

LABOR SUPPLY IN THE FUTURE: WHO WILL WORK?

Timo Boppart

IIES, Stockholm University

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MOTIVATION

Are there lessons to be learned from looking at the past?

What are the most salient features of looking at data on hours worked in the long run (over 100+ years)?

Hours worked per worker is falling steadily over time in all countries.

This long-run trend asks for a neoclassical explanation.

HOURS WORKED PER WORKER SINCE 1870

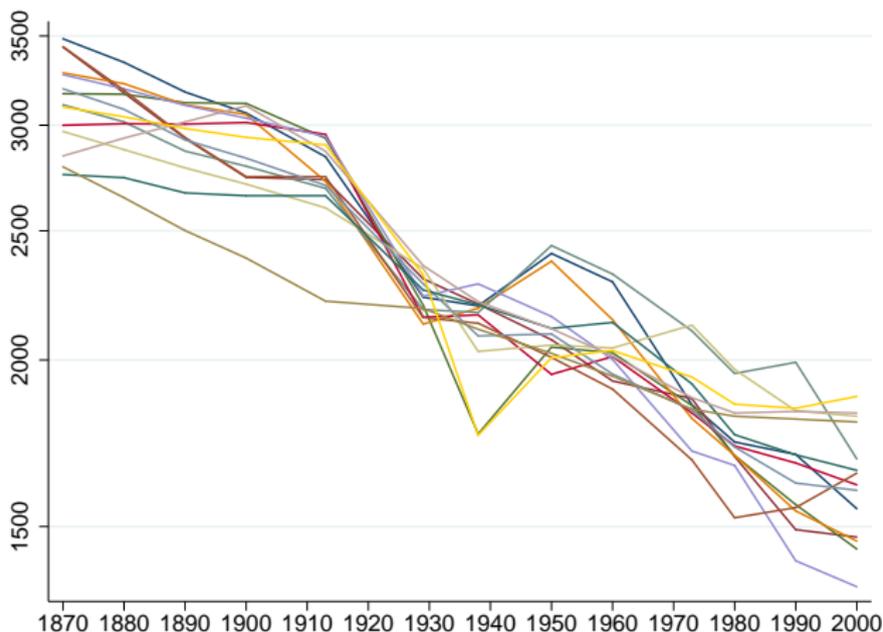


FIGURE: Annual hours worked per worker

Notes: The figure shows data for the following countries: Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland, U.K., Australia, Canada, and U.S. The scale is logarithmic which suggests that hours fall at roughly 0.57 percent per year. Source: Huberman and Minns (2007).

POST-WAR DATA

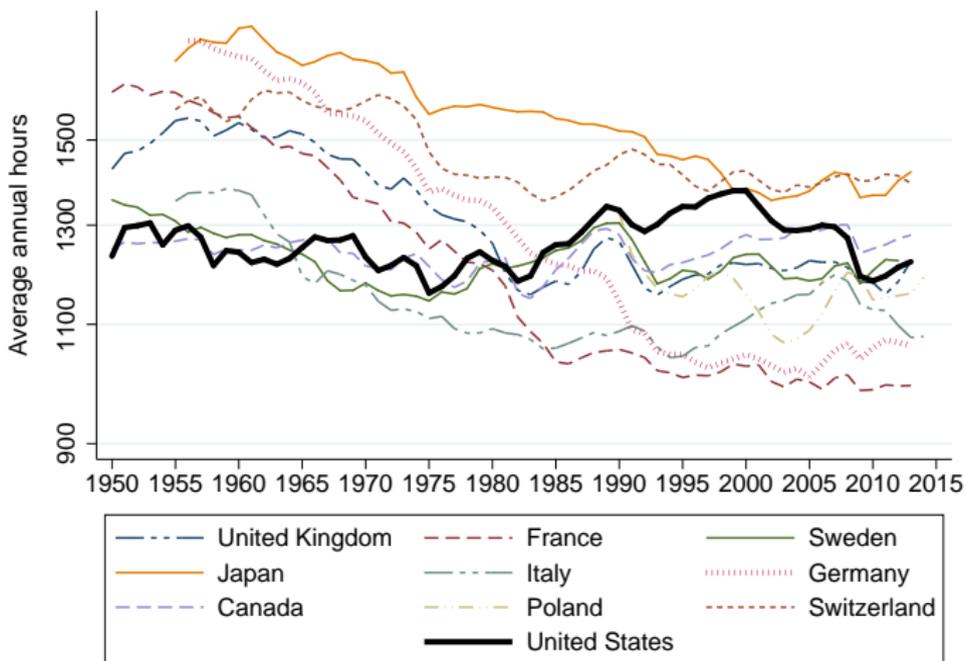


FIGURE: Annual hours per capita aged 15–64, 1950–2015

Notes: Source: GGDC Total Economy Database for total hours worked and OECD for the data on population aged 15–64. The figure is comparable to the ones in Rogerson (2006). Regressing the logarithm of hours worked on time gives a slope coefficient of -0.00455 .

U.S. POST-WAR

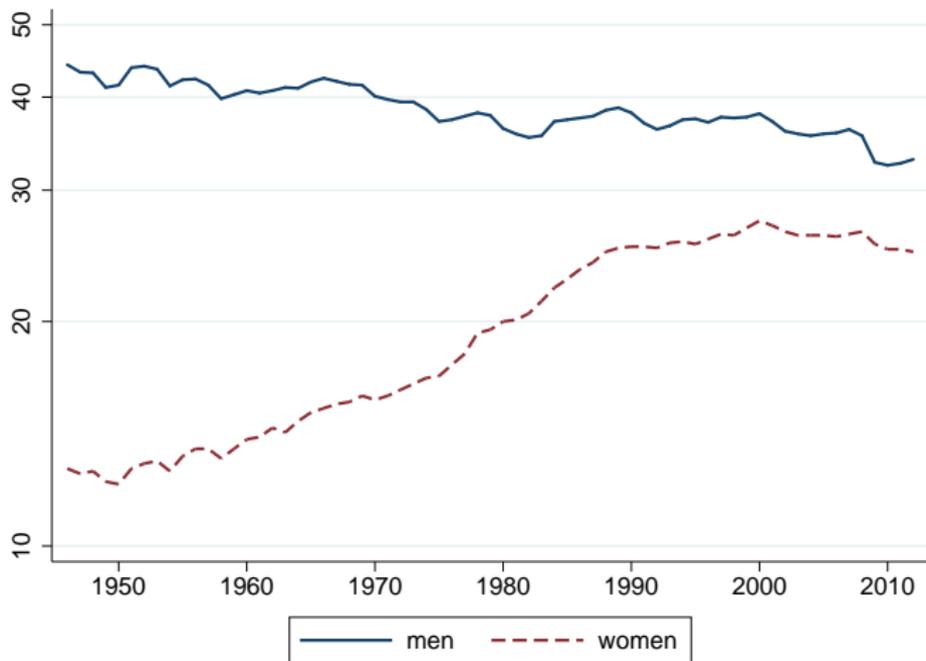


FIGURE: Weekly U.S. hours worked by gender per population aged 25–54, 1946–2012

Notes: The scale is logarithmic. Source: Update of the data in Ramey (2009). Regressing the logarithm of male hours worked on time gives slope coefficient of -0.00353 .

INTERPRETATION

Overall, as productivity and wages increase people *chose* to work less.

Labor supply determines the aggregate hours worked in the long run.

As productivity grows at 2% annually households increased leisure time by 0.4% and increase consumption by 1.6%.

Falling hours is a good thing instead of a signal of a malfunctioning labor market!

MAIN TAKE AWAY

Empirical finding suggests that preferences are such that the income effects of increasing wages (slightly) dominate the substitution effect.

If in future productivity keeps on growing we expect hours worked to fall.

The groups with the least labor market attachment will leave the labor force first as productivity keeps on rising.

CONCLUSIONS

Labor supply will be the important determinant of hours worked in future.

Income effects on labor supply are potentially larger than thought

- ▶ Wealth distribution is important for labor supply
- ▶ Policy implications

Overall, as a society we won't run out of work.

However, challenging distributional issues arise from technical change.