Informality, Children and Female Occupational Choice

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Motivation

- The arrival of children affects labor market outcomes of women (Kuziemko et al., 2018; Kleven et al., 2019, 2024).
- However, this remains underexplored in developing countries.
- These countries are often characterized by high labor market rigidities (in the formal sector) and a large informal sector.
- In Latin America, recent evidence shows that mothers who remain employed reallocate toward informal sector. (Berniell et al., 2021; Martínez Leyva, 2025)

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- In Latin America, recent evidence shows that mothers who remain employed reallocate toward informal sector. (Berniell et al., 2021; Martínez Leyva, 2025)

$\Rightarrow$ This paper studies mothers' reallocation toward the informal sector and quantitatively assesses the mechanisms behind it.

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Preview of the results:

- Conditional on employment, informal entrepreneurship rises by 7.3 pp after childbirth.
- Two dimensions of flexibility in entrepreneurship:
  - Time: full vs part-time
  - Earnings: fewer hours reduce wage earnings one-for-one; entrepreneurial earnings fall less than proportionally.

Motivating Evidence

1. Informality is quantitatively important among employed women.
2. Mothers are more likely to be informal during fertility window. ▸ E2
3. Around first birth:
   - ↓ labor force participation by about 22.2 pp.
   - conditional on employment, ↑ informal entrepreneurship by about 7.3 pp and ↓ formal wage work by about 10 pp.

- Brazilian Labor Force Survey PNAD-Continua 2012–2023. ▸ Why Brazil?
- 17.8% of employed women are informal entrepreneurs and 10.8% are informal wage workers.
- Full-time work is far more common in formal wage employment than in informal entrepreneurship. ▸ sector ▸ occ1digit ▸ stats ▸ number of children by occ

	Share (1)	Full-time share (2)
Formal Workers	0.601	0.927
Formal Entrep	0.113	0.795
Informal Workers	0.108	0.705
Informal Entrep	0.178	0.490

Working women aged 20–40; full-time: 35+ hours.

- Childbirth is associated with a decline in labor force participation and a reallocation across occupations.
- There is lack of panel data with informal job characteristics.

3: Pseudo Event Study

- Childbirth is associated with a decline in labor force participation and a reallocation across occupations.
- There is lack of panel data with informal job characteristics.
- Construct a pseudo-panel around birth of a first child using Kleven 2026.
- Consider a parent i observed at event time $t = 0$ in a calendar year y with age a
- Match this parent to a childless individual j observed in a year $y - n$ with age $a - n$ based on observable demographic characteristics $X_i = X_j$ ▸ on methodology

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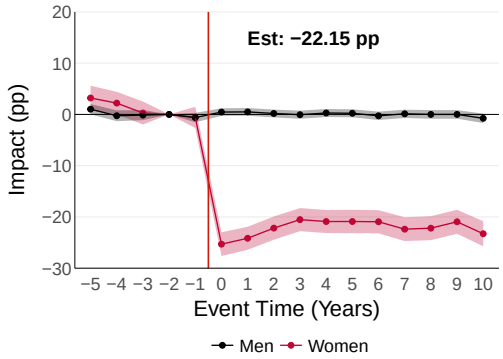
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- Match this parent to a childless individual j observed in a year $y - n$ with age $a - n$ based on observable demographic characteristics $X_i = X_j$ ▸ on methodology
- Match on education, marital status, region, age, year, gender and race
- Estimate changes in occupational composition around first birth

- Estimate a linear probability model for individual i at an event time t in survey year s:

$$Y_{ist} = \underbrace{\sum_{\substack{j=10 \\ j\neq -2 \\ j=-5}} \alpha_j \mathbb{1}[j = t]}_{\text{Event time dummies}} + \underbrace{\sum_{k} \beta_k \mathbb{1}[k = age_{is}]}_{\text{Age dummies}} + \underbrace{\sum_{y} \gamma_y \mathbb{1}[y = s]}_{\text{Year dummies}} + v_{ist}$$

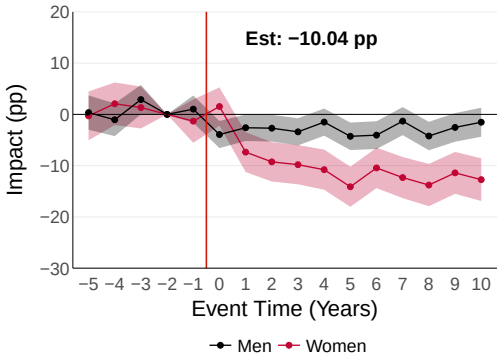
- Focus on α_t, time event $t \in \{-5, -4, -3, -2, -1, 0, 1, 2, ...10\}$ where $t = 0$ corresponds to the birth of a first child.
- α_t for $t \geq 0$ captures the effect of parenthood on outcome Y after the birth of a first child.
- 4 occupational categories: Formal work, Informal work, Formal Entr, Informal Entr

- Labor Force Participation ▸ by education

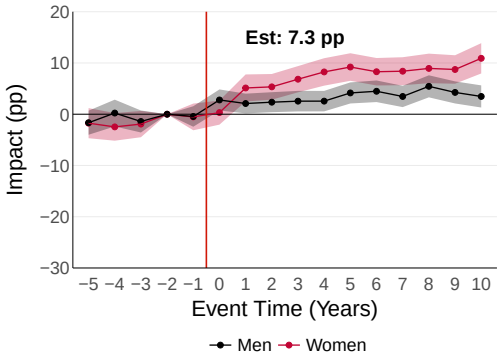


- Formal wage work falls after childbirth among women who remain employed.

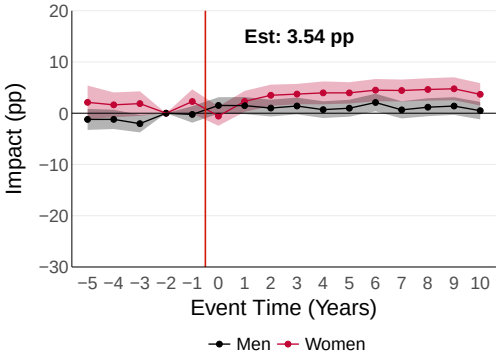
▸ by education ▸ hours



- Informal entrepreneurship rises by about 7.3 pp after childbirth, conditional on employment. ▸ by education ▸ model fit ▸ validation with Berniell



- Informal wage work rises by 3.5 pp after childbirth, less than informal entrepreneurship.



Model - Demographics and Heterogeneity

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- Discrete time life-cycle economy, one model period $\equiv$ 3 years.
- Women differ in initial managerial and labor productivity levels ($\mathbf{z} = \{z_m, z_w\}$).
- Men are mapped into exogenous labor productivity profiles. ($s = \{1, 2\}$)

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- Women face an exogenous probability of having a first and only child. ($\mathbf{b} = \{b, j_c\}$) ▸ hazard

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- Children impose time costs; working mothers also incur monetary childcare costs.
- Full-time formal wage work increases labor productivity (e).
- Women choose whether to participate in labor force, occupation ($occ = \{FW, FE, IE\}$), how much to work ($h = \{h_{ft}, h_{pt}\}$), how much to consume and save ($a \geq 0$)
- Type $\Theta = \{\mathbf{z}, s, q\}$, state space $X = \{j, e, a, \mathbf{b}, P\}$ ▸ pref.

Model - Female Earnings

- Women begin with initial productivity levels $\mathbf{z} = \{z_m, z_w\}$. draw V_W
- In each working-age period, a woman draws a formal job opportunity with prob p_f.
- Formal workers only work full-time: $h = h_{ft}$.
- After age 1, labor market productivity of women evolves endogenously as in Guner et al. (2020):

$$e' = \exp\left[\ln e + \alpha_j \cdot \chi^{FW}_{h=h_{ft}} - \delta_w \cdot (1 - \chi^{FW})\right]$$

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$$y^W_{net} = (1-\tau)\left(\underbrace{w}_{\text{eff. unit wage}} \quad \underbrace{e}_{\text{labor efficiency}} \quad \underbrace{h}_{\text{hours}} + y_s + ra\right)$$

Model - Female Earnings

- Managerial productivity remains constant over the life-cycle, z_m.
- Women independent of P can choose whether to
  - work as an entrepreneur
  - work part-time or full-time $h = \{h_{pt}, h_{ft}\}$ ▸ V_{FE} ▸ V_{IE}

$$\Pi(z_m, h) = \left[(z_m h^{\phi_h})^{\eta}(k_d^{\alpha} n_d^{1-\alpha})^{1-\eta}\right] - (r+\delta)k_d - w n_d$$

  - ϕ_h governs the elasticity of managerial time input. (Yurdagul, 2017)

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Formal Entrepreneur:

- $y_{net}^{FE} = (1-\tau)(\pi + y_s + ra)$
- $\pi = \Pi$

Informal Entrepreneur:

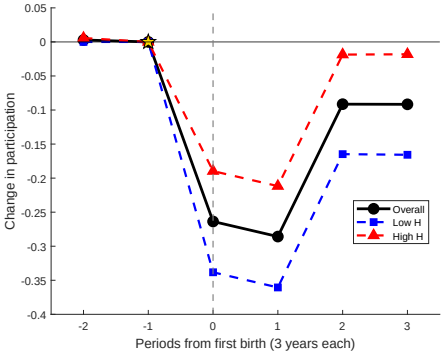
- $y_{net}^{IE} = (1-\tau)(y_s + ra) + \Pi$
- $k_d \leq \bar{b}$

- Children impose a fixed time cost that depends on the child's age: $\xi(\mathbf{b})$
- Childcare costs, $\kappa(\mathbf{b}, h)$ depend on:
  - age of the child
  - working schedule: part-time, full-time, out of labor force ($h_j = \{0, h_{pt}, h_{ft}\}$)
  - $CIH = y - \kappa(\mathbf{b}, h)$
- As in Guner et al. 2023, ▸ costs ▸ arrival

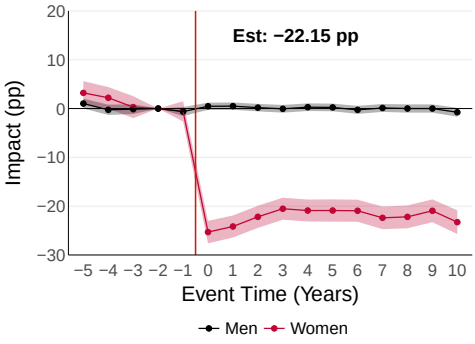
$$U(c, h, q, \mathbf{b}) = \log(c) - \alpha_l \cdot (h + \xi(\mathbf{b}))^{1+\frac{1}{\gamma}} - q\mathbb{1}_{h>0}$$

▸ back ▸ decisions

Model Fit: Labor Force Participation

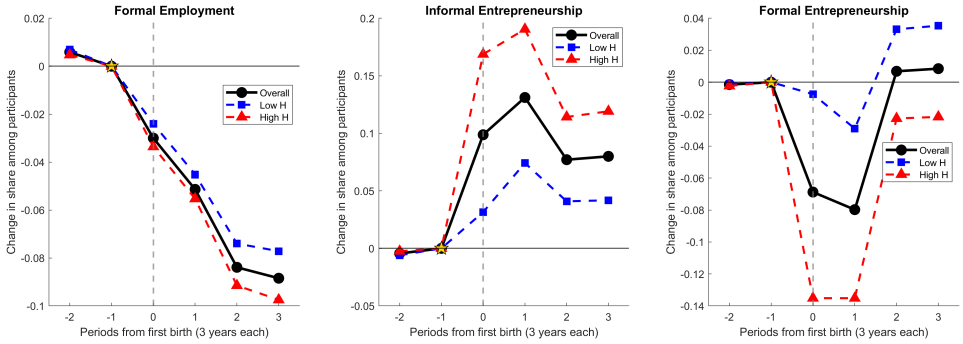


(a) Model



(b) Data

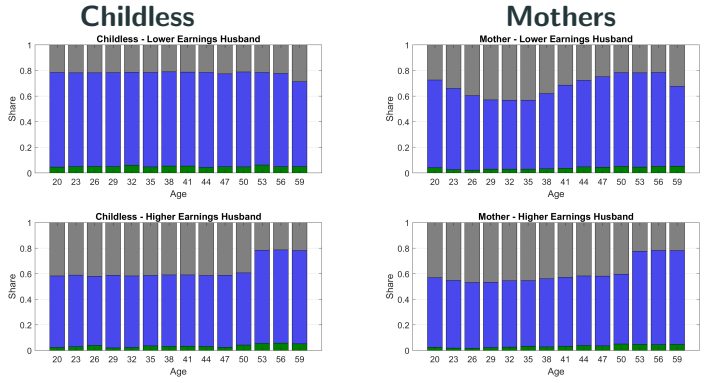
Model Fit: Occupational Reallocation



- The model reproduces the reallocation from formal wage work to informal entrepreneurship around childbirth.

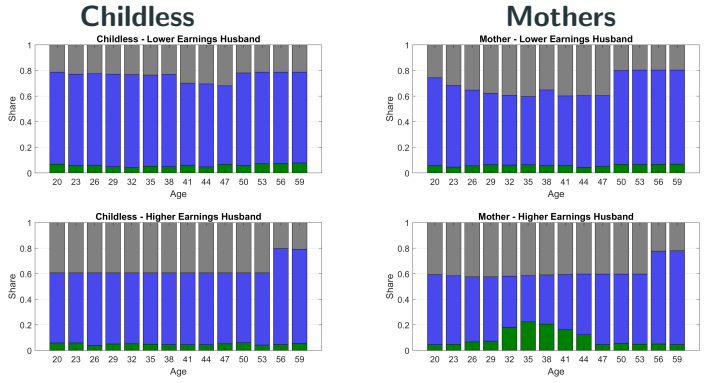
▸ pseudo event study ▸ CA low ▸ CA switch ▸ CA dynamic ▸ CA formal ▸ baseline

Model Results: Lowest Comparative Advantage ($z_m/z_w = 0.87$)



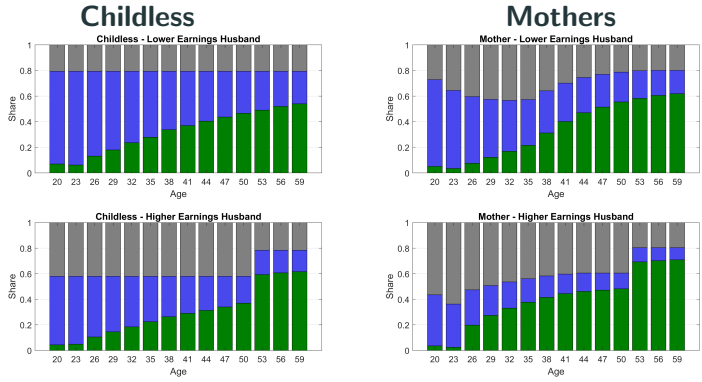
Gray: Non-participation; Blue: Formal wage work; Green: Informal entrepreneurship; Yellow: Formal entrepreneurship back

Model Results: Switcher ($z_m/z_w = 3.87$)



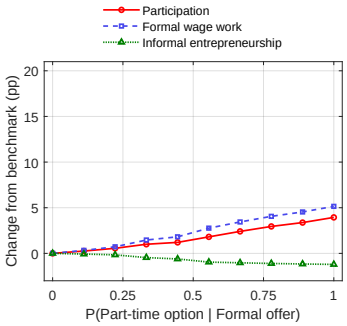
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Model Results: Switcher ($z_m/z_w = 5.02$)



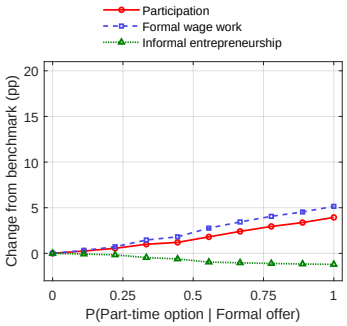
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Counterfactuals: Flexibility versus Access

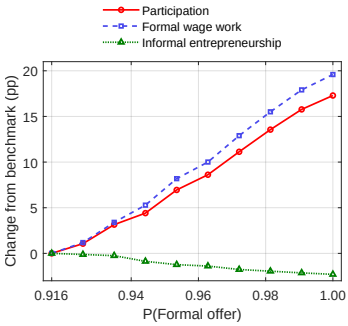


(a) Part-time availability

Counterfactuals: Flexibility versus Access



(a) Part-time availability



(b) Formal job opportunity

- Informal entrepreneurship falls more when formal job access expands than when part-time availability rises.

Children Transfers

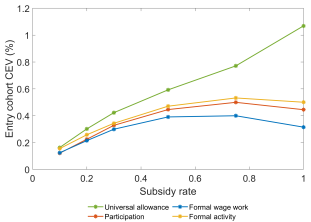
Revenue-neutral transfers to women with children: universal or conditional:

- Formal wage work
- Formal activity
- Any work (formal or informal)

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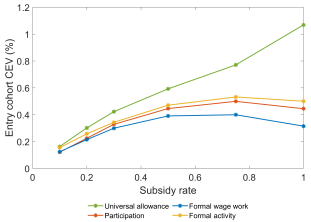


(a) Entry-cohort CEV

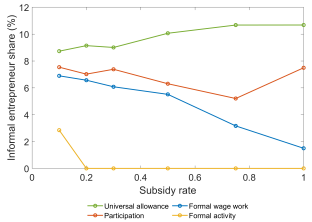
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(a) Entry-cohort CEV



(b) Informal entrepreneurship

▸ cross-sectional CEV ▸ participation

Conclusion

- Document occupational transitions around childbirth in Brazil.
- Rationalize the observed patterns with a life-cycle model of occupational choice with imperfect tax enforcement and childcare costs.
- Women who switch into informal entrepreneurs have high enough managerial productivity to become informal entrepreneurs.
- Counterfactuals suggest that access to formal jobs is more effective at reducing informality than expanding part-time contracts within the formal sector.
- Welfare experiments suggest that stronger formalization incentives need not deliver the largest welfare gains.

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THANK YOU!

Decisions - Big Picture

- At the beginning of the period, households observe a realization of the child and formal opportunity shock.
- Then a woman decides:
  - Whether she participates in the labor market
  - If yes, which occupation to choose (formal wage job, formal or informal entrepreneurship)
  - Part-time or full-time schedule
  - She decides how much to consume and save.

▸ external ▸ internal ▸ parameters ▸ back

Table 1: Externally assigned parameters

Description	Parameter	Value	Source
Preferences and technology			
Discount factor	β	0.980	Bhandari and McGrattan (2020)
Physical capital depreciation rate	δ	0.040	Morandi and Reis (2004)
Span of control	η	0.198	Allub and Erosa (2019)
Capital share	α	0.406	Allub and Erosa (2019)
Disutility of market work	α_l	7.630	Guner et al. (2020)
Taxes and joint heterogeneity			
Proportional income tax rate	τ	0.166	Franjo et al. (2022)
Correlation of working and managerial fixed effects	$\rho_{\alpha_m \alpha_w}$	0.148	Allub and Erosa (2019)
Labor market and fertility			
Human capital depreciation	δ_w	0.074	de Almeida and Narita (2024)
Probability of a part-time contract | formal offer	p_o	0	See text
Returns to formal wage work	$\{\alpha_j\}$	–	See text
Probability of having a child	$\{p_j^{\text{birth}}\}$	–	See text

back

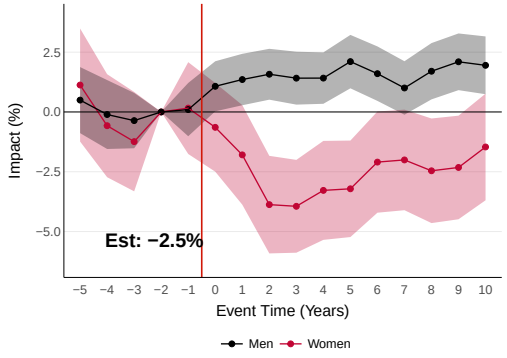
Counterfactuals: Mothers with Babies

Moment	(1) Time costs $\xi_b = 0$	(2) Monetary costs $\kappa_b = 0$	(3) Perfect tax enforcement
Share of formal workers	18.2%	55.2%	+3.5%
Share of informal entrepreneurship	-60.1%	-8.2%	–
Share of formal entrepreneurship	140.2%	178.6%	+136.1%
Non-participation	-10.2%	-43.5%	+5.2%

Percent changes from benchmark; mothers aged 23–34 with children aged 0–5. back

3: Hours Worked

- Hours worked conditional on participation



back

Sector of Informal Entrepreneurs

back

	freq	pct	cumpct
Retail/Repair	13955.95	29.30	29.30
Other Services	11166.02	23.45	52.75
Industry	8768.292	18.41	71.16
Hospitality	6267.259	13.16	84.32
Finance/Professional	3592.933	7.54	91.86
Education/Health	2929.733	6.15	98.02
Transport/Logistics	652.2207	1.37	99.39
Construction	287.3142	0.60	99.99
Public Administration	5.282682	0.01	100.00
Total	47625	100.00	

Survey-weighted estimates. Sample: women aged 16-65, informal entrepreneurs (infe=1).

Occupation of Informal Entrepreneurs

back

	freq	pct	cumpct
Service & Sales Workers	25646.24	53.85	53.85
Construction & Artisans	8010.34	16.82	70.67
Skilled Professionals	4938.996	10.37	81.04
Machine Operators & Assemblers	3122.046	6.56	87.60
Elementary Occupations	3027.442	6.36	93.95
Mid-Level Technicians	1920.281	4.03	97.98
Directors & Managers	850.3648	1.79	99.77
Administrative Support Workers	80.19949	0.17	99.94
Skilled Agricultural Workers	29.08798	0.06	100.00
Total	47625	100.00	

Survey-weighted estimates. Sample: women aged 16-65, informal entrepreneurs (infe=1).

Brazilian Data

- Labor force survey PNAD-Continua 2012–2023 excluding 2020, 2021.
- Rotating panel following individuals for 5 quarters.
- Available information on firm and labor informality.
- Focus on urban areas only.
- Information on children is available only for head of the household and spouse.

back

Time and Childcare Costs

Time costs:

$$\xi(\mathbf{b}) = \begin{cases} \xi_b, & \text{baby,} \\ \xi_t, & \text{school-aged,} \\ 0, & \text{no child at home.} \end{cases}$$

Full-time childcare costs:

$$\bar{\kappa}(\mathbf{b}) = \begin{cases} \kappa_b, & \text{baby,} \\ \kappa_t, & \text{school-aged,} \\ 0, & \text{no child at home.} \end{cases}$$

$$\kappa(\mathbf{b}, h) = \begin{cases} \bar{\kappa}(\mathbf{b}), & h = h_{ft}, \\ 0.5\,\bar{\kappa}(\mathbf{b}), & h = h_{pt}, \\ 0, & h = 0. \end{cases}$$

back

Brazilian Data: Summary

- Summary statistics for a sample

	Male			Female		
	(1)			(2)		
	mean	sd	count	mean	sd	count
College degree	0.14	0.34	442,669	0.16	0.36	472,061
HS degree	0.37	0.48	442,669	0.39	0.49	472,061
No HS degree	0.49	0.50	442,669	0.45	0.50	472,061
Labor Force	0.87	0.33	442,669	0.55	0.50	472,061
Employed	1.00	0.00	376,755	1.00	0.00	242,997
Informal firm	0.41	0.49	242,748	0.39	0.49	124,507
Worker	0.62	0.49	372,977	0.64	0.48	195,935
Informal worker	0.17	0.38	224,346	0.27	0.45	161,470
Entrepreneur	0.38	0.49	372,977	0.36	0.48	195,935
Informal entrepreneur	0.61	0.49	151,425	0.60	0.49	75,468
Full-time	0.80	0.40	442,669	0.41	0.49	472,061
Hours worked	43.74	9.48	376,755	38.81	11.39	242,997

back

Fact 2 Backup: Children and Hours by Occupation

- Number of children and hours worked across occupations.

	Men				Women			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	FW	FE	IW	IE	FW	FE	IW	IE
	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd
Number of children	1.162	1.211	1.178	1.245	1.131	1.220	1.202	1.300
	(0.997)	(0.961)	(1.081)	(1.118)	(0.971)	(0.957)	(1.046)	(1.065)
Hours worked	43.956	46.727	42.331	42.110	41.692	42.634	37.860	33.603
	(6.690)	(11.405)	(10.547)	(11.919)	(6.623)	(12.803)	(11.835)	(14.504)
Observations	181,194	54,212	40,358	97,213	100,664	28,186	19,803	47,282

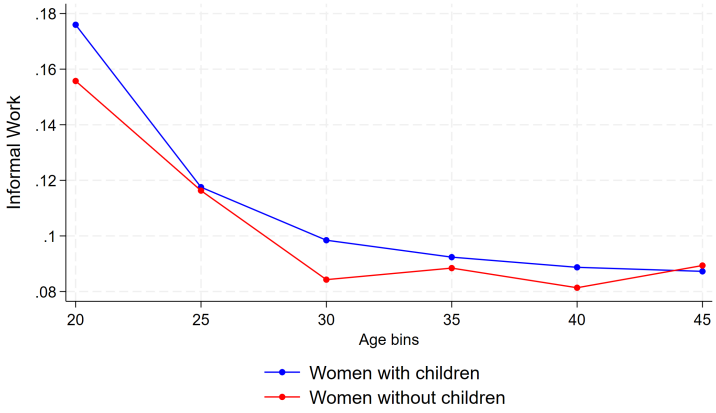
mean coefficients; sd in parentheses

back

Fact 2 Backup: Informal Wage Work

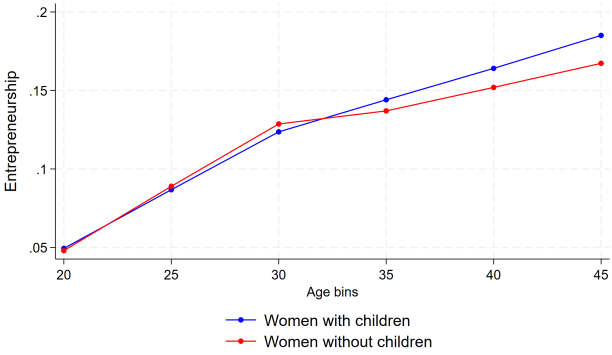
- Rates of informal work for women with and without children

back



Fact 2 Backup: Formal Entrepreneurship

- Rates of formal entrepreneurship



back

Regression

Outcome variable: informal entrepreneurship

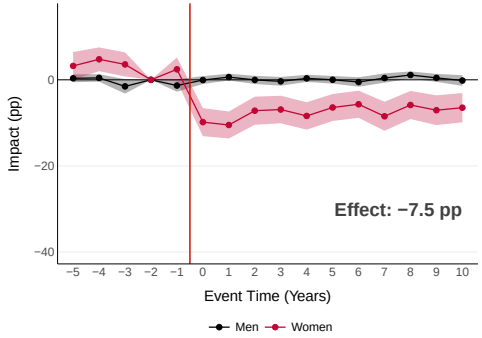
	No controls	Controls	Controls + spouse
	(1)	(2)	(3)
1 child	0.013***	0.011***	0.015***
	(0.003)	(0.003)	(0.003)
2 children	0.033***	0.030***	0.035***
	(0.003)	(0.003)	(0.004)
>2 children	0.041***	0.032***	0.033***
	(0.004)	(0.004)	(0.005)
HH has extended family member (rel 07-14)=1		0.001	0.002
		(0.003)	(0.004)
Controls	No	Yes	Yes
Husband controls	No	No	Yes
Observations	235,361	235,361	185,211

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

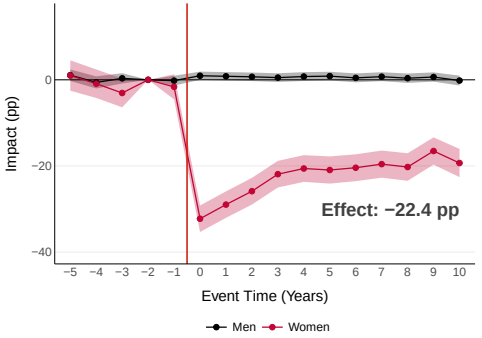
back

Fact 3 Backup: Labor Force Participation by Education

- By educational level back



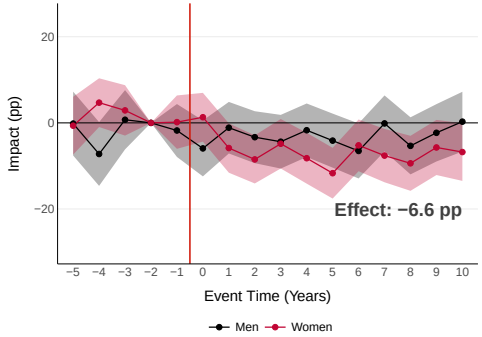
(a) College



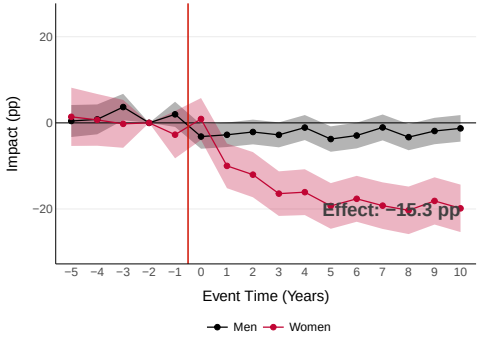
(b) No College

Fact 3 Backup: Formal Wage Work by Education

- By educational level back



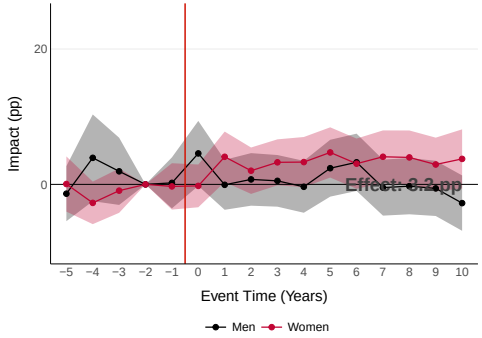
(a) College



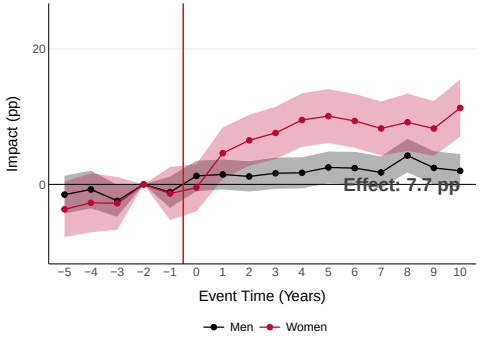
(b) No college

Fact 3 Backup: Informal Entrepreneurship by Education

- By educational level back model fit



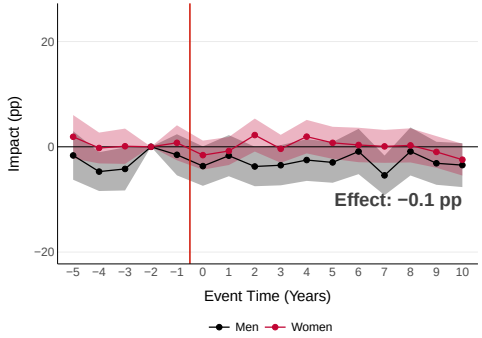
(a) College



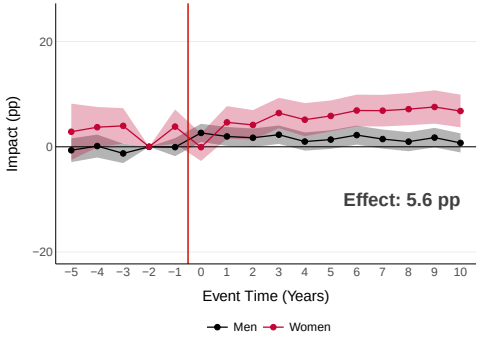
(b) No College

Fact 3 Backup: Informal Wage Work by Education

- By educational level back



(a) College



(b) No College

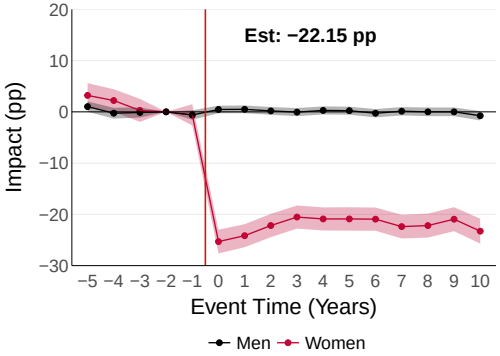
Kleven's Pseudo Panel Methodology

1 Determine event time
   - For individuals with children, age of the first child determines event study time, $t \geq 0$
   - Main challenge is to determine controls: $t < 0$
- Split the sample into two categories: with a child and without a child
- Match individuals with (child $= 1$) to controls (child $= 0$) matching them on observable characteristics: age, gender, survey year, region, education, marital status and race
- Extract information from matched controls to treated individuals

back

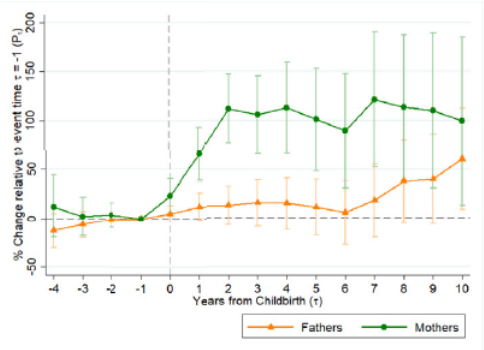
Validation with Kleven Child Penalty Atlas

- My estimates using PNAD-C back
- Employment Rates: the estimated impact of children on employment rates



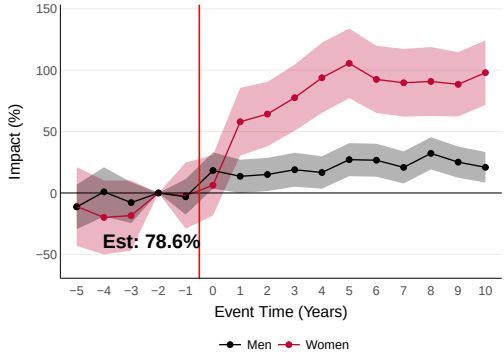
Validation with Panel Data from Chile

- Berniell et al. (2021) (Figure 4d) back Brazil
- Self-employment rates: the estimated impact of children on the probability of being self employed conditional on being employed.



Pseudo Event: in percentage

- Informal Self Employment back validation
- P_t: captures year-t's effect of children as a percentage of the counterfactual outcome without children. $P_t \equiv \frac{\hat{\alpha}_t}{\mathbb{E}\left[\tilde{Y}_{ist}|t\right]}$
- $\tilde{Y}_{ist}$: denotes a predicted outcome when omitting the contribution of the event dummies



Calibration: Targeted Moments

Moment	Model	Target	Parameter
Participation of childless women	0.703	0.707	ψ
Non-participation of childless women, top offer-wage quartile	0.218	0.173	γ_q
Share formal workers – childless	0.541	0.544	p_f
Share informal entrepreneurs – childless	0.076	0.107	$\bar{b}$
Part-time – mothers with children ages 0–5	0.178	0.129	ξ_b
Part-time – mothers with children ages 6–17	0.114	0.115	ξ_t
Participation – mothers with children ages 0–5	0.456	0.484	κ_b
Participation – mothers with children ages 6–17	0.610	0.611	κ_t
Variance of log wages	0.114	0.098	σ^2_{wf}
Mean log earnings difference (entrepreneurs–workers)	-0.442	-0.298	w
Variance of husbands' log wages	0.253	0.245	σ^2_h
Spousal earnings correlation	0.418	0.339	ρ^2_h
Log earnings gap, informal entrepreneurs (full-time–part-time)	0.363	0.482	ϕ_h
Entrepreneurial income dispersion ln(P90/P50)	0.745	0.983	η_p
Entrepreneurial income dispersion ln(P10/P50)	-1.212	-1.185	$\Phi(z_{m,\min})$

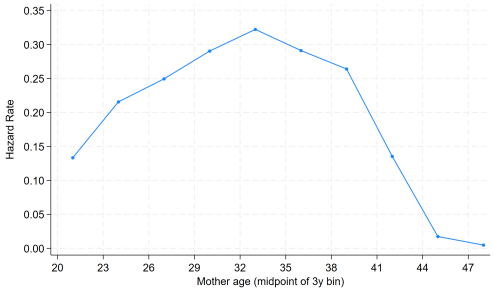
back

Table 2: Internally calibrated parameters

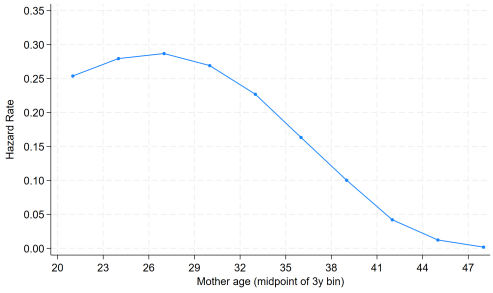
Description	Parameter	Value
Preferences and labor supply		
Participation disutility (level)	ψ	0.756
Participation disutility (dispersion)	γ_q	0.134
Formal job probability	p_f	0.916
Child-related costs		
Time costs of young children	ξ_b	0.082
Time costs of school-aged children	ξ_t	0.097
Monetary costs of young children	κ_b	0.175
Monetary costs of school-aged children	κ_t	0.017
Wages and household heterogeneity		
Variance of log wages	σ^2_{wf}	0.125
Variance of husbands' log wages	σ^2_h	0.253
Efficiency-unit wage	w	1.169
Spousal working-ability correlation	ρ^2_h	0.744
Entrepreneurship		
Detection threshold for informal entrepreneurs	$\bar{b}$	0.936
Elasticity of managerial time input	ϕ_h	0.963
Pareto tail of managerial skill	η_p	1.771
Probability mass on lowest managerial skill	$\Phi(z_{m,\min})$	0.527

back

Hazard Rates



(a) PNDS 2006



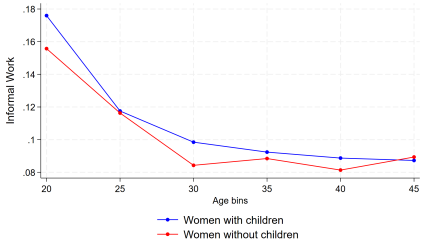
(b) PNAD-C

▸ back ▸ demographics

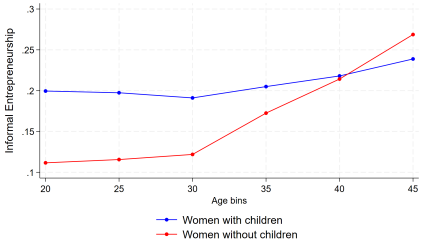
2: Motherhood and Informality Rates

- Informality rates for mothers and non-mothers differ during prime childbearing ages.
- The gap is concentrated in informal entrepreneurship, not informal wage work.
- Average rates by 5-year age bins:

▸ informal work ▸ regression ▸ back

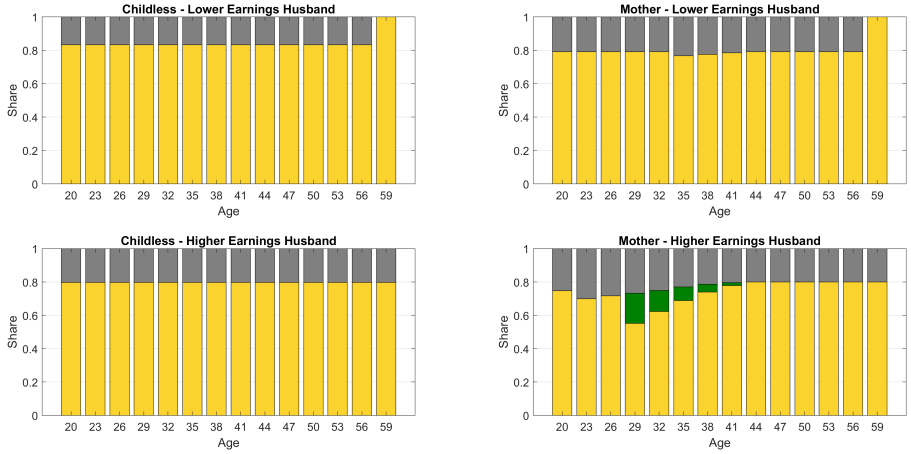


(a) Informal wage work



(b) Informal entrepreneurship

Model Results: Highest Comparative Advantage ($z_m/z_w = 14.78$)



Gray: Non-participation; Blue: Formal wage work; Green: Informal entrepreneurship; Yellow: Formal entrepreneurship back

Drawing Managerial and Working Ability

- Following Allub and Erosa (2019):
- Managerial ability (z_m) is drawn from a Pareto distribution.
- Working ability is drawn from a Normal component; its conditional mean depends on managerial ability.

$$\alpha_w = \epsilon_w + \rho_{\alpha_m \alpha_w} \frac{z_m - \mathbb{E}[z_m]}{\text{std}(z_m)} \sigma_{wf}, \qquad z_w = \exp(\alpha_w),$$

$$\epsilon_w \sim N\left(0, \left(1 - \rho^2_{\alpha_m \alpha_w}\right) \sigma^2_{wf}\right).$$

back

Formal Wage Worker Value

State $X = (j, e, a, \mathbf{b}, P)$ and type $\Theta = (\mathbf{z}, s, q)$.

$$
\begin{aligned}
V_j^W(X, \Theta) = \max_{c, a',\, h \in \mathcal{S}(P)} & \{U(c, h, q, \mathbf{b}) + \beta\, \mathbb{E}[B_{j+1}(X', \Theta) \mid X, \Theta]\} \\
\text{s.t.} \quad c + \kappa(\mathbf{b}, h) + a' &= (1 - \tau) y^W + a, \\
y^W &= weh + y_s + ra, \\
e' &= \exp\left[\ln e + \alpha_j \chi^{FW}_{h=h_{ft}} - \delta_w (1 - \chi^{FW})\right], \\
h + \xi(\mathbf{b}) + \ell &= 1, \qquad \ell \geq 0, \\
a' &\geq 0.
\end{aligned}
$$

$$
\mathcal{S}(P) = \begin{cases} \{h_{ft}\}, & P = FT, \\ \{h_{pt}, h_{ft}\}, & P = M. \end{cases}
$$

back

Formal Entrepreneur Value

State $X = (j, e, a, \mathbf{b}, P)$ and type $\Theta = (\mathbf{z}, s, q)$.

$$
\begin{aligned}
V_j^{FE}(X, \Theta) = & \max_{c, a', h, k_d, n_d} \{U(c, h, q, \mathbf{b}) + \beta\, \mathbb{E}[B_{j+1}(X', \Theta) \mid X, \Theta]\} \\
\text{s.t.} \quad c + \kappa(\mathbf{b}, h) + a' &= (1 - \tau) y^E + a, \\
y^E &= \Pi + ra + y_s, \\
\Pi &= \left[(z_m h^{\phi_h})^{\eta} (k_d^{\alpha} n_d^{1-\alpha})^{1-\eta}\right] - (r + \delta) k_d - w n_d, \\
h + \xi(\mathbf{b}) + \ell &= 1, \qquad \ell \geq 0, \\
a' &\geq 0.
\end{aligned}
$$

back

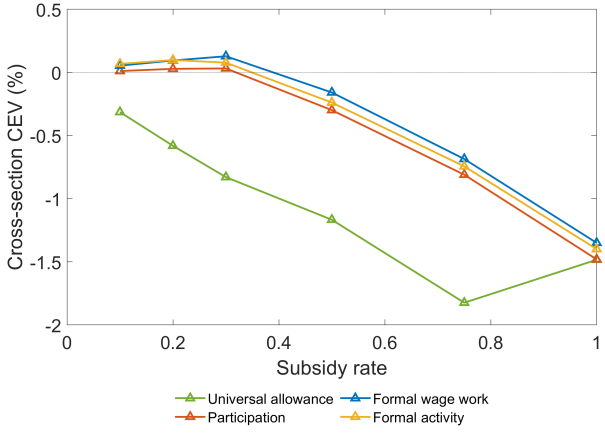
Informal Entrepreneur Value

State $X = (j, e, a, \mathbf{b}, P)$ and type $\Theta = (\mathbf{z}, s, q)$.

$$
\begin{aligned}
V_j^{IE}(X, \Theta) = \max_{c, a', h, k_i, n_i} \{ & U(c, h, q, \mathbf{b}) + \beta \, \mathbb{E}[B_{j+1}(X', \Theta) \mid X, \Theta] \} \\
\text{s.t.} \quad c + \kappa(\mathbf{b}, h) + a' &= \Pi + (1 - \tau) y^E + a, \\
y^E &= ra + y_s, \\
\Pi &= \left[(z_m h^{\phi_h})^{\eta} (k_i^{\alpha} n_i^{1-\alpha})^{1-\eta} \right] - (r + \delta) k_i - w n_i, \\
h + \xi(\mathbf{b}) + \ell &= 1, \qquad \ell \geq 0, \\
k_i &\leq \bar{b}, \\
a' &\geq 0.
\end{aligned}
$$

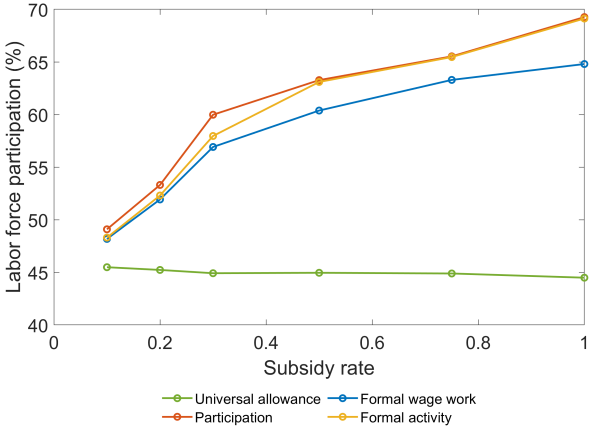
back

Child Transfers: Cross-sectional CEV



back

Child Transfers: Labor Force Participation



back

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