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ABSTRACT

This paper studies the impact of broad changes in the economic and financial environment on the savings rate and portfolio composition of individuals in different age groups and household types. Employing survey data, household savings are cumulated as increases in net transactable wealth observed across three benchmark dates: January-February 1962, the first half of 1970, and August-September, 1977. This paper describes how savings rates and the allocation of accumulated savings across different financial and real-estate assets varied with household circumstances. A sharp turnaround is observed between the 1960s and 1970s in the profiles of saving and homeownership for younger and older households.

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MICROECONOMIC EVIDENCE ON THE COMPOSITION OF EFFECTIVE HOUSEHOLD SAVINGS DURING THE 1960s AND 1970s

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Employing survey data on consumer balance sheets, this chapter describes mean differences in effective savings rates and in the allocation of accumulated savings across financial and real-estate assets for households in different demographic circumstances. Adopting a balance-sheet perspective, effective saving is defined as the net increase between survey dates in the amount of wealth a household holds in the particular assets and liabilities for which survey data are collected. Effective saving is an ex post and data-determined concept. It differs from anticipated saving not only because of income and expenditure surprises, but also by the amount of the unanticipated capital gain or loss that accrues on a respondent's overall portfolio position. In that it includes the effect of revaluations of existing assets, it differs also from the concept of ex post saving that is embodied in the national income and product accounts.[1]

Three surveys conducted by the Survey Research Center (SRC) of the University of Michigan serve as our principal source of data. Because survey instruments did not regularly include questions about the value of pension claims, claims against insurance reserves, and tangible assets other than real estate, these assets are neglected in our study. To assign a name to the wealth concept that corresponds to the net-worth account of these truncated survey balance sheets, we introduce the term "net transactable wealth."

In this paper, household savings are cumulated as increases in net transactable wealth observed across three benchmark dates: January-February 1962, the

first half of 1970, and August-September 1977. These time intervals are chosen because in each of them the SRC conducted a comprehensive national survey of household balance sheets. Because data were collected from over 2,000 households in each instance, the samples are large enough to support some analysis of cross-classified data.

Our goal is to develop and to interpret data on cross-sectional differences in wealth trajectories through time. Our unifying hypothesis is that changes in the economic and financial environment seldom lead individuals in different demographic circumstances to effect parallel adjustments either in their saving rate or in the composition of their equilibrium portfolios. This hypothesis implies that class-level differences in the rate of wealth accumulation reflect returns from active portfolio management as well as the passive realignment of portfolio shares occasioned by unpredictable fluctuations in the prices of individual assets. We strive to show that, over 1962-1977, wealth redistribution had an active as well as a passive dimension.

Our analysis can be likened to examining the slopes of line segments drawn triangularly through three data points. For most partitions of survey respondents, we concern ourselves mainly with differences in the orientations of the 1962-70 and 1970-77 legs of the triangle. However, for specified age cohorts, we look also at data covering the longer 1962-1977 segment.

A PRELIMINARY LOOK AT THE DATA

Although the 1962 and 1970 Surveys of Consumer Finances record holdings to the nearest dollar (i.e., asked respondents for point estimates), most of the balance-sheet data collected in the 1977 Consumer Credit Survey sponsored by the Federal Reserve Board are in interval form. To aggregate 1977 observations across asset

classes to estimate an individual household's transactable wealth, it is first necessary to convert the interval estimates into point estimates. Detailed aggregation procedures, which draw on mean values recorded for various asset-holding intervals in the 1962 and 1970 surveys, are explained in Shumay and Kane (1983).

Because the accuracy and representativeness of survey data are always in doubt, a responsible researcher must endeavor as far as possible to collate survey measurements with comparable figures from other data sets. Reported percentage allocations of consolidated transactable wealth to financial assets and real-estate equity differ greatly between SRC surveys of households and institutionally derived Federal Reserve Flow of Funds (FOF) data. Averaged across survey years, SRC portfolio weights for financial assets are roughly 3/8. This is just over one-half of their average weight in FOF data. For real-estate equity, the situation is reversed: SRC weights range between 60 and 65 percent, while FOF weights vary between 25 and 35 percent. These discrepancies have many sources. First, in sample surveys, respondents have both a tendency to forget and an understandable reluctance to disclose sensitive economic information. This leads respondents to misreport (and on average to underreport) their positions in various financial assets (Ferber, Forsythe, Guthrie, and Maynes 1969a and 1969b; Goldsmith 1982). Shumay and Kane (1983) describe the error-detection and error-correction procedures to which the 1962, the 1970, and particularly the 1977 data sets were subjected. Answers to straightforward questions of fact such as whether a household is a homeowner or has mortgage debt should be more reliable than value estimates. In an interview situation, a household that owns a wide variety of stocks and bonds may easily overlook its position in particular securities. Second, valuation skills may differ across respondents, especially for real-estate assets. Third, valuation principles,

intrayear timing, and reporting categories differ between the SRC and Flow of Funds accounts. In the Flow of Funds accounts, the household sector includes personal trusts and nonprofit organizations, and a category of miscellaneous assets exists. A fourth complication is that the interviewing unit in SRC surveys shifted after 1964 from the "spending unit" to the "family unit."

In view of these discrepancies, the purpose of this paper is not to produce unbiased estimates of consolidated balance sheets for the household sector as a whole. Rather, it is to examine differences in saving and portfolio behavior across households partitioned by age and family composition. To assess the representativeness of SRC samples and of our aggregation procedures vis-a-vis patterns of incremental wealth accumulation, Table 9-1 compares cumulative movements

Place Table 9-1 near here

shown for the pooled cross-section sample between survey dates with time-series changes reported in FOF data covering approximately the same intervals. SRC and FOF estimates of cumulative growth rates for deposits and savings bonds and for owner-occupied real estate are similar in both periods, but especially for 1962-1970 other categories diverge considerably. In part this is because, in an effort to compensate for the greater nonreporting of financial information by high-income households, SRC surveys oversample high-income households (Katona, Mandell, and Schmiedescamp, 1971:3-4; Durkin and Elliehausen, 1978: 97-99). Measured against Census data, the concentration on high-income households increased from the 1970 to 1977 survey. In Table 9-1, the divergences are greatest for assets favored by wealthy households: for corporate equities, for marketable bonds (where, by recording increases in par values without respect to ongoing price depreciation, SRC surveys seriously overstate value growth in an era of rising interest rates), and

for the category of investment real estate (which has no strict counterpart in the Flow of Funds accounts). In addition, these same assets bulk large in the portfolios of personal trusts and nonprofit organizations. Goldsmith reports that nonprofit organizations greatly reduced the weight of bonds and stocks in their portfolios between 1964 and 1975. Except for corporate equities, the alternative estimates of cumulative growth in net transactable wealth prove closer for the 1970-77 period (which makes use of the same concept of interviewing unit at both end dates) than for 1962-70.

For equity in homes, it proved impossible to maintain complete comparability between 1977 and earlier survey data. First, fully 6.6 percent of 1977 respondent households reported themselves as homeowners without revealing either the value of their home or information about the terms of their mortgage. Second, unlike the 1962 and 1970 survey instruments, the 1977 questionnaire did not ask for the value of outstanding mortgage debt. Fortunately, in all but 57 cases (2.2 percent of sample respondents and 5.2 percent of the 1,099 mortgagors in the sample), it proved possible to estimate the book value of mortgage debt from information concerning the terms of the mortgage. In the sample analyzed in this study, the homeownership rate falls short of the 64.8 percent Census estimate for 1977 reported by Carliner (1982), even though the unedited survey sample showed a homeownership rate of 68.9 percent. Moreover, the deletion bias does not fall uniformly across various demographic partitions. In particular, because families that have undergone some form of breakup or have occupied a home for a long time are more likely to fail to report the value of their home as well as to forget relevant information or to report inconsistent mortgage terms, the cases deleted include a disproportionately large number of older mortgagors. The edited sample's lack of representativeness can be assessed from Table 9-2, which compares

Place Table 9-2 near here

homeownership rates in our 1977 sample with two-age class partitions published in Carliner (1982). Data presented in Table 9-9 show that the percentage of deleted homeowners increases steadily with the age of a household's head.

FACTORS DIFFERENTIALLY AFFECTING HOUSEHOLD SAVINGS PATTERNS IN THE 1960s AND 1970s

Modern theories of consumption emphasize that, for a representative household, savings behavior differs as it moves through the life cycle. Life-cycle theories of saving (Modigliani and Brumberg 1954; Ando and Modigliani 1963) hold that, over its lifetime, a household accumulates and decumulates wealth to smooth the timestream of its consumption expenditures by offsetting the effects of anticipated and unanticipated variation in income receipts and in spending goals. Spending goals include predictable and partly controllable bulges in expenditure, such as those occasioned by retirement, college expenses, vacations, and downpayments on big-ticket items such as cars and houses. They also include provisions for bequests and unpredictable (and often uncontrollable) bulges in expenditure such as for household repairs and health emergencies. If it could ignore complications due to uncertainty about the age of death, this theory would predict that, as a household approached the end of its expected life span, it would plan to decumulate wealth to the level of intended bequests.

Because differences in implicit and explicit transactions charges and in securities' minimum denominations affect the liquidity of various assets, the existence of a life cycle in saving patterns suggests the likelihood of a corresponding life cycle in patterns of asset holding. In this second life cycle, we may expect differences in age-class transactions costs, tax structure, and portfolio risks to play an important role. Historically, securities dealers and brokers have priced

their services in ways that discourage small individual trades: imposing odd-lot fees, transactions minima, and per-trade charges. Calculated as a percentage of the value of a trade, explicit transactions charges fall as the dollar amount increases. Although we may presume that this schedule of charges mirrors underlying broker costs, it predisposes financial investments by low-wealth households toward small-denomination retail assets such as deposits and U.S. savings bonds. At the same time, households must worry about the exposure of their accumulated wealth to implicit and explicit taxation and to various kinds of risk. Differential changes between survey dates in age-class transactions costs, tax structure, and portfolio risk-return loci should lead to a change in the equilibrium composition of age-class portfolios. For convenience, we may call this the portfolio-churning hypotheses.

Of course, the distribution of wealth across age classes may change without active churning of household balance sheets. Passive churning occurs when the prices of assets held to a disproportionate extent by particular age classes appreciate or depreciate faster than the prices of other assets. Over any interest-rate cycle, passive churning occurs because the assets favored by low-wealth households (checking accounts and passbook savings accounts) are fixed in value, while the value of highly wealth-elastic assets such as stocks, bonds, and real estate fluctuate with market forces. As Table 9-3 shows, between the 1962 and 1970

Place Table 9-3 about here

survey dates, savings accounts and U.S. Treasury bills both returned about 12.5 percent after inflation while common stock and single-family homes both appreciated 28 percent. However, in the 1970-1977 period, while liquid investments in Treasury bills held their real value only slightly better than savings accounts did, stocks and bonds appreciated at greatly divergent rates. As stock prices rose less

than 8 percent, the value of single-family homes increased 85.4 percent. Even ignoring the implicit or shelter services a house provides, over 1970-77 housing investments far outperformed financial assets.

Real-estate and stock prices move in response to private economic forces such as exogenous movements in construction costs, to demographic pressures, and to government taxes and subsidies. In particular, much of the active and passive churning observed in the 1960s and 1970s was driven by the interaction of unanticipatedly accelerating inflation with the inherited structure of deposit-rate ceilings, deposit insurance, federal income taxes, and housing subsidies. Households also responded to changes in taxes and regulations that, after a lag, authorities made to adapt taxes and regulatory policies to ongoing inflation.

For households, the federal income tax is nonneutral with respect to inflation in two principal ways. First, capital-gains taxes (though set typically at only a fraction of tax rates on ordinary income) are levied even when purely nominal price increases are realized in the sale of physical assets. Second, federal taxes are levied progressively on nominal incomes. For both reasons, inflation tends over time to push given levels of real personal income into potentially higher and higher tax brackets. Bracket drift simultaneously puts pressure on Congress to lower statutory tax rates and raises the incentive for households to engage in tax-avoidance activity. Estimates of average marginal tax rates on personal income show a small upward drift between survey dates (Barro and Sahasakul 1983). Moreover, the changing structure of tax rates, particularly on explicit capital income as documented by Estrella and Fuhrer (1983), ought to have affected various types of households differently.

During 1970-77, effective tax rates on capital gains were increased in several ways. First, over 1970-1972, the maximum tax rate on long-term capital gains was

increased in three steps to 35 percent. However, until 1978, the tax rate on the first $50,000 of an individual's capital gains was capped at 25 percent. Second, the holding period necessary to qualify a capital asset for preferential long-term capital-gains treatment was raised from six months to nine months in 1977 and to one year in 1978. Third, beginning in 1970, net long-term capital losses of $1000 or less could no longer be deducted in full against ordinary income. Henceforth, only 50 percent of these losses could be deducted, again up to a maximum deduction of $1000 (now $3000) in any tax year.

It is widely believed that, because service returns and capital gains from investments in owner-occupied housing continued to be treated preferentially throughout the 1970s, unanticipated increases in inflation and inflation risk tended to raise the price of owner-occupied homes relative to stock prices (DeLeeuw and Ozanne 1979; Summers 1981; Hendershott and Hu 1983).[2] Tax preferences accorded owner-occupied housing include nontaxation of the value of the services provided by an owner-occupied home, the capacity for repeated deferrals of capital gains due on changes in residence, and a once-in-a-lifetime forgiveness of some of the capital-gains taxes that would otherwise be due on the sale of a principal residence once the seller has attained a designated age. Before July 26, 1978, gains on the sale of a principal residence with an adjusted sales price of $35,000 or less were not taxable for sellers who were 65 or older and who had occupied the residence for five of the eight years preceding the sale. In cases where the adjusted sales price exceeded $35,000, sellers who met the age and occupancy tests could still exclude a portion of the gain from taxation. In 1978, the critical age was lowered to 55, the occupancy rule shortened to three of five years, and the excludable amount raised to $100,000. (While not strictly indexed with inflation,

the maximum exclusion has since been raised to $125,000.) Although the alteration in the capital-gains tax forgiveness on sales of homes occurred after the 1977 survey date, it would not have found a place on the legislative agenda unless households who were in or approaching the 55-64 age range were fighting for it politically during the preceding years. The cost of mobilizing political resources to extract a new tax advantage suggests that, during the 1970s, many so-called "empty nest" households must have been contemplating the sale of what had become in terms of its size or implied burden of school taxes an inappropriate house.

It should be clear that the value of the in-kind services a house performs for its occupants varies with the composition of the household residing in it. Because these services are not taxed for owner-occupants, changes in the structure of explicit taxes differentially affect implicit rates of return on rental and owner-occupied types of housing.

Leveraged investments in housing financed with regulatorily subsidized fixed-rate mortgages benefited additionally from unanticipated inflation. Unanticipated inflation lowers the real burden of fixed-rate mortgage debt (see Hendershott and Hu 1981). With returns on financial instruments distorted by deposit-rate ceilings and multiple regulatory subsidization of homeownership and home financing (see Kane 1981), no other easily available financial transaction offered established or growing households of low or average wealth as high an anticipated real after-tax rate of return or as favorable a hedge against unanticipated inflation.

Extended to savings-and-loan associations in 1966, ceilings on nominal interest rates payable on deposits discriminated against low-wealth households. Regulators selectively relaxed these ceilings in the 1970s by tying differences in ceiling rates on certificate accounts to differences in maturity and minimum denominations. This helped deposit institutions to discriminate more effectively between interest-sensitive and interest-insensitive low-wealth customers. As

Table 9-3 shows, this discrimination pushed inflation-adjusted explicit returns in the 1970s on savings accounts below those on Treasury bills and left them sharply negative for passbook savings.

Opportunities to counterbalance the negative real after-tax rates of explicit returns on deposit assets differed with the level of household wealth. For wealthy households, they differed also between the 1960s and 1970s. In either era, wealthy households could better extract a compensating stream of implicit returns from deposit institutions and move wealth more efficiently into stocks and bonds. Transactions costs and the risks of being underdiversified made these avenues less feasible for low-wealth households. Similarly, when money-market mutual funds (whose rate of growth first surged in 1974) and the variety of high-rate certificate-of-deposit (CD) accounts expanded in the 1970s, financial-market opportunities improved for households of moderate and high wealth. But these changes did little for low-wealth investors. Hence, while wealthy households could reallocate their portfolios to escape most of the ex ante burden that anticipated inflation and deposit-rate regulation would otherwise place on them, throughout the period of observation, poor households were more tightly constrained. Two principal avenues of adjustment were open to low-wealth households: (1) to make highly leveraged investments in housing and durable goods, and (2) to cut back their overall rate of saving.

This study focuses on transactable and noncontractual savings, forms of household wealth that are not administered by outside parties such as insurance companies, pension funds, and the Social Security System. However, we must recognize that wealth accumulated in contractual arrangements should, as explained in Munnell (1981), condition a household's decisions about how to accumulate and to manage transactable wealth. Whatever life cycle in portfolio structure we observe must be interpreted in the light of the lifetime pattern of simultaneous and

partly exogenous growth in the risk-adjusted present value of households' pension-fund and social-security claims.[3] In 1972, the decision to increase real social-security benefits and to double-index them to an upwardly biased consumer price index may be interpreted as a governmental redistribution of wealth from younger to older households. This redistribution, which also reduced older households' exposure to inflation risk, might have altered each group's need for transactable saving.

FOCAL HYPOTHESES CONCERNING DIFFERENTIAL SAVINGS BEHAVIOR

We hypothesize that a household's effective saving rate over any period varies with its place in the life cycle, its size, and the marital status of its head. We further hypothesize that, as the economic and financial environment changes, class-level saving rates and portfolio structures vary actively as well as passively. Passively, any class of households tends to gain or lose wealth relative to other classes whenever assets in which that class historically maintains a disproportionately large position experience an unanticipated increase or decrease in value. This hypothesis implies that on average windfall gains and losses on particular assets impact saving as well as consumption. Asset revaluation is only partly offset by readjustments in the level and composition of new savings (Jianakoplos 1983). Actively, households in any class adapt their portfolios to differential movements in the net after-tax risk-adjusted real returns anticipated on different assets. Because anticipated returns were not observed for survey respondents, the institutional facts developed in the previous section are used along with the ex post returns listed in Table 9-3 as proxies for the set of information on which a rational respondent would have conditioned his or her rate-of-return forecasts. Particular

stress is placed on the roles played by three factors: differential changes in implicit returns on owner-occupied housing, the 1965 expansion of deposit-rate regulation and its subsequent decline in effectiveness, and the level of a household's wealth as a restraint on incentives to engage in disintermediation.

To examine what we may call the life-cycle, family-size, and marital-status hypotheses, we develop a series of statistical tables. The first two tables present evidence on differences in propensities to save and in patterns of real wealth accumulation. These tables are reported for every partition we examine. Other tables track differences in class-level positions in particular assets. These tables throw light on the extent to which active and passive portfolio churning may be observed at the class-level.

Although portfolio churning is examined in detail only for age classes, we compare summary distributions for all sample partitions of class-level positions in selected financial and real-estate assets with the percent of sample families in each class. These tables amount to a series of Lorenz curves for assets.

For age classes and age cohorts, various additional tables are developed. Two of these disaggregate percentage and dollar changes in class-level wealth across specific financial and real-estate opportunities. These tables support inferences about the allocation of new saving. A third table reports mean wealth and homeownership and mortgagor rates for each class. Finally, for age classes only, wealth-based Engels curves are estimated for four types of financial and real-estate investments. Differences in Engels-curve coefficients are tested both across survey dates and across age classes at each date. This analysis provides additional evidence on the extent of active and passive portfolio churning.

OBSERVED SHIFTS IN LIFE-CYCLE SAVINGS PATTERNS

Tables 9-4 through 9-9 compare households at identical stages of the life cycle across time. Table 9-4 focuses on mean savings in dollars and on ratios of real

(i.e., inflation-adjusted) saving to real income. The ratios reported in the table tend to overstate the magnitude of age-class average propensities to save because incomes reported by survey respondents tend to be understated. Survey responses are subject to deliberate underreporting and omit imputed income such as unrealized capital gains, the services of owner-occupied housing, and implicit interest received as subsidized accountholder services from deposit institutions.

This error in measurement tends to raise reported saving-to-income ratios for all groups. If we ignore possible differences in measurement errors across demographic classes, Table 9-4 indicates that, during the 1960s, households whose

Place Table 9-4 near here

heads were at least 55 years old saved a much larger percentage of their real incomes than younger persons did. Moreover, unless it reflects age-related reporting bias in 1977 home equity or unanticipated passive appreciation of existing portfolio holdings, the high rate of accumulation observed in the 1960s for households in the 65-and-over category is hard to reconcile with the life-cycle theory. But increased life-cycle decumulation by older households and the hypothesized redistributive impact of social-security indexing is consistent with the turnaround between the 1960s and the 1970s in effective patterns of life-cycle saving reported in the table. This pattern pivots like a mirror image around the breakpoint observed at age 55. Below this age, households increased their effective saving rates substantially during the 1970s. However, over the same period, older households greatly reduced their effective saving rates. Comparing 1972-73 with 1962 behavior in an income-expenditure data set, Lieberman and Wachtel (1980) report a similarly sharp decline in the savings rate of older households that predates the 1974 adjustment in social-security benefits.

Table 9-5 reports cumulative growth rates for mean nominal wealth and mean

Place Table 9-5 near here

real wealth. As explained in the note to the table, the cumulative rate of increase in real wealth is calculated from the ratio of mean end-date wealth to inflation-adjusted base-date wealth. The table provides further evidence that age-group wealth trajectories differed sharply between the two periods. During the 1960s, wealth accumulation by households whose heads were 55 and older greatly outpaced the savings growth achieved by younger households. In the 1970-77 period, the reverse proves true. Although two-thirds of the population of sample households were on balance net savers during the 1970s, these households were the youngest ones. Because the proportion of transactable wealth controlled by households in the designated age classes rises on average with the age of the household head, the pooled growth rate in real saving fell by almost two-thirds.

Table 9-6 shows mean dollar increments experienced in three broad components of net transactable wealth: retail financial assets (deposits and savings bonds), wholesale financial assets (stocks and bonds), and equity in real estate (i.e., value of real-estate assets less mortgage debt). To allow readers to unravel the

Place Table 9-6 near here

effect of mortgage leverage, an additional column describes the cumulative increase in the market value of real-estate assets. The table indicates that, for households above and below age 55, differential rates of wealth accumulation spread across portfolio categories during the 1970s, but (in keeping with the wealth constraint on opportunities for disintermediation) differences observed during the 1960s were dominated by differences in the flow of new savings into wholesale financial assets.

Table 9-7 illustrates the proportionate weight carried by real-estate invest-

Place Table 9-7 near here

ment as a vehicle of household wealth accumulation. Real-estate equity is defined as the difference between the market value of real-estate owned and the book

value of mortgage debt secured by these holdings.[4] This variable is dominated by equity in homes. For survey respondents in the 1960s and 1970s, real-estate equity carried roughly 60 percent of the overall increase in mean household wealth.

For each survey date, Table 9-8 shows the distribution across age classes of retail financial assets (deposits and savings bonds), wholesale financial assets (stocks and marketable bonds), real-estate equity, net transactable wealth, and the value of owner-occupied housing. This table presents something like a Lorenz curve

Place Table 9-8 near here

for age classes. It lets us see that the age structure of the population interacts with life-cycle patterns of asset accumulation to determine the share of national wealth controlled by a given age group. To assess the degree of wealth redistribution occurring across age classes between survey dates, it is useful to focus on changes in what we may call the control ratio: the percentage of net transactable wealth held per each one percent of respondents in a given age class. For this purpose, it is convenient to consolidate households into three age classes: under 35, 35 to 54, and 55 and older. In 1962, older households held the greatest percentage control of transactable wealth. Their control ratio stood at 1.44, as against 1.14 for middle-aged households and 0.34 for young ones. Between 1962 and 1970, and in keeping with the savings rates shown in Tables 9-4 and 9-5, older households improved their control ratio even further, to 1.73 as against declines to 0.95 and 0.23 for middle-aged and young households, respectively. However, the high saving rates maintained by young and middle-aged households during the 1970s improved their 1977 ratios. In 1977, the control ratios were 0.42, 1.28, and 1.26, respectively. If these changes were due only to passive portfolio churning, percentage control of component assets would not change at all. Contrary to the

temporal variation shown in the data underlying Table 9-8, control ratios for individual asset categories (e.g., for the value of homes) would have to remain constant over time.

Table 9-9 shows that at each survey date mean wealth, homeownership rates, and use of mortgage leveraging differed across age groups. For the first of these

Place Table 9-9 near here

variables, the table also reports the standard error of the mean. Even allowing for age-level differences in leverage, variation in the percentage of wealth allocated to leveraged investments in housing across age-group portfolios made passive opportunities to benefit from unanticipated inflation in 1962 lowest for very young households and highest for middle-aged ones. This table provides evidence that unanticipated returns on accumulated wealth cannot account fully for the turn-around in the age profile of effective savings performance during the 1970s. New saving by young households is suggested by their establishing a steadily higher percentage of homeownership. Even allowing for the bias in our estimates of age-class homeownership rates, the table suggests that during the 1970s, some empty-nest housing was bid away from households in the 55-and-over group.[5] Given young families' typically high use of leverage in their housing investments, their expanded homeownership rates repositioned them to realize portfolio gains from anticipated and unanticipated inflation.

TESTING FOR SHIFTS IN WEALTH-HOLDING PATTERNS

These data show that wealth-holding patterns differ both across age groups and across time. This section fits these patterns into a framework of optimal choice.

Modern portfolio theory portrays balance-sheet choices as allocating wealth in response to variation in the mean vector and covariance matrix of asset returns

(Friedman 1982). In this application, these choices should be conditioned by unobserved differences in the composition of an individual's holdings of nonmarketable assets such as pension claims and human capital (Mayers 1973). Taxes and transactions costs may (at least as an interpretive first approximation) both be presumed to vary with portfolio size. However, the means and covariances of asset returns (although not necessarily the marginal risks) should be the same for all households at each date. Hence, a particularly straightforward way to explain differences in asset-holding patterns is to estimate for every age group at each survey date a set of wealth-based Engels curves for the main components of transactable wealth. We interpret each curve as showing how the increment in wealth that a household desires to place in a particular portfolio component varies with the level of household wealth.

Using a quadratic approximation, Tables 9-10, 9-11, 9-12, and 9-13 report

Place Tables 9-10 through 9-13 near here

estimates of wealth-based Engels curves for retail financial assets, wholesale financial assets, home equity, and equity in investment real estate. Because reported portfolio positions in these assets never fall below zero, a Tobit limited-dependent-variable estimation procedure is employed. Respecting individual balance-sheet constraints, when the censored-regression equations for any age class are summed across the four portfolio opportunities, the wealth coefficients must sum to one, while the intercepts and wealth-squared terms must each sum to zero. Except for the 65-and-over group in 1977, mean wealth rises with age. The column labeled "wealth-squared coefficient times twice mean wealth" tells us how much the first derivative of the mean portfolio position with respect to wealth departs from the regression coefficient for wealth. The sum of this adjusted coefficient and the regression coefficient for wealth represents the marginal

proportion of mean wealth that allocated to the asset class in question. Although deviations between the marginal proportion and the wealth coefficient range up to 0.125 in magnitude, the median adjustment is less than 0.05.

The tables show that, across age groups and dates, portfolio positions in all four portfolio categories generally increase with household wealth. The major differences concern life-cycle differences in allocation patterns and the sensitivity of incremental allocation rates to the level of wealth. For most age groups, what we may call the marginal propensity to hold retail financial assets and real-estate equity decreases with wealth. On the other hand, the marginal propensity to hold wholesale financial assets increases with wealth.

Estimated differences in the wealth sensitivity of the various marginal propensities accord broadly with conventional wisdom about the role of transactions costs, minimum denominations, and difficulties in arranging credit as barriers to investment by low-wealth households in wholesale financial assets and investment real estate (Kane 1980). As compared to low-wealth households, high-wealth households should hold retail financial assets more for liquidity and diversification purposes than as vehicles for maximal accumulation of expected future wealth.

For retail financial assets, wholesale financial assets, and (to reduce the number of computer runs) the sum of the two kinds of equity in real-estate, formal tests were conducted of differences in coefficient estimates across age classes and across survey dates. These tests apply one-zero dummy variables for specific dates and age classes to all three parameters in the model. Because observations on the regressand are truncated in Tobit estimation, the distribution of the "t-statistics" developed may not be well-approximated by Student's t when the number of nonlimit observations is small.

Differences in Engels coefficients across time may be attributed to differences in the mean vector and covariance matrix of anticipated risk-adjusted after-tax returns on the component assets at different dates, to differences in the range of wealth observed, and to sampling error as well. Differences in coefficients across age groups reflect differences in life-cycle status, effective transactions costs, and range of wealth observed, as well as sampling error once again.

Coefficient Differences Across Age Groups

On a cross-section basis, we are interested at each survey date in the significance of differences in coefficient estimates across age classes. If significant differences did not exist, studying age-class Engels curves for assets would have no statistical justification.

Although to save space the detailed results are not reported here, we used slope and intercept dummy variables to test the significance of differences between coefficient estimates for every age-class pair. For all equations, in both 1962 and 1977, significant differences prove to be the rule rather than the exception. On average in these years, two-thirds of the slope coefficients and 40 percent of the intercepts differ significantly from the corresponding estimates for other classes. In 1970, only about one-fifth of the coefficient pairs differ significantly, with significant differences particularly rare in the equation for real-estate equity. We interpret the similarity of coefficient pairs in 1970 as evidence that wealth-related constraints on a household's ability to engage in disintermediation temporarily became a more important force in portfolio allocation than life-cycle considerations.

Coefficient Differences Over Time

Tables 9-10, 9-11, and 9-14 indicate that, for retail financial assets, wholesale

Place Table 9-14 near here

financial assets and real-estate equity, more than half of the estimated slope coefficients differ significantly across survey dates. The significance of coefficient differences is somewhat more frequent for the quadratic than for the linear term. This is important because an individual's marginal allocation to a given asset deviates from the wealth coefficient by the product of the coefficient for the quadratic term and twice the individual's level of wealth.

The pattern of differences observed is consistent with the hypothesis that the benefits of financial disintermediation increase with household wealth. Although importantly constrained by the evolving structure of taxes and transactions costs, households actively reallocated their portfolios to protect themselves against the interaction of ceilings on explicit nominal rates of interest on deposit assets with rising market rates of interest.

Between 1962 and 1970, older households increased their propensity to hold wholesale assets and decreased their propensity to hold retail assets and home equity. Although households in the under-45 group increased their marginal propensity to hold retail assets, this propensity to hold financial assets of either kind became more sensitive to increases with wealth. Older and wealthier households showed a reduced disposition to hold retail financial assets and a higher propensity to invest in more-volatile wholesale securities. The resulting increase in the demand for brokerage services drove up transactions costs in wholesale markets, especially for small trades (Kane 1980). These transactions-cost increases reinforced the attractiveness to very-young families of leveraged investments in homes, bringing about a reverse shift in wealth propensities for younger households.

Schemes for paying implicit interest on household deposits (e.g., "free" checking) proliferated in the 1970s and the regulatory strategy shifted to one of letting the ceiling rate on a deposit account more closely approach its market level the larger the account's minimum denomination and the longer its stated maturity. In addition, as shown in Table 9-3, 1970-77 holding-period returns on stocks and Treasury bills proved negative in real terms. For at least some of these reasons, as our data show, between 1970 and 1977 retail assets regained their former attractiveness to older households, while wholesale assets lost some of their luster. Young and middle-aged families generally increased their propensity to allocate wealth to real estate, while this propensity declined significantly for (nonmarried) households in the 65-and-over group.

ACCUMULATIONS BY AGE COHORTS

Another way to look at patterns of life-cycle saving is to study how the mean net worth of a particular age cohort behaves as members of the cohort grow older. Here, the focus falls on transitions through a prolonged preretirement phase of average wealth accumulation into a hypothesized phase of planned wealth decumulation.

Table 9-15 pushes forward the age cohorts reported in Table 9-4 and 9-5 for

Place Table 9-15 near here

the 1962 and 1970 surveys to develop comparable data for appropriately older respondents in the 1970 and 1977 surveys. The table deletes the wealth of household heads that were under 18 in 1962 and 1970 and therefore too young to be sampled. Following age classes through time provides something akin to a panel perspective on patterns of life-cycle saving. We see that, in all cohorts, households managed to increase their mean real net worth from 1962 to 1970. However, the

second panel shows that, during the 1970s, the per-year rate of real accumulation increased dramatically for the youngest 1962 cohort, decreased for the fourth cohort (some of whom were passing into the retirement stage), and turned negative for the two oldest cohorts. The third panel, which compares post-sample accumulation rates for 1962 and 1970 cohorts, shows a similar picture.

Economic theory treats changes in saving rates as adaptive responses to changing requirements for consumption smoothing. In the 1970s, the two oldest cohorts experienced consumption-expanding windfall gains in wealth from two sources: the double-indexing of social-security benefits and unanticipated appreciation in real housing prices. For these cohorts, the desirability of decumulating transactable wealth may have been further enhanced by the structure of capital-gains taxes and declines in reported mean real incomes of 20 and 30 percent, respectively. If the two youngest cohorts' sharply higher savings rates represents consumption smoothing too, it may be due mainly to unanticipated increases in the capitalized real value of fulfilling their lifetime housing needs. We show in the next section that families with three or more children (for whom the average implicit return on housing space is greatest) greatly increased their mean saving rate in the 1970s, while smaller families drastically reduced theirs. Given the secularly rising divorce rate, in the 1970s some small-sized families may have been adapting to a reduction in family size.

To carry out plans to increase their mean rate of homeownership in the 1970s, many young households may have postponed the consumption of other goods and services. Although SRC data do not bear on this issue, young households may also have perceived secular growth in the size of government transfer programs as increasing the discounted real value of their lifetime tax bills.

Tables 9-16 and 9-17 provide evidence on the composition of age-cohort savings across different survey dates. Mean dollar increments in the values of

real-estate assets and of three components of net transactable wealth are shown in Table 9-16. Data on real-estate assets are included to permit the interested reader to decompose increases in real-estate equity into price-appreciation, portfolio-rebalancing, and debt-expansion elements. Although component-by-component

Place Table 9-16 near here

growth rates vary widely across age classes and asset categories (from -61.2 percent to 5181.5 percent), Table 9-17 clarifies that for every age class whose

Place Table 9-17 near here

mean nominal wealth increased (i.e., all but the 72-and-older group in 1970-77), real-estate equity served in both periods as the major vehicle for carrying increased wealth across time.

Lorenz distributions for age cohorts are displayed in Table 9-18. For each

Place Table 9-18 near here

asset category, percentage control ratios are reported in parentheses. These control percentages show the relative position that a representative household takes in each type of wealth as it ages. For most assets and dates, the control percentage follows a humped or inverted-U curve. The typical curve reaches its maximum in middle age. Compared to financial assets, real-estate equity shows higher values for young cohorts and generally peaks at an earlier age. The control percentage for wholesale financial assets rises relative to retail assets as households move through their 30s and 40s. Households in their 50s and early 60s hold the maximal percentage of wholesale assets, but this percentage falls off rapidly when they reach retirement age. Although for comparable age classes the percentage level of control varies across survey dates (presumably with differences in the economic environment), the qualitative association with the life cycle does not.

Table 9-19 focuses on changes in the homeownership rate and use of

Place Table 9-19 near here

mortgage debt across time. Allowing for the extent to which the understatement of 1977 homeownership rates rises with age, the table provides time-series confirmation of cross-section evidence on life-cycle patterns of homeownership and mortgage repayment. Both within and across survey dates, homeownership rates are seen to rise into late middle age and to fall off thereafter, while the use of mortgage debt declines steadily as a household ages.

DIFFERENCES IN ACCUMULATION RATES FOR HOUSEHOLDS OF DIFFERENT SIZES

For many households, family size rises and falls over the life cycle in a humped pattern that parallels the rise and fall of age-class homeownership rates. This cycle in the size of the typical nuclear family reflects corresponding cycles in the market value of its human capital, in marginal in-kind rates of return on given amounts of housing space and school taxes, and in the household's detailed expenditure goals.

One-person households consist of bachelors, divorced and separated individuals, and widowed persons. The age distribution of this group may have distinct modes for each component class. The above-average age and high standard deviation shown for one-person households in Table 9-20 supports this presumption of multimodality.

Place Table 9-20 near here

Two-person households consist of childless couples, older "empty-nest" couples, widowed, divorced, and even single parties with one child, and various combinations of unmarried adults. The high (though falling) average age reported for heads of two-person households in Table 9-20 is consistent with the hypothesis that the mean number of children in these households is small.

Tables 9-21 and 9-22 show a sharp change in effective savings propensities

Place Tables 9-21 and 9-22 near here

between the 1960s and the 1970s paralleling the age-class reversals reported earlier. Households of three or more persons were much more effective savers in the 1970-77 period than in the 1962-70 era. Correspondingly, while smaller households grew wealthier during the 1960s, on average they drew down their real wealth during the 1970s.

These patterns may be explained as adaptations to changes observed between survey dates in tax structure, financial transactions costs, and risk-return opportunities. As risk-adjusted real after-tax returns on financial assets fell, the relatively constant real in-kind return on housing space for large households made it optimal for them to expand their housing investments more than a smaller household would. Interacting with the life cycle, the proportion of households owning their home rises sharply with household size, as does the use of mortgage leverage. For households with three or more persons, ownership and mortgagor rates are twice as high as for smaller households. Table 9-23 shows that positions

Place Table 9-23 near here

in real-estate equity and owner-occupied housing also increase with household size. Although two-person households have higher per-capita wealth than the other categories at all three survey dates, during the 1970s larger households narrowed the gap considerably. In contrast, the relative positions of one-person households change little across dates. Differential savings performance across size classes in the two eras does not merely reflect the passive interaction of increasing real-estate prices with the positive association between prior real-estate holdings and household size. During the 1970s, large families increased their holdings of

financial assets even more rapidly than their real-estate equity. This increased financial saving may have two sources. First, it may reflect the efforts of households still occupying rental housing to accumulate a sufficient downpayment to support a planned house purchase. Second, it may reflect the use of mortgage credit (which to most households represents the low-cost form of credit available) to support financial investments.

DIFFERENCES IN ACCUMULATION RATES FOR DIFFERENT TYPES OF HOUSEHOLDS

Table 9-24 explores the relationship between household size and marital status.

Place Table 9-24 near here

During the 1960s, all types of large households were less-effective savers than smaller ones. Moreover, the 1970-77 increase in savings propensities for large households was limited to married and other nonsingle (i.e., widowed, separated, and divorced) households. This provides further support for the view that movements in the expected value and variance of implicit returns on owner-occupied housing explain a good part of the divergent movements in saving propensities during the 1970s. These families' future housing requirements may be presumed to be more stable than those for single households. During the 1970s, large single households dissaved at a high rate.

Table 9-25 shows the effect of changing savings propensities on the real rate

Place Table 9-25 near here

of accumulation of transactable wealth. In the 1970-77 period, except for large households in the married and other categories, no household type much improved the real value of its mean transactable wealth. Table 9-26 shows that, in 1977, the

Place Table 9-26 near here

mean age of the heads of accumulating large households in the married and other categories was in the 40s. The mean ages of the heads of the four low-

accumulation types of households all prove significantly older or younger than this. Particularly remarkable is the downward trend in the age of heads of single families with two or more members. This reflects growth in the number of couples living together without benefit of marriage. For these households, unsettled property rights and uncertainty about the couple's commitment to a shared future may erect substantial disincentives to homeownership and saving.

Data on portfolio shares (not reported here) show that the turnaround between 1962-70 and 1970-77 in savings performance by large nonsingle families was an across-the-board one. During the 1970s, relative to their initial wealth, these families expanded their holdings of retail assets, wholesale assets and real-estate equity all at above-average rates. As they cut their savings rate, single families markedly shifted the composition of their wealth accumulations. One-person single households, which had concentrated on amassing real-estate equity in the 1960s, accumulated their wealth in financial assets in the 1970s. Larger single households (people living with friends and relatives) had reallocated wealth from real-estate equity into financial assets during the 1960s, but reversed the pattern in the 1970s, apparently in response to improved implicit returns on owner-occupied housing.

Table 9-27 clarifies the role of home equity in the saving behavior of

Place Table 9-27 near here

households of different type by tracking trends in homeownership and mortgage financing by household type. The most marked trends are the continued high use of leverage by large married households, its increasing use by single and other nonmarried households, and the increased rate of homeownership for one-person households. For so-called small savers -- households not wealthy enough to invest directly in wholesale financial assets, these trends may be interpreted as a form of

disintermediation. Small savers with large and stable households found it profitable to shift some of their deposit balances into housing. These investments offered untaxed implicit returns, protection against unanticipated inflation, a better anticipated real after-tax explicit return than small-denomination accounts, and a regularized and partially subsidized arrangement for borrowing against small accumulations of wealth. Even for wealthy households, some of these advantages apply. In particular, changes in the level and structure of federal capital-gains tax rates enacted during the 1970s enhanced the tax advantages of owner-occupied housing relative to stock-market investments.

SUMMARY AND CAUTION

Our analysis of SRC data supports three broad inferences. First, life-cycle patterns of accumulation and asset holdings shift importantly with such changes in the economic environment as inflation risk, tax structure, and transactions costs. Perhaps because of such shifts, consistent evidence of average postretirement decumulation emerged only for cohorts of advanced age. Second, between the 1960s and 1970s, a sharp turnaround occurred in the profiles of household saving and homeownership. Households whose heads were 55 and older were strong savers in the 1960s, but younger households proved to be the principal accumulators of the 1970s. A parallel shift in savings propensities occurred between large married or previously married households and other families, suggesting that movements in the expected value and variance of the implicit return on owner-occupied housing may have evoked the adjustment. During the 1960s, all age groups increased their homeownership rates. In the 1970s, large nonsingle households and households whose heads were under 45 accentuated the trend, while most other households merely continued it. Third, the compositions of 1962 and 1977 portfolios end up far

closer to each other than to 1970 values. This suggests that some of the portfolio churning observed in SRC data reflects disintermediation that was reversed during the 1970s as deposit institutions made ceilings on explicit interest less effective by broadening their product line to develop less-restricted liability instruments and to expand the ways in which they could pay implicit interest on regulated accounts. Combined with a capital-gains tax structure that taxed nominal as well as real price appreciation, these ceilings made the implicit and explicit tax rate on financial savings rise with the rate of inflation. This lowered the saving rate for many households and distorted the allocation of transactable wealth between financial and real-estate assets for everyone.

Because the hypotheses of differential behavior and portfolio churning are such straightforward ones, this paper emphasizes statistical description over statistical testing and interpretation. By conventional Chi-square tests, saving and asset-holding behaviors reported by respondents differ significantly across demographic categories. But we must keep in mind two problems in drawing inferences from SRC data. First, observations taken at only three points in time cannot discriminate closely among plausible alternative explanations for observed differences in class-level behavior. Second, in a survey context the ultimate meaningfulness of statistical tests depends on the validity of joint hypotheses about the appropriateness of the sampling frame and the accuracy of respondent reports. Validation studies (Ferber et al. 1969a and 1969b) indicate that noncooperation, especially among high-income groups, leads to a systematic understatement of sample variances. Ascertaining the ways in which the three survey observations of cross-section data on respondent wealth management are each, in fact, representative of the population of U.S. households is a herculean task. This task can be accomplished only by carefully examining sampling frames and respondent behavior

in alternative data sets and tirelessly endeavoring to reconcile whatever differences emerge.

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FOOTNOTES

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1. Peek (1983) explores the link between capital gains and saving as measured by the national income and product accounts. Friend and Silberman (1975) use 1963 Federal Reserve Survey data to estimate the effect of capital gains on what they call saving net of depreciation on owned homes.
2. In equilibrium, some of the benefit would be shifted backwards to specialized construction labor and materials (Diamond 1983).
3. Using Canadian data, Dicks-Mireau and King (1982) investigate the effect of pension wealth on the composition of household portfolios.
4. On the grounds that a mortgage is obviously a financial instrument, we might have chosen to categorize mortgage debt as a negative financial asset. Our approach has the advantage of incorporating the portfolio restriction that mortgage loans are limited to owners of real estate. Programming difficulties persuaded us to defer our efforts to estimate the market value of mortgage debt.

5. Detailed analysis of 1977 survey data indicate that a decrease in the homeownership rate for older households was recorded only for nonmarried households, especially households whose heads were separated, divorced, or widowed.

Table 9-1

Comparison of Survey and Time-Series Estimates of Cumulative Growth Rates Between Survey Dates in the Mean Value of Components of Net Transactable Wealth

(in percent)

	1961-1969 Cumulative Growth for F.R. data	1962-1970 Survey Estimates of Cumulative Growth	1969-1976 Cumulative Growth for F.R. data	1970-1977 Survey Estimates of Cumulative Growth
Deposits and Savings Bonds	80.9	85.9	109.7	100.0
Marketable Bonds	105.2	829.3	73.2	78.7
Corporate Equities	49.0	97.2	3.5	54.8
Owner-Occupied Real Estate	73.2	65.8	118.2	108.0
Investment Real Estate	48.9	132.2	67.1	26.9
Home Mortgages	84.7	59.6	95.5	61.2
Other Mortgages	92.2	57.4	43.3	50.3
Net Transactable Wealth	63.8	88.4	68.5	79.8

Sources: Board of Governors of the Federal Reserve System, Division of Research and Statistics, Flow of Funds Section, Balance Sheets for the U.S.Economy 1945-81, Washington, D.C.: 1982; and calculations made from data tapes of the 1977 Consumer Credit Survey and of the 1962 and 1970 Surveys of Consumer Finances. In the Flow of Funds accounts, the household sector is consolidated with personal trusts and nonprofit organizations.

Notes: Survey data record savings bonds, marketable bonds, and mortgages at par value. From the Flow of Funds Accounts, the sum of miscellaneous assets and mortgage assets is treated as a loose proxy for the SRC concept of "investment real estate."

Table 9-2

Comparison of Homeownership Rates for Married Households and One-person Households in the Edited 1977 SRC Sample With Census Estimates for the Same Year

	One-Person Households		Married Households	
Age of Household Head (in years)	Homeownership Rate in Our Sample	Homeownership Rate in Census Data	Homeownership Rate in Our Sample	Homeownership Rate in Census Data
Under 25	3.0	7.6	33.3	35.3
25-34	20.4	19.2	73.2	69.5
35-44	25.8	27.0	82.4	82.1
45-54	51.2	41.4	80.1	86.9
55-64	47.6	52.3	80.0	86.5
65 and over	53.1	57.1	76.7	83.1
Subset of Respondents Classified	38.4	42.2	74.5	77.1

Source: Census estimates from Carliner (1982).

Table 9-3

Estimates of Cumulative Price Appreciation and Cumulative Inflation-Adjusted Total Returns on Selected Assets Between Survey Dates (in percent)

	Cumulative Percentage Price Appreciation			Inflation-Adjusted Cumulative Price Appreciation in Constant-Quality Houses	Inflation-Adjusted Cumulative Total Returns			
	in Deflator for Personal Consumption Expenditures	in Prices of Common Stock	in Price of Constant-Quality House		on Common Stock	on Long-Term Government Bonds	on U.S. Treasury Bills	on Savings Accounts at S&Ls
Feb., 1962-Mar., 1970	25.7	28.1	27.8	1.7	32.2	-16.8	12.5	12.3
Mar., 1970-Sept., 1977	52.5	7.7	85.4	21.6	-6.5	11.4	-1.1	-3.4
Feb., 1962-Sept., 1977	91.7	38.0	137.0	23.6	23.7	-7.4	11.3	8.5

Source: Business Cycle Developments for PCE Deflator. Ibbotson and Sinquefield (1979) for price appreciation and nominal total returns on stocks, bonds, and bills.

C-27 Construction Reports for Second Quarter 1981 for appreciation in constant-quality houses.

Savings and Loan Fact Book (Annual) for yields on savings accounts at S&Ls.

Notes: Appreciation in PCE deflator and housing prices are calculated from the first quarter of 1962 to the first quarter of 1970 and from the latter quarter to the third quarter of 1977. Yields on savings accounts are compounded using annual figures for 1962-69 and 1970-76. During the 1970s, due to growing role of certificate accounts, these yields moved increasingly above ceiling rates on passbook accounts. Every inflation-adjusted return is calculated from the ratio of one plus the cumulative nominal return in source data to one plus the cumulative rate of appreciation in the PCE deflator over the same period.

Table 9-4

Incremental Mean Savings and Per Year Real Saving Rates Between Survey Dates, for Households in Specific Age Classes

Age of Household Head (in years)	1962 to 1970 Dollar Increment in Mean Transactable Wealth	1962 to 1970 Real Increment Per Year As a Percentage of Mean Real Income in The Two Survey Years	1970 to 1977 Dollar Increment in Mean Transactable Wealth	1970 to 1977 Real Increment Per Year As a Percentage of Mean Real Income in the Two Survey Years	Difference in Real Savings Rate Between Eras (in percent)
Under 25	-607	-2.6	6316	8.3	10.9
25 to 34	2074	1.0	13414	8.4	7.4
35 to 44	9140	6.9	23670	8.8	1.9
45 to 54	6030	2.0	37437	17.8	15.8
55 to 64	21566	24.5	22717	2.4	-22.1
65 and older	22250	44.8	3068	-29.2	-74.0
All Respondents	10683	10.5	18178	5.6	-4.9

Source: Calculated from data tapes of the 1977 Consumer Credit Survey and of the 1962 and 1970 Surveys of Consumer Finances. Real values are calculated by multiplying base-date wealth and income by one plus the cumulative rate of change between survey dates in the deflator for personal consumption expenditures.

Table 9-5

Cumulative Percentage Change in the Real and Nominal Value of Accumulated Mean Savings Between Survey Dates, by Age of Household Head

(in percent)

Age of Household Head (in years)	Cumulative Percentage Change in Mean Net Wealth Between 1962 and 1970		Cumulative Percentage Change in Mean Net Wealth Between 1970 and 1977	
	Nominal Wealth	Real Wealth	Nominal Wealth	Real Wealth
Under 25	-28.5	-43.1	413.8	237.0
25 to 34	41.4	12.5	189.2	89.6
35 to 44	77.4	41.1	113.0	39.7
45 to 54	37.4	9.1	168.0	75.7
55 to 64	131.0	83.8	59.7	4.8
65 and older	121.5	76.2	7.6	-29.5
All Respondents	88.4	49.9	79.8	17.9

Note: Percentage changes in real wealth employ base-date wealth that has been inflated by cumulative growth in the implicit deflator for personal consumption expenditures (PCE) figured from either the first quarter of 1962 to the second quarter of 1970 or from the latter quarter to the third quarter of 1977, as appropriate. Let c represent cumulative growth in the deflator for PCE between survey dates and W_0 and W_1 represent mean base-date and end-date wealth, respectively. The cumulative percentage growth rate in real wealth is calculated as $\frac{W_1-(1+c)W_0}{(1+c)W_0}$.

Table 9-6

Dollar Increments Between Survey Dates in the Mean Values

of Real-Estate Assets and Three Components of Net Transactable Wealth,

by Age of Household Head

(all entries in dollars)

Age of Household Head (in years)	Between 1962 and 1970				Between 1970 and 1977			
	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Real-Estate Assets	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Real-Estate Assets
Under 25	272	-1098	218	1348	1732	1595	2988	3848
25 to 34	458	-35	1652	3916	2339	2535	8542	14539
35 to 44	1471	694	6981	11429	4020	2995	16665	21936
45 to 54	1135	-929	5830	8678	5982	10873	20664	24387
55 to 64	3550	7522	10538	12095	5283	4051	13537	15092
65 and older	3664	8176	10409	11167	4182	-6338	5279	5079
All Respondents	1880	2439	6372	8518	4068	2684	11464	14441

Table 9-7

Distribution of Cumulative Changes in the Nominal Value of Mean Transactable Wealth Between Survey Dates, by Age of Household Head

(in percent)

Age of Household Head (in years)	Percentage of 1962-1970 Increase Attributable to:			Percentage of 1970-77 Increase Attributable to:		
	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity
Under 25	-44.8[a]	180.9[a]	-36.0[a]	27.4	25.3	47.3
25-34	22.1	-1.7	79.6	17.4	18.9	63.7
35-44	16.1	7.6	76.4	17.0	12.7	70.4
45-54	18.8	-15.4	96.7	16.0	29.0	55.2
55-64	16.5	34.9	48.9	23.3	17.8	59.6
65 and older	16.5	36.7	46.8	136.3	-206.6	172.1
All Respondents	17.6	22.8	59.6	22.4	14.8	63.1

[a]Because nominal wealth declined for this age class during the 1962-1970 period, the signs of the percentage allocations are the reverse of observed portfolio movements. In fact, holdings of wholesale assets declined while the other two portfolio components increased.

Table 9-8

Distribution of Selected Assets and Respondent Population

Across Age Classes at 1962, 1970, and 1977 Survey Dates

(in percent)

Age of Household Head (in years)	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Net Transactable Wealth	Value of Homes	Respondent Population	No. of Respondents
	1962 Survey						
Under 25	1.7	5.1	0.6	1.6	0.6	9.1	192
25-34	8.5	5.5	8.7	8.1	13.5	19.5	413
35-44	16.5	25.6	23.9	22.8	29.3	23.4	495
45-54	21.2	29.3	26.8	26.2	26.6	19.5	413
55-64	17.6	17.9	18.3	18.1	15.1	13.3	281
65 and older	34.4	16.5	21.8	23.1	14.9	15.3	323
All Respondents	99.9	99.9	100.1	99.9	100.0	100.1	2117
	1970 Survey						
Under 25	1.7	0.3	0.5	0.7	1.5	10.0	257
25-34	6.4	2.3	6.6	5.7	12.5	18.3	471
35-44	14.0	12.6	20.0	17.4	24.3	18.9	488
45-54	17.3	10.1	23.3	19.5	24.9	20.0	514
55-64	26.1	37.5	24.8	27.6	19.6	16.5	426
65 and older	34.6	37.2	24.8	29.0	17.2	16.3	420
All Respondents	100.1	100.0	100.0	99.9	100.0	100.0	2576

(Table 9-8 Continued)

	1977 Survey						
Under 25	2.6	2.1	1.3	1.7	1.5	8.8	225
25-34	10.6	9.8	12.3	11.5	17.8	23.0	587
35-44	13.7	13.1	19.4	17.2	22.1	15.8	402
45-54	19.9	31.0	24.9	25.0	23.4	17.1	437
55-64	24.0	33.4	22.8	24.9	18.8	16.8	429
65 and older	29.1	10.6	19.3	19.7	16.3	18.5	472
All Respondents	99.9	100.0	100.0	100.0	99.9	100.0	2552

Table 9-9

Homeownership Rate, Mortgage Status, and Mean Dollar Value of Net Transactable Wealth in 1962, 1970 and 1977, by Age of Household Head

Age of Household Head (in years)	1962 Mean Dollar Value of Transactable Wealth	1962 Percent Owning Home	1962 Percent of Homeowners with Mortgage Debt	1970 Mean Dollar Value of Transactable Wealth	1970 Percent Owning Home	1970 Percent of Homeowners with Mortgage Debt	1977 Mean Dollar Value of Transactable Wealth	1977 Percent Owning Home	1977 Percent of Homeowners with Mortgage Debt
Under 25	2133	5.2	80.0	1526	11.7	90.0	7843	20.0	80.0
	(934)			(192)			(1652)	(20.9)	(80.9)
25-34	5015	43.1	84.3	7090	47.8	90.2	20504	54.3	88.4
	(564)			(735)			(2147)	(56.5)	(88.0)
35-44	11807	63.4	81.2	20948	70.9	86.4	44618	72.9	84.6
	(1913)			(2167)			(3688)	(77.9)	(83.1)

(Table 9-9 Continued)

45 to 54	16258	68.5	61.1	22288	73.7	64.6	59726	74.6	73.3
	(1288)			(1338)			(5159)	(81.0)	(70.3)
55 to 64	16459	68.3	40.1	38025	77.0	32.9	60743	71.1	45.9
	(1551)			(5352)			(5223)	(79.0)	(42.8)
65 and older	18312	63.2	15.2	40563	71.2	16.4	43631	64.4	15.5
	(1835)			(5023)			(3093)	(79.4)	(13.6)
All Respondents	12083	55.8	58.8	22766	62.4	57.9	40944	62.4	62.3
	(646)			(1334)			(1613)	(69.0)	(58.8)

Source: Calculated from data tapes of the 1977 Consumer Credit Survey and the 1970 Survey of Consumer Finances.

Note: The U.S. Bureau of the Census estimates that the aggregate homeownership rate was 62.9 percent in 1970 and 64.8 percent in 1977 (Carliner, 1982). In the mean-wealth columns, the standard error of mean wealth is given in parentheses. In the percentage ownership and mortgagor columns for 1977, the figures in parentheses report corresponding values for the unedited sample. For age-class homeownership rates, the standard error of the mean rounds to 0.1 percent in all but two instances where it rounds to 0.2 percent.

Table 9-10

Tobit Estimates of Wealth-Based Engels Curves for Holdings of Retail Financial Assets, for Samples Disaggregated by the Age of Household Head

Age of Household Head (in years)	Estimated Intercept	Estimated Slope Coefficients for: Wealth	Wealth Squared	Wealth-Squared Coefficient Times Twice Mean Wealth	R^2	d.f.
1962 Data Set						
	321.0	.06	-.18 D-06	-.001		
Under 25	(5.51)	(3.55)	(1.57)		.24	189
	440.0	-.00	.33 D-05	.033		
25-34	(4.49)	(.14)	(27.75)		.86	410
	624.0	.07	.38 D-07	.001		
35-44	(4.46)	(8.82)	(3.80)		.74	492
	-5.0	.19	-.74 D-06	-.024		
45-54	(.02)	(12.41)	(8.67)		.30	410
	33.0	.21	-.56 D-06	-.018		
55-64	(.08)	(9.25)	(4.54)		.32	278
	-932.5	.40	-.10 D-05	-.037		
65 and older	(1.61)	(15.32)	(9.98)		.46	320
	408.1	.15	-.70 D-07	-.002		
Pooled Sample	(3.22)	(25.88)	(6.84)		.35	2114

(Table 9-10 Continued)

1970 Data Set

	165.0	.48[b]	-.18 D-04[b]	-.055		
Under 25	(2.30)	(10.75)	(6.45)		.41	254
	186.0	.20[b]	-.65 D-06[b]	-.009		
25-34	(1.44)	(15.52)	(10.23)		.37	468
	-256.0[a]	.21[b]	-.39 D-06[b]	-.016		
35-44	(.74)	(14.82)	(12.15)		.32	486
	-154.0	.20	-.53 D-06	-.024		
45-54	(.40)	(10.22)	(4.12)		.31	511
	1195.0	.18	-.11 D-06[a]	-.008		
55-64	(1.79)	(13.40)	(11.80)		.30	423
	2312.0[b]	.20[b]	-.16 D-06[b]	-.013		
65 and older	(3.06)	(14.83)	(12.04)		.35	417
	971.0[a]	.16	-.11 D-06[a]	-.005		
Pooled Sample	(5.19)	(33.62)	(25.98)		.31	2573

(Table 9-10 Continued)

1977 Data Set

	349.0	.27	-.13 D-06	-.002		
Under 25	(.69)	(5.68)	(.42)		.46	222
	-703.0[a]	.25[b]	-.20 D-06[b,c]	-.008		
25-34	(1.55)	(15.71)	(8.44)		.40	584
	-1589.0[a]	.22[b]	-.13 D-06[b,d]	-.012		
35-44	(1.54)	(10.33)	(3.99)		.35	399
	-707.0	.23	-.22 D-06[a]	-.026		
45-54	(.69)	(13.05)	(9.93)		.32	432
	-2441.0[c]	.29[d]	-.25 D-06[d]	-.030		
55-64	(1.75)	(13.81)	(8.57)		.38	426
	-4880.0[a,d]	.47[d]	-.48 D-06[a,d]	-.042		
65 and older	(3.97)	(20.67)	(11.75)		.51	469
	-1865.0[b,d]	.30[b,d]	-.28 D-06[b,d]	-.023		
Pooled Sample	(4.53)	(36.18)	(23.02)		.39	2560

Notes: Coefficient t-values are reported in parentheses. A superscript a indicates that the t-value of the difference from the corresponding coefficient in 1962 lies between 1.96 and 3.0; b that this value exceeds 3.0. A superscript c indicates that t-value of difference from corresponding coefficient in 1970 is between 1.96 and 3.0; d that this value exceeds 3.0.

Table 9-11

Tobit Estimates of Wealth-Based Engels Curves for Holdings of Wholesale Financial Assets, for Samples Disaggregated by the Age of Household Head

Age of Household Head (in years)	Estimated Intercept	Estimated Slope Coefficients for: Wealth	Wealth Squared	Wealth-Squared Coefficient Times Twice Mean Wealth	R^2	d.f.
1962 Data Set						
	51.0	.13	.53 D-05	.023		
Under 25	(.54)	(4.97)	(28.64)		.99	189
	19.0	.05	.22 D-05	.022		
25-34	(.20)	(3.93)	(18.95)		.80	410
	-3035.0	.43	.18 D-06	.004		
35-44	(7.76)	(18.88)	(6.53)		.92	492
	-549.0	.11	.21 D-05	.068		
45-54	(.94)	(3.28)	(10.90)		.68	410
	531.0	-.07	.38 D-05	.125		
55-64	(1.20)	(2.98)	(28.29)		.90	278
	1073.0	-.08	.19 D-05	.070		
65 and older	(1.86)	(3.00)	(18.27)		.74	320
	-2134.0	.33	.34 D-06	.008		
Pooled Sample	(10.13)	(33.31)	(19.83)		.75	2114

(Table 9-11 Continued)

1970 Data Set

	-32.0	.17	-.83 D-05[b]	-.025		
Under 25	(.82)	(6.95)	(5.36)		.17	254
	-21.0	.07	.23 D-06[b]	.003		
25-34	(.21)	(7.24)	(4.59)		.52	468
	-2672.0	.30[b]	-.18 D-06[b]	-.008		
35-44	(3.46)	(9.62)	(2.47)		.40	485
	-1042.0	.10	.81 D-06[b]	.036		
45-54	(1.69)	(3.22)	(3.96)		.32	511
	-5346.0[b]	.31[b]	.28 D-06[b]	.021		
55-64	(5.42)	(16.15)	(20.30)		.96	423
	-2888.0	.25[a]	.28 D-06[b]	.023		
65 and older	(1.16)	(5.44)	(6.42)		.62	417
	-1577.0	.19[b]	.34 D-06	.015		
Pooled Sample	(3.47)	(16.82)	(33.96)		.78	2573

(Table 9-11 Continued)

1977 Data Set

	747.0	-.16[a]	.33 D-05[a]	.052		
Under 25	(1.64)	(3.70)	(12.32)		.71	222
	415.0	-.04[d]	.10 D-05[a,d]	.041		
25-34	(1.15)	(2.81)	(57.51)		.96	584
	3126.0[b,d]	-.12[b,d]	.11 D-05[b,d]	.098		
35-44	(3.02)	(5.54)	(32.64)		.89	399
	-3141.0	.07	.79 D-06[b]	.094		
45-54	(2.06)	(2.79)	(23.70)		.91	432
	-2017.0	.08[d]	.77 D-06[b,d]	.094		
55-64	(1.25)	(3.08)	(23.15)		.88	426
	-3890.0[b]	.20[b]	-.88 D-07[b,d]	-.008		
65 and older	(4.16)	(11.34)	(2.82)		.34	469
	-1034.0	.04[b,d]	.78 D-06[b,d]	.064		
Pooled Sample	(1.99)	(4.25)	(51.33)		.84	2560

Notes: Coefficient t-values are reported in parentheses. A superscript a indicates that the t-value of the difference from the corresponding coefficient in 1962 lies between 1.96 and 3.0; b that this value exceeds 3.0. A superscript c indicates that t-value of difference from corresponding coefficient in 1970 is between 1.96 and 3.0; d that this value exceeds 3.0.

Table 9-12

Tobit Estimates of Wealth-Based Engels Curves for the Equity in Owner-Occupied Housing, for Samples Disaggregated by the Age of Household Head

Age of Household Head (in years)	Estimated Intercept	Estimated Slope Coefficients for: Wealth	Wealth Squared	Wealth-Squared Coefficient Times Mean Wealth	R^2	No. of Nonlimit Observations
1962 Data Set						
	74.0	.12	-.79 D-06	-.003		
Under 25	(1.05)	(5.91)	(5.71)		.16	12
	155.0	.57	-.38 D-05	-.038		
25-34	(.85)	(23.36)	(17.02)		.58	175
	2045.0	.40	-.41 D-06	-.010		
35-44	(6.82)	(22.80)	(19.14)		.54	315
	1073.0	.51	-.11 D-05	-.036		
45-54	(2.08)	(16.74)	(6.26)		.60	284
	1544.0	.49	-.19 D-05	-.063		
55-64	(3.15)	(18.13)	(13.05)		.56	192
	1980.0	.36	-.64 D-06	-.023		
65 and older	(3.31)	(13.38)	(5.97)		.47	208
	1974.0	.34	-.36 D-06	-.009		
Pooled Sample	(11.88)	(43.66)	(26.93)		.49	1186

(Table 9-12 Continued)

1970 Data Set

	-184.0	.45	.39 D-05	.012		
Under 25	(1.77)	(6.96)	(.96)		.57	29
	439.0	.54	-.17 D-05	-.024		
25-34	(2.01)	(24.76)	(15.80)		.61	218
	2887.0	.43	-.71 D-06	-.030		
35-44	(5.36)	(20.02)	(14.29)		.50	341
	4155.0	.34	.30 D-06	.013		
45-54	(5.69)	(9.42)	(1.23)		.52	378
	9186.0	.13	.11 D-07	.001		
55-64	(9.75)	(6.86)	(.83)		.50	327
	6125.0	.20	-.79 D-07	-.006		
65 and older	(7.11)	(12.75)	(5.26)		.46	299
	4967.0	.22	-.64 D-07	-.003		
Pooled Sample	(18.27)	(31.47)	(10.57)		.44	1592

(Table 9-12 Continued)

1977 Data Set

	14.0	.47	-.23 D-05	-.036		
Under 25	(.03)	(9.62)	(7.57)		.32	45
	2301.0	.49	-.60 D-06	-.025		
25-34	(4.26)	(26.00)	(20.93)		.54	319
	1984.0	.62	-.61 D-06	-.054		
35-44	(1.43)	(22.18)	(13.71)		.61	293
	9932.0	.38	-.26 D-06	-.031		
45-54	(6.34)	(14.32)	(7.61)		.49	325
	8216.0	.39	-.39 D-06	-.047		
55-64	(5.21)	(16.26)	(11.95)		.41	303
	11087.0	.15	.77 D-06	.067		
65 and older	(8.83)	(6.29)	(18.27)		.77	303
	5478.0	.42	-.30 D-06	-.025		
Pooled Sample	(9.26)	(34.95)	(17.56)		.43	1593

Note: Coefficient t-values are reported in parentheses.

Table 9-13

Tobit Estimates of Wealth-Based Engels Curves for the Equity in Investment Real-Estate, for Samples Disaggregated by the Age of Household Head

Age of Household Head (in years)	Estimated Intercept	Estimated Slope Coefficients for: Wealth	Wealth Squared	Wealth-Squared Coefficient Times Mean Wealth	R^2	No. of Nonlimit Observations
1962 Data Set						
	-445.0	.70	-.43 D-05	-.018		
Under 25	(3.44)	(19.34)	(16.83)		.69	9
	-614.0	.38	-.17 D-05	-.017		
25-34	(3.31)	(15.48)	(7.60)		.45	54
	366.0	.10	.19 D-06	.004		
35-44	(1.48)	(7.21)	(10.73)		.85	81
	-519.0	.19	-.29 D-06	-.009		
45-54	(1.25)	(7.92)	(2.15)		.29	89
	-2108.0	.38	-.13 D-05	-.043		
55-64	(3.94)	(12.88)	(8.03)		.42	57
	-2120.0	.32	-.22 D-06	-.008		
65 and older	(2.54)	(8.35)	(1.44)		.37	62
	-247.0	.18	.94 D-07	.002		
Pooled Sample	(1.47)	(23.02)	(6.91)		.50	352

(Table 9-13 Continued)

1970 Data Set

	52.0	-.10	.22 D-04	.067		
Under 25	(.63)	(2.01)	(7.01)		.37	11
	-604.0	.18	.21 D-05	.030		
25-34	(2.49)	(7.45)	(17.73)		.83	57
	41.0	.07	.13 D-05	.054		
35-44	(.40)	(1.61)	(13.56)		.73	86
	-2959.0	.36	-.58 D-06	-.049		
45-54	(4.20)	(10.11)	(2.48)		.38	125
	-5035.0	.38	-.18 D-06	-.014		
55-64	(4.89)	(18.74)	(12.56)		.55	100
	-5549.0	.35	.42 D-07	.003		
65 and older	(2.38)	(8.33)	(1.02)		.40	76
	-4360.0	.43	-.17 D-06	-.008		
Pooled Sample	(8.94)	(34.59)	(15.84)		.43	455

(Table 9-13 Continued)

1977 Data Set

	-1081.0	.41	-.92 D-06	-.014		
Under 25	(1.61)	(6.41)	(2.28)		.37	11
	-2014.0	.30	-.30 D-06	-.012		
25-34	(3.71)	(16.04)	(10.48)		.36	78
	-3521.0	.28	-.34 D-06	-.030		
35-44	(2.98)	(11.68)	(8.98)		.26	97
	-6085.0	.32	-.31 D-06	-.037		
45-54	(4.15)	(13.10)	(9.55)		.33	98
	-3758.0	.24	-.14 D-06	-.017		
55-64	(2.61)	(10.94)	(4.54)		.37	106
	-2317.0	.18	-.20 D-06	-.017		
65 and older	(2.69)	(11.21)	(6.80)		.23	61
	-2578.0	.24	-.20 D-06	-.016		
Pooled Sample	(5.99)	(27.86)	(15.89)		.30	452

Note: Coefficient t-values are reported in parentheses.

Table 9-14

Pattern of Significant Coefficient Shifts Across Survey Dates in Engels Curves for Equity in Real Estate, by Age of Household Head in 1962, 1970, and 1977

Age of Household Head (in years)	Intercept Shift	Shift in Slope for Wealth	Shift in Slope for Wealth-Squared
1. 1970 versus 1962 Data Sets			
Under 25	...	Significant at 1%	Significant at 1%
25-34	...	Significant at 1%	Significant at 1%
35-44	...	...	Significant at 1%
45-54	...	...	Significant at 1%
55-64	Significant at 5%	Significant at 1%	Significant at 1%
65 and over	...	...	...
All Respondents	...	Significant at 1%	...
2. 1977 versus 1962 Data Sets			
Under 25	...	...	...
25-34	...	Significant at 5%	Significant at 1%
35-44	Significant at 1%	Significant at 1%	Significant at 1%
45-54	Significant at 5%	...	Significant at 5%
55-64	Significant at 5%	Significant at 5%	Significant at 1%
65 and older	Significant at 1%	Significant at 1%	Significant at 1%
All Respondents	...	Significant at 1%	Significant at 1%

(Table 9-14 Continued)

3. 1977 versus 1970 Data Sets

Under 25	...	...	...
25-34	...	...	Significant at 1%
35-44	Significant at 1%	Significant at 1%	Significant at 1%
45-54	...	...	...
55-64	...	Significant at 1%	Significant at 1%
65 and older	Significant at 5%	Significant at 1%	Significant at 1%
All Respondents	Significant at 1%	...	Significant at 1%

Note: Coefficient shifts that are not significant by conventional dummy-variable t-tests are represented by an ellipsis (...).

Table 9-15

Changes in the Real and Nominal Value of Accumulated Mean Savings Between Survey Dates, by Age Cohorts Determined by the Age of a Household Head in 1962 and 1970

Age of Household Head at the Later Survey Date (in years)	Dollar Increment in Mean Transactable Wealth	(in percent) Cumulative Percentage Change in Mean Net Wealth		Accumulated Mean Real Saving Per Year As a Percentage of Mean Survey-Date Real Incomes
		Nominal Wealth	Real Wealth	
1962 Age Cohorts in 1970				
26-33	3928	184.1	126.1	9.6
33-42	12643	252.1	180.1	13.3
43-52	11478	97.2	56.9	9.6
53-62	19745	121.4	76.2	18.7
63-72	24207	147.1	96.6	33.8
73 and older	20092	109.7	66.8	43.8
All Cohorts	13484	111.6	68.3	14.0
1962 Age Cohorts in 1977				
33-40	35713	1673.8	825.6	16.7
40-49	43841	874.1	408.2	15.4
50-59	49863	422.3	172.5	15.5
60-69	42679	262.5	89.1	13.4
70-79	24989	151.8	31.4	6.8
80 and older	14276	78.0	-7.2	-2.8
All Cohorts	38568	319.2	118.7	12.8

(Table 9-15 Continued)

1970 Age Cohorts in 1977				
25-31	15226	997.4	619.9	16.8
32-41	32390	456.8	265.1	22.2
42-51	31207	149.0	63.3	13.8
52-61	41102	184.4	86.5	21.8
62-71	16321	42.9	-6.3	-3.9
72 and older	-4287	-10.6	-41.4	-44.2
All Cohorts	21378	93.9	27.2	8.2

Note: See notes to Tables 9-4 and 9-5.

Table 9-16

Dollar Increments Between Survey Dates in the Mean Value of Real-Estate Assets and Three Components of Net Transactable Wealth, by Age Cohorts Determined by the Age of a Household Head in 1962 and 1970

(all entries in dollars)

Age of Household Head (in years)	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Real-Estate Assets
1962 Age Cohorts in 1970				
26-33	846	-842	3928	9516
33-42	1891	2107	8647	13315
43-52	1744	235	9505	12458
53-62	3170	5789	10823	11175
63-72	5546	7298	11362	11326
73 and older	4298	7890	7902	7952
All Cohorts	2324	3029	8141	10727
1962 Age Cohorts in 1977				
33-40	5522	4705	25486	40554
40-49	6815	6455	30628	38718
50-59	9940	11189	28937	31953
60-69	9668	8485	24622	23885
70-79	11259	826	12902	11715
80 and older	4079	3665	6531	6392
All Cohorts	7882	6828	23931	28863

(Table 9-16 Continued)

1970 Age Cohorts in 1977				
25-31	2212	1989	11031	21325
32-41	4564	5941	21894	30464
42-51	5932	6526	18788	19671
52-61	7954	11958	21387	22410
62-71	6796	-1965	11560	10428
72 and older	3140	-6436	-991	-1929
All Cohorts	4624	3222	13578	17097

Table 9-17

Distribution of Cumulative Percentage Change in the Nominal Value of Mean Transactable Wealth Between Survey Dates, by Age of Cohorts Determined by the Age of Household Head in 1962 and 1970

(in percent)

Age of 1962-Cohorts in 1977 (in years)	Percentage of 1962-1977 Increase Comprised by: Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Age of 1970 Cohorts in 1977 (in years)	Percentage of 1970-77 Increase Comprised by: Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity
33-40	15.5	13.2	71.4	25-31	14.5	13.1	72.4
40-49	15.5	14.7	69.9	32-41	14.1	18.3	67.6
50-59	19.9	22.4	58.0	42-51	19.0	20.9	60.2
60-69	22.7	19.9	57.7	52-61	19.4	29.1	52.0
70-79	45.1	3.3	51.6	62-71	41.6	-12.0	70.8
80 and older	28.6	25.7	45.8	72 and older	-73.3	150.1	23.1
All Cohorts	20.4	17.7	62.1	All Cohorts	21.6	15.1	63.5

Table 9-18

Percentage Distribution of Selected Assets and of Respondent Population Across Age Cohorts of the 1962 and 1970 Age Classes, at the 1970 and 1977 Survey Dates

Age of Household Head (in years)	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Net Transactable Wealth	Percentage of Cohort Respondents
1962 Age Cohorts in 1970					
25-33	4.2(.28)	1.1(.07)	4.2(.28)	3.5(.23)	14.9
33-42	13.1(.63)	10.9(.52)	15.9(.76)	14.4(.69)	20.8
43-52	16.9(.73)	11.6(.50)	25.4(1.09)	21.1(.91)	23.2
53-62	24.0(1.22)	34.1(1.74)	26.5(1.35)	27.6(1.41)	19.6
63-72	24.1(1.88)	25.2(1.97)	17.8(1.39)	20.4(1.59)	12.8
73 and older	17.7(2.06)	17.0(1.98)	10.3(1.20)	13.0(1.51)	8.6
Totals	100.0	100.0	100.0	100.1	99.9
1962 Age Cohorts in 1977					
33-40	10.4(.59)	11.6(.66)	14.4(.82)	13.1(.75)	17.5
40-49	16.3(.77)	16.6(.79)	22.7(1.08)	20.3(.96)	21.1
50-59	28.4(1.13)	37.8(1.51)	29.2(1.16)	30.6(1.22)	25.1
60-69	24.1(1.19)	26.4(1.31)	22.5(1.11)	23.5(1.16)	20.2
70-79	17.3(1.42)	5.1(.42)	9.1(.75)	10.0(.82)	12.2
80 and older	3.5(.92)	2.6(.68)	2.1(.55)	2.5(.66)	3.8
Totals	100.0	100.1	100.0	100.0	99.9

(Table 9-18 Continued)

1970 Age Cohorts in 1977					
25-31	6.2(.34)	5.0(.27)	7.8(.42)	7.0(.38)	18.4
32-41	13.3(.69)	16.1(.83)	18.8(.97)	17.3(.90)	19.3
42-51	17.4(1.03)	20.7(1.22)	20.5(1.21)	20.0(1.18)	16.9
52-61	26.2(1.30)	36.6(1.82)	27.4(1.36)	28.8(1.43)	20.1
62-71	22.9(1.53)	16.3(1.09)	17.8(1.19)	18.5(1.23)	15.0
72 and older	14.0(1.36)	5.4(.52)	7.6(.74)	8.5(.83)	10.3
Totals	100.0	100.1	99.9	100.1	100.0

Note: The figures recorded in parentheses report the percentage of outstanding balances in each portfolio category controlled per each one percent of respondent population occupying the cohort.

Table 9-19

Homeownership Rate and Mortgage Status in 1962, 1970, and 1977,

by Age Cohorts Reflecting the Age of a Household Head in 1962 and 1970

(in percent)

Age of Household Head At Indicated Survey Date (in years)	1962			1970			1977		
	No. of Households	Percent Owning Home	Percent of Homeowners with Mortgage Debt	No. of Households	Percent Owning Home	Percent of Homeowners with Mortgage Debt	No. of Households	Percent Owning Home	Percent of Homeowners with Mortgage Debt
1962 Age Cohorts									
All under 25	192	5.2	80.0	339	30.9	91.0	325	50.4	87.8
25-34	413	43.1	84.3	473	70.6	85.9	391	75.7	81.1
35-44	495	63.4	81.2	526	72.4	71.7	466	71.7	59.6
45-54	413	68.5	61.1	445	77.5	36.8	374	69.0	31.4
55-64	281	68.3	40.1	291	71.1	24.2	227	64.3	11.0
65 and older	323	63.2	15.2	196	71.9	9.2	71	59.2	7.1
All Respondents	2117	55.8	58.8	2270	62.4	57.9	1854	62.4	62.3

(Table 9-19 Continued)

1970 Age Cohorts						
18-25	257	11.7	90.0	428	52.8	89.8
25-34	471	47.8	90.2	449	67.9	86.2
35-44	488	70.9	86.4	393	74.6	77.8
45-54	514	73.7	64.6	467	71.9	55.4
55-64	426	77.0	32.9	350	67.7	27.0
65 and older	420	71.2	16.4	240	62.5	8.0
All Respondents Classified	2576	62.4	57.9	2327	66.5	61.8

Table 9-20

Age of Heads of Households of Different Sizes

in 1962, 1970, and 1977

(in years)

Number of Persons in Household	1962 Survey Mean Age	1962 Survey Standard Deviation	1970 Survey Mean Age	1970 Survey Standard Deviation	1977 Survey Mean Age	1977 Survey Standard Deviation
One	48.9	20.7	51.7	20.7	53.6	21.1
Two	54.4	16.2	53.8	17.5	51.8	18.1
Three or more	40.0	11.0	40.8	11.7	40.9	12.0
All Respondents	45.5	16.1	46.5	16.5	46.9	17.3

Table 9-21

Accumulated Mean Savings in Dollars and Savings Per Year as a Percentage of Mean Survey-Date Incomes, for Households in Different Size Classes

Number of Persons in Household	1962 to 1970		1970 to 1977		
	Dollar Increment in Mean Transactable Wealth	Real Increment Per Year As a Percentage of Mean Real Income in the Two Survey Years	Dollar Increment in Mean Transactable Wealth	Real Increment Per Year As a Percentage of Mean Real Income in the Two Survey Years	Difference in Real Savings Rate Between Eras (in percent)
One	9202	19.2	9354	0.3	-18.9
Two	14858	14.7	15786	-1.4	-16.1
Three or more	7736	5.8	23319	10.1	4.3
All Respondents	10681	10.5	18155	5.6	-4.9

Note: Same as Table 9-4.

Table 9-22

Cumulative Percentage Change in the Real and Nominal Value of Accumulated Savings Between Survey Dates, for Households in Different Size Classes

(in percent)

Number of Persons in Household	Cumulative Percentage Change in Mean Net Wealth Between 1962 and 1970		Cumulative Percentage Change in Mean Net Wealth Between 1970 and 1977	
	Nominal Wealth	Real Wealth	Nominal Wealth	Real Wealth
One	111.2	68.0	53.5	0.7
Two	82.3	45.0	48.0	-3.0
Three or more	70.9	36.0	125.1	47.6
All Respondents	88.4	49.9	79.8	17.9

Note: As in Table 9-4, percentage changes in real wealth are calculated from base-date wealth figures that have been inflated by the cumulative growth rate in the implicit deflator for personal consumption expenditures figured from survey quarter to survey quarter of the years in question.

Table 9-23

Distribution of Selected Assets and Respondent Population

Across Household-Size Classes at 1962, 1970, and 1977 Survey Dates

(in percent)

Number of Persons in Household	Retail Financial Assets	Wholesale Financial Assets	Real-Estate Equity	Net Transactable Wealth	Value of Homes	Respondent Population
1962 Survey						
One	24.6 (1.12)	15.5 (.70)	12.2 (.55)	15.0 (.68)	7.9 (.36)	22.0
Two	42.5 (1.73)	36.2 (1.48)	35.1 (1.43)	36.6 (1.49)	28.7 (1.17)	24.5
Three or more	32.9 (.61)	48.3 (.90)	52.7 (.99)	48.3 (.90)	63.4 (1.19)	53.5
All Respondents	100.0	100.0	100.0	99.9	100.0	100.0
1970 Survey						
One	18.7 (1.14)	11.6 (.71)	11.1 (.68)	12.6 (.77)	8.3 (.51)	16.4
Two	48.6 (1.61)	55.0 (1.82)	38.6 (1.28)	43.7 (1.45)	30.4 (1.01)	30.2
Three or more	32.6 (.61)	33.4 (.63)	50.3 (.94)	43.7 (.82)	61.3 (1.15)	53.4
All Respondents	99.9	100.0	100.0	100.0	100.0	100.0

(Table 9-23 Continued)

1977 Survey						
One	21.6 (1.04)	14.7 (.71)	10.7 (.52)	13.6 (.66)	9.0 (.43)	20.7
Two	40.3 (1.30)	35.9 (1.16)	36.2 (1.17)	36.9 (1.19)	30.6 (.99)	31.0
Three or more	38.1 (.79)	49.3 (1.02)	53.1 (1.10)	49.5 (1.03)	60.4 (1.25)	48.2
All Respondents	100.0	99.9	100.0	100.0	100.0	99.9

Note: The figures recorded in parentheses report the percentage of outstanding balances in each portfolio category controlled per each one percent of the respondent population occupying the cohort.

Table 9-24

Dollar Increment in Mean Wealth and Ratio of Accumulated Mean Saving Per Year to Average Survey-Date Incomes, by Type of Household

Type of Household	1962 to 1970		1970 to 1977		
	Dollar Increment in Mean Transactable Wealth	Real Increment Per Year as a Percentage of Mean Real Income in the Two Survey Years	Dollar Increment in Mean Transactable Wealth	Real Increment Per Year as a Percentage of Mean Real Income in the Two Survey Years	Difference in Real Savings Rate Between Eras (in percent)
Single, One in Household	7068	13.1	7429	0.5	-12.6
Single, Two or More	5866	6.5	806	-9.7	-16.2
Married, Two Only	17672	17.3	19495	0.2	-17.1
Married, Three or More	8376	6.0	25820	10.8	4.8
Other, One Only	9796	21.6	10372	-0.2	-21.8
Other, Two or More	2495	1.6	11316	9.4	7.8
All Households Classified	10698	10.5	18285	5.7	-4.8

Note: Real savings rates are constructed as explained in the note to Table 9-4.

A few observations (7 in 1962 and 3 in 1970) coded as "married, one only" are assumed to be miscoded. They are included in the "married, two only" class.

Table 9-25

Cumulative Percentage Change in the Real and Nominal Value of Accumulated Mean Savings Between Survey Dates, by Type of Household Head

(in percent)

Type of Household	Cumulative Percentage Change in Mean Net Wealth Between 1962 and 1970		Cumulative Percentage Change in Mean Net Wealth Between 1970 and 1977	
	Nominal Wealth	Real Wealth	Nominal Wealth	Real Wealth
Single, One in Household	109.2	66.4	54.9	1.6
Single, Two or More	58.1	25.8	5.0	-31.1
Married, Two Only	93.3	53.7	53.2	0.5
Married, Three or More	72.8	37.4	129.8	50.7
Other, One Only	95.8	55.8	51.8	-0.4
Other, Two or More	35.6	7.9	119.0	43.6
All Households Classified	88.5	50.0	80.3	18.2

Note: As in Table 9-5, percentage changes in real wealth are calculated from base-date wealth figures that have been inflated by the observed cumulative growth rate in the implicit deflator for personal consumption expenditures, calculated from survey quarter to survey quarter of the years in question.

Table 9-26

Age of Heads of Different Types of Households

in 1962, 1970, and 1977

(in years)

Type of Household	1962 Survey		1970 Survey		1977 Survey	
	Mean Age	Standard Deviation	Mean Age	Standard Deviation	Mean Age	Standard Deviation
Single, One in Household	35.5	17.6	33.8	17.6	36.2	18.2
Single, Two or More	43.8	19.0	40.4	16.8	35.4	17.6
Married, Two Only	54.6	15.9	54.8	17.5	53.6	17.5
Married, Three or More	40.0	10.9	40.7	11.4	41.0	11.7
Other, One Only	62.3	13.9	62.7	13.6	62.2	16.7
Other, Two or More	46.5	15.0	46.4	15.3	45.4	15.3
All Households Classified	45.5	16.1	46.5	16.5	46.8	17.2

Note: A few observations (7 in 1962 and 3 in 1970) coded as "married, one only" are thrown into the "married, two only" class.

Table 9-27

Homeownership Rate and Mortgage Status in 1962, 1970, and 1977, by Household Type

(in percent)

Type of Household	1962		1970		1977	
	Percent Owning Home	Percent of Homeowners with Mortgage Debt	Percent Owning Home	Percent of Homeowners with Mortgage Debt	Percent Owning Home	Percent of Homeowners with Mortgage Debt
Single, One in Household	10.2	17.4	15.6	28.0	18.2 (21.0)	46.9 (43.2)
Single, Two or More	33.3	25.0	32.8	40.0	27.6 (33.7)	48.1 (39.4)
Married, Two Only	65.7	37.9	67.7	36.4	70.0 (77.4)	44.6 (42.3)
Married, Three or More	66.2	76.2	70.9	77.8	77.3 (81.5)	79.9 (78.1)
Other, One Only	43.7	19.8	59.8	23.2	48.7 (60.2)	27.9 (24.5)
Other, Two or More	47.1	49.2	43.7	47.9	44.1 (54.2)	62.9 (56.6)
All Households Classified	55.8	58.7	62.3	58.1	62.5 (69.0)	62.4 (58.9)

Notes: Figures in parentheses report the homeownership and mortgagor rates in the unedited 1977 sample.

A few observations (7 in 1962 and 3 in 1970) coded as "married, one only" are thrown into the "married, two only" class.