

# **An Analysis of the Public-Private Wage Differential in the Palestinian Labor Market**

**Sami H. Miaari<sup>1</sup>**  
*Tel-Aviv University*

**April, 2018**

---

\* \* *Acknowledgements:* I am deeply grateful to the Palestinian Central Bureau of Statistics for providing the Palestinian Labour Force Survey data; I owe special thanks to Michael Beenstock, Massimiliano Cali, Esteban Klor, Hani Mansour, Daniele Paserman, Robert Sauer, Eytan Sheshinski, Avichai Snir, Asaf Zussman, and Noam Zussman for their helpful suggestions and comments.

<sup>1</sup> Department of Labor Studies, Tel-Aviv University, Tel-Aviv 69978, Israel. Email: [SamiMiaari@post.tau.ac.il](mailto:SamiMiaari@post.tau.ac.il)

# **An Analysis of the Public-Private Wage Differential in the Palestinian Labor Market**

## **Abstract**

*This paper measures and analyzes the dynamics of the public-private wage differential in the West Bank and Gaza for the period before and during the “second Intifada” using data from the Palestinian Labour Force Survey (PLFS) of the Palestinian Central Bureau of Statistics (PCBS). Because the distribution of workers’ individual characteristics, such as skills, and the “returns” to these characteristics may differ across workers, the wage differential is decomposed into two components: an ‘endowment’ effect and a ‘returns’ effect. The results show that in the pre-Intifada period, the wage gap between the public and private sectors narrowed in both the West Bank and Gaza. However, a sharp increase is seen after the outbreak of the Intifada. Moreover, most of this increase comes from an increase in “returns” to skills composition in the public sector, (unexplained effect), rather than a change in the skills composition of public sector workers, (explained effect). Using recent econometric quantile regression techniques, the analysis of the public-private sector wage gap from 1998 to 2006, at various points along the wage distribution, shows that the wage premium, (penalty), for the public sector varies across the distribution, being higher, (lower), at the lowest end of the wage distribution and decreasing (increasing) along the wage distribution; it becomes negative in the top percentiles.*

**JEL Classification:** J21, J31, J61, J45, C14, C24

**Keywords:** Conflict; Decomposition; Intifada; Palestine; Public Sector; Quantile; Wage Gap

## 1. Introduction

Public sector salaries have attracted much attention in the West Bank and Gaza in recent years. Salaries are by far the largest component of the Palestinian Authority's (PA's) budget, accounting for 62% of total expenditure in 2005. Labour market data from the last quarter of 2006 suggest that public sector employment accounts for nearly 25% of all full-time employment. As the largest employer in Palestine, the PA has both political and economic influence on Palestinian labour markets.

Historically, in the West Bank and Gaza, as in other developing countries, the processes of recruitment, promotion, and wage determination have differed substantially between the public and private sectors. Following the second Intifada, the Palestinian public sector was perceived as a "buffer" to absorb the private sector job losses resulting from the impact, on product and labour markets, of increased closures and movement restrictions imposed by Israel. (Cali and Miaari, 2013; Miaari and Sauer, 2011). Latterly, there were also increases in public sector salaries, such that in 2005 the wage bill averaged \$US 85m per month<sup>2</sup>. Given that the net revenues of the PA were approximately \$US 101m per month in 2005 (Fig. 1), the commitment to public sector salaries and employment crowded out other forms of expenditure, including spending on the maintenance and development of critically important infrastructure.

This situation has created a serious dilemma for a Palestinian government faced with the unenviable task of cutting expenditure at a time when the economy has been stagnating as a result of the closure regime; Reducing its workforce and / or reducing public sector salaries carries the considerable risk of dangerously high levels of unpopularity, at a time when the PA needs to convince the populace of its ability to carry out its electoral mandate. On the one hand, high public sector salaries can represent unsustainably high costs for the PA, while on the other, excessively low salaries can be expected to have a negative impact on employee motivation and productivity, also making it difficult for the PA to attract skilled professionals.

Theoretical and empirical research points to a number of reasons for the emergence of public-private wage differentials, the most obvious being the difference in the economic, political, and institutional environment surrounding these sectors. The public sectors of most countries are not bound by the profit-maximizing concerns of private sector firms and the

---

<sup>2</sup> Source: International Monetary Fund data files.

consequent cost-consciousness that prevails in a competitive market. In most cases, particularly in developing countries, the public sector must compete with the private sector to attract the top professionals. This situation suggests that while there is a “floor” to public sector wages—often dictated by private sector wages—there might not be a “ceiling”. Finally, wage differentials can also emerge as part of the “electoral wage-cycle process”, or because of the collective bargaining strength of the health care and education sectors (Disney and Gosling 1998).

International data on wage differentials are mixed, and it is not easy to draw generalizations based on country patterns<sup>3</sup>. In some developing and developed countries, such as Australia (Cai and Liu 2008) Brazil (Emilio, Ponczek and Botelho 2012), Greece (Papapetrou 2006), Haiti (Terrel, 1993), India (Azam and Prakash 2015; Glinskaya and Lokshin 2005), Ireland (Foley and O'Callaghan 2009) Italy (Carlo, Lucifora and Origo 2005; Depalo and Giordano 2011), Pakistan (Aslam and Kingdon 2009; Hyder 2002; Hyder and Reilly 2005; Naser 2000) and Romania (Voinea and Mihaescu 2012), there is evidence of a significant wage premium in favour of the public sector. On the other hand, in cases such as Estonia (Leping 2005; Leping 2006), Germany (Dustmann and van Soest 1998) and Poland (Adamchik and Bedi 2000) the bias seems to be in the other direction, with a negative public wage premium (or a positive private wage premium). France has mixed results, with Giordano et al. (2011) and Lucifora and Meurs (2004) showing a negative public sector premium, and Bargain and Melly (2008) finding both penalties, (for male employees), and premiums, (for females), to be the consequence of selection, and the gap itself negligible. Some recent studies find a gradual narrowing of the public sector premium in many OECD countries, as market forces have begun to influence public sector performance and decision-making.

Christofides and Michael (2013) find the public-private wage premium to be generally positive for a 2008 cross-sectional sample of workers from 27 European states, but also some inter-country heterogeneity, with Luxembourg, Cyprus, Greece, Hungary, and Estonia<sup>4</sup> having the largest gaps and Belgium, Germany and Norway with small negative gaps. Giordano et al.

---

<sup>3</sup> The Palestinian political and economic situation is unique in many ways, and international experience should be interpreted with care when applied to the Palestinian context.

<sup>4</sup> This is contrary to Leping (2005; 2006). Some of this difference can be attributed to the different timeframe for the data of these papers, which is 2000 and 1989-2005, respectively, compared to 2008 for Christofides and Michael (2013). We also know from Leping (2006) that the negative public sector premium became less negative with time.

(2011) also find the gap to be generally positive based on data from 10 European countries over the years 2004-2007, with Greece, Ireland, Italy, Portugal and Spain exhibiting a larger gap and France exhibiting a negative one. Panizza and Qiang (2005) find positive public sector wage premiums for most of 13 Latin American countries studied, and Mizala, Romaguera and Gallegos (2011) further examine such gaps using 1992-2007 panel data on 11 Latin American countries, (not all of which are studied by Panizza and Qiang), finding a positive premium for all of them, that increased over the study period. Differences between these two studies can be attributed to the narrower nature of the data used by Panizza and Qiang (2005), which consists of a single-year set for each country. A review of empirical wage-gap studies finds the premium to be negative in Eastern European economies that transitioned from communism to capitalism during the 1990s, although it became less negative with time, and a zero to positive premium in developed countries (Lausev 2014).

The public-private wage gap was found to decrease with wage distribution: high, positive gaps for lower-paid workers and small positive, or even negative, gaps for higher paid workers (Azam and Prakash 2015; Cai and Liu 2008; Christofides and Michael 2013; Depalo and Giordano 2011; Foley and O'Callaghan 2009; Mizala, Romaguera and Gallegos 2011; Papapetrou 2006; Poterba and Rueben 1994; Saha, Roy and Kar 2014). However, two papers show a different result: Maczulskij (2008) finds that Finnish private sector males at the lower end of the income distribution enjoyed higher premiums, in relation to several factors, such as education, which decreased with income deciles. Voinea and Mihaescu (2012) find that in Romania, the public sector wage premium increases across wage percentiles, then decreases for the top few percentiles of workers.

An accurate understanding of public sector salaries vis-à-vis the private sector and how they vary across the wage distribution can greatly assist in setting correct wage and employment policies. A sizeable public sector wage premium has been observed to lead to aberrant labour market behaviour, as individuals might prefer to “queue, or wait in unemployment” for a stable public sector job with an appealing pension plan, and eschew low-paid and/or uncertain jobs in the private sector. This tendency has immediate relevance to Palestine, where a growing number of young people are entering the pool of the unemployed.

The aim of this paper is to estimate the public-private wage differential in the West Bank and Gaza Strip, and to describe its dynamics between 1998 and 2006 using labour force surveys from the Palestinian Central Bureau of Statistics (PCBS). It is important to discover how much of the wage variation can be explained by differences in individual characteristics in the two sectors, and how much by differences in the returns to these characteristics across sectors.

The econometric results are interesting for a variety of reasons: this is the first serious assessment of public-private wage differentials in Palestine, and the data are rich enough to allow a dynamic analysis of the evolution of differentials over time and by geographical area. The results show that in the pre-Intifada period the wage gap between the public and private sectors narrowed in both the West Bank and Gaza. However, a sharp increase was seen after the outbreak of the Intifada. Moreover, most of the increase in the wage gap comes from an increase in the “returns” to skill composition in the public sector, (unexplained effect), rather than a change in the skills composition of public sector workers, (explained effect). These findings have implications for the incentives presented to a relatively youthful population and a rapidly growing work force, when deciding whether to aim for a job in the public or in the private sector

Because of the possibility that the distribution of salaries in the public sector may differ from that in the private sector due to compression, focusing exclusively on the mean salary levels in the two sectors can be misleading. Instead, using recently developed regression techniques, it has been possible to compare the wage differential at various points along the distribution of salaries. This comparison provides a much richer description of the wage differential along the salary scale, and allows testing for whether there is a decrease or an increase in the differential at upper or lower levels of income respectively.

The wage premium, (penalty), for the public sector varies across the distribution, being higher, (lower), at the lowest end of the wage distribution and decreasing, (increasing), along it; it becomes negative in the top percentiles. Over time, the lower quantiles of West Bank public sector wage earners have continued to earn a significant (log) wage premium, which increased over time, particularly after the outbreak of the Intifada. On the other hand, those in the very top income percentile, (95<sup>th</sup>), continue to face a wage penalty that has attenuated over time. In Gaza, the wage premium has increased over time, (especially after the outbreak of the Intifada), for both low and high wage earners in the public sector. Comparing 2000 to 2006, the estimates

indicate that there was a steady increase in the wage premium for workers in the West Bank and Gaza in all percentiles.

Given the inseparability, and thus complexity, of the political and economic challenges facing the PA, and the need for objective analysis to inform policy, this paper offers an interpretation of the wage gap phenomenon in terms of the changing demographic composition of the workforce over the period under study. During this period the public sector was perceived as a “buffer” to absorb private sector job losses, resulting from the impact, on product and labour markets, of increased closures and movement restrictions imposed by Israel following the second *Intifada*. However, these results have important policy implications, and could explain whether or not public sector workers are underpaid, why they are reluctant to leave their jobs, and why the PA finds it consistently difficult to fill, and retain the staff in, top-level administrative and managerial positions.

The rest of this paper is organized as follows: the next section presents features of the data available on the Palestinian labour market. Section 3 describes the methodology, econometric specification, and techniques used to measure wage gaps. The main results of the study are reported in section 4. Section 5 provides further evidence on the wage gap using quantile regressions. The conclusion summarizes the findings and caveats.

## **2. Data**

This paper’s data are drawn from the Palestinian Labour Force Survey (PLFS) of the West Bank and Gaza Strip, which is administered by the Palestinian Central Bureau of Statistics (PCBS). The PLFS was established in 1995, following the signing of the Oslo Accords and the creation of the Palestinian Authority (PA). In the PLFS, the same household is surveyed four times over six quarters. Two surveys are conducted during two consecutive quarters, and then two more are conducted after a break of two quarters, after which the household is dropped from the sample. From 1998 each yearly survey round contains approximately 7,600 households, containing 22,000 individuals aged 15 years and above, residing in the West Bank or Gaza. Nomads and persons living in institutions such as prisons or shelters are not included in the survey.

For the purpose of analyzing the public-private sector wage gap, the sample is restricted to male wage-earning employees, working in the domestic, public and private sectors of the West Bank and Gaza, aged between 18 and 64, and reporting positive net hourly wages and positive days worked per month in the 1998 and 2006 surveys<sup>5</sup>. This excludes Palestinian workers employed in the Israeli labour market<sup>6</sup>. Palestinian women are excluded because their labour force participation rates have traditionally been low<sup>7</sup>. Workers' hourly wages are calculated by dividing daily income by hours worked per day<sup>8</sup>. Because a "simple average" can be strongly affected by large or extreme values, outliers in terms of hourly wage are dealt with by excluding observations below the 1<sup>st</sup> and above the 99<sup>th</sup> percentile of the log hourly wage distribution for each year<sup>9</sup>.

Rounds of the survey prior to 1998 are not considered because in 1995 the survey was conducted in one quarter only, and it was an experimental sample. In 1996, the survey was conducted over three quarters. It was not until 1998, after the Palestinian census of 1997, that the survey was conducted in all four quarters of the year.

### *2.1. The Local Palestinian Labor Market After the Intifada*

The share of West Bank male workers employed in the private sector, as a proportion of all employees in the West Bank labour market, decreased sharply between 1998 and 2006. This share fell by 10 percentage points, from a high of 67% in 1998 to 57% in 2006. Note the sharp drop in the share of people employed in the private sector, out of all employed individuals, in

---

<sup>5</sup> Wage employment represents approximately 55% of total employment in the West Bank, and two-thirds of total employment in Gaza, percentages that have remained fairly stable since the outbreak of the Intifada. The other three types of employment are "employer", representing approximately 5% of total employment in the West Bank and 3% in Gaza; "self-employed," amounting to roughly 28% in the West Bank and 23 percent in Gaza; and "unpaid family member," which accounts for approximately 11% of employment in the West Bank and 9% in Gaza. These three groups were not asked about their wages in the PLFS.

<sup>6</sup> Including Palestinians workers in Israel would give a confused picture of the public-private wage gap in the Palestinian local market, because Palestinian workers in Israel are generally paid more than those employed in the Palestinian local market.

<sup>7</sup> The female labour force participation rate in 1998-2006 averaged 14.4% for females from the West Bank and 8.4% for females from Gaza.

<sup>8</sup> The PLFS questionnaire on hours worked asks, "How many hours did the household member work in all jobs last week?" This number was multiplied by 4.35 weeks per month, and then divided by the number of reported workdays in the month to calculate hours worked per day.

<sup>9</sup> Thereby removing the most extreme responses, which in some cases are simply the results of incorrect data entry.



2002 (Fig. 2). This is a consequence of the second Intifada, which began in September 2000, and the onerous system of checkpoints imposed in the West Bank in 2002. In 1998, 45% of Gaza's male employees worked in the private sector; by 2006, this proportion had dipped to 30% (Figure 3)<sup>10</sup>. As the share of workers in the private sector declined over the period 1998-2006, the role of the public sector, in absorbing a growing Palestinian labour force, grew, especially following the second Intifada. In 1998, 30% of West Bank male employees, and 48% of Gazan male employees were working in the public sector; by 2006 the proportions had reached 39% for West Bank males and 60% for Gazan males (Figs. 2 and 3). It should be noted that the overall size of the Palestinian public sector workforce, (as opposed to the percentage of workers employed by the public sector), is not very large by international standards: Based on 2013 World Bank estimates, (which include civil servants and the security services, but which exclude employees of state enterprises, autonomous public bodies not financed by the national government's budget, and municipal government employees), public sector employment in the West Bank and Gaza comprised just 4.6% of the Palestinian population, while the average for the 75 developed and developing countries in the World Bank's database was about 5.4%<sup>11</sup> (Niksic, Eddin and Stevens 2015).

Two factors contributed to the growth of the Palestinian public sector: First, the external and internal closure regimes, imposed by the Israeli authorities, restricted the mobility of Palestinians, leading to a decline in the number of Palestinians employed in the Israeli labour market, (thus increasing the supply of employees to the local private sector), and to a fall in local economic activity in the West Bank and Gaza, (and thus lower demand for employees in the local private sector)<sup>12</sup>. Consequently, the share of employees in the local (Palestinian) private

---

<sup>10</sup> According to the World Bank report in 2006 "West Bank and Gaza Update": "Between Q3 of 2000 and Q4 of 2000, the number of wage employees working in the private sector in the West Bank fell by 28,500; by Q2 of 2002, a further 27,900 West Bank private sector wage employees were no longer working, a decline of 48% from the last quarter prior to the Intifada, when 117,600 workers enjoyed regular wage employment. In Gaza, the reduction was more sudden: Whereas 43,000 Gazans held regular wage employment in Q3 of 2000, that number fell to 22,600 in Q4 of 2000; a further 2,900 were without regular private sector wage jobs by Q3 of 2002, a decline of 59%."

<sup>11</sup> According to the same report, public sector employment increased by 13% through 2007-2013, making it likely that for the period studied in this paper, the public sector was also not very large by international standards.

<sup>12</sup> For instance, the UNSCO database shows that the number of comprehensive closure days imposed in the West Bank increased from 53 in 1998 to 260 in 2006; and in Gaza from 28 days to 77 days during the same period.

sector decreased (Fig. 2 and 3).<sup>13</sup> As a result of the closure regime, the unemployment rate in the West Bank increased from 11% in 1998 to 28% in 2002, and in Gaza from 20% in 1998 to 38% in 2002. Given this increase the PA felt compelled to absorb a large number of the unemployed—despite the unfavourable economic circumstances—in order to minimize the negative effect of unemployment. Second, faced with political instability, the PA sought to control both individuals and security in general, and this led it to employ a greater number of workers in its military and law enforcement services / agencies. One might expect that the monopsonistic power of the PA, derived from the decline of the private sector, coupled with possible reductions in revenue, would translate into lower wages in the public sector. As we see throughout this paper, the opposite is true; public sector wages have risen. It is possible that this increase was, in part, a response to political pressure on the PA to provide "pane e circus", ("bread and entertainment"), to keep the population satisfied during a period of upheaval. The fact that much of the growth, both in jobs and wages, was in the security sector (Niksic, Eddin and Stevens 2015; World Bank 2006b), required to maintain public order, strengthens the hypothesis that the increase was a response to political pressures on the PA to keep the population in order.

## 2.2. *Descriptive Statistics*

Table 1 summarizes the mean values of the labour force attributes observed in the period 1998-2006 for West Bank male workers in the public and private sectors respectively. The labour force profile of workers in the samples changed over the study period. There was a small increase in the average age of private sector workers and their average years of schooling. However, for public sector workers, the average years of schooling remained unchanged over the same period, with only a slight increase in average age. Comparing 2006 to 2000, there was an increase in the proportion of married workers, and in average tenure in both the public and private sectors. Compared with private sector employees, the figures in Table 1 also show that public sector employees were on average better educated, older, more likely to be married, and more likely to be tenured.

---

<sup>13</sup> According to the World Bank report in May 2003, "The negative impact on domestic employment of job losses in Israel was aggravated by the difficulties in conducting business within the West Bank and Gaza: Internal closures and curfews are attended by significant transaction costs, disruption in production cycles, losses of perishable output, and lower economies of scale. Regional variations in unemployment and labor participation between the West Bank and Gaza are significant. By Q3/2002, 51,000 of the 327,000 eve-of-intifada private sector jobs had been lost in the West Bank (16%), and 54,000 of 164,000 in Gaza (33%)."

However, the trend of real hourly wages differed considerably between the public and private sectors over the period in question. In the public sector, real hourly wages increased over the period 1998-2000, in 2001 they decreased, and from 2002 they again increased as a result of legislation and administrative decisions (Niksic, Eddin and Stevens 2015; World Bank 2006b). On the other hand, in the private sector there was a decrease in salaries over the period 2001-2006, as a result of a sharp decrease in the number of Palestinians employed in the Israeli labour market and low demand for employees in the local private sector<sup>14</sup>.

A comparison between real hourly wages in the public and private sectors reveals that the unadjusted wage gap between the two sectors decreased between the years prior to the second Intifada, from 3.4% in 1998 to -4% in 2000. However, it increased after the beginning of the second Intifada, from -1.7% in 2001 to 28% in 2006.

Table 2 describes the mean characteristics of the sample of male workers in Gaza. The labour force profile of males in Gaza changes over the period with a slight increase in the average age of private sector workers and in their average years of schooling. For public sector workers these averages remained unchanged over the same period. The proportion of married workers increased in both sectors. A significant increase in the average tenure of public sector employees is observed, while there is no clear pattern among private sector employees. The figures in Table 2 also show that public sector employees are on average better educated, older, more likely to be married, and more likely to be tenured. The unadjusted wage gap between the public and private sectors decreased between 1998 and 2000, from 73% in 1998 to 55% in 2000. However, it increased from 46% in 2001 to 134% in 2006.

It is evident from Tables 1 and 2 that over the sample period real wages in the private sector remained below those in the public sector. The only exceptions to this are the years 2000 and 2001 in the West Bank male sample, where the wage gap was in favour of the private sector. Moreover, the decrease in the real hourly wage in the West Bank was faster than that in Gaza,

---

<sup>14</sup> Miaari and Sauer (2011) document the large and statistically significant negative effects of the Israeli-Palestinian conflict on Palestinian employment rates in Israel and mean monthly earnings, regardless of work location, (Israel or the West Bank and Gaza), following the outbreak of the Intifada.

because internal and external closures imposed in the West Bank, after the beginning of the second Intifada, were more widespread than those in Gaza<sup>15</sup>.

### 3. Methodology

#### 3.1. Basic specification of model

A convenient starting point for estimating the magnitude of the public-private wage gap is to use ordinary least squares with a dummy variable for public sector participation on a pooled sample of workers. In this approach, an individual  $i$  has (log) real hourly wage  $\ln W_i$ , conditional on observed characteristics  $X_i$  and a dummy variable  $D_i$  that takes the value of 0 or 1 depending on whether the individual works in the private sector or public sector. Adding an error term  $\varepsilon_i$  distributed with a mean of zero leads to the least squares (OLS) specification:

$$\ln W_i = X_i' \beta + D_i \delta + \varepsilon_i, \quad (1)$$

where  $\beta$  is a vector of unknown parameters whose estimates would provide the influence or “returns” of the observed qualitative variables  $X_i$  on  $\ln W_i$ , and  $\delta$  is the unknown parameter whose estimates provide the *ceteris paribus* impact of working in the public sector.

While simple and intuitive, the foregoing approach is problematic for several reasons. The OLS estimate of  $\delta$  captures only a pure “shift” effect of working in the public sector, and ignores the fact that salaries could well differ because of differences in observed characteristics such as education and age across the two sectors. The foregoing OLS estimation assumes that error terms are homoskedastic and identically distributed across individuals. This may not be an appropriate assumption, especially when dealing with survey samples and two quite distinct population groups.

Secondly, the pooled OLS dummy variable specification assumes that the earnings are distributed identically across both the private and public sectors. To the extent that the public sector compresses the distribution of earnings of those employees who work in that sector

---

<sup>15</sup> External closures consist of restrictions on the movement of Palestinians and Palestinian goods between the West Bank, Gaza, and Israel (as well as third countries). Internal closures consist of restrictions on the movement of Palestinians within the territories.

relative to the private sector, the least squares estimates are likely to be biased and produce an incomplete picture of the conditional distribution of  $\ln W_i$  (see Disney and Gosling 1998; Nielsen and Rosholm 2001).

Finally, the least squares procedure, as specified above, does not control for endogenous selectivity bias; that is, the distribution of workers between the public and private sectors may not be completely random in the West Bank and Gaza.

The approach employed to correct for these problems was to adopt the Oaxaca-Blinder decomposition method with modifications: a) for decomposing the wage gap according to observed characteristics; and b) implementing a correction for endogenous selectivity bias. Moreover, a quantile regression framework that examines the wage gap at various points along the wage distributions is appropriate to accommodate differing distributions of wages between the two sectors. It is important to correct for these in any econometric specification within the context of Palestine, where the public sector continues to attract workers in an environment where the private sector is buffeted by considerable uncertainty and exogenous shocks.

### 3.2. *Decomposing the wage gap within the OLS framework*

While the preceding section calculates the wage premium/penalty for working in the public sector, it does not make it possible to control for the fact that individual attributes or their returns might vary across workers and sectors. Thus, the dummy variable estimates of the preceding section show the “shift” or *ceteris paribus* effect of working in the public sector, and provide no information as to whether the observed differentials are due to differences in attributes or to differences in the returns to these attributes. The focus of this section is on decomposing the observed wage differential in order to better understand how much of it is caused by differences in the distribution of attributes, and how much is due to differences in the returns to these attributes.

Within the OLS framework, a convenient way of decomposing observed pay gaps is to run separate regressions for each sector. Letting the subscript  $j$  ( $j = 1, 0$ ) denote the public and private sectors respectively, and  $i$  individuals, the following regression specification is estimated for each sector:

$$\ln W_{ij} = X'_{ij}\beta_j + \varepsilon_{ij}, \quad (2)$$

where  $W_{ij}$  is the hourly wage,  $X_{ij}$  is a vector of worker characteristics, and  $\varepsilon_{ij}$  a zero-mean constant-variance error term. Then, the wage equations, estimated by OLS at the mean point, will be:

$$\overline{\ln W_j} = \bar{X}'_j \hat{\beta}_j \quad \text{for } j = 1, 0, \quad (3)$$

where  $\hat{\beta}_j$  is the OLS estimate of the marginal effects, or returns of observed characteristics  $X_j$  on salaries, and  $\bar{X}_j$  is the mean level of observed characteristics across sector  $j$ . The regressors vector  $X'_j$  includes age, age squared, years of schooling, tenure, (total months in the same workplace), marital status, (dummy which takes value 1 if the worker is married and zero otherwise), full-time employment, (dummy which takes value 1 if the worker works at least 35 hours a week and zero otherwise); set of location of residence dummies, (urban area and refugee camp), occupational dummies, and district fixed effects<sup>16</sup>. The average public-private gross wage gap  $\ln(1+G)$  is the difference between the average salaries in the two sectors<sup>17</sup>:

$$\overline{\ln W_1} - \overline{\ln W_0} = \ln(1+G) = \underbrace{(\bar{X}_1 - \bar{X}_0)' \hat{\beta}^*}_E + \underbrace{\bar{X}'_1 (\hat{\beta}_1 - \hat{\beta}^*) + \bar{X}'_0 (\hat{\beta}^* - \hat{\beta}_0)}_R, \quad (4)$$

where  $\hat{\beta}^*$  is the estimate of the non-discriminatory wage coefficients. Equation (4) is the general Oaxaca decomposition, as per Oaxaca and Ransom (1994). It disentangles the average gross wage differential  $\ln(1+G)$  across the two sectors into two terms: the first term,  $E$ , is the explained component of the overall wage gap: the differential due to differences in the distribution of average characteristics, (the endowment effect). The second,  $R$ , is the unexplained component of the overall wage gap: the differences in the estimated coefficients or “returns” between the two sectors (the 'returns' effect). If we assume that  $\hat{\beta}^* = \hat{\beta}_1$ , then the general Oaxaca decomposition reduces to the classical Oaxaca-Blinder (1973) decomposition. In this case, the first term will be evaluated at the returns in the public sector, and the second at the mean set of private sector characteristics.

---

<sup>16</sup> Controlling for occupational affiliation in the wage regressions would eliminate inter-occupational wage gaps.

<sup>17</sup> Adding and subtracting the term  $(\bar{X}_1 - \bar{X}_0)' \hat{\beta}^*$  in Equation (3).

The study was conducted under two differing assumptions regarding the non-discriminatory wage coefficients  $\hat{\beta}^*$ . First, the estimated wage structure of the public sector was adopted as the non-discriminatory standard, i.e.  $\hat{\beta}^* = \hat{\beta}_1$  as per Oaxaca-Blinder (1973). These are the main results, reported in Tables 4-7. Second,  $\hat{\beta}^*$  is assumed to be equal to the estimated wage coefficients from a pooled regression that includes both public and private sectors, as per Neumark (1988), and Oaxaca and Ransom (1994)<sup>18</sup>. These results are reported in the appendix. Moreover, since the decomposition results for categorical predictors depend on the choice of the omitted "base" category (Jones 1983; Jones and Kelley 1984; Oaxaca and Ransom 1999; Nielsen 2000; Horrace and Oaxaca 2001; Gardeazabal and Ugidos 2004; Polavieja 2005; Yun 2005b), we estimate the model with the conventional dummy arrangement, but transform the coefficient vectors so the usually omitted coefficient for the base category is included and deviations from the grand mean are expressed. That keeps the result independent of the choice of base category (Suits 1984; Yun 2005).

### 3.3. *Selectivity-Corrected Wage Gap Decomposition*

Estimates of wage gaps are potentially afflicted by sample selection bias arising from self-selection into sector (Heckman 1979). This section explores the possible impact of this source of bias on the estimate of the public-private wage differential. In order to obtain selectivity-corrected decompositions, the selectivity effect as a whole was calculated. The corrected gross wage gap was then decomposed into an endowment effect, a return effect, and a selectivity effect. In other words, the decomposition in Equation 4 is generalized as follows<sup>19</sup>:

$$\ln(1 + G) = \underbrace{(\bar{X}_1 - \bar{X}_0)' \hat{\beta}^*}_E + \underbrace{\bar{X}'_1 (\hat{\beta}_1 - \hat{\beta}^*) + \bar{X}'_0 (\hat{\beta}^* - \hat{\beta}_0)}_R + \underbrace{(\hat{\theta}_1 \hat{\lambda}_1 - \hat{\theta}_0 \hat{\lambda}_0)}_{Selection}, \quad (5)$$

<sup>18</sup> We also use (a) pooled regression non-discriminatory wage coefficients because the source of the wage gap might stem from both positive discrimination of one sector and negative discrimination of the other, and the two often occur together (Jann, 2008). In our case, the positive "discrimination" is the extra funds allocated towards public sector employment, while the negative one is the effects of the second Intifada on the private sector.

<sup>19</sup> See Reimers (1983) and Neuman and Oaxaca (2004a) for more details on choosing the "correct" selectivity decomposition.

where  $\hat{\theta}$  is the coefficient of the Inverse Mills Ratio ( $\hat{\lambda}$ ) in the modified wage equation. The selectivity-corrected wage equations are estimated by the Heckman two-step procedure.

The probability of working in the public or private sector depends on the individual's profile and a number of factors may constitute the costs and benefits of employment in a particular sector, such as job security and working environment. Thus, the explanatory variables in the selection equation are: age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders in the same household, number of adults aged 70 or more in the household, and share of public sector employees as a proportion of total labour force in locality. The number of jobholders (Lokshin and Javanovic, 2001), number of adults aged 70 or more in a given household (Aslam and Kingdon, 2009), and share of public sector employees (Voinea and Mihaescu, 2012) are the additional variables included only in the selection equation. These variables affect a worker's decision to seek a secure job, in either the public or private sector, yet do not affect his or her wage. That is, they account for the importance of a secure job and its associated benefits in sector choice<sup>20</sup>.

## 4. Results

Table 3 summarizes the OLS results from estimating Equation (1) for each year of the PCBS labour force survey in two specifications both for the West Bank and Gaza. Specifications 1 and 3 include only the public dummy variable; the reported coefficient therefore measures the overall unadjusted (logarithmic) wage gap. In Specifications 2 and 4, in addition to the public dummy variable, all of the explanatory variables, as described in the previous section, are included, hence the reported coefficient measures the adjusted wage gap.

For most years in the West Bank and Gaza Strip, the estimated coefficients of  $\delta$  are highly significant at the 95% confidence level, and increase over time. It is apparent from Table 3 that introducing the productivity-related variables into the wage equations greatly reduces the

---

<sup>20</sup> A greater number of jobholders in the same household increases the probability of joining the private sector, without affecting the worker's wage. A higher share of public sector employees in a locality facilitates access to jobs in the public sector,



measured wage gap. This fact highlights the magnitude of the explained components of the wage gap.

The estimates for West Bank male workers suggest that in the earlier phases of the second Intifada, public sector male workers in the West Bank faced a wage penalty vis-à-vis their private sector counterparts, (controlling for differences in attributes or *ceteris paribus*), yet this effect disappears, then eventually reverses over time. From the beginning of the second Intifada, the PA systematically addressed the issue of a negative public sector wage gap through salary increases, such that by 2003 there is considerable evidence of an increase in the wage gap. In 1999, the public-private log wage differential was estimated at -0.10. However, by 2003 a positive public sector pay premium emerged. In 2005, the public sector pay premium rose significantly as another salary increase was implemented, (column 2). This increase may represent an effort to appeal to public sector workers in the run-up to the national elections, held in January 2006. Among male workers in the Gaza Strip, the public sector pay premium declined between the years 1998 and 1999, while the period 2000-2006 witnessed an increase (column 4).

Alongside the fiscal burden of providing the public sector with wage premiums in relation to the private sector and the equity issues it raises, this trend is also worrying for other reasons. Within an environment of high unemployment, particularly among the young, the trend creates an incentive for job seekers to “wait” for a secure job in the public sector, (or engage in civil strife to acquire it), rather than to strive to find employment in a highly fragmented and uncertain private sector. This may be described as *rent seeking*.

Although the simple empirical exercise can be revealing, the objective is to decompose the observed wage differential into two components: one is due to differences in individual worker characteristics, and the other is due to differences in returns to those characteristics. The econometric results for the Oaxaca decomposition are shown in Table 4, under the assumption that  $\hat{\beta}^* = \hat{\beta}_1$ . The analyses of Tables 5-7 are also performed under that assumption. For comparison, Tables A1-A4 report analyses made under the assumption that  $\hat{\beta}^* = \hat{\beta}_{pooled}$ , i.e.  $\hat{\beta}^*$  is equal to the estimated wage coefficients from a pooled regression that includes both public and private sectors. The results under the two assumptions are reported for the sake of

completeness, although the description of the data findings will be confined to the first assumption.

The figures in Table 4, column (G), indicate the mean (log) wage differential between the public and private sectors. It is the *sum* or *aggregate* of the endowment effect (E) and the returns effect (R). An interesting pattern emerges among West Bank male workers: during the period before the Intifada, between 1998 and 2000, the gross wage gap decreased. This decrease is explained by the returns effect decreasing during this period. During that time, the endowment effect increased. After the outbreak of the Intifada, the period between 2001 and 2006, the gross wage gap increased. During that time, both the returns effect and the endowment effect increased, with the returns effect responsible for the majority of the wage gap increase. In other words, the positive endowment impact in the public sector is offset by the large negative return effect in the early years, resulting in a *negative* wage differential or an overall wage penalty for working in the public sector by the year 2000. However, a rapid *rise* in the returns effect over time generates a *positive* wage gap in favour of the public sector from 2001. In 2006, both the returns effect and the endowment effect are positive and work in the same direction to produce a substantial wage premium for the public sector, about 48% of which is due to the endowment effect, and 52% to the so-called *return effect*. Note that throughout 1998-2006, (with the exception of 2006), the endowment effect constituted the majority of the gross wage gap's size.

Among male workers in Gaza, the gross wage gap experienced the same general trend as the West Bank – decreasing in 1998-2000 and increasing in 2001-2006. However, unlike for the West Bank, both the endowment effect and the returns effect decreased, in the period before the Intifada. As in the West Bank, after the outbreak of the Intifada, both effects increased. The decline in the endowment and returns effects in the public sector in the early years of the study, in turn result in a significant *decline* in the public-private wage differential. A rapid *rise* in the returns and endowment effects over time generates a concurrent *increase* in the wage gap from 2001. In 2006, both the returns effect and the endowment effect are positive and work in the same direction to produce a wage premium for the public sector, about 40% of which is due to the endowment effect and 60% to the returns effect. Unlike for the West bank, it was the returns effect that constituted the majority of the wage gap over the entire period, with the exception of 1999-2000.

The results reported so far do not take into account the possible selection bias caused when workers with different characteristics choose different sectors. Table 5 reports the selectivity-corrected decomposition results. We see that taking into account selectivity correction does not change the general trend of the gross wage gap, but does affect the trends of its components. The corrected gross wage gap,  $\hat{G}$ , still declines in the period before the outbreak of the Intifada, (1998-2000), and increases thereafter, (2001-2006). There are however some differences. In the West Bank, the gross wage gap decreases in the period before the outbreak of the Intifada (1998-2000). This is explained by a decrease in the returns effect and in the selection effect. During the same period, the endowment effect increases, but this effect is much smaller. After the outbreak of the Intifada (2001-2006), the gross wage gap increases. The majority of this increase is explained by an increase in the returns effect. The endowment effect also increases during the same period, but this effect is smaller. Throughout this period, the endowment effect is dominant in explaining the gross wage gap itself, (though not the change).

In Gaza, the gross wage gap also decreased in the years before the outbreak of the Intifada (1998-2000). During this period, the endowment effect increases, the returns effect decreases, and the returns effect is more dominant in determining the net change in the wage gap. The dominant component accounting for the gross wage gap itself remained the endowment effect. In the period after the outbreak of the Intifada (2001-2006), the gross wage gap increases. This increase is explained by an increase in the returns effect. The endowment effect decreased during this period. Except for 2001, the returns effect was dominant in explaining the gross wage gap itself.

The results show that in the pre-Intifada period, the wage gap between the public and private sectors narrowed in both the West Bank and Gaza. However, a sharp increase was seen at the end of the time period, as a result of the increase in public sector wages brought on by implementation of new civil service laws and government-mandated public wage increases, and a rapid decrease in private sector wages brought on by a sharp decrease in the number of Palestinians working in the Israeli labour market and low demand for employees in the local private sector<sup>21</sup>. This is not surprising given the disruptive influence the Intifada had on private-

---

<sup>21</sup> The number of Palestinian labourers in Israel falls from a high of 146,000 just prior to the start of the uprising, (116,000 from the West Bank and 30,000 from Gaza), to around 50,000 in Q4 of 2004; since then, the number of

sector jobs. Moreover, most of the increase in the wage gap, in both the West Bank and Gaza after the outbreak of the Intifada, stems from an increase in the “returns” to skill composition in the public sector, (unexplained effect), rather than a change in the skills composition of public sector workers (explained effect).

Palestinians working in Israel were generally less skilled, (and lower paid), workers in the private sector, or workers with fewer years of schooling, relative to the average for the Palestinian workforce (Miaari and Sauer, 2011). Unskilled workers, returning from Israel, compete with locals largely for private sector unskilled jobs in the Palestinian labour market, often winning them at the expense of unskilled local workers. Consequently, for wage earners who continued to be employed in the local market, or who had obtained jobs in the local market, the impact was exacerbated by the decline in average real private sector wages over much of the Intifada period, meaning a high gross public-private wage gap among unskilled workers during this period. Further, since the unskilled workers are homogenous, we would expect the endowment effect of the wage gap to be low. In turn, we would expect the unexplained component of the wage gap to follow the pattern of the overall gross pay gap.

Table 6 and Table 7 document the selectivity-corrected decomposition of the public-private wage gap for skilled and unskilled workers in the West Bank and Gaza respectively. For skilled workers in the West Bank, the gross wage gap decreased between 1998 and 2002, and increased from 2003 to 2006. The selectivity-corrected gap decreased between 1998 and 2000, and increased between 2001 and 2006. The endowment effect for these workers increased in 1998-2000, decreased in 2001, and increased in 2002-2006. The returns effect decreased in 1998-2000, increased in 2001, decreased again in 2002-2003, and increased in 2004-2006. The gross wage gap among unskilled workers in the West Bank decreased, (became more negative), from 1998 and 2000, and increased thereafter, reaching 0.24 in 2006. The selectivity-corrected gap's trend was similar, although more volatile. The endowment effect increased between 1998 and 1999, decreased between 2000 and 2001, and increased again from 2002 to 2006, while the returns effect decreased from 1998 to 1999, and increased over the period 2000-2006. The continued increase during the years of the Intifada is related to the entry of a large number of unskilled workers previously employed in the Israeli labour market, coinciding with a decline in

---

Palestinian workers in Israel and in the settlements has been relatively stable, fluctuating with the extent of closure imposed by Israel.

the local economic activity. An increase in unskilled labour supply, along with a general decrease in demand, resulted in a decrease in private sector wages unrelated to skills and other explained variables, thus increasing the returns effect.

In Gaza, the gross wage gap among skilled workers decreased between 1998 and 2001 and increased over the period 2002-2006. The selectivity-corrected wage gap was more volatile, but generally decreased from 1998 to 2002, and increased between 2003 and 2006. The return effect followed exactly the same pattern as the selectivity-corrected wage gap. The endowment effect steadily decreased over the period 1998-2006. The gross wage gap among unskilled workers in Gaza decreased between 1998 and 2001 and increased between 2002 and 2006. The selectivity corrected gap decreased between 1998 and 2000, and increased between 2001 and 2006. The endowment effect increased from 1998 to 2001, decreased in 2002 and increased again from 2003 to 2006. The returns effect decreased from 1998 to 1999, increased between 2000 and 2002, decreased in 2003, and increased again from 2004 to 2006.

As shown in Tables 6 and 7, for most of the period studied, especially the years after the outbreak of the Intifada, the returns effect is the dominant component of the gross wage gap for unskilled workers in both the West Bank and Gaza. Furthermore, the returns effect follows almost exactly the same trends as the selectivity-corrected wage gap for unskilled workers, in both the West Bank and Gaza<sup>22</sup>. Both of these results confirm our expectations regarding the effect on unskilled workers.

## **5. Estimating the wage gap at various percentiles**

The simple OLS analysis has thus far focused exclusively on the average level of earnings differentials between the public and private sectors. It provides little information on the extent to which this differential varies across the wage distribution. Empirical evidence from many countries suggests that the pay gap,  $\ln(1+G)$ , varies across the wage spectrum, and focusing on the mean could be misleading. Here, the dummy-variable approach is used in a quantile

---

<sup>22</sup> Note that there is also great similarity between the trends of the returns effect and those of the selectivity-corrected wage gap for skilled workers.

regression model, where the estimates of  $\beta$  and  $\delta$  are computed at various points along the wage distribution. A series of quantile regressions is estimated, taking the form<sup>23</sup>:

$$Q_\theta(\ln w_i | x_i) = x_i \beta_\theta + d_i \delta_\theta, \quad (6)$$

where  $\theta$  is an arbitrary percentile between (0,1);  $Q_\theta(\ln w_i | x_i)$  is the “ $\theta^{\text{th}}$ ” quantile function of wages conditional on observed characteristics or attributes specified by  $x_i$ ;  $\beta_\theta$  is the vector specifying the “returns” or “effects” of individual characteristics; and  $\delta_\theta$  captures the unexplained gap of log earnings, all at the  $\theta^{\text{th}}$  quantile. Within the QR framework, for any given  $\theta$  and a sample size of  $n$ ,  $\beta_\theta$  is derived as the argmin to

$$n^{-1} \sum_{i=1}^n \mu_\theta(\ln w_i - x_i \beta_\theta - d_i \delta_\theta), \quad (7)$$

where  $\mu_\theta$  is the “check” function and is defined as  $\mu_\theta = \theta \varepsilon$  if  $\varepsilon \geq 0$ , or  $\mu_\theta = (\theta - 1) \varepsilon$  if  $\varepsilon < 0$ .  $\varepsilon$  is the “error” term analogous to the OLS specification. The QR estimates of  $\beta$  at any given quantile can be interpreted as the “returns” to the attributes if  $Q_\theta(w_i | x_i)$  is assumed to be linear, (or a linear approximation). Moreover, to ensure the results are not driven by selection bias, we estimate the QR specifications using the Heckman selection correction method where the first step is a probit regression.

The usefulness of this technique can be seen from Table 8, which compares the OLS and quantile regression, (QR), estimates of the dummy variable, or unexplained variation, (or impact), of working in the public sector. While the OLS estimates only give information near the median or 50<sup>th</sup> percentile of the wage distribution, the QR technique also provides estimates at various points along the wage distribution.

Looking at the pay differential across the wage distribution, (Table 8), suggests a distinct trend over time: the wage premium (penalty) for the public sector varies across the distribution, being higher, (lower), at the lowest end of the wage distribution and decreasing, (increasing), along the wage distribution. It becomes negative at the top percentiles. By comparison, Azam

---

<sup>23</sup> See Bassett and Koenker (1982) for details on quantile regressions.

and Prakash (2015) found this to be positive for the entire wage distribution in India, but still smaller at the top quantiles, while Saha, Roy and Kar (2014) found the premium to be positive at the 25<sup>th</sup> quantile and negative at the 50<sup>th</sup> and 75<sup>th</sup> quantiles. Christofides and Michael (2013), found that the wage gap is negatively related to income quantiles.

West Bank workers in the lowest 5<sup>th</sup> percentile earn significant wage premiums in the public sector compared to their private sector counterparts. West Bank public sector workers in the 20<sup>th</sup> percentile also had a positive premium throughout the entire observed period, as did public sector workers at the median, (50<sup>th</sup> percentile), for the period 2001-2006. For the 75<sup>th</sup> percentile the premium was negative until 2001, and for the 95<sup>th</sup> percentile it was negative throughout 1998-2006 (except for 2004). Between 1998 and 2000, the wage gap becomes more negative for the higher percentiles, and more positive for the lower percentiles. Both of these trends reverse between 2000 and 2001. The wage premium increased for all groups, except for the 95<sup>th</sup> percentile, between 2001 and 2002, becoming less negative for high wage earners and more positive for those on lower wages. There was a decrease in the gap between 2003 and 2004, and then another increase during the period 2005-2006. For workers of the 95<sup>th</sup> percentile, the gap increased between 2001 and 2004 and decreased in the period 2005-2006. In Gaza, public sector workers in the 5<sup>th</sup>, 20<sup>th</sup> and 50<sup>th</sup> percentiles have a positive premium in 1998, while the others have a negative one. Between 1998 and 2000, the wage gap decreases for all groups except the 5<sup>th</sup> percentile, for whom it increases. All groups' wage gaps rapidly rise in 2001, and for all except the 95<sup>th</sup> percentile, this trend continues to 2002. For all groups, there is another decrease in 2003, and an increase in 2004-2006. In both the West Bank and Gaza, the wage gap sharply increased for lower wage workers during the years of the Intifada. This difference in the public sector premium, between high and low earning workers, mirrors the difference between high and low skilled workers reported in section 4.

## **6. Conclusion**

Currently, Palestinian public sector salaries absorb at least 85% of net revenues, crowding out virtually all other expenditure. The past five years have seen a series of wage increases in the public sector with the stated intention of bringing public sector salaries up to par with the private sector. This paper has measured the public-private wage differential in the West Bank and Gaza, and described its dynamics before and during the second Intifada using data from the PLFS of the

PCBS. The paper is the first systematic analysis of the public-private wage gap in the context of the economic costs of political instability. While the public sector has become increasingly attractive to workers, the private sector continues to be buffeted by exogenous shocks and beset by considerable uncertainty. Given that the public sector was seen as a “buffer” to absorb private sector job losses, due to increased closures and movement restrictions following the second Intifada, employment in it expanded as the political and economic situation worsened. Given the inseparability, and thus complexity, of the political and economic challenges facing the PA, and the need for objective analysis to inform policy, this paper offers an interpretation of the wage gap phenomenon in terms of the changing demographic composition of the Palestinian workforce over the study period. The paper has used Oaxaca-Blinder decomposition to estimate the explained and unexplained components of the wage gap.

The estimates for West Bank workers suggest that in the earlier years of the analysis, particularly in the pre-Intifada period, the public sector suffered a penalty in (log) hourly wages, but this penalty disappeared, and then reversed over time. In 1999, the public-private log wage differential was estimated at -0.10. However, from 2003 a clear public sector premium emerges, which rises significantly in 2005, just prior to the Palestine national elections. Among Gaza Strip workers, the public sector pay premium declined between 1998 and 1999, and then increased between 2000 and 2006. Moreover, most of the increase in the wage gap, in both the West Bank and Gaza, in the post-Intifada period stems from an increase in the “returns” to skills composition in the public sector (unexplained effect), rather than a change in the skills composition of public sector workers, (explained effect).

The massive influx of Palestinians, who had previously worked in the Israeli private sector before the second Intifada, into the PA local private sector, and a fall in local economic activity in the West Bank and Gaza, simultaneously reduced the demand for, and increased the supply of, Palestinian unskilled workers. Consequently, the wage for private sector employees decreased over the Intifada period. Moreover, public sector wages increased several times during the study period. The average PA wage increased at an annual rate of 3.5% during the years 2000-2003 (World Bank 2006b). Furthermore, public sector wages were further increased in the period 2004-2005, when the PA implemented its Civil Service Law (Niksic, Eddin and Stevens 2015; World Bank 2006b) and again in 2006 (Niksic, Eddin and Stevens 2015). Consequently,



although in the pre-Intifada period the wage gap between the public and private sectors narrowed, it has widened in the post-Intifada period.

Looking at the pay differential in the West Bank and Gaza across the wage distribution suggests a distinct trend over time: the wage premium, (penalty), for the public sector varies across the distribution, being higher, (lower), at the lowest end of the wage distribution and decreasing, (increasing), along the wage distribution. It becomes negative at the top percentiles. Over time, the lower quantiles of West Bank wage earners have continued to earn a significant (log) wage premium, and this has increased after the outbreak of the Intifada. On the other hand, those in the very top income percentiles, (95<sup>th</sup>), continue to face a wage penalty, which has attenuated over time. In Gaza, especially after the outbreak of the Intifada, the wage premium increased for both low and high wage earners in the public sector. Comparing 2000 to 2006, estimates indicate that public sector workers in the West Bank and Gaza in all percentiles showed a steady increase in the wage premium.

Besides the fiscal burden of providing the public sector with wage premiums vis-à-vis the private sector and the equity issues this raises, this trend is also worrying for other reasons. In an environment of high unemployment, particularly among the young, this trend creates an incentive for job seekers to “sit it out” and wait for a secure job in the public sector rather than become absorbed in a highly fragmented and uncertain private sector.

The results of this paper might suggest that the PA was using the expansion of the public sector and the wage increases to maintain its popular support. Further research is needed to test this hypothesis. Another interesting hypothesis is that security sector jobs are used to “buy out” various armed groups or potential dissidents.

## REFERENCES

- Adamchik, V. A., & Bedi, A. S. (2000). Wage differentials between the public and the private sectors: Evidence from an economy in transition. *Labour economics*, 7(2), 203-224.
- Aslam, M., & Kingdon, G. (2009). Public–private sector segmentation in the Pakistani labour market. *Journal of Asian economics*, 20(1), 34-49.
- Asmy, Hyder and B. Reilly (2005), “The Public Sector Pay Gap in Pakistan: A Quantile Regression Analysis”, PRUS Working Paper No. 33.
- Azam, M., & Prakash, N. (2015). "A Distributional Analysis of Public–Private Wage Differentials in India". *Labour*, 29(4), 394-414.
- Bargain, O., & Melly, B. (2008). *Public sector pay gap in France: new evidence using panel data*. Available at SSRN 1136232.
- Bassett, G. and R. Koenker (1978), “Regression Quantile”, *Econometrica* vol. 46 pp. 33-50.
- Bassett, G. and R. Koenker (1982), “An Empirical Quantile Function for Linear Models with i.i.d Errors”, *Journal of the American Statistical Association* 77, pp. 407-415.
- Blinder, A.S. (1973), “Wage Differential: Reduced Form and Structural Variables”, *Journal of Human Resources*, vol. 8, pp. 436-455.
- Cai, L., & Liu, A. Y. (2011). Public–private sector wage gap in Australia: variation along the distribution. *British Journal of Industrial Relations*, 49(2), 362-390.
- Calì, M., & Miaari, S. H. (forthcoming). "The labor market impact of mobility restrictions: Evidence from the West Bank", *Labour Economics*.
- Carlo, D. A., Lucifora, C., & Origo, F. (2005). *Public Sector Pay and Regional Competitiveness: A First Look at Regional Public-Private Wage Differentials in Italy* (No. 1828). *Institute for the Study of Labor (IZA)*.
- Christofides, L. N., & Michael, M. (2013). Exploring the public-private sector wage gap in European countries. *IZA Journal of European Labor Studies*, 2(1), 1-53.
- Depalo, D., & Giordano, R. (2011). The public-private pay gap: a robust quantile approach. *Bank of Italy Temi di Discussione (Working Paper) No*, 824.
- Cotton, J. 1988. On the decomposition of wage differentials. *Review of Economics and Statistics* 70: 236–243.
- Disney, R. and A. Gosling (2003), “A New Method for Estimating Public Sector Pay Premia: Evidence from Britain in the 1990s”. CEPR Discussion Paper No. 3787 (Feb).
- Disney, R. and A. Gosling (1998), “Does it Pay to Work in the Public Sector?” *Fiscal Studies*, 19, 4, pp. 347-374.
- Emilio, D., Ponczek, V., & Botelho, F. (2012). *Evaluating the wage differential between public and private sectors in Brazil*. *Revista de Economia Política*, 32(1), 72-86.

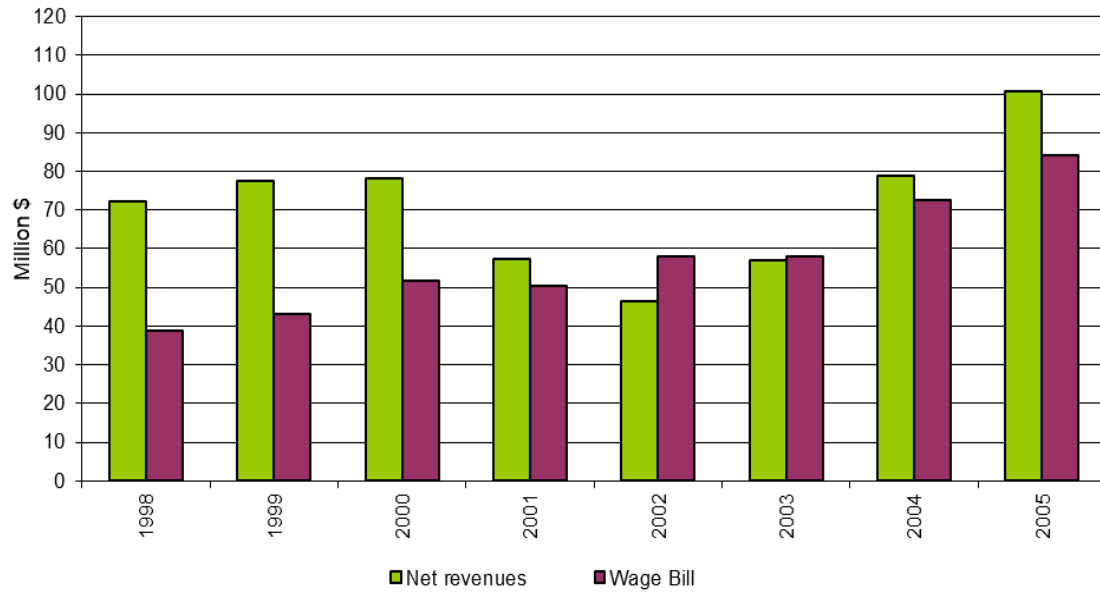
- Foley, P., & O'Callaghan, F. (2011). *Investigating the public-private wage gap in Ireland using data from the National Employment Survey 2007. Journal of the Statistical and Social Inquiry Society of Ireland*, 39, 23-52A.
- Gardeazabal, J., & Ugidos, A. (2004). More on identification in detailed wage decompositions. *The Review of Economics and Statistics*, 86(4), 1034-1036.
- Giordano, R., Depalo, D., Pereira, M. C., Eugène, B., Papapetrou, E., Perez, J. J., ... & Roter, M. (2011). *The public sector pay gap in a selection of euro area countries*.
- Glinskaya, Elena and Michael Lokshin (2005), "Wage Differential between the Public and Private Sectors in India", *Mimeo*, Washington DC: World Bank.
- Heckman, James J. (1979), "Sample Selection Bias as a Specification Error", *Econometrica*, 47(1), pp. 153-162.
- Horrace, W. C., & Oaxaca, R. L. (2001). Inter-industry wage differentials and the gender wage gap: An identification problem. *ILR Review*, 54(3), 611-618.
- Hyder, A. (2002). Public-Private Wage Differentials in Pakistan. *The Bangladesh Development Studies*, 28(4), 79-93.
- Hyder, A., & Reilly, B. (2005). The public and private sector pay gap in Pakistan: A quantile regression analysis. *The Pakistan Development Review*, 271-306.
- Jann, B. (2008). The Blinder-Oaxaca decomposition for linear regression models. *The Stata Journal*, 8(4), 453-479.
- Jones, F. L. (1983). On decomposing the wage gap: a critical comment on Blinder's method. *The Journal of Human Resources*, 18(1), 126-130.
- Jones, F. L., & Kelley, J. (1984). Decomposing differences between groups: A cautionary note on measuring discrimination. *Sociological Methods & Research*, 12(3), 323-343.
- Kristjan, Olari Lebing (2005), "Public-Private Sector Wage Differential in Estonia: Evidence from Quantile Regression", Faculty of Economic and Business Administration, University of Tartu.
- Lausev, J. (2014). What has 20 years of public-private pay gap literature told us? Eastern European transitioning vs. developed economies. *Journal of Economic Surveys*, 28(3), 516-550.
- Leping, K. O. (2005). Public-private sector wage differential in Estonia: evidence from quantile regression. *University of Tartu Faculty of Economics and Business Administration Working Paper*, (39).
- Leping, K. O. (2006). Evolution of the public-private sector wage differential during transition in Estonia. *Post-Communist Economies*, 18(4), 419-436.
- Lokshin, M. and B. Javanovic (2001), "Public-Private Sector Employment Choice and Wage Differential in Yugoslavia", *Mimeo*, Washington DC: World Bank.

- Lokshin, M. and B. Javanovic (2002), “Wage Differential Between the State and the Private Sector in Moscow”, *Mimeo*, Washington DC: World Bank.
- Lucifora, C. and D. Meurs (2004), “The Public Sector Pay Gap in France, Great Britain, and Italy”, *IZA Discussion Paper No. 1041*.
- Maczulskij, T. (2008). Public-private wage differentials for males: Evidence from Finland.
- Miaari, S.H. and Sauer, R.M. (2011). The labor market costs of conflict: Closures, foreign workers, and Palestinian employment and earnings. *Review of Economics of the Household*, 9: 129-148.
- Mizala, A., Romaguera, P., & Gallegos, S. (2011). Public–private wage gap in Latin America (1992–2007): A matching approach. *Labour Economics*, 18, S115-S131.
- Naser, Z. M. (2000), “Earnings Differential Between Public and Private Sectors in Pakistan”, *Pakistan Development Review*, vol.39, no.2. pp. 111-130.
- Neuman, Shoshana and Ronald L. Oaxaca (2004a), “Wage Decompositions with Selectivity-Corrected Wage Equations: A Methodological Note”, *Journal of Economic Inequality*, 2(1), pp. 3-10.
- Neumark, D. (1988) Employers’ Discriminatory Behavior and the Estimation of Wage Discrimination, *The Journal of Human Resources*, 23:279–295.
- Nielsen, H. S. (2000). Wage discrimination in Zambia: an extension of the Oaxaca-Blinder decomposition. *Applied Economics Letters*, 7(6), 405-408.
- Nielsen, H. S. and M. Rosholm (2001), “The Public-Private Sector Wage Gap in Zambia in the 1990s: A Quantile Regression Approach”, *Empirical Economics*, vol. 26: pp. 169-182.
- Niksic, O., Eddin, N. N., and Stevens, M. (2015). *Causes behind the Palestinian Authority’s Large Wage Bill and the Road to Its Sustainability*. World Bank Group.
- Oaxaca, Ronald L. (1973), “Male-Female Wage Differential in the Urban Labor Market”, *International Economic Review* 14(3), pp. 693-709.
- Oaxaca, R. L., & Ransom, M. R. (1999). Identification in detailed wage decompositions. *The Review of Economics and Statistics*, 81(1), 154-157.
- Oaxaca, Ronald L. and Michael R. Ransom (1994), “On Discrimination and the Decomposition of Wage Differentials”, *Journal of Econometrics*, 61(1), pp. 5-21.
- Panizza, U., & Qiang, C. Z. W. (2005). Public–private wage differential and gender gap in Latin America: Spoiled bureaucrats and exploited women?. *The Journal of Socio-Economics*, 34(6), 810-833.
- Papapetrou, E. (2006). The public-private sector pay differential in Greece. *Public Finance Review*, 34(4), 450-473.

- Polavieja, J. G. (2005). Task specificity and the gender wage gap: theoretical considerations and empirical analysis of the Spanish survey on wage structure. *European Sociological Review*, 21(2), 165-181.
- Poterba, J.M., Rueben, K.S., 1994. "The Distribution of Public Sector Wage Premia: New Evidence Using Quantile Regression Methods". *NBER Working Paper No. 4734* (May).
- Reimers, Cordelia W. (1983). "Labor Market Discrimination Against Hispanic and Black Men", *Review of Economics and Statistics*, 65(4), pp. 570-579.
- Saha, S., Roy, P., & Kar, S. (2014). Public and private sector jobs, unreported income and consumption gap in India: Evidence from micro-data. *The North American Journal of Economics and Finance*, 29, 285-300.
- Suits, D. B. (1984). Dummy variables: Mechanics v. interpretation. *Review of Economics and Statistics*, 66, 177-180.
- Terrell, K. (1993). Public-private wage differentials in Haiti Do public servants earn a rent?. *Journal of Development Economics*, 42(2), 293-314.
- Voinea, L., & Mihaescu, F. (2012). A contribution to the public-private wage inequality debate. *Economics of Transition*, 20(2), 315-337.
- World Bank (2003), "Twenty-Seven Months: Intifada, Closures, and Palestinian Economic Crisis: An Assessment", May, World Bank, Washington, D.C.
- World Bank (2006), *West Bank and Gaza Update*, a quarterly publication of the West Bank and Gaza Office, April, World Bank, Washington, D.C.
- World Bank (2006). *West Bank and Gaza Public Expenditure Review: From Crisis to Fiscal Independence*.
- Yun, M. S. (2005). A simple solution to the identification problem in detailed wage decompositions. *Economic Inquiry*, 43, 766-772.
- Yun, M. S. (2005). Normalized equation and decomposition analysis: computation and inference.

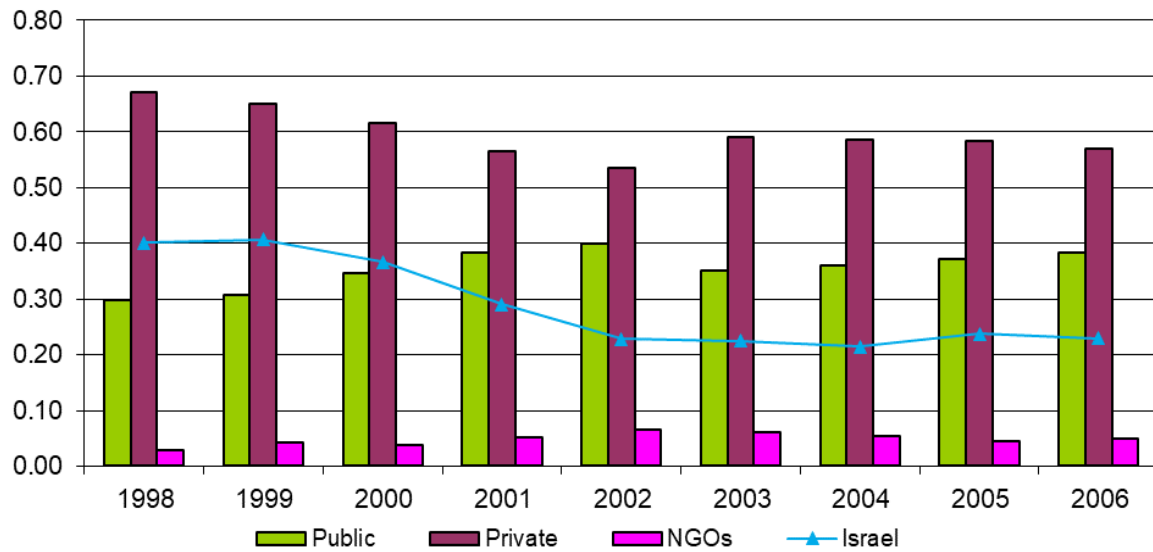
## Figures and tables

**Figure 1: Net Revenue and Wage Bill, 1998-2005**



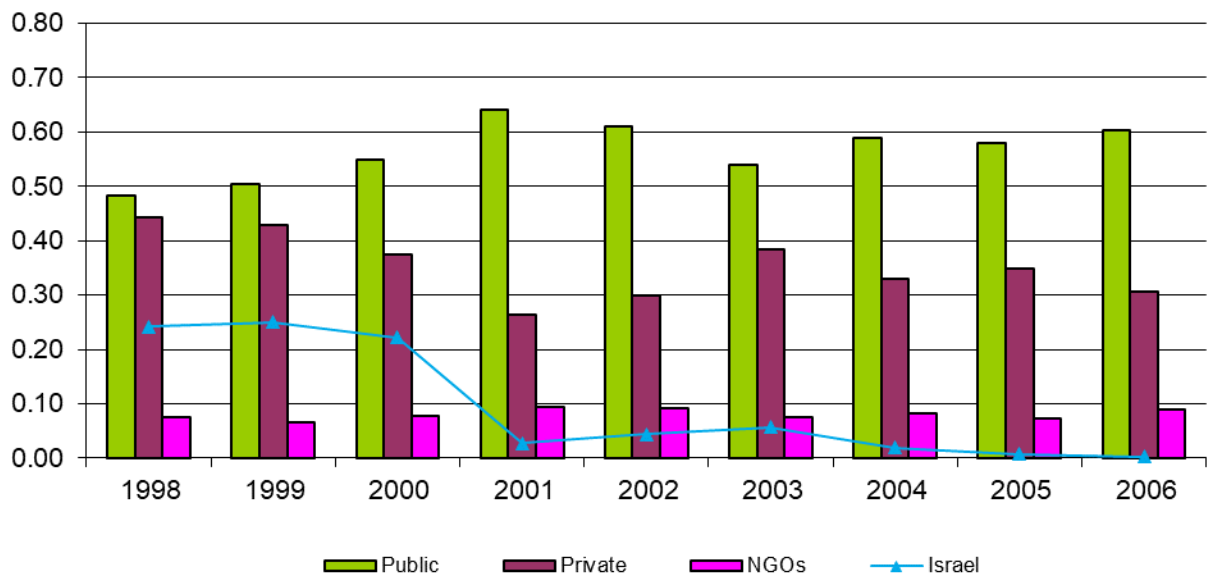
**Source:** International Monetary Fund data Files.

**Figure 2: Share of West Bank male employees across various sectors, 1998-2006**



**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS).

**Figure 3: Share of Gaza male employees across various sectors, 1998-2006**



**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS).



**TABLE 1: SUMMARY STATISTICS OF VARIABLES BY SECTOR: WEST BANK MALES, 1998-2006**

Year	Hourly Wage		Schooling		Age		Married		Tenure		City		Village		Full-time employment		N	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
1998	6.555	6.336	12.399	9.581	35.052	29.996	0.695	0.585	80.677	58.937	0.378	0.437	0.543	0.490	0.908	0.894	2,098	4,385
	(3.41)	(3.50)	(3.90)	(3.51)	(10.87)	(9.83)	(0.46)	(0.49)	(96.80)	(78.78)	(0.48)	(0.50)	(0.50)	(0.50)	(0.29)	(0.31)		
1999	6.967	6.809	12.499	9.598	35.289	30.279	0.734	0.597	139.394	116.169	0.401	0.404	0.447	0.451	0.919	0.901	2,208	4,393
	(3.40)	(3.49)	(3.91)	(3.51)	(10.37)	(9.81)	(0.44)	(0.49)	(166.50)	(166.71)	(0.49)	(0.49)	(0.50)	(0.50)	(0.27)	(0.30)		
2000	6.913	7.205	12.466	9.719	34.297	30.473	0.664	0.585	81.462	69.454	0.401	0.414	0.412	0.449	0.889	0.882	2,527	4,237
	(3.33)	(3.65)	(3.87)	(3.54)	(10.95)	(9.92)	(0.47)	(0.49)	(92.16)	(77.75)	(0.49)	(0.49)	(0.49)	(0.50)	(0.31)	(0.32)		
2001	6.490	6.604	12.420	9.858	35.424	30.809	0.695	0.595	85.572	67.891	0.376	0.430	0.430	0.432	0.954	0.899	2,112	2,954
	(2.77)	(3.15)	(3.74)	(3.38)	(10.87)	(9.68)	(0.46)	(0.49)	(91.19)	(75.76)	(0.48)	(0.50)	(0.50)	(0.50)	(0.21)	(0.30)		
2002	6.681	6.608	12.605	10.144	37.764	31.103	0.753	0.588	99.474	69.916	0.411	0.426	0.437	0.450	0.907	0.813	1,495	1,925
	(3.38)	(3.96)	(3.80)	(3.55)	(11.11)	(9.84)	(0.43)	(0.49)	(98.74)	(78.61)	(0.49)	(0.49)	(0.50)	(0.50)	(0.29)	(0.39)		
2003	6.643	6.028	12.755	10.058	37.625	31.698	0.749	0.589	98.574	70.825	0.355	0.416	0.515	0.447	0.910	0.862	1,791	2,497
	(3.42)	(3.61)	(3.73)	(3.55)	(10.93)	(10.31)	(0.43)	(0.49)	(94.64)	(82.06)	(0.48)	(0.49)	(0.50)	(0.50)	(0.29)	(0.35)		
2004	7.093	5.753	12.627	10.157	37.155	31.546	0.745	0.592	98.048	70.301	0.362	0.458	0.507	0.410	0.936	0.883	1,873	2,554
	(3.54)	(3.64)	(3.63)	(3.57)	(11.19)	(10.15)	(0.44)	(0.49)	(92.52)	(81.02)	(0.48)	(0.50)	(0.50)	(0.49)	(0.24)	(0.32)		
2005	6.929	5.520	12.442	10.069	35.828	31.902	0.733	0.619	92.021	69.595	0.344	0.436	0.508	0.428	0.927	0.849	2,357	3,510
	(3.33)	(3.44)	(3.59)	(3.45)	(10.74)	(10.20)	(0.44)	(0.49)	(85.24)	(78.45)	(0.48)	(0.50)	(0.50)	(0.49)	(0.26)	(0.36)		
2006	7.207	5.588	12.331	10.133	35.782	32.067	0.708	0.611	95.003	70.668	0.344	0.422	0.525	0.454	0.926	0.786	2,338	3,466
	(3.60)	(3.69)	(3.67)	(3.46)	(10.69)	(10.16)	(0.45)	(0.49)	(82.85)	(82.81)	(0.48)	(0.49)	(0.50)	(0.50)	(0.26)	(0.41)		
Total	6.844	6.315	12.492	9.877	35.878	30.994	0.716	0.596	96.050	74.664	0.374	0.426	0.480	0.448	0.919	0.867	18,799	29,921
	(3.37)	(3.60)	(3.76)	(3.51)	(10.90)	(10.00)	(0.45)	(0.49)	(103.81)	(97.96)	(0.48)	(0.49)	(0.50)	(0.50)	(0.27)	(0.34)		

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** The sample includes West Bank salaried, prime-aged (18-65) males. The Income variable is the real hourly wage in constant 1996 New Israeli Shekels (₪). In 1996, 1₪.00 equalled approximately \$US 0.33. The Married variable takes on the value 1 if the person is married, and 0 otherwise. The Tenure variable is in months. Standard deviations in parentheses.

**TABLE 2: SUMMARY STATISTICS OF VARIABLES BY SECTOR: GAZA MALES, 1998-2006**

	Hourly Wage		Schooling		Age		Married		Tenure		City		Village		Full-time employment		N	
<i>Year</i>	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
<b>1998</b>	6.474	3.737	12.564	8.894	34.517	29.364	0.755	0.683	62.604	38.635	0.436	0.558	0.144	0.143	0.891	0.947	1,781	1,513
	(3.44)	(1.99)	(3.72)	(3.64)	(11.03)	(9.59)	(0.43)	(0.47)	(79.68)	(49.34)	(0.50)	(0.50)	(0.35)	(0.35)	(0.31)	(0.22)		
<b>1999</b>	6.586	4.009	12.197	9.435	35.219	28.997	0.830	0.636	148.098	94.277	0.533	0.613	0.088	0.089	0.903	0.941	2,296	1,762
	(3.12)	(2.35)	(3.74)	(3.60)	(10.84)	(9.02)	(0.38)	(0.48)	(191.51)	(151.05)	(0.50)	(0.49)	(0.28)	(0.28)	(0.30)	(0.24)		
<b>2000</b>	6.780	4.353	12.416	9.439	35.135	30.046	0.808	0.640	62.169	44.866	0.547	0.590	0.067	0.094	0.878	0.894	2,354	1,428
	(3.12)	(2.69)	(3.60)	(3.88)	(10.58)	(10.02)	(0.39)	(0.48)	(59.91)	(57.98)	(0.50)	(0.49)	(0.25)	(0.29)	(0.33)	(0.31)		
<b>2001</b>	6.742	4.600	12.486	10.046	34.917	31.145	0.784	0.698	64.196	49.934	0.553	0.593	0.064	0.089	0.874	0.870	2,241	745
	(2.63)	(2.49)	(3.50)	(3.80)	(10.37)	(9.69)	(0.41)	(0.46)	(58.55)	(60.06)	(0.50)	(0.49)	(0.25)	(0.28)	(0.33)	(0.34)		
<b>2002</b>	6.771	4.294	12.587	9.946	36.178	31.068	0.825	0.684	71.197	42.714	0.542	0.614	0.068	0.090	0.875	0.850	1,903	849
	(2.97)	(3.09)	(3.53)	(3.77)	(10.37)	(9.89)	(0.38)	(0.47)	(68.22)	(52.33)	(0.50)	(0.49)	(0.25)	(0.29)	(0.33)	(0.36)		
<b>2003</b>	6.520	4.006	12.414	9.513	36.291	31.854	0.800	0.722	75.157	44.426	0.546	0.603	0.065	0.110	0.868	0.854	2,089	1,304
	(3.22)	(2.28)	(3.78)	(3.67)	(10.84)	(9.35)	(0.40)	(0.45)	(59.33)	(48.52)	(0.50)	(0.49)	(0.25)	(0.31)	(0.34)	(0.35)		
<b>2004</b>	6.733	3.973	12.554	9.948	36.214	32.362	0.781	0.708	80.825	47.424	0.520	0.599	0.077	0.096	0.890	0.925	2,186	1,141
	(3.23)	(2.64)	(3.71)	(3.81)	(10.75)	(9.76)	(0.41)	(0.45)	(64.26)	(62.32)	(0.50)	(0.49)	(0.27)	(0.29)	(0.31)	(0.26)		
<b>2005</b>	7.592	3.659	12.464	9.725	35.936	32.367	0.820	0.702	84.698	39.389	0.502	0.614	0.086	0.121	0.875	0.926	2,454	1,418
	(3.46)	(2.59)	(3.64)	(3.63)	(10.15)	(9.90)	(0.38)	(0.46)	(60.69)	(56.85)	(0.50)	(0.49)	(0.28)	(0.33)	(0.33)	(0.26)		
<b>2006</b>	8.370	3.566	12.474	9.996	35.390	33.185	0.807	0.724	87.886	37.895	0.494	0.575	0.099	0.137	0.862	0.861	2,450	1,193
	(3.70)	(2.53)	(3.53)	(3.56)	(10.14)	(10.39)	(0.39)	(0.45)	(65.27)	(55.60)	(0.50)	(0.49)	(0.30)	(0.34)	(0.35)	(0.35)		
<b>Total</b>	6.990	3.982	12.456	9.597	35.537	31.001	0.802	0.685	82.506	50.481	0.520	0.595	0.083	0.109	0.879	0.903	19,754	11,353
	(3.29)	(2.51)	(3.64)	(3.71)	(10.56)	(9.81)	(0.40)	(0.46)	(91.93)	(80.00)	(0.50)	(0.49)	(0.28)	(0.31)	(0.33)	(0.30)		

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** The sample includes Gaza salaried, prime-aged (18-65) males. The Income variable is the real hourly-wage in constant 1996 New Israeli Shekels (₪). In 1996, 1₪.00 equalled approximately \$US 0.33. The Married variable takes on the value 1 if the person is married and 0 otherwise. The Tenure variable is in months. Standard deviations in parentheses.

**TABLE 3: ESTIMATED UNADJUSTED AND  
ADJUSTED WAGE DIFFERENTIAL**

	<b>West Bank Males</b>		<b>Gaza Males</b>	
<i>Year</i>	(1)	(2)	(3)	(4)
<b>1998</b>	0.0648*** (0.0128)	-0.0544*** (0.0137)	0.5462*** (0.0156)	0.2655*** (0.0187)
<b>1999</b>	0.0385*** (0.0123)	-0.1028*** (0.0139)	0.5292*** (0.0140)	0.2269*** (0.0187)
<b>2000</b>	-0.0156 (0.0117)	-0.0965*** (0.0128)	0.4906*** (0.0156)	0.2380*** (0.0173)
<b>2001</b>	0.0137 (0.0123)	-0.0341** (0.0135)	0.4332*** (0.0186)	0.2367*** (0.0176)
<b>2002</b>	0.0760*** (0.0183)	-0.0296 (0.0201)	0.5410*** (0.0205)	0.2742*** (0.0233)
<b>2003</b>	0.1487*** (0.0159)	0.0207 (0.0164)	0.5049*** (0.0154)	0.2604*** (0.0187)
<b>2004</b>	0.2764*** (0.0154)	0.0883*** (0.0148)	0.5837*** (0.0182)	0.3005*** (0.0196)
<b>2005</b>	0.2870*** (0.0133)	0.1252*** (0.0133)	0.7904*** (0.0158)	0.4266*** (0.0180)
<b>2006</b>	0.3310*** (0.0141)	0.1944*** (0.0154)	0.9182*** (0.0174)	0.5515*** (0.0210)

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** Samples include salaried, prime-aged (18-65) males. The reported gap is measured by the coefficient of sector dummy variables (that take on the value 1 if the worker is employed in the public sector, and 0 if employed in the private sector) in a pooled wage regression that includes both public and private sector employees. The dependent variable in all specifications is the log of hourly wage. Specifications 1 and 3 include only public dummy variable. Specifications 2 and 4 include public dummy variable, age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE 4: DECOMPOSING THE WAGE DIFFERENTIAL OVER TIME:**  
 $\beta^* = \beta_{public}$

Year	West Bank males			Gaza males		
	G	E	R	G	E	R
<b>1998</b>	0.0664*** (0.0129)	0.1405*** (0.0165)	-0.0741*** (0.0178)	0.5483*** (0.0156)	0.2587*** (0.0191)	0.2896*** (0.0203)
<b>1999</b>	0.0336*** (0.0129)	0.1772*** (0.0174)	-0.1436*** (0.0182)	0.5248*** (0.0142)	0.2768*** (0.0186)	0.2479*** (0.0202)
<b>2000</b>	0.0277** (0.0120)	0.1878*** (0.0153)	-0.1602*** (0.0161)	0.4911*** (0.0156)	0.2493*** (0.0160)	0.2418*** (0.0176)
<b>2001</b>	0.0318** (0.0125)	0.1250*** (0.0153)	-0.0932*** (0.0168)	0.4333*** (0.0188)	0.1423*** (0.0146)	0.2910*** (0.0183)
<b>2002</b>	0.0868*** (0.0187)	0.1502*** (0.0220)	-0.0634*** (0.0241)	0.5410*** (0.0207)	0.1881*** (0.0177)	0.3529*** (0.0222)
<b>2003</b>	0.1490*** (0.0160)	0.1725*** (0.0204)	-0.0235 (0.0220)	0.5049*** (0.0155)	0.2152*** (0.0180)	0.2897*** (0.0200)
<b>2004</b>	0.2776*** (0.0155)	0.2118*** (0.0190)	0.0658*** (0.0202)	0.5832*** (0.0183)	0.2244*** (0.0192)	0.3587*** (0.0210)
<b>2005</b>	0.2884*** (0.0134)	0.1815*** (0.0158)	0.1069*** (0.0171)	0.7902*** (0.0158)	0.3445*** (0.0154)	0.4457*** (0.0164)
<b>2006</b>	0.3296*** (0.0142)	0.1575*** (0.0197)	0.1721*** (0.0214)	0.9182*** (0.0175)	0.3638*** (0.0169)	0.5545*** (0.0194)

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. G refers to the gross wage gap (or  $\ln(1+G)$ ), E refers to the explained component of the wage gap (endowment effect), and R refers to the unexplained (return effect) component of the wage gap. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE 5: SELECTIVITY-CORRECTED WAGE GAP DECOMPOSITION:  $\beta^*=\beta_{public}$**

West Bank males						Gaza males				
Year	G	E	R	Selection	$\hat{G}$	G	E	R	Selection	$\hat{G}$
1998	0.0656*** (0.0129)	0.1690*** (0.0409)	-0.1284* (0.0742)	0.025	0.041	0.5483*** (0.0156)	0.4576*** (0.0845)	-0.0070 (0.1298)	0.098	0.451
1999	0.0291** (0.0129)	0.2310*** (0.0497)	-0.2703*** (0.0833)	0.068	-0.039	0.5248*** (0.0142)	0.5803*** (0.0707)	-0.1866* (0.1041)	0.131	0.394
2000	0.0277** (0.0120)	0.1747*** (0.0357)	-0.1375** (0.0623)	-0.009	0.037	0.4911*** (0.0156)	0.4926*** (0.0630)	-0.1214 (0.1101)	0.120	0.371
2001	0.0318** (0.0125)	0.1009** (0.0430)	-0.0783 (0.0750)	0.009	0.023	0.4333*** (0.0188)	0.3792*** (0.0510)	0.3609** (0.1409)	-0.307	0.740
2002	0.0868*** (0.0187)	0.1778*** (0.0520)	0.0489 (0.0890)	-0.140	0.227	0.5410*** (0.0207)	-0.0305 (0.0575)	0.7707*** (0.1351)	-0.199	0.740
2003	0.1490*** (0.0160)	0.1513*** (0.0461)	0.0525 (0.0827)	-0.055	0.204	0.5049*** (0.0155)	0.1822*** (0.0539)	0.3956*** (0.0952)	-0.073	0.578
2004	0.2776*** (0.0155)	0.2406*** (0.0370)	0.0198 (0.0685)	0.017	0.260	0.5832*** (0.0183)	0.1386** (0.0585)	0.5440*** (0.1038)	-0.099	0.683
2005	0.2884*** (0.0134)	0.2290*** (0.0385)	0.0007 (0.0722)	0.059	0.230	0.7902*** (0.0159)	0.2055*** (0.0429)	0.6968*** (0.0779)	-0.112	0.902
2006	0.3296*** (0.0142)	0.2066*** (0.0527)	0.0654 (0.0925)	0.058	0.272	0.9182*** (0.0175)	0.2136*** (0.0457)	0.8617*** (0.1084)	-0.157	1.075

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** Regressions are estimated using the Heckman selection correction method where the first step is a probit regression. G refers to the gross wage gap (or  $\ln(1+G)$ ), E refers to the explained component of the wage gap (endowment effect), R refers to the unexplained (return effect) component of the wage gap. Selection is the component of the wage gap attributed to self-selection into Sector, and  $\hat{G}$  is the selectivity-corrected gross wage gap. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. The selection equation includes as explanatory variables , age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE 6: SELECTIVITY-CORRECTED WAGE GAP DECOMPOSITION BY SKILL GROUP: WEST BANK,  $\beta^*=\beta_{public}$** 

West Bank males										
Year	Skilled					Unskilled				
	G	E	R	Selection	$\hat{G}$	G	E	R	Selection	$\hat{G}$
<b>1998</b>	0.0653*** (0.0246)	0.0763 (0.0620)	0.1668 (0.1169)	0.011	-0.085	-0.1022*** (0.0151)	0.0244 (0.0423)	-0.2219** (0.0943)	-0.216	0.097
<b>1999</b>	0.0288 (0.0233)	0.1283** (0.0593)	-0.0340 (0.1260)	0.092	-0.136	-0.1728*** (0.0152)	0.0627 (0.0562)	-0.3806*** (0.1076)	0.016	-0.210
<b>2000</b>	0.0294 (0.0229)	0.1586*** (0.0389)	-0.1622* (0.0970)	0.086	-0.067	-0.1654*** (0.0141)	0.0322 (0.0431)	-0.2308*** (0.0848)	0.022	-0.214
<b>2001</b>	0.0065 (0.0241)	-0.0156 (0.0626)	0.1777 (0.1446)	-0.116	0.084	-0.1116*** (0.0151)	-0.0051 (0.0474)	-0.2060** (0.0940)	0.004	-0.116
<b>2002</b>	-0.0732** (0.0342)	0.0230 (0.0620)	0.1514 (0.1425)	0.122	-0.247	-0.0531** (0.0221)	0.0494 (0.0654)	-0.0988 (0.1214)	-0.072	0.021
<b>2003</b>	-0.0267 (0.0307)	0.0175 (0.0844)	-0.0003 (0.1717)	-0.044	0.012	0.0146 (0.0188)	0.0703 (0.0452)	-0.1104 (0.0919)	0.053	-0.018
<b>2004</b>	0.0770*** (0.0297)	0.0355 (0.0443)	0.1840 (0.1275)	-0.027	0.032	0.1408*** (0.0171)	0.1393*** (0.0416)	-0.1592* (0.0835)	0.094	0.060
<b>2005</b>	0.1417*** (0.0280)	0.0583 (0.0476)	0.4427*** (0.1641)	0.000	0.161	0.1537*** (0.0144)	0.1147*** (0.0415)	-0.1286 (0.0821)	0.069	0.092
<b>2006</b>	0.1946*** (0.0293)	0.1047 (0.0753)	0.2054 (0.1992)	0.135	0.070	0.2415*** (0.0162)	0.1559*** (0.0597)	-0.0527 (0.1050)	0.186	0.051

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** A skilled worker is defined as one with more than 12 years of schooling. Regressions are estimated using the Heckman selection correction method where the first step is a probit regression. G refers to the gross wage gap (or  $\ln(1+G)$ ), E refers to the explained component of the wage gap (endowment effect), R refers to the unexplained (return effect) component of the wage gap. Selection is the component of the wage gap attributed to self-selection into Sector, and  $\hat{G}$  is the selectivity-corrected gross wage gap. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. The selection equation includes as explanatory variables age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE 7: SELECTIVITY-CORRECTED WAGE GAP DECOMPOSITION BY SKILL GROUP: GAZA,  $\beta^*=\beta_{public}$**

Gaza males										
Skilled						Unskilled				
Year	G	E	R	Selection	$\hat{G}$	G	E	R	Selection	$\hat{G}$
1998	0.4620*** (0.0513)	0.2317** (0.0954)	0.6233 (0.4890)	0.183	0.038	0.4094*** (0.0160)	0.2115** (0.0988)	0.0477 (0.1585)	-0.089	0.495
1999	0.4466*** (0.0433)	0.2588*** (0.0886)	0.3716 (0.3304)	0.314	0.042	0.4136*** (0.0143)	0.4284*** (0.0774)	-0.1747 (0.1153)	-0.020	0.436
2000	0.3236*** (0.0430)	0.2088*** (0.0521)	0.8365** (0.3592)	-0.053	0.377	0.3883*** (0.0157)	0.3177*** (0.0721)	-0.1073 (0.1214)	0.087	0.310
2001	0.2357*** (0.0427)	0.1411*** (0.0420)	0.0134 (0.3418)	0.509	-0.294	0.3737*** (0.0188)	0.3595*** (0.0618)	0.1368 (0.1375)	-0.003	0.441
2002	0.2492*** (0.0611)	0.0983** (0.0460)	-0.8875* (0.5141)	0.780	-0.567	0.4722*** (0.0194)	-0.2088*** (0.0645)	0.7112*** (0.1211)	-0.069	0.571
2003	0.3297*** (0.0486)	0.1111* (0.0596)	0.3257 (0.3546)	-0.176	0.510	0.4032*** (0.0153)	0.1448*** (0.0551)	0.2179** (0.0954)	0.043	0.404
2004	0.2091*** (0.0450)	0.0757** (0.0331)	0.5193 (0.3840)	0.198	-0.013	0.5188*** (0.0172)	0.1817*** (0.0659)	0.3304*** (0.1018)	0.038	0.483
2005	0.4445*** (0.0435)	0.0984** (0.0396)	0.6139*** (0.2236)	0.012	0.401	0.7209*** (0.0150)	0.2293*** (0.0515)	0.4659*** (0.0870)	0.052	0.671
2006	0.6790*** (0.0474)	-0.0739 (0.0619)	1.0955*** (0.2273)	-0.252	0.856	0.8574*** (0.0176)	0.3445*** (0.0580)	0.6376*** (0.1091)	0.136	0.729

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** A skilled worker is defined as one with more than 12 years of schooling. Regressions are estimated using Heckman selection correction method where the first step is a probit regression. G refers to the gross wage gap (or  $\ln(1+G)$ ), E refers to the explained component of the wage gap (endowment effect), R refers to the unexplained (return effect) component of the wage gap. Selection is the component of the wage gap attributed to self-selection into Sector, and  $\hat{G}$  is the selectivity-corrected gross wage gap. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. The selection equation includes as explanatory variables , age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE 8: SELECTIVITY-CORRECTED QUANTILE REGRESSION RESULTS**

Quantile Regression wage differentials at various percentiles												
Year	West Bank males						Gaza males					
	OLS Wage Differential	5 <sup>th</sup>	20 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	95 <sup>th</sup>	OLS Wage Differential	5 <sup>th</sup>	20 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	95 <sup>th</sup>
1998	-0.0544*** (0.0137)	0.1358 (0.1355)	0.0838* (0.0503)	-0.0284 (0.0647)	-0.0825 (0.0865)	-0.0621 (0.1712)	0.2655*** (0.0187)	0.0008 (0.4103)	0.3812** (0.1713)	0.2617** (0.1101)	-0.1585 (0.1432)	-0.0759 (0.3757)
1999	-0.1028*** (0.0139)	0.1602 (0.1653)	-0.0106 (0.0612)	0.0231 (0.0552)	-0.1090** (0.0468)	-0.5158*** (0.1662)	0.2269*** (0.0187)	0.0350 (0.2199)	0.1630 (0.1083)	-0.0521 (0.0976)	-0.2419*** (0.0851)	-0.1279 (0.2068)
2000	-0.0965*** (0.0128)	0.5629*** (0.1644)	0.2565*** (0.0563)	-0.0260 (0.0403)	-0.1392*** (0.0484)	-0.4870*** (0.0865)	0.2380*** (0.0173)	0.0687 (0.2360)	-0.0392 (0.1190)	-0.1375 (0.1233)	-0.2434* (0.1324)	-0.0971 (0.1965)
2001	-0.0341** (0.0135)	0.1463 (0.1863)	0.2145*** (0.0722)	0.0771 (0.0784)	-0.1280 (0.1144)	-0.2939** (0.1200)	0.2367*** (0.0176)	0.6550*** (0.1987)	0.4137*** (0.1509)	0.4636*** (0.1154)	0.3330** (0.1638)	0.5337** (0.2654)
2002	-0.0296 (0.0201)	0.4545* (0.2375)	0.4999*** (0.1218)	0.4361*** (0.0874)	0.0799 (0.0874)	-0.2831* (0.1518)	0.2742*** (0.0233)	1.0119* (0.6138)	0.9175*** (0.2148)	0.7921*** (0.1155)	0.7881*** (0.0796)	0.4774* (0.2525)
2003	0.0207 (0.0164)	0.2289 (0.1906)	0.2553** (0.1216)	0.2409*** (0.0591)	0.0662 (0.0657)	-0.2039 (0.1438)	0.2604*** (0.0187)	0.4979** (0.2262)	0.3197** (0.1364)	0.3769*** (0.0979)	0.4816*** (0.1063)	0.3170* (0.1741)
2004	0.0883*** (0.0148)	0.0082 (0.2350)	0.0372 (0.0884)	0.0892* (0.0529)	-0.0049 (0.0489)	0.1334 (0.1788)	0.3005*** (0.0196)	0.2681 (0.1978)	0.3541** (0.1578)	0.5604*** (0.0900)	0.5677*** (0.1148)	0.2195 (0.2266)
2005	0.1252*** (0.0133)	0.2374 (0.1547)	0.2318** (0.1004)	0.1086 (0.0749)	0.0225 (0.0775)	-0.0349 (0.1174)	0.4266*** (0.0180)	0.2904* (0.1705)	0.5824*** (0.0836)	0.7133*** (0.0708)	0.6733*** (0.0812)	0.3793*** (0.1265)
2006	0.1944*** (0.0154)	0.3370* (0.1820)	0.3497*** (0.0937)	0.2833*** (0.0831)	0.1295 (0.0797)	-0.1802 (0.1132)	0.5515*** (0.0210)	0.4365** (0.1893)	0.5400*** (0.1058)	0.7678*** (0.0872)	0.7785*** (0.1112)	0.4352** (0.1835)

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** Regressions are estimated using the Heckman selection correction method where the first step is a probit regression. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects and a sector dummy variable (that takes on the value 1 if the worker is employed in the public sector, and 0 if employed in the private sector). The selection equation includes as explanatory variables , age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.



## Appendix: Additional Tables

**TABLE A1: DECOMPOSING THE WAGE DIFFERENTIAL OVER TIME:**

$\beta^* = \beta_{pooled}$

<i>Year</i>	West Bank males			Gaza males		
	<i>G</i>	<i>E</i>	<i>R</i>	<i>G</i>	<i>E</i>	<i>R</i>
<b>1998</b>	0.0664*** (0.0129)	0.1208*** (0.0121)	-0.0544*** (0.0137)	0.5483*** (0.0156)	0.2828*** (0.0170)	0.2655*** (0.0186)
<b>1999</b>	0.0336*** (0.0128)	0.1364*** (0.0124)	-0.1028*** (0.0139)	0.5248*** (0.0142)	0.2979*** (0.0165)	0.2269*** (0.0186)
<b>2000</b>	0.0277** (0.0120)	0.1241*** (0.0116)	-0.0965*** (0.0128)	0.4911*** (0.0156)	0.2531*** (0.0153)	0.2380*** (0.0171)
<b>2001</b>	0.0318** (0.0125)	0.0659*** (0.0118)	-0.0341** (0.0134)	0.4333*** (0.0186)	0.1966*** (0.0150)	0.2367*** (0.0171)
<b>2002</b>	0.0868*** (0.0186)	0.1164*** (0.0179)	-0.0296 (0.0199)	0.5410*** (0.0205)	0.2669*** (0.0187)	0.2742*** (0.0225)
<b>2003</b>	0.1490*** (0.0160)	0.1283*** (0.0149)	0.0207 (0.0161)	0.5049*** (0.0154)	0.2445*** (0.0156)	0.2604*** (0.0185)
<b>2004</b>	0.2776*** (0.0154)	0.1893*** (0.0142)	0.0883*** (0.0146)	0.5832*** (0.0182)	0.2826*** (0.0171)	0.3005*** (0.0188)
<b>2005</b>	0.2884*** (0.0133)	0.1632*** (0.0122)	0.1252*** (0.0131)	0.7902*** (0.0158)	0.3636*** (0.0156)	0.4266*** (0.0173)
<b>2006</b>	0.3296*** (0.0141)	0.1351*** (0.0133)	0.1944*** (0.0152)	0.9182*** (0.0174)	0.3667*** (0.0166)	0.5515*** (0.0204)

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are: age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. *G* refers to the gross wage gap (or  $\ln(1+G)$ ), *E* refers to the explained component of the wage gap (endowment effect), and *R* refers to the unexplained (return effect) component of the wage gap. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE A2: SELECTIVITY-CORRECTED WAGE GAP DECOMPOSITION:  $\beta^* = \beta_{pooled}$**

West Bank males						Gaza males				
<i>Year</i>	<i>G</i>	<i>E</i>	<i>R</i>	<i>Selection</i>	<i>Ĝ</i>	<i>G</i>	<i>E</i>	<i>R</i>	<i>Selection</i>	<i>Ĝ</i>
<b>1998</b>	0.0656*** (0.0129)	0.1100*** (0.0259)	-0.0694 (0.0581)	0.025	0.041	0.5483*** (0.0156)	0.3304*** (0.0675)	0.1202 (0.1299)	0.098	0.451
<b>1999</b>	0.0291** (0.0128)	0.1139*** (0.0279)	-0.1531** (0.0597)	0.068	-0.039	0.5248*** (0.0142)	0.4475*** (0.0613)	-0.0538 (0.1092)	0.131	0.394
<b>2000</b>	0.0277** (0.0120)	0.0895*** (0.0239)	-0.0523 (0.0516)	-0.009	0.037	0.4911*** (0.0156)	0.4020*** (0.0555)	-0.0308 (0.1244)	0.120	0.371
<b>2001</b>	0.0318** (0.0125)	0.0534* (0.0285)	-0.0308 (0.0620)	0.009	0.023	0.4333*** (0.0186)	0.0533 (0.0395)	0.6868*** (0.1452)	-0.307	0.740
<b>2002</b>	0.0868*** (0.0186)	-0.0350 (0.0371)	0.2617*** (0.0800)	-0.140	0.227	0.5410*** (0.0205)	-0.0399 (0.0695)	0.7800*** (0.1846)	-0.199	0.740
<b>2003</b>	0.1490*** (0.0160)	0.0547* (0.0294)	0.1491** (0.0667)	-0.055	0.204	0.5049*** (0.0154)	0.1524*** (0.0422)	0.4254*** (0.0976)	-0.073	0.578
<b>2004</b>	0.2776*** (0.0154)	0.1959*** (0.0267)	0.0645 (0.0624)	0.017	0.260	0.5832*** (0.0182)	0.1889*** (0.0442)	0.4937*** (0.1072)	-0.099	0.683
<b>2005</b>	0.2884*** (0.0133)	0.1625*** (0.0249)	0.0671 (0.0594)	0.059	0.230	0.7902*** (0.0158)	0.3090*** (0.0406)	0.5933*** (0.0870)	-0.112	0.902
<b>2006</b>	0.3296*** (0.0141)	0.1137*** (0.0307)	0.1583** (0.0728)	0.058	0.272	0.9182*** (0.0174)	0.3188*** (0.0456)	0.7565*** (0.1279)	-0.157	1.075

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** Regressions are estimated using the Heckman selection correction method where the first step is a probit regression. *G* refers to the gross wage gap (or  $\ln(1+G)$ ), *E* refers to the explained component of the wage gap (endowment effect), *R* refers to the unexplained (return effect) component of the wage gap. *Selection* is the component of the wage gap attributed to self-selection into Sector, and *Ĝ* is the selectivity-corrected gross wage gap. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. The selection equation includes as explanatory variables age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE A3: SELECTIVITY-CORRECTED WAGE GAP DECOMPOSITION BY SKILL GROUP: WEST BANK,  $\beta^*=\beta_{pooled}$**

West Bank males										
Skilled						Unskilled				
Year	G	E	R	Selection	$\hat{G}$	G	E	R	Selection	$\hat{G}$
1998	0.0653*** (0.0244)	0.0389 (0.0377)	0.2041* (0.1143)	0.011	-0.085	-0.1022*** (0.0151)	-0.0071 (0.0250)	-0.1905*** (0.0680)	-0.216	0.097
1999	0.0288 (0.0230)	0.0954** (0.0403)	-0.0012 (0.1212)	0.092	-0.136	-0.1728*** (0.0151)	0.0096 (0.0310)	-0.3275*** (0.0773)	0.016	-0.210
2000	0.0294 (0.0227)	0.1222*** (0.0307)	-0.1257 (0.1079)	0.086	-0.067	-0.1654*** (0.0140)	-0.0949*** (0.0251)	-0.1036* (0.0620)	0.022	-0.214
2001	0.0065 (0.0237)	0.1081** (0.0440)	0.0540 (0.1544)	-0.116	0.084	-0.1116*** (0.0150)	-0.0943*** (0.0282)	-0.1168 (0.0714)	0.004	-0.116
2002	-0.0732** (0.0336)	0.0690 (0.0469)	0.1053 (0.1417)	0.122	-0.247	-0.0531** (0.0219)	-0.2381*** (0.0422)	0.1887* (0.1040)	-0.072	0.021
2003	-0.0267 (0.0303)	0.0786* (0.0439)	-0.0613 (0.1520)	-0.044	0.012	0.0146 (0.0187)	-0.1217*** (0.0299)	0.0815 (0.0728)	0.053	-0.018
2004	0.0770*** (0.0293)	0.0790** (0.0379)	0.1405 (0.1533)	-0.027	0.032	0.1408*** (0.0170)	0.0286 (0.0282)	-0.0485 (0.0736)	0.094	0.060
2005	0.1417*** (0.0277)	0.1582*** (0.0353)	0.3429** (0.1528)	0.000	0.161	0.1537*** (0.0143)	-0.0382 (0.0257)	0.0243 (0.0638)	0.069	0.092
2006	0.1946*** (0.0290)	0.0900* (0.0468)	0.2201 (0.1988)	0.135	0.070	0.2415*** (0.0161)	-0.0559* (0.0330)	0.1592** (0.0769)	0.186	0.051

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** A skilled worker is defined as one with more than 12 years of schooling. Regressions are estimated using the Heckman selection correction method where the first step is a probit regression. G refers to the gross wage gap (or  $\ln(1+G)$ ), E refers to the explained component of the wage gap (endowment effect), R refers to the unexplained (return effect) component of the wage gap. Selection is the component of the wage gap attributed to self-selection into Sector, and  $\hat{G}$  is the selectivity-corrected gross wage gap. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. The selection equation includes as explanatory variables age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.

**TABLE A4: SELECTIVITY-CORRECTED WAGE GAP DECOMPOSITION BY SKILL GROUP: GAZA,  $\beta^* = \beta_{pooled}$**

Gaza males										
Skilled						Unskilled				
Year	G	E	R	Selection	$\hat{G}$	G	E	R	Selection	$\hat{G}$
1998	0.4620*** (0.0499)	0.2710*** (0.0906)	0.5839 (0.5121)	0.183	0.038	0.4094*** (0.0159)	0.1997*** (0.0759)	0.0595 (0.1435)	-0.089	0.495
1999	0.4466*** (0.0423)	0.2903*** (0.0679)	0.3401 (0.3801)	0.314	0.042	0.4136*** (0.0142)	0.3391*** (0.0698)	-0.0854 (0.1225)	-0.020	0.436
2000	0.3236*** (0.0420)	0.1817*** (0.0447)	0.8636** (0.3473)	-0.053	0.377	0.3883*** (0.0156)	0.2675*** (0.0639)	-0.0571 (0.1356)	0.087	0.310
2001	0.2357*** (0.0415)	0.1025** (0.0400)	0.0520 (0.3834)	0.509	-0.294	0.3737*** (0.0186)	0.0036 (0.0481)	0.4926*** (0.1370)	-0.003	0.441
2002	0.2492*** (0.0597)	0.1348*** (0.0508)	-0.9240* (0.4898)	0.780	-0.567	0.4722*** (0.0192)	-0.0461 (0.0866)	0.5485*** (0.1716)	-0.069	0.571
2003	0.3297*** (0.0470)	0.1590*** (0.0490)	0.2777 (0.3444)	-0.176	0.510	0.4032*** (0.0152)	0.1273*** (0.0471)	0.2355** (0.1059)	0.043	0.404
2004	0.2091*** (0.0439)	0.0817*** (0.0286)	0.5134 (0.3643)	0.198	-0.013	0.5188*** (0.0171)	0.1417*** (0.0464)	0.3703*** (0.0969)	0.038	0.483
2005	0.4445*** (0.0428)	0.1497*** (0.0351)	0.5626*** (0.1852)	0.012	0.401	0.7209*** (0.0149)	0.2960*** (0.0502)	0.3993*** (0.1013)	0.052	0.671
2006	0.6790*** (0.0464)	0.1288*** (0.0453)	0.8928*** (0.2258)	-0.252	0.856	0.8574*** (0.0175)	0.3540*** (0.0542)	0.6281*** (0.1243)	0.136	0.729

**Source:** Author calculations using Palestinian Labor Force Surveys (PLFS) of the Palestinian Central Bureau of Statistics (PCBS), 1998-2006.

**Note:** A skilled worker is defined as one with more than 12 years of schooling. Regressions are estimated using the Heckman selection correction method where the first step is a probit regression. G refers to the gross wage gap (or  $\ln(1+G)$ ), E refers to the explained component of the wage gap (endowment effect), R refers to the unexplained (return effect) component of the wage gap. Selection is the component of the wage gap attributed to self-selection into Sector, and  $\hat{G}$  is the selectivity-corrected gross wage gap. The dependent variable in the wage equations is the logarithm of hourly wage; the independent variables are age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, and district fixed effects. The selection equation includes as explanatory variables, age, age squared, years of schooling, tenure, marital status, full-time employment; urban area/refugee camp residence, occupational dummies, district fixed effects, number of jobholders, number of adults aged 70 or more in a given household, and locality's share of public sector employees. Robust Standard errors are in parentheses. The symbols \*, \*\*, \*\*\* represent statistical significance at the 10, 5, and 1 percent levels.