

Supplemental Material for
“Why Are the Wealthiest So Wealthy? New Longitudinal
Empirical Evidence and Implications for Theories of Wealth
Inequality”¹

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¹The “(r)” symbol indicates certified random order for authors’ names (Ray and Robson, 2018).

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1 Additional Tables

TABLE A.1 – BASIC SAMPLE STATISTICS

	Panel A: Population Shares				
	1995	2000	2005	2010	2015
Age 25/44	43.80%	43.00%	40.90%	39.20%	36.30%
Age 45/64	30.10%	32.90%	35.60%	36.30%	36.40%
Age 65+	26.00%	24.10%	23.50%	24.50%	27.30%
Male	63.20%	62.60%	62.50%	62.60%	62.10%

	Panel B: Descriptive Statistics (US\$ of 2018)						
	Mean	Std. Dev.	P10	P50	P90	P99	P99.9
Safe Assets	42,869	204,242	345	12,001	102,886	408,838	1,474,710
Public Equity	7,899	303,496	0	0	11,036	118,260	642,274
Private Equity	35,205	2,312,932	0	0	490	409,833	4,425,962
Housing	285,608	300,826	0	222,809	638,730	1,384,161	2,192,636
Gross Wealth	371,581	2,551,564	2,778	259,693	749,967	1,922,639	6,978,503
Debt	92,417	114,888	0	45,135	250,202	464,635	678,678
Net wealth	279,164	2,546,067	-24,242	16,0147	637,285	1,731,470	6,750,314

Household Observations:	51.3 Million
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Notes: Table A.1 show cross-sectional statistics of the population of households in Norway. Panel A shows, population shares for head of household. Panel B shows household-level wealth statistics in real US\$ of 2018 (1 USD=8.14 NOK). To obtain these statistics, we first calculate cross sectional moments at the annual level and then we average the statistics across all years in the sample (1993 to 2015).

TABLE A.2 – INCOME AND WEALTH CONCENTRATION

	Bottom 50	Top 10%	Top 5%	Top 1%	Top 0.1%	Top 0.01%
Labor Earnings	8.15	32.72	19.44	5.77	1.13	0.25
Safe Assets	4.14	59.32	44.01	21.12	7.73	2.69
Public Equity	0	99.89	99.19	86.64	53.71	27.87
Private Equity	0	91.03	80.85	55.55	29.49	15.91
Housing	12.52	35.95	23.47	8.53	2.11	0.60
Gross Wealth	13.22	38.43	26.56	11.81	4.44	1.87
Debt	5.09	39.26	23.64	7.01	0.87	0.16
Net wealth	7.31	43.81	30.73	14.10	5.46	2.33

Notes: Table A.2 show cross sectional concentration statistics at the household level. To calculate these statistics, we first calculate cross sectional moments at the annual level and then we average across all years in the sample (1993 to 2015). The concentration of net wealth deviates slightly from official statistics due to our use of alternative housing values.

TABLE A.3 – SAMPLE STATISTICS: US SCF DATA

	Descriptive Statistics (US\$ of 2018)						
	Mean	SD	P10	P50	P90	P99	P99.9
Safe Assets	125,615	602,358	85	16,521	281,479	1,620,551	5,924,482
Public Equity	84,644	1,109,028	0	0	76,413	1,569,328	9,102,842
Private Equity	91,180	1,825,445	0	0	7,301	1,574,025	12,985,575
Housing	237,051	1,477,831	0	98,010	457,038	2,389,650	10,598,920
Gross Wealth	538,491	3,293,036	382	143,885	938,809	7,116,825	31,126,536
Debt	78,513	532,779	-2	12,596	194,056	694,872	2,637,272
Net wealth	459,978	3,113,103	-1,741	78,847	801,826	6,685,830	27,845,214

Notes: Table A.3 show cross sectional statistics of the population of households in the United States using data from SCF in real US\$ of 2018. To obtain these statistics, we first calculate cross sectional moments at the annual level and then we average the statistics across all years in the sample after 1989.

TABLE A.4 – INCOME AND WEALTH CONCENTRATION: US SCF DATA

	Bottom 50	Top 10%	Top 5%	Top 1%	Top 0.1%	Top 0.01%
Income	9.41	49.92	38.58	21.42	8.32	3.03
Safe Assets	1.60	70.35	55.24	28.46	9.16	2.89
Public Equity	-0.04	95.77	87.27	59.96	25.47	8.90
Private Equity	-0.01	99.95	97.48	77.97	36.47	13.67
Housing	4.77	59.39	47.08	26.87	11.17	4.87
Gross Wealth	3.86	68.31	56.79	33.12	12.06	3.88
Debt	-0.08	58.84	43.93	23.31	10.95	5.59
Net wealth	1.78	73.37	61.55	36.24	13.28	4.33

Notes: Table A.4 show cross sectional statistics of the population of households in the United States using data from SCF in real US\$ of 2018. To obtain these statistics, we first calculate cross sectional moments at the annual level and then we average the statistics across all years in the sample after 1989.

TABLE A.5 – RETURNS ON ASSETS

	N 000s	Mean	SD.	Skew.	Kurt.	P1	P5	P10	P50	P90	P95	P99
Panel A: Individual-level returns												
All	29,482	0.033	0.202	0.702	19.911	-0.628	-0.241	-0.106	0.022	0.186	0.293	0.740
Equity	8,538	0.119	0.376	2.516	25.905	-0.920	-0.302	-0.119	0.069	0.414	0.643	1.545
Housing	23,558	0.045	0.201	2.619	30.030	-0.533	-0.229	-0.089	0.025	0.184	0.282	0.809
Safe	26,907	0.026	0.026	4.459	41.027	0.000	0.000	0.000	0.024	0.049	0.061	0.127
Panel B: Household-level returns												
All	20,902	0.030	0.186	0.468	16.887	-0.587	-0.234	-0.103	0.022	0.177	0.276	0.658
Equity	6,968	0.120	0.383	2.872	30.027	-0.905	-0.301	-0.117	0.068	0.413	0.643	1.569
Housing	16,070	0.044	0.187	2.207	26.019	-0.505	-0.216	-0.085	0.028	0.180	0.276	0.738
Safe	19,823	0.026	0.025	4.216	40.075	0.000	0.000	0.000	0.025	0.049	0.060	0.116

Notes: Table A.5 shows cross-sectional statistics of the returns distribution for different asset classes based on a pooled sample of households between 2004 and 2015. We calculate returns following ?. Equity corresponds to the sum of equity on private and publicly traded firms.

TABLE A.6 – SHARE OF LIFETIME RESOURCES IN THE CROSS SECTION

	Share out of lifetime resources, $\sum Y_{it}$ for 50 years old							
	Top 0.1% Wealth Group				Top 1% Wealth Group			
	P50	P90	P95	P99	P50	P90	P95	P99
Labor Income	6%	19%	26%	42%	19%	51%	64%	91%
Self-Emp. Income	0%	3%	10%	36%	0%	12%	28%	60%
Inheritance	0%	5%	10%	38%	0%	5%	9%	31%
Initial Wealth	8%	63%	81%	98%	14%	58%	70%	87%
Inheritance+Init Wealth	12%	68%	81%	98%	16%	60%	72%	88%

Notes: Table A.6 shows cross-sectional moments of the distribution of lifetime income shares.

TABLE A.7 – AVERAGE VALUES AND COUNTERFACTUAL FOR 50-TO-54 YEAR OLD HOUSEHOLDS

Wealth Rank	Labor Income, \tilde{l}	Inheritances \tilde{h}	Saving Rate, s	Capital Income, R^{INC}	Initial Wealth*
<0	407,266	9,615	-0.81	-0.15	0.00
[0, W_{min}]	265,827	5,460	-0.02	-0.32	0.04
[W_{min} , P50]	441,424	13,568	0.08	0.04	0.25
[P50, P75]	516,047	22,237	0.20	0.08	0.50
[P75, P90]	584,986	33,729	0.28	0.11	0.70
[P90, P95]	682,008	50,342	0.34	0.13	0.93
[P95, P99]	802,292	68,162	0.37	0.15	1.42
[P99, P99.9]	1,048,610	115,041	0.42	0.20	3.74
Top 0.1%	1,354,062	274,699	0.74	0.16	29.61
Counterfactual	471,402	17,051	0.13	0.06	0.25

Notes: Table A.7 shows the average of the component of the budget constraint for households who are 50 to 54 years old.

*Initial wealth is expressed relative to the average wealth in the economy. Labor and Inheritances (sum of inheritances and inter-vivos transfers) are in real NOK of 2018.

TABLE A.8 – COUNTERFACTUAL INITIAL WEALTH UNDER DIFFERENT ASSUMPTIONS

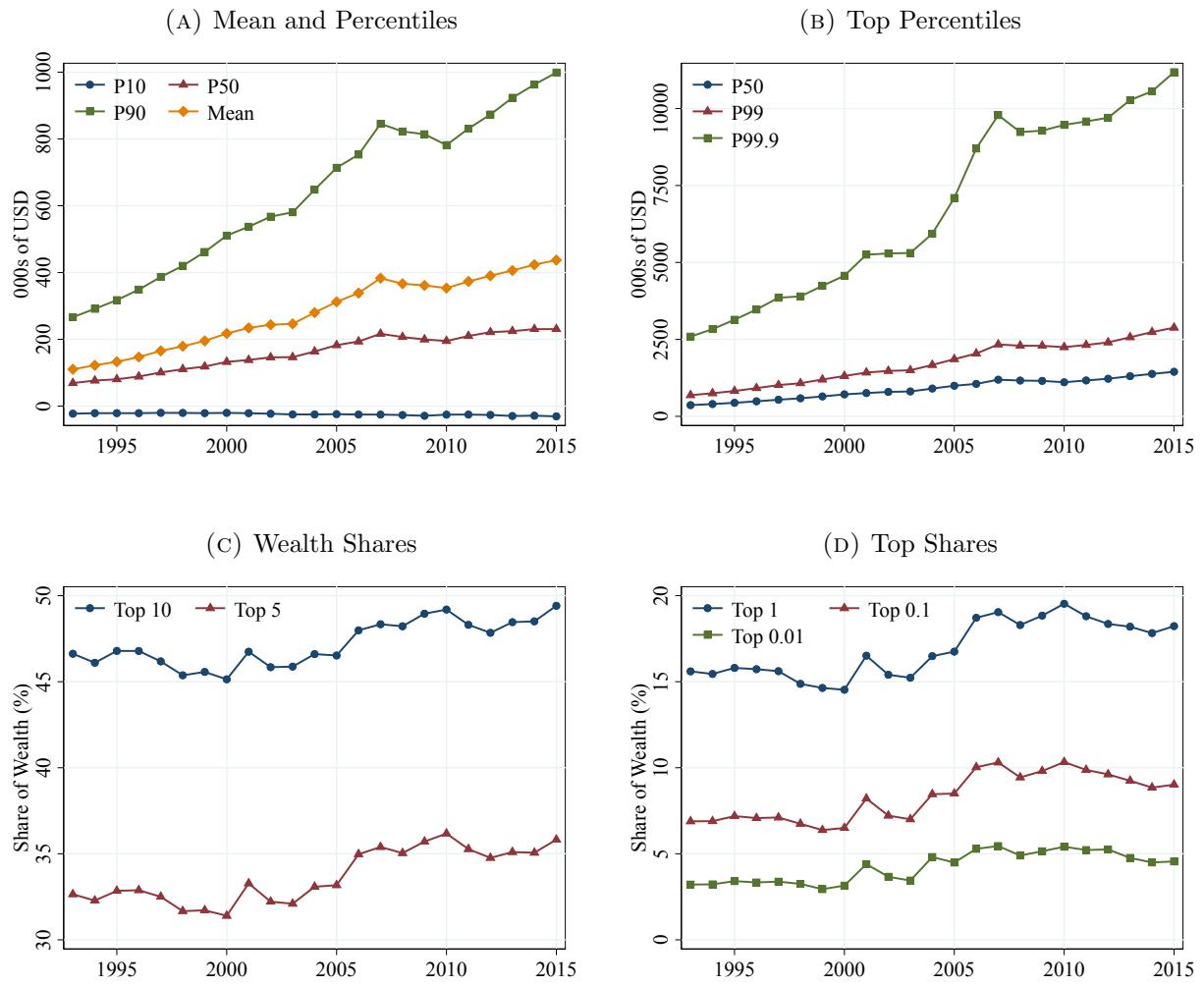
Age group	Labor prior 1993		Counterfactual		AW in 1993 Data	
	Values in Multiples of Average Wealth					
	(1)	(2)	(3)	(4)	(5)	(6)
40	Top 0.1	Old Money	Top 0.1	Old Money	Top 0.1	Old Money
40	0.47	0.49	0.39	0.39	3.15	11.88
45	2.38	2.51	2.19	2.29	7.87	25.39
50	5.26	5.42	5.59	5.73	20.15	76.73
55	9.49	9.69	12.02	12.18	37.57	131.71

Notes: Columns (1) and (2) report the sum of labor income prior to 1993, for the top 0.1% (backward-ranking), respectively the subgroup Old Money. Counterfactual initial wealth in (3) and (4) refers to the estimated initial wealth (in 1993) when capitalizing observed post-tax and transfer labor income prior to 1993 with the observed saving rate and return on net wealth post-1993. We contrast this estimated counterfactual initial wealth to the actual observed initial wealth in 1993 of each group (all top 0.1% households in (5) and the subgroup of Old Money in (6)). All values are in units of average economy-wide wealth (AW).

2 Additional Figures

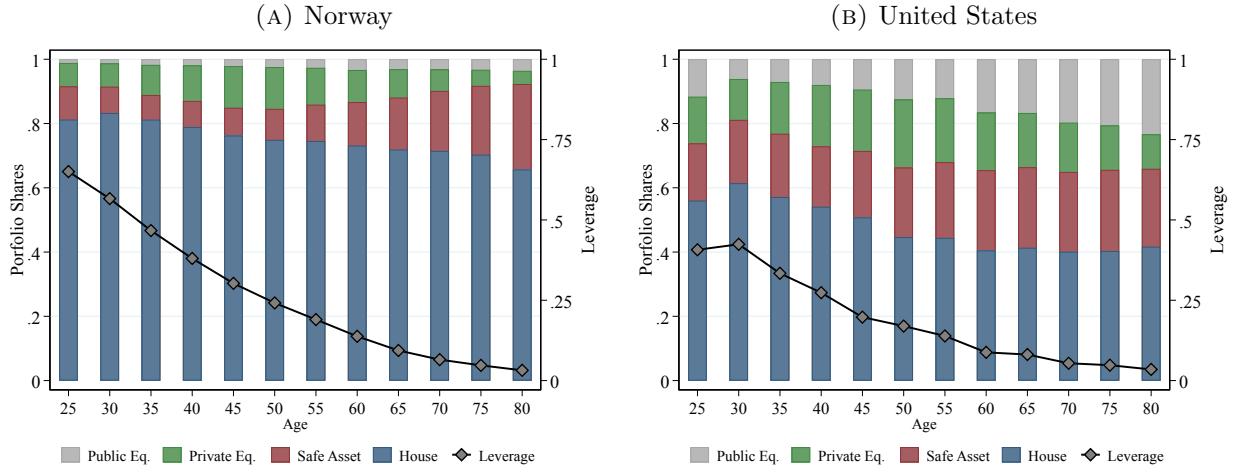
2.1 Cross-Sectional Moments

FIGURE A.1 – TIME SERIES OF WEALTH AND CONCENTRATION



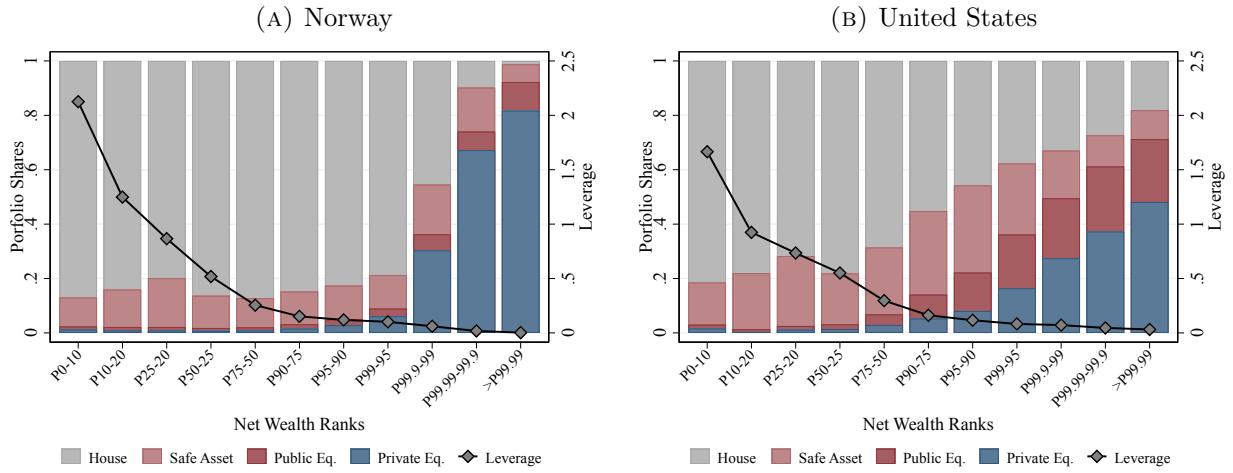
Notes: Figure A.1 shows time series of different moments of the wealth distribution in Norway.

FIGURE A.2 – PORTFOLIO COMPOSITION OVER THE LIFE CYCLE



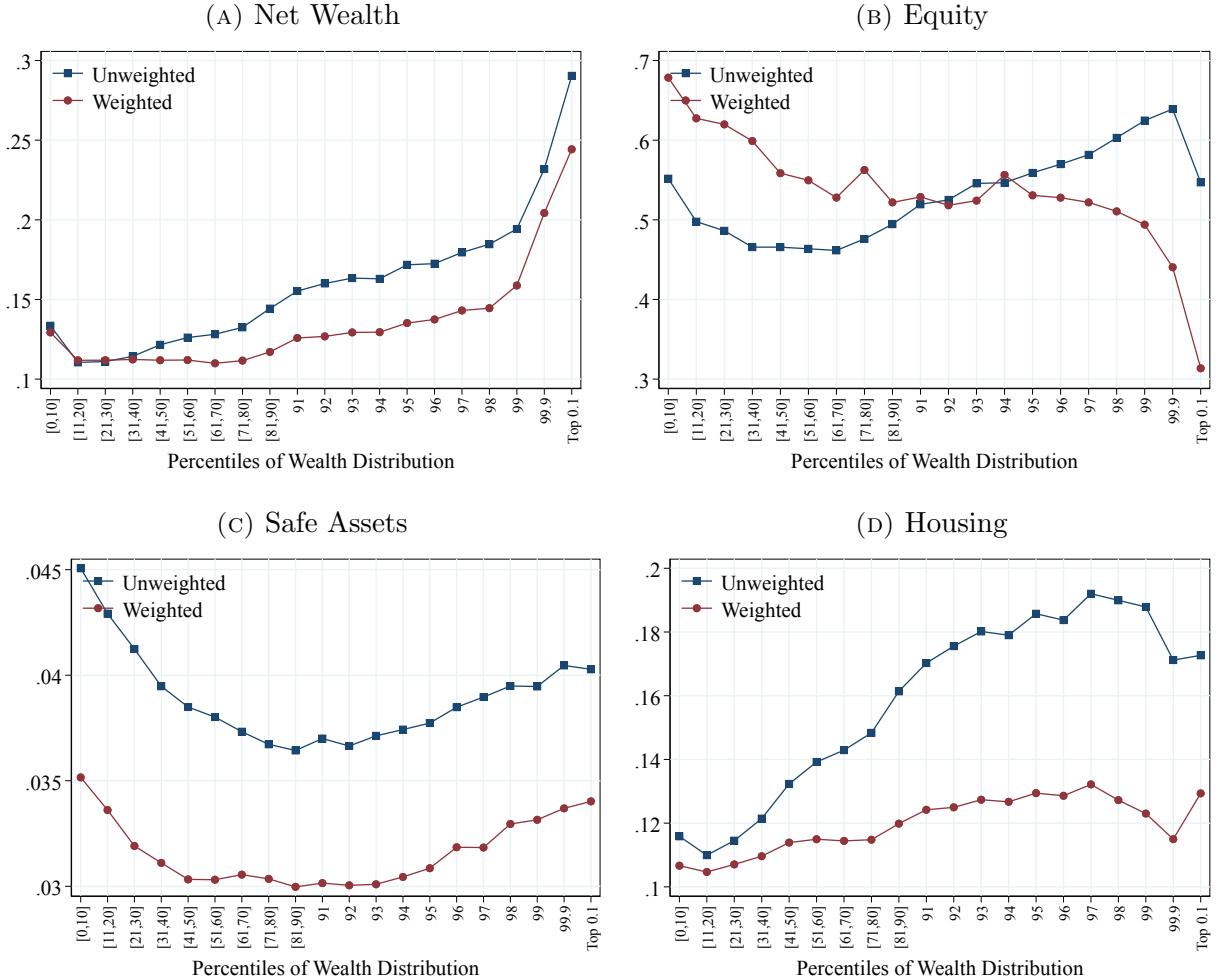
Notes: Figure A.2 shows the portfolio shares and leverage within five-year age groups labeled by their starting age (25–29, 30–34, and so on) for Norway and the United States. Portfolio shares are calculated as the ratio between the value of all assets in a particular category (e.g. total value of safe assets) over the total value of gross wealth (i.e. sum of wealth in housing, safe assets, public equity, and private equity) within an age group. Similarly, within-group leverage, is the ratio between the sum all debt (e.g. mortgages, student debt, credit card debt) within a wealth rank and age group and the sum of all total assets within the same group. See Appendix ?? for additional details and definitions.

FIGURE A.3 – PORTFOLIO COMPOSITION OVER THE WEALTH DISTRIBUTION



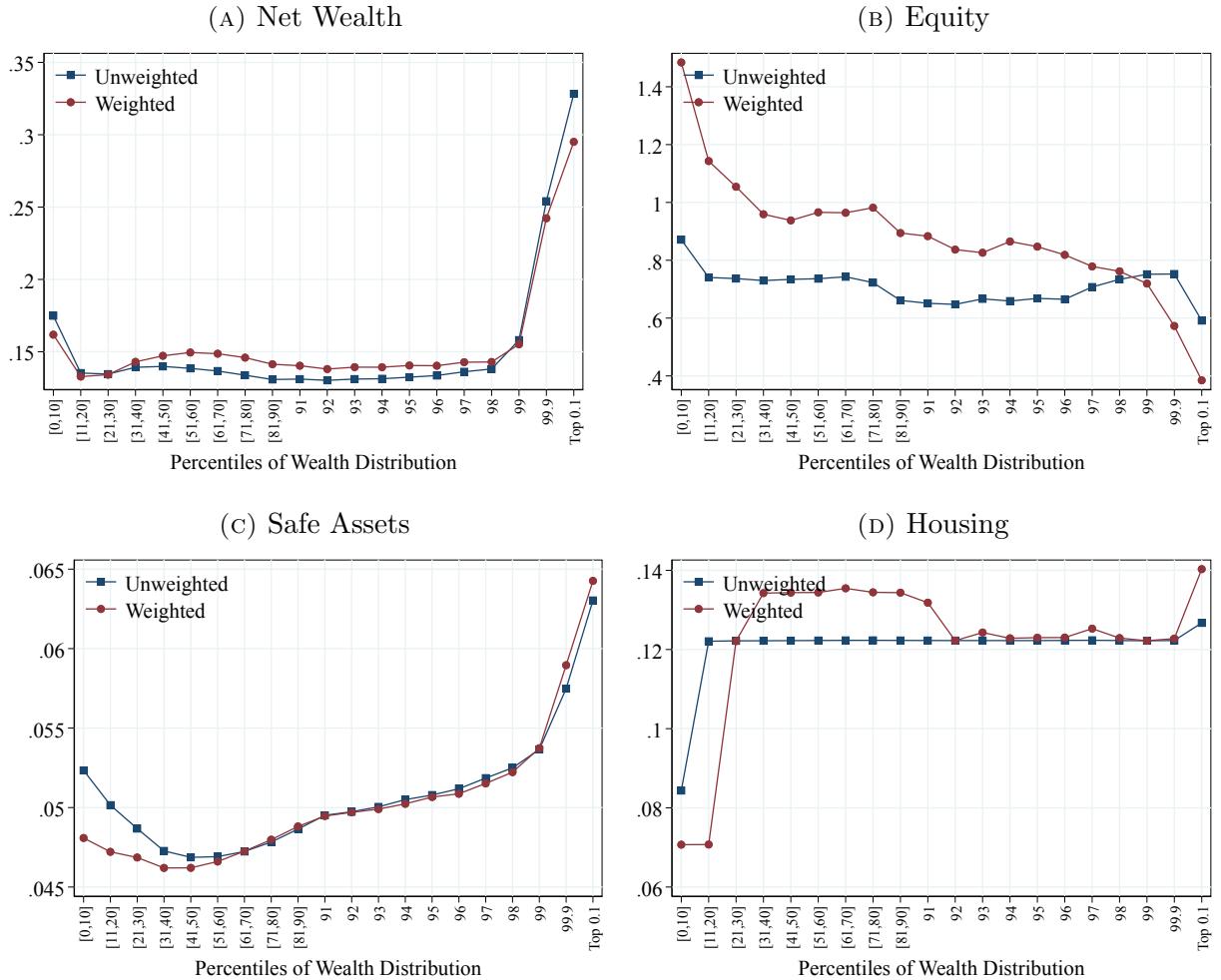
Notes: Figure A.3 shows the portfolio shares and leverage within wealth percentiles for Norway and the United States. Portfolio shares are calculated as the ratio between the value of all assets in a particular category (e.g. total value of safe assets) over the total value of gross wealth (i.e. sum of wealth in housing, safe assets, public equity, and private equity) within an wealth group. Similarly, within-group leverage, is the ratio between the sum all debt (e.g. mortgages, student debt, credit card debt) within a wealth group and the sum of all total assets within the same group. See Appendix ?? for additional details and definitions.

FIGURE A.4 – CROSS-SECTIONAL STANDARD DEVIATION OF RETURNS



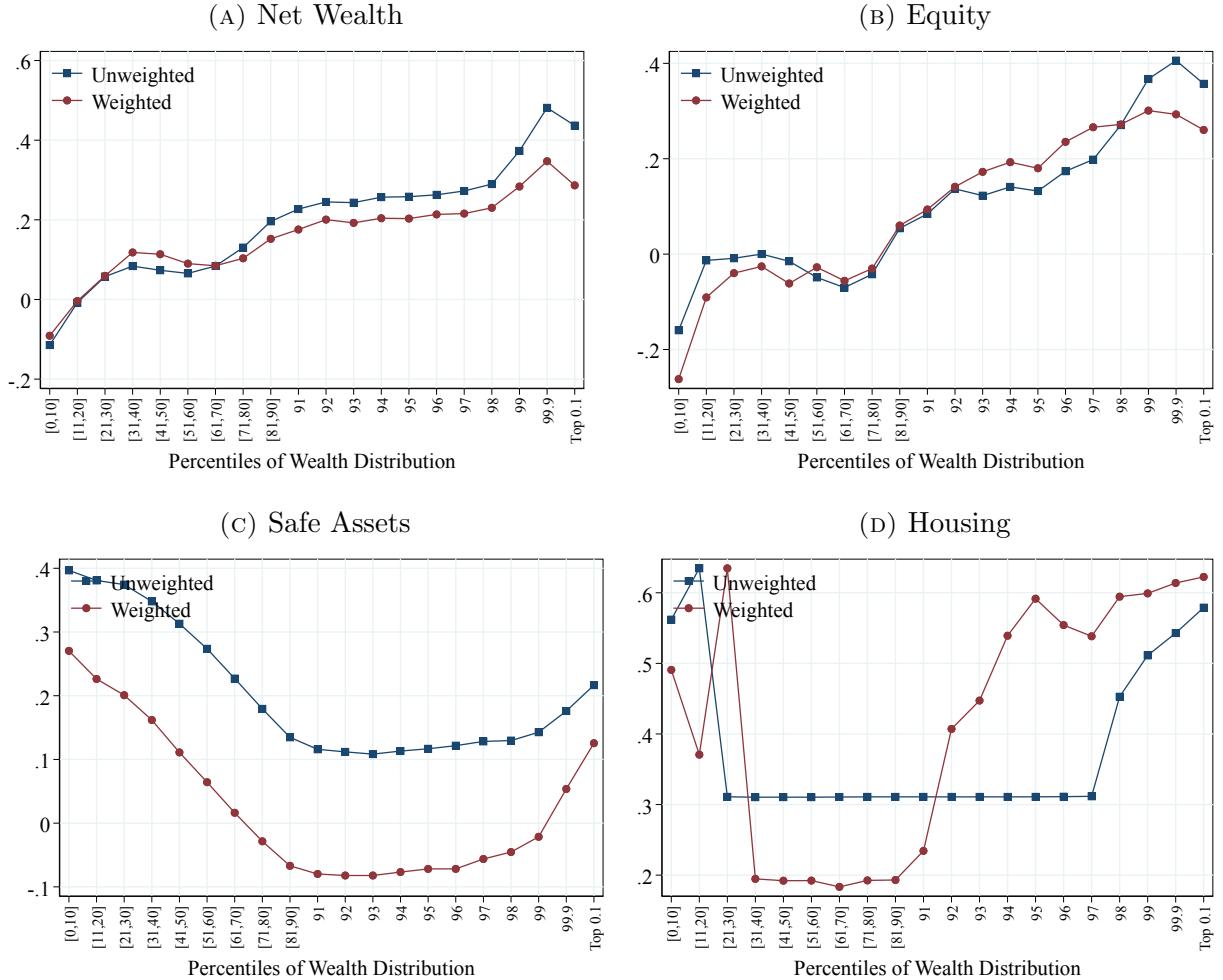
Notes: Figure A.4 shows the standard deviation returns within different quantiles of the households net worth distribution. To construct this figure, we pool household observations between 2005 and 2015. Weighted averages are weighted using the value of the corresponding asset. Negative or missing asset values are assigned a weight of 0.

FIGURE A.5 – CROSS SECTIONAL P90-P10 OF RETURNS



Notes: Figure A.5 shows the P90-P10 of returns within different quantiles of the households net worth distribution. To construct this figure, we pool household observations between 2005 and 2015. Weighted averages are weighted using the value of the corresponding asset. Negative or missing asset values are assigned a weight of 0.

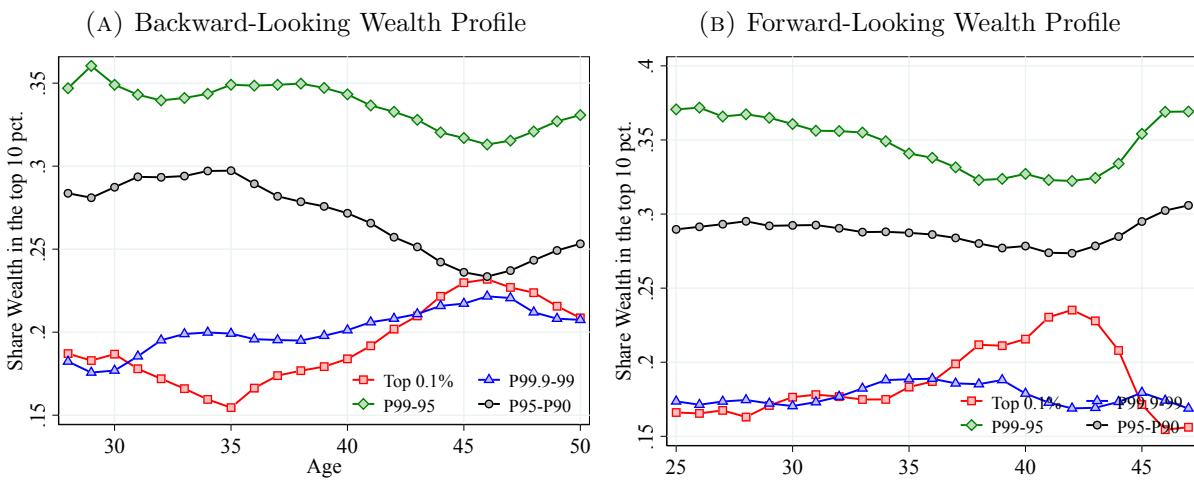
FIGURE A.6 – CROSS SECTIONAL KELLEY SKEWNESS OF RETURNS



Notes: Figure A.6 shows the Kelley Skewness returns within different quantiles of the households net worth distribution. To construct this figure, we pool household observations between 2005 and 2015. Weighted averages are weighted using the value of the corresponding asset. Negative or missing asset values are assigned a weight of 0. Kelley Skewness is defined as $S_K = \frac{P_{90} - P_{50}}{P_{90} - P_{10}} - \frac{P_{50} - P_{10}}{P_{90} - P_{10}}$.

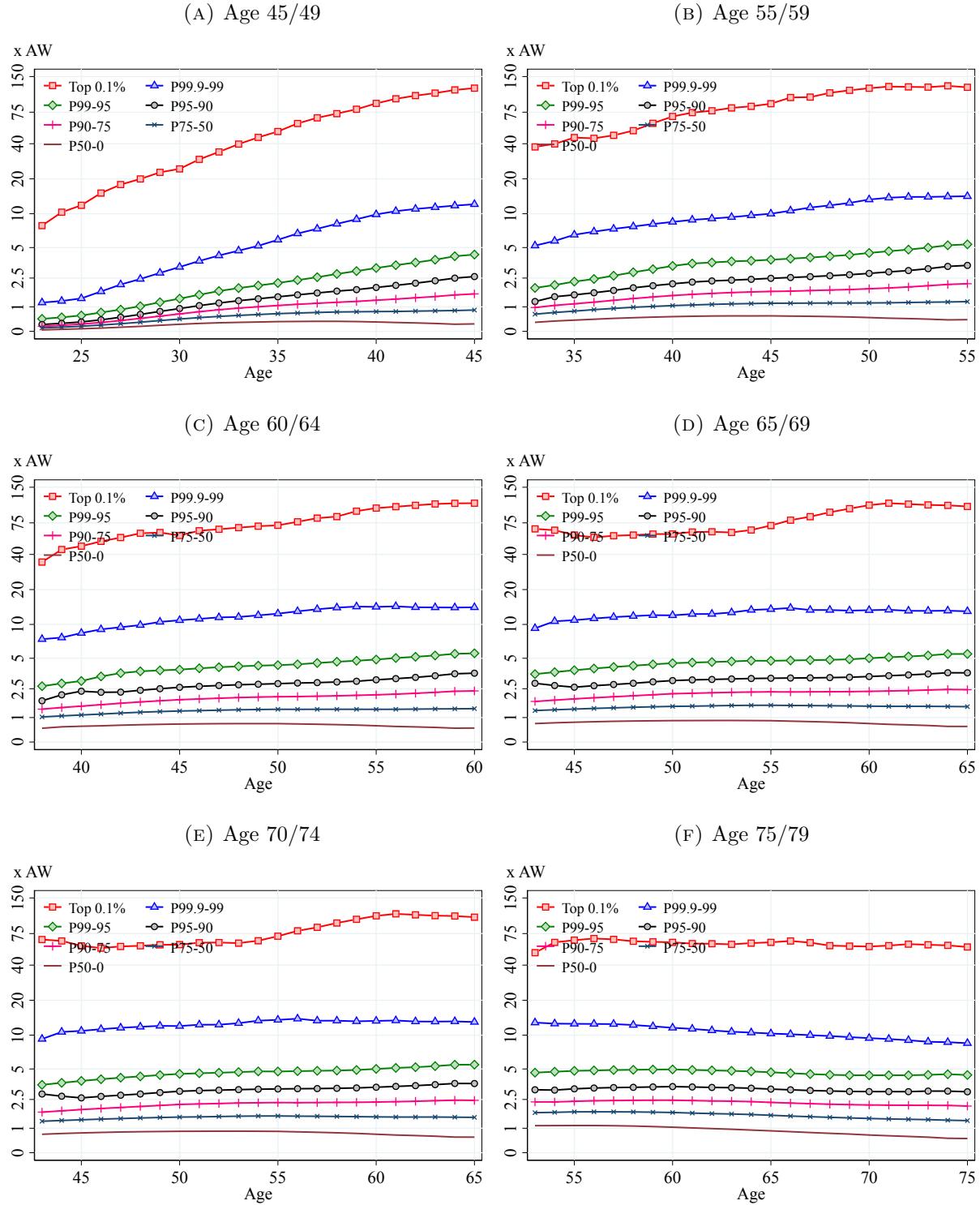
2.2 Backward-Looking Results

FIGURE A.7 – SHARE OF WEALTH AT THE TOP 10 PERCENTILE.



Notes: Figure shows the share of the economy-wide net wealth held by households at the top 10% of the distribution.

FIGURE A.8 – BACKWARD-LOOKING WEALTH PROFILES: AGE GROUPS



Notes: Figure A.8 shows the evolution of average wealth for different wealth groups conditional on their wealth at the end of the sample period sorted by BW_j^h .

FIGURE A.9 – LONG-TERM TRANSITION MATRIX: AGE GROUPS

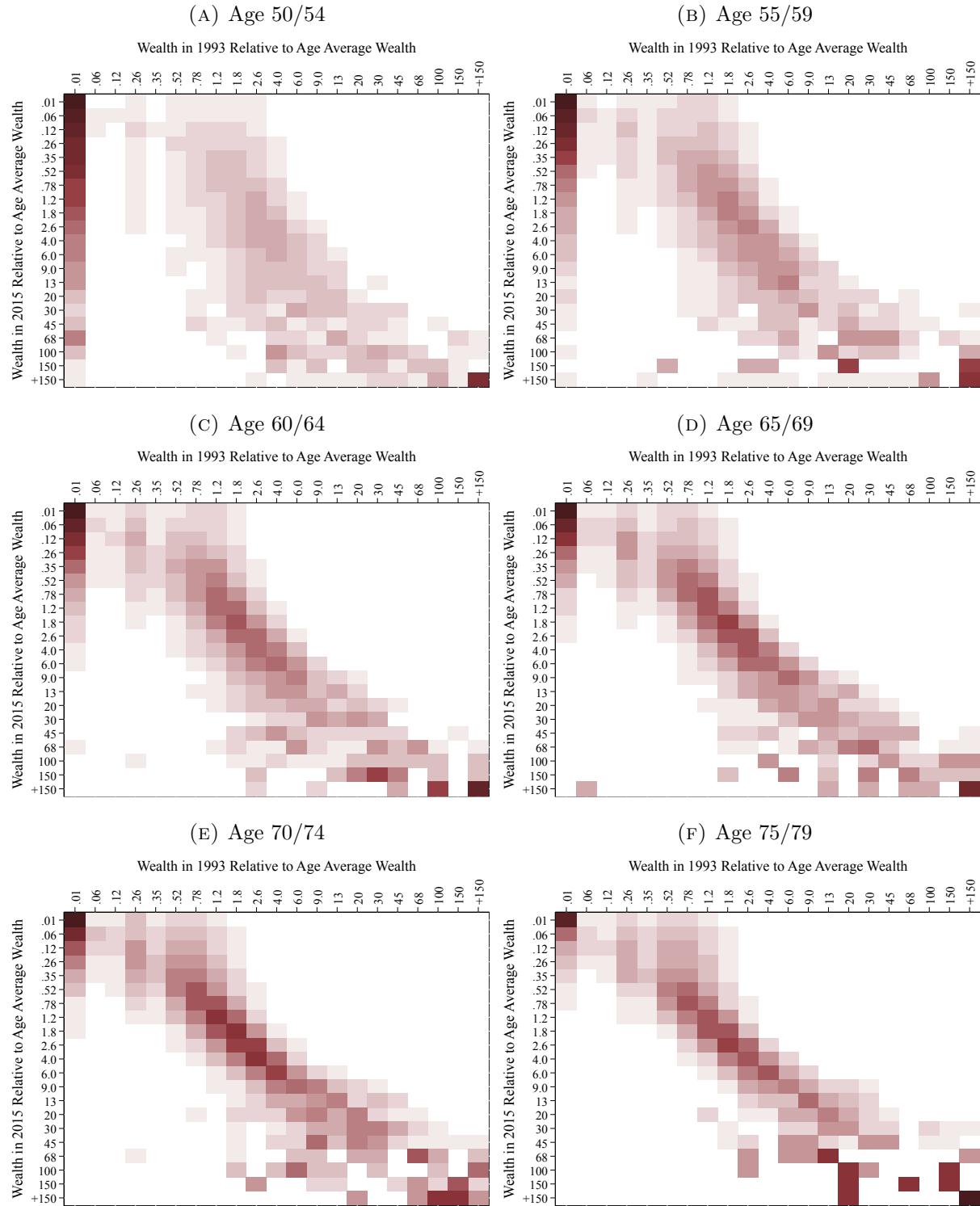
(A) Age 45/49								(B) Age 55/59								
Initial Average Wealth Rank								Initial Average Wealth Rank								
	[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%	
End-of-Period Wealth Rank, BW_j^h	[0,50]	60.3	23.4	11.2	2.9	1.9	0.3	0.0	[0,50]	66.5	21.7	8.2	2.1	1.4	0.1	0.0
	(50-75]	44.9	26.4	18.4	5.9	3.8	0.5	0.0		40.4	32.4	19.0	4.8	3.0	0.3	0.0
	(75-90]	40.7	24.2	19.6	8.0	6.4	1.0	0.0		30.3	28.0	25.9	9.0	6.0	0.8	0.0
	(90-95]	37.7	22.1	19.3	9.0	9.7	2.1	0.1		24.3	21.9	25.8	13.8	11.9	2.2	0.1
	(95-99]	33.9	19.3	18.1	9.0	12.7	6.7	0.4		18.9	16.8	21.2	15.1	21.0	6.6	0.4
	(99-99.9]	30.0	15.1	16.9	8.3	14.3	11.2	4.2		12.6	10.3	13.8	10.4	22.9	26.0	3.9
	Top 0.1%	29.6	8.6	9.5	7.0	11.1	11.2	23.0		5.4	4.6	7.2	7.3	12.2	32.9	30.4

(C) Age 60/64								(D) Age 65/69								
Initial Average Wealth Rank								Initial Average Wealth Rank								
	[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%	
End-of-Period Wealth Rank, BW_j^h	[0,50]	68.8	20.6	7.4	2.0	1.1	0.1	0.0	[0,50]	70.2	19.8	7.2	1.8	0.9	0.1	0.0
	(50-75]	39.3	34.3	18.8	4.6	2.8	0.2	0.0		39.3	35.6	18.1	4.4	2.5	0.2	0.0
	(75-90]	27.2	29.2	27.9	8.9	6.0	0.6	0.0		24.8	30.5	29.3	9.0	5.8	0.6	0.0
	(90-95]	20.5	21.3	28.3	14.9	12.9	2.0	0.1		17.2	20.8	30.5	16.1	13.5	1.9	0.1
	(95-99]	14.3	15.2	22.6	16.1	24.4	7.1	0.3		11.3	13.0	22.6	18.6	27.1	7.0	0.3
	(99-99.9]	7.9	8.0	11.9	10.5	25.5	31.8	4.4		5.2	5.8	9.2	9.4	30.0	35.6	4.8
	Top 0.1%	3.9	3.4	7.1	6.2	10.7	34.9	33.8		3.2	3.4	4.1	3.5	8.7	42.6	34.5

(E) Age 70/74								(F) Age 75/79								
Initial Average Wealth Rank								Initial Average Wealth Rank								
	[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%	
End-of-Period Wealth Rank, BW_j^h	[0,50]	71.0	19.1	7.1	1.8	0.8	0.1	0.0	[0,50]	71.6	18.7	7.0	1.8	0.8	0.1	0.0
	(50-75]	39.6	36.0	17.7	4.1	2.3	0.2	0.0		39.9	36.0	17.4	4.1	2.3	0.2	0.0
	(75-90]	23.1	32.5	29.0	9.0	5.8	0.6	0.0		22.0	33.9	29.2	9.0	5.3	0.7	0.0
	(90-95]	14.6	20.8	33.5	16.2	13.1	1.7	0.1		12.1	21.5	35.7	16.1	12.8	1.7	0.1
	(95-99]	8.7	11.8	22.9	20.5	28.9	7.1	0.2		7.0	10.8	23.7	21.2	30.1	6.9	0.3
	(99-99.9]	2.8	4.6	8.0	9.8	33.5	36.0	5.2		1.7	3.1	6.9	9.2	39.1	35.5	4.4
	Top 0.1%	1.4	2.9	4.2	2.6	13.3	42.3	33.4		0.2	2.3	3.0	2.4	9.2	42.4	40.6

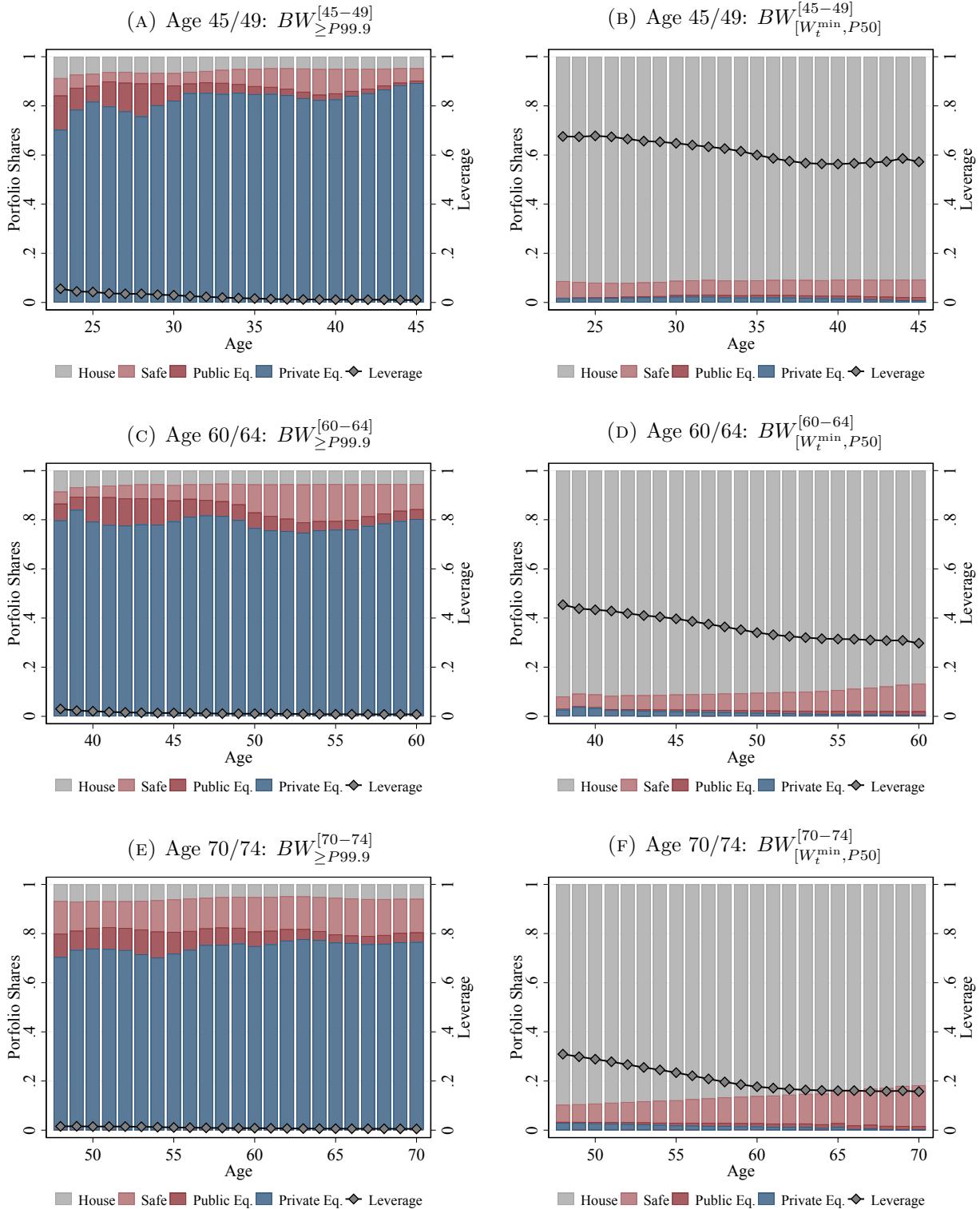
Notes: Figure A.9 shows the intragenerational persistence of net wealth. Figure ?? shows the results by first sorting household whose head is in different age groups in the conditioning year and then again by $\bar{W}_{i,1993}$. Each cell represent the fraction of household in different percentiles of the wealth distribution in $\bar{W}_{i,1993}$ (columns), conditional on their percentile of the wealth distribution in the conditioning year, BW_j^h (rows).

FIGURE A.10 – BACKWARD-LOOKING TRANSITION MATRIX: LEVEL



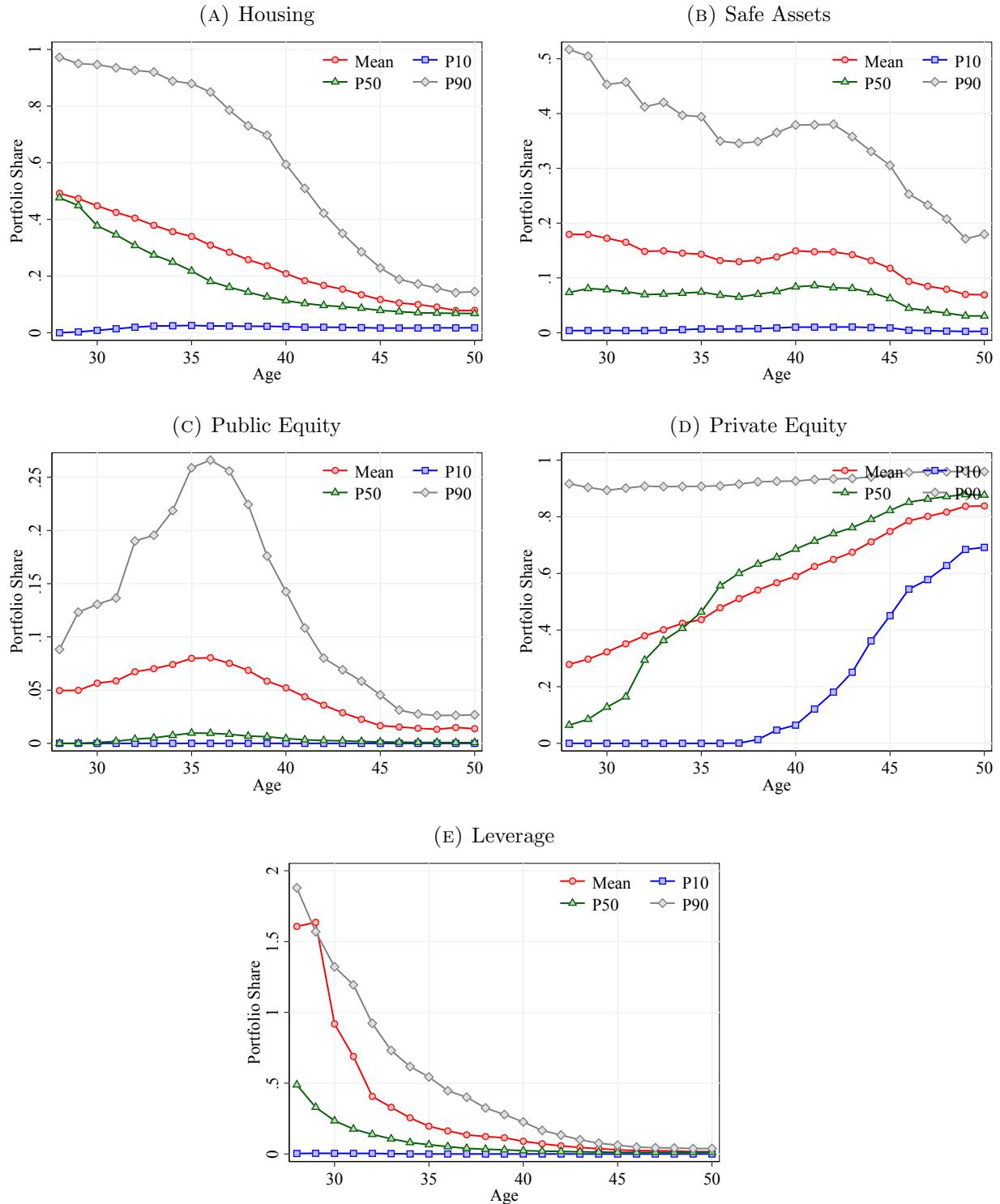
Notes: In the different panels of Figure A.10, each cell represent the fraction of household in different levels of the wealth distribution in $\bar{W}_{i,1993}$ (columns), conditional on their levels of the wealth distribution in the conditioning year, BW_j^h (rows). Wealth is expressed in multiple of AW .

FIGURE A.11 – BACKWARD-LOOKING PORTFOLIO SHARES: AGE GROUPS



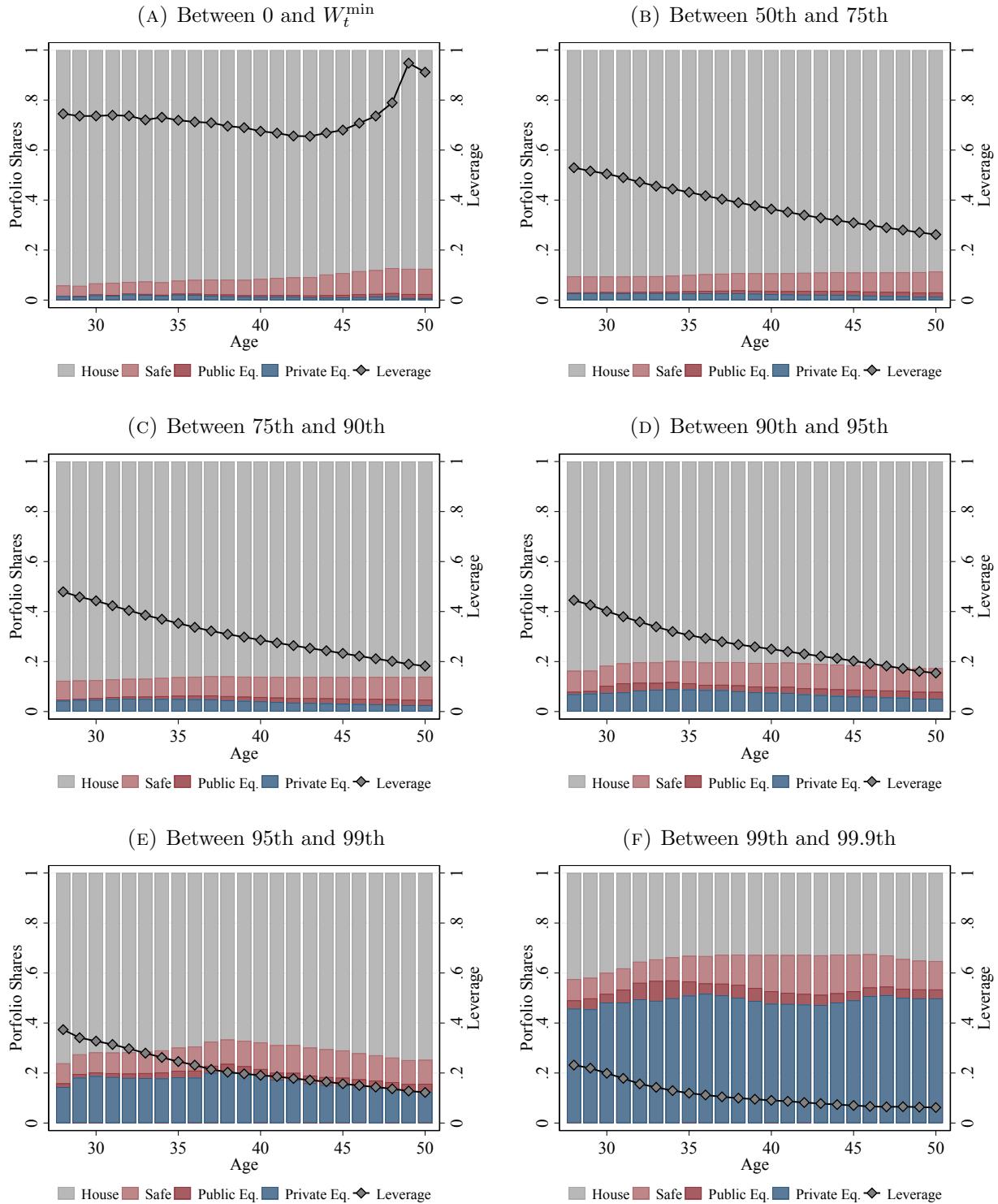
Notes: Figure A.11 shows the evolution of the portfolio shares (left y-axis) and leverage (right y-axis).

FIGURE A.12 – CROSS-SECTIONAL PORTFOLIO SHARES FOR $BW_{\geq P99.9}^{[50-54]}$



Notes: Figure A.12 cross-sectional moments of the distribution portfolio shares for households in $BW_{\geq P99.9}^{[50-54]}$.

FIGURE A.13 – BACKWARD-LOOKING PORTFOLIO SHARES FOR $BW_{\geq P99.9}^{[50-54]}$



Notes: Figure A.13 shows the evolution of the portfolio shares (left y-axis) and leverage (right y-axis) for households.

FIGURE A.14 – RETURNS ON ASSETS ACROSS THE WEALTH DISTRIBUTION-UNWEIGHTED

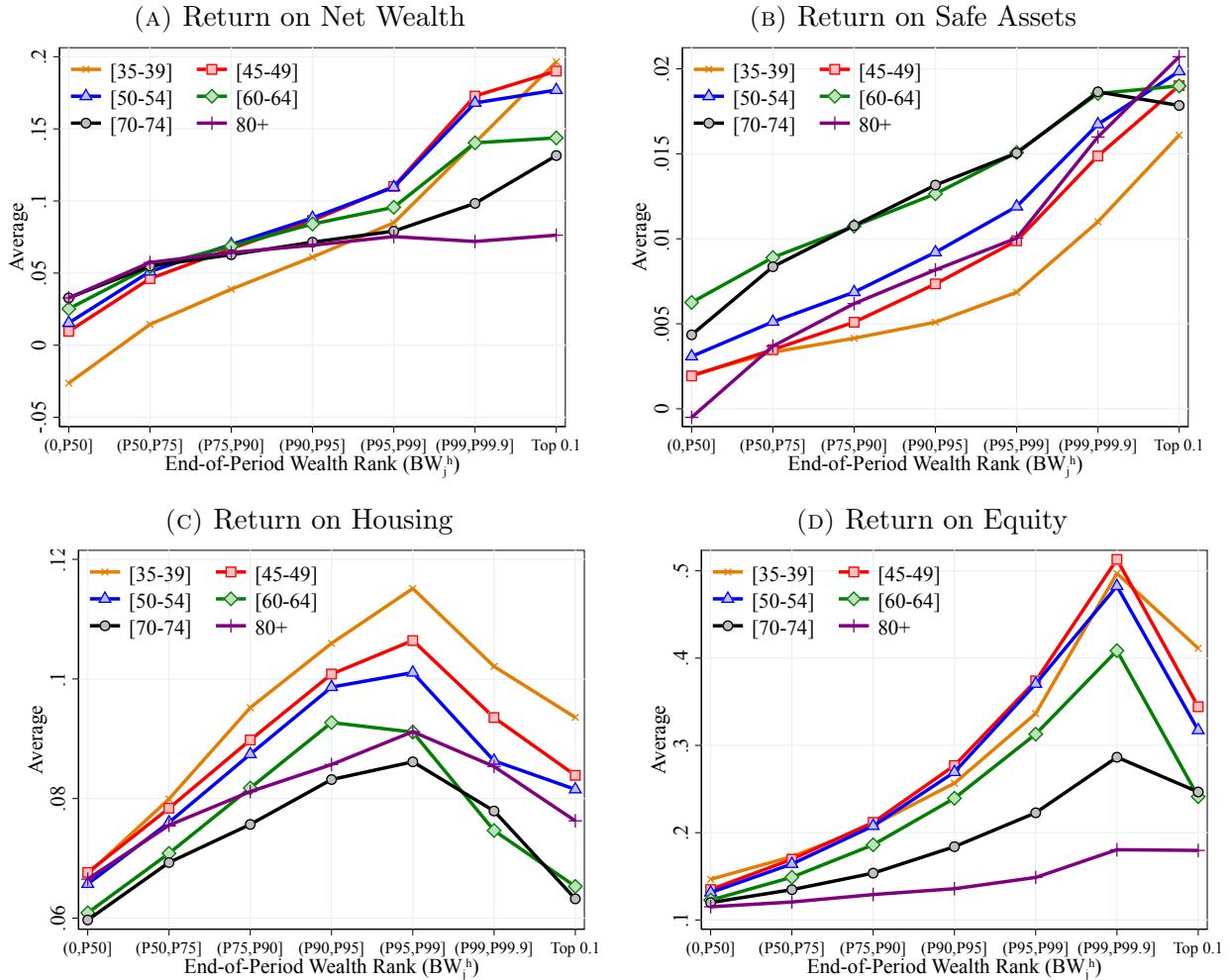
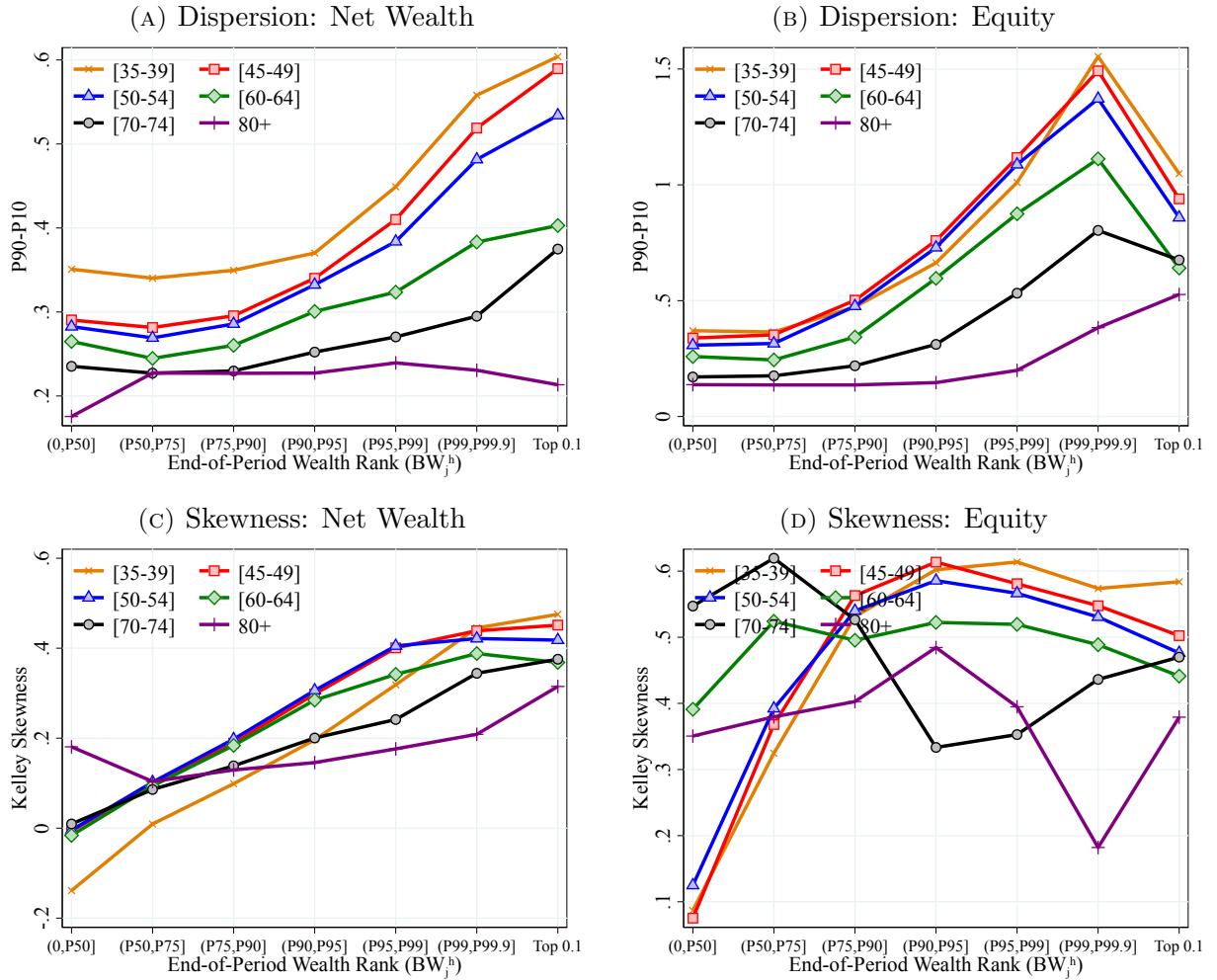
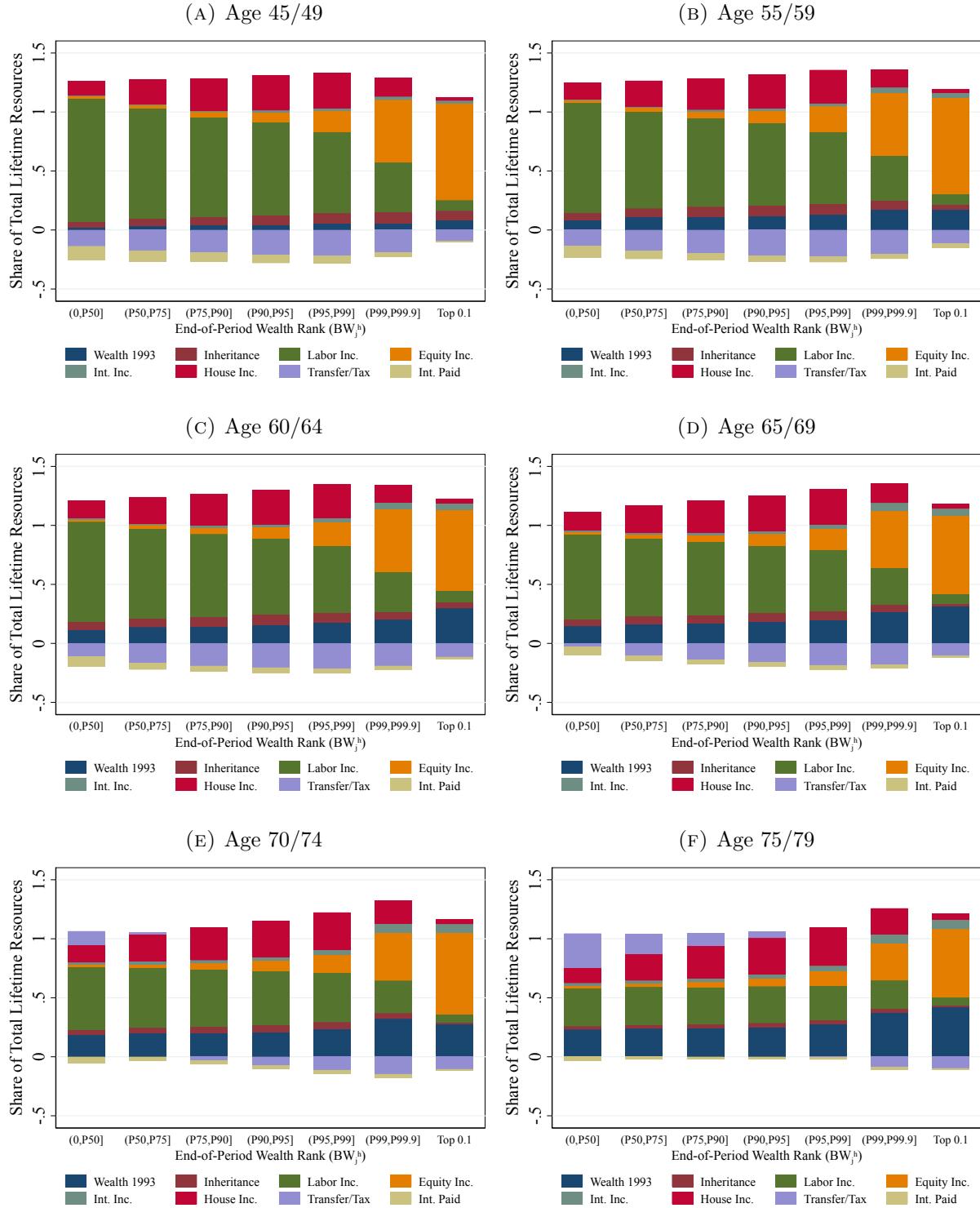


FIGURE A.15 – DISPERSION AND SKEWNESS OF RATES OF LOG-TERM RETURNS-UNWEIGHTED



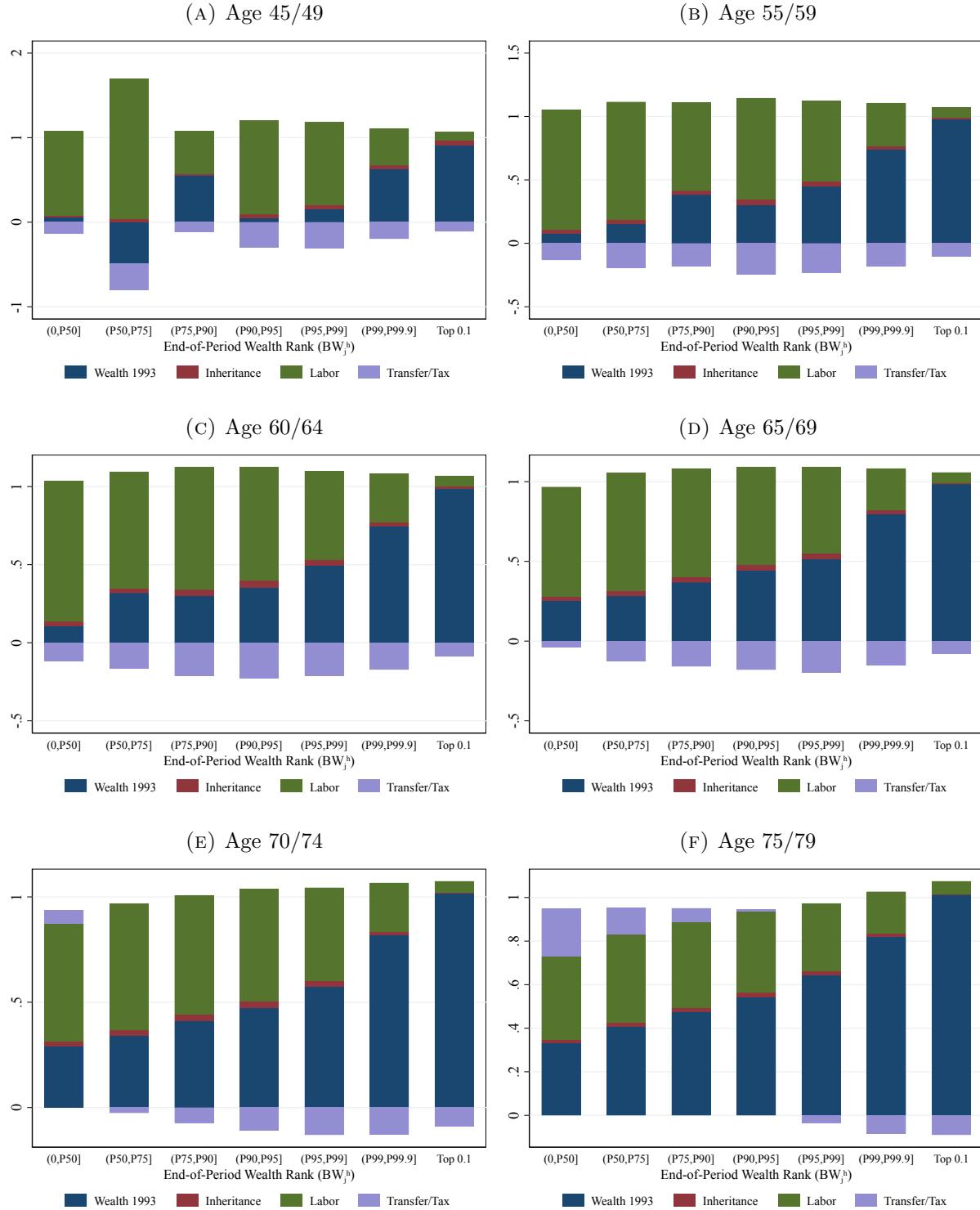
Notes: Figure A.15 shows the 11-years mean of the value-weighted cross-sectional moments of the gross annual returns within age and wealth groups across different conditioning years for different asset classes.

FIGURE A.16 – DECOMPOSITION OF LIFE TIME RESOURCES: AGE GROUPS



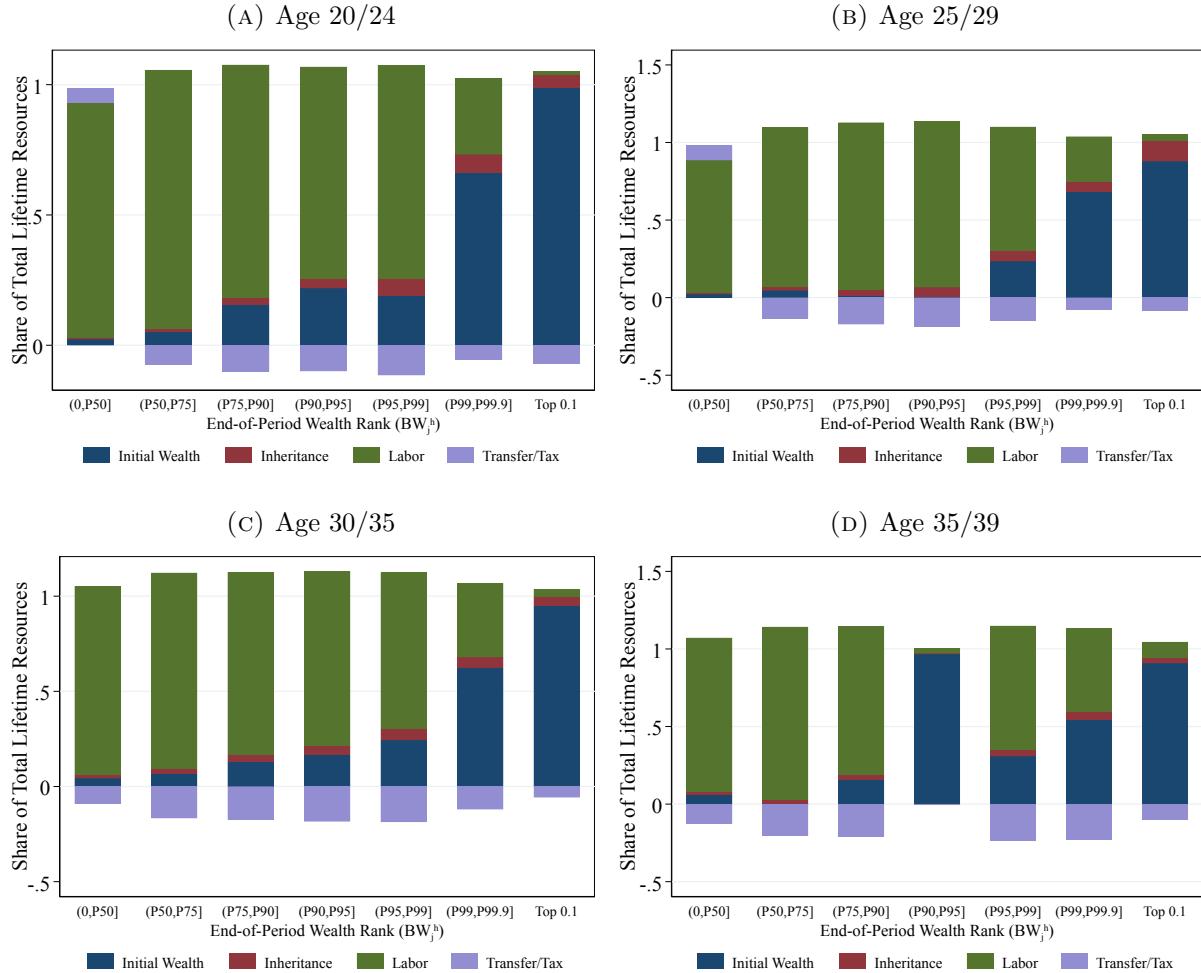
Notes: Figure A.16 shows the shares of lifetime income for a sample of households in a given conditioning year for different age groups conditional on BW_j^h . Lifetime income refers to the sum of initial wealth (net worth in 1993) and all income sources between 1994 and the conditioning year. We average these shares across conditioning years.

FIGURE A.17 – FUNDAMENTAL INCOME DECOMPOSITION: AGE GROUPS



Notes: Figure A.17 shows the shares of lifetime income for a sample of households in a given conditioning year for different age groups conditional on BW_j^h and accounting for capitalization.

FIGURE A.18 – FUNDAMENTAL INCOME DECOMPOSITION: YOUNG AGE GROUPS



Notes: Figure A.18 shows the shares of lifetime income for a sample of households in a given conditioning year for different age groups conditional on BW_j^h and accounting for capitalization.

FIGURE A.19 – INTERGENERATIONAL TRANSITION MATRIX: AGE GROUPS

		Parents Life Time Wealth Rank								
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		
End-of-Period Wealth Rank (BW_j^h)	[0,50]	47.6	36.8	12.7	2.1	0.7	0.1	0.0		
	(50-75]	34.7	41.1	18.8	3.8	1.5	0.1	0.0		
	(75-90]	27.0	39.1	24.5	6.1	3.0	0.3	0.0		
	(90-95]	21.9	35.6	27.1	8.7	5.8	0.9	0.0		
	(95-99]	19.5	30.6	26.5	11.1	9.8	2.3	0.1		
	(99-99.9]	14.0	22.9	23.1	10.0	17.3	11.5	1.3		
	Top 0.1%	9.2	16.6	18.4	6.1	8.6	18.4	22.7		

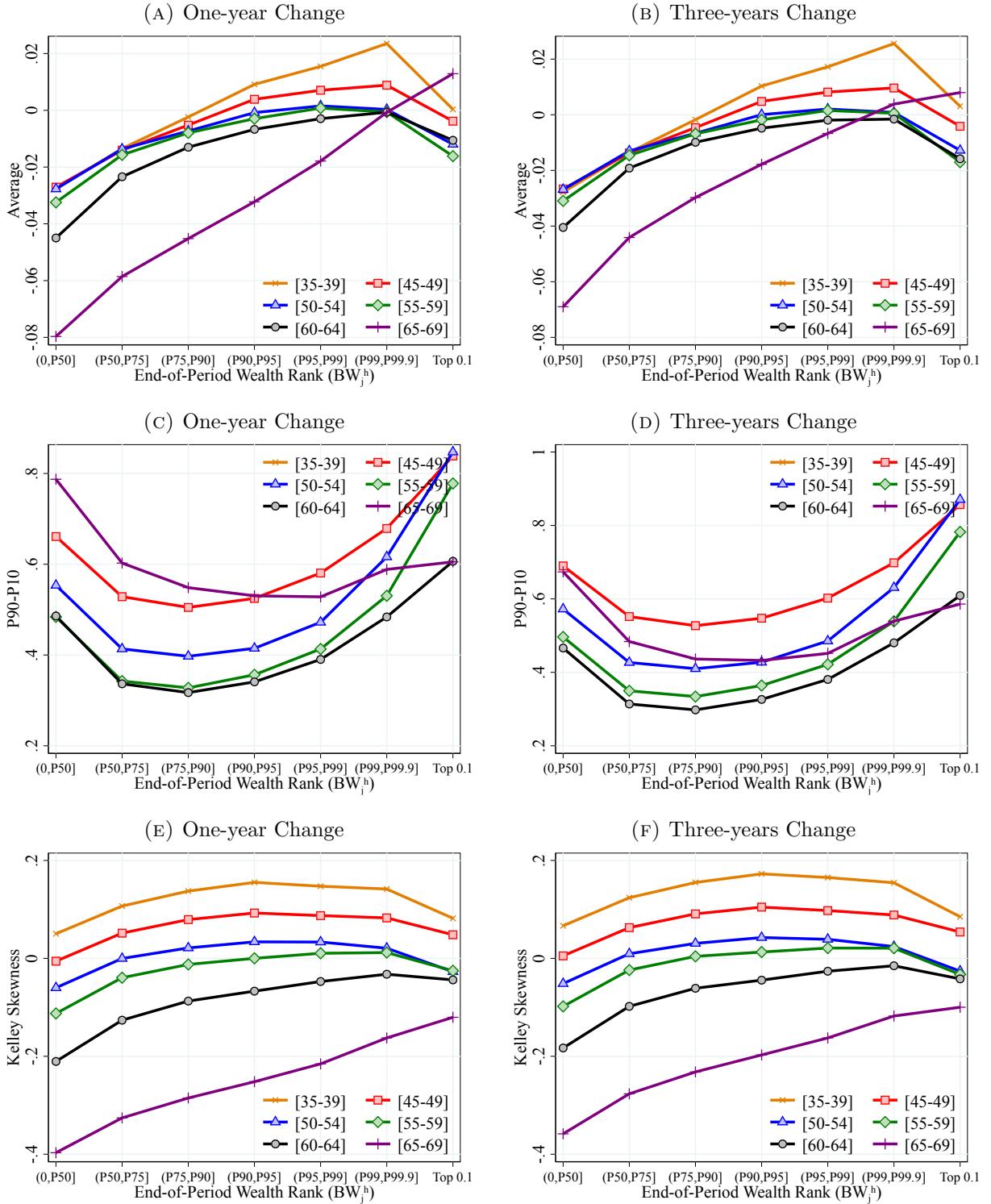
		Parents Life Time Wealth Rank								
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		
End-of-Period Wealth Rank (BW_j^h)	[0,50]	47.2	37.6	12.5	2.0	0.7	0.0	0.0		
	(50-75]	33.9	41.7	18.7	4.0	1.6	0.1	0.0		
	(75-90]	26.4	40.1	23.7	6.3	3.2	0.3	0.0		
	(90-95]	21.8	35.0	27.0	9.2	6.4	0.6	0.0		
	(95-99]	16.3	32.0	27.2	12.2	10.3	2.0	0.1		
	(99-99.9]	14.0	28.1	21.3	10.9	15.5	8.6	1.6		
	Top 0.1%	7.0	22.8	15.8	11.4	13.9	17.7	11.4		

		Parents Life Time Wealth Rank								
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		
End-of-Period Wealth Rank (BW_j^h)	[0,50]	48.8	36.7	11.8	2.0	0.7	0.0	0.0		
	(50-75]	36.4	40.6	17.5	3.7	1.7	0.1	0.0		
	(75-90]	28.8	39.7	21.8	6.1	3.4	0.3	0.0		
	(90-95]	22.5	36.0	25.2	8.9	6.4	0.9	0.0		
	(95-99]	18.3	31.2	27.0	11.3	9.8	2.2	0.1		
	(99-99.9]	16.2	25.6	22.0	10.5	15.9	8.5	1.2		
	Top 0.1%	13.7	17.6	19.8	11.5	9.9	16.8	10.7		

		Parents Life Time Wealth Rank								
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%		
End-of-Period Wealth Rank (BW_j^h)	[0,50]	51.9	34.4	10.9	2.0	0.8	0.0	0.0		
	(50-75]	38.9	38.4	17.2	3.7	1.7	0.1	0.0		
	(75-90]	31.8	36.6	21.8	5.9	3.6	0.3	0.0		
	(90-95]	25.0	33.3	25.7	8.3	6.8	1.0	0.0		
	(95-99]	20.4	29.7	25.0	11.8	10.7	2.3	0.1		
	(99-99.9]	16.1	25.9	22.3	10.9	16.3	8.1	0.3		
	Top 0.1%	7.1	14.3	24.3	10.0	18.6	20.0	5.7		

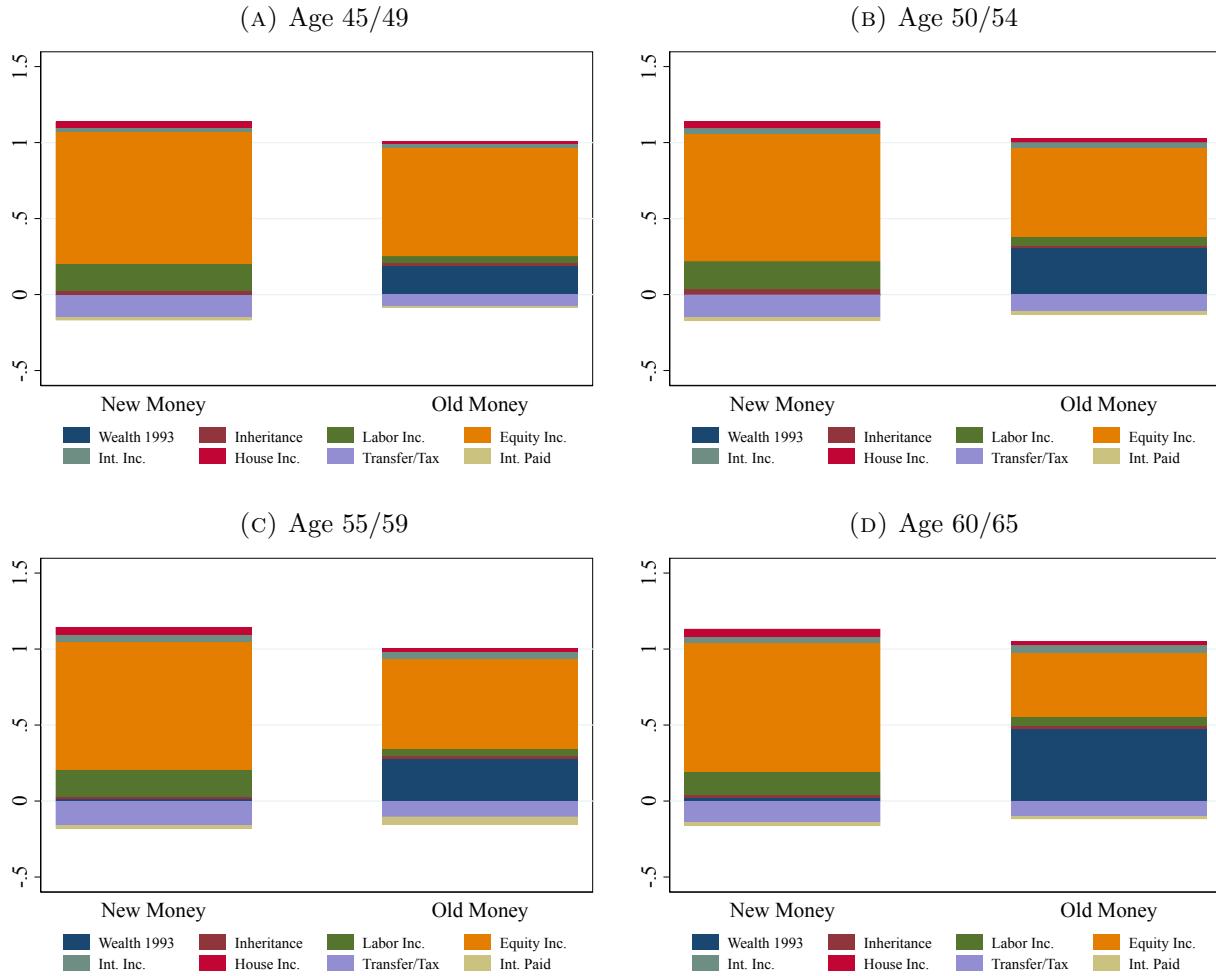
Notes: Figure A.19 shows the intergenerational persistence of net wealth. It shows the results by first sorting household within age groups by the lifetime wealth of their parents. Each cell represent the fraction of household in different percentiles of the parents wealth distribution (columns), conditional on their percentile of the wealth distribution in the conditioning year, BW_j^h (rows). Each row sums to 100. The Parents Life Time Wealth Rank is calculate as the rank of the average wealth adjusted for an age and year specific mean.

FIGURE A.20 – LABOR INCOME GROWTH ACROSS THE WEALTH DISTRIBUTION



2.3 New Money and Old Money: Additional Figures

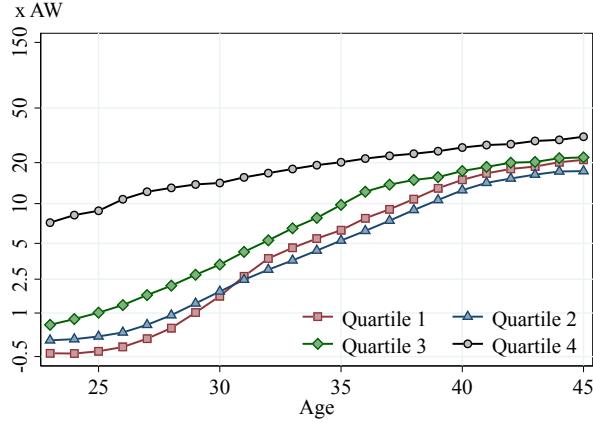
FIGURE A.21 – INCOME SOURCES FOR NEW- AND OLD-MONEY HOUSEHOLDS



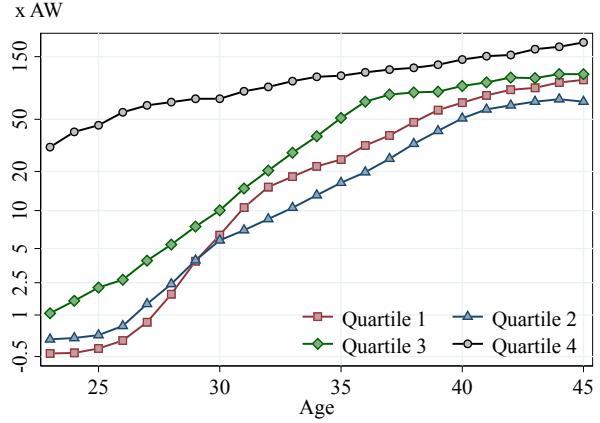
Notes: Figure A.21 shows the shares of lifetime income for a sample of households in a given conditioning year for different age groups conditional on $BW_{\geq P99.9}^h$ and were in different quartiles of the initial average wealth distribution ($\bar{W}_{i,1994}$). Lifetime income refers to the sum of initial wealth (net worth in 1993) and all income sources between 1994 and the conditioning year. We average these shares across conditioning years.

FIGURE A.22 – AVERAGE WEALTH PROFILE: OLD MONEY AND NEW MONEY

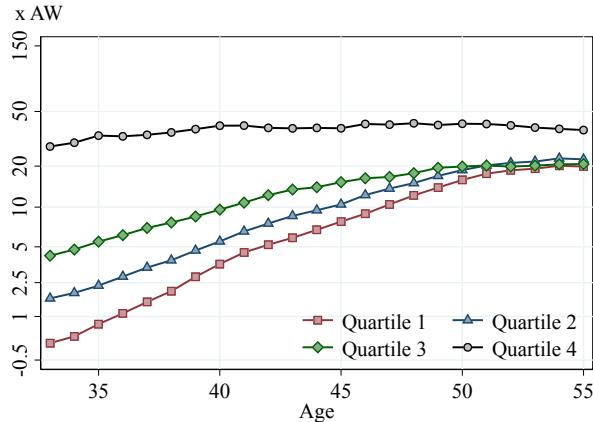
(A) Age 45/49: Top 1% Households



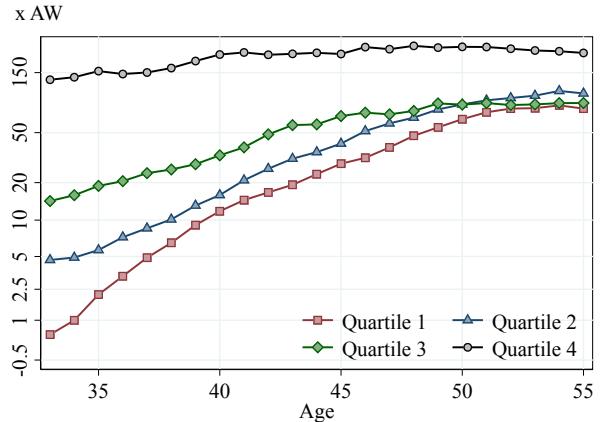
(B) Age 45/49: Top 0.1% Households



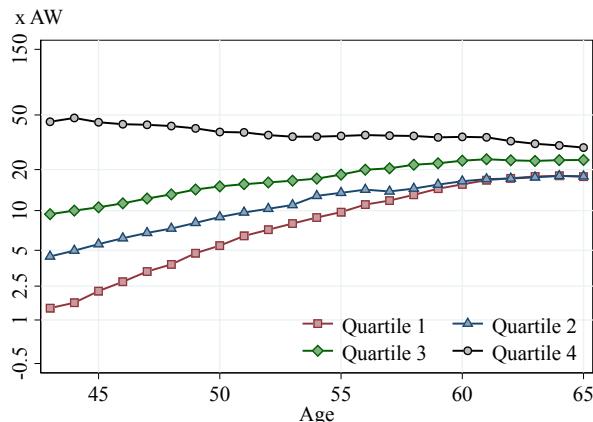
(C) Age 55/59: Top 1% Households



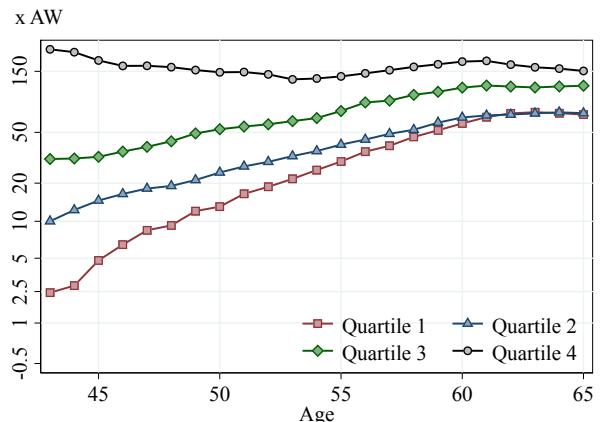
(D) Age 55/59: Top 0.1% Households



(E) Age 65/69: Top 1% Households

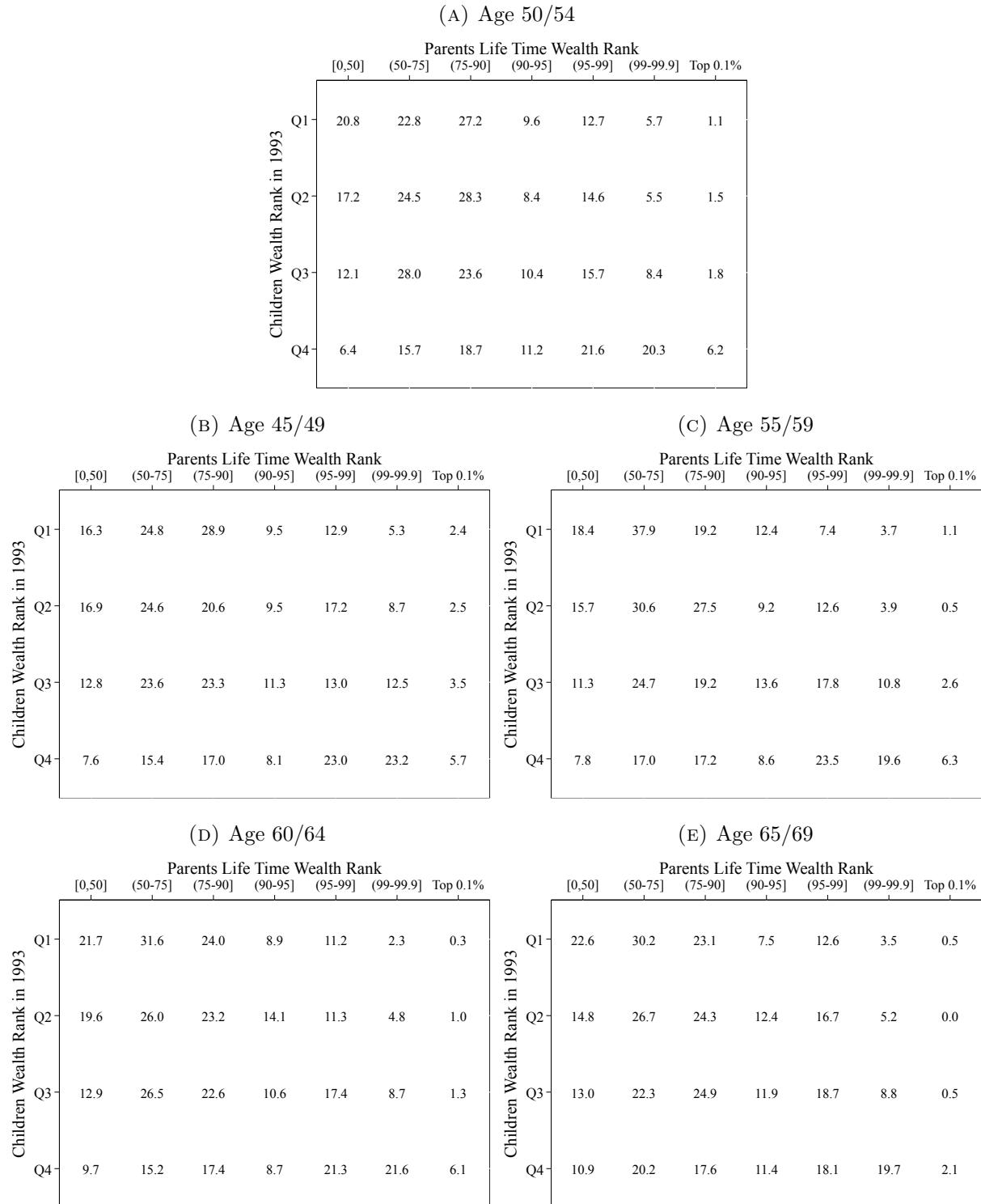


(F) Age 65/69: Top 0.1% Households



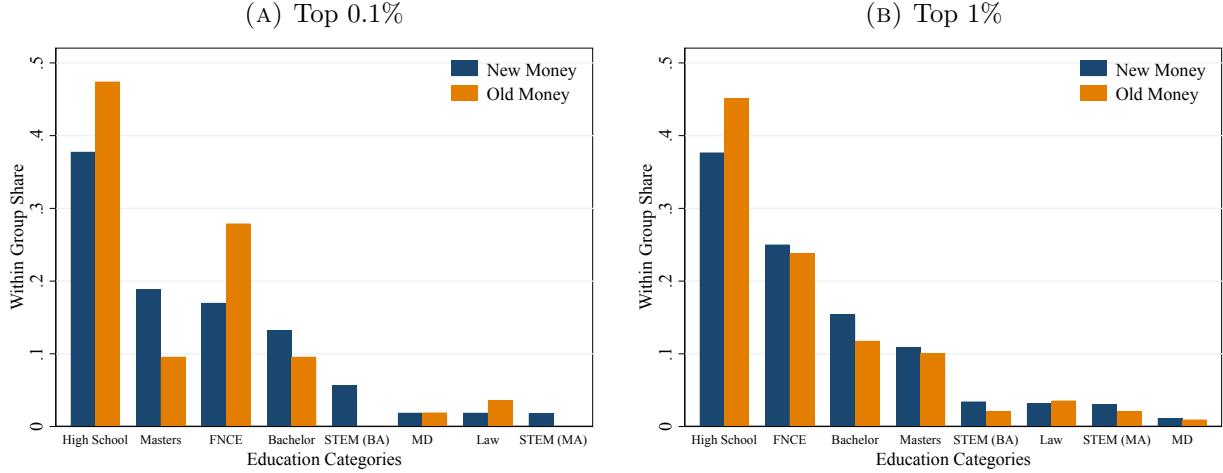
Notes: Figure A.22 shows the average wealth profile for household whose head is in different wealth age and belong to the top 0.1% of the wealth distribution at the end of the sample ($BW_{\geq P99.9}^h$) and were in different quartiles of the initial average wealth distribution ($\bar{W}_{i,1994}$).

FIGURE A.23 – INTERGENERATIONAL TRANSITION MATRIX: AGE GROUPS



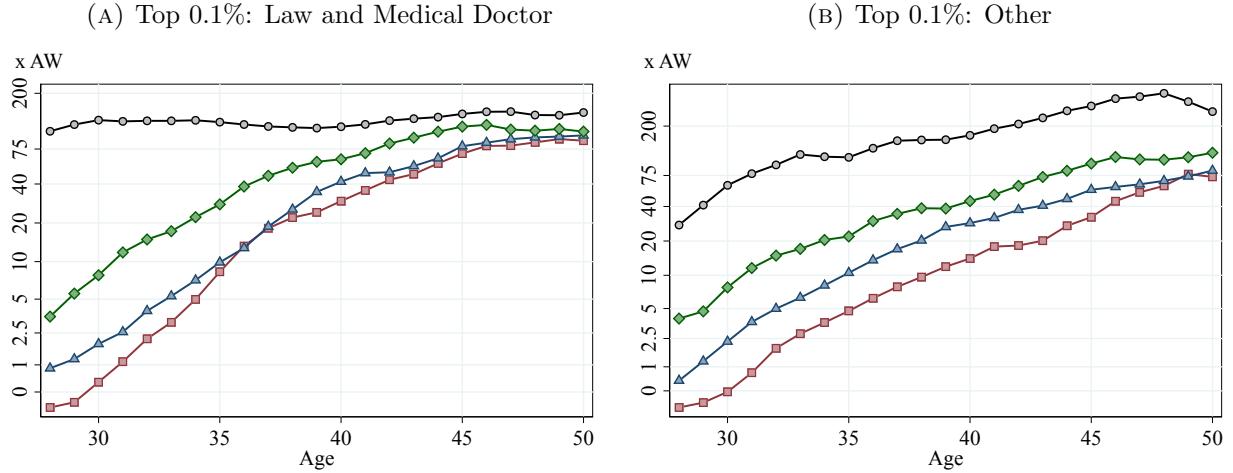
Notes: Figure A.23 shows a intergenerational transition matrix between households wealth in 2015 and their parental household wealth for households in different age groups. Each cell represent the fraction of household in different percentiles of the parents wealth distribution (columns), conditional on their percentile of the wealth distribution in the conditioning year, BW_j^h (rows). Each row sums to 100. The Parents Life Time Wealth Rank is calculate as the rank of the average wealth adjusted for an age and year specific mean.

FIGURE A.24 – EDUCATION SHARES FOR NEW AND OLD MONEY HOUSEHOLDS



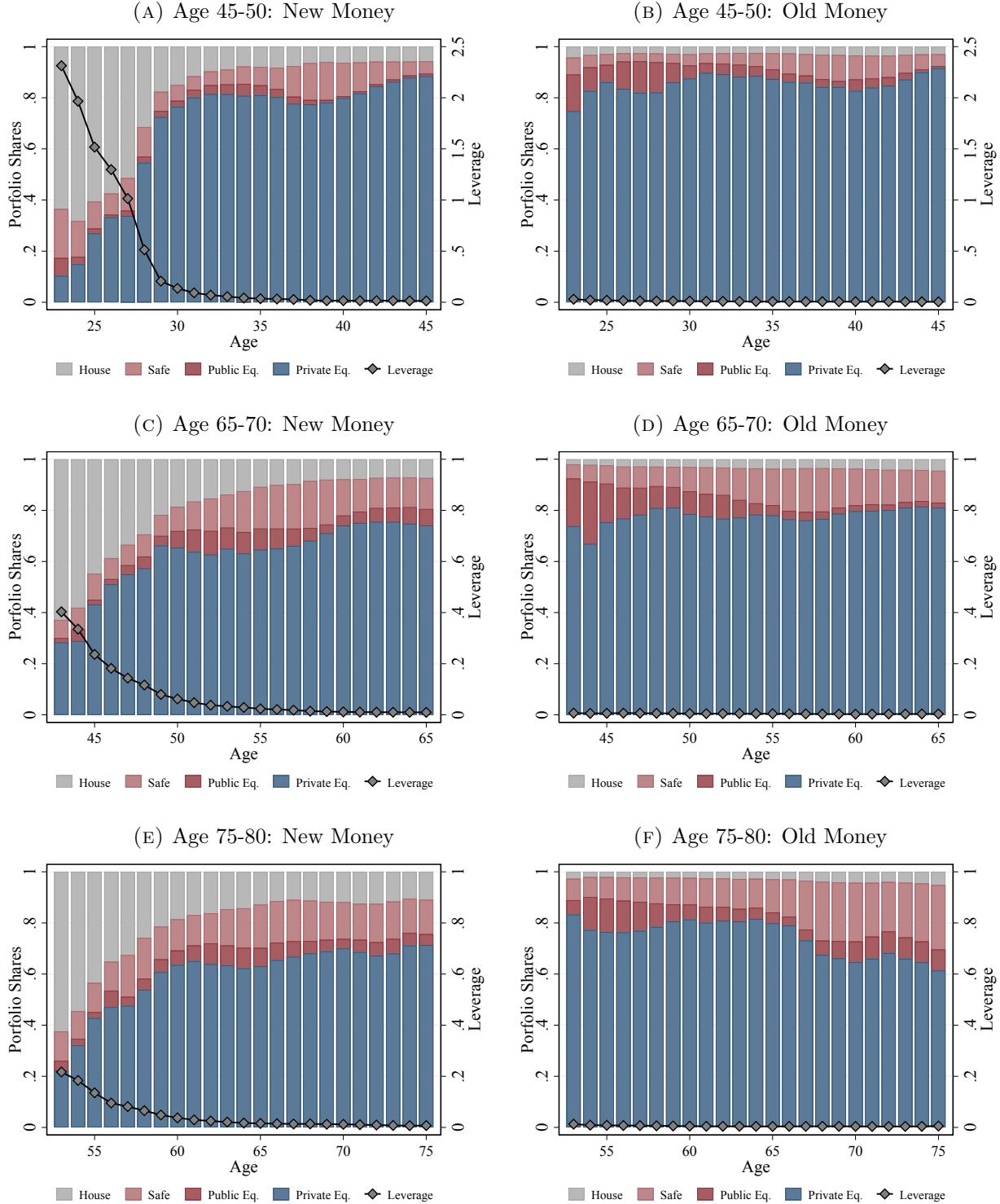
Notes: Figure A.24 shows the share of different education groups households (highest degree of the head of the household) for households at the top 0.1% and top 1% among 50 to 54 year old households ($BW_{\geq P99.9}^{50-54}$ and $BW_{\geq P99}^{50-54}$ respectively) divided in New Money (first quartile in the initial average wealth, $\bar{W}_{i,1994}$) and Old Money (forth quartile in the initial average wealth, $\bar{W}_{i,1994}$). HS is High-school or less, FNCE BA/MA is Bachelor or MBA on a finance or business administration major, BA and MA are other bachelor degrees or master degrees, MD is Medical Doctor or Dentist, H-STEM is BA or MA on a health related degree (except for Medical Doctor or Dentist) and STEM major.

FIGURE A.25 – AVERAGE WEALTH PROFILE BY EDUCATION



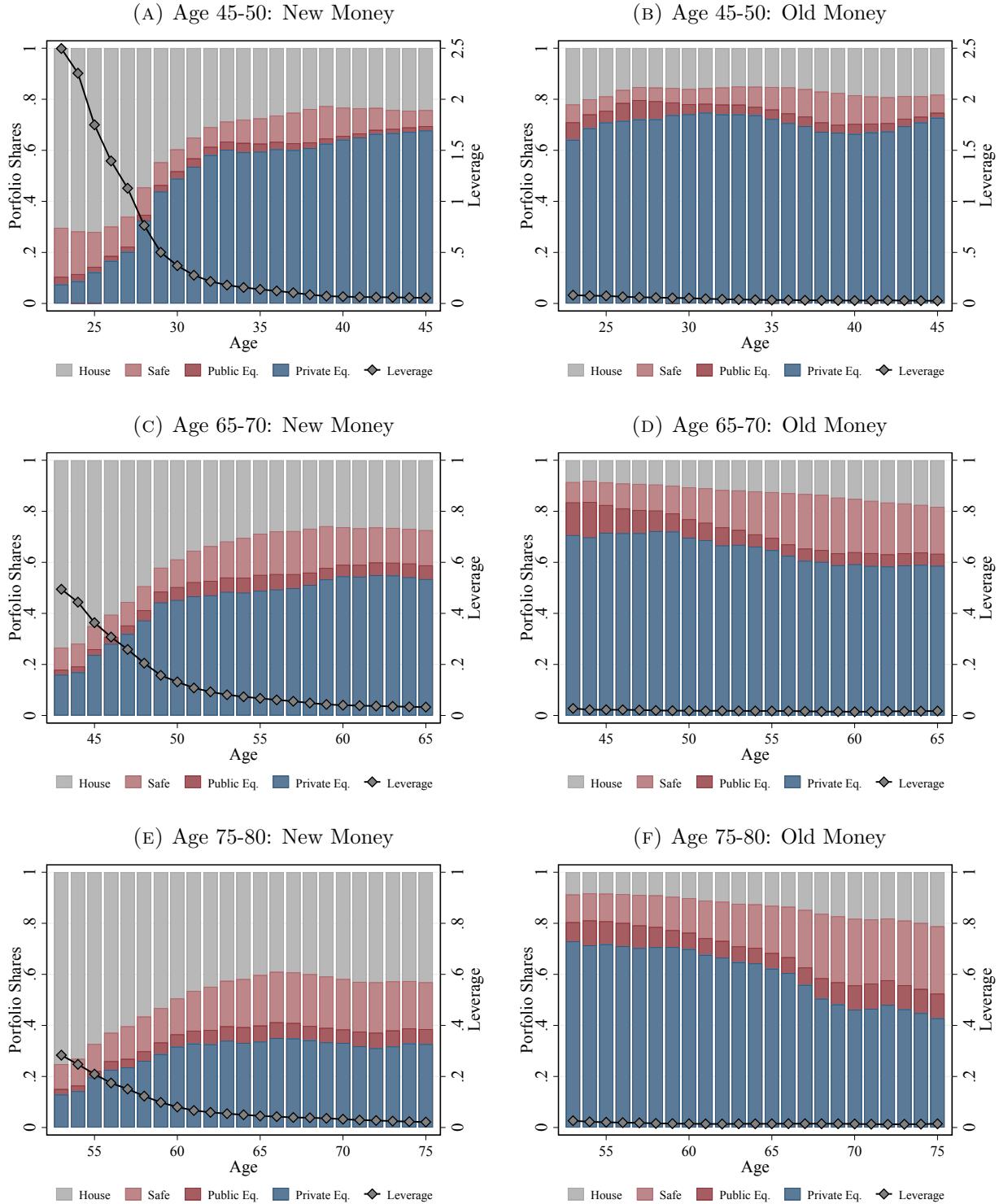
Notes: Figure A.25 shows the average wealth profile for household whose head is between 50 and 54 years old in 2015 and belong to the top 0.1% in that year. Each line is the average wealth for individuals in different quartiles of the wealth distribution in 1993. Panel A shows households whose head has the title of lawyer or medical doctor. Panel B shows all other educational titles.

FIGURE A.26 – PORTFOLIO SHARES: OLD MONEY AND NEW MONEY AND AGE GROUPS



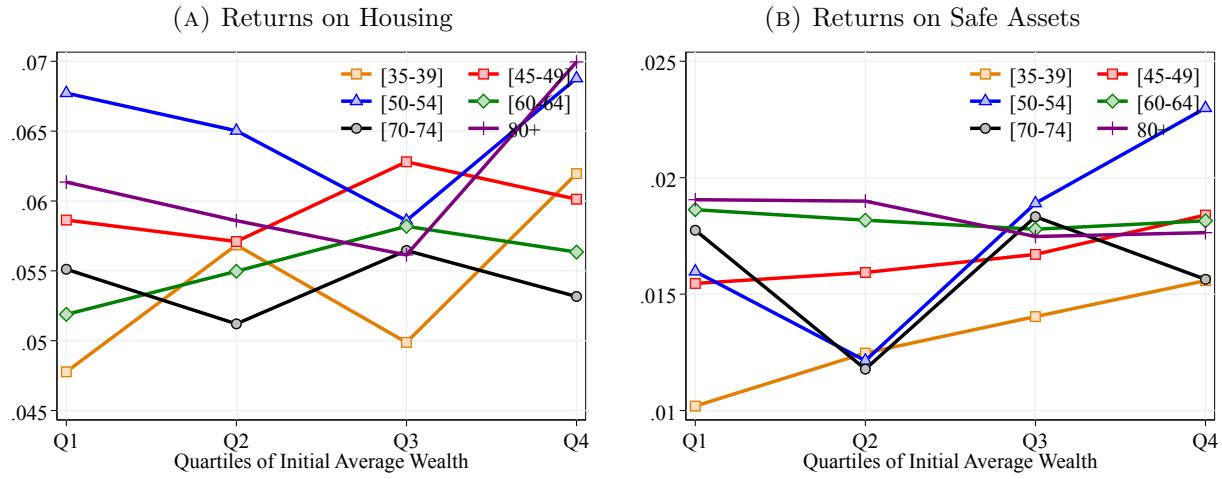
Notes: Figure A.26 shows the portfolio composition and leverage for households that belong to the top 1% in 2015. New Money households (Panel A, C and E) are those household that where in the first quartile of the wealth distribution in 1993; Old Money households (panel B, D, and E) are those households that were in the fourth quartile of \overline{W}_{1993} .

FIGURE A.27 – PORTFOLIO SHARES: OLD MONEY AND NEW MONEY AT TOP 1%



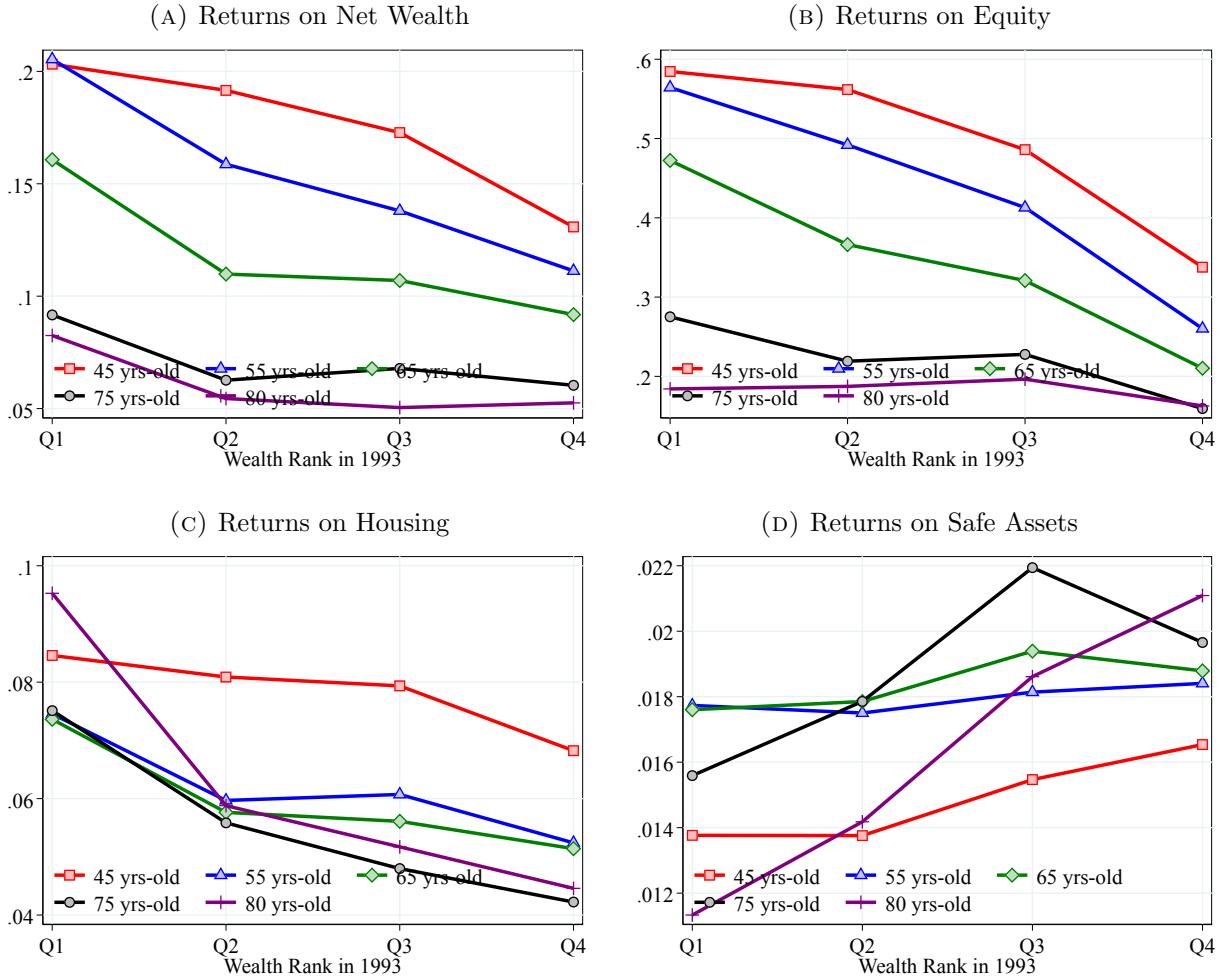
Notes: Figure A.27 shows the portfolio composition and leverage for households that belong to the top 1%. New Money households (Panel A, C, E) are those household that where in the first quartile of the wealth distribution in 1993; Old Money households (panel B, D, and E) are those households that were in the fourth quartile of \bar{W}_{1993} .

FIGURE A.28 – AVERAGE LONG-TERM RETURNS: OLD MONEY AND NEW MONEY



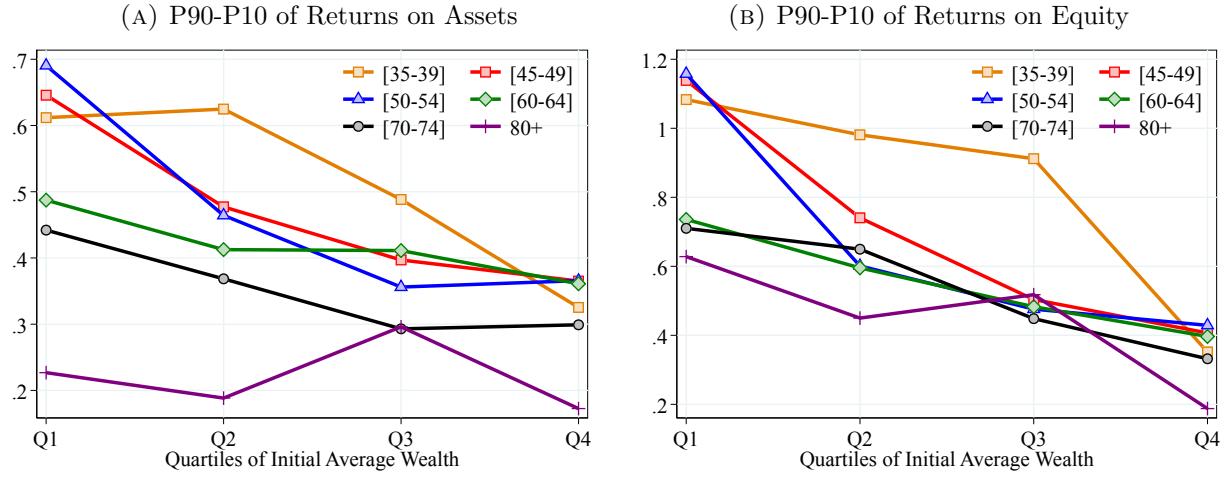
Notes: Figure A.28 shows the 11-years mean of the value-weighted average gross annual returns within age and wealth groups across different conditioning years for different asset classes.

FIGURE A.29 – LIFETIME RETURNS: OLD MONEY AND NEW MONEY (UNWEIGHTED)



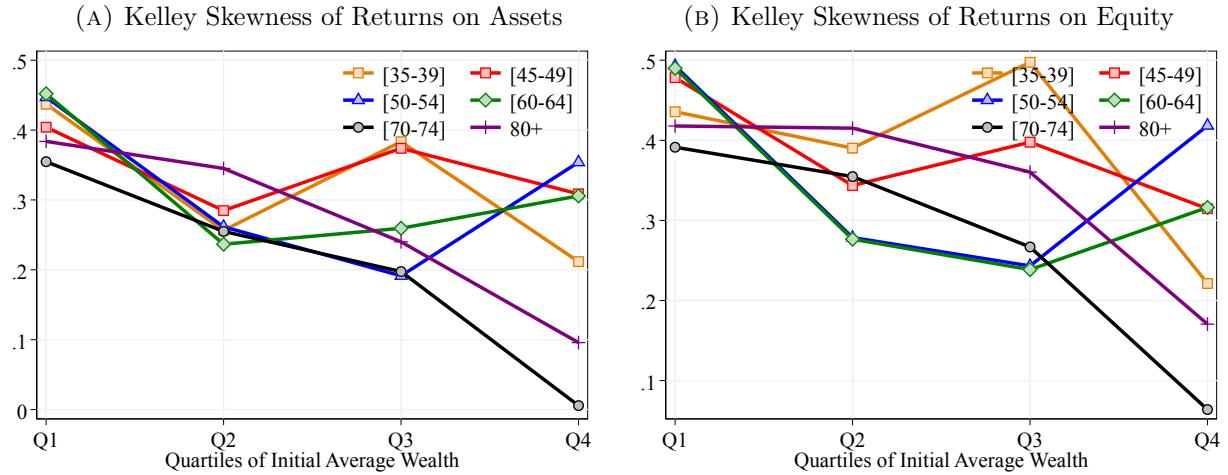
Notes: Figure A.29 shows the average lifetime returns for households who are at the top 1% of the wealth distribution at the end of the sample period (2015) and were in different quartiles of the wealth distribution at the start of the sample period (1993) identified as Quartile 1 (Q1) to Quartile 4 (Q4).

FIGURE A.30 – DISPERSION OF LONG-TERM RETURNS: OLD MONEY AND NEW MONEY



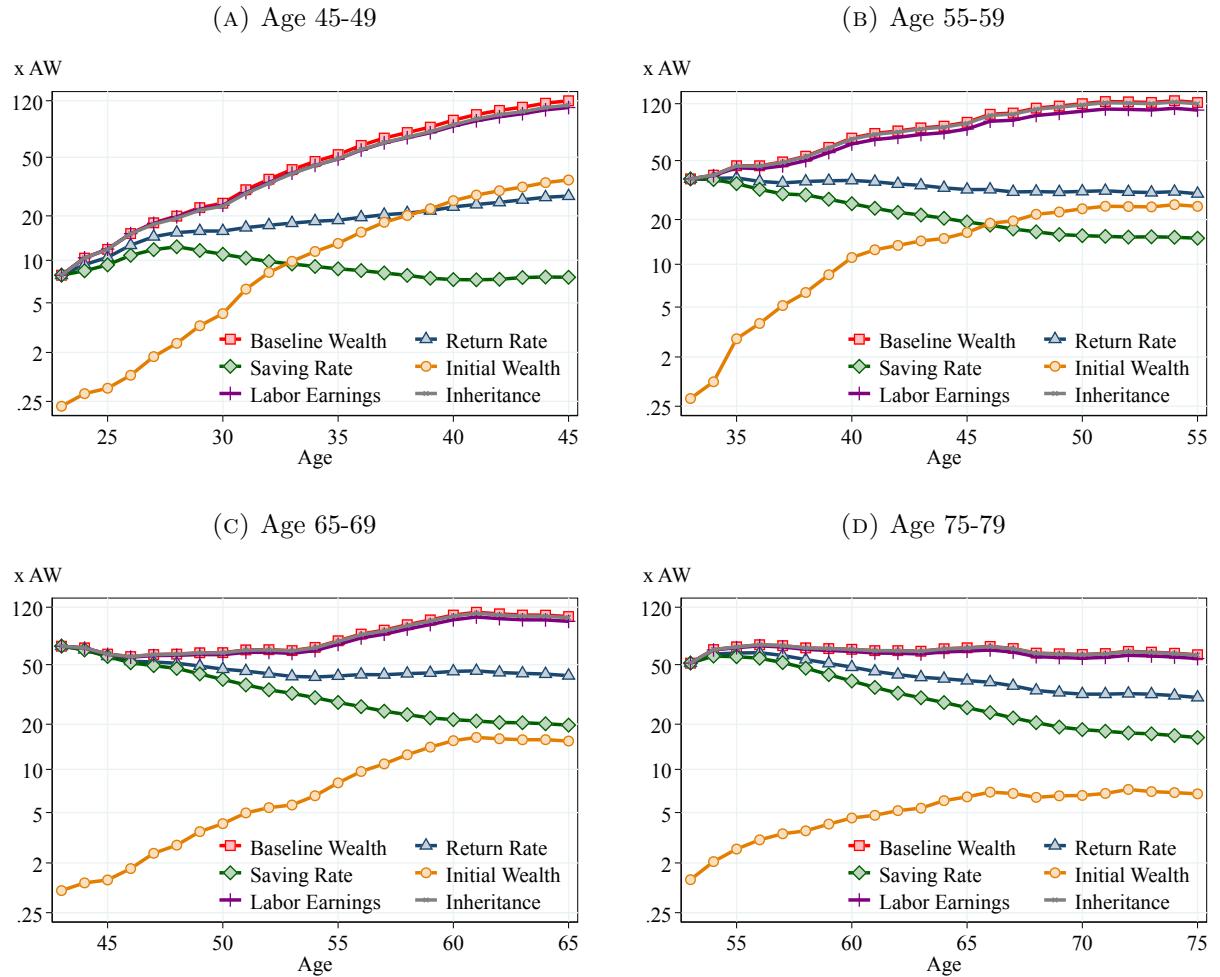
Notes: Figure A.30 shows the 11-years mean of the value-weighted P90-P10 of returns for households who are at the top 0.1% of the wealth distribution at the end of the sample period ($BW_{\geq P99.9}^h$) and were in different quartiles of the initial average wealth distribution ($\bar{W}_{i,1994}$) identified as Quartile 1 (Q1) to Quartile 4 (Q4).

FIGURE A.31 – SKEWNESS OF LONG-TERM RETURNS: OLD MONEY AND NEW MONEY



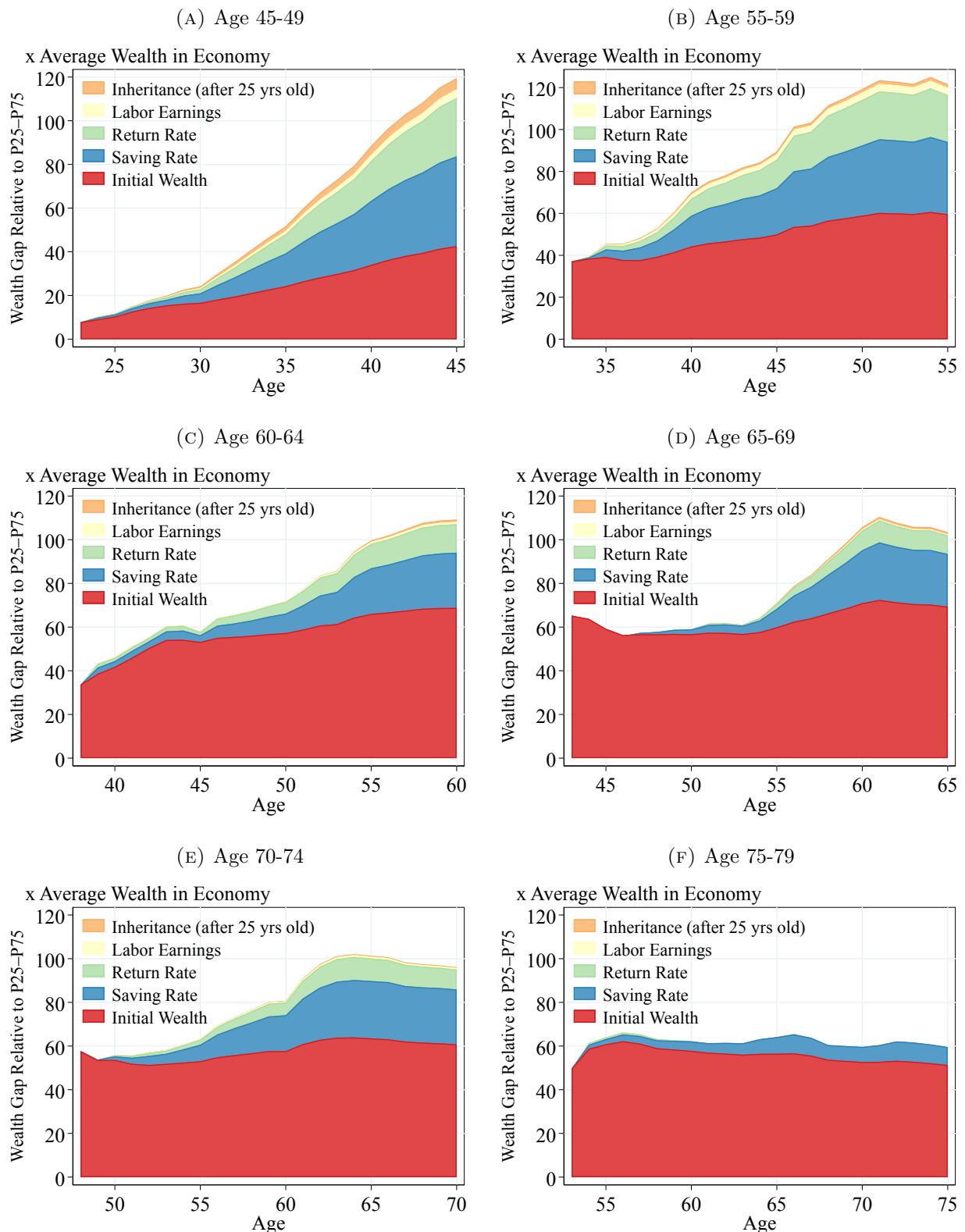
Notes: Figure A.31 shows the 11-years mean of the value-weighted Kelley Skewness of returns for households who are at the top 0.1% of the wealth distribution at the end of the sample period ($BW_{\geq P99.9}^h$) and were in different quartiles of the initial average wealth distribution ($\bar{W}_{i,1994}$) identified as Quartile 1 (Q1) to Quartile 4 (Q4).

FIGURE A.32 – TOP WEALTH HOUSEHOLDS FOR DIFFERENT AGE GROUPS



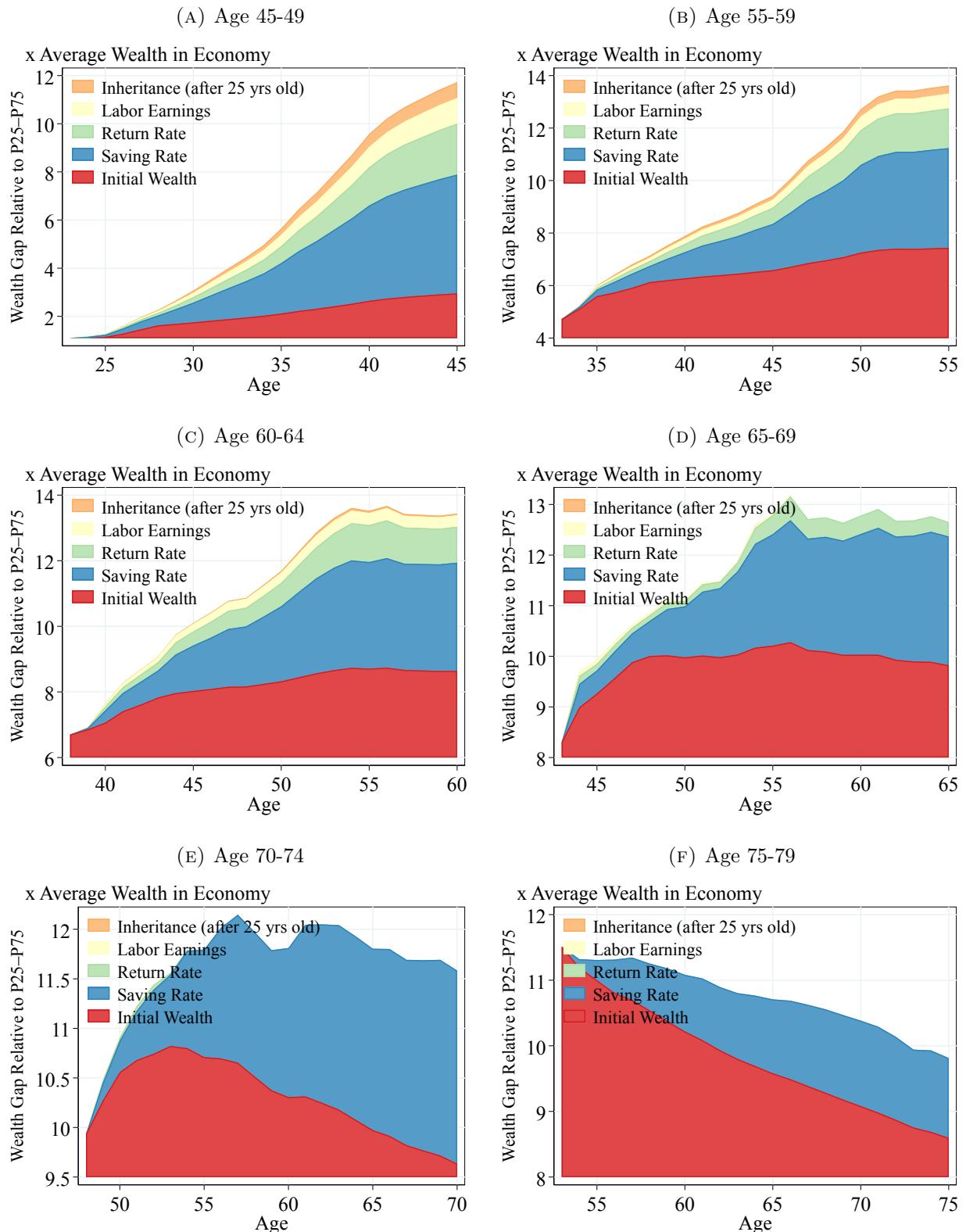
Notes: Figure A.32 shows the counterfactual wealth profiles for households at the top 0.1% of the wealth distribution if 2015 for different age groups.

FIGURE A.33 – SHAPLEY-Owen DECOMPOSITION OF WEALTH GAP: AGE GROUPS



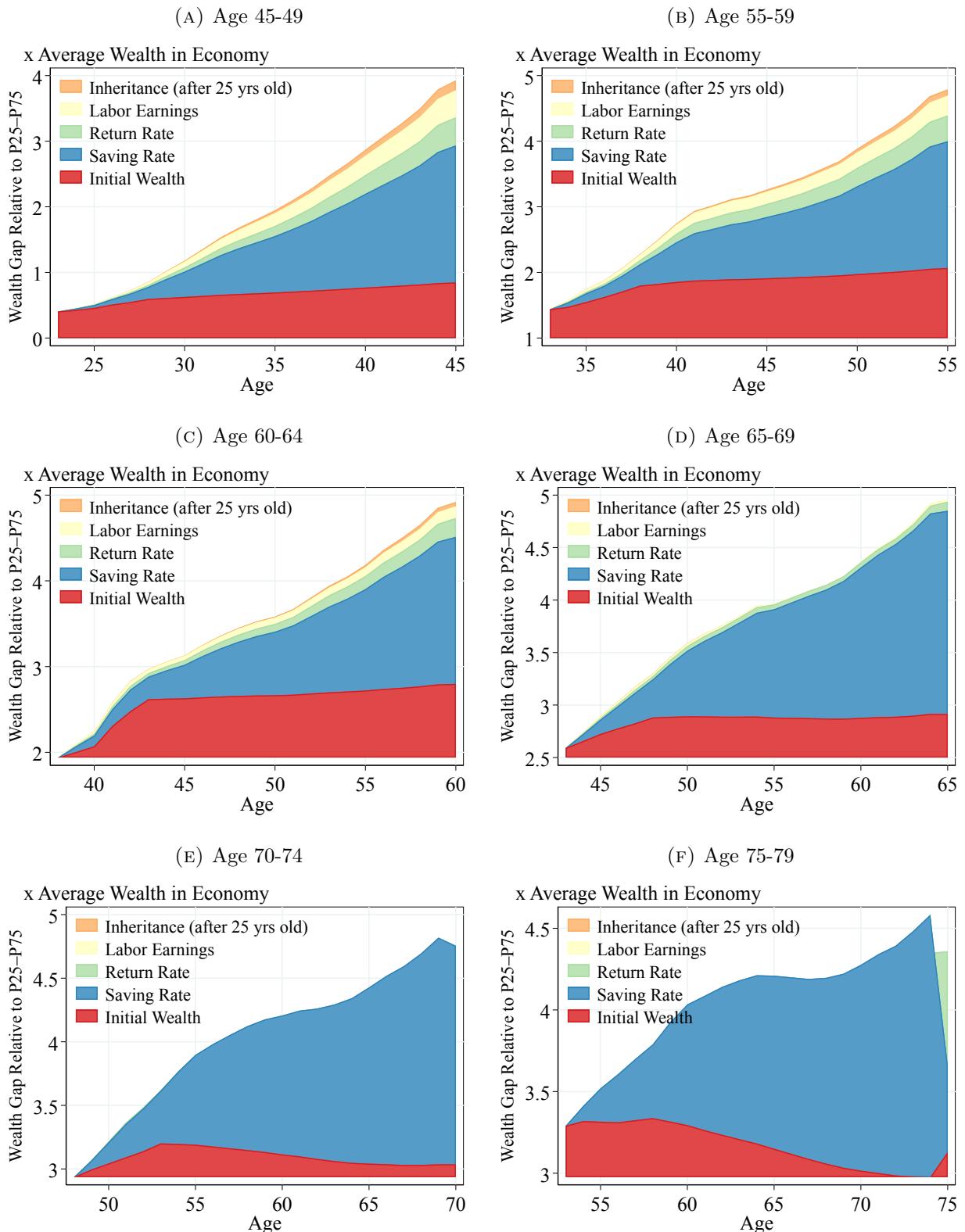
Notes: Figure A.33 shows the counterfactual wealth profiles for households at the top 0.1% of the wealth distribution if 2015 for different age groups.

FIGURE A.34 – SHAPLEY-Owen DECOMPOSITION OF WEALTH GAP: 99 TO 99.9%



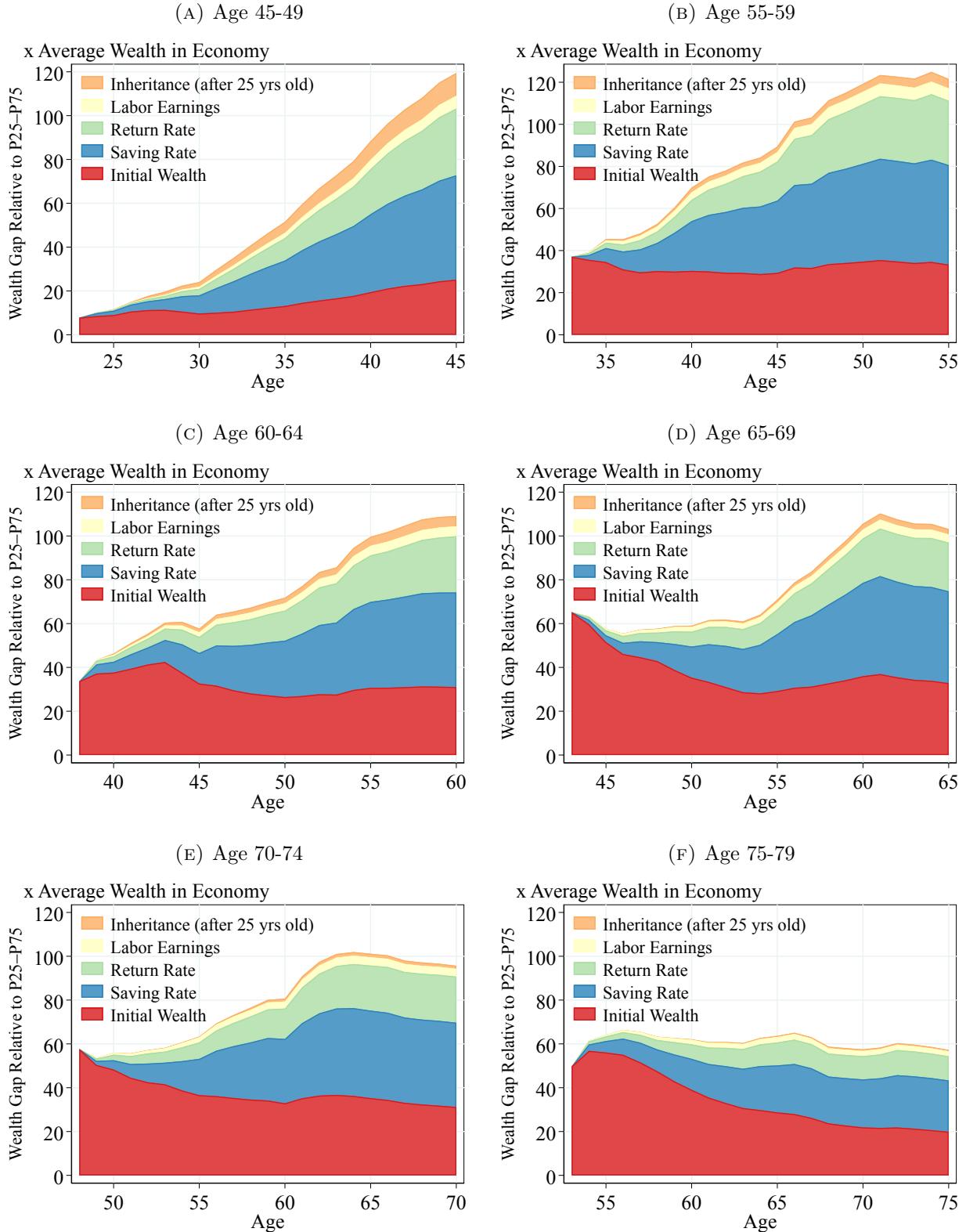
Notes: Figure A.34 shows the counterfactual wealth profiles for households between the 99 and 99.9th percentiles of the wealth distribution if 2015 for different age groups.

FIGURE A.35 – SHAPLEY-OWEN DECOMPOSITION OF WEALTH GAP: 95 TO 99%



Notes: Figure A.35 shows the counterfactual wealth profiles for households between the 95 and 99th percentiles of the wealth distribution if 2015 for different age groups.

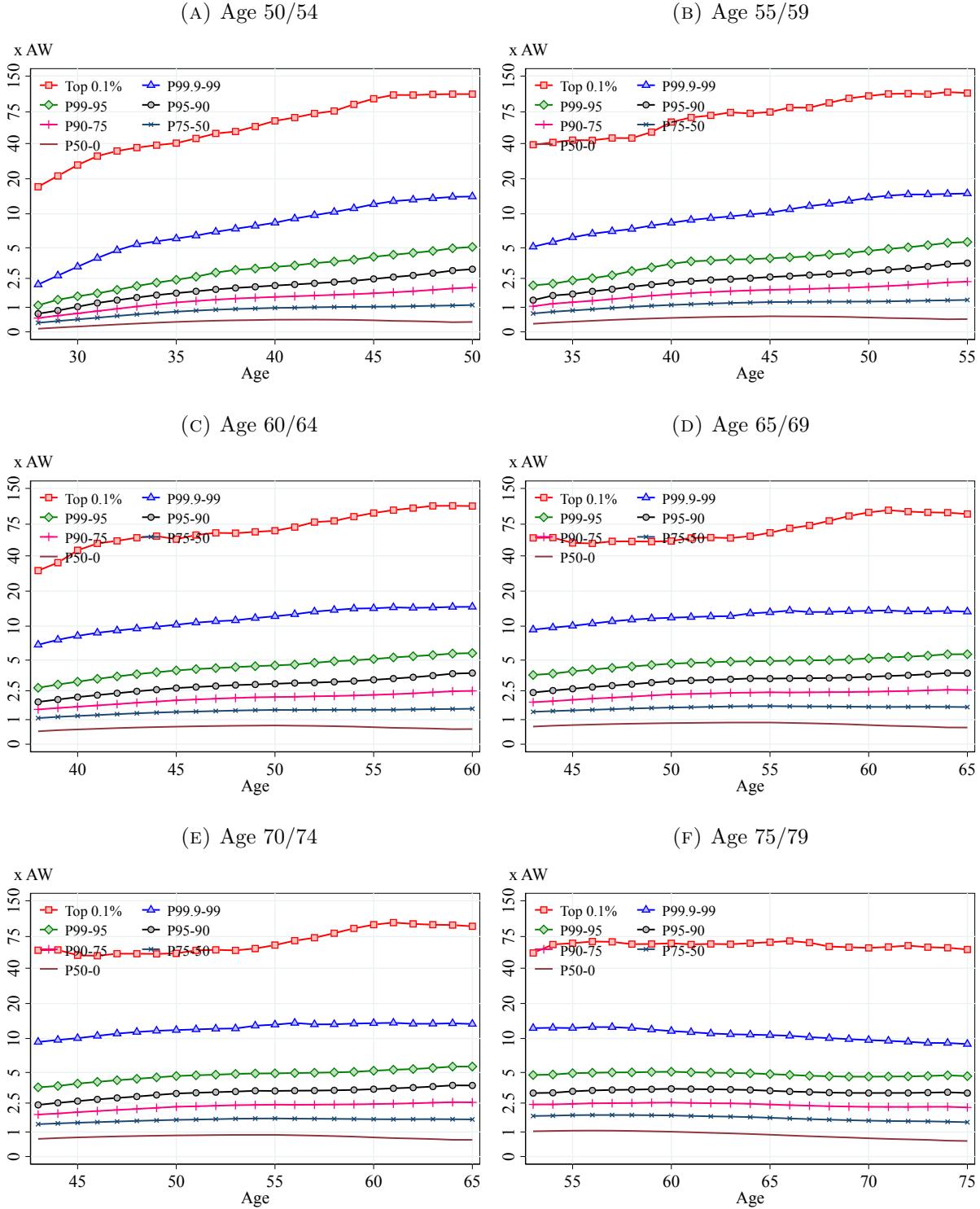
FIGURE A.36 – SHAPLEY-OWEN DECOMPOSITION: CASH-ON-HAND SAVING RATE



Notes: Figure A.36 shows the counterfactual wealth profiles for households at the top 0.1% of the wealth distribution in 2015 for different age groups. The saving rate is defined as $\tilde{s}_{it} = W_{it}/(W_{it-1} + \tilde{L}_{it} + \tilde{H}_{it} + \tilde{R}_{it}W_{it-1})$.

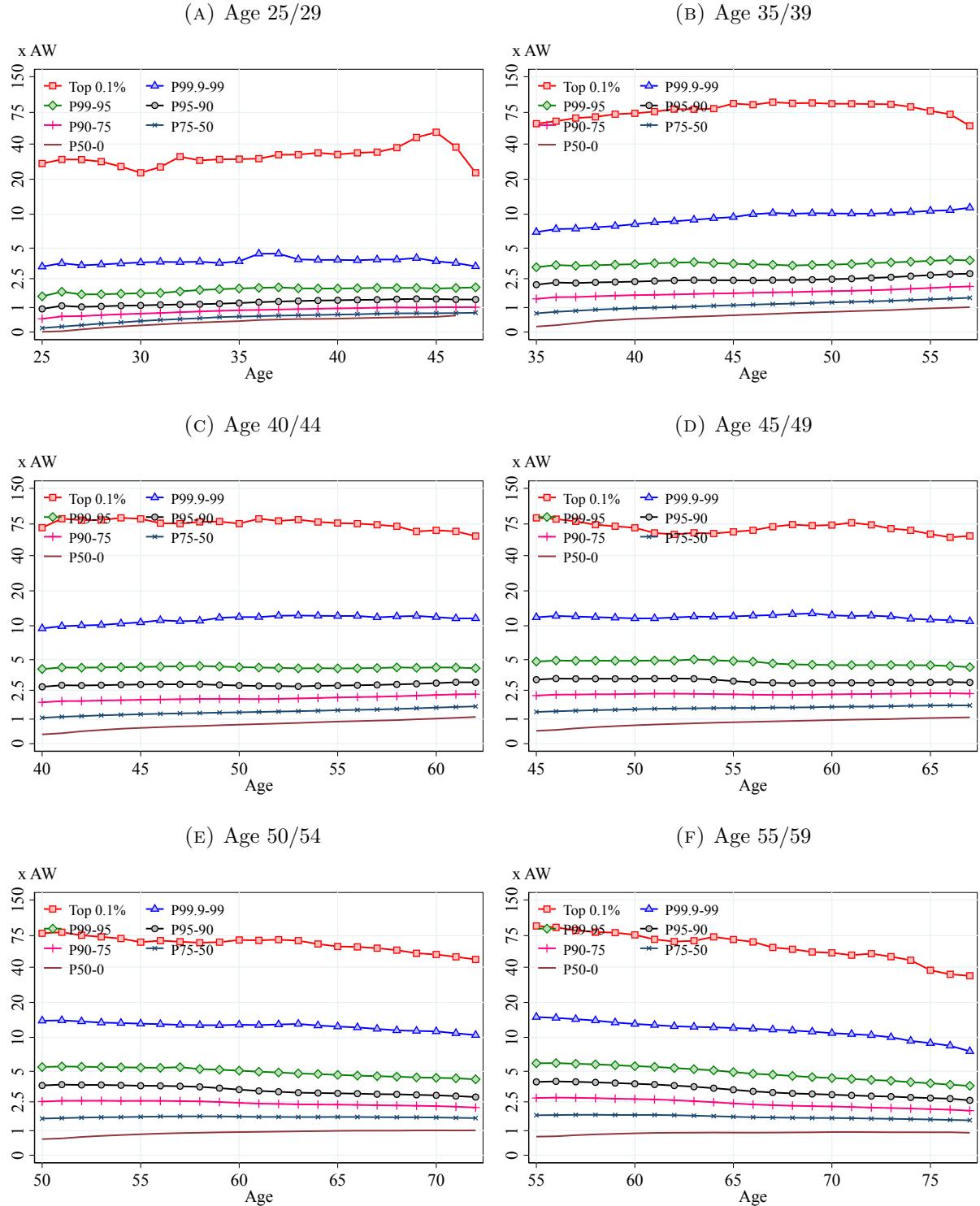
2.4 Balanced Sample

FIGURE A.37 – BALANCED BACKWARD-LOOKING WEALTH PROFILES: AGE GROUPS



Notes: Figure A.37 shows average wealth for different BW_j^h groups considering households that have been stable for at least ten years.

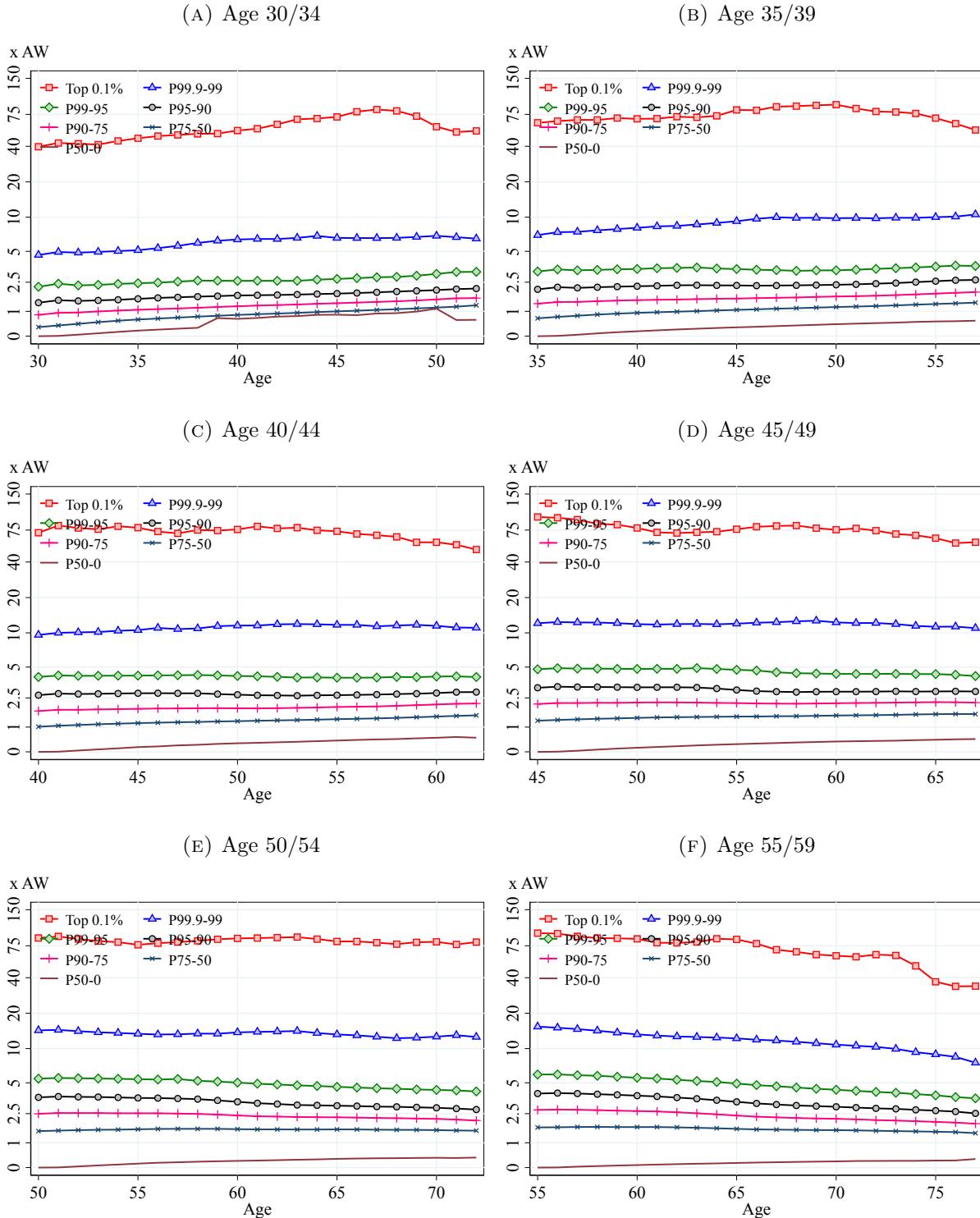
FIGURE A.38 – BALANCED FORWARD-LOOKING WEALTH PROFILES: AGE GROUPS



Notes: Figure A.38 shows average wealth for different FW_j^h groups considering households that have been stable for at least ten years.

2.5 Forward-Looking Results

FIGURE A.39 – FORWARD-LOOKING WEALTH PROFILES: AGE GROUPS



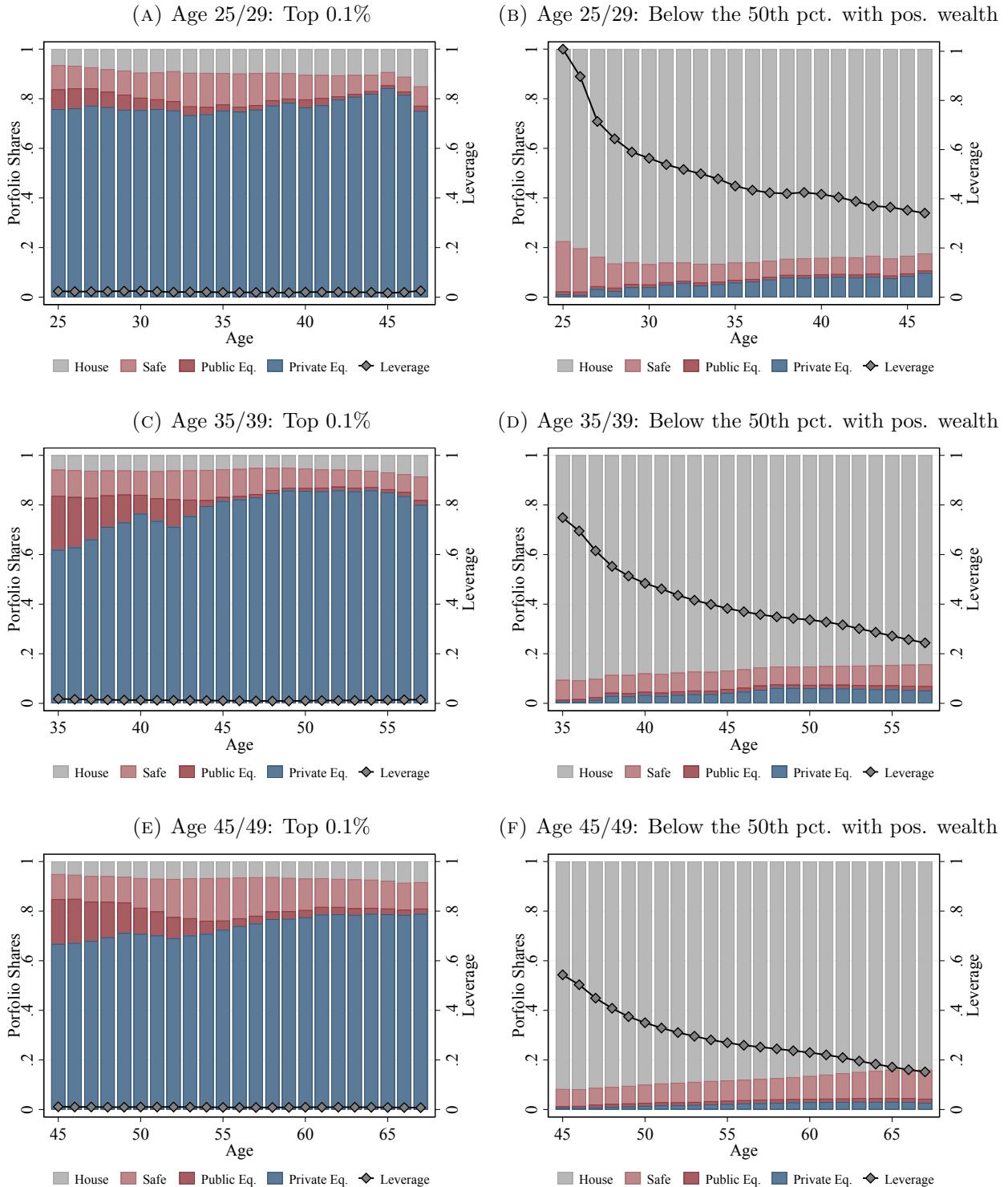
Notes: Figure A.39 shows the evolution of average household for households in different FW_j^h groups.

FIGURE A.40 – FORWARD-LOOKING TRANSITION MATRIX: AGE GROUPS

(A) Age 30/34								(B) Age 35/39							
		Ending Average Wealth Rank							Ending Average Wealth Rank						
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%	[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%
Start-of-Period Wealth Rank, FW_j^h	[0,50]	62.6	21.0	10.7	3.2	2.2	0.4	0.0	67.1	19.7	8.9	2.5	1.6	0.2	0.0
	(50-75]	48.0	28.6	15.2	4.7	3.1	0.5	0.0	44.4	32.0	16.0	4.4	2.8	0.4	0.0
	(75-90]	32.5	32.9	21.6	6.9	5.1	0.9	0.1	26.4	33.9	25.6	7.8	5.4	0.8	0.0
	(90-95]	22.7	28.8	27.8	10.3	8.5	1.6	0.1	17.1	25.6	31.0	13.3	11.0	1.9	0.1
	(95-99]	16.2	21.8	27.3	14.3	16.1	4.0	0.3	11.7	18.8	26.5	16.7	21.0	5.2	0.2
	(99-99.9]	7.5	10.7	16.9	13.5	33.5	16.0	2.0	4.9	6.6	14.1	13.1	32.7	25.0	3.5
	Top 0.1%	3.1	2.5	2.6	4.4	14.1	44.1	29.2	2.8	0.9	4.4	3.7	11.8	41.2	35.2
(C) Age 40/44								(D) Age 45/49							
		Ending Average Wealth Rank							Ending Average Wealth Rank						
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%	[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%
Start-of-Period Wealth Rank, FW_j^h	[0,50]	69.9	18.9	7.9	2.1	1.2	0.1	0.0	71.7	18.5	7.1	1.7	0.9	0.1	0.0
	(50-75]	41.9	34.5	16.6	4.3	2.4	0.3	0.0	39.9	36.6	17.1	4.1	2.1	0.2	0.0
	(75-90]	22.7	33.8	28.3	8.8	5.7	0.7	0.0	21.0	32.7	30.5	9.5	5.8	0.6	0.0
	(90-95]	14.9	24.1	31.3	15.1	12.6	1.9	0.1	14.0	21.9	32.2	16.8	13.5	1.6	0.1
	(95-99]	9.6	15.5	25.5	17.9	25.3	5.8	0.3	8.1	13.5	23.6	19.3	28.9	6.5	0.2
	(99-99.9]	3.5	5.0	10.8	11.2	33.6	31.7	4.2	2.5	4.1	8.1	10.1	34.4	36.6	4.3
	Top 0.1%	1.7	1.4	3.9	2.3	12.2	45.5	32.9	1.7	0.7	2.9	1.6	9.2	44.9	39.0
(E) Age 50/54								(F) Age 55/59							
		Ending Average Wealth Rank							Ending Average Wealth Rank						
		[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%	[0,50]	(50-75]	(75-90]	(90-95]	(95-99]	(99-99.9]	Top 0.1%
Start-of-Period Wealth Rank, FW_j^h	[0,50]	72.8	18.7	6.2	1.4	0.7	0.1	0.0	73.9	18.8	5.6	1.1	0.6	0.0	0.0
	(50-75]	38.2	38.0	18.0	3.8	1.8	0.2	0.0	36.3	39.0	19.2	3.7	1.7	0.1	0.0
	(75-90]	20.2	31.4	32.0	10.1	5.7	0.5	0.0	20.0	29.9	33.0	10.9	5.7	0.4	0.0
	(90-95]	13.7	19.5	31.8	18.4	15.2	1.5	0.0	13.3	18.1	30.5	19.9	16.4	1.6	0.1
	(95-99]	7.2	11.0	22.8	20.3	31.4	7.1	0.2	7.7	11.5	20.7	19.6	32.7	7.6	0.2
	(99-99.9]	2.7	3.8	8.7	9.6	31.8	38.7	4.6	2.2	3.6	8.9	9.2	32.3	39.0	4.8
	Top 0.1%	0.8	1.2	2.5	0.8	10.2	42.5	42.0	0.9	0.0	3.1	2.5	7.8	46.1	39.5

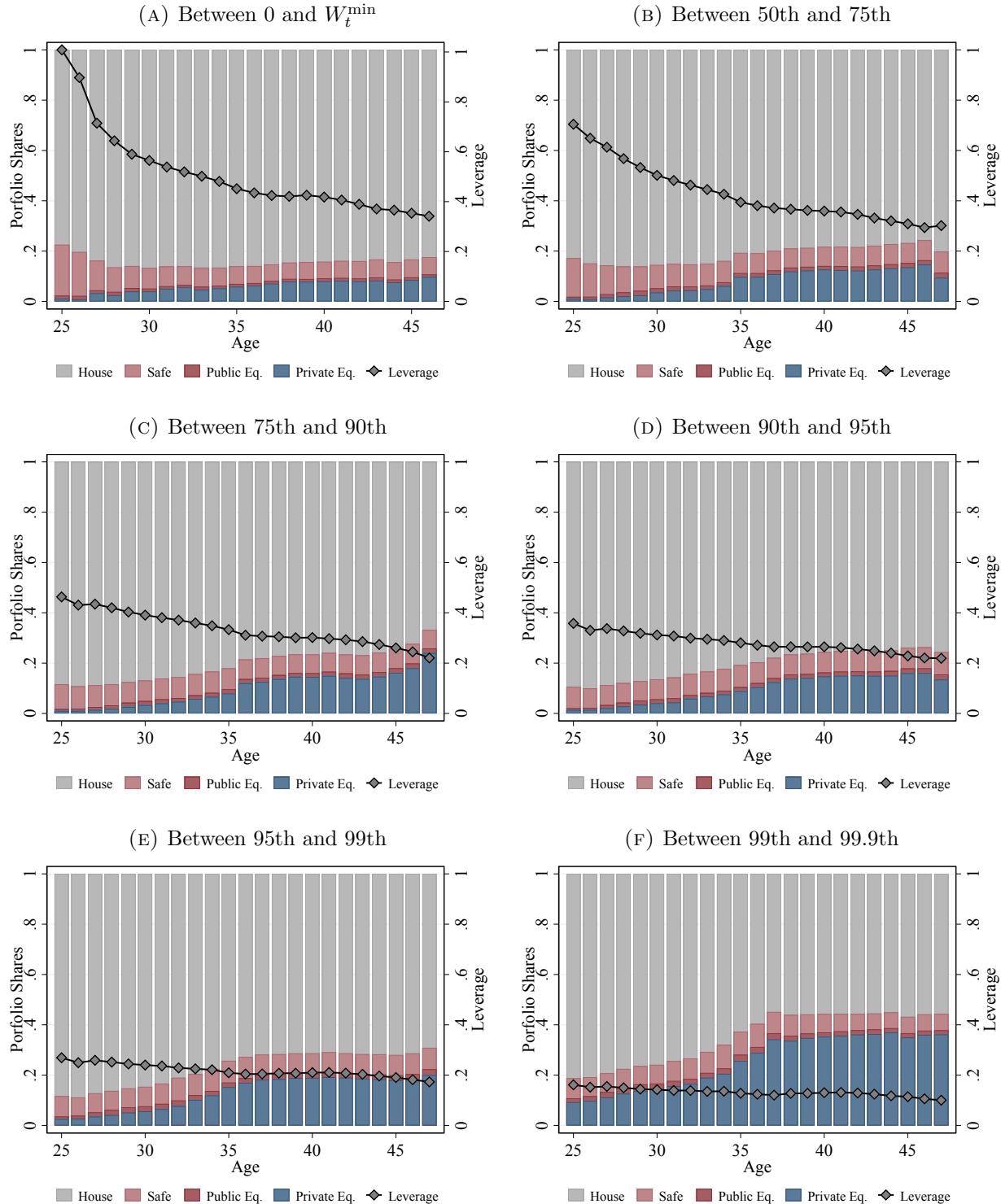
Notes: Figure A.40 shows the intragenerational persistence of net wealth. Figure A.40 shows the results by first sorting household whose head is in different age groups in the conditioning year and then again by $\bar{W}_{i,2015}$. Each cell represent the fraction of household in different percentiles of the wealth distribution in $\bar{W}_{i,2015}$ (columns), conditional on their percentile of the wealth distribution in the conditioning year, FW_j^h (rows).

FIGURE A.41 – FORWARD-LOOKING PORTFOLIO SHARES: AGE GROUPS



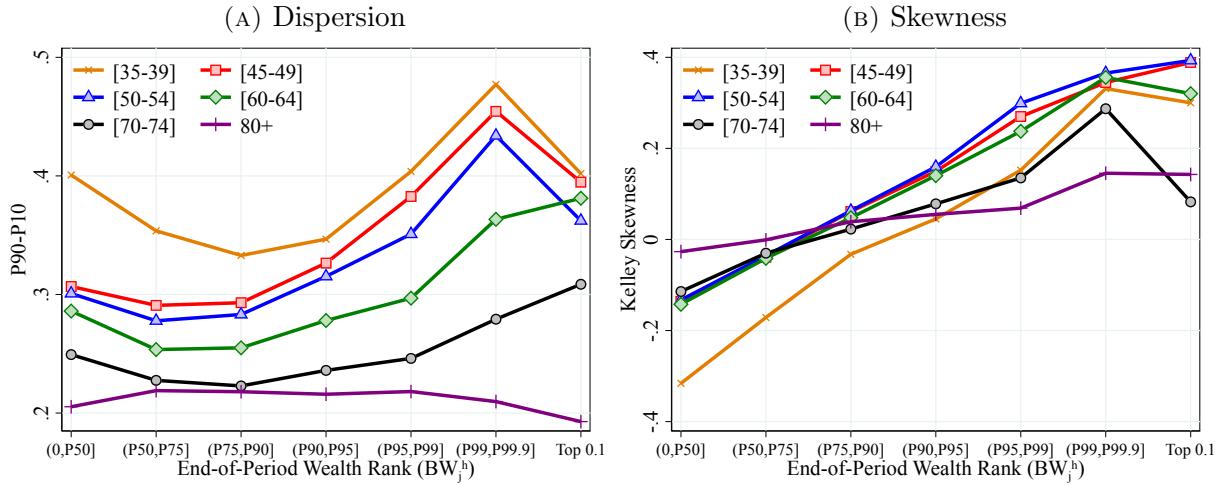
Notes: Figure A.41 shows the evolution of the portfolio shares (left y-axis) and leverage (right y-axis) for households.

FIGURE A.42 – FORWARD-LOOKING PORTFOLIO SHARES: OTHER GROUPS (25-29 YEARS OLD)



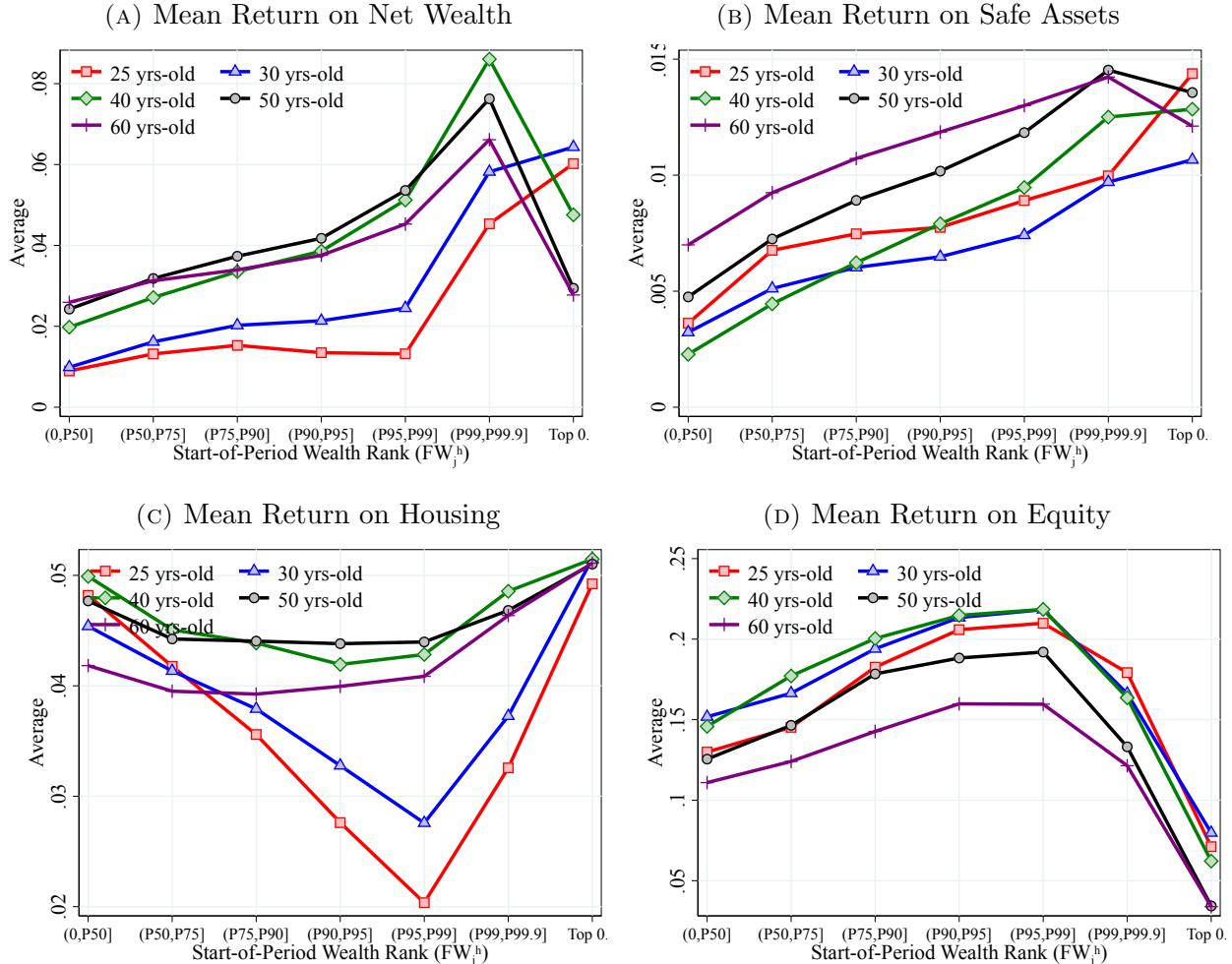
Notes: Figure A.42 shows the evolution of the portfolio shares (left y-axis) and leverage (right y-axis) for households.

FIGURE A.43 – DISPERSION AND SKEWNESS OF RETURNS ON NET WEALTH



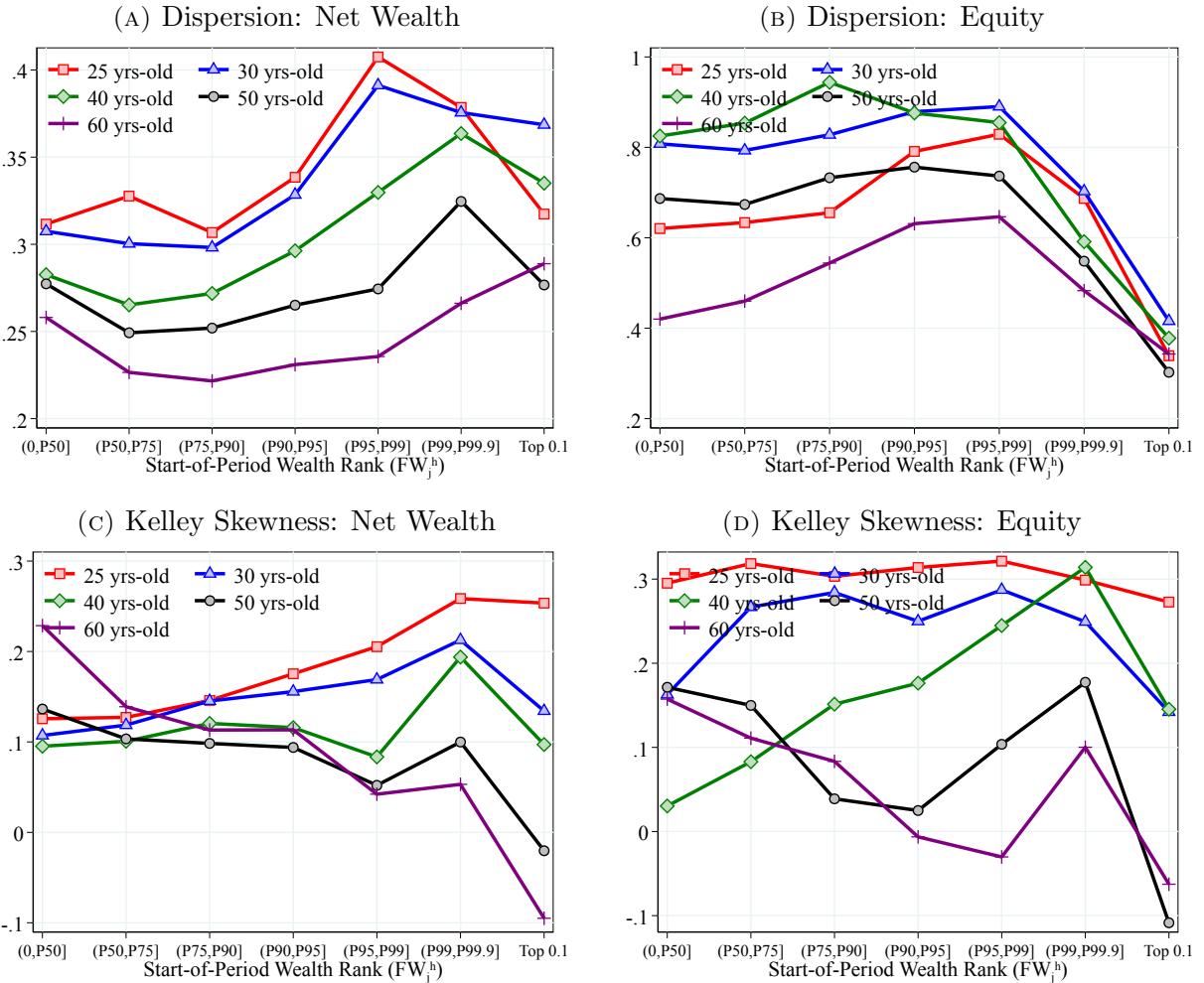
Notes: Figure A.43 shows value-weighted cross-sectional moments of annual returns within age and wealth groups.

FIGURE A.44 – LIFETIME RETURNS BY START-OF-THE-PERIOD WEALTH



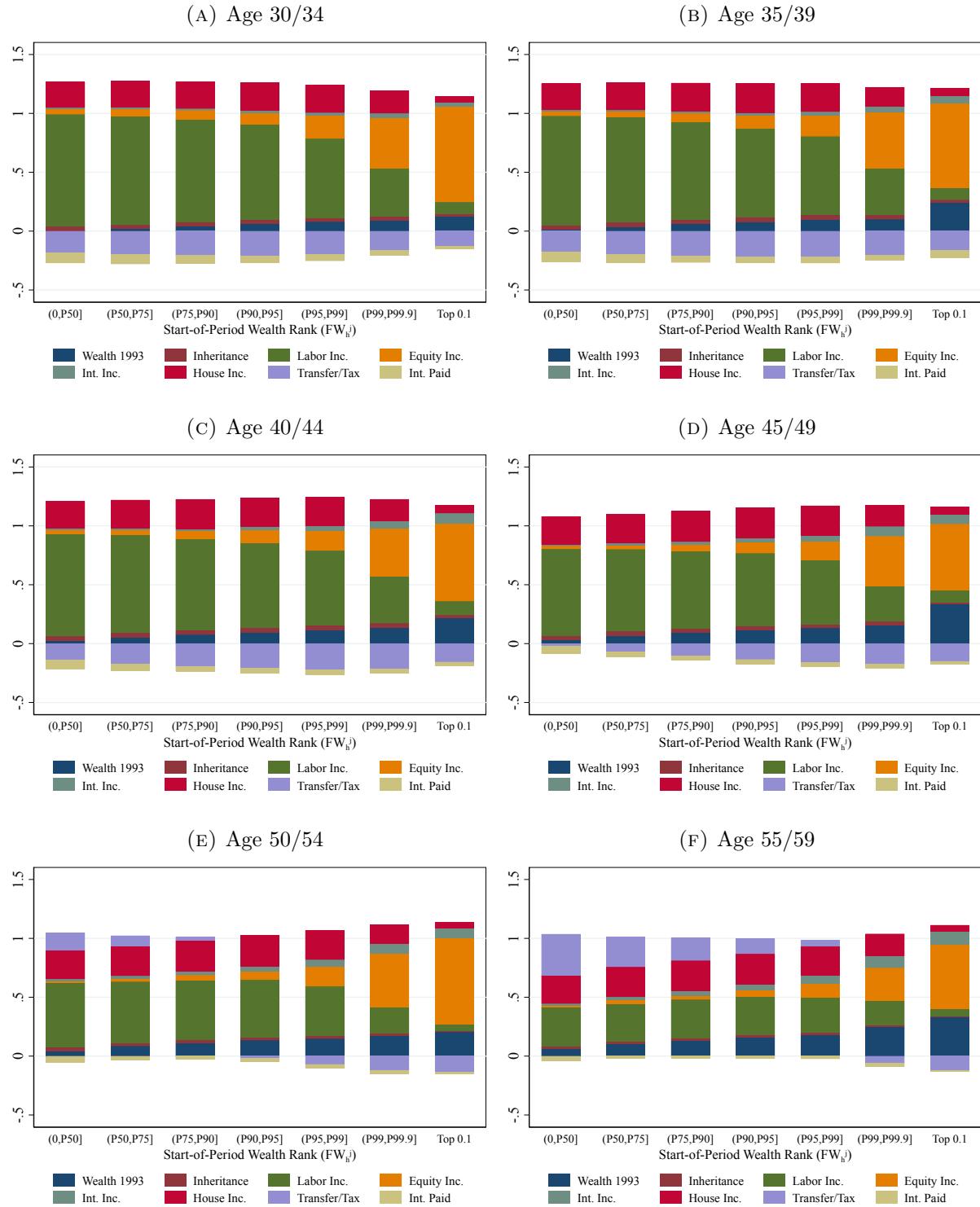
Notes: Figure A.44 shows the 11-years mean of the value-weighted average gross annual returns within age and wealth groups across different conditioning years for different asset classes.

FIGURE A.45 – DISPERSION AND SKEWNESS OF RATES OF RETURNS



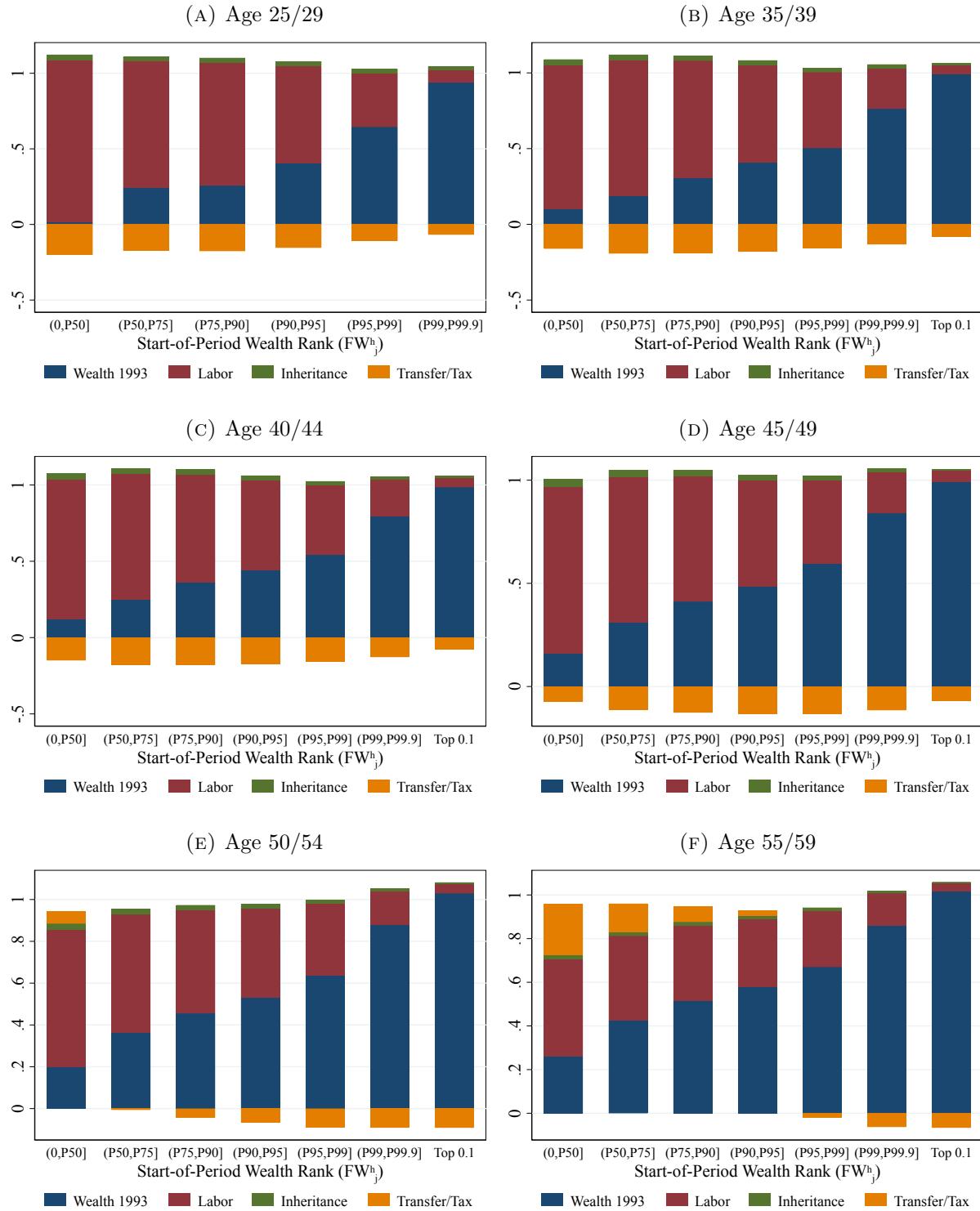
Notes: Table A.45 shows the 11-years mean of the value-weighted cross-sectional moments of the gross annual returns within age and wealth groups across different conditioning years for different asset classes.

FIGURE A.46 – LIFETIME RESOURCES DECOMPOSITION: AGE GROUPS



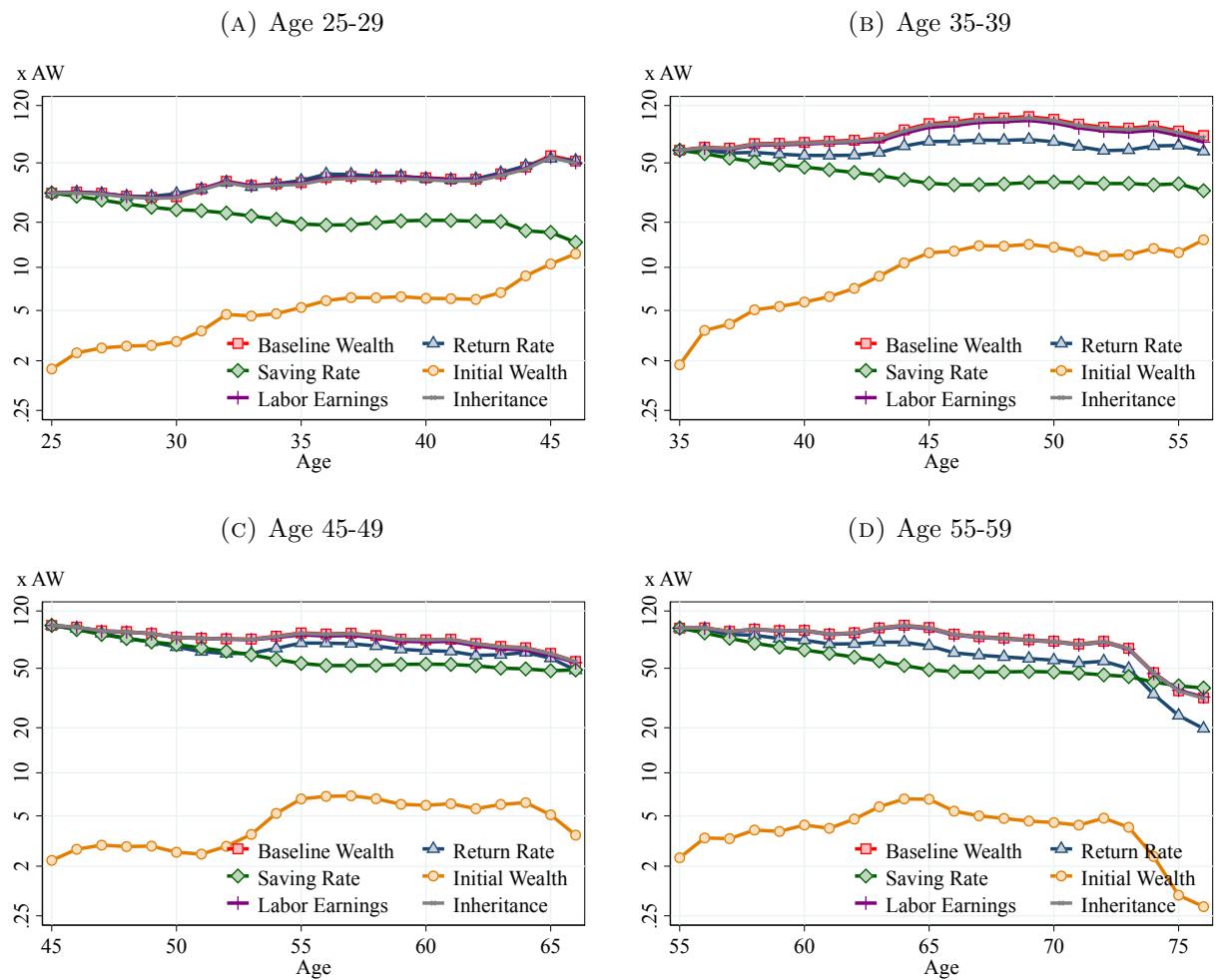
Notes: Figure A.46 shows lifetime resources shares for households in different age groups and wealth rank, FW_h^h .

FIGURE A.47 – FORWARD-LOOKING DYNAMIC DECOMPOSITION: AGE GROUPS



Notes: Figure A.47 shows the shares of lifetime resources for a sample of households in different age groups and wealth rank, FW_j^h , accounting for capitalization.

FIGURE A.48 – COUNTERFACTUAL: TOP WEALTH HOUSEHOLDS; AGE GROUPS

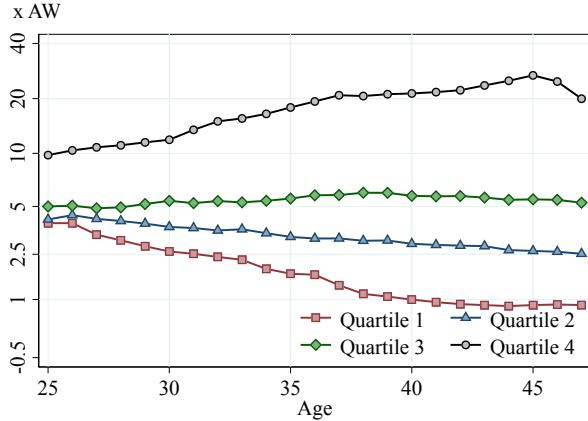


Notes: Figure A.48 shows the counterfactual wealth profiles for households at the top 0.1% of the wealth distribution.

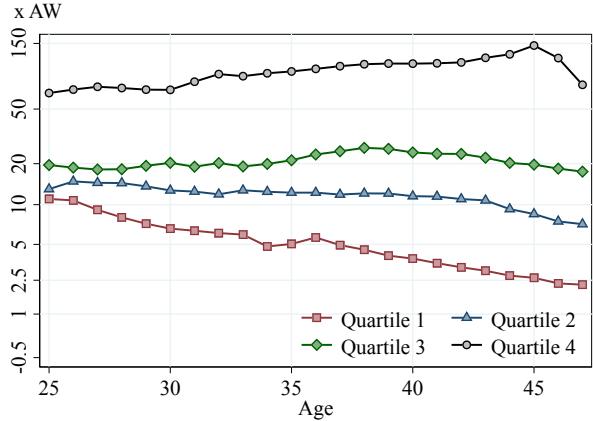
2.6 Forward-Looking Evolution of the Rich

FIGURE A.49 – FORWARD WEALTH PROFILE: OLD MONEY AND NEW MONEY

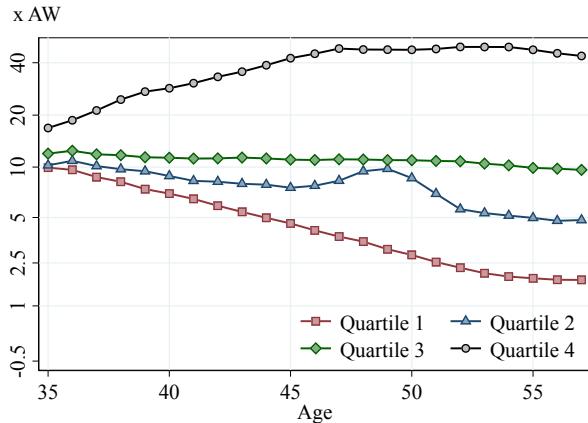
(A) Age 25/29: Top 1% Households



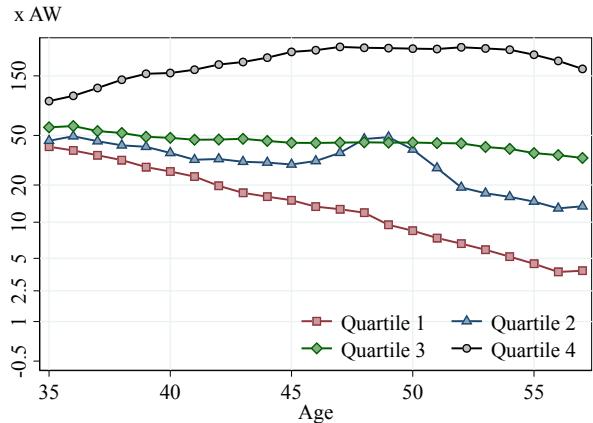
(B) Age 25/29: Top 0.1% Households



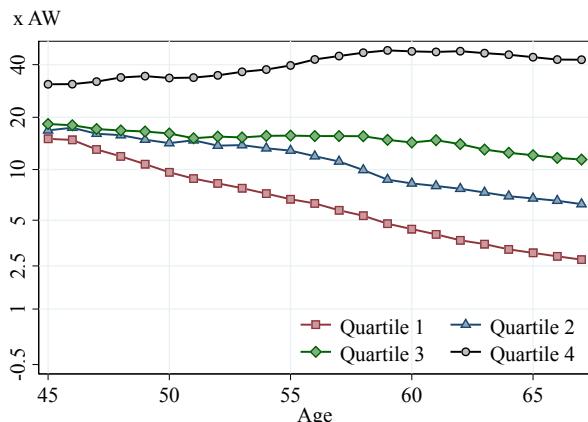
(C) Age 35/39: Top 1% Households



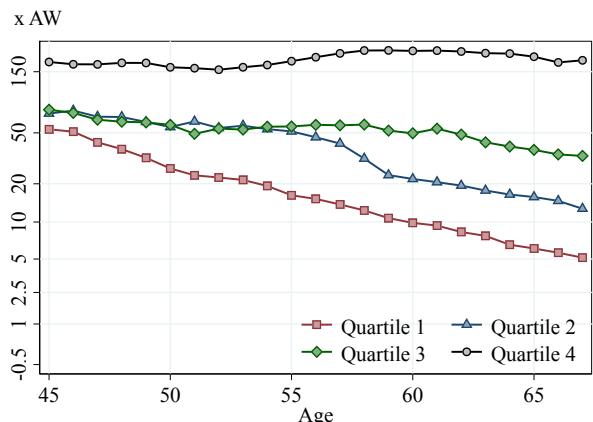
(D) Age 35/39: Top 0.1% Households



(E) Age 45/49: Top 1% Households



(F) Age 45/49: Top 0.1% Households



Notes: Figure A.49 shows the average wealth profile for household whose head is in $FW_{\geq P99.9}^h$ different age groups, h and belong to the top 0.1% of the wealth distribution at the start of the sample and were in different quartiles of the end-of-period average wealth distribution ($\bar{W}_{i,2015}$).