

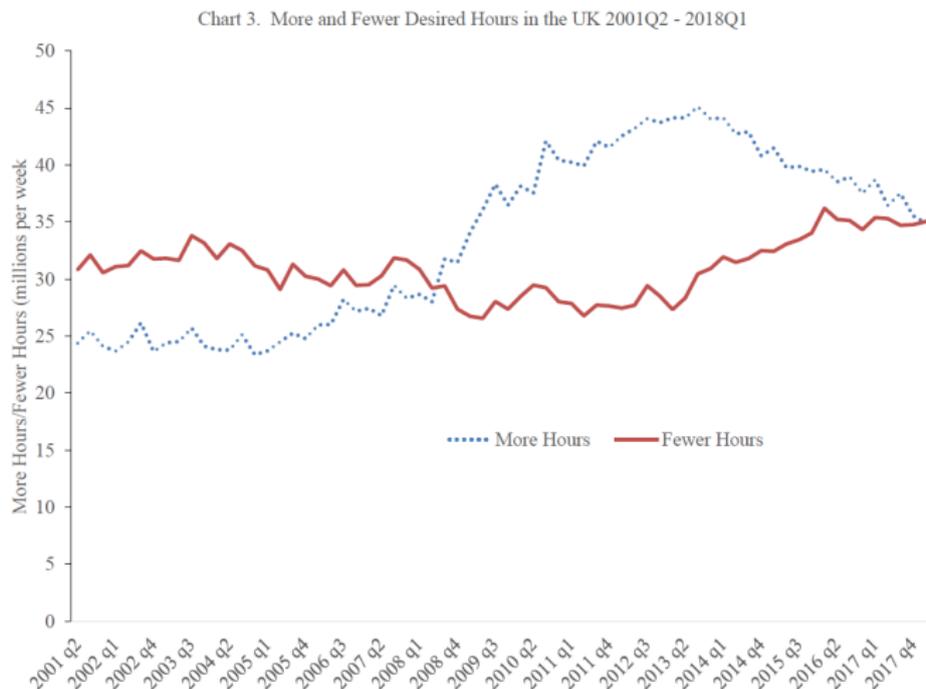
Desired hours worked over the business cycle: Stylised facts for European countries

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Desired hours in the UK



Bell and Blanchflower (2018)

Why are desired hours important?

- Desired hours reveal true preferences on the labour market, unconstrained by the labour demand, access to childcare, labour market institutions – Tummers and Woitiez (1990), Aaberge et al. (1999), Callan et al. (2009)
- Unemployment rate does not fully capture the available labour supply in an economy – underemployment is more informative – Bell and Blanchflower (2018)
- Precautionary labour supply theory – in the presence of an income risk (wage cut or risk of losing a job), individuals would like to work more hours – Jessen et al. (2018)

We do not know how desired hours vary over the business cycle or across countries

Research questions

- 1 How (and why) do desired hours worked vary over the business cycle?
- 2 What is the effect of recessions on desired hours?

This paper

Descriptive stylised facts for European countries:

- 1 Average desired hours are counter-cyclical in analysed European countries (1998–2017)
- 2 During recessions, the underemployment gap is driven by desired hours; actual hours remain fairly stable

Identify the effect of recessions on desired hours – variation in regional unemployment rates – Lazear et al. (2016)

Narrow the sample period to the beginning of the Great Recession (2007q4–2009q1) – French LFS – even larger positive effects

This paper (continued)

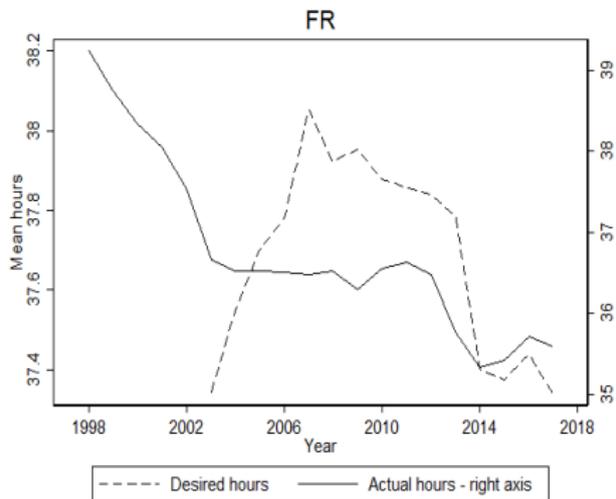
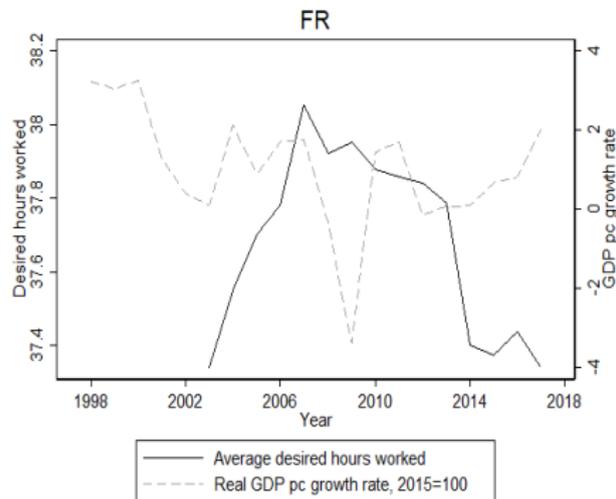
An exploration of the income effect mechanisms:

- Bottom income deciles increase desired hours the most
- Part-time and temporary workers increase desired hours more than the average – substantial heterogeneity between countries

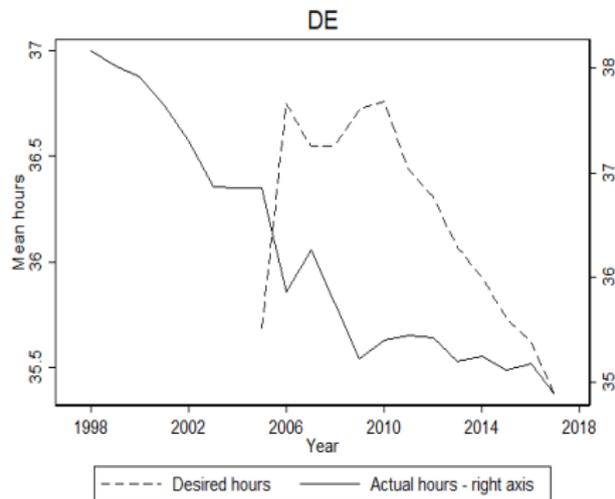
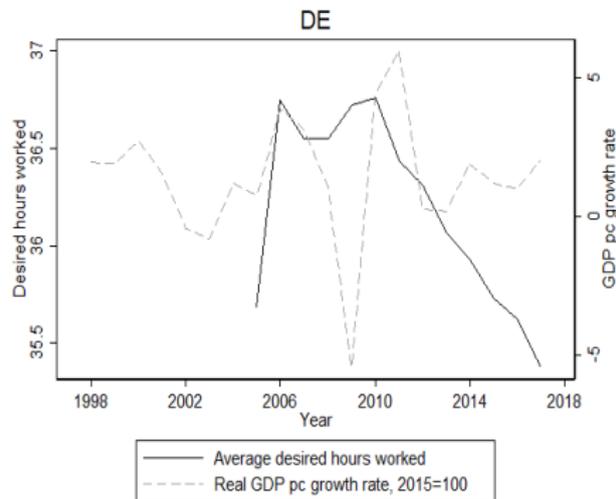
- EU Labour Force Survey, Eurostat – publishes comparable unemployment rates for European countries – repeated cross-section
- 12 European countries, 1998 - 2017: Austria, Belgium, Czech Republic, Finland, **Germany**, Spain, **France**, Greece, **Ireland**, Poland, Portugal, the UK
- Employed individuals, who answered the question about desired hours
- 3 questions asked in the survey:
 - 1 *Wish to work more than the current number of hours*
 - 2 *The way the individual would like to work more hours*
 - 3 ***Total number of hours the individual would like to work***
- Individual wages not available, income decile information start in 2009

Descriptive statistics

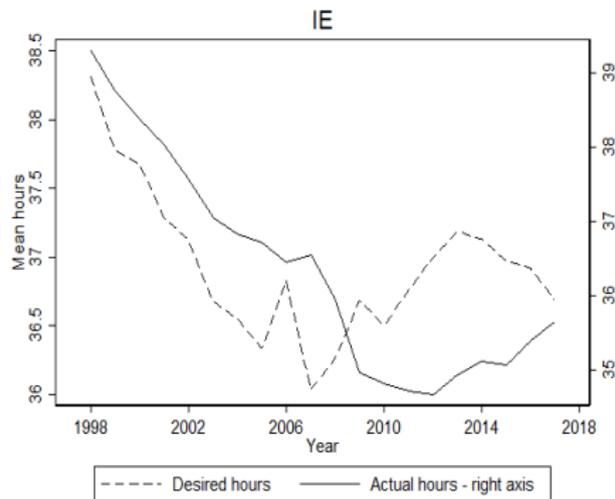
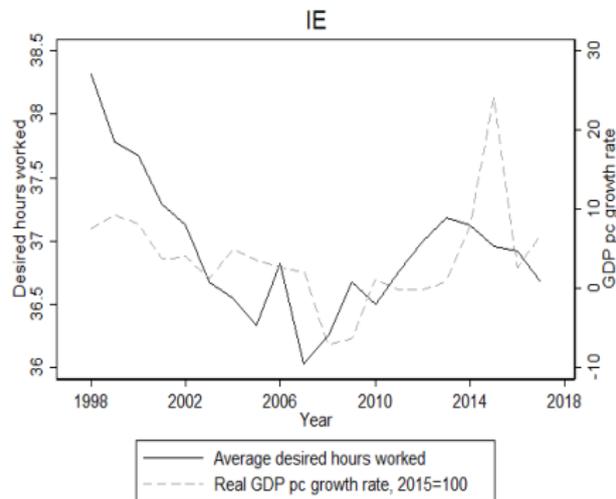
Desired and actual hours over the business cycle



Desired and actual hours over the business cycle



Desired and actual hours over the business cycle



Why would desired hours be countercyclical?

Wealth effect – if an individual's assets (e.g. housing or financial assets) lost value during a recession, she would like to work more hours to compensate for the wealth loss

Precautionary motives – in high income risk situations, individuals would like to work more hours to compensate for the future (expected) income losses – Jessen et al. (2018) for Germany

Income effect – if an individual's labour income decreased during recessions, she would increase desired hours for the given wage rate:

- Part-time work becomes more prevalent in recessions – Borowczyk-Martins and Lale (2019) for the US and UK
- Temporary workers
- Income could be targeted on the household level – e.g. partner lost their job

Identification strategy

The effect of recessions on desired hours identified using variation in regional (NUTS2) unemployment rates:

- Regional unemployment rates vary within a country
- Unemployment rates over time change at different rates between regions

Identifying assumption: regional unemployment rate is exogenous to individual desired hours

ID threat: unable to control for e.g. conscientiousness – add individual fixed effects using panel dataset for France

Empirical specification

$$hours_{irt} = \alpha_0 + \beta_0 UR_{rt} + \beta' X_{irt} + \mu_r^1 + \mu_t^2 + X_{irt} * \mu_r^1 + \mu_r^1 * \mu_t^2 + \epsilon_{irt} \quad (1)$$

$hours_{irt}$ – desired hours for individual i in region r in year t

UR_{rt} – regional unemployment rate

X_{irt} – individual characteristics: age, education, gender, part-time and temporary contracts, sector, occupation, number of employed individuals in the household

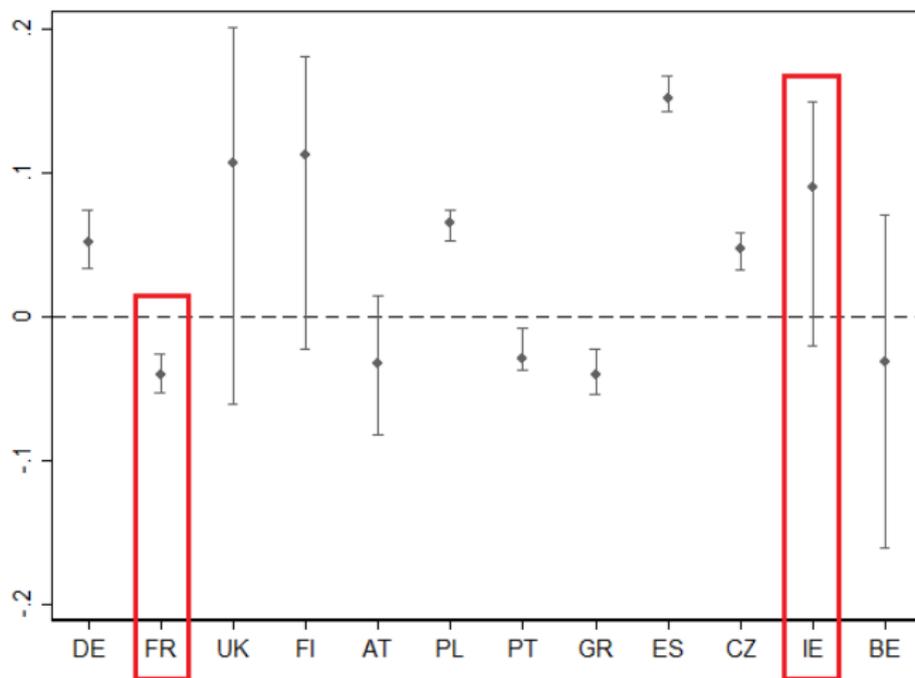
μ_r^1 – region-fixed effects

μ_t^2 – time-fixed effects

Unable to control for individual fixed-effects – sorted later using a panel dataset from France

The effect of regional unemployment rates on desired hours

- β_0



French LFS – Enquête emploi en continu

Rolling panel dataset – each individual interviewed for 6 quarters; each quarter 1/6 individuals replaced by new interviewees

Sample: employed individuals in 6 consecutive quarters, answered desired hours question in at least 2 quarters

Table: Descriptive statistics on desired hours worked for French panel data

	2006q1 - 2007q2	2007q4 - 2009q1	2009q4 - 2011q1	2015q1 - 2016q2
Average desired hours	39.6	39.1	39	38.6
SD desired hours	8.5	10.2	9.3	9.6
Average actual hours	35	34.3	34.1	32.9
SD actual hours	12.2	12.2	12.2	13.2
N groups	1332	1254	1634	1790
N	7992	7524	9804	10740

Random effects model:

$$hours_{irt} = \alpha_0 + \beta_0 UR_{rt} + \beta' X_{irt} + \alpha_i + \mu_r^1 + \mu_t^2 + X_{irt} * \mu_r^1 + \mu_r^1 * \mu_t^2 + \epsilon_{irt} \quad (2)$$

$hours_{irt}$ – desired hours for individual i in region r in year t

UR_{rt} – regional unemployment rate

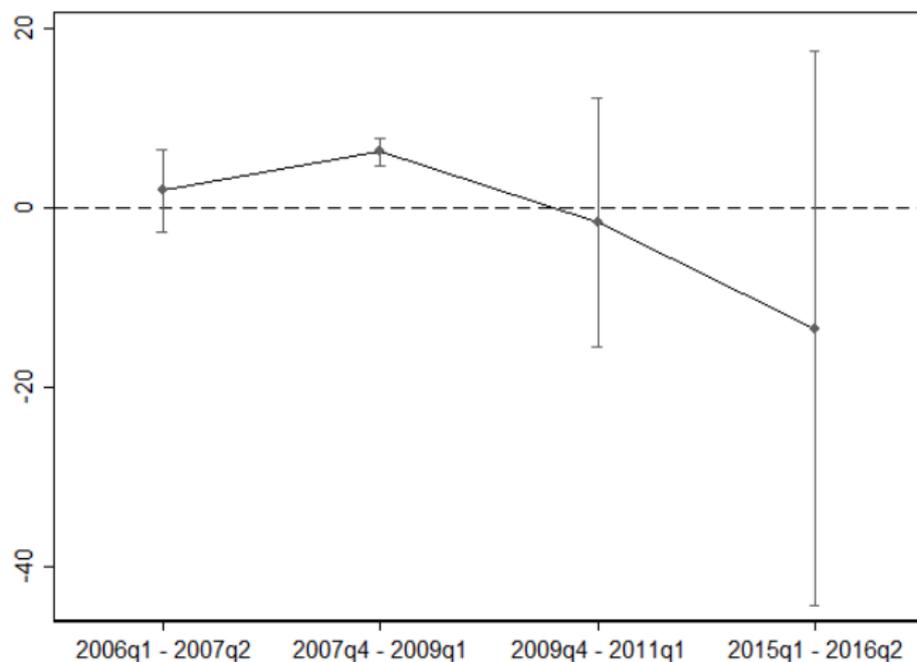
X_{irt} – individual characteristics μ_r^1 – region-fixed effects

μ_t^2 – time-fixed effects

α_i – **individual fixed effects**

The effect of the Great Recession on desired hours in France

- β_0



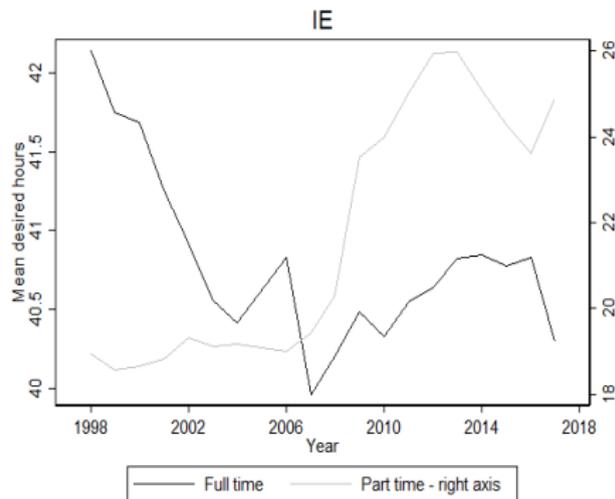
Desired hours and the income effect

Recessions reduce incomes and outside options for workers (Lazear et al. 2016) – vulnerable groups on the labour market could increase desired hours the most:

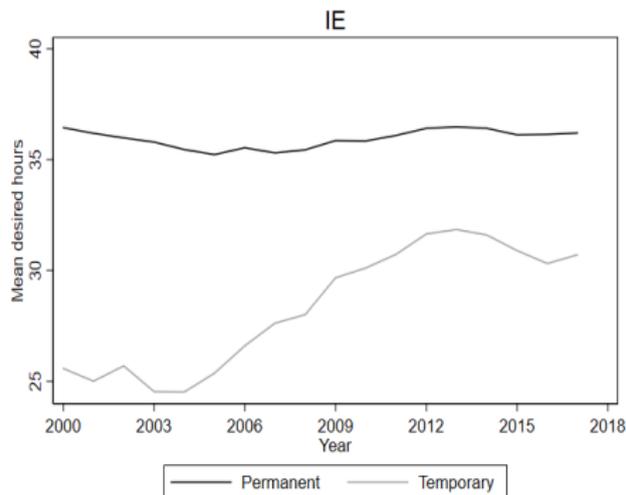
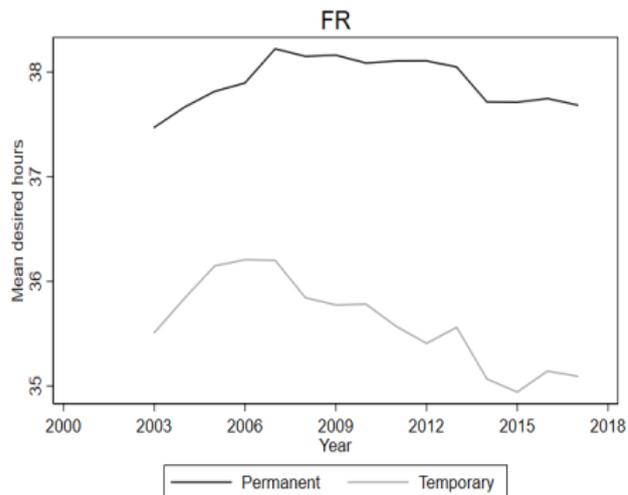
- individuals from the bottom of the income distribution
- part-time (Borowczyk-Martins and Lale 2019) and temporary workers

Income effect on the household level – if a partner loses their job, workers might want to work more hours Employed in HH

Desired hours for part-time and full-time workers



Desired hours for temporary and permanent workers



The effect of recessions on desired hours for temporary and permanent workers

	FR	IE
Regional UR	-0.0374*** (0.0105)	-0.129 (0.0950)
Part time * UR	0.196*** (0.0232)	0.395*** (0.0366)
Temporary * UR	-0.0735** (0.0224)	-0.00291 (0.0521)
PT = 1	-11.01*** (0.484)	-19.28*** (0.508)
Temporary = 1	2.126*** (0.482)	-0.203 (0.747)
<i>N</i>	1415503	268384
adj. R^2	0.330	0.494

Concluding remarks

- Desired working hours are counter-cyclical in most European countries
- In Ireland, the most vulnerable groups on the labour market drive the increase in desired hours – part-time workers and bottom of the income decile
- Top of the income distribution increases desired hours – could be driven by the wealth effect in the Great Recessions

Implications for recovery periods – labour demand starts to increase but very costly to hire new workers

Thank you for your time!

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