Assessing the Effect of Partners' Age Differentials in Predicting Wealth Accumulation: Analysis of 2022 SCF Data

Joseph Cohen
Department of Sociology
City University of New York, Queens College
Last Updated: 2025-08-04

Abstract. *This analysis tests whether consideration of domestic partners' ages and age differentials improves models predicting household wealth. It uses data from the 2022* Survey of Consumer Finances *(SCF) to show that including partner age or age differences offers negligible gains in explanatory power. The age of the household head alone remains a sufficient and parsimonious proxy for household age in wealth models using this data.*

Introduction

Do age differences help predict couples' economic fortunes? This research note considers the predictive power of domestic partners' age differentials in regression models predicting wealth accumulation. Using data from the U.S. Federal Reserve's (2023) *Survey of Consumer Finances* (SCF), it estimates the distribution of domestic partners' age differentials. It tests the results of alternative strategies for measuring "household age" in linear models predicting household net worth. The results suggest that including age differentials in SCF-built wealth accumulation models mostly introduces noise, and that the age of the household head is a parsimonious and highly predictive stand-in for overall household age.

Background

Age is a powerful predictor of household wealth accumulation (Modigliani and Brumberg 1954; Cohen 2025a). Older people have had more time to accumulate personal property and are more likely to have received intergenerational transfers.

It is a convention in household finance surveys to equate the household's age with the age of its "head." In the SCF, the *head* is the male in a mixed-sex couple or the elder of a same-sex couple. Implicitly, such a strategy for measuring household age presumes that the secondary head's age is immaterial to predicting wealth accumulation. Ignoring partners might blind our models to the importance of their role in wealth accumulation.

On the other hand, incorporating the effects of age differentials comes at the cost of model parsimony, and focusing on partners' ages may be splitting hairs on what is a crude relationship. Given that wealth accumulates over decades (Cohen 2025a), it may make little difference if a couple's age difference is two, four, or seven years.

One can imagine scenarios in which age differentials may be predictively powerful or irrelevant. The matter may be more fruitfully addressed with a focus on empirics and proceed from observed findings to broader postulations on why something is, or is not, related.

Methods

The analysis uses data from the U.S. Federal Reserve's (2023) *Survey of Consumer Finances* (SCF). Analyzing the Survey's microdata requires a cognizance of the Survey's complex sampling mechanism and its imputation scheme for handling missing data (see Kennickell 1999a, 1999b; Cohen 2025b). To facilitate the handling of these data, I developed the R package `scf` (Cohen 2025c), whose workings are described in Cohen (2025d). This analysis focuses on paired households, in which two adults jointly manage finances and living arrangements. The measurement question being engaged in this analysis is not pertinent to modeling single-person households' wealth accumulation.

Outcome: Net Worth. Net worth is the primary outcome of interest in this analysis. It is defined as the sum of all assets minus all liabilities, and is measured in 2022 U.S. dollars. Following Cohen (2025a), we model a transformed version of the SCF's net worth metric, in which we bottom- and top-code it at $1 and $10 million, respectively, then log the variable. That paper describes the metric, its measurement, and its meaning at greater length.

Focal Variable: Partner Age. We compare four specification strategies: (1) model the head's age only, (2) include a predictor capturing the secondary head's age, (3) model the difference between the first and second heads' ages, or (4) use a dummy variable that denotes partners who are close in age.

Controls. To gauge the explanatory power of respecifying age in wealth accumulation models net of commonly-used controls, the analysis looks at the performance of our alternative age metrics net of each partner's race, educational attainment, and parental college attainment. These controls are discussed at greater length in Cohen (2025).

Regression Analysis. I compare the results of linear regression models, assessing comparative model fit by comparing mean Akaike Information Criterion (AIC) scores. I also note whether other predictors are affected by these age measurement strategies.

Prevalence of Age Differentials

Figure 1 (below) depicts the distribution of household age differentials among paired households in our data. The *age differential* is defined as the age of the head minus the age of the partner. A negative value means that the couple is mixed-sex and the younger member is the male. It is not possible to have a negative value in a same-sex couple because the head is, by definition, the oldest. To improve legibility, I bottom- and top-coded the difference at -7 and +15, beyond which individual categories' estimated prevalence in the population almost all fell below 0.5% of the population.

[Insert Figure 1 about here]

The most salient point to emerge from these estimates is that people tend to marry others who are close in age. There is a mean age difference of +2.3 years. The middle 50% of the population includes couples with an age differential of zero (25th percentile) to +4 years (75th percentile). About 77% of the population is paired with someone who is within five years of their age, and 93% are within ten years. Given that wealth covaries over long time frames, a large majority of couples are paired with someone whose age is close enough to theirs that they are in the same general life stage of wealth accumulation. This suggests that the age of the household head is a reasonable proxy for the age of the household as a whole.

The data do show a gender imbalance in which mixed-sex couples are more likely to be comprised of older men and younger women. The male/elder partner is at least one year older in about 65% of couples. The female is older than their male partner in about 22% of households. Couples' age differentials were greater than +10 years older males/elders in about 7.6% of households, and less than -10 (with a female elder in a mixed-sex couple) in 1.3% of households.

I reserve extensive bivariate comparisons for the sake of focus and brevity. Age differentials were roughly the same between married and cohabiting couples. Age differentials were, on average, larger among the lowest education groups and in households headed by a Black person.

Comparisons in Regression Analysis

Table 1 (below) shows our four different model specifications. They reveal near-identical coefficient estimates and model fits.

[Insert Table 1 about here]

These are very straightforward results. Substantively, the predicted effects associated with partner age are minor and do not meaningfully alter model fit. When we include the partner's raw age (Model B *versus* Model A), the estimated effect of the head's age is redistributed across both partners, which would not be expected to render substantial differences in household wealth estimates because partner ages are so correlated. This effect is modest and only slightly smaller than the revised coefficient on the head's age in the same model.

Model C looks at the head's age and the age differential between the head and the spouse. The model fit is near-identical, and the coefficients yield substantively similar results. The primary head's age effect is similar, but the model predicts that net worth will be 3.3% lower for each year the head is older than their partner. In other words, larger age differentials occur among poorer people. The result is interesting, but seems unlikely to produce substantially different predicted scores given that this number tends to be small,

particularly because larger age differentials occur with older heads. Model fit statistics suggest a near-identical fit.

Model D examines the proposition that age differences do matter by using a dummy variable denoting couples who are less than two years apart in age. The dummy variable was not significant.

Taken together, these results indicate that incorporating partner age yields marginal predictive gains. While the variables can register as statistically significant, their effects are substantively minor. The head's age continues to perform well as a simple, robust proxy for household age in SCF-based models of wealth accumulation.

It is similar with regard to the controls. For example, these models predict that a person who completes college will have between 578% and 587% more wealth than a person who does not complete high school. Likewise, the effect of being headed by a Black person is predicted to have an effect that ranges between -76.5% and -77.0% less wealth than a White-headed household. These are substantively identical results.

Moreover, fit scores are identical. R-squared varied over a fraction of a percentage point. The AIC scores varied over a range of three points, which is well below the standard thresholds to infer significant differences in model fit (Burnham and Anderson 2002). The difference in fit across specifications is near-zero, even if the spouse's age registers as significant.

Discussion

The results offer a clear recommendation: modeling the age of the household head alone is sufficient for predicting wealth accumulation in paired households using SCF data. While partner age and age differentials are statistically significant in some specifications, their substantive effects are minor, and they yield no meaningful improvement in model fit. Age difference, in particular, is associated with a slight negative wealth gradient (approximately a 3.3% decline in wealth per additional year that the head is older than their partner), but this effect is small relative to standard predictors such as education or race, and its inclusion generally does not alter estimates meaningfully.

More broadly, the findings suggest that the conventional practice of using the head's age as a proxy for household age continues to strike the best balance between parsimony and predictive power. For analysts using the SCF, the implication is straightforward: when modeling household net worth, there is little gained by complicating age measurement beyond the head's age. Simpler specifications retain explanatory power while avoiding overfitting or the introduction of interpretive ambiguity.

Bibliography

Burnham, Kenneth, and David R. Anderson (2002). *Model Selection and Multimodel Inference*. Springer.

Cohen, Joseph Nathan (2025a) “Household Wealth Inequality.” Mimeo.

Cohen, Joseph Nathan (2025b). “Analyzing the Survey of Consumer Finances: A Methodological Guide for Generalist Analysts” Mimeo.

Cohen, Joseph Nathan (2025c). R package.

Cohen, Joseph Nathan (2025c). “Modeling the Effects of Education on Household Wealth.” Mimeo.

Cohen, Joseph Nathan (2025d). “The `scf` Package: Analyzing Survey of Consumer Finance Public-Use Microdata in R.” Mimeo.

Modigliani, Franco and Richard Brumberg (1954) “Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data” *Post Keynesian Economics*. Kenneth K. Kurihara (ed.) Rutgers University Press.

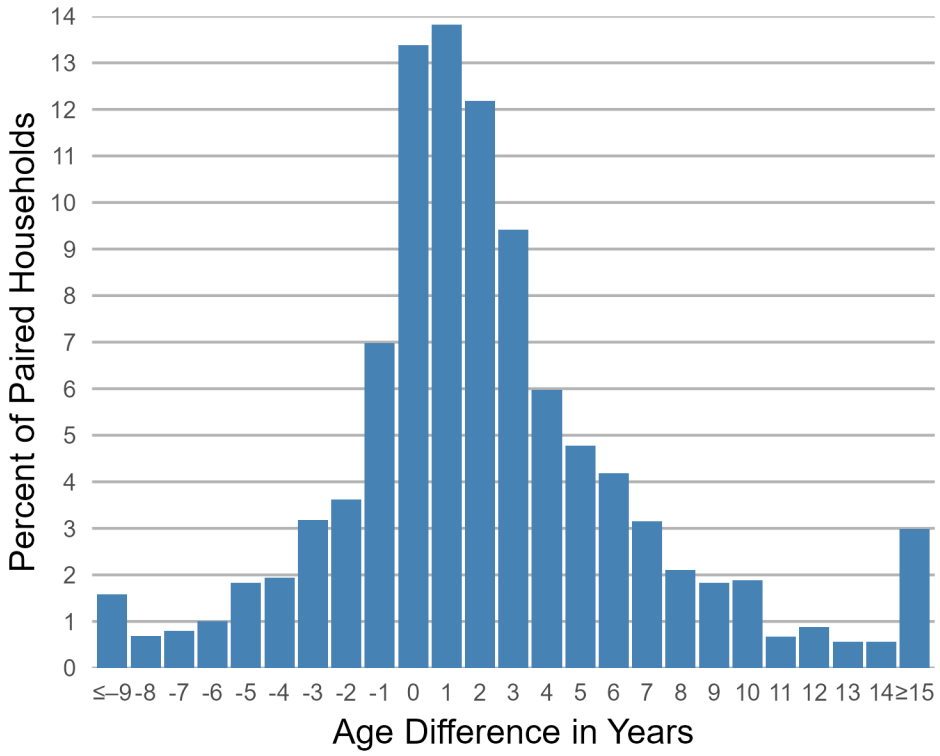

Figure 1: Estimated Distribution of Age Differentials among Paired U.S. Household Heads, 2022

Table 1: Log-Linear Regression Predicting Household Net Worth in 2022, Paired Couples Only

Term	Model 1	Model 2	Model 3	Model 4
(Intercept)	8.180*** (0.287)	8.136*** (0.289)	8.144*** (0.289)	8.056*** (0.288)
Age Metrics				
Age (Head)	0.055*** (0.004)	0.030** (0.010)	0.058*** (0.004)	0.056*** (0.004)
Age (Partner)	–	0.028** (0.010)	–	–
Age Difference	–	–	-0.034** (0.012)	–
Age Diff. ≤ 2 yrs	–	–	–	0.156 (0.103)
Education (versus Did Not Complete High School)				
High School	0.963*** (0.186)	0.963*** (0.185)	0.963*** (0.185)	0.961*** (0.185)
College	1.928*** (0.200)	1.918*** (0.200)	1.918*** (0.201)	1.912*** (0.199)
Grad School	2.420*** (0.199)	2.422*** (0.197)	2.424*** (0.197)	2.404*** (0.198)
Cohabiting	-0.637*** (0.165)	-0.619*** (0.161)	-0.616*** (0.161)	-0.609*** (0.162)
Race of Head (versus White)				
Asian	0.244 (0.344)	0.264 (0.346)	0.267 (0.346)	0.258 (0.344)
Black	-1.474*** (0.201)	-1.442*** (0.203)	-1.441*** (0.204)	-1.461*** (0.202)
Hispanic	-0.821*** (0.156)	-0.809*** (0.157)	-0.808*** (0.156)	-0.818*** (0.155)
Other	-1.022 (0.789)	-1.004 (0.785)	-0.999 (0.785)	-1.015 (0.791)
N	2,905	2,905	2,905	2,905
R2	0.218	0.220	0.220	0.218
AIC	4726	4724	4723	4726

***** p < 0.001, ** p < 0.01, *p < 0.05, ^p < 0.10**
Standard Errors in Parentheses Under Coefficient