

Global Working Hours

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November 11, 2025

This Project

1) A New Database on Global Working Hours

- Compile and harmonize 2,200 surveys fielded in 160 countries representative of 97% of the world's population
- Long time series (20+ years) in 87 countries

2) Worldwide Working Hours Patterns

- By age, gender, sector, and development

3) Working Hours Determinants

- Young (age 15-19): School attendance
- Elderly (age 60+): Pension coverage
- Prime-Age: Labor taxes, social transfers, hours regulations

A. Harmonized database of 2,200 country-year surveys

- 1) **International Labor Organization (ILO)**: gathers and harmonizes labor force surveys since 1990. First external sharing.
- 2) **World Bank** global survey databases: I2D2, Global Monitoring Database, Global Labor Database.
- 3) **Other sources**: EU-LFS for Europe, Luxembourg Income Study surveys, IPUMS International censuses, country-specific sources.

B. Public policy variables: Recently created macro labor tax data (Bachas et al. 2022), government spending by category (Gethin 2024), hours regulations (World Bank).

Definition and Variables

Working Hours: Actual hours worked in the past 7 days at all **jobs**

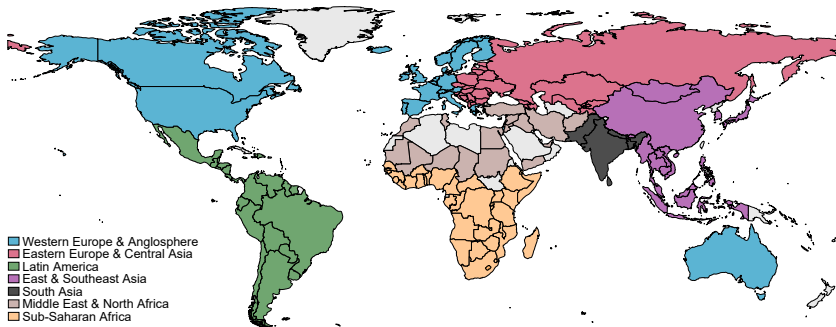
Jobs include all paid jobs (employees+self-employed) and home-production of goods (but not home-produced services)

= All GDP-producing activities.

- Includes informal agricultural work
- Excludes unpaid childcare, elderly care, cooking, cleaning, etc.

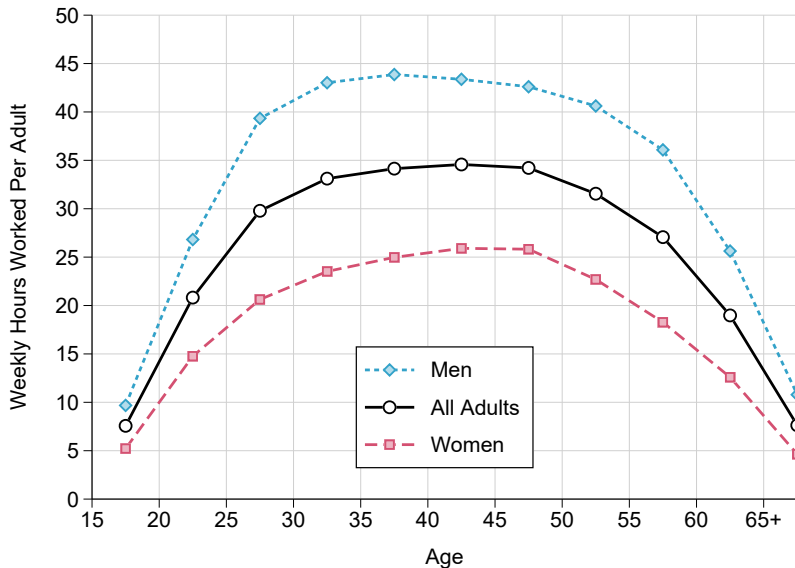
Variables: Age, gender, school attendance, labor force status, formality, industrial sector, hours, rural/urban, wages and self-employment income.

Data Coverage

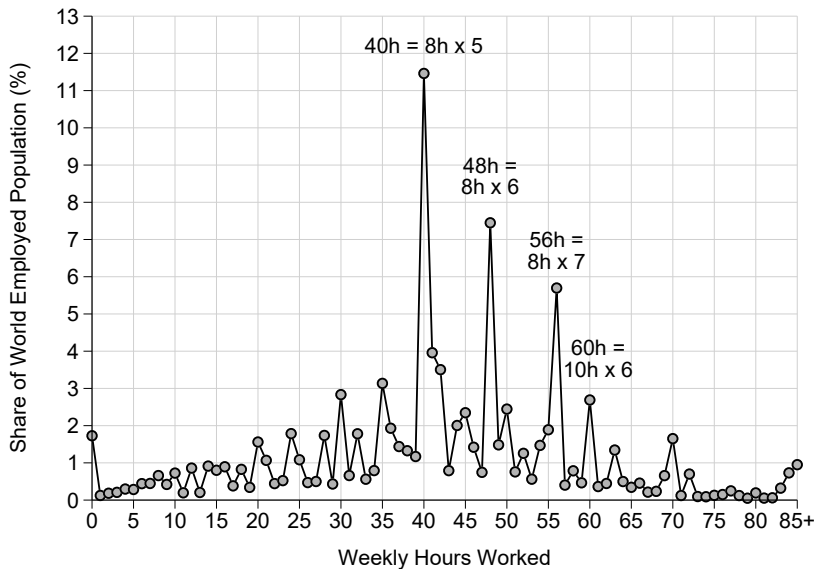


Largest missing countries: Algeria (pop. 32m), Saudi Arabia (27m), North Korea (22m), Taiwan (21m), Cuba (9m).

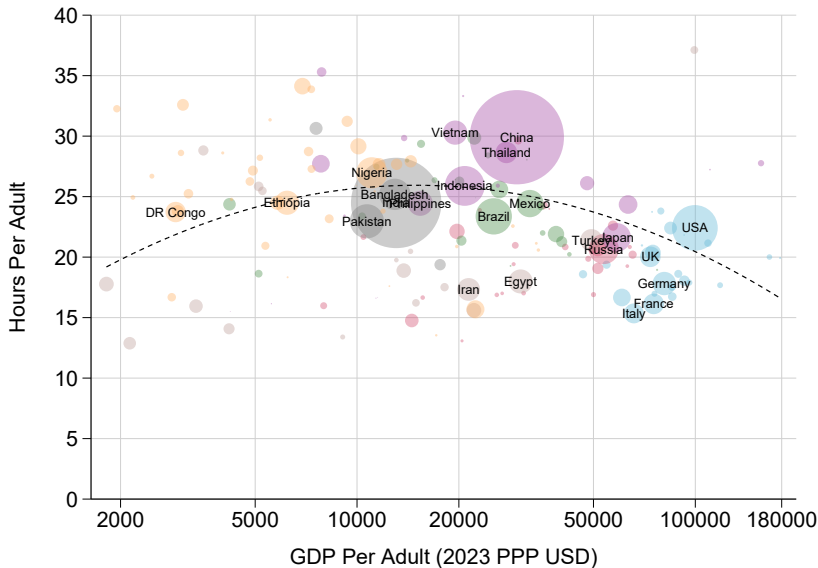
Global Hours **per Adult** by Age and Gender



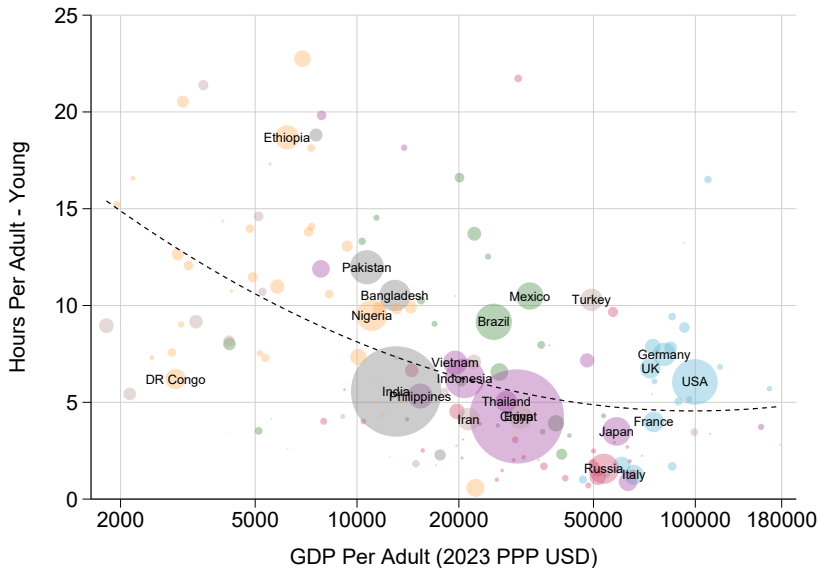
The World Distribution of Hours: the Role of Norms



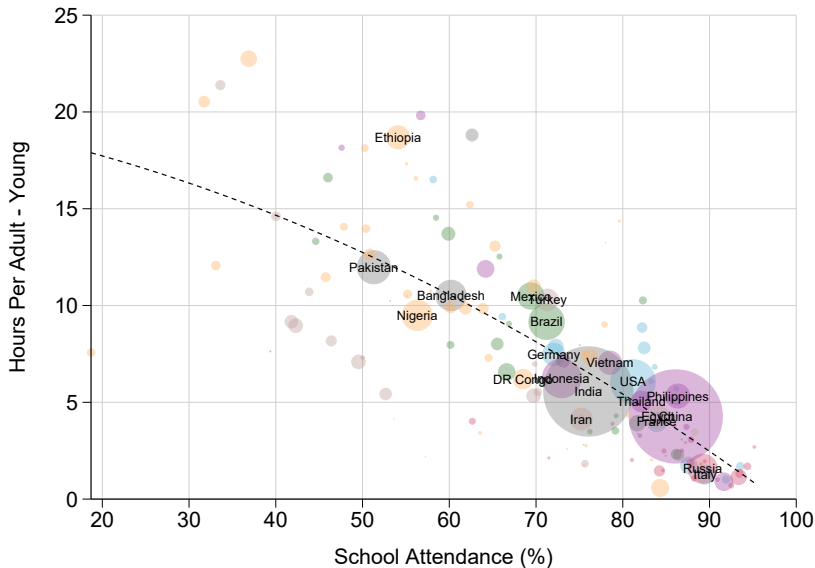
Working Hours and Development: Hours per Adult (15+)



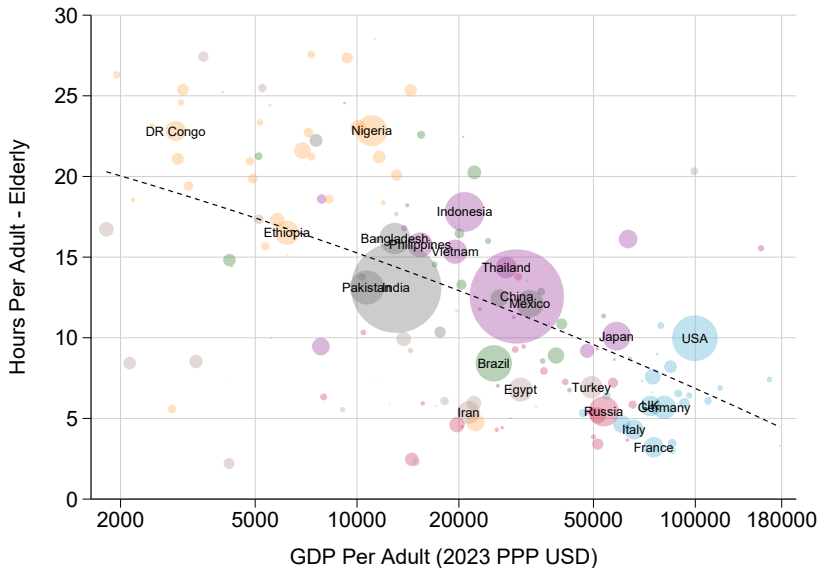
Working Hours of the Young (15-19)



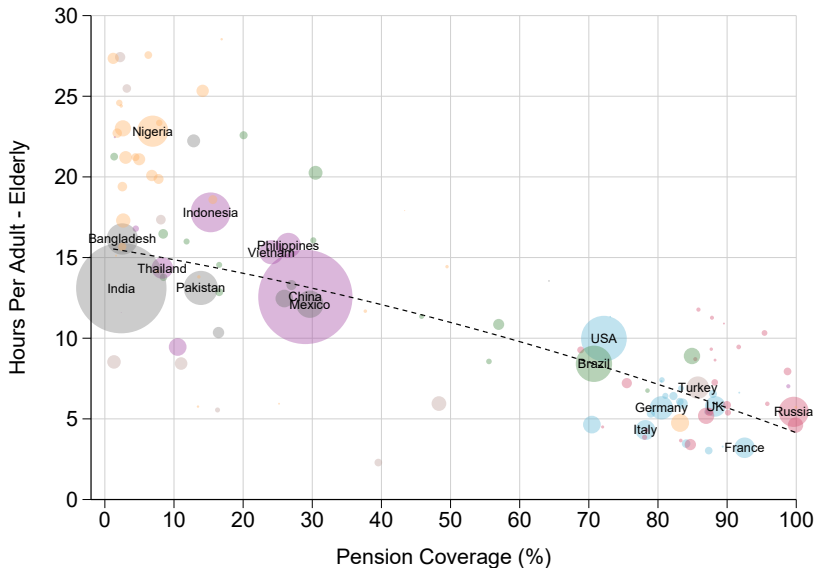
Working Hours of the Young and School Attendance



Working Hours of the Elderly (60+)

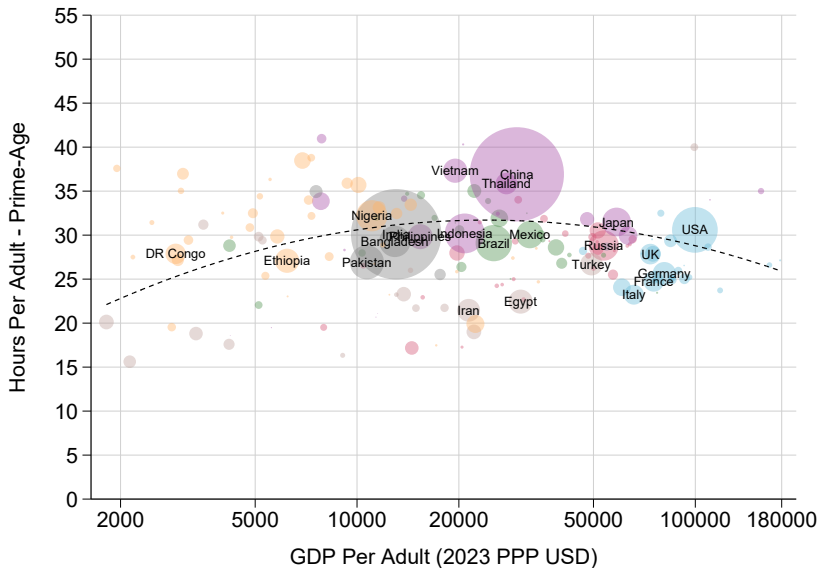


Working Hours of the Elderly (60+) and Pension Coverage

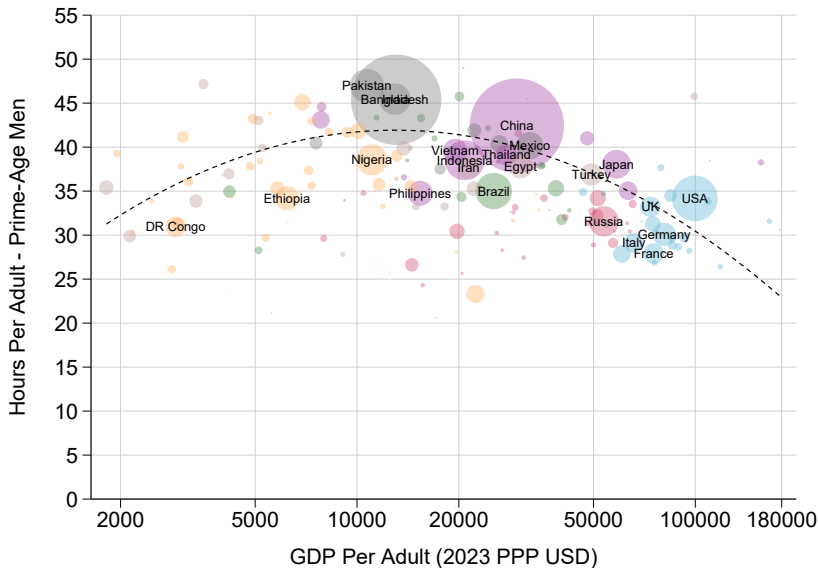


Pension coverage = % of elderly living in a household receiving a public pension

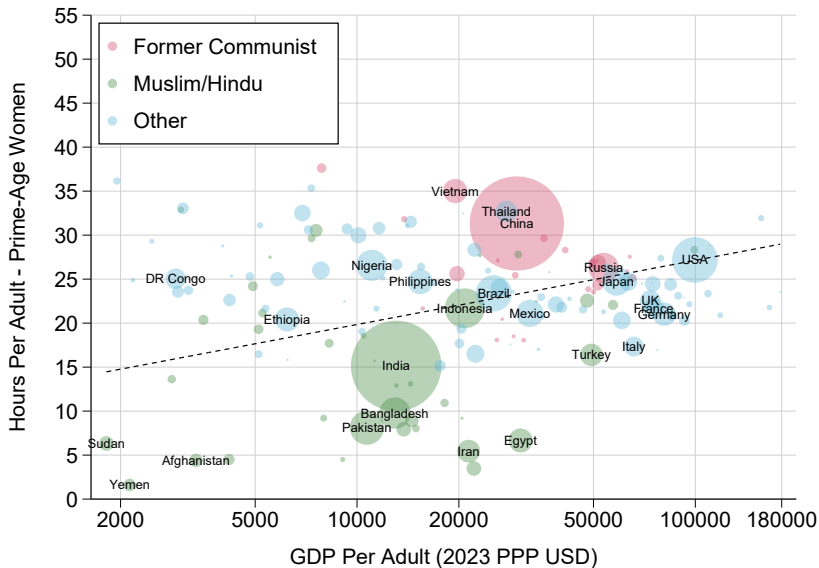
Working Hours among Prime-Aged Adults (20-59)



Hours per Adult, Prime-Aged Men (20-59)



Hours per Adult, Prime-Aged Women (20-59)

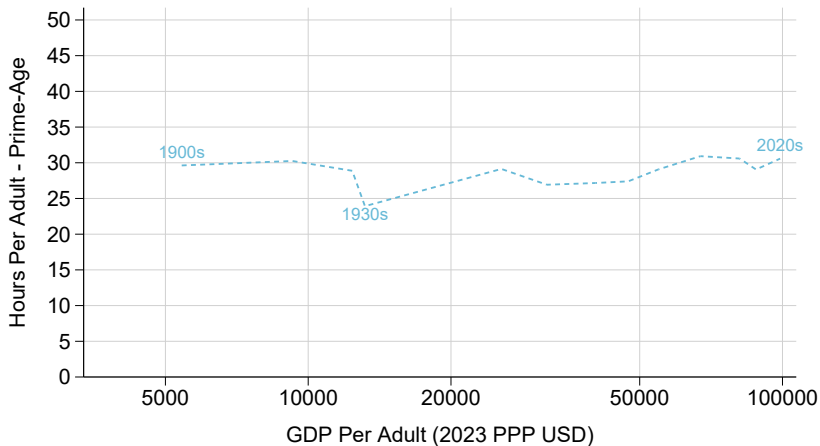


Hours and Development in Cross-Section: Summary

	(1) All Adults	(2) Prime-Age Adults	(3) Prime-Age Men	(4) Prime-Age Women	(5) Young 15-19	(6) Elderly 60+
Log GDP Per Adult	-0.82 (0.67)	0.59 (0.71)	-2.27** (1.02)	3.16** (1.26)	-2.20*** (0.61)	-3.48*** (0.54)
Mean DepVar	24.7	30.7	39.3	22.3	6.6	12.5
N	160	160	160	160	159	160

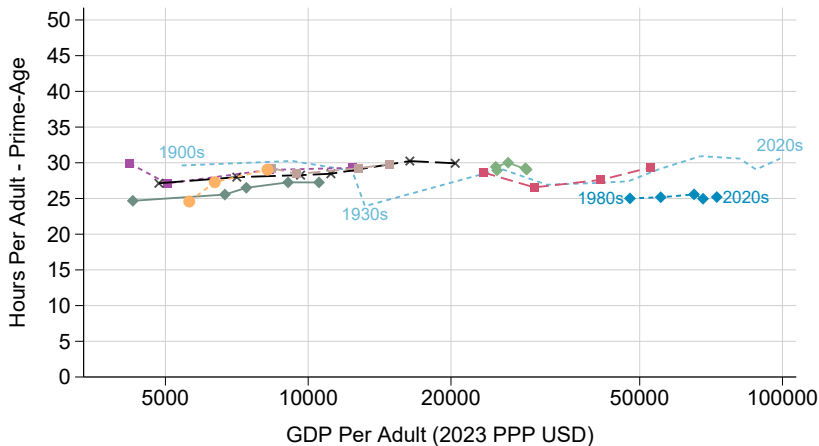
Long-Run Trends - Prime Aged (20-59)

Each dot is a decade average, last dot=2020s, US since 1900 (Francis-Ramey)

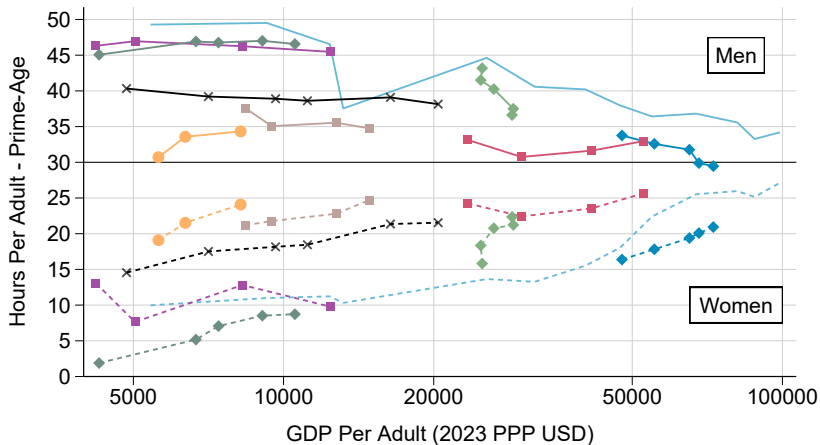


Long-Run Trends - Prime Aged (20-59)

Each dot is a decade average, last dot=2020s, US since 1900 (Francis-Ramey)



Long-Run - A Great Gender Reshuffling



Hours and Development: Cross-Section vs. Panel Data

A. Cross Section

	(1) All Adults	(2) Prime-Age Adults	(3) Prime-Age Men	(4) Prime-Age Women	(5) Young 15-19	(6) Elderly 60+
Log GDP Per Adult	-0.82 (0.67)	0.59 (0.71)	-2.27** (1.02)	3.16** (1.26)	-2.20*** (0.61)	-3.48*** (0.54)
Mean DepVar	24.7	30.7	39.3	22.3	6.6	12.5
N	160	160	160	160	159	160

B. Panel Data

	(1) All Adults	(2) Prime-Age Adults	(3) Prime-Age Men	(4) Prime-Age Women	(5) Young 15-19	(6) Elderly 60+
Log GDP Per Adult	-0.54* (0.30)	0.96*** (0.30)	-4.86*** (0.38)	6.14*** (0.48)	-7.54*** (0.50)	0.08 (0.32)
Mean DepVar	22.3	28.5	36.3	21.0	8.1	9.3
N	2,166	2,166	2,166	2,166	2,143	2,166

Prime-Age Hours: Labor Taxes, Transfers, and Regulations

Labor taxes and transfers can reduce hours of work through substitution and income effects.

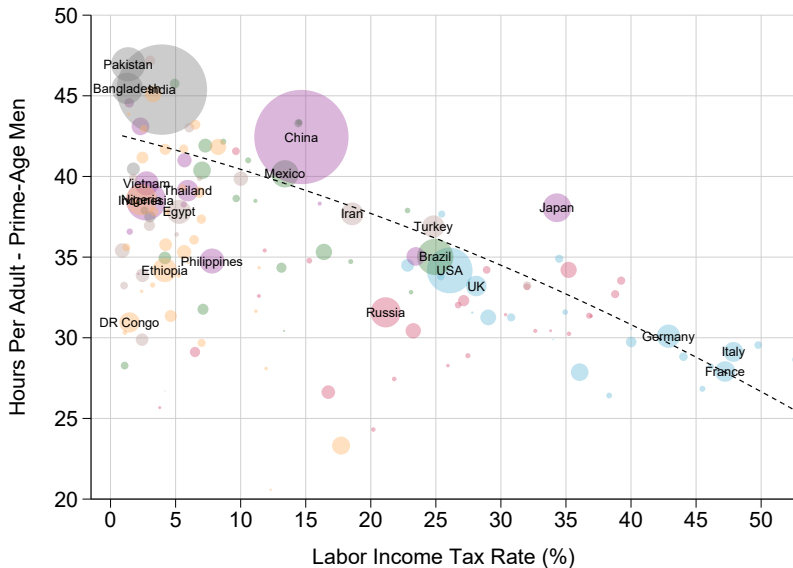
Bachas et al. (2024) have constructed tax rates. We use average labor income tax rates.

Gethin (2024) has constructed govt spending variables. We use cash transfers/GDP (excluding pensions)

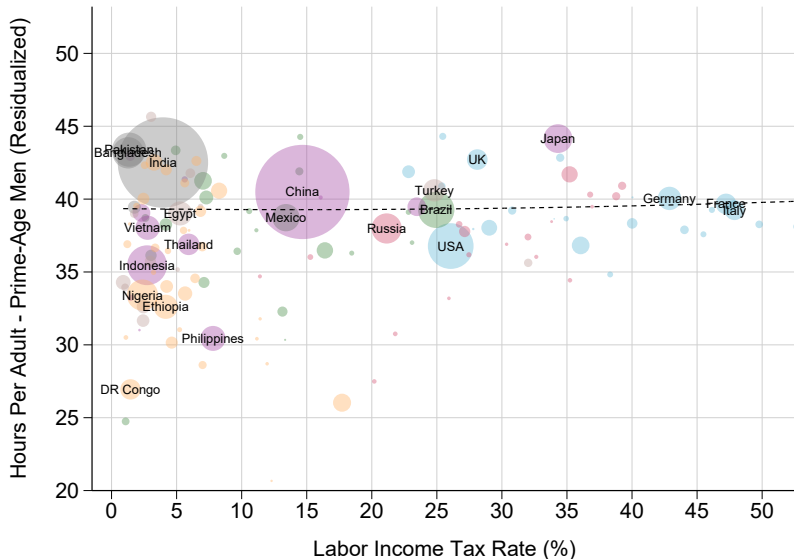
Working Hours Regulations Overtime premium pay, maximum hours, mandated vacations, etc.

World Bank has database of working hours regulations (12 variables): we create a single index.

Working Hours vs. Labor Income Taxes, Prime-Aged Men



Working Hours vs. Labor Income Taxes, Prime-Aged Men, Conditioning on Social Spending & Regulations/Formality



Conclusion

This Paper: A New Global Database on Working Hours by age, gender, sector in 160 countries.

Global Historical Correlates of Hours Worked:

- 1) Education (young) and pension systems (elderly).
- 2) Cultural norms (gender).
- 3) Structural change from agriculture to industry/services
- 4) Labor income taxes / transfers / working regulations.
- 5) Little independent effect of economic development.

→ **Collective choices powerfully shape working hours over and above pure economic factors.**

Thank You!