# The Effect of Public Sector on Private Jobs: Evidence from Palestine

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### 2017



The paper estimates the effect of expanding public jobs on private employment during the Second Intifada period (between September of 2000 and end of 2004).

## **Contribution to Literature**

- First, it re-visits the linkages between public and private employment in a context of developing economy with ill economic. By the end of Second Intifada, unemployment rate rose from 0.12 to 0.23. During this period, the share of public employment in the West Bank, relative to all waged workers, rose from 0.19 to 0.31.
- It empirically explores the channels of the public employment effects.
- This paper is also the first to explain how a local labor market responds to changes in public employment in an aid-based economy-public employment is largely funded by international donations.

## Data and Empirical Models

The empirical analysis draws upon quarterly labor force data in the West Bank districts covering the Second Intifada period. The labor force data is collected by the Palestinian Census Bureau of Statistics. The model of the overall private employment is specified as follows:

$$prvt_{dq} = \alpha + \beta Pub_{dq} + \Theta X_{dq} + \mu_d + \gamma_q + \varepsilon_{dq} \dots (1)$$

Where "prvtdq" is the change in private employment measured as (privatedq-privatedq1-)/tot\_emp dq1-. The main independent variable (Pubdq) is the change (contribution) of public employment and measured in the same fashion. A major concern of estimating model (1) is endogeneity. I utilize the following instrumental variable:

$$IV1 = (logpub_q - logpub_{q-1}) \times pub\_sh_{jq0} \dots (2)$$

# Results

#### **Effect of Expanding Public Employment on Waged-Private Employment**

	Non-Tradable								
	Total Private Emp		<u>Sector</u>		Tradable sector				
Variable	OLS	IV	OLS	IV	OLS	IV			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>			
Public Employment	0.68	0.52	0.41	0.34	0.26	0.19			
	(2.55)£	$(2.3)_{f}$	$(2.63)_{f}$	(2.45)£	(2.47) f	(2.45)£			
Controls	Y	Y	Y	Y	Y	Y			
Quarter FE, District									
FE	Y	$\mathbf{Y}$	$\mathbf{Y}$	$\mathbf{Y}$	$\mathbf{Y}$	Y			
No. of obs	152	152	160	160	152	152			
<u>First Stage</u>									
IV estimate		-1.53		-1.54		-1.53			
		(-24.74)†		(-26.34)†		(-24.74)†			
F-statistics		25.96		27.55		25.69			

Robust standard errors (Huber-White method) clustered at district level in parentheses. The symbols¥, **f**, and † represent statistical significance at the 10, 5, and 1 percent levels.

## **How Expanding Public Sector Increases Private Employment?**

1 Effect on Local Demand: measured using number of entrepreneurs.

Variable	Over All	Non- tradable OLS	Tradable	All	Non- tradable IV	Tradable
_	1	2	3	4	5	6
Public Employment	0.81	0.59	0.23	0.64	0.48	0.17
	(2.93)	(3.39)†	(2.12)¥	(3.24)†	(3.56)†	(2.26)
All Controls	Y	Y	Y	Y	Y	Y
Quarter FE, District						
FE	Y	Y	Y	Y	Y	Y
No. of obs	160	160	155	160	160	155
Adjusted R square	0.59	0.58	0.41	0.58	0.57	0.4

Robust standard errors (Huber-White method) clustered at district level in parentheses. The symbols¥, , and † represent statistical significance at the 10, 5, and 1 percent levels. 2 Linkages Between Expanding Public Employment and Private Wages.

$$\log Wage_{ijq} = \gamma Pub_{jq} + \mathbf{B_1Control}_{ijq} + \mu_i + \gamma_q + e_{ijq} \dots (3)$$

The results, whether estimated by OLS or IV techniques, show that the effect is statistically insignificant, suggesting that local private wages are insensitive to the expansion of public jobs, paving the way for local demand of tradable and non-tradable sectors to increase.

#### Linkages between Wage Effect and Labor Force

To explain the insignificant effect of public employment on private wages, I provide evidence that that the increase in the labor market participation is a driving factor. The IV estimate suggest that increasing public employment by 100 jobs increases labor force participants by 168.

#### Does Expanding Public Employment Reduces Unemployment?

The effect depends on the extent of increase in labor force participation. The results suggest that expanding public employment has made it more appealing for individuals to join the labor market. However, the extent of crowd in effect is short of absorbing all job seekers, leading to increase unemployment (expanding public employment by 100 jobs would increase the number of unemployed by about 119).

# **Policy Implications**

The finding of this paper exhibits interesting policy implications. Commonly, limiting public hiring is often prescribed for developing countries to reduce fiscal stress during ill economic conditions. The findings of this research suggest that such a policy might back fire and negatively affect labor market outcomes. Put differently, expanding public employment is possibly one venue to revive private sector and create more jobs in a labor market with excess labor supply.