Macroeconomics and Inequality

Habilitation à Diriger des Recherches: Soutenance

September 4, 2025

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Sciences Po, CNRS & CEPR

Macroeconomics and Inequality

- Scientific research since 2015
  - "Optimal Redistribution: Rising Inequality vs. Rising Living Standards"
- Research perspectives
- Research management

Scientific Research

- Inequality, fiscal policy, and business cycles
  - Distribution of **taxes and transfers** and macroeconomic dynamics in HA(NK)
  - Heterogeneity in labor supply elasticities & in marginal propensities to consume

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  - Heterogeneity in labor supply elasticities & in marginal propensities to consume
  - Spending is more expansionary when financed with more progressive taxes
    + Ferriere and Navarro, Review of Economic Studies (2024)
  - Labor tax credits to low-income workers can stabilize business cycles
    + Ferriere and Navarro, IMF Economic Review (accepted)

Scientific Research

- Optimal fiscal policy: Bridging Mirrlees and Ramsey
  - Optimal instruments with functional forms guided by insights from public finance

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  - A UBI combined with simple progressive taxes is typically welfare-improving
    + Ferriere, Gruebener, Navarro, and Vardishvili, JPE Macro (2023)
  - Fiscal policy and non-homothetic preferences
    + Ferriere, Gruebener, and Sachs, R&R JPE (2025)

Scientific Research

- Inequality in open economies
  - Dynamic models of trade with incomplete markets and education
    - Ferriere, Navarro, and Reyes-Heroles, working paper

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- Ambiguity, robustness, and business cycles
  - Optimal fiscal policy with robust preferences
    - Ferriere and Karantounias, AEJ Macro (2019)
  - International risk-sharing with smooth-ambiguous preferences
    - Backus, Coleman, Ferriere, and Lyon, JEDC (2016)

Original Manuscript

- "Optimal Redistribution: Rising Inequality vs. Rising Living Standards"
  - With Philipp Gruebener and Dominik Sachs

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    Mankiw, Weinzierl, and Yagan (2009), Diamond and Saez (2011)
- Large increase in **standard of living**
  - Income per capita tripled, spending share on necessities dropped

$\Rightarrow$ How does the standard of living affect the optimal tax-and-transfer ($t\&T$) system?

General Approach

- **This paper:** Optimal taxation with non-homothetic preferences
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- **Formalize** the effects of rising living standards in a static Mirrlees setup
  - Distribution vs. efficiency concerns

    Heathcote and Tsujiyama (2021)
- **Quantify** the effects of rising inequality vs. rising living standards in Aiyagari setup
  - Using inverse optimum approach

    Bourguignon and Spadaro (2012), Lockwood and Weinzierl (2016)

Intratemporal and Intertemporal Allocations

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  - IA preferences Alder, Boppart, and Mueller (2022)

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  - $\Rightarrow$ Typically generate Decreasing Relative Risk Aversion
- Theoretical literature Stiglitz (1969), Hanoch (1977), Crossley and Low (2011), Atkeson and Ogaki (1996), Browning and Crossley (2000)
- Empirical literature Ogaki and Zhang (2001), Zhang and Ogaki (2004), Blundell, Browning, and Meghir (1994), Attanasio and Browning (1995), ...

Rising Living Standards and Redistribution

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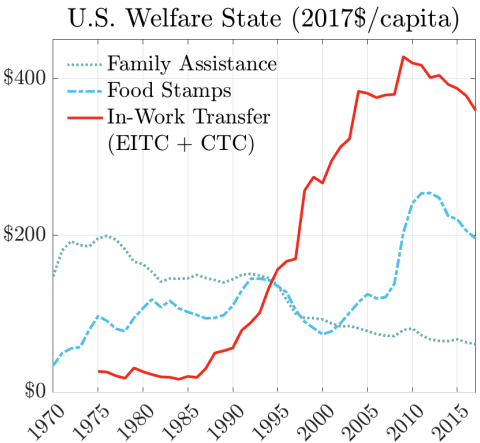
- Quantitatively large effects of rising living standards
  - Calibrated model generates a small fall in relative risk aversion
  - Rising living standards calls for less redistribution
  - Dampens by 30% the optimal increase in redistribution due to rising inequality

Research Perspectives

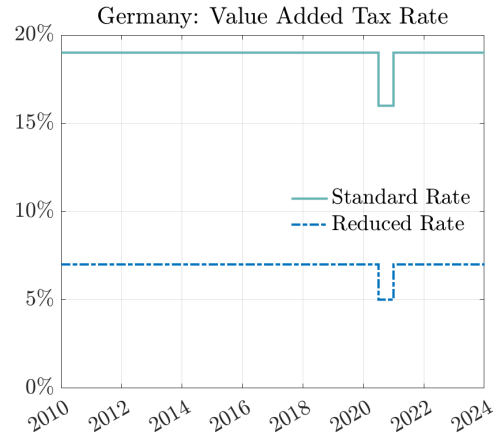
- On income support to the poor
- On consumption taxes and the business cycle
- On wealth dynamics and wealth taxes

On Transfers to the Poor and Work Requirements



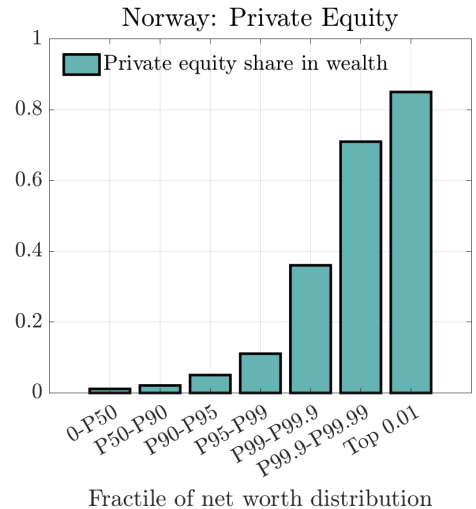
- Paradigm shift in the design of the welfare state
  - **In-work transfers**: work requirements
  - ↑ incentives: labor participation; ↓ redistribution
- **Optimal provision** of both types of transfers? Why did in-work transfers expand over time?
- Quantitative model with heterogeneity across household types and rich labor decisions
  - Structural estimation, large-scale optimization
  - Historical perspective

On Consumption Taxes in Recessions



- Temporary consumption tax cuts recently been discussed in European countries in recessions
  - Redistribution gains
- Consumption taxes as **automatic stabilizers**?
- Theoretical equivalence between τ_c & G
- Quantify optimal time-varying τ_c

On Capital Income Taxes on Private Equity



- The wealthiest mostly invest in private equity
  - Large capital returns
- Should we tax these **returns**? Do these returns reflect skills? Or rents/market power of "extractive" investors?
- Evidence on wealth dynamics of entrepreneurs vs. investors using Norwegian data
- Quantitative model with heterogeneous returns to evaluate wealth taxes

Research Management

- Student supervision
  - EUI: Ph.D. second supervisor
  - PSE, Sciences Po: Ph.D. co-supervision, member of committees; master supervision
  - Member of Ph.D. thesis jury
- Teaching, editorial activity, conferences

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Thank you!

RETTHINQ: Summary

	In-Work Transfers	Consumption Taxes	Capital Taxes
Evidence	• New measures of distributions of transfers since the 80s United States		• Entrepreneurs/investors ○ Clusters of investors ○ Skill/market power Norway
Theory	• New transfer functions to benchmark Ramsey vs. Mirrlees	• New equivalence between τ^c and G	
Quantitative	• New OLG model with heterogeneity married/single/children & labor ○ Structural estimation ○ Large-scale Ramsey optimization ○ Historical perspective	• Optimal rule for τ^c in a rich HANK model	• New model with investors & entrepreneurs ○ Taxation of investors vs. entrepreneurs

WP1: Overview

- Theory: Unconditional/in-work transfers depend on intensive/extensive elasticities
  Besley and Coate (1992), Saez (2002)

- Applied literature: Elasticities of individuals at some points in the cross-section
  MaCurdy (1981), Blundell and MaCurdy (1999), Blau and Kahn (2007), Meghir and Phillips (2010), Bargain & Peichl (2016), ...

- Quantitative OLG model to structurally estimate intensive and extensive elasticities at the household level
  - Accounting for rich household type heterogeneity and labor supply decisions
  - Matching distributions of participation/hours/income/... and evidence on elasticities

- Evidence (1.1); theory (1.2); quantitative work: optimal (1.3), historical (1.4)

WP1: Evidence

- **WP1.1: On the Nature & Scope of Fiscal Redistribution Since the 80s**
  - – Documents distributional effects of the shift to in-work transfers in the U.S.
    - + Imputation of transfers over time using CPS and SIPP
  - – Introduces new functional forms for unconditional and in-work transfers
    - + Provides yearly parameter estimates for use in macro models

⊙ Moffitt and Pauley (2018), Cardona, Moffitt, and Pauley (2022), Ferriere, Grübener, Navarro and Vardishvili (2023)

⊙ Guner, Kaygusuz, and Ventura (2014), Heathcote, Storesletten, and Violante (2020), Borella, de Nardi, Pak, Russo, and Yang (2024), Fleck, Heathcote, Storesletten, and Violante (2024), Guner, Rauh, and Ventura (2024), Ferriere and Navarro (2025a)

WP1: Theory

- **WP1.2: A Tractable Framework of Transfers with Work Requirements**
  - – Static theoretical Ramsey model
    - + Simple instruments: Formalize interaction of both transfers with tax progressivity
    - + Rich fiscal functions: Benchmark Ramsey against Mirrleesian optimum

⊙ Mirrlees (1971), Saez (2002), Hansen (2021), Boyer, Bierbrauer, and Hansen (2023)

⊙ Heathcote, Storesletten, and Violante (2017), Heathcote and Tsujiyama (2022), Ferriere, Grübener, Navarro and Vardishvili (2023)

WP1: Quantitative Model

- **WP1.3: Optimal Transfers and Tax Credits in the United States**
  - Estimate structural life-cycle model with rich household heterogeneity
    - + Household types: single/married/children; labor decisions: intensive/extensive
    - + Simulated Method of Moments
  - Recover labor elasticities across household types and income levels
  - Compute optimal policy for unconditional and in-work transfers and progressive taxes

⊙ Erosa, Fuster, and Kambourov (2016), Attanasio et al. (2018)

⊙ Conesa and Krueger (2006), Guner, Kaygusuz, and Ventura (2012, 2020, 2023), Kindermann and Krueger (2022), Boar and Midrigan (2022), Ferriere, Grübener, Navarro and Vardishvili (2023)

⊙ Froemel and Gottlieb (2021), Ortigueira and Siassi (2023)

⊙ Rothstein (2010), Gravoueille (2024)

WP1: Quantitative Model

- **WP1.4: Why Has the EITC Expanded So Much Since the 1980s?**
  - Recalibrates the model to the U.S. economy of the late 1970s
  - Quantifies: structural changes $\Rightarrow$ labor elasticities $\Rightarrow$ optimal redistribution
    - Changes in labor force participation: (married) women, men
    - Changing marriage patterns: single mothers, assortative matching
    - Rising inequality

⊙ Heathcote, Storesletten, and Violante (2020), Brinca, Duarte, Holter, and Oliviera (2022), Ferriere, Grübener, and Sachs (2025)

WP2: Theory and Quantitative Model

- **WP2.1: Consumption Taxes as an Automatic Stabilizer**
  - New theoretical equivalence: consumption tax cuts vs. government spending shocks
    - + Separable log-utility: $U(c,n) = \log c - v(n)$ in NK model (Gali 2008)
  - Quantitative exploration of optimal consumption tax rule $\tau_{c,t} = \bar{\tau}_c + \sigma \log(Y_t/Y)$
    - + Rich HANK model suitable to analyze business cycles

⊙ Parodi (2024), Bachmann, Born, Goldfayn-Frank, Kocharkov, Luetticke, and Weber (2025)

⊙ Wolf (2024), Bartal & Becard (2024)

⊙ Oh & Reis (2012), McKay & Reis (2016), Ferriere & Navarro (2025b), ...

⊙ Kaplan, Moll & Violante (2018), Bilbiie (2020), Bayer, Born, & Luetticke (2024), Ferriere & Navarro (2025a), Auclert, Rognlie, & Straub (2025), ...

⊙ Blundell (2009), Benzarti, Carloni, Harju, and Kosonen (2020), ...

WP3: Overview

- Wealth inequality partly driven by capital return heterogeneity
  - Key component: private businesses
- Capital income taxation depends on nature of capital returns
  - Type- vs. scale- dependance; productivity vs. market power/rents
- What do we know about capital returns to private businesses in the data? Should we tax entrepreneurs $\neq$ investors?
- Evidence: investors vs. entrepreneurs, networks of investors; quantitative model

⊙ Fagereng, Guiso, Malacrino, and Pistaferri (2020), Bach, Calvet, and Sodini (2020), Halvorsen, Hubmer, Ozkan, and Salgado (2024)

⊙ Gaillard and Wangner (2022), Guvenen, Kambourov, Kuruscu, Ocampo, and Chen (2023), Ferey, Lockwood, and Taubinsky (2024), Gerritsen, Jacobs, Spiritus, and Rusu (2024), Schulz (2024)

WP3: Evidence

- **WP3.1: Who Are the Wealthiest Individuals: Entrepreneurs or Investors?**
  - Decompose top-wealth private-business accumulation
    - + Norwegian data: shareholder registry & board roles, personal income & wealth
    - + Classify holdings via: roles, wage history, shares, founder status

- **WP3.2: Heterogenous Returns in Private Businesses: Network Approach**
  - Clusters of serial co-investors obtain persistently high returns? Market power?
  - Build the investors' network $\Rightarrow$ Identify "Golden clusters"
  - Drivers of high returns using firm-level data and synthetic matching estimation
    - + Do comparable firms ex-ante perform better? Do comparable firms ex-post reward investors with higher returns?

⊙ Fagereng, Guiso, Malacrino, and Pistaferri (2020), Halvorsen, Hubmer, Ozkan, and Salgado (2024)

⊙ Kerr, Lerner, and Schoar (2014), Bernstein, Giroud, and Townsend (2016), Greenwood, Akcigit, Dinlersoz, and Penciakova (2022), Karlsen, Kisseleva, Mjos, and Robinson (2025), Boar, Gorea, and Midrigan (2025)

WP3: Quantitative Model

- **WP3.3: Market Power and Capital Income Taxes**
  - Life-cycle quantitative model with entrepreneurs and investors
    - + Exogenous stochastic processes
    - + Matching frictions to generate endogenous stochastic returns
  - Evaluate optimal tax policy
    - + Capital income taxes higher on investors than on entrepreneurs?

⊙ Guvenen, Kambourov, Kuruscu, Ocampo, and Chen (2023), Boar and Knowles (2024), Boar and Midrigan (2024), Guvenen, Kambourov, Kuruscu, and Ocampo (2024), Bhandari, Kass, May, McGrattan and Schulz (2025), Guvenen, Ocampo, and Ozkan (2025)

⊙ Denes, Howell, Mezzanotti, Wang, Xu (2023)

CV Highlights

- Education: PhD in Economics, **New York University** (2015)
- Academic positions
  - Research Fellow, **Centre National de la Recherche Scientifique** (CNRS)
  - Associate Professor, **Sciences Po**
  - Research Affiliate, **Center for Economic Research** (CEPR)
- Main publications on the topic
  - HANK: **Review of Economic Studies** (2025), **IMF Economic Review** (2025, new!)
  - Quant macro/public finance: **JPE Macro** (2023)
- Main awards
  - Maria de Maeztu Fellowship, Cemfi (2025), Fernand Braudel Fellowship, EUI (2022)
  - ⋆ Bronze Medal, CNRS, (2025, new!)