

Sources and Mechanism of Stagnation and Impaired Growth in Advanced Economies

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ECB Forum on Central Banking

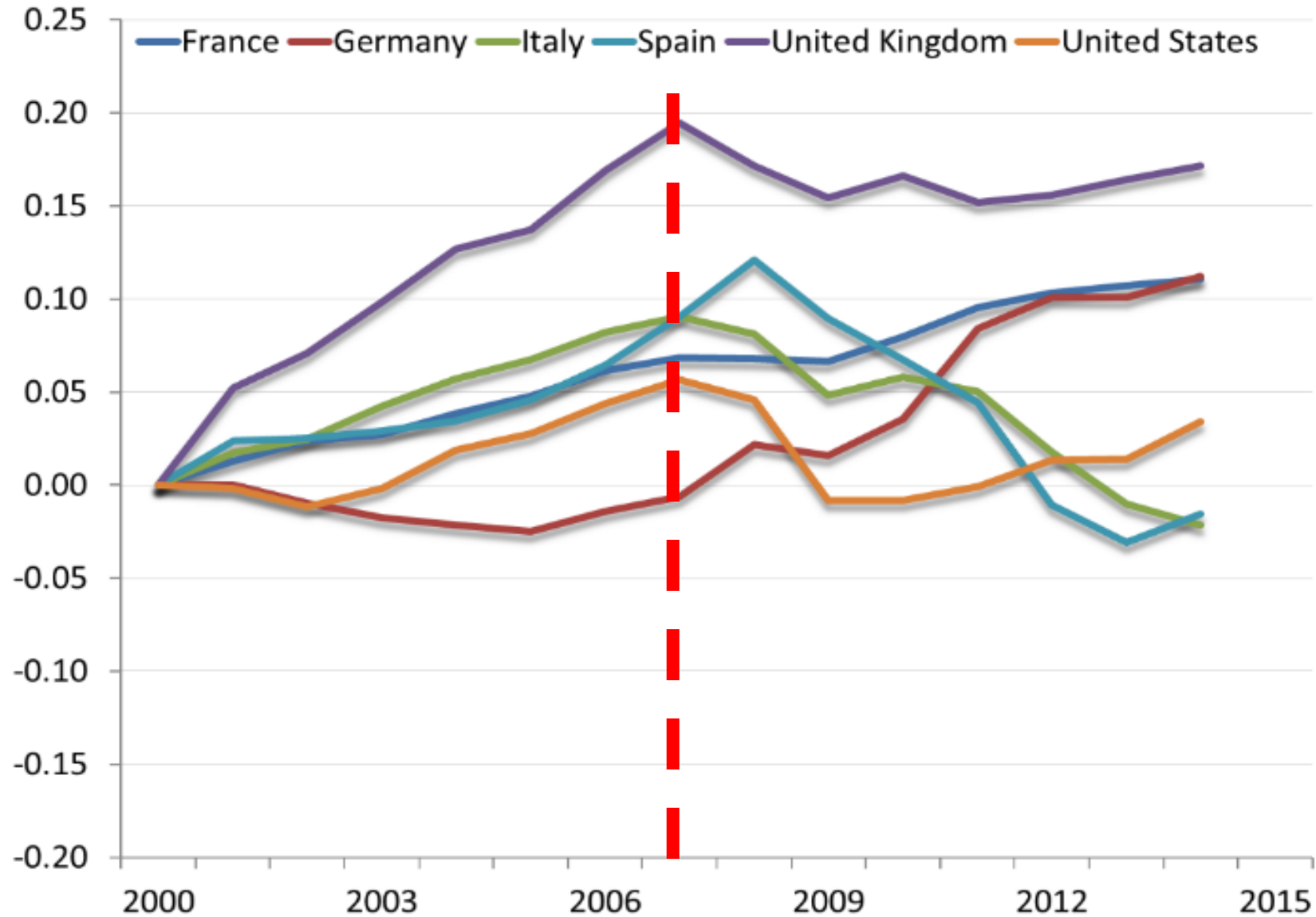
Overview

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

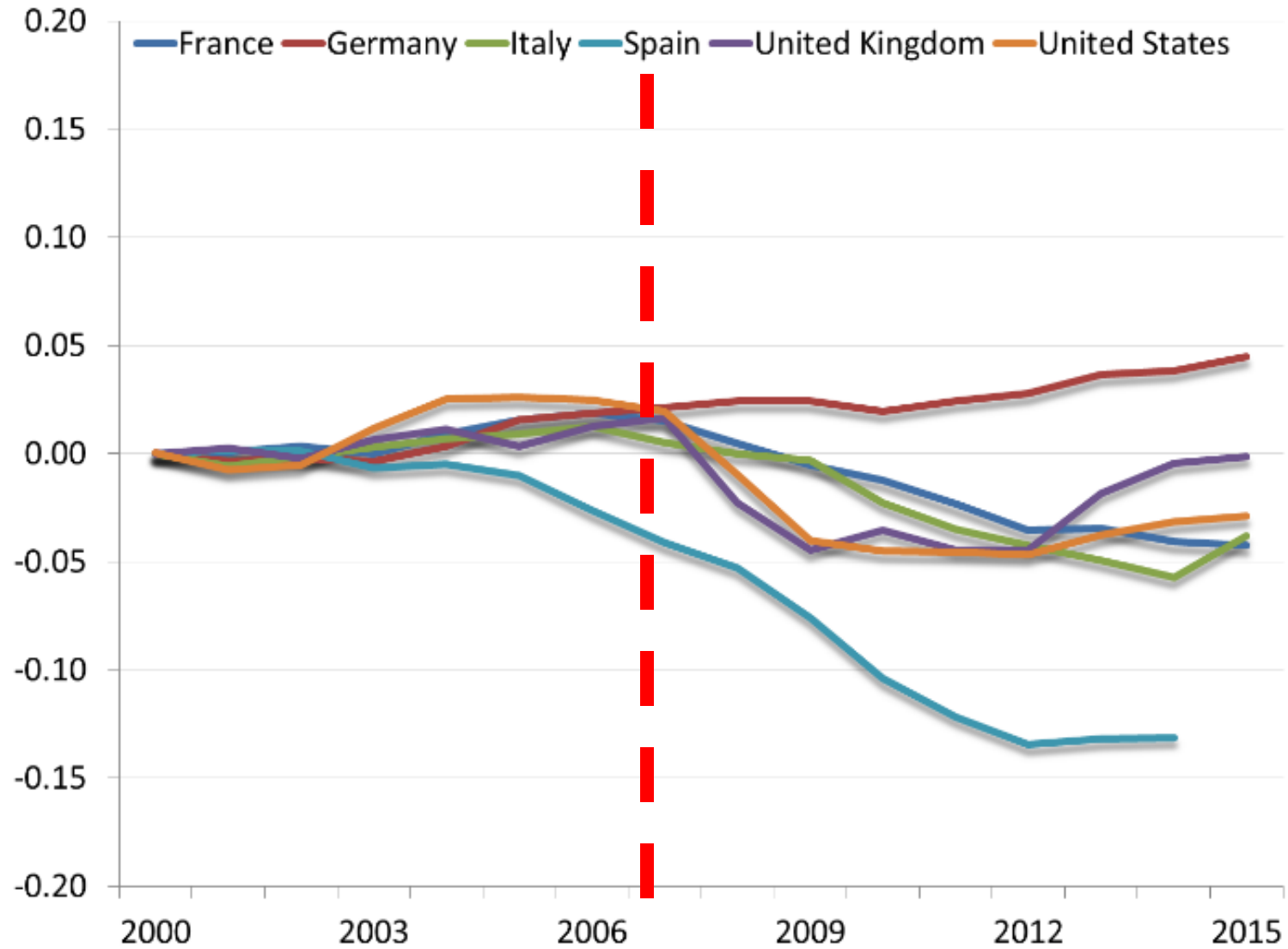
Real income income per member of population has been falling, or growing slower



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

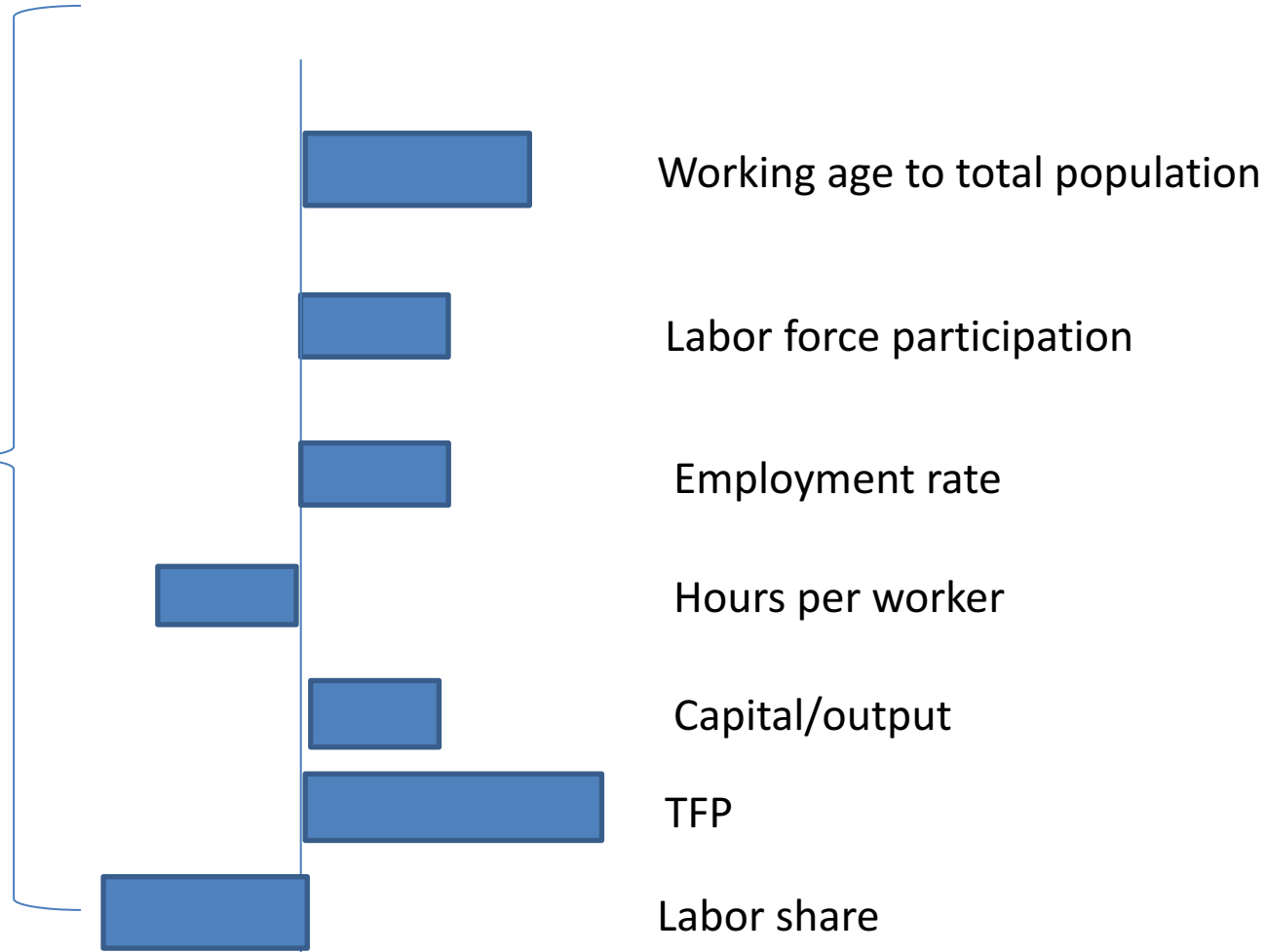
Hall's decomposition

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

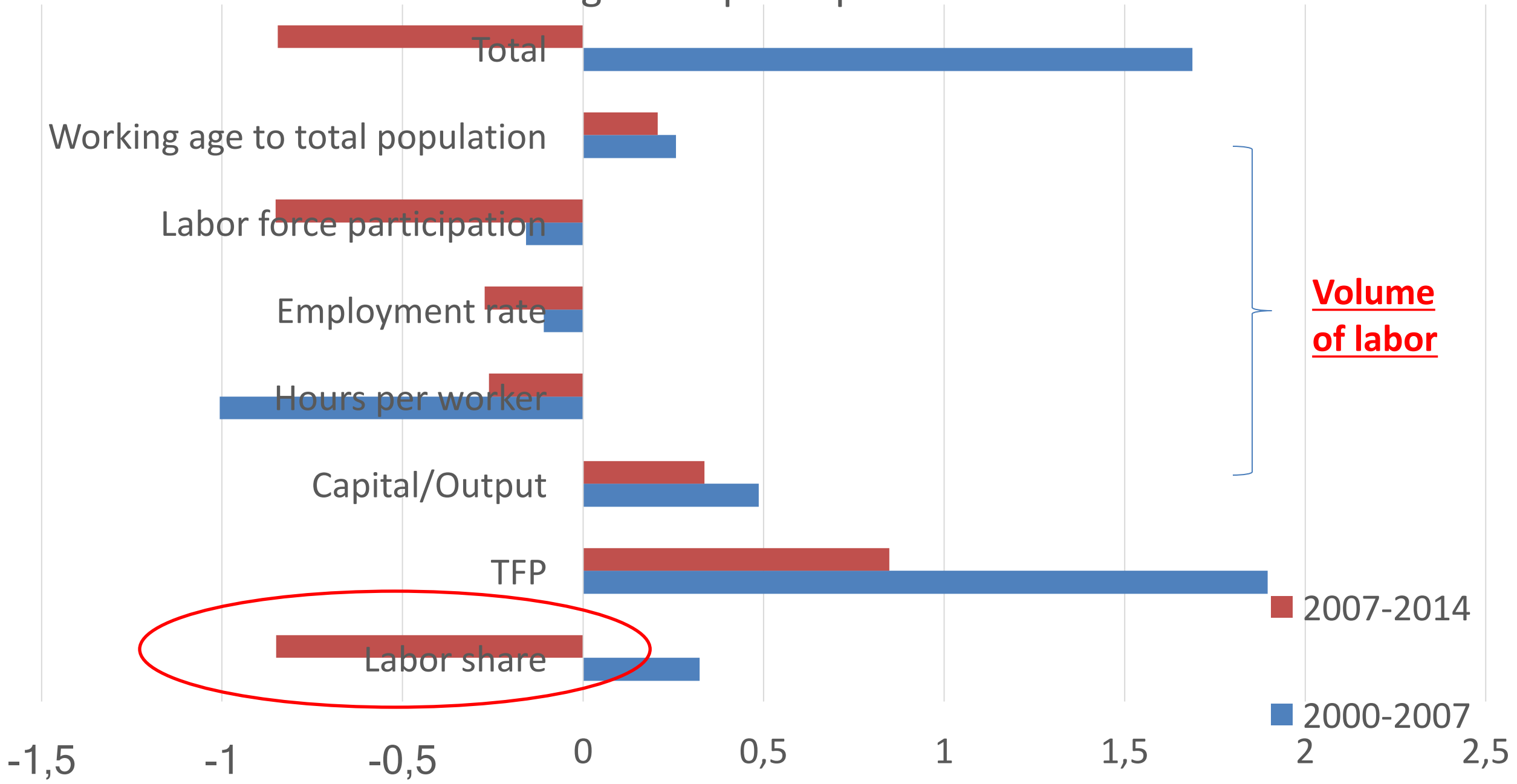


Income growth per member of population

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Income growth per capita: United States

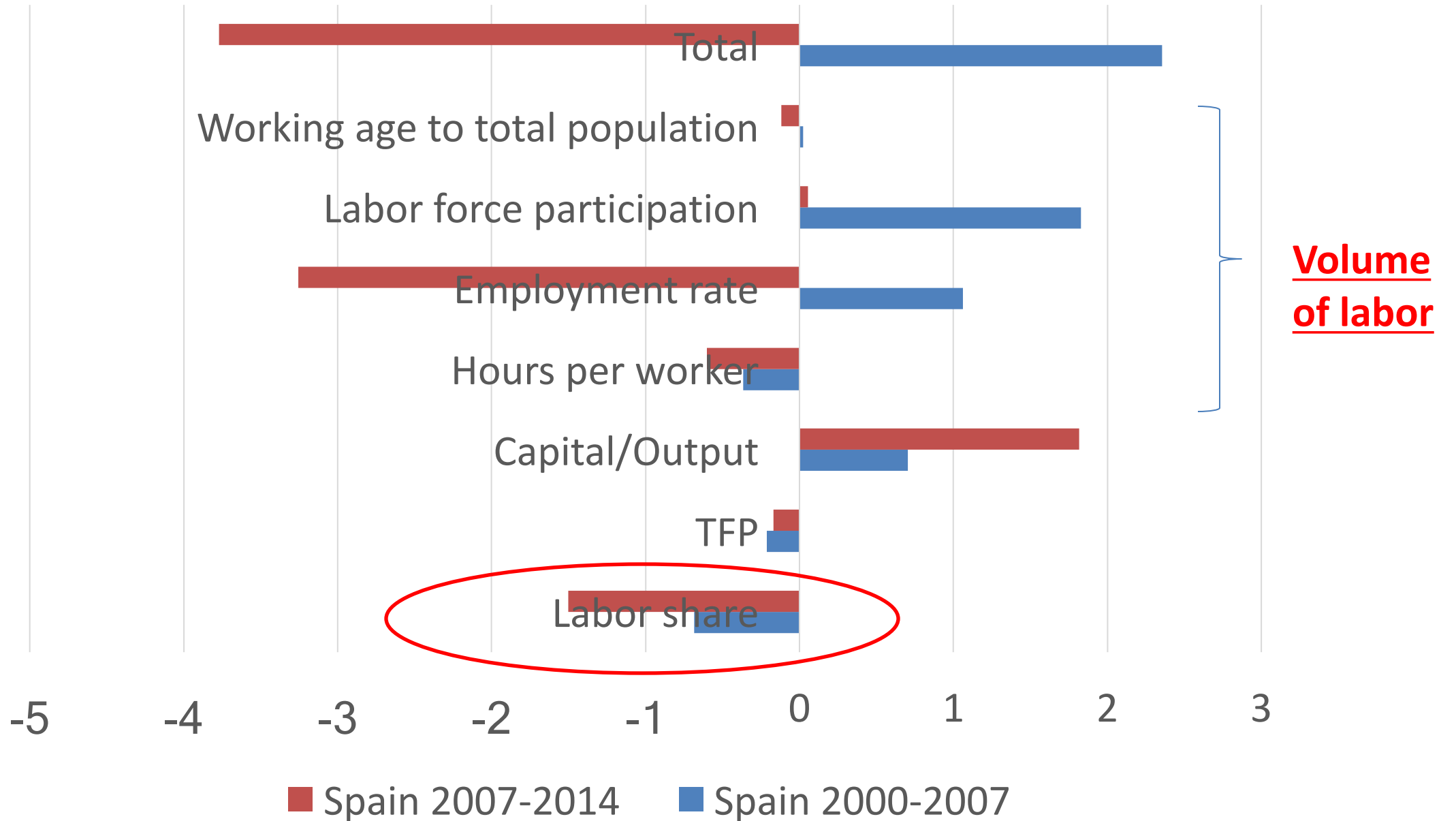


Volume
of labor

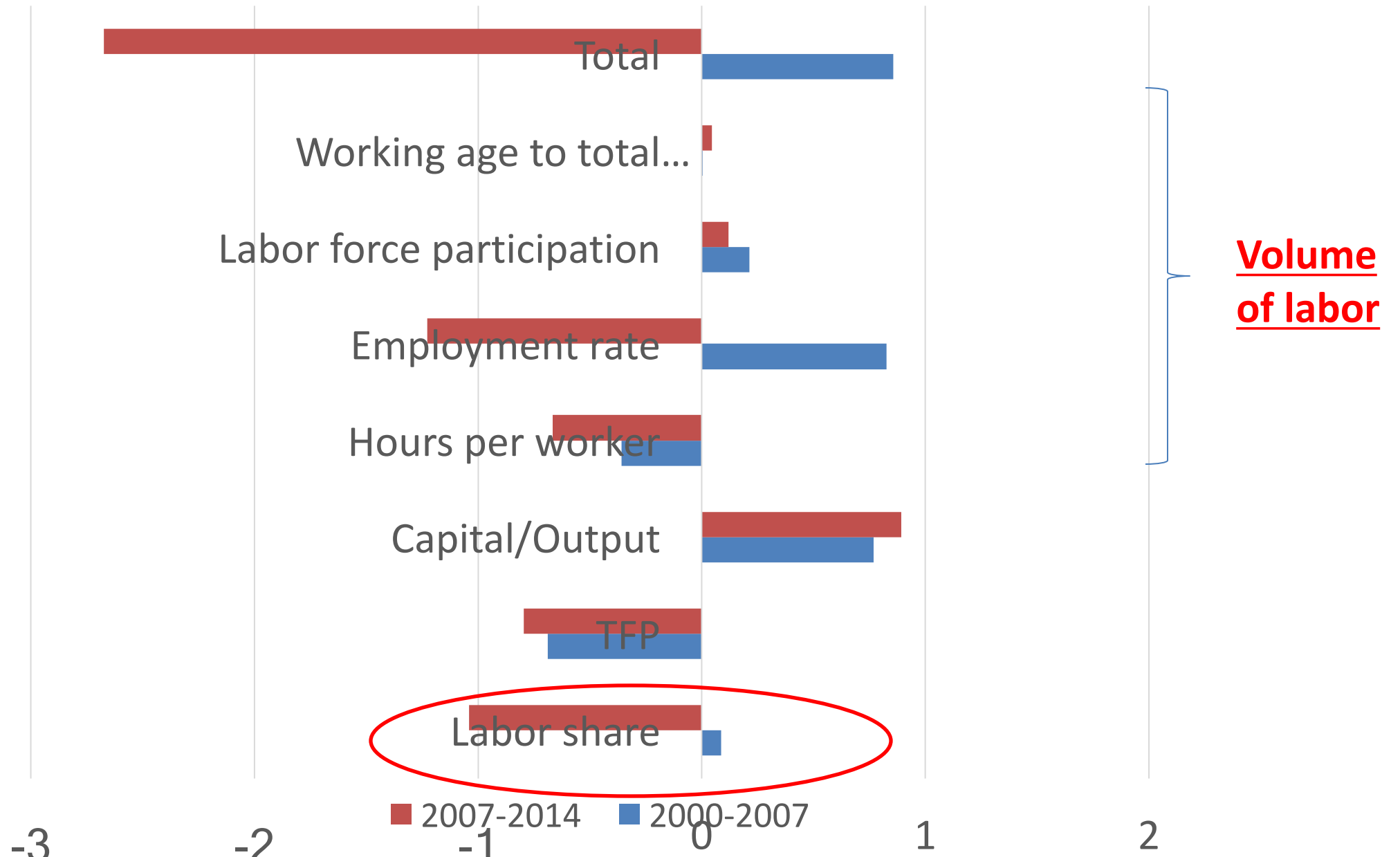
■ 2007-2014

■ 2000-2007

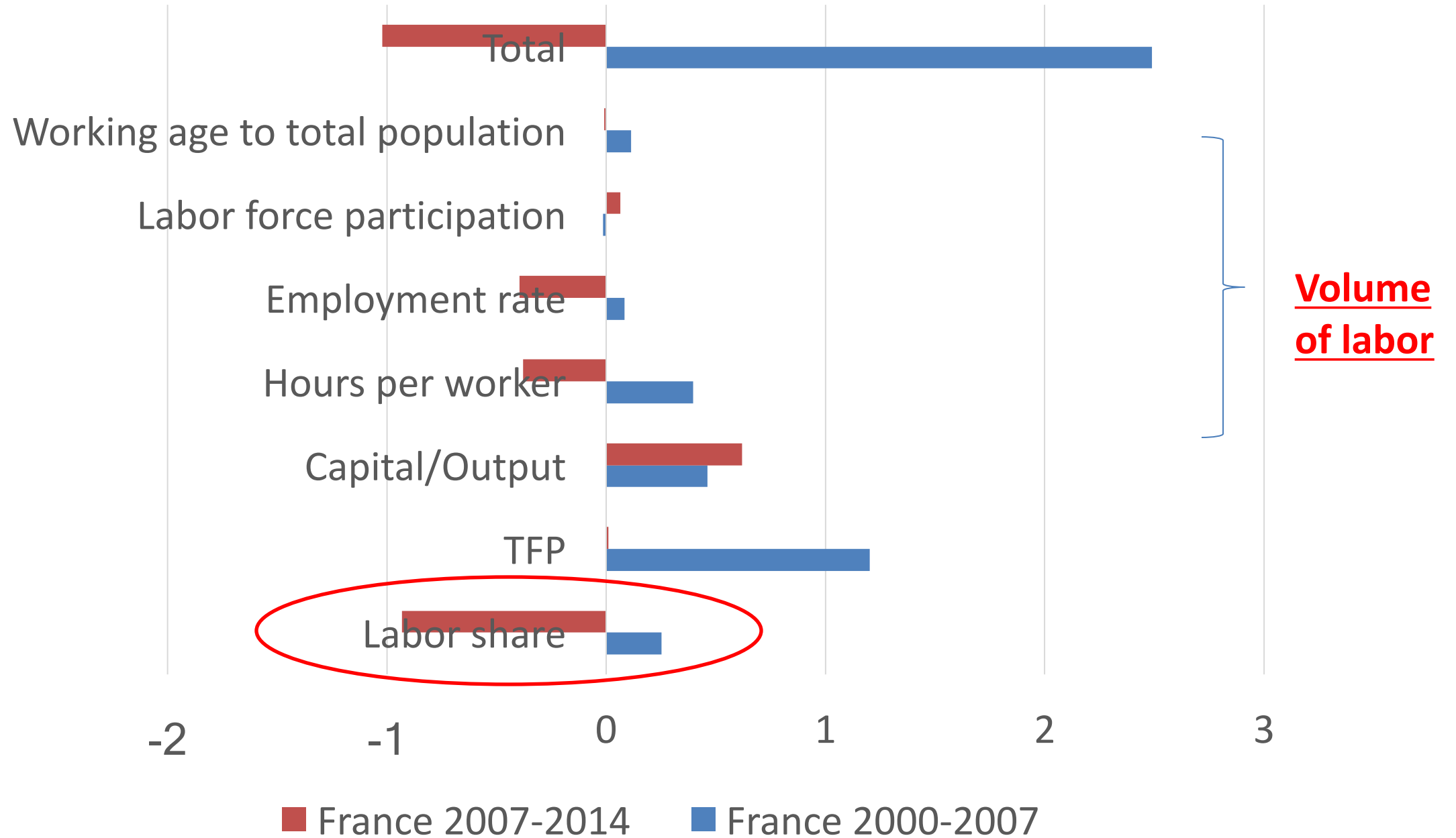
Income Growth Per Capita: Spain



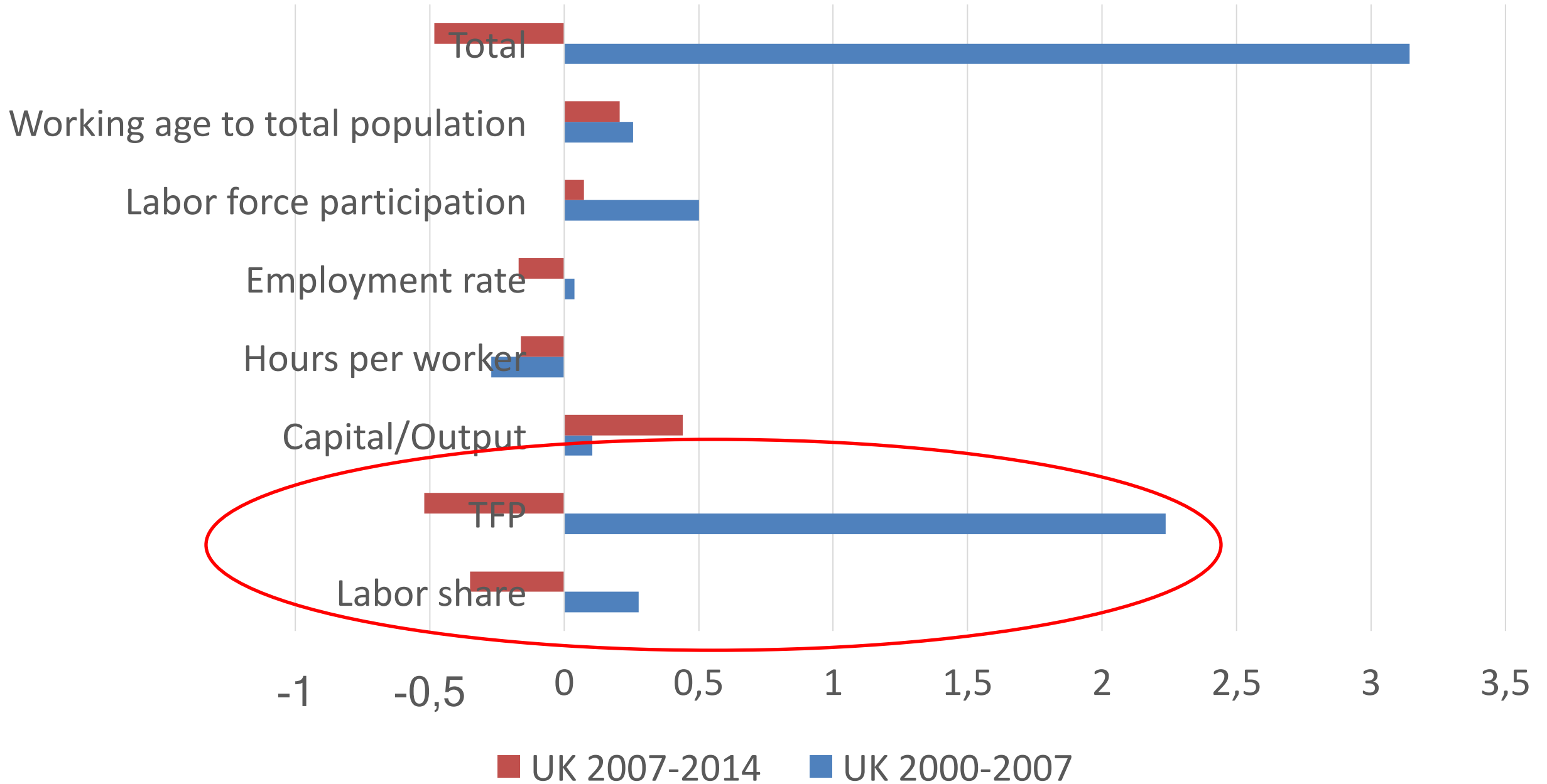
Income Growth Per Capita: Italy



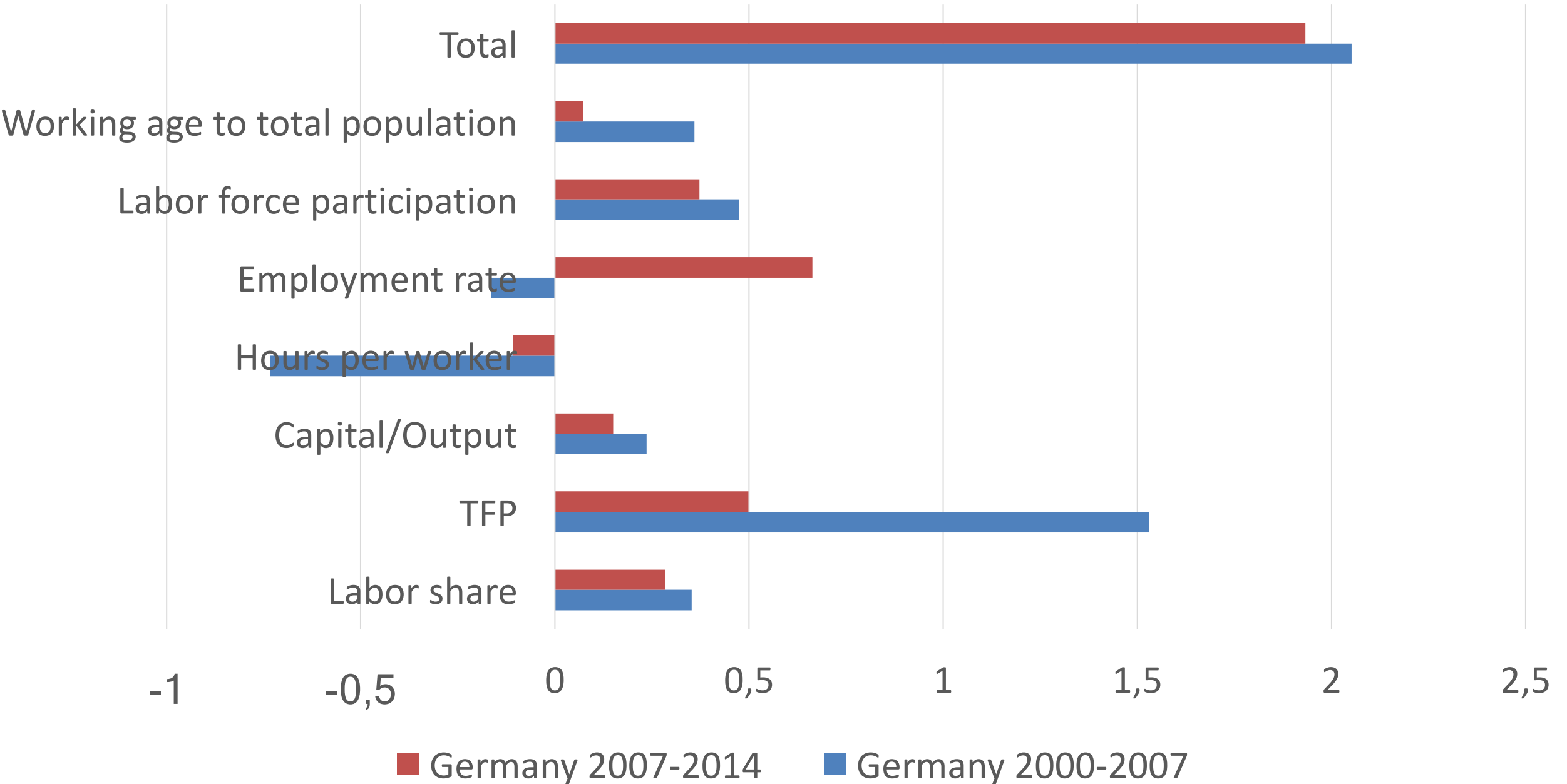
Income growth per capita: France



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.