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A Tool to Simulate Tax-and-Benefit Reforms
An Example with Basic Income

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  - AXA Research Fund
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Presentation of simulated reforms

The reform under study

- **A Radical Reform of the Tax and Benefit System**
  - Removal of most means-tested benefits (except disability benefits)
  - Removal of the current income taxes (flat-tax and progressive income tax)
- **A New Unified System**
  - A Basic Income, at the family level, with supplement for renters
  - A unified income tax
    - at the individual level
    - without loopholes
    - based on all income (net of payroll taxes)

The reform under study

- **Objectives**
  - Objective 1 : balanced budget
  - Objective 2 : to maintain the same minimum income support
  - Objective 3 : to limit loosers within the poorest part of the distribution
- **Many scenarios are possible**
  - Here, only one scenario as an illustration of the simulation tool

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Presentation of simulated reforms

TAXIPP 1.0 Model

Case study

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- Redistributive impacts

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TAXIPP 1.0 Model

Methodology: TAXIPP 1.0 model

- **Data**
  - Income tax returns (FELIN, DGFiP)
    - Sample of 500,000 French tax units
    - Universe among top 1%
  - Survey "Revenus fiscaux et sociaux" (ERFS, Insee)
- **Separate data**
  - Indirect taxation (*Enquête budget des familles*, Insee)
  - Local taxation (*fichiers Fideli*, Insee)
- **Connection to the calculator OpenFisca**
  - Open source calculator
  - Used also by different governmental agencies
    - `https://mes-aides.gouv.fr`

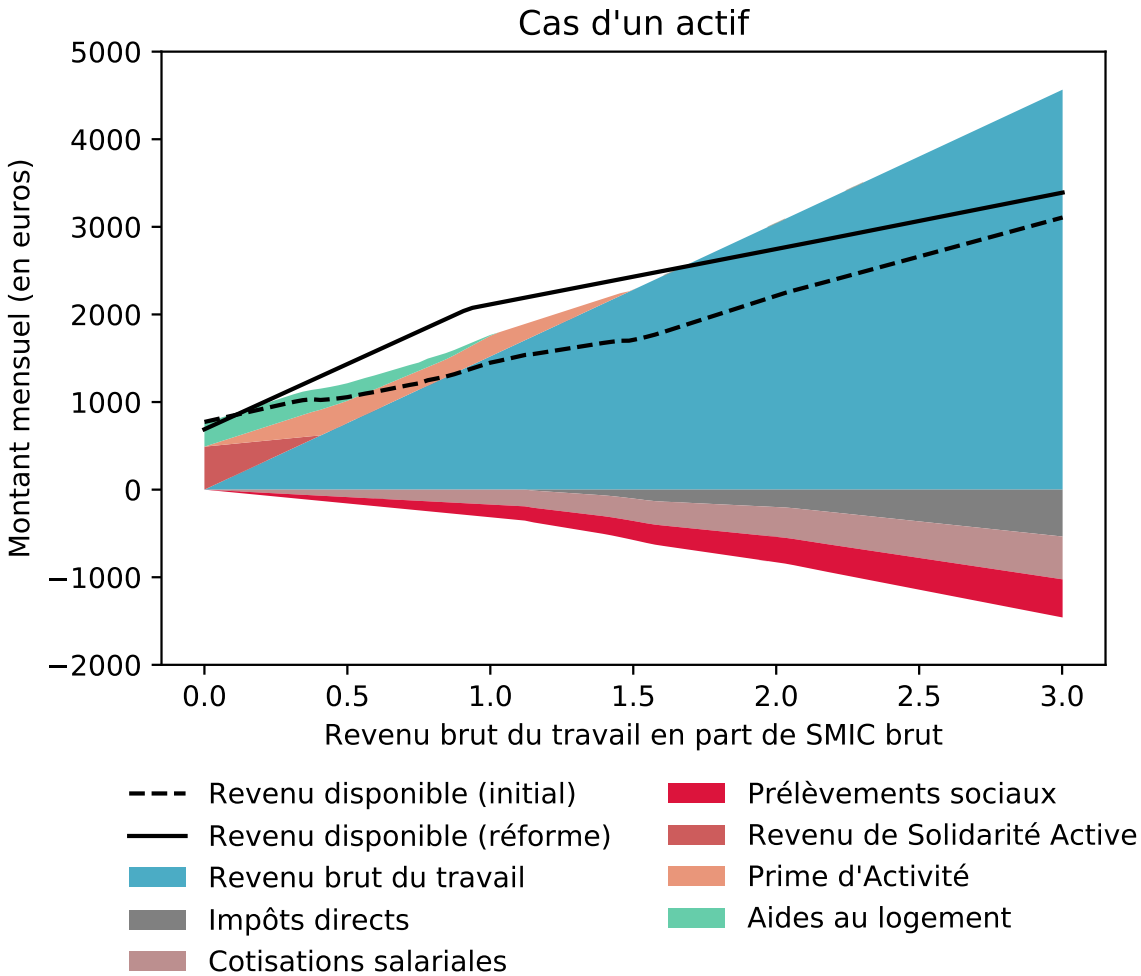
Case study

Case study: negative income tax on labor income

- **New income tax schedule**
  - Labor income
    - -10.0% up to 15,000 €
    - 53.2% above 15,000 €
  - Other income
    - Flat tax rate of 53.2%
- **Family basic income**
  - Amount: 492 € monthly
  - Supplement for each child under 14: +30%
  - Supplement for each child above 14: +50%
  - Supplement for being a renter: +40%
- **Cost:** 1.3 billion euros

Case of a single worker

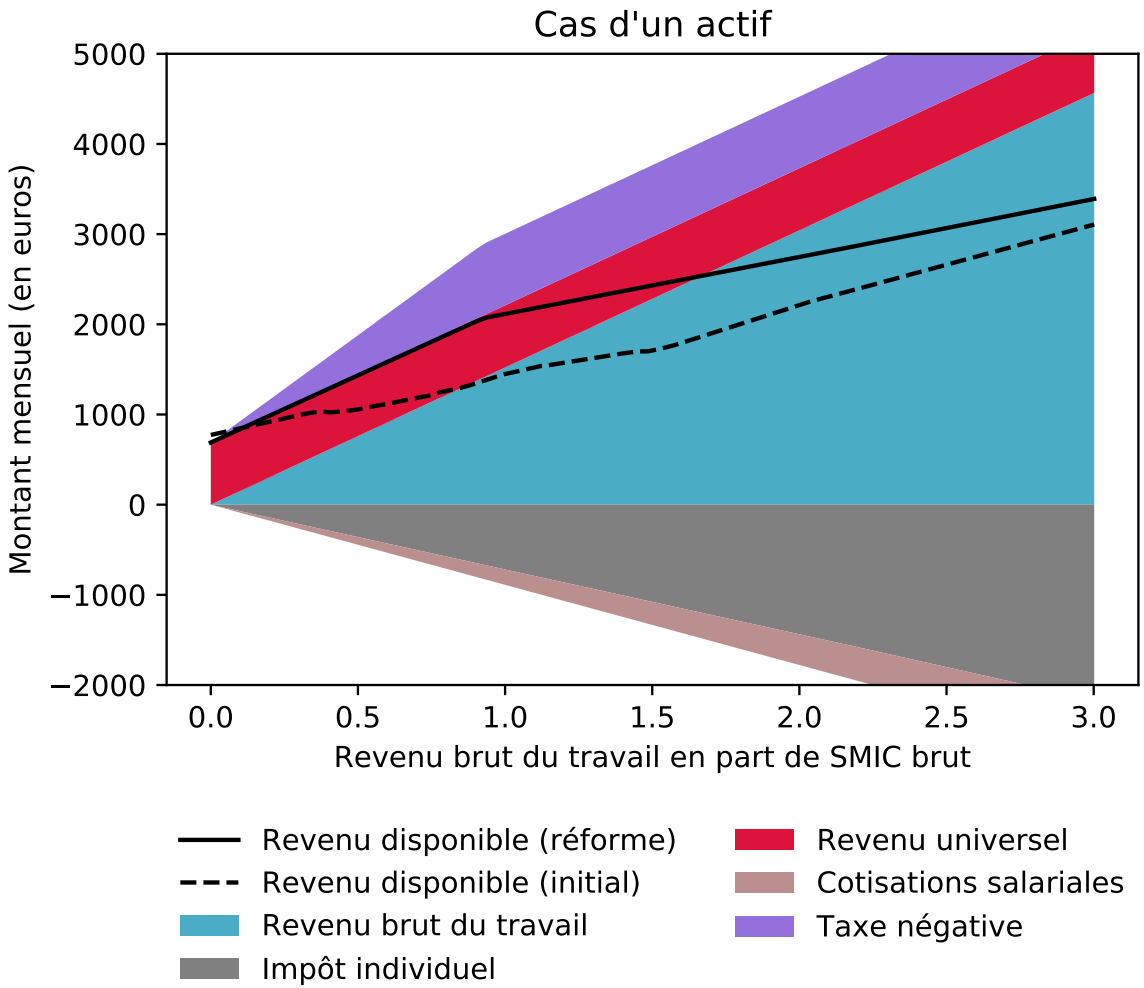
Current system



Note: Simulation of the theoretical tax schedule, without underlying data.
Sources: TAXIPP 1.0.

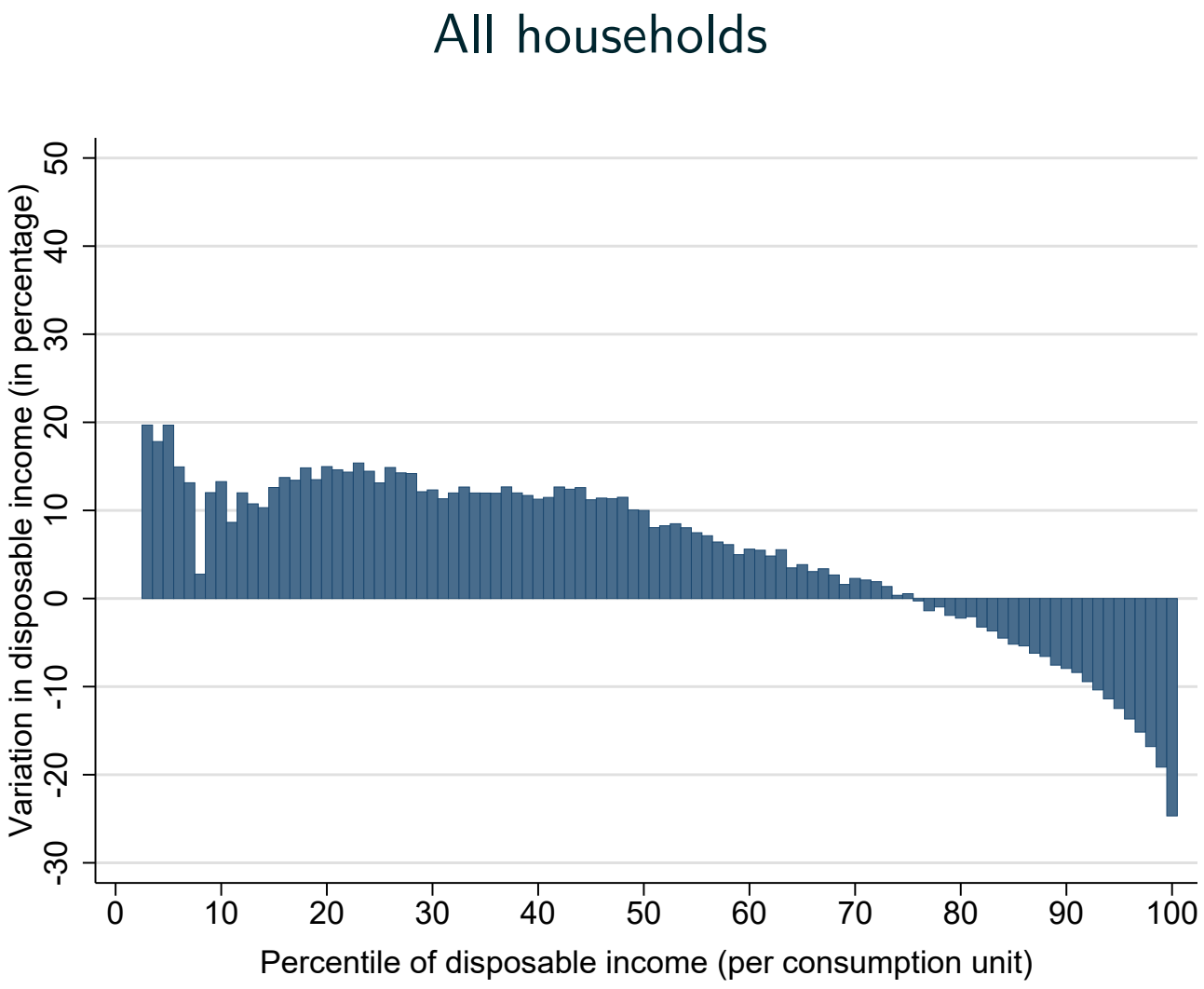
Case of a single worker

After the reform



Note: Simulation of the theoretical tax schedule, without underlying data.
Sources: TAXIPP 1.0.

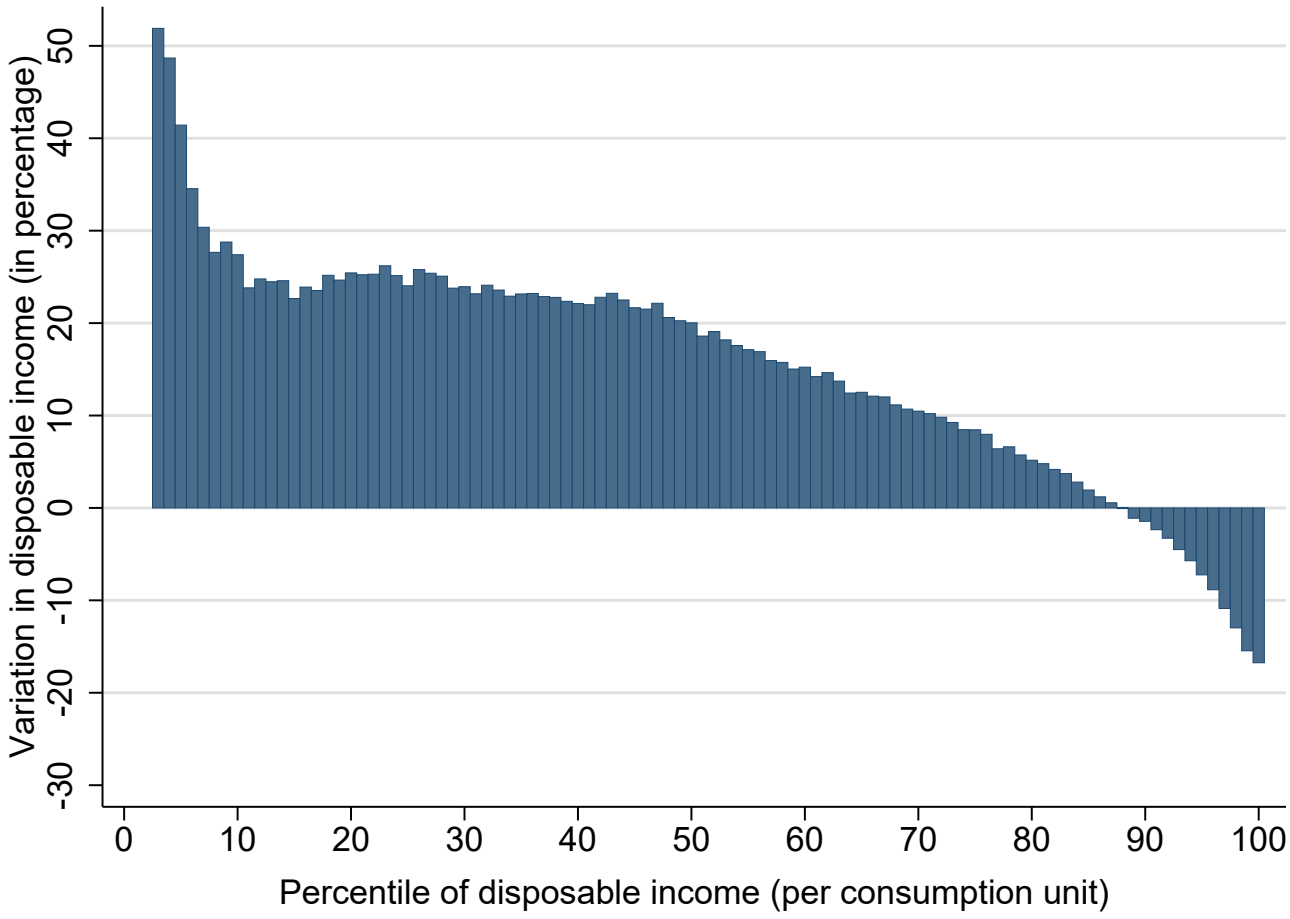
Redistributive impacts



Note: Households are classified according to their disposable income per unit of consumption.
Sources: TAXIPP 1.0, FELIN, ERFS, Budget des familles, Fideli.

Redistributive impacts

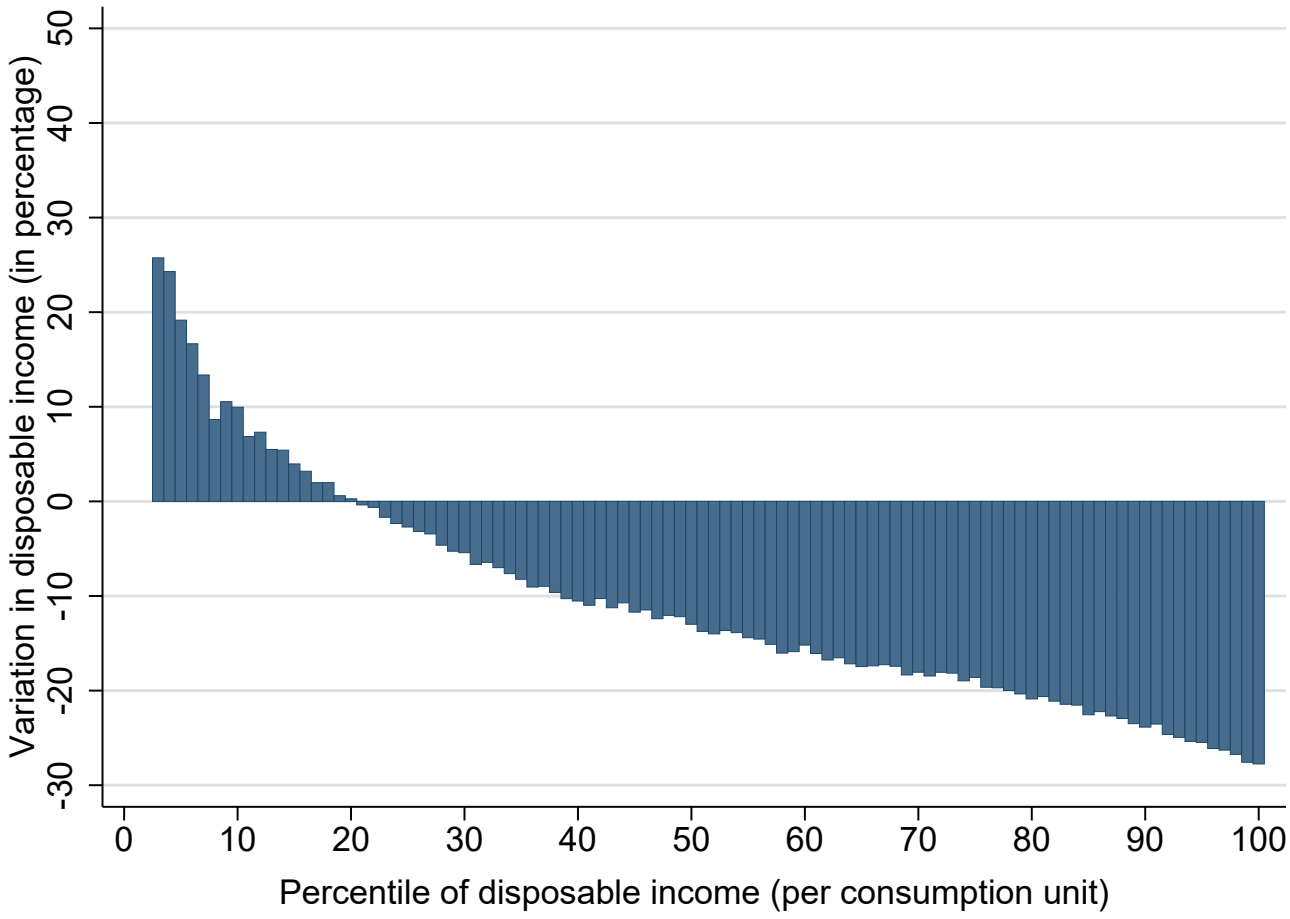
Households with mostly labor income



Note: Households are classified according to their disposable income per unit of consumption.
Sources: TAXIPP 1.0, FELIN, ERFS, Budget des familles, Fideli.

Redistributive impacts

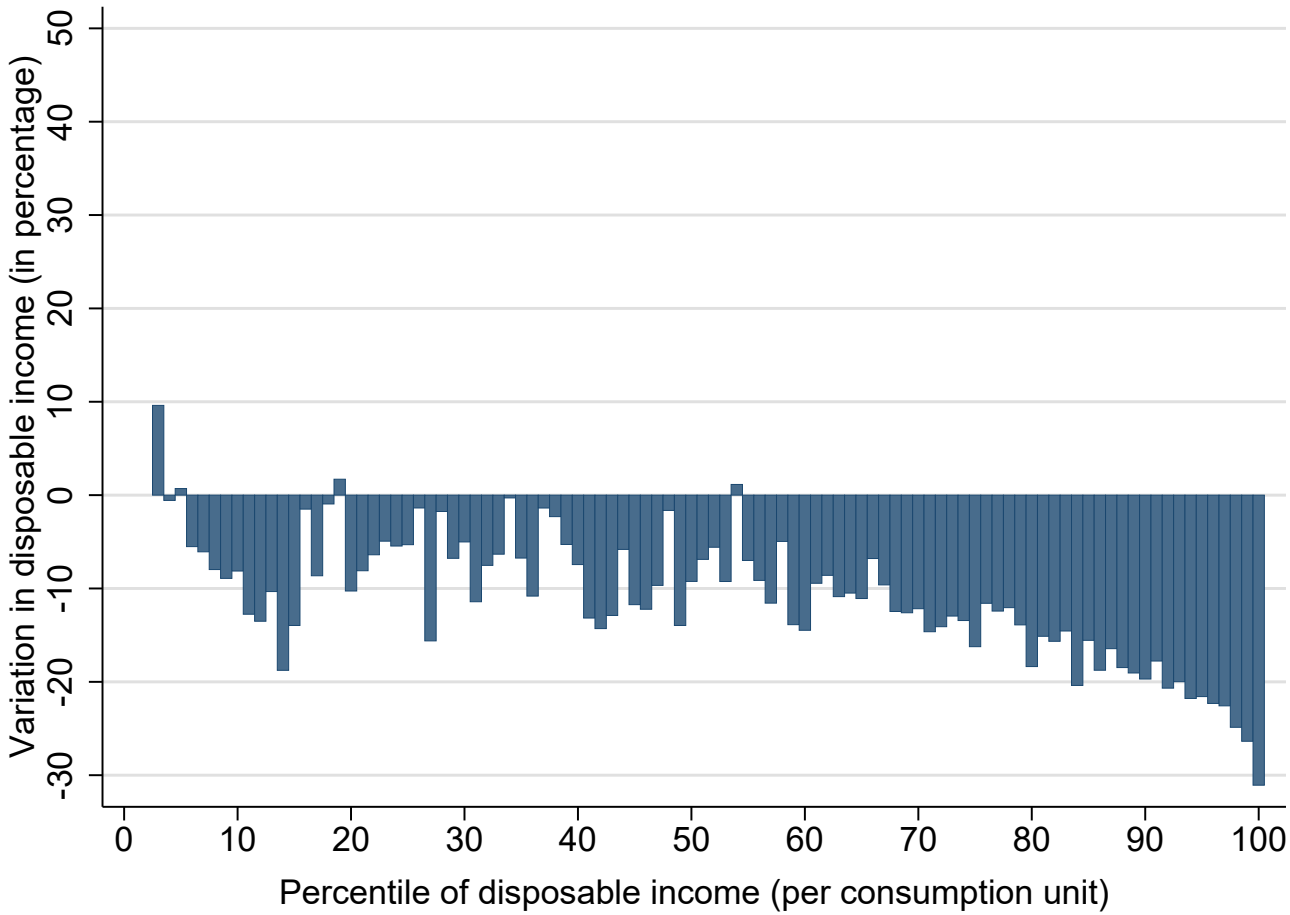
Households with mostly pension income



Note: Households are classified according to their disposable income per unit of consumption.
Sources: TAXIPP 1.0, FELIN, ERFS, Budget des familles, Fideli.

Redistributive impacts

Households with mostly capital income



Note: Households are classified according to their disposable income per unit of consumption.
Sources: TAXIPP 1.0, sur données FELIN, ERFS, Budget des familles, Fideli.

Results of the simulations

- **Some major redistribution**
  - Gains up to the 75th percentile
  - Reductions in disposable income in the top of the distribution
  - -24,7% for the top 1%
  - Redistributive effects in favor of workers
  - At the expense of pensioners and capital income holders
- Highlights both the possibility to design a radical reform of simplification of the tax system, and the difficulty to limit gainers and losers given the current system treats different income sources very differently.

Conclusion

Perspectives for the model development

- **Progress in data access has been major in France**
  - Ministry of finance has been a key player
  - New set of data recently released (wealth tax records, panel data of income tax records)
- **Still some limitating issues**
  - No data on tax evasion
  - No data on tax-preferred savings vehicle (e.g., life insurance accounts)

TAXIPP 2.0 forthcoming

- **Use more sources of administrative data**
  - Universe of local tax data (Fideli, DGFiP-Insee)
  - Universe of Social Security data (matched employer-employee) (DADS, Insee)
  - Data on housing transactions
  - Wealth tax data
- **Capture new sources of heterogeneity**
  - A database with precise localisation
    $\rightarrow$ how different local conditions matter?
  - A database linked with sectorial occupation (to study economy-wide shocks like covid-19)