## How does part-time work affect productivity?

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2. Part-time work: determinants and trends

- Who?
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- Which industries?

3. Details on data samples, the Belgian context, and prior literature on the subject

## 1. Implications of part-time work for productivity and profitability



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## Part-time work is positively associated with firm-level labor productivity

A 10 percentage point increase in the share of employees working part time within a firm (e.g., from 20 to $30 \%$ ) is associated with a $2 \%$ increase in firm-level labor productivity

- Firm-level labor productivity = gross added value per hour worked
- Effect is most positive for firms with less than $30 \%$ of employees on parttime contracts (effect seems to weaken beyond this point)

Hopes for a post-pandemic productivity surge will be disappointed

More woe for eurozone as labour productivity growth grinds to halt

Work productivity is stagnating; do we expect too much from new technologies?
SUSTAINABILITY - Delivery drones, order pillars and autonomous robot in th is stagnating.
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There is still value in equities, if you can find it

How the West fell out of love with economic growth


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Spain: Productivity, an endemic weakness of the spanish economic model

## $2 \%$ is highly substantial

The average annual productivity growth in the European Union over the 2010-2021 period was 0.9\% (OECD, GDP per hour worked)

Productivity growth is the most important driver of long-term income growth, directly influencing living standards, competitiveness and a government's scope to pursue policy

## Part-time work equally as beneficial for older firms as for younger firms

Labor productivity


## Part-time work is more beneficial for firm-level productivity when it's tenured employees who work part time

Unless part-time work is very common in the organization (i.e., above $50 \%$ of employees work part time), in which case, the tenure of the part-time workers doesn't seem to have an impact.


Labor productivity


## The age of the part-time workers has no influence on productivity



## A negative relationship between part-time work and employee absence due to illness

A 10\% increase in part-time workers is associated with a 3-7\% reduction in total sick days per year


## Substantial variation across industries

| Industry | \% employees part time | Effect of 10\% increase in share of part-time contracts on labor productivity |
| :---: | :---: | :---: |
| - Real estate activities | 23\% | 4.9\% |
| - Professional, scientific and technical | 14\% | 3.3\% |
| - Construction | 11\% | 3.4\% |
| - Accommodation and food service | 50\% | 3.1\% |
| - Information and communication (IT) | 12\% | 2.1\% |
| - Wholesale and retail trade | 39\% | 1.6\% |
| - Arts, entertainment and recreation | 40\% | 1.6\% |
| - Manufacturing | 22\% | 1.1\% |
| - Administrative and support services | 42\% | 1.1\% |
| - Financial and isurance | 24\% | 1.1\% |
| - Agriculture | 19\% | 0.2\% |
| - Transportation and storage | 20\% | -0.5\% |
| - Education | 60\% | -1.4\% |
| - Human health and social work | 61\% | -2.1\% |

## While working part-time increases labor productivity, there is no relationship with profitability



## 2. Part-time work: determinants and trends

- Who?
- What kind of firms?
- Which industries?



## Within the sample

## 52\% of women <br> 17\% of men <br> work part-time



## Employee age

Part-time work is most common among employees above 50 years old.

Likelihood of full-time work declines from age 25 to 37 , then picks up again after.

Major factors:

- Family demands and priorities (caring for children)
- Economic needs
- Moving into retirement
- ....


Model controlling for differences in industry, province, year, company size, company age, white/blue collar, employee tenure, workforce composition

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## Relationship with income (€/hour)



## Influence of company size, age and region

Part-time work more common in large firms

- Increasing from $20 \%$ of contracts in small firms (less than 10 employees) to about $30 \%$ in large firms (more than 500 employees)

Company age has no meaningful effect

## Part-time employment is least common in "male" industries



## Percentage of female/male employees working part-time

## Men/women equally

likely to work part-time


Female employeesMale employees

Electricity, gas, steam and air conditioning supply
7\%

## 3. Details on data sample, Belgian context, and prior literature



## Sample

Data from 7,575 firms and 824,000 employees from 2016 to 2022

- Approximately $68 \%$ full-time employed
- $41 \%$ female, $59 \%$ male
- $37 \%$ blue-collar, $63 \%$ white collar ( $10 \%$ manager role')
- Average salary: 2,950 €/month (median: 2,620 €/m)

Average firm

- 804 employees (median: 309)
- €258M assets (€57M), €221M revenue (€81M), 3\% ROA (3\%)
- 35 years old (31y)

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## Belgian context

General convention for full-time employment is a 38 -hour workweek

- Differences depend on joint committee (commission paritaire)
- 40-hour workweek is also common - extra hours are compensated with 12 days off per year
- 50-hour week is the maximum, in cases of extraordinary workload
- Part time = not full time and working a minimum of 12 hours/week

Average weekly working hours of Belgian part-time workers is among the highest in Europe

- On average a part-time job in Belgium represents about 60\% of a full-time job (Eurostat)

Feb 22. New regulation allowing employees to request to work 38 hours in a 4-day workweek

## Popularity of part-time work has stabilized in Belgium, at least for women

\% part time (\% of salaried workers in Belgium)


## Part-time work is more common in Belgium than in most other EU countries

Part-time work as \% of total employment (2022, Q2)
43\%

> Lack of access to full-time jobs plays an important role in many countries (especially southern EU states) but not so much in Belgium (Eurostat, 2018)
$11 \%$
$13 \% 14 \%$
$17 \% \quad 17 \% 18 \% 18 \% 18 \%$


## Almost 30\% of employment contracts in the data are part-time contracts



## Part-time employees work either half time (~50\%) or 4/5 (~80\%)



30\% working less than 35 hours/week (FOD Economie, 2016: 27\% working part time)

## \% Part-time of total workforce

- The share of part-time workers in Spain was close to the EU27 average in 2022: $13.0 \%$ in Spain vs $14.8 \%$ in EU27
- Countries with the highest share of part-time workers are the Netherlands (36\%), Indonesia (25.9\%), Japan (25.6\%), and Australia (25.5\%). Germany also scores highly (22.2\%), as does the UK (21.7\%)
- Brazil (14.2\%), Colombia (14.3\%), Chile (16.6\%) and Mexico (17.9\%) are comparable to the average rate in the EU

The share of employees that work part-time has remained more stable in the last 10 years than expected:

- Only very few countries had a strong increase in part-time employment: Korea (from $10.6 \%$ in 2010 to $16 \%$ in 2022), Japan (from $20 \%$ in 2010 to $26 \%$ in 2022).
- In the EU27, the share of part-time work has remained relatively stable (from $15.1 \%$ in 2010 to $14.8 \%$ in 2022).
- Similarly in Spain (12.2\% in 2010 to $12.9 \%$ now)


## Breakdown by gender

- The gender difference (\% of women who work part time vs. \% men who work part time) is 15 percentage points in the OECD as a whole: $24.7 \%$ of women work part time vs. only $9.8 \%$ of men.
- In the United States ( $16 \%$ for women vs. $8 \%$ for men), and countries in the Nordics such as Finland ( $21 \%$ vs. 13\%), Denmark ( $21 \%$ vs. $13 \%$ ), differences between men and women are smaller than in countries such as Austria ( $36 \%$ vs. $9 \%$ ), Australia ( $37.1 \%$ vs. $15 \%$ ), Germany ( $36 \%$ vs. $10 \%$ ) or the United Kingdom (35\% vs. 11\%).
- Overall, gender difference has remained surprisingly stable in the past 10 years. Trends towards more equity are most pronounced in the Nordic countries, the United Kingdom and Germany (even though the differences remain quite strongly in the latter two countries, as highlighted above).


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[^0]:    ${ }^{1}$ Has one of the following terms in job title: manager, chief, director, CEO, executive, team leader,...

