



L'emploi des seniors en Italie : des réformes importantes aujourd'hui questionnées

15^e colloque du COR

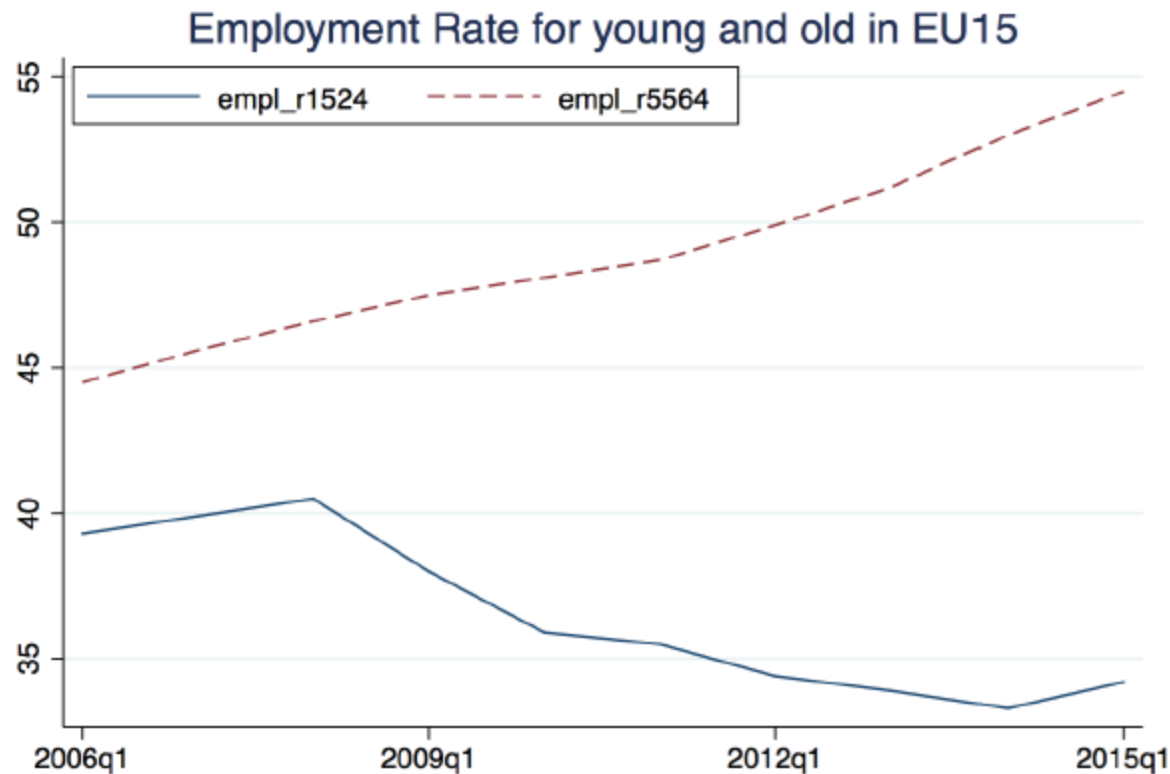
Emploi des seniors et vieillissement actif en Europe

Pietro Garibaldi

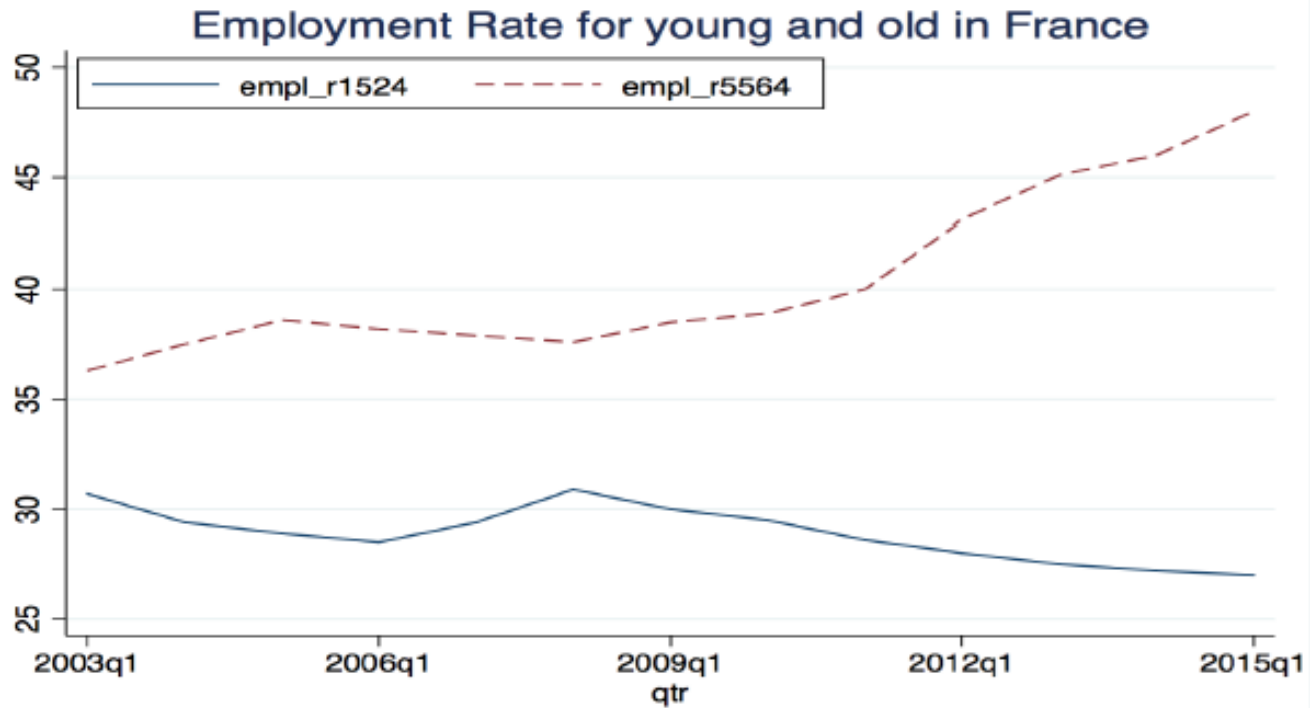
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Young and older workers: divergent dynamics in the EU

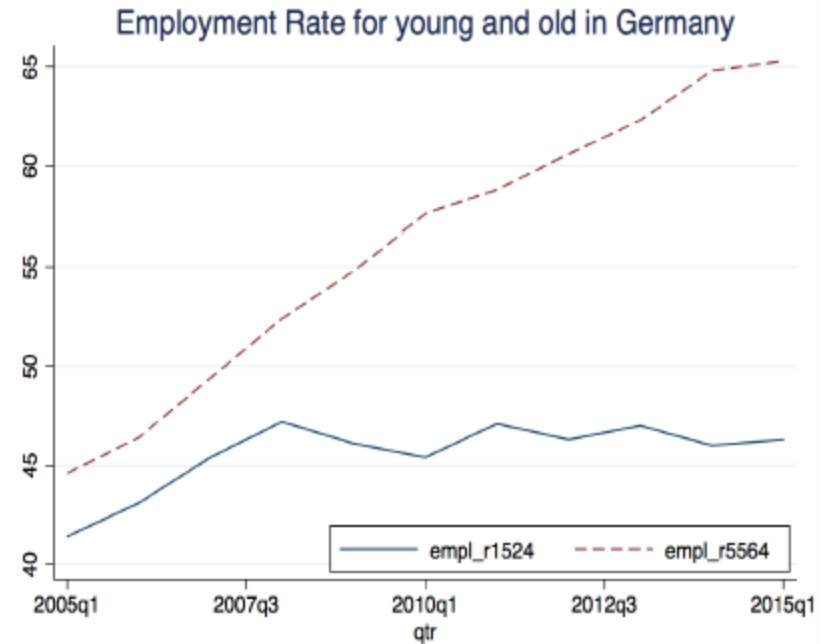
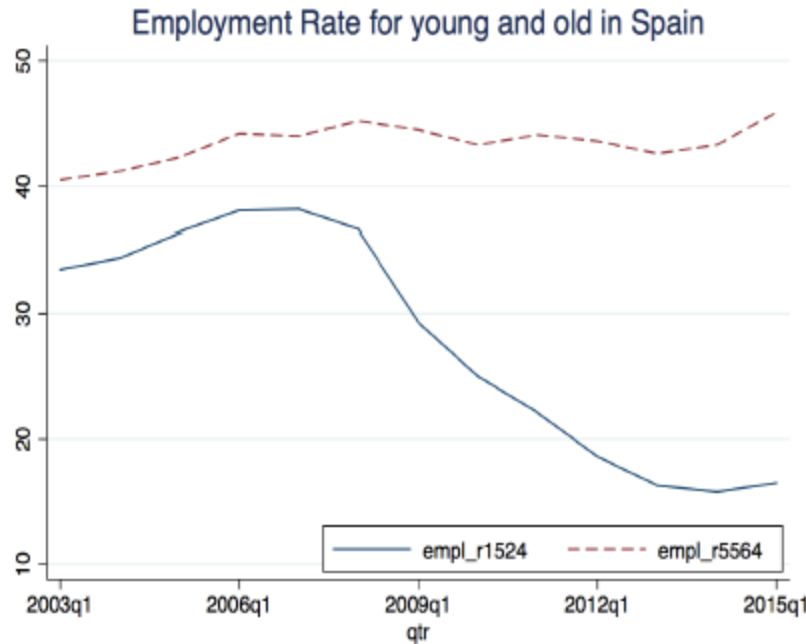
Figura: Employment rate for youth (15-24) and older (55-64) workers in EU15



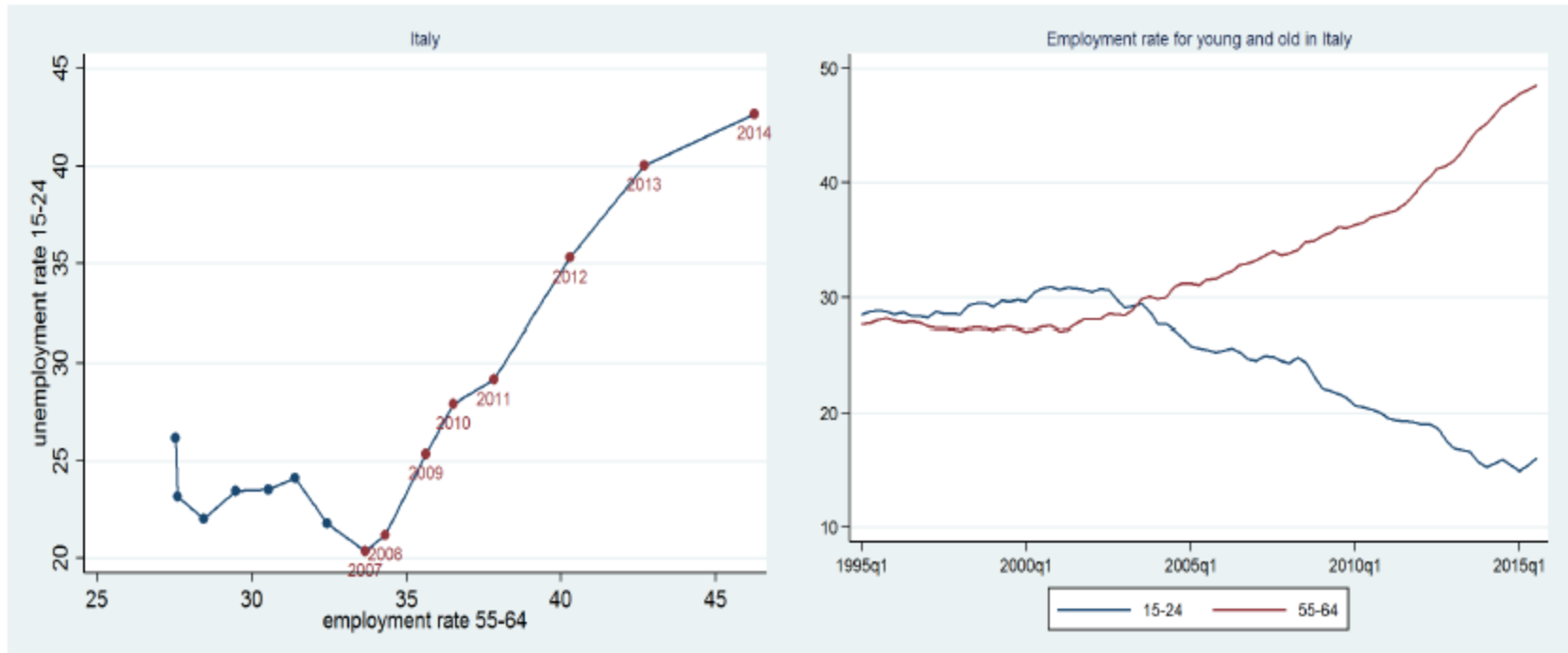
Old-in Young-out in France



Old-in Young-out in Spain, but not in Germany



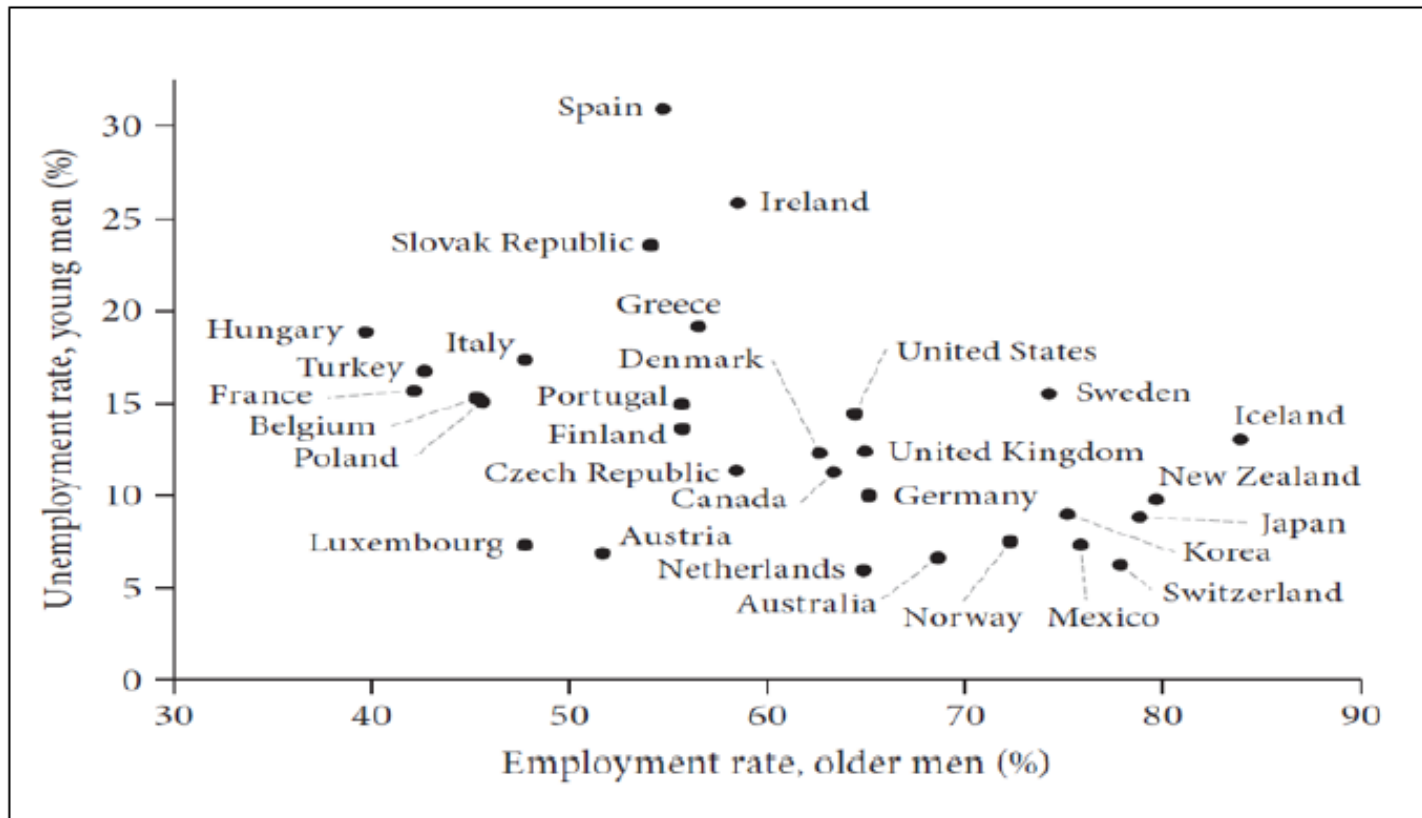
Dramatic old-in young-out in aggregate Italian data



Cyclical and structural reasons behind older / young divergence

- Cohort effects (increase in female participation) and increase in retirement age can account for increase in employment rates of the over 55
- The Great Recession and dual labor market partially account for increase in youth unemployment (Boeri and Garibaldi, The Honeymoon Effect of Temporary Reforms, 2007)
- In the long run there is no lump of labor (eg. Boeri Van Ours, 2013)
- Any connection between the two phenomena in the **SHORT RUN?**

In the long run: no lump of labor ...



Fonte: Boeri, Van Ours, 2013. *The economics of imperfect labor markets.*

Yet, in the short run, during a recession...

- A sudden increase in retirement age in a labor market characterized by strong employment protection may have short run (negative) effects on hirings across the age distribution, and notably on youth
- This may happen even when there is complementarity in production between age groups
- Of course this effect requires fixed capital and rigid wages

The 2011 Monti Fornero Reform

- In November 2011, Italy experienced a financial crisis. There was a run on the Italian public debt. Spread over German bonds rose above 500 basis points
- Forced by international institutions (the Euro is at risk), the centre right government headed by Berlusconi resigned in November 2011
- A technocrat government headed by Mario Monti (Elsa Fornero as labor minister) took immediately office and avoided intervention of the Troika (IMF, ECB EU) by approving a tough austerity package
- In December 2011, the *Decreto Salva Italia* was enacted, including a large temporary increase in retirement age

Immediate and tough response from the Monti Government



Monti: decreto salva-Italia

Pensioni, lei Iva, manovra da 30 miliardi. Togli alla politica, riduzioni per Province e Authority
Non cambia l'Irpef e arriva una tassa (L3%) sui capitali sentati. Estimati catastali rivisti del 60%

Presidenza

- Fiancheggiare il candidato per tutti. Si stanno mettendo in piedi di un'Italia a 12,140, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390, 395, 400, 405, 410, 415, 420, 425, 430, 435, 440, 445, 450, 455, 460, 465, 470, 475, 480, 485, 490, 495, 500, 505, 510, 515, 520, 525, 530, 535, 540, 545, 550, 555, 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660, 665, 670, 675, 680, 685, 690, 695, 700, 705, 710, 715, 720, 725, 730, 735, 740, 745, 750, 755, 760, 765, 770, 775, 780, 785, 790, 795, 800, 805, 810, 815, 820, 825, 830, 835, 840, 845, 850, 855, 860, 865, 870, 875, 880, 885, 890, 895, 900, 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000.
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Giustizia

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Costi della politica

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Sviluppo

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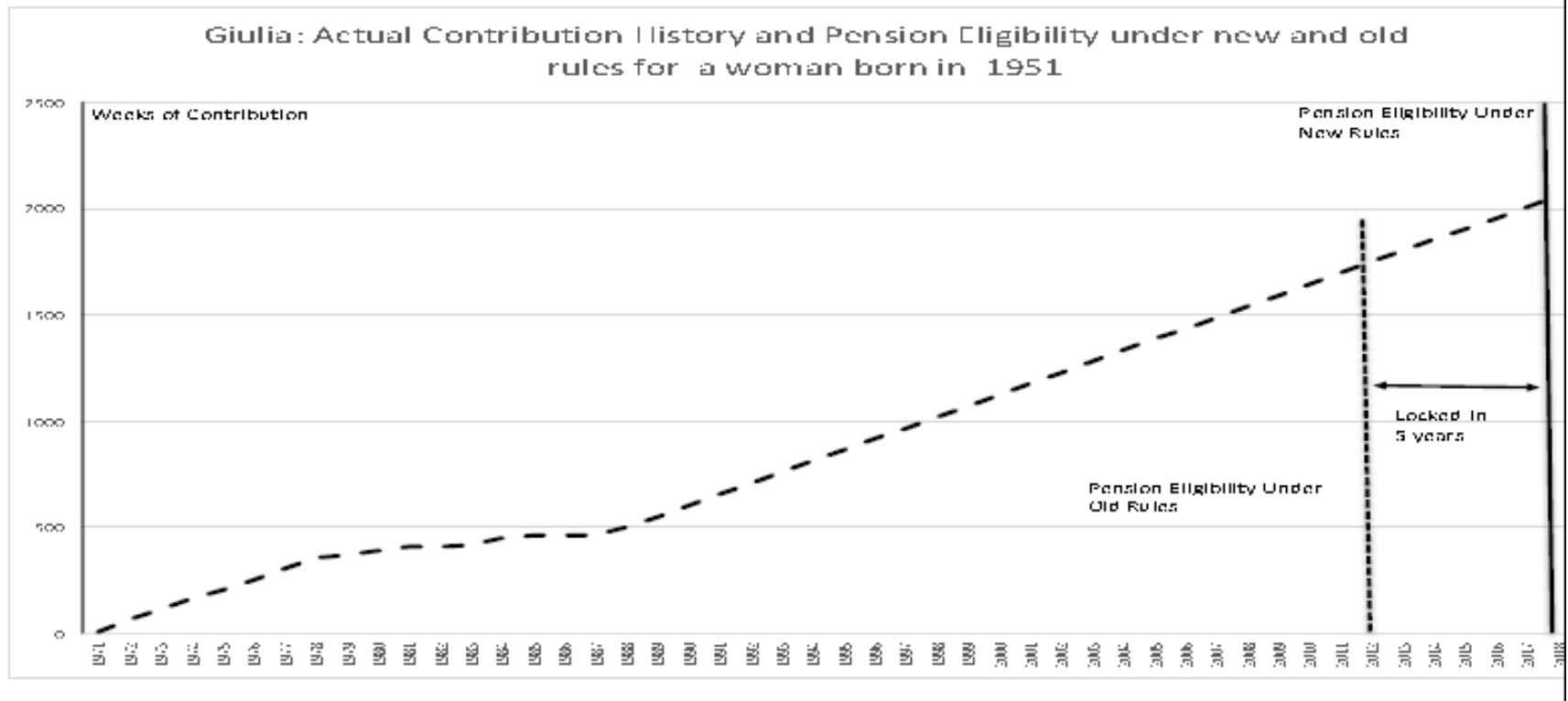
The Content of the Reform

- Large tightening of **Early Retirement** as of January 1 2012
 - Before the reform, a system of quotas (age years plus contribution) was regulating early retirement
 - After the reform, men (women) need 42 (41) years and 1 month, and further increase in the following years
- Immediate increase of **Regular Retirement** of one year for men and two years for women hired before 1996
 - Further increases up to 2020 (for women by 2016 4 years and 6 months)
- **No basic changes in rules for those hired after 1996** No changes for the youth

Data and Sample

- Continuing Private sector firms with more than 15 employees (the EPL threshold) active between 2008 and 2014 (approximately 60.000 firms)
- We observe worker characteristics and whether retirement has been postponed by the reform (reconstruction from social security records).
- We know how many workers are *locked_in* from the reform and for how many years.
- **Our sample:** All firms below between 15 and 150 employees with **positive locked_in workers**. Each firm is thus observed 7 times.
- Approximately 21000 firms (that grow to 24000 when we consider 200 employment threshold)

Actual Contribution Histories of selected locked-in Workers



Definitions

- young workers are below the age of 30
- older workers are above the age of 55
- Prime-age workers are the employees within these two thresholds.
- If $n_{i,t}$ is total employment if firm i in year t , it follows that in each firm i

$$n_{i,t} = \sum_{j=1}^3 n_{ij,t} \quad j= 1: \text{young}, 2: \text{prime- age}, 3: \text{older}$$

- main outcome is employment change normalized by employment at the time of the reform

$$g_{ij,t} = \frac{n_{ij,t} - n_{ij,t-1}}{n_{2011}} = \frac{\Delta n_{ij,t}}{n_{2011}} \quad j= \text{young, older, prime age, total}$$

- We also experiment with employment changes.

Treatment

- Treatment: number of workers locked-in in 2011 in each firm.
- We distinguish between workers who are locked in for more than 3 years, more than 2 years and more than 1 year.
- The size of the locked-in population in each firm is normalized by the number of workers aged more than 54.

$$T_i^s = \frac{\text{Locked}_{in} \text{ old workers in firm ifor at least } s \text{ year}}{\text{old workers in 2011}} \quad s=1,2,3$$

- $T_i^3 = 0.25$ means that the employer of firm i found out that 25 percent of its older workforce had been locked-in for at least 3 years.
- Pre-trend impact of the policy variables, or the effect of the policy in the years 2009, 2010 and 2011, act as *placebo* in our regression analysis.

Regression Analysis

- Baseline specification

$$g_{ij,t} = \delta + \alpha_i + \sum_{k=2008}^{2014} \gamma_k I_k + \sum_{k=2008}^{2014} \beta_k I_k T_i^s \quad s = 1, 2, 3 \quad (1)$$

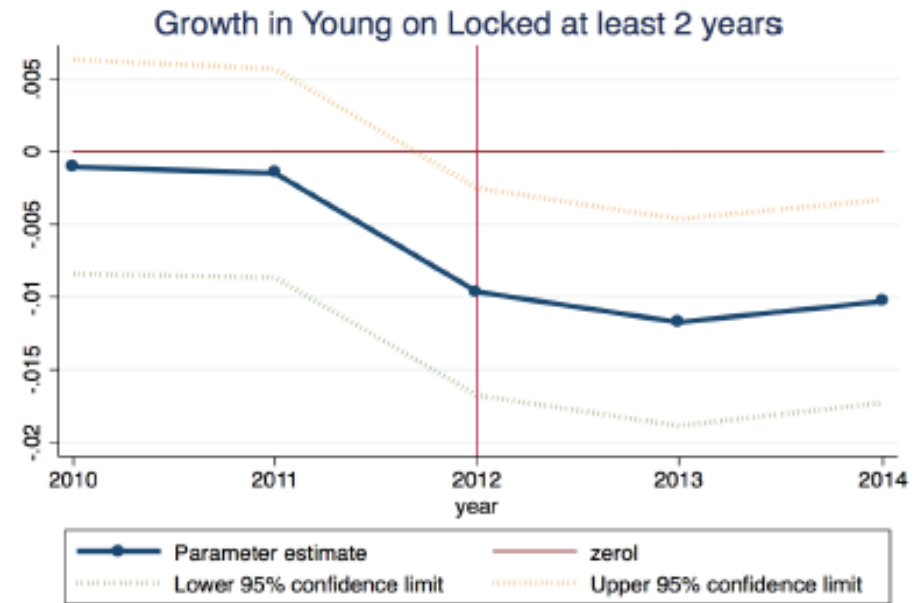
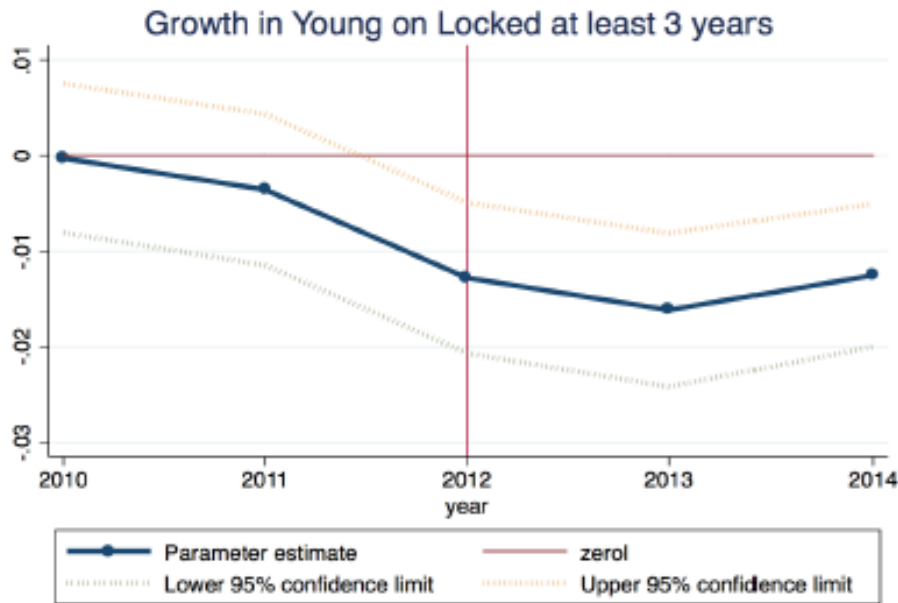
- δ constant: α_i firm fixed effect: I_k time dummies
- robustness check, we also allow the left-hand-side to be the absolute variation in employment in group j so that

$$\Delta n_{ij,t} = \delta + \alpha_i + \sum_{k=2008}^{2014} \gamma_k I_k + \sum_{k=2012}^{2014} \beta_k I_k T_i^s \quad s = 1, 2, 3 \quad (2)$$

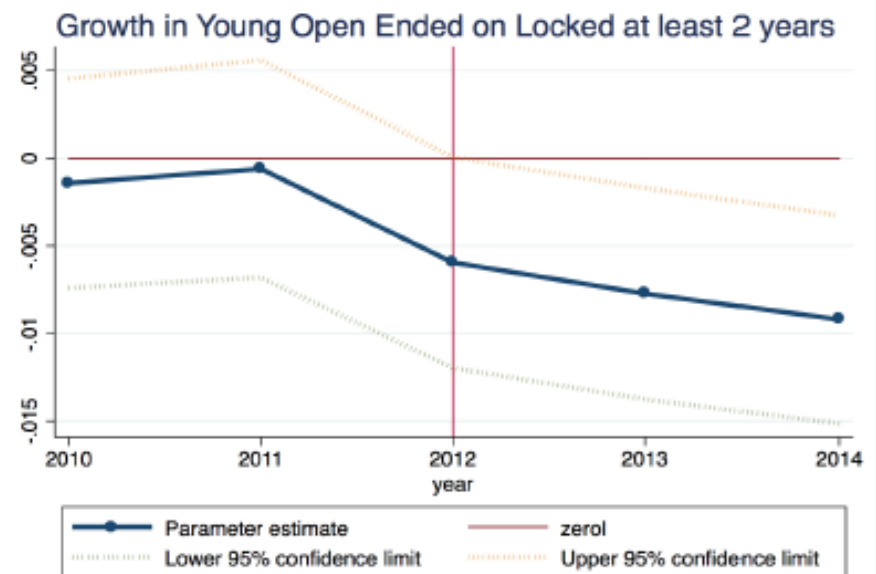
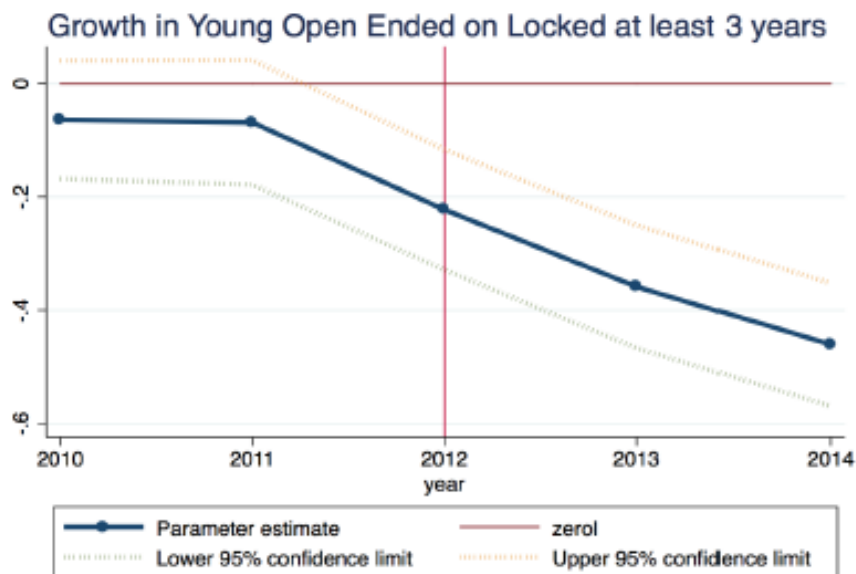
Summary *locked_k_old* of *k* years in 2011 by quantile for different years of delay

	(1) All	(2) 1	(3) 2	(4) 3	(5) 4	(6) 5
	mean <i>a</i>	mean <i>b</i>	mean <i>b</i>	mean <i>b</i>	mean <i>b</i>	mean <i>b</i>
<i>locked3_old</i> ^c	0.279	0.084	0.147	0.224	0.329	0.665
<i>N</i>	8472	1862	1773	1984	1173	1680
<i>locked2up_old</i> ^d	0.292	0.094	0.157	0.226	0.334	0.684
<i>N</i>	11085	2634	1832	2595	1808	2216
<i>locked1up_old</i> ^e	0.367	0.127	0.225	0.324	0.475	0.902
<i>N</i>	21662	4905	5240	4036	4491	2990

Coefficients on Young Growth over time: All workers

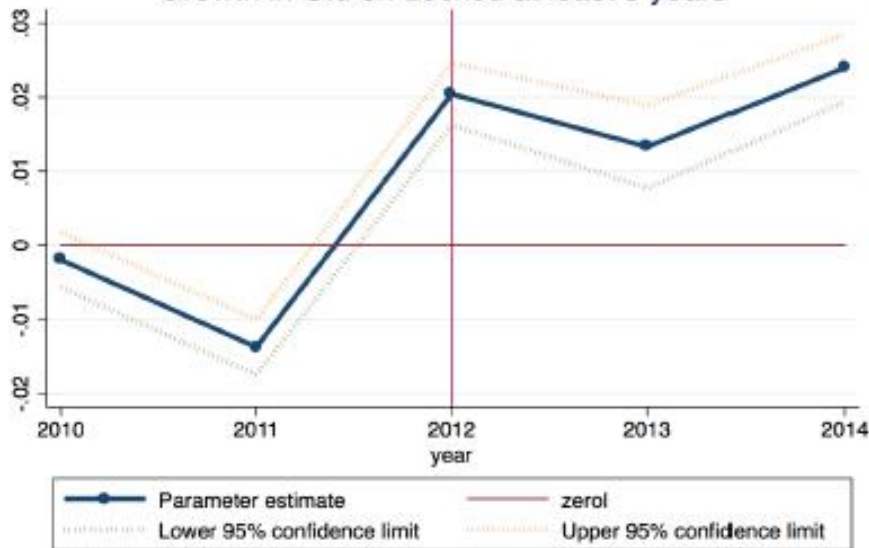


Coefficients on Young Growth over time: Open Ended Employment

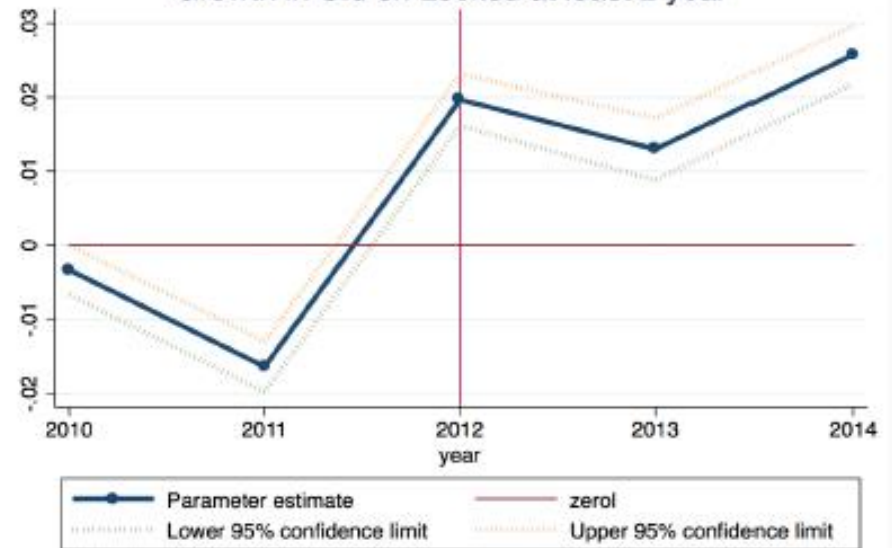


Coefficients on Old: Total Employment

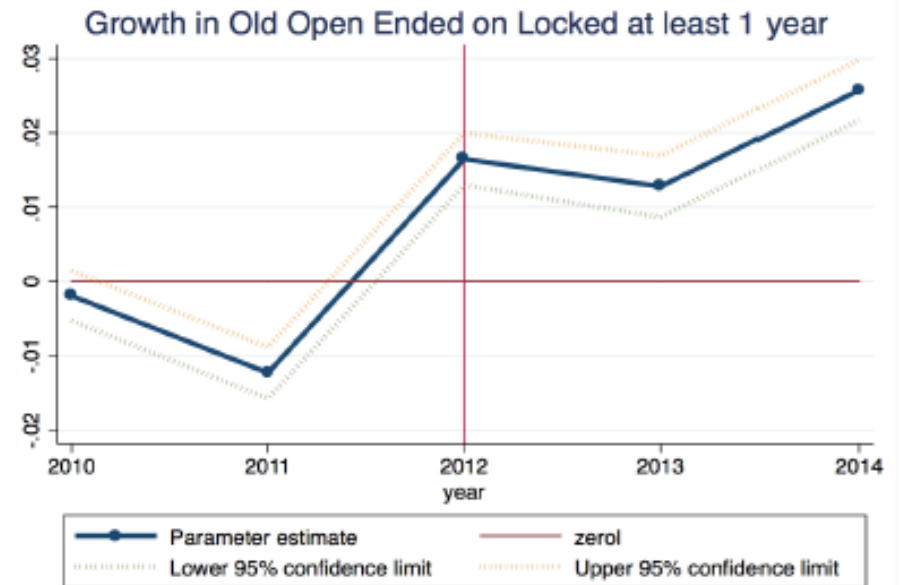
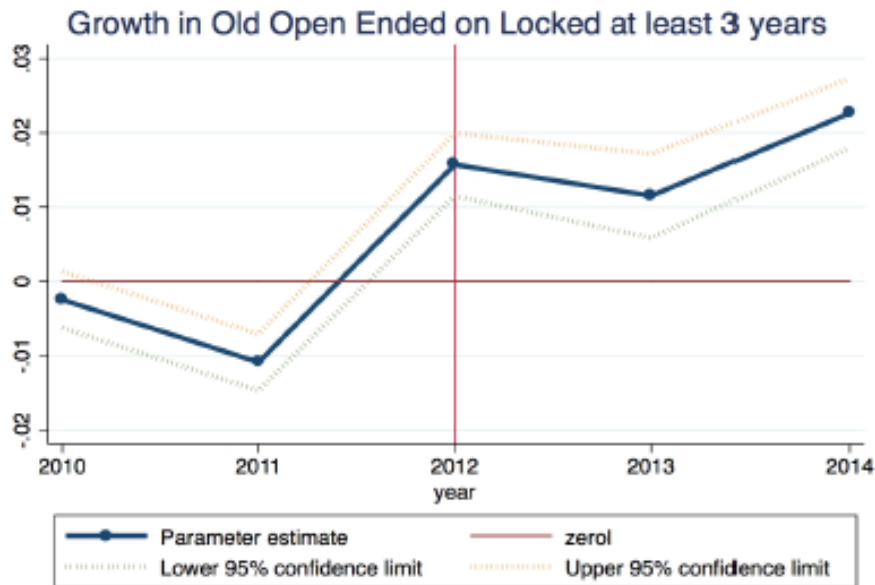
Growth in Old on Locked at least 3 years



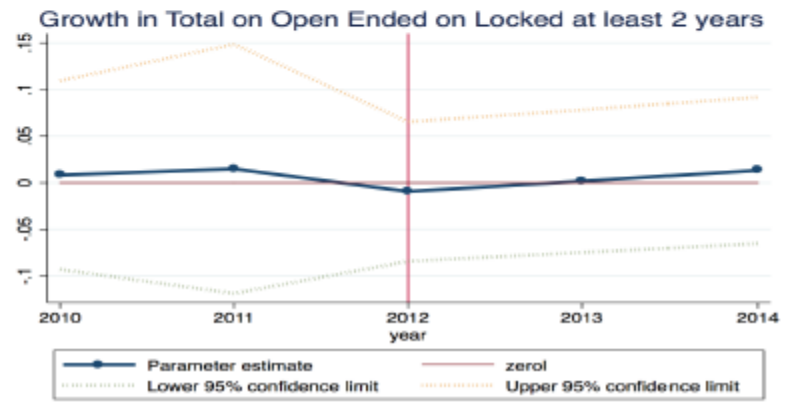
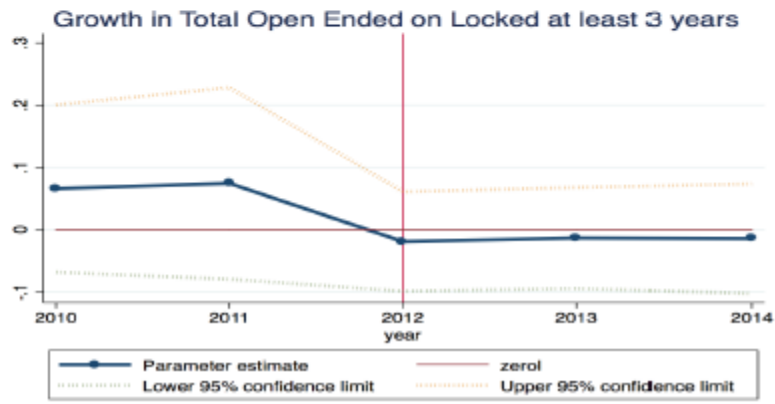
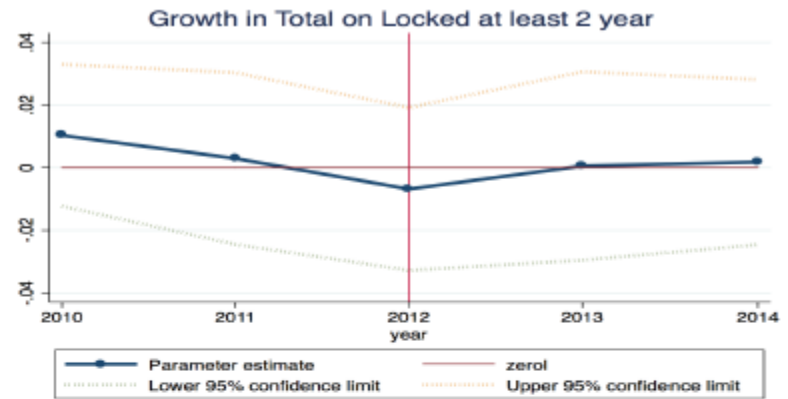
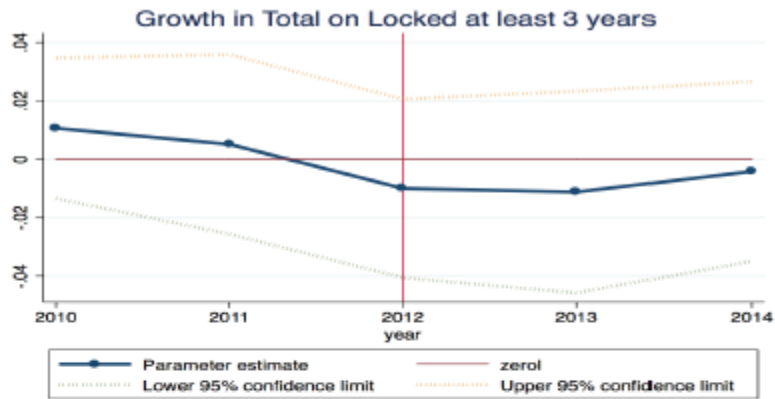
Growth in Old on Locked at least 2 year



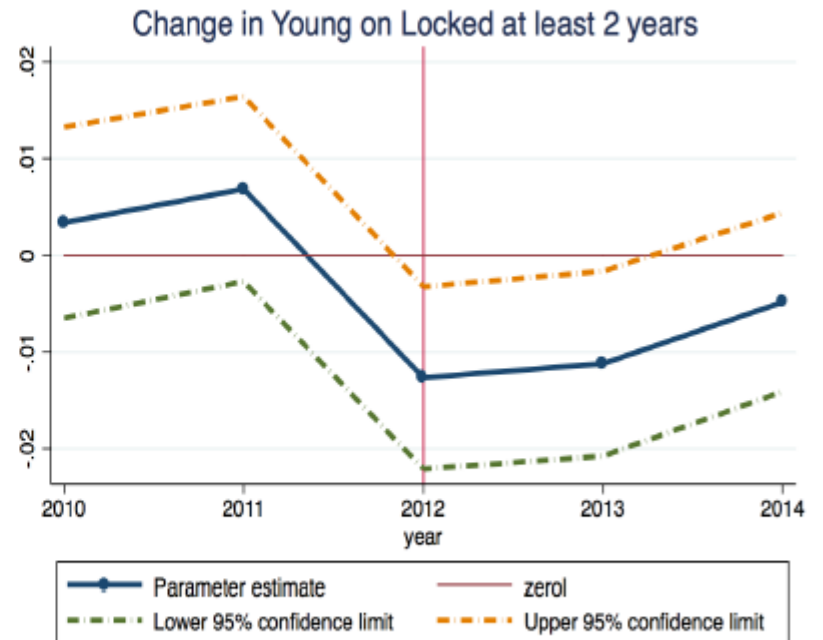
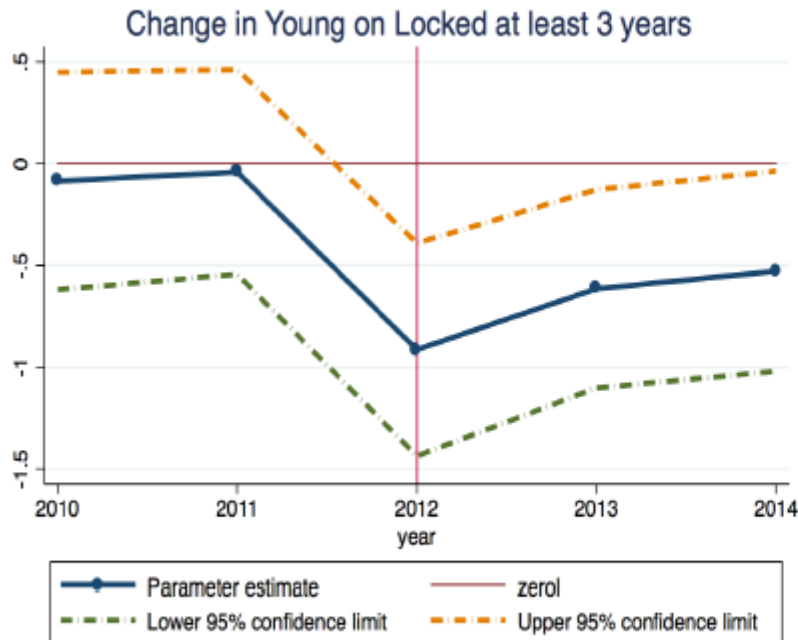
Coefficients on Old: Open Ended Employment



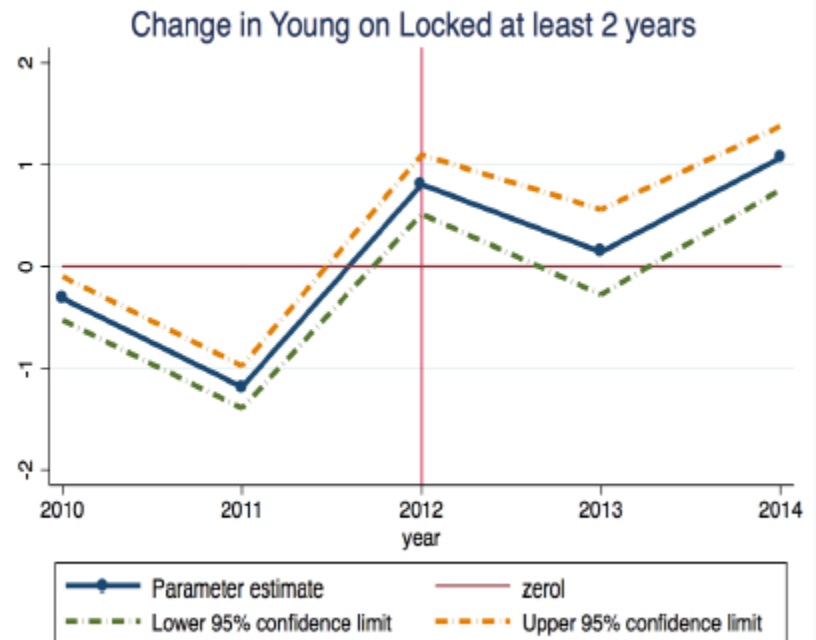
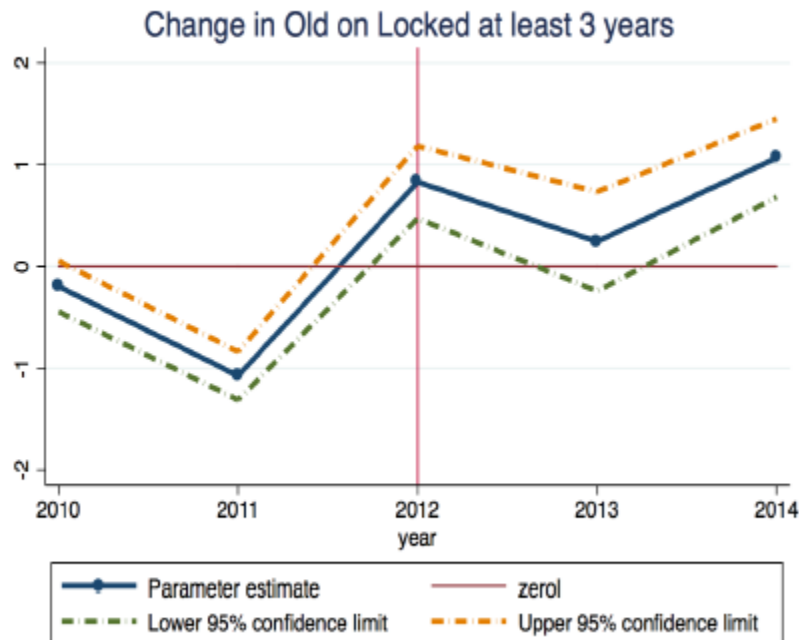
Coefficients on Total Employment



Coefficients on Young in Absolute Changes



Coefficients on Old in Absolute Changes



Quantifying Size of the Effects

- Let us focus on the average firm in 2012. The evolution of the average treated firm is

$$\underbrace{n_{2012}}_{\approx 53.16} = \underbrace{n_{2011}}_{\approx 52.70} + \underbrace{\Delta n_{12,11}^{young}}_{\approx -0.33} + \underbrace{\Delta n_{12,11}^{prime}}_{\approx +0.18} + \underbrace{\Delta n_{12,11}^{old}}_{\approx 0.59} \quad (3)$$

- We consider the coefficient in 2012 from our baseline specification. We can obtain

$$\left\{ \begin{array}{l} \hat{\Delta n}_{12,11}^{young} = \underbrace{\hat{\gamma}}_{\approx -0.014} \underbrace{n_{2011}}_{\approx 52.70} \underbrace{\overline{locked3_old}}_{\approx 0.28} = -0.207 \\ \hat{\Delta n}_{12,11}^{old} = \underbrace{\hat{\gamma}}_{\approx 0.03} \underbrace{n_{2011}}_{\approx 52.70} \underbrace{\overline{locked3_old}}_{\approx 0.28} = 0.59 \end{array} \right.$$

Estimates of the Effects

- The share of employment changes explained by our regressions is

$$\left\{ \begin{array}{l} \frac{\hat{\Delta}n_{12,11}^{young}}{\Delta n_{12,11}^{young}} = \frac{-0.207}{-0.33} = 0.626 \\ \frac{\hat{\Delta}n_{12,11}^{old}}{\Delta n_{12,11}^{old}} = \frac{0.502}{0.59} = 0.85 \end{array} \right. \quad (4)$$

- At least 60 percent of the fall in youth employment can be accounted for by locked₃
- At least 80 percent of the increase in old employment can be accounted for by locked₃

Conclusions

- Across most European countries, increase in older employment is associated to increase in youth unemployment
- The paper evaluates whether increase in retirement age contributed to these diverging developments at the two extremes of the age distribution in the short run
- We exploit a unique data set from Italy and a quasi experiment setting from the steep and unexpected increase in the legal retirement age in Italy (Monti Fornero reform)
- Results are clearly significant and survive to several robustness checks
- Large effects on the crowding-out of young workers and growth of older workers;
- Reform explains 60% of the former and 80% of the latter among affected firms