

More insecure and less paid? The effect of perceived job insecurity on wage distribution

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OUTLINE

- Introduction
- Job insecurity: definition and previous literature
 - Psychology/Sociology/Economics
- Data, model and econometric techniques
- Results
- Conclusions

INTRODUCTION: THE GLOBAL SCENARIO

- The **increased global competition** – in particular since **the Great Recession** - has put organizations under pressure
- Merging, dismissals, re-organization, downsizing, restructuring have become common phenomena



- As a result ...we live in “**liquid times**” (Bauman, 2007)
- The nature of work has changed: from a secure employment to an insecure employment

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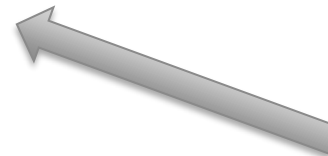
PREVIOUS LITERATURE

- Currently, perceived job-insecurity (JI) is a topic that crossways a growing literature in different disciplines such as
 - **psychology,**
 - **sociology,** (Erlinghagen, 2008, Gallie et. Al 2017, Helbling, and Kanji, 2017, Lubke, and Erlinghagen 2014)
 - **but only marginally economics** (Burchell, 2009, Koutentakis, 2008)

Definitions of Job Insecurity

An employee's...

- “...expectations about continuity in a job situation”
(Davy et al., 1997)
- “...concern about the future permanence of the job”
(van Vuuren & Klandermans, 1990)
- “...perception of a potential threat to continuity in his
or her current job” (Heaney et al., 1994)
- “...subjectively perceived likelihood of involuntary job
loss” (Sverke et al., 2002)



Subjective definition of Job Insecurity

- **Subjective:** JIS is a perceptual phenomenon
 - *Different* perception of same ‘objective’ situation
- **Uncertainty** about the future
 - *Not* ‘certainty of dismissal’ (=> it’s different from unemployment, being fired, or temporary job)
- **Involuntary**
 - *Discrepancy* between experience and preferences

Consequences for individual health and well-being

Psychology literature

- **Mental and physical health** (De Witte, 1999)
- **Anxiety & depression** (Orpen, 1993)
- Burnout (Dekker & Schaufeli, 1995)
- Life dissatisfaction (Lim, 1996)
- High blood pressure (Burchell, 1994)
- **Use of medical services** (Roskies & Louis-Guerin, 1990)
- **Occurrence of heart disease** (Siegrist et al., 1990)

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PREVIOUS LITERATURE ON JI AND WAGES: SOCIOLOGY/ECONOMICS

- Maurin and Postel-Vinay (2005): perceived job security and wage are two substitute components in the functioning of European labour markets.
- Hubler and Hubler (2010): perceived and objective JI has a negative effect on wages in both the UK and Germany.
- Cambell et al. (2007): in Britain the fear of unemployment has a negative and significant effect on the mean level of wages.
- In **ITALY**:
 - Since the great **economic and financial crisis**—it has shown both a quite large **increase in JI and a decline in the hourly real wage**, even more clearly than the other OECD countries. (OECD 2016).
 - Pay gap permanent vs temporary contracts (Berton et al. 2012, Bosio 2014)

- Psychology: focus on **subjective/perceived JI (subjectively perceived likelihood of involuntary job loss)**. It does not evaluate effects on wages
- Economics: focus on **“objective”** JI (fixed term contracts vs open-ended contracts)

Psychology



Economics

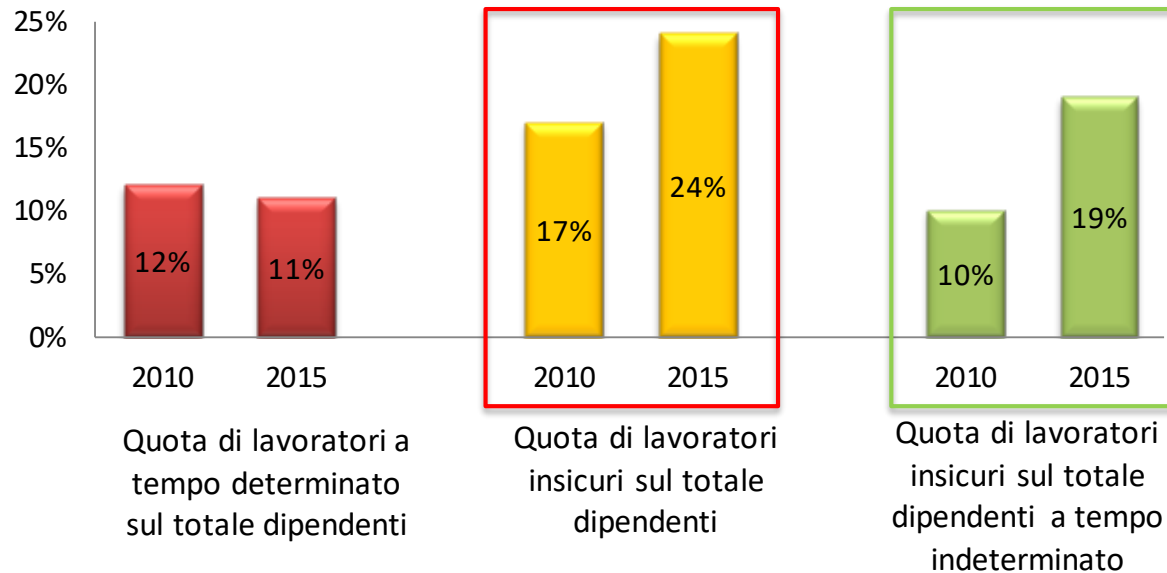
What about the effects of JI on wage?

1. Objective definition of JI

2. Average level of wage

- It is important to note that when trying to assess the effects of policy variables, policy maker is more interested in the effects on the **whole distribution** of a variable, rather than on its average.
- This is particularly relevant in the case of **social policies tailored to deal with wage inequality**.
- Thus, a study investigating the effects on the average income actually leaves out the most relevant aspects **concerning its distribution**.
- We add to the existing literature, **evaluating the effects of the perceived JI on the income distribution as well as on its average.**

L'insicurezza sul mercato di lavoro oggettiva e soggettiva



Fonte: elaborazione su dati INAPP - QdL

Source: Scicchitano (2018), *La percezione dell'insicurezza del lavoro*, in *L'esplosione dei lavori temporanei: fattori ciclici o strutturali?* (C. Dell'Aringa ed.), pp. 79-86, AREL

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DATA (1)

- The data are from the **Fourth INAPP Survey on Quality of Work (InappQoW)** that has been carried out in **2015** on a sample of **15,000 workers**.
- INAPP realizes this periodical survey every four years, with the aim of measuring the concept of work quality in Italy.
- The project is inspired to the **European Working Conditions Survey** carried out by Eurofound.
- We first excluded self-employed workers. The sample was then restricted to employees between 18 and 64 years. The final sample consisted of **4,155 secure and 1,239 insecure workers**.

DEFINITION OF JI

- In order to measure subjective (perceived) JI we refer to a specific question which was asked in the InappQoW.
- Individuals who are currently in employment are asked: **“In the next 12 months I could not have more work, in spite of myself”**. Individuals were required to respond “Yes” or “Not”.
- **So 3 issues:**
 - Subjective:** JI is a perceptual phenomenon
Different perception of same ‘objective’ situation
 - Uncertainty** about the future
Not ‘certainty of dismissal’ (=> it’s different from unemployment, being fired, or temporary job)
 - Involuntary**
Discrepancy between experience and preferences

COVARIATES

- The **logarithm of the monthly net wage** is regressed on a set of covariates representing:

(i) individual characteristics:

- **age and its squared**
- **gender**
- **household ability to make ends meet** (3 categories indicating “simply”, “with some difficulties”, and “with many difficulties”)
- **education** (eight categories based on the highest level achieved),
- **education of father** (eight categories based on the highest level achieved)
- **work experience**

COVARIATES (2)

(ii) job characteristics:

- part-time/full-time
- temporary/permanent
- mobility in change job (four categories showing how many changes since the first job, “never changed”, “1/2 changes job”, “3/5”, “more than 5”)
- stability of job security over time (three categories given by the response to the question “by comparing your current work situation with that of January 2008, do you think the job stability has worsened, equaled or improved?”)
- training received in the last year
- supervisory position
- telework
- welfare/social security contributions payment
- **routine tasks prevailing at work (perceived routine)**
- skill mismatch
- job-stress (three categories for the question “consider your stressful work?”, ranging from “never” to “always or most of the time”)

COVARIATES (3)

(iii) firm characteristics:

- size (measured by the number of workers in the same local unit),
- location in the Southern Italy (Mezzogiorno),
- sector of economic activity (17 dummy variables);

Empirical strategy

1, Estimate wage gap - Mincerian Wage Equations, at each quantile:

$$\log(W_{ir}) = f(X'_{ir}\beta, J'_{ir}\gamma, F'_{ir}\delta)$$

X_{i} = individual characteristics: age, gender, household ability to make ends meet, education, education of father, work experience;

J_{i} = job characteristics: part-time, temporary, job mobility, training received in prev. year, supervisory position, telework, welfare/social security contributions payment, skill mismatch, job-stress, perceived routine in tasks.

F_{i} = firm characteristics: unit size, location in the South, sector of activity (17 categories), skills (9 categories, ISCO 1stdigit).

2, Counterfactual Decomposition Analysis : estimate how much of this pay gap is attributed to differences in labor market characteristics btw the two groups or to differences in rewards that the two groups receive for characteristics (wage structure).

$$\Delta(\bar{y}) = (\bar{X}_{nr} - \bar{X}_r)' \hat{\beta}_{nr} + \bar{X}_{nr}' (\hat{\beta}_{nr} - \hat{\beta}_r) + \bar{X}_r' (\hat{\beta}_r - \hat{\beta}_{nr})$$

Econometric technique

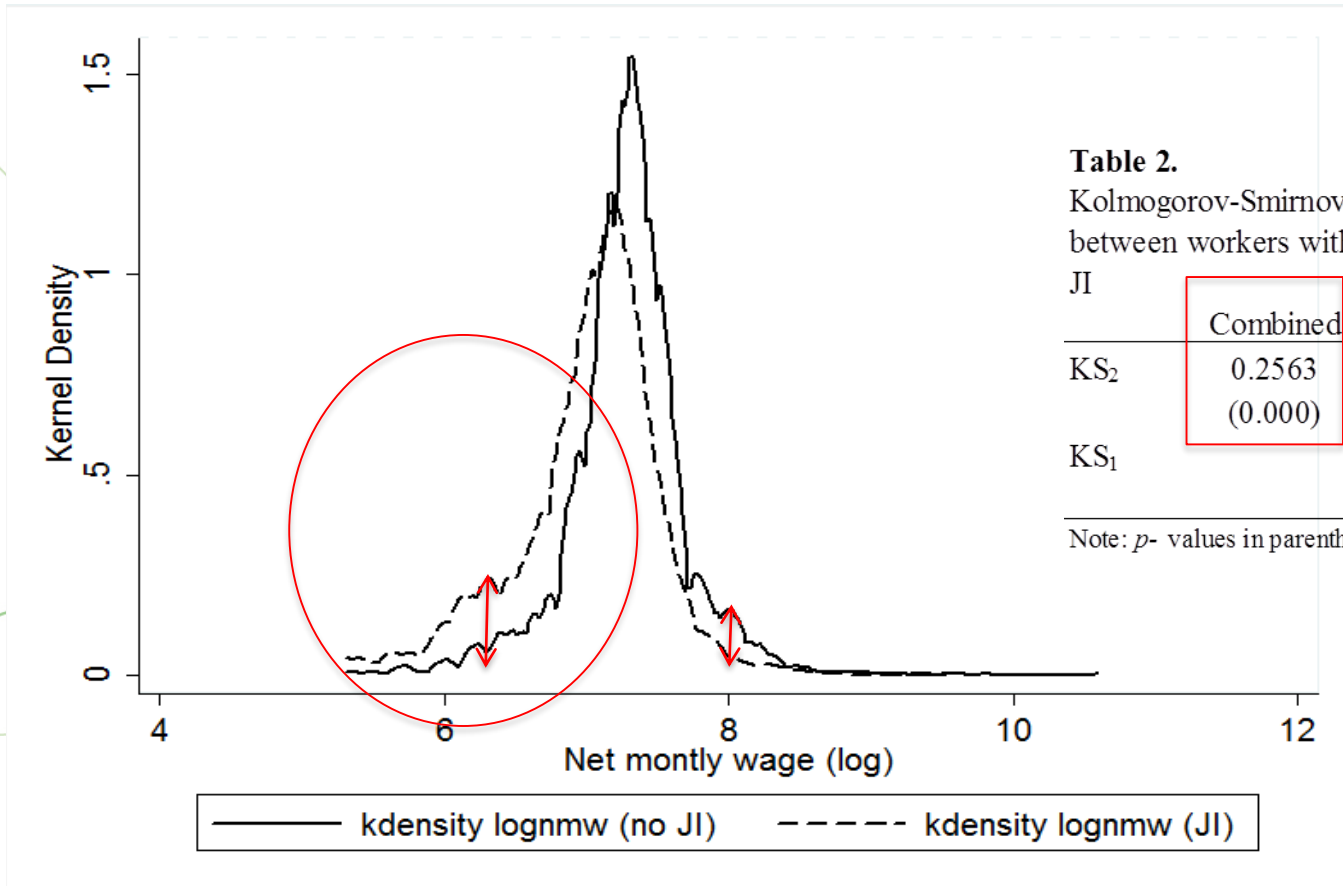
- We use a **Counterfactual Decomposition Analysis (CDA)** using quantile regression
- More specifically, we estimate whether and to what extent this pay gap is attributed more to differences in labor market characteristics between the two groups of workers or to differences in rewards that the two groups receive for their characteristics in the Italian labor market.
- We exploit both a **semi-parametric method** (Melly 2006, with no selectivity bias in JI) and **a non-parametric one (IPW Di Nardo, Fortin, Lemieux 1996, with selection bias)**.
 - **In the IPW:** first probability model to be insecure, then a second stage with selection bias in the counterfactual wage distributions

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WAGE DISTRIBUTIONS

Figure 1
Wage distribution for workers with JI and workers with no JI



OLS AND QUANTILE REGRESSION:JI NO

Table 3A

OLS and Quantile Regressions estimates. Job Insecurity:no

	OLS	q10	q20	q30	q40	q50	q60	q70	q80	q90
age	0.015* (0.009)	0.031** (0.014)	0.021*** (0.007)	0.010 (0.007)	0.017** (0.007)	0.015** (0.007)	0.009 (0.008)	0.018** (0.009)	0.018 (0.012)	0.022* (0.012)
age_sq	-0.000 (0.000)	-0.000** (0.000)	-0.000*** (0.000)	-0.000 (0.000)	-0.000* (0.000)	-0.000* (0.000)	-0.000 (0.000)	-0.000* (0.000)	-0.000 (0.000)	-0.000 (0.000)
male	0.153*** (0.019)	0.162*** (0.034)	0.155*** (0.023)	0.138*** (0.024)	0.136*** (0.032)	0.129*** (0.022)	0.133*** (0.024)	0.154*** (0.019)	0.161*** (0.025)	0.162*** (0.022)
make_ends_meet_1	0.101*** (0.020)	0.160*** (0.034)	0.122*** (0.031)	0.079*** (0.023)	0.086*** (0.021)	0.099*** (0.021)	0.086*** (0.016)	0.079*** (0.022)	0.069** (0.027)	0.047 (0.037)
make_ends_meet_2	0.185*** (0.026)	0.209*** (0.028)	0.177*** (0.040)	0.150*** (0.030)	0.141*** (0.030)	0.143*** (0.028)	0.134*** (0.025)	0.131*** (0.026)	0.164*** (0.044)	0.217*** (0.061)
edu_faith	0.020* (0.011)	0.005 (0.018)	0.004 (0.009)	0.012* (0.007)	0.016** (0.007)	0.013** (0.005)	0.013* (0.008)	0.019 (0.013)	0.016 (0.013)	0.043*** (0.014)
work_exp	0.005*** (0.002)	0.007** (0.003)	0.006*** (0.001)	0.006*** (0.002)	0.003** (0.002)	0.004* (0.002)	0.003* (0.002)	0.003* (0.002)	0.003 (0.002)	0.003 (0.002)
pasted	0.053*** (0.007)	0.055*** (0.010)	0.055*** (0.009)	0.050*** (0.007)	0.041*** (0.003)	0.050*** (0.006)	0.049*** (0.007)	0.046*** (0.008)	0.057*** (0.012)	0.059*** (0.012)
full	0.408*** (0.025)	0.574*** (0.037)	0.496*** (0.040)	0.483*** (0.033)	0.428*** (0.023)	0.382*** (0.025)	0.344*** (0.023)	0.344*** (0.020)	0.315*** (0.022)	0.273*** (0.046)
perm	0.093*** (0.026)	0.099* (0.055)	0.153*** (0.041)	0.112*** (0.024)	0.122*** (0.023)	0.097*** (0.019)	0.082*** (0.020)	0.080** (0.031)	0.041 (0.045)	0.035 (0.040)
mobility_1	-0.060*** (0.023)	-0.026 (0.033)	-0.032 (0.028)	-0.022 (0.023)	-0.032 (0.024)	-0.067*** (0.026)	-0.070*** (0.026)	-0.078*** (0.026)	-0.083** (0.040)	-0.066 (0.045)
mobility_2	-0.068*** (0.023)	-0.109*** (0.040)	-0.054* (0.032)	-0.040 (0.028)	-0.028 (0.028)	-0.051** (0.024)	-0.051*** (0.019)	-0.054** (0.022)	-0.077** (0.037)	-0.053* (0.029)
mobility_3	-0.029 (0.028)	-0.066 (0.053)	-0.043 (0.036)	-0.022 (0.028)	-0.005 (0.031)	-0.023 (0.023)	-0.042 (0.030)	-0.017 (0.032)	-0.034 (0.045)	-0.027 (0.043)
stability	-0.011 (0.012)	-0.021 (0.025)	-0.004 (0.020)	-0.004 (0.017)	-0.010 (0.015)	-0.013 (0.014)	-0.018* (0.010)	-0.020 (0.015)	0.005 (0.012)	-0.001 (0.020)
training	0.058*** (0.017)	0.090*** (0.025)	0.064*** (0.020)	0.044** (0.020)	0.038* (0.022)	0.040* (0.023)	0.044*** (0.013)	0.047** (0.021)	0.056* (0.031)	0.015 (0.041)
supervisor	0.098*** (0.019)	0.029 (0.028)	0.060*** (0.022)	0.081*** (0.013)	0.082*** (0.014)	0.098*** (0.018)	0.115*** (0.013)	0.112*** (0.008)	0.111*** (0.025)	0.161*** (0.025)
telework	0.082*** (0.029)	0.077 (0.074)	0.051 (0.035)	0.038 (0.026)	0.058** (0.023)	0.057 (0.039)	0.084** (0.042)	0.083*** (0.032)	0.085* (0.046)	0.059 (0.041)
contr	0.098 (0.063)	0.190* (0.111)	0.121 (0.097)	0.133** (0.058)	0.058 (0.055)	0.058 (0.052)	0.063 (0.057)	-0.021 (0.051)	-0.002 (0.030)	0.034 (0.055)
routine	-0.055*** (0.020)	-0.061* (0.035)	-0.045 (0.037)	-0.047 (0.031)	-0.065*** (0.015)	-0.069*** (0.024)	-0.075*** (0.023)	-0.070*** (0.032)	-0.072*** (0.019)	-0.074*** (0.024)
mismatch	-0.030 (0.019)	0.003 (0.021)	-0.030 (0.019)	-0.023 (0.020)	-0.025 (0.024)	-0.035* (0.022)	-0.034 (0.025)	-0.023 (0.021)	-0.037 (0.025)	-0.019 (0.040)
stress	0.078*** (0.017)	0.147*** (0.027)	0.101*** (0.025)	0.077*** (0.013)	0.050*** (0.017)	0.055*** (0.013)	0.056*** (0.019)	0.045** (0.021)	0.043** (0.021)	0.082*** (0.025)
unionsize	0.000** (0.000)	0.000 (0.000)	0.000 (0.000)	0.000* (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000** (0.000)
mezzogiorno	-0.033 (0.021)	-0.050 (0.050)	-0.024 (0.047)	-0.027 (0.039)	-0.023 (0.031)	-0.014 (0.029)	-0.019 (0.030)	-0.024 (0.036)	-0.024 (0.033)	-0.026 (0.036)
_cons	5.508*** (0.210)	4.569*** (0.352)	5.012*** (0.250)	5.471*** (0.146)	5.571*** (0.120)	5.670*** (0.147)	5.863*** (0.151)	5.817*** (0.174)	5.934*** (0.263)	5.892*** (0.369)
Sectors	Yes									
N	1239									
Pseudo R2	0.557	0.446	0.403	0.375	0.351	0.337	0.325	0.315	0.316	0.332

Notes: Standard errors in parentheses; robust standard errors are computed for OLS coefficients while the quantile regression standard errors are obtained by bootstrapping (200 repetitions). 17 dummies for sectors included, but not reported. ***p < 0.01, **p < 0.05, *p < 0.1

OLS AND QUANTILE REGRESSION: INSECURE WORKERS

Table 3B
OLS and Quantile Regressions estimates. Job Insecurity:yes

	OLS	q10	q20	q30	q40	q50	q60	q70	q80	q90
age	0.013** (0.005)	0.025** (0.010)	0.019** (0.007)	0.019*** (0.005)	0.017*** (0.004)	0.020*** (0.003)	0.019*** (0.005)	0.018*** (0.006)	0.010 (0.010)	0.005 (0.007)
age_sq	-0.000 (0.000)	-0.000** (0.000)	-0.000* (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000** (0.000)	-0.000* (0.000)	-0.000 (0.000)	0.000 (0.000)
male	0.126*** (0.010)	0.112*** (0.010)	0.103*** (0.009)	0.113*** (0.008)	0.111*** (0.008)	0.099*** (0.011)	0.109*** (0.013)	0.115*** (0.009)	0.125*** (0.014)	0.143*** (0.015)
make_ends_meet_1	0.082*** (0.013)	0.093*** (0.022)	0.072*** (0.018)	0.067*** (0.015)	0.068*** (0.012)	0.064*** (0.016)	0.069*** (0.014)	0.073*** (0.014)	0.070*** (0.014)	0.039* (0.023)
make_ends_meet_2	0.173*** (0.014)	0.156*** (0.025)	0.141*** (0.014)	0.131*** (0.018)	0.137*** (0.015)	0.139*** (0.020)	0.139*** (0.019)	0.146*** (0.019)	0.156*** (0.018)	0.141*** (0.031)
edu_fath	0.018*** (0.005)	0.004 (0.010)	0.008 (0.007)	0.015*** (0.005)	0.016*** (0.004)	0.014*** (0.005)	0.016** (0.007)	0.019*** (0.007)	0.021*** (0.006)	0.020** (0.008)
work_exp	0.002* (0.001)	0.002 (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.002** (0.001)	0.002* (0.001)	0.001 (0.001)	0.000 (0.001)
pasted	0.059*** (0.004)	0.050*** (0.005)	0.052*** (0.004)	0.048*** (0.003)	0.049*** (0.004)	0.052*** (0.003)	0.054*** (0.002)	0.057*** (0.003)	0.061*** (0.003)	0.076*** (0.007)
full	0.393*** (0.016)	0.586*** (0.036)	0.494*** (0.029)	0.418*** (0.023)	0.383*** (0.016)	0.356*** (0.012)	0.333*** (0.011)	0.307*** (0.012)	0.295*** (0.015)	0.268*** (0.026)
perm	0.060* (0.032)	0.119 (0.082)	0.072** (0.035)	0.059*** (0.019)	0.068*** (0.020)	0.063*** (0.014)	0.073*** (0.016)	0.070*** (0.020)	0.079* (0.044)	0.029 (0.050)
mobility_1	-0.018 (0.011)	-0.021 (0.016)	-0.033*** (0.008)	-0.035*** (0.013)	-0.025** (0.012)	-0.023** (0.013)	-0.019 (0.015)	-0.011 (0.019)	-0.013 (0.014)	-0.019 (0.017)
mobility_2	-0.022* (0.012)	-0.029** (0.014)	-0.033*** (0.009)	-0.043*** (0.012)	-0.037*** (0.014)	-0.036** (0.014)	-0.022 (0.019)	-0.024 (0.015)	-0.007 (0.016)	0.003 (0.023)
mobility_3	-0.036** (0.017)	-0.039 (0.024)	-0.049*** (0.018)	-0.061*** (0.013)	-0.057*** (0.016)	-0.047*** (0.017)	-0.036 (0.022)	-0.033** (0.014)	-0.013 (0.010)	-0.015 (0.029)
stability	0.010 (0.007)	0.006 (0.007)	-0.002 (0.007)	0.003 (0.009)	-0.004 (0.007)	-0.002 (0.007)	0.005 (0.009)	0.001 (0.008)	0.011 (0.009)	0.020** (0.009)
training	0.043*** (0.009)	0.027* (0.015)	0.038*** (0.012)	0.033*** (0.010)	0.034*** (0.008)	0.037*** (0.007)	0.028** (0.012)	0.025** (0.010)	0.034*** (0.011)	0.033*** (0.013)
supervisor	0.118*** (0.009)	0.085*** (0.009)	0.075*** (0.005)	0.087*** (0.006)	0.090*** (0.008)	0.092*** (0.011)	0.099*** (0.014)	0.115*** (0.014)	0.147*** (0.016)	0.187*** (0.021)
telework	0.058*** (0.013)	0.044* (0.025)	0.045*** (0.014)	0.044*** (0.014)	0.055*** (0.012)	0.050*** (0.009)	0.063*** (0.011)	0.068*** (0.012)	0.071*** (0.015)	0.057** (0.023)
contr	0.074 (0.049)	0.129 (0.162)	0.025 (0.030)	0.046** (0.020)	0.057* (0.034)	0.071** (0.033)	0.085** (0.039)	0.071* (0.042)	0.049 (0.046)	0.082 (0.087)
routine	-0.059*** (0.010)	-0.051*** (0.017)	-0.045*** (0.013)	-0.053*** (0.011)	-0.057*** (0.007)	-0.053*** (0.009)	-0.062*** (0.011)	-0.062*** (0.010)	-0.054*** (0.010)	-0.078*** (0.017)
mismatch	-0.029** (0.011)	-0.050*** (0.016)	-0.021*** (0.007)	-0.014*** (0.004)	-0.011* (0.006)	-0.004 (0.005)	-0.008 (0.011)	-0.006 (0.014)	-0.003 (0.014)	-0.011 (0.025)
stress	0.041*** (0.009)	0.029*** (0.008)	0.030*** (0.012)	0.037*** (0.010)	0.030*** (0.011)	0.025** (0.015)	0.018 (0.015)	0.022* (0.014)	0.026** (0.013)	0.033** (0.014)
unionsize	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000* (0.000)
mezzogiorno	-0.011 (0.010)	-0.024 (0.016)	-0.009 (0.011)	-0.023* (0.012)	-0.006 (0.010)	0.003 (0.013)	0.011 (0.011)	0.012 (0.012)	0.014 (0.013)	-0.011 (0.028)
_cons	5.732*** (0.143)	4.838*** (0.313)	5.487*** (0.150)	5.683*** (0.079)	5.755*** (0.066)	5.748*** (0.062)	5.784*** (0.073)	5.881*** (0.117)	6.094*** (0.271)	6.320*** (0.194)
Sectors					Yes					
N					4155					
Pseudo R2	0.493	0.370	0.334	0.315	0.300	0.285	0.286	0.293	0.303	0.341

Notes: see table A1

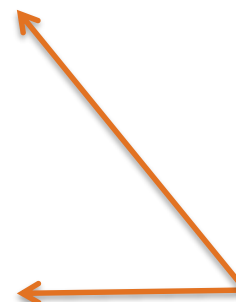
COUNTERFACTUAL DECOMPOSITION

Table 4.

Decompositions of changes in JI wage gap and counterfactual distribution, using semi-parametric and fully non-parametric estimation

	Raw	Semi-parametric estimate					Non-parametric estimate				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		Tot. Diff..	Char.	%	Coeff.	%	Tot. Diff..	Char.	%	Coeff.	%
Mean	0.266	0.207	0.155	75%	0.052	25%	0.240	0.172	72%	0.068	28%
$\theta=.10$	0.596	0.338	0.231	68%	0.107	32%	0.349	0.223	64%	0.126	36%
$\theta=.20$	0.363	0.273	0.202	74%	0.071	26%	0.300	0.216	72%	0.083	28%
$\theta=.30$	0.262	0.219	0.167	76%	0.052	24%	0.260	0.194	75%	0.066	25%
$\theta=.40$	0.241	0.183	0.139	76%	0.044	24%	0.232	0.175	76%	0.057	24%
$\theta=.50$	0.223	0.164	0.126	77%	0.038	23%	0.212	0.162	76%	0.051	24%
$\theta=.60$	0.208	0.155	0.118	76%	0.037	24%	0.198	0.152	77%	0.046	23%
$\theta=.70$	0.194	0.149	0.112	75%	0.038	25%	0.189	0.146	77%	0.043	23%
$\theta=.80$	0.145	0.146	0.108	74%	0.038	26%	0.184	0.143	78%	0.041	22%
$\theta=.90$	0.201	0.153	0.108	71%	0.045	29%	0.189	0.148	78%	0.041	22%

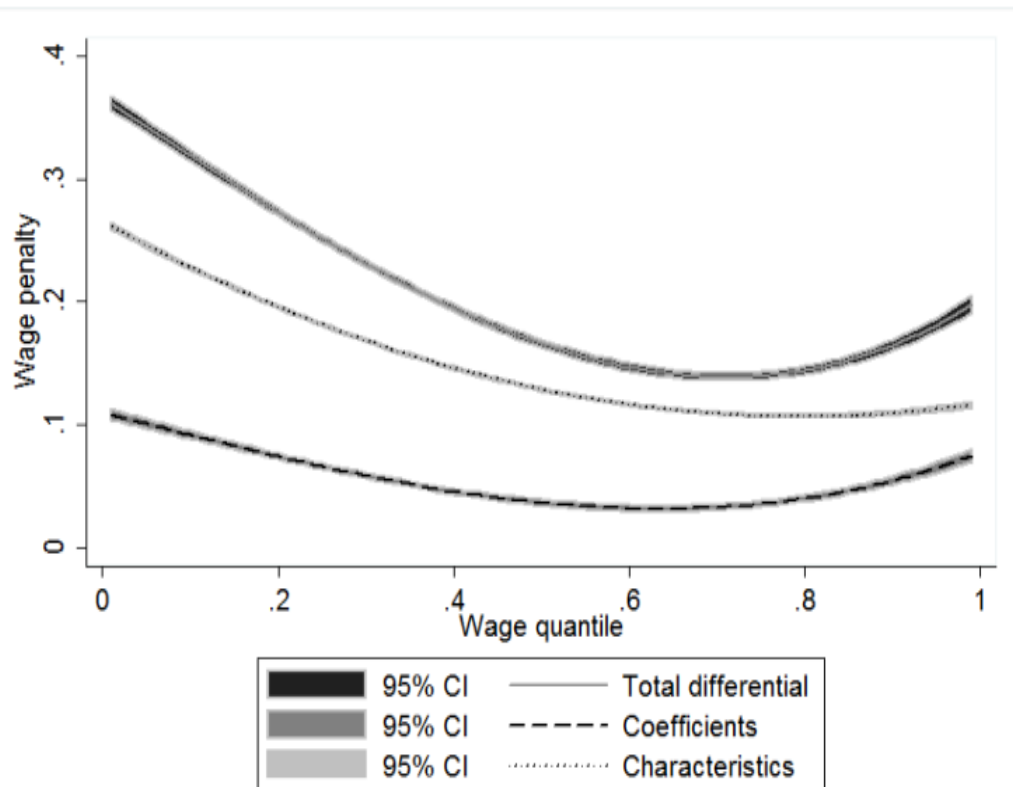
Note. Bootstrap standard errors for semi-parametric estimates are obtained with 200 replications. Mean values for the semi-parametric estimation are obtained with the B-O decomposition. All coefficients are significant at 1%



- The B-O decomposition shows a difference between mean wages of the two groups of 282 euros (1509 vs. 1227 euros).
- On average, the secure group earns almost **23 pp** more than the insecure workers.
- **Endowments account for 75%, coefficients 25%. Semi and non param: similar estimates**
- When the decomposition approach is extended to the whole wage distribution, the contribution of differences in returns is larger than that of different covariates at each of the estimated quantiles.
- The relative incidence of the coefficient component accounts roughly **for 22 up to 36%** of the total difference, being more relevant at the bottom of the wage distribution, thus showing **a greater effect of JI for low wages.**

COUNTERFACTUAL SEMI-PARAMETRIC

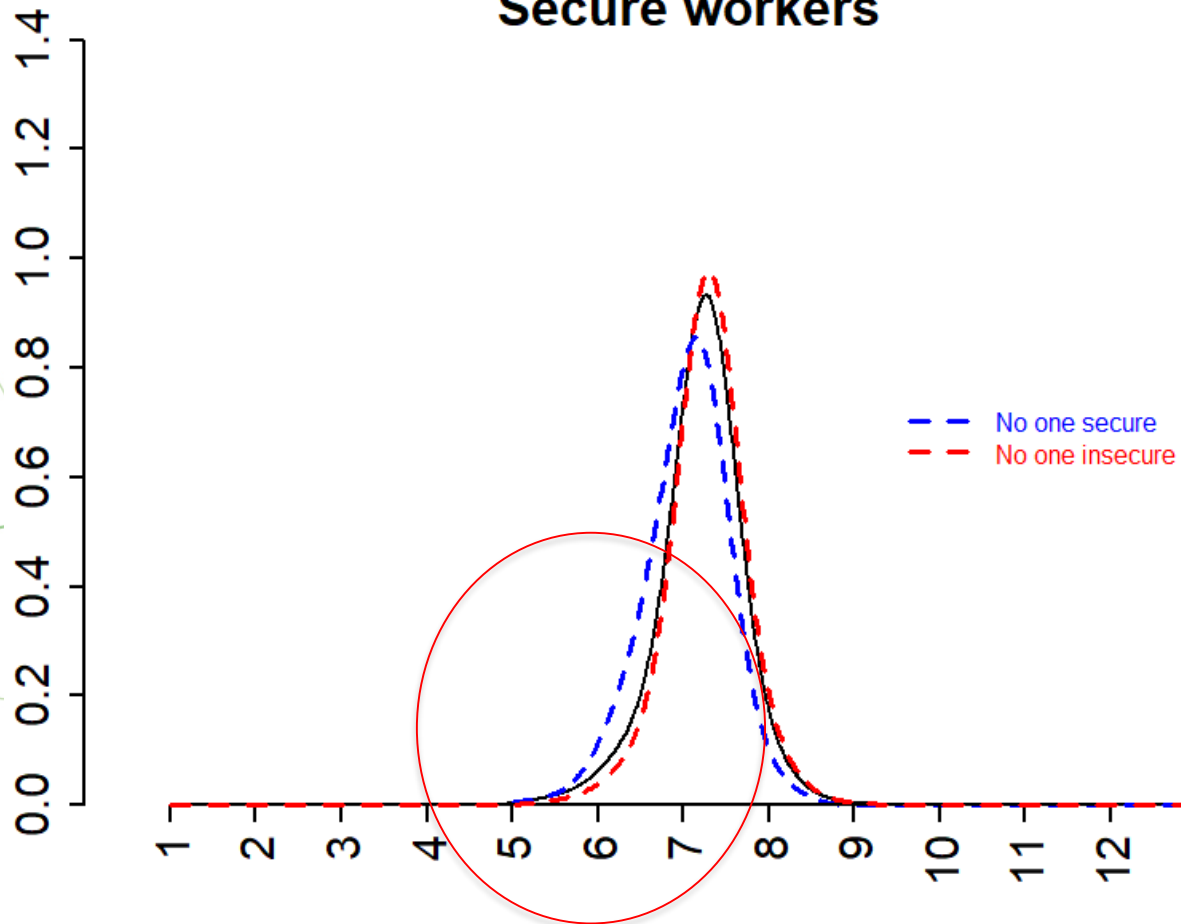
Figure 2.
Decomposition of differences in distribution using quantile regression



- Insecure group of workers suffer from a statistically significant pay gap along all the wage distribution
- the pay gap seems **mirror J-shaped**, with the presence of a so called «**sticky floor**» (i.e. a situation in which the 10th percentile wage gap is significantly higher than the estimated wage gap at the 50th percentile).
- The pattern is slightly shifted over the right side, with the lowest value reached around the 80th percentile.

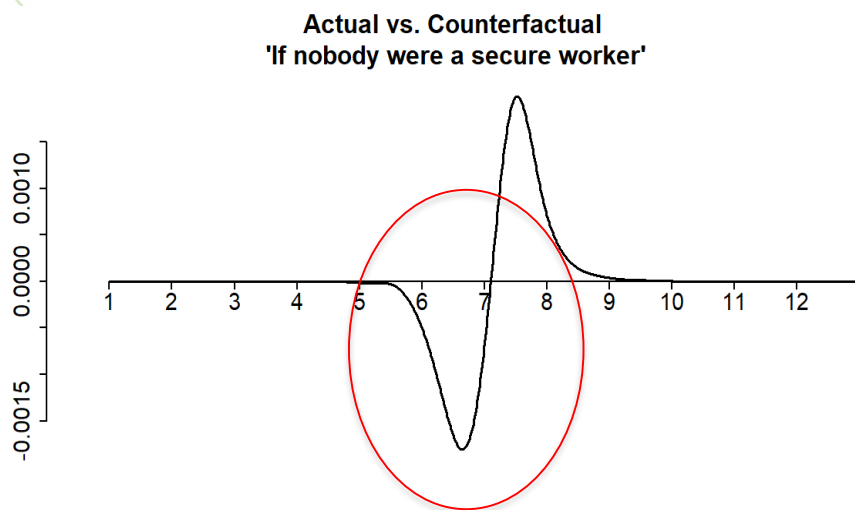
IPW: Counterfactual distributions

Explained and unexplained Secure workers



NON PARAMETRIC - IPW

Figure 3.
IPW, smoothed difference between actual and counterfactual (if nobody were a secure worker) distribution of wages



- Results from the non-parametric model indicate that the **estimate is not substantially distorted by a selection bias**, thus strengthening the sticky floor effect found with the semi-parametric method
- The insight here is that, being the dependent variable a self-perceived JI, **it already probably contains a sort of self-selection term**: therefore the distortion due to self-selection is low.
- Figure 3 shows the smoothed difference between the actual and the counterfactual distribution «if nobody were a secure worker. the impact is higher on the left tail of the distribution, **consistently with the hypothesis that the wage gap due to JI is higher for lowest quantiles.**

OUTLINE

- Job insecurity: definition and previous literature
 - Psychology/Sociology/Economics
- Data, model and econometric techniques
- Results
- **Conclusions**

CONCLUSIONS

- Using the last wave of the INAPP Survey on Quality of Work, this paper employs both the OLS and the QR linear techniques regressions as well as a semi-parametric and a non parametric decomposition method to **examine the impact of perceived JI at the mean and over the entire conditional wage distribution of the Italian dependent workforce.**
- Results show the clear presence a **mirror J-shaped pattern for the wage gap between secure and insecure workers, together with a significant sticky floor phenomenon.**
- The counterfactual decomposition also highlights that JI accounts roughly for 22% up to 36% of the total difference along the wage distribution, **with a higher incidence at lowest quantiles.**

Possible explanations and policy indications

- This evidence suggests that a **highly imperfect competitive labour** market is at work in Italy, where greater JI may probably lead to workers accepting lower wages (Blanchflower, 1991). The reluctance of workers to leave their insecure and underpaid job reinforces the hysteresis of precariousness in the current labour market conditions.
- Our article has some **policy indications** emerged for the Italian welfare state. Indeed, to fill the wage gap, there is a need for social policies tailored to deal with income support measures.
- For this to happen, well-functioning and “well-intertwined” labour market and educational institutions are needed in order to strengthen the quality of job contracts (**full-time and permanent** being of course strongly correlated with the high level of the salary), **increase employees’ educational attainment, promote job training, reduce routine and mismatch** during the job.

THANK YOU

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Link to Working Paper:

https://sergioscicchitano.files.wordpress.com/2019/01/glo-dp-0293_ji.pdf

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