Consumption & Income Inequality across Generations

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Cross-Sectional Inequality across Generations

- **Parental heterogeneity affects life-cycle inequality among children**
  - Two drivers of long-term impacts of parents:
    1. Inequality in the cross-section of parents
    2. Intergenerational pass-through from parent to child
  - Contrast to importance of idiosyncratic (child-specific) drivers of inequality

Cross-Sectional Inequality across Generations

- **What do parents pass on to their children?**
  - Earning ability/potential
    - Innate traits, education, labour market info
  - Access to other income
    - Marital preferences and spousal earnings, inter-vivos transfers, etc.
  - Attitudes towards consumption expenditures
    - Propensity to save, preferences for expenditures/risk, etc.
- **Potential impact on different measures of inequality: earnings, other income, consumption**

Roadmap

- Step 1: Descriptive evidence
  - Reduced-form estimate of **lifetime persistence** across generations.

  $\Rightarrow$ stationarity of intergenerational persistence in earnings and consumption

- Step 2: Model joint evolution of Earnings, Other Income & Consumption.

  Estimate parameters dictating:

  - intergenerational persistence
  - permanent income inequality
  - covariation between permanent income and expenditures

  $\Rightarrow$ Quantify importance of parental linkages for cross-sectional inequality in younger generations

Data

Data

- **Source**: PSID. Follows adult lives of parents and their children.
  Long panels for children born in 1950s, 1960s, 1970s.

- **Period**: Annual 1967 through 1995; Biennial 1996 through 2014.

- **Sample**:
  - Male children born between 1952 & 1989
  - Parents aged below 65 years

- **Key Variables**:
  (1) Earnings: Labour earnings of male household head

  (2) Other Income: Transfer income (public + private) of head and wife + Labour earnings of wife

  (3) Consumption: Adult equivalent family expenditure

Panel Data on Consumption Expenditures

Measuring Consumption Expenditures

- More detailed consumption data starts in 1998 Expenditure Categories
- We either use food consumption data (full sample, since 1967)...
- ...or impute consumption data adopting PSID-to-PSID Imputation (Attanasio & Pistaferri, 2014)
  - Estimate demand system after 1998 Imputation Regression
  - Invert system to impute total expenditures back to 1967 Quality of Fit
- Robustness on several different subsamples and time periods.

Some Reduced-Form Evidence

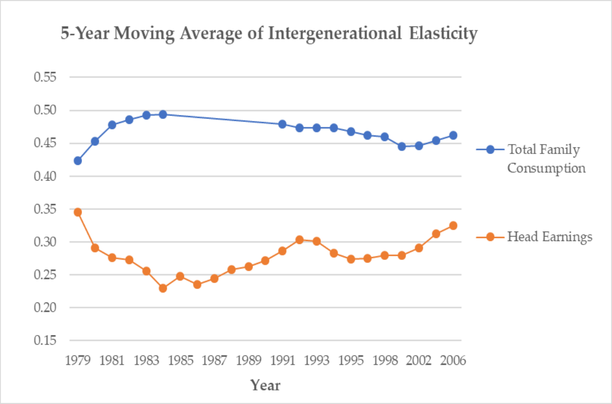
Intergenerational Elasticity (see Lee and Solon, 2009)

$$y_{fht} = \mu D_t + \beta_t x_{fh}^p + \gamma a_{fh}^p + \delta a_{fht}^k + \theta z_{fht} + \epsilon_{fht}$$

- D_t: Year t dummies
- x_{fh}^p: Average parental variable when cohort h child is 15-17 years
- a_{fh}^p: Quartic of average parental age when cohort h child is 15-17 years
- a_{fht}^k: Quartic of child age in year t normalized around age 40, $(t - h - 40)$
- z_{fht}: Interaction between x_{fh}^p and a_{fht}^k

Intergenerational Elasticity: Estimates

Heterogeneity: Mobility Matrix



- Time series of intergenerational elasticity estimates (for 40-year-old child)
- No significant time trend

Model

Income Processes: Earnings & Other Income

- Parent (p)

$$\textbf{Earnings:}\quad e^p_{f,t} = \bar{e}^p_f + \zeta^p_{f,t}$$

$$\textbf{Other Income:}\quad n^p_{f,t} = \bar{n}^p_f + u^p_{f,t}$$

- Child (k)

$$\textbf{Earnings:}\quad e^k_{f,t} = \bar{e}^k_f + \zeta^k_{f,t}$$

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- Intergenerational Persistence: Elasticities

$$\bar{e}^k_f = \gamma\, \bar{e}^p_f + \theta\, \bar{n}^p_f + \delta^k_f$$

$$\bar{n}^k_f = \rho\, \bar{n}^p_f + \lambda\, \bar{e}^p_f + \varepsilon^k_f$$

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Life-Cycle Consumption Problem

- Baseline model; Solve dynamic consumption plan; same for each generation.
- Maximise lifetime utility:

$$
\begin{aligned}
\max_{\{C_{f,k}\}_{k=t}^{T}} \quad & \mathbb{E}_t \sum_{j=0}^{T-t} \beta^j u(C_{f,t+j}) \\
s.t. & \\
A_{f,t+1} \quad & = \quad (1+r)\left(A_{f,t} + E_{f,t} + N_{f,t} - C_{f,t}\right)
\end{aligned}
$$

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\end{aligned}
$$

- Generalising:
  - Explicit about intertemporal linkages - eg paternalism
  - Does the timing of parental resources matter (eg credit constraints)

Consumption Process

- $C_{f,t} \approx \frac{r}{1+r}\left[A_{f,t} + \sum_{j=0}^{T}\left(\frac{1}{1+r}\right)^{j}\mathbb{E}_t\left(E_{f,t+j} + N_{f,t+j}\right)\right]$
- In logs: $c_{f,t} \approx q_{f,t} + \bar{e}_f + \bar{n}_f + \frac{r}{1+r}\left(\zeta_{f,t} + u_{f,t}\right)$

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- **Intergenerational Persistence**: $\bar{q}_f^k = \phi \bar{q}_f^p + \psi_f^k$

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- Assume $q_{f,t} = \bar{q}_f + v_{f,t}$
- **Intergenerational Persistence**: $\bar{q}_f^k = \phi\bar{q}_f^p + \psi_f^k$
- Agnostic about parents' intentions

Unobserved $q_{f,t}$ — What does it measure?

- Annuitised value of non-earned resources, e.g., rental income, non-labour part of business income
- Higher order preference terms, e.g., prudence and other saving motives
- Consumption-shifters, e.g., taste in particular commodities, etc.
- Outflows: transfers to others and income and wealth taxes
- Measurement error in consumption

Earnings:

$$
\begin{aligned}
e^{p}_{f,t} &= \bar{e}^{p}_{f} + \zeta^{p}_{f,t} \\
e^{k}_{f,t} &= \gamma \bar{e}^{p}_{f} + \theta \bar{n}^{p}_{f} + \delta^{k}_{f} + \zeta^{k}_{f,t}
\end{aligned}
$$

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Other Income:

$$\begin{aligned} n^p_{f,t} &= \bar{n}^p_f + u^p_{f,t} \\ n^k_{f,t} &= \rho \bar{n}^p_f + \lambda \bar{e}^p_f + \varepsilon^k_f + u^k_{f,t} \end{aligned}$$

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\end{aligned}
$$

Consumption:

$$
\begin{aligned}
c^p_{f,t} &= \overbrace{\bar{q}^p_f + v^p_{f,t}}^{q^p_{f,t}} + \overbrace{e^p_f + \frac{r}{1+r}\zeta^p_{f,t}}^{\text{from } e^p_{f,t}} + \overbrace{n^p_f + \frac{r}{1+r}u^p_{f,t}}^{\text{from } n^p_{f,t}} \\
c^k_{f,t} &= \underbrace{\phi \bar{q}^p_f + \psi^k_f + v^k_{f,t}}_{q^k_{f,t}} + \underbrace{(\gamma + \lambda)\, \bar{e}^p_f + (\rho + \theta)\, \bar{n}^p_f + \delta^k_f + \varepsilon^k_f + \frac{r}{1+r}\left(\zeta^k_{f,t} + u^k_{f,t}\right)}_{\text{from } e^k_{f,t} + n^k_{f,t}}
\end{aligned}
$$

Estimation

Empirical Steps

1. Regress log variables on year & cohort dummies; **use residual variation**

2. Minimize distance between empirical and theoretical moments **(GMM)**
   - Equally weighted moments
   - Bootstrap standard errors

3. **Over-identification**
   - Panel Variation: 48 moment conditions & 25 parameters
   - Cross-Section Variation: 21 moment restrictions & 17 parameters

Examples of Moment Conditions

(a) Variances

$$Var\left(e^k_{f,t}\right) = \gamma^2\sigma^2_{\bar{e}^p} + \theta^2\sigma^2_{\bar{n}^p} + 2\gamma\theta\sigma_{\bar{e}^p,\bar{n}^p} + \sigma^2_{\delta^k} + \sigma^2_{\zeta^k}$$

$$\begin{aligned} Var\left(c^p_{f,t}\right) &= \sigma^2_{\bar{q}^p} + \sigma^2_{\bar{e}^p} + \sigma^2_{\bar{n}^p} + 2\left(\sigma_{\bar{q}^p,\bar{e}^p} + \sigma_{\bar{q}^p,\bar{n}^p} + \sigma_{\bar{e}^p,\bar{n}^p}\right) \\ &+ \sigma^2_{v^p} + \left(\frac{r}{1+r}\right)^2\left(\sigma^2_{\zeta^p} + \sigma^2_{u^p} + 2\sigma_{\zeta^p,u^p}\right) \end{aligned}$$

(b) Contemporaneous Covariances

$$Cov\left(e^p_{f,t}, e^k_{f,t}\right) = \rho\sigma^2_{\bar{e}^p} + \theta\sigma_{\bar{e}^p,\bar{n}^p}$$

$$Cov\left(e^k_{f,t}, n^k_{f,t}\right) = \left(\rho\gamma + \theta\lambda\right)\sigma_{\bar{e}^p,\bar{n}^p} + \gamma\lambda\sigma^2_{\bar{e}^p} + \rho\theta\sigma^2_{\bar{n}^p} + \sigma_{\delta^k,\varepsilon^k} + \sigma_{\zeta^k,u^k}$$

(c) Non-contemporaneous Covariances

$$Cov\left(e^p_{f,t}, c^p_{f,t+1}\right) = \sigma^2_{\bar{e}^p} + \sigma_{\bar{q}^p,\bar{e}^p} + \sigma_{\bar{e}^p,\bar{n}^p}$$

$$Cov\left(e^p_{f,t}, n^k_{f,t+1}\right) = \rho\sigma_{\bar{e}^p,\bar{n}^p} + \lambda\sigma^2_{\bar{e}^p}$$

Parameters

- **Intergenerational Elasticities**
  - Earnings: γ
  - Other Income: ρ
  - Consumption shifters: ϕ

  Cross-effects:

  - Parental earnings on child other income: λ
  - Parental other income on child earnings: θ

Parameters

Intergenerational Elasticities

- Earnings: γ
- Other Income: ρ
- Consumption shifters: ϕ

Cross-effects:

- Parental earnings on child other income: λ
- Parental other income on child earnings: θ

Variance

- Permanent fixed effects: $\sigma^2_{\bar{e}^p}$, $\sigma^2_{\delta^k}$, $\sigma^2_{\bar{n}^p}$, $\sigma^2_{\varepsilon^k}$, $\sigma^2_{\bar{q}^p}$, $\sigma^2_{\psi^k}$
- Transitory shocks: $\sigma^2_{\zeta^p}$, $\sigma^2_{\zeta^k}$, $\sigma^2_{u^p}$, $\sigma^2_{u^k}$, $\sigma^2_{v^p}$, $\sigma^2_{v^k}$

Covariance

- Permanent fixed effects: $\sigma_{\bar{q}^p,\bar{e}^p}$, σ_{ψ^k,δ^k}, $\sigma_{\bar{q}^p,\bar{n}^p}$, $\sigma_{\psi^k,\varepsilon^k}$, $\sigma_{\bar{e}^p,\bar{n}^p}$, $\sigma_{\delta^k,\varepsilon^k}$
- Transitory shocks: σ_{ζ^p,u^p}, σ_{ζ^k,u^k}

Estimates: Intergenerational Persistence

Variables	Parameters	Estimates (1)
Earnings	γ	0.230 (0.027)
Other Income	ρ	0.100 (0.023)
$\bar{e}_f^p$ on $\bar{n}_f^k$	λ	0.206 (0.032)
$\bar{n}_f^p$ on $\bar{e}_f^k$	θ	0.055 (0.019)
Consumption Shifters	ϕ	0.154 (0.032)
No. of Parent-Child Pairs	N	760

Note: Bootstrap standard errors with 100 repetitions are reported in parentheses. The average age for parents is 47 years, while that for children is 37 years in the sample.

Variance Covariance Fit of Moments

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Variance Covariance Fit of Moments

Role of Parents

Contribution of Parental Heterogeneity to Cross-Sectional Variances

- **Earnings**

$$Var\left(e_f^k\right) = \underbrace{\gamma^2\sigma^2_{\bar{e}^p} + \theta^2\sigma^2_{\bar{n}^p} + 2\gamma\theta\sigma_{\bar{e}^p,\bar{n}^p}}_{\textbf{Parental contribution}:\ 8.0\%} + \sigma^2_{\delta^k}$$

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- **Other Income**

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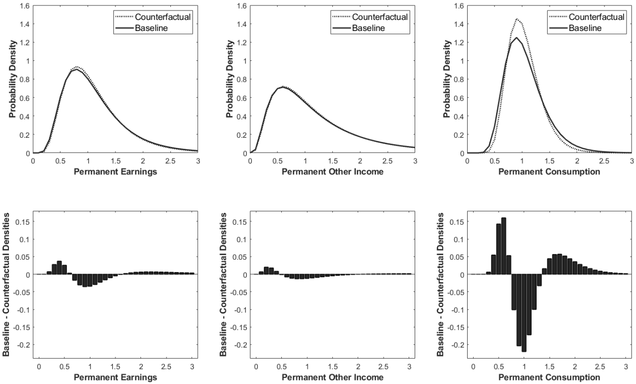
- **Consumption**

$$\begin{aligned} Var\left(c_f^k\right) &= \phi^2\sigma^2_{\bar{q}^p} + (\gamma+\lambda)^2\sigma^2_{\bar{e}^p} + (\rho+\theta)^2\sigma^2_{\bar{n}^p} \\ &+ \underbrace{2\left[(\gamma+\lambda)\phi\sigma_{\bar{q}^p,\bar{e}^p} + (\rho+\theta)\phi\sigma_{\bar{q}^p,\bar{n}^p} + (\rho+\theta)(\gamma+\lambda)\sigma_{\bar{e}^p,\bar{n}^p}\right]}_{\textbf{Parental contribution: } 29.9\%} \\ &+ \sigma^2_{\varepsilon^k} + \sigma^2_{\delta^k} + \sigma^2_{\psi^k} + 2\left(\sigma_{\psi^k,\varepsilon^k} + \sigma_{\psi^k,\delta^k} + \sigma_{\delta^k,\varepsilon^k}\right) \end{aligned}$$

Family Background & Polarization



- Random allocation of parents reduces intragenerational dispersion
- Insurance within families generates cross-section inequality

Long Run Inequality

$$
\begin{aligned}
e^{k_1} &= \gamma \bar{e}^p + \delta^{k_1} \\
e^{k_2} &= \gamma^2 \bar{e}^p + \gamma \delta^{k_1} + \delta^{k_2} \\
&\vdots \\
e^{k_t} &= \gamma^t \bar{e}^p + \sum_{j=1}^{t} \gamma^{t-j} \delta^{k_t}
\end{aligned}
$$

$$
Var(e^*) = \lim_{t \to \infty} \left[\gamma^{2t} \sigma^2_{\bar{e}^p} + \sum_{j=1}^{t} \gamma^{2(t-j)} \sigma^2_{\delta^k} \right] = \frac{\sigma^2_{\delta^k}}{1 - \gamma^2}
$$

Similarly, $Var(n^*) = \frac{\sigma^2_{\varepsilon^k}}{1-\rho^2}$.

$$
Var(c^*) = \frac{\sigma^2_{\psi^k}}{1-\phi^2} + \frac{\sigma^2_{\delta^k}}{1-\gamma^2} + \frac{\sigma^2_{\varepsilon^k}}{1-\rho^2} + \frac{2\sigma_{\delta^k,\varepsilon^k}}{1-\gamma\rho} + \frac{2\sigma_{\psi^k,\varepsilon^k}}{1-\phi\rho} + \frac{2\sigma_{\psi^k,\delta^k}}{1-\phi\gamma}.
$$

Long Run Steady State Inequality

Table: Steady state inequality vs. current inequality

Variable	Parental Inequality	Child Inequality	Steady-state Inequality
Earnings	0.199	0.251	0.255
Other Income	0.845	0.669	0.676
Consumption	0.097	0.118	0.127

Note: Estimates based on sample of 336 unique parent-child pairs. Age restricted between 30 and 40 years.

What matters most? Parental inequality or persistence?

Table: Varying Persistence γ

γ (1)	$\widehat{\sigma^2_{\delta^k}}$ (2)	$\widehat{Var(e^p)}$ (3)	$\widehat{Var(e^k)}$ (4)	$\widehat{Var(e^*)}$ (5)	$\frac{\gamma^2 \widehat{Var(e^p)}}{\widehat{Var(e^k)}}$ (6)
0.21	**0.241**	**0.199**	**0.251**	**0.255**	**4.0%**
0.40	0.221	0.182	0.251	0.263	12.2%
0.60	0.194	0.155	0.251	0.303	22.8%
0.80	0.168	0.128	0.251	0.467	33.1%

- Persistence matters most. Role of parental inequality is secondary.
- Importance of parents for inequality in the next generation requires very high (counterfactual) estimates of persistence

Robustness

Robustness Checks

- Components of Other Income: Estimates
  Wife's earnings are linked across generations, transfer income is not.
- Restricting cross-effects ($\lambda = \theta = 0$): Estimates Importance
  Parental importance increases for earnings inequality.
- Blundell, Pistaferri, Preston (2008) Specification:
  Alternative model of persistence in permanent shocks (growth rates) rejected
  Details
- Different cohorts of children: Estimates
  No statistical evidence of changes across 1960s and 1970s cohorts
- Imputed consumption instead of food expenditure:
  Parents matter more for child consumption inequality.
- Use panel variation:
  Quantitatively similar estimates for persistence and inequality
- Random matching between parents and children:
  Placebo test validates our findings.

Conclusion

Conclusion

- Stylised facts
  - Inter-generational persistence stable in U.S. (income and consumption)
  - Evidence of greater intergenerational persistence in consumption than earnings
- Idiosyncratic shocks contribute much more than parental channel to inequality
- Greater parental inequality is not sufficient to trigger increased long-run inequality. Would need much larger inter-generational elasticities.
- Cross-generational persistence in permanent-income and consumption *levels*: no evidence of persistence in *growth rates*.

Appendix

Consumption Expenditure Categories Back

Consumption: 11 categories observed in different PSID-waves

(A1.) food (1968-2015 except 1973, 1988 and 1989)
(A2.) housing (1968-2015 except 1978, 1988 and 1989)

(B1.) child-care (1970-1972, 1976, 1977, 1979, 1988-2015)

(C1.) education (1999-2015)
(C2.) transportation (1999-2015)
(C3.) healthcare (1999-2015)

(D1.) recreation and entertainment (2005-2015)
(D2.) trips and vacation (2005-2015)
(D3.) clothing and apparel (2005-2015)
(D4.) home repairs and maintenance (2005-2015)
(D5.) household furnishings and equipment (2005-2015)

Consumption Imputation (Attanasio & Pistaferri, 2014) Back

Step 1:

$$ln\left(N_{it}\right) = Z'_{it}\omega + p'_{t}\pi + g(F_{it};\lambda) + u_{it}$$

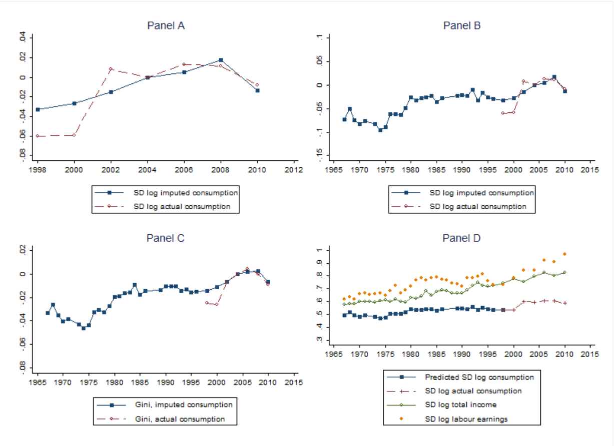
Step 2:

$$\hat{C}_{it} = F_{it} + exp\left\{Z'_{it}\hat{\omega} + p'_{t}\hat{\pi} + g\left(F_{it};\hat{\lambda}\right)\right\}$$

Notations:

- $\hat{C}_{i,t}$: Imputed total consumption
- $N_{i,t}$: Total consumption net of food expenditure
- $Z_{i,t}$: Set of socio-economic controls List
- p_t: Relative prices — overall CPI, and CPI for food at home, food away from home and rent
- $g(.)$: A polynomial function
- $F_{i,t}$: Total food expenditure
- $u_{i,t}$: Error term

Goodness of Imputation Back



List of controls, $Z_{i,t}$

Back to regression Back to main

1. Age Dummies
2. Education Dummies
3. Marital Status Dummies
4. Race Dummy
5. State of Residence Dummies
6. Employment Status Dummy
7. Self-Employment Dummy
8. Hours worked by household head
9. Homeownership Dummy
10. Disability Dummies
11. Family Size Dummies
12. Number of children in the household
13. Household Income (allows for non-homothetic preferences)

Intergenerational Mobility: Matrices Definition Back

Earnings

Child \ Parent	$Q_{p,1}$	$Q_{p,2}$	$Q_{p,3}$	$Q_{p,4}$
$Q_{c,1}$	45.98	27.88	17.29	9.56
$Q_{c,2}$	25.41	29.64	27.17	15.93
$Q_{c,3}$	19.75	24.80	30.44	23.10
$Q_{c,4}$	8.86	17.69	25.10	51.41

Consumption

Child \ Parent	$Q_{p,1}$	$Q_{p,2}$	$Q_{p,3}$	$Q_{p,4}$
$Q_{c,1}$	53.02	27.79	9.75	4.95
$Q_{c,2}$	26.53	32.04	25.65	13.65
$Q_{c,3}$	16.28	26.51	35.40	23.55
$Q_{c,4}$	4.17	13.67	29.20	57.84

Mobility Matrix

A cell $c_{i,j}$ in a mobility matrix at the intersection of the i^{th} row and the j^{th} column $\forall i, j = 1(1)4$ is given by

$$c_{i,j} = Prob\left[child \in Q_{k,i} \middle| \, parent \in Q_{p,j}\right] \times 100$$

where $Q_{k,i}$ denotes the i^{th} quartile of the child distribution and $Q_{p,j}$ denotes the j^{th} quartile of the parental distribution. Back Back to Main

Alternative Model (Blundell, Pistaferri & Preston, 2008) Back

Parents

- $e^p_{f,t} = \bar{e}^p_f + P^p_{f,t} + u^p_{f,t}$; where $u^p_{f,t} \overset{iid}{\sim} \left(0, \sigma^2_{u^p}\right)$
- $P^p_{f,t} = P^p_{f,t-1} + v^p_{f,t}$; where $v^p_{f,t} \overset{iid}{\sim} \left(0, \sigma^2_{v^p}\right)$

Children

- $e^k_{f,t} = \bar{e}^k_f + P^k_{f,t} + u^k_{f,t}$; where $u^k_{f,t} \overset{iid}{\sim} \left(0, \sigma^2_{u^k}\right)$
- $P^k_{f,t} = P^k_{f,t-1} + v^k_{f,t}$; where $v^k_{f,t} \overset{iid}{\sim} \left(0, \sigma^2_{v^c}\right)$

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- $\Delta e^k_{f,t} = \rho v^p_{f,t} + \varepsilon^k_{f,t} + \Delta u^k_{f,t}$; Estimate of $\rho = 0.241$ (0.16)

Alternative Model (Blundell, Pistaferri & Preston, 2008) Back

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- $\Delta e^k_{f,t} = \rho v^p_{f,t} + \varepsilon^k_{f,t} + \Delta u^k_{f,t}$; Estimate of $\rho = 0.241$ (0.16)
- $\Delta n^k_{f,t} = \lambda \nu^p_{f,t} + \theta^k_{f,t} + \Delta \zeta^k_{f,t}$; Estimate of $\lambda = 0.094$ (0.07)

Alternative Model (Blundell, Pistaferri & Preston, 2008) Back

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- $e^p_{f,t} = \bar{e}^p_f + P^p_{f,t} + u^p_{f,t}$; where $u^p_{f,t} \overset{iid}{\sim} \left(0, \sigma^2_{u^p}\right)$
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- $\Delta c^p_{f,t} = \phi_{e^p} v^p_{f,t} + \phi_{n^p} \nu^p_{f,t} + \psi_{e^p} u^p_{f,t} + \psi_{n^p} \zeta^p_{f,t} + \xi^p_{f,t}$

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- $\Delta e^k_{f,t} = \rho v^p_{f,t} + \varepsilon^k_{f,t} + \Delta u^k_{f,t}$; Estimate of $\rho = 0.241$ (0.16)
- $\Delta n^k_{f,t} = \lambda \nu^p_{f,t} + \theta^k_{f,t} + \Delta \zeta^k_{f,t}$; Estimate of $\lambda = 0.094$ (0.07)
- $\Delta c^k_{f,t} = \phi_{e^k} \rho v^p_{f,t} + \phi_{e^k} \varepsilon^k_{f,t} + \phi_{n^k} \lambda \nu^p_{f,t} + \phi_{n^k} \theta^k_{f,t} + \psi_{e^k} u^k_{f,t} + \psi_{n^k} \zeta^k_{f,t} + \gamma \xi^p_{f,t} + \chi^k_{f,t}$;
  Estimate of $\gamma = 0.009$ (0.05)

Estimates: Variance

Back

Explanation	Parameters	Estimates (1)
Parental Outcomes: Variances		
Permanent Earnings	$\sigma^2_{\bar{e}^p}$	0.295 (0.021)
Permanent Other Income	$\sigma^2_{\bar{n}^p}$	0.806 (0.06)
Permanent Consumption Shifters	$\sigma^2_{\bar{q}^p}$	1.031 (0.065)
Child Idiosyncratic Shocks: Variances		
Permanent Earnings	$\sigma^2_{\delta^k}$	0.228 (0.011)
Permanent Other Income	$\sigma^2_{\varepsilon^k}$	0.511 (0.043)
Permanent Consumption Shifters	$\sigma^2_{\psi^k}$	0.730 (0.056)

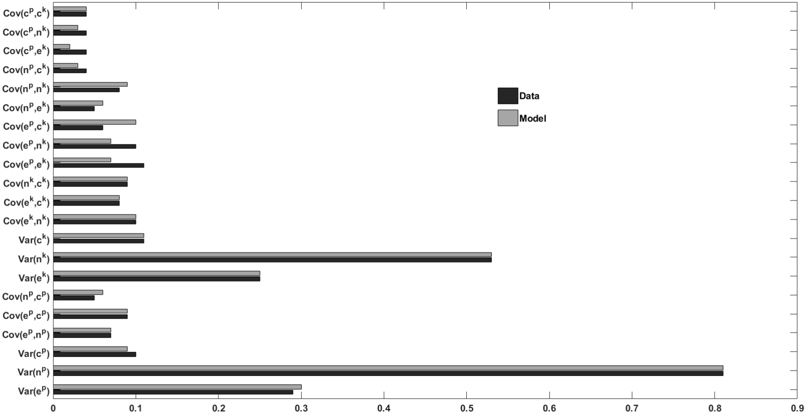
Note: Bootstrap standard errors with 100 repetitions are reported in parentheses.

Estimates: Covariance Back

Explanation	Parameters	Estimates (1)
Parental Outcomes: Covariances		
Consumption Shifters & Earnings	$\sigma_{\bar{q}^p,\bar{e}^p}$	-0.271 (0.024)
Consumption Shifters & Other Income	$\sigma_{\bar{q}^p,\bar{n}^p}$	-0.818 (0.061)
Earnings and Other Income	$\sigma_{\bar{e}^p,\bar{n}^p}$	0.070 (0.013)
Child Idiosyncratic Shocks: Covariances		
Consumption Shifters & Earnings	σ_{ψ^k,δ^k}	-0.247 (0.018)
Consumption Shifters & Other Income	$\sigma_{\psi^k,\varepsilon^k}$	-0.522 (0.048)
Earnings & Other Income	$\sigma_{\delta^k,\varepsilon^k}$	0.075 (0.013)

Note: Bootstrap standard errors with 100 repetitions are reported in parentheses.

Fit of Moments Back



'Other Income' Decomposition: Intergenerational Persistence

Back

Explanation	Parameters	Transfers (1)	Spouse Earnings (2)	Other Income (3)
Earnings	γ	0.239 (0.050)	0.275 (0.027)	0.254 (0.032)
Other Income	ρ	0.031 (0.046)	0.142 (0.036)	0.097 (0.033)
$\bar{e}_f^p$ on $\bar{n}_f^k$	λ	0.107 (0.073)	0.232 (0.033)	0.184 (0.045)
$\bar{n}_f^p$ on $\bar{e}_f^k$	θ	-0.007 (0.017)	0.144 (0.033)	0.086 (0.027)
Consumption Shifters	ϕ	0.007 (0.047)	0.372 (0.047)	0.217 (0.047)
No. of Parent-Child Pairs	N	459	459	459

Note: Bootstrap standard errors with 100 repetitions are reported in parentheses.

Role of Marital Selection Back

Table: Parental vs. Idiosyncratic Heterogeneity: Role of Marital Selection

Variable	**Child Variance** (1)	**Variance due to Parents** (2)	**Idiosyncratic Variance** (3)
Panel A			
Earnings	0.229	0.033 (14.6%)	0.196 (85.4%)
Wife Earnings	0.322	0.026 (8.1%)	0.296 (91.9%)
Consumption	0.113	0.025 (22.5%)	0.088 (77.5%)
Panel B			
Earnings	0.229	0.016 (7.1%)	0.213 (92.9%)
Transfer Income	1.068	0.005 (0.4%)	1.063 (99.6%)
Consumption	0.113	0.034 (30.3%)	0.079 (69.7%)
Panel C			
Earnings	0.229	0.024 (10.7%)	0.205 (89.3%)
Other Income	0.457	0.016 (3.5%)	0.441 (96.5%)
Consumption	0.113	0.027 (24.2%)	0.086 (75.8%)

Note: Panel A corresponds to the case where wife earnings is used as the measure of other income. Panel B uses transfer income of the male household head and his wife as the measure of other income. Panel C corresponds to the case where other income is defined as the sum of wife earnings and total transfer income. Numbers obtained using parameter estimates based on sample of 459 unique parent-child pairs in which both transfers and wife earnings are not missing.

Cohorts: Intergenerational Persistence   Back

Explanation	**Parameters**	**All Cohorts** (1)	**1960s Cohort** (2)	**1970s Cohort** (3)
Earnings	γ	0.209 (0.069)	0.251 (0.087)	0.191 (0.106)
Other Income	ρ	0.041 (0.058)	-0.006 (0.068)	0.099 (0.093)
$\bar{e}_f^p$ on $\bar{n}_f^k$	λ	0.217 (0.079)	0.202 (0.131)	0.244 (0.12)
$\bar{n}_f^p$ on $\bar{e}_f^k$	θ	0.040 (0.032)	0.009 (0.046)	0.079 (0.038)
Consumption Shifters	ϕ	0.075 (0.075)	-0.029 (0.09)	0.200 (0.124)
No. of Parent-Child Pairs	N	336	166	170

Note: Bootstrap standard errors with 100 repetitions are reported in parentheses. Both parent and child ages are restricted between 30 and 40 years. All columns use cross-sectional data variation that is net of cohort and year effects only.

Robustness Checks: Intergenerational Persistence Back

Parameters	Baseline (1)	$\boldsymbol{\lambda = \theta = 0}$ (2)	Random Match (3)	Imputation (4)	Panel Data (5)
Earnings: γ	0.230	0.340	-0.018	0.257	0.294
	(0.029)	(0.02)	(0.028)	(0.029)	(0.041)
Other Income: ρ	0.100	0.121	-0.039	0.096	0.095
	(0.029)	(0.029)	(0.025)	(0.028)	(0.045)
$\bar{e}_f^p$ on $\bar{n}_f^k$: λ	0.206	0	-0.007	0.236	0.107
	(0.038)	(0)	(0.035)	(0.033)	(0.060)
$\bar{n}_f^p$ on $\bar{e}_f^k$: θ	0.055	0	-0.015	0.052	0.066
	(0.017)	(0)	(0.023)	(0.015)	(0.035)
Consumption Shifters: ϕ	0.154	0.109	-0.048	0.127	0.153
	(0.034)	(0.032)	(0.034)	(0.033)	(0.046)
No. of Parent-Child Pairs: N	760	760	760	760	760

Note: Bootstrap standard errors with 100 repetitions are reported in parentheses.

Robustness Checks: Intergenerational Persistence Back

Variables	**Baseline** (1)	$\boldsymbol{\lambda = \theta = 0}$ (2)	**Random Match** (3)	**Imputation** (4)	**Panel Data** (5)
Earnings	8.0	13.5	0.1	9.4	12.3
Other Income	4.4	2.2	0.2	5.0	2.1
Consumption	29.9	19.5	0.2	47.4	22.8

Note: All numbers are in percentage terms.