# Dual Labor Markets and the Equilibrium Distribution of Firms by J. Pijoan-Mas and P. Roldan-Blanco

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#### Introduction \_\_\_\_\_

- Coexistence of open-ended (OE) and fixed-term (FT) contracts is pervasive in Europe ("duality")
  - > FT contracts provide needed flexibility to firms in a "rigid" market
  - But they create important inequalities (income, housing market, financial services, human capital, intergenerational...)
  - Many calls to abolish two-tier system in favor of a unique contract (Tirole, 2016)
- Large literature that studies worker-side implications, less on firm side
- Pijoan-Mas and Roldan-Blanco (2022):
  - How does duality affect firm dynamics and the equilibrium firm distribution?
  - Implications for unemployment, welfare, productivity?

# Empirics \_\_\_\_\_

Three main facts:

- Fact #1: share of temporary workers is highly heterogeneous
- Fact #2: tiny fraction explained by aggregate/sectoral, most by firm FE
- Fact #3: share of temporary workers increases in firm size



#### Theory \_

• Directed search framework with multiworker firms

- ▶ Kaas and Kircher (2015), Schaal (2017), Roldan-Blanco and Gilbukh (2021)
- Efficient benchmark with complete dynamic contracts
- Two types of contracts *i* = *OE*, *FT* that differ in:
  - Matching efficiency A<sub>i</sub>
  - Firing costs  $C^F(\delta_i) = \chi_i \delta_i^{\psi_i}$
  - Exogenous separations s<sup>W</sup><sub>i</sub>
  - Promotions  $FT \rightarrow OE$
  - Enter differently in production

$$Y\left(\overrightarrow{n},z
ight)=\exp\left(z
ight)\left(\omega n_{OE}^{lpha}+\left(1-\omega
ight)n_{FT}^{lpha}
ight)^{rac{
u}{lpha}}$$

#### Quantitative Results \_\_\_\_

• Model is calibrated to match various moments

- ▶ Key: UE & EU rates for OE vs. FT contracts; temporary share by size
- Key trade-off:
  - FT contracts have higher matching efficiency A<sub>FT</sub>(1.53) > A<sub>OE</sub>(0.42)
  - But higher exogenous separation  $s_{FT}^W(0.52) > s_{OE}^W(0.05)$
  - ⇒ FT workers are cheap but face high turnover
- The model can rationalize why large firms use more FT workers :
  - Productive firms prefer OE because high opportunity cost of not filling vacancies
  - Large firms with low marginal product (DRS) prefer FT workers
- Policy counterfactuals: reduce duration of FT contracts (higher  $s_{FT}^W$ )
  - temporary share \sqrt\_i, unemployment \sqrt\_i
  - BUT: productivity \(\sqrt\_\), output \(\sqrt\_\) because a key input becomes more expensive!

- · Super important topic that deserves more study
  - Possibly important policy impact
  - Huge demand from politicians/general public
- Extremely well executed paper:
  - Clean state-of-the-art model with lots of features
  - Super transparent, clear desire to understand and explain
- Kudos to the authors!

## Comments: Spanish Background and Data \_\_\_\_

• It would like to see more on Spanish institutional background

- How many times can an FT contract be renewed? Do firms have an obligation to promote workers after a while?
- Limits on the number of FT contract at the same time?
- More on the legal framework: social security, payroll taxes, firing costs?
- By focusing on firms, the authors seem to avoid worker-side characteristics
  - Obvious data limitations...but it matters to understand firm incentives
  - Which types of jobs are given to FT workers (tasks/occupations,...)?
  - Who are the workers employed in FT jobs (young, low educated,...)?
- In the data, why focus specifically on firm size?
  - What about age, volatility of demand, growth rate?
    - "hockey stick" graph with decomposition of hires and separations b/w OE vs FT
  - Occupation composition (production/admin, skilled/unskilled)?

### Comments: Modeling Choices \_

• Why model FT workers as a separate input?

- Unclear why two legal contracts enter production differently
- Maybe justifiable in a model of tasks and worker heterogeneity...
- But hardwires the need for both types of workers
- Also matters a lot for misallocation and productivity results...
- Why should matching efficiency be higher for FT contracts?
  - Required here to make FT contracts desirable
  - Data: UE<sub>FT</sub> > UE<sub>OE</sub>, but is it also true for job filling rate?
  - In practice, this must be an endogenous outcome:
    - Firms understand that OE workers will stay long, so tougher screening process → lower acceptance probability, higher recruiting costs
    - On the other hand, FT workers may be assigned to task that require less talent or specific knowledge  $\rightarrow$  easier to recruit
    - · Selection on worker side: large pool of FT workers with lower outside options
  - Modeling all this is hard, but is exogenous matching efficiency a good proxy?

## Comments: Are these the right trade-offs? \_\_\_\_

- FT is usually perceived as the most flexible contract
  - Businesses like to hire cheap, expendable FT workers to compensate for excess rigidity of OE workers
    - · At the cost of getting lower skilled workers with weak attachment
  - A big part comes from large severance payments for OE workers
    - But severance payments DO NOT matter here
    - Is the choice of contracting model wise (complete and efficient)?
- Here instead, FT contracts are quite bad for firms:
  - Were it not for a higher matching efficiency or for entering as a separate input...
  - ▶ Least flexible: high exogenous separations (10x) and endogenous not allowed
  - Only way to escape this fate is by promoting worker...
    - ...but the workers then shows up as OE in production
  - Bottom line: FT workers are essentially a costly essential input
- Interpretation of policy counterfactual:
  - Shortening duration of FT contracts basically make that input even more costly...
  - But does NOT capture the fact that FT contracts fulfill flexibility needs of businesses

### Comments: Temporary Share by Size \_

- Intuition why large firms have more FT workers seems ambiguous
  - Productive firms, who are usually large, prefer OE...
  - So this must come from large unproductive firms
- Who are the large firms?
  - Productivity process is very volatile and not super persistent:

$$d \log (z_t) = -0.2053 \log z_t dt + 0.1700 dB_t$$

- ► Here: frictions+lack of persistence
  - large firms are those with history of positive shocks
  - growth rate of large firms in this model is likely negative on average
- Is this a good model of large firms?
  - Perhaps not, but this is common to this literature
  - This type of models usually do not match well the firm size distribution:
    - Fail to deliver Pareto tail, Gibrat's law...
    - · To fix it typically requires persistent fat-tailed shocks or random walk
  - But they usually do well in matching job flow dynamics
- Perhaps forget about role of size to concentrate on firm growth?
  - OE/FT hires and separations for growing vs. contracting firms?

- Great topic
- A beautiful paper by extremely skilled authors
  - A great display of modeling skills and how to conduct serious quantitative work!
- My main suggestions:
  - Expand empirics to other observables and go beyond firm size
  - Concentrate on getting the mechanism right