A Mechanism for the Household
(Carlos E. da Costa, Lucas Lima)

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This Paper

Goal

- Extension of Mirrleesian framework for environment with collective households.

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Main Results

1. A model of collective household behavior that allows comparing outcomes across various institutional settings.
2. Intra-household power distribution doesn't matter for **revelation principle** validity.
   - With a suitable definition of spousal types, **the revelation principle is valid**.
3. Intra-household power distribution matters for **taxation principle** validity.
   - Unless no changes in environment that occur after marriage affect the intra-household power distribution, **the taxation principle doesn't hold**.

Mechanism Design with Collective Households

Environment

Economy populated by a continuum of individuals who are either married or single.

Life cycle:

1. Marriage market that delivers equilibrium distributions of couples and singles.
2. Individuals make transactions, decide how to combine acquired goods with endowment to produce goods, and decide how to share these goods within household.

Key: Nash bargaining + threat points can be affected by changes in environment after marriage.

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Private Information

Two sources: (i) individual types (known by singles and spouses only) and (ii) allocation of goods within couples (known by spouses only).

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✓ Revelation Principle (⇒ Characterization of Incentive-Feasible Allocations)

If a married person's type is given by (i) own productivity, (ii) spousal productivity, and (iii) whether the spouses are in agreement or not, then the revelation principle is valid.

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× **Taxation Principle (⇒ Decentralization of IF Allocations)**

Fails unless the distribution of bargaining power is fully determined at the marriage stage.

Optimal Income Taxation of Couples

Before reading this paper, I knew just a few studies that combine Mirrleesian framework and collective approach off the top of my head (+ Alves, da Costa, Lobel, Moreira, 2021).

- Immervoll, Kleven, Kreiner, Verdelin ('11), Cremer, Lozachmeur, Maldonado, Roeder ('16).
- IKKV (2011): extensive-extensive model; CLMR (2016): intensive-intensive model.
- **IKKV (2011):** W/o income effects on labor supply, similar optimal tax rules under unitary and collective approaches (w/ income effects, additional Pigouvian term).
- **CLMR (2016):** Optimal MTR includes Pigouvian (corrects for a difference in social and private welfare) & incentive (depends on weight structure across couples) terms.

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Multidimensional screening problem.

- Challenging task (first-order approach can fail).
- Frankel (2014), Moser and Olea de Souza e Silva (2019), Malkov (2020).
- Cross-sectional distribution (assortative mating) and taste for redistribution matter.

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Taxation + Marriage/Commitment: Divorce-law changes and optimal taxation of couples?

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- In the 1950s-2010s, the decline of marriage coincided with a rise in cohabitation in the United States (Lundberg, Pollak, and Stearns, 2016).
- Cohabiting couples: Other threat points, other (?) distribution of power.
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Scope for other policy implications.

- E.g., partnerships.
- Full commitment assumption looks more justifiable in this case.