Wealth Mobility in the United States

Empirical Evidence from the PSID

Christophe Van Langenhove

9 July, 2025

1. Introduction

Setting

- Research on wealth inequality has expanded considerably, while studies on wealth mobility remain relatively scarce

Setting

- Research on wealth inequality has expanded considerably, while studies on wealth mobility remain relatively scarce
- **United States**: Charles & Hurst (2003), Conley & Glauber (2008), Klevmarken et al. (2003), Menchik (1979), Pfeffer & Killewald (2018), Shiro et al. (2022)

Setting

- Research on wealth inequality has expanded considerably, while studies on wealth mobility remain relatively scarce
- **United States**: Charles & Hurst (2003), Conley & Glauber (2008), Klevmarken et al. (2003), Menchik (1979), Pfeffer & Killewald (2018), Shiro et al. (2022)
- **Nordic countries**: Adermon et al. (2018), Audoly et al. (2024), Black et al. (2020), Boserup et al. (2017), Fagereng et al. (2021), Hubmer et al. (2024)

Setting

- Research on wealth inequality has expanded considerably, while studies on wealth mobility remain relatively scarce
- **United States**: Charles & Hurst (2003), Conley & Glauber (2008), Klevmarken et al. (2003), Menchik (1979), Pfeffer & Killewald (2018), Shiro et al. (2022)
- **Nordic countries**: Adermon et al. (2018), Audoly et al. (2024), Black et al. (2020), Boserup et al. (2017), Fagereng et al. (2021), Hubmer et al. (2024)
- **UK & Australia**: Gregg & Kanabar (2023), Levell & Sturrock (2023) and Siminsky & Yu (2022)

Relevance

Relevance of data on wealth mobility?

Relevance

Relevance of data on wealth mobility?

1. Informative for academic and popular debates on wealth taxation and estate taxation

Relevance

Relevance of data on wealth mobility?

1. Informative for academic and popular debates on wealth taxation and estate taxation
   - The negative externalities of high wealth inequality may be more limited when wealth mobility is high as well

Relevance

Relevance of data on wealth mobility?

1. Informative for academic and popular debates on wealth taxation and estate taxation
   - The negative externalities of high wealth inequality may be more limited when wealth mobility is high as well
2. Input to Bewley-Huggett-Aiyagari heterogeneous agent models of the US wealth distribution

Relevance

Relevance of data on wealth mobility?

1. Informative for academic and popular debates on wealth taxation and estate taxation
   - The negative externalities of high wealth inequality may be more limited when wealth mobility is high as well
2. Input to Bewley-Huggett-Aiyagari heterogeneous agent models of the US wealth distribution
   - Do existing models of the US wealth distribution also generate realistic wealth mobility outcomes?

Relevance

Relevance of data on wealth mobility?

1. Informative for academic and popular debates on wealth taxation and estate taxation
   - The negative externalities of high wealth inequality may be more limited when wealth mobility is high as well
2. Input to Bewley-Huggett-Aiyagari heterogeneous agent models of the US wealth distribution
   - Do existing models of the US wealth distribution also generate realistic wealth mobility outcomes?
   - What are the driving forces behind cross-country differences in wealth mobility outcomes?

This paper

- Data from the Panel Study of Income Dynamics (PSID)

This paper

- Data from the Panel Study of Income Dynamics (PSID)
- Descriptive evidence on US relative wealth mobility

This paper

- Data from the Panel Study of Income Dynamics (PSID)
- Descriptive evidence on US relative wealth mobility

Three research questions:

1. Inter-generational wealth mobility: wealth ranks of children versus those of their parents (two-generational) and grandparents (three-generational)

This paper

- Data from the Panel Study of Income Dynamics (PSID)
- Descriptive evidence on US relative wealth mobility

Three research questions:

1. Inter-generational wealth mobility: wealth ranks of children versus those of their parents (two-generational) and grandparents (three-generational)
2. Intra-generational wealth mobility: wealth ranks of individuals over their lifecycle (working life and older age)

This paper

- Data from the Panel Study of Income Dynamics (PSID)
- Descriptive evidence on US relative wealth mobility

Three research questions:

1. Inter-generational wealth mobility: wealth ranks of children versus those of their parents (two-generational) and grandparents (three-generational)
2. Intra-generational wealth mobility: wealth ranks of individuals over their lifecycle (working life and older age)
3. Within-family wealth rank interdependence: do changes in individuals' wealth ranks correlate with those of their parents over the same period?

2. Data & methods

Data

- Panel Study of Income Dynamics (PSID): survey data running from 1968 to 2021

Data

- Panel Study of Income Dynamics (PSID): survey data running from 1968 to 2021
- Waves in 1984, 1989, 1994 and 1999-2021 include questions on assets and debt (and a wealth estimate)

Data

- Panel Study of Income Dynamics (PSID): survey data running from 1968 to 2021
- Waves in 1984, 1989, 1994 and 1999-2021 include questions on assets and debt (and a wealth estimate)
- By contrast, prior to 1984: no direct wealth estimate is available in the PSID

Data

- Panel Study of Income Dynamics (PSID): survey data running from 1968 to 2021
- Waves in 1984, 1989, 1994 and 1999-2021 include questions on assets and debt (and a wealth estimate)
- By contrast, prior to 1984: no direct wealth estimate is available in the PSID
    - Main housing values are commonly used to proxy total wealth (e.g. Pfeffer & Killewald, 2018; Chetty et al., 2020)

Data

- Panel Study of Income Dynamics (PSID): survey data running from 1968 to 2021
- Waves in 1984, 1989, 1994 and 1999-2021 include questions on assets and debt (and a wealth estimate)
- By contrast, prior to 1984: no direct wealth estimate is available in the PSID
  - Main housing values are commonly used to proxy total wealth (e.g. Pfeffer & Killewald, 2018; Chetty et al., 2020)
  - Instead, I estimate a gradient-boosting ML-model which uses additional household-level socio-economic data

Data

- Panel Study of Income Dynamics (PSID): survey data running from 1968 to 2021
- Waves in 1984, 1989, 1994 and 1999-2021 include questions on assets and debt (and a wealth estimate)
- By contrast, prior to 1984: no direct wealth estimate is available in the PSID
  - Main housing values are commonly used to proxy total wealth (e.g. Pfeffer & Killewald, 2018; Chetty et al., 2020)
  - Instead, I estimate a gradient-boosting ML-model which uses additional household-level socio-economic data
  - The ML-proxies significantly outperform the naive proxies used in the literature

3. Inter-generational (family-level) mobility

Description

- Across two generations (parents-children) and three generations (grandparents-grandchildren)

Description

- Across two generations (parents-children) and three generations (grandparents-grandchildren)
- Two generations: parents' and children's within-cohort wealth ranks are compared at identical lifecycle stages

Description

- Across two generations (parents-children) and three generations (grandparents-grandchildren)
- Two generations: parents' and children's within-cohort wealth ranks are compared at identical lifecycle stages
- Three generations: grandchildren's within-cohort wealth ranks at ages 30-39 versus their grandparents' wealth ranks from age 40

Description

- Across two generations (parents-children) and three generations (grandparents-grandchildren)
- Two generations: parents' and children's within-cohort wealth ranks are compared at identical lifecycle stages
- Three generations: grandchildren's within-cohort wealth ranks at ages 30-39 versus their grandparents' wealth ranks from age 40

Two individual-level wealth rank κ (wealth levels w) series:

Description

- Across two generations (parents-children) and three generations (grandparents-grandchildren)
- Two generations: parents' and children's within-cohort wealth ranks are compared at identical lifecycle stages
- Three generations: grandchildren's within-cohort wealth ranks at ages 30-39 versus their grandparents' wealth ranks from age 40

Two individual-level wealth rank κ (wealth levels w) series:

- κ^{Ψ} (w^{Ψ}) $-$ actual within-cohort wealth ranks (wealth levels) in the post-1984 sample

Description

- Across two generations (parents-children) and three generations (grandparents-grandchildren)
- Two generations: parents' and children's within-cohort wealth ranks are compared at identical lifecycle stages
- Three generations: grandchildren's within-cohort wealth ranks at ages 30-39 versus their grandparents' wealth ranks from age 40

Two individual-level wealth rank κ (wealth levels w) series:

- κ^{Ψ} (w^{Ψ}) $-$ actual within-cohort wealth ranks (wealth levels) in the post-1984 sample
- $\hat{\kappa}^{\Omega}$ ($\hat{w}^{\Omega}$) $-$ ML-proxy within-cohort wealth ranks (wealth levels) in the full sample (from 1968 onwards)

Two generations

Key findings:

1. Estimated parent-child rank-rank coefficients β range from 0.34 to 0.38 (actual wealth) and from 0.36 to 0.51 (ML-proxy wealth)

Two generations

Key findings:

1. Estimated parent-child rank-rank coefficients β range from 0.34 to 0.38 (actual wealth) and from 0.36 to 0.51 (ML-proxy wealth)
2. Parent-child lifecycle bias: the resemblance between parents and their children increases with age (similar to e.g. Pfeffer & Killewald, 2018; Boserup et al., 2017)

Two generations

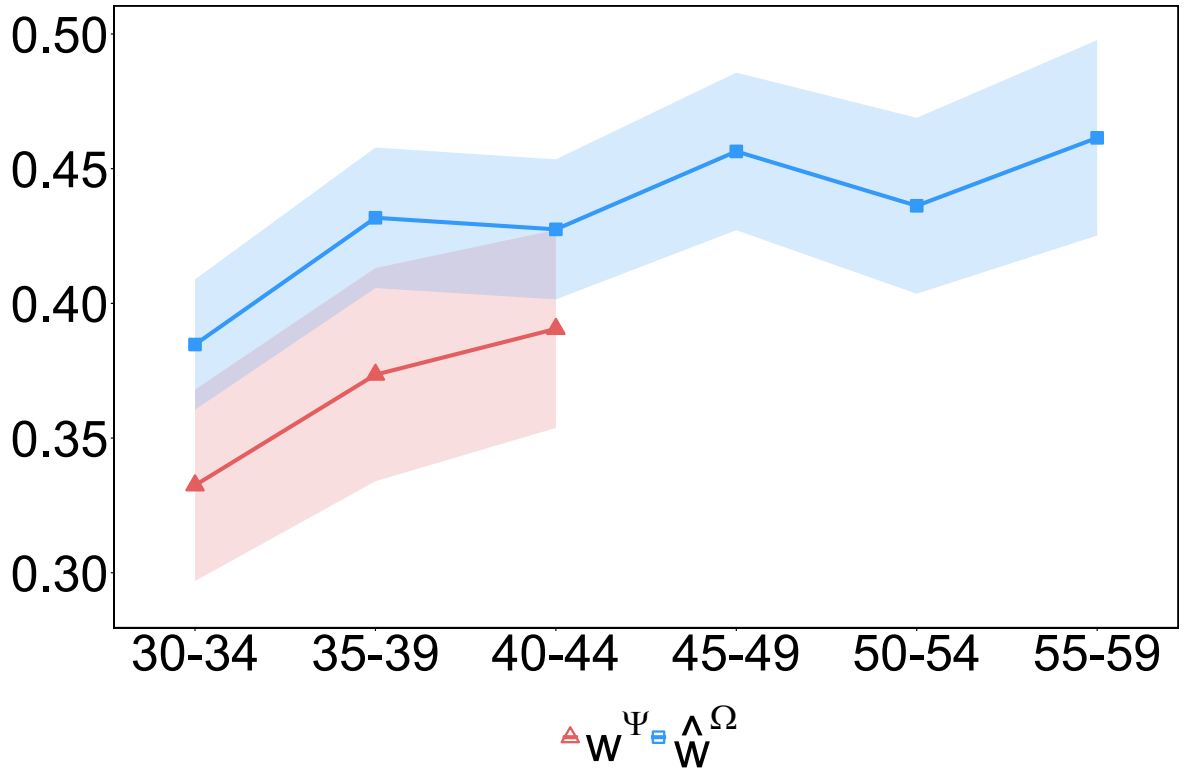

Figure 1: Two-generational rank-rank coefficients β for parents and children at identical lifecycle stages for the pooled dataset.

Two generations

Key findings:

1. *Estimated parent-child rank-rank coefficients β range from 0.34 to 0.38 (actual wealth) and from 0.36 to 0.51 (ML-proxy wealth)*
2. *Parent-child lifecycle bias: the resemblance between parents and their children rises with age (similar to e.g. Pfeffer & Killewald, 2018; Boserup et al., 2017)*

Two generations

Key findings:

1. *Estimated parent-child rank-rank coefficients β range from 0.34 to 0.38 (actual wealth) and from 0.36 to 0.51 (ML-proxy wealth)*
2. *Parent-child lifecycle bias:* *the resemblance between parents and their children rises with age (similar to e.g. Pfeffer & Killewald, 2018; Boserup et al., 2017)*
3. Cross-country differences: two-generational wealth mobility in the US is lower than in Norway, Denmark and Australia ($0.17-0.27$), but similar to the UK and Sweden ($0.30-0.39$)

Two generations

Key findings:

1. *Estimated parent-child rank-rank coefficients β range from 0.34 to 0.38 (actual wealth) and from 0.36 to 0.51 (ML-proxy wealth)*
2. *Parent-child lifecycle bias:* *the resemblance between parents and their children rises with age (similar to e.g. Pfeffer & Killewald, 2018; Boserup et al., 2017)*
3. Cross-country differences: two-generational wealth mobility in the US is lower than in Norway, Denmark and Australia ($0.17-0.27$), but similar to the UK and Sweden ($0.30-0.39$)
4. Time trend: two-generational wealth mobility in the US has declined over time

Two generations

4. Time trend: two-generational wealth mobility in the US has declined over time.

Variable	Stage	1946–55	1956–65	1966–75	1976–85	1986–95	Pooled
κ^{Ψ}	30–34	-	-	-	0.35	-	0.33
	35–39	-	-	0.34	0.40	-	0.38
	40–44	-	-	0.35	0.46	-	0.38
$\hat{\kappa}^{\Omega}$	30–34	-	-	0.36	0.36	0.38	0.36
	35–39	-	0.38	0.44	0.45	-	0.43
	40–44	-	0.36	0.42	0.49	-	0.42
	45–49	0.47	0.42	0.46	-	-	0.45
	50–54	0.44	0.40	-	-	-	0.43
	55–59	0.47	0.45	-	-	-	0.45
	60–64	0.50	-	-	-	-	0.51

Table 1: Two-generational rank-rank coefficients β across children's age cohorts $\in \Upsilon^{PC}$ for parents and children at identical lifecycle stages.

Two generations

5. Overall mobility across two generations is driven by mobility at both the bottom and top.

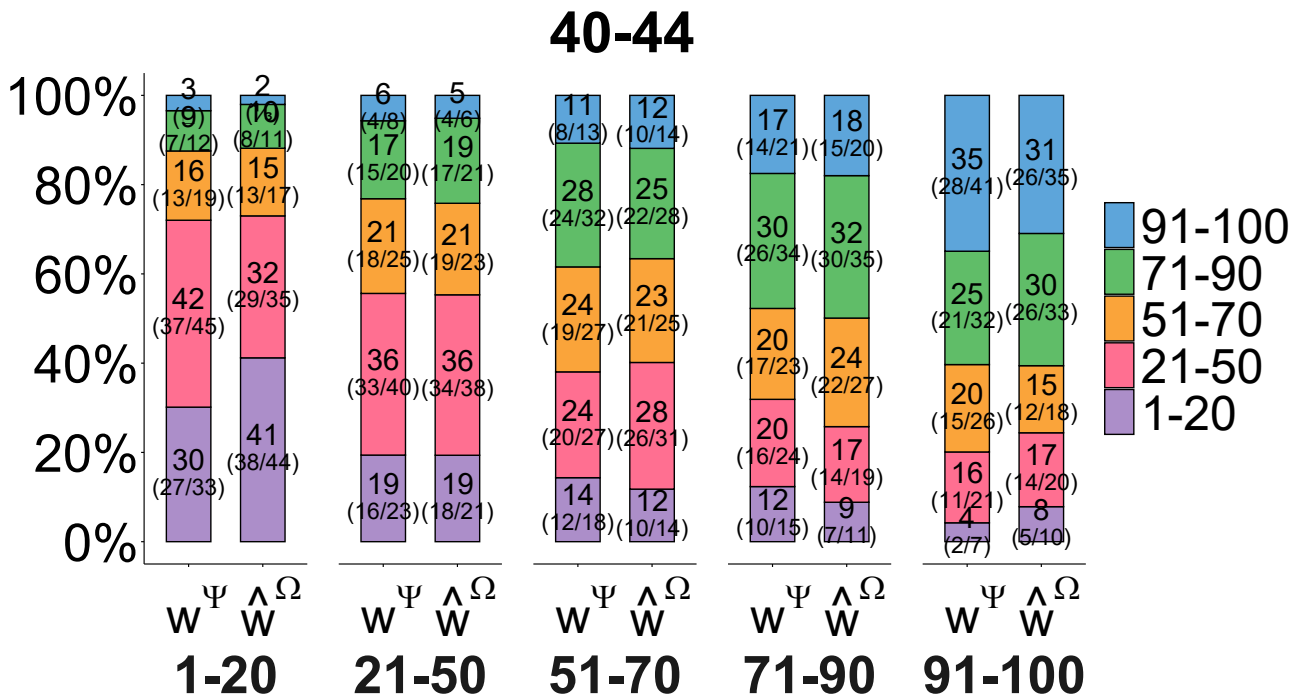

Figure 2: Ex-ante transition matrices $T_{EA}(a)$ between parental and children wealth ranks at lifecycle stage 40-44 for the pooled dataset.

Three generations

Key findings:

1. Grandparent-grandchild inter-generational wealth mobility is higher than parent-child mobility

Three generations

Key findings:

1. Grandparent-grandchild inter-generational wealth mobility is higher than parent-child mobility
2. Grandchild lifecycle bias: wealth rank resemblance between grandparents and grandchildren is stronger for grandchildren aged 35-39 compared to ages 30-34

Three generations

Grandchild age 30-34: three-generational rank-rank coefficients of 0.21−0.23 (actual wealth) or 0.27−0.29 (proxy wealth).

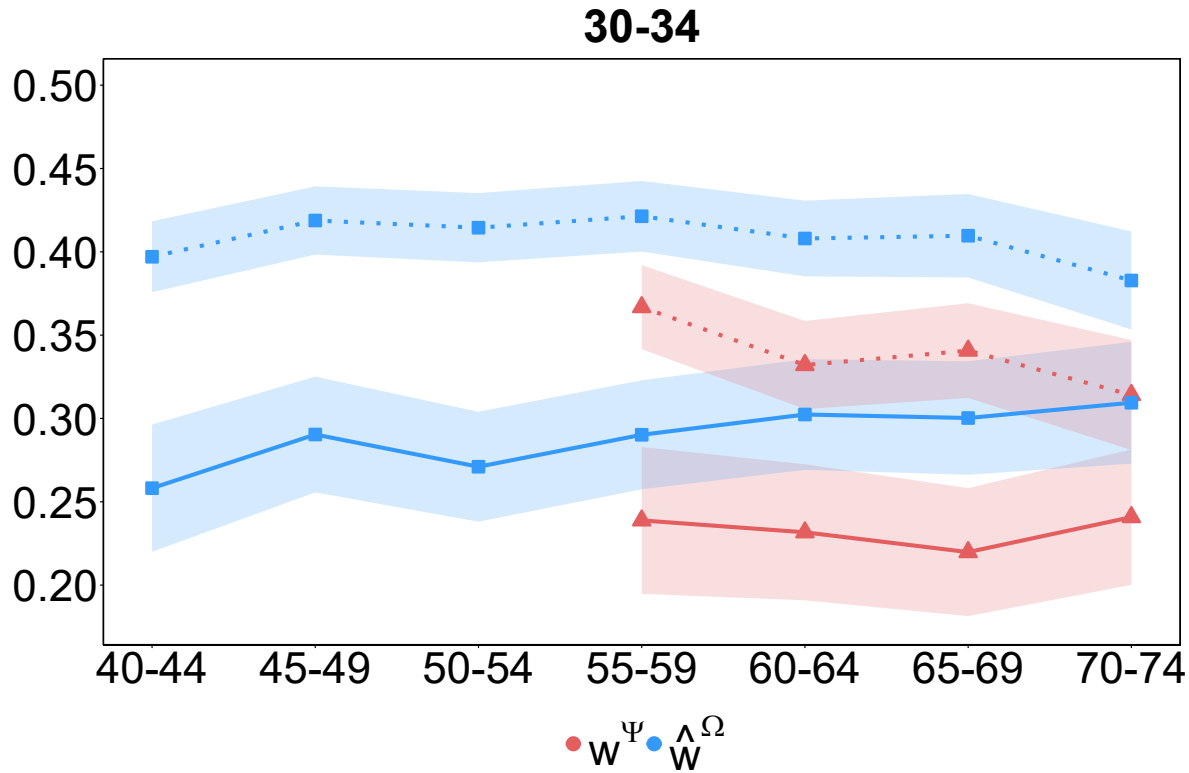

Figure 3: Rank-rank coefficients β for grandparents and grandchildren (solid lines) and parents and children (dotted lines) when (grand)children are aged 30-34.

Three generations

Grandchild age 35-39: three-generational rank-rank coefficients of 0.30−0.34 (proxy wealth).

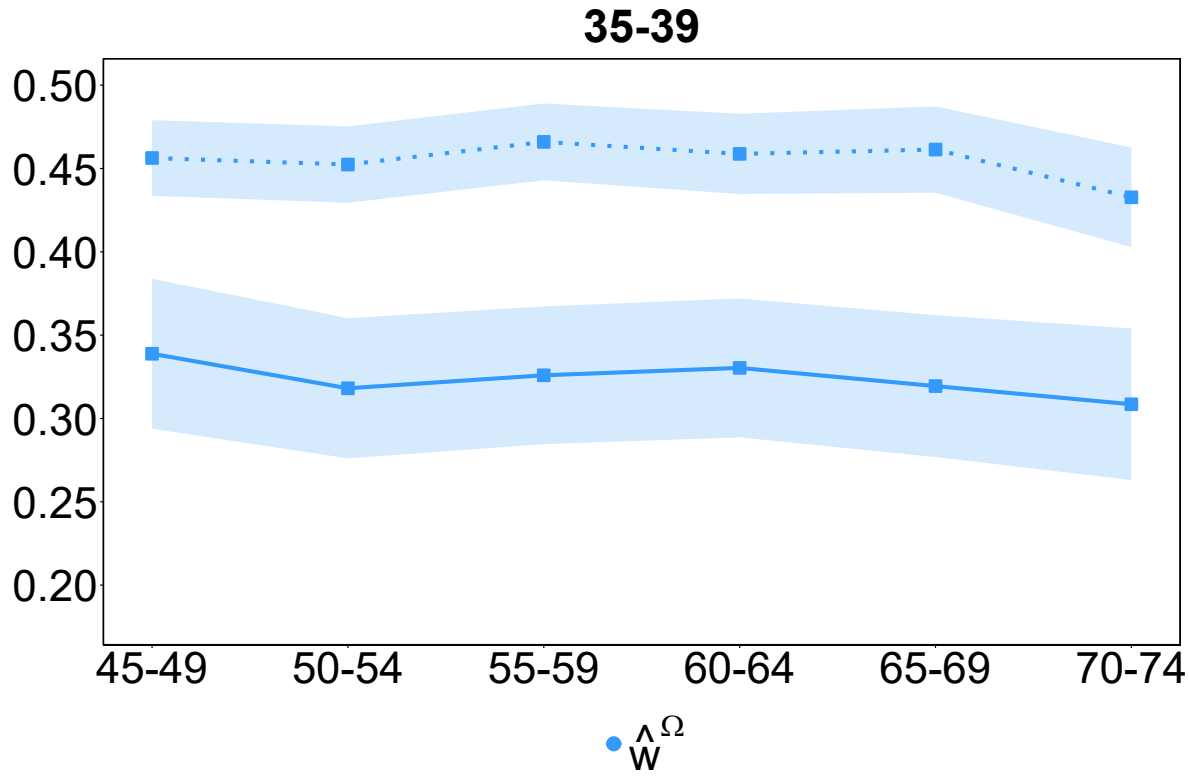

Figure 4: Rank-rank coefficients β for grandparents and grandchildren (solid lines) and parents and children (dotted lines) when (grand)children are aged 35-39.

Three generations

Key findings:

1. *Grandparent-grandchild inter-generational wealth mobility is higher than parent-child mobility*
2. *Grandchild lifecycle bias: wealth rank resemblance between grandparents and grandchildren is stronger for grandchildren aged 35-39 compared to ages 30-34*

Three generations

Key findings:

1. *Grandparent-grandchild inter-generational wealth mobility is higher than parent-child mobility*
2. *Grandchild lifecycle bias: wealth rank resemblance between grandparents and grandchildren is stronger for grandchildren aged 35-39 compared to ages 30-34*
3. Cross-country differences: three-generational wealth mobility is lower in the US compared to Sweden (0.14−0.17, Adermon et al., 2018) and Denmark (0.16, Boserup et al., 2014)

Three generations

Key findings:

1. *Grandparent-grandchild inter-generational wealth mobility is higher than parent-child mobility*
2. *Grandchild lifecycle bias: wealth rank resemblance between grandparents and grandchildren is stronger for grandchildren aged 35-39 compared to ages 30-34*
3. Cross-country differences: three-generational wealth mobility is lower in the US compared to Sweden (0.14−0.17, Adermon et al., 2018) and Denmark (0.16, Boserup et al., 2014)
4. Evidence of non-linearity: mobility at the top is significantly higher over three compared to two generations

Three generations

Steady poor: grandparents and grandchildren in the bottom 20%

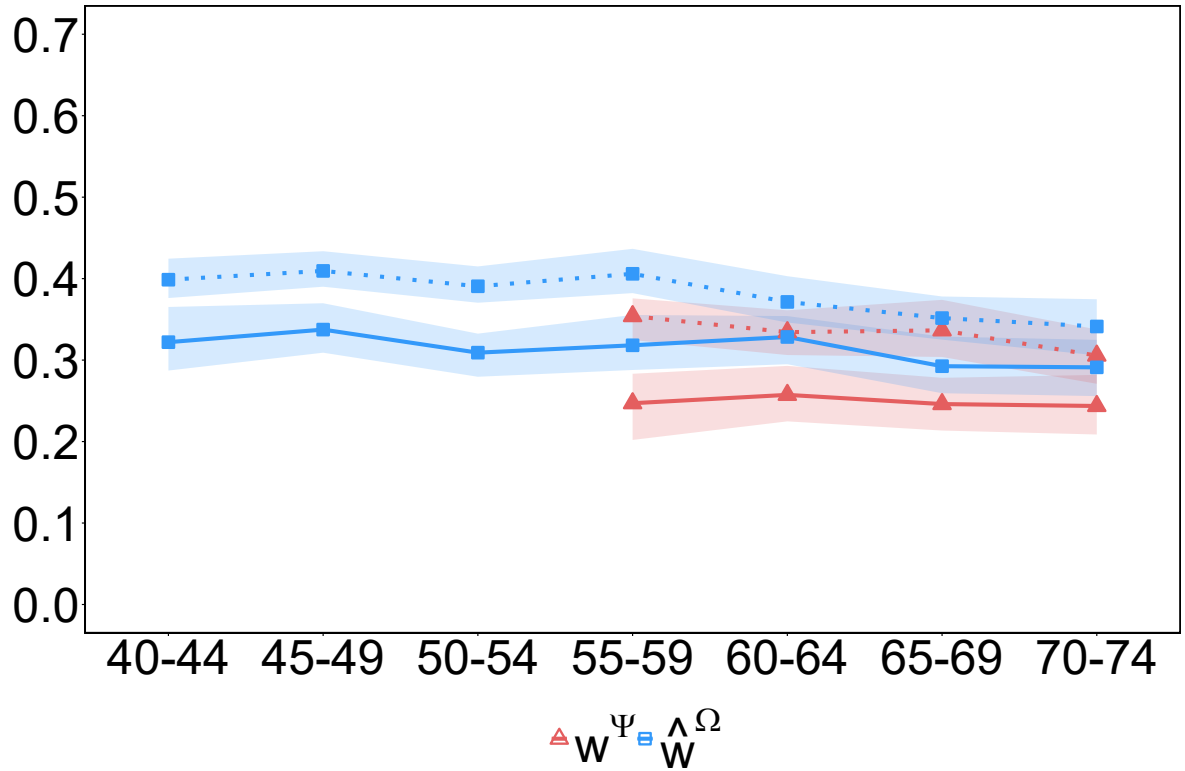

Figure 5: Transition probabilities for grandparents and grandchildren (solid lines) and parents and children (dotted lines) when (grand)children are aged 30-34.

Three generations

Steady wealthy: grandparents and grandchildren in the top 10%

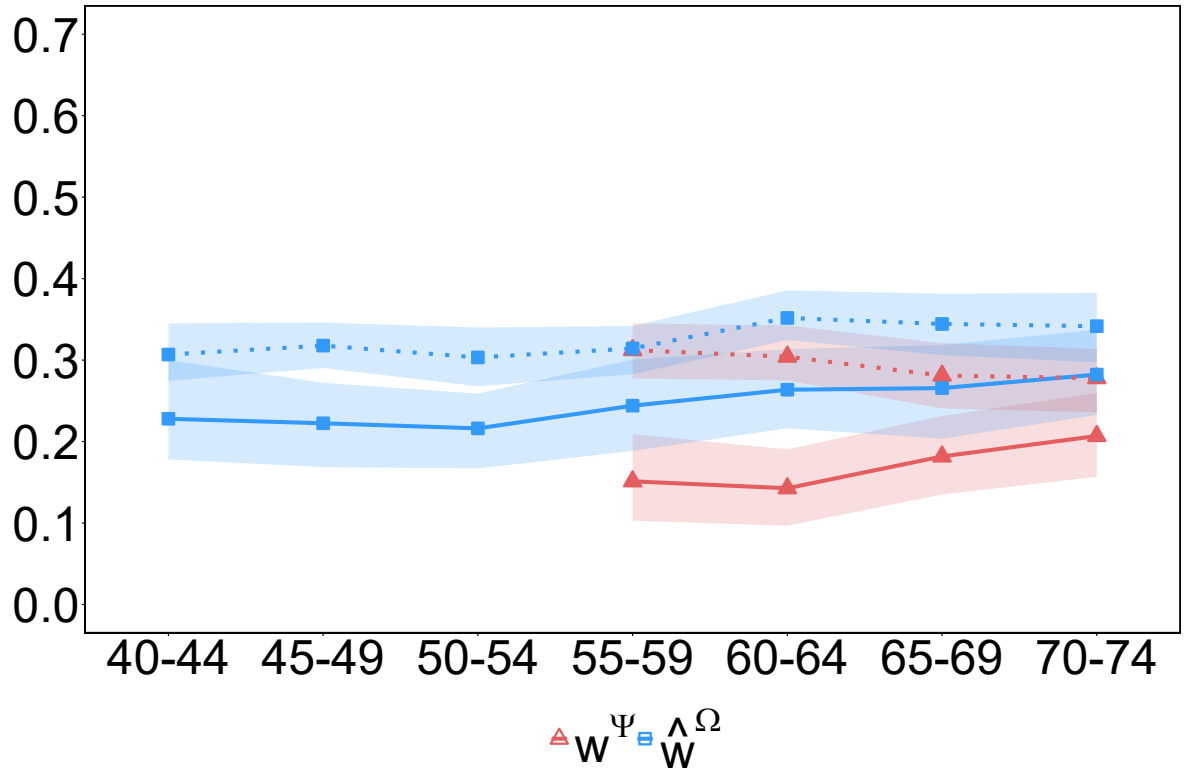

Figure 6: Transition probabilities for grandparents and grandchildren (solid lines) and parents and children (dotted lines) when (grand)children are aged 30-34.

4. Intra-generational (individual-level) mobility

Intra-generational analysis

- Intra-generational mobility: within-cohort wealth rank trajectories of individuals over the lifecycle

Intra-generational analysis

- Intra-generational mobility: within-cohort wealth rank trajectories of individuals over the lifecycle
- Lifecycle is split into working life (ages 30-54) and older age (ages 55-74); the remainder of this presentation focuses on working life

Mobility during working life

1. The rank-rank coefficient β during working life is estimated at 0.56, in line with other research for the United States (Shiro et al., 2022)

Mobility during working life

1. The rank-rank coefficient β during working life is estimated at 0.56, in line with other research for the United States (Shiro et al., 2022)
2. During older age, the estimated β is significantly higher at 0.76 (even when accounting for differences in lifecycle phase length)

Mobility during working life

1. The rank-rank coefficient β during working life is estimated at 0.56, in line with other research for the United States (Shiro et al., 2022)
2. During older age, the estimated β is significantly higher at 0.76 (even when accounting for differences in lifecycle phase length)
3. Intra-generational wealth mobility occurs both at the bottom and top of the wealth distribution

Mobility during working life: bottom & top

3. Intra-generational wealth mobility occurs both at the bottom and top of the wealth distribution.

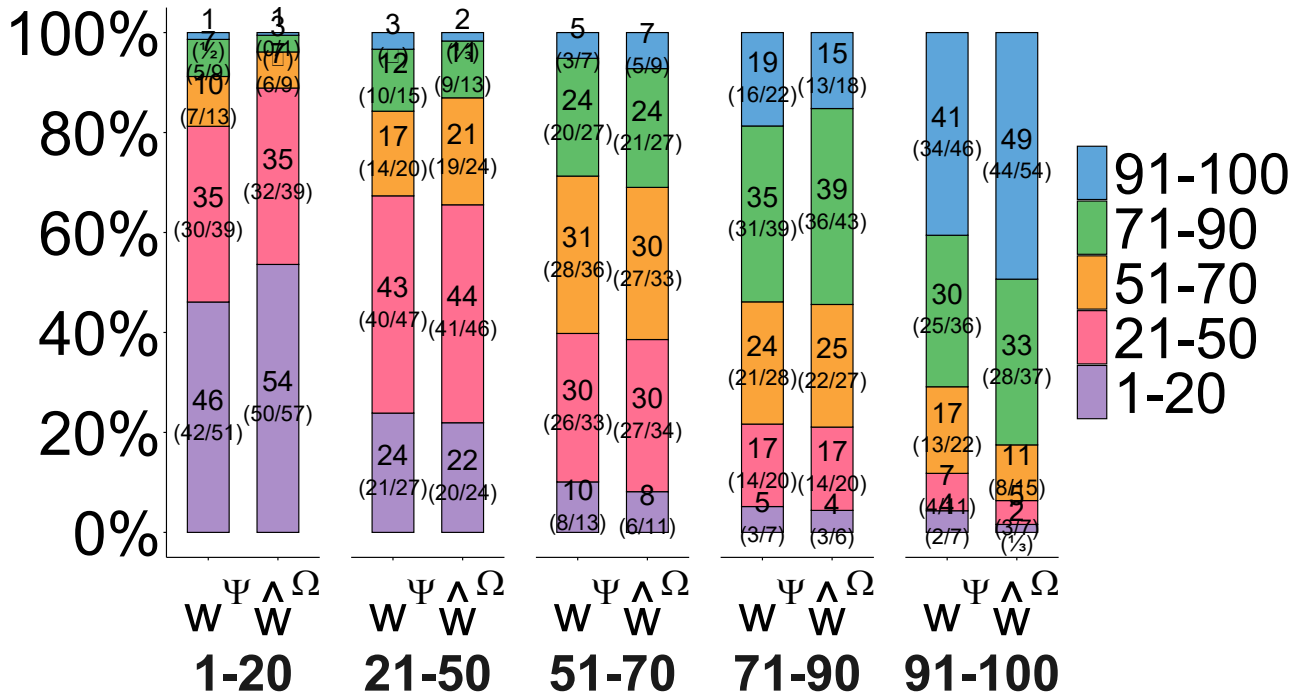

Figure 7: Ex-ante transition matrices during working life (ages 30-54) for the pooled dataset.

Mobility during working life: bottom & top

3. Intra-generational wealth mobility occurs both at the bottom and top of the wealth distribution.

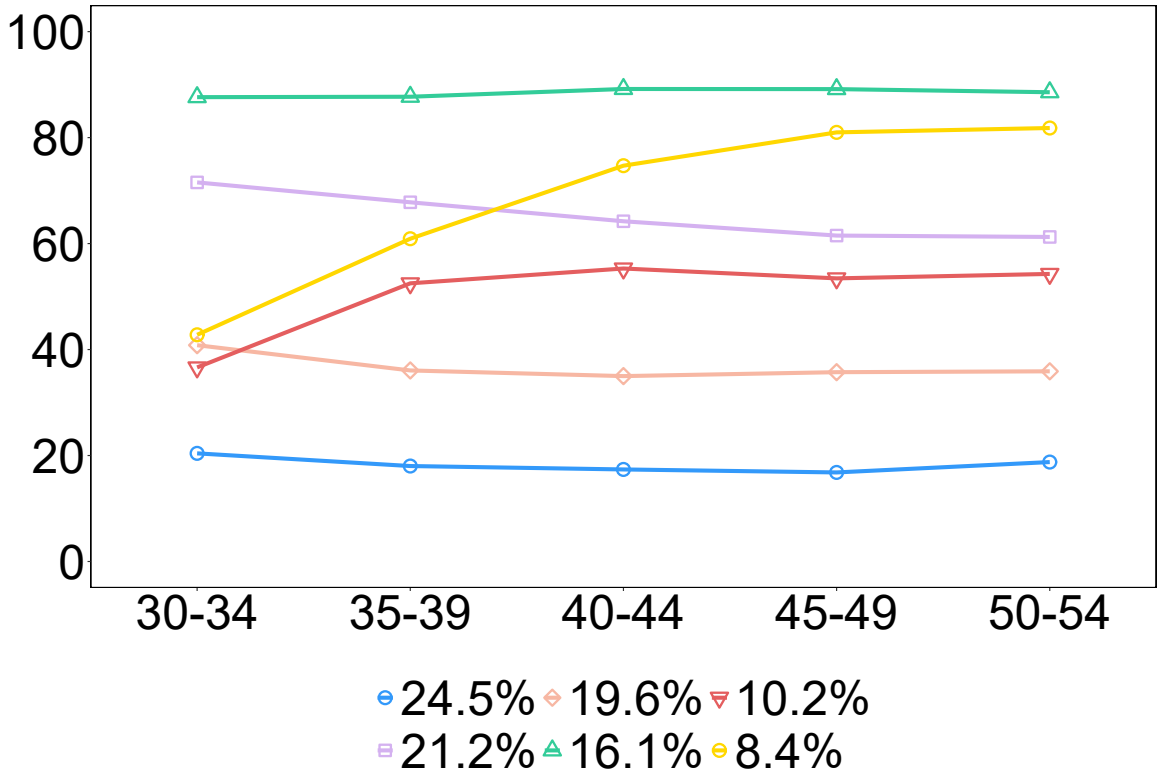

Figure 8: Hierarchical clustering wealth rank trajectories for working life for the pooled dataset based on actual wealth ranks κ^{Ψ}.

Mobility during working life

1. *The rank-rank coefficient β during working life is estimated at 0.56, in line with other research for the United States (Shiro et al., 2022)*
2. *During older age, the estimated β is significantly higher at 0.76 (even when accounting for different lifecycle phase spans)*
3. *Intra-generational wealth mobility occurs both at the bottom and top of the wealth distribution*

Mobility during working life

1. *The rank-rank coefficient β during working life is estimated at 0.56, in line with other research for the United States (Shiro et al., 2022)*
2. *During older age, the estimated β is significantly higher at 0.76 (even when accounting for different lifecycle phase spans)*
3. *Intra-generational wealth mobility occurs both at the bottom and top of the wealth distribution*
4. Intra-generational wealth mobility in the US ($\beta = 0.56$) is significantly lower compared to the Nordic countries ($\beta = 0.20 - 0.22$)

Mobility during working life

1. *The rank-rank coefficient β during working life is estimated at 0.56, in line with other research for the United States (Shiro et al., 2022)*
2. *During older age, the estimated β is significantly higher at 0.76 (even when accounting for different lifecycle phase spans)*
3. *Intra-generational wealth mobility occurs both at the bottom and top of the wealth distribution*
4. Intra-generational wealth mobility in the US ($\beta = 0.56$) is significantly lower compared to the Nordic countries ($\beta = 0.20 - 0.22$)
5. Intra-generational wealth mobility occurs primarily between ages 30 and 39

Mobility during working life: timing

5. Intra-generational wealth mobility occurs primarily between ages 30 and 39.

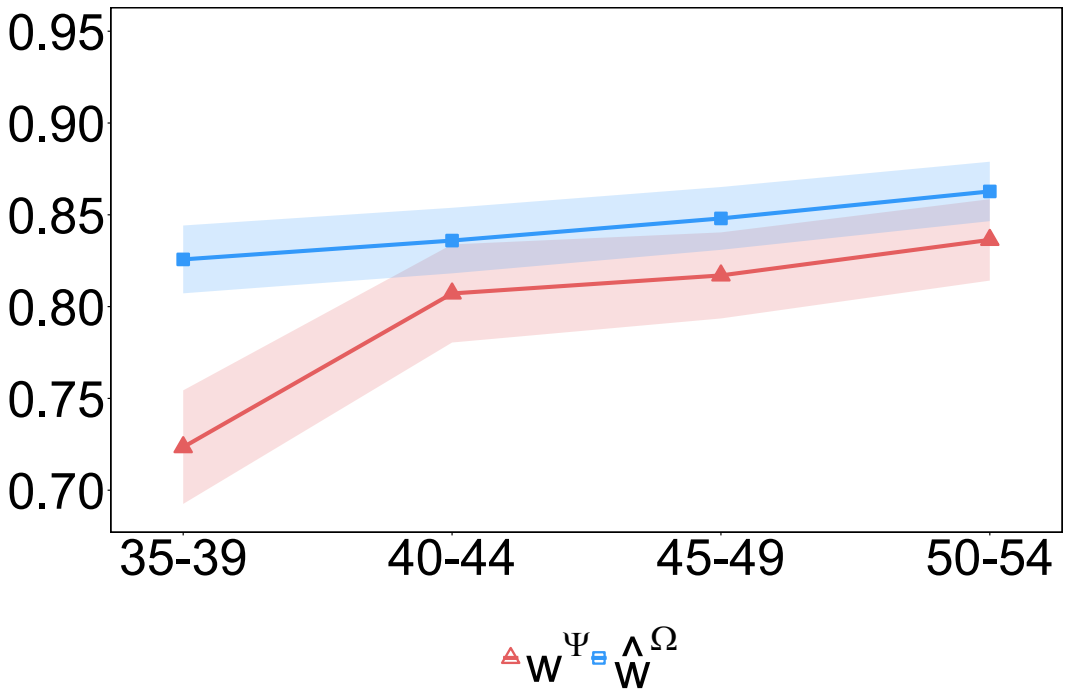

Figure 9: Rolling window analysis for rank-rank coefficient β.

Mobility during working life: time trend

6. Intra-generational wealth mobility has declined at the top over time.

Cohort	Poor Groups (%)			Wealthy Groups (%)			β
	Steady	Past	New	Steady	Past	New	
Pooled	9.2	3.8	3.3	4.4	2.8	2.4	0.56
1946–55	9.8	3.6	2.6	3.7	3.7	3.9	0.56
1956–65	9.4	3.2	3.7	4.3	2.6	1.7	0.56
1966–75	8.1	5.7	3.5	5.5	1.8	1.5	0.57

Table 2: Fraction of individuals belonging to each of the discretionary groups (in %) and rank-rank coefficients β across cohorts $\in \Upsilon^{WL}$ based on actual wealth ranks κ^{Ψ}.

5. Within-family interdependence

Within-family interdependence

Correlation between individuals' (within-cohort) wealth rank changes and those of their parents *over the same historical time period*?

Within-family interdependence

Correlation between individuals' (within-cohort) wealth rank changes and those of their parents *over the same historical time period*?

Individuals experiencing upward or downward mobility (in their cohort) are likely to have parents facing similar mobility (in their own cohort)

Within-family interdependence

Correlation between individuals' (within-cohort) wealth rank changes and those of their parents *over the same historical time period*?

Individuals experiencing upward or downward mobility (in their cohort) are likely to have parents facing similar mobility (in their own cohort)

1. Risk-sharing across generations within families through inter-generational transfers (possibly in-kind)

Within-family interdependence

Correlation between individuals' (within-cohort) wealth rank changes and those of their parents *over the same historical time period*?

Individuals experiencing upward or downward mobility (in their cohort) are likely to have parents facing similar mobility (in their own cohort)

1. Risk-sharing across generations within families through inter-generational transfers (possibly in-kind)
2. Exposure to the same sources of idiosyncratic risk (e.g. specific businesses, housing areas, sectors of employment, etc.)

Within-family interdependence

Downward mobility from the top: individuals starting working life in the top 10% but dropping to the bottom 70%

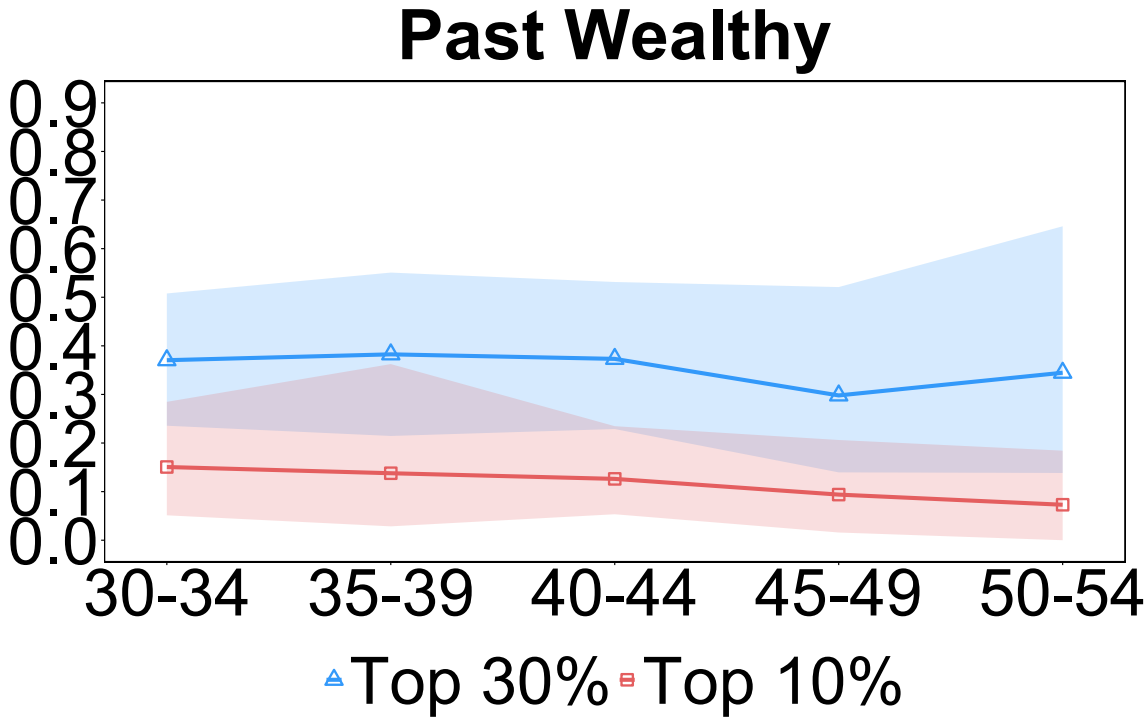

Figure 10: Interdependence between individuals' and their parents' wealth rank trajectories based on actual wealth ranks κ^{Ψ}.

Within-family interdependence

Upward mobility to the top: individuals starting working life in the bottom 70% but rising to the top 10%

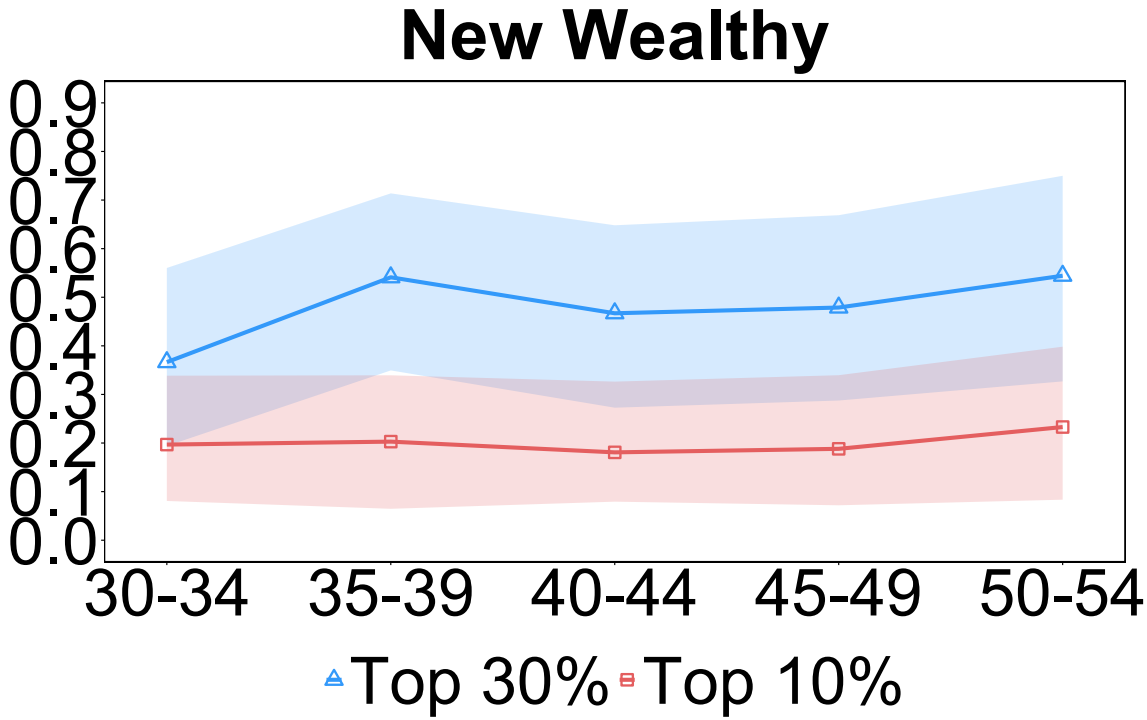

Figure 11: Interdependence between individuals' and their parents' wealth rank trajectories based on actual wealth ranks κ^{Ψ}.

6. Conclusion

Conclusion

- Extensive descriptive evidence on US wealth mobility using the Panel Study of Income Dynamics (PSID)
- Empirical mobility moments are particularly useful for the heterogeneous agent macro literature
- Overall: US wealth mobility has declined over time and is lower compared to most other countries with available data
- Positive interdependence between individuals' wealth rank trajectories and those of their parents