

# Revisiting the Global Decline of the (Non-Housing) Labor Share

Germán Gutiérrez and Sophie Piton

NYU and BoE

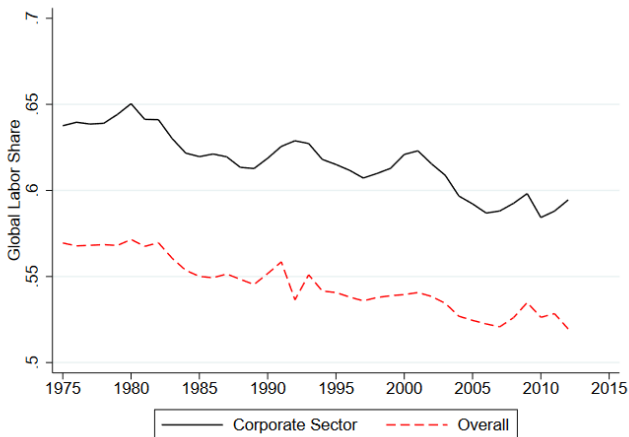
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# The Global Decline of the Labor Share

- Several papers document a **global decline of the labor share**
  - Karabarbounis and Neiman (2014); Piketty and Zucman (2014); IMF (2017); Autor and Salomons (2018)...
- These papers struggle with **two measurement challenges**:
  - Labor income of self-employed (Gollin, 2002)
  - Rise in housing value added (Rognlie, 2015)
- In response, the literature often focuses on **corporate sector labor shares**
  - Viewed as the “best” measure of allocation of income between owners and workers

## Karabarbounis and Neiman (2014)



Source: Karabarbounis and Neiman (2014)

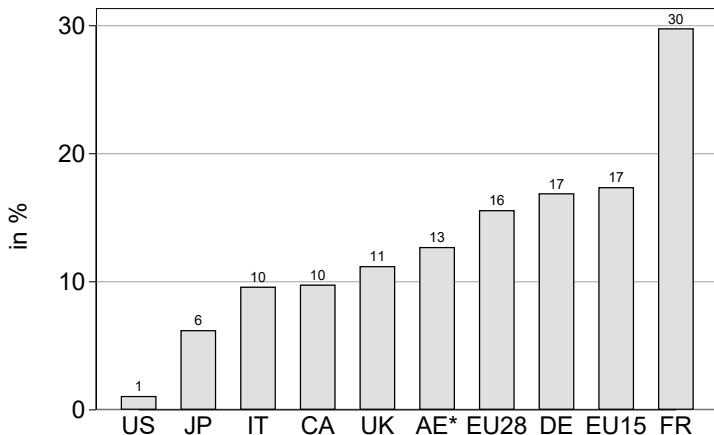
## Common decline → Common explanations

- **Corporate labor shares fell globally**
- The **common decline** points towards **common explanations**
- Most **prominent theories** emphasize some form of **technological change**
  - Price of capital (Karabarbounis and Neiman, 2014)
  - Intangibles (Koh et al., 2015; IMF, 2017)
  - Automation (Acemoglu and Restrepo, 2018)
  - Superstar firms (Autor et al., 2020)
  - ...

## But, Are Corporate Sectors Truly Free of Self Employment and Housing?

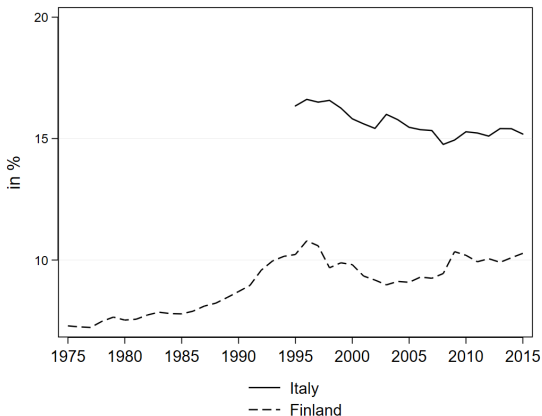
- Yes in the US
  - NIPA corporate sector = Legally organized corporations
  - Virtually no housing or self-employment
- But not elsewhere!
  - SNA corporate sector = Legally organized corporations + cooperatives, limited liability partnerships, notional resident units and quasi-corporations
  - Additional entities often own housing and include self-employed workers

# Housing Share of Corporate Fixed Assets, 2015



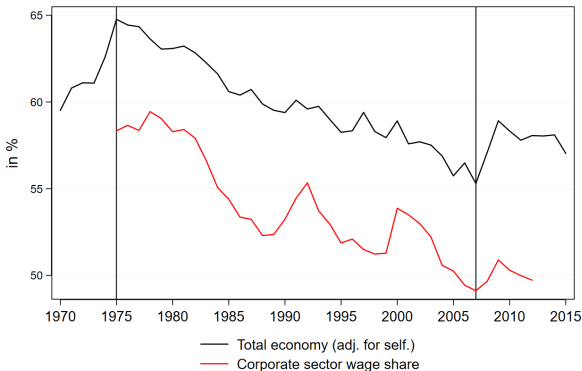
\*AE: advanced economies excluding the US.

# Self-Employed Share of Corporate Sector Workers



- Very limited data → only Italy and Finland
- Affects 23 out of 30 European economies (Eurostat, 2019)

## Additional issue: Timing



- Global Stagflation period (Bruno and Sachs, 1985; Blanchard, 1997) [Analyses](#)
- Post-Great Recession increase



## Two Methods for Obtaining Harmonized Non-housing Labour Shares

# Method 1: Excluding Real Estate using Industry Accounts

- All residential assets are included in real estate (RE) sector
- We compute **business sector LS** excluding real estate

$$LS^{ex RE} = \frac{\sum_k w_e^k (N_e^k + N_s^k) - w_e^{RE} (N_e^{RE} + N_s^{RE})}{Y - Y^{RE}}$$

- Limitations
  - Excludes **all** real estate (residential and commercial)
  - Assumes wages of self-employed = wages of employees

## Method 2: Adjusting for Housing and Self-employment in Corporate Sector

- Adjusted corporate sector LS:

$$LS^{c,adj} = \frac{w_e^c N_e^c + w_s^c N_s^c}{Y_h^c - Y_h^c}$$

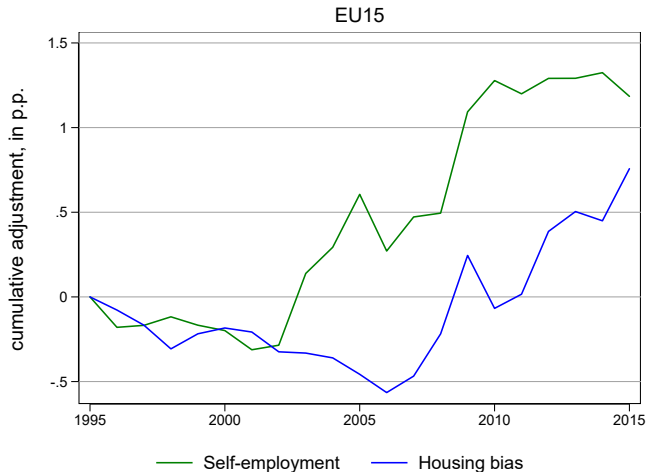
- Self-employment compensation:

$$w_s^c N_s^c = \underbrace{w_e N_s}_{\text{Total self-emp comp (est. as in KLEMS)}} - \underbrace{LS^{exRE} MI^h}_{\text{HH self-emp comp}}$$

- Housing value-added:

$$Y_h^c = \underbrace{(\text{HH Rents} - GOS^h)}_{\text{Housing income outside HH sector}} \times \underbrace{K_h^c / (K_h - K_h^h)}_{\text{Corp. share of housing capital outside HH sector}}$$

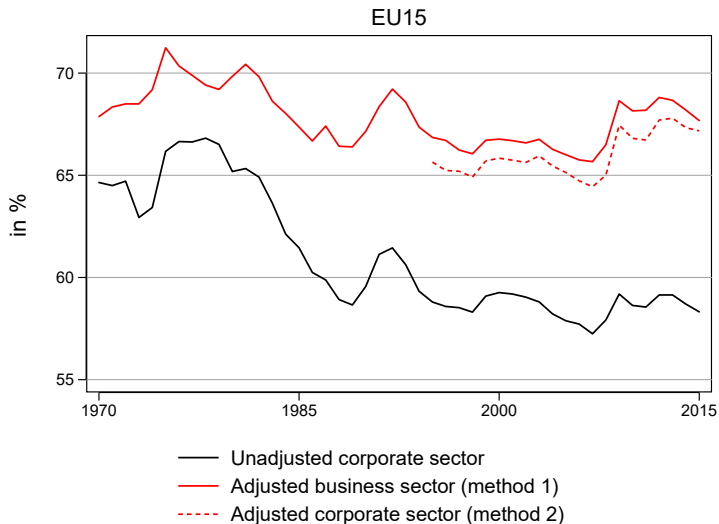
# Corporate Sector Adjustments, EU15



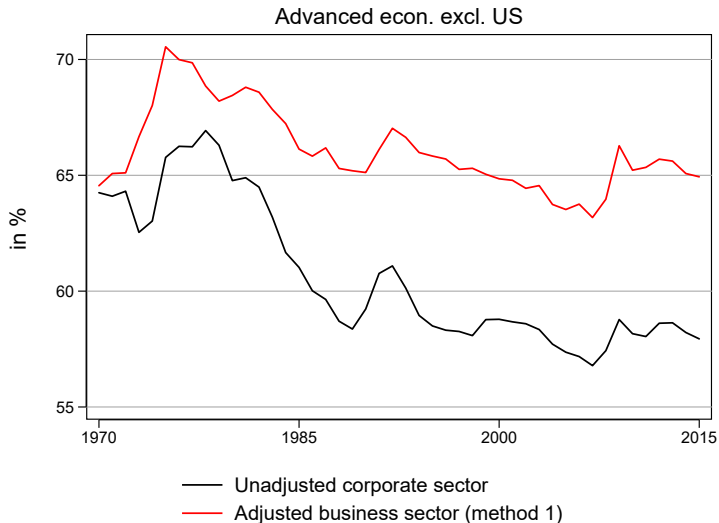
# Baseline and Adjusted Gross LS, US



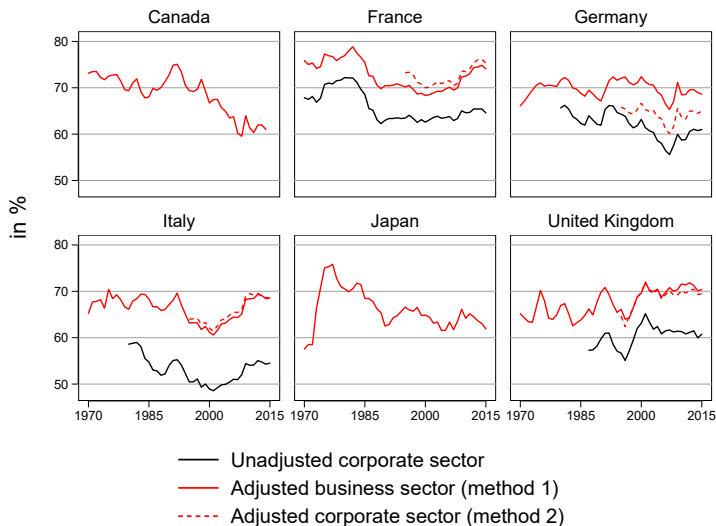
# Baseline and Adjusted Gross LS, EU15



# Baseline and Adjusted Gross LS, AEs

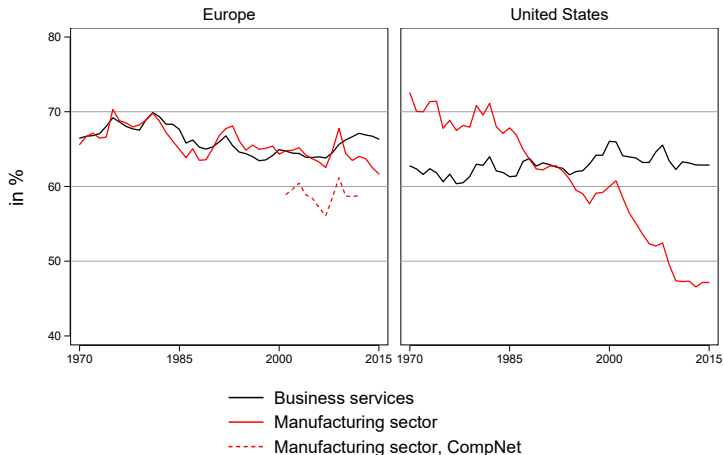


# Baseline and Adjusted Gross LS, by Country





# Manufacturing Explains Most of the Differences



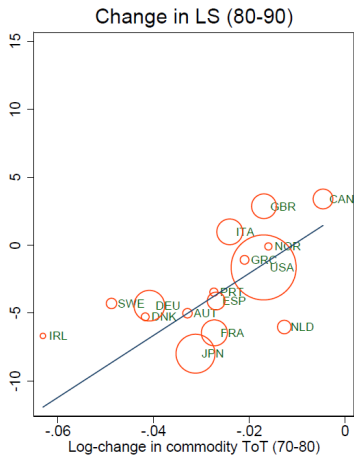
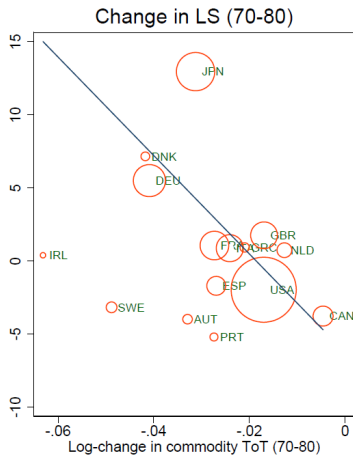
## Conclusion

- There is **NO** global decline of the business labor share
  - Especially since 1985, when ICT revolution accelerated
- Casts doubts on most technological explanations
  - Country-specific explanations? (Gutierrez and Philippon, 2018)
  - Offsetting mechanisms keeping non-US labour shares flat? (Gutierrez et al., 2019)

# The End

# Thank You!

# Commodity ToT changes vs. Labor Share

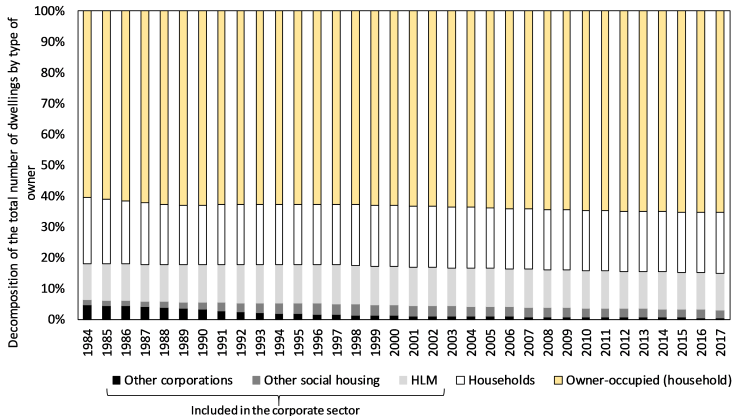


## Comparison to KN (2014) and AS (2018)

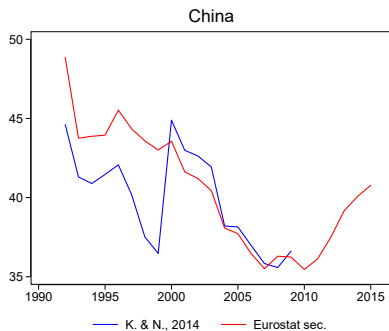
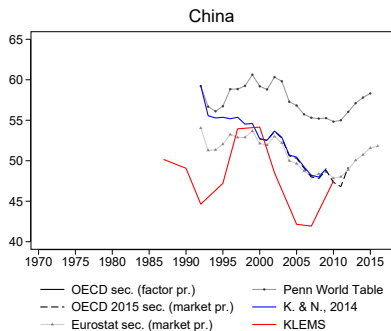
### Country groups excluding the US

		AE	EU28	Global <sup>a</sup>
(1)	<b>KN total economy</b>	<b>-3.28</b>	<b>-4.17</b>	<b>-3.50</b>
(2)	Adjustment for self-employed	-3.83	-3.15	-3.80
(3)	Excluding farm, private households and public sectors	0.41	0.15	0.28
(4)	Raw data differences (revisions and coverage)	0.58	-1.16	1.23
(5)	Timing (KN to AS)	0.48	2.78	0.06
	<i>(for comparison: KN corporate sector)</i>	<i>-8.56</i>	<i>-7.67</i>	<i>-8.61</i>
(6)	<b>AS selected industries (1+2+3+4+5)</b>	<b>-5.64</b>	<b>-5.56</b>	<b>-5.73</b>
(7)	Excluding real estate	3.88	4.22	3.63
(8)	Excluding health and education	-1.95	-1.95	-1.89
(9)	Raw data differences (revisions and coverage)	3.05	1.60	2.08
(10)	Timing (AS to GP)	1.05	1.19	2.23
(11)	<b>GP business sector (6+7+8+9+10)</b>	<b>0.38</b>	<b>-0.50</b>	<b>0.32</b>
<b>Time periods</b>	Karabarbounis & Neiman, 2014 (KN)	75-12	75-12	75-12
	Autor & Salomons, 2018 (AS)	70-07	70-07	70-07
	Gutierrez & Piton, 2019 (GP)	70-15	70-15	70-15

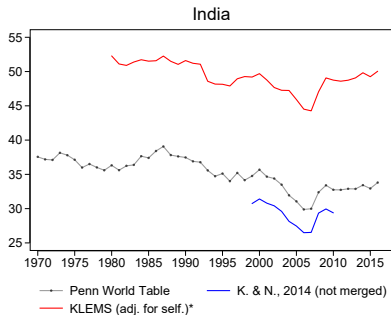
# Housing in Corporate Sector: France



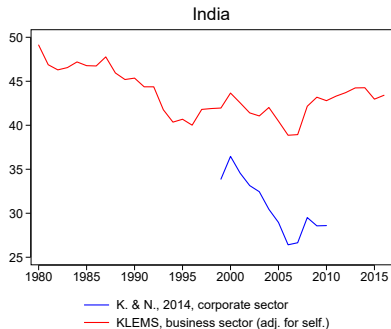
# China



# India



\*KLEMS does not provide data on compensations of employees only.





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