Dream Jobs

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Very preliminary and incomplete

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Motivation

It is customary to think there are better and worse workers. It is also natural to think there are better and worse jobs. Indeed, in the labour literature

- There is a large number of contributions showing **large wage differentials across industries** for otherwise similar workers
- There is a large number of contributions showing that **firm characteristics** (size, productivity, firm fixed effects) **also explain a large portion of the cross sectional distribution of wages**

The above can be thought of as **static wage level effects/jumps**

Motivation

By contrast we focus our attention on **dynamic wage growth effects/profiles**

More specifically, it is quite natural to **think that by working we accumulate valuable knowledge** so increasing our productivity and wages. Indeed, in the labour literature

- Age/potential **experience (and its square) are customary covariates** used in mincerian wage regressions explaining a sizeable chunk of wage heterogeneity
- Besides allowing for different age profiles for skilled and unskilled workers **the literature does not allow for experience to be more or less valuable for (in) particular types of workers (firms)**.

Our contribution

We allow for experience to have a **differential value** depending on the **characteristics of the worker and employing firm**

More specifically we focus on **Young Managers** and distinguish between **Big** and **Small** firms

We employ two complementary ways of drawing the line between the two groups of firms:

- **Internationally Active (exporting and/or importing and/or foreign-owned)** and **Domestic** firms **TODAY**
- **High-Layer (3 layers of management)** and **Low-Layer (2 or less layers of management)** firms

Data

We use three panel data sets:

- A matched employer-employee database (*Quadros de Pessoal*); currently about 350,000 firms and 3 million employees
- A trade database at the transaction-level, both extra-EU and intra-EU trade (exports and imports)
- An ownership database related to the *Quadros de Pessoal*

We consider the time span 1991-2006 and use single-job, full-time managers born in 1973 or later (this way we observe the full employment history of managers). All sectors of the economy

Information is reliable and (quasi) exhaustive which is key to our research question.

Starting model (reality check 1)

$$w_{it} = \beta_0 + \beta_1 Int.\,Act._{ft} + \mathbf{I'_{it}\Gamma_I} + \mathbf{C'_{ft}\Gamma_C} + \eta_r + \varepsilon_{it}. \quad (1)$$

w_{it} is the (log) hourly wage of manager i in year t. We de-trend wages before any regression using industry-year pair dummies on the full set of workers.

The vector $\mathbf{I_{it}}$ stands for worker i time-varying observables: **overall experience**, number of years of education as well as tenure in the firm and its square.

The vector $\mathbf{C_{ft}}$ refers to current employing firm observables: firm size (log employment), log apparent labour productivity, share of skilled workers and log firm age.

η_r denotes firm location dummies (NUTS3 regions)

Final model

$$w_{it} = \beta_0 + \beta_1 Int.\ Act_{ft} + \mathbf{I'_{it}\Gamma_I} + \mathbf{C'_{ft}\Gamma_C} + \eta_i + \eta_f$$

$$+ \underbrace{\beta_2 Dom.\ EXP_{it} + \beta_3 Int.\ EXP_{it}}_{\text{Domestic vs. International Experience}} +$$

$$+ \underbrace{\beta_4 Dom.\ EXP_{it} * Int.\ Act_{ft} + \beta_5 Int.\ EXP_{it} * Int.\ Act_{ft}}_{\text{Portability of Experience}}$$

$$+ \underbrace{\beta_6 Job.\ Mobil_{it} + \beta_7 Job.\ Mobil_{it} * Int.\ Act_{ft}}_{\text{Job Mobility}}$$

$$+ \underbrace{\beta_8 Dom.\ EXP_{it} * \eta_i + \beta_9 Int.\ EXP_{it} * \eta_i}_{\text{Skill-specific Return on Experience}} + \varepsilon_{it}$$

Estimations (core covariates)

VARIABLES	Standard	Heterogeneous returns on experience
Int. Act. Firm (0/1)	0.1223[a]	-0.0095[a]
	(0.0026)	(0.0029)
Experience (Yrs)	0.0203[a]	
	(0.0004)	
Domestic Exp. (Yrs)		0.0269[a]
		(0.0002)
International Exp. (Yrs)		0.0375[a]
		(0.0009)
Dom. Exp. * Int. Act. Firm (Yrs)	-0.0010	-0.0001
	(0.0007)	(0.0003)
Int. Exp. * Int. Act. Firm (Yrs)	-0.0023	0.0037[a]
	(0.0018)	(0.0010)
Change of firm (0/1)	0.0810[a]	0.0854[a]
	(0.0065)	(0.0007)
Change of firm * Int. Act. Firm (0/1)	-0.0059	-0.0053[a]
	(0.0041)	(0.0019)
International Exp. * Manager FE (Yrs)		0.0090[a]
		(0.0004)
Domestic Exp. * Manager FE (Yrs)		0.0092[a]
		(0.0001)
Observations	321,853	126,418
R-squared	0.3052	0.8729
Manager-Year Controls	X	X
Firm-Year Controls	X	X
Region FE	X	
Manager FE		X
Firm FE		X

Clustered standard errors (manager-level)

Estimations of Models (controls)

VARIABLES	Standard	Heterogeneous returns on experience
Tenure (Yrs)	0.0076[a]	0.0239[a]
	(0.0007)	(0.0003)
Tenure Sq. (Yrs)	-0.0001[b]	-0.0017[a]
	(0.0000)	(0.0000)
Education (Yrs)	0.0506[a]	
	(0.0004)	
Firm Size (log)	0.0458[a]	0.0180[a]
	(0.0007)	(0.0016)
App. Labor Productivity (log)	0.0394[a]	0.0044[a]
	(0.0009)	(0.0008)
Firm Age (log)	0.0130[a]	-0.0150[a]
	(0.0013)	(0.0016)
Share of Skilled Workers	-0.0012	0.0418[a]
	(0.0038)	(0.0037)
Manager-Year Controls	X	X
Firm-Year Controls	X	X
Region FE	X	
Manager FE		X
Firm FE		X

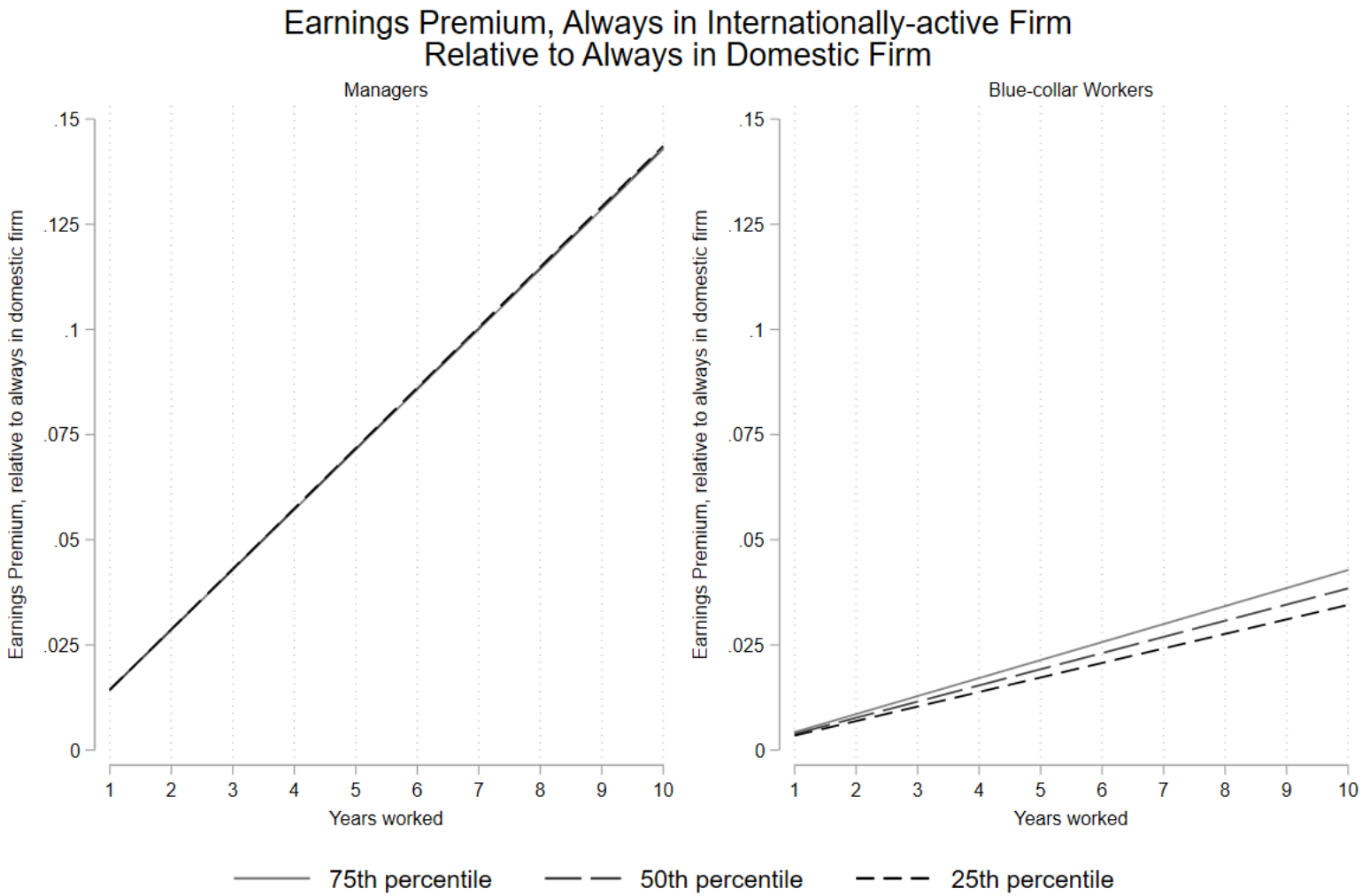
Clustered standard errors (manager-level)

Key findings

- **Flagship.** We consistently find that one more year of International Experience pays more than one more year of Domestic Experience (robust to many alternative specifications)
- **Learning.**
  - The international experience premium is "fully portable" to domestic active firms.
  - One more year of Domestic or International experience is more beneficial to more able managers.
  - When repeating the analysis for blue-collar workers we find much weaker patterns.
- **Magnitude.**
  - In a cross section of wages International Experience explains almost as much variation as Overall Experience.
  - 15% wage difference after 10 years (very similar across skills levels)

Differential returns over time: managers vs blue-collars

Figure: Earning profiles in internationally-active firm vs. domestic firm, Managers vs. Low-medium Skilled Workers (Blue-collars)

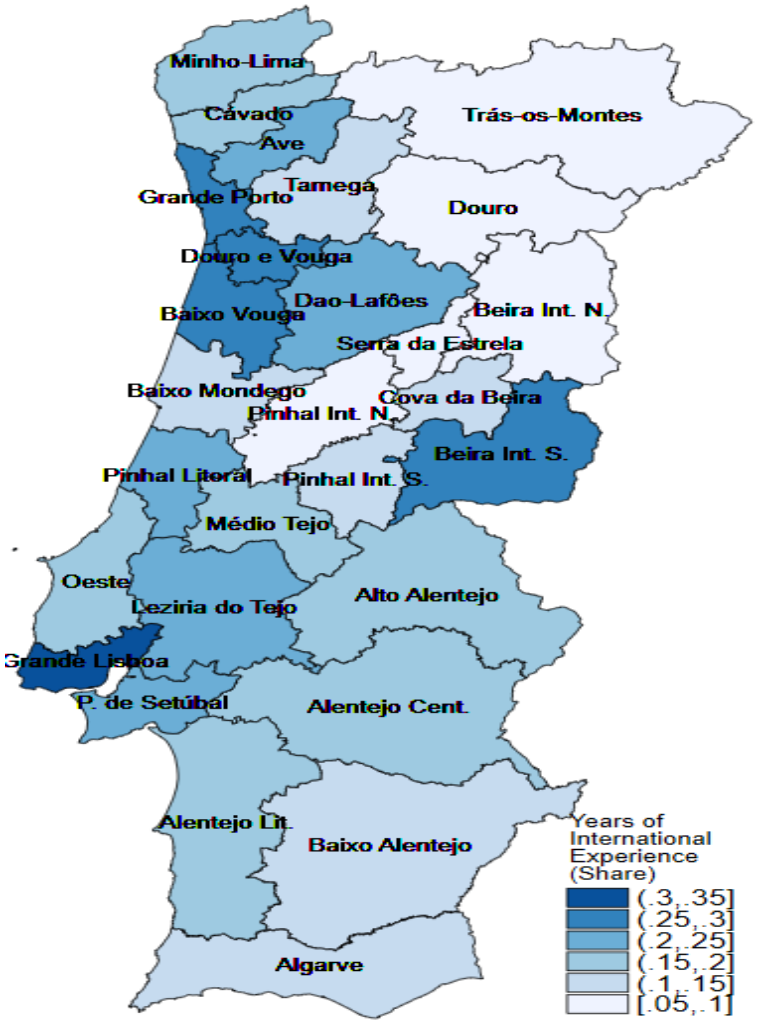


Furthermore

- The Internationally Active firms wage premium (stylized fact in many countries and datasets) is entirely due to the dynamic component (International Experience); no static gains
- **Robustness.**
  - Results on managers are robust to dropping performance-pay wage components, to controlling for job hopping, bargaining, and differential wage profiles depending on education
  - **Not a simple firm size** story.
  - Very similar results when focusing on **displaced managers**.
  - Previous findings do not hold much for **blue collar workers**. This points to our findings for managers being related to **knowledge and complexity of tasks**.
  - Internationally-active (or high layer) firms **grow faster**, conditioning on firm age and size. Even more if employing managers with more international and/or hierarchy-based experience.

What if? A counterfactual

- Both wages (and incomes) and the presence of internationally-active firms are very unequally distributed
- Figure: Average share of overall experience acquired in internationally active firms by NUTS3



What if? A counterfactual

- The coefficient of variation of average regional managers' wages in our data is 0.326
- If the share of international experience in overall experience was equally distributed across space the coefficient of variation will reduce by 9.34%.
- If the share of international experience in overall experience was (maybe as a result of a policy intervention) increased to match the country mean in those regions below the mean the coefficient of variation will reduce by 7.71%.