Trends in Pension Cash-out at Job Change and the Effects on Long-term Outcomes

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Abstract

Might the financial security of working Americans during retirement be jeopardized by their ability to cash out their pension plans when they leave a job? Federal tax rules discourage such actions, but the limited evidence available suggests the practice is common. This paper takes advantage of long-term longitudinal data in the Health and Retirement Study to update prior findings, investigate cohort differences and study the long-term consequences of pension cash-out at job separation. We find that pension cash out is more concentrated among workers who experience economic or health shocks around the time of job separation. The most recent cohort of older workers more often cashed out pension balances and more frequently used the balances for spending or to pay off debt. This is likely due to most of the job separations for this cohort occurring during or in the aftermath of the Great Recession, which brought about economic shocks at higher frequency. Long-term outcomes for those who cashed out pension balances are worse than for those who did not cash out, but so were their baseline characteristics. Taking this together with the fact that outcomes are the same across populations of workers with or without access to pension cash-out, we conclude that the worse outcomes among workers who cashed out are due to the experience of shocks rather than due to access to the cash-out option.

Keywords:
Pensions, financial security, retirement resources, economic shocks, health shocks

INTRODUCTION

Promoting financial security in retirement is the primary objective of U.S. policies governing employer-provided pensions. To encourage workers and employers to participate, legislation mandates very large tax advantages for private-pension savings. These effectively represent "tax expenditures" to the federal government in the form of forgone tax revenues.

U.S. policymakers have a substantial interest in the results of these large expenditures for promoting financial security in retirement. Is the private-pension system effectively enhancing financial security in retirement? What are the barriers or impediments to achieving economic security for old age among U.S. workers? Which groups of workers are at greatest risk of falling short?

One feature of the U.S. pension system in particular may jeopardize the objective of promoting retirement-income security: the ability of workers to cash out (i.e., withdraw funds from) their private-pension plans upon job separation. Federal rules aim to discourage such pre-retirement cash-outs. For example, the Tax Reform Act of 1986 introduced a 10 percent tax penalty on withdrawals prior to the age of 59 ½. Burman et al. 2012 showed that this tax penalty reduced pre-retirement cash-out of pension balances and increased rollovers into individual retirement accounts that preserve the tax-advantaged status of the pension balances. They also found reductions of cash-outs in response to a 1992 reform that imposed 20 percent tax withholding (without affecting the total tax liability).
These policy changes have reduced, but not eliminated, early withdrawals. Several studies have investigated the causes of the remaining early pension withdrawals. It appears that a significant portion of these are made by households facing liquidity constraints and experiencing financial shocks (Amromin and Smith, 2003; Scherpf, 2010). Still, according to Butrica et al. (2010), about half of early withdrawals from 401(k) defined-contribution pension accounts and Individual Retirement Accounts (IRAs) could not be attributed to the events observed in the data, possibly indicating "unnecessary loss of retirement savings."

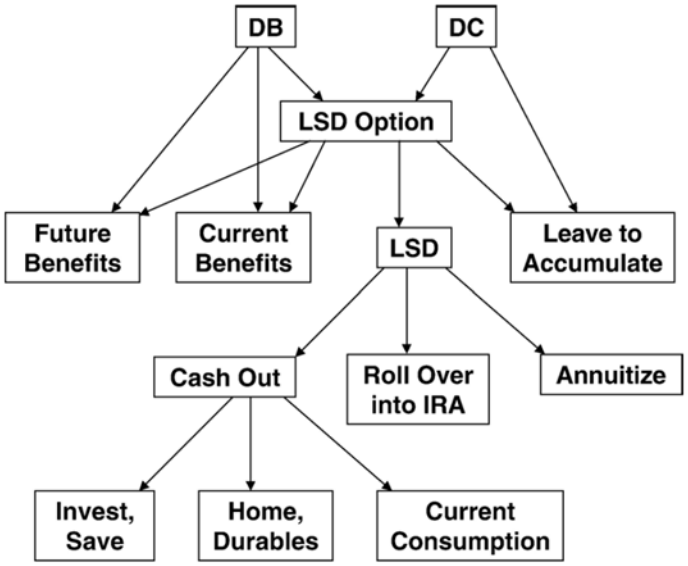
This paper uses the long panel of data collected in the Health and Retirement Study (HRS), spanning up to 20 years for the earliest cohorts, to add new insights to prior research findings on this topic. Analyses in the current study addressed trends in pension cash-outs among older workers, cohort differences,

and retirement income security metrics at later years or ages and their relations to earlier job and cash-out choices. We did not restrict ourselves to looking at single cash-out actions but incorporated cumulative measures of pension cash-out decisions.[1] The paper includes analyses of precipitating events that shed light on determinants of cash-out behavior and how it may have changed over time. We were especially interested in how the Great Recession affected cash-out choices. The HRS data allowed relation of variation in cash-out choices of older workers to a variety of outcomes observed in panel up to 20 years later, including assets, income and health.

In an antecedent to this paper, Hurd and Panis (2006) analyzed HRS data on cash-outs and other dispositions of pension entitlements among workers over the age of 50 who left their jobs between 1992 and 2000 (five waves of biennial HRS data). Their study highlighted an issue that had been under-appreciated in prior research: whether a lump-sum distribution (LSD) harms retirement preparation depends critically on what the worker does with the money. Some LSDs may be rolled into an IRA, some may be annuitized, and some may be cashed out. Only the last of these may harm retirement preparation, and even then some uses may function as savings. Hurd and Panis use the following graphic to clarify the situation. In the cash-out branch, some of the funds may be invested or saved directly and some may be invested in the home, which is a form of saving. While bringing such funds out of tax-sheltered accounts may not be optimal tax management, it is primarily spending for current consumption that poses the greatest harm to economic preparation for retirement.

[1] In the next version of this paper we will incorporate assessments of pension cash-outs at the household level.

Potential options for the disposition of pension entitlements, as illustrated in Hurd and Panis (2006):



Hurd and Panis established several facts that are important for understanding the causes and consequences of LSD decisions. Not all plans allow an LSD on job separation. In fact, the availability of LSDs varies dramatically across types of plans: a little over 80% of DC plan participants report an LSD option, versus just 42% of DB plan participants.

Besides looking at the fraction of workers who cashed out their pensions, Hurd and Panis examined the implications of cash-outs for aggregate pension balances and net wealth, including non-retirement wealth. They identified two factors that implied a limited overall impact of cash-outs on retirement and total household wealth. First, cashed-out plans had lower average value than other plans, especially among those holding DC plans. Second, over 75% of cashed-out funds were either invested or used to pay off debt. Hurd and Panis conclude that "among workers that are within roughly 10 years of retirement, only a small fraction of pension plan dollars is consumed immediately after job separation and that the vast majority is preserved for retirement income security."

While the Hurd and Panis paper provided a useful perspective up through the year 2000, the demographic and pension landscape has changed considerably with the decreasing importance of DB plans, the increasing pension entitlement of women, and changes in marriage and divorce.

Furthermore, the Great Recession may have led to more cash-outs, harming particular segments of the population. These changes in the landscape warrant revisiting the Hurd and Panis analysis, which is the objective of this paper.

DATA

The HRS is a biennial longitudinal survey of persons at least 50 years of age. Since its launch in 1992, the HRS has gathered data on income, work assets, pension plans, health insurance, disability, physical health and functioning, cognitive functioning, and health-care expenditures, among other topics. Periodic additions of cohorts ensure the HRS remains representative of the population at least 50 years of age.

The analyses in this paper are focused on several key variables. We analyzed self-reported data on employer-provided pensions for HRS respondents. The HRS asks whether respondents own such a pension, and whether it is a defined-benefit (DB) or a defined-contribution (DC) plan. It also asks respondents whether the pension plan allows for a lump-sum distribution. They are asked about the disposition of the pension plan at job separation or retirement: whether it was left with the former employer to accumulate; whether a full or partial LSD was taken; whether DB holders started drawing benefits on separation or chose to await future, larger benefits; whether the pension plan was lost with separation (likely where there is lack of vesting); or whether some other disposition occurred. For those who took an LSD, the survey asks whether the money was rolled into an IRA, converted to an annuity, or cashed out. For those who cashed out their pension plan, the HRS asks whether the money was saved or invested, whether it was used to pay off debt[2] or to purchase durable goods or a home, or whether it was used for non-durable consumption.

This research updated and expanded that of Hurd and Panis in several directions. First, more waves of the HRS are now available. Hurd and Panis used five waves of HRS data from 1992 through 2000. Since then, six more waves of HRS surveys—from 2002 through 2012—have been conducted and the data made available for analysis, bringing not only an increase in sample size, but also an expansion in the types of analyses that could be conducted. In particular, because additional waves of data became

[2] Paying off debt is conceptually the same as investing or saving the money, but this distinction is recorded in the HRS responses and shows patterns of interest, especially in the context of the Great Recession.

available, differences across cohorts (e.g., those born before World War II and post-war "Baby Boom" cohorts) could be analyzed. A growing number of DC plans is also available for analysis, partly because of the time elapsed since 2000, but perhaps more importantly because DC plans have become increasingly prevalent in the U.S. pension system, so workers in more recent cohorts are more likely to have them.

More recent cohorts are also likely to have more women who have earned pension entitlements at work. Their decisions regarding pension wealth may differ from those of men and merit additional analysis. Indeed, within a household, the behavior of both spouses is important in determining use or disposal of pension assets. The incorporation of more waves of HRS data with more female respondents who hold pension wealth promotes the analysis of pension wealth and its use or disposal from a household perspective.

The analysis has been updated to provide insights on the effects of the Great Recession on pension behavior, particularly on cash-outs. The earlier work by Hurd and Panis studied a period of relatively low unemployment and high stock market and housing returns. The years since then, particularly those surrounding the Great Recession that began in 2008, have not been as favorable. Unemployment in 2009 reached 10 percent, more than two percentage points higher than it was at any point between 1992 and 2000, and more than double what it was in the late 1990s. Though eventually recovering, the stock market lost about half its value during the Great Recession, and housing values decreased by more than one-third, representing a large shock to wealth that may have led some workers to cash out their pensions. Indeed, using tax data on preretirement withdrawals, Argento et al. (2014) verified that workers substantially increased withdrawal rates between 2004 and 2010, especially after 2007.

The long HRS panel supports analyses of retirement security outcomes at later years or ages and how they relate to earlier job and cash-out choices. For example, consider a 57-year-old worker who cashed out a pension between 1992 and 1994. We have been able to observe that worker's subsequent economic position at age 75 in 2012, and we could then compare that worker with otherwise similar workers who did not cash out.

By gaining access to more years of data, we were able to analyze and compare a broader array of events precipitating cash-out, including whether different precipitating events led to differences in subsequent

events. We could, for example, analyze and compare cash-outs resulting from adverse health changes, unemployment, shocks to household wealth caused by the Great Recession, marital disruption, and extractions to buy real estate during the housing bubble of 2004 to 2008 and the subsequent loss of equity and, possibly, home ownership during the Great Recession.

Changes in the Macroeconomic Environment, 1992-2012

We begin this report of the results of our analyses with an overview of the contextual changes occurring over the period 1992-2012. The first half of that period covers the HRS waves available to Hurd and Panis in conducting their analysis, and the second half folds in the years covered by the current work. We specifically focus on labor force participation (LFP) and the recessions that characterized the macroeconomy near the beginning and towards the end of the period of interest.

Labor Force Participation

Using Current Population Survey (CPS) data, we examined trends in LFP by sex. As shown in Figure 1, between the early 1990s and the early 2010s, LFP among males aged 65-69 increased substantially, whereas LFP among males 40-54 decreased slightly. Men of intermediate age (55-64) increased their LFPs modestly if at all. LFPs among older women (Figure 2), aged 55-69, increased at rates matching those of the oldest men in the analysis, although there appears to have been a leveling off following the start of the Great Recession. LFPs among women in their 40s exhibited a slight increase or stasis until around the turn of the century and a slight downward trend thereafter.

[INSERT FIGURES 1 & 2]

Clearly, the most dramatic trends are the LFP increases among older men and women. These increases reflect trends toward later retirement. In the descriptive analyses which compare cohorts over eight years, we thus expect to see trends toward relatively fewer separations due to retirement, which may alter the frequency of pension cash-outs.

Macroeconomic Conditions

We are here concerned with the recession of 1991 and the Great Recession beginning in 2008. They are of interest because a recession is characterized by unemployment and adverse financial outcomes—loss of income, loss of assets including the value of stocks and real property. Involuntary job losses could trigger pension cash-out particularly when accompanied by wealth losses.

Recession of 1991. Unemployment, which had been falling in the late 1980s, from around 7.5% to 5%, turned around with the recession to exceed 7% again in 1992 (all figures seasonally adjusted). Stocks simultaneously dropped in value; the Standard & Poor's 500 index lost some 15% of its worth in 1991. Value of housing was not so dramatically affected. The Case-Schiller house price index had been falling for several years and bottomed out in 1991. (The Federal Housing Finance Agency's house price index showed no movement but had just been established.)

Great Recession. While changes in macroeconomic indexes were noticeable in 1991, they were much more dramatic for the great recession that began in 2008 (see Figure 3). The unemployment rate had been falling for several years, to 4.3%, or down about 20% since 2002. In the second half of 2007 it began rising and continued doing so very rapidly until the end of 2009, when it topped out at more than 10%.

[INSERT FIGURE 3]

The Standard & Poor's 500 index had been rising since 2003, making up some losses from 2002 and eventually reaching some 35% over the 2002 datum. It then plummeted through 2008, losing more than half its value. The FHFA's U.S. house price index had increased dramatically, by about 40%, between 2002 and the middle of 2007. It then began a long downturn that by early 2011, when it leveled off, it had lost almost half of the gain.

RESULTS

Cohort Comparisons

Sample Sizes

Table 1 shows the sizes of the three cohorts we follow for these analyses. For example, we follow as Group 1 the 5,355 people who entered the HRS with the 1992 wave of data collection. Of these 5,355 persons, 3,871 were working at entry, 2,161 were working with pension coverage, and 1,396 were working and covered by a pension plan allowing a lump sum distribution (LSD). We follow these groups for 8 years, as their participants age from 51-56 up to 59-64. Group 4, only entered in 2010 so that insufficient time has elapsed for a longitudinal analysis; we use this group for baseline comparisons only.

[INSERT TABLE 1]

Baseline Comparisons

Labor force status. Figure 4 shows labor force status at age 51-56, as reported by the respondents in each group. Employment was lower in 1992 and 2010, and, unemployment higher particularly in 2010 reflecting the Great Recession.

[INSERT FIGURE 4]

Pension coverage and plan type. Pension coverage improved modestly over the period of interest (see Figure 5), increasing a few percentage points to a 60% coverage rate in 2010. There was a large change in the *type* of coverage, though. Most who had pensions were covered by defined-benefit (DB) plans, versus defined-contribution (DC) plans in 1992. By 1998, that switched around, and the trend from DB to DC was still in progress in 2010.

[INSERT FIGURE 5]

The great majority—over 80%--of persons having a DC pension plan are allowed by the plan to cash out via an LSD (see Figure 6). The like percentage for DB plans is 45 and possibly getting larger.

[INSERT FIGURE 6]

Longitudinal Comparisons

Job separations. Table 2 lists the number of job separations within HRS cohorts between their entry year (1992, 1998, or 2004, when they are 51-56 years old) and 8 years later (when they are 59-64). These can be separations to another job, to unemployment, to retirement, or to any other employment status category. They also include separations by individuals not having a job at entry into the HRS who later take a job and then separate from that job, and they count multiple separations per individual where those occur.

[INSERT TABLE 2]

We sought trends in age at separation and in labor force status following job separation among respondents with pensions. Figure 7 shows the age at which cash-outs occur. The large cash-outs appear to happen around ages 59/60, the age at which tax penalties for early withdrawals end. There is little evidence of any trend in age.

[INSERT FIGURE 7]

There were substantial differences by cohort in labor force status after job separation (see Figure 8). The 2004 cohort (group 3) was much more likely to be unemployed than the other two cohorts, whereas the 1992 cohort was much more likely to retire after a job separation and thus be less likely to be employed.

[INSERT FIGURE 8]

Table 3 shows the number of job separations over 8 years among respondents covered by a pension, plan, classified by whether the individual had a DC or DB plan. For example, there were 637 job separations among persons with DC plans, and those amounted to 44.8% of all job separations involving a pension plan. The table documents sharp increases in the percentage of respondents with pension plan coverage who have a DC plan, and sharp decreases in the percentage with a DB plan. (Note, some persons have both types of plan, so the row totals exceed 100%.)

[INSERT TABLE 3]

As the prevalence of DC plans was changing over the period of interest, so was the means of disposition of these plans at job separation (see Table 4). Cash-outs increased sharply from less than 14% to 24% (not conditioned on LSD availability), while rates of rolling plan assets into IRAs remained high, at around 30 to 40%. While cash-outs may be the principal worry from the retirement security point of view, IRAs do not necessarily protect savings well. These funds are no longer under the protection of the Employee Retirement Income Security Act (ERISA), and transfers to IRAs may presage spending.

[INSERT TABLE 4]

If the analysis is altered to include only those respondents who had DC plans with LSD options, some differences are observed (see Table 4a). Cash-outs are higher in levels when the LSD option is available, but increase at about the same rate across cohorts. Rollover prevalence does not exhibit consistent trends across cohorts and is higher, but variably so, when the sample is restricted to these having the LSD option. The LSD-available group also shows consistently reduced probabilities of leaving savings with the employer (down 34 to 38%).

[INSERT TABLE 4A]

A like analysis was conducted for respondents with DB plans at job separations. As shown in Table 5, the prevalence of cash-outs increased with cohort from 12% to 18%. There was a much smaller rate of rollover to IRAs than there was for the DC people, but IRA rollover rates did increase across cohorts, from 8% to 21%. Over half the respondents with DB plans at job separation were drawing benefits from it—an important annuity feature of DB plans--but this had fallen by over 30% in the 2004 cohort.

[INSERT TABLE 5]

If we restrict the sample to those having DB plans with an LSD option (Table 5a), cash-out rates are considerable higher but there is no longer an increase across cohorts. IRA rollovers rates are higher and they markedly increased across cohorts. Fewer individuals are drawing benefits, though the cross-cohort profile is similar.

[INSERT TABLE 5A]

If people have been cashing out retirement savings more often and at younger ages, what have they been doing with the money? Patterns of use of cashed-out retirement funds among persons with a DB plan are shown in Table 6. Use patterns were similar for the 1992 and 1998 cohorts. Somewhat more

than half was put into some other form of savings, and the remainder divided between spending and paying off debt. The 2004 cohort (data for 2004 to 2012) cut the percentage of cash-out funds going to other savings by half, doubling the percentage spent on debt and increasing spending by half. These patterns are consistent with a greater rate of negative shocks generated by the Great Recession and experienced by this cohort: they were more likely to spend and pay down debt.

[INSERT TABLE 6]

Precipitating events of pension cash-outs

Closely related to the question of what cash-out recipients do with the money is why they sought the cash-out. A respondent's use of funds from a cash-out could reflect a specific event that precipitated the transfer. We have a window into this through HRS questions on reasons for job separations. Potential reasons include health shocks, unemployment, other wealth shocks (such as the Great Recession's effects on retirement savings), and family needs such as the effects of divorce or widowing or the need to support children financially. Answers to the HRS question on reasons for job separations are given for those with DC plans in Figure 9 and for those with DB plans in Figure 10.

[INSERT FIGURES 9 & 10]

Among individuals separating from a job with a DC plan (Figure 9), the first three reasons shown—retirement, job loss, or voluntary separation—were all important reasons for separating from a job. However, retirement was less often the reason in the 2004 cohort and job loss--"let go" or "business closed"--was more often the reason. Poor health or disability is less often cited by each cohort than by the preceding one.

Among those separating from a job with a DB plan, retirement was given as the reason by 40 to 55% of the respondents, whereas fewer than 20% gave any other reason (Figure 10). Fewer retired in the 1998 and 2004 cohorts, but there was no increase in those responding "business closed/let go" for the 2004 cohort.

We next seek to learn what fraction of respondents cashed out their retirement plans when facing a shock around the time of job separation. The results of this analysis are shown in Table 7. Among those separating with a pension, the overall fraction that cashed out for any reason was 18.6%. Rates were

much higher among those affected by some specific shock. In particular, among those who were separating from a job with a pension and falling behind on their mortgage, 55% cashed out, as did 36% of those losing their health insurance at job separation and 26% of those whose health became poor.

[INSERT TABLE 7]

Statistical predictors of pension cash-out: DB and DC plans with lump-sum option

To control for a number of covariates, we ran several regression models of the relationship between cash-out of pension plans among those separating from jobs and 26 right-hand (explanatory) variables, including shocks. Probit estimation was employed on five models. In one model (designated "0") the dependent variable was cash-out of a DB or DC pension. The other models all pertained to cash-out of a DC plan. They differed from each other in whether the value of the DC plan and/or membership in the 2004 cohort (relative to the 1992 cohort) was included.

The analysis identified numerous variables predictive of cash-outs at a statistically significant level (see Table 8). Being older, living in an area with a higher unemployment rate, and being African-American were associated with a higher probability of a pension cash-out. Being wealthier or more educated or having a longer planning horizon, better health (self-reported), health insurance, or a higher DC plan value was associated with lower pension cash-out probability. Generally, these were similarly predictive across models.

[INSERT TABLE 8]

Several variables were not predictive of pension cash-out at statistically significant levels; these included gender, subjective probability of survival, and disability. They also included membership in the 2004 cohort, which predicted cash-out but not at a statistically significant level (when the latter was dropped from the analysis, membership in the 1998 cohort became predictive of cash-out with $p<.05$).

Longitudinal Analyses: consequences of cash-outs

By taking advantage of the HRS's longstanding longitudinal panel, we can track respondents who cashed out and compare outcomes (economic status, personal characteristics, survival) with those of participants who did not cash out. Specifically, we focus on the 1992 cohort and follow it for 20 years.

As shown in Table 9, 25% of those who had never separated from a job died by 2012, compared with only 16% of those who had ever separated. This difference is at least partially due to the time window over which a job separation could occur: those who died early had fewer chances for job separation. Among those who had ever separated with a cash-out, over 19% died compared with 16% among those who separated without a cashout. Most likely this difference is a reflection of a positive correlation between cashout and economic shocks, and a negative correlation between cashout and 1992 socio-economic status: as will be shown below that those who cashed out were initially less wealthy, had lower incomes and were in worse health, all of which predict greater mortality.

[INSERT TABLE 9]

Table 10 shows the labor force states in 2012 among those who survived and who worked with pension coverage over the 20 years between 1992 and 2012. Although, of course, most had retired, a non-negligible fraction was still working.

[INSERT TABLE 10]

Table 11 shows several measures of health and economic status in 1992 and in 2012, by employment and cash-out status.

[INSERT TABLE 11]

Considering wealth, health, household income, and pension income among those who survived to 2012, those who cashed out do look worse off in 2012 compared to those who never separated or separated without cash-out, for either retirees or those still working. However, these individuals were also worse off in 1992, *before they cashed out*. Whether cashing out affects individuals negatively is therefore conflated with the types of people who choose to cash out: selection plays a role in attempts to isolate the effects of cashing out on these well-being measures. Further, as we have seen, cash-out is accompanied by shocks such as losing health insurance and falling behind on mortgages. Those events by themselves would lead to relatively worse outcomes in 2012, even were the individual not to cash out.

To separate the causal effect of cash-out from initial conditions that are correlated with cash-out and from precipitating shocks, we used as a classifying variable the availability of an LSD option in the pension plan. Under the assumption that the availability of an LSD was orthogonal to initial characteristics and to the probability of a shock during the 20 years of observation, the variation by availability shows whether giving an LSD option results in worse outcomes, and when properly used as an instrumental variable, how large the negative effects of cash-out are.

We first note (see Table 12) that about 11 percent of workers who apparently did not have an LSD option reported a cash-out. However, the classification is by LSD status on the 1992 job. Because of subsequent job changes (prior to 2012), a respondent who did not have an LSD option in 1992 could have shifted into a job that had one and on switching out of that job cashed out that pension. Further, some of the cash-outs among the 1,362 were likely due to misreporting of cash-out availability in the 1992 HRS. Hurd and Panis (2006) also noted this. Nonetheless, the rates of cashout are about 50% higher among the 2,178 reporting the option, showing that respondent reporting about LSD availability does have discriminatory power.

[INSERT TABLE 12]

There are several results of interest. First, there is little apparent difference in the survival rates. Second, pension income is lower by a quarter for people with the LSD option, as would be expected because they withdrew some pension wealth on cash-out. However their household income is about a third larger and their wealth over half again as large as for those without the option. Thus, this table does not support the view that a cash-out option has led to pension holders being less economically prepared for retirement.

CONCLUSIONS

Among policymakers concerned about retirement economic security, the practice of cashing out retirement plans at the time of job separation has been a worry. Changes to the tax code have been enacted to discourage such transfers, but the limited evidence available suggests that cash-outs continue to pull substantial amounts out of retirement plans, even when households are not facing imminent liquidity challenges. In this paper we have attempted to add to the literature on pension

cash-out practices. Specifically, we draw on long-duration panel data from the Health and Retirement Study to learn what shocks can trigger cash-outs, whether and how cash-out practices are changing, and what might be their long-term consequences.

The events most likely to trigger cash-outs are issues with mortgages; in particular, over half of those who fell behind on their mortgage cashed out pension accounts. Health was another important factor: more than a third of those losing their health insurance at job separation engaged in cash-outs, and only a quarter of those whose health turned bad did so.

Trends are of particular interest. To identify them, we took advantage of the HRS entering cohorts in 1992, 1998, and 2004. Most of these analyses showed that cashing out was becoming more frequent. Also, fewer job separations in the 2004 cohort were followed by retirement; among those with DC plans, more separations were due to employer closures and layoffs.

Ultimately, the concerns about retirement economic security rest on the long-term welfare of the nation's senior citizens. How are these affected by cash-outs? The 1992 HRS cohort has been running for over 20 years, so some inferences can be drawn. At first glance, those who cashed out do look worse off in 2012 compared to those who never separated or separated without cash-out. However, these individuals were also worse off in 1992, *before they cashed out.* This suggests some confounding of genuine cashing-out effects with participants' prior attitudes and behaviors. Further work to isolate these relationships suggests that respondents having access to cashing out have greater wealth and household income, but lower pension income, than persons without the ability to cash out. This is not necessarily the outcome we would have expected, but it is not inconsistent with the conclusions of Hurd and Panis (2006). Further attention to this topic is warranted.

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Figure 1: Labor force participation, men

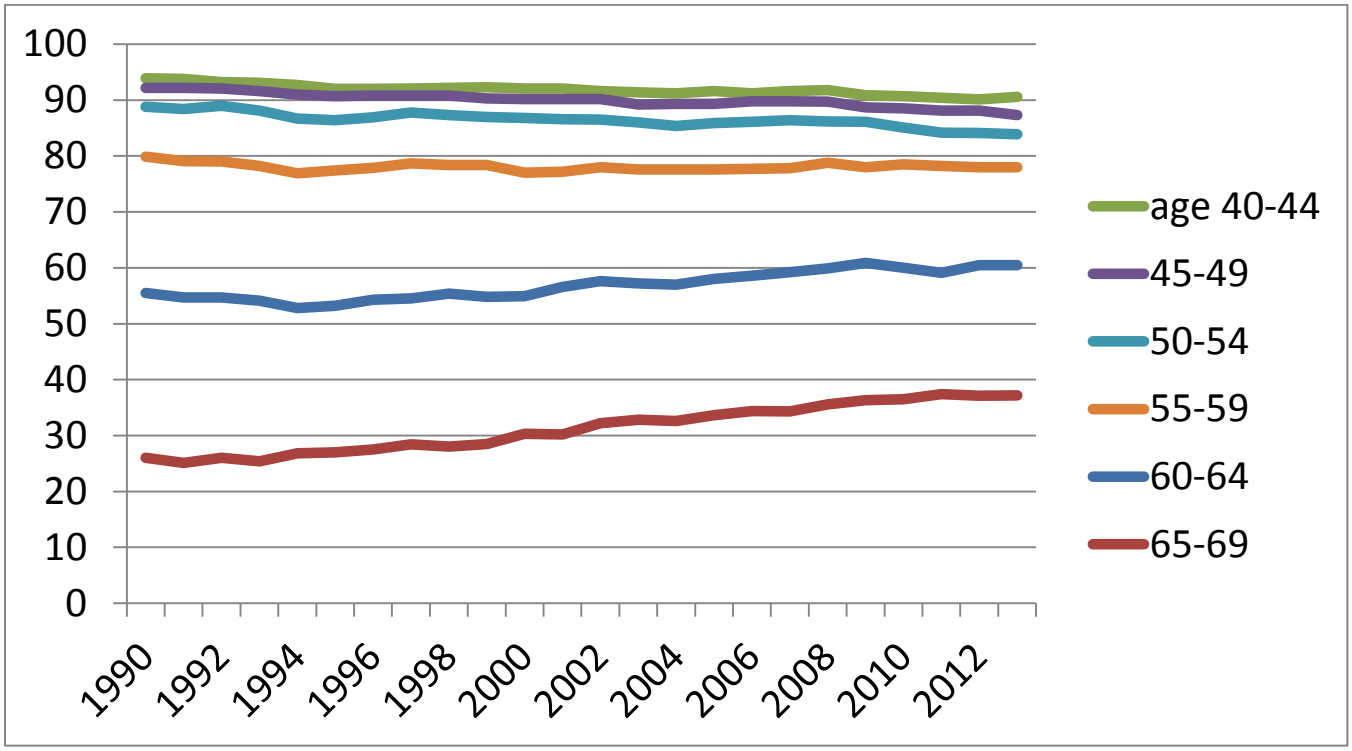

Figure 2: Labor force participation, women

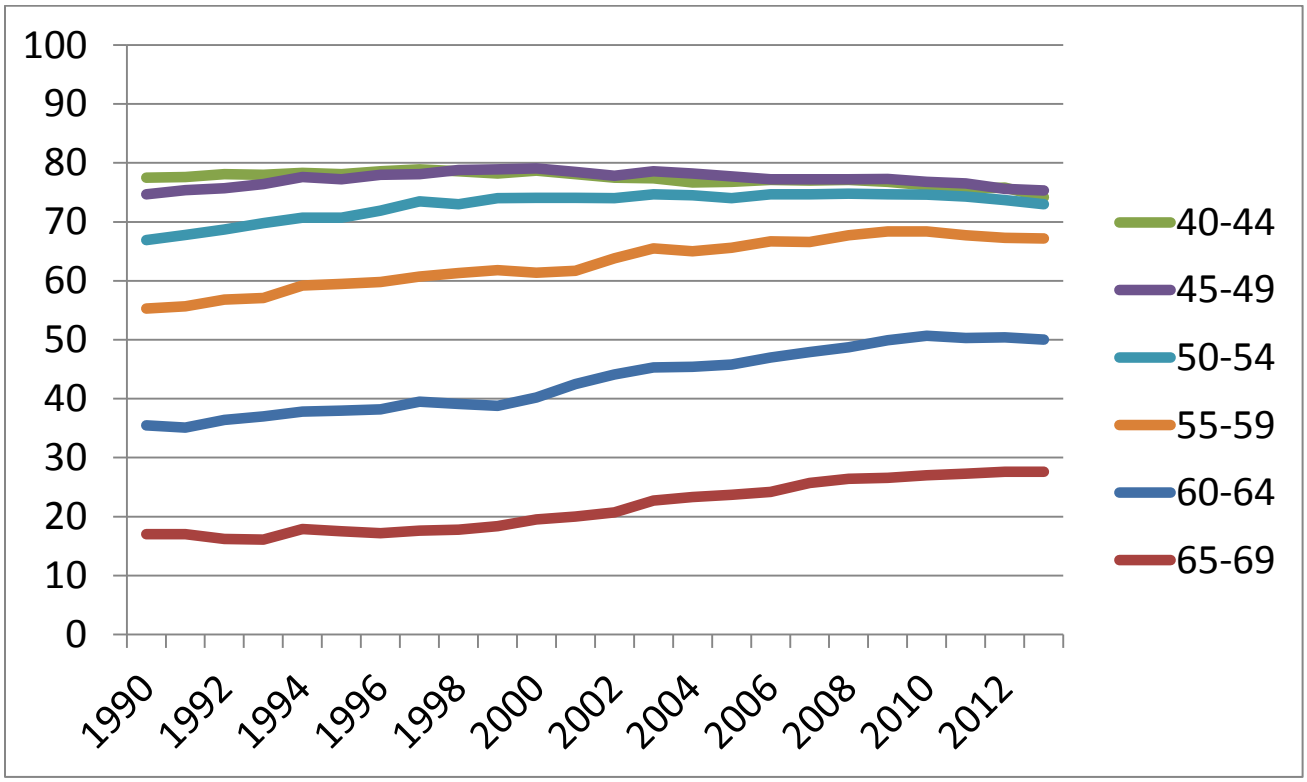

Figure 3:

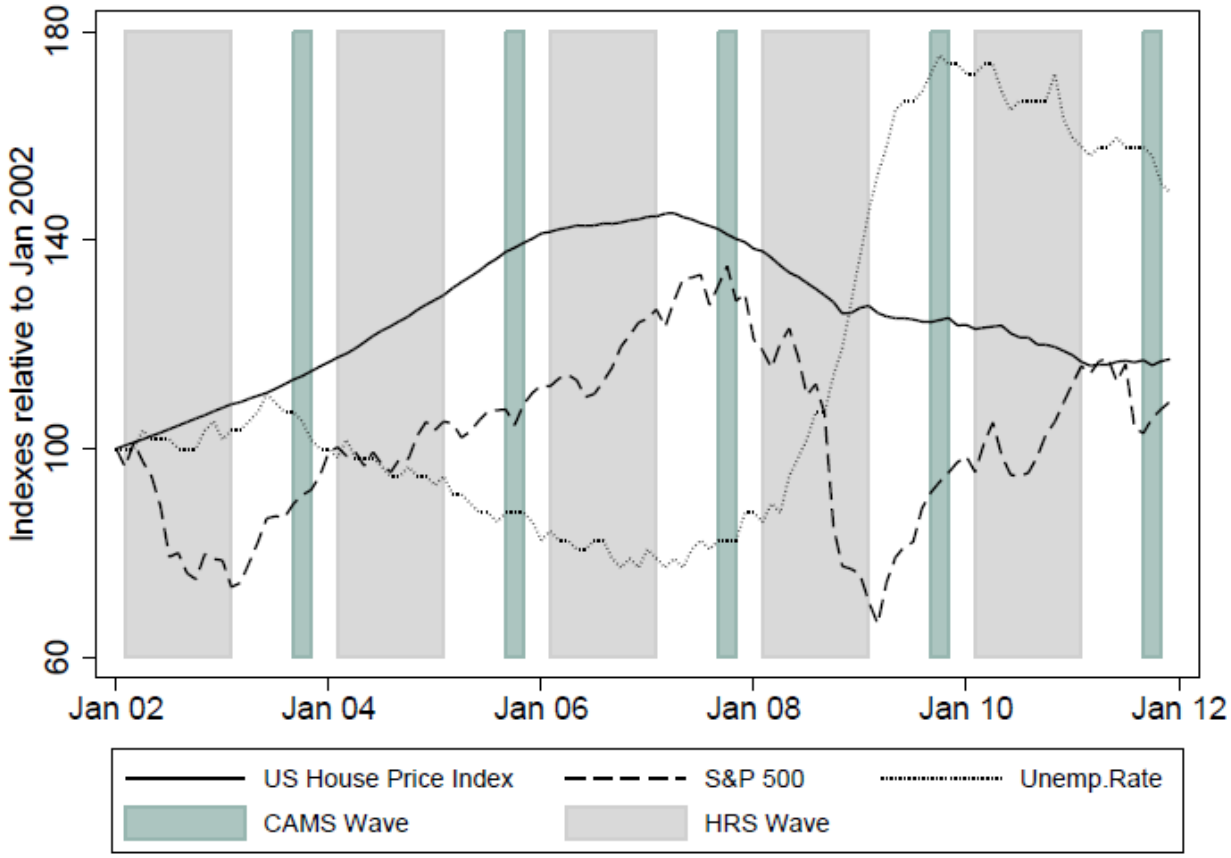
Indexes relative to Jan 2002
180
140
100
60
Jan 02
Jan 04
Jan 06
Jan 08
Jan 10
Jan 12
US House Price Index
S&P 500
Unemp.Rate
CAMS Wave
HRS Wave

Figure 4: Labor force status at age 51-56

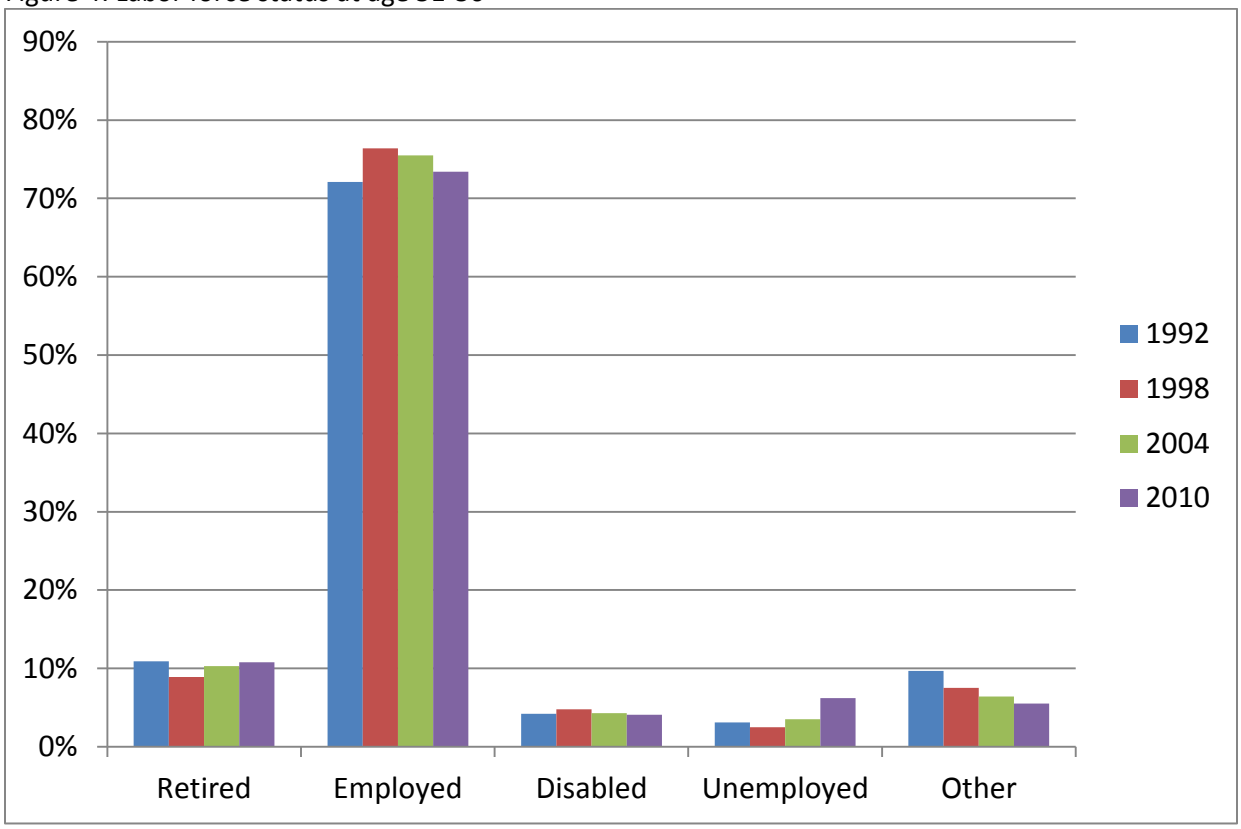

Figure 5: Pension coverage and plan type, conditional on working

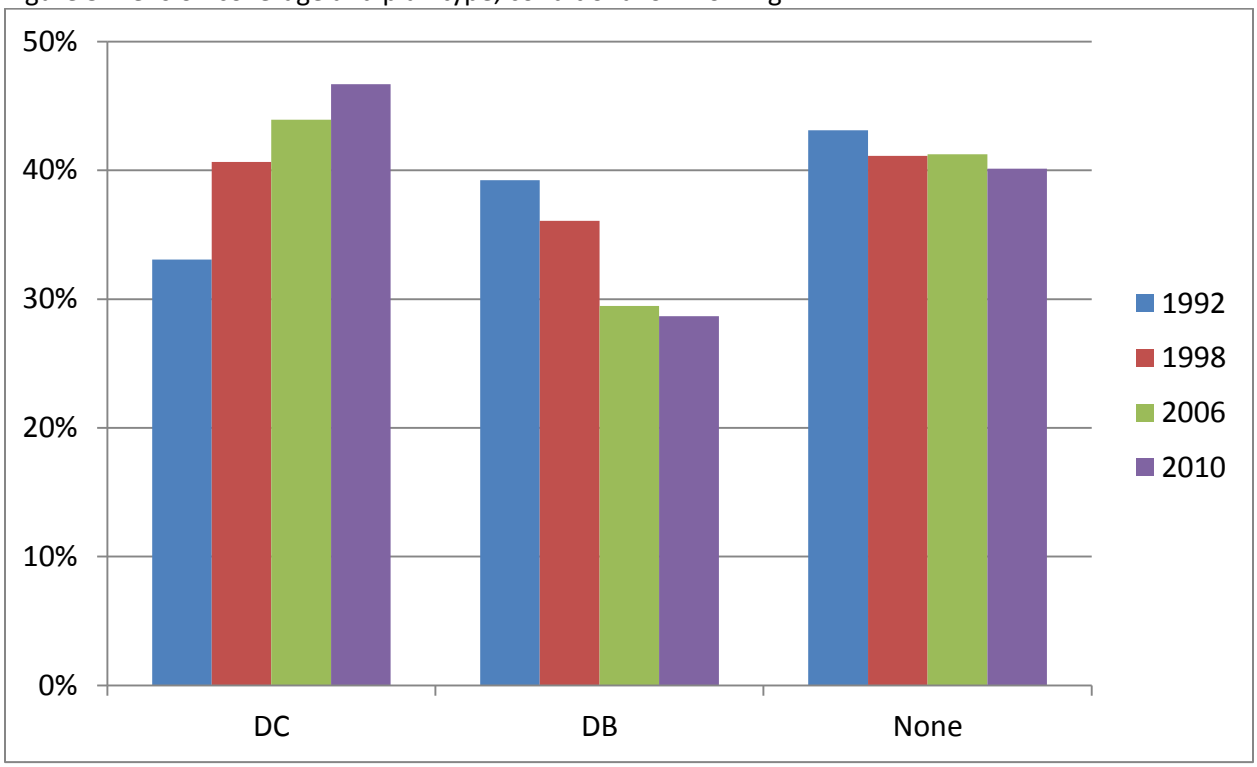

Figure 6: Pension plan allows LSD, conditional on work & pension on job

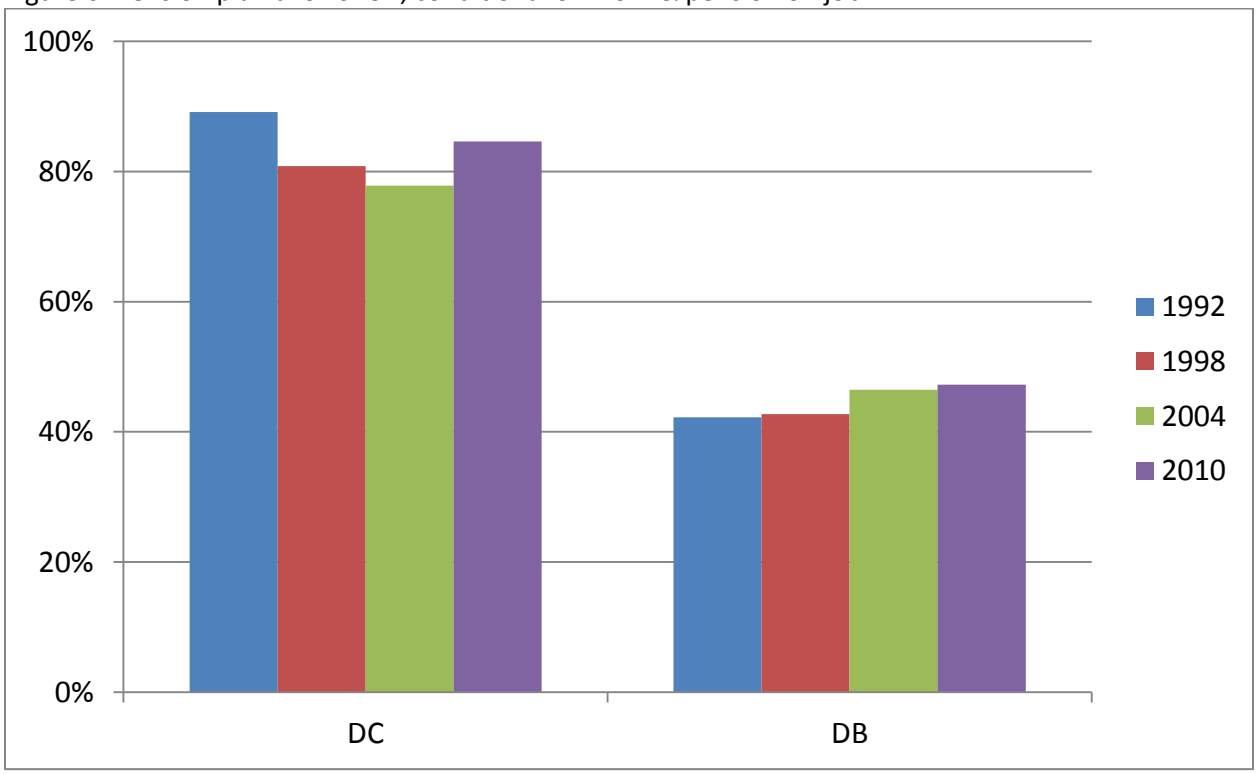

Figure 7: Age at time of cash-out

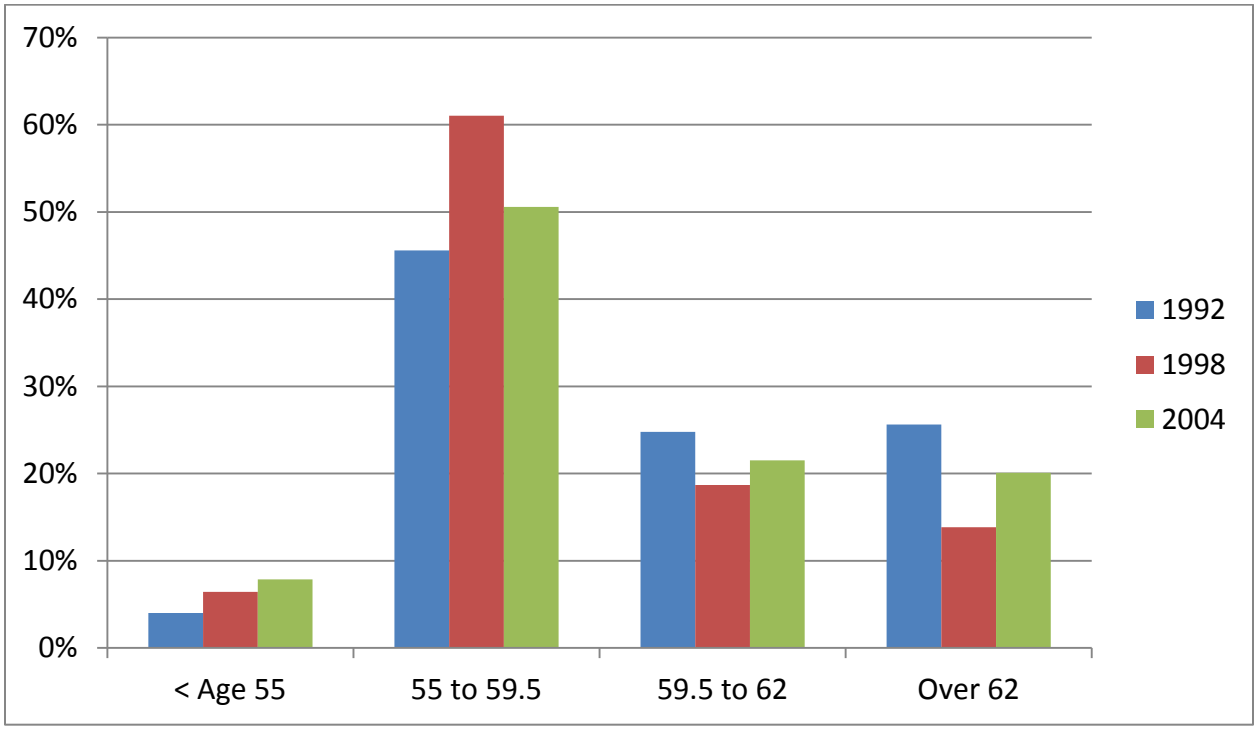

Figure 8: Labor Force Status after Job Separation

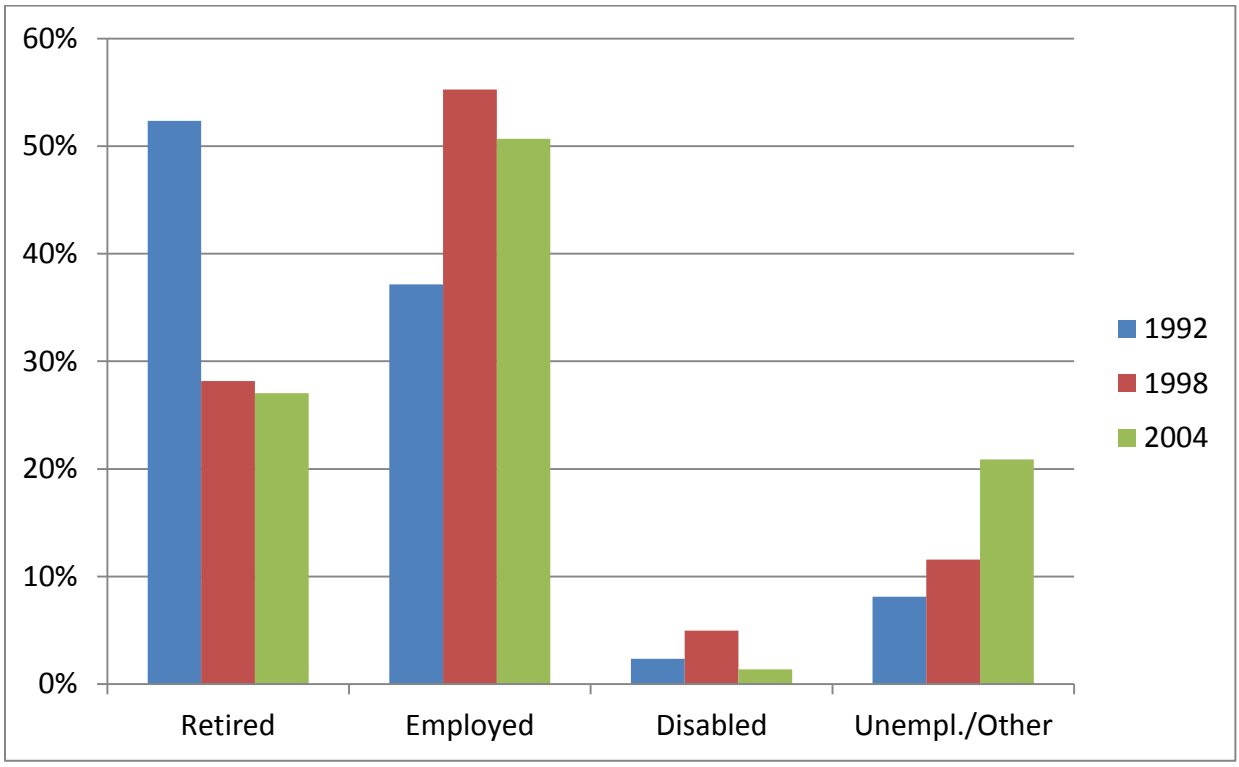

Figure 9: Reason for job separation among DC cash-outs

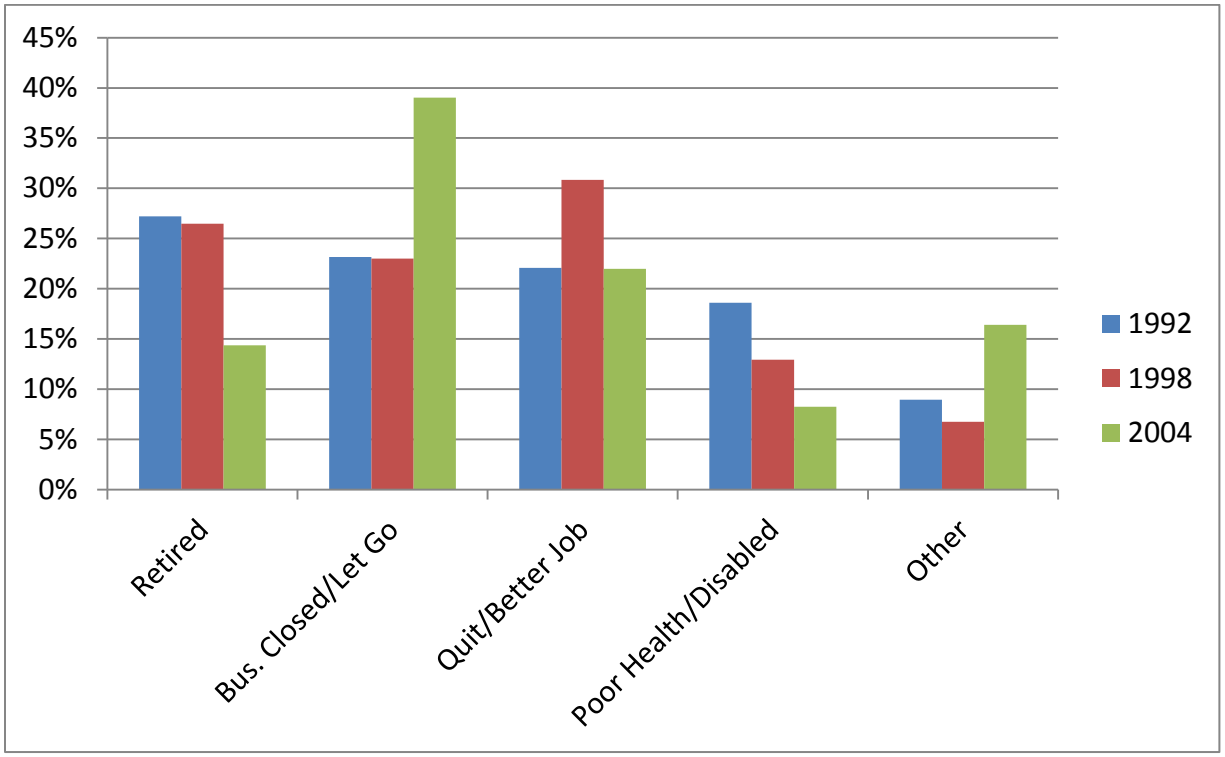

Figure 10: Reason for job separation among DB cash-outs

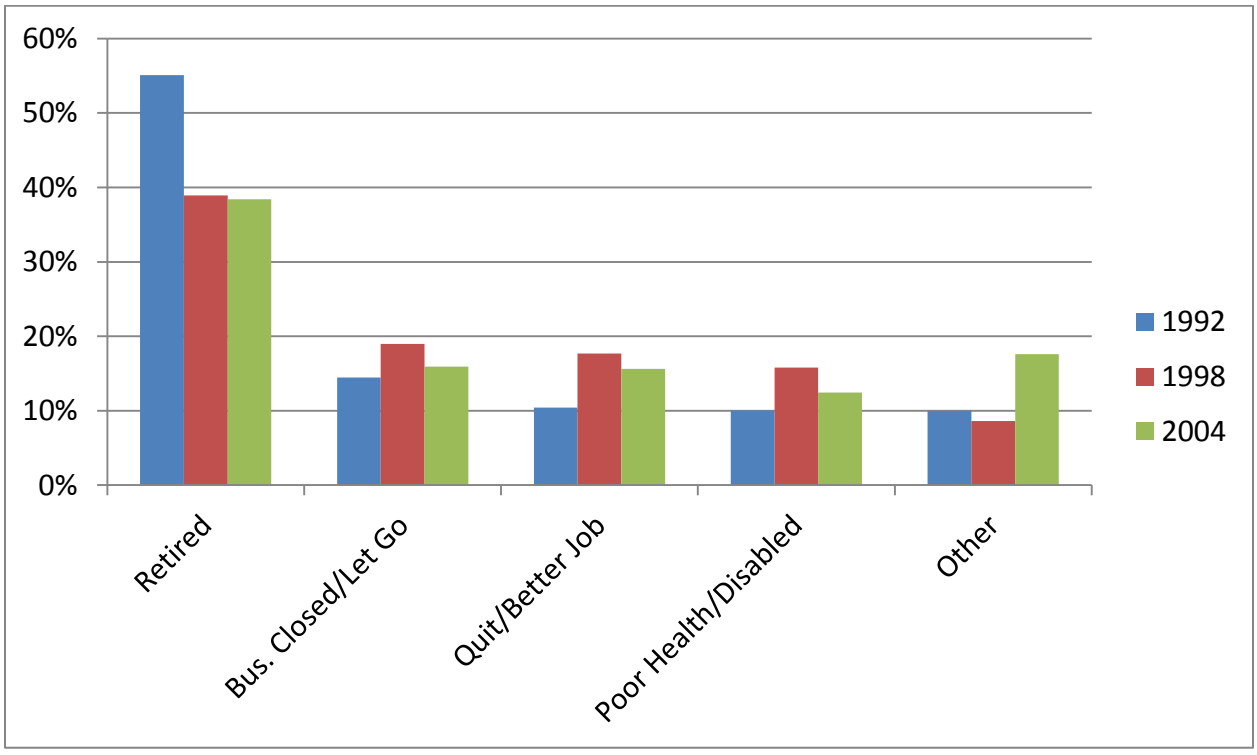

Table 1. Sample sizes of four groups used in analyses

		Sample Size			
	Initial year observed in HRS	Age 51-56	Age 51-56 and Working	Age 51-56 and Working with Pension Coverage	Age 51-56 and Working with Pension Coverage allowing LSD Option
Group 1	1992	5,355	3,871	2,161	1,396
Group 2	1998	3,209	2,402	1,401	878
Group 3	2004	3,322	2,477	1,417	908
Group 4	2010	4,690	3,172	1,688	1,144

Table 2. Number of persons with job separations over eight years

Cohort	ALL # individuals with one or more job separations	# individuals with any separations from a job with a pension plan	# individuals with any separations from a job with a pension and cash-out option
1992	2,067	1,204	731
1998	1,386	901	567
2004	1,319	738	528

Separation counts are larger for 1992 because the HRS cohort was larger.

Table 3. Job separations among those with a pension: number and % by plan type

	Any DC		Any DB	
Cohort	% with DC	N with DC	% with DB	N with DB
1992	44.8%	637	67.9%	956
1998	57.4%	614	62.5%	642
2004	70.1%	591	46.6%	400

Table 4. Pension disposition of DC plans at job separation, by cohort (over 8 years each)

	Cohort		
	1992	**1998**	**2004**
Cashed Out	13.6%	19.0%	24.0%
Rolled over into IRA	35.1%	31.6%	40.8%
Annuitized	2.4%	2.5%	2.6%
Left with Employer	41.5%	45.6%	32.7%
Transferred to New Employer	0.0%	2.4%	2.8%
Lost	0.3%	1.3%	3.9%
Other	9.3%	5.6%	3.2%

Note: Not conditioned on cash-out option being available, weighted.

Table 4a. Cohort comparison: pension disposition of DC plans at job separation (over 8 years), conditioned on availability of lump-sum distribution option

	1992	**1998**	**2004**
Cashed Out	18.9%	26.7%	29.1%
Rolled over into IRA	49.0%	44.5%	49.5%
Annuitized	3.3%	3.5%	3.2%
Left with Employer	26.0%	29.3%	21.9%
Transferred to New Employer	0.0%	2.2%	2.0%
Lost	0.0%	0.2%	3.2%
Other	5.7%	4.3%	2.3%

Note: All Percentages are weighted, categories are not mutually exclusive. Conditioned on cash-out option being available.

Table 5. Cohort comparison: pension disposition of DB plans at job separation (over 8 years)

	1992	1998	2004
Cashed Out	12.5%	12.0%	18.0%
Rolled over into IRA	8.1%	11.2%	20.6%
Annuitized	0.0%	0.0%	0.0%
Expecting Benefits	29.3%	28.8%	28.7%
Drawing Benefits	57.3%	52.6%	36.4%
Lost	2.7%	1.9%	2.9%
Other	2.2%	3.8%	3.2%

Note: Not conditioned on cash-out option being available, weighted.

Table 5a. Cohort comparison: pension disposition of DB plans at job separation (over 8 years), conditioned on availability of Lump-Sum Distribution Option

	1992	1998	2004
Cashed Out	37.7%	29.2%	29.3%
Rolled over into IRA	24.5%	27.3%	33.6%
Annuitized	0.0%	0.0%	0.0%
Expecting Benefits	19.2%	16.7%	21.7%
Drawing Benefits	45.0%	43.3%	24.5%
Lost	0.5%	0.4%	3.6%
Other	1.5%	3.7%	2.8%

Note: All percentages are weighted, categories are not mutually exclusive. Conditioned on cash-out option being available.

Table 6. Uses of cash-out funds by those with a DB plan

	1992	1998	2004
Spent	24.8%	21.9%	31.0%
Saved	55.9%	55.7%	29.2%
Debt	19.3%	18.6%	38.3%
Durables	0.0%	3.7%	1.5%

Note: All percentages are weighted.

Table 7. Among those separating with a pension, the percent that cashed out, by precipitating events

Shock at (or around time of) job separation	Fraction cashed out (%)
Lost Health Insurance	36.2
Got Divorced	20.7
Became Widowed	19.5
Became Work-Limited	22.1
Health Worsens	19.4
Became Poor Health	26.5
Fell Behind on Mortgage	54.6
Any Mortgage Issues	47.2

Table 8. Probit Coefficients Predicting Cash-out of Pension Plan among Separations from Jobs with Pension Coverage with Lump-Sum Option

	Dependent variable				
	DB or DC Cash-out	DC Cash-out			
	(0)	(1)	(2)	(3)	(4)
Age (continuous)	0.0102*	0.0218***	0.0214***	0.0368***	0.0370***
	(0.00546)	(0.00682)	(0.00702)	(0.00865)	(0.00887)
Group 2	0.0101	0.0721	0.0615	0.201**	0.184**
	(0.0661)	(0.0839)	(0.0877)	(0.0886)	(0.0932)
Group 3	0.0575	0.122	0.102	**Dropped**	**Dropped**
	(0.0712)	(0.0896)	(0.0918)		
Unemployment Rate (1-100)	0.0619***	0.0374**	0.0454**	0.0469*	0.0570**
	(0.0143)	(0.0184)	(0.0187)	(0.0253)	(0.0256)
Male	-0.0309	-0.0521	0.00166	-0.0821	-0.0200
	(0.0474)	(0.0604)	(0.0618)	(0.0688)	(0.0715)
Black	0.226***	0.245***	0.275***	0.151	0.180*
	(0.0705)	(0.0881)	(0.0888)	(0.107)	(0.107)
Less than High School	0.0995	0.200**	0.190*	0.279***	0.285***
	(0.0821)	(0.0971)	(0.0993)	(0.0998)	(0.101)
More than High School	-0.119**	-0.191***	-0.159**	-0.209***	-0.169**
	(0.0520)	(0.0661)	(0.0672)	(0.0758)	(0.0773)
Log(Total HH Wealth[a])	-0.0477***	-0.131***	-0.101***	-0.141***	-0.100***
	(0.0157)	(0.0217)	(0.0217)	(0.0265)	(0.0258)
Subjective Prob(Survive to 85)=0	-0.0951	-0.119	-0.148	-0.0494	-0.0585
	(0.114)	(0.140)	(0.136)	(0.142)	(0.138)
Few Months Planning Horizon	0.0589	0.165*	0.124	0.242**	0.203*
	(0.0789)	(0.0949)	(0.0968)	(0.103)	(0.104)
Five Years or More Planning Horizon	-0.0191	-0.0407	-0.0513	-0.124*	-0.115
	(0.0498)	(0.0648)	(0.0659)	(0.0741)	(0.0761)
Health (increasing in healthiness, 1-5 scale)	-0.0392	-0.0713**	-0.0662**	-0.0630*	-0.0535
	(0.0240)	(0.0299)	(0.0304)	(0.0345)	(0.0349)
Any Health Insurance	-0.271***	-0.376***	-0.331***	-0.377***	-0.307**
	(0.0875)	(0.104)	(0.106)	(0.125)	(0.125)
Disabled	-0.319*	-0.0814	-0.0414	0.00375	0.0638
	(0.192)	(0.228)	(0.234)	(0.242)	(0.237)
Working	-0.0193	0.0981	0.0429	0.116	0.0589
	(0.0513)	(0.0654)	(0.0672)	(0.0753)	(0.0788)
DC Plan Value			-0.136***		-0.152***
			(0.0224)		(0.0245)
Missing DC Plan Value			-1.445***		-1.713***
			(0.237)		(0.257)
Observations	4,910	3,802	3,802	2,890	2,890

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

[a] Wealth includes net values of primary residence, secondary residence, other real estate, business, stocks and investment funds, bonds, bank accounts, and other savings.

[a]For components of wealth, see note to Table 7.

[b]Includes income from individual earnings, household capital, employer pension or annuity, public pension (including Social Security), Supplemental Security Income, unemployment or workers compensation benefits, and other government transfers.

[c]Includes overall health status, changes in it, whether health limits ability to work, difficulties in activities of daily living, and health behaviors (smoking, drinking, exercise), among other variables.

Table 9. Mortality among 1992 workers

	% Dead by 2012
Never Separated	24.9%
Ever Separated	15.9%
Ever Separated with Cash-out	19.3%

Table 10. Labor force status in 2012

	Alive in 2012 and Had Ever Worked with Pension Coverage
Retired	2,443
Working	855
Disabled	2
Unemployed	44
Other	17

Table 11. Economic measures in 1992 and 2012 conditional on survival to 2012

Retirees in 2012				
1992 Measures for those Retired in 2012	**Log(Wealth[a])**	**Household Income[b]**	**Health[c]**	**Pension Income**
Never Separated	11.42721	70313.67	3.828536	602.5271
Ever Separated	11.23839	69276.99	3.840183	413.0793
Ever Separated with Cash-out	10.78382	53130.08	3.466667	245.3238
2012 Measures for those Retired in 2012	**Log(Wealth)**	**Household Income**	**Health**	**Pension Income**
Never Separated	11.43324	32664.85	3.157866	3373.633
Ever Separated	11.38194	33853.29	3.109804	2410.175
Ever Separated with Cash-out	9.94281	23616.5	2.867257	338.8938
Workers in 2012				
1992 Measures for those Working in 2012	**Log(Wealth)**	**Household Income**	**Health**	**Pension Income**
Never Separated	11.13573	72398.88	3.826681	718.173
Ever Separated	11.4942	72376.26	3.877332	503.7278
Ever Separated with Cash-out	10.98416	59599.71	3.73176	655.3736
2012 Measures for those Working in 2012	**Log(Wealth)**	**Household Income**	**Health**	**Pension Income**
Never Separated	11.65441	78795.01	3.638356	1437.549
Ever Separated	11.75603	55235.64	3.632708	3338.716
Ever Separated with Cash-out	10.94464	45021.87	3.491379	1338.957

Table 12 Long-Term Outcomes based on 1992 Availability of LSD Option

	LSD Option in 1992		
	No	**Yes**	
Counts	1,362	2,178	
Fraction Alive in 2012	80.4%	81.8%	
Conditional on being Alive in 2012			
Any Non-Retirement Separation by 2012	27.3%	31.0%	Significant at 10% Level
Any Retirement Separation by 2012	92.5%	90.3%	Significant at 10% Level
Both Non-Retirement and Retirement separations	24.1%	25.7%	Not significant
Any Cash-out	10.7%	15.7%	Significant at 0.1% Level
Wealth in 2012	322,385	543,775	Significant at 0.1% Level
Pension Income in 2012	4,076	3,031	Significant at 5% Level
Household Income in 2012	33,920	44,843	Significant at 1% Level

Sample: 51-61 1992 HRS Cohort, Working in a Job with Pension Coverage