

West Bank and Gaza: Labor Market Trends, Growth and Unemployment¹

Labor market developments in the West Bank and Gaza (WBG) since the 1994 Oslo accords have reflected relatively sluggish growth performance. Employment growth has been insufficient to absorb the rapid rise in the labor force, leading to high levels of under- and unemployment. A real growth rate of at least 8 percent per annum, with 3 percent productivity growth, is needed to absorb new entrants into the labor market and achieve a low long-term unemployment rate of 7 percent, while allowing for real wages to grow 1.5 percent per year. A key prerequisite for the expansion of private sector activity and employment is the removal of the restrictions on movement and access.

A. Labor Market Trends since Oslo²

The WBG has a very young population with low labor force participation. While the population of working age has been growing at 4 percent on average since 1995, labor force participation increased only marginally from 39 percent in 1995 to 44 percent in mid-2012. Labor force participation was at a low of 38 percent in 2002 when the political and economic environment deteriorated as a result of the second Intifada (2000-2002). The low participation rate of women (averaging 15.4 percent since 2005) and the relatively high share of students in the working-age population keep labor force participation low.

Employment growth since Oslo has been insufficient to absorb new labor market entrants.³ About 0.6 million people have entered the Palestinian labor force since 1995, while the private sector created only 0.3 million additional jobs and the public sector added 0.2 million jobs. Unemployment increased by 0.1 million and for most of the post-Oslo period unemployment remained high, fluctuating between 20 and 31 percent. During the second Intifada many private sector jobs were shed and employment in Israel declined by 60 percent, and as a result the employment rate reached a low of 64 percent in 2002. As the private sector recovered and workers from the West Bank returned to their jobs in Israel, the employment rate in WBG recovered to around 70 but it never reached pre-Intifada levels as the private sector in Gaza never fully recovered and workers from Gaza were not allowed to re-enter the Israeli labor market due to the closure.

¹ Prepared by Udo Kock, Mariusz Sumlinski, and Hania Qassis; December 2012. The views expressed in this note are those of the authors and do not necessarily represent those of the IMF or IMF policy.

² The primary data source is the Labor Market Survey from the Palestinian Central Bureau of Statistics (PCBS). PCBS has conducted labor market surveys since 1995. The latest survey included in this note is for the second quarter 2012. References to 2012 therefore refer to the period January-June 2012.

³ Employment referenced in this note includes underemployment, which according to the ILO includes all employed persons who during a specified period work less than 35 hours a week and who wish to work additional hours.

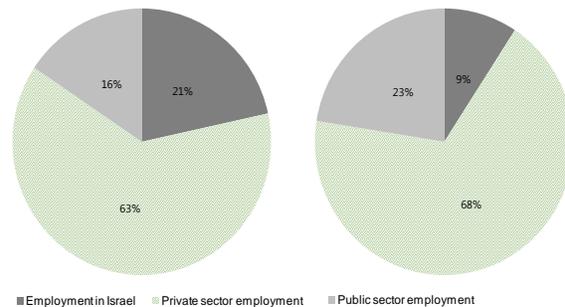
Private sector employment growth was slow while the share of employment in Israel and the settlements shrank dramatically. Private employment grew from 248 thousand in 1995 to 584 thousand in mid-2012, an average annual increase of 6 percent. Employment of Palestinians in Israel and the settlements reached a high of 127 thousand in 1999, but declined after the second Intifada, mainly due to the closure of the border between Israel and Gaza and other restrictions. Before the closure 14 percent of Gaza's workers were employed in Israel, thereafter and currently the number is negligible. The number of West Bank workers in Israel has increased in recent years to about 80 thousand in mid-2012. Before the second Intifada the share of West Bank workers employed in Israel and settlements was 26 percent, these days it is about 13 percent. Public employment (PA and local governments) amounted to about 192 thousand in mid-2012, an average increase of 5 percent per year. The high rate of public employment growth is linked to insufficient job creation in the private sector as a result of restrictions on movement and access, investment, exports and imports. More recently employment growth by the PA has been capped within the framework of the reforms outlined in the Palestinian Reform and Development Plan (2008-2010) and its successor National Development Plan (2011-2013) to a net increase of 3,000 per year.

Composition of Labor Force Growth: 1997 - 2012
(Annual average, in percent of previous year's labor force)

	1997-2012	2008-2012
Labor Force	4.4	4.6
Unemployment	0.9	1.2
Underemployment	0.1	0.3
Israel and Settlements	0.1	0.4
West Bank and Gaza	3.4	3.0
Palestinian Authority	0.9	0.8
Private sector	2.5	2.2

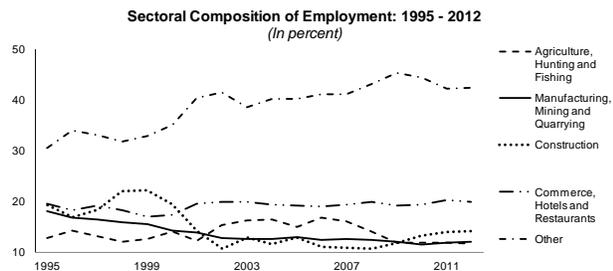
Source: Palestine Central Bureau of Statistics and IMF staff calculations.

Relative Composition of Total Employment in West Bank and Gaza : 1999 and 2012



Source: Palestinian Center Bureau of Statistics and IMF staff calculations

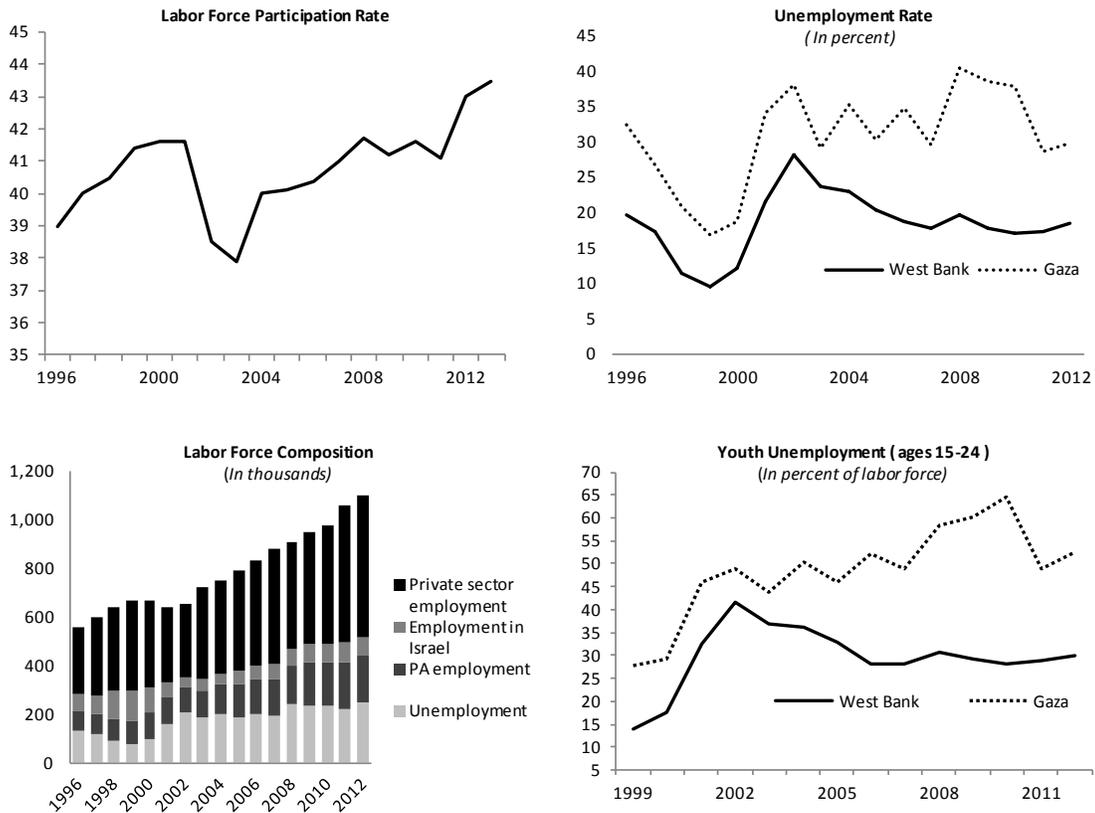
Employment in tradable sectors shrank the most owing to the loss of market share and reduced access to imported inputs as a result of the restrictions on movement and access. The share of manufacturing, mining, and quarrying in total employment fell from 18 percent to 12 percent between 1995 and 2012, while the share of construction declined from 19 percent to 14 percent. The share of services (including commerce, hotel and restaurants, transportation, storage, communication and other services) in total employment increased from around 50 percent in 1995 to about 62 percent in 2012.



Source: Palestine Central Bureau of Statistics and IMF staff calculations.

Unemployment has remained high throughout the post-Oslo period, especially among youth and in Gaza. After a rapid decline in the first post-Oslo years, unemployment reached a peak in 2002 when almost one in three Palestinians were unemployed. It then declined to 22 percent in 2007 before rising to 26 the next year as a result of the Gaza blockade. Since then it came down to 22 percent in mid-2012. Unemployment has been much higher in Gaza (33 percent on average between 2000 and 2011) than in the West Bank (20 percent on average in the same period). In the West Bank, average unemployment among the young (aged 15-24) was 30 percent in mid-2012, much lower than at the peak of 40 percent in 1998, but slightly higher than in 2007 (28 percent).⁴ In Gaza youth unemployment is 52 percent, higher than before the 2008 war in Gaza when it averaged 49 percent. The average unemployment duration in WBG is about 11 months, roughly the same as before the Gaza war, suggesting that once unemployed, many workers struggle to find another job.

Trends in Labor Force Participation and Employment in West Bank and Gaza : 1996 - 2012



Source: Palestine Central Bureau of Statistics and IMF staff calculations.

⁴ Youth unemployment is calculated as the simple average of unemployment in the age groups 15-19 and 20-24.

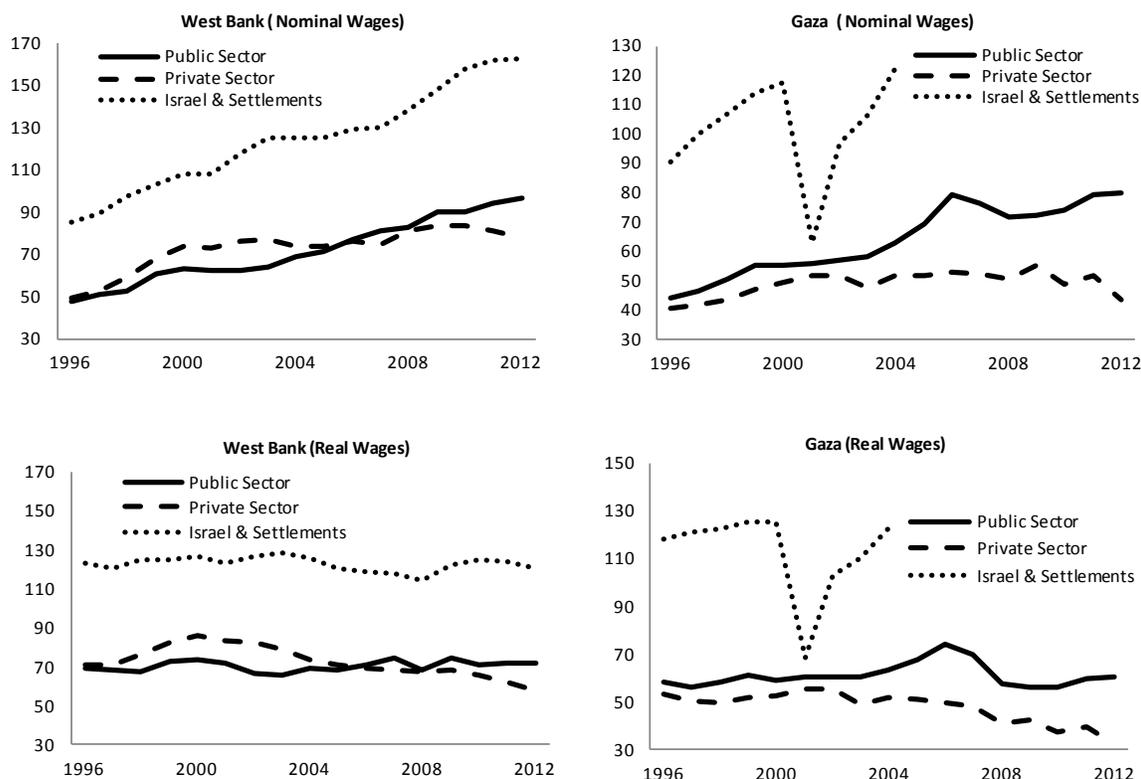
High and persistent unemployment can be attributed to:

- Restrictions on imports and exports. This is particularly, but not exclusively, an impediment for job creation in Gaza, where there have been tight restrictions, including a virtual export ban and severe restrictions on imports of building materials.
- Continued restrictions on labor mobility and on the reallocation of productive capital between the Gaza Strip and the West Bank.
- Low levels of private sector investment, other than for construction.
- High reservation wage of some job seekers. Some job seekers may opt for temporary unemployment or underemployment hoping for a job in either public sector or in Israel or settlements where wages exceed those paid by the private sector in WBG.
- The small size of most enterprises. Most enterprises in the WBG employ less than 20 employees. They tend to be more flexible than large enterprises and may make a significant contribution to employment at a relatively low capital cost. However, they face obstacles to their development and ability to create jobs, including the absence of a legal framework for their operations, lack of access to markets and technology, and relatively limited financing opportunities.⁵

Real wage growth has been suppressed in both the public and private sector. Real private sector wages have declined in the West Bank, despite strong economic growth, by 8 percent in 2008-11. In Gaza real private sector wages have dropped 4 percent since 2008 and are now significantly lower than in 1999, before the start of the second Intifada. Wages in Israel and the settlements far exceed public and private sector wages in WBG, although there too real wage growth has been stagnant. In 2012, the average daily wage of a West Bank worker in the private sector was about half of the average wage for Palestinians employed in Israel and settlements. Public sector wages declined sharply by 9 percent in real terms in 2008 and recovered somewhat thereafter. In the West Bank they are now roughly back at their 2006 level while in Gaze real public sector wages are about 20 percent lower than in 2006. Public sector wages exceed private sector wages (in the West Bank since 2006) which is the result of downward pressures on wages in the private labor market owing to economic constraints related to restrictions on movement and access. These restrictions result in lower investment, lower growth and hence less private sector job creation, and thus excess labor supply. All of those factors put downward pressure on private sector wages.

⁵ Atyani, Nasr and Sarah Al Haj Ali, 2009, *“Problems of Micro, Small and Medium Enterprises in Palestine”*, Palestine Economic Policy Research Institute (MAS), Jerusalem and Ramallah.

Average Daily Wages (In NIS)



Source: Palestine Central Bureau of Statistics and IMF Staff calculations.

B. Growth and Unemployment

Unemployment and growth in the West Bank and Gaza are negatively correlated, while employment and growth are positively correlated. An estimation of Okun's Law, which describes the relation between unemployment and growth, for WBG yields a coefficient of -0.3 on a growth variable.^{6,7} It implies that every 1 percent deviation of output above potential leads to a reduction in cyclical unemployment of about one third of a percentage point. However, estimates of natural or potential levels of macroeconomic variables are very

⁶ Okun's law as specified in Ch.4 IMF October 2012 World Economic Outlook. The deviations of unemployment from its natural rate are regressed on deviations of output from its potential. The natural rate of unemployment and potential output are series smoothed with the Hodrick-Prescott filter.

⁷ As shown in the recent IMF World Economic Outlook (October 2012) this estimate is typical for emerging markets and developing economies estimates (EMEDS). For the majority of EMEDS the estimates fall between -0.2 and -0.4. The estimated relationship is strongly significant.

uncertain, especially for fragile economies like the WBG where time series are short and the economy is subject to various shocks. We therefore estimate a relationship between employment and output that does not refer to natural levels of these variables. The estimate of one year ahead elasticity of employment with respect to output is about 0.98. This implies that 1 percent change in output will result in about 1 percent change in employment. This elasticity is a combination of contemporaneous employment elasticity with respect to output and employment persistence.⁸

A growth rate of 4½ percent is needed to absorb new labor market entrants from the young and rapidly growing Palestinian population, while much higher growth rates are needed to reduce unemployment. It is estimated that in 2012-15 about 250 thousand young Palestinians will enter the labor market. Labor force participation among elderly workers is low, so only a limited number of existing jobs will become available as workers retire. Assuming the estimated elasticity holds in the medium term an average growth of 4½ percent is required to absorb the projected expansion of the labor force. Growth is forecasted to be 5.4 percent in 2012-15, which would lead to a modest reduction in the unemployment rate from currently 22 percent to about 18 percent in the medium term.⁹ A reduction of the unemployment rate by half would require average real growth rates of 7¼ percent in 2012-15. It is estimated that a lower average growth rate of about 2 percent would result in an unemployment rate of about 25 percent in the medium term.

Allowing reasonable real wage growth would require even higher real growth rates to absorb new entrants and bring unemployment down. We perform a simulation of required GDP and productivity growth depending on the assumed real wage growth (see text table). The rates correspond to three scenarios for the real wage: low (constant real wage), medium (1.5 percent growth), and high (3 percent growth). The results show that in order to reduce unemployment to 7 percent in 2020 at a constant real wage the economy needs to grow at 7 percent with

Scenarios for Growth in Total Factor Productivity and Real GDP: 2012-2020 /1

Real wage growth	TFP	Real GDP	Unemployment rate 2020
	(Average annual percent)		(In percent)
Low (0 percent real wage growth)	2	7	7
Medium (1.5 percent real wage growth)	3	8	7
High (3 percent real wage growth)	5	9	7

Source: IMF staff calculations

1/ Note: Scenarios assume that employment in Israel and the settlements remains unchanged from its 2012 level.

⁸ Log employment is regressed on a lagged log employment, log GDP, and a constant. Employment includes private sector, public sector and Israel and settlements. The estimation period, using annual data from the Palestinian Central Bureau of Statistics, is 1994-2011.

⁹ This assumes that the estimated relationship holds and there are no structural changes in the economy, such as for example a sharp deterioration of the fiscal situation due to withholding of clearance revenues, a substantial change in the movement and access regime, or a deteriorating of the security situation.

productivity growth of 2 percent. A more realistic scenario with a growing real wage requires higher productivity and GDP growth rates. To illustrate, with wages increasing at 1.5 percent per year, a target unemployment rate of 7 percent by 2020 will require real GDP to grow by 8 percent per year, and productivity to grow by 3 percent per year.¹⁰ Real GDP growth in WBG has average 4.8 percent per year in the post-Oslo era.

¹⁰ The simulation was performed with the following estimated (log-linearized) Cobb-Douglas production function. A similar analysis for an earlier time period was performed by Davoodi and Erickson von Allmen (published in Rosa A. Valdivieso, et. Al, IMF (2001), *West Bank and Gaza: Economic Performance, Prospects, and Policies – Achieving Prosperity and Confronting Demographic Challenges*, Washington, DC).