Inheritance, Misallocation, and Development

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Motivation

Countries with larger gender inheritance gaps are poorer.
- Would closing gender gap promote growth?

Policies aiming at closing inheritance gaps have limited effects.
- Why gender-biased inheritance persists?

This paper: Dev. & welfare effects of equalizing children's bequests.
- Law: Women's inheritance rights & set equal inheritance legal default.

What I do: A micro-to-macro approach

Build a quantitative two-sector OLG GE model of land inheritance.
- Parents split time between ag. & non-ag. work + Educate & bequeath children.

Validate the model using new reduced-form evidence from Benin.
- Benin 2004: Extended legal rights over parental bequests to daughters.

Evaluate the aggregate & distributional effects of:
- A constraint on the minimum share of parental bequest left to daughters.

Preview of results: Closing gender inheritance gap · · ·

· · · Roughly triples the gender education gap.
- Men's education +30.8%, women's education -27.0%.

· · · Expands output (+6.0%) due to labor reallocation.
- Men's non-ag. labor roughly doubles, women's more than halves.

· · · Is welfare-improving but transition loss exists.
- Welfare $+2.9\%$ (CEV) in new steady state, -1.01% for initial parents.

Benin 2004: Equal inheritance rights to daughters

- Diff-in-Diffs: $Y_{icat} = \boldsymbol{\delta} \times TREAT_c \times LOW_a + X_{icat} + \epsilon_{icat}$
- $Treat_c$: Cohorts exposed to reform. Age cutoff: 33 (adult), 17 (child).
- Low_a: Administrative where women's land ownership $<$ medium.
- Fixed effects: Birth cohort, administrative area, survey year.
- DHS sampling weights.
- Standard errors clustered by birth cohort and ADM2.

Regression results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Adult							
Dep. Var.:	Land	Agriculture			Employed		
Treat × Low	0.051	0.042	-0.049		-0.006	-0.017	
	(0.015)	(0.020)	(0.027)		(0.027)	(0.023)	
$\widehat{\text{Land}}$				0.480			-0.070
				(0.260)			(0.316)
Sample	Female	Female	Male	Female	Female	Male	Female
Estimates		RF	RF	2SLS	RF	RF	2SLS
Dep. var. mean	0.107	0.242	0.492	0.242	0.842	0.929	0.842
Panel B: Children							
Dep. Var.:		Education Attainment			Education Years		
Treat × Low		0.030	0.245		0.099	0.712	
		(0.100)	(0.086)		(0.298)	(0.332)	
Low × Young × Men				0.215			0.613
				(0.112)			(0.423)
Sample		Female	Male	All	Female	Male	All
Dep. var. mean		1.149	1.921	1.340	3.568	6.265	4.234

Event study

- Adult women/men; Ag. employment (0/1).



- School-aged girls/boys; Educ. attainment (0-3).



Summary of idea

Inheritance: Valuable endowment but under use-it-or-lose-it friction.
- Men are more educated than women & have comp. advantage in non-ag. job.
- Men are tied to ag. sector due to inheritance.
- Shift inheritance ⇒ redistribute land market frictions & labor reallocation.

Parents jointly choose education & inheritance for children.
- Constraint parents respond to equal bequest by adjusting education.

Net effect on development & welfare:
- ↑ Efficiency from labor reallocation *vs.* ↑ distortion from behavioral response.

Environment

- Household: A continuum of homogeneous families live for 2 periods.
- Two-gender model: Each household has a man and a woman.
- Cooperative model: Men and women make joint decisions. Chiappori 1992
- Altruism: Parents are fully altruistic towards children. Barro Becker 1989
- "Transfer": Parents educate (E) & bequeath (L) son & daughter.
- Abstract from: Asset accumulation, matching, population growth. Cordoba Liu Ripoll 2025

Parental maximization problem

$$V(L_f, L_m, E_f, E_m, \vec{L}_A, \vec{E}_A) = \max_{\substack{c_f,\, c_m,\, t_f^a,\, t_m^a, t_f^{na} \\ t_m^{na}, E_f', E_m', L_f', L_m'}} \sum_{j \in f,m} \gamma_j \frac{c_j^{1-\sigma}}{1-\sigma} + \beta \sum_{j \in f,m} \beta_j V_j' \left(L_j', L_{-j,A}, E_j', E_{-j,A}, \vec{L}_A', \vec{E}_A'\right)$$

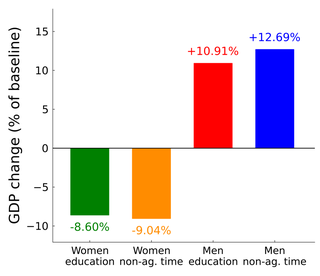
- Budget: $c_f + c_m + p_e(E_f' + E_m') \leq p_a Y_a + w_f E_f t_f^{na} + w_m E_m t_m^{na} - \Phi + T + \Pi_{na}$.
- Time constraint: $t_j^a + t_j^{na} \leq 1, j \in \{f, m\}$.
- Inheritance rule: $L_f' \geq \tau(L_m + L_f)$.
- Bargaining power: $\gamma_f' = L_f'^{\xi} / (L_f'^{\xi} + L_{m,A}^{\xi})$, $\gamma_m' = L_m'^{\xi} / (L_m'^{\xi} + L_{f,A}^{\xi})$.
- Insecure rights cost: $\Phi = \nu L_f t_f^{na} + \nu L_m t_m^{na}$.
- Family farm: $Y_a = A_a (L_f + L_m)^{\theta_a} [\omega_m^a (E_m t_m^a)^{\rho_a} + \omega_f^a (E_f t_f^a)^{\rho_a}]^{(1-\theta_a)/\rho_a}$.
- Rebate T; Firm revenue Π_{na} (due to DRS).

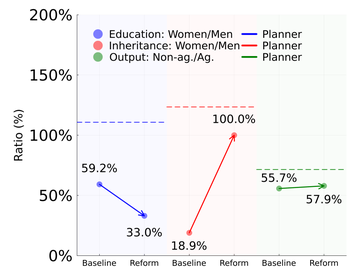
Effects of equalizing inheritance

Moment	Description	$\tau = 0$ No reform	$\tau = 0.5$ Equal inheritance	% Change Equal vs. no reform
L_f	Inheritance: Women	0.606	1.902	+213.9%
L_m	Inheritance: Men	3.198	1.902	-40.5%
E_f	Education: Women	0.637	0.465	-27.0%
E_m	Education: Men	1.076	1.407	+30.8%
$1 - t_f^a$	Non-ag. labor: Women	0.675	0.241	-64.3%
$1 - t_m^a$	Non-ag. labor: Men	0.358	0.680	+90.0%
$E_m/E_f - 1$	Gender education gap	0.689	2.027	+194.0%
Y	GDP	0.651	0.689	+6.0%
W	Household	3.603	3.638	+2.9%

- Gender inequality: Closing inheritance gap → education gap $+194.0\%$
- Men reallocate to HK-intensive sector → Return of educating men ↑.

Equal inheritance ⇒ Development



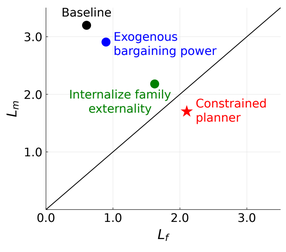


- Decomposition: Mainly due to men with ↑ HK supply ↑ labor in non-ag.
- Efficiency: Inheritance $(+)$; Education $(-)$; Production $(+)$.

Two family externalities & Constraint planner problem

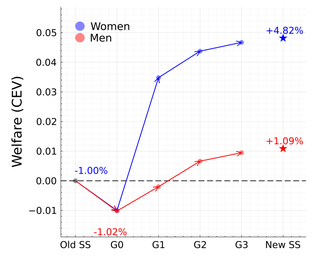
- Endogenous bargaining power. Basu 2006
  - Parents w/ son preference want sons have higher marital bargaining power.
  - Additional incentive to bequest sons, distorts inheritance decisions.
- Family decision externality. Doepke Tertilt 2009
  - Parents bequest/educate by taking other parents' decision as given.
  - Parents neglect that by bequeathing their son (thus raising his bargaining power), they make daughter-in-law have less power & worse-off.
- Both externalities are internalized by constraint planner.

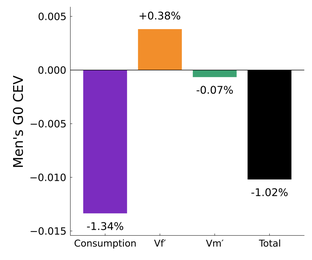
Remove distortion



- Planner chooses slightly female-biased inheritance allocation.
  - By tying women to ag., men work less in ag..
- Inheritance law corrects family externality.
- A land-titling reform eliminate land friction would ↑ gender inheritance gap!

Utility & Transition loss





- Law: Additional constraint on family decision → Costly adjustment.
- Men's "trade-off": Lose as men, gain as fathers' of daughters.

Conclusion

- Persistent gender inheritance gap & policy efforts to close the gaps.
- *This paper: What are the aggregate effects of inheritance law?*
- Equal inheritance: Output & Welfare ↑; Educ. gap ↑ & Transition loss.
  - Development: Increasing men's education + efficient labor allocation.
  - Parental behavior response distorts education allocation.
  - Empowerment face opposition from both men and women.
  - Men lose from empowerment as individuals, gain as fathers of daughters.
  - Family frictions matter for aggregate economy.
  - A land-titling reform can increase gender inheritance gap.