

WHY DO LATE BOOMERS HAVE SO LITTLE RETIREMENT WEALTH?

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Introduction

Over the last 40 years, the retirement system has shifted from defined benefit plans to defined contribution plans, primarily 401(k)s and Individual Retirement Accounts (IRAs). This shift has been accompanied by a decline in Social Security benefits relative to pre-retirement earnings as the program's Full Retirement Age has moved from 65 to 67. Thus, the expected pattern when examining retirement wealth across cohorts is relatively less wealth from defined benefit plans and Social Security and much more from 401(k)s and IRAs.

However, the numbers for the most recent cohort in the *Health and Retirement Study* – the Late Boomers – show not only the predicted declines in defined benefit plans and Social Security but also an unexpected drop in 401(k)/IRA assets. This drop is alarming given that Late Boomers, who were ages 51-56 in 2016, would have spent the majority of their careers in a defined contribution world.

This *brief* is a first pass at trying to explain why this younger cohort has less in 401(k)/IRA assets than older cohorts had at the same age and what that means for the future of retirement security.

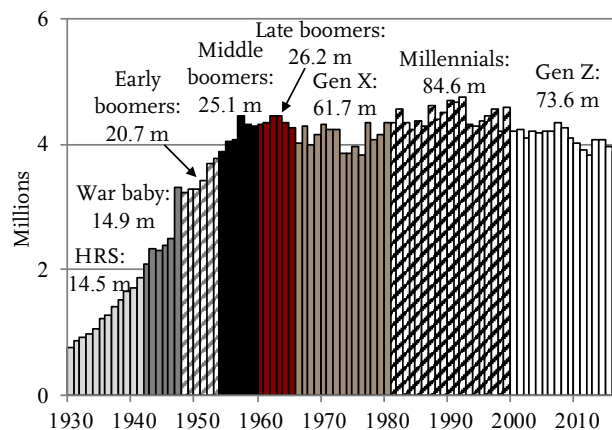
The discussion proceeds as follows. The first section identifies the cohorts that are examined and the calculation of retirement wealth. The second section identifies a turn in the fortunes of Late Boomers during the Great Recession, when a significant share stopped working. But lack of employment does not explain the whole problem, so the third section follows working households and finds that after the Great Recession they had lower earnings, less 401(k) participation, and flat 401(k) balances, ending up well below earlier cohorts. A look at more recent cohorts offers a mixed picture for the future. The final section concludes that the Late Boomers' low 401(k)/IRA wealth can be explained by particularly high levels of unemployment during the Great Recession and more reliance on lower-paid jobs when they re-entered the labor market. Why they were so hard hit, why they were unable to recover, and the fate of future cohorts remain open questions.

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Retirement Wealth by Cohort

The data for calculating retirement wealth are from the *Health and Retirement Study* (HRS), a biennial longitudinal survey of American households over age 50. The focus of this analysis is on Late Boomers, the last of those born during the sharp uptick in fertility rates after World War II. Since the HRS divides the Boomers into three groups, Figure 1 follows that nomenclature and shows the current U.S. population by age cohort from Census data. The Boomers are followed by Generation X – those born in the mid-1960s and 1970s, then by the Millennial Generation (also called Generation Y), and finally by Generation Z. It is important to decipher whether the wealth patterns of Late Boomers are unique or portend a larger trend that will affect these younger generations as well.

FIGURE 1. DISTRIBUTION OF THE U.S. POPULATION BY AGE COHORT AND BIRTH YEAR, IN MILLIONS, 1930-2018



Source: U.S. Census Bureau, *American Community Survey* (ACS) (2018).

Wealth for HRS respondents is defined broadly to include: 1) Social Security; 2) employer-sponsored retirement plans (defined benefit and defined contribution (DC)); 3) non-DC financial wealth; 4) housing wealth; and 5) other assets.¹ All wealth amounts are net of debt.

The analysis covers five birth cohorts, including the recently added Late Boomer cohort (born 1960-1964). To compare this youngest cohort to the others, the focus is on boomer households at ages 51-56 who joined the HRS surveys in 1992, 1998, 2004, 2010 and 2016. While households are sorted into quintiles

based on the broad definition of retirement wealth (including non-DC financial assets and housing), the analysis hones in on wealth from Social Security, defined benefit plans, and 401(k)s/IRAs.

Social Security

Social Security benefit data come from Social Security's administrative records. To convert benefits – an income stream – into a wealth measure requires calculating the expected present value (EPV) at age 65. Once the EPV at age 65 is calculated, it is further discounted back to the age at the survey year.¹ Finally, to facilitate a comparison to other wealth that the household has accumulated by ages 51-56, Social Security wealth is prorated based on the ratio of earnings in the household's early 50s to its lifetime earnings.²

Defined Benefit Wealth

Defined benefit wealth is based on self-reported estimates of pension income at the participant's expected retirement age. Similar to Social Security, this expected income stream is transformed into a wealth measure by calculating the EPV of lifetime benefits, discounting using annual survival probabilities and a rate of interest.³ This measure of defined benefit wealth is then apportioned between past and projected service, based on self-reported years of tenure for past service and years from current age to expected retirement age for future service.

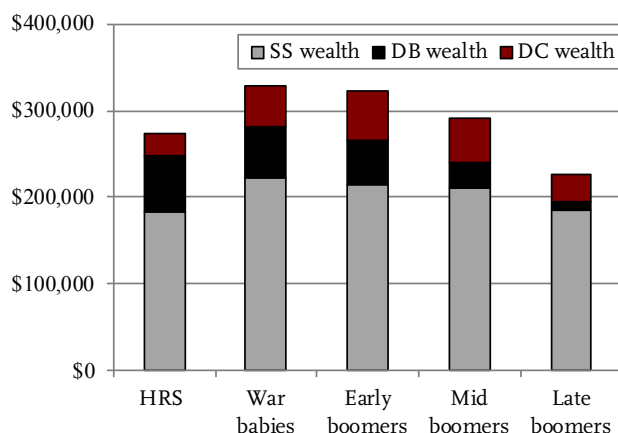
Defined Contribution Wealth

Respondents who report having a defined contribution plan in either their current job or a previous one are asked for the account balance. Total defined contribution wealth is simply the total balances of all accounts, plus the balance of any IRA accounts. IRA accounts are important because, while few contribute directly to these accounts, they often end up as the repository for assets transferred out of 401(k) plans.

The amount of retirement wealth in 2016 dollars for the average household in the middle wealth quintile in each cohort is shown in Figure 2 (on the next page). For most cohorts, the pattern is as expected. Defined benefit wealth declines over the cohorts, Social Security wealth stays roughly constant (as the cuts due to the increase in the Full Retirement Age are offset by the impact of higher wages), and defined contribution wealth increases. That pattern, however,

comes to an abrupt halt with the Late Boomers, when defined contribution wealth drops sharply and Social Security wealth slips a little.

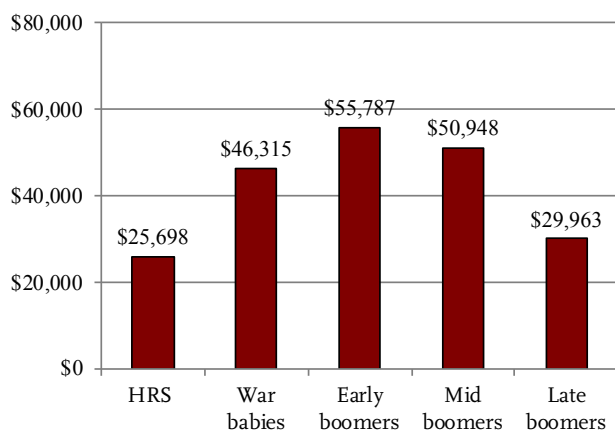
FIGURE 2. RETIREMENT ASSETS AT AGES 51-56 FOR HOUSEHOLDS IN THE MIDDLE WEALTH QUINTILE, BY TYPE OF ASSET AND COHORT, 2016 DOLLARS



Source: Authors' calculations from University of Michigan, Health and Retirement Study (HRS) (1992-2016).

The drop in Late Boomers' DC wealth (Figure 3) is particularly unexpected, since they were the first cohort to spend the majority of their worklives in a 401(k) world as opposed to a defined benefit world.

FIGURE 3. AVERAGE DC ASSETS AT AGES 51-56 FOR HOUSEHOLDS IN THE MIDDLE WEALTH QUINTILE, BY COHORT, 2016 DOLLARS



Source: Authors' calculations from HRS (1992-2016).

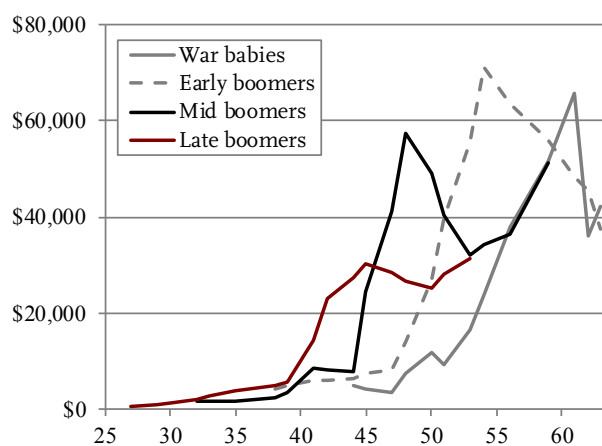
What Happened to Late Boomers?

The question is what happened to Late Boomers and why are their wealth holdings so low even after a long stock market expansion?

To answer these questions requires shifting to another survey since the HRS focuses only on households ages 50 and over. The Federal Reserve's *Survey of Consumer Finances* (SCF) includes households of all ages, has been conducted every three years since 1983, and questions households about their income, wealth, and pension coverage. These triennial surveys make it possible to construct "synthetic" cohorts. For example, Late Boomers who were ages 51-56 in 2016 are linked to Late Boomers in previous survey years, who were 48-53 in 2013, 45-50 in 2010, and so on.

Examining Late Boomers across their lifecycle shows that they were not always behind in private retirement savings. In fact, until their mid-40s, Late Boomers held more 401(k)/IRA assets than earlier cohorts at the same age (see Figure 4). Thereafter, however, that pattern changed abruptly, and they fell behind.

FIGURE 4. AVERAGE 401(k)/IRA ASSETS FOR HOUSEHOLDS IN THE MIDDLE WEALTH QUINTILE, BY COHORT, 2016 DOLLARS



Source: Authors' calculations using U.S. Federal Reserve Board of Governors, *Survey of Consumer Finances* (SCF) (1989-2016).

Interestingly, the Late Boomer's 40s coincided with the onset of the Great Recession, which appears to have particularly affected them (see Table 1). Their

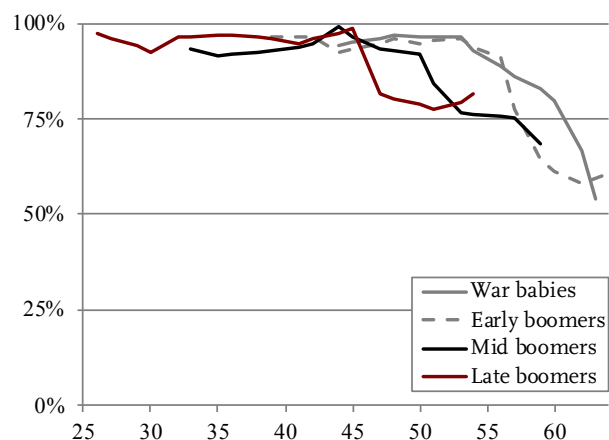
TABLE 1. BIRTH YEAR AND AGE DURING GREAT RECESSION, BY COHORT

	Birth years	Age during recession ^a
War babies	1942-1947	60-67
Early boomers	1948-1953	54-61
Mid boomers	1954-1959	48-55
Late boomers	1960-1965	42-49

^a The National Bureau of Economic Research defined December 2007-June 2009 as the dates of the Great Recession. Source: Authors' calculations.

employment rate – that is, the percentage of individuals working – dropped sharply (see Figure 5). More importantly, the percentage of the cohort not working did not rebound as the economy recovered.⁴ Thus, one explanation for the low level of retirement assets is simply that many Late Boomers ended up permanently unemployed, unable to contribute to their

FIGURE 5. SHARE OF INDIVIDUALS WORKING BY COHORT



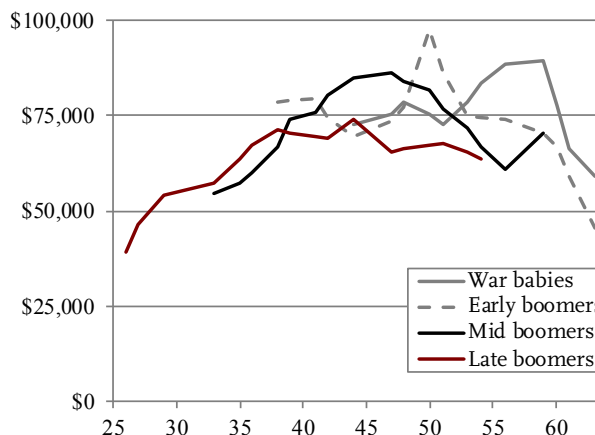
Source: Authors' calculations using SCF (1989-2016).

401(k)s, and likely having to drain accumulated retirement assets to support themselves. But a closer look at those who were employed suggest that the damage went beyond the unemployed.

A Closer Look at Working Households

Even among working households, the Great Recession appears to have taken a greater toll on Late Boomers than earlier cohorts. When Late Boomers reached their 40s, their average earnings flattened out and then declined continuously thereafter, leaving them with earnings well below the earnings of Early and Mid Boomers (see Figure 6).

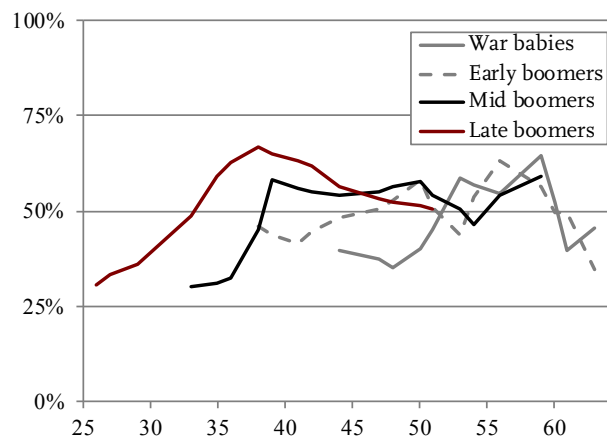
FIGURE 6. AVERAGE EARNINGS FOR WORKING HOUSEHOLDS IN THE MIDDLE WEALTH QUINTILE, BY COHORT, 2016 DOLLARS



Source: Authors' calculations using SCF (1989-2016).

The Late Boomers' lower earnings were accompanied by a decline in the share of these households participating in a 401(k) plan (see Figure 7 on the next page). As one would expect, initially 401(k) participation rates were much higher for Late Boomers than for those in preceding cohorts. But participation rates peaked for Late Boomers around age 40 and then began to decline, so that by age 50 their 401(k) participation rates were below those of earlier cohorts.

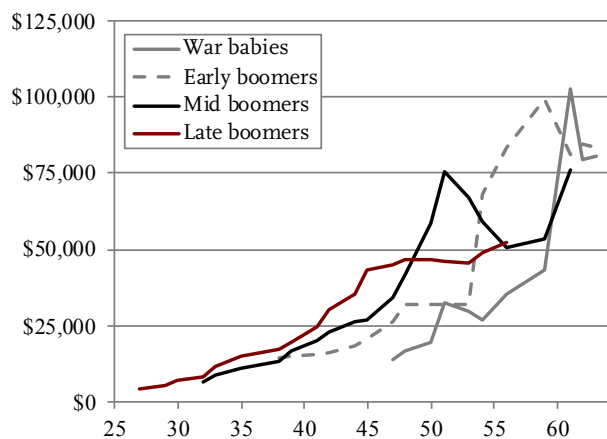
FIGURE 7. PERCENTAGE OF WORKING HOUSEHOLDS IN THE MIDDLE WEALTH QUINTILE PARTICIPATING IN A 401(K) PLAN AT THEIR CURRENT JOB, BY COHORT



Source: Authors' calculations using SCF (1989-2016).

Finally, even for those working households participating in a 401(k) plan, the trajectory of their 401(k)/IRA balances changed dramatically after the Great Recession. Whereas before the economic collapse their balances exceeded those of earlier cohorts, afterwards they flattened and remained below those of other Boomers (see Figure 8).

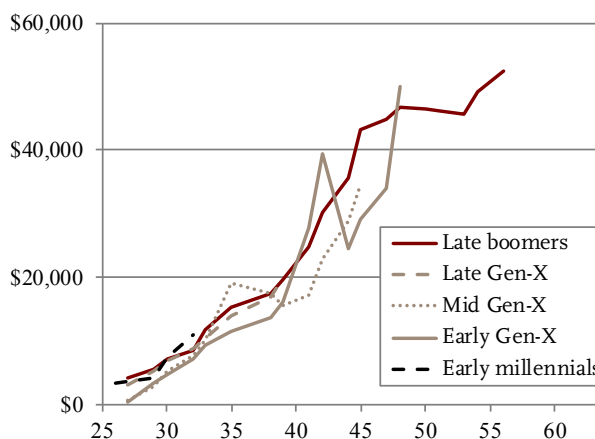
FIGURE 8. AVERAGE 401(K)/IRA ASSETS FOR WORKING HOUSEHOLDS WITH A BALANCE IN THE MIDDLE WEALTH QUINTILE, BY COHORT, 2016 DOLLARS



Source: Authors' calculations using SCF (1989-2016).

In short, the decline in 401(k)/IRA balances for the Late Boomers reflects not only the unemployment caused by the Great Recession but also the deterioration of labor market outcomes for those who stayed employed. But the analysis provides no answer to the question of why the late Boomers were hit so hard or the implications for future cohorts. Figure 9, which presents the same information on 401(k)/IRA wealth as Figure 8 for early, mid, and late Gen Xers and for early Millennials, suggest these later cohorts may not see any improvement. Their balances tend to fluctuate around those for the Late Boomers, which would not be a good result.

FIGURE 9. AVERAGE 401(K)/IRA ASSETS FOR WORKING HOUSEHOLDS WITH A BALANCE IN THE MIDDLE WEALTH QUINTILE, BY COHORT, 2016 DOLLARS



Source: Authors' calculations using SCF (1989-2016).

Conclusion

As advertised, this *brief* is only a first pass at trying to explain why the 401(k)/IRA holdings for the Late Boomers are less than those for earlier cohorts. This pattern is evident not only in the HRS data, where the analysis began, but also in the SCF, which was used for lifetime patterns. Therefore, it appears that the phenomenon is real. Data on employment rates and labor market experience confirm that Late Boomers rank lower on every metric.

The questions of why the Late Boomers were hit so hard, why they were unable to recover, and the implications for future cohorts remain unanswered. The 2019 SCF, which is expected to be released this September, may provide some additional insights.

Endnotes

- 1 Other assets include vehicles, businesses, trusts, life insurance, etc.
- 2 If the respondent is married and eligible for spousal and survivor benefits, the benefit components are weighted by the appropriate survival probabilities and converted to an EPV as described above. This calculation follows a methodology well established in the literature. For example, see Gustman, Steinmeier, and Tabatabai (2014) or Fang, Brown and Weir (2016).
- 3 For more details on the calculation of Social Security wealth, see Hou and Sanzenbacher (2020).
- 4 This estimation follows Mitchell and Moore (1997) and Gustman, Steinmeier, and Tabatabai (2010).
- 5 This finding is in line with many studies that have documented the decline in employment rates among the prime-age (25-54) in recent decades. For an overview see Krueger (2017) and Abraham and Kearny (2020 forthcoming).

References

- Abraham, Katharine G, and Melissa S. Kearney. 2020 (forthcoming). "Explaining the Decline in the US Employment-to-Population Ratio: A Review of the Evidence." *Journal of Economic Literature*.
- Fang, Chichun, Charles Brown, and David Weir. 2016. "Cohort Changes in Social Security Benefits and Pension Wealth." Working Paper 2016-350. Ann Arbor, MI: University of Michigan Retirement Research Center.
- Gustman, Alan L., Thomas L. Steinmeier, and Nahid Tabatabai. 2010. *Pensions in the Health and Retirement Study*. Cambridge, MA: Harvard University Press.
- Gustman, Alan L., Thomas L. Steinmeier, and Nahid Tabatabai. 2014. "The Great Recession, Decline and Rebound in Household Wealth for the Near Retirement Population." Working Paper 20584. Cambridge, MA: National Bureau of Economic Research.
- Hou, Wenliang and Geoffrey T. Sanzenbacher. 2020. "Measuring Racial/Ethnic Retirement Wealth Inequality." Working Paper 2020-2. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Krueger, Alan B. 2017. "Where Have All the Workers Gone? An Inquiry into the Decline of the US Labor Force Participation Rate." *Brookings Papers on Economic Activity* (2): 1.
- Mitchell, Olivia S. and James F. Moore. 1997. "Retirement Wealth Accumulation and Decumulation: New Developments and Outstanding Opportunities." Working Paper 6178. Cambridge, MA: National Bureau of Economic Research.
- National Bureau of Economic Research. "US Business Cycle Expansions and Contractions." Cambridge, MA. Available at: <https://www.nber.org/cycles.html>
- University of Michigan. *Health and Retirement Study, 1992-2016*. "RAND HRS Longitudinal File 2016 V1 Public Use Dataset." Produced and Distributed by the University of Michigan with funding from the National Institute on Aging (Grant Number NIA U01AG009740). Ann Arbor, MI.
- U.S. Census Bureau. *American Community Survey, 2018*. Washington, DC.
- U.S. Board of Governors of the Federal Reserve System. *Survey of Consumer Finances, 1989-2016*. Washington, DC.

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The research reported herein was supported by the Anna-Maria & Stephen Kellen Foundation. The findings and conclusions expressed are solely those of the authors and do not represent the opinions or policy of the Anna-Maria & Stephen Kellen Foundation or the Center for Retirement Research at Boston College.