

EC555: Family Macroeconomics

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Why (Macro-) Economics Works Well for Understanding the Family

- **Family decisions are big decisions:** a place where incentives really matter and the economic approach works well
- **Family decisions are complicated decisions:** rich, strategic interactions between multiple people over long periods of time, a place where the economic tool set shines
- **Input from other social sciences:** Lots of work on the family in sociology, psychology, and demography, with lots of ideas to draw from
- **An open field:** Application of frontier economic theory and quantitative modeling to the family fairly recent, with many open questions

Broad Topics for the Course

1. Households in macro models and family decision making.
2. Fertility, population growth, and economic growth.
3. Parenting, human capital, and social mobility.
4. Marriage, matching, and social inequality.

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- Invest in human capital
 - Childhood is key phase for human capital accumulation; transmission of wealth, knowledge, and preferences in the family matter beyond

Topic 1: Families in Standard Macro Models

How do families matter for decisions on consumption, savings, and labor?

1. Document role of family for insuring income shocks
2. Document role of gender and marital status for labor supply responses
3. Include these features in models of household side of macro models

Empirical Evidence on Family Insurance

Blundell, Pistaferri, and Saporta-Eksten: “Consumption Inequality and Family Labor Supply” (AER 2016)

In the data, consumption is much smoother than income at the household level—households have some insurance.

Standard (exogenously) incomplete markets models emphasize insurance through credit markets and (less often) the tax and transfer system.

Family labor supply is an additional potential insurance channel.

Objective of the paper: quantify the importance of family insurance.

Approach in BPS 2016

Allow for multiple margins of family insurance: added worker effect (secondary earner entering labor market when primary earner becomes unemployed), adjustments on the intensive margin, correlated wage shocks, interaction of taxes and joint earnings.

Steps:

- Estimate model of wage dynamics with transitory and permanent shocks.
- Empirically estimate reaction of family consumption to wage shocks using PSID data.
- Interpret resulting transmission coefficients from perspective of life-cycle incomplete markets model.

Household Maximization Problem

$$\max E_t \sum_{s=0}^{T-t} u_{t+s} (C_{i,t+s}, H_{i,1,t+s}, H_{i,2,t+s}; z_{i,t+s}, z_{i,1,t+s}, z_{i,2,t+s}),$$

subject to the intertemporal budget constraint

$$A_{i,t+1} = (1 + r) (A_{i,t} + T (H_{i,1,t} W_{i,1,t} + H_{i,2,t} W_{i,2,t}) - C_{i,t}).$$

Unitary decision problem, non-separable preferences, number of children and age can shift preferences.

Tax function matched to US data.

Wage Process

For earner $j \in \{1, 2\}$ in household i , period t , **wage growth** is:

$$\Delta \log W_{i,j,t} = \Delta X'_{i,j,t} \beta_j + \Delta u_{i,j,t} + v_{i,j,t}$$

$$\begin{pmatrix} u_{i,1,t} \\ u_{i,2,t} \\ v_{i,1,t} \\ v_{i,2,t} \end{pmatrix} \sim i.i.d. \left(\begin{pmatrix} 0 \\ 0 \\ 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \sigma_{u,1}^2 & \sigma_{u_1,u_2} & 0 & 0 \\ \sigma_{u_1,u_2} & \sigma_{u,2}^2 & 0 & 0 \\ 0 & 0 & \sigma_{v,1}^2 & \sigma_{v_1,v_2} \\ 0 & 0 & \sigma_{v_1,v_2} & \sigma_{v,2}^2 \end{pmatrix} \right)$$

- Allow the variances to differ across the life cycle and across the business cycle.

Wage Parameter Estimates

Baseline

Sample			All
Males	Trans.	$\sigma_{u_1}^2$	0.033 (0.007)
	Perm.	$\sigma_{v_1}^2$	0.032 (0.005)
Females	Trans.	$\sigma_{u_2}^2$	0.012 (0.006)
	Perm.	$\sigma_{v_2}^2$	0.043 (0.005)
Correlation of shocks	Trans.	ρ_{u_1, u_2}	0.244 (0.22)
	Perm.	ρ_{v_1, v_2}	0.113 (0.07)

Transmission of Permanent Wage Shock to Consumption

Consumption growth:

$$\Delta \ln C_{it} \cong \kappa_{cv_1t} v_{i,1t} + \kappa_{cv_2t} v_{i,2t} + \kappa_{cu_1t} \Delta u_{i,1t} + \kappa_{cu_2t} \Delta u_{i,2t} + \xi_{it}$$

- Key transmission parameter: consumption response to a permanent wage shock

$$\kappa_{c,v_j} = (1 - \beta)(1 - \pi_{i,t}) s_{i,j,t} \frac{\eta_{c,p} (1 + \eta_{h_j,w_j})}{\eta_{c,p} + (1 - \beta)(1 - \pi_{i,t}) \overline{\eta_{h,w}}}$$

- declines with $\pi_{i,t}$ (accumulated assets as a fraction of lifetime wealth—allows for more self-insurance)
- declines with β (outside insurance allows more smoothing)
- increases with $s_{i,j,t}$ (j 's earnings share)
- declines with $\overline{\eta_{h,w}}$ (“added worker” effect)

Identification of Outside Insurance

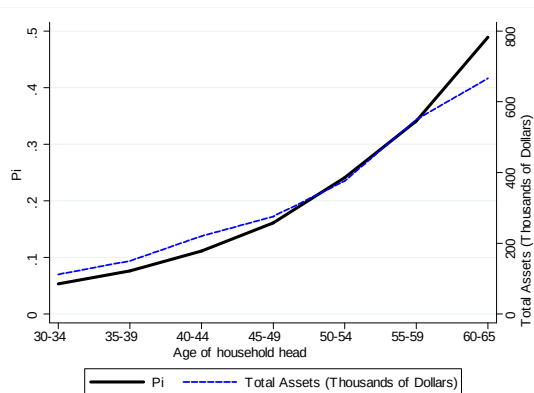
- Note that β is not identified separately from π
- Back out π from the data and estimate β

$$\pi_{i,t} \approx \frac{\overbrace{\text{Assets}_{i,t}}^{\text{Observed in PSID}}}{\underbrace{\text{Human Wealth}_{i,t}}_{\text{Projected lifetime earnings}} + \text{Assets}_{i,t}}$$

- Human wealth is projected using observables that evolve deterministically (e.g., age).

Distribution of π by Age

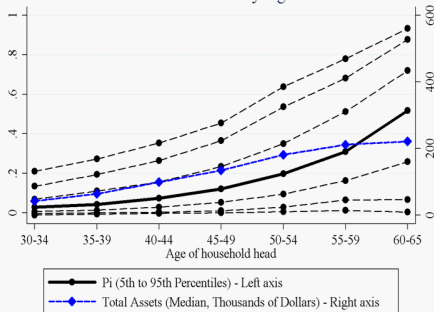
$$\pi_{i,t} \approx \frac{\text{Assets}_{i,t}}{\text{Assets}_{i,t} + \text{Human Wealth}_{i,t}}:$$



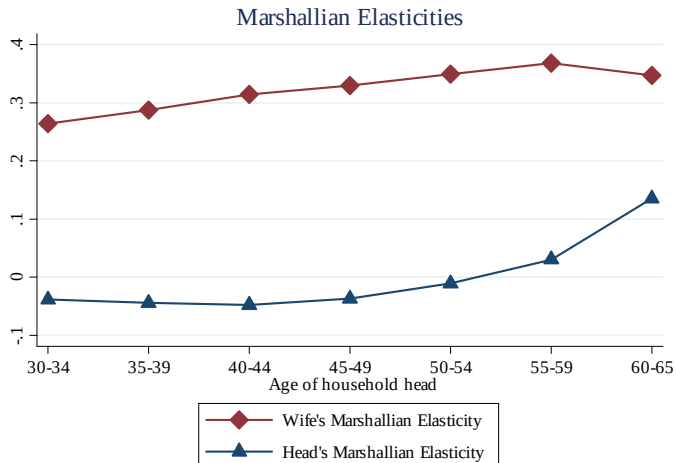
Distribution of π by Age

$$\pi_{i,t} \approx \frac{\text{Assets}_{i,t}}{\text{Assets}_{i,t} + \text{Human Wealth}_{i,t}}:$$

The Distribution of π and Assets by Age of Household Head



Marshallian Elasticities by Age



Main Result: Most Insurance Is Family Insurance

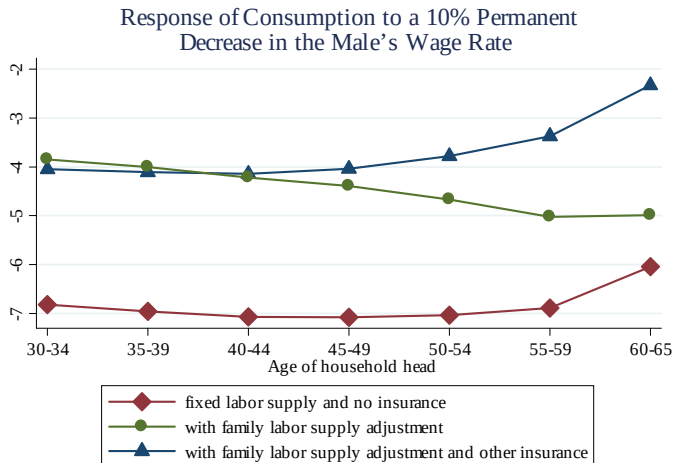
The average response of total earnings ($y = y_1 + y_2$) to a permanent shock to the male's wages:

$$\frac{\partial \Delta y}{\partial v_1} = \underbrace{s}_{\hat{s}=0.69} \times \underbrace{\frac{\partial \Delta y_1}{\partial v_1}}_{\hat{\kappa}_{y_1, v_1}=0.98} + \underbrace{(1-s)}_{1-\hat{s}=0.31} \times \underbrace{\frac{\partial \Delta y_2}{\partial v_1}}_{\hat{\kappa}_{y_2, v_1}=-0.81} = 0.44$$

Response of **consumption** to a 10% permanent decrease in the male's wage rate ($v_1 = -0.1$):

one earner, fixed labor supply and no insurance	-10%
two earners, fixed labor supply and no insurance	-6.9%
with husband labor supply adjustment	-6.8%
with family labor supply adjustment	-4.4%
with family labor supply adjustment and other insurance	-3.8%

Insurance via Labor Supply by Age



Insurance for Shock to Female Wages

The average response of total earnings to a permanent shock to the female's wages:

$$\frac{\partial \Delta y}{\partial v_2} = \underbrace{s}_{0.69} \times \underbrace{\frac{\partial \Delta y_1}{\partial v_2}}_{\kappa_{y_1, v_2} = -0.23} + \underbrace{(1-s)}_{0.31} \times \underbrace{\frac{\partial \Delta y_2}{\partial v_2}}_{\kappa_{y_2, v_2} = 1.32} = 0.25$$

Response of consumption to a 10% permanent decrease in the female's wage rate ($v_2 = -0.1$):

two earners, fixed labor supply and no insurance	-3.1%
with family labor supply adjustment	-2.5%
with family labor supply adjustment and other insurance	-2.1%

Summary and Interpretation

Results imply that family insurance is the dominant insurance channel for married couples.

Insurance beyond self-insurance through savings and family insurance plays little role.

Also demonstrates quantitative importance of non-separable preferences and allowing for non-stationarity over the life cycle.

Some Limitations

Sample focuses on men continuously in the labor force; does not fully capture the extensive margin, other family types, and transitions between types.

Interpretation relies on life cycle model with strong forward-looking savings behavior.

Follow-up work (BPS 2018 JPE) emphasizes the role of presence of children for insurance.

Related Work on Family Insurance

- Lundberg, “The Added Worker Effect” (JOLE 1985): classic study of wives entering the labor force when their husbands become unemployed; finds the effect to be small.
- Blundell, Pistaferri, and Preston, “Consumption Inequality and Partial Insurance” (AER 2008): framework for measuring the pass-through of permanent and transitory income shocks to consumption; BPS 2016 extends it to family labor supply.
- Heathcote, Storesletten, and Violante, “Consumption and Labor Supply with Partial Insurance: An Analytical Framework” (AER 2014): structural model that separates insurable from uninsurable wage risk, with endogenous labor supply.

A Structural Model Behind BPS: Wu and Krueger (2021)

Wu and Krueger, "Consumption Insurance against Wage Risk: Family Labor Supply and Optimal Progressive Income Taxation" (AEJ: Macro 2021)

- **Model:** life-cycle Bewley model of two-earner households with the BPS wage process; male hours, female hours and participation; savings; progressive taxes and social security.
- **Link to BPS:** compare the model's true transmission coefficients with the BPS estimates (the BPS estimator also works well on simulated data).

Pass-through to consumption	BPS data	Model
Permanent shock to male wage (κ_{C,v_1})	0.32	0.35
Permanent shock to female wage (κ_{C,v_2})	0.19	0.18
Transitory shocks ($\kappa_{C,u_1}, \kappa_{C,u_2}$)	-0.14, -0.04	0.01, 0.01

A standard model with family labor supply matches BPS; one-earner models with exogenous income give too little insurance (Kaplan and Violante 2010).

Wu and Krueger (2021): Sources of Insurance and Policy

Share of a permanent male wage shock that is insured, by source:

Economy	Male earner	Female earner	Income tax	Savings + Soc. Sec.	Total
One earner, exogenous income	–	–	13.3%	33.7%	47.0%
Full model (family labor supply)	–17.2%	50.5%	8.9%	24.6%	66.7%

Female earner: 34.5% from the presence of her income, 0.5% extensive margin, 15.5% intensive margin.

- **Most insurance comes from the second earner**, mainly through her income being there at all; male hours actually fall after a negative permanent shock.
- **Policy:** ignoring family insurance overstates the need for public insurance:
 - welfare cost of wage risk: 15.0% vs. 23.2% of consumption in the one-earner model;
 - optimal tax progressivity: 0.32 vs. 0.38; welfare gain from optimal taxes cut in half (2.75% vs. 5.45%).

Evidence on Family Insurance Based on US Tax Returns

Pruitt and Turner, “Earnings Risk in the Household: Evidence from Millions of US Tax Returns” (AEA Insights 2020).

Accounts for all margins of adjustment in labor income, including extensive margin.

Find that households experience substantially less income risk than single men.

Also experience a smaller countercyclical increase in negative skewness.

Two important active channels:

- Non-working spouse more likely to enter when male earnings fall.
- Continuously employed spouse experiences less earnings growth if male earnings rise.

From Micro Evidence to Macro Implications

Empirical literature documents crucial role for family insurance, and family insurance is getting stronger over time.

Female labor force participation has also been increasing over time, the gender wage gap has decreased, and the share of single households has risen.

Now what does this all imply for the macroeconomy?

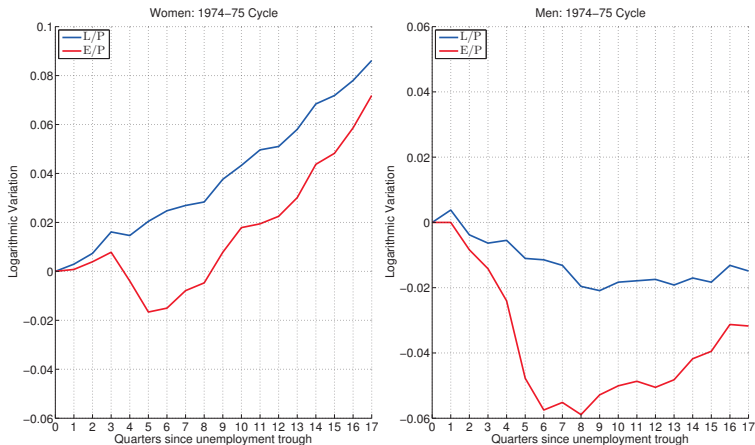
Implications of Rising Women's Employment

Stefania Albanesi, "Changing Business Cycles: The Role of Women's Employment" (AEJ:Macro 2025)

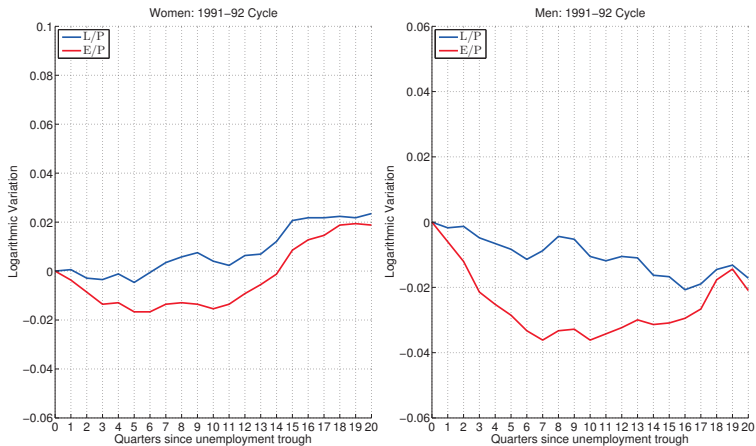
Rising married women's labor force participation explains ...

- ...much of the great moderation.
- ...much of the productivity slowdown.
- ...most of jobless recoveries.

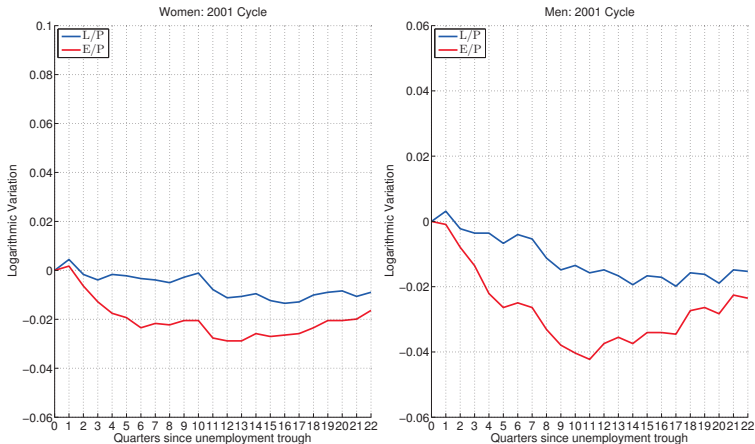
The Rise in Female LFP and Jobless Recoveries: 1974–75 Cycle



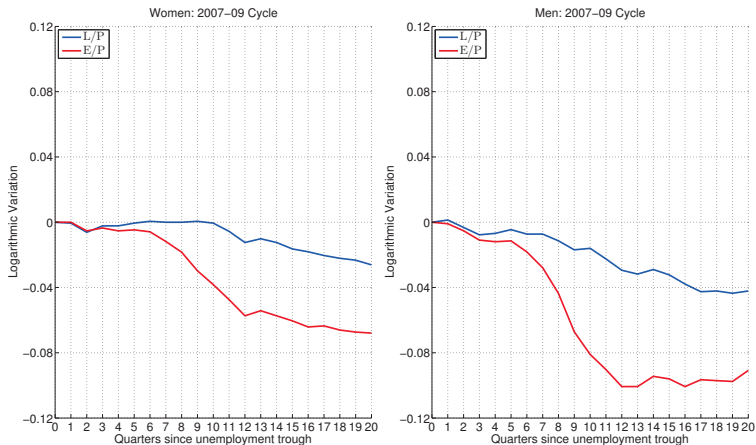
The Rise in Female LFP and Jobless Recoveries: 1991–92 Cycle



The Rise in Female LFP and Jobless Recoveries: 2001 Cycle



The Rise in Female LFP and Jobless Recoveries: 2007–09 Cycle



The Rise in Female LFP and Jobless Recoveries

Change in Employment/Population Ratio in Four Years After Peak in Unemployment Rate

Period	Change in E/P		
	Total	Men	Women
Pre-1990	0.65	-2.62	5.85
Post-1990	-2.78	-3.94	-1.41
Post-1990, excl. Great Recession	-1.35	-2.47	-0.07

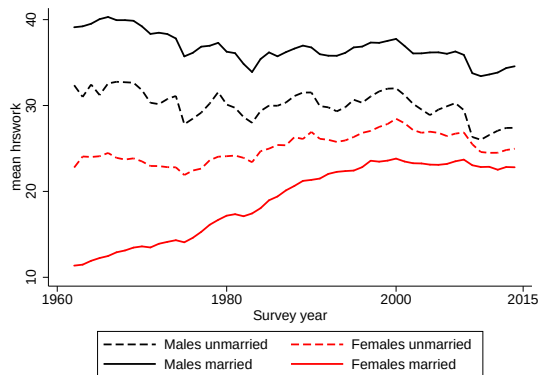
Family Labor Supply and the Transmission of Macro Shocks

- Effects through the composition of employment
- Effects through different reactions to shocks across gender and family types
- Effects through gender-tilt of macro shocks
(e.g., which industries are affected by a downturn)

Household Composition and Aggregate Labor Supply in the US

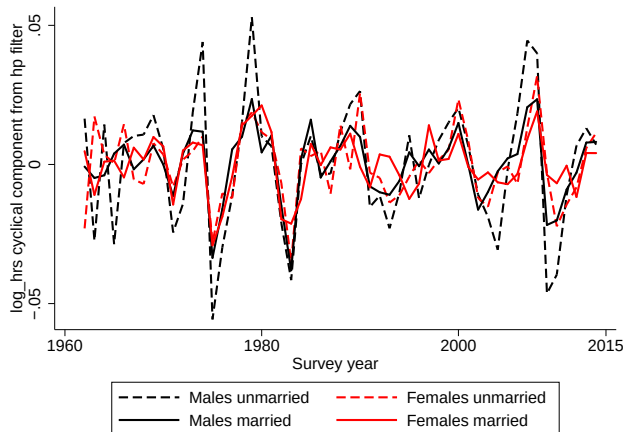
Doepke and Tertilt, "Families in Macroeconomics," 2016 Handbook Chapter

Average Weekly Work Hours by Gender and Marital Status over Time, United States



Household Composition and Aggregate Labor Supply in the US

Cyclical Component of Average Weekly Work Hours by Gender and Marital Status over Time, United States



Volatility of Hours Worked in the United States

	All			Married		Single	
	Total	Women	Men	Women	Men	Women	Men
1962–2014							
Total	1.25	1.04	1.46	1.04	1.25	1.33	2.33
Cyclical	0.99	0.72	1.18	0.67	1.01	0.74	1.68
Hours Share		38.09	61.91	23.90	47.71	14.19	14.20
Vol. Share		27.22	72.78	16.20	48.98	10.64	24.17
1962–1988							
Total	1.35	1.19	1.48	1.26	1.36	1.37	2.44
Cyclical	1.08	0.87	1.19	0.87	1.09	0.79	1.65
Hours Share		33.71	66.29	21.99	55.29	11.72	11.00
Vol. Share		27.14	72.86	18.02	56.29	8.67	17.02
1989–2014							
Total	1.15	0.87	1.47	0.79	1.16	1.30	2.25
Cyclical	0.91	0.51	1.23	0.38	0.95	0.70	1.82
Hours Share		42.64	57.36	25.89	39.83	16.75	17.53
Vol. Share		23.68	76.32	10.80	41.51	12.88	34.81

Key Observation: Women's Labor Supply Is Less Cyclical

	Married		Single	
	Women	Men	Women	Men
Cyclical volatility	0.38	0.95	0.70	1.82
Share of cyclical hours vol.	10.8%	41.5%	12.9%	34.8%

CPS 1989–2014; HP-filtered hours

- **Sectoral composition:** More men in cyclical sectors (manufacturing, construction), more women in counter-cyclical sectors (government, health)
- **Within-family insurance:** married women raise labor supply when husbands lose jobs

Note: Women's employment less volatile in the aggregate, even though it is more volatile and responsive at the micro level

However: When Women Do Lose Jobs, the Effect Is More Persistent

- Non-reentry $\Rightarrow$ extra fraction NILF 12 months after a job separation, vs. similar workers who kept their job

	NILF (Base)	NILF (Job Loss)	Non-Reentry Diff.	Gender Gap
Men	1.9%	19.7%	17.8pp	12.9pp
Women	4.2%	35.0%	30.8pp	

- Among married couples, the gap widens with children:

	No kids	Small kids	Big kids
Men's non-reentry	18.9pp	12.2pp	12.2pp
Women's non-reentry	31.7pp	36.5pp	32.8pp
Gender gap (DiD)	12.8pp	24.3pp	20.6pp

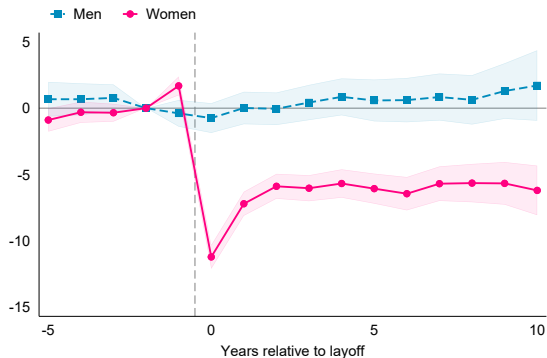
Persistent Effect on Women Linked to Reallocation of Housework

Ucciolli and Di Tella, "Gender Norms and Household Responses to Economic Shocks," 2026 Working Paper

- Look at response of within-couple time allocation to layoffs in UK data.
- Also consider role of social norms.
- Interpret results with a structural model.

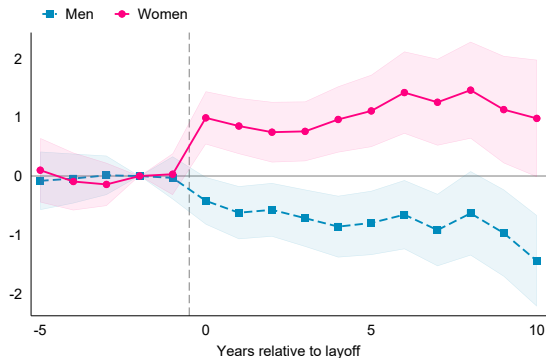
Employment and Housework If Woman Is Laid Off

Weekly hours in paid employment



Event: Woman is laid off.

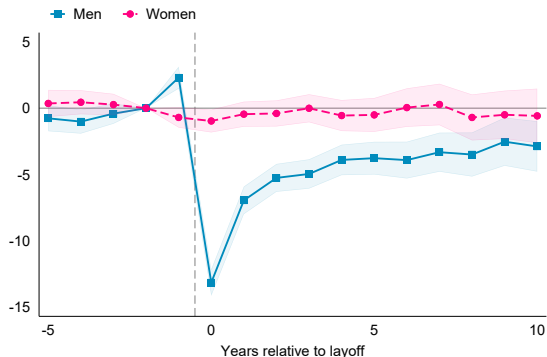
Weekly hours in housework



Event: Woman is laid off.

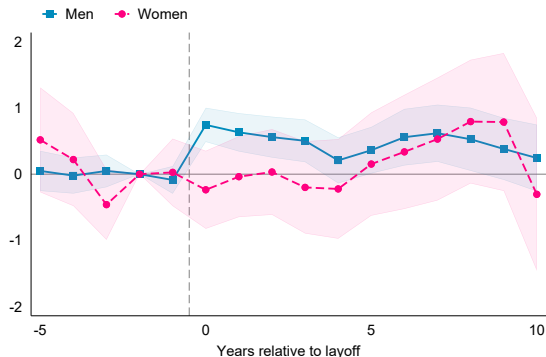
Employment and Housework If Man Is Laid Off

Weekly hours in paid employment



Event: Man is laid off.

Weekly hours in housework



Event: Man is laid off.

Progressive Women Have the Same Labor Market Behavior as Men



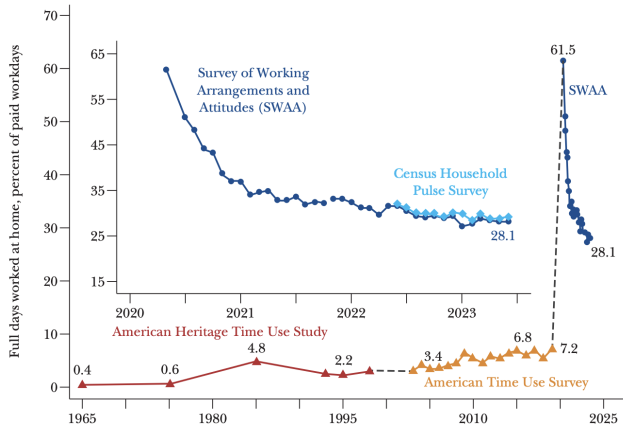
Social Norms Also Impact the Level of Labor Supply

- 22% of US couples hold **traditional** norms: agree/strongly agree with “children suffer when mothers work”.

	Share	Employment		Hours	
		Husband	Wife	Husband	Wife
Modern	78%	94%	77%	0.92	0.70
Traditional	22%	95%	58%	0.91	0.52
Ratio (T/M)		101%	76%	99%	73%

- Social norm employment gap driven entirely by women.

A New Factor: Persistent Shift to Telework



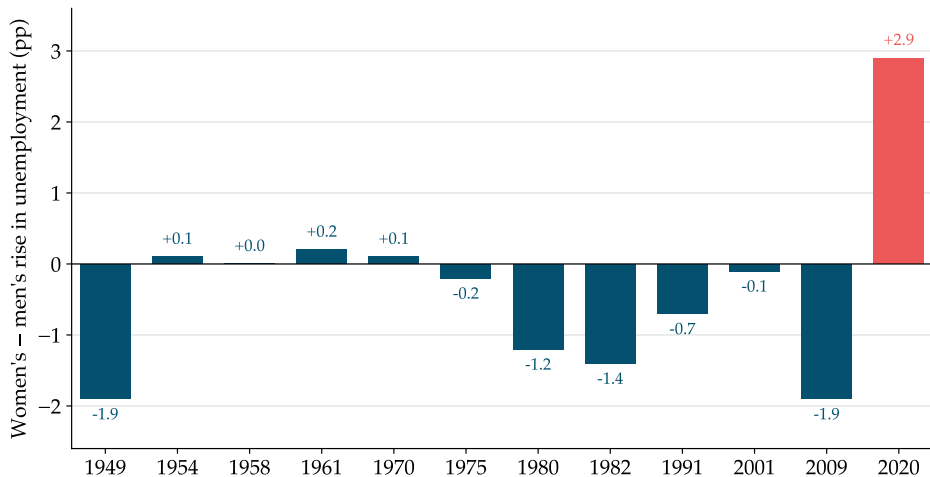
- Large and persistent increase in telework since the pandemic.
- Telework lets parents do more childcare: conditional on non-teleworking spouse, **+50%** for men and **+14%** for women.

How Do These Channels Matter in a Macro Model of the Household Sector?

Alon, Doepke, Olmstead-Rumsey, Symons-Hicks, Tertilt, “This Time It’s Different: The Role of Women’s Employment in Recessions,” 2026 Working Paper

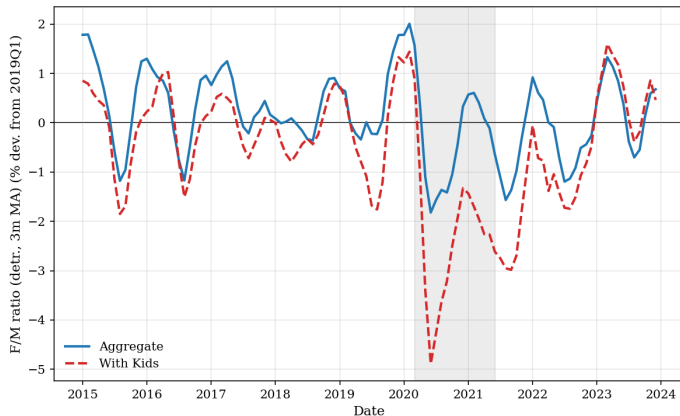
1. **Facts on women’s vs. men’s employment in recessions**
2. **Quantitative model of household decision-making**
 - Calibrated model with occupational dynamics, endogenous labor supply, and childcare allocations.
3. **Recession dynamics of he-cessions vs she-cessions**
 - Effects on depth of the downturn, within-family insurance, and aggregate income.
4. **Pandemic recession**
 - She-cession *plus* a surge in childcare needs from school and daycare closures.
5. **Post-pandemic new normal**
 - More telework and more gender-equal norms reshape household labor supply and future recessions.

Not All Recessions Are the Same



A She-Cession, Especially for Mothers

Female/Male Employment Ratio - Detrended



(Broader overview in Alon, Coskun, Doepke, Koll, and Tertilt, “From Mancession to Shecession: Women’s Employment in Regular and Pandemic Recessions,” NBER Macro Annual 2021)

Model Overview

- Partial-equilibrium household decision-making with **search frictions**: shocks hit through job-finding and job-loss probabilities.
- Three permanent household types: **single women, single men, couples**.

Household state variables:

- assets a , human capital h , children $k \in \{0, s, b\}$;
- employment offers $e \in \{E, U\}$, occupation $o \in \{TC, NT\}$, last period's work status n_{-1} ;
- couples also carry a social norm $m \in \{0, 1\}$ (traditional / modern).
- **Timing**: receive offers $\rightarrow$ accept / reject $\rightarrow$ full- or part-time $\rightarrow$ consume, save, allocate childcare.

The Singles' Problem

Value function for a single household of gender g with an offer:

$$v_E^g(a, h, k, o, X) = \max_{a', c, \ell, n, t, t_w} \left\{ u^g(c, \ell) - \alpha_w^g(t_w)^\phi + \omega\beta \mathbb{E}[\tilde{v}_e^g(\cdot')] \right\},$$

with $u^g(c, \ell) = \log c + \alpha_\ell^g \log \ell$, subject to:

$$c + a' = w^g h n^{\theta_g} + (1 + r)a \quad \text{(budget)}$$

$$t + t_w = \gamma(k, X) \quad \text{(childcare need)}$$

$$t_w \leq \mathbb{I}(o = TC) n \quad \text{(multitasking)}$$

$$\ell + n + t = T \quad \text{(time)}$$

- Choose savings a' , consumption c , hours $n \in \{0, 0.5, 1\}$, dedicated childcare t , and **multitasking time** t_w .
- θ_g : returns to PT work; $\alpha_w^g(t_w)^\phi$: utility curvature of multitasking.

The Couples' Problem – Preferences

Couples solve a joint problem (with bargaining, joint childcare production, and social norm):

$$V_{EE}(\cdot) = \max \left\{ \lambda \left(u^f(c^f, \ell^f) - \alpha_w^f(t_w^f)^\phi \right) + (1 - \lambda) \left(u^m(c^m, \ell^m) - \alpha_w^m(t_w^m)^\phi \right) \right. \\ \left. - (1 - m) \psi \left(t^m + t_w^m - t^f - t_w^f \right) \right. \\ \left. + \omega \beta \mathbb{E} \left[\tilde{V}_{(e^f)', (e^m)' }(\cdot) \right] \right\}$$

- Bargaining weights λ (wife) / $1 - \lambda$ (husband).
- $(1 - m) \psi (t^m + t_w^m - t^f - t_w^f)$: **social-norm** penalty if the father does more childcare than the mother (traditional couples, $m = 0$).

The Couples' Problem – Constraints

Couples face a joint budget, a shared childcare technology, and a time constraint for each spouse:

$$c^f + c^m + a' = w^f h^f (n^f)^{\theta_f} + w^m h^m (n^m)^{\theta_m} + (1 + r)a \quad (\text{budget})$$

$$\left((t^f + t_w^f)^\nu + (t^m + t_w^m)^\nu \right)^{1/\nu} = \gamma(k, X) \quad (\text{childcare})$$

$$t_w^g \leq \mathbb{I}(o^g = TC) n^g \quad (\text{multitasking})$$

$$\ell^g + n^g + t^g = T \quad (\text{time, each } g)$$

- The two parents' time enters a **shared CES technology** (curvature ν): spouses substitute for each other in childcare.
- **Multitasking time** t_w^g lets a parent provide childcare while working, up to hours n^g (teleworkers only).

Re-entry Costs & Stochastic Processes

Re-entry cost. A worker not employed last period pays a stochastic cost to return:

$$\kappa^g(n_{-1}, n, k, o) = \begin{cases} \kappa_L^g(\cdot), & \text{w.p. } p, \\ \kappa_H^g(\cdot), & \text{w.p. } 1 - p. \end{cases}$$

- Value for couple with both offers *after* deciding n is:

$$V_{EE}(\cdot) - \kappa^m(n_{-1}, n, k, o) - \kappa^f(n_{-1}, n, k, o)$$

Human capital accumulation:

- Increases to next gridpoint w.p. η with full-time work ($\frac{\eta}{2}$ for PT); falls w.p. δ in non-employment.

Children $k \in \{0, s, b\}$ arrive and age stochastically, with transitions that differ for singles (by gender) and couples.

Aggregate States & Shocks

- Two absorbing steady states:
 - **Normal** (N): pre-pandemic economy.
 - **New normal** (NN):
 - more telework offers (7% $\rightarrow$ 28%)
 - fewer traditional couples (22% $\rightarrow$ 11%)
- Recessions arrive as **MIT shocks**: lower job-finding, higher job-loss probabilities; expected to persist w.p. $\rho = \frac{5}{6}$ ($\approx$ six quarters).
- Stylized shocks isolate the gender margin:
 - **Recession** (R): men's offer rates fall more than women's.
 - **He-cession** (H): only men's offer rates fall.
 - **She-cession** (S): only women's offer rates fall.
 - **Pandemic** (P): higher incidence on *women*, a surge in childcare needs, a one-off jump in telework, and transition to the *new normal*.

Calibration: Fit Model to Pre-Pandemic Target Moments

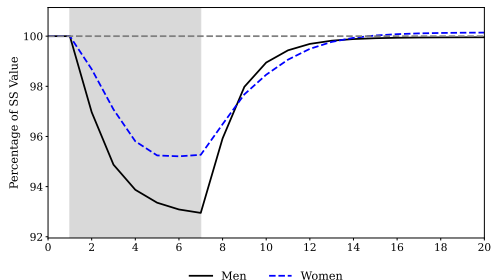
Moment	Data	Model
<i>Labor supply (hours)</i>		
Labor supply, single men	0.66	0.66
Labor supply, married men	0.9	0.83
Labor supply, single women	0.68	0.71
Labor supply, married women	0.64	0.66
<i>Job flows</i>		
Male E-to-E rate	0.93	0.91
Male U-to-U rate	0.62	0.66
Female E-to-E rate	0.9	0.87
Female U-to-U rate	0.77	0.73
<i>Wage gap</i>		
Gender wage gap (conditional on working)	0.19	0.21
<i>Re-entry moments</i>		
Non-reentry gap (F-M), married, no kids	0.13	0.13
Non-reentry gap (F-M), married, small kids	0.24	0.23
Non-reentry gap (F-M), married, big kids	0.21	0.19
<i>Telecommuting</i>		
Telecommute share	0.07	0.07
<i>Childcare</i>		
Fraction of childcare done by men, full-time couples	0.39	0.41
Childcare ratio (TC/NT): men, small kids, NT wife	1.5	1.42
Childcare ratio (TC/NT): women, any kids, NT husband	1.14	1.06
<i>Social norms</i>		
Ratio of M/F labor supply, traditional vs. modern couples	1.36	1.13
<i>Part time moments</i>		
Share of married mothers working part-time	0.18	0.24
Share of married mothers working full-time	0.52	0.49
Share of males working full-time	0.92	0.87
Share of females working full-time	0.76	0.75
<i>MPCs</i>		
MPC, couples	0.25	0.25
MPC, singles	0.25	0.24
<i>Inequality</i>		
Gini index, consumption	0.35	0.32

Calibrating the Recession Shocks

Recession magnitudes are set to match Great-Recession **employment rate** drops (men -5.9pp , women -3.0pp peak to trough):

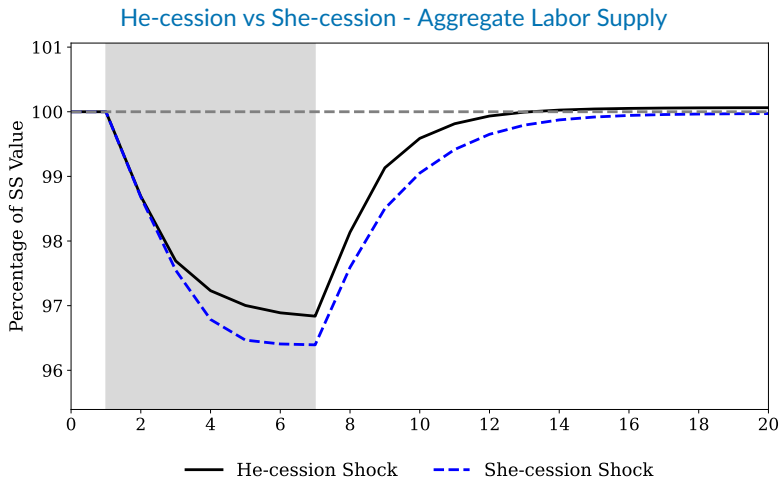
- Job offer (UE) and retention (EE) rates fall **2.9pp** (men) and **1.7pp** (women).

Recession: Male vs. Female Labor Supply

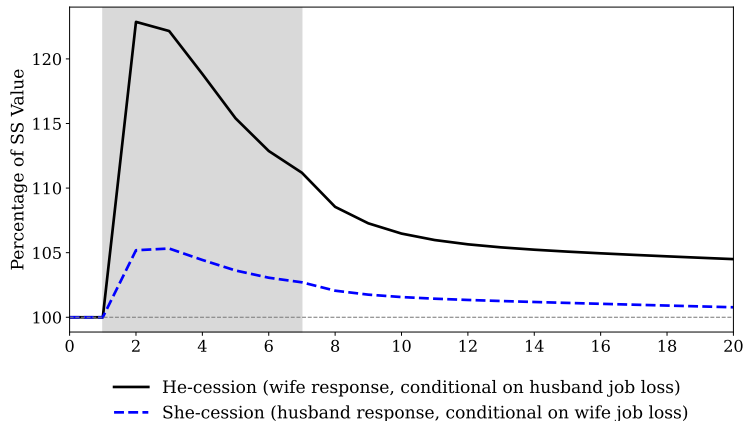


- A **he-cession** / **she-cession** applies the **same-size shock** (2.9pp) to one gender only.

(1) She-Cessions Are Deeper and Slower



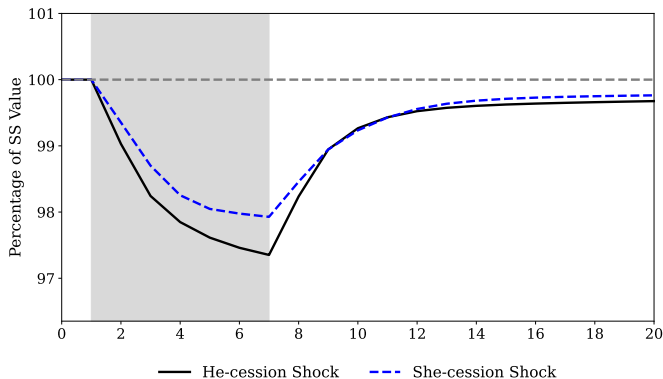
(2) The Added-Worker Effect Is Asymmetric



- In a he-cession, wives of unemployed men raise their labor supply (≈ 5.5 hours/week)
- The reverse is muted: married men are **already near-fully employed**.

(3) He-Cessions Cost More Income

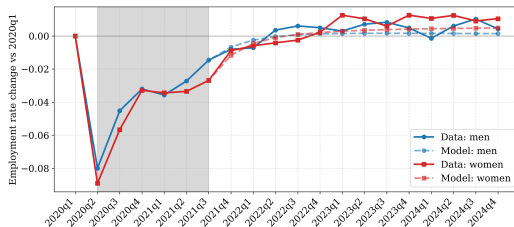
He-cession vs She-cession - Aggregate Household Income



- Men make up a larger share of the labor force, more often work full-time, and earn higher wages.

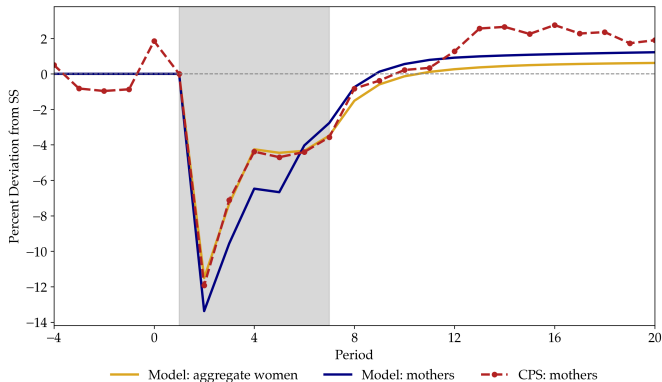
Validation Exercise: Pandemic

- **Childcare needs** rise 20% for the first year (4 quarters):
 - Small kids: $0.34 \rightarrow 0.41$ Big kids: $0.11 \rightarrow 0.13$
- **Telecommuting** status jumps to 28%.
- **Job offer rates** calibrated for the duration of the shock to match the percentage-point deviations from pre-pandemic employment rates.



- Economy transitions to the **New Normal** afterward.

Pandemic: Additional Decline for Mothers



1. Additional decline for mothers → labor force drop out due to childcare requirements.
2. Faster recovery for mothers → increased teleworking share.
3. Higher employment rate for mothers post pandemic.

Pandemic: Medium-Term Effects

16 Quarters After Start of Pandemic: Model vs Data

Moment	Data	Model
Fraction of childcare done by men, couples	+10.5%	+17.1%
Married women, hours	+3.0%	+1.5%
F/M employment rate ratio, couples with kids	+2.5%	+2.0%
Aggregate hours	+0.6%	+0.6%

Summary for Today

1. Families are a key source of insurance for economic shocks
2. Women's and men's labor supply behavior is qualitatively driven, in large part due to within-family decisions
3. This implies that He- vs. she-cessions are qualitatively different in terms of the transmission of shocks and the persistence of effects
4. Changes in the composition of family types, women's labor force participation, job flexibility, and the prevalence of conservative social norms all shape macro labor supply

Outlook

- Other recent work on household labor supply in macroeconomics.
- Additional channels of family insurance.
- Then: Moving on to non-unitary models of the family.