

Sources and Mechanism of Stagnation and Impaired Growth in Advanced Economies

Gauti B. Eggertsson, Brown University

ECB Forum on Central Banking

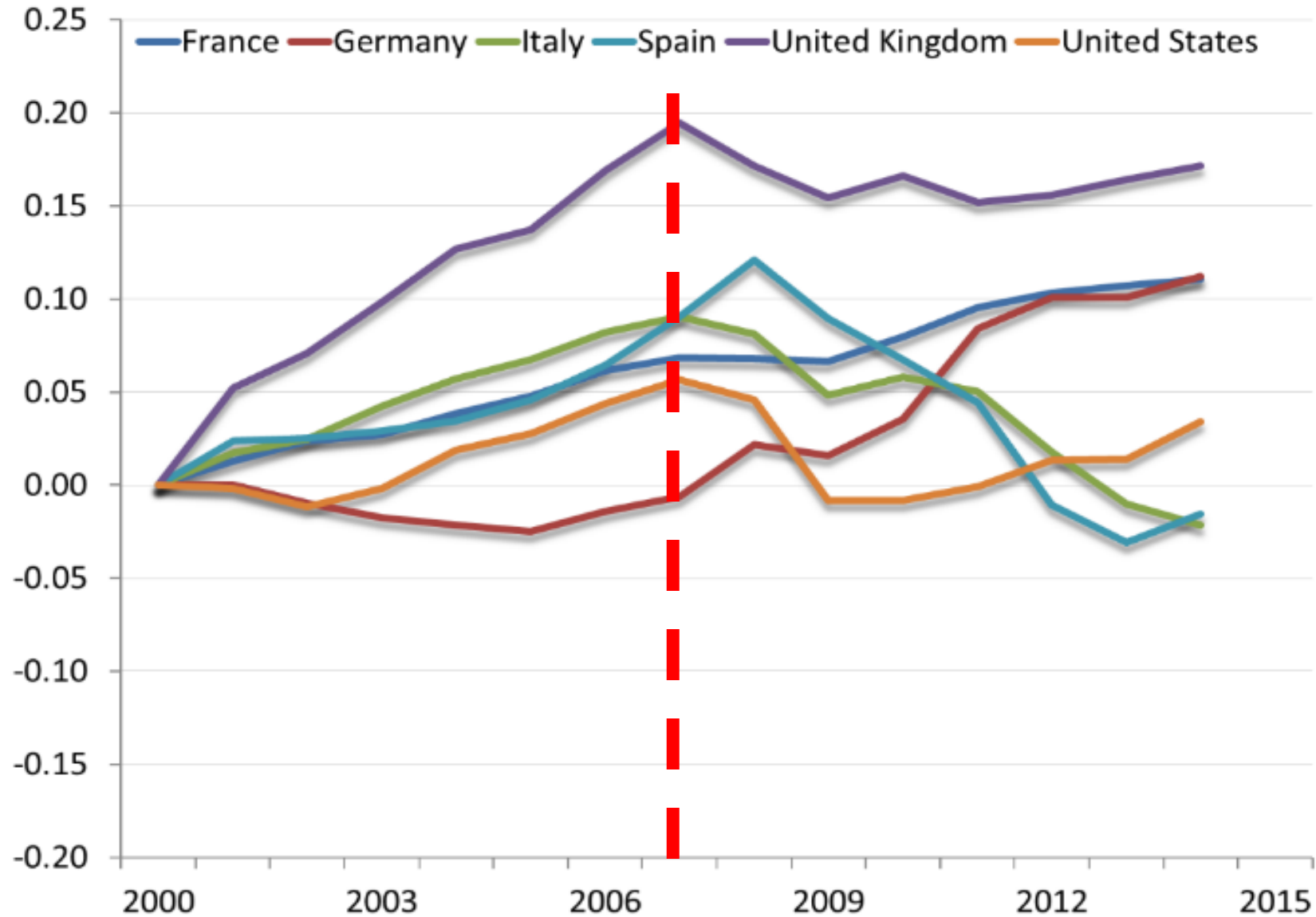
Overview

1. Hall's stylized facts
2. Hall's decomposition
3. Interpretation
4. Disagreements

Hall's stylized fact #1

- The Great Recession market a fall in income per capita

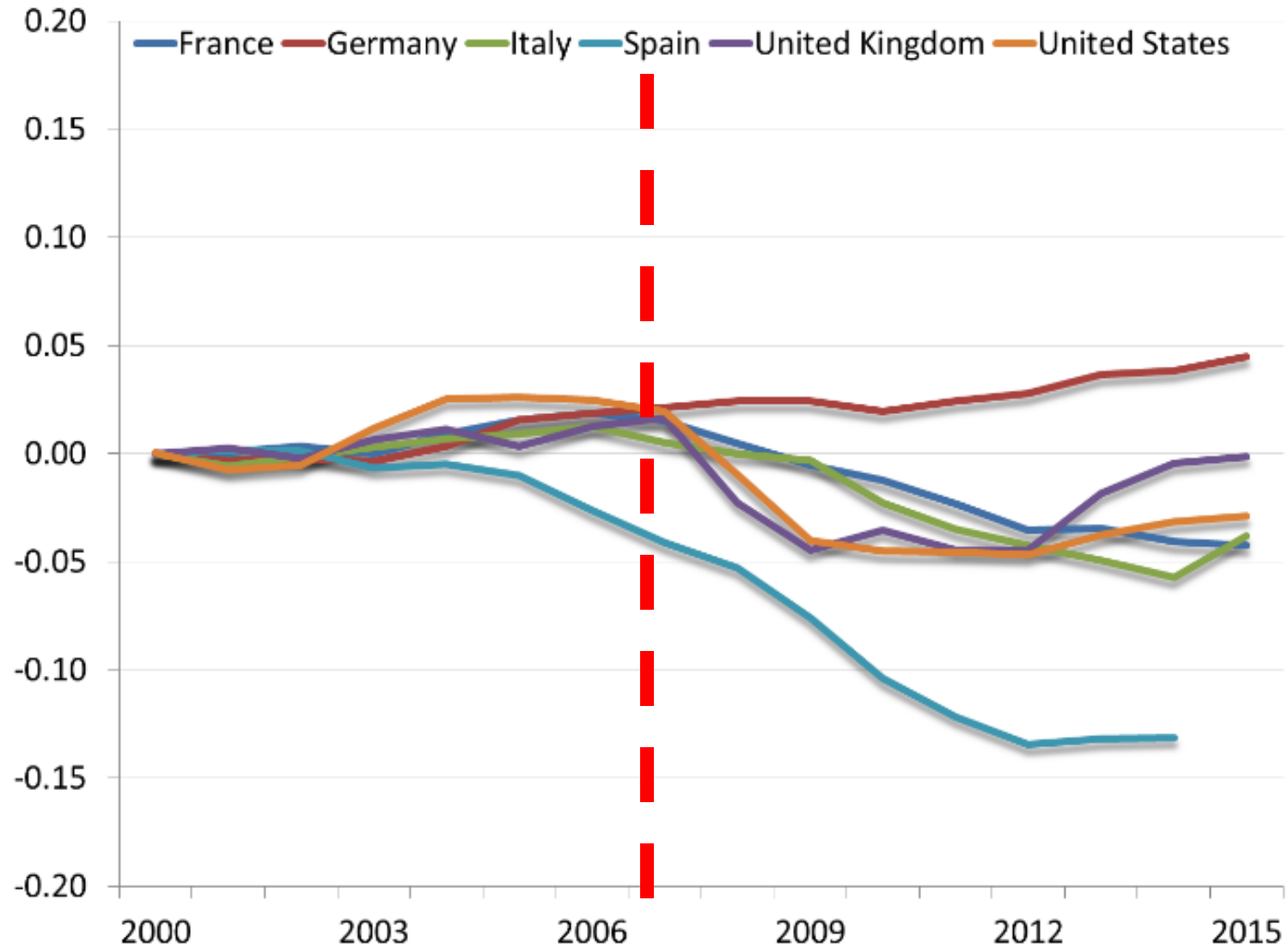
Real income income per member of population has been falling, or growing slower



Hall stylized fact # 2

- Part of this fall is explained by a fall in the share of income that goes to labor

Labor share has been falling



Hall's decomposition

- How can we *account* for the drop in *income* per member of the population?
- Proposes a simple and useful accounting framework, which is akin to growth accounting but has much more details in decomposing labor inputs and allows for time varying factor shares.

Hall's decomposition

$$Y_t = A_t K_t^{1-\alpha_t} L_t^{\alpha_t}$$

TFP → A_t
Volume of capital → $K_t^{1-\alpha_t}$
Labor share → $L_t^{\alpha_t}$

Volume of Labor Input

Hours per worker

Fraction of labor force employed

Member of labor force relative to working age

Working age relative to population

Population

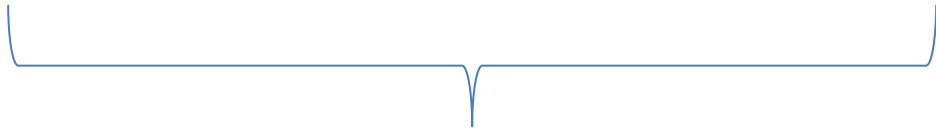
$$m_t e_t \frac{F_t}{H_t} \frac{H_t}{N_t} N_t$$

↑

Full employment

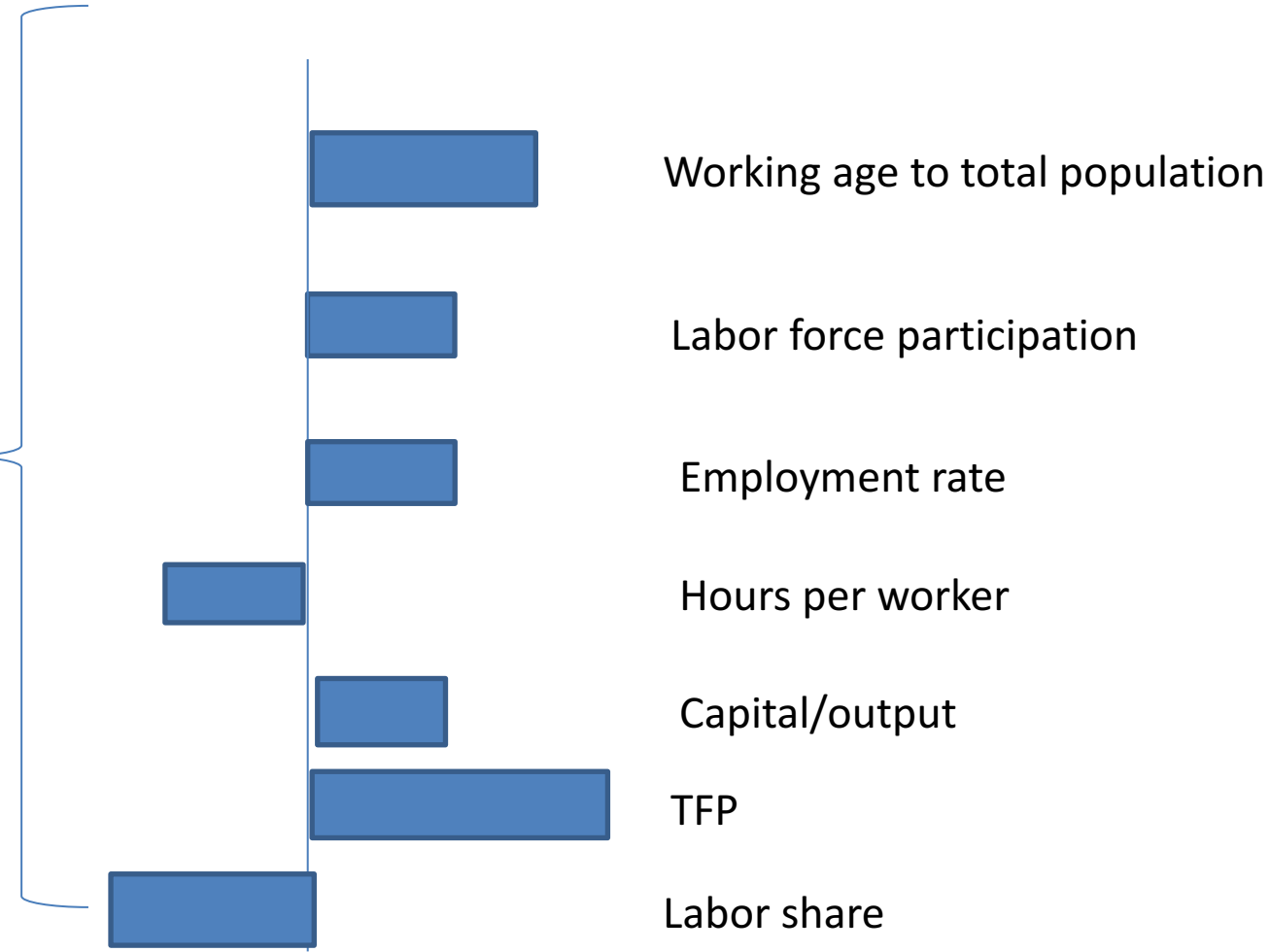
Hall's decomposition

$$\log \alpha_t \frac{Y_t}{N_t} - \log \alpha_{t-k} \frac{Y_{t-k}}{N_{t-k}}$$

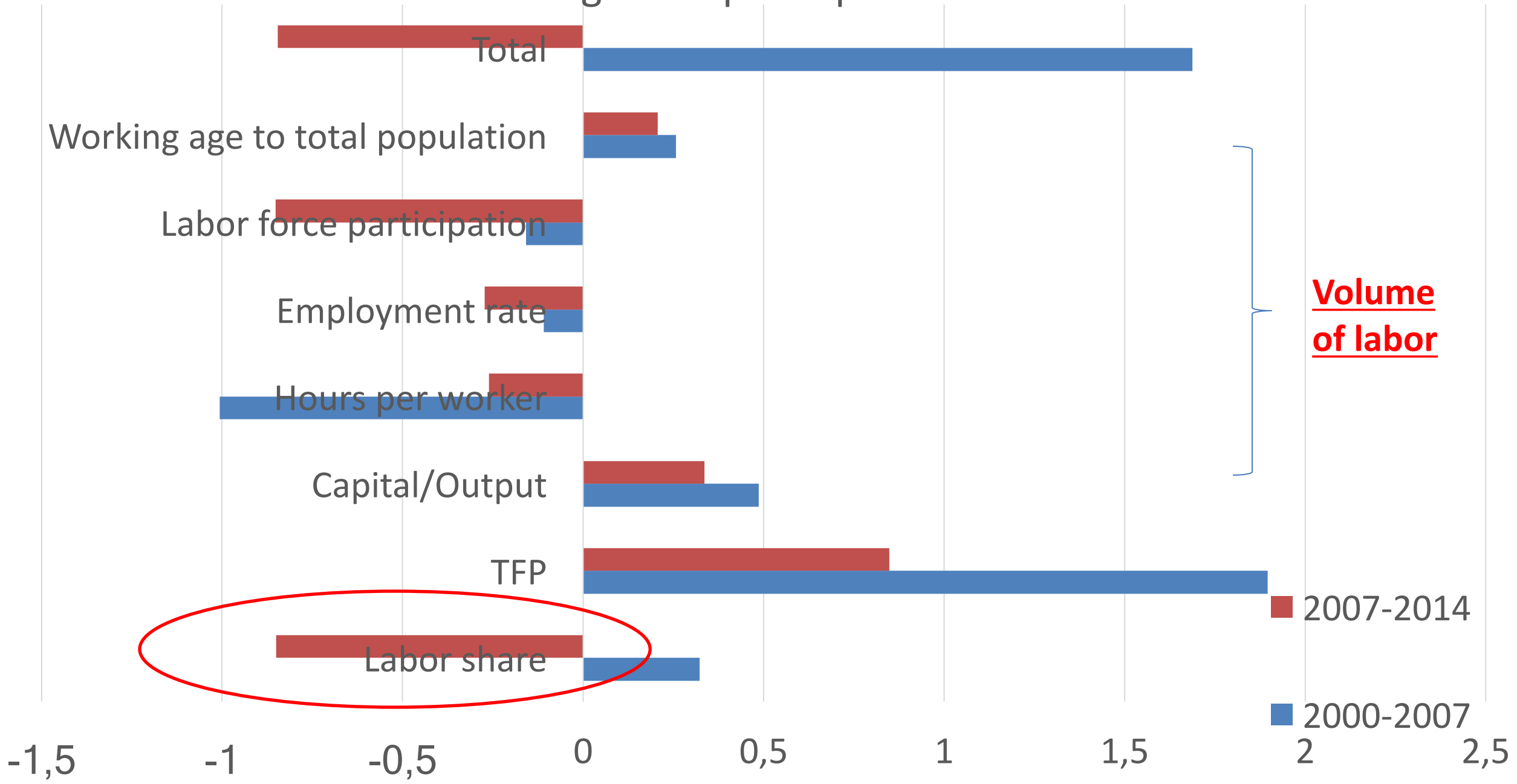


Income growth per member of population

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Income growth per capita: United States

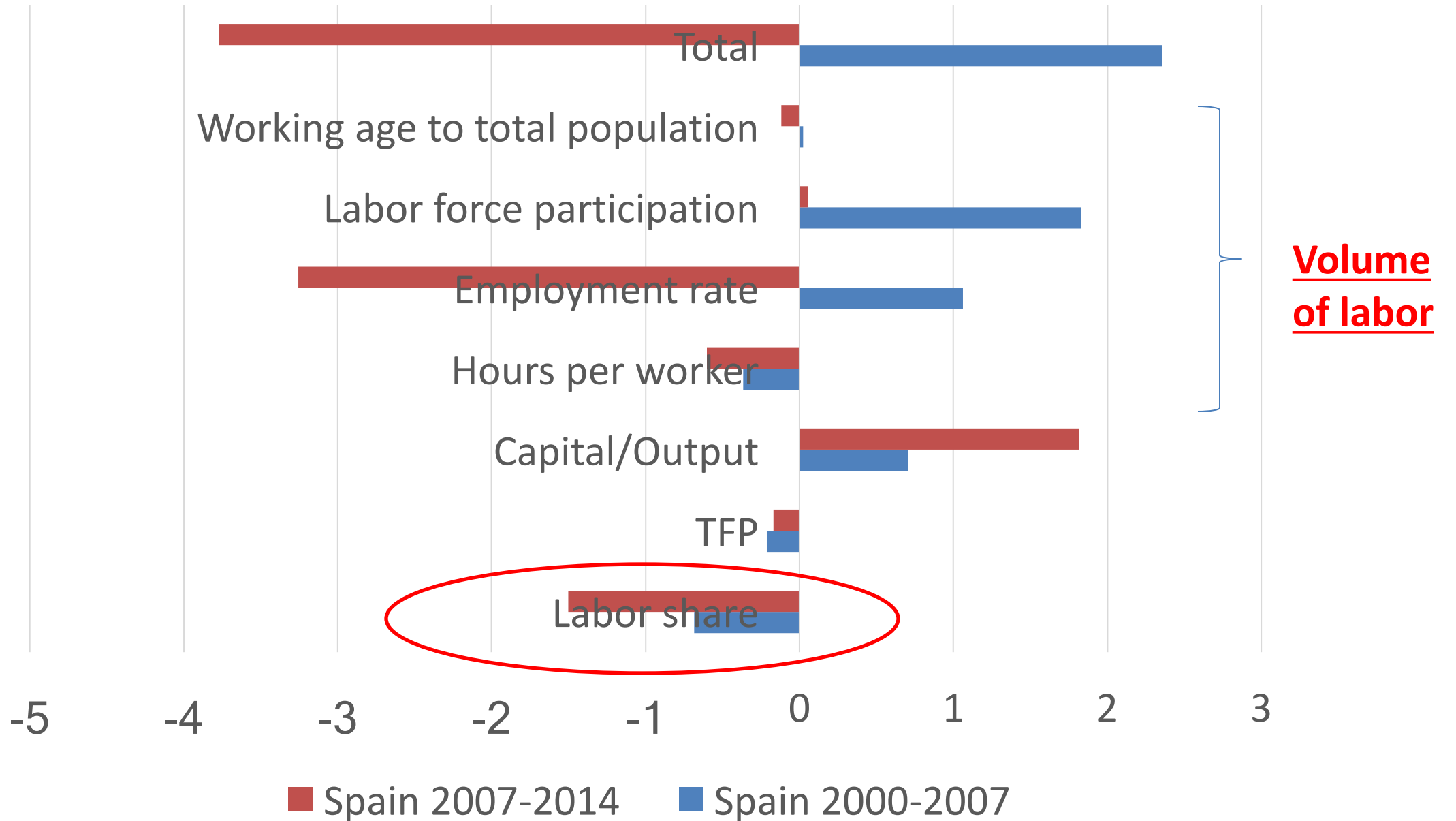


Volume of labor

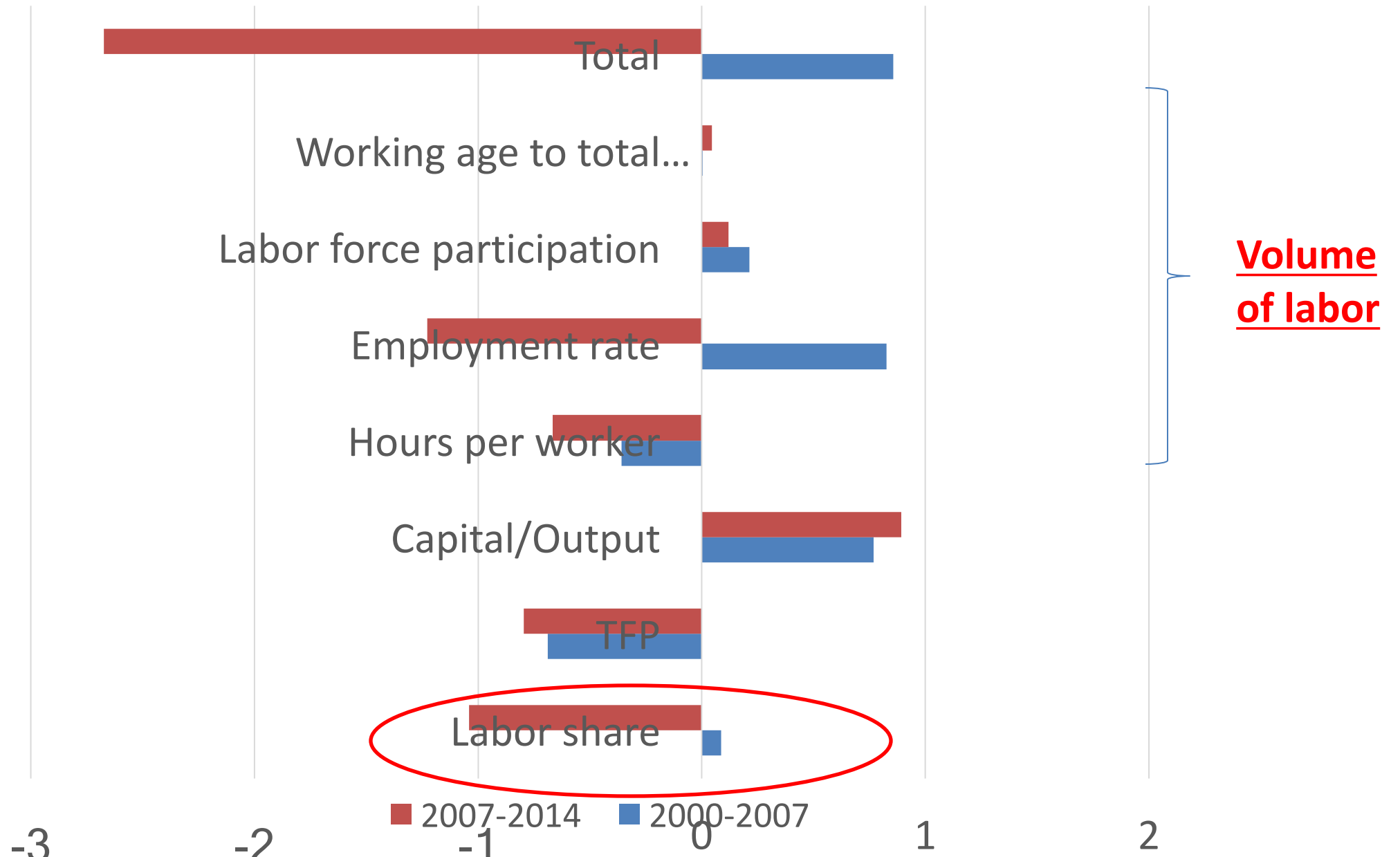
2007-2014

2000-2007

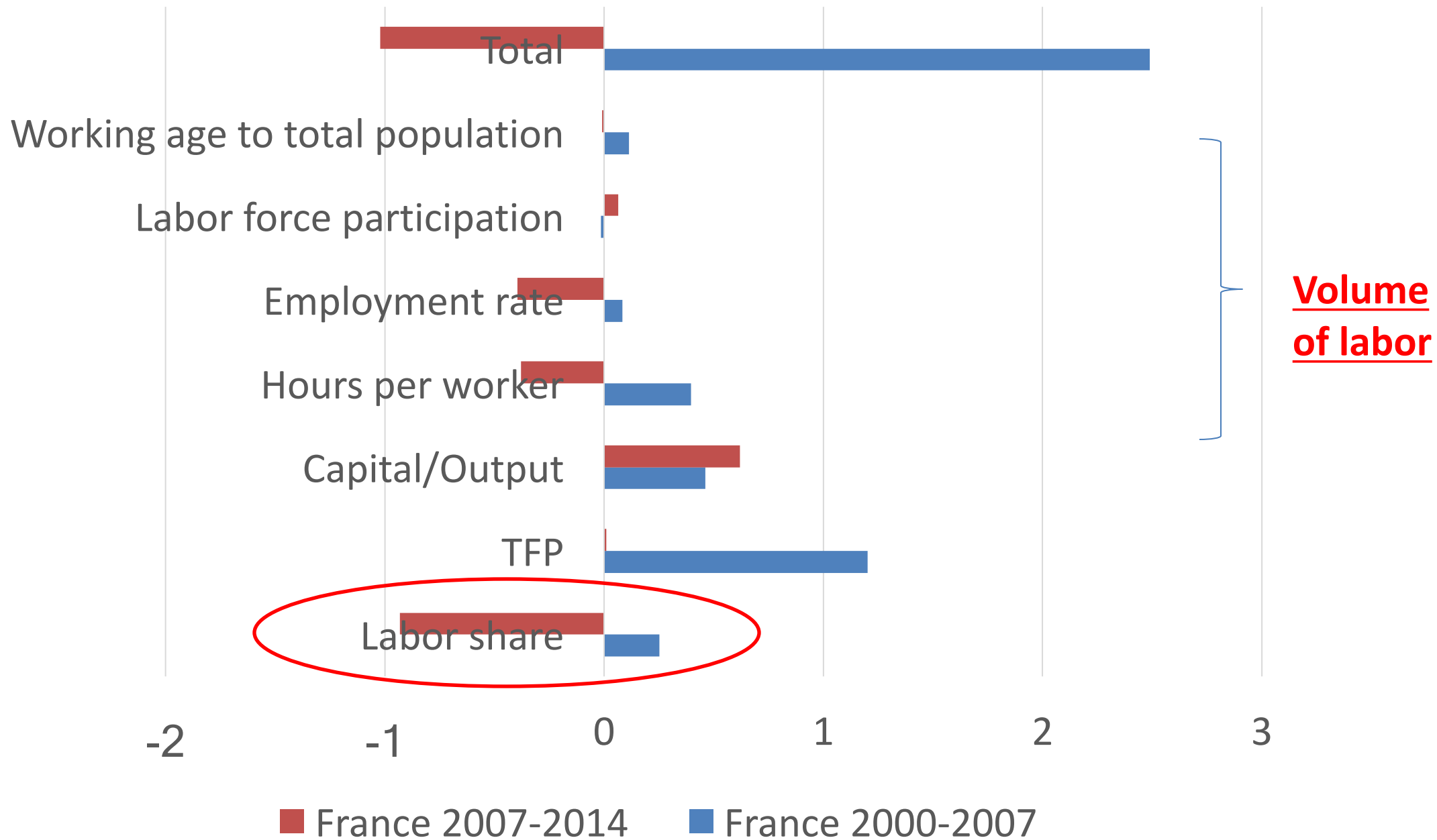
Income Growth Per Capita: Spain



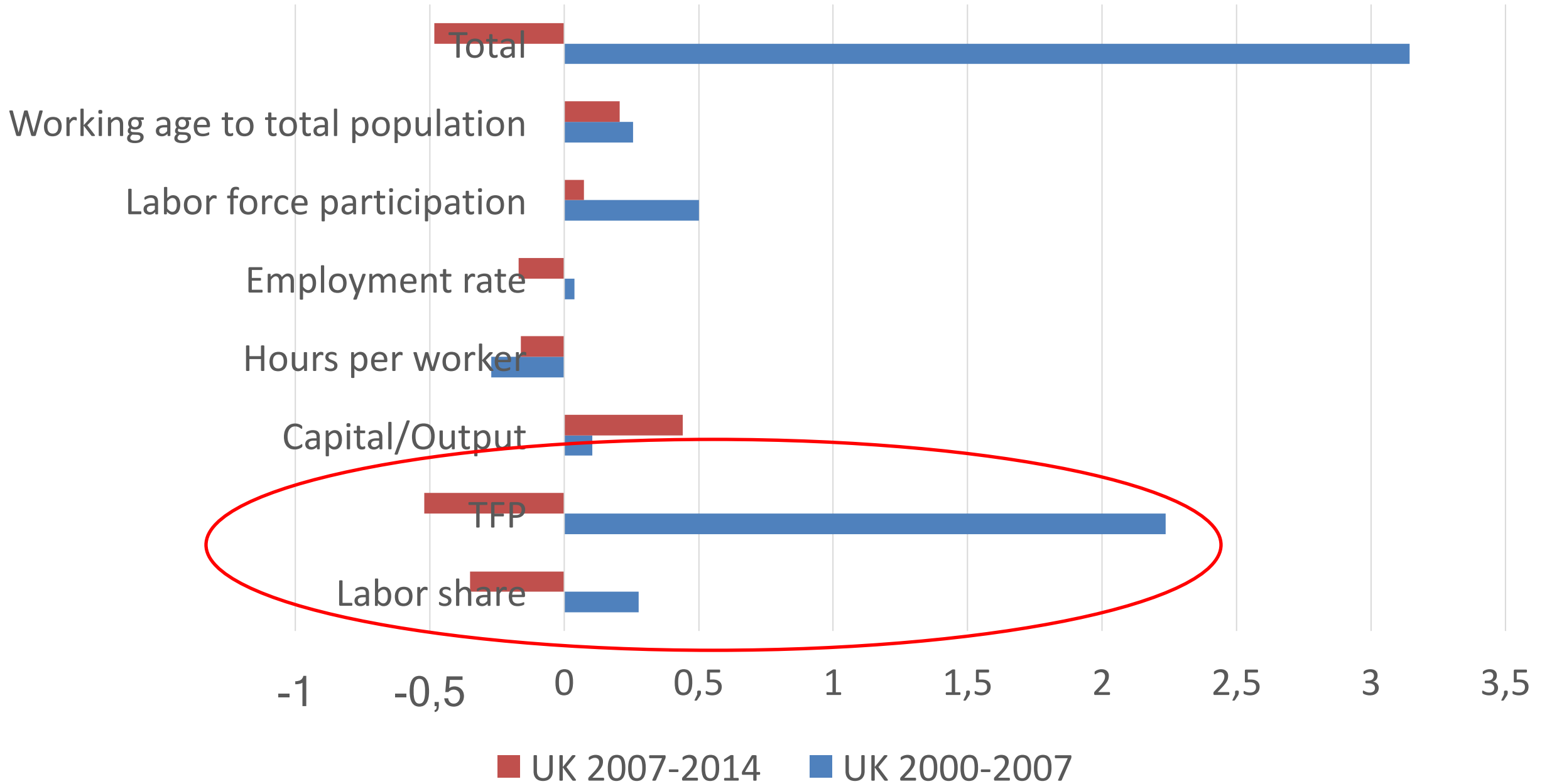
Income Growth Per Capita: Italy



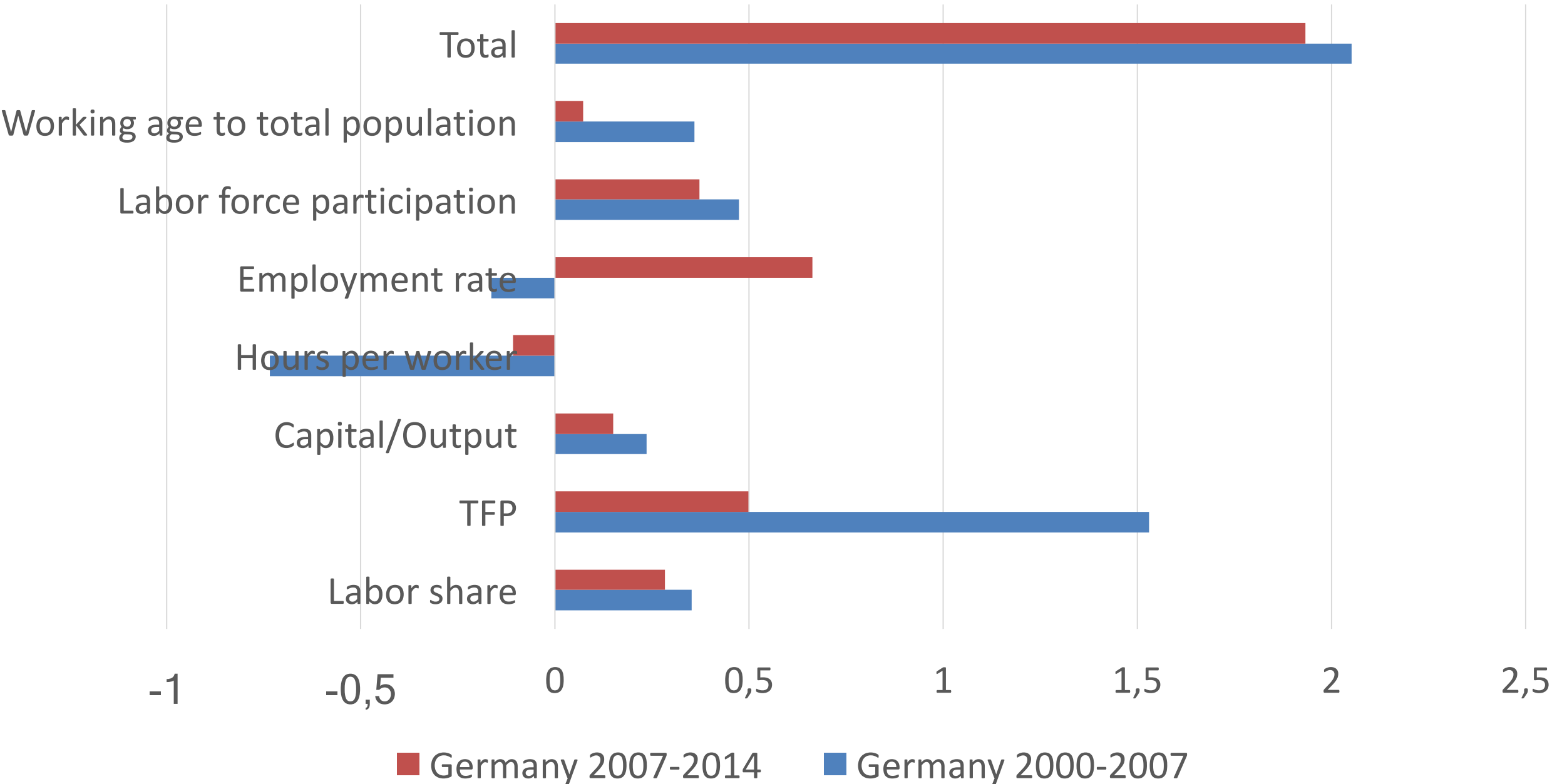
Income growth per capita: France



Income growth per Capita: UK



Income per capita: Germany



What's NOT the story?

- Aging is NOT the story: Contribution of Working Age to Total Pop NOT important to explain the drop in income per population.
 - Popular narrative of aging not supported
- Lack of Investment NOT the story: Contribution small
 - Popular narrative of financial frictions holding back growth not supported.
- Drop in TFP inconsistent as a coherent story for stylized facts, all over the place.

What is the story?

- In most countries (France-Italy-Spain) there is a drop in labor input via employment rate and or hours worked.
- In US this shows up instead via drop in labor participation.
- Key question: Why does the drop in labor input show up in different measures across countries?
- Labor market institutions?

What is the story?

- All (except Germany) show a drop in labor share (violating a classic Kaldor's fact).
- Key question: What is driving the drop in labor share?
 - Increase in monopoly power? Data from US and Europe different.

Peculiarity 1

- TFP rather than changes in labor input is driving the UK slowdown in income growth.
- Drop in labor share still there

Peculiarity 2

- Germany

Bottom-line

- Nowhere is lack of capital formation a big deal.
- Nowhere is aging a big deal
- Labor share falling across the board (Germany excluded).
- In Spain, Italy, France, US, then labor income stagnation also shows up in sluggishness in labor inputs while in UK is productivity the main culprit.
- Germany has no stagnation.

Overview

1. Hall's stylized facts
2. Hall's decomposition
3. Interpretation
4. My disagreements

3. Interpretation

- Slack in the volume of labor input not a sign of insufficient demand if it comes from labor participation?
 - Not obvious why "demand" should only show up via employment/unemployment rate.
 - Perhaps labor "rationing" is happening via different mechanism across the countries?
- There is no reason why demand cannot show up in TFP.
 - Hysteresis effect. Lack of demand reduces future output potential
- Bottom-line: I see nothing in these results that would suggest that the slowdown is not driven by low demand.

4. Sources of disagreement

- What does “demand even mean”? Does it matter?
- Important because if demand is an issue, then one would tend to think that fiscal and monetary policy could do something about it.
- This paper has a dangerous message, even if it may be correct, namely that policy should not concern itself .
- Do these countries have anything in common?

Prediction of a demand driven recession

$$r_t \geq r_t^n \leq 0$$

Prediction

$$\dot{i}_t = 0$$

$$\pi_t \leq \pi^*$$

$$x_t \leq x^*$$



Nothing that says “output gap” cannot show up in

-- low productivity

-- low labor force participation

Does not “need” to show up in employment rate

Conclusion

- Very interesting decomposition of the reduction in real income growth rates across advanced economies
- There is nothing in this paper that leads me to conclude one way or the other about the source of the stylized fact.
- We do simply not know.
- Paper gives very valuable tool via simple decomposition generating data that our theory should be consistent with.