Global Income Dynamics: France

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In collaboration with the CASD
Secure Data Access Center

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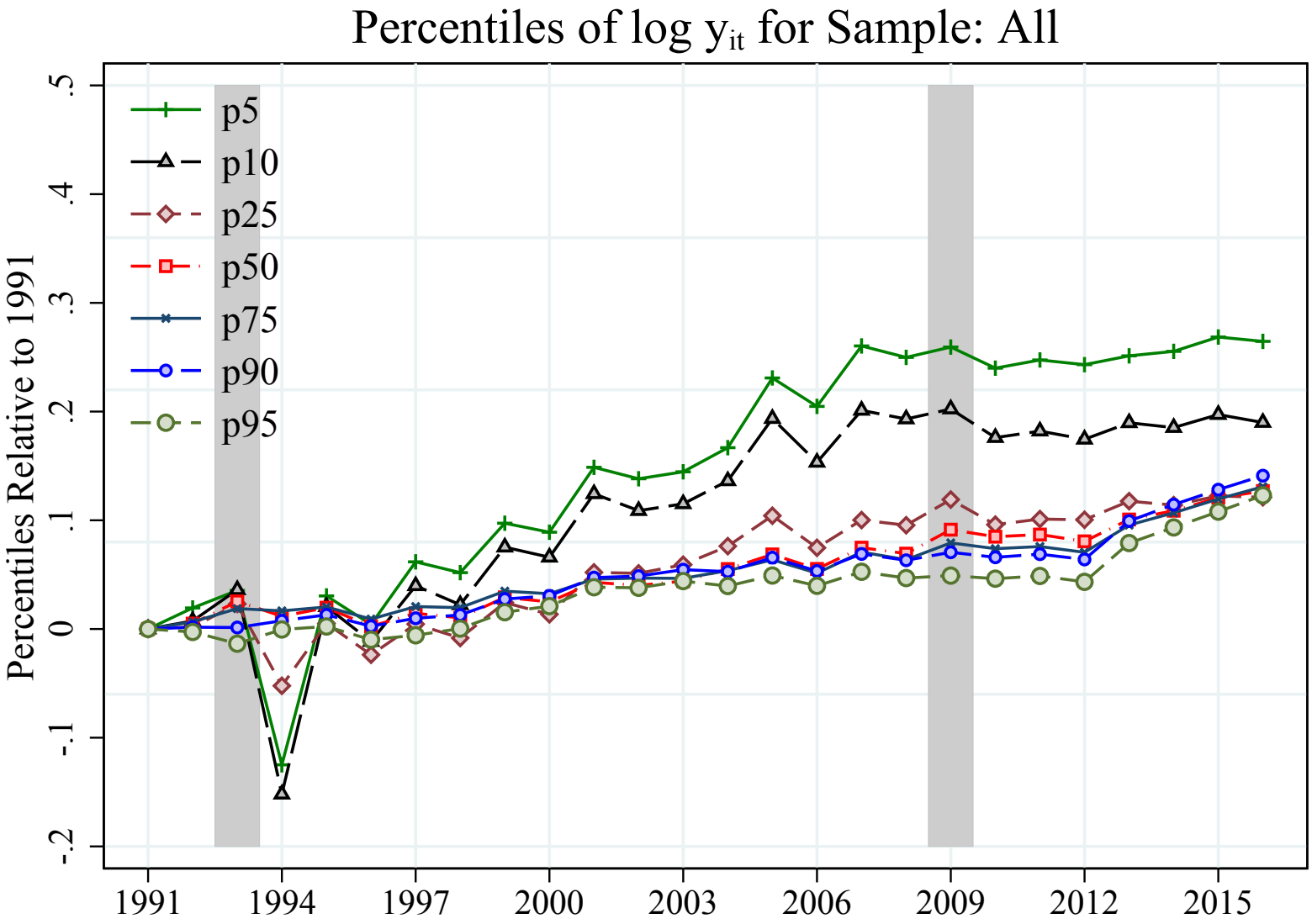
Background

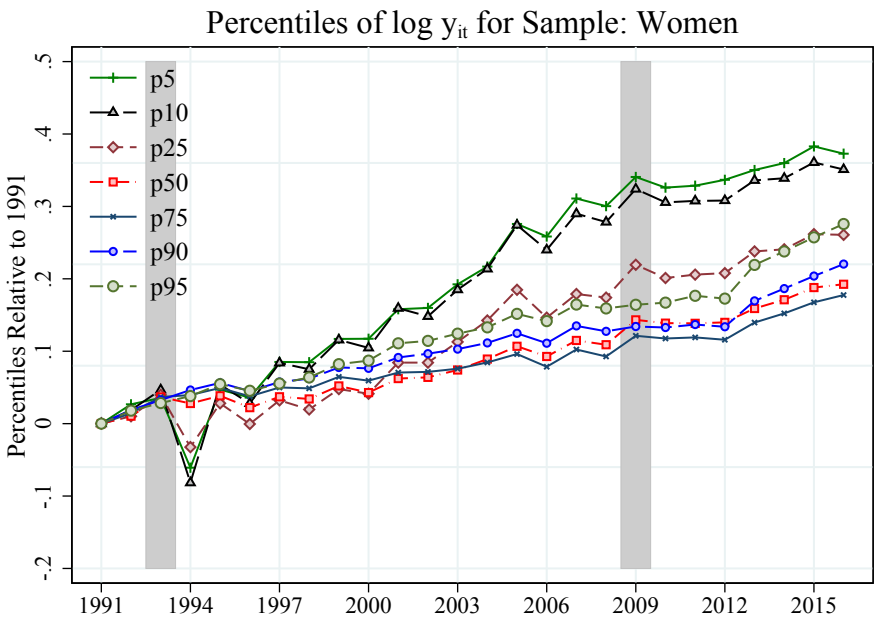
- **The French labor market :**
  - Wage employment represents 88% of total employment in 2018
  - Two types of contracts : permanent and temporary
  - Very high minimum wage entailing extremely high labor costs until the 90s

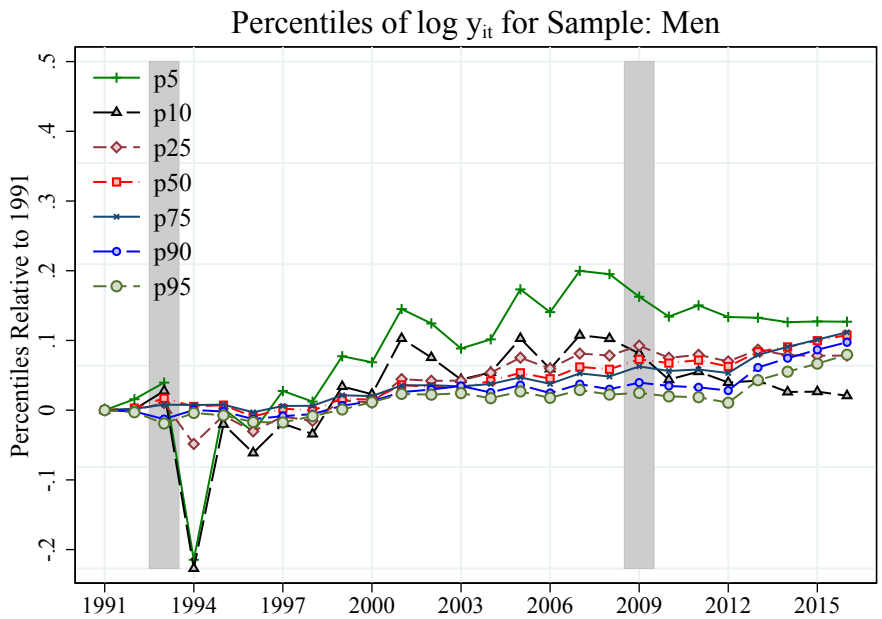
- **Main changes over the period :**
  - Minimum wage
    - ★ Real value increased by 40% between 1980-2015 SMIC
    - ★ Nine discretionary increases of the minimum wage ("coups de pouce") Table
    - ★ Virtual elimination of employer-paid payroll taxes at the min. wage (end of 90s) Labor cost
  - Legal working week
    - ★ 1999-2001 : Staggered decrease of the working week, from 39 to 35 hours
    - ★ Associated increase in hourly wage to leave monthly earnings unaffected
  - Labor Market
    - ★ 2 recessions (1993 ; 2008) and 1 boom (1998-2000) Unemployment GDP
    - ★ Decreasing trend in working hours over the whole period Hours
    - ★ Increase in LF participation in particular for women and older workers Participation 55-64 By gender

Low Wage-Growth and Low-Wage Growth



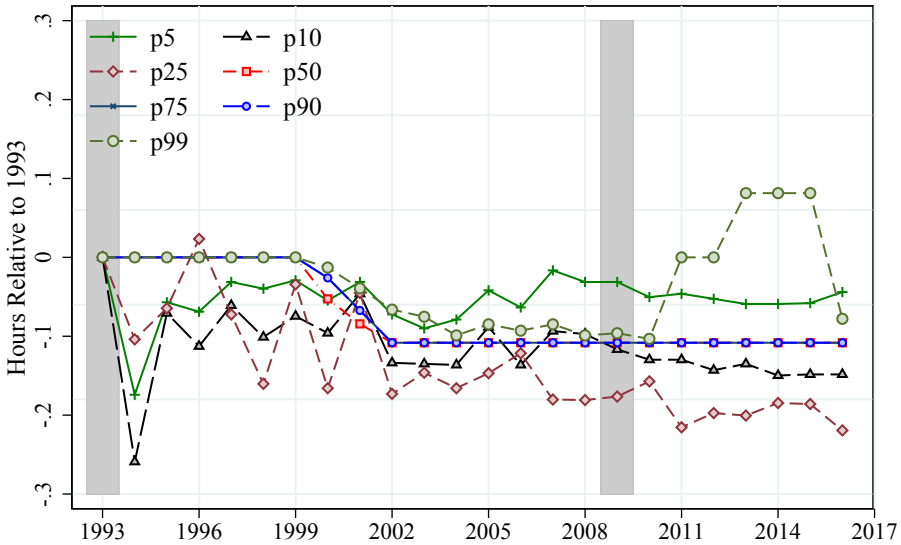
... With Low-Wage Growth Concentrated on Women

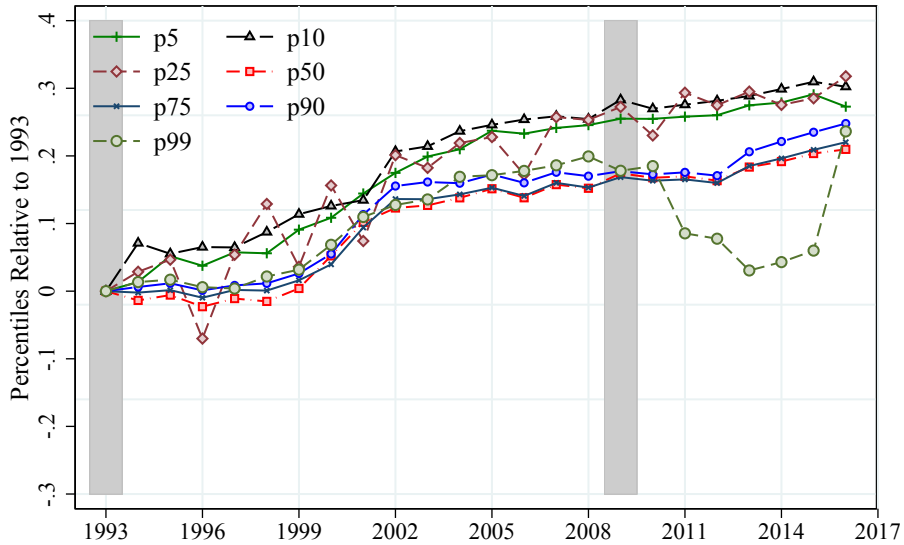




Reduction of the Legal Working Week from 1999

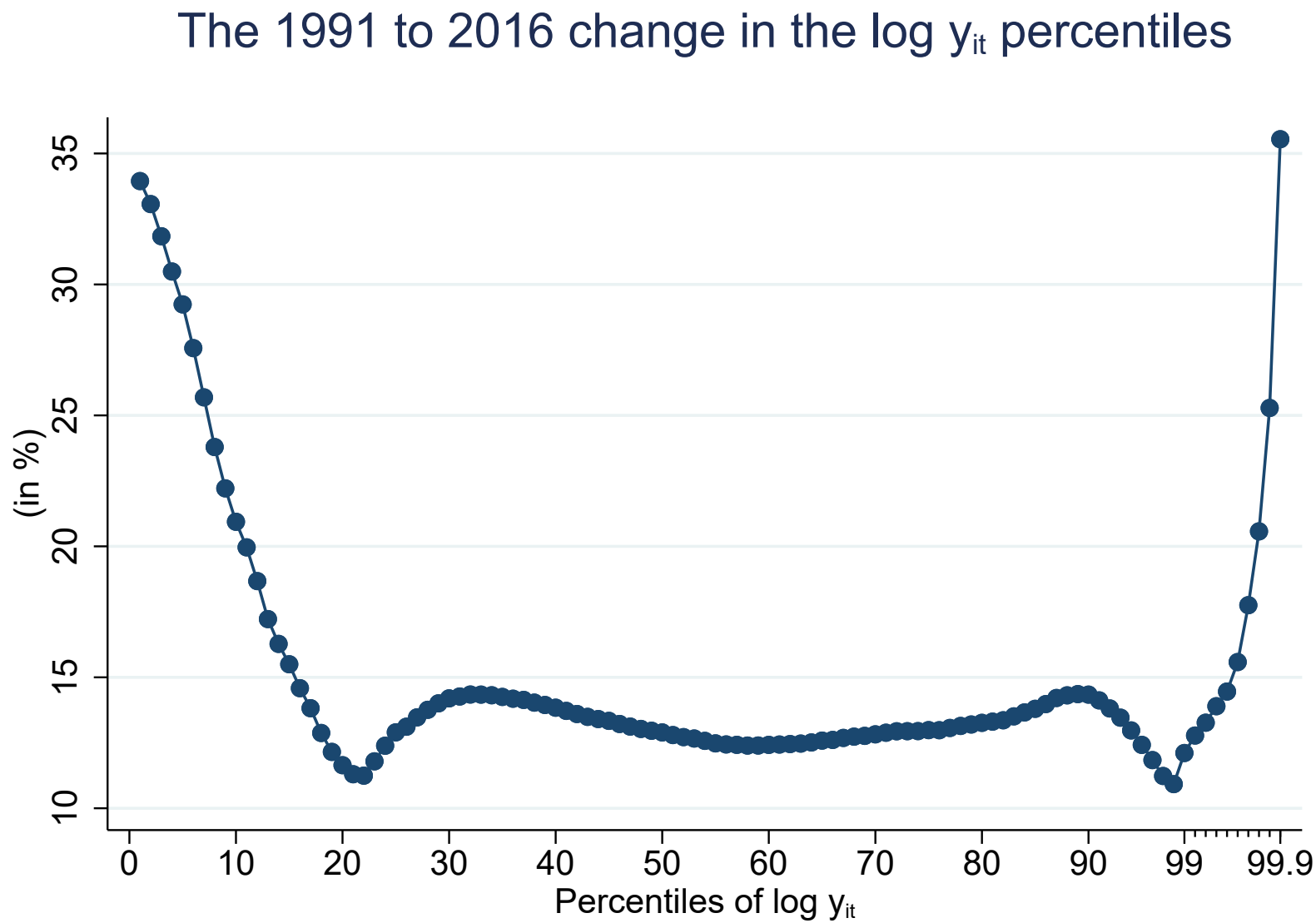
Women Men





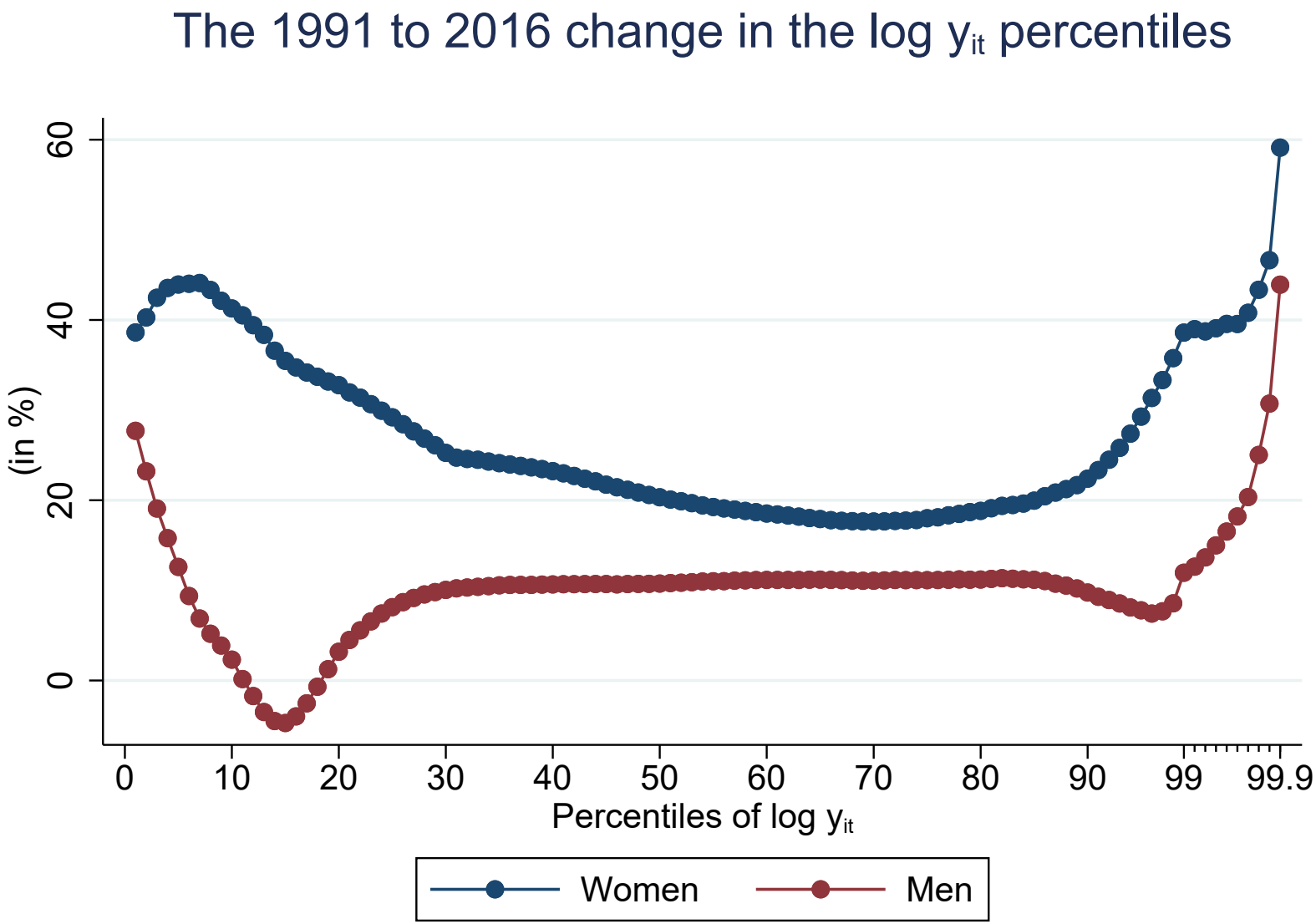
The Changing Earnings Distribution : a U-shape

USA | 2001-2016 | Total Income FR | Labor vs. capital FR



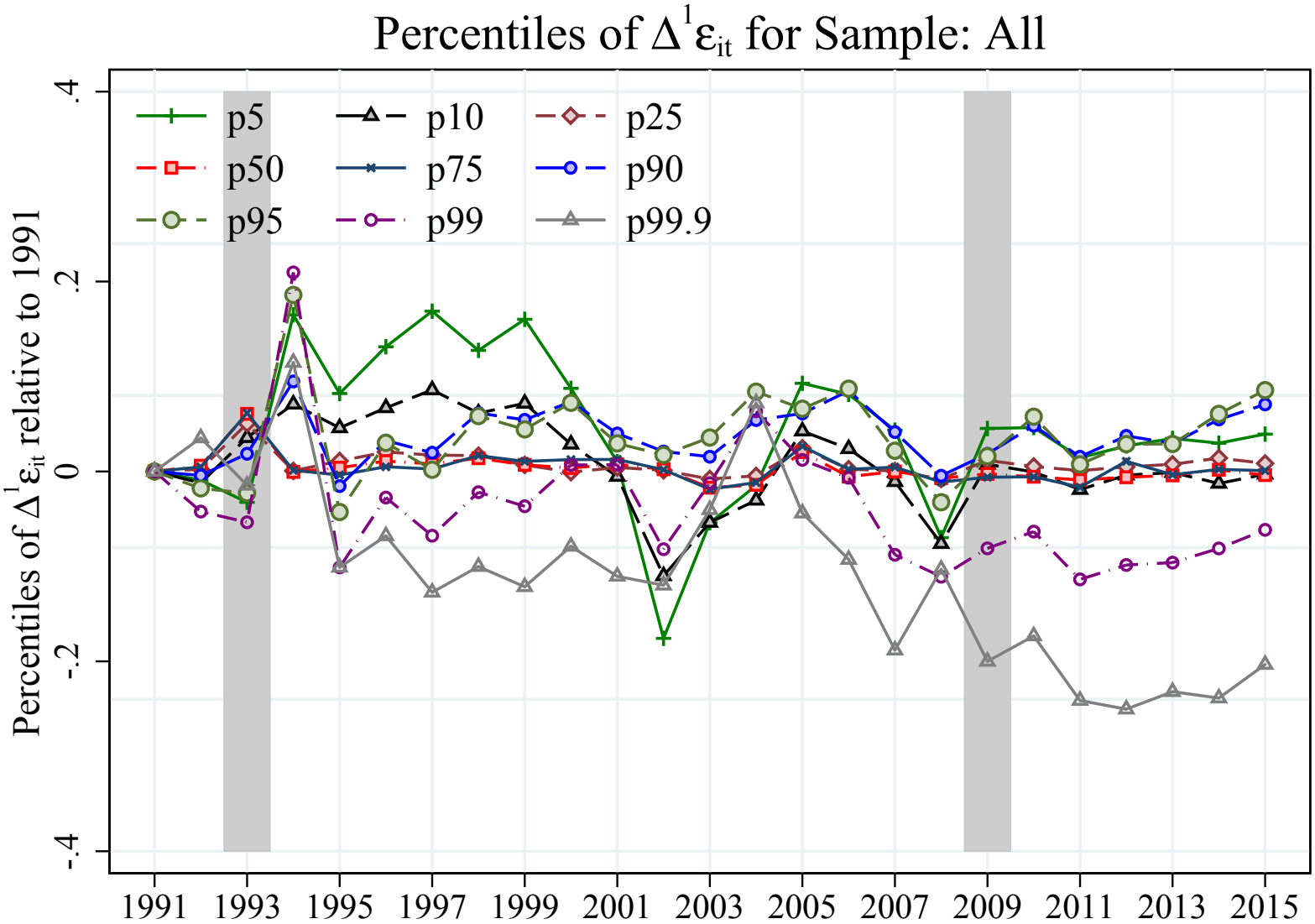
... Mostly for Women

Comprehensive data



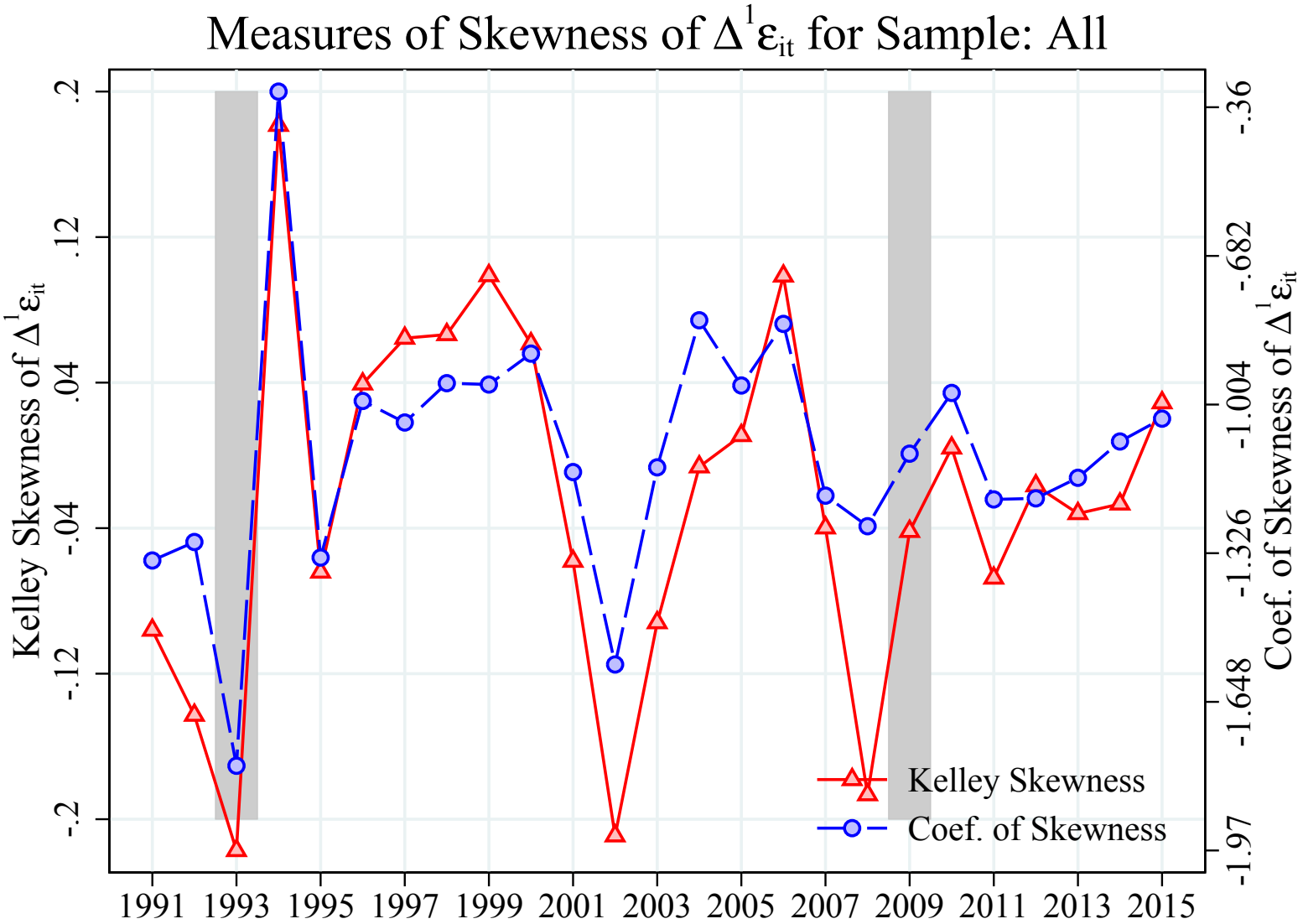
The Distribution of the One-Year Growth of Residualized Earnings : Smaller Extreme Changes

5-years growth



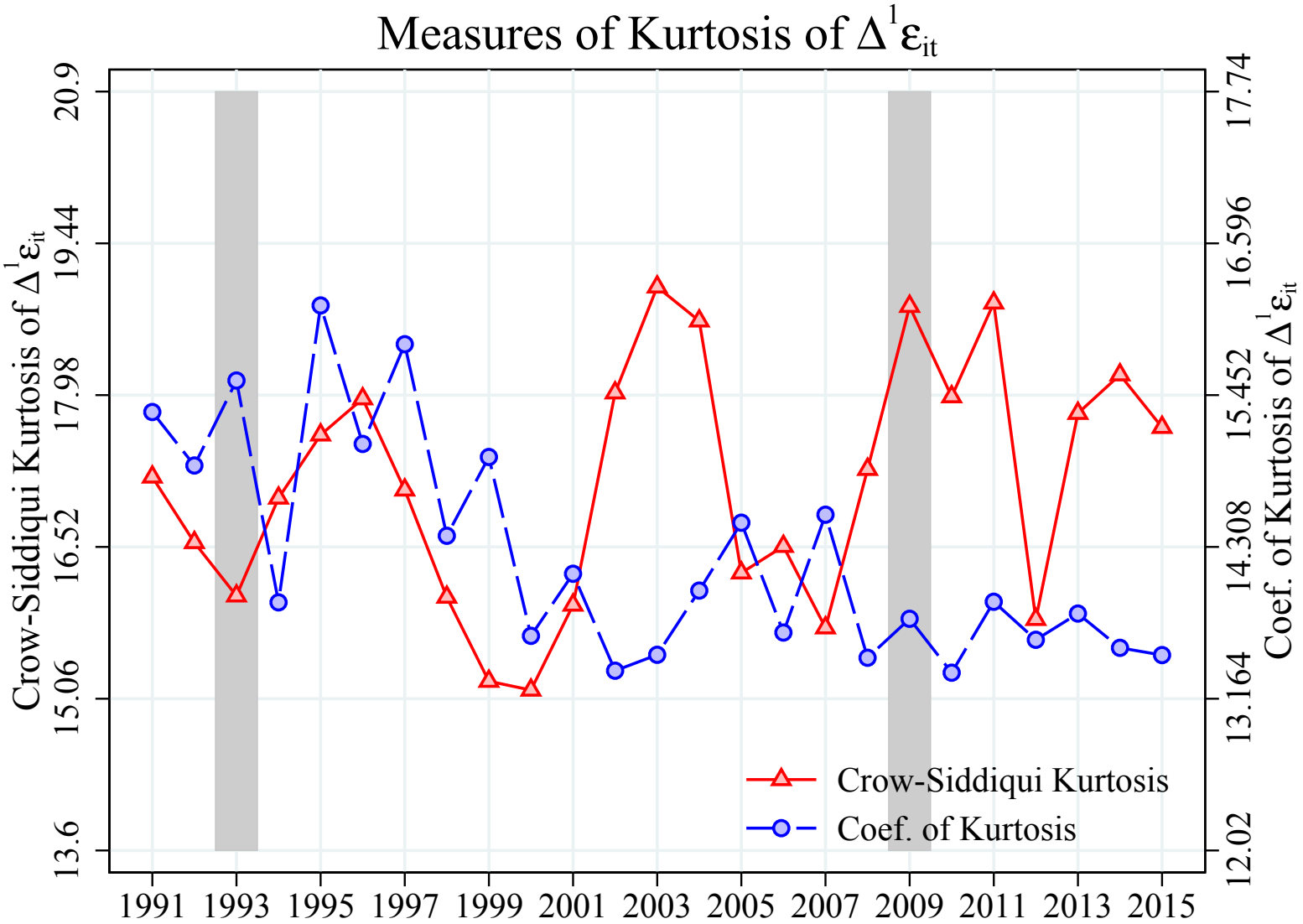
Pro-Cyclical Skewness in the One-Year Growth of Residualized Earnings

5-years growth



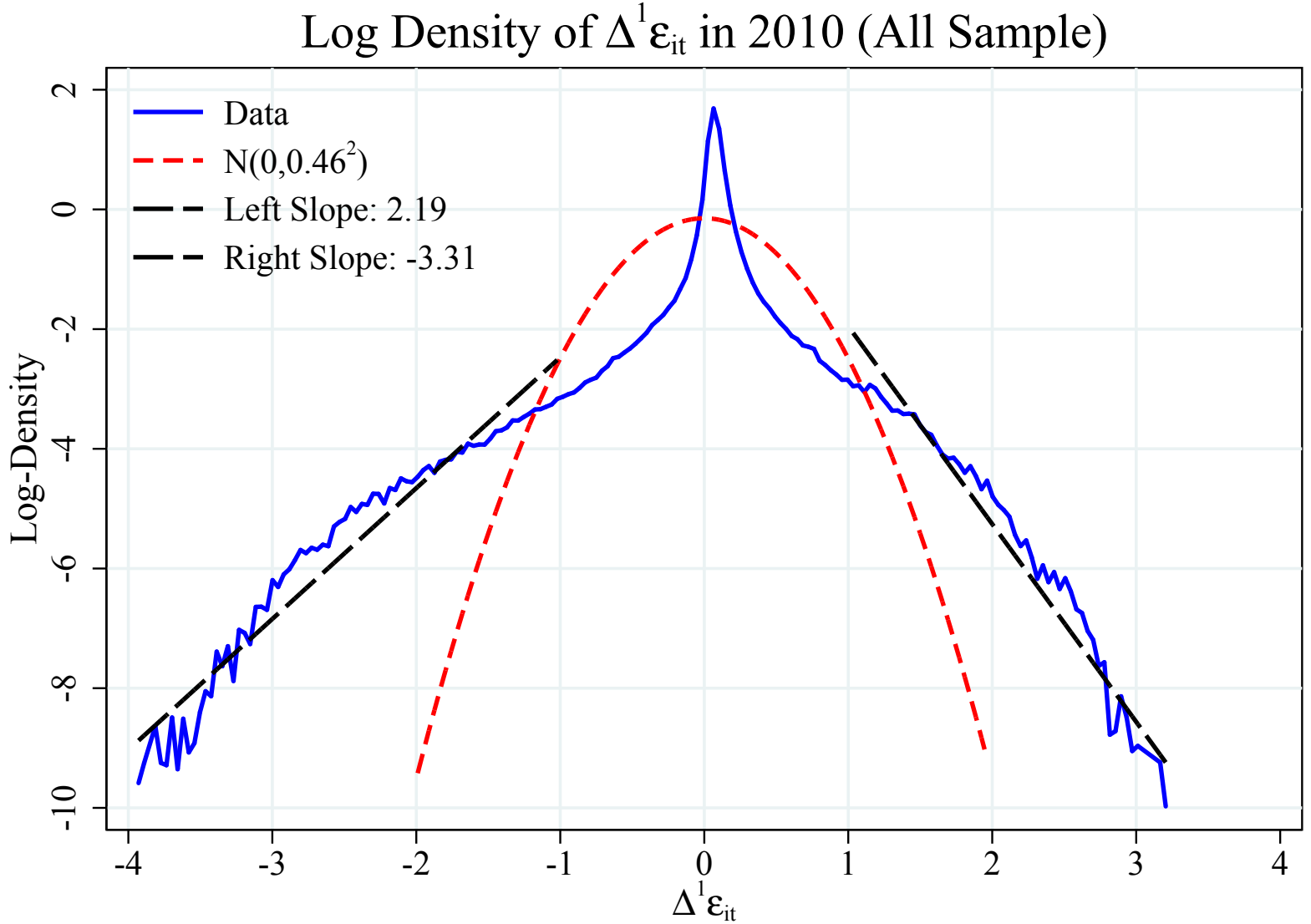
No Pattern (?) in Kurtosis in the One-Year Growth of Residualized Earnings

5-years growth



The Double Pareto Tails of Residualized Earnings Growth ...

USA | 5-years growth



... are Thinning

	One-year growth of residualised earnings				Five-year growth of residualised earnings			
	Left slope	Right slope	Skewness	Kurtosis	Left slope	Right slope	Skewness	Kurtosis
1991	1.58	-2.69	-1.34	15.3	1.36	-2.49	-1.08	11.2
1995	1.78	-2.77	-1.34	16.1	1.43	-2.82	-0.83	11.4
2000	2.06	-2.91	-0.89	13.6	1.51	-2.76	-0.96	10.1
2005	2	-2.84	-0.96	14.5	1.61	-2.86	-0.92	10.6
2010	2.19	-3.31	-0.98	13.4	1.63	-3.1	-1.02	10
2015	2.09	-3.33	-1.03	13.5				

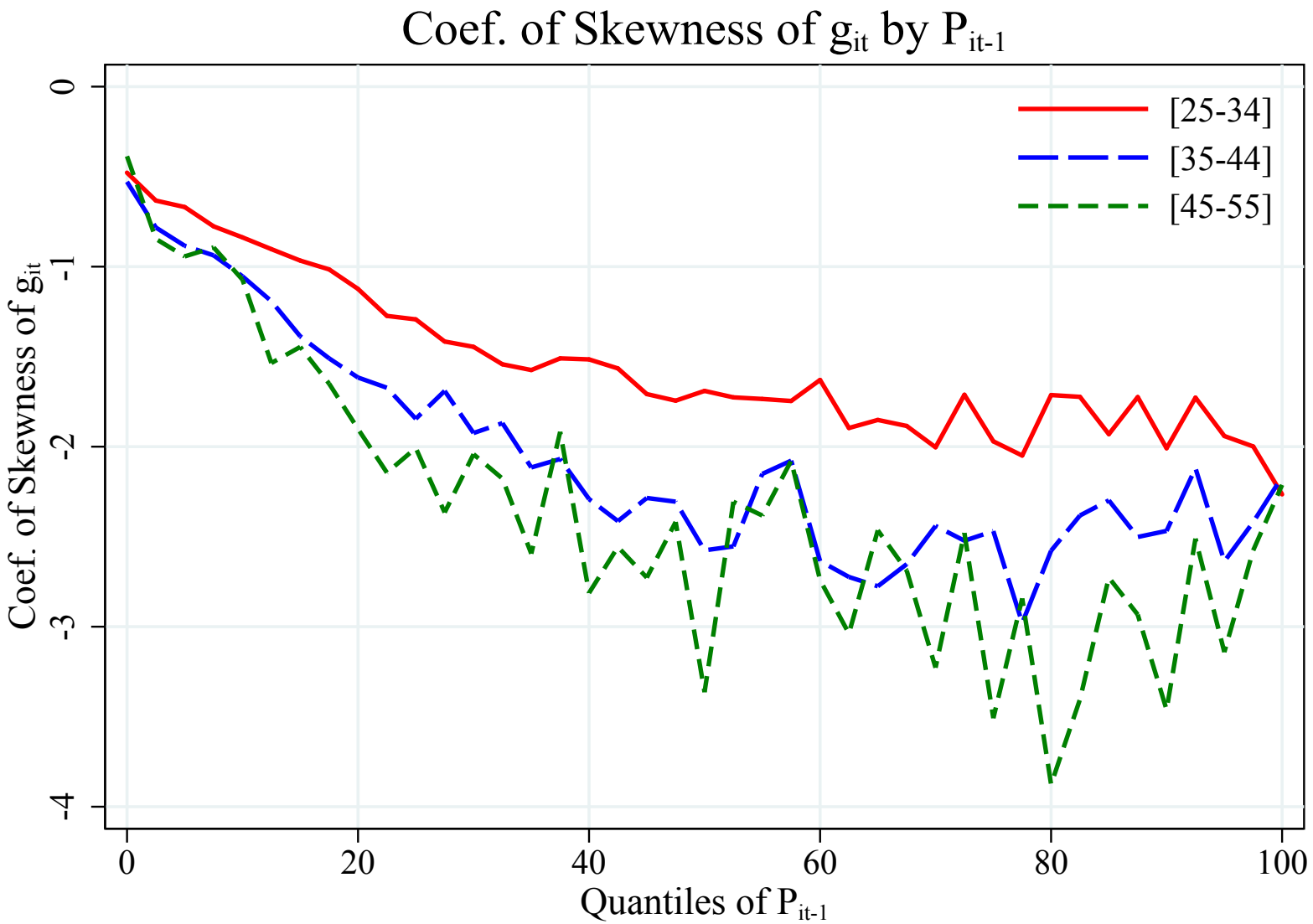
1. Introduction

2. Main results from part A
   - Inequality
   - Top Income
   - Volatility
     - Distribution
     - Heterogeneity

3. Part B

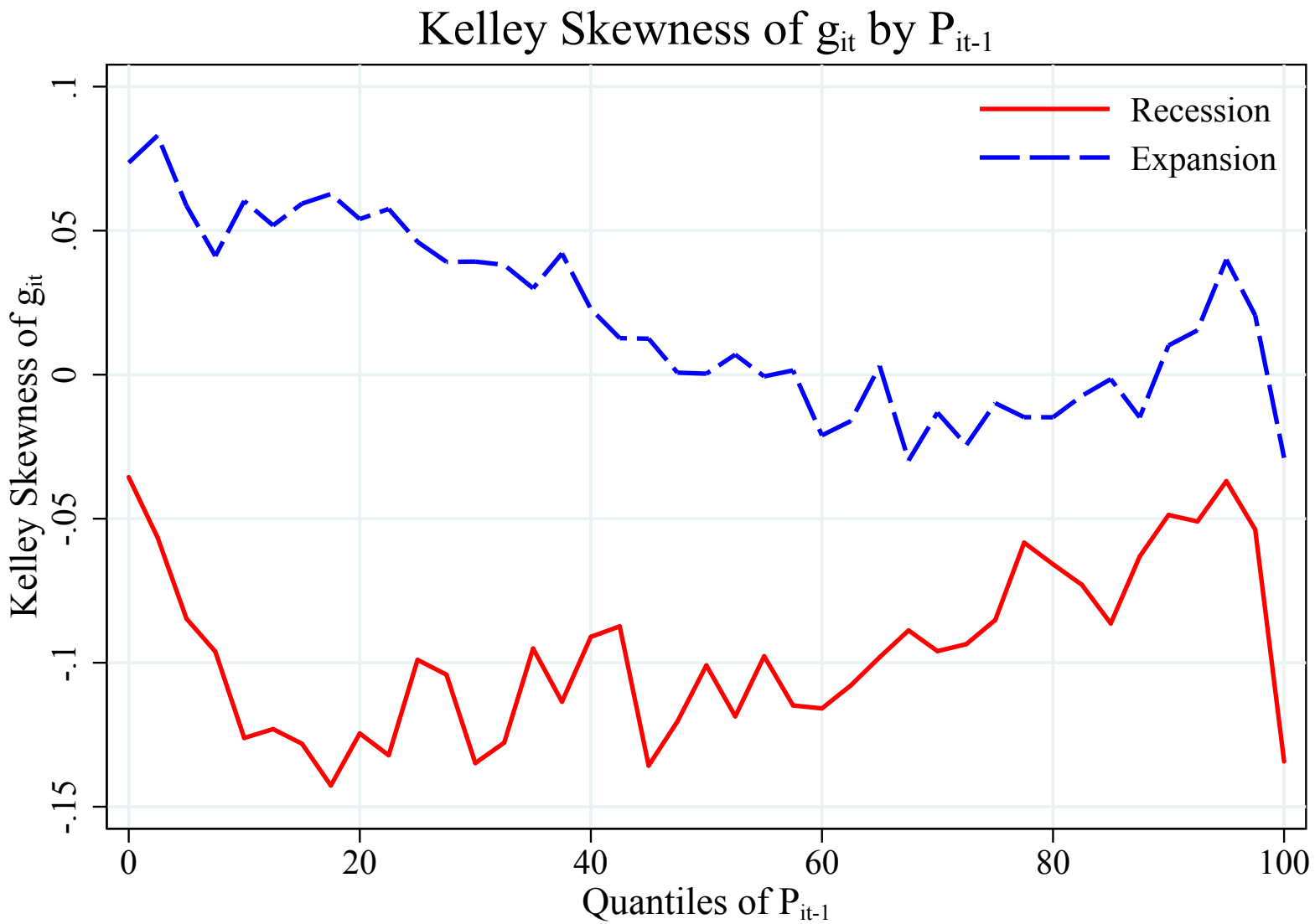
Skewness Similar to that Found in the US

USA | 5-years growth



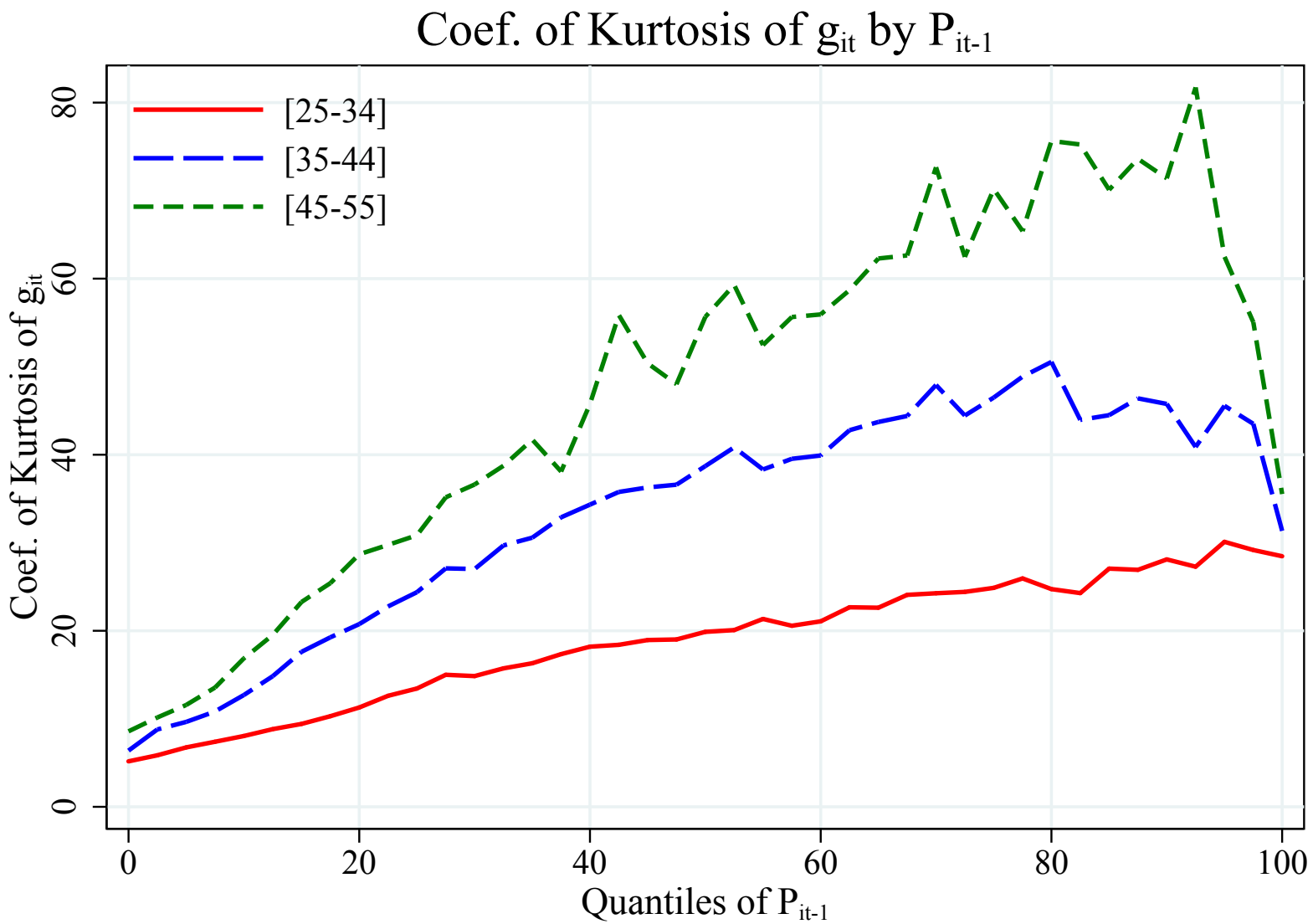
Procyclical Kelley Skewness

USA | Coef of Skewness



An Increasing Excess Kurtosis with Permanent Income

USA | 5-years growth



The Catch-up of Rural and Remote Territories

Some elements about France :

- Strong heterogeneity across territories
  - A centralized Administration (Paris)
  - more than 36,000 municipalities : $\approx$ 11,000 in Germany or UK
  - many small and remote cities : 1,800 inhabitants in average

To help illuminate some recent protests :

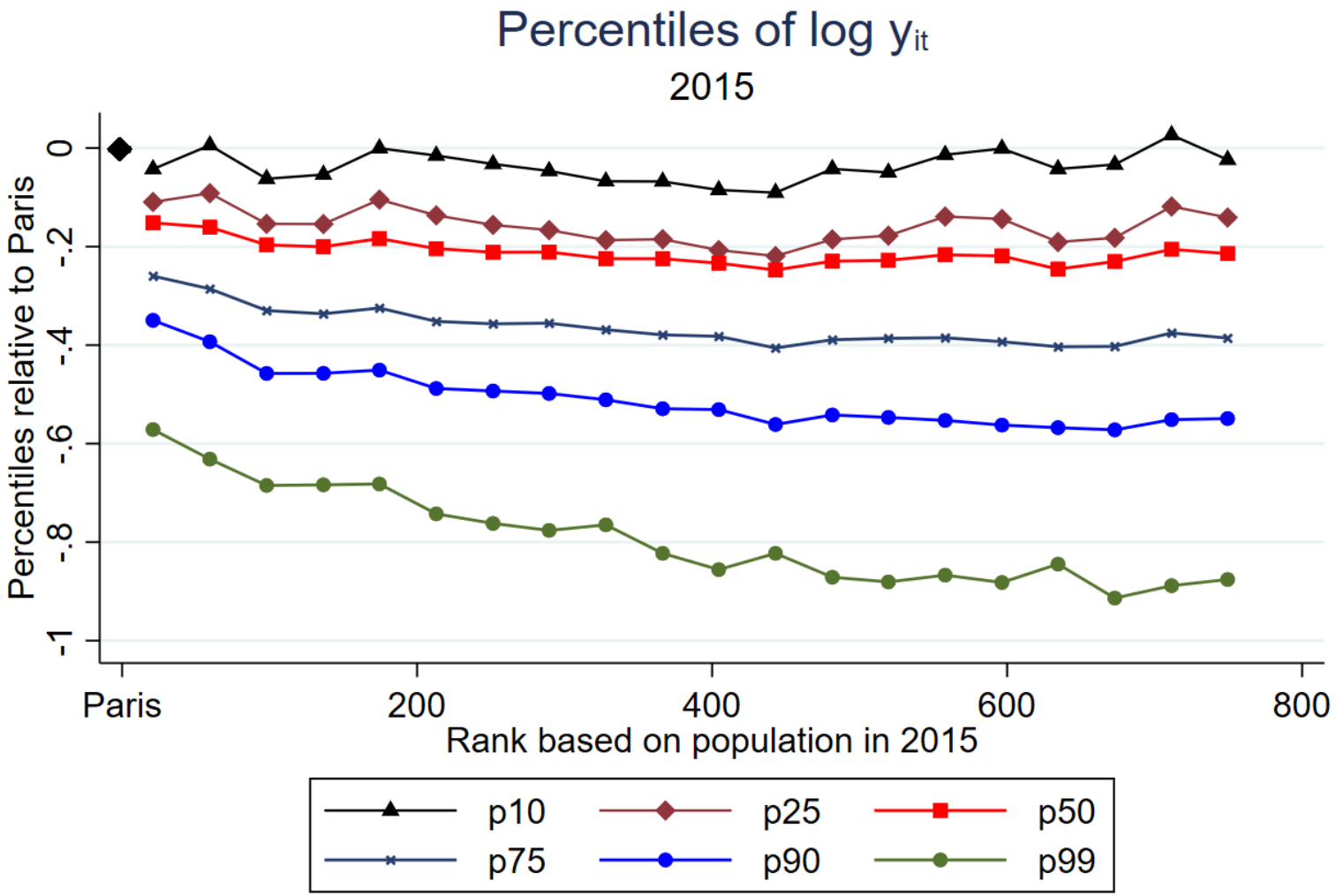
- 2005 : riots in the suburbs of Paris
  - Claims : to reduce police violence and youth unemployment in poorest neighborhoods
- 2013 : the "Red caps" (Brittany)
  - Opposed to a carbon tax
- 2018 : the "Yellow vests"
  - Ask for less inequality and more public services
  - Protests organized locally roundabout

What we do

- We characterize inequality between "urban areas" and between urban and rural territories
- We decompose the gap into what is driven by observable and unobservable characteristics
- We document the trends over the past 23 years
- We highlight strong differences in terms of plant-to-plant mobility and (positive/negative) shocks

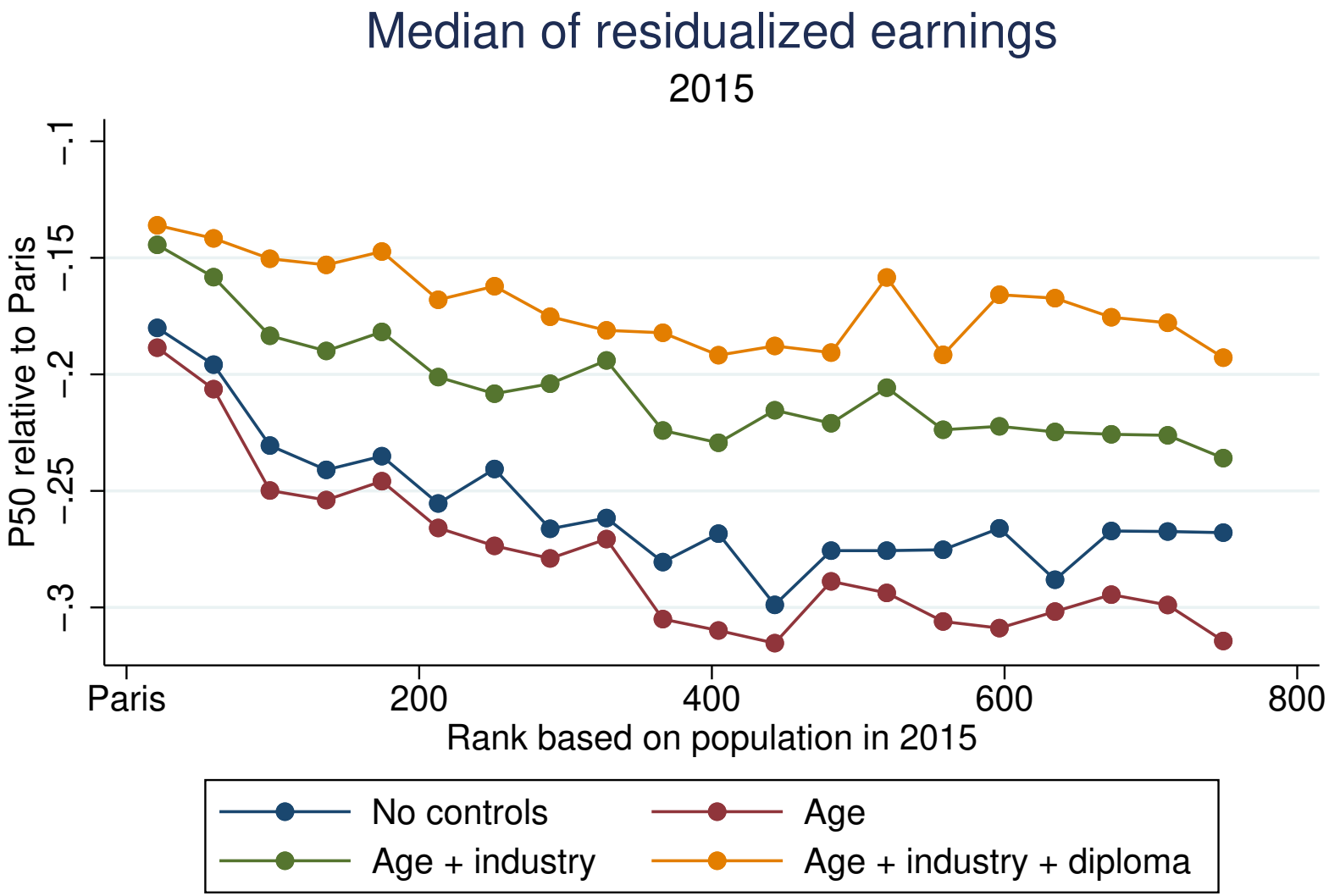
Earnings Inequality : Paris vs. other "Urban Areas"

Biggest areas



Note: observations are the 759 "urban areas".

Observables Reduce the Gap by 1/3

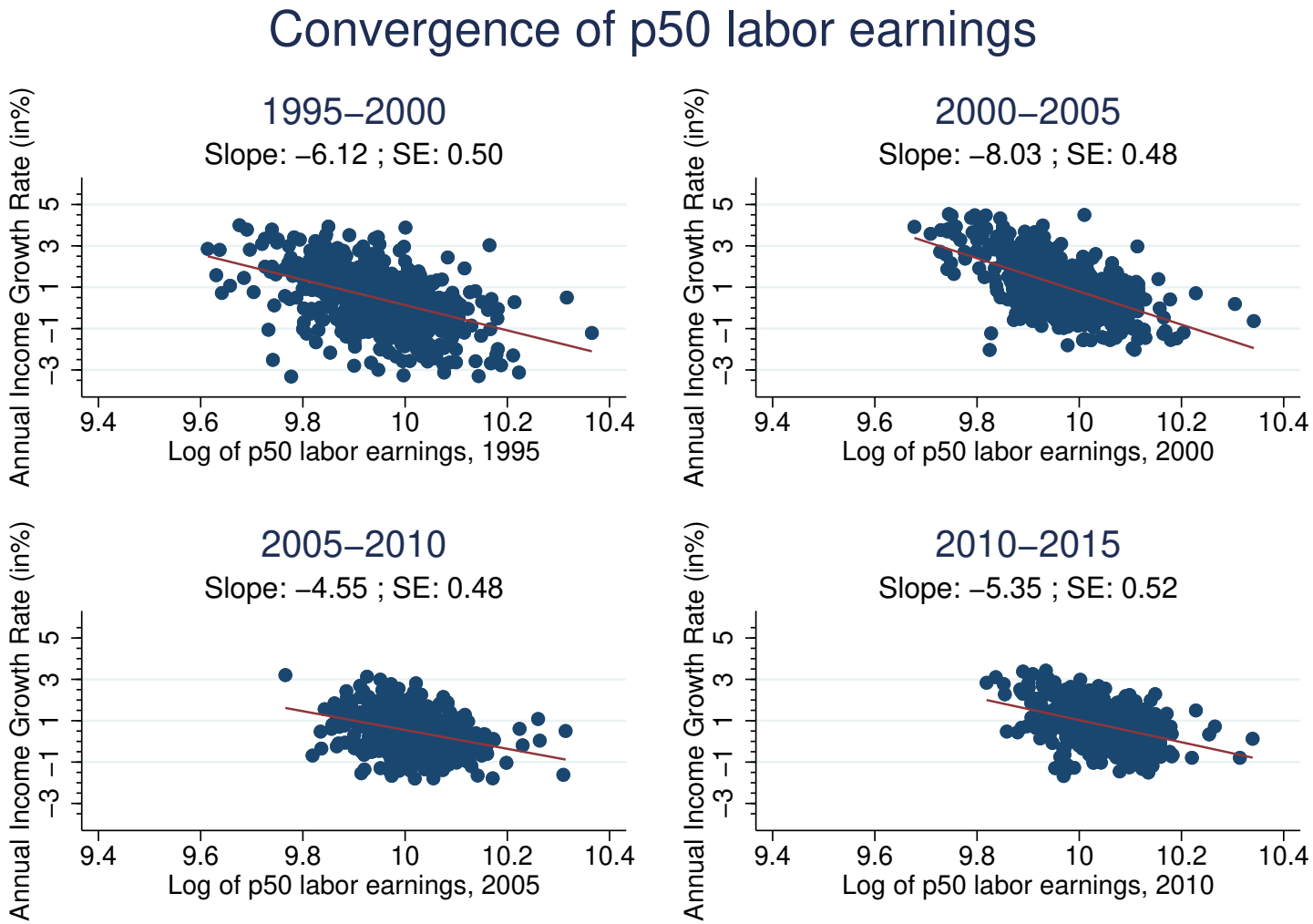


Note: observations are the 759 "urban areas."

The Convergence of the "Poorest" Urban Areas

Median wage

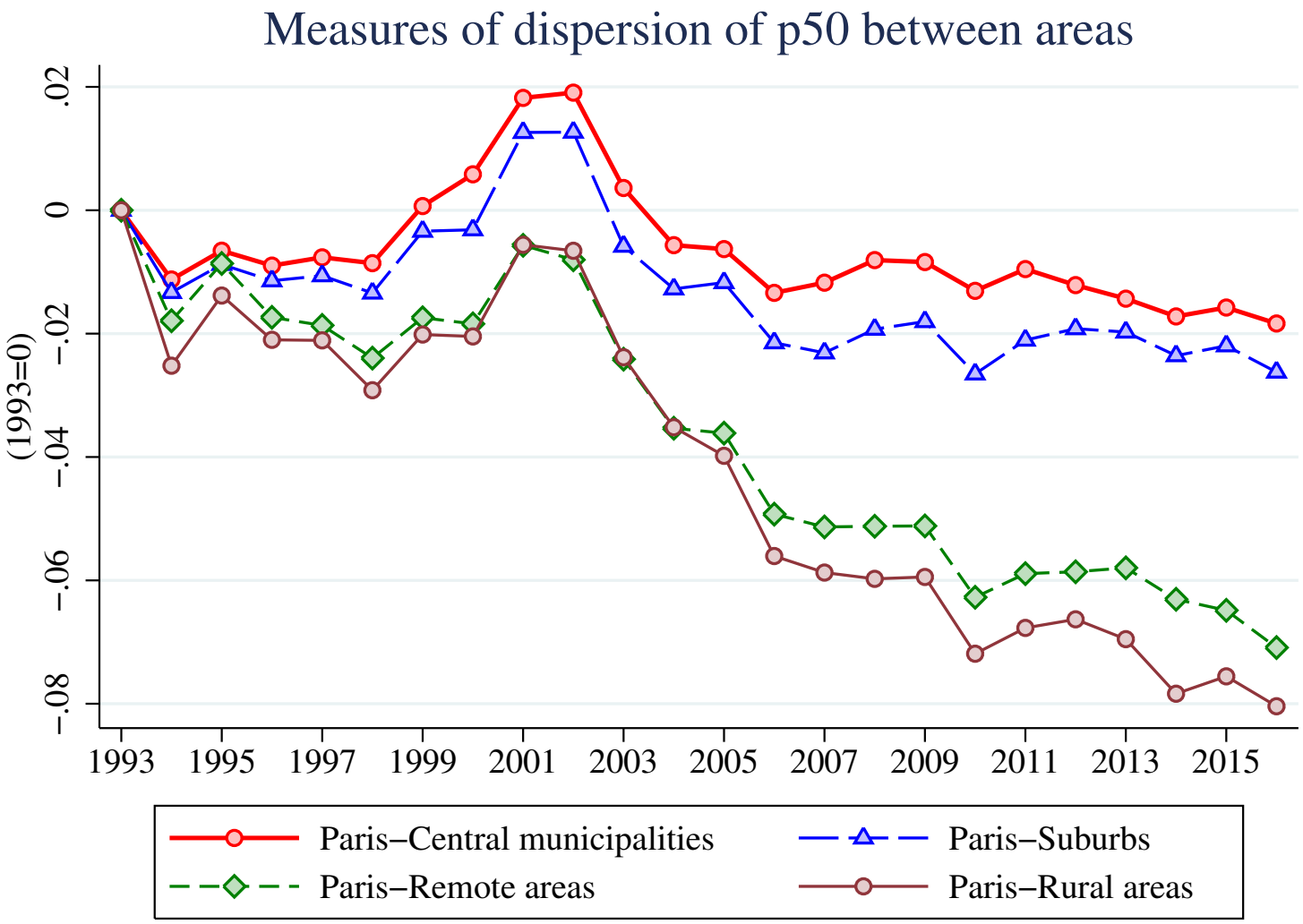
Mean wage | Compared to Paris | Convergence of the Smallest



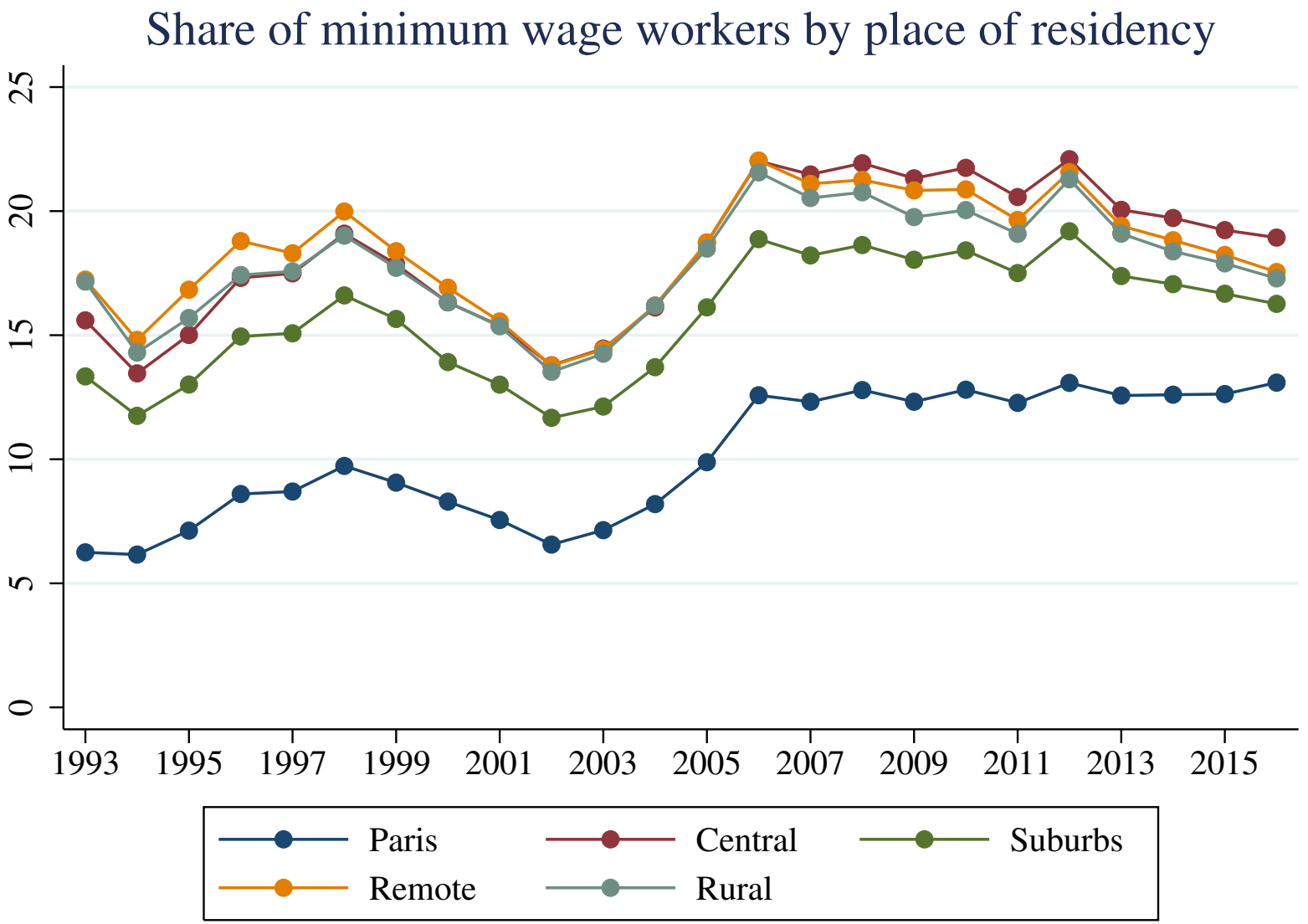
Note: Observations are the 759 "urban areas" trimmed at the 1% level.

And Convergence Between Paris and Rural/Remote Areas

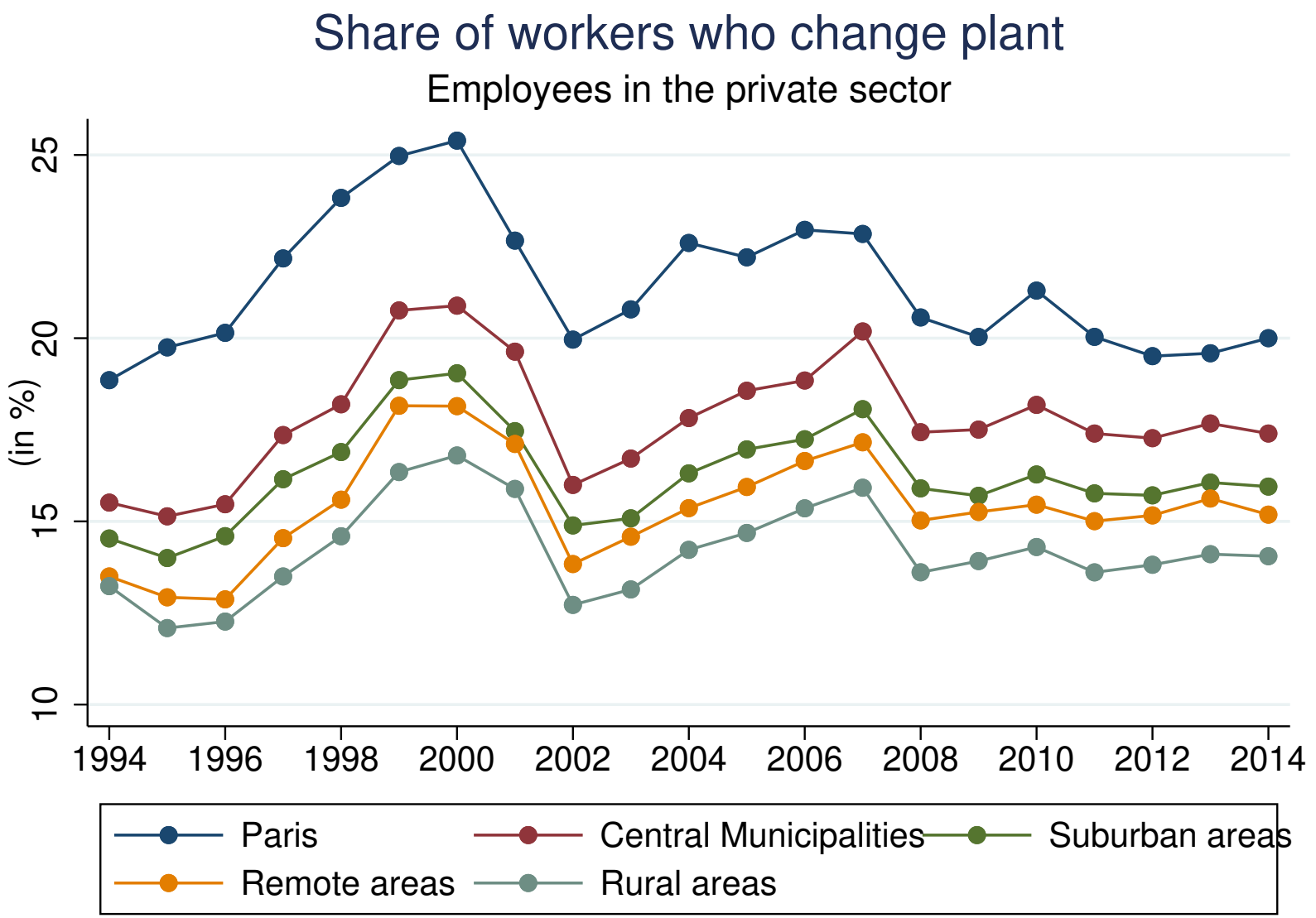
P99



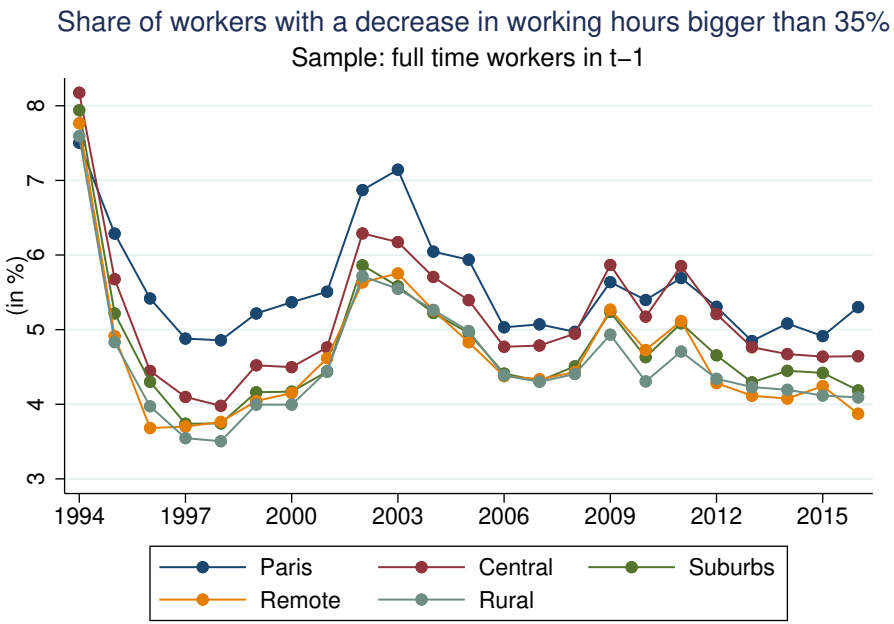
Fewer Minimum Wage Workers in Paris Area

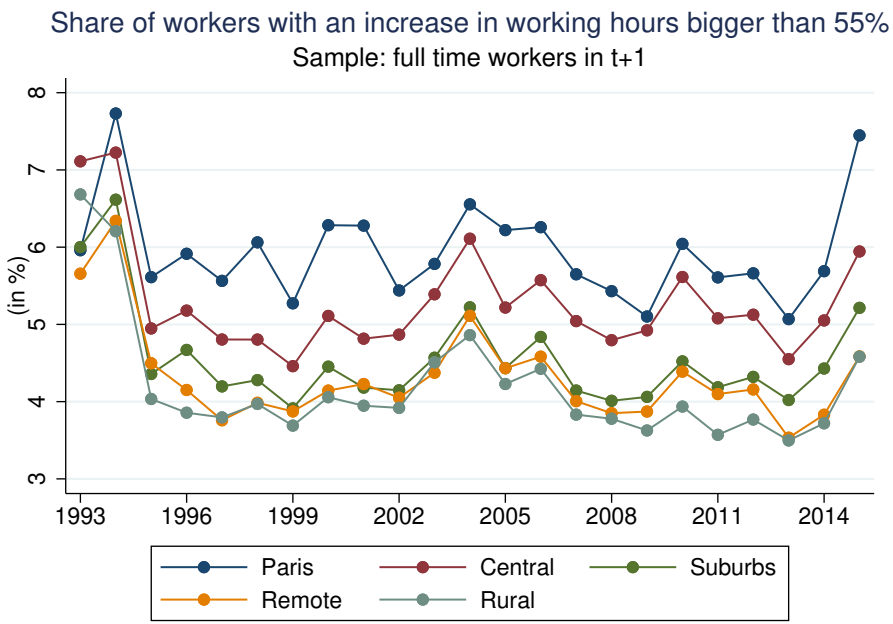


Plant-to-Plant Mobility : Paris vs Remote/Rural Areas



Positive and Negative Shocks are Larger in Paris Area





Conclusion

- Many important institutional changes over the period (minimum wage, 35h working week, $\searrow$ in employer payroll taxes) explain our results.
- Despite the low growth rate of total earnings, earnings per hour worked have increased.
- Bottom and (very) top percentiles of labor earnings have experienced the highest growth.
- Skewness of residualized earnings growth is procyclical.
- We observe a strong convergence of the "poorest" and smallest urban areas.
- Workers in rural and remote areas experience fewer positive/negative shocks and a lower job-to-job mobility.

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APPENDIX

Our measure of labor income

Definition

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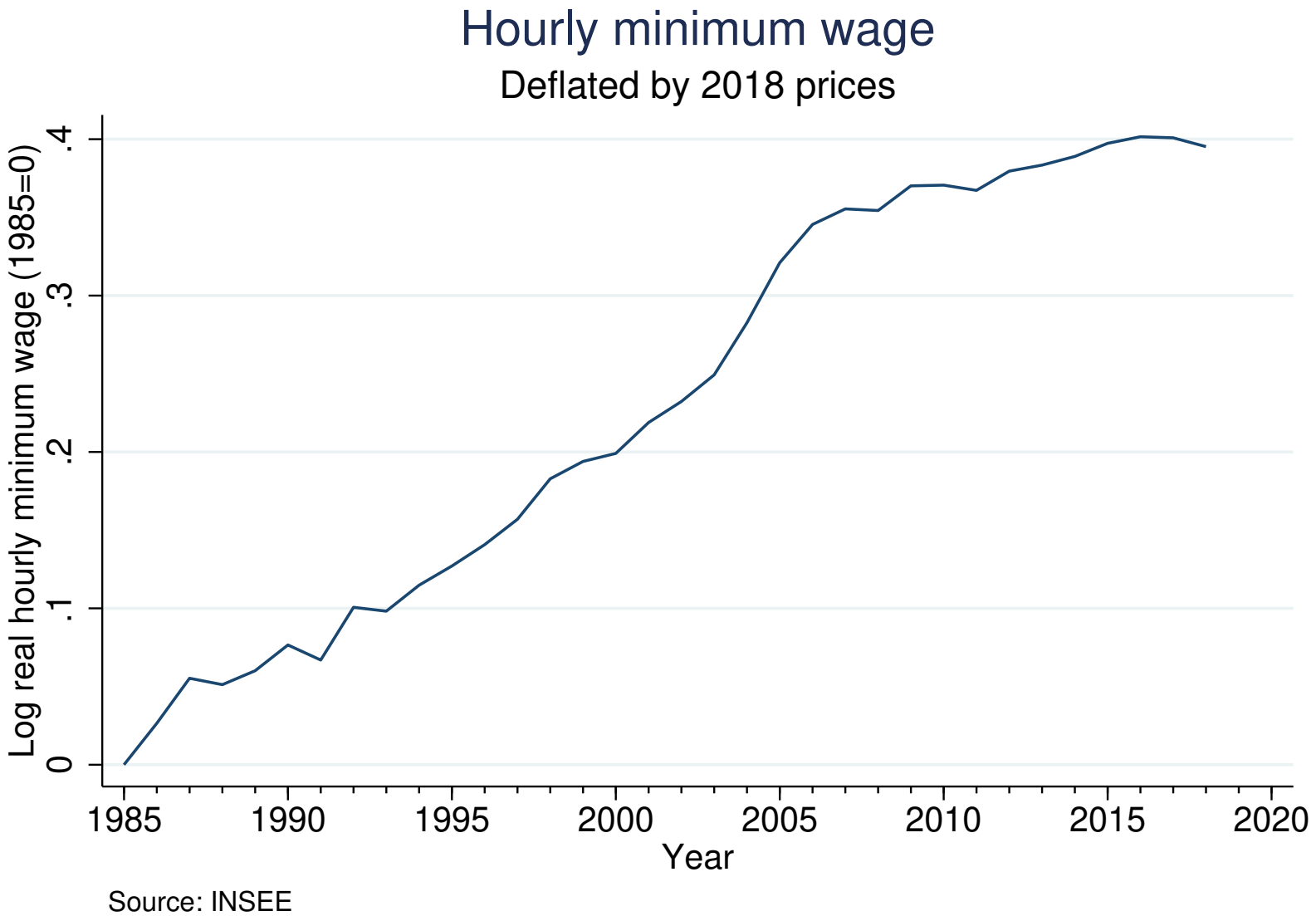
Gross wage :

- Definition : sum of what is paid to the employee because of his/her contract, inclusive of profit-sharing, bonus on profit, and worker's mandatory social contributions.
- Our data include :
  - the wage, overtime hours and paid leave
  - bonuses
  - several kinds of compensations (sickness, short-time work, firing, . . .)
  - in kind benefits

$\rightarrow$ It does not include stock options !

Real Hourly Minimum Wage

Back Nominal value



Source: INSEE

Nominal Hourly Minimum Wage

Back

Source: INSEE

Discretionary Increases of the Minimum Wage

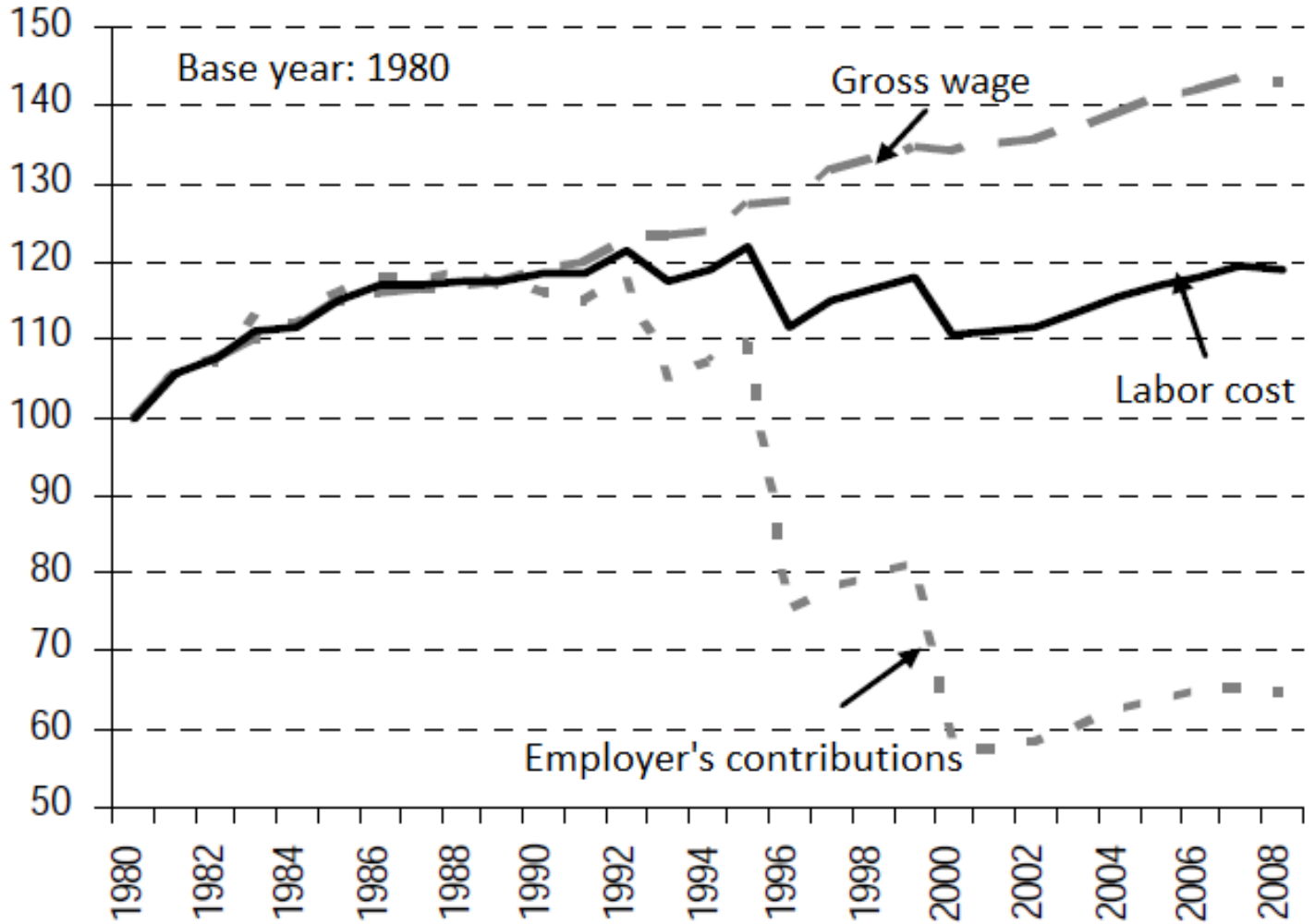
"Coups de Pouce"

Back

Year	1995	1996	1997	1998	2001	2006	2012
Value	+2.20%	+0.16%	+2.26%	+0.50%	+0.29%	+0.30%	+0.60%

Labor Cost at Minimum Wage

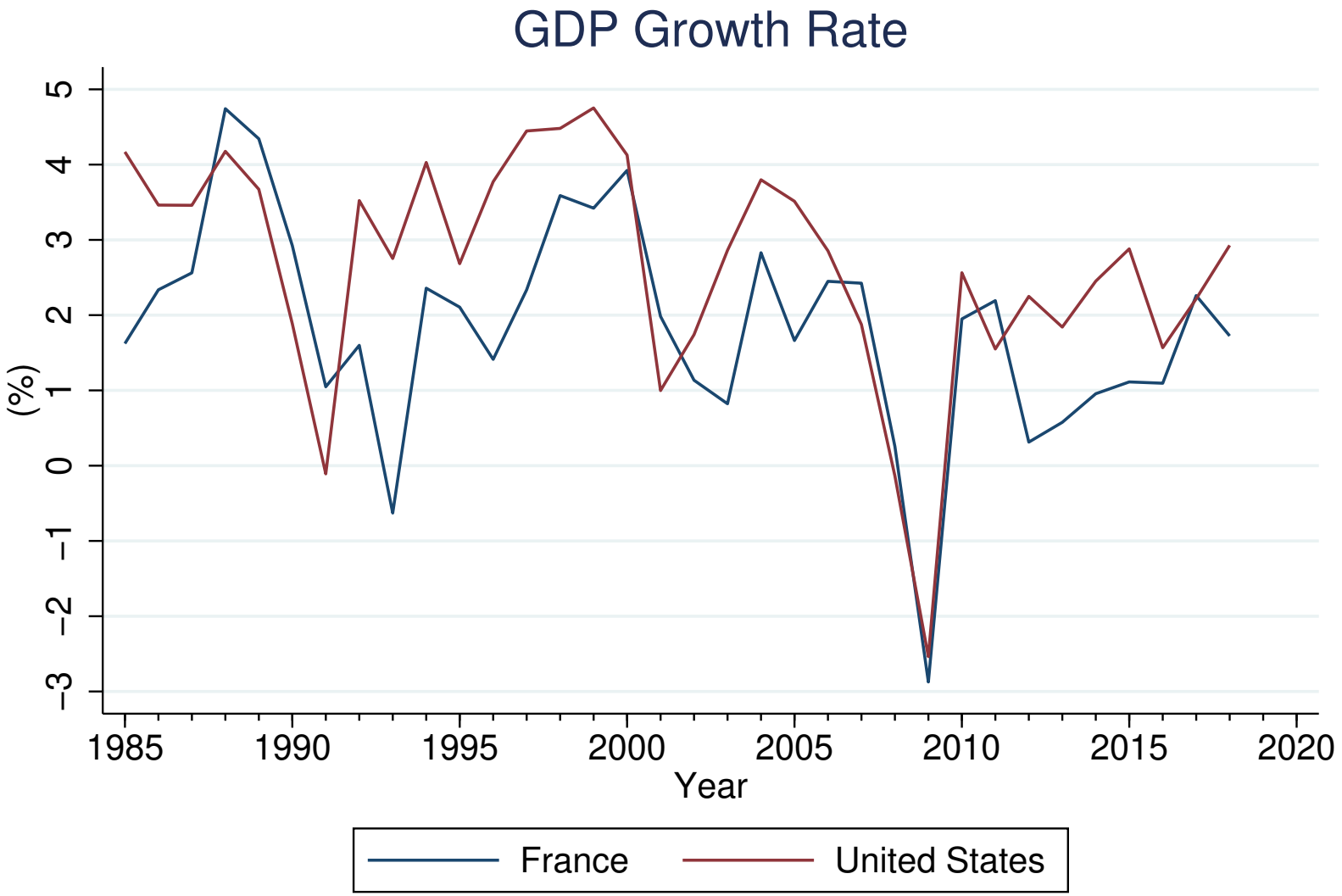
Back



French Business Cycle

GDP Growth Rate

Back



Source: World Bank

French Business Cycle

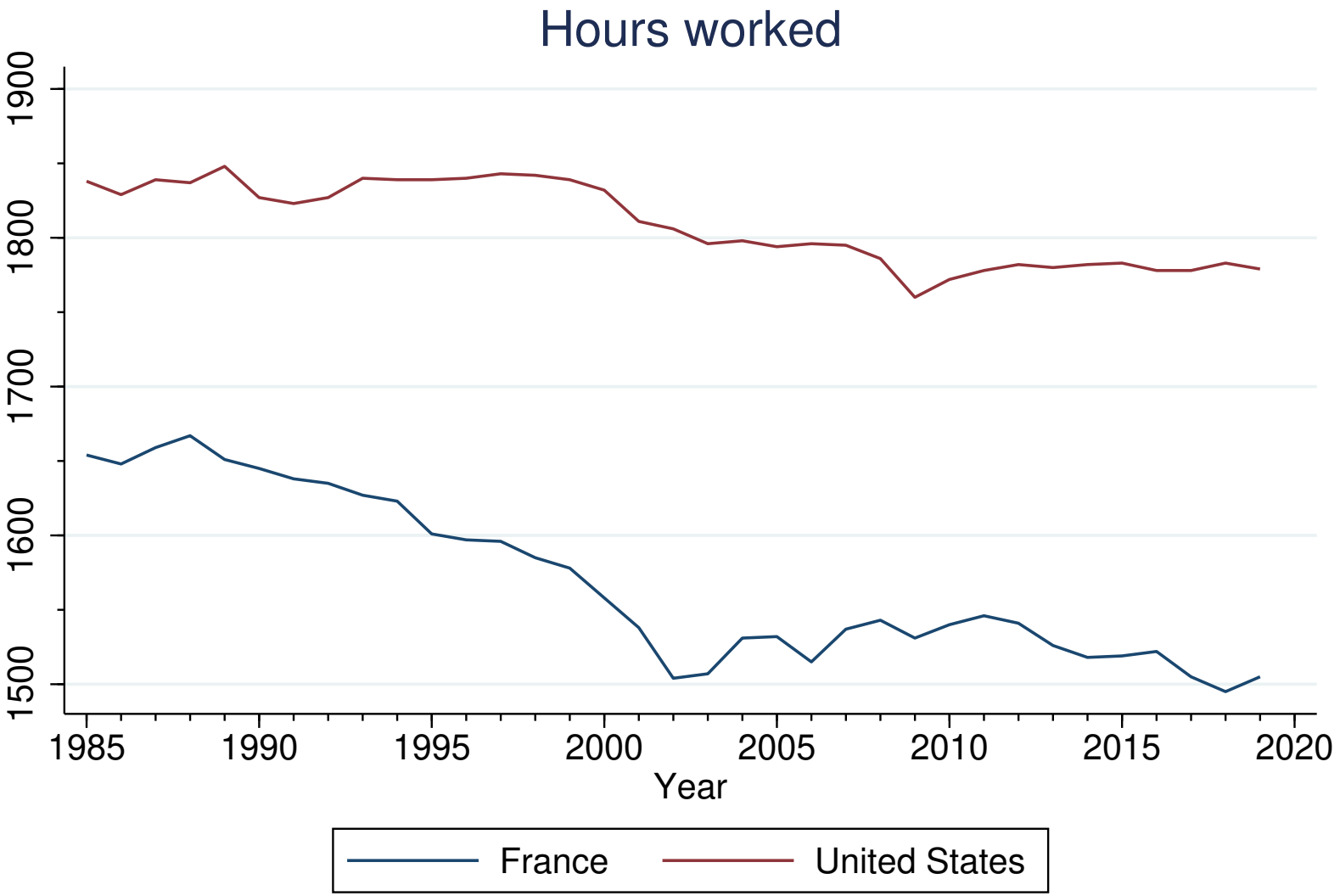
Unemployment

Back

Source: INSEE & BLS

Average Annual Hours Worked

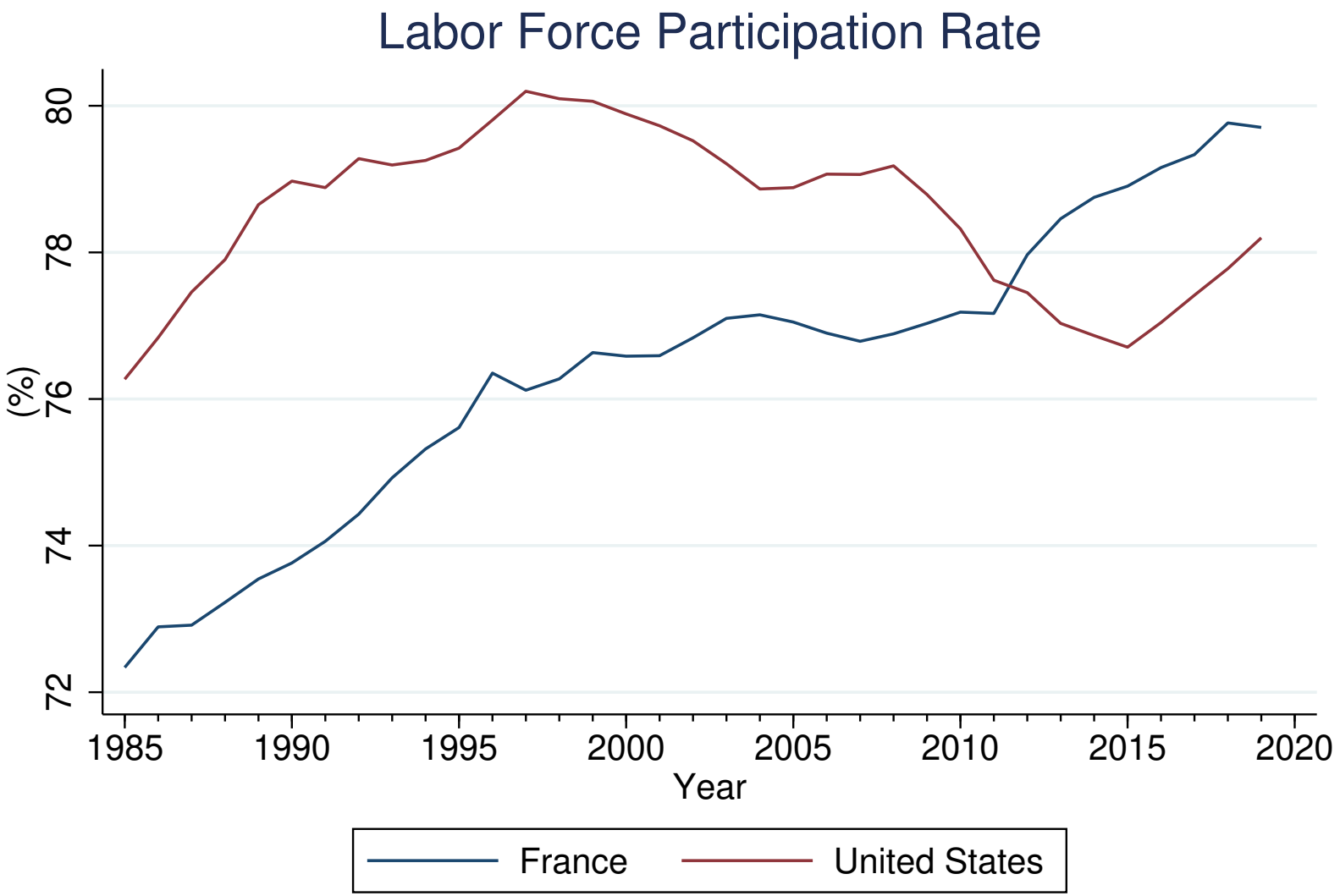
Back



Source: OECD

Strong Increase in the Labor Force Participation

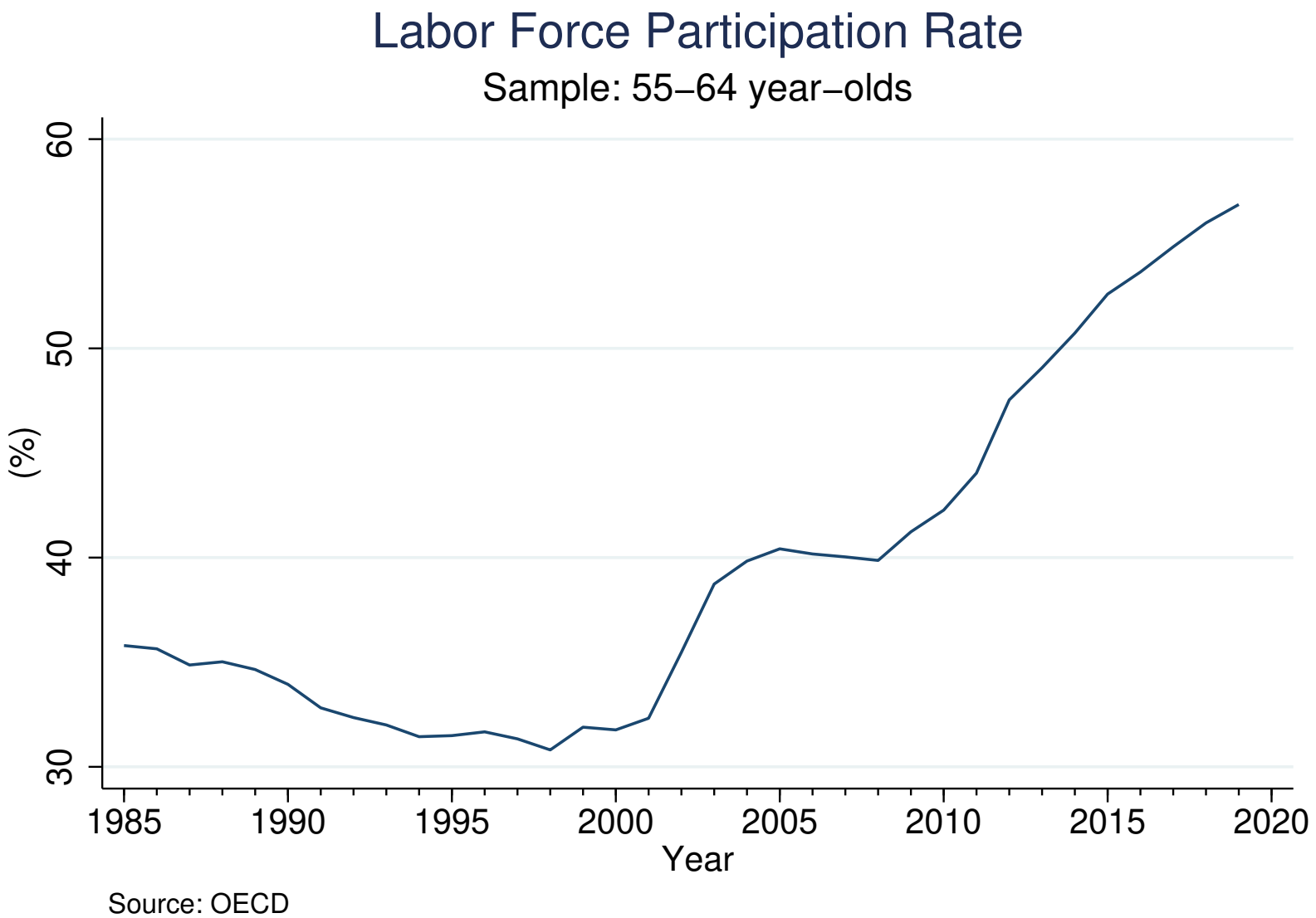
Back 55-64 By gender



Source: OECD. Sample: 25–64 years olds

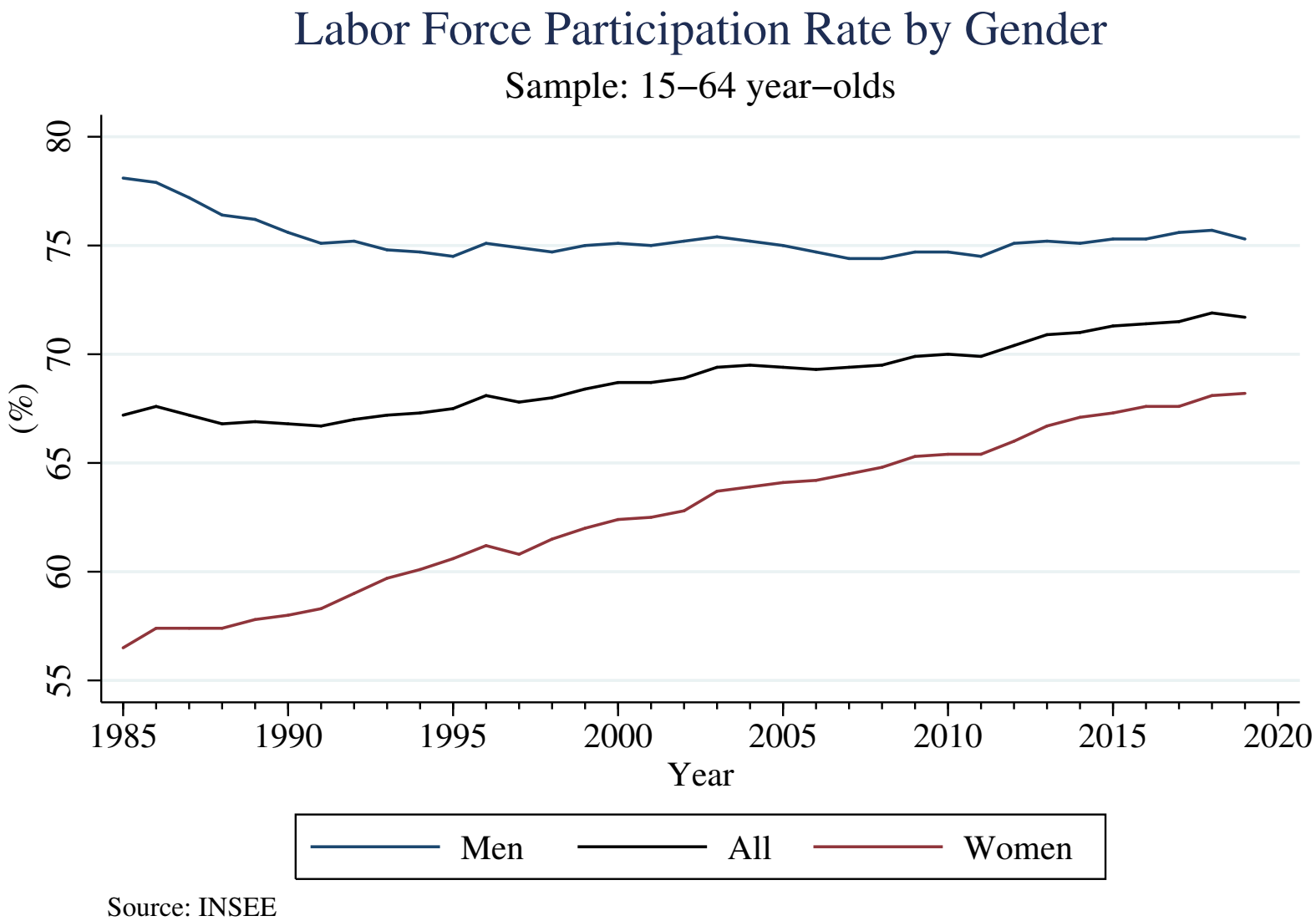
Strong Increase for Older Workers (55-64)

Back | Participation | By gender



Strong Increase for Women

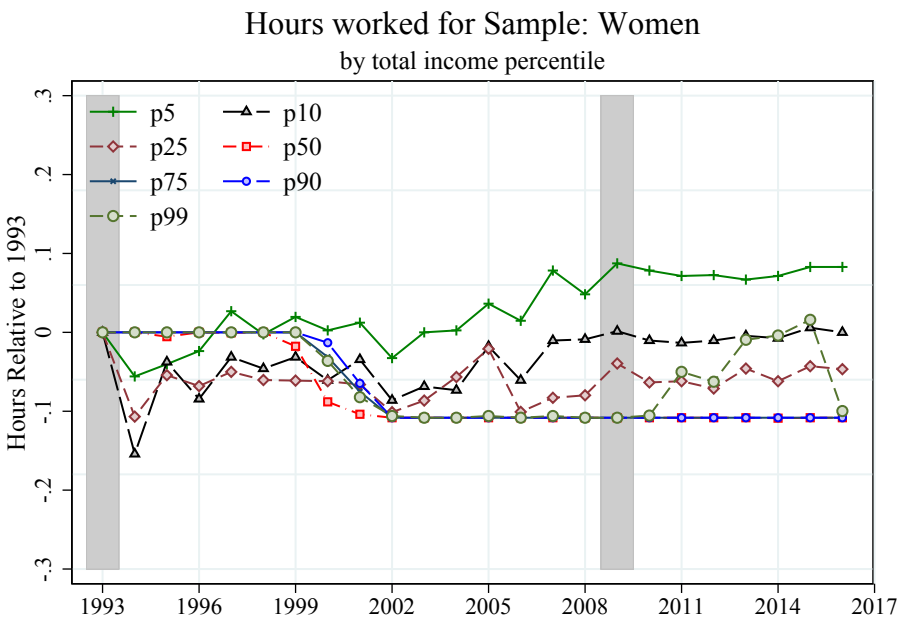
Back Participation 55-64

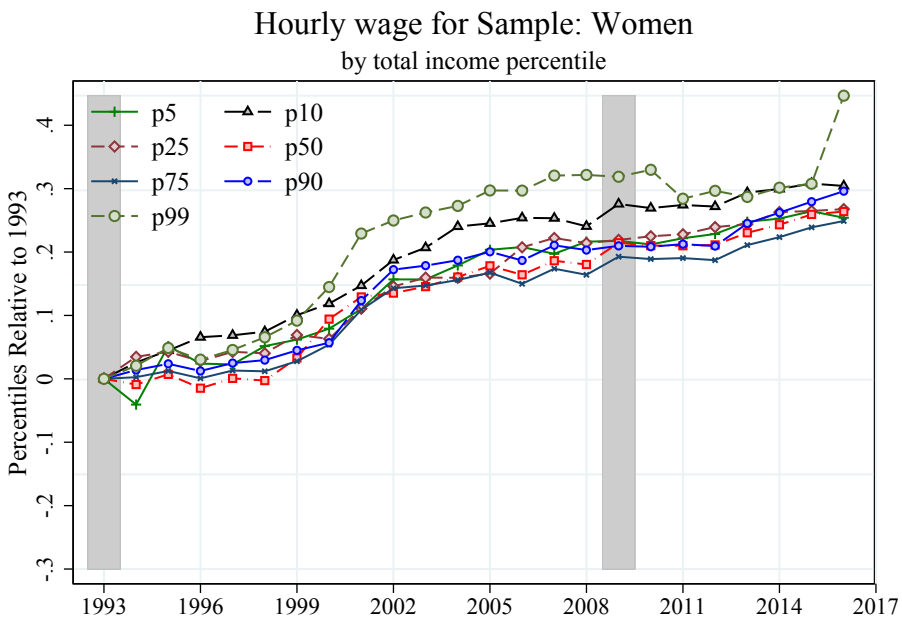


Source: INSEE

Hours Worked and Hourly Wage (Women)

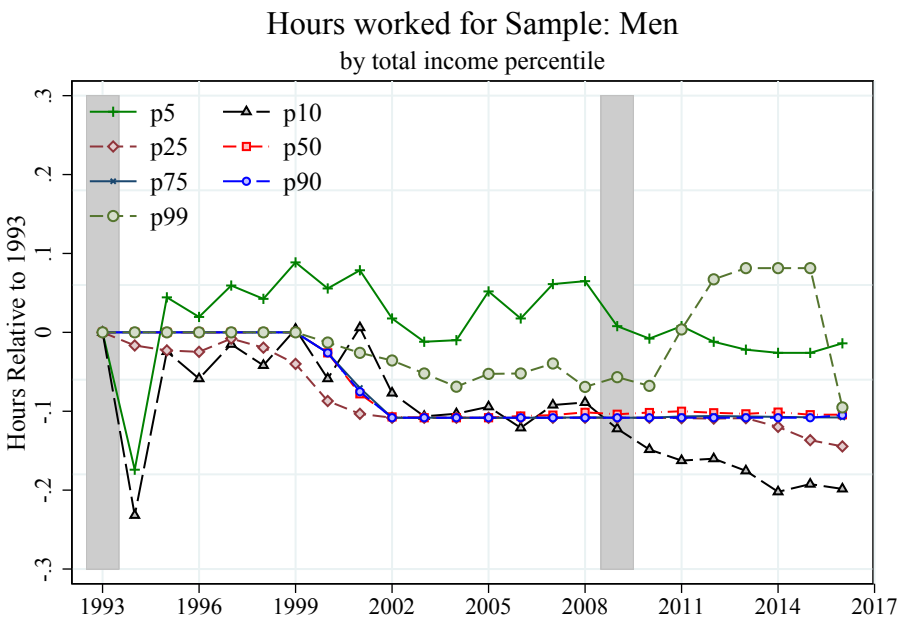
Back Men

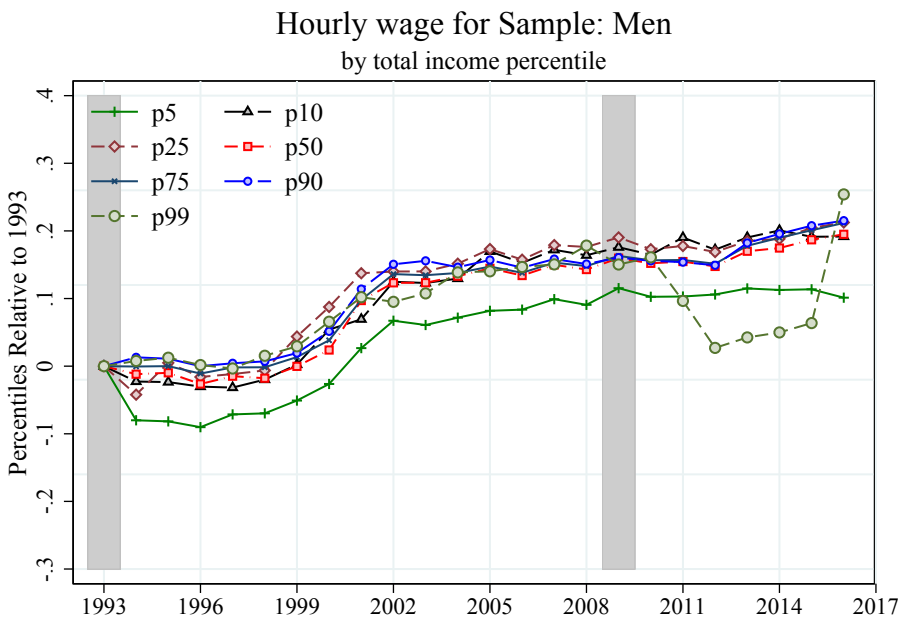




Hours Worked and Hourly Wage (Men)

Back | Women

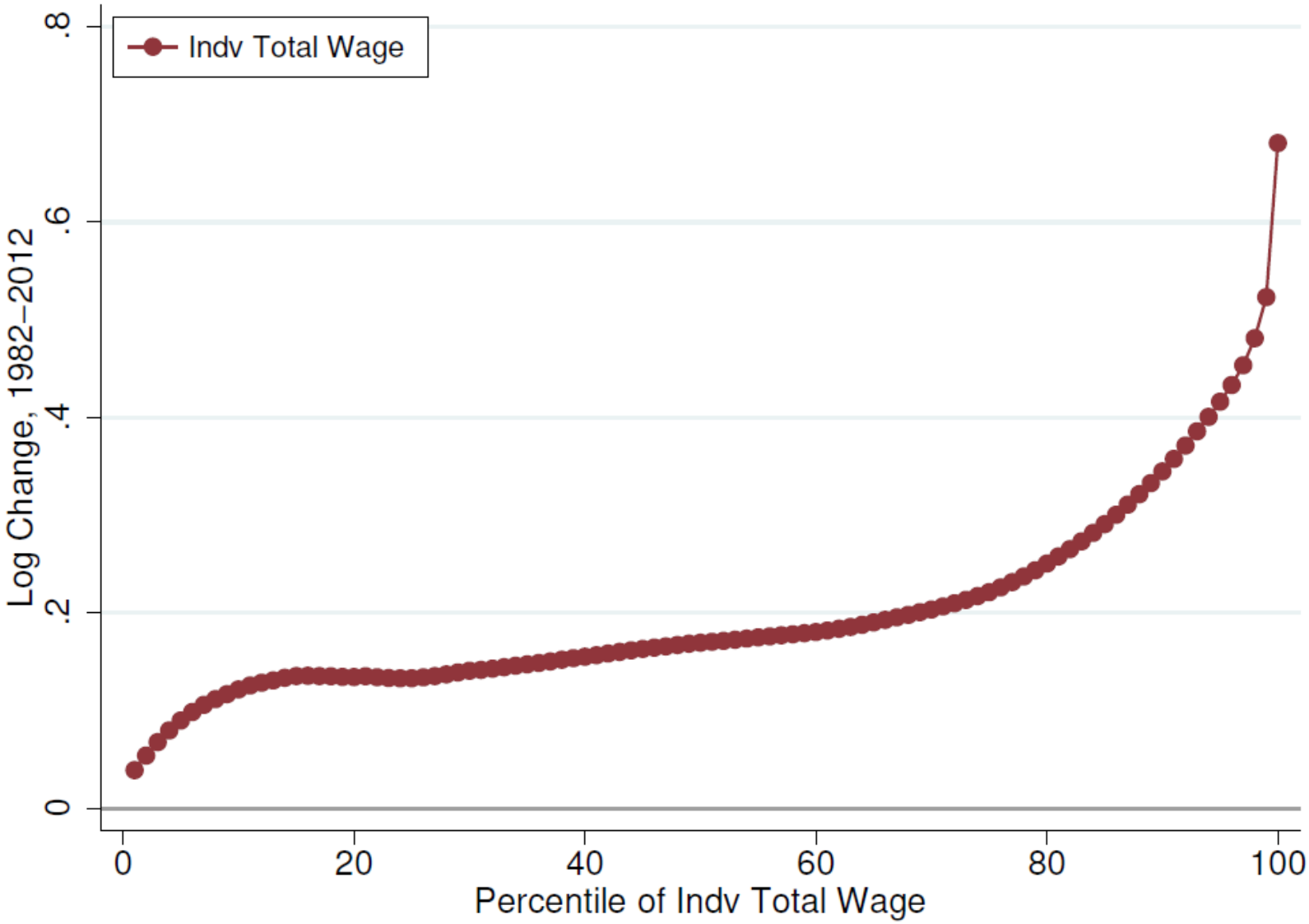




The Changing Earnings Distribution in the US

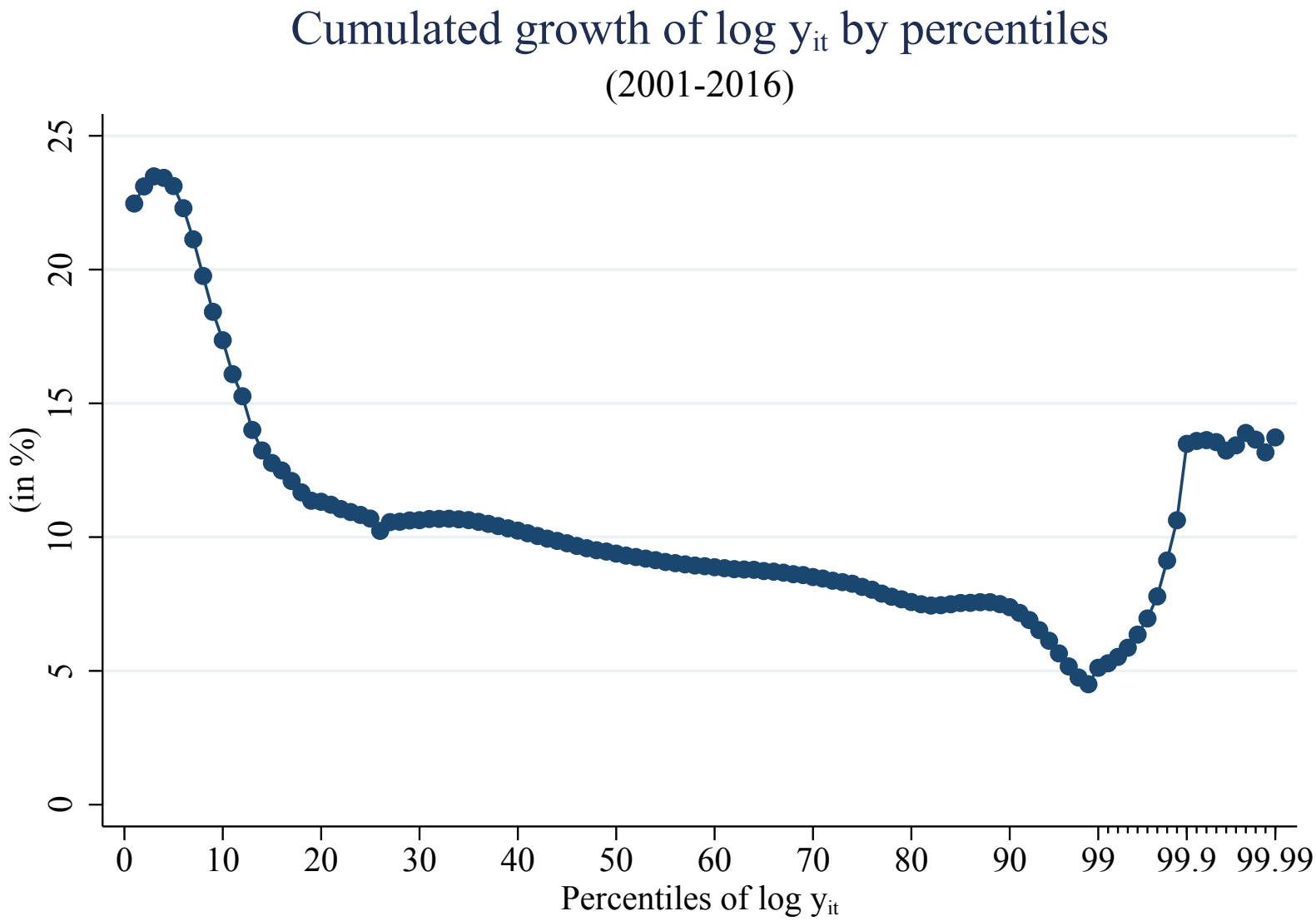
Guvenen (2016)

Back | 2001-2016 | Total Income FR | Labor vs. capital FR



Using Comprehensive Data between 2001 & 2016

Back | USA | Total Income FR | Labor vs. capital FR



The Changing Income Distribution in France

Garbinti, Goupille-Lebret, Piketty (2018)

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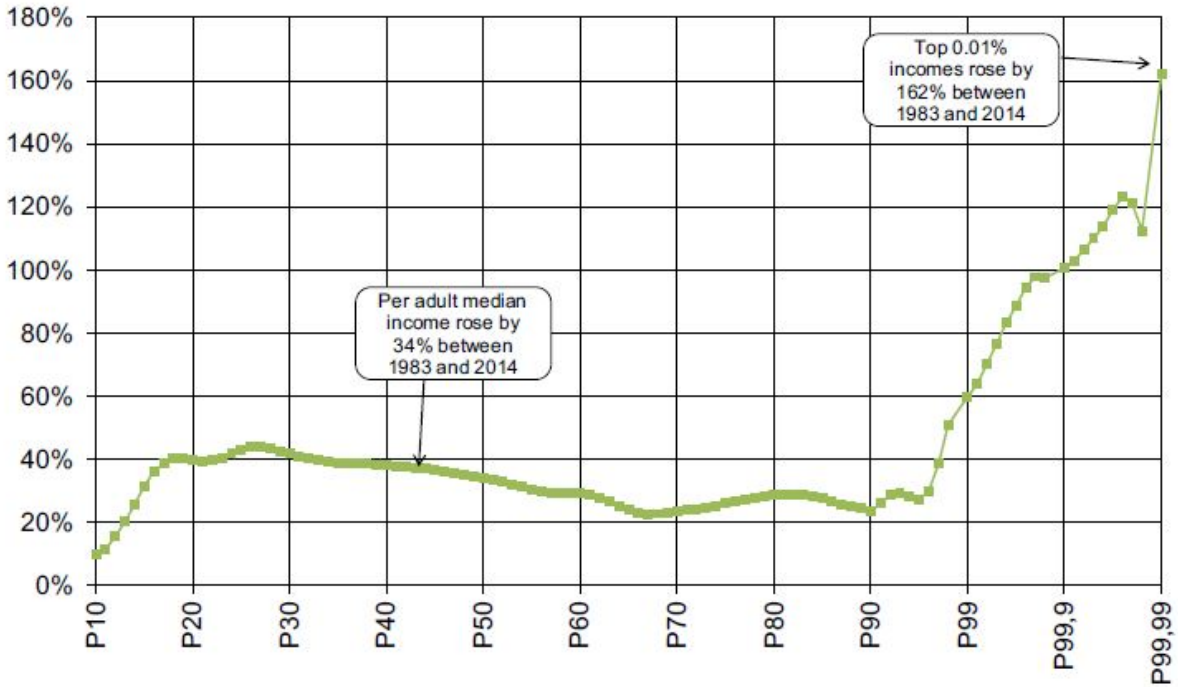
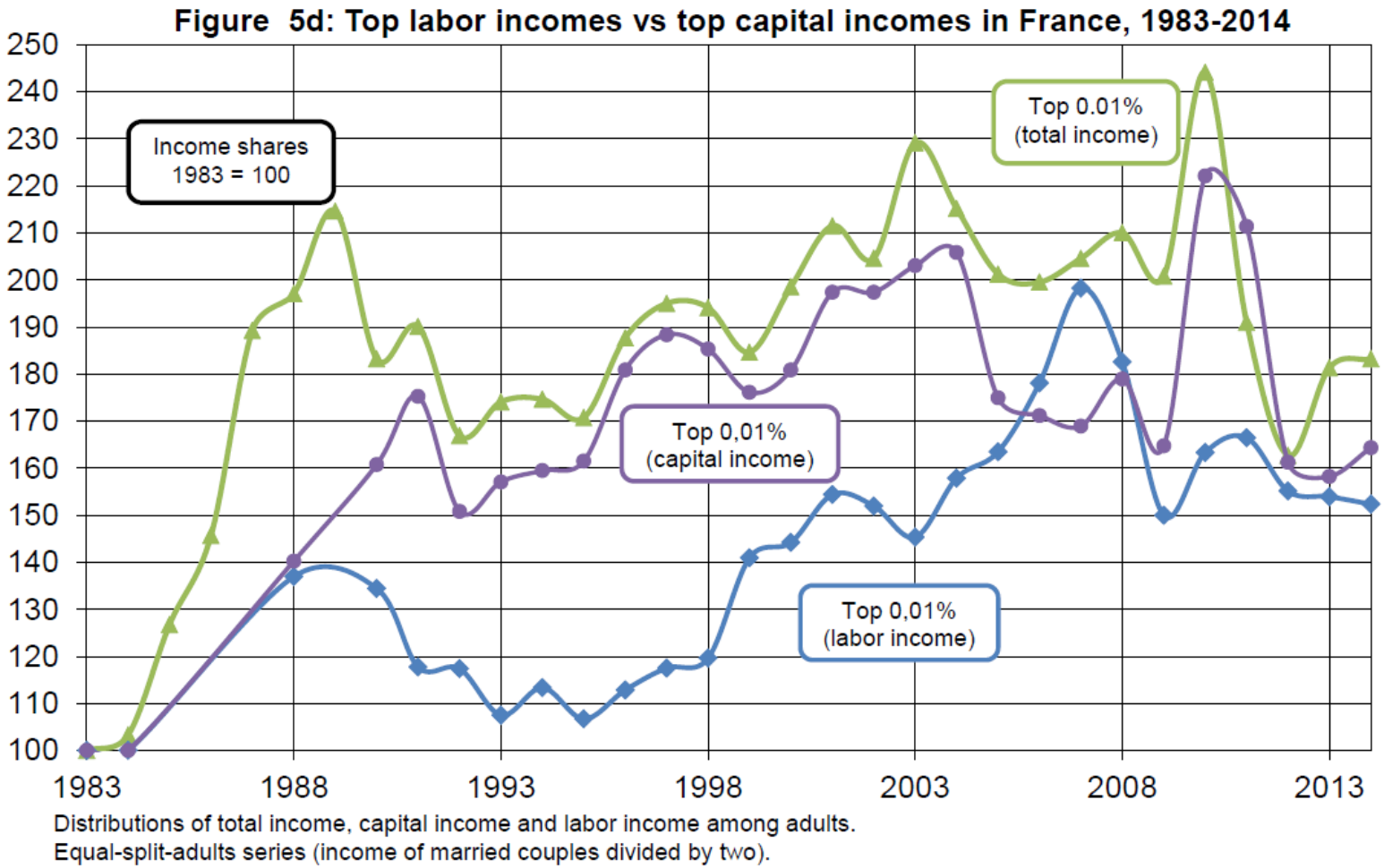


Fig. 4. Total cumulated real growth in France, 1983–2014.
Note: Total cumulated real growth of pre-tax per adult income by percentiles (growth incidence curves). Equal-split-adults series (income of married couples divided by two).

Top 0.01% : Labor vs. Capital Income

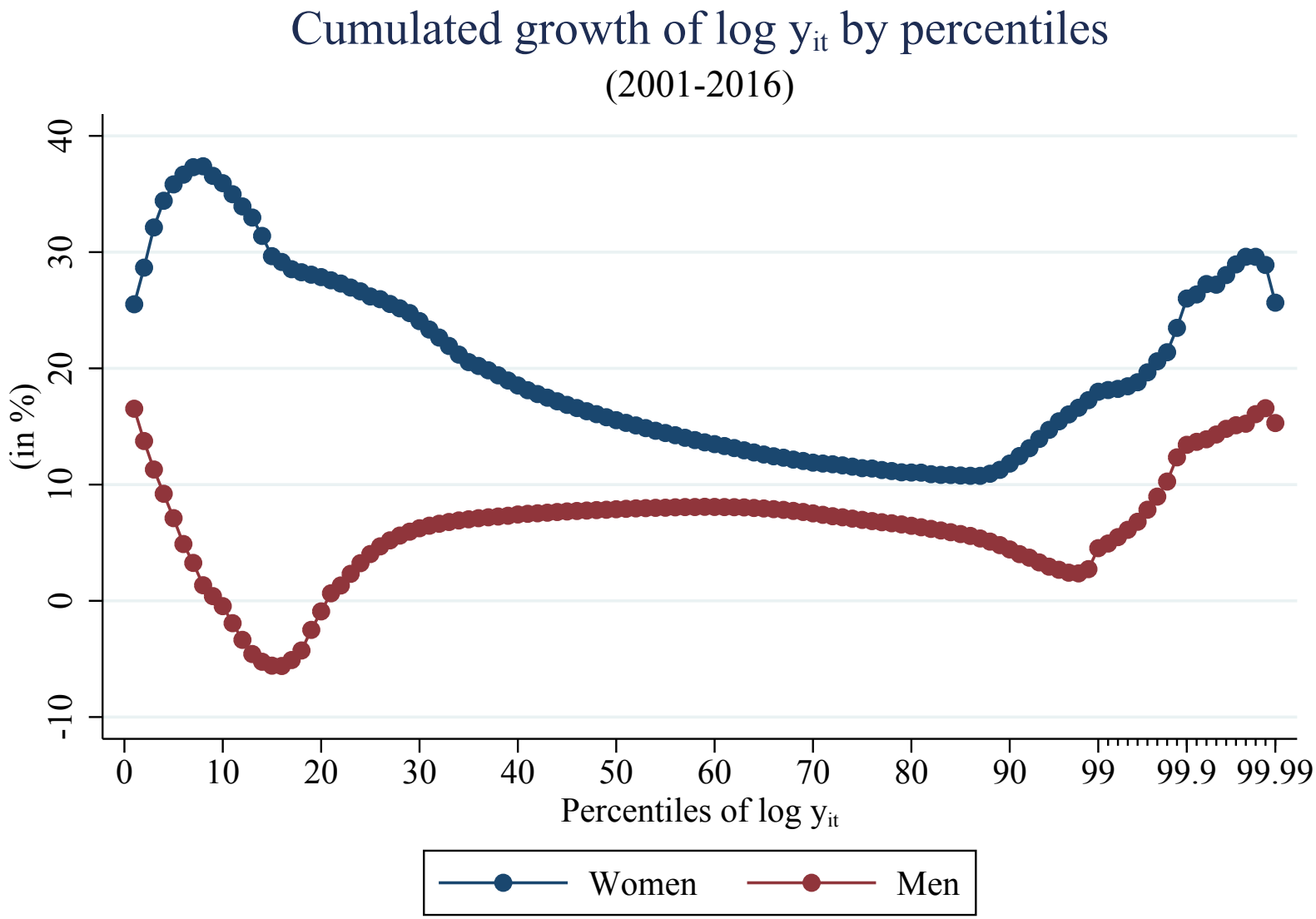
Garbinti, Goupille-Lebret, Piketty (2018)

Back | USA | 2001-2016 | Total Income FR



By Gender, Using Exhaustive Data Between 2001 & 2016

Back



The Distribution of the Five-Years Growth of Residualized Earnings : Smaller Extreme Changes

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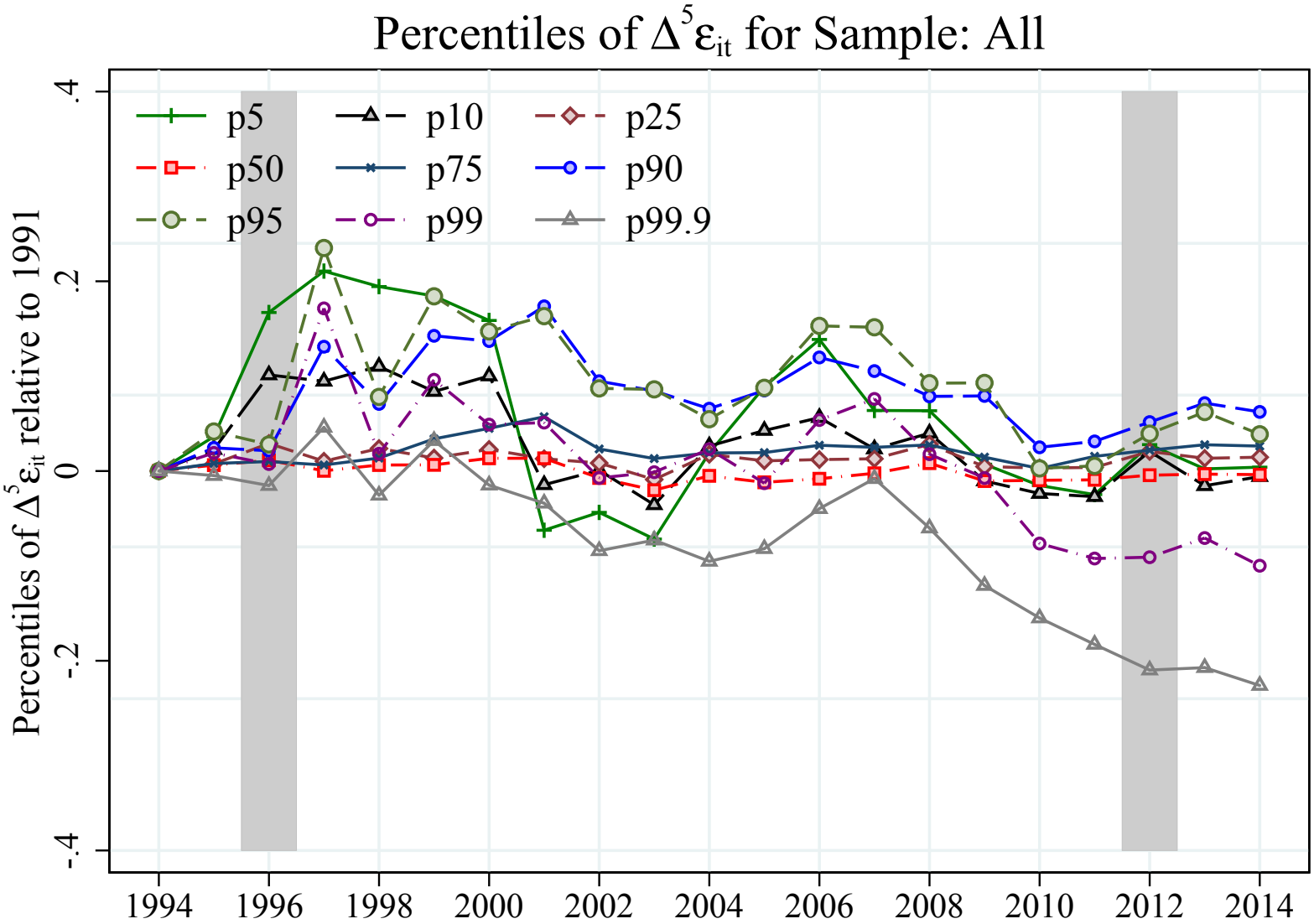
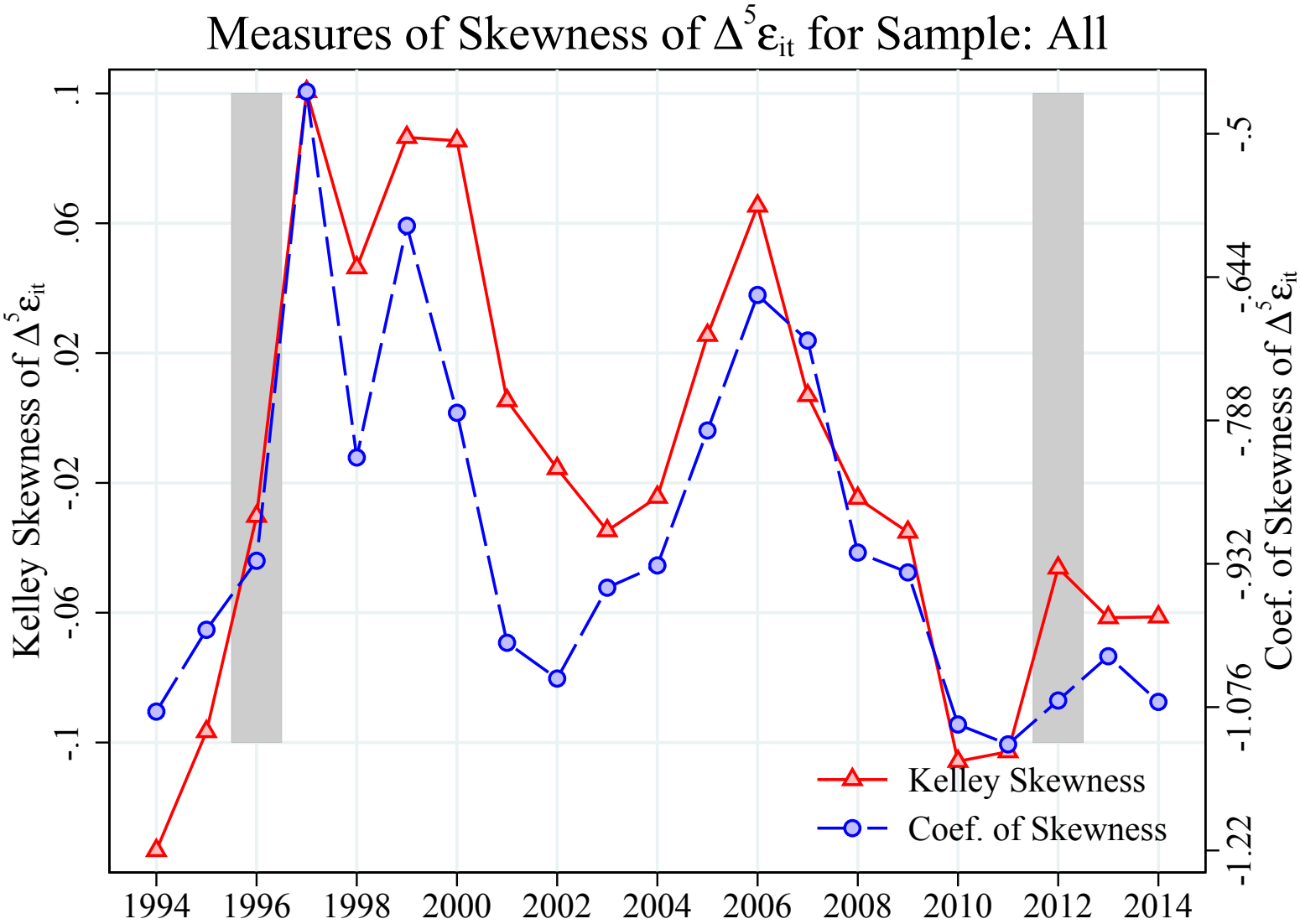


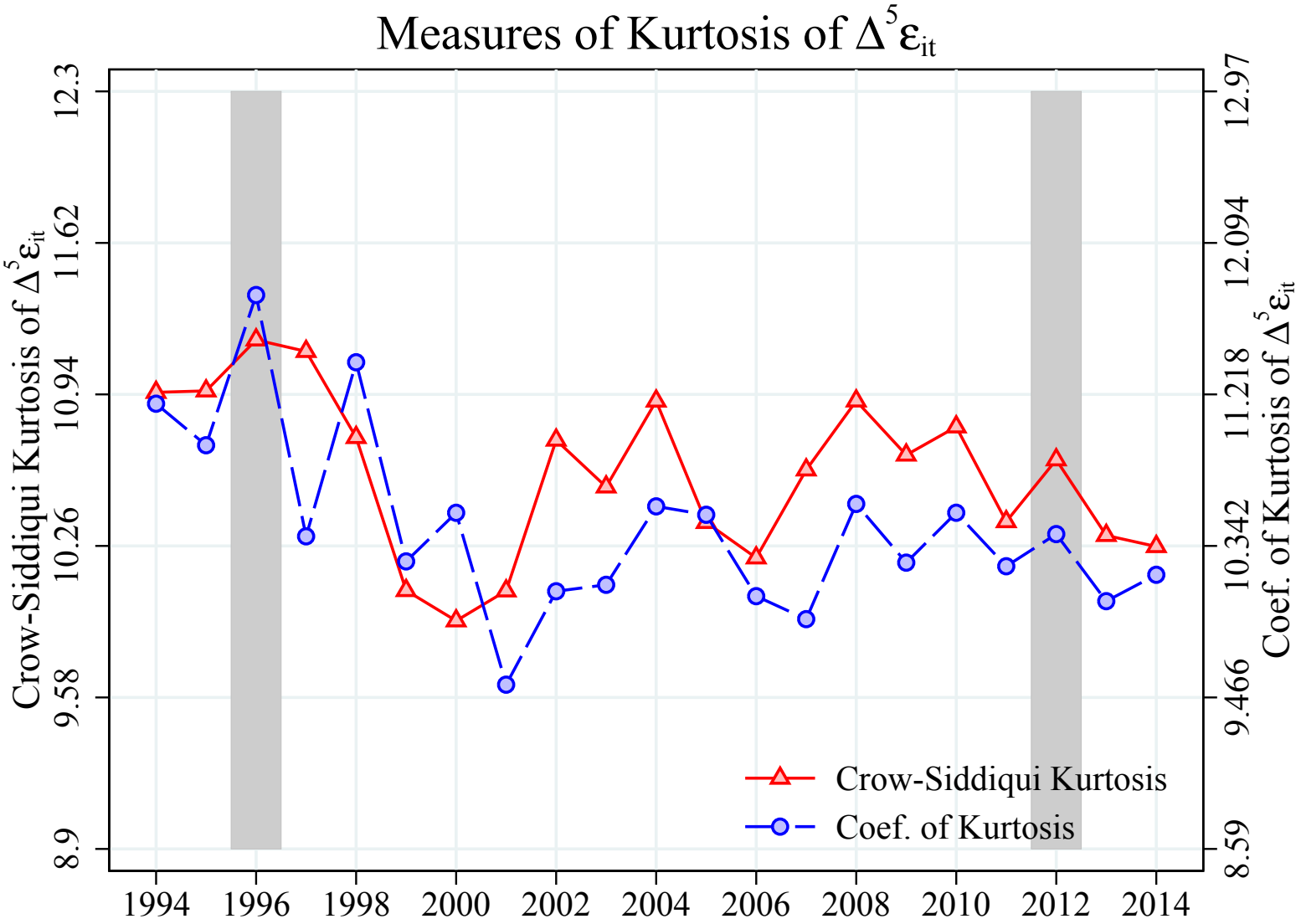
Skewness Over the Cycle - Five-Years Growth of Residualized Earnings

Back



Kurtosis Over the Cycle - Five-Years Growth of Rezidualized Earnings

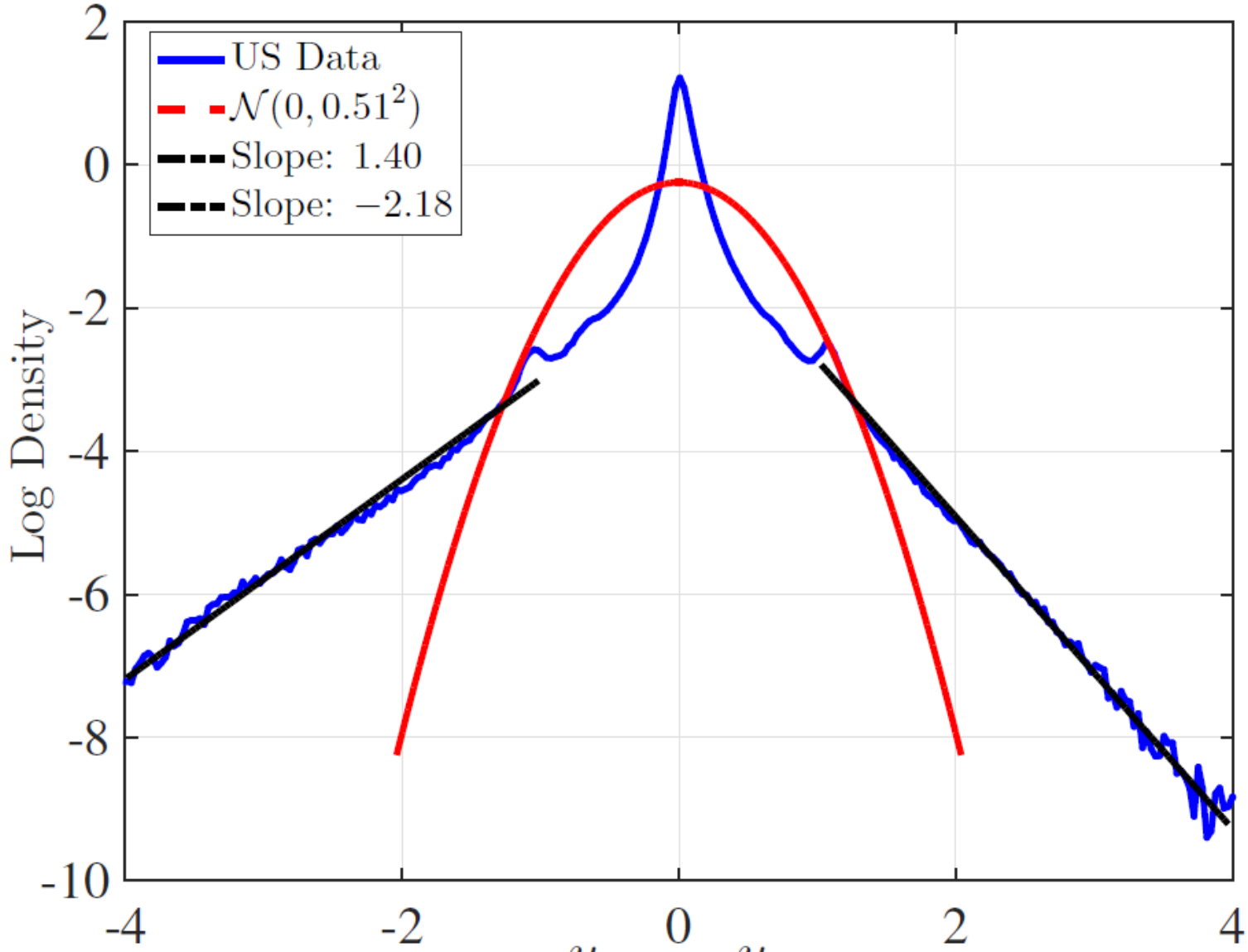
Back



The Double Pareto Tails in the USA

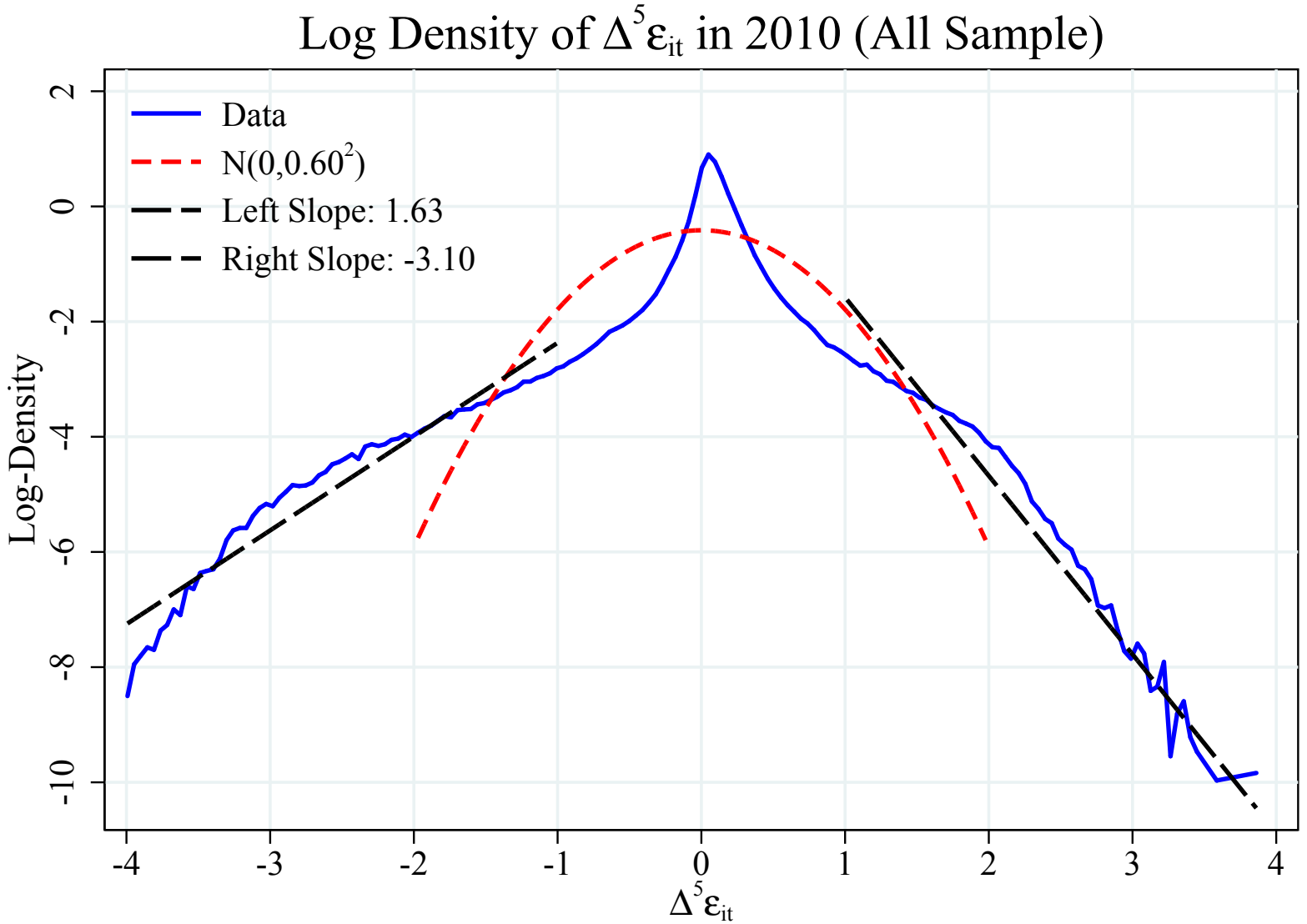
Guvenen (2016)

Back 5-years growth



The Double Pareto Tails of Five-Years Earnings Growth)

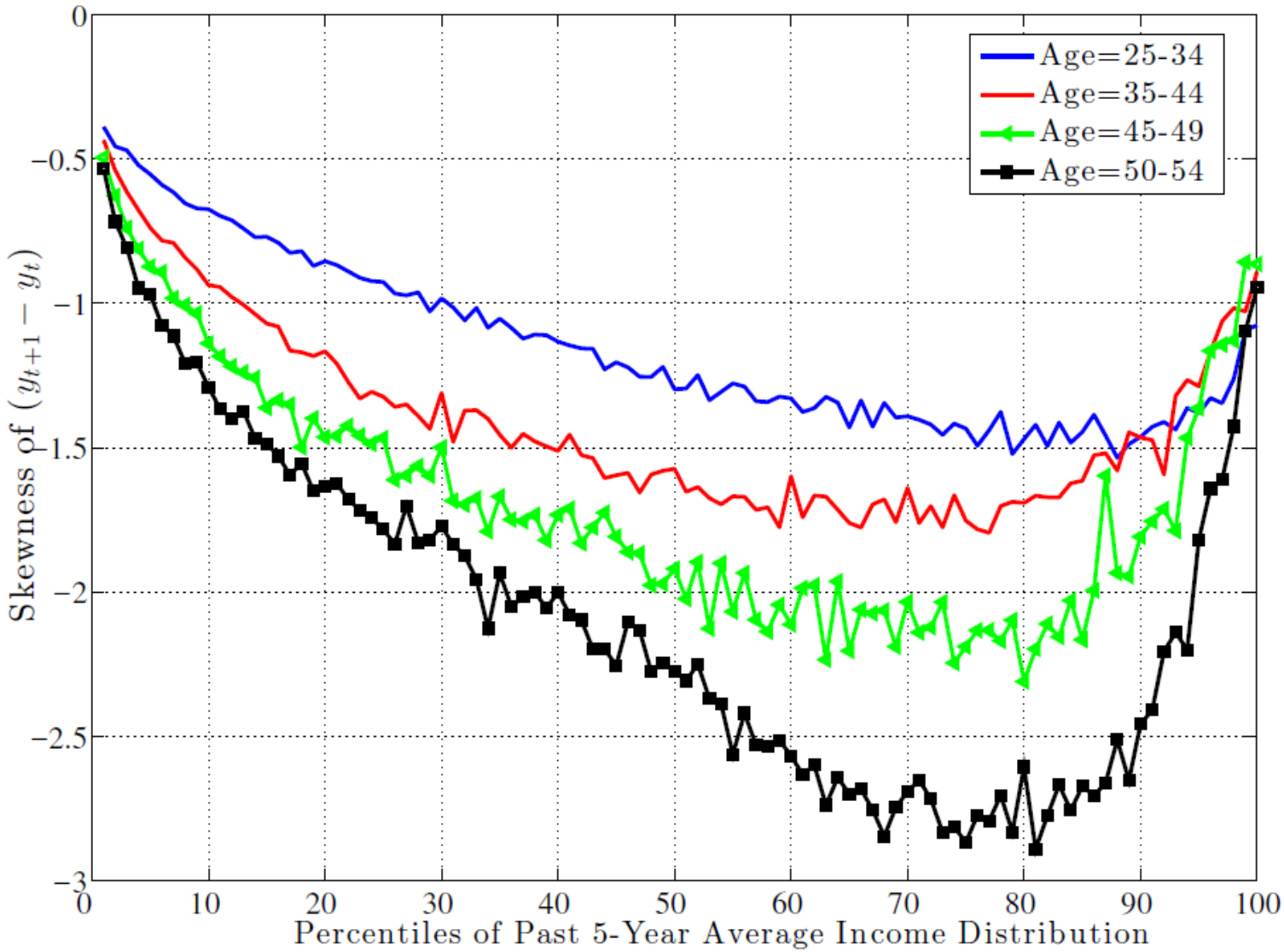
Back USA



Skewness by age group in the USA

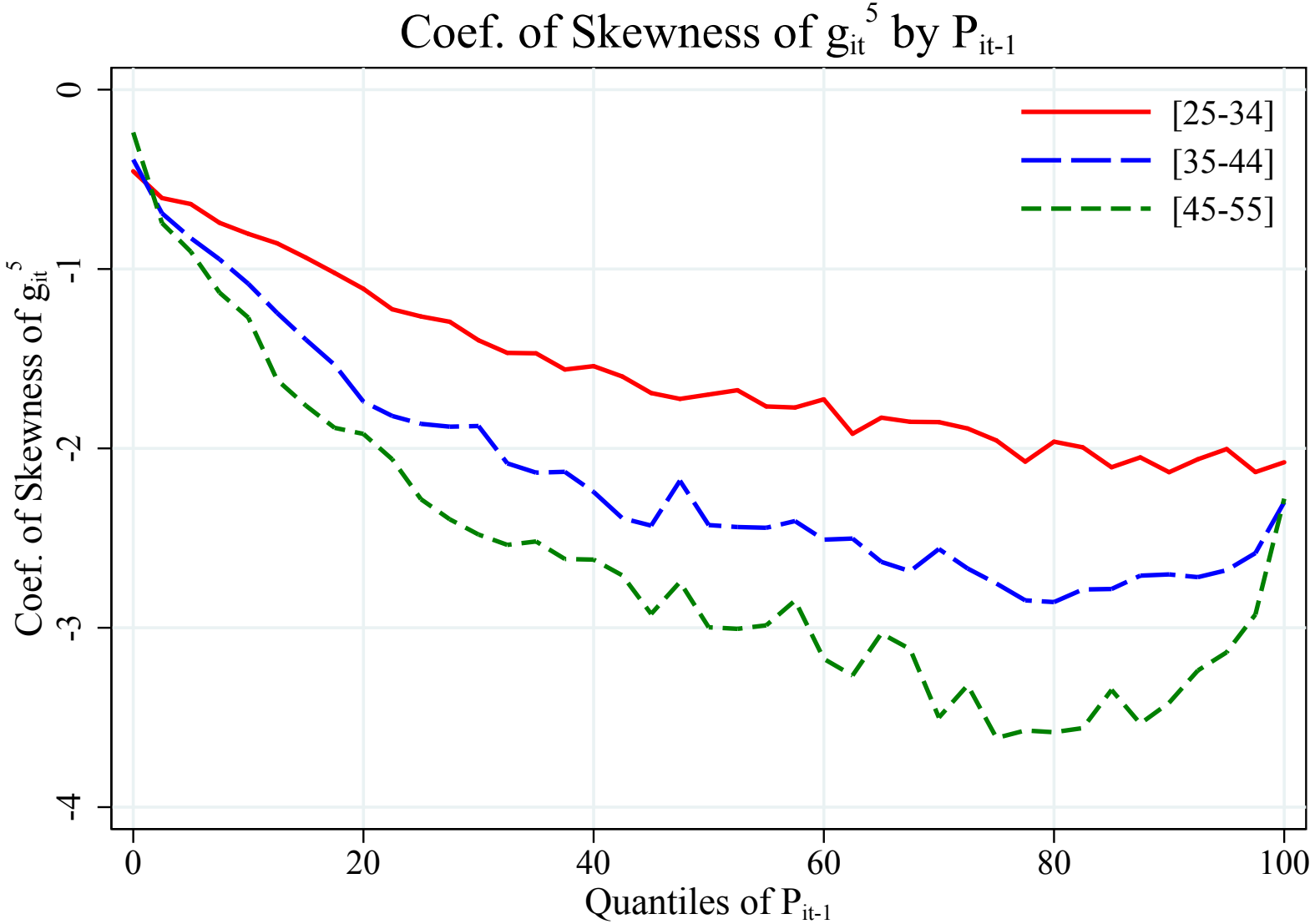
Guvenen (2016)

Back 5-years growth



Skewness of the Five-Years Growth of Earnings

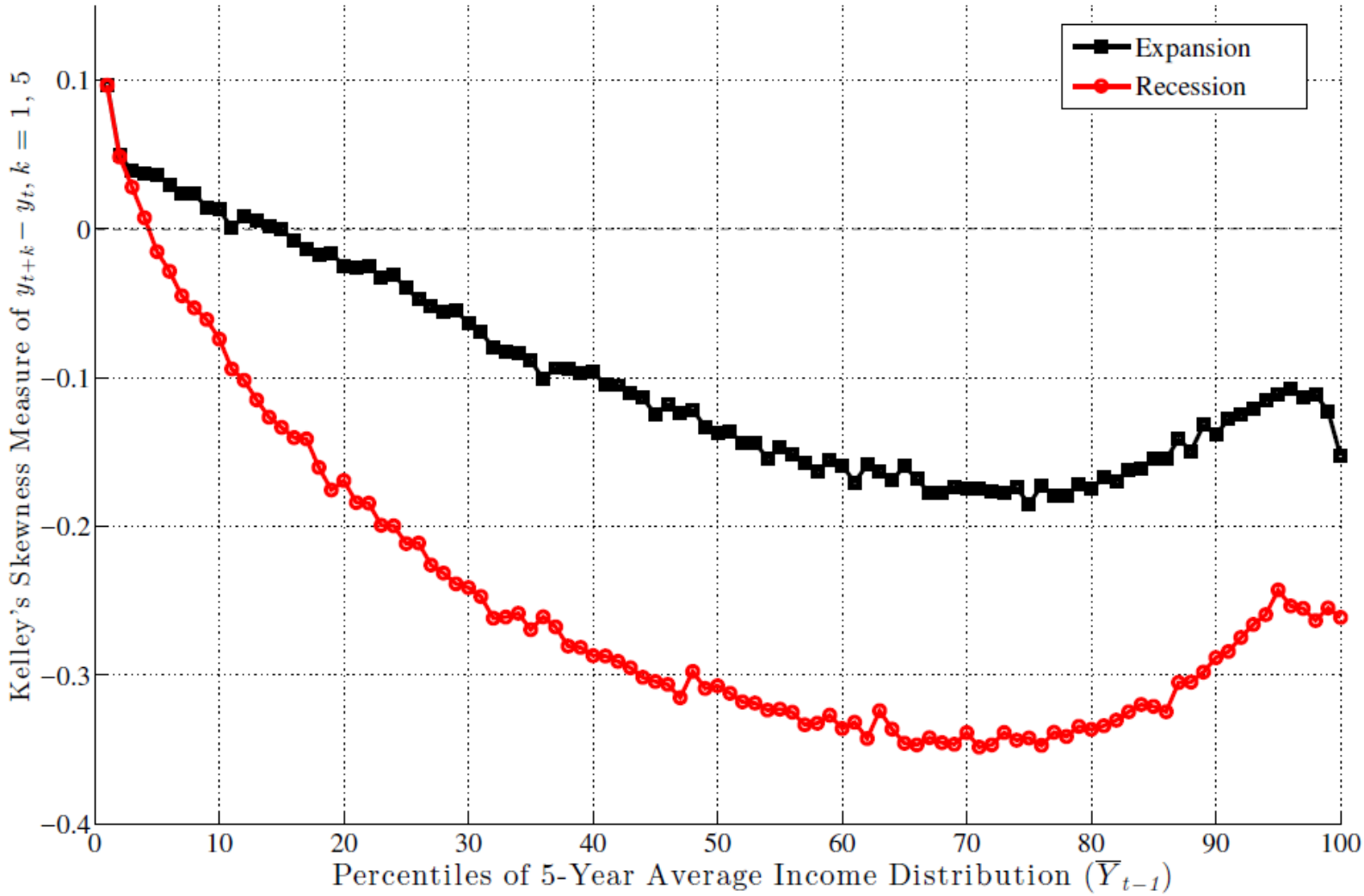
Back USA



Procyclical Skewness in the USA

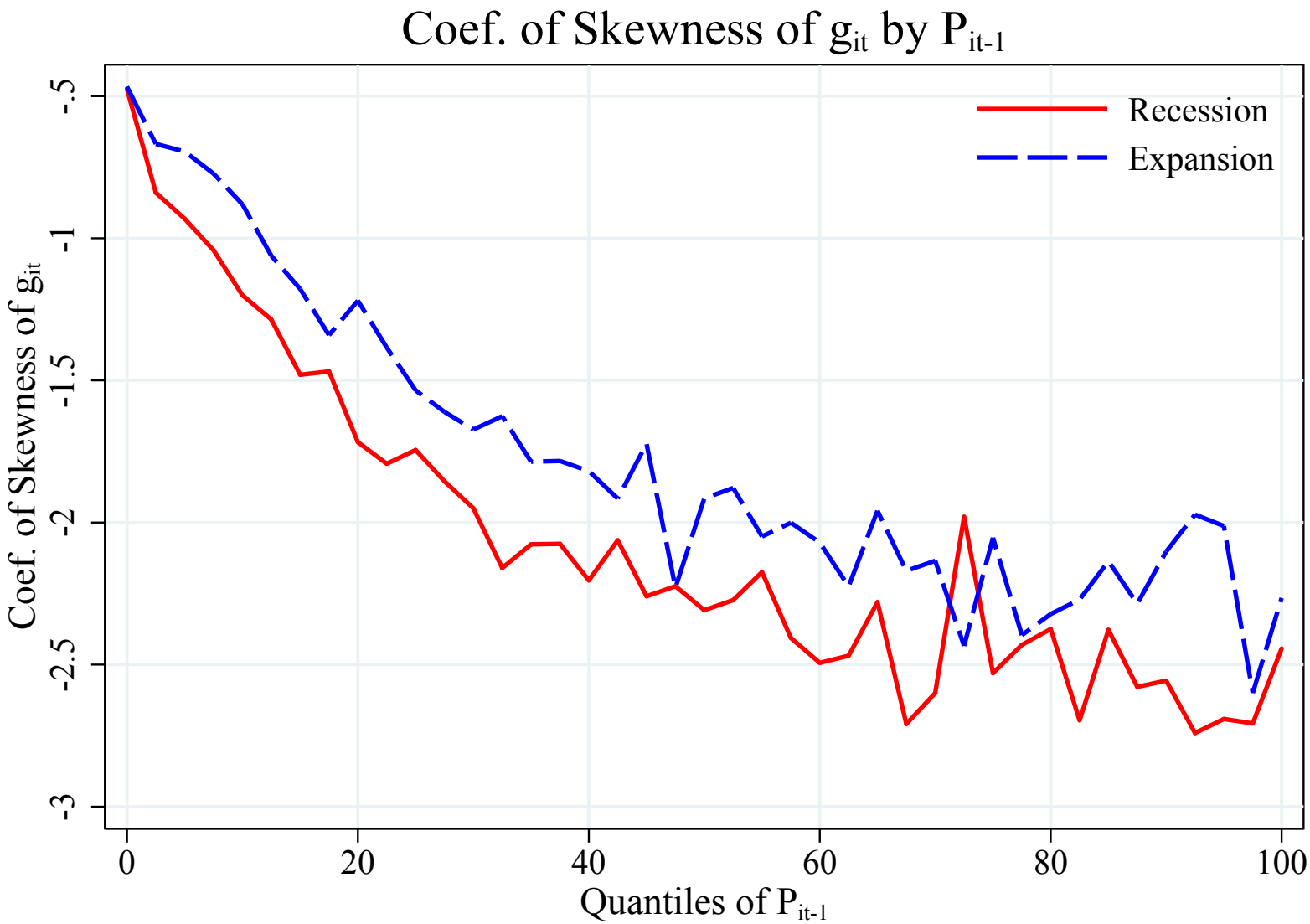
Guvenen (2016)

Back Coef of Skewness



Procyclical Coefficient of Skewness

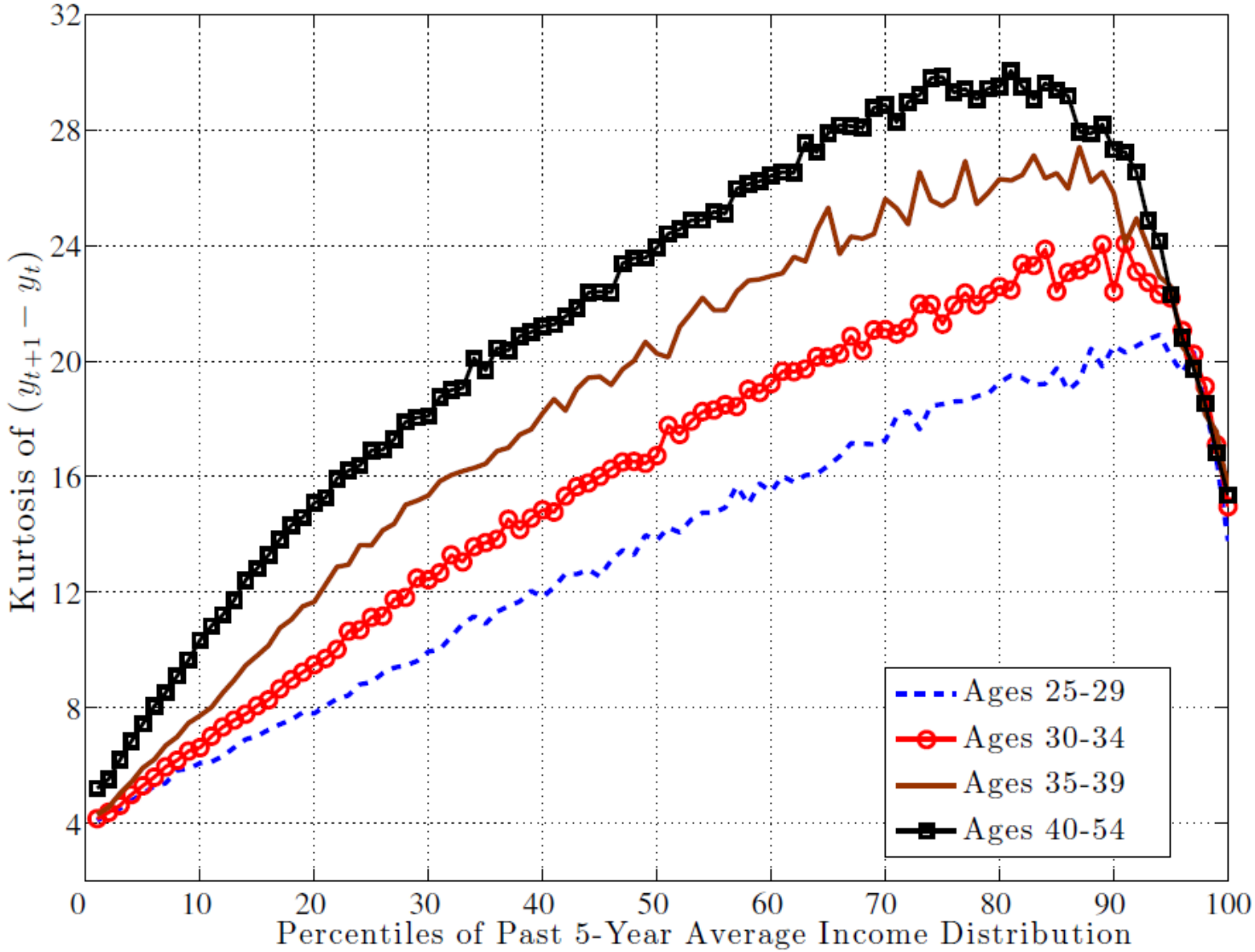
Back USA



Kurtosis in the USA

Guvenen (2016)

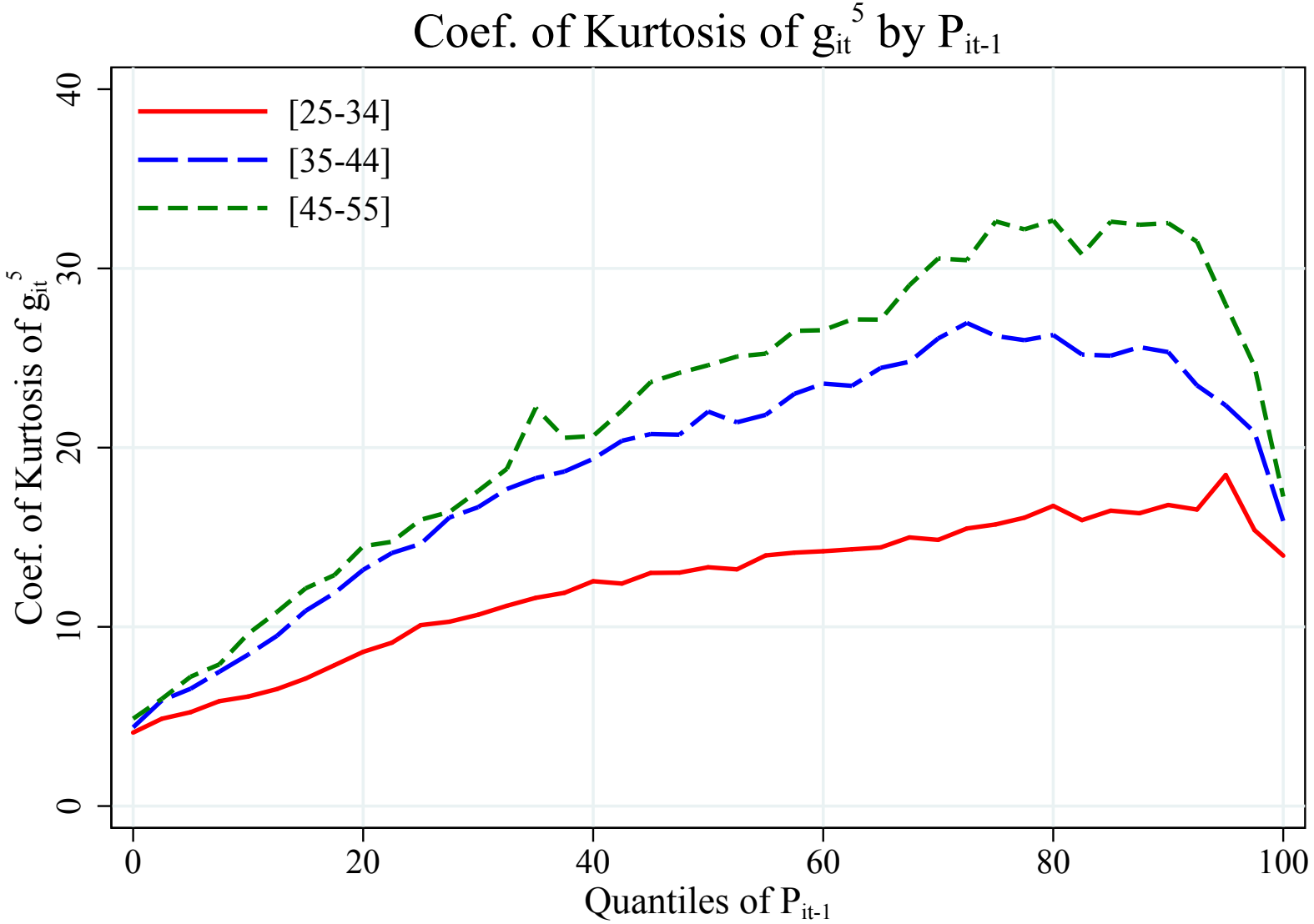
Back 5-years growth



An Increasing Excess Kurtosis with Permanent Income

Kurtosis of the Five-Years Growth of Earnings

Back USA

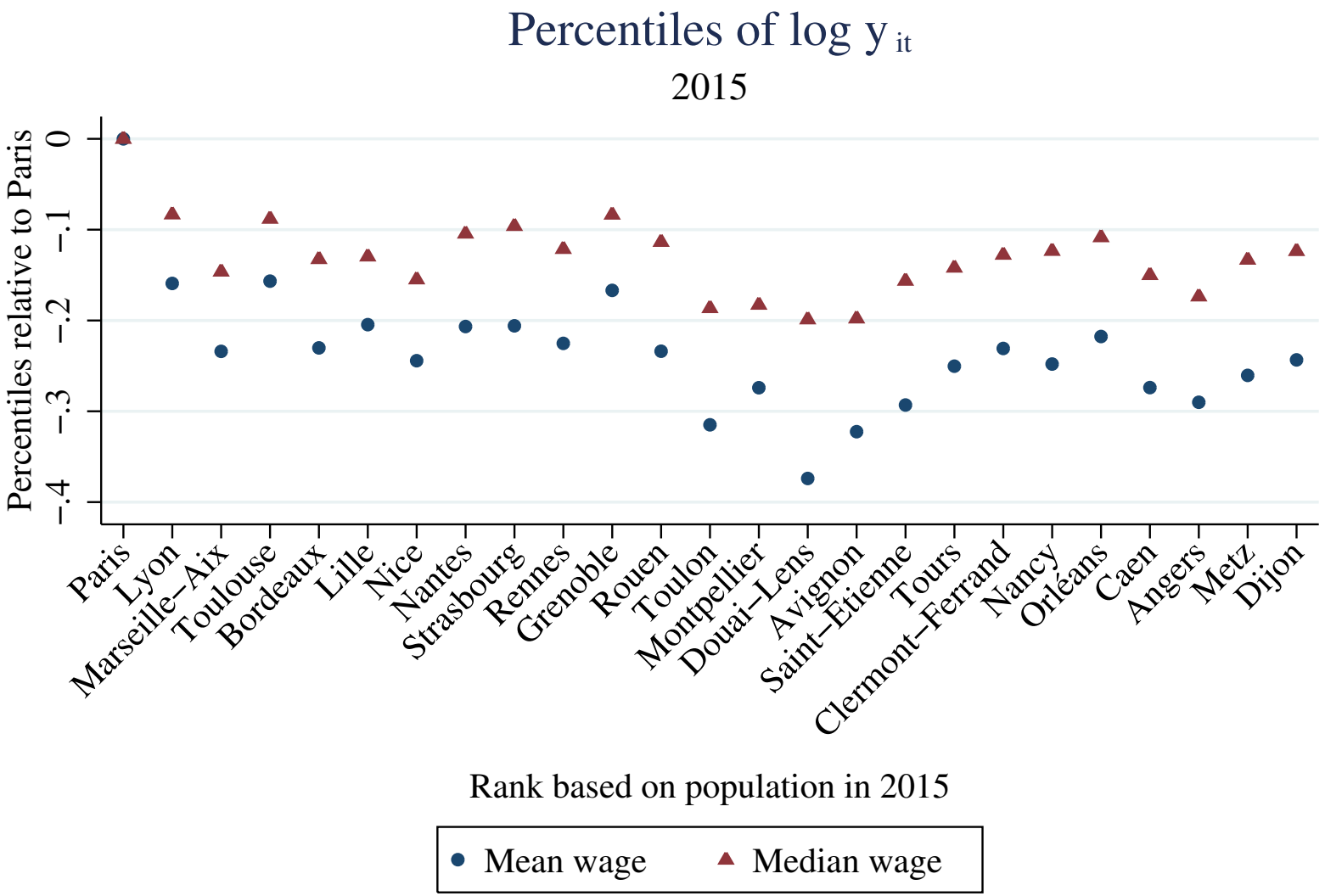


The "Yellow Vests"

Back

Earnings Inequality : Paris vs. the Biggest "Urban Areas"

Back

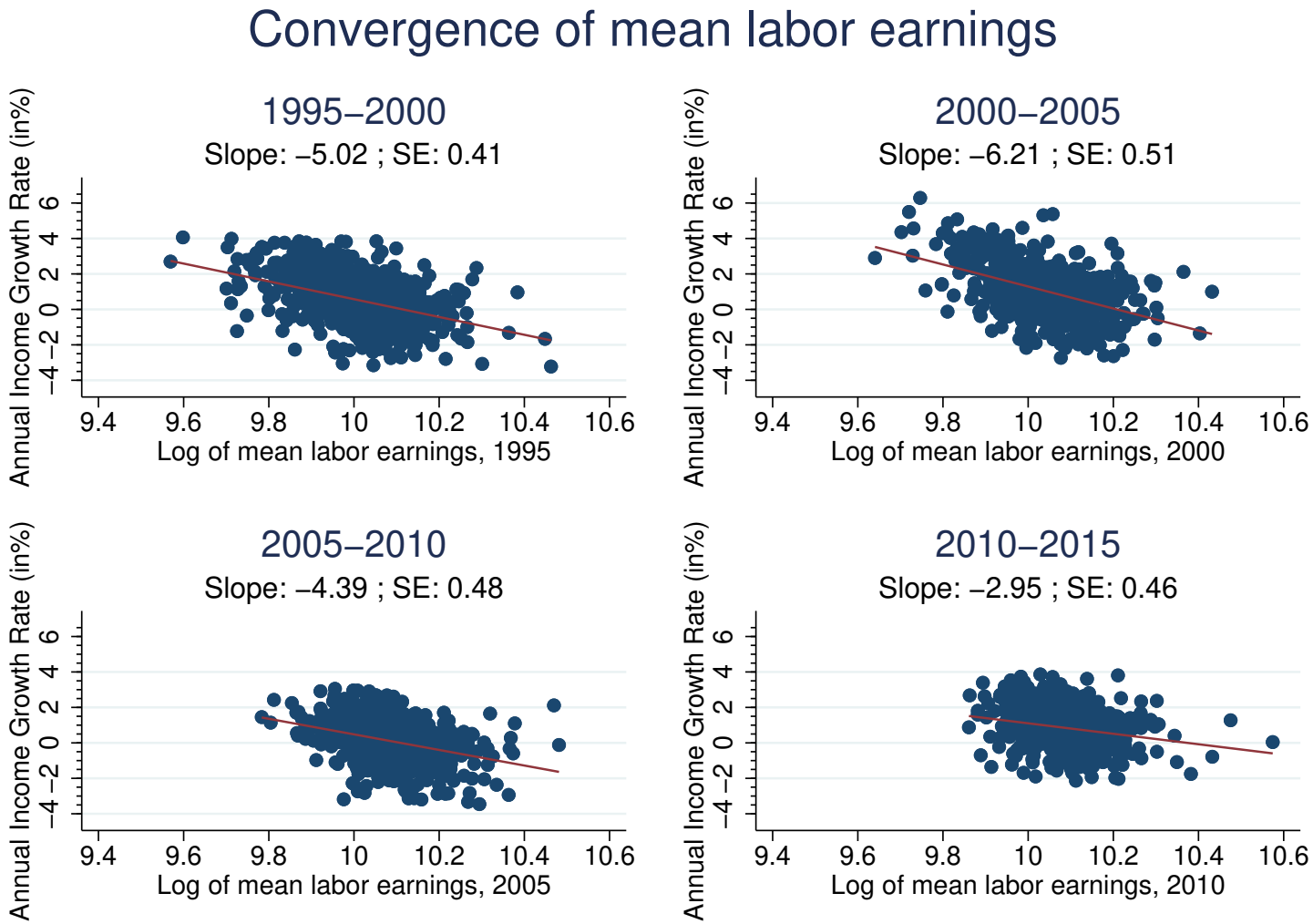


Note: observations are the 759 urban areas.

The convergence of the "poorest" areas

Mean wage

Back

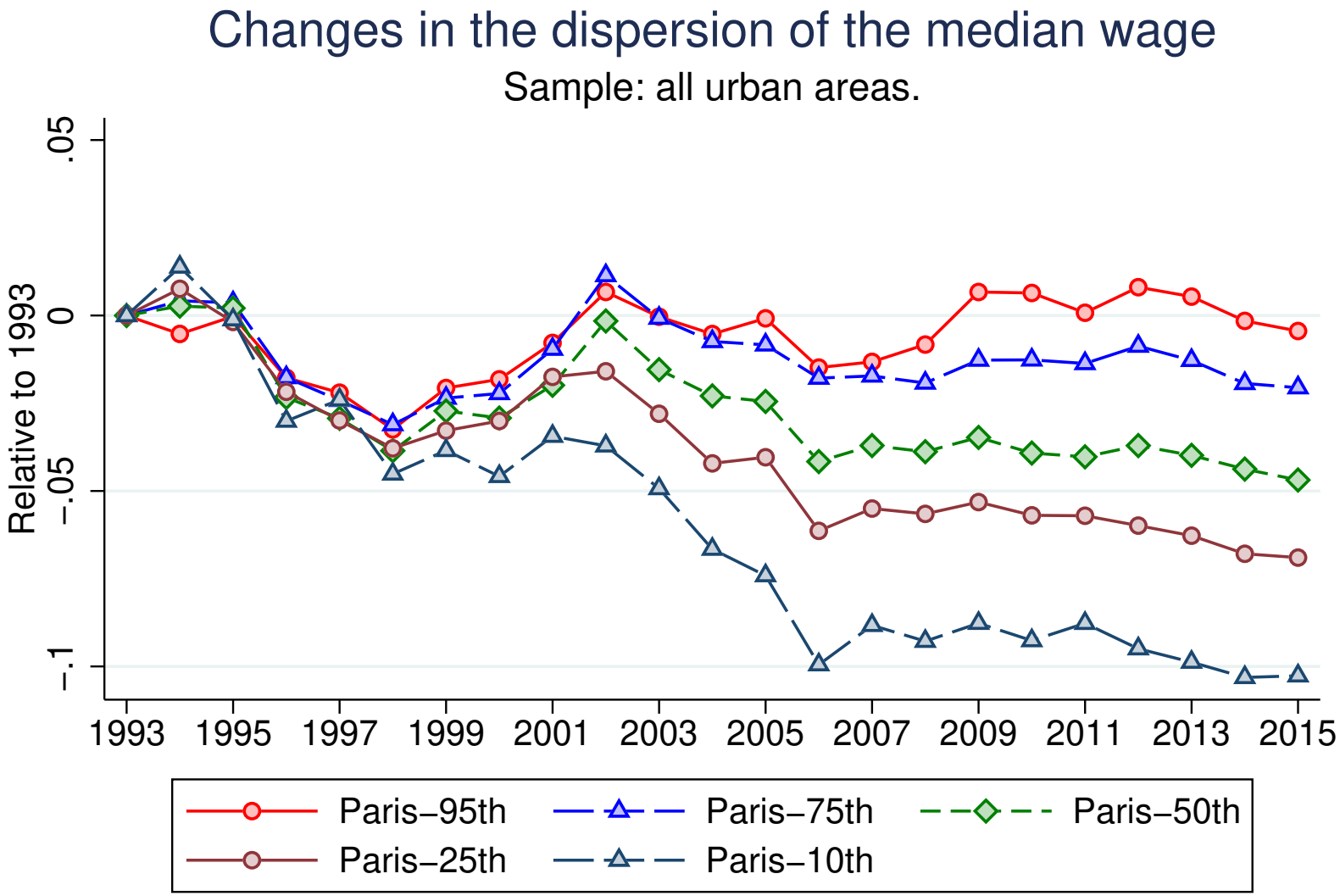


Note: Observations are the 759 "urban areas" trimmed at the 1% level.

The convergence of the "poorest" areas

Compared to Paris

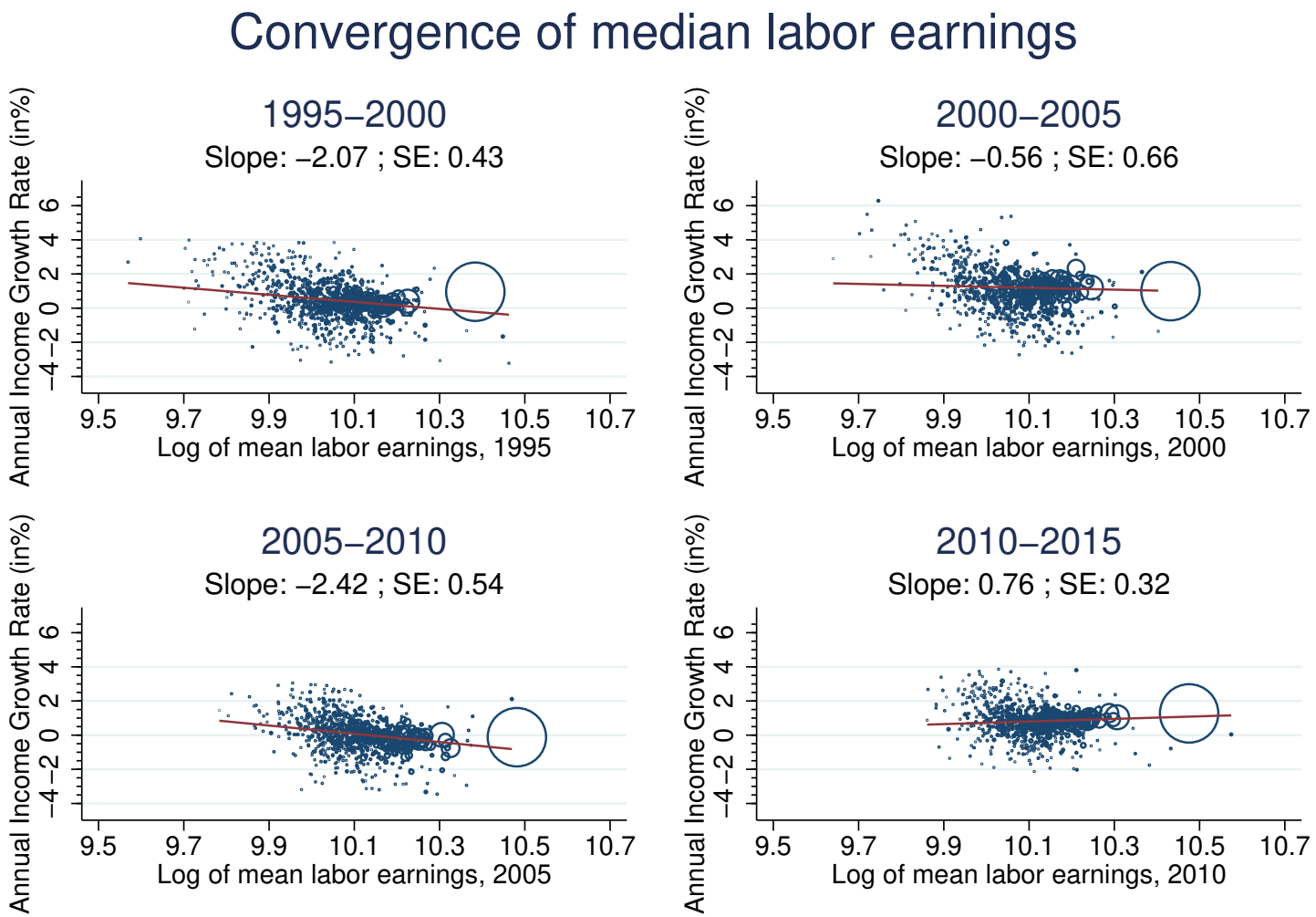
Back



Note: We rank urban areas at each date by their median wage.

The Convergence of the "Smallest" Urban Areas

Back



Note: Observations are the 759 urban areas. They are weighted by initial employment and trimmed at the 1% level.
The slope is computed excluding Paris.

But a Divergence at the Top of the Distribution

Back