Social Forces
Online Supplement

to

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"Generations of Advantage. Multigenerational Correlations in Family Wealth"

APPENDIX A. MEDIATION OF WEALTH CORRELATIONS: COMPARISON TO CHARLES AND HURST

Charles and Hurst (2003) also consider mechanisms of intergenerational wealth transmission, specifically (lifetime) income, education, prior transfers and anticipated bequests, and the types of assets held. To assess the role of each channel, they add controls for both the parent and child value to the regression model estimating the two-generational association in wealth. They find that estimated lifetime family income is the largest contributor to the intergenerational wealth association, explaining 52 percent of the association. Education explains 28 percent of the association, 17 percent is explained by prior gifts received by the child and anticipated bequests of the parents, and 36 percent is explained by portfolio composition. Net of similarities in income, education and transfers have little additional explanatory power. However, portfolio composition explains an additional 11 percent of the intergenerational association, net of income.

We pursue a different approach. First, in our analysis of the mediation of two-generational correlations, we adjust for children's characteristics (receipt of gifts and bequests, educational attainment, marriage, homeownership, and business ownership), but not the characteristics of parents. Similarly, in our analysis of the mediation of three-generational correlations we do not adjust for characteristics of grandparents, but we adjust for the characteristics of both parents and children. Charles and Hurst aim to estimate to what extent intergenerational wealth reproduction is explained by other characteristics of both parents and children. In contrast, we consider as channels of transmission the mediating pathway from parental to offspring wealth, ignoring the direct intergenerational transmission of other, associated characteristics (like parental education) and the direct effects of these parental traits on offspring wealth. Our approach is in keeping with our descriptive focus on channels of wealth transmission: we seek to understand the potential role for parental wealth in facilitating offspring wealth through investments in other child

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outcomes. Because the mediating channels are positively correlated between parents and children, our estimates will be more conservative in terms of the share of the wealth correlation explained by each factor, while Charles and Hurst's residual wealth association net of controls in both generations will be a more conservative estimate of the causal effect of parental wealth on offspring wealth.

Second, we do not treat income as an independent mediating channel. Charles and Hurst's finding that education explains little of the intergenerational transmission of wealth net of income is important, as it indicates that the importance of education as a channel of transmission is largely through education's effect on income, rather than other mechanisms, such as enhanced financial skills. However, interpreting the mediating role of income is challenging: we learn that much of the between-generation similarity in wealth is because of income in the parent and child generations, but we still do not know why this is true. By focusing on education, marriage, homeownership, business ownership, and gifts and inheritances, we identify channels that are more directly subject to (grand)parental manipulation — (grand)parental action that seeks to increase offspring wealth directly through transfers or indirectly through investments in their future income- and wealth-generating potential.

APPENDIX B. ACCOUNTING FOR WEALTH IN BOTH GRANDPARENTAL LINEAGES

The prospective panel design of the PSID implies that we typically only observe either maternal or paternal grandparents. Not knowing the wealth of one set of grandparents may lead to conservative estimates of multigenerational associations. To directly address this potential bias, we use data from the 1988 PSID "Time and Money Transfer" module that asked respondents to report the wealth of their parents and parents-in-law, thereby capturing the net worth of both paternal and maternal grandparents in our sample (N=570).

Mean grandparental net worth (G1) as reported by parents (G2) in 1988 is somewhat lower than grandparents' self-reports in 1984/1989 ($320,989 versus self-reported $396,353), despite the fact that parents are reporting on both lineages (their own parents and their parents-in-law), while grandparents report only on their own wealth. A somewhat greater share of parents report grandparental zero wealth or net debt (4.8 percent) than self-reported by grandparents (3.4 percent). These disparities suggest that parents' reports of grandparental wealth in 1988 may suffer from substantial measurement error, which would risk downward-biasing our estimates of the multigenerational wealth association. For this reason, we do not use the 1988 wealth reports for our estimates of the multigenerational association in net worth. Instead, we use the 1988 sample only to estimate how the multigenerational wealth associations change when the net worth of one rather than both grandparental lineages are used.

Nevertheless, this multigenerational sample provides a very similar estimate of the three-generational association in net worth (0.212 compared to 0.230 and 0.209 based on our main multigenerational samples). The estimated two-generational association in this sample is higher (column 2) than in our main multigenerational samples (0.464 compared to 0.320 and 0.348). However, as stated above, the main use of this additional multigenerational sample is to assess

whether the restriction to a single grandparental lineage is likely to have significantly biased the estimated multigenerational associations reported above.

To accomplish this, we compare the multigenerational associations in grandparental wealth summed across maternal and paternal grandparents (Table B.1, section 1) to associations based on only maternal (section 2) or paternal (section 3) grandparents within the same sample. Maternal grandparental wealth alone nearly perfectly replicates the unconditional multigenerational association based on total grandparental wealth (0.207 versus 0.212 based on total wealth), while the association based on the paternal lineage is somewhat weaker (0.179).[1] By contrast, the conditional multigenerational association is somewhat higher for the paternal lineage alone (0.073) than for total grandparental wealth (0.065), which is in turn somewhat higher than for the maternal lineage alone (0.058). This comparison gives additional credibility to the main estimates of multigenerational associations: our estimates based only on one grandparental lineage are unlikely to substantially understate the grandparent-grandchild association in wealth.

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[1] The difference between estimates based on the maternal versus paternal lineage is not statistically significant. Similarly, in our main multigenerational analyses we do not find significantly different associations based on whether the maternal or paternal lineage provides the grandparental wealth measure.

Table B.1: Multigenerational Correlations Based on Both Grandparental Lineages
Rank slopes, with controls for age and squared age in each generation

	Two-Gen. Sample	Three-Generational Sample		
	(1)	(2)	(3)	(4)
(1) Net Worth (both lineages observed)				
Parental	0.390***	0.464***		0.415***
	(0.020)	(0.053)		(0.054)
Grandparental (1988 proxy report)			0.212***	0.065
			(0.050)	(0.049)
R^2	0.275	0.205	0.118	0.218
N	4,608	570	570	570
(2) Net Worth (maternal lineage only; where both observed)				
Parental	0.390***	0.464***		0.416***
	(0.020)	(0.053)		(0.052)
Grandmaternal (1988 proxy report)			0.207***	0.058
			(0.050)	(0.047)
R^2	0.275	0.205	0.118	0.218
N	4,608	570	570	570
(3) Net Worth (paternal lineage only; where both observed)				
Parental	0.390***	0.464***		0.421***
	(0.020)	(0.053)		(0.057)
Grandpaternal (1988 proxy report)			0.179***	0.073
			(0.049)	(0.047)
R^2	0.275	0.205	0.105	0.22
N	4,608	570	570	570

Note: Statistical significance levels at * p<.05, ** p<.01, and *** p<.001 based on two-tailed tests.

Table C.1. Intergenerational Correlations in Net Worth
Table: Rank Slopes & Elasticities

	Elasticity	SE	N	Rank Slope	(SE)	N	Rank Slope (ranks drawn within age groups)	(SE)	N
Overall	0.436***	(0.038)	3,319	0.390***	(0.020)	4,608			
By Age (4 groups)									
(1) Age 25-34	0.419***	(0.050)	829	0.329***	(0.039)	1,329	0.329***	(0.038)	1,329
(2) Age 35-44	0.368***	(0.052)	883	0.374***	(0.039)	1,278	0.380***	(0.038)	1,278
(3) Age 45-54	0.408***	(0.070)	909	0.390***	(0.034)	1,193	0.422***	(0.034)	1,193
(4) Age 55-64	0.544***	(0.064)	698	0.443***	(0.040)	808	0.431***	(0.040)	808
By Age (2 groups)									
(5) Age 25-44	0.407***	(0.038)	1,712	0.362***	(0.027)	2,607	0.365***	(0.026)	2,607
(6) Age 45-64	0.453***	(0.057)	1,607	0.412***	(0.027)	2,001	0.427***	(0.027)	2,001
Test of Differences (p-values)									
(2) vs. (1)				0.363			0.283		
(3) vs. (1)				0.204			0.050		
(4) vs. (1)				0.042			0.064		
(6) vs. (5)				0.198			0.100		
Alternative specifications									
Wealth ranks (instead of pctl. ranks)				0.387***	(0.020)	4,608			
Unweighted	0.428***	(0.025)	3,319	0.420***	(0.016)	4,608			
Equalized wealth (adj. by family size)	0.434***	(0.037)	3,319	0.396***	(0.020)	4,608			
Parental wealth measured in 2013/15	0.370***	(0.027)	2,404	0.365***	(0.020)	3,312			
Home equity as wealth measure	0.393***	(0.034)	2,207	0.311***	(0.025)	4,608			
Wealth of missing parent imputed	0.319***	(0.033)	3,368	0.346***	(0.021)	4,608			

Note: Statistical significance levels at †p<.10, * p<.05, ** p<.01, and *** p<.001 based on two-tailed tests.

Table C.2. Wealth Mobility

Parental Wealth Quintile		Child's Wealth Quintile					
		Lowest [<=$15k]	Quintile 2 [$16k-$87k]	Quintile 3 [$88k-$246k]	Quintile 4 [$247k-$627k]	Highest [>=$631k]	Total
Lowest	[<=$58k]	39.0	29.0	17.7	7.1	7.2	100.0
Quintile 2	[$59k-$153k]	25.3	27.0	23.3	13.4	11.1	100.0
Quintile 3	[$153k-$280k]	18.2	21.9	24.0	21.2	14.7	100.0
Quintile 4	[$283k-$545k]	11.6	14.4	21.5	27.6	24.8	100.0
Highest	[>=$548k]	6.1	7.3	13.8	30.6	42.1	100.0
Total		20.1	19.9	20.1	20.0	20.0	

Note: Children aged 45-64 (N=2,001); quintiles drawn within that population and quintile boundaries in 2015 US dollars.

Table C.3. Channels of Wealth Transmission: Alternative Specifications

	2-gen Net Worth (N=2,001)	2-gen Home Value (N=1,992)	3-gen Home Value (N=359)
Gift/Inheritance (≥ $10,000 in each period)			
Whether any gift/inheritance received	10.4%	10.9%	-2.8%
Value (ihs transformed)	**12.3%**	**12.6%**	**-0.2%**
Among those receiving any: value (log transformed)	13.2%	6.2%	NA
Inheritance: in past calendar year			
Whether any gift/inheritance received	3.8%	3.8%	-1.4%
Value (ihs transformed)	4.5%	4.2%	-2.6%
Among those receiving any: Value (log transformed)	4.4%	1.3%	NA
Parental/Grandparental Death			
At least one grand/parental death observed (by 2013)	1.8%	2.6%	0.7%
None, one, or both grand/parents dead by 2013 (counting unobserved grand/parents as dead)	7.1%	8.6%	4.3%
None, one, or both grand/parents dead by 2013 (among cases with both grand/parents observed)	4.7%	5.0%	NA
Education			
Years of education	23.7%	25.7%	48.0%
Whether attained BA or more	19.3%	19.0%	47.6%
Highest degree received	**25.5%**	**27.2%**	**55.0%**
Marriage			
Currently married?	**14.2%**	**17.7%**	**5.2%**
Ever married?	5.3%	7.4%	21.3%
Total number of years married	10.9%	12.1%	12.3%
Business Ownership			
Currently business owner?	**8.0%**	**3.9%**	**27.3%**
Homeownership			
Currently homeowner?	23.6%		
Ever a homeowner?	10.5%		
Years in homeownership (as fraction of observed)	**28.4%**		

* Best mediators: Cumulative value of inheritance (ihs), highest educational degree, currently married, value of business (ihs), [for net worth only:] number of years in home ownership

NA = Less than 50 cases

Table C.4. Wealth Mobility by Race

(1)

Parental Home Value	Child's Home Value				
		None	Lower Half	Upper Half	Total

WHITES (N=2,768)

Parental Home Value		Child's Home Value			
None	13.1	47.1	33.4	19.5	100.0
Lower Half	40.8	27.1	45.8	27.1	100.0
Upper Half	46.2	20.5	25.4	54.1	100.0
Total	100.0	26.6	34.8	38.6	100.0

AFRICAN-AMERICANS (N=1,653)

Parental Home Value		Child's Home Value			
None	45.4	70.3	27.0	2.6	100.0
Lower Half	45.9	43.1	45.1	11.9	100.0
Upper Half	8.7	57.8	16.7	25.5	100.0
Total	100.0	56.7	34.4	8.9	100.0

Notes: Children aged 25-64

(2)

Grandparental Home Value	Child's Home Value				
		None	Lower Half	Upper Half	Total

WHITES (N=1,473)

Grandparental Home Value		Child's Home Value			
None	18.3	44.0	30.6	25.4	100.0
Lower Half	37.1	38.1	38.3	23.5	100.0
Upper Half	44.6	34.8	29.7	35.5	100.0
Total	100.0	37.7	33.0	29.2	100.0

AFRICAN-AMERICANS (N=958)

Grandparental Home Value		Child's Home Value			
None	50.6	67.1	27.6	5.3	100.0
Lower Half	45.7	60.2	29.2	10.6	100.0
Upper Half	3.6	50.0	7.7	42.3	100.0
Total	100.0	63.6	27.6	9.1	100.0

Notes: Children aged 25-64

Table C.5. Channels of Wealth Transmission by Race

	Net Worth		Home Value	
	Whites (N=1,135)	African-Am. (N=802)	Whites (N=1,134)	African-Am. (N=795)
Large inheritance or gift received: cumulative value (IHS transformed)	12.2%	2.2%	11.4%	5.2%
Education: highest degree attained	25.2%	42.9%	26.7%	33.9%
Marriage: currently married (yes/no)	8.8%	11.1%	11.5%	1.8%
Business ownership: currently business owner (yes/no)	7.6%	3.9%	2.9%	1.7%
Homeownership: years of homeownership (fraction of observed years)	19.9%	38.7%		
Joint Consideration				
All mediators	52.4%	67.5%		
All mediators, except inheritance/gift	46.9%	69.3%		
All mediators, except homeownership			39.3%	32.1%
All mediators, except homeownership & inheritance			35.6%	30.2%

Notes: Children aged 45-64; degree of mediation of 2-generational rank slopes