

# Jobs for votes: Micro-evidence from Albania

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**LONG ABSTRACT:** Previous studies have documented vote-buying practices and job patronage in public administrations. In this paper, we estimate the labour market returns to political alignment in the economy at large, focusing on grassroots voters rather than elite supporters such as campaign donors. We use information on political preferences for the near-universe of registered voters in Tirana, which comprises almost half the population of Albania. While based on informal surveys by incumbent-party activists, the measurement of individual preferences is reliable and predicts voting behaviour at the polling station level. We match this data with information on formal sector employment and wage earnings in the months preceding the April 2021 general elections. We first document a significant increase in aggregate public-sector employment in the last quarter preceding the election. Using a difference-in-differences design for identification, we then find that, in the last pre-election quarter, the probability of incumbent supporters' having a formal-sector job increases by 0.2-0.4 percentage points relative to that of non-incumbent supporters.

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*abstract (cont'ed)*

Moreover, conditional on having a job, the wage earnings of incumbent-party supporters increase by an additional 85-105 Albanian leks (ca. 1 euro) relative to those of opposition supporters. These effects are driven by voters that are more likely to be in patron-client relationships with politicians – namely, young voters coming from incumbent-aligned families from Tirana that were never migrants abroad. In addition, we find that alignment with the incumbent generates labour-market premiums in the public, but not in the private, sector. Finally, we show that, across polling stations, the intensity of job patronage is associated with gains in vote share by the incumbent party. This evidence is consistent with anecdotal reports indicating that, before elections, incumbent party activists mobilise the party's supporters into the campaign effort and, in return, reward them with public-sector jobs and/or salary bonuses. Our findings shed light on the politicisation of labour markets in emerging economies.

# Job Patronage

- Practice of allocating (government) jobs to political supporters (vote buying), friends (cronyism) or relatives (nepotism)
- *Political business cycles*: incumbent government intervenes in the economy to increase its probability of re-election. It does so by manipulating:
  - ✓ Fiscal and monetary policy (Alesina et al., 1997)
  - ✓ Allocation of construction permits (Imami et al., 2018), privatization decisions (Ivanovic et al., 2023)
  - ✓ Hiring decisions: jobs for votes (THIS PAPER!)

# Job Patronage

- Previous studies document job patronage and vote-buying practices in the public sector (Colonnelli et al., 2020; Gagliarducci & Manacorda, 2020).
- Focus on ‘elite supporters’:
  - ✓ Party members
  - ✓ Non-elected (unsuccessful) candidates
  - ✓ Politicians’ relatives
- There is no evidence of systematic *jobs-for-votes exchanges* involving:
  - 1 ‘Grassroots supporters’
  - 2 Private-sector jobs

## This paper

- Focus on voters ('grassroots supporters'), rather than 'elite supporters'.
  - Unique (leaked) dataset of political preferences covering the near universe of registered voters in Tirana (capital city of Albania).
- Estimate the labour market returns to political alignment in the economy at large, rather than just in the public sector.
  - Data on the universe of employed individuals in Tirana.

## This paper

- **The ‘story’:** Before elections, party activists/brokers enlist the party’s supporters into the election campaign effort. The supporters mobilise (buy?) chunks of votes in their immediate circles, and ‘resell’ them to party activists/brokers; in exchange, they get a job or a salary bonus.
- **DiD strategy:**
  - ✓ *Treatment:* pre-electoral mobilisation of loyal supporters by incumbent party
  - ✓ *Treated group:* Incumbent party supporters
  - ✓ *Control group:* Opposition party supporters & undecided voters
  - ✓ *Outcome:* Employment and earnings

## Preview of results

- 1 Being politically aligned with the incumbent party generates a labour market premium (in terms of employment and wage earnings) before elections
- 2 The premium is likely to arise from the allocation of patronage jobs to vote-buying supporters.
- 3 From the perspective of the incumbent party, job patronage is a rational strategy: giving jobs to party supporters allows the incumbent to generate vote gains at the ballot box



## Previous literature

### 1 **Vote-buying & job patronage**

Baland & Robinson (2008); Finan & Schechter (2012); Vicente (2013); Hicken et al. (2017); Bobonis et al. (2022)

### 2 **Political business cycles**

Alesina et al. (1997); Khemani (2004); Ivanovic et al. (2023)

### 3 **Discrimination in labour markets**

Lang & Kahn-Lang Spitzer (2020); Cortés & Pan (2023)

## Previous literature

- **Colonnelli et al. (2020), *AER***: Using municipal-election data from Brazil and an RDD design, they find that influential political supporters of the winning party (non-elected candidates, campaign donors) are more likely to be employed in the public sector.
- **Gagliarducci & Manacorda (2020), *AEJ: Applied***: Using Italian data and a DiD design, they find that having a family member in politics improves an individual's labour-market outcomes.

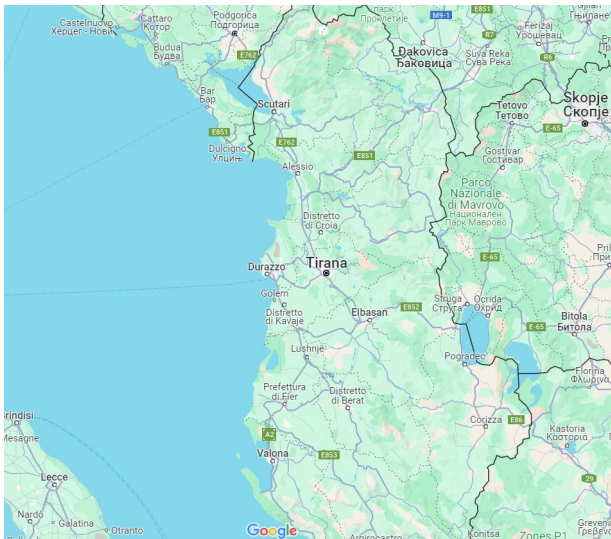
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## Remainder of this seminar..

- 1 Introduction
- 2 Data & context
- 3 Empirical strategy
- 4 Empirical results
- 5 Mechanisms
- 6 Conclusion

## Data & context

# Albania



## Albania: Labour market

Labor force participation rate	2022	59%
Growth of employment creation	(annual)	~ 3%
Unemployment rate	2022	11.6%
Gross average monthly salary	2023	€695
Wage growth	2021-23	30%
Public sector / total employment	2011	14.2%
Public sector wage premium	2020	34%

# Albania: Electoral politics

## Elections:

- MPs are elected every 4 years through a closed-list, proportional representation system
- Two main parties:
  - centre-left Socialist Party (PS), incumbent
  - centre-right Democratic Party (PD), opposition
- 2021 general election (25 April): Edi Rama's SP wins a third term in office
- Electoral fraud is typically limited to vote-buying, which is widespread.

# Albania: Electoral politics

## Electoral irregularities:

- During election campaigns, the party in power mobilizes existing supporters (i.e. loyal voters). Supporters are offered economic benefits (e.g. a job, a higher salary, a one-off bonus) if they can generate additional votes.
- Political supporters bring or buy votes (of extended family members, friends, neighbours, employees) and 're-sell' them to the incumbent party in exchange for a job
- The exchange is mediated by party brokers (*patronazhistët*), who may be embedded in the public administration or in private firms.
- Political supporters may be already employed, or may be unemployed.



# Tirana



# 1. Salary dataset

- Matched employer-employee dataset recording the gross labor income (in current Albanian lek, including bonuses and premia) paid under *all* existing wage labor contracts in Albania.
- Collected by the General Tax Office (*Drejtoria e Përgjithshme e Tatimeve*), and leaked in December 2021
- Two time periods:
  - $t_1$ : January 2021 (4 months before elections);
  - $t_2$ : April 2021 (1 month before elections)
- Drop individuals (10.8%) that hold more than 1 job to obtain an individual-level dataset
- 535,806 individuals in a single employment relationship in Albania (in either Jan, Apr or both).

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## 2. Political preference dataset

- Individual-level dataset providing an estimate of the political preference of almost 70% of registered voters in Tirana.
- Collected by PS party activists/brokers (*patronazhistë*) since before 2013, and leaked in mid-April 2021. Legacy of communist-era neighbourhood spy networks.
- Information collected directly from voters, or inferred indirectly.
- 570,172 registered voters surveyed by 8,884 *patronazhistë* (On average, each *patronazhist* observes 64 individuals).
- Preferences estimated as of 2013 (N = 341,659), and again as of 2021 for a larger sample (N = 570,172).
- The estimated preference (2021) is accompanied by an estimate of the degree of certainty: 133,901 'sure' estimates (23.5%) and 436,271 'unsure' estimates (76.5%).

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### 3. Other data sources

- 1 **Car dataset:** Data on car ownership from the Department of Motor Vehicles (*Drejtoria e Përgjithshme e Shërbimeve të Transportit Rrugor*). To be merged with the salary and political preference datasets.
- 2 **Voting dataset:** Data on electoral results (2021) at the polling-station level from the Central Election Commission (*Komisioni Qëndror i Zgjedheve*)
- 3 **Time-series dataset:** Aggregate monthly data (1999-2021) on public expenditure for the compensation of government employees (central and local government) from the Ministry of Finance and Economy (in constant 1999 leks)

## 4. Final dataset

- We match individuals across the salary, political preference and car datasets using an individual tax (TIN) identifier.
- We focus on individuals of voting *and* working age (18-61 for women, 18-65 for men).
- 32.8% of all Tirana voters appear in the salary dataset.
- Thanks to perfect matching (the salary dataset covers the entire population of salaried workers), we can classify unmatched Tirana voters of working age as non-employed (unemployed or economically inactive) → employment and wage earnings = 0.

## 4. Final dataset

- Wage data are winsorized at the 1 percent level in each tail
- We construct a (balanced) panel dataset at the individual level covering two periods (January and April 2021).
- Number of employed individuals increased by around 50,000 units during Jan-Apr



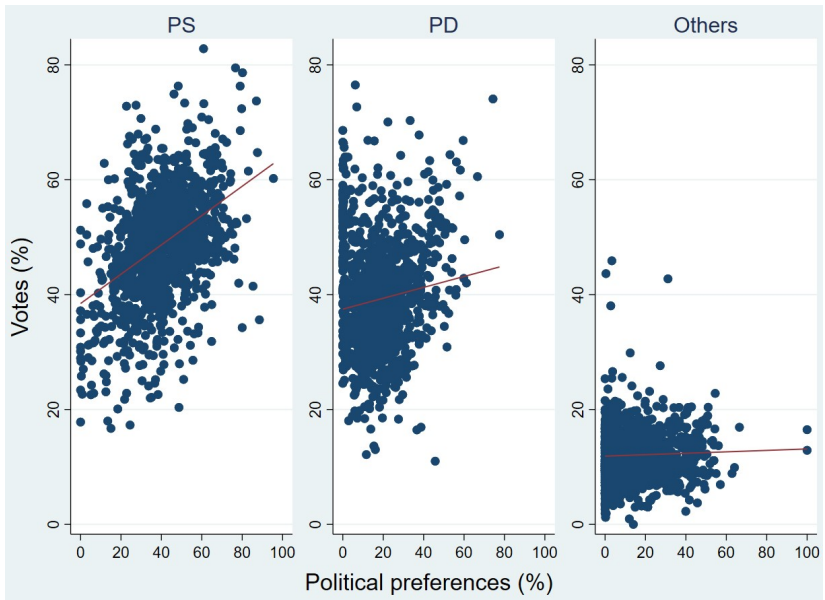
**TABLE 1 - Final dataset (two-period panel): Descriptive statistics**

Statistics by:	Party alignment		Time	
	PS (1)	non-PS (2)	January (3)	April (4)
PS supporter (dummy)	0.394 (0.489)		0.394 (0.489)	0.394 (0.489)
l(employed)	0.301 (0.459)	0.186 (0.389)	0.227 (0.419)	0.235 (0.424)
Wage earnings (lek)	16,830 (31,566)	9,763 (25,092)	12,350 (27,872)	12,747 (28,201)
Age (# years)	47.7 (17.6)	45.6 (17.2)	46.5 (17.4)	46.5 (17.4)
Male (dummy)	0.543 (0.498)	0.530 (0.499)	0.536 (0.499)	0.536 (0.499)
Tirana-born (dummy)	0.298 (0.467)	0.257 (0.437)	0.273 (0.446)	0.273 (0.446)

The table reports sample means. Sample standard deviations in parenthesis

## Are the estimates of political preferences reliable?

- We use the voters dataset to assess the reliability of the preference estimates in the political preference datasets.
- Individual information on political preferences is aggregated at the polling station level.
  - Across polling stations ( $i$ ), the preference dataset surveys around 65% of registered voters (s.d. = 17.8 pp).
  - $Corr[\text{Share surveyed}_i; \text{Share of PS preferences}_i] = 0$
  - $Corr[\text{Share surveyed}_i; \text{PS vote share}_i] = 0$
  - $Corr[\text{Share of PS preferences}_i; \text{PS vote share}_i] = 0.43$  (see next slide, left panel)



## Empirical strategy

## Empirical specification

‘Canonical’ two-period DiD setting:

- *Treated group*: PS supporters, who receive a treatment (=being mobilized by party activists/brokers) at  $t_2$  (in the last month before the election) but not at  $t_1$  (4 months before the election)
- *Control group*: non-PS supporters, who never receive the treatment

$$l(\text{employed})_{it} = \alpha_i + t2_t + \beta PS_i \times t2_t + \epsilon_{it} \quad (1)$$

$$\text{wage}_{it} = \alpha_i + t2_t + \beta PS_i \times t2_t + \gamma l(\text{employed})_{it} + \delta l(\text{fulltime})_{it} + \eta_{it} \quad (2)$$

## Identifying assumptions

$\hat{\beta}_{OLS}$  provides a consistent estimate of the average labour-market effects of political mobilization on PS supporters (ATT) under the following assumptions:

- 1 **No anticipatory effects:** Amongst PS supporters, earnings and employment in January were not affected by the pre-electoral mobilization of party supporters.
- 2 **Parallel trends:** Labour market outcomes for PS and non-PS supporters would have evolved in parallel in the absence of pre-electoral mobilization.

## Assumption 1 (no anticipatory effects)

- We use the time-series dataset to assess the validity of this assumption.
  - N. of months/observations ( $t$ ) = 276 (1999-2021)
  - *Finding*: in public-sector organizations, hiring increases ca 5% before elections, but ONLY in the last quarter (3 months) before elections.

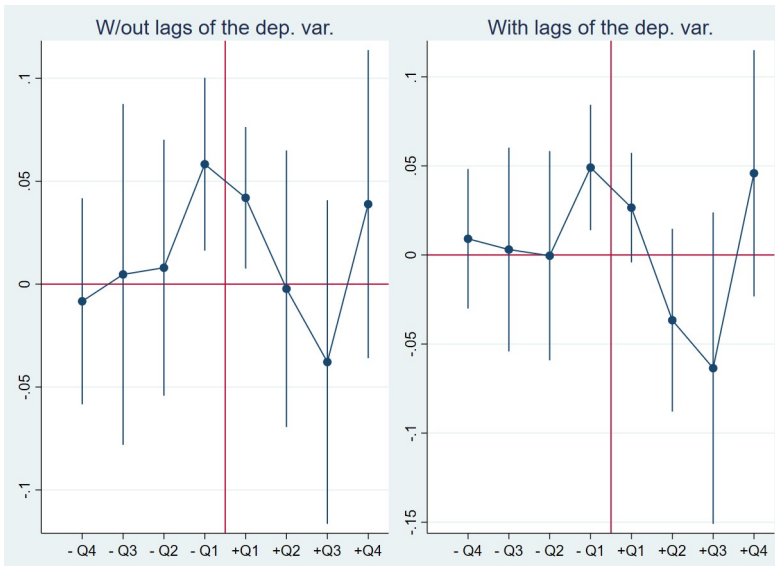
$$\ln \text{SALEXP}_t = \sum_{k=-4}^{k=+4} \alpha_k I_{kt} + \eta \ln \text{TAX}_t + \sigma_t + \epsilon_t$$

$\ln \text{SALEXP}_t$ : total government expenditure for salaries

$I_{kt}$ : indicator variable for  $k$ th quarter before/after general election

*Controls for*: tax revenues ( $\ln \text{TAX}_t$ ), seasonality ( $\sigma_t$ )

*Alternative specification*: add 6 lags of the dependent variable





## Assumption 2 (parallel trends)

Parallel trends does not hold if:

- 1 *Political preferences are chosen as a result of (or simultaneously with) hiring (e.g. out of reciprocity concerns)*
  - Political preferences are measured over time, and not just during the last pre-election quarter
  - The results are unchanged if we only include long-term PS loyalists in the treated group, rather than any PS supporter (alternative specification).
- 2 *PS alignment is correlated with individual characteristics (e.g. age, gender) with differential trends around elections*
  - Include a full set of  $(X_i \times t2_t)$  interactions.  $X_i$ : age, age squared, gender, car ownership (dummies), h'hold size (large h'hold dummy), Tirana native, former migrant dummy
  - Allow for differential neighborhood (polling station)-specific trends

## Empirical results

# Main results (equations 1 and 2)

**TABLE 3 - Political alignment and labour market outcomes: main results**

Dependent variable:	l(employed)			wage earnings		
	(1)	(2)	(3)	(4)	(5)	(6)
PS × t2	0.0037*** (0.0006)	0.0024*** (0.0008)	0.0021*** (0.0006)	103.9*** (19.0)	84.3*** (25.4)	92.1*** (20.9)
Other party × t2		-0.0012 (0.0010)			-29.2 (23.9)	
No preference × t2		-0.0021*** (0.0008)			-24.3 (29.9)	
Individual fixed effects	YES	YES	YES	YES	YES	YES
t2 dummy	YES	YES	No	YES	YES	No
Polling-station × t2 fixed effects	No	No	YES	No	No	YES
Additional interaction terms ( $X_i \times t2_t$ )	No	No	YES	No	No	YES
l(employed) and l(full-time)	No	No	No	YES	YES	YES
Observations	849,674	849,674	849,650	849,674	849,674	849,650

OLS regressions with robust standard errors clustered at the individual level. PS refers to the incumbent Socialist Party. In models (2) and (5), the reference category is the main opposition party, the Democratic Party (PD). All parties other than PS and PD are classified as 'other party'.  $X_i$  includes controls for age, gender, car ownership, household size, being born in Tirana, and former migrant status.

## Identification issues

- *Political preferences emerge endogenously (e.g. switch preferences as a result of getting a job):*
  - Distinguish between long-term PS supporter ('loyalists'), who were already aligned with the PS in 2013, and those that were not aligned with the PS in 2013 ('switchers')
- *Political preferences are measured with error:*
  - Distinguish between individuals with a 'certain' estimate of PS alignment and individuals with 'uncertain' estimate.

# Identification issues

**TABLE 5 - Political alignment and labour market outcomes: identification issues**

Dependent variable:	Loyals vs switchers		Measurement error	
	l(employed) (1)	wage earnings (2)	l(employed) (3)	wage earnings (4)
PS (loyalists) $\times t2$	0.0025*** (0.0008)	61.6** (28.9)		
PS (switchers) $\times t2$	0.0022** (0.0011)	30.7 (40.9)		
PS (certain) $\times t2$			0.0048*** (0.0007)	134.6*** (23.7)
PS (uncertain) $\times t2$			0.0022*** (0.0008)	61.2** (26.6)
Equality [ <i>p</i> -value]	[0.792]	[0.496]	[0.007]	[0.024]
Individual fixed effects	YES	YES	YES	YES
<i>t2</i> dummy	YES	YES	YES	YES
l(employed) and l(full-time)	No	YES	No	YES
Observations	453,350	453,350	849,674	849,674

OLS regressions with robust standard errors clustered at the individual level.

## Mincer regressions

- Estimate the returns to PS alignment using a cross-section of wage-earners in January and April
- *Main finding*: the returns to supporting the incumbent party approximately double between January and April (from 1.3% to 3.2%, or from 3.5% to 5.1%)
- Mincer earnings function:

$$\ln wage_{ij} = \beta PS_{ij} + \gamma X_{ij} + \delta I(fulltime)_{ij} + \mu_j + \epsilon_{ij}$$

- Use household FE ( $\mu_j$ ) as a proxy for human capital and other unobservables that are subject to inter-generational persistence.
- Use the full set of controls ( $X_{ij}$ ) used in eq. (1) and (2). Car ownership and h'hold size (which vary at the h'hold level) are absorbed by the h'hold FE.

# Mincer regressions

**TABLE 4 - Mincer earnings functions: January vs April 2021**

Dependent variable: ln(wage)	PS vs non-PS		PS vs. PD	
	January (1)	April (2)	January (3)	April (4)
PS	0.013 (0.009)	0.032*** (0.009)	0.035** (0.014)	0.052*** (0.013)
Other party			0.032** (0.016)	0.027* (0.015)
No preference			0.026*** (0.018)	0.028 (0.018)
age	0.042*** (0.002)	0.042*** (0.002)	0.042*** (0.002)	0.042*** (0.002)
age <sup>2</sup>	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
male	0.087*** (0.005)	0.076*** (0.005)	0.087*** (0.005)	0.076*** (0.005)
Born in Tirana	-0.007 (0.008)	-0.018 (0.008)	-0.007 (0.008)	-0.018 (0.008)
Never a migrant	0.044 (0.027)	0.030 (0.025)	0.046 (0.027)	0.033 (0.025)
Full time	0.826*** (0.015)	0.795*** (0.015)	0.826*** (0.015)	0.795*** (0.015)
Household FE	YES	YES	YES	YES
Adjusted R <sup>2</sup>	0.41	0.39	0.41	0.39
Observations	76,119	80,326	76,119	80,326

OLS regressions with robust standard errors clustered at the household level.

# Mechanisms

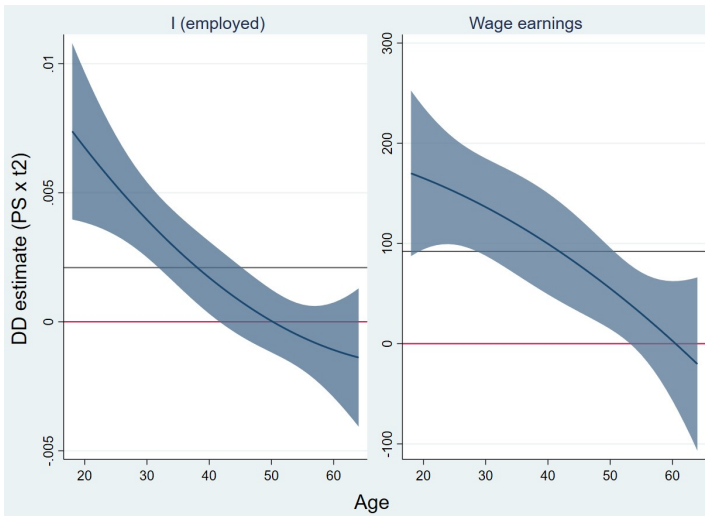


## Job patronage vs. alternative explanations

The results are consistent with at least two alternative explanations:

- 1 **Observable ability:** *After two PS terms in office, recruiters have access to better "soft" information about PS-aligned workers*
  - If so, the estimated effect should hold uniformly across PS supporters
  - Yet, we estimate heterogeneous effects: effect stronger amongst PS supporters that are most likely to have established patron-client relationships with party activists/brokers (young voters, whose families are staunch PS supporters, who were never migrants abroad, and were born in Tirana)
- 2 **Ideology:** *Recruiters favour ideologically aligned workers to facilitate cohesion with government's policy objectives*
  - Explains PS supporters' premium in the public administration, but NOT in the private sector or in state-owned companies/service-providers

# Heterogeneous effects



# Heterogeneous effects

**TABLE 7 - Heterogeneous effects: individual characteristics**

Dependent variable:	I(employed)				Wage earnings			
	Family alignment	Migration	Birthplace	All	Family alignment	Migration	Birthplace	All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PS × t2	-0.0005 (0.0013)	0.0001 (0.0008)	0.0012* (0.0007)	-0.0031** (0.0014)	29.2 (42.8)	-49.6** (21.3)	91.9*** (23.6)	-109.7** (43.8)
PS × t2 × Fraction PS in family	0.0034** (0.0014)			0.0032** (0.0014)	81.1* (49.2)			80.2* (49.4)
PS × t2 × Never a migrant abroad		0.0023** (0.0011)		0.0022** (0.0011)		164.3*** (30.6)		164.2*** (30.5)
PS × t2 × Born in Tirana			0.0028** (0.0013)	0.0026** (0.0013)			0.7 (44.7)	-5.6 (44.8)
Individual fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Polling-station × t2 fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Additional interaction terms ( $X_i \times t2_t$ )	YES	YES	YES	YES	YES	YES	YES	YES
I(employed) and I(full-time)	No	No	No	No	YES	YES	YES	YES
Observations	848,478	849,650	849,650	848,478	848,478	849,650	849,650	848,478

OLS regressions with robust standard errors clustered at the individual level. PS refers to the incumbent Socialist Party.  $X_i$  includes controls for age (age and age squared), gender, car ownership (dummies for households owning one or more than one car), household size (dummy for above-median household size), being born in Tirana, and former migrant status. The fraction of PS supporters in an individual's family excludes the individual from the count. Models (1), (4), (5) and (8) also control for  $I(single) \times t2_t$ , and  $PS \times t2_t \times I(single)$ , where  $I(single)$  is a dummy for single-person households. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

# Homogeneous effects

Dependent variable: Heterogeneity by:	I(employed)			Wage earnings		
	Gender (1)	H'hold size (2)	City vs province (3)	Gender (4)	H'hold size (5)	City vs. province (6)
PS × t2	0.0018*** (0.0008)	0.0022** (0.0009)	0.0023*** (0.0007)	78.1** (29.2)	114.6*** (30.5)	76.7*** (25.7)
PS × t2 × Male	0.0005 (0.0011)			24.8 (38.2)		
PS × t2 × Above-median household		-0.0002 (0.0012)			-41.6 (38.8)	
PS × t2 × Tirana province			-0.0006 (0.0014)			57.7 (41.7)
Individual fixed effects	YES	YES	YES	YES	YES	YES
Polling-station × t2 fixed effects	YES	YES	YES	YES	YES	YES
Additional interaction terms ( $X_i \times t2_i$ )	YES	YES	YES	YES	YES	YES
I(employed) and I(full-time)	No	No	No	YES	YES	YES
Observations	849,650	849,650	849,650	849,650	849,650	849,650

OLS regressions with robust standard errors clustered at the individual level. PS refers to the incumbent Socialist Party.  $X_i$  includes controls for age (age and age squared), gender, car ownership (dummies for households owning one or more than one car), household size (dummy for above-median household size), being born in Tirana, and former migrant status. The 'Tirana province' dummy is equal to 1 if an individual is registered to vote in any municipality of the Tirana province (*qark*) except for the municipality (city) of Tirana, and to 0 if they are registered to vote in the municipality of Tirana. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## Heterogeneous effects & job characteristics

- PS-aligned voters enjoy a labour market advantage in getting full-time jobs in the public sector, but not in the private sector
- In the public sector, PS supporters are more likely to be employed also in state-owned enterprises & front-line public-service providers (e.g. public hospitals and schools), rather than just in the state administration (e.g. ministries).

# Heterogeneous effects & job characteristics

**TABLE 8 - Heterogeneous effects: job characteristics**

Dependent variable: Employed as/in	Hours worked:		Sector:			
	Full-time	Part-time	State bureau-cracry	State firms and ser-vices	Private sector, domestic	Private sector, foreign
	(1)	(2)	(3)	(4)	(5)	(6)
PS × $t_2$	0.0021*** (0.0006)	-0.0000 (0.0006)	0.0007*** (0.0001)	0.0002* (0.0001)	0.0002 (0.0004)	-0.0001 (0.0002)
Individual fixed effects	YES	YES	YES	YES	YES	YES
Polling-station × $t_2$ fixed effects	YES	YES	YES	YES	YES	YES
Additional interaction terms ( $X_i \times t_{2i}$ )	YES	YES	YES	YES	YES	YES
Observations	849,650	849,650	825,566	825,566	825,566	825,566

OLS regressions with robust standard errors clustered at the individual level. PS refers to the incumbent Socialist Party. The dependent variable is a dummy that takes the value 1 if individual  $i$  at time  $t$  is in an employment relation of a specified kind (e.g. part-time, pr in the private, domestically-owned sector), and 0 if he/she is unemployed or in a different type of employment relation.  $X_i$  includes controls for age (age and age squared), gender, car ownership (dummies for households owning one or more than one car), household size (dummy for above-median household size), being born in Tirana, and former migrant status. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## Electoral consequences of job patronage

- Does it pay off for the incumbent (PS) to reward vote-buying political supporters with patronage jobs and wage premiums?

→ we examine whether the labour market gains of PS supporters are correlated with gains in vote share by the incumbent PS party? Do the PS supporters that get jobs reciprocate by mobilizing votes?

→ Additional suggestive evidence in support of a job patronage interpretation of the DiD results

## Electoral consequences of job patronage

- Using aggregated data at the polling-station level, we regress the **vote share of the PS (2021)** on  $\Delta y_{ij}$ , which is:
  - The number of new jobs started by PS-aligned voters (between Jan. and Apr. 2021) in polling station  $i$  located in municipality  $j$  (Panel A, next slide)
  - The increase in total wage payments to PS-aligned voters between Jan. and Apr. 2021 (Panel B, next slide)

$$PS\_VoteShare_{ij}^{(2021)} = \rho PS\_VoteShare_{ij}^{(2017)} + \beta \Delta y_{ij} + \gamma X_{ij} + \phi_j + e_{ij}$$

→ Main finding: An increase in jobs/wage payments to PS supporters is associated with gains in vote share for the PS at the ballot box (relative to the previous general election)



# Electoral consequences of job patronage

Dependent variable: PS vote share, 2021 (%)	(1)	(2)	(3)	(4)
<i>PANEL A - Impact of additional jobs to PS supporters</i>				
PS vote share, 2017 (%)	0.615*** (0.025)	0.606*** (0.025)	0.606*** (0.026)	0.698*** (0.028)
$\Delta$ (Apr-Jan) jobs to PS supporters (#)	0.139* (0.084)	0.158* (0.084)	0.211** (0.084)	0.136* (0.078)
$\Delta$ (Apr-Jan) jobs (#)		-0.221*** (0.072)	-0.104 (0.070)	-0.055 (0.061)
Adjusted R <sup>2</sup>	0.47	0.48	0.50	0.60
<i>PANEL B - Impact of additional wage payments to PS supporters</i>				
PS vote share, 2017 (%)	0.618*** (0.025)	0.617*** (0.024)	0.616*** (0.026)	0.704*** (0.028)
$\Delta$ (Apr-Jan) wage payments to PS supporters (mln lek)	0.437 (0.332)	0.500 (0.321)	0.850*** (0.311)	0.854*** (0.309)
$\Delta$ (Apr-Jan) wage payments (mln lek)		-0.948** (0.428)	-0.427 (0.314)	-0.416 (0.281)
Adjusted R <sup>2</sup>	0.47	0.47	0.50	0.60
Controls	No	No	YES	YES
Municipality FE	No	No	No	YES
Observations (polling stations)	1,165	1,165	1,165	1,165

OLS regressions with robust standard errors. The unit of analysis is the polling station.

## Conclusions

- Before elections, incumbent party supporters (PS voters) improve their labour market outcomes relative to non-incumbent supporters (non-PS voters)
- The evidence is consistent with a job patronage mechanism: PS supporters obtain jobs in exchange for mobilizing additional votes for the PS

Next steps in the analysis:

- 1 Analyse time series in total employment and study the impact of elections on aggregate outcomes (to further validate the PT and NA assumption)
- 2 Where is the wage premium of incumbent supporters coming from? new hires or incumbent workers?
- 3 Prepare an ethics appendix

**THANK YOU!**