverty, measured by the squared poverty gap, which reflects the inequality among the poor by giving more weight to households that are further away from the poverty line, almost tripled. In general, the poor of Gaza became much poorer, evidenced by a drastic decline in the consumption of the bottom two quintiles.

Table 1: Overall Poverty								
Poverty Headcount Rate (P0)								
		2004	2005	2006	2007	2009 ²¹	Change (2004-09)	
Total	25.9	24.2	24.0	31.0	22.6		-3.3	
West Bank		23.4	21.5	20.1	20.2	16.2	-7.2	
Gaza		30.2	28.5	30.0	49.5	33.7	3.5	
Poverty Gap (depth)								
	2004 2005 2006 2007 2009 Change (2004-09)							
Total		6.5	6.3	5.4	8.5	5.1	-1.4	
West Bank		5.9	5.7	4.6	4.9	3.3	-2.6	
Gaza		7.5	7.3	6.6	14.8	8.3	0.8	
Squared Poverty Gap (severity)								
		2004	2005	2006	2007	2009	Change (2004-09)	
Total		2.4	2.4	1.8	3.5	1.8	-0.6	
West Bank		2.3	2.2	1.7	1.8	1.0	-1.3	
Gaza		2.7	2.8	2.1	6.4	3.0	0.3	

Table	2:	Deep	Po	vert	ty
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Deep Poverty Headcount Rate (P0)						
	2004	2005	2006	2007	2009	Change (2004-09)
Total	14.6	15.1	13.7	18.7	123	-2.4
West Bank	13.1	14.0	11.7	10.4	8.0	-5.3
Gaza	17.2	16.8	16.9	32.8	19.9	2.8

²⁰ When measured across the poor population, the poverty gap represents how much the mean consumption of the poor on average is short of the poverty line (in terms of percentage of the poverty line). The deficit multiplied by the number of the poor and typically expressed as percentage of GDP, provides an estimate of the minimum cost of eliminating poverty, assuming resources could be perfectly targeted to the poor.

²¹ These are the poverty estimates for 2009 as released by the PCBS as part of its comparable poverty series from 2004 to 2009. The subsequent analysis in this report uses a slightly older version of the PECS 2009 data than the one PCBS used to produce these poverty estimates. When this report was at its final stages, due to a small protocol change, the PCBS made minor adjustments to the expenditures data in PECS 2009. These changes result in very minor differences in expenditure and poverty estimates (the revised 2009 poverty estimates are within 0.5 percentage points of the older estimate) compared to the older version of PECS 2009 used in this report. We have conducted consistency checks and the findings of the report do not change at all in any substantial form as a result of using different versions of PECS 2009. Note that the poverty headcount rate generated by the version of PECS 2009 used in this report yield the following estimates: Total 22.1 percent, the West Bank 15.8 percent, and Gaza 33.2 percent. The deep poverty estimates are: Total 12.2 percent, the West Bank 7.7 percent, and Gaza 19.9 percent.

2.8 This massive increase in poverty demonstrates the vulnerability of the economy to political and economic shocks. 2006 marked the rise of Hamas to power in Gaza, which triggered two actions that severely affected available resources in the West Bank and Gaza. First, the Government of Israel decided to withhold transfers of tax revenues collected on behalf of the Palestinian Authority. Second, key donors suspended international aid flows. Together, these represent a drop of 60 percent in government income (Oxfam Briefing Note, 2007). With the formation of the caretaker government in 2007, the main sources of foreign aid resumed. In fact, in 2008, aid flows doubled compared to 2006 (GDF database on aid) and both the West Bank and Gaza experienced rapid declines in poverty levels by 2009 – about 16 percentage points in Gaza and 4 percentage points in the West Bank.

Box 2: Establishing Official Poverty Lines

The National Commission for Poverty Alleviation (NCPA) established an official definition of poverty in the West Bank and Gaza in 1998. This definition was developed based on expenditures data from the Palestinian Expenditure and Consumption Survey (PECS) of 1996 and 1997. The official poverty line was set at the median expenditure level of certain key items of the poorest 25 to 30 percent of households (the sixth 'vingtile'). The expenditure patterns of households with 2 adults and 4 children were used as the reference household in developing the poverty line. The items in the poverty line included food, clothing, housing, health care, education, transportation, personal care, and housekeeping supplies. This poverty line takes into account household economies of scale (household size) and equivalence scales (household composition) in consumption.¹ In addition to the official poverty line, a poverty line reflecting *deep* poverty is also used by the PCBS. These poverty lines were adjusted over time and used until 2007.

Beginning in December 2009, the PCBS reviewed its prevailing poverty measurement methodology based on broad consultations with stakeholders within the country and supported by technical assistance from the World Bank. The aim of this exercise was to validate the prevailing practice of poverty measurement and to incorporate approaches according to international best practice. This resulted in several adjustments to the measurement methodology leading to revised official poverty estimates for the period from 2004 to 2009. First, to enable a meaningful comparison of living standards across the Palestinian territories, the new poverty estimates are adjusted for differences in regional prices across the West Bank (excluding East Jerusalem), Gaza and East Jerusalem. For this adjustment, spatial price indices were developed from the price surveys collected for constructing the official CPI; for example, in 2009 the West Bank (excluding East Jerusalem) was 1 percent more expensive than the national level, while Gaza was 6 percent cheaper, and East Jerusalem was 13 percent more expensive. Second, in keeping with international practice, the poverty headcount is calculated at the individual level rather than the previous practice at the PCBS of measuring poverty at the household level. Finally, to ensure that poverty lines over time reflect the same level of purchasing power, the 1997 poverty line was adjusted for price inflation over time using the official CPI. The World Bank produced four technical notes detailing these methodological updates.² These methodological changes enabled the PCBS to produce poverty estimates that were comparable across time from 2004 to 2009. It is these comparable poverty numbers that this report uses. In early 2011, the PCBS decided to redefine its poverty line by changing the reference household to 2 adults and 3 children, and the new poverty series begins in 2010. This new poverty series incorporates all the methodological changes referred to above. The 2004-2009 series as well as the 2010 poverty estimates have now been officially released. The press release is available at:

http://www.pcbs.gov.ps/DesktopModules/Articles/ArticlesView.aspx?tabID=0&lang=en&ItemID=1693&mid=12235

¹The formula used for adult equivalent consumption was $C^* = (A + 0.46 C)^{0.89}$; A is the number of adults (aged 18 or more), C is the number of children in the household.

² See World Bank (2010a) for details

A highly Vulnerable Population

- 2.9 While the poverty levels and trends highlight the regional divergence and the improvement in poverty rates since 2007, a significant share of the population remains highly vulnerable to poverty. One measure of vulnerability relates to a household's ability to meet its basic needs: adult equivalent per capita expenditures measure per capita consumption expenditures controlling for differences in household composition in age and gender. The distribution of adult equivalent per capita expenditures in 2009, after the improvement in poverty rates from 2007, reveals a sizeable concentration of households around the poverty line. Figure 19 plots this measure for cumulative percentages of the population ranked from the poorest to the richest.
- 2.10 Vulnerability to poverty is an important concern in both regions. For example, a 20 percent increase in the poverty line would increase the poverty headcount rate in West Bank from 15 to 28 percent and in Gaza from 33 to 49 percent. In other words, an additional 13 percent of the population in the West Bank and an additional 16 percent of the population in Gaza, currently consumes no more than 1.2 times the current poverty line. Thus, while the West Bank's overall poverty levels appear better than Gaza's, the population in both regions remains highly vulnerable to economic volatility. This vulnerability is extremely relevant in understanding poverty in the West Bank and Gaza where 20 percent declines in income are well within the realm of possibility. In fact, in 2007, average per capita expenditures in Gaza did fall by over 20 percent. Moreover, the decline in per capita expenditures was over 20 percent across *all* expenditure quintiles, and poverty incidence rose by about 20 percentage points (from 30 percent in 2006 to 49.5 percent in 2007).



2.11 Figure 20 further illustrates vulnerability to poverty by estimating the increase in poverty under three different scenarios. These estimates suggest that a decline in monthly per capita adult equivalent expenditures in Gaza would translate into an almost commensurate increase in poverty rates. For instance, with a fall in monthly per capita (adult



equivalent) expenditures of 30 percent, the poverty headcount would increase by 30 percentage points in Gaza and 23 points in the West Bank.

2.12 To illustrate this point further, Table 3 examines the cumulative impact of various poverty risk factors for a hypothetical household of 2 adults and 4 children with an employed head of household who has completed at least secondary education. In 2009, in the West Bank, such a household would have an 8.8 percent risk of being poor whereas in Gaza, it would have a 15.2 percent risk of being poor. Additional disadvantages rapidly increase the risk of poverty. For the same household, if the head were to become unemployed, the poverty risk of the household would double in the West Bank and as much as triple in Gaza. With further weakening of education attainments of the head – for instance, if the head of household had only completed elementary education as opposed to secondary schooling, poverty risks would climb by another 8 percentage points in the West Bank, and by 15.3 percentage points in Gaza.

		2009				
	West	Bank	Gaza			
Risk Factor	Probability of being Poor (estimates)	Partial Effect on Poverty Risks (% pt)	Probability of being Poor (estimates)	Partial Effect on Poverty Risks (% pt)		
Base household	8.8		15.2			
Head: unemployed	15.2	+ 6.4	45.0	+ 29.8		
Head: Elementary Education	23.1	+ 7.9	60.3	+ 15.3		
Note: The base household is a	2 adult and A child	dran household with	the head being em	ployed and having		

Table 3: The 'Net' Impact of Various Risk Factors on the Probability of being Poor from PECS2009

Note: The base household is a 2-adult and 4-children household with the head being employed and having secondary education. Poverty is based on the general poverty line expressed in terms of adult equivalent per capita expenditures. Poverty risk is estimated based on multivariate analysis of adult equivalent per capita consumption.

2.13 Thus, while both Gaza and the West Bank have a sizable poor population, they also have a sizable population who remain at risk of falling into poverty. Therefore, identifying the

determinants of poverty is extremely important not only for poverty alleviation but also to protect vulnerable households from falling into poverty. Subsequent analysis in this chapter identifies these determinants and further demonstrates the importance of education and employment related attributes as key correlates of household poverty and vulnerability.

3. Poverty, Growth and Inequality

2.14 In light of the growth trends in the West Bank and Gaza – with the West Bank experiencing moderate growth and Gaza facing strong volatility – it is important to understand how growth and its distribution are linked to poverty. This section suggests that in both the West Bank and in Gaza, there is strong evidence that most of the changes in poverty are explained by changes in the growth of mean consumption expenditures rather than changes in its distribution.

Per capita Consumption Expenditure Growth: Regional Divergence and Volatility

- 2.15 Consistent with the regional divergence in poverty trends, per capita consumption expenditure growth across regions diverged starkly during the period. Between 2004 and 2009, while per capita expenditures rose by 12.8 percent (in real adult equivalent terms) in the West Bank, they fell by 6.3 percent in Gaza (Table 20 and Table 21 in the Annex to Chapter 2). A sharp contrast is also observed in the volatility of growth. In the West Bank, per capita expenditure grew between 2004 and 2005, and again between 2007 and 2009, with no growth in the intervening years. Gaza has seen extreme fluctuations especially in recent times a severe decline of 23 percent in per capita expenditures between 2006 and 2007 and a less than commensurate growth between 2007 and 2009.
- 2.16 Beginning in 2004, these trends in per capita consumption growth are reflected in the clear regional divergence in GDP, with the West Bank gaining and Gaza losing. Figure 21 plots the official GDP figures for the West Bank and Gaza for the period 2000-2008. This is based on data from the PCBS National Accounts and the GDF database on aid. What is interesting, especially in the context of Gaza, is that these trends in GDP come at a time when external assistance is increasing. Over the entire past decade, external aid has been increasing in the West Bank and Gaza, both in real terms and as a share of GDP (Figure 22). In 2000, external aid stood at about 8 percent of GDP, but by 2004 it rose to 18 percent of GDP. Its share further increased to 22 percent and then to 26 percent in 2006 and 2007, and by 2008, it was about a third of GDP. While it is not possible to disaggregate external assistance between the West Bank and Gaza, it is important to recognize the potential role of external aid in contributing to the growth in the West Bank and eventually in bringing poverty rates in Gaza in 2009 back down from their 2007 levels. The role of foreign aid, and in particular, social assistance, in explaining growth and the decline in poverty is explored in Chapter 6.
- 2.17 Despite these opposing growth trends, an examination of the distribution of per capita expenditures over the entire period by quintile reveals that in both regions the poorest quintile has been somewhat protected. In the West Bank, consumption increased proportionately more for the poorest quintile than for the richest, while in Gaza, consumption growth was less negative for the poorest (Table 20 and Table 21).



- 2.18 The time trend in per capita consumption expenditure growth demonstrates the huge adverse shock suffered by all households in Gaza in 2007. In this year, households in each expenditure group in Gaza faced large negative shocks with average expenditures (in real adult equivalent per capita terms) falling by about 20 percent or more compared to the previous year. Moreover, the poorest households faced the largest losses, with their expenditures falling by as much as 28 percent. The losses to households in the second and third quintiles were also substantial, and overall, the shock translated into about half the entire population of Gaza living under the poverty line in 2007.
- 2.19 These trends are reflected in the Growth Incidence Curves (GICs) for consumption expenditures in the West Bank and Gaza for the two periods 2006-2007 and 2007-2009. These curves allow us to compare the incidence of growth in poorer segments of the population with that of richer segments or with the rate of growth of mean expenditure in the pre and post 2007 period. Figure 23 shows that between 2006 and 2007, the poorest 10 percent of the population in Gaza suffered the largest expenditure losses. The rest of the population faced declines of about 20 percent. In contrast, the West Bank did not encounter such substantial setbacks, with expenditures falling 0.8 percent for the population as a whole and 1.6 percent for the lowest quintile.





2.20 For the period between 2007 and 2009 (Figure 24), the recovery in Gaza is reflected in the strong rebound in consumption expenditure growth after its precipitous decline in 2007. The West Bank enjoyed strong growth as well. The poorest households – the bottom 10 percent – grew at relatively higher proportions. However, it is worth reiterating that despite improvements since 2007, households in Gaza continue to be worse off than they were in 2006.

How did Growth and Distributional Changes Influence Poverty Trends?

2.21 Trends in poverty over time and across the two regions could be driven by changes in the growth of per capita consumption expenditures and through changes in inequality, i.e.., the distribution of these expenditures. The relationship between poverty reduction, growth in consumption and changes in inequality can be quantified by a growth-inequality decomposition of changes in poverty headcounts. The growth effect measures the simulated impact of an increase in average per capita consumption on poverty headcounts, assuming that the distribution remains unchanged. On the other hand, the redistribution effect measures the simulated impact on the headcount of changes in the distribution of per capita consumption, holding mean consumption expenditures unchanged from the previous year. Table 4 shows that adult-equivalent consumption inequality barely changed between 2004 and 2009. In the West Bank, the Gini coefficient of inequality changed very little, and in Gaza also it fell by less than 1 percentage point.²² In the interim period, however, there are slightly larger changes in the year to year distribution of expenditures.

Table 4: Inequality: Gini Coefficient of Adult Equivalent Per Capita Expenditures						
Year	All	West Bank	Gaza			
2004	30.65	30.16	31.06			
2005	31.44	32.24	28.73			
2006	30.50	31.11	28.17			
2007	32.31	30.98	28.80			
2009	30.94	29.85	30.27			

2.22 Figure 25 decomposes the relative contributions of consumption expenditure growth and changes in inequality on changes in poverty. This decomposition confirms that between 2004 and 2009, in the West Bank, growth in mean consumption expenditures had a relatively large impact on poverty reduction while changes in distribution had virtually no impact. The West Bank experienced a 7.6 percentage point decline in poverty during 2004-2009. Had inequality not changed at all during that time period, it would have experienced only a slightly higher (7.8 percentage point) decline in poverty. In contrast, in Gaza, during the same timeframe, poverty incidence increased 3.1 percent, driven by the contraction of the economy. At the same time, inequality in consumption expenditures became slightly less unequal. So, in the absence of any change in inequality, Gaza would actually have seen a higher (4.3 percentage point) increase in poverty. The observed increase in poverty incidence was thus dampened by a reduction in inequality, with the latter by itself contributing to a reduction in poverty by 2.4 percentage points.

²² Other measures of inequality such as the General Entropy or the Atkinson measures give similar trends.



2.23 Table 22 shows the relative contribution of changes in consumption growth and changes in its distribution on poverty immediately before and following the crisis of 2007. Between 2006 and 2007, Gaza's poverty increase was driven predominantly by the massive reduction in per capita consumption expenditure growth, accounting for an increase in poverty of 19.4 percentage points. At the same time, inequality in expenditure across different groups became lower: while the poorest decile took the largest hit, those in the 10-40 percentiles were relatively less affected than those in higher expenditure groups. In the absence of this decrease in inequality, the already large poverty impacts of the economic shock would have been even larger. Post 2007, in Gaza, the poorest decile recovered very fast, but the bottom 10-40 percent did not recover as fast as the rest of the population. This explains the subsequent increase in inequality and as a result, poverty went up by 3.73 percentage points. However, this was dwarfed by the much larger reduction in poverty due to growth in expenditures to the extent of 19.2 percentage points.

4. Who are the Poor in the West Bank and Gaza? A Poverty Profile

2.24 This section identifies key household and individual characteristics associated with poverty in the West Bank and Gaza. Our analysis suggests that there are multiple drivers of poverty and of these, education and employment status have particularly strong links to poverty.

Household Demographics

2.25 In the West Bank and Gaza, as in many other countries in the world, larger households tend to be associated with a higher incidence of poverty (Figure 26), and this relationship is stronger in Gaza. Across the years, households in Gaza are consistently larger in size than in the West Bank: in 2009, the average household size in Gaza is 6.4 while in the West Bank it is 5.8. For each household size, poverty incidence is higher in Gaza than in West Bank. These results highlight the importance of using a poverty line that embeds both economies of scale and equivalence scales. In the absence of these adjustments, the negative correlation between poverty status and household size would be even more pronounced.



Figure 26: Poverty Status and Household Size in the West Bank and Gaza (2004, 2007, 2009)

- 2.26 Larger households with more children are also more vulnerable to poverty: households with more than 5 children in Gaza and households with more than 7 children in the West Bank are particularly vulnerable (Table 23). However, over time, households with a larger number of children are declining in both the West Bank and in Gaza.
- 2.27 An overwhelming majority of households in both the West Bank and in Gaza report having maleheaded households, with only about 5 percent of households being female-headed (PECS). Simple cross tabulations provide no clear conclusion of the relative poverty status of male-versus female-headed households, as the small sample size of female headed households makes the poverty estimates unreliable. In several other conflict situations, there is evidence of femaleheaded households being poorer than male-headed households (e.g., Bosnia, Kosovo, and Iraq). A World Bank (2009) study explores the gender dimensions of the economic crisis in the West Bank and Gaza in more detail.²³ The study stresses the multifaceted livelihood strategies women have had to adopt in response to the high levels of unemployment among men, especially in Gaza, to prevent family destitution and aid dependence. Although it is reasonable to expect that the conflict in the West Bank and Gaza has increased vulnerability among female-headed households, this hypothesis is very hard to explore using PECS data.

Poverty and Employment Status

2.28 Labor market outcomes and employment status in particular, have a profound impact on household poverty status. Poverty incidence in the West Bank and Gaza is considerably more pronounced among households whose heads are unemployed or are out of the labor force compared with households whose heads are employed (Figure 27).

²³ World Bank (2009). Checkpoints and Barriers: Searching for Livelihoods in the West Bank and Gaza Gender Dimensions of Economic Collapse"



- 2.29 Unemployment of the household head is particularly strongly associated with poverty status in Gaza. At the time of the 2007 crisis, households with unemployed heads in Gaza suffered a massive increase in poverty rates to more than 74 percent. And this group's extraordinarily high poverty incidence persists even after the ensuing economic recovery in Gaza. In 2009, poverty incidence in households with unemployed heads was more than 68 percent, compared with only 24 percent among households whose heads were employed. Among the employed, public sector jobs are associated with lower poverty rates, particularly in Gaza (see Chapter 3). In the West Bank, while poverty rates are much lower than in Gaza irrespective of employment status, unemployment and being out of the labor force are strong drivers of poverty. In 2009, the incidence of poverty among households whose heads are unemployed in the West Bank is almost double that of households with employed heads.
- 2.30 The location of employment for the head of household also matters for their poverty status. Households whose heads were employed in private sector work in Israel or in settlements have lower poverty levels than those who work in the private sector in the West Bank and Gaza Table 25). In the West Bank (including East Jerusalem), the proportion of the population working in Israel and the settlements has increased over time and in 2009, of the population that have households heads working in the private sector about a quarter has heads that are working in Israel and settlements.²⁴ Like most other indicators of economic activity, Gaza shows just the opposite trend, with the number of household heads working in Israel or in settlements almost completely disappearing by 2007.

Household Members Labor Market Participation

2.31 Households in the West Bank and Gaza are large in size and have on average, 4 members of working age (aged 15-64 years). Table 26 describes poverty incidence by a few key labor market

²⁴ Note that West Bank includes the area of East Jerusalem; inhabitants of East Jerusalem have access to Israel, whereas those in the rest of the West Bank much more limited access.

indicators of individual household members across the West Bank and Gaza over 2004-2009, and reveals the strong relationship between the labor market participation and employment status of household members and poverty.

- 2.32 Households with poor employment attributes generally have limited alternative sources of income, and therefore very poor capability to absorb economic shocks, and this is evident in both the West Bank and Gaza. The incidence of poverty is much greater among households that do not have any member that is employed, and this is particularly stark in Gaza. About 10 percent of Gaza's population comprises households without any employed member (2004-2009). During the crisis of 2007, about 75 percent of the population belonging to such households was poor in Gaza. The link between unemployment and poverty continues to be compelling for Gaza even in 2009: over half of the population who had at least one unemployed member in their household and 63 percent of the population who had no working members in their households was poor.
- 2.33 In the West Bank, in contrast, the proportion of population living in households with no member employed is much lower than in Gaza at 4 percent and this figure has been declining over time. Nevertheless, employment and unemployment status of household members are strongly associated with poverty in the West Bank. Among households without any employed member the poverty incidence was 27 percent in 2009, almost twice that of households that have at least one member employed. Similarly, among households with at least one member unemployed, the poverty incidence was 24 percent. Households with many members of working age may also use migration as a coping strategy for risk mitigation, by diversifying their income sources to include remittances. While our data does not permit a rich analysis of this hypothesis, there is suggestive evidence that in Gaza, households receiving domestic remittances have relatively lower poverty incidence (See Box 3)

Box 3: Do Remittances Matter?

Remittances are believed to be an important driver of the economy in the West Bank and Gaza, and it is often argued that in their absence, the economy would be much worse off than it is. ¹ Remittances are considered to have a played a particularly important role since the Israeli occupation in 1967, with remitted earnings from Gulf states and Israel benefiting households across the West Bank and Gaza. It is difficult to find evidence on the role of remittances based on PECS data, where remittance incidence or amounts are not available. We attempted to elicit some information on remittance incidence from the PECS based on a question that asks households to rank its various income sources by importance, including remittances from within the West Bank and Gaza, and remittances from abroad.

According to this rather rudimentary and possibly imprecise indicator, sizable portions of households in the West Bank (a fifth) and in Gaza (about two-fifths) receive remittances from domestic sources in 2009. This indicator suggests a lower poverty incidence in Gaza among households receiving domestic remittances relative to those that do not, while in the West Bank the figures look quite similar. Furthermore, according to this indicator, the share of households receiving foreign remittances is very low – less than 5 percent – in both the West Bank and Gaza. While crude tabulations suggest that households receiving foreign remittances tend to be better off than those that do not, these numbers should be treated with caution because of small sample size.

¹ For example, World Bank (2010b).

Education

2.34 As elsewhere in the world, education is an important determinant of poverty status (Figure 28). In both the West Bank and in Gaza, having a household head with more than elementary education is associated with a lower poverty rate (Table 24). Poverty incidence is even lower among households whose heads have more than secondary level of education. Figure 29 plots the poverty rate in 2007 and 2009 against years of education of household heads and shows a clear inverse relationship between household poverty status and education levels in both West Bank and Gaza. There is some evidence of lower returns to education in Gaza: compared to the West Bank, in Gaza the same level of education appear to be on the rise: the share of the population living in households where the heads have less than elementary level education declined across 2004 and 2009, while those with more than secondary education have been increasing.





2.35 Are these encouraging trends also reflected in school enrolment among children? The overall school enrolment rate among children aged 6 to 18 is high (Figure 30) and among girls, the enrolment rate is very similar across poor and non-poor households. However, boys appear to lag behind girls in school enrolments, and boys from poorer households lag behind girls even more. While these trends are similar in the West Bank and in Gaza also, generally boys' enrolment rates are higher in Gaza. Moreover, in the West Bank the male enrolment rate has actually declined between 2004 and 2009, while in Gaza it has remained static.



2.36 However, these statistics mask the challenges faced by children of school-going age in terms of school enrolment. Figure 31 and Figure 32 plot school enrolment rates by age across boys and girls in the West Bank and Gaza for 2009. Figure 31a illustrates how enrolment falls sharply among boys in West Bank after the age of 14; among girls the drop is smaller. Moreover, the drop is more precipitous among boys belonging to poor households in the West Bank (Figure 31b). In Gaza, similar trends are observed with school enrolments dropping steeply after boys reach the age of 14 (Figure 32). However, in Gaza, which is the poorer of the two regions, the school enrolment situation appears better than in West Bank, with relatively lower drop outs among those from poor households. This high dropout among boys, especially among those in poor households that are more likely to have unemployed and inactive heads of households, suggests that these boys are leaving school to earn incomes and support their households.



Refugee Status

- 2.37 A sizable portion of the Palestinian population comprises of refugees, and most of them are officially registered. This is not surprising, as registration as a refugee retains their political right to compensation or the 'right of return' in the event of an Israeli-Palestinian peace settlement. Having been displaced for some generations, most of those identified as refugees no longer live in camps. According to estimates based on the PECS 2009, 27.4 percent of the population in the West Bank is refugees. In Gaza, a vast 70 percent of the population is refugees, and roughly a fifth of these people live in refugee camps.
- 2.38 In the West Bank, poverty incidence among refugees living in camps and outside of camps tends to be higher than among non-refugees after 2007. In Gaza, however, the situation is noticeably different. Table 27 suggests that the incidence of poverty among refugees living in camps in Gaza

is consistently lower than that of refugees not living in camps or of non-refugees across the years. However, once other household characteristics such as education and work status are taken into account, there is no significant difference in per capita adult equivalent expenditure levels across refugees (in and outside of camps) and non-refugees in recent years. This may be related to the greater availability of aid-driven social assistance in refugee camps. Data limitations preclude our ability to delve deeper.

Access to Infrastructure and Services

- 2.39 The provision and quality of infrastructure and services is indispensable to the welfare and the long-term development prospects of any country. Across the years 2004-2009, households in both the West Bank and Gaza have had high and slowly increasing levels of connectivity to amenities such as electricity and water through public networks (Table 28). According to PECS data, the poor appear to have similar levels of connectivity as the non-poor to water and electricity. In contrast to relative regional poverty trends, connectivity to water, electricity and public sewage in Gaza is slightly better than in West Bank.
- 2.40 While these figures appear impressive, they should be interpreted with caution: higher connectivity rates may not imply physical access especially in a context like that of the West Bank and Gaza. Reports from the UNOCHA (United Nations Office for the Coordination of Humanitarian Affairs) and the press suggest power outages and water shortages to be rampant in recent times, particularly in Gaza. These chronic power shortages are related to the prevailing political situation. The UNOCHA reports that since 2006 Gaza has suffered from chronic electricity shortages, following an escalated confrontation with Israel, which led to the destruction of all six transformers at the Gaza Power Plant (GPP). Electricity production resumed five months later but only at half the capacity. Since January 2010, the electricity deficit has worsened even more with 1.4 million households in Gaza facing 6 to 8 hours of power cuts on a daily basis.²⁵ The electricity shortage also reportedly disrupts the quality of water and sanitation services.²⁶ This has resulted in strong public disaffection, which has been documented in the international press.²⁷
- 2.41 In both the West Bank and in Gaza, the physical distance to education, health and public transportation services is fairly low for a majority of the population (Table 29). On average, households in Gaza, which has a relatively large population in a small area, face shorter distances than households in the West Bank. For instance, in 2009, about 93 percent of all households in Gaza report having public transportation within one kilometer from their homes, while 84 percent of West Bank households report that being the case. Importantly, there appears to be only small differences in the distance to services for poor and non-poor households.

²⁵ UNOCHA (United Nations Office for the Coordination of Humanitarian Affairs). 2011. "Gaza's Electricity Crisis: The Impact of Gaza's Electricity Cuts on the Humanitarian Situation."

²⁶ UNOCHA (2011).

²⁷ New York Times. 2010. Trapped by Gaza Blockade, Locked in Despair. July 14, 2010 issue. New York, NY. Available at http://www.nytimes.com/2010/07/14/world/middleeast/14gaza.html.

- 2.42 Much like the indicators of connectivity to water, electricity and public sewage, the existence of such educational and health services in close proximity does not necessarily translate into the quality of services. Indeed, qualitative reports and anecdotal evidence suggest the ongoing fiscal crisis and difficult security situation have led to a decline in the access and quality of services.²⁸ Power shortages are reported to have directly affected hospital facilities. A World Bank report from 2004 indicates that closures had already imposed significant burdens on health systems. Specifically, due to their relatively easier accessibility, primary care centers have assumed an added burden of providing services to those unable to reach the main cities due to closures or movement restrictions. In addition to mobility restrictions, the violent nature of the prevailing conflict significantly increased demand for healthcare; between 2000 and 2004 emergency ward injury visits increased by 52.6 percent. With capacity not increasingly commensurately, the quality of healthcare has been under strain.²⁹ To the extent that these closures, both internal and external, are still in place, this is likely to continue to be true.
- 2.43 Thus, measures of household access to infrastructure and services in the PECS, while inadequate, suggest that the physical presence of these facilities is adequate and relatively equitable. However, many sources of anecdotal and qualitative evidence highlight major shortages and inadequacies in the actual delivery of many services as discussed above.

5. What Drives Poverty in the West Bank and Gaza?

- 2.44 Poverty in the West Bank and Gaza has many drivers and it is important to isolate the contribution of each characteristic on poverty. This is important because the characteristics might be linked to poverty in different ways than the poverty profile suggests. For example, simple cross tabulations reveal that households with unemployed members were at greater risk of being poor than households with employed members, suggesting a clear correlation between unemployment and poverty. At the same time poverty is also associated with lower education levels of household heads. However, unemployment status and education are not necessarily independent of each other; a person may be unemployed precisely because he or she is less educated. Even if that unemployed person were to find a job, it might be a low paying job, and the household might still remain poor. Thus, a household may be poor because of unemployment but also because of poor educational attainment.
- 2.45 In order to identify dominant drivers of poverty, we estimate OLS regressions of the log of adult equivalent per capita household expenditures on a set of household characteristics, controlling for location-specific effects. An important caveat here is that these regressions do not necessarily show causality; rather they give a picture of the dominant correlates of poverty.
- 2.46 We estimate these dominant correlates of poverty for the West Bank and Gaza separately for each year using the PECS data from 2004 to 2009. The results from the model show that education and employment related variables emerge as highly important predictors of poverty over time. For example, in the West Bank in 2009, households with heads with post-secondary education on average consume 34.6 percent more than households whose heads have not competed elementary

²⁸ See for example, New York Times. (2010) or UNOCHA (2011).

²⁹ World Bank (2004).

level education (Table 20). In Gaza, the education 'premium' appears even more pronounced: in the same year, households whose heads completed post-secondary education on average consume 48 percent more than households whose heads have not completed elementary level education, holding other factors constant (Table 21).

- 2.47 The unemployment of the household head is strongly correlated with lower consumption in both the West Bank and in Gaza (the links between employment and poverty are discussed in greater detail in Chapter 3). While being out of the labor force was associated with lower consumption levels in the West Bank over time, interestingly, in Gaza it is not. This may be related to receipts of social assistance benefits by households whose heads are inactive; conversely, the potential receipt of social assistance could alter the labor market behavior of households as well. Households with any member in the public sector are likely to be better off in both the West Bank and in Gaza. Another interesting finding that points to the importance of aid and social assistance in Gaza is that across the years employment in the NGO / aid/ other sector is positively and significantly associated with consumption.
- 2.48 It is worth noting that, in Gaza there is no significant relationship between refugee status and household consumption levels. This might be attributable to the definition of refugees as well as due to the aid refugees in camps likely receive. In the West Bank, however, households with refugee status appear worse off than non-refugees. Particularly, refugees in camps appear to lag behind others.
- 2.49 Finally, in the West Bank, household composition matters. Households with higher dependency ratios consume lower amounts. In Gaza, where household size is typically larger than in the West Bank, this relationship is not significant.

How Vulnerable are Households to Poverty? Links to Education and Employment

2.50 Education and employment emerge as clear and enduring correlates of poverty status and vulnerability. Table 5 probes further by estimating the partial effects of key household level education and employment characteristics on poverty, isolating their role after controlling for the impact of other factors.³⁰ To do this, for each household, we estimate the contribution of a single factor to its adult equivalent per capita expenditures (based on the OLS regressions reported in Table 25a and Table 25b). We subtract this estimate from the observed consumption expenditures for each household, yielding an estimate of expenditures net of the contribution of that single factor. We then compare this simulated expenditure with the poverty line to calculate the poverty risk of the household in the absence of this factor.

³⁰ See World Bank (2003b) for more details of this approach.

		•	·				
	West	Bank	Gaza				
	Observed risk (% point)	Partial Risk (% point)	Observed risk (% point)	Partial Risk (% point)			
Education of Household head (compared to below elementary)							
Elementary	-5.7	0.0	0.5	-3.9			
Secondary	-11.7	-7.9	-17.7	-19.2			
>Secondary	-21.5	-16.5	-40.4	-30.4			
Work status of Household head (compared to employed head)							
Unemployed	11.1	6.4	44.0	29.8			
Out of Labor Force	8.8	9.4	16.0	3.9			

Table 5: Household Characteristics and Simple and Simulated Poverty Risks

2.51 Table 5 shows the observed poverty risk of different education and work status characteristics. The observed risks are simply the difference between the average poverty incidences across the various groups as shown in the cross tabulations earlier in this chapter (Table 24 for poverty status by education level). For example, because the average poverty incidence among households whose heads have elementary education is 19.1 percent, compared to 24.9 percent for those with households below elementary education, the observed risk for this category is - 5.7 percent. The partial risk presented in Table 24, however, embodies the effect of a characteristic when other factors are controlled for. The comparison of partial and observed poverty risks indicate that employment and education-related attributes continue to be strong drivers of poverty even after controlling for other factors. At the same time, this comparison also demonstrates that there are multiple drivers of poverty at work.

6. Why Did Poverty Fall Drastically in Gaza between 2007 and 2009?

- 2.52 While few may be surprised at the large adverse impact of the events of 2007 in Gaza, what *is* remarkable is the subsequent economic rebound and rapid decline in poverty rates from 49.5 percent in 2007 to 33.7 percent in 2009. Our analysis suggests that while the rapid reduction of poverty in 2009 is certainly good news, it needs to be interpreted with caution. The decline in poverty was likely driven by a resumption of wage payments in the public sector in Gaza in 2009 and an increase in social assistance to households. Major fundamental, structural economic factors such as employment, remain weak. Despite the strong growth, the economy continues to remain fragile with most of Gaza's recovery attributable to factors such as increased dependence on the public sector and on foreign aid rather than an expansion of productive private sector activity.
- 2.53 On the face of it, the growth-inequality decomposition exercise in section 3 suggests that this reduction was driven by a growth in per capita consumption expenditures rather than by distributional changes through a reduction in inequality. What was the source of this growth in consumption expenditures in Gaza? Key correlates of household poverty in Gaza did not show considerable change between 2007 and 2009. For example, the fraction of households with employed heads remained at about 65 percent across the two years; the total number of unemployed and out of labor force heads remained virtually unchanged. Educational

characteristics of household heads also did not show much change in that short time. An indicator that did show some change was public sector employment: in 2007, 38.7 percent of the population was in households whose heads were employed in the public sector and in 2009 this increased to 43 percent (by about 4.3 percentage points). However, by 2007, public sector employment was already an important source of employment, and therefore unlikely to explain the observed expenditure growth by itself.

- 2.54 While descriptive statistics suggest that the typical profile of the Palestinian household did not change much across 2007 and 2009, allowing for these characteristics to be considered jointly, the increases in expenditures or reductions in poverty may stem from an improvement in the profile of characteristics itself, an improvement in returns to a given profile, or both. For example, during a period of high economic growth, the market returns to a given profile could increase due to tight labor markets. This would translate into higher household income and reduced poverty.
- 2.55 Thus, in order to identify the sources of expenditure growth, we use a Blinder-Oaxaca decomposition to separately estimate the contributions to expenditure growth of changes in profiles and changes in returns (Figure 33). Our analysis shows that while changes in profiles did contribute to the improvement, its impact was dwarfed by the return effects: the contribution of increased returns is nearly three times larger than that of improved profiles (Figure 33).



Figure 33: Decomposition of % Expenditures Growth (Per Capita Adult Equivalent) in Gaza

2.56 What explains this increase in returns at a time when the profile of household characteristics remained essentially unchanged? The answer may be related to public sector employment, which was already an important source of employment in 2007 and increased only modestly by 2009. In 2007, a third of all Gazans belonging to households where the head was employed in the public sector were below the poverty line (Figure 28b for Gaza). In 2009, the situation changed drastically, with a corresponding figure of only 13 percent. What was the reason for this dramatic

increase in returns to public sector employment? We can only speculate that this was a result of the resumption of foreign aid for public sector expenditures, which was suspended in 2007. In 2009, therefore, unlike in 2007, wages to public sector employees were paid in full and on time, and public sector jobs became prominently associated with lower poverty rates.

- 2.57 Another potential explanation has to do with the role of social assistance and foreign aid. In 2007 itself, Gaza saw a massive increase in social assistance to households, and this proportion increased by another 20 percentage points by 2009. Primarily financed through foreign aid, this predominantly took the form of food and cash transfers and safety nets programs, and is another possible explanation for the decline in poverty rates in Gaza between 2007 and 2009. A more detailed examination of the role of social assistance in explaining poverty trends is undertaken in Chapter 6.
- 2.58 The poverty decline in Gaza between 2007 and 2009 occurred despite no improvement in inherent profile of the population or in the structure of the economy, which continues to be highly aid-dependent. The recovery in poverty in Gaza therefore remains fragile.
3. Poverty and the Labor Market: A Sheer Lack of Jobs?

"Young people [in Gaza] are ready to explode. They go to college, they graduate with no opportunity of any job at the end..."³¹

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

³¹ Mukhaimer Abu Sada, a professor of political science at al-Azhar University in Gaza, in '*Gaza youth vent anger on Facebook*', BBC News, 9 February 2011. http://www.bbc.co.uk/news/world-middle-east-12398354

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 which degree to Palestinians lack work, since those who have



jobs increasingly report being underemployed during the work week. The incidence of underemployment among those employed rose from 15 percent in 1998 to above 25 percent in 2009.³²

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.

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 North Africa and region, vouth 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 word. It is likely that Palestinian women face the same constraints on working outside home as women in other MENA









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.³⁵

3.13 There are also sharp gender difference 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.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.



³⁵ See for example, World Bank (2010). "Checkpoints and Barriers: Searching for Livelihoods in the West Bank and Gaza."

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, 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.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.



³⁷ http://www.bbc.co.uk/news/world-middle-east-12398354



3.16 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 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

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.

	1994	2000	2001	2002	2003	2004	2005	2006	2007	2008
West Bank					(shares o	f 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.
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.
Public sector services 2/	16.4	22.1	25.6	28.9	29.8	26.0	25.3	25.9	24.7	23.
Other 3/	2.8	9.6	15.0	12.4	11.2	13.6	15.4	17.2	15.9	16.
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gaza										
Agriculture	11.1	9.4	10.1	8.5	8.2	8.3	5.6	6.7	7.1	8.0
Manufacturing	16.4	3.0	8.4	9.7	9.5	8.2	7.5	6.3	2.7	2.5
Construction	11.2	9.8	6.4	4.1	4.7	6.4	7.7	7.0	5.9	3.0
Private sector services 1/	34.9	32.0	26.3	29.8	25.5	26.4	28.6	24.2	27.8	24.3
Public sector services 2/	24.8	36.7	42.9	40.3	40.0	36.7	36.5	45.4	47.0	56.7
Other 3/	1.6	9.1	5.9	7.7	12.1	14.1	14.1	10.3	9.5	4.8
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
West Bank					(annual grow	wth rate)				
Agriculture		-20.0	-24.2	-26.1	16.4	-3.2	-21.2	5.1	9.7	19.5
Manufacturing		9.6	-15.1	-23.8	21.7	28.5	5.8	-9.7	17.7	3.4
Construction		-44.1	-47.7	-34.2	46.9	21.1	20.2	20.8	4.1	20.9
Private sector services 1/		3.6	-19.8	-4.7	0.3	21.2	-0.7	-1.2	19.7	15.5
Public sector services 2/		5.2	2.5	-3.1	13.3	2.1	-0.3	5.8	6.3	4.9
Other 3/		-21.9	37.8	-28.7	-1.2	41.8	15.8	15.8	2.9	15.9
GDP		-7.7	-11.4	-14.0	9.6	16.9	2.5	3.5	11.4	11.7
Gaza										
Agriculture		4.0	5.7	-26.5	21.9	4.5	-19.1	-3.4	-3.0	2.3
Manufacturing		-77.8	171.9	2.0	22.7	-11.2	10.9	-32.5	-60.9	-15.6
Construction		-32.2	-36.3	-43.8	46.0	39.5	46.8	-27.2	-23.3	-44.2
Private sector services 1/		-0.8	-19.4	-0.5	7.7	6.7	31.1	-32.5	5.9	-21.0
Public sector services 2/		-2.5	14.7	-17.2	24.6	-5.5	20.4	-0.5	-4.7	8.8
Other 3/		66.9	-37.0	15.0	98.9	20.0	21.4	-41.6	-15.3	-54.9
GDP		-11.1	-2.0	-11.9	25.7	3.1	21.0	-20.1	-8.0	-9.8

Table 6: West Bank and Gaza: Structure of Economic Activity and Growth

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, heath 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.

- 3.19 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).
- 3.20 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

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 is much lower than that in the West Bank, and it is the public sector where the largest share of workers is now employed.



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).



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.



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 PLFS data uses 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 explai*n 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.

- 3.28 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.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.
- 3.29 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).³⁹
- 3.30 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.
- 3.31 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.

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.
³⁹ From Mansour (2010): "The most conservative results in the paper suggest that a 10 percent increase in the supply of low

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."

3.32 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

2009 8.6 8.5 8.4 8.3 8.2 <u>8</u>. 15 n 5 10 Years of Education West Bank ---- Gaza National Source: PECS 2009. Nonparametric Regressions on Returns to Education.

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.

3.33 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.

Figure 47: Consumption as a Function of Years of Education



Source: PECS 2009. Nonparametric Regressions on Returns to Education.

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

3.34



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 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 surprisingly, Not 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 unemployed among the increased from 32 percent in 2004 to 45 percent in 2007; and have yet to come down to their 2004 levels 50). 2009 (Figure By 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.



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.

Box 4: Youth Unemployment and Poverty

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 is declining 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.

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-employed. 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.



- 3.43 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.
- 3.44 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.
- 3.45 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.
- 3.46 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.

3.47 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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	Me	an	% change			
	2004	2007	2009	2004-07	2007-09	2004-09
West Bank						
Agriculture	725.1	692.3	865.5	-4.5	25.0	19.4
Manufacturing, Mining	1,045.8	1,061.7	1,097.1	1.5	3.3	4.9
Construction	946.3	1,064.0	1,012.8	12.4	-4.8	7.0
Services	1,075.4	1,153.4	1,226.7	7.3	6.4	14.1
Gaza						
Services	953.3	613.9	786.7	-35.6	28.1	-17.5
Non-Services	792.1	653.1	639.6	-17.5	-2.1	-19.3
Source: PECS 2004-2009	2					

Table 7: Mean Per Capita Adult Equivalent Expenditure Levels and Growth Rates Across Industry Categories (in the Private Sector) of Household Head

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.



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.

4. The Spatial Dimensions of Poverty in the West Bank: Geography or Checkpoints?

"Where is Spain? Before the checkpoint, or after the checkpoint?"⁴¹

Based on a series of maps using geo-referenced data, this chapter presents a powerful visual depiction of spatial disparities in economic outcomes in the West Bank, in the unique context of manmade internal barriers to mobility in addition to external movement restrictions. In this context, the analysis validates our findings on the determinants of poverty: areas characterized by high rates of poverty also tend to be areas with severe mobility restrictions, poor access to markets, high rates of unemployment, a dominance of low-wage sectors, and a reliance on increasingly scarce employment opportunities in Israel. The West Bank defies the stylized facts of economic geography: the economic heart of the West Bank, Ramallah, is a mid-sized city while its most populous city, Hebron, is its poorest. Hebron also faces harsh restrictions in mobility restrictions in the form of checkpoints have far-reaching economic implications: the presence of checkpoints is associated with higher transaction costs and uncertainty that manifest in increases in price differentials and unemployment rates. To the best of our knowledge, this is the first attempt to measure the size of the distortions brought on by the internal checkpoints, which is found to be comparable to the transaction costs incurred when crossing the U.S.-Canada border. The 'immobile' agricultural sector is particularly vulnerable.

1. Introduction

- 4.1 The poverty narrative so far is one of a large and widening divergence in poverty and labor market outcomes between the two territories of the West Bank and Gaza. This spatial divergence is driven by the increasing isolation of Gaza from the rest of the world. This chapter now turns to the West Bank, examining its increasing geographical fragmentation and its implications for poverty and the economy. It demonstrates large differences within the West Bank itself, highlighting intra-regional variations through a series of maps, exploring the role of natural and man-made geographic factors in explaining spatial disparities in poverty. The internal mobility restrictions imposed by Israel, unique to the West Bank, play an important role in explaining divergent outcomes within the West Bank. This is strikingly analogous to the role of Gaza's external barriers in explaining the divergence between the West Bank and Gaza.
- 4.2 Arguably, one of the most important reasons for this divergence is the external mobility restrictions imposed on Gaza, which has been entirely `closed' with almost all movements across the border controlled by Israel. In practice, this means that few people and a limited number of goods are allowed to travel in and out; in particular, inputs for commercial production are prohibited from entering the area.⁴² The lack of inputs and lack of access to markets have resulted

⁴¹ Anonymous girl from a West Bank school dance troupe of 11-12 year olds, when the troupe was invited to perform in Spain.

⁴² Imports to Gaza declined in real terms by 47 percent% and exports by 66 percent% over the 2000-2008 period (source: PCBS).

in a virtual shut-down of the private sector, which in turn, has been associated with high levels of unemployment, under employment and higher rates of poverty in Gaza.

4.3 The West Bank too is hampered by mobility restrictions, but of a different kind than Gaza. The West Bank is controlled by internal barriers in the form of road closures as well as external barriers. Goods and services still make it across the border, but transportation within the area is restricted and often encounters significant delays. As in Gaza, the mobility restrictions hurt the private sector, albeit to a lesser extent. What is unique to these internal restrictions in mobility is that they artificially create disadvantaged areas within the West Bank, namely those areas where restrictions are most severe. In order to understand the relationship between internal mobility restrictions and economic outcomes, we therefore concentrate on the West Bank. Gaza is very small, highly urbanized, and does not have internal closure obstacles: its spatial story is one of its isolation as a whole rather than one of internal spatial variations in economic outcomes.

Box 5: How 45 Minutes can Turn into 3 Hours

A June 2009 article from the BBC, 'Working the West Bank checkpoints', documents how internal mobility restrictions enlarge the West Bank for a truck driver commuting between Hebron and East Jerusalem: "It is getting close to 0600 and the moon is still on the horizon. Palestinian storefronts are still closed on the empty streets of Hebron. But workers at the al-Junaidy Dairy Company are finishing the night shift, loading delivery trucks with milk, yoghurt and cheese. At about 0615, truck driver Wael Shyuri climbs into one of the vehicles and rumbles out of the car park. The five tonnes of dairy products he is hauling are to be sold in shops in and around Jerusalem. Mr Shyuri says he makes this same delivery run between three and six times every week. If he is allowed to drive straight from Hebron to Jerusalem, he says the 26 miles (45km) trip would only take about 45 minutes – and he could do two or three trips a day. But it usually takes him two to three hours, he says, and occasionally much longer. "It all depends on what happens at the checkpoints," he says". (BBC news, 2009)



- 4.4 Despite its small area, there is a surprisingly large degree of spatial heterogeneity in the West Bank. As in most countries, geography is in large part determined by nature. People settle where there is a hospitable climate, better access to natural resources and water, and access to markets, which predicts that economic activity will form along important rivers, coastal areas, and border passages (see for instance, WDR, 2009). The presence of internal mobility restrictions means that, in the case of the West Bank, the geography of economic activity is also affected by manmade factors including a multitude of checkpoints and other closure obstacles. As a result of Israel's control of the road-network, a commute between two cities that would normally take 45 minutes in the absence of restrictions, now takes up to three hours or more (Box 5). These internal mobility restrictions effectively enlarge the West Bank fivefold.
- 4.5 Spatial inequalities are not by themselves alarming or unnatural: geographical diversity and non-negligible transaction costs imply that there will inevitably be leading and lagging areas. The empirical literature on economic geography (see e.g., World Development Report, 2009) highlights another stylized fact: growth favors densely populated areas, in particular, large cities. By being more likely to be well connected to other leading areas, large cities have an additional advantage in terms of a cost-efficient access to markets. The services sector that is dependent on high-skilled labor, tend to concentrate in these large and well-connected cities. What is different in the West Bank is that these natural tendencies for spatial inequalities have also been influenced by a man-made system of internal closures and mobility restrictions.
- 4.6 This chapter begins with a description of the economic geography of the West Bank followed by a visual examination of the spatial distribution of poverty, identifying well-defined pockets of poverty. Using detailed road closure data provided by UNOCHA, we categorize the areas of the West Bank with the poorest access to the road network, and illustrate how this shapes its economic landscape. By sequentially introducing new variables into the analysis, we explore the role of natural and man-made geographic factors in explaining spatial disparities in poverty. Our main findings are that it is precisely those areas in the south of the West Bank that are most disconnected from the rest of the territory that are also the most vulnerable. Using Hebron, the poorest governorate in the West Bank as an illustrative case, we explore the links between poverty, unemployment, and mobility restrictions. Finally, we attempt to quantify the size of the checkpoint-induced increase in transaction costs that are manifested in increases in price differentials and unemployment rates. To the best of our knowledge, this is the first attempt to measure the size of the distortions brought on by the internal checkpoints in the West Bank.

2. The Economic Geography of the West Bank

4.7 The West Bank is a land-locked region with a land surface area of approximately 5640 square kilometers, slightly smaller than the U.S. state of Delaware. It shares its 307 km western border with Israel and its 97 km eastern border along the Jordan River with Jordan. Despite its small surface area, there is a considerable variation in elevation with the lowest elevation of a little more than 400 meters below sea level (the Dead Sea) and the highest point of just over 1000 meters (tall Asur), close to the geographical center of the West Bank. The world's lowest city, Jericho, lies just north of the Dead Sea in the West Bank.

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Governorate	Capital city	Governorate	Capital city	Capital city population
		Population	Population	share
Jenin	Jenin	256,619	39,004	0.152
Tubas	Tubas	50,261	16,100	0.320
Tulkarm	Tulkarm	157,988	51,300	0.325
Nablus	Nablus	320,830	126,132	0.393
Qalqilyah	Qalqilyah	91,217	41,739	0.458
Salfit	Salfit	59,570	8,796	0.148
Ramallah	Ramallah-Al-	279,730	65,662	0.235
	Bireh			
Jericho	Jericho	42,320	18,346	0.434
Bethlehem	Bethlehem	176,235	25,266	0.143
Hebron	Hebron	552,164	163,146	0.295

Box 6: Population Structure of the West Bank: Hebron and Ramallah

Unlike many other countries in the world, the economic and political center of the West Bank, Ramallah, with less than 70,000 people, is not its largest city. That distinction belongs to Hebron city, capital of the southernmost governorate of the West Bank. The towns and villages in the area around Hebron (not shown in the map) are also relatively large in terms of population. According to estimates not reported here, Hebron governorate has some of the highest birth rates and largest average household sizes in the region. What truly sets Hebron apart from other cities in the West Bank is that it has Israeli settlers located within its city borders, and consequently, Israeli Defense Forces (IDF) presence to guard the settlers and control the Israeli road closures and checkpoints inside and around the city.¹ Approximately 80 percent of the city is under Palestinian control (mostly residential and new commercial area) while 20 percent is under Israeli control (that includes the old city). Palestinian control of Hebron is limited to the 20 or 30 square kilometers of the main part of Hebron, which contains around 140,000 Palestinians. In the area of Hebron city where more than 600 Jewish settlers live among 30,000 Palestinians, the Palestinian populations' movements are heavily restricted.² Palestinians commuting to work and transporting goods in and around the city often encounter long and uncertain delays.

¹Bouckaert, Peter (2001). <u>Center of the Storm: A Case Study of Human Rights Abuses in Hebron District</u>. Human Rights Watch. pp. 5, 40–43, 48, 71–72. <u>ISBN 1564322602</u>.; <u>http://www.time.com/time/magazine/article/0,9171,980306,00.html</u> ²http://www.washingtonpost.com/wp-dyn/content/article/2010/03/07/AR2010030702702.html

According to the most recent population census of 2007, the West Bank has a total population of a little over 2.3 million, and recent estimates suggest it has surpassed 2.5 million. The region is divided into 11 governorates, with governorate capitals of the same name: Jenin, Tulkarm, Nablus, Qalqiliya, Salfit, Ramallah, Jericho, Bethlehem, Hebron, and East Jerusalem. The twin cities of Ramallah and Al-Bireh (henceforth Ramallah) in Ramallah governorate serve as the de facto administrative capital, as well as the political and economic center of the region. It is located in the heart of the West Bank, only 10 km north of East Jerusalem, the hopeful future capital of the Palestinian territories depicts the distribution of the population across the West Bank. The majority of the population is located along a mountainous spine that runs from north to south, in the cities of Jenin, Nablus, Ramallah, Jerusalem, Bethlehem, and Hebron.



- 4.8 The services sector makes by far the largest contribution to the West Bank's GDP (33.8 percent private and 23.2 percent public in 2008, see Table 6 in Chapter 3), followed by manufacturing (13.8 percent), construction (7.4 percent), and agriculture (5.3 percent). The declining contribution of agriculture relative to a decade ago could reflect a modernization of the economy where the private sector is becoming more services oriented. However, it is also plausible that this decline reflects the constraints faced by the sector as a result of increasing restrictions on internal mobility of goods and services in the West Bank.
- 4.9 This growth in the services sector exemplifies Ramallah's rise as the West Bank's economic capital. With a high-skilled services sector, there is anecdotal evidence that businesses from Jerusalem and elsewhere are relocating to Ramallah, and people are moving into the city from other parts of the West Bank where job opportunities are fewer.⁴³ Most international organizations and foreign embassies are currently based in Ramallah, bringing with them resources that are large relative to the domestic economy of the West Bank, which is still largely aid dependent. Nearly all of the hundreds of millions of dollars of aid (see Chapter 6) go through Ramallah, which has arguably been a stimulating force behind Ramallah's economic recovery following the second Intifada. The arrival of these new businesses and organizations increases the demand for real estate, which reportedly preceded Ramallah's recent building boom (see e.g., Reuters, 2010). This expansion of Ramallah's economy, largely fueled by international aid money, potentially helps attract higher-skilled private sector services. One of these, with the highest worker productivity in the West Bank, the pharmaceuticals industry, is also among a select few industries experiencing rapid growth. Five of the six pharmaceuticals industries in the West Bank are currently located in Ramallah (see e.g., USAID, 2009).⁴⁴
- 4.10 Hebron accounts for roughly one-third of the West Bank's GDP, and in contrast to Ramallah, is dominated by manufacturing and agriculture. The largest industries in Hebron include stone cutting (the governorate holds roughly 60 percent of the West Bank and Gaza's national reserve in marble⁴⁵), manufacturing of leather and shoes (used to be one of the largest industries until a decade ago; see USAID, 2009), manufacturing of plastic pipes (see USAID, 2009), dairy products (home to major dairy product manufacturer Al-Junaidi) and other agricultural produce. It is locally also known for its grapes, figs, limestone, and glassblowing factories.
- 4.11 On the face of it, Hebron has several comparative advantages over a mid-size city like Ramallah. Its large population and proximity to other population centers implies potential access to a large market. Hebron is also strategically located, in terms of its proximity to a potential canal linking the Red Sea and the Dead Sea and in the event of a future gateway to Gaza.⁴⁶ "The potential for

⁴³ See the Wikipedia page on Ramallah (section on the economy): http://en.wikipedia.org/wiki/Ramallah

⁴⁴ The economies of Nablus and Bethlehem are based to a lesser extent on the services sector. Nablus, houses the Palestine Securities Exchange and the al-Quds Financial Index, and the nearby An-Najah national university is the largest university in the Palestinian territories. The economy is based on a mix of services, manufacturing, and agriculture. Tourism and related sectors such as hotels, shopping and handicrafts are the main industries in Bethlehem. Its manufacturing sector includes stone cutting and textiles. In contrast, the cities of Jenin and Jericho, are primarily based on agriculture.

⁴⁵ See e.g., The American Task Force on Palestine article entitled "Bringing the Palestinian economy out of recession": http://www.americantaskforce.org/daily_news_article/2010/09/14/1284436800_0

⁴⁶ The "Valley of Peace Initiative": There are tentative plans to develop the Arabah Valley in the south of the West Bank (just south of Hebron), between the Red Sea and the Dead Sea, as part of an economic cooperation initiative between Israel, Jordan

the [Hebron] district to play a significant role in the growth and development of the economy is unmatched", says Al-Herbawi, an advisor to the mayor of Hebron (see footnote 5). However, the significant presence of IDF in the city and the consequently severe internal mobility restrictions currently hamper Hebron's ability to take advantage of these natural advantages: the local services sector (shops and restaurants) have been particularly badly hit as a result of the curfews and forced store closured imposed by the IDF (Box 6).

3. An Unusual Geography

- 4.12 There are at least two unusual features of the West Bank's geography:
- 4.13 First, the largest city in the West Bank, Hebron, is among the least developed economic areas in the region. While it has a large economy, it is primarily based on low wage sectors. In contrast, Ramallah, with a much smaller population, is the center of economic activity in the region, driven by growth in the services sector. This is unusual because in most countries, the largest cities also tend to be the most vibrant economically (see e.g., WDR, 2009). In densely populated areas, local businesses have access to large markets and in turn, people are drawn to areas with abundant economic opportunities. Thus, high economic growth is followed by population growth, and vice versa.
- 4.14 Why isn't Hebron economically vibrant and conversely, why isn't Ramallah larger given its economic growth? A potential explanation might be that while Hebron is densely populated, the populated areas in and around the city are poorly connected due to the severe mobility restrictions imposed by the IDF. Hebron has a number of Israeli settlements within the city, and a part of the city is under Israeli control. A UNOCHA 2010 report argues that "Israeli settlements and their continuous expansion have the single largest impact on the configuration of the system of access restrictions applied to the Palestinian population"⁴⁷. In fact, Hebron city has the highest number (11) of permanently manned checkpoints within the city itself.
- 4.15 Moreover, as the next sections will demonstrate, the city as a whole, as is true of other cities in the West Bank like Nablus, is also poorly connected to the rest of the West Bank and to international markets. This means that Hebron is unable to tap into its potential as a city with a large market access. This stylized fact of economic geography, that economic outcomes favor well-connected areas, also explains why Ramallah is currently the West Bank's economic center. It is strategically located just 10 km north of Jerusalem, giving Ramallah better access to international markets and services, and possibly explaining the location of most of the international organizations and embassies, and its resulting role as the entry point for most

and the Palestinians. Part of the plan is to connect the Red Sea with the Dead Sea via a 166 km long canal. If that were to materialize, the development plans for the area along the canal include convention centers, hotels, restaurants, parks, artificial lakes, green houses for winter fruits, and a high speed railway.

A future gateway to Gaza: As the West Bank's most southern governorate, Hebron is also ideally located for a future gateway to Gaza. Cautious plans to re-establish a link between the two regions by means of a railway have indeed been made (the project name is "Arc"; see e.g., Khamaisi, 2010), which would make Hebron the first stop after Gaza.

⁴⁷ West Bank Movement and Access Update, June 2010; UN OCHA oPt

international aid. Finally, Ramallah is situated in the geographical center of the West Bank, and is closer than Hebron to other major cities in the West Bank. Our data shows that while mobility in Ramallah is hampered by internal restrictions, these restrictions are more severe in Hebron.

- 4.16 Is Hebron's large population a residual of its past as an economic center? Hebron has been the largest governorate in the West Bank at least since 1997, and possibly considerably longer (PCBS). One potential explanation for its large population may be related to its endowment of natural resources, as it holds roughly 60 percent of the territory's national reserve in marble (which makes up for a large contribution to the West Bank's GDP) and about half of the territory's goldsmith's industry (see footnote 5). Taken together, it may be reasonable to expect that in the future, population growth in Ramallah will be rapid, and if Hebron becomes better connected, it ought to see rapid economic growth as well.
- 4.17 The second unusual geographical feature of the West Bank is that the area along the West Bank side of the Jordan River (the area's only river) is not a populated area. In most countries, riverbeds and coastal areas tend to be the more densely populated. Why is this not the case in the West Bank? Firstly, the river is a dead end, draining into the land-locked Dead Sea, making the Jordan River ill-suited as a trade route. Secondly, the local climate is warm with little rainfall due its low altitude and it being located on the eastern side of the West Bank's mountainous spine. Moreover, it is a relatively shallow river with a modest water flow, although the river is a source of irrigation for the Jordan valley. Finally, the Jordan Valley is currently part of Israel's military zone, which implies that the entire area is under full Israeli control (including the bridge to Jordan).
- 4.18 The central hypothesis explored in this chapter is the role of man-made and natural barriers to mobility in explaining spatial differences in economic outcomes in the West Bank. One important element of this analysis involves understanding the effect of a unique feature of the West Bank-the presence of internal barriers, in particular, checkpoints- on accessing economic opportunities, markets and employment. In the absence of any measure of effective distance and travel time in household surveys such as the PECS or the LFS, we use multiple sources of data to estimate these measures. These include individual and household level survey data, an exceptionally rich GIS data set, and highly disaggregated price data. The GIS data allows us to map the localities sampled by the household surveys along with the road network and road closure obstacles, primarily focusing on checkpoints (See Annex for details).

Box 7: Measuring Distance in the Presence of Checkpoints

We use the GIS data to construct two important variables: (1) the distance from each locality to its nearest governorate capital using the road network, and (2) the number of checkpoints between the two locations. A locality is then defined to be "restricted" if it has at least one checkpoint en route to the nearest governorate center or "unrestricted" if it is not hampered by any checkpoints. Since we do not observe the routes most popularly travelled between locations, we estimate the route by minimizing the travel time over all possible routes, given the constraints of road closure obstacles. Map 6 below shows examples of such routes over the road network, along with the checkpoints, between two city pairs. In the left panel, for instance, the blue line maps the shortest route in terms of travel time involves one full time and two part-time checkpoints between Nablus and Jenin. However, to travel between Ramallah and Hebron (right panel), a similar time- minimizing route involves crossing three full-time and one part-time checkpoint (June 2009).



Map 6: Imputed Routes between Locations

4. Understanding Spatial Disparities in Poverty

4.19 This section begins with a visual depiction of the spatial distribution of poverty in the West Bank (Map 7). In terms of both the percentage of poor as well as the absolute number of poor, Hebron, the most populous governorate, clearly stands out as the West Bank's poorest area. In contrast, Ramallah and Nablus have the lowest poverty headcount rates while Salfit and Jericho, relatively sparsely populated governorates have the lowest number of poor.



⁴⁸ Note that the spatial distribution of head-count poverty (left panel of Map 7) is estimated by means of spatially smoothing local observations of poverty, i.e. each point on the map measures the weighted average of the locality poverty rates, where localities located closer to the point on the map are given more weight. A popular alternative to estimating small area poverty is the approach put forward by Elbers et al. (2003), which imputes household consumption poverty into a population (or agricultural) census, and then aggregates the imputed poverty estimates at the small area level. This might give more accurate estimates when the spatial heterogeneity is particularly large. However, this methodology requires access to unit-record census data.

4.20 Despite these large spatial disparities in poverty, the relationship between poverty and distance to urban centers is similar to what is typically observed in developing countries. The left panel of Figure 56 shows the relationship between head-count poverty and the distance to the nearest governorate capital. We find that poverty is lowest in the vicinity of the major cities, and that poverty increases when moving away from the cities. Not surprisingly, larger households in the West Bank are also more likely to be live farther from economic centers, and more likely to be poor (right panel Figure 56).



- 4.21 In what follows, we sequentially examine the correlation between poverty and access to markets (with and without mobility restrictions), education, employment, the sectoral distribution of the private sector, and labor mobility. The results are compelling the odds against Hebron are overwhelming: its high poverty rates are accompanied by severe mobility restrictions, poor access to markets, high rates of unemployment, dominance of low-wage sectors, and a heavy reliance on employment opportunities in Israel. It is no coincidence that Hebron remains the poorest governorate in the West Bank.
- 4.22 In addition to Israeli border restrictions governing the movement of Palestinians between the West Bank, Gaza, Israel and Jordan, internal movement restrictions are an omnipresent feature in the West Bank. Although, the Israeli authorities have started lifting some of these restrictions, most noticeably between the urban centers of Ramallah, Nablus, Qalqiliya, Jerricho and Salfit (see e.g., the "West Bank movement and access update" by UNOCHA, 2009), no such restrictions have been lifted in Hebron.
- 4.23 The very design of these restrictions implies that some areas are more affected than others. For instance, many of these restrictions are in place to facilitate the travel of Israeli settlers between Israel and their settlements in the West Bank, and as a result, leave important segments of the main road network blocked for the use of residents of the West Bank. Among the areas most affected are Hebron, East-Jerusalem and the Jordan Valley, which are also key centers of
manufacturing and agricultural production.⁴⁹ According to the November 2009 UNOCHA update, toward the end of 2009, the West Bank had a total of 578 closure obstacles, including 69 full-time checkpoints, 21 part-time checkpoints, and 488 miscellaneous unstaffed obstacles such as road gates (that may serve as so-called `flying checkpoints'), road blocks, earth mounds, earth walls, road barriers and trenches (see UNOCHA, 2009). Map 6 plots, for each point on the map, the number of checkpoints one would encounter when travelling from there to the nearest governorate capital.⁵⁰ The right panel of Map 8 shows the number of checkpoints within a 5km radius of the governorate capital, which yields one measure of checkpoint-induced mobility restrictions for each governorate.



4.24 While the two maps display different definitions of mobility restrictions, by both measures, the Hebron governorate represents the most severely restricted area in the West Bank. It is important

⁴⁹ Much of West Bank's agricultural production is located in the Jordan Valley. The Hebron governorate is home to some of the largest manufacturing sites.

⁵⁰ This yields a number for each of the 620 localities observed in the West Bank. We then apply spatial smoothing to obtain the continuous map.

to note that even the cluster of checkpoints located south of Ramallah, while outside the Hebron governorate, still poses a mobility restriction for Hebron because it blocks the main and only route connecting Hebron to the rest of the West Bank.

Box 8: A World without Checkpoints?

Map 9: A Hypothetical Scenario: What would Market Access be in the Absence of Checkpoints?



As Map 9 shows, even in the absence of any checkpoints, Hebron is not well connected to the rest of the West Bank. Only one main road connects Hebron to Ramallah and the rest of the West Bank, whereas Ramallah is located on or close to four main roads (Map 9). Estimates of market access are low for most parts of the Hebron governorate, and only comparable to a few remote corners of the West Bank that are sparsely populated. Thus, Hebron's limited market access is not attributable to the presence of checkpoints alone but is also related to a general lack of road infrastructure linking it to the rest of the West Bank.

Map 10: Ramallah's Access to the Road Network

What would the West Bank look like in the absence of checkpoints? We consider a hypothetical scenario of access to markets in the absence of any checkpoints. We define "access to markets" as the share of the population that can be reached (from a specified location on the map) within a certain amount of time. Following this definition, we adopt an approach put forward by Deichmann (1997) that computes market accessibility as a spatially weighted average of population. The resulting outcome is purely a function of the existing road network and the distribution of the population where spatial variations indicate that some points are better connected than others (See annex for details).



- 4.25 Not surprisingly, spatial disparities in poverty within the West Bank are unrelated to disparities in the access to education. This finding is in line with the relative equal access to services documented in Chapter 2. Map 11 shows the spatial distribution of average levels of education, and that educated individuals are most likely to reside in or around the major cities. The dark "pockets" indicate higher levels of average years of schooling, especially in cities with a nearby university, and Hebron is no exception. The average years of schooling in Hebron are on par with the rest of the West Bank. Figure 57 shows this relationship in greater detail: education levels decline with distance to the nearest governorate capital.
- 4.26 Clearly, this does not translate into labor market outcomes. Map 12 highlights two large pockets of unemployment in the West Bank. One of them is Hebron, which is consistent with the high poverty estimates for the Hebron governorate. The other area with high unemployment rates is located west of Ramallah, along the border with Israel. However, poverty rates for that area are average. What this area does have in common with Hebron, as we show later, is that they both rely on Israel for employment opportunities, and it is precisely this source of employment that has been hit particularly badly in terms of job losses.

Map 11: Education (Years of Schooling)







- 4.27 As Figure 58 shows, unemployment rates are lower in or around the city, which are the hubs of economic activity. Judging from the map (Map 12), this seems to be less true of Hebron. The positive relationship between unemployment and distance to the city, however, is consistent with the relationship between distance to economic centers and poverty and education.
- 4.28 What explains these pockets of unemployment and poverty in and around Hebron? Map 13 reveals a clear geographical pattern in the



sectoral distribution of private sector employment. Agriculture is located in the Jordan Valley, Hebron and parts of Jenin. The manufacturing sector is spread throughout the West Bank with a large cluster occupying the border area between Hebron and Bethlehem (home of some of the West Bank's largest stone-cutting manufacturers). Construction is concentrated west of Ramallah, and around Bethlehem. Finally, the West Bank's services economies can be found in the Ramallah area, and in the north of Jenin.

- 4.29 In particular, the economy of Hebron is largely based on agriculture and manufacturing, sectors that are both labor intensive and low-wage. In contrast, Ramallah stands out as a more service-oriented, high-wage economy, which is consistent with the low estimates of poverty for the area. This finding is also consistent with the spatially-blind cross-tabulations between poverty and sectors of employment reported in Chapter 3: poverty is highest among agricultural workers, and lowest among workers in the services sector.
- 4.30 As we might expect, we find that in general, employment in services declines with distance from the nearest governorate capital, while employment in agriculture increases with distance to the urban center. Figure 59 confirms that poor private sector workers are more likely to be employed in agriculture and manufacturing, and less likely in services. Agriculture becomes the dominant sector of employment among the poor at a distance of 6 km from the governorate capital or further. Among the non-poor, the services sector remains the dominant sector of employment at all distances from the nearest governorate capital.



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4.31 How does the distribution of location of work fit into these spatial patterns? The right panel of Map 13 shows the spatial distribution of employment in Israel while the left shows the spatial distribution of individuals that reside and work in the same locality. It is striking that the spatial distribution of employment in Israel is very similar to the geographic distribution of unemployment. In other words, in areas where there is more unemployment, we find more workers that rely on job opportunities in Israel: with Hebron and the area west of Ramallah along the border with Israel both standing out. The border tightening of regulations and the reduction in the number of working permits for Palestinians since the second Intifada probably means that a significant share of those currently unemployed (in these border areas) used to go to



work in Israel prior to the second Intifada. The fact that these very same areas also have high rates of unemployment might point to the limited availability of jobs within these areas.

4.32 Comparing the right panel of Map 14 with Map 13 suggests that many of the workers from Hebron who work across the border in Israel are likely involved in agriculture, whereas those who cross the border west of Ramallah are most likely construction workers. Thus, even those workers who have jobs in these areas are possibly employed in low-skill jobs, as Palestinians who work in Israel tend to be less educated on average (see Chapter 3).



5. The Economic Implications of Checkpoints

- 4.33 In any economy, restrictions on the movement of goods and services introduce both transaction costs and uncertainty, with visible implications, the first of which is a widening of spatial price deviations, i.e. a distortion of the 'law of one price'. In time, if inefficiencies brought on by within-country trade barriers persist, there may be a restructuring of economic activity, with unemployment increasing and private sector wages decreasing in locations where restrictions are tightened. Long and unpredictable delays arguably hurt the agricultural sector the most. "The stakes are highest for fresh produce, as the whole shipment could spoil if not delivered on time" (Akkaya et al., 2008). The added costs may induce a reduction in sales, either because higher consumer prices have lowered demand, or in the more extreme case, if high transaction costs have led traders to look elsewhere for their supply. This puts pressure on the profits and wages of agricultural producers and their employees.
- 4.34 In this section, we examine the economic implications of checkpoints starting with the relationship between poverty, unemployment and mobility restrictions. Next, we present evidence

of the checkpoint-induced increases in transaction costs by examining spatial price differentials that stem from mobility restrictions. Figure 60 compares poverty estimates for agricultural and non-agricultural workers residing in mobility "restricted" and "unrestricted" localities. Not only is the negative impact of mobility restrictions most apparent for those involved in agriculture, poverty is also higher in "restricted" localities that are located away from the major urban centers, where most of the agricultural workers live. Among non-agricultural workers, on the other hand, those living in "restricted" localities appear to have lower poverty rates. How is that possible? One explanation could be that checkpoints are more often placed along routes that see large flows of Palestinians, in areas that are economically more active. In line with this hypothesis, "restricted" areas also have a higher share of private sector employment and higher private sector wages, which may explain the lower poverty rates (see Table 36 in the Annex to Chapter 4).



- 4.35 In order to understand the effect of checkpoints on economic outcomes, ideally, one would like to compare the same location with and without a checkpoint at the same point of time. In the absence of this counterfactual, we compare economic outcomes for the same location at different points of time through a regression that isolates changes in locality unemployment rates related to past changes in mobility restrictions, while separately accounting for the effect of selected determinants of employment. The results, reported in Table 37 in the Annex, support the hypothesis that an increase in the number of checkpoints in a locality will subsequently increase its unemployment rate.
- 4.36 Over and above the relationship between poverty, unemployment and mobility restrictions, checkpoints lead to increased transaction costs. Most directly, the resulting delays increase transport costs through higher costs of labor and other inputs such as fuel. The extra travel time also means that any given vehicle will on average be transporting lower trade volumes per time unit, which implies a higher fixed cost per transaction. Uncertainty is also introduced by the unpredictability of waiting times at the checkpoints (see Box 5 in this chapter). These unanticipated delays may result in penalties, or even a discontinuation of trade, if on-time delivery is demanded (see e.g., World Bank, 2007, 2008). Even if no penalties are incurred, delays may result in damage to the shipment, especially for perishable goods, which too adds to the costs.

4.37 Checkpoints effectively introduce man-made `borders' that divide up the West Bank into different economic areas. Crossing these `borders' for trade between areas, comes with costs analogous to crossing national borders for international trade. Based on the literature of border crossings (see Box 9), the following analysis attempts to quantify the effect of crossing within-country `borders'.

Box 9: The Economic Costs of Trade Barriers

To illustrate the economic costs of trade barriers, Akkaya et al. (2008) use a one-day retail price survey of selected agricultural products from 11 towns and cities in the West Bank conducted on February 15, 2006, which shows spatial price differences to be very large, up to 400 percent. As February 15 is no different from any other day, they associate these price gaps with "the extent to which agricultural markets in the West Bank have been subject to the uncertainties of closures". While traders will be aware of these price differences, it will not always be in their best interest to act on it as "the risks of a shipment being tied up at an internal crossing point outweigh any benefit of price arbitrage".

Engel and Rogers (1996) were the first to quantify the effect of crossing a border on prices (the border between the U.S. and Canada in their study). Many have since adopted their approach to study the border effect for different countries, and using variations on their original model (see e.g., Parsley and Wei, 2001; and Engel et al., 2003). This analysis in this chapter is the first to quantify the effect of crossing within-country `borders'.

- 4.38 To the best of our knowledge we are the first to attempt to quantify the size of the distortions brought on by internal mobility restrictions. In order to do this, we estimate the increase in price differentials, a proxy for transaction costs, induced by checkpoints between neighboring localities. We regress absolute spatial price differentials on the number of checkpoints that separate the locations. For each location in our sample we only include the price differential with the nearest neighbor, as these are most likely to trade. In the absence of arbitrage, the difference in prices for a given good between two locations is bounded by the transaction costs incurred when transporting and selling a unit of the good from one location to the other. Spatial price differentials therefore serve as a proxy for transaction costs that are incurred with the addition of checkpoints.
- 4.39 As an illustration, Map 15 plots the spatial variations in prices for two selected food items: tomatoes (top panel) and potatoes (bottom panel). The maps in the left panel are based on locality level unit value prices; while the maps on the right show the governorate level prices obtained by the PCBS for the same goods (see Box 14 in Annex for more details). Our regressions are at the locality level. We include the comparison between locality and governorate prices as a consistency check. The price maps confirm that prices exhibit substantial spatial variation, and are higher in the main centers of economic activity, Ramallah and Nablus. For a full description of the price data, list of food items considered, and the methodology please refer to the Annex to chapter 4.



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Table 8: Regression of Abs	solute Log	Locations	ce on Number of C	neckpoints i	between
		200000000			
Neighboring location pairs	Rice	Vegetables ⁵¹	Potato & Onion	Fruits ⁵²	Tea &
Distance	0.012	0.010	0.018	0.005	0.006
1 checkpoint	0.032*	0.010	0.018	0.055**	0.017
2 or more checkpoints	-0.005	0.040	0.090**	0.099**	0.083**
Constant	0.042	0.116**	0.056	0.094**	0.061**
Adj. R-squared	0.036	0.008	0.080	0.051	0.085
Observations	95	325	173	203	176

- 4.40 The results, presented in Table 8 show that checkpoints indeed have a significant and sizeable positive effect on spatial price differences. The economic effect of two checkpoints or more is an added price difference of up to 10 percent, depending on the category of consumer goods, which is roughly comparable to the transaction costs incurred when crossing the U.S.-Canada border (see e.g., Engel et al., 2003). The regressions control for the distance between locations, which too is positively and significantly associated with price differentials, as expected.
- 4.41 It is conceivable that our estimated impact of checkpoints on transaction costs is in fact conservative. Note that no arbitrage implies that price differentials may vary anywhere below the transactions costs, and thus may be considerably lower. In theory, only for locations that actually trade with each other may we expect the price differential to match the transaction costs. For this reason, the regressions would ideally only include pairs that trade with each other. Since we do not observe domestic trade, our regressions will inevitably include non-trading pairs. This means that any two locations may well be separated by high transaction costs, yet show very small price differences, simply because they have similar production functions or have close neighbors with similar production functions (reasons for the pair to not trade). Including such pairs in the regression will weaken the link between actual transaction costs and observed price differentials, and thereby yield a downward bias of the effect of checkpoints on transaction costs.
- 4.42 We work with a subsample of pairs that are more likely to interact with each other, namely pairs that are each other's nearest neighbor, in an effort to reduce the above mentioned bias. Results not reported here show that including all pairs indeed reduces the estimated impact of checkpoints from a 7-10 percent to a 1-3 percent increase in the price differential. In both regressions the coefficients are statistically significant.
- 4.43 This chapter presents a powerful visual depiction of spatial disparities in economic outcomes in the West Bank, a region unique in the world in terms of the presence of man-made internal barriers to mobility. Based on a series of maps and innovative use of multiple sources of data, the analysis validates our findings on the determinants of poverty and presents evidence on the role of natural and manmade geographic factors, in particular, checkpoint-induced mobility restrictions, in explaining spatial variations in outcomes.

⁵¹ Vegetables: cucumber, eggplant, green pepper and cauliflower

⁵² Fruits: lemons, bananas and water melons

CHAPTER 4

4.44 A better understanding of the role of internal mobility restrictions will require an extension of the analysis in this chapter along three dimensions. First, our analysis does not account for all road blocks, earth walls, earth mounds and road gates (which are numerous), primarily due to missing information on the dates during which these obstacles have been in operation. We are currently also assuming the same waiting time (transaction cost) for each checkpoint, as we have no information that allows us to distinguish between checkpoints. Adding these missing variables and updating the analysis accordingly, is an important step. Second, the poverty map presented in this chapter is obtained by spatially averaging locality estimates of poverty, which does not take advantage of any census data that might be available. A third area of future analysis is to explore the economic impact of the relative easing of mobility restrictions. This must take into account not only the number of checkpoints, but also their location and cost to the economy. Another question that is of interest is the link between internal road closures and international trade. Finally, our analysis confirms that there is a significant intra-regional variation in consumer prices that is currently not accounted for in the measurement of real consumption and hence poverty. It is conceivable that a more accurate account of spatial price differences will have implications for poverty comparisons between different regions, and for designing and targeting policy interventions where they are most needed.

5. Multiple Dimensions of Poverty: The Truth Behind Perceptions?

"The issue is not hunger. It is idleness, uncertainty and despair"⁵³.

This chapter examines the non-income dimensions of poverty and deprivation in the West Bank and Gaza. With some of the best child nutrition outcomes in the world, the West Bank and Gaza performs strikingly well in terms of important measurable indicators of human development: nearly all children are immunized, almost all children of school going age are enrolled and attendance rates are consistently high. However, these investments in human capital have not translated into productive employment, which is reflected in people's perceptions of their own poverty status: subjective poverty rates did not decline as steeply as consumption poverty between 2007 and 2009. In assessing their own wellbeing, households place value on broader measures of capability and on labor market outcomes in particular. This suggests that multiple dimensions of deprivation are at work in the West Bank and Gaza and that these matter in how people evaluate their own wellbeing. What is striking is that in Gaza in 2007, as consumption poverty increased, households became increasingly vulnerable, simultaneously suffering multiple deprivations. While in 2009, consumption poverty in Gaza dramatically declined by 16 percentage points, the incidence of multiple deprivations fell by only 3 percentage points. Neither subjective poverty rates nor broader measures of deprivation in 2009 reflect the strong recovery suggested by consumption poverty. Perceptions of wellbeing in the West Bank and Gaza are consistent with the reality of an economy where fundamental structural factors have not improved.

1. Introduction

- 5.1 Poverty encompasses multiple and diverse dimensions. Income, or lack thereof, is a relevant and key dimension-the means and resources to access necessary goods and services for meeting minimum basic needs. Measures of consumption poverty, based on household expenditures on a preselected bundle of goods and services, estimate this dimension of poverty. Insofar as this measure includes expenditures on education and health, consumption poverty is a multidimensional measure of poverty. However, consumption poverty measures, by design, exclude all household and individual characteristics that cannot be transacted in markets. For example, education or health outcomes have intrinsic values beyond their costs while the welfare loss from unemployment is potentially associated not only with the observed income loss but also with a lower perception of quality of life and human dignity. Health, nutrition, education, physical security, voice, justice, and capacity and opportunity to improve one's life are also essential dimensions of poverty and wellbeing (World Bank 2010). This inherent multidimensionality is perhaps best conceptualized by Amartya Sen's approach to poverty as capability-deprivation-being deprived of those capabilities and freedoms of value for a functional life (Sen 1985). Thus, understanding the multiple dimensions of poverty and subjective perceptions about poverty must take into account non-monetary aspects of overall welfare and living standards.
- 5.2 Such an approach is particularly important in the context of the West Bank and Gaza, where the trajectory of consumption poverty indicates a worsening of living standards in 2007 followed by

⁵³ 'Trapped by Gaza Blockade, Locked in Despair', New York Times, July 14, 2010.

http://www.nytimes.com/2010/07/14/world/middleeast/14gaza.html?_r=2

a quick recovery in 2009. However, this is not accompanied by commensurate improvements in fundamental structural factors: there is little evidence of sustained GDP growth, the private sector remains sluggish, and unemployment and discouragement continue to be high. A multidimensional approach to understanding poverty and deprivation can help further our understanding of this fragile recovery.

- 5.3 This chapter complements the analysis of Chapter 2 by exploring non-consumption dimensions of poverty and wellbeing. Chapter 2 focused on consumption-based poverty and showed that West Bank and Gaza have followed starkly divergent paths. While the former has been making steady progress in poverty reduction, the latter has seen high volatility with a dramatic poverty increase in 2007 and an encouraging reduction thereafter. Labor market conditions are at the core of the contrast. Gaza residents face a severe scarcity of jobs, with aid-driven public sector employment acting as the main buffer. The West Bank, on the other hand, experienced growth across all sectors between 2007 and 2009.
- 5.4 Building on these findings, this chapter extends the examination of poverty in four directions. First, this chapter presents levels and trends in health status, with a special focus on child malnutrition and its evolution in a conflict-affected context. Second, the chapter looks at another dimension of human development, the area of education and schooling, examining both enrollment and attendance rates and associated outcomes. Third, it takes advantage of the availability of self-reported rankings of poverty in the PECS to examine subjective or self-assessed poverty, its relationship to consumption poverty and explores what underlies these judgments.
- 5.5 Finally, this chapter brings these multiple dimensions of poverty together, exploring their incidence over time and identifying the presence of overlapping deprivations. This analysis is different from typical poverty diagnostics in the following sense. First, unlike the standard poverty diagnostics, some household and individual characteristics will be treated as important aspects of poverty beyond their linkage to consumption poverty alone. Second, this analysis pays attention to overlaps of multiple deprivations and their evolution over time, focusing on increases in multiple deprivations in times of economic and political instability. Finally, we attempt to anchor these incidences of deprivation within the subjective self-assessment of poverty to try and understand how people evaluate each dimension of deprivation and their overlaps. As a result, we hope to shed light on why this subjective measure of poverty differs from the consumption based measure, and what deprivations are important in explaining a household's self-assessment of poverty status.
- 5.6 Most of the evidence on human development outcomes discussed in this chapter comes from utilizing three rounds of the Demographic and Health Survey (DHS), collected by PCBS in 2000, 2004 and 2006.⁵⁴ The DHS offers three unique advantages. First, the DHS team measures height and weight of children, providing high quality anthropometric data to study nutrition outcomes. Second, the DHS collects information on school attendance, permitting us to examine education outcomes beyond just enrollment, and assess quality dimensions of the education system through student absenteeism. Third, the DHS contains an array of demographic and socio-economic

⁵⁴ An additional round was collected in 2009, but was unavailable at the time of this analysis.

information—aside from income and consumption—about households and their members, making it possible to characterize correlates and drivers of health and education outcomes. The analysis on subjective poverty, the incidence of different and multiple dimensions of deprivation, and their relation to subjective poverty is based on five rounds of the PECS covering the period 2004 to 2009.

2. Health and Early Childhood Nutrition

- 5.7 Health is an essential dimension of any characterization of wellbeing and human development. In a context of conflict and economic volatility and uncertainty, like the West Bank and Gaza, health status and health care access may well be at risk. Media reports often suggest dire health and nutritional conditions. In this section, we attempt to establish the facts and trends in health outcomes, especially the nutritional status of children using representative DHS data.
- 5.8 Health outcomes, especially in early childhood, have strong repercussions for long term economic and physical well being. Poor nutritional conditions in the first few months of a newborn can have irreversible adverse consequences on cognitive development. Measuring nutrition at a national scale, however, can be very challenging. It is a time-intensive and costly data collection exercise to gather height, weight, and other anthropometric measures. The West Bank and Gaza has invested in three rounds of the Demographic and Health Surveys- 2000, 2004 and 2006-which collects detailed data on anthropometry and other correlates of health status. This data forms the basis for the analysis in this section.
- 5.9 In terms of indicators of early childhood nutrition, the West Bank and Gaza is among an outstanding performer. Among children under the age of 5, only 11.5 percent suffer from stunting (low height for age), and a mere 1.4 percent are affected by wasting (low weight for height). Compared to a sample of more than 130 countries, nutritional indicators in the West Bank and Gaza are better than almost any other country in the world. The prevalence of stunting among children is akin to American levels rather than to the performance of most middle and low income countries. In the average middle income country 3 out of 10 children are stunted, more than three times the figure for the West Bank and Gaza (Figure 61⁵⁵). Performance in terms of wasting incidence is even more compelling. One in 10 children in a middle income country suffers from wasting; the rate is 7 times lower in the West Bank and Gaza (Figure 62). Thus, judged by its anthropometric outcomes, the West Bank and Gaza performs better than most other countries in the world, irrespective of income.

⁵⁵ The sizes of the circles indicate the relative population sizes of the countries.



Figure 62: Incidence of Wasting in Palestinian territories and Around the World



5.10 It is indeed impressive that there are very few countries across the developing world --low and middle income--that exhibit better nutrition indicators than the West Bank and Gaza. This result may come as a surprise to many, and perhaps seems contradictory to general beliefs and perceptions, as well as media reports. For example, Lancet (2009) in a series of short articles on the status of nutrition and related issues in the Palestinian territories portrayed a rather alarming situation. However, it failed to place these figures within the global context. Even if this benchmarking exercise is limited by data availability, it is important to note that the pool of

countries in the sample includes a variety of middle income countries from the region, such as

Jordan, Turkey, Egypt, Morocco, and the West Bank and Gaza fares far better than these in terms of early childhood nutrition indicators.

5.11 Figure 63 and Figure 64 present a more systematic assessment of the relative performance of the West Bank and Gaza. The figures present the association between nutrition outcomes and GDP per capita (in log scale of PPP US dollars). It is worth noting that overall and across countries the link between GDP and stunting and wasting, particularly the latter, is weakly negative. In general, this implies that countries with higher income are associated with better nutrition indicators. For the West Bank and Gaza's level of GDP per capita (PPP) of \$2,900,⁵⁶ the performance commensurate with the overall trends would be stunting rates of 31.6 and wasting rates of 7.9 percent. By any measure or comparison, nutritional outcomes of children in the WBG are excellent.



Sources: World Health Organization, Global Database on Child Growth and Malnutrition; and World Bank, World Development Indicators.

5.12 These outstanding nutrition results are consistent with other indicators of child health and nutrition. For example, almost all children are immunized against diphtheria, pertussis, tetanus. measles and tuberculosis. Vaccination rates in the West Bank and Gaza exceed those of the average middle-income country. There is also near universal coverage of prenatal care-every pregnant woman is attended at least once by skilled health personnel. Important nutrition

Table 9: Health and Nutrition-Related Markers

	Palestinian territories	Middle Income
Received immunization (ages 0-5)	99%	
Received DPT3 (ages 1-5)	95%	81%
Received Measles (ages 2-5)	96%	83%
Received BCG (ages 0-5) Prenatal care	99% 99%	88% 84%
Nutrition markers		
Breastfed (ages 1-5)	97%	
Breastfed >=6 months (ages 1-5)	89%	
Diarrhea last 2 weeks (ages 0-5)	12%	
Source: DHS 2006. WHO Database.		

⁵⁶ CIA Factbook, https://www.cia.gov/library/publications/the-world-factbook/geos/we.html

inputs such as breastfeeding behavior and diarrhea incidence are in line with the observed anthropometric measures, and overall, present a consistent story of good child health and nutritional outcomes.⁵⁷

- 5.13 Overall incidence rates of stunting and wasting have been relatively stable over time. Looking across regions, the West Bank tends to have lower incidence rates than Gaza. Wasting rates are comparable and show a similar evolution across regions over time. Stunting, however, has increased relatively more in Gaza, reaching 14 percent in 2006 (Table 10), which is a concern in the light of the severe economic crisis in Gaza in 2007, a year for which data is not available. Nevertheless, these rates are still very low by international standards.
- 5.14 Do the good outcomes reported above, which are average rates for all children aged 0-5, mask age-specific trends? For example, it may be that younger children are confronting relatively worse environments than those

Table 10: Stunting and Wasting Time Trends						
		Stuntin	g	,	Wasting	
	2000	2004	2006	2000	2004	2006
National	9.0%	9.1%	11.5%	1.6%	2.6%	1.4%
West Bank	8.8%	8.5%	9.5%	1.8%	3.0%	1.7%
Gaza	9.4%	9.9%	14.2%	1.4%	2.1%	1.2%
Source: DHS						

faced by children born a few years earlier. This is especially relevant in the West Bank and Gaza context where conflict-related closures and restrictions periodically impeded access to markets, employment and health services. We break down the analysis into annual cohorts and compare outcomes for selected cohorts to isolate the effect of year-specific conditions on anthropometric outcomes (Table 11). In other words, we compare, for instance, the outcomes of those children below one year of age in 2004, with those in the same age group in 2006 and in 2010. Comparing outcomes by age cohorts across years can hone in on the effect of year-specific conditions on nutritional outcomes. We find mixed results—while rates of stunting have increased for the 2006 cohort, rates of wasting decreased. Since measures of wasting are more responsive to changes in nutrition, this suggests that in this period, nutritional intake was improving. However, the results on stunting -- which is less responsive to changes in nutrition -- are indicative of chronic conditions. Their trends show in general small changes, although they display a worsening trend.

⁵⁷ A usual marker that is looked at is "exclusive breastfeeding" among children 6 months-old or younger. WHO database lists a rate of exclusive breastfeeding of 26.5 for West Bank and Gaza compared to 39.5 for middle income countries. However it is unclear, for the Palestinian context, how this measure is calculated, and on the basis of which instrument. For this reason, we have chosen not to feature this information in the table.

	Table 11:	Nutrition ov	ver Time by Ag	ge Groups			
	Stunting				Wasting		
	2000	2004	2006	2000	2004	2006	
0-11 months	4.4%	4.4%	6.3%	4.6%	6.0%	2.6%	
12-23 months	10.0%	12.0%	15.7%	1.2%	2.0%	1.2%	
24-35 months	11.5%	10.8%	13.0%	1.0%	1.4%	1.1%	
36-47 months	10.4%	12.2%	12.0%	0.2%	1.7%	1.1%	
48-60 months	8.7%	6.3%	10.3%	0.8%	1.3%	1.3%	
Source: DHS							

- 5.15 Overall, stunting and wasting levels for the national and regional populations are relatively low by any standard, and especially for a conflict-affected developing country. However, some of the indications of worsening outcomes suggest the need to explore sources of vulnerability. For example, certain groups and families may lack resources or information so that children face more difficult conditions. We examine two such contexts, looking at employment of household head and education of the mother.
- 5.16 Lack of employment of household head may be a strong indicator of lack of resources. Particularly in Gaza given the high incidence and persistence of joblessness--explored in

Table 12: S	Stunting an	d Wasting b	y Employmer	nt of Head
	Stu	nting	Wa	sting
	Gaza strip	West Bank	Gaza strip	West Bank
Employed	12.7%	9.5%	1.3%	1.6%
Unemployed	18.1%	9.3%	0.7%	1.7%
Out of force	13.1%	11.2%	1.0%	0.9%
Source: DHS 200)6			

detail in Chapter 3--it is not a temporary shock to household's budget constraint. Tellingly, we find that in Gaza, in households where the head does not have a job, stunting rates are almost 5 percentage points higher than in households where the head is employed (Table 12). In West Bank, where unemployment is not a chronic condition, we do not observe such a gap.

5.17 Mother's education is known to be an important predictor of children's nutritional It is status. partly related to information-better educated mothers are more informed about inputs for appropriate nutrition. It may also be a proxy for

Table 13:	Stunting an	d Wasting by	Education of	of Mother
	Stunting		Wasting	
education	West Bank	Gaza strip	West Bank	Gaza strip
<elementary< td=""><td>13.3%</td><td>16.6%</td><td>2.3%</td><td>3.8%</td></elementary<>	13.3%	16.6%	2.3%	3.8%
elementary	9.9%	8.1%	2.6%	3.6%
preparatory	5.3%	9.9%	1.5%	2.1%
secondary	8.7%	8.6%	1.2%	1.9%
>secondary	4.5%	8.5%	2.3%	0.0%
Source: DHS				

better economic status. We find that lower levels of education of the mother are highly correlated with higher levels of stunting, both in the West Bank and in Gaza (Table 13).

5.18 In addition, in the absence of income or expenditure data in the DHS, we use housing conditions and ownership of durables to generate a wealth index and rank households accordingly. We find that children of poorer households in both the West Bank and Gaza are at significant disadvantage vis-à-vis children living in

Table	14: Stuntin	ig and Wastin	ng by Wealth	Quintiles
	Stu	nting	Was	sting
	Gaza strip	West Bank	Gaza strip	West bank
poorest	19.5%	12.4%	1.8%	1.6%
second	13.1%	8.8%	0.7%	1.5%
middle	12.3%	8.0%	1.0%	1.2%
fourth	14.6%	9.7%	1.6%	1.4%
richest	10.7%	8.6%	0.8%	2.8%
Source: DI	IS			

wealthier households (Table 14) the poorest fifth of Gaza's population are almost twice as high as in the richest fifth. While the contrast is not as stark in the West Bank, it is still sizable. On the other hand, wasting rates are too low to pick up meaningful variation over the wealth distribution.

- 5.19 To summarize, our analysis suggests that the performance of the WBG in terms of child nutrition outcomes is remarkable, especially considering the conflict context. Unlike other self-reported indicators of health status, this analysis is based on DHS data that follows strict field protocols to ensure accurate measurement. The examination of trends does suggest some cause for concern. While wasting trends suggests nutrition intake has not worsened and may be improving, the evidence on stunting is more mixed. It has remained relatively low for West Bank, but it shows an increase in Gaza for 2006. The upcoming 2010 round of the DHS provides an opportunity to extend this analysis in this direction.
- 5.20 Finally, it is important to acknowledge that this is a partial picture on health outcomes. There are many other dimensions of health, one of the most pertinent in this context being mental wellbeing. The literature documents extensive evidence of an association between mental health and conflict as well as other 'stressors' in a wide array of settings (Summerfield 2000). Common mental health disorders in conflict situations include depression, anxiety and post-traumatic stress disorder (PTSD) (Lancet 2003), with intensity and duration of symptoms varying with the degree of exposure, with women typically suffering worse symptoms.
- 5.21 A population-based study completed by WHO in 2000 found that about a fifth of a random sample of Gazans presented symptoms of PTSD. Even though these numbers are based on a small sample size of 600 observations, these prevalence rates are substantially above the rates typically found in Western countries. Exposure to conflict is among the most important predictors of psychological health disorders. Moreover, cumulative exposure is found to increase the risk of disorder, implying the scope for adaptation is limited (De Jong et al). In a context such as West Bank and Gaza, mental health illnesses are therefore likely important health issues. A more systematic assessment of the exposure to conflict and mental health risks is essential.

3. Education: School Attendance and Absenteeism

5.22 This section explores another dimension of human development covered in the DHS- education. Evidence from PECS presented in Chapter 2 shows that enrollment outcomes are consistently high over time and across regions with an average of 90 percent enrolment for the school age population. In this section, we use more detailed education outcome data from the DHS to go further: we validate the enrolment findings from the PECS, examine student attendance and absenteeism rates, and explore what drives these trends.

- 5.23 In 2006, about 95 percent of all school age children (ages 5-17) are enrolled in schools.⁵⁸ 8 percent of children miss a day of school in the West Bank, and the figure is twice as high in Gaza (Table 15). This may be reflective of the uncertainty and instability, especially in Gaza following the political transition in 2006
- 5.24 Breaking down the analysis by age and gender, we find that access to basic education is near universal-all children, whether girls or boys, whether in Gaza or West Bank, enroll in school between the ages of 6 to 12. However, differences between girls and boys begin to emerge in the teenage years, especially among late teensat 17 years of age, rates of enrollment are more than 10 percent higher for girls than for boys (Figure 65).

Table 15: Edite	ducation Indi	cators for Chi	ldren (Age 5-17)
	Enrollment	Days attended past week	Missed 1 day or more
Gaza	0.96	5.11	0.15
West Bank	0.95	5.35	0.08
Source: DHS 2	2006		



5.25 Similarly, regional differences in enrollments appear among boys in the late teens, with higher enrollment rates among boys in Gaza. While the data does not allow us to explore the reasons for these trends, one plausible explanation for the lower enrolment rates among boys in their late teens is that they begin to enter the labor market. This may be more pronounced in the West Bank, with better labor market opportunities. Among 16-year old boys, in Gaza, only 5 percent had a job in 2006, compared to 16 percent in the West Bank. Among 17-year olds the gap narrows but it is still evident—11 percent of boys in Gaza are employed compared to 18 percent in West Bank.

⁵⁸ Depending on the level, school weeks have 5 to 6 days.



10 in Gaza, compared to 7 and 8 percent in West Bank. Among 17 year olds, absenteeism rates in Gaza for girls and boys are much higher at 22 and 23, while in the West Bank they remain at 7 and 12 percent.

5.27 The relationship between children's educational outcomes and the household's labor market outcomes are further explored below. When the head of household has a job, we may expect that economic conditions in the household are better, and the pressure for teenagers to trade-off school for work is reduced. For instance, in Gaza, enrollment rates for 17 year old boys are almost 20 points higher if head is employed than for boys in households where the head is unemployed or out of the labor force (Figure 67).



5.28 There is a less clear pattern between student absenteeism and household head's employment (Figure 68). If anything, it appears that children are more likely to miss school days when the head is employed than when the head is unemployed, especially in late teens. This suggests there are distinct determinants of enrolment and attendance conditional on enrollment. While the household head's employment is a strong predictor of enrolling children in school, attendance appears strong even among jobless heads. This suggests that different factors might explain enrolment and attendance. In particular, when the head of household does not have a job, attendance rates may continue to be high if there are compensating factors at play. For instance, if physical safety is a concern, the parent can now ensure the child reaches school safely. Alternatively, the loss of a job may not have a very adverse impact on income if the household has access to coping mechanisms such as social assistance and remittances.



5.29 In terms of enrollment, we find a positive association between the wealth index (described above) and enrollments in school, a link that holds for all ages, for both boys and girls, and for both regions. It is heartening to see that irrespective of wealth, a vast majority of children in the poorest and richest quintiles are enrolled in school when young. It is only in the teenage years that a wealth differential kicks in enrollment rates. For example, at age 17, only 67 percent of boys from the poorest households are enrolled in school in Gaza, compared to more than 90 percent for boys in the wealthiest contexts (Figure 69).



5.30 The pattern between student absenteeism and wealth is potentially indicative of the role of the school as a protective environment for the poor. Conditional on enrolling in school, children from the poorest households tend to miss fewer days than children from wealthier households. In Gaza, only 11 percent of 5-year-old boys from poorest households miss school days, compared to 21 percent for the wealthiest (Figure 70).



- 5.31 Children missing school days reflect a number of interrelated conditions, beyond the binary associations with employment and wealth described above. Other relevant characteristics, such as education and age of household head, or whether there are more obstacles to access schools in rural or refugee camps contexts are likely to have a role, and may confound the observed links with employment and wealth. We fit a probabilistic model (Probit) to better understand correlates and drivers of student absenteeism (regression results reported in Table 38 in the Annex to Chapter 5).
- 5.32 We highlight three findings from our analysis particular to Gaza. First, we find that children are less likely to miss school days if the household head is more educated—for every additional year of education of the head the probability that a child misses school goes down by 1 percentage point. Further, as household size increases, children absenteeism goes down—typically larger household are poorer, but controlling for economic status, an additional household member reduces the potential burden on the child to miss school due to household chores. Finally, attendance in school is negatively correlated with household wealth. This may be the result of two factors. On one hand, wealthier households can afford complementary measures such as private tutors and home schooling. On the other hand, poorer households may gain value from the better access their children have to services when in school.

5.33 In the West Bank, we find that children are more prone to miss school days in rural areas. However, we do not find a significant association between absenteeism, employment and wealth. After accounting for household and head's characteristics, there is no clear pattern between the likelihood of missing school days, and employment and economic conditions. A potential determinant worth mentioning, although we are not able to assess its relevance at this point, is closures. If movement of people across space is restricted this may well impact the possibilities to access the school any given day, beyond economic conditions and other characteristics of the household.

4. Subjective Wellbeing

Levels and Trends of Subjective Wellbeing

- 5.34 PECS, the same instrument that collects information to measure consumption-based poverty, compiles poverty-related subjective assessments. A household informant is asked to provide a judgment on the following two main areas:
 - Rate the household's situation and rank it in one of four categories: good, middle, poor, very poor
 - Assess the total amount of money needed to satisfy basic needs.
- 5.35 While the first of these questions is broad in scope, the second one is restricted to the income dimension. Each measure presents its own pros and cons. The first measure gives room for respondents to consider other dimensions of poverty beyond just income This flexibility makes it interesting as a vehicle to characterize poverty more broadly (as explored in the next section). However, the inbuilt subjectivity and relativity of this implies that each respondent will use their own judgments which can either be influenced by their immediate peer or reference group or by aspirations that guide their view of what constitutes a reasonable standard of living to be non-poor. This very heterogeneity in self-assessments allows us to explore why some households consider themselves as poor when they in fact lie above the poverty line and vice-versa.
- 5.36 The second subjective measure, basic needs income question anchors the response in more concrete terms. However, the notion of what constitutes basic needs will still vary from one person to another depending on aspirations and context, but the question focuses all respondents on the income dimension. Even more importantly, this reported minimum income is not directly comparable to a consumption-based measure as it may not include the same basket of goods and services that underlie the constructed consumption based poverty line.
- 5.37 Keeping these caveats in mind, the analysis suggests some interesting insights that reinforce the spatial and time trends in the evolution of consumption poverty as described in Chapter 2.
 - Defining subjective poverty as the self-assessed condition of poor or very poor, we find that in 2009, in the West Bank one in ten people are in subjective poverty. In Gaza, the rate is twice as high. Thus, whether we look at subjective or objective measures of poverty, households in Gaza are substantially worse off.
 - In both regions subjective poverty rates follow time-trends that are consistent with the trends in consumption-based rates. Subjective wellbeing deteriorates severely in Gaza in 2007, and exhibits an encouraging improvement in 2009. Relative to 2004, however, only West Bank has seen a reduction in

subjective poverty—exactly the same case as with objective poverty. Figure 71 fully describes trends and comparisons.

- While both subjective and objective trends are similar, subjective poverty exhibits less volatile behavior. This is particularly true of Gaza, where in 2007 objective poverty increased by 20 points, or 66 percent compared to 2006, while subjective poverty went up 6 points, or 33 percent relative to 2006.
- Over time and across space subjective poverty rates are consistently lower than objective rates; both in West Bank and in Gaza, the subjective rate is about two thirds of the objective rate. The differential rates may suggest that households value other things over and above consumption levels. A subsequent analysis in sub-section 4.2 aims to improve our understanding of these other dimensions.



Figure 71: Objective and Subjective Poverty Head Counts Compared

Subjective counts measure the share of the population that assess their situation as poor or very poor; Since there is no data for 2008, dotted line indicates linear trend between '07 and '09.

- 5.38 Turning our attention to our second subjective measure, the income for basic needs question (Minimum Income Question or MIQ),⁵⁹ we construct an alternative poverty definition by comparing income reported in MIQ to actual income or expenditure levels⁶⁰, with the caveat that households with the same income may be classified differently if their basic needs assessments differ sufficiently.⁶¹
- 5.39 We find that MIQ-based poverty compares fairly well with subjective poverty in Gaza, following a similar trend and levels. As the previous subjective poverty measure, the MIQ measure is also below the objective consumption-based poverty rates, and is less volatile over time. In sharp contrast, in the West Bank, poverty rates based on MIQ are higher than both subjective and

⁵⁹ Referred to in the literature as Minimum Income Question, or MIQ (Pradhan and Ravallion, 2000, Kapteyn et al 1988)

⁶⁰ The difference between income and expenditure is given by savings. If savings are widespread among people at the lower end of the income distribution, then using income or expenditure to compare to MIQ is not innocuous. While we do not have the data to test this empirically, this is unlikely the case.

⁶¹ Pradhan and Ravallion, op.cit., undertake an alternative regression-based approach. For the purposes of this chapter, we do not deem necessary to go down that road, since the interest is set on the raw reports and how they compare with the subjective assessment of poverty across space and time.

objective poverty measures. The difference is not trivial, with gaps ranging from 5 to 15 points, as is evident in Figure 72.



on this measure. Clearly, subjective notions of what constitutes basic needs and the income required to meet them are not the same across the two regions. In the West Bank, where there is more likely a larger and richer set of opportunities relative to Gaza, this wider range of options seems to be accompanied by higher aspirations and ambitions, leading to larger evaluations of what constitute basic needs.



Objective line represents official consumption-based poverty rates. Subjective line measures the share of the population that assess their situation as poor or very poor. MIQ line shows the share of the population with expenditure levels lower than self-reported minimum income for basic needs.

Since there is no data for 2008, dotted line indicates linear trend between '07 and '09.

			Ga	aza		W	est Bank			
			S	ubjective Mea	sure	Subje	Subjective Measure			
Year			Nonpoor	Poor	Total	Nonpoor	Poor	Total		
2004		Nonpoor	63.7	6.1	69.8	68.7	7.9	76.6		
		Poor	18.6	11.6	30.2	15.1	<i>8.3</i>	23.4		
		Total	82.3	17.7	100.0	83.8	16.2	100.0		
2005		Nonpoor	62.7	8.8	71.5	72.3	6.2	78.6		
		Poor	15.6	12.9	28.5	15.1	6.4	21.5		
	re	Total	78.3	21.7	100.0	87.4	12.6	100.0		
2006	Aeasu	Nonpoor	62.5	7.5	70.0	73.3	6.5	79.9		
	ve N	Poor	19.4	10.7	30.0	14.7	5.5	20.1		
	bjecti	Total	81.8	18.2	100.0	88.0	12.0	100.0		
2007	ō	Nonpoor	42.5	8.1	50.6	73.3	6.5	79.8		
		Poor	32.0	17.4	49.5	13.3	6.9	20.2		
		Total	74.5	25.5	100.0	86.6	13.4	100.0		
2009		Nonpoor	59.6	7.2	66.8	78.2	6.1	84.2		
		Poor	19.2	14.0	33.2	11.1	4.7	15.8		
		Total	78.8	21.2	100.0	89.2	10.8	100.0		
Source: PEC	CS									

Table 16: Subjective Poverty does not Mean Objective Poverty

- 5.41 So what explains the difference between subjective poverty assessments and consumption-based measures of poverty? Are all those who assess themselves as poor (or very poor) also objectively poor? In the absence of panel data, one way to understand what explains subjective poverty assessments and what distinguishes these from the consumption-based poverty rate is to look at both measures jointly, to examine joint distributions and to study their correlates. Table 16 presents the overlaps and discrepancies between these two measures, for each year and each region, based on the first measure of subjective poverty.
- 5.42 In any given year, the diagonal cells (italicized) represent the proportion of households who consider themselves both subjectively and objectively poor or both subjectively and objectively non-poor. The off-diagonal cells represent the proportion of households who are poor by one measure and not by another. Based on our findings in Figure 70, that show that fewer households consider themselves subjectively poor, we would expect to find positive values below the diagonal. What is surprising is that some households consider themselves to be subjectively poor when in fact they are above the poverty line.
- 5.43 In 2009 in Gaza, for instance, almost 20 percent of the population is below the poverty line but does not consider itself poor, while 7 percent are not poor but do consider themselves poor. In the West Bank, these percentages are 11 and 6, respectively. These figures are non-negligible. Overall, of all the subjectively poor in Gaza, one third are above the poverty line, while in the West Bank, among those households who report themselves as poor, about half are above the poverty line.

What Characteristics Drive Households to have Contradictory Subjective and Objective Poverty Status?

- 5.44 Why do subjective assessments of poverty status differ so much from consumption based poverty measures? In the following analysis, we use a multinomial logit model to understand this question.⁶²
- 5.45 The results suggest that poor households whose heads have at least a secondary education are more likely to consider themselves not poor, especially in the West Bank. In both territories, non-refugee status, larger household size and having an employed head of household are all characteristics that make poor households more likely to not consider themselves as poor. Conversely, households who are above the poverty line with better educational attainment, employment, job security and larger families, are less likely to report that they are poor. Some characteristics are more important than others in each of the territories. Consistent with the higher returns to education in the West Bank as discussed in Chapter 3, education plays a more important role in poor households evaluating themselves as non-poor relative to Gaza. Not surprisingly, having a job is equally important in both regions and is strongly associated with a more favorable assessment of their poverty status. Refugee status is more pertinent in Gaza where

⁶² See Annex to Chapter 5. Table 39. The dependent variable is the four possible combinations of objective and subjective poverty status: Poor-Poor; Nonpoor-Nonpoor; Poor-Nonpoor. Explanatory variables include household and household head characteristics addressing demographics, labor market attachment, and contextual variables. Models are run separately for Gaza and West Bank. Models were also run fully interacted by time dummies to test differences in regression coefficients across time, but overall we did not find significant changes.

non-poor refugee households are more likely to consider themselves as poor. Finally, poor households with larger families are more likely to report themselves as non poor in the West Bank, perhaps reflecting the greater potential for work opportunities in the West Bank relative to Gaza.

5.46 Taken altogether, these results are strongly suggestive of the dimensions that households value beyond consumption. Even when current consumption conditions are unfavorable, households value other dimensions such as education, non-refugee status, large families, and employment. These are important measures of broader capabilities and are important drivers of consumption poverty itself. In fact, these characteristics may be valued by households because of their very potential as mechanisms to move out of consumption poverty.

5. Multiple Dimensions of Deprivation

- 5.47 While trends in consumption poverty indicate a worsening of living standards in 2007 followed by a quick recovery in 2009, poverty diagnostics also seem to indicate that recovery in other dimensions such as employment and private sector growth were limited. A closer examination of the drivers of poverty as undertaken in Chapter 2 also confirms the existence of multiple drivers of poverty with some- education and labor force status among them-having particularly strong and enduring associations with poverty status (Chapter 2, Table 38a). This analysis of the determinants of poverty also indicates that the importance of these different dimensions of deprivation, like refugee status for instance, varied across time and across the two regions. The preceding analysis in this chapter confirms that while the West Bank and Gaza perform very well in health outcome measures such as anthropometrics, and in education measures such as universal access and enrolments, there is a clear and positive association between wealth and employment status of the household head and enrollment outcomes. Moreover, as the analysis of the measure of subjective self-assessment of poverty status demonstrates, residents of West Bank and Gaza value other dimensions of wellbeing beyond income when assessing their poverty situation. In particular, two dimensions are of particular importance for households: having a job and education attainment. They play an important role in determining whether households consider themselves not to be poor when in fact their expenditure levels are below the consumption poverty line. This suggests that multiple dimensions of deprivation are at work in the West Bank and Gaza and that these matter in how people evaluate their own wellbeing.
- 5.48 Building on the examination of non-income dimensions of poverty and subjective measures of poverty in this chapter, this explores multiple dimensions of poverty or deprivation explicitly. Since consumption poverty measures from the PECS do not include those dimensions of deprivation that may have intrinsic value over and above that measured by market expenditures, in this section, we first consider the incidence and trends over time for some dimensions of deprivation that are available in the same dataset. Next, the analysis identifies the presence of overlapping dimensions of deprivation, suggesting that certain households may be more vulnerable than others. Tracking these multidimensional deprivations over time also yields insights into when, whether and how some households fared particularly poorly. Finally, we explore how subjective assessments of poverty status might be related to these dimensions of deprivation. Moving beyond the incidence of single and multiple deprivations, we explore the

"intensity" of this incidence by treating the strength of the association between each dimension and the self assessment of poverty as the average weight or importance of that dimension. We compare the resulting measures of weighted incidences or intensities along single and multiple dimensions with their incidences, illustrating why and how subjective, objective, and multidimensional measures of poverty might differ.

- 5.49 The simple analysis in this section focuses on four main dimensions of deprivation:
 - i. Consumption poverty: A household is denoted as consumption deprived if its consumption expenditures are below the poverty line.
 - ii. Labor force status deprivation: A household is defined as being deprived on the labor dimension if the head of the household is either unemployed or out of the labor force
 - iii. Education deprivation: A household is said to be deprived on the education dimension if the head of the household has less than secondary education or if any adult member of the household is illiterate
 - iv. Refugee status: A household is denoted as a refugee household if the household reports being registered as refugees, either living in camps or outside
- 5.50 The choice of these dimensions of deprivation is motivated by the analysis of the determinants of poverty in Chapter 2. Health outcomes are not included here partly because evidence from the preceding analysis and chapters suggests that performance on indicators such as anthropometrics continues to be good and that most households have physical access to health facilities. The main reason for not including health outcomes is that the PECS does not include rich health indicators that are strongly associated with poverty status, and it is important to use the same data source when examining deprivations along multiple dimensions.

Multidimensionality of Poverty: Comparing and Tracking Dimensions of Deprivation

5.51 Figure 74 shows the trends of consumption poverty and deprivations along the dimensions of labor force status, educational attainment, and refugee status in the West Bank and Gaza for the period between 2004 and 2009. As in the rest of this poverty assessment, the incidence of each of these dimensions of deprivation shows the stark regional disparities between the West Bank and Gaza. In every dimension of deprivation other than education, households in Gaza had higher incidences of deprivation in every year relative to those in the West Bank. In Gaza, as shown in the poverty diagnostics, consumption poverty rose in 2007 and returned to its pre-2007 level in 2009. However, other trends suggest that this recovery needs to be seen with caution. A larger proportion of households in Gaza reported having the head of household unemployed or out of the labor force in 2007 relative to earlier years, and this has only increased in 2009. Moreover, an additional 10 percent of households in Gaza are registered refugees in 2009 relative to 2007. In contrast, in the West Bank, along all dimensions of deprivation, incidence seems to be falling gradually over time.



Overlapping Dimensions of Deprivation

- 5.52 In order to better understand the relationship between these different dimensions of deprivation, as well as the regional and time trends in their evolution, Figure 75a and Figure 75b plot trends in overlaps of deprivations. "Single" refers to the share of households who suffer from only one dimension of deprivation while "multiple" refers to the share of households who suffer at least two or more dimensions of deprivation. Figure 75a shows that in the West Bank, the proportion of households who did not have any deprivation along these dimensions has been increasing steadily since 2004, whereas those who are deprived along a single dimension alone has remained steady over time, with no difference between 2004 and 2009 levels. However, there was an increase in the proportion of households simultaneously suffering from multiple deprivations in 2007, which has since come down.
- 5.53 In Gaza, on the other hand (Figure 75b) there has been a steady decline in the proportion of households without any deprivation; in 2009 only 13 percent of households had no deprivation. This figure is less than a third of the corresponding measure in the West Bank. Moreover, the large increase in consumption poverty among households in Gaza was accompanied by a 15 percentage point increase in the proportion of households that suffered along multiple dimensions. Importantly, this number has not yet come down to its 2006 levels, suggesting that the recovery in Gaza has been an incomplete one. In fact, almost 19 percent of households in Gaza simultaneously suffered from three or more deprivations in 2007, and this number has only come down to 16 percent in 2009 (Table 17).



West Bank					G	aza		
Year	No deprivation	Single deprivation	Two deprivations	Three or more deprivations	No deprivation	Single deprivation	Two deprivations	Three or more deprivation
2004	35.84	35.87	19.72	8.58	16.19	44.37	24.61	14.83
2005	38.76	38.23	16.38	6.64	17.94	39.49	27.89	14.69
2006	41.25	37.89	15.74	5.12	17.88	45.85	24.89	11.38
2007	40.64	35.09	19.21	5.05	15.54	33.21	32.57	18.68
2009	45.31	35.54	14.31	4.84	12.76	44.91	26.02	16.32

5.54 One of the overarching findings in the analysis throughout this poverty assessment is the role of labor market outcomes in explaining poverty status. As Figure 74 shows, the regional trends in the incidence of unemployment and inactivity of the household head are also ones of divergence between the two territories, with gradual improvement in the West Bank and steady deterioration in Gaza. Figure 76 focuses on those households who are deprived on the labor dimension, to understand how this increase in the incidence of multiple deprivations especially in Gaza in 2007, might have increased the vulnerability of these households.


5.55 While in the West Bank, the proportion of households suffering from overlapping deprivations has been declining, even among those households who were already deprived along the labor dimension, in Gaza, these households are far more vulnerable to multiple deprivations in general, and especially since 2007. Between 2006 and 2007, there was a large increase in the share of households suffering three or more deprivations and the incidence of multiple deprivations among households with unemployed or inactive heads remains high even in 2009. Thus, in Gaza, both the incidence and multidimensionality of poverty worsened dramatically between 2006 and 2007. The observed recovery in consumption poverty is not mirrored in these other measures of deprivation that are yet to recover fully in 2009. Among those households in Gaza that were already vulnerable in terms of their labor market outcomes, the crisis of 2007 exposed a very large majority to multiple deprivations, and these households continue to remain vulnerable in 2009.

Relating Subjective Poverty and Multiple Dimensions of Deprivation: How do People Evaluate Different Dimensions of Deprivation and Their Overlaps?

5.56 In the above analysis, we report each dimensions of deprivation (consumption poverty, labor deprivation, education deprivation and refugee status), and all combinations of overlaps as if they were equally important. This begs the question: How do these different dimensions of deprivation matter to people's own assessment of their poverty status. Perhaps people care much more about consumption poverty than any other dimension. In that case, policies that reduce poverty not only

address the immediate objective but also improve people's perceptions about their own lives. On the other hand, addressing consumption poverty might not be enough if people feel that their standards of living and quality of life are much more strongly determined by not being gainfully employed, by their status as refugees or by the presence of both deprivations together. Moreover, such valuations of different and multiple dimensions of poverty in determining a subjective assessment of poverty might vary over time and space.

- 5.57 In order to further understand how self-perceptions of welfare are determined along and by multiple dimensions of deprivation, we adopt a *revealed preference* approach, whereby a household's preferences can be revealed by their behavior. We regress a measure of self-reported subjective poverty status on all combinations of these preselected dimensions and treat the regression coefficients as the average valuation (or weight) of that dimension or combination of dimensions in the self-assessment of poverty status. We use a dummy variable measure of subjective poverty that takes the value 1 for all households that report that they are "poor" or "very poor", and 0 otherwise. For each year and region, we estimate the coefficients of each of the deprivations and each overlap to understand their role in self-assessed poverty status.
- 5.58 Table 40 and Table 38 present the results of this exercise, demonstrating that there is significant variation over time and space in the relative evaluations of different and multiple dimensions of deprivation. In the West Bank, neither educational deprivation alone, refugee status alone or their combination are important in whether a household assesses itself to be poor. Not surprisingly, consumption poverty is positively and significantly associated with the subjective poverty status. After 2007, deprivation along the labor dimension alone becomes positively associated with subjective poverty, unlike in the preceding three years. What is also revealing is that in general, the presence of multiple overlapping deprivations is associated with a higher likelihood that a household considers itself to be poor. Figure 77 plots the time trend in the valuations of single, two and three or more dimensions of deprivation over time. For ease of interpretation, the coefficients plotted have been normalized to sum to one. Thus, while the weight of each dimension and its combination varies over time (Table 40), the presence of multiple deprivations is consistently and strongly associated with subjective poverty in the West Bank, accounting for 88 percent of the total on average.



5.59 In Gaza, as well, education and refugee status alone are not important predictors of subjective poverty status, and neither is their combination, except in 2007. Surprisingly, consumption poverty alone is not significantly associated with subjective poverty in 2007. This is potentially driven by the increasing weight placed by households on the presence of overlapping dimensions of deprivation rather than a single dimension in the context of the severe economic crisis of 2007. This suggests that households may be adjusting their evaluation of their own status, especially in times of crisis, taking into account the worsening of general conditions in the economy. Compared to the West Bank, Gaza residents place even greater weight on the presence of multiple deprivations in evaluating their own welfare: on average, the presence of multiple deprivations accounts for 95 percent of the total weight of the dimensions we consider (Figure 77).

How do Perceptions of Deprivation Differ from the Incidence of Deprivation?

5.60 The preceding analysis explores how subjective assessments of poverty status might be related to different dimensions of deprivation. This suggests that if households' self-assessments of their own welfare are important, given the variation across time and space in how different dimensions matter, it is important to not just look at the incidence of a certain kind of deprivation, but also at its "intensity" or its weighted incidence. Based on the subjective valuations of each dimension and all its possible combinations, we derive this weighted incidence as the product of the incidence and the corresponding subjective valuation. Figure 78 and Figure 79 compare these resulting measures of perceived intensities with their corresponding incidences or occurrences for the West Bank and Gaza in 2009.



5.61 This comparison between incidences of deprivation and their weighted incidences or intensities demonstrate that while the proportion of households who suffer from multiple deprivations may not appear to be very large in the West Bank, the presence of multiple deprivations plays a much more important role in terms of how households perceive their own wellbeing. For instance, in the West Bank in 2009 (Figure 78), the share of multiple deprivations in incidence is around 25 percent while its share in the intensity of deprivation is around 60 percent.



5.62 In Gaza, however, the incidence of multiple deprivations, at 50 percent, is double that of the West Bank. As in the West Bank, the perceived intensities of multiple deprivations are far more

important, accounting for 90 percent of the overall intensity. Consumption poverty is the only dimension that matters by itself to how households in Gaza evaluate their wellbeing: all other dimensions of deprivation that matter are multiple and overlapping.

A Broader Index of Multidimensional Deprivation

- 5.63 The preceding analysis indicates that different dimensions of deprivation matter to households in the West Bank and Gaza in assessing their welfare. The value or weight placed on each dimension also varies, although in general, the presence of multiple overlapping deprivations is very important in assessing subjective poverty status. The next part of the analysis uses these estimated weights and valuations to create an index of multidimensional deprivation, exploring how this multidimensional index compares with the levels and trends of consumption and subjective poverty.
- 5.64 In order to create this index, we first estimate the average weights of each of these deprivations and each of their overlaps in influencing self-reported subjective poverty status for the entire period covering 2004 and 2009. In the spirit of the Multidimensional Poverty Index (MPI), we then calculate a weighted average of all dimensions of deprivation for a household, and if a household falls above a certain threshold, the household is identified as poor along this index of deprivation. After assigning 0 to the remaining households, we create regional headcounts separately for the West Bank and Gaza for each year as the proportion of households who suffer more than the threshold level of deprivation. The resulting Index of Deprivation is plotted alongside consumption-based and subjective poverty headcounts in Figure 80.



5.65 All three measures suggest quite similar trends in both the regions. It is important to note that the level of the headcount rates for the Index of Deprivation is not useful in itself as we can artificially increase this level by reducing the cutoff (currently we chose a cutoff of 30 percent of total deprivation). On the other hand, the trend does contain useful information since the indices of deprivation headcounts are directly comparable over time within a region. With this in mind, Table 14 shows that in the West Bank, consumption poverty, multidimensional deprivation and subjective poverty all showed significant improvements since 2004. On the other hand, in Gaza, it was consumption poverty that increased most dramatically in 2007 and recovered most rapidly in 2009. Subjective poverty rates seem to be the least volatile of the three measures, with the relatively smallest increases in 2007 and the relatively smallest declines thereafter. The multidimensional index of deprivation is less volatile than consumption poverty rates. What is

revealing is that this index did not recover as rapidly as consumption poverty rates between 2007 and 2009, perhaps reflecting the lack of significant improvements in other dimensions of the Gaza economy, and in labor market outcomes in particular.

Box 10: Multiple Dimensions of Poverty: Comparing Measures

A central innovation of the Human Development Report of 2009 is the UNDP-OPHI Multidimensional Poverty Index or MPI¹. Based on three broad dimensions of deprivation chosen for ease of cross-country comparisons- education, health and living standards-, the MPI (based on the 2006 MICS), finds that the West Bank and Gaza is one of the best performers in the world, with less than 1 percent of its population MPI poor. This outstanding result is not surprising given the remarkable performance of the WBG in terms of human development achievements, which is validated in the findings of this poverty assessment as well.

However, these dimensions of deprivation are not the same as those suggested by detailed household data and the analysis of the determinants of consumption poverty. As an experiment, we measure multidimensional poverty along these dimensions instead (see Index of Deprivation below)- consumption poverty, labor market deprivation, educational deprivation and refugee status, all of which are highly correlated with subjective poverty status. While the levels of the Index of Deprivation cannot be interpreted as it can be changed arbitrarily by changing the cutoff-- we do find that the residents of the WBG are significantly deprived along these dimensions. Another interesting feature of this experiment is in the design and construction of weights for each of the dimensions of deprivation considered. Taking advantage of a unique feature of the PECS, the measurement of subjective poverty, we assign weights to each dimension of deprivation according to their relative importance in determining subjective assessments of poverty status. The resulting measure therefore includes those objective dimensions of deprivation that are also important in households' self- assessments of wellbeing.

Given that any choice of weights choice is arbitrary and ad hoc, this measure of multiple dimensions of deprivation nevertheless has an interesting interpretation. If we are of the opinion that subjective poverty is important for policy makers, which may be increasingly true in the context of the Middle East and North Africa region, where consumption poverty is relatively low and discordant with public perceptions of satisfaction with their quality of life, then this analysis can shed light on why this may be the case.

¹ Alkire, Sabina & Maria Emma Santos. 2010. Occupied Palestinian Territories Country Briefing. Oxford Poverty & Human Development Initiative (OPHI) Multidimensional Poverty Index Country Briefing Series. Available at: www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/

5.66 Thus, the poverty narrative of the last decade in the West Bank and Gaza is remarkably consistent whether we look at the determinants of consumption poverty, measures of subjective poverty, or explicitly take multiple dimensions of deprivation into account. Consumption poverty by itself is very important; however, other dimensions – education, labor market outcomes and refugee status- are also important in understanding poverty, vulnerability and the resilience of the recent economic 'recovery'.

6. Staying Afloat? The Role of International Aid and Social Assistance

Between 2001 and 2008, donor assistance to government increased 500 percent in the West Bank and Gaza and by 2008, it comprised 58 percent of GDP. Using macro and household level data, this chapter examines the vital role of donor assistance in financing public sector and social assistance. In the wake of the severe economic crisis in Gaza in 2007, the Palestinian Authority and international donors responded by rapidly expanding social assistance to the poor and vulnerable. At 6 percent of GDP, social assistance spending in the WBG is high by any international standards. By 2009, international assistance coverage had doubled and a staggering 71 percent of all Gazans were beneficiaries of at least one form of social assistance. In contrast, only 12 percent of the population and 20 percent of the poor in the West Bank have any access to social assistance. Our findings point to the crucial importance of social assistance in poverty reduction and mitigation in Gaza. However, there are large potential gains in improving the targeting effectiveness of social assistance in both the West Bank and in Gaza: in 2009, a large proportion of the Ministry of Social Affairs's (MoSA) assistance reaches relatively better-off households-about 25 percent of Gazan households receiving assistance from MoSA belong to the richest 40 percent of the population. In the West Bank, about 40 percent of beneficiaries belong to the top 60 percent of the expenditure distribution. Reallocating resources can do more for the poor within the same budget envelope.

1. Introduction

- 6.1 The ongoing conflict and the plight of the Palestinian population have not gone unnoticed by the international community. Total transfers to the government and to other sectors have grown from 18 percent of GDP in 2000 to 58 percent of GDP in 2008.⁶³ Some of this assistance has gone towards institution building, but the majority has been directed toward humanitarian assistance and social sector infrastructure and services. The channels used by donors in delivering this assistance have included both government and non-government agencies and have partly compensated for revenue declines resulting from the conflict. In particular, after the formation of the Hamas-led government in Gaza in 2006, most donors refrained from providing direct financial assistance to the government. They nonetheless continued to provide funds to support the Palestinian people through a number of channels that bypassed the Hamas-led government.
- 6.2 What sort of an impact has aid had on the economy and on poverty? While it is not possible to make direct causal links from the available data, the analysis in this chapter suggests that in a context with a large poor and highly vulnerable population, social assistance has an important role in helping households cope with economic risk. We begin by exploring the macroeconomic flows of aid, i.e., total assistance according to the macroeconomic accounting of transfers received by both the public and private sectors. We discuss the public financing reliance on donor funding, and trace some of the channels through which past shortages have been financed. Following our macro analysis, we use the available micro-data in the PECS to examine the links between various sources of social assistance and the incidence of poverty. The availability of

⁶³ GDP and Balance of Payments data are from the Palestinian Central Bureau of Statistics.

comparable data over time enables us to look at the changes that have taken place across the years, especially during and following the economic shock in 2007.

- 6.3 The analysis shows that social assistance played a significant role as a safety net during the sharp downturn experienced by Gaza residents in 2007. Assistance expanded both in terms of the number of people receiving assistance (coverage) as well as in terms of the amounts of assistance received (generosity of assistance), particularly for the poor population.
- 6.4 However, there is considerable room for improvement in the efficiency and targeting of social assistance. In Gaza, although there is widespread coverage, about 50 percent of the beneficiary roster of social assistance programs of the Ministry of Social Affairs (MoSA), the main organization through which the Palestinian Authority delivers social assistance, is non-poor. Moreover, about 70 percent of the benefits MoSA pays out accrues to the non-poor, highlighting potential efficiency gains if resources become better targeted. In the West Bank, coverage rates from any of the sources of aid remain in the single digits but even among those who do receive assistance from the MoSA, almost 70 percent are non-poor. Especially in a context where a large proportion of households have become increasingly dependent on social assistance as a safety net, these results point to the importance of improving the efficiency of the safety nets system.
- 6.5 The rest of the chapter is structured as follows: the next section discusses the trends in foreign assistance from a macroeconomic perspective, including both the external accounts and the fiscal implications of donor flows. This analysis is followed by a description of the existing social assistance programs in the West Bank and Gaza. Next, an analysis of the performance of existing programs is analyzed in the context of the 2007 crisis and in the recovery that followed. Then a series of simulations are presented, which discuss the effect that the crisis would have had on poverty in the absence of existing social assistance programs. The chapter then concludes with a summary of the main messages.

2. An Increasing Dependence on Foreign Assistance

6.6 To get an overall sense of the magnitude of foreign aid, we first examine the aggregate external accounts for West Bank and Gaza. Chapter 1 discussed the extreme dependence of the West Bank and Gaza on imports, as relatively few goods are produced domestically. Between 2000 and 2008, imports amounted to 64 percent of GDP on average. In contrast, exports were only 10.5 percent of GDP on average during the same period, resulting in very large trade deficits. Prior to the Second Intifada, these deficits were financed by the incomes of WBG residents earned in Israel, and partly by donor flows.⁶⁴ This tendency has continued throughout the decade, with the trade deficit now being financed with remittances and donor flows. In 2008, the trade deficit amounted to 62 percent of GDP and was mostly financed by a combination of remittances (about 11 percent of GDP), donor assistance to the government (32 percent of GDP) and current transfers to other sectors (26 percent of GDP – see Figure 81).

⁶⁴ Unfortunately data on the magnitude of these flows prior to 2000 are difficult to come by, since donors financed and executed these projects without going through the Treasury. Balance of Payments Statistics are only available beginning in 2000.



6.7 The increase donor assistance over this period is striking: donor funding government increased by over 500 percent between 2001 and 2008. With the beginning of the Second Intifada in early 2001, Israel suspended the monthly transfer of clearance tax revenues (VAT, customs and excise duties) that collects on behalf



of the Palestinian Authority (PA). With steeply declining domestic tax revenues as a result of the fall in economic activity, the PA faced a severe budget crisis. Donors, in particular other Arab countries, responded by providing direct budget support to the PA, therefore doubling estimates

of total aid disbursements between 2001 and 2002.⁶⁵ This trend continued throughout the decade. By 2008, total donor funding of the public sector reached 58 percent of GDP, with transfers to the government making up the bulk of this aid, equivalent to 32 percent of GDP (Figure 82).

Box 11: Temporary International Mechanism

The TIM was designed to channel assistance directly to the people of WBG, by-passing the Hamas-led government. It aimed to relieve the socio-economic crisis and to help ensure the continued delivery of essential public services.

The TIM consisted of three windows:

- Window I covered nonwage running costs of ministries to sustain essential health, education, and social services delivery, through the World Bank's Emergency Services Support Program (ESSP), a multi-donor trust fund;
- Window II aimed to support the uninterrupted supply of utilities, including fuel for generators, through the European Commission's (EC) Interim Emergency Relief Contribution;
- Window III provided allowances to health care workers, and to the poorest part of the population, including low-income government workers and retirees, and those facing social hardships.
- 6.8 Following the election of Hamas and the escalation of tensions between Israel and WBG, total donor financing increased by 54.6 percent between 2006 and 2007. However, much of the support explicitly by-passed the PA government. As the Hamas-led government's platform fell short of the conditions set by the Middle East Quartet—representing the UN, the US, the EU, and Russia—major donors stopped providing budget support directly to the PA government. Even donors still willing to finance the PA government directly were faced with obstacles as banks were no longer willing to channel support to the PA government, for fear of possible repercussions under anti-terror legislation abroad. Consequently, direct budget support virtually came to a halt. Nevertheless, donors provided assistance through alternative routes. In particular, while Arab donors channeled their assistance through the Office of the President, multilaterals and other bilateral donors did so through a Temporary International Mechanism (TIM see Box 11).⁶⁶ As a result, foreign flows to non-governmental sectors reached 28 percent of GDP in 2007-2008.

Public Expenditures: A Largely Unfunded Mandate

6.9 This vulnerability of fiscal revenues to escalations in tension severely hampers the Government's ability to effectively establish safety nets especially in times of conflict when they are most needed. Each time tensions escalate the underlying revenue collection declines significantly along with the decrease in activity and incomes. For instance, with the onset of the Second Intifada, the Government of Israel (GoI) systematically stopped transferring clearance revenues that it collected on behalf of the PA and fiscal revenues actually received by the PA declined by 78 percent in 2001 compared to 2000.⁶⁷ Similarly, with the election of Hamas in 2006, the PA

⁶⁵ IMF 2003 Staff Report.

⁶⁶ IMF 2006b Staff Report.

⁶⁷ IMF 2003 Staff Report.



received 60 percent less in budget resources, including tax revenues, domestic financing, and external financing (Figure 83).

6.10 Although the decline in own revenues was partially offset by an increase in external support, a large portion of total spending had no financing sources. As a result, the government was unable to meet all its commitments, leading to a large increase in wage and other arrears. In fact, public employees did not receive any payment for more than two months following the formation of the new Hamas-led government, because of the lack of resources. During the first six months of the Hamas regime, government workers on average received payments equivalent to only about 40 percent of their normal incomes.⁶⁸



⁶⁸ IMF 2006b Staff Report.

- 6.11 Large wage arrears accumulated in 2006 and early 2007, despite the fact that wage payments were prioritized when compared to other current expenditures, including social transfers. This is partly on account of a growing wage bill, reflecting a generous wage increase of on average 20 percent that was granted in the second half of 2005, combined with a growing government work force. As described in Chapter 3, public employment was effectively used as a form of social assistance, and even in 2006 contributed a significant share of total employment. It is telling that even in this constrained fiscal scenario, wage payments although partial, were relatively progressive. There were large differences between the various categories of employees, with the lowest-paid civil servants receiving the equivalent of five months of their normal annual incomes, while higher-paid employees received a much smaller fraction of their normal annual incomes.⁶⁹ Once the TIM was operational, priority was given to health sector employees.
- 6.12 This inability to pay wages fully to public sector employees is relevant in understanding the increases in poverty for public sector employees documented in Chapter 3. However, as discussed earlier, public sector employees fared relatively better during the 2006-2007 crisis compared to their private sector counterparts, and to the unemployed population. Public sector wages were prioritized ahead of other types of social spending or safety nets, largely leaving the donor community to deliver social assistance.

An increasingly Donor-Financed Budget

- 6.13 Indeed, there is some evidence that aid directed to humanitarian and social sector spending increased during 2006 and 2007. Figure 85 shows the decomposition of total aid flows to the Palestinian territory as recorded by the OECD creditor reporting system. Under their classification, humanitarian aid includes emergency response, reconstruction, relief and rehabilitation, and disaster prevention and preparedness. Social infrastructure and services includes spending on education, health, reproductive health, water and sanitation, and government and civil society. Under these definitions, humanitarian assistance increased to 30 percent of total aid flows to both the public and private sectors in 2006, followed by 20 percent directed toward social infrastructure and services, and 13 percent directed to Government and civil society.⁷⁰
- 6.14 Donor funding has since grown further to the point that most of the budget of the PA has been financed through donor funding. The total amount pledged at the December 2007 Paris donors' conference for 2008–10, at \$7.7 billion, was significantly above the financing needs for the Palestinian Reform and Development Plan (PDRP). Pledges included amounts for uses outside the PRDP (e.g., humanitarian assistance), and did not fully cover necessary recurrent spending in the PRDP, leading to continuous arrears to suppliers, which have affected private sector confidence over the years.⁷¹ As a result, the PA has announced its desire to have the entire PA budget be funded through domestic revenues by 2013.⁷²According to the OECD creditor

⁶⁹ See IMF 2006b Staff report.

⁷⁰ Data come from the OECD creditor reporting system, available at <u>http://stats.oecd.org/index.aspx</u> Note that data are incomplete, making up a total of 68 percent of total funding according to the PCBS Balance of Payments information in 2008. ⁷¹ IMF, May 2008.

⁷² European Union. 2011. "Proposal for a comprehensive development strategy for the Ministry of Social Affairs."





Figure 85: Destination of Donor Funding to Palestinian Territories (Percent of Total Aid Flows)

3. Social Assistance in the West Bank and Gaza

- 6.15 How are these aid flows reflected in social assistance programs? This section provides a short overview of existing programs in the West Bank and Gaza. Social assistance is offered by formal sources including the Palestinian Authority (PA) and international organizations, and more informally by non-governmental organizations. The importance of PA-led social assistance is quite evident from its share of government transfer expenditures and its estimated share of GDP of 3 percent. A recent study commissioned by the European Union (2011) speculates that social assistance related spending by non-PA actors is almost as high in magnitude as that by the PA. This would imply overall social assistance spending to be about 6 percent of GDP, which is high by any international standards: social assistance programs typically represent less than 1 to 2 percent of GDP in developing countries, and 2 to 4 percent of GDP in industrial countries.⁷³
- 6.16 The analysis in this section broadly illustrates the nature of social assistance in the West Bank and Gaza. In order to assess how well social programs work, a detailed analysis would be needed involving program level and administrative data. Then it would be possible to evaluate how closely the administration of benefits matched the standards set by a program (e.g., whether or not

⁷³ Grosh, M, C. Nino, E. Tesliuc, A. Ouerghi (2008). For Promotion and Protection: The Design and Implementation of Effective Safety Nets. Washington DC: The World Bank.

a program reaches its stated beneficiaries). However, this is beyond the scope of this poverty assessment.

PA-led Social Assistance

- 6.17 The Palestinian Authority is a main actor in providing social assistance to households in the West Bank and Gaza. In 2010, the PA allocated about \$210 million dollars to social transfers, which is equivalent to a fifth of all transfer payments made by the government and about 3 percent of the GDP. The Ministry of Social Affairs (MoSA) is the main organization through which official social assistance is delivered. Apart from MoSA, the PA's social assistance activities are carried out by the President's Office and by several ministries such as the Ministries of Health, Education, and Finance.
- 6.18 The main assistance programs of the PA involve cash transfers and food aid. Cash assistance programs intended for poor households are MoSA's most important programs in terms of scope and funding. Apart from this, MoSA offers food aid, and other in-kind aid in the form of access to health and educational services as well. The assistance programs of MoSA target not only the poor but special vulnerable groups such as families where the primary earner is absent or incapacitated, households headed by the elderly or widows, and disabled people. A bulk of MoSA's budget comes from foreign assistance with domestic revenues making up only a small fraction.⁷⁴ For example, about 90 percent of MoSA's Cash Transfer Program (CTP) comes from foreign assistance received mostly from the European Union (EU). The food aid programs of the PA are largely funded by the World Food Program (WFP).

International Donors and NGOs

- 6.19 Off-budget social assistance carried out by international donor aid, independent of the auspices of the PA, has been important in the West Bank and Gaza for a long time, and was noted in the last poverty assessment conducted by the World Bank in 2001 as well. The United Nations Relief and Work Agency (UNRWA) has been at the forefront of such efforts. The UNRWA assists disadvantaged Palestinian refugees both within the West Bank and Gaza and outside in countries such as Jordan, Lebanon and Syria. In recent years, emergency food aid has been a major vehicle of its social assistance within the West Bank and Gaza, especially in Gaza. This aid is meant for individuals registered as refugees, not just for those residing in refugee camps. Apart from food aid, UNRWA delivers education, healthcare, relief and social services in the West Bank and Gaza; separately, it also carries out microcredit and infrastructure development activities.
- 6.20 The non-governmental sector also has significant presence in the provision of social assistance, although the total amount of assistance provided cannot be estimated here due to lack of available data. Charitable organizations (which include religion-based charities such as Zakaat Committees) are prominent non-governmental actors. A large number of these organizations receive funds from neighboring Arab countries. Parallel authorities such as political parties also are a source of social assistance in the form of cash, food or household needs (blankets, etc.), especially in Gaza.

⁷⁴ European Union. 2011. "Proposal for a comprehensive development strategy for the Ministry of Social Affairs."

4. Performance Profile of Various Sources of Social Assistance

- 6.21 What has been the role of these social assistance programs on the wellbeing of the population? The analysis of safety nets here utilizes data from the PECS to understand the broad links between such programs and poverty. The PECS collects information on the incidence and levels of social assistance received at the household level from as many as thirteen sources (encompassing the PA, international organizations, non-governmental actors). Since this information can be linked to household poverty status and socioeconomic attributes, this analysis provides key insights on the interplay between social assistance programs and key welfare indicators. The availability of comparable data over the years enables us to look at the changes that have taken place across the years, especially during and following the economic shock in 2007.
- 6.22 Our analytical framework to examine social assistance sources is built on the assessment of key markers of assistance performance, including coverage, generosity, overlap, leakage, benefit distribution, and simulation of poverty and inequality impact.
 - **Coverage**, measured as the percentage of the population that receives assistance, helps assess how effective the program is in reaching specific groups of interest, like the poor or the unemployed.
 - **Generosity** represents the magnitude of the transfers as a share of household budget, and assesses how adequate the aid is in helping the poor sustain a level of consumption.
 - **Overlap** across aid sources identifies whether lack of coordination and fragmentation across sources result in selected groups benefitting from multiple programs.
 - **Leakage** determines the share of assistance benefits that accrue to the non-poor, as well as the share of beneficiaries that are non-poor.
 - **Poverty and inequality** simulations produce suggestive information on what the poverty and inequality indicators would look like in the absence of social assistance.
- 6.23 To complete our framework, we look at coping mechanisms and sources of support outside the sphere of social assistance. In particular, we examine self-reported data on transfers received from friends and family to cope with humanitarian needs. We assess whether this coping strategy complements or substitutes the aid received from social assistance sources.
- 6.24 The evidence presented in this section is based on three rounds of PECS data: 2004, 2007, 2009, which allows us to analyze the evolution of social assistance before and after the downturn observed around 2007. We begin by focusing on the crisis of 2007 in Gaza, and then turn to the recovery of 2009. Finally, we look at the contrasting context of assistance in the West Bank.

A Rapid Expansion of Social Assistance in the Face of Crisis

6.25 In this section we study the role of assistance around the time when the Gaza economy was sharply contracting. We first devote our attention to what was done, and then move on to present

what could have been done better. On top of exposing the extent of social assistance's breadth, we answer questions related to whether assistance reached those that needed it more, whether efforts were strong enough to play a part in averting higher poverty levels, and whether there are gains to potential adjustments in social assistance programs' beneficiary rosters.

6.26 Gaza faced an alarming 20 percentage point increase in poverty following the economic crisis in 2007. In the midst of that crisis, both the PA and international organizations played a high profile role in reaching the poor and vulnerable population dramatically increasing coverage of their social assistance. The PA raised its overall coverage rate from 10 to 21 percent (Figure 86), with the Ministry of Social Affairs (MoSA) more than doubling it coverage from 6 to 15 percent. Other non-government sources' increased their coverage of the population from 8 to 12 percent. Taking all these formal sources as a whole, coverage almost doubled between 2004 and 2007, going up from covering about a quarter of all Gazans to covering slightly more than half of them.



6.27 The increase in assistance was relatively well directed towards the neediest; this is especially true for government programs. PA assistance to the Gazan population reached 21.3 percent of those in the poorest expenditure quintile, up 12.2 points from 2004, and at the same time more than doubled the rate of coverage in the richest quintile (Figure 86). In other words, for every individual in the richest expenditure quintile that received PA assistance, two individuals in the poorest quintile were recipients as well. International organizations' efforts were reflected in an impressive coverage rate of almost 40 percent of the poorest quintile's population. As might be expected given the nature of UNRWA-type assistance, well-off groups also benefit substantially from this source: a little over a quarter of the population in the richest quintile received benefits from it. Together, all these sources serviced the vast majority—about 60 percent—of the population in dire economic conditions.



6.28 Lack of job opportunities is a main area of vulnerability for the Gaza economy, as highlighted in the preceding chapters. In fact, the PA's social assistance was responsive to labor market constraints during the crisis years and reached out to those struggling



to find employment. About 40 percent of those with an out-of-labor-force household heads and 25 percent of those with unemployed household heads received public social assistance in 2007 (Figure 88). In contrast, international assistance's coverage did not appear to distinguish beneficiaries based on employment conditions, extending similar coverage to those with or without a job.

6.29 Altogether, the efforts of the various distributors of assistance during the crisis year of 2007, added up to covering 60 percent of the population under the official poverty line (Figure 89). Importantly, the assortment of sources of aid does not result high rates of in overlapping across



programs, where selected groups are able to capture multiple benefits from various sources. Among the poor, only 12 percent are observed to receive assistance from two or more sources. Conditional on being an assistance recipient, about only a fifth of beneficiaries received more than one source of aid. Given the context of the crisis of 2007 and the need for rapid deployment of assistance, this is noteworthy and encouraging for future initiatives to streamline social assistance programs. Such streamlining would require more detailed data about the specific programs being implemented by each source. The data at hand does not allow disaggregating at the program level, and is only informative about the organization that is the source of assistance.



6.30 In critical times, social assistance transfers not only expanded in coverage but also represented meaningful sources of support for recipients. In particular, for beneficiaries in the poorest quintile, the share of PA assistance in their budgets rose from 13 to 22 percent during 2004 to

2007 (Figure 90). Among recipients of international assistance, those in the poorest quintile were financing 31 percent of their expenditures, up from 23 percent in the pre-crisis year of 2004. Even support from charities and other non-government sources amounted to close to 10 percent of recipients' budgets. Overall, for every dollar spent by beneficiaries below the poverty line, 44 cents are facilitated by assistance.

6.31 Altogether, by extending coverage and increasing generosity, social assistance played an important part in providing a cushion or safety net in the face of the crisis. A crude estimate of the role of assistance on poverty incidence indicates that it prevented up to a 6 point increase in the poverty headcount. In the absence of of source social anv assistance, it is estimated that 56 percent of the population



would have fallen below the poverty line in Gaza (Figure 91). This is an upper bound estimate of poverty that assumes that all assistance resources are removed from recipients, and nothing else replaces them. Further analysis related to this is presented in section 6.5 of this chapter.

6.32 Although the overall indicators of social assistance satisfactory suggest performance in 2007, certain gaps remained. Importantly, about 40 percent of the poor were not receiving any formal social assistance (Figure 92); and almost 40 percent of those in the richest expenditure quintile were recipients of assistance. These indicators suggest that there was room for efficiency gains in the delivery of assistance, i.e., to do more for the poor and the vulnerable within the same resource envelope.



- 6.33 How did the poor who did not receive social assistance cope with the crisis? We find that only one in every ten individuals in the non-recipient poor population obtained support from relatives and friends during 2007. This figure remained stable since 2004, as depicted in. While not many households received assistance from relatives and friends, this informal source of coping was relatively meaningful in terms of resources for those among the poor that did receive them, financing on average 16 percent of their expenditures. Why does the prevalence of this source of support seem relatively low? A likely explanation is that in the context of a generalized downturn, where--as shown in Chapter 2 -- the budgets of all households along the expenditure distribution were adversely affected, the ability to depend on relatives and friends as a coping resource becomes limited. In the immediate aftermath of the crisis in Gaza, it is formal sources that stepped up their assistance, while informal support remained largely unchanged. If anything, evidence suggests that among those being supported by relatives and friends, it became more common to resort to formal sources of assistance to complement resources: a majority (about 6 in ten) of the population that received assistance from relatives and friends also received social assistance.
- 6.34 Even after accounting for all formal and informal assistance and coping strategies observed in the PECS in 2007, 4 of every 10 people under the poverty line were without access to a social safety net. This leaves two important open questions, both of which require access to more detailed data. The first: How did the poor who did not or could not access sources of assistance cope with shocks and unfavorable economic conditions? If they were, for example, resorting to the sale of productive assets, or withdrawing children from school, it will be important for policy makers to understand how to reach these households with safety net umbrellas, and avoid a de-accumulation of physical and human capital that may perpetuate poverty in the household. Second: Why were these poor households excluded from social assistance? Was this due to bottlenecks in implementation, or limited information about the programs? This would demand, in principle, detailed information and administrative data on the characteristics and operational aspects of the programs implemented by each source of aid. A preliminary discussion on the profile of those excluded is presented in
- 6.35 Inevitably, delivery of social assistance has some degree of inclusion error, i.e., the inclusion of non-poor in social assistance programs. In 2007, 44 percent of all beneficiaries in Gaza were non-poor. However, a sizable number of those beneficiaries are near or just above the poverty line. Nevertheless, about 15 percent of recipients belonged in the top 20 percent of the expenditure distribution, and a third of all social assistance recipients were in fact in the top 40 percent. These inclusion errors should be interpreted in the backdrop of a situation where social assistance programs have aims of reaching different types of vulnerable groups, not only the poor. Importantly, these figures are lower for MoSA programs, which do have cash transfer programs that explicitly target the poor. Only one in every 10 beneficiaries of MoSA assistance was in the richest quintile of the population in 2007.
- 6.36 Leakages (i.e., the share of assistance benefits that accrue to the non-poor) in the distribution of amounts of benefits were not insignificant. Half of the monetary value of all social assistance accrued to the non-poor, and almost four in every ten dollars were captured by the richest 40 percent of the population. For MoSA this figure was about 35 percent. In the crisis context of

2007, with rapid scaling up of operations taking place to distribute assistance urgently, these figures did not represent poor outcomes by themselves. However, they do indicate there is potential for efficiency gains in assistance delivery since for each two dollars distributed through MoSA's assistance only one dollar went to the poor.

A Recovery Underpinned by Social Assistance

6.37 In the period following the crisis of 2007, social assistance remained strong and extensive, consistent with Gaza's continued vulnerability on many fronts. Even though poverty fell by double digits by 2009, it was not accompanied by an equally strong recovery in the more genuine sources of income such as labor earnings. Coverage of PA assistance remained at roughly the same level as in 2007. International assistance coverage doubled and by 2009, an absolute majority of Gazans was receiving direct international support. Overall, a staggering 71 percent of all Gazans were beneficiaries of at least one form of social assistance (Figure 93).



6.38 By 2009, only 20 percent of the poor in Gaza were not being served by any form of assistance. Exclusion error was quite low. Coverage among the poor was higher than the national average, implying that assistance was targeted more towards those under the poverty line. This increase in coverage from 2007 was driven by the expansion in international aid.



6.39 It is worth noting that, receipts from assistance amounted to about 60 percent of the budget of poor recipients, up 15 percentage points since 2004. Interestingly, this increase is provoked by a higher degree of generosity from non-government sources, since neither PA nor international sources exhibited visible change in generosity between 2007 and 2009 (Figure 95). However, the generosity of benefits to better-off recipients of MoSA assistance is significant. For example, transfers cover about 11 percent of consumption expenditures for the richest 40 percent of the Gazan population. There is room to re-adjust efforts so that social assistance can be more effective in protecting the poor and vulnerable. This will be especially important in the absence of any robust growth accompanied by job creation in Gaza, as social assistance will continue to play a critical role and will remain the primary policy level for poverty reduction and mitigation.



Figure 94: Evolution of Social Assistance Coverage (%) by Expenditure Status in Gaza, by Source,

Box 12: Who is Left Out?

Over the years the proportion of households left out of social programs in Gaza has been in constant decline, while in contrast, this proportion has remained high and quite steady in the West Bank. Even among the poor and among the bottom decile in the West Bank about 80 percent are not covered by any social assistance program. In contrast, by 2009, only 20 percent of the poor population in Gaza was not receiving coverage from any social assistance source.

Table 18: Share of households (%) not receiving any social assistance										
				West Bank		Gaza				
		All population	Poor	Bottom decile	All population	Poor	Bottom decile			
	2004	89.2	87.3	85.4	74.3	75.0	76.3			
	2007	85.0	79.1	78.5	49.3	42.3	54.9			
	2009	88.2	80.5	79.1	28.5	20.5	18.6			

Source: PECS 2009

What do the poor households who are left out look like? How do they differ from households that are recipients of assistance? Table 19 provides a set of interesting summary statistics of key characteristics from PECS 2009. It is worth noting that neither in the West Bank nor in Gaza do we observe differences in average expenditures (per adult equivalent) across poor households that receive social assistance vis-a-vis those that do not. In addition, characteristics of household heads also appear similar among beneficiaries and non-beneficiaries. For example, the level of educational attainment of the head is indistinguishable across recipients and non-recipients. Interestingly, we find some differences in labor conditions. For example, in Gaza heads of beneficiary households face unemployment rates that are 1.5 times higher than non-beneficiary households. Again, the proportion of social assistance recipients that are out of the labor force is 1.5 times greater than that among non-recipients.

Table 19: Characteristics of beneficiaries and non-beneficiaries among the poor population									
	West Bank	Gaza							
	Beneficiari es	Non- Beneficiaries	Beneficiarie s	Non- Beneficiarie					
				S					
Mean per capita expenditures (adult equivalent)	427.7	443.8	419.5	417.1					
Education of household head (elementary or less)	62.8	62.8	49.1	45.8					
Household head unemployed	9.4	10.0	23.3	16.2					
Household head out of labor force	31.4	19.2	30.3	32.2					

Source: PECS 2009

As a thought experiment and to obtain further hints at targeting and exclusion of assistance among the poor, we compare expenditure distributions of non-recipients, of recipients, and of recipients net of the value of assistance. The idea is to portray a crude counterfactual of how expenditures of recipients would look like had they not received any assistance. A clear shortcoming of this exercise is that it is an ex-post abstraction, as if it was possible to (exogenously) extract assistance without a behavioral response from recipients. That being said, we find some thought provoking results. Figure 96 shows the distribution of (per capita adult equivalent) expenditures among poor households that receive social assistance and those that do not to be remarkably similar. Interestingly, when we plot the distribution of expenditures of beneficiaries *net* of social assistance, we notice that it is entirely to the left of the distribution of poor households who do not receive assistance. This exercise, while analytically limited, does suggest that social assistance is in fact reaching the poorest among the poor.



6.40 The increase in coverage relative to 2007 was accompanied by higher inclusion errors and benefit leakage. On the one hand, the fact that in 2009 more than 60 percent of the beneficiary roster is non-poor can be partially justified in a context of vulnerability and labor market constraints, since many households still remained in the proximity of the poverty line. On the other hand, if we look at the richest 40 percent in the population, we find that about 30 percent of MoSA's transfers, accrued to them. These households are not in the proximity of the poverty line, thus there is clear room for policy action and efficiency gains through redesigning MoSA's social assistance programs to reduce leakages.

Role of Assistance in the West Bank

6.41 Social assistance, whether provided by the PA or any other organizations, much is less widespread in the West Bank than in Gaza. Across the years, for the entire population and even for all quintiles of the expenditure distribution, coverage rates from any of the sources of aid remained in the single digits. On



the one hand, these lower coverage rates are consistent with a geographic prioritization in allocation of national and international resources in terms of poverty incidence reflecting the lower poverty rates in the West Bank. However, in the context of near 20 percent poverty incidence, these single-digit coverage rates do raise some concerns.

6.42 Coverage rates among the poor are noticeably higher than they are for the entire West Bank population, and coverage has increased from its 2004 level. Still, in 2009. about 80 percent of the poor are not recipients of any source of assistance. The PA has almost doubled



its coverage of the poor since 2004, but the increase has not reached far enough as evidenced by the large number of the poor who do not receive any social assistance.

6.43 Moreover. informal assistance does not play the role of filling gaps left by the formal social assistance. Among the poor who did not receive any formal social assistance, only 5 percent were receiving support from informal sources such as relatives and friends. Moreover, since 2007 this source of support has diminished.



which might be related to the increasing severity of internal mobility restrictions on the flow of goods and services in the West Bank.

6.44 Such low coverage rates preclude further analysis on other performance markers such as generosity and other indicators by each source of assistance. Of MoSA's beneficiaries 70 percent are non-poor and they receive an estimated 86 percent of all MoSA benefits. However, even among recipients of assistance, almost 90 percent of the benefits accrue to the non-poor population. Therefore, notwithstanding the lower relative needs for social assistance in the West Bank compared to Gaza, and insofar as this has led to a lower flow of funds and assistance, there is clearly a need to develop an appropriate social assistance system for poor households in the West Bank. As it stands now, only one in every ten dollars of social assistance distributed reaches the hands of the poor.

5. Poverty Reduction Impact of Social Assistance

- 6.45 How important is social assistance in reducing poverty in the West Bank and Gaza? Table 41 in the Annex to Chapter 6 presents the simulated impact of discontinuing social assistances programs. This exercise is done separately for the West Bank and for Gaza. In this simulation it is assumed that aggregate expenditures of beneficiary households fall by the amount they receive in assistance. This is a rather stringent assumption, ignoring a household's ability to compensate for income losses. These simulations therefore produce an upper bound of the poverty impact of social assistance. Nevertheless, they give us a strong sense of the importance of social assistance in a context where the economy is virtually closed and earning opportunities are severely limited.
- 6.46 Figure 100 shows that the poverty impact of social programs in the West Bank was quite modest across 2004, 2007 and 2009. For example, compared with the actual poverty rates, in the absence of all social assistance, the poverty headcount rate would have been 1 percentage point higher in 2004, 3 percentage points higher in 2007, and 2 percentage points higher in 2009. None of the individual programs have much of a poverty impact. This is likely attributable to the relatively low levels of coverage of social assistance among the poor over the years (with coverage of the poor peaking at 15 percent in 2007).



- 6.47 The regional contrast in simulated poverty impact is telling. In contrast to the West Bank, social assistance programs in Gaza were estimated to reduce poverty by about 3 percentage points in 2004, and in subsequent years their impact increased. For example, in 2007 the official poverty headcount rate in Gaza was 49.5 percent. In the absence of all social assistance poverty would have reached 55.6 percent. In 2009, the impact was even larger; in the absence of all social programs the official poverty headcount rate would have been 9.2 percentage points higher. Over the years, as social assistance programs expanded and reached a larger number of the poor, their role in alleviating poverty also increased.
- 6.48 Individual sources of social assistance typically tend to reduce poverty by 1 to 2 percentage points (Table 41 in the Annex. But in 2009 international aid stands out above other sources, reducing poverty by an estimated 6 percentage points (with UNRWA contributing an estimated 4.4 percentage points of the reduction). Assistance from relatives and friends is separate from social assistance. While in 2004 and 2007 the poverty impact of this source alone is not large, in 2009 its importance in reducing poverty appears to have increased. In that year, discontinuing assistance from relatives and friends would have increased poverty by a little over 3 percentage points.
- 6.49 It is instructive to look at the statistics related to the depth and severity of poverty as well, as measured by the poverty gap and poverty gap squared. Data from Gaza in 2009 suggests that the removal of social assistance would not only push many non-poor into poverty; it would also make the existing poor even poorer (both the poverty gap and severity of poverty increase substantially by twofold and threefold respectively if social assistance is taken out). Social assistance also promotes equity. In its absence inequality would have also increased quite dramatically the Gini coefficient of inequality increases by about 20 percent (from 0.30 to 0.36). These results imply that social assistance help the existing poor substantially, even if they are inadequate to lift them out of poverty. For example, the statistics on generosity shows that overall social assistance receipts by poor households were about a third of their total expenditures. Thus, on average these households would have seen their expenditures fall by about a third if all social assistance disappeared.

6. Making Social Assistance more Effective in Poverty Reduction

- 6.50 Previous chapters have shown that the poverty trends observed in the West Bank and Gaza in recent years (2004-09) are linked to the levels of economic growth. There is no doubt that improving growth will be critical to reducing poverty, and generating sufficient domestic revenues so that the PA can achieve self-sufficiency over the medium term. However in the short term, and until economic activity takes off, substantial donor funding is likely to remain necessary. As shown in this chapter, the PA is dependent on these donor flows not only for its regular functioning, but most especially for its social assistance programs.
- 6.51 In this context, it is important to recognize that social assistance programs can be an integral part of a broader poverty reduction strategy. International evidence suggests that programs involving direct transfer of resources to the poor and the vulnerable can reduce the adversities associated with severe poverty and mitigate the risk of households falling into or falling deeper into poverty

as a result of an economic shock. While shocks can affect all sections of the population, typically the poorer segments of the population face more negative consequences given their already low consumption levels. Therefore, to be effective in reducing vulnerability among the poor, safety net programs need to target assistance to the needy, ensuring a minimum level of consumption, particularly in response to economic shocks. The typical clientele for such assistance would consist of the poor and the most vulnerable among them.

- 6.52 With these considerations in mind, the Palestinian Authority and international organizations have instituted a number of social assistance programs in the West Bank and Gaza that function both through the PA as well as through non-government channels. The analysis in this chapter has shown that these programs are generally adequate in terms of coverage and generosity in Gaza. They were critical in mitigating the effects of the 2006-2007 crises, reaching the neediest to cushion the sharp reductions in income carried by the downturn. In addition, social assistance has remained high following the crisis. This has been particularly important given that the 2009 recovery shows signs of vulnerability and has not been accompanied by commensurate improvements in employment and labor earnings. As of 2009, only 20 percent of the poor population in Gaza is not receiving social assistance of some sort. Moreover, in terms of the generosity of programs, resources from assistance amount to 60 percent of the budget of poor recipients in Gaza.
- 6.53 Although the existing programs are a sound basis for constructing a well-articulated social assistance system, there is room for improvement both in terms of coverage as well as in terms of targeting of social assistance programs. In Gaza, although there is widespread coverage, 30 percent of MoSA's transfers accrue to the richest two expenditure quintiles. This result points to large potential efficiency gains should resources become better targeted. In the West Bank, coverage rates from any of the sources of aid remain in the single digits. Although these lower coverage rates are consistent with a geographic prioritization toward Gaza, they seem insufficient in the face of near 20 percent poverty incidence in the West Bank context. In 2009, despite a doubling of the MoSA's coverage of the poor relative to 2004, about 95 percent of the poor do not receive any assistance from MoSA, and 80 percent of the poor in the West Bank do not receive any source of assistance.