

## Chapter 14

### **Retiring on the House? Cross-Cohort Differences in Housing Wealth**

---

*Julia L. Coronado, Dean Maki, and Ben Weitzer*

As the leading edge of the Baby Boom generation turns 60, there is growing interest in how well this large group has prepared for retirement and how it will manage its assets in later life. There has been concern among the popular media, policymakers, and academic economists that Boomers have not saved enough for retirement, and indeed Figure 14-1 indicates a precipitous decline in the personal saving rate as Boomers have moved through adulthood.

This chapter evaluates the role of housing wealth in Baby Boomers' retirement prospects to determine what role housing wealth will play in their retirement well-being. Our approach compares the wealth position of the leading edge of the Boomers with that of the generation immediately preceding it, in the years just prior to retirement. We rely on the Health and Retirement Survey (HRS) and compare persons aged 51–61 in 1992, whom we refer to as the original HRS cohort, with the Early Baby Boomers (EBBs) interviewed at age 51–56 in 2004. We conclude that Boomers do have more valuable homes, but they have also borrowed more against these. As a result, they have a similar fraction of assets allocated to home equity as their predecessors. On net, however, the median EBB member had similar home equity and net worth compared to previous retirees at the same age. When we assess how the original HRS respondents have managed their home equity over the period 1992–2004, we find that—unlike prior studies—people do view housing as a source of wealth that can help them finance their retirement needs. Indeed, a substantial fraction of older households do move; and in the process, they appear to liquidate some home equity which they convert to financial assets. Consequently, some of the home equity extraction observed in recent years may be related to the aging of the population, rather than a cyclical response to rapid house appreciation.

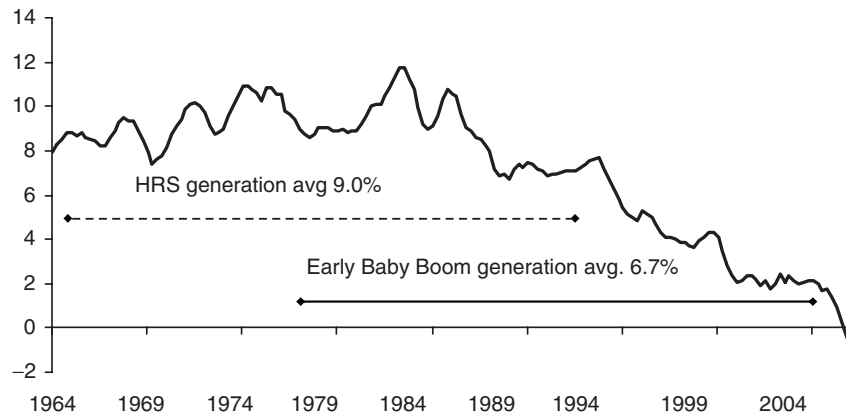


Figure 14-1. Personal saving as a percentage of disposable income between the ages of 28 and 51. (Source: US Bureau of Economic Analysis (various years); Haver Analytics (various years).)

### Comparing Early Baby Boomers with Their Predecessors

Previous research that has evaluated Boomers' retirement prospects has generally taken one of two approaches.<sup>1</sup> One compares Boomers' finances with those of previous generations at a similar age. As we show below, these studies have typically concluded that Baby Boomer households have higher incomes and are accumulating wealth at a similar or greater pace than previous generations. So in an absolute sense, Boomers, on average, are doing as well or better than their parents. Indeed, though aggregate saving rates have declined, this is partly a response to capital gains on assets which have led households in the aggregate to accumulate significantly more wealth as shown in Figure 14-2. That said, increasing inequality has also been noted: the lowest income households among Boomers appear to be worse off economically than previous generations (Butrica et al., this volume; Manchester et al., this volume).

A second set of studies evaluates the retirement preparedness of Baby Boomers by asking whether they have accumulated enough wealth to sustain their standard of living through retirement (Moore and Mitchell 2000). Their higher real household incomes, combined with static retirement timing, would imply that they need to accumulate more wealth in order to maintain the higher consumption through retirement. This second literature is far from uniform in its conclusions, in part because authors differ in their economic assumptions and definitions of wealth.

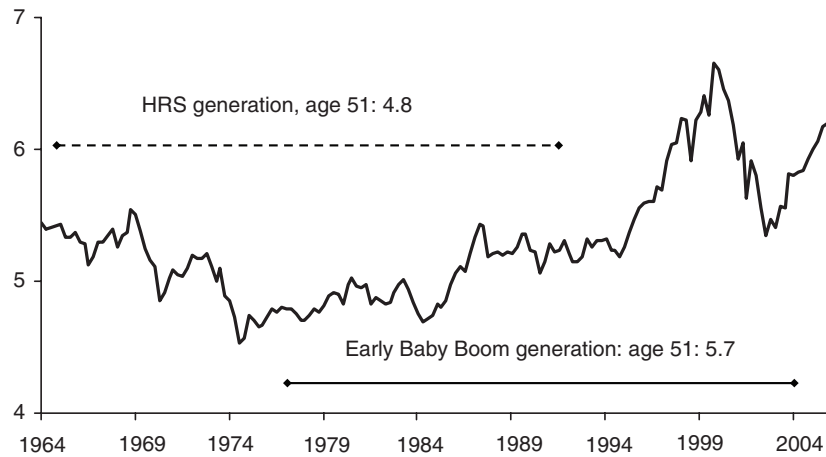


Figure 14-2. The ratio of net worth to disposable income between the ages of 28 and 51. (Source: US Bureau of Economic Analysis (various years); Haver Analytics (various years).)

A main bone of contention has been the question of whether home equity should be included as a retirement asset. In our view, it seems unreasonable to exclude housing wealth when evaluating retirement preparedness, inasmuch as home equity accounts for 43 percent of net worth for the median household and more than one-third of aggregate household wealth.<sup>2</sup> It is true that, in the past, there were only limited ways for retirees to tap home equity, short of selling their homes. It is also true that elderly persons appeared to be reluctant to sell their homes unless confronted with the death of a spouse or a serious illness.<sup>3</sup> Thus housing wealth appeared to serve as insurance against adverse events, but not as a source of wealth to finance general consumption needs other than shelter. Nevertheless, the fact that housing satisfies the need for shelter would seem to necessitate its inclusion in evaluating retirement preparedness. Shelter accounts for between 15 and 33 percent of total consumption needs.<sup>4</sup> And not surprisingly, if home equity is included as an asset, this produces a more favorable assessment of Boomers' preparedness for retirement. In any case, the question remains open as to whether households are tapping into their home equity appropriately for two reasons. First, Boomers are beginning to transition into retirement with a great deal of home equity. Second, markets have developed for tapping into home equity; indeed, home equity loans now account for 12 percent of all mortgage debt. In addition, the size of the reverse mortgage market, where older households can obtain an annuity stream of income from their home equity, has doubled in each of the past

TABLE 14-1 Comparing the Wealth and Home Equity Position of the Original HRS and Early Baby Boomers at Age 51–56

	<i>Original HRS</i>	<i>EBB</i>
1. Year surveyed	1992	2004
2. Number of respondents	5,722	4,330
3. Married	77.9%	70.3%
4. Some college education or higher	42.1%	57.3%
5. Retired	11.5%	12.1%
6. Has DB pension	64.1%	54.7%
7. Home ownership	80.3%	82.9%
8. Median net worth (\$)	153,444	155,000
9. Median net worth per capita (\$)	83,116	90,250
10. Net worth/household income	2.40	2.13
11. Median home value (\$)	100,950	140,000
12. Median equity in home	84.0%	65.9%
13. Median home equity/net worth	44.0%	43.8%

*Source:* Authors' calculations.

*Note:* Dollar amounts in \$2004.

five years. In 2005, roughly \$3.6 billion in reverse mortgages was issued against homes valued at \$11 billion.<sup>5</sup> This market remains small compared to the over \$1 trillion mortgage market that year; it does appear that older households can increasingly use their home equity to finance retirement needs.

Table 14-1 permits an assessment of the comparative economic positions of the original HRS and EBB cohorts (all dollar figures are in \$2004). We focus on persons aged 51–56 in 2004 and 1992. As others have noted, Boomers are less likely to be married, are better educated, and are less likely to be covered by a defined benefit (DB) pension than the HRS generation. Both generations had similarly low rates of retirement in their early 50s and remarkably similar median net worth, though the EBB cohort had higher per capita net worth and a lower ratio of net worth to household income owing to the smaller household size and higher household incomes.

Turning to housing wealth, we note that the Early Boomers had a slightly higher rate of home ownership, and they owned homes worth nearly 40 percent more than the HRS cohort. This is not terribly surprising given that the EBB group was interviewed in 2004 after a housing boom that, as shown in Figure 14-3, had lasted nearly a decade. The EBB group is indeed more leveraged with only 66 percent equity versus 84 percent for the HRS cohort (equity in home is calculated as market value of the home minus all mortgage debt as a fraction of home value). But because the Boomers' homes are more valuable, the percentage of their portfolio devoted to

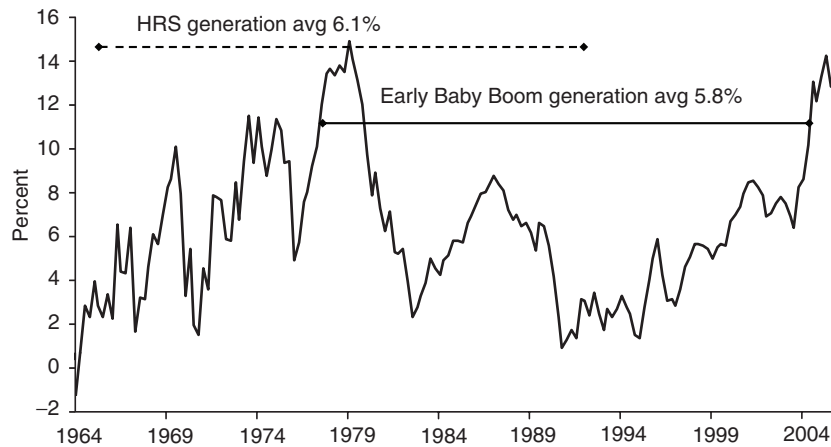


Figure 14-3. Real home price appreciation between the ages of 28 and 51 (% change, year on year). (Source: OFHEO (various years); Haver Analytics (various years).)

home equity is nearly identical to the HRS generation. In other words, the two groups had very similar percentage allocations to housing and financial assets, as they approached retirement. Subsequently, the portfolio of the HRS group then experienced the boom and bust of the equity markets, as well as the housing market boom; nonetheless, the two groups were quite similarly situated prior to retirement.

More detail on the distribution of housing wealth across the two generations is provided in Table 14-2. Here households are divided into quintiles of household income, and the picture painted by the aggregate statistics holds up in this more disaggregated view. Increasing home ownership is evident for the younger EBB cohort, and home ownership rates and median home values were higher for every quintile of the EBB generation. Likewise, the data are consistent with more liberal credit markets across the income spectrum, as each EBB quintile had greater leverage (evidenced by the lower median equity in their homes). The share of home equity in total net worth is basically similar across generations by quintile; it is a touch higher for lower HRS quintiles and a bit lower for upper income groups. The ratio of net worth to income is higher for the HRS group in all but the middle income quintile.

In other words, the evidence suggests that, despite higher leverage, the Early Boomers were similarly positioned to the prior generation, just before retirement. Some of the EBBs' increased leverage can thus be viewed as an asset allocation move to keep their portfolio from being overweighed in home equity after an extended period of appreciation in home values. This

TABLE 14-2 Comparison of Home Ownership and Values for the HRS and Early Baby Boom Generations at Age 51–56, by Household Income Quintile

	<i>First</i>	<i>Second</i>	<i>Third</i>	<i>Fourth</i>	<i>Fifth</i>
<i>Original HRS</i>					
1. Home ownership	51.5%	74.4%	84.2%	89.5%	97.1%
2. Median home value (\$)	13,460	74,030	94,220	134,600	235,550
3. Median equity in home	56.0%	73.1%	81.5%	85.0%	100%
4. Median home equity/net worth	0	59.5%	52.3%	47.0%	28.5%
5. Net worth/household income	0.5	1.58	2.07	3.4	7.69
<i>Early Baby Boomers</i>					
1. Home ownership	60.1%	80.4%	86.3%	91.7%	95.2%
2. Median home value (\$)	30,000	95,000	145,000	200,000	375,000
3. Median equity in home	42.2%	58.0%	64.2%	66.6%	78.6%
4. Median home equity/net worth	0	57.8%	54.9%	51.5%	33.8%
5. Net worth/household income	0.4	1.4	2.3	3.0	7.1

*Source:* Authors' calculations.

*Note:* Dollar amounts in \$2004.

portfolio shifting view is also quite consistent with aggregate data. Many observers, including former Federal Reserve Chairman Greenspan, credited the extraction of home equity with supporting consumption spending through the most recent economic downturn (Figure 14-4). But the flows of money out of home equity through increased leverage have roughly paralleled the flows of funds into financial assets.

Clearly retirement preparedness rests on more than housing, and Boomers face lower levels of DB pension coverage, longer life spans, and looming Social Security and Medicare deficits. Consequently, Boomers may not be able to retire at the same age and maintain their standard of living during retirement if they continue to retire early. Yet estimates of saving adequacy respond dramatically to assumptions about retirement ages. Moore and Mitchell (1997) show how required saving rates are cut in half, if retirement is delayed from 62 to 65. And there is at least a suggestion that Boomers may retire later than their predecessors (Maestas, this volume).

### **Housing Wealth and Retirement Needs: A Focus on the HRS Cohort**

Next we assess how the HRS generation has managed its housing investments, as it has moved through retirement. Specifically, we evaluate the

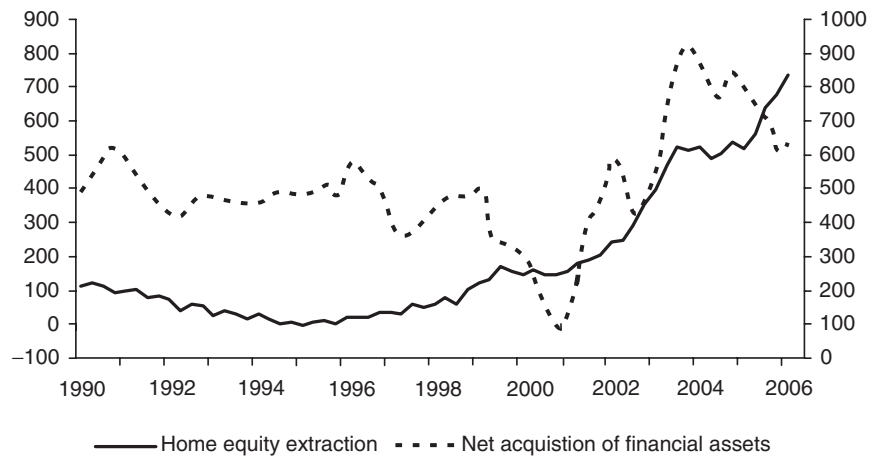


Figure 14-4. Home equity appears to be moving into financial assets (\$ billions, 4-quarter moving average). (Source: Federal Reserve Board of Governors (various years); Haver Analytics (various years).)

extent to which the HRS generation has drawn down its home equity to finance its retirement needs. This may offer insights into how the EBB generation will manage its housing investments going forward.

The periods during which we observe the HRS cohort are the years between 1992 and 2004. This was a time characterized by first booming, and then falling, equity markets, and then a surging housing market. As Figure 14-2 indicated, on balance, this was a time when net worth grew rapidly relative to disposable income. Since rates of appreciation in both of these asset classes were well beyond their historical norms, at least some portion of this appreciation likely came as a surprise, particularly to the HRS generation who had already reached its peak saving period. This makes it a difficult period to assess the degree and patterns of wealth drawdown.

Some of the same questions are evaluated by Venti and Wise (2001), who ask whether people give up their homes in later life and whether the amount invested in home equity declines with age. They concluded that retirees do not view their home equity as an asset available to finance retirement needs. We approach this question somewhat differently, since in our view, giving up home ownership is a crude way for older persons to access home equity. Furthermore, the fact that the housing market was booming over this period implies that it is unlikely to observe outright declines in the value of home equity. Instead, we explore changes in the share of home equity in retirees' total portfolios, how this share changed

TABLE 14-3 Comparison of Housing and Wealth Measures for the HRS Generation as They Transitioned into Retirement

<i>Year</i>	<i>1992</i>	<i>2004</i>
1. Age of primary respondent	51–56	63–68
2. Number of respondents	5,722	4,127
3. Married	77.9%	68.7%
5. Retired	11.5%	62.1%
6. Has DB pension	64.1%	71.9%
7. Home ownership	80.3%	85.1%
8. Median net worth (\$)	153,444	207,000
9. Median net worth per capita (\$)	83,116	123,000
10. Net worth/household income	2.40	4.43
11. Median home value (\$)	100,950	133,000
12. Median equity in home	84%	95%
13. Median home equity/net worth	44.0%	44.5%

*Source:* Authors' calculations.

*Note:* Dollar amounts in \$2004.

over this period, and whether those who moved were more likely to tap into this source of wealth, either for rebalancing into financial assets or to finance consumption needs. Accordingly, an examination of movers' choices can shed light on what the unconstrained choices of retirees might look like.

Table 14-3 reports key aspects of the HRS cohort in 1992 and again in 2004. Just under two-thirds of the sample were retired by 2004 (when they were aged 63–68). Some respondents are lost owing to death and nonresponse, and there is a decline in the marriage rate mainly to widowhood (and some divorce). The rate of people indicating they were covered by a DB pension increased significantly due to either pension vesting or lack of awareness of these benefits prior to retirement. Given financial market conditions, both real median net worth and the ratio of net worth to income rose substantially over the period. The rate of home ownership actually rose, as did median home value and equity in the home. In the aggregate, the median fraction of the portfolio allocated to home equity changed little over this time frame.

The same data movers and nonmovers are shown in Table 14-4. Roughly a one quarter of all households moved over this eleven-year period. Movers started the period with greater net worth, higher incomes, and more valuable homes in 1992, though they had slightly less equity in their homes; health, marital status, and retirement were also similar. Then between 1992 and 2004, both movers and nonmovers increased their net worth

TABLE 14-4 Comparing Changes in Housing and Wealth Variables for Original HRS Cohort: Movers versus Nonmovers

	<i>Movers</i>			<i>Nonmovers</i>		
	<i>1992</i>	<i>2004</i>	<i>Difference</i>	<i>1992</i>	<i>2004</i>	<i>Difference</i>
1. Median net worth (\$)	205,938	242,000	36,062	188,440	298,000	109,560
2. Median household income (\$)	71,338	46,500	-24,838	63,531	45,180	-18,351
3. Median net worth/household income	2.82	4.70	1.88	2.96	5.99	3.03
4. Median house value (\$)	148,060	165,000	16,940	121,000	153,000	31,860
5. Median home equity/net worth	51.7%	37.9%	-13.7%	55.0%	52.7%	-2.4%
6. Good health or better	89.4%	80.8%	- 8.6%	87.3%	77.7%	-9.6%
7. Married	85.5%	67.9%	-15.6%	85.8%	77.8%	-17.6%
8. Retired	11.5%	62.3%	50.8%	11.5%	63.2%	51.8%

*Source:* Authors' calculations.

*Note:* Dollar amounts in \$2004.

and decreased their income, though movers had a significantly smaller rise in net worth and a larger decline in income. Median home values also increased for both groups, though the increase was much larger for the nonmovers, and the fraction of net worth allocated to home equity declined substantially more for movers while it only edged down for nonmovers. Both groups became less healthy, and retired at a similar pace.

The fact that movers started the sample better-off but saw smaller increases in wealth and significantly reduced their allocation to home equity suggests that movers may have used some of their wealth gains for spending purposes and reallocated some housing wealth to financial assets. Another possibility is that those households who moved suffered some type of health shock or death in the family that precipitated their move and reallocation of wealth. We are interested in distinguishing between the use of home equity as an insurance policy and the use of home equity for more general retirement needs. For this reason, we estimate a multivariate regression model linking the change in the share of net worth allocated to home equity between 1992 and 2004, using movers as

TABLE 14-5 The Impact of Moving on Home Equity Extraction: Evidence of a Regression of Home Equity Shares Using Movers as a Control Group

Independent Variable	Dependent Variable: Change in the Ratio of Home Equity to Net Worth, 2004–1992		
	(A)	(B)	(C)
Moved	–0.13 (0.011)	–0.10 (0.012)	–0.07 (0.013)
Changed marital status		0.10 (0.021)	0.08 (0.021)
Moved*changed marital status		–0.17 (0.029)	–0.16 (0.031)
Change in health status		0.06 (0.031)	0.02 (0.017)
Moved*change in health status			–0.07 (0.031)
Log of household income			–0.03 (0.006)
Education: < high school			0.12 (0.021)
Education: high school diploma			0.05 (0.017)
Education: some college			0.05 (0.018)
Education: college degree			0.00 (0.021)
Covered by DB pension			0.04 (0.012)
Constant	0.52 (0.006)	0.50 (0.007)	0.79 (0.073)
Adjusted $R^2$	0.05	0.06	0.09

Source: Authors' calculations.

Notes: Regressions estimated using weighted ordinary least squares. Estimated coefficients shown with standard errors in parentheses. All variables are significant at the 95% confidence level with the exceptions of change in health status and college degree in the specification presented in column (C).

a control group; we also include variables to capture the effect of adverse events.

We estimate the change in home equity by taking the position in 2004 and subtracting the 1992 allocation, so that on average the change will be negative. Results appear in Table 14-5, where the first column shows the results of regression the change in home equity on only an indicator variable indicating whether the household moved. The coefficient indicates that movers reduced their allocation to home equity 13 percentage points over this period relative to nonmovers, highly significant and close to Table 14-4. The second column also controls for whether there was a change in marital status (including widowhood or divorce), change in health status, and an interaction term between change in marital status and moving. The results indicate that households who moved with no change in marital status or health shock reduced their home equity 10 percentage points, relative to nonmovers. This result is highly significant and represents an indication of the magnitude of home equity liquidated through a move *not* accompanied by a health or marital shock, possibly

for general retirement purposes. The interaction between moving and marital status suggests that households who moved *and* had a marital status shock reduced their home equity a further 17 percentage points beyond movers without such an event, as their home equity served as a source of insurance.

The third column adds other general controls for education, household income, and whether the household is covered by a DB pension, as well as an interaction between a change in health status and moving. All variables are significant at the 95 percent confidence level with the exception of change in health status and having a college education. The results indicate that movers with no health or marital shock reduced their home equity by 7 percentage points, relative to nonmovers, while those with a marital shock reduced their allocations an additional 16 percentage points; those with a health shock reduced their home equity 7 percentage points relative to movers without adverse marital and health changes.

## Discussion and Conclusions

This chapter compares the economic position of Baby Boomers with that of current retirees, both during their preretirement years. We note that Boomers have similar levels of net worth, and a comparable fraction of their net worth invested in equity of their homes. Yet their homes are more valuable, and they hold more mortgage debt against that value. Overall, Boomers have higher rates of home ownership and greater leverage against their homes across the income spectrum. Next we assessed how HRS retirees tapped into their housing wealth, as they transitioned into retirement. This analysis is confounded by a sustained above-trend boom in asset markets, yet we do find that more than a quarter of households in this cohort moved between their early 50s and mid-60s. Further, they used the move as an opportunity to tap into their home equity and reallocate some of this wealth to financial assets. Home equity also serves as an insurance policy in the event of shock such as the death of a house or deterioration in health.

We conclude from this analysis that the recent surge in home equity extraction is more of a trend than a cyclical phenomenon. As indicated in Figure 14-5, this is not inconsistent with the aggregate data which show no sign of slowing in the growth of home equity extraction relative to income, even as the housing market has slowed. While Boomers are more leveraged than their predecessors, they still have considerable equity in their homes. Accordingly, we would expect the trend toward home equity extraction to continue as this cohort ages.

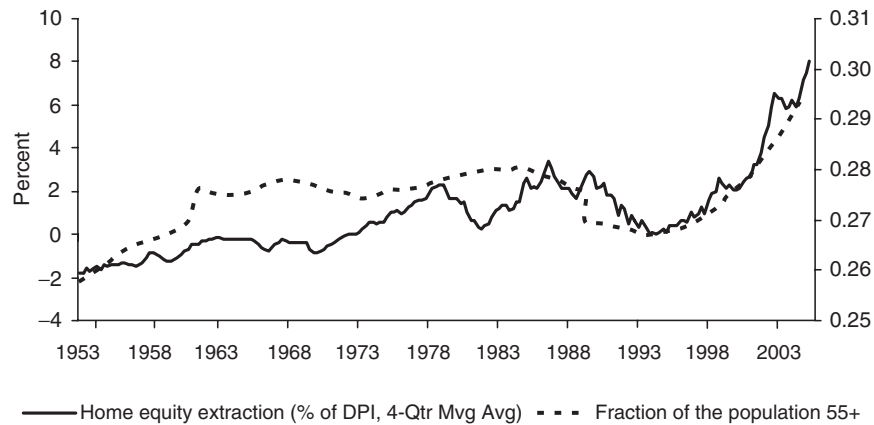


Figure 14-5. Home equity extraction: trend rather than cyclical phenomenon. *Note:* Home equity extraction is measured as net borrowing minus net residential investment in primary residences by households as a percentage of disposable personal income. (*Source:* Federal Reserve Board of Governors (various years); Bureau of Economic Analysis (various years); Haver Analytics (various years).)

## Notes

<sup>1</sup> A comprehensive and useful review of studies on this issue is available from the Congressional Budget Office (November 2003).

<sup>2</sup> These figures are taken from Federal Reserve Board of Governors (various years) *Survey of Consumer Finances* and *Flow of Funds*, respectively.

<sup>3</sup> Some notable examples of this work include Sheiner and Weil (1993) and Venti and Wise (1991).

<sup>4</sup> The lower figure is the weight of shelter in consumer spending according to the National Income and Product Accounts published by the US Bureau of Economic Analysis (various years), while the larger number is the weight of shelter in the Consumer Price Index published by the US Bureau of Labor Statistics (various years).

<sup>5</sup> Data on home equity debt come from the Federal Reserve Board of Governors (various years). Figures on reverse mortgages come from IndyMac Bank (2005), OFHEO (various years), and our own calculations.

## References

- Bureau of Economic Analysis (various years). *National Income and Product Accounts*, US Department of Commerce. Washington, DC: <http://www.bea.gov/>
- Butrica, B. A., Iams, H. M. S., and Smith, K. E. (Chapter 4). 'Understanding Baby Boomers' Retirement Prospects'.

- Congressional Budget Office (November 2003). *Baby Boomers Retirement Prospects: An Overview*. Washington, DC: US GPO.
- Federal Reserve Board of Governors (various years). *Flow of Funds Accounts of the United States*. Washington, DC: Federal Reserve Board: <http://www.federalreserve.gov/>
- Haver Analytics (various years). *Economic and Financial Databases*. <http://www.haver.com/>
- IndyMac Bank (2005). *Annual Report*. <http://phx.corporateir.net/phoenix.zhtml?c=118924&p=irol-reportsAnnual>
- Maestas, Nicole (Chapter 2). 'Cross-Cohort Differences in Retirement Expectations and Realizations'.
- Manchester, J., Weaver, D., and Whitman, K. (Chapter 6). 'Baby Boomers versus Their Parents: Economic Well-Being and Health Status'.
- Moore, J. and Mitchell, O. S. (2000). 'Projected Retirement Wealth and Saving Adequacy', in O. Mitchell, B. Hammond, and A. Rappaport (eds.), *Forecasting Retirement Needs and Retirement Wealth*. Philadelphia, PA: University of Pennsylvania Press, pp. 68–94.
- Office of Federal Housing Enterprise Oversight (OFHEO) (various years). *House Price Indexes*. <http://www.ofheo.gov/>
- Sheiner, L. and Weil, D. (1993). 'The Housing Wealth of the Aged', NBER Working Paper No. 4115.
- US Bureau of Economic Analysis (various years). *National Income and Product Accounts*. Washington, DC: <http://internationalecon.com/v1.0/Finance/ch5/5c010.html>
- US Bureau of Labor Statistics (various years). *Employment Situation*. Washington, DC: <http://www.bls.gov/news.release/empsit.nr0.htm>
- Venti, S. F. and Wise, D. A. (1991). 'Aging and the Income Value of Housing Wealth', *Journal of Public Economics*, 44: 371–97.
- (2001). 'Aging and Housing Equity', in Z. Bodie, B. Hammond, and O. Mitchell (eds.), *Innovations for Financing Retirement*. Philadelphia, PA: University of Pennsylvania Press, pp. 50–76.