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# Perspectives on Household Portfolios, 1977–1983

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High or rising household debt can be viewed as a problem at two levels. On the macroeconomic level, overly high household borrowing can weaken credit-financed consumer spending on housing and durable goods, worsen the effects of an economic downturn, and place relatively high burdens upon future generations. On the microeconomic level, high debt service expenses relative to income or assets can force households to cut back consumption severely or even to default or become bankrupt.

The more common macroeconomic approach examines aggregate data on borrowing levels over time. Studies by Pearce [7] and French [5] document a secular increase in aggregate debt as a proportion of national income since World War II with rapid growth since 1982. However, this approach tells us little about how debt is distributed among households, as Luckett and August [6] note. Increases in debt over a limited range of borrowers may well pose different problems of repayment than when debt is broadly undertaken. Also, aggregate debt to income statistics do not reveal whether those building up debts are primarily low-income, low-asset households or relatively affluent consumers. A microeconomic approach which provides information on the distribution of debt and characteristics of borrowers is needed to assess the impact of changes in borrowing patterns.

This study adopts a microeconomic outlook on household borrowing to examine the portfolio positions of U.S. households in 1977 and 1983.[1] The use of household level survey data on consumer finances allows us to examine the distribution of debt among U.S. households and to identify households with high debt relative to their income, who are potentially in financial difficulty. We examine the financial position of such "high debt" households and determine whether the proportion of financially vulnerable U.S. households grew between 1977 and 1983.

Section I presents the data sources used in this study. The mean debt and asset holdings for all households in 1977 and 1983 are listed and discussed in Section II. Section III describes how debt is distributed among U.S. households. In Section IV, we analyze the balance sheets and net financial positions of zero, medium, and high debt households (defined by nonhousing debt/income category) in 1977 and 1983. Section V provides the distribution of high debt households by income and selected other demographic characteristics. Section VI summarizes the results.

## I. DATA SOURCES

Data used in this study are from surveys of consumer finance conducted in 1977 and 1983 and sponsored by the Federal Reserve System. Both surveys contain detailed information on assets and debts held by a representative sample of U.S. households. This information plus economic and demographic data supplied for each household allow the researcher to not only profile the average U.S. household's balance sheet but to analyze how portfolio positions vary with differing economic and demographic characteristics.

The 1977 Consumer Credit Survey [4] contains data on 2563 households. Values for 12 debt and asset variables which contained either missing or truncated values (generally constituting less than one percent of the sample) were imputed using means of the nonmissing and nontruncated cases for nine age and income categories. Other property assets, missing in 4 percent of the cases and not coded for values over $100,000 in 2 percent of the cases, were replaced with mean values by type of asset from the 1983 survey.

The 1983 Survey of Consumer Finances [1; 2; 3], which includes financial information on 4103 households, updates balance sheet information from the 1977 survey. Three adjustments were made to make the 1983 survey conform with the 1977 survey. First, I removed a high income supplement of 438 households in the 1983 survey (bringing the "base sample" size to 3665) since the 1977 survey did not include a similar supplement. Second, I converted all variables denominated in 1983 dollars into 1977 dollars using the Consumer Price Index. Income variables available for 1976 and 1982 in the 1977 and 1983 surveys, respectively, were also converted into 1977 dollars. Third, I removed the value of business and value of life insurance from total assets in the 1983 survey since these variables were not included in the 1977 survey. Also removed from the 1983 definition of total assets to conform with the 1977 definition were the value of trusts, cars, land contracts, loans owed to the households, and value of gas or oil leases held.

## II. PORTFOLIOS OF ALL HOUSEHOLDS, 1977–1983

Total household debt, total assets, and net worth all declined in real terms for the mean U.S. household from 1977 to 1983. Real household debt declined by approximately 10 percent from its 1977 value of approximately $11,600 to $10,400 (1977 dollars) in 1983 for the mean U.S. household. While mean real total assets fell by just 7 percent over the 1977-83 period, the dollar drop of over $3,500 in real assets led to a decline in mean real net worth of nearly $2,400 from approximately $43,400 in 1977 to $41,000 in 1983 (table 1).

While no one should be surprised that real net wealth was greater in the expansionary economic period of 1977 than in the slower 1983 period (which just followed the 1982 recession), the expected path of debt and asset components in the business cycle is less clear. In the remainder of this section we discuss how and why the individual components of household debt changed from 1977 to 1983, followed by a similar discussion for assets.

Real mean household debt fell as a result of a decrease in real estate debt—half in home mortgage debt and half in other real estate debt.[2] Consumer debt was stable over the 1977-83 period. Slight declines in real mean instalment and noninstalment consumer debt were more than offset by a doubling in revolving charge debt. The growth in revolving charge debt, which includes credit card debt, does not reflect growth in "convenience credit" since credit card debt is measured as the balance owed after payment of the last bill and thus excludes the amount paid in full within thirty days to avoid interest.

Business cycle factors, costs of credit, and life cycle factors may all affect the levels and composition of household debt. Two views exist on the role of the business cycle on borrowing activity. The first view is that debt accumulation is procyclical, leading to less than normal growth in debt between 1977 and 1983. In 1977, the middle of an expansionary economic period, optimism about future income and ability to repay debts was high, which would lead to relatively high borrowing for home and consumer durable purchases. In 1983, just after a rather severe recession in 1982, pessimism and uncertainty about future income would lead to postponing durable purchases and thus less borrowing than otherwise. According to a second



**TABLE 1**
Portfolios of All Households, 1977–1983

| Portfolio Item | Mean Value 1977 | Mean Value 1983 | Share of Total 1977 | Share of Total 1983 | Median Value 1977 | Median Value 1983 |
|---|---|---|---|---|---|---|
| | 1977 Dollars | | Percent of Total Assets | | 1977 Dollars | |
| ASSETS | | | | | | |
| home | 27863 | 26304 | 50.6 | 51.1 | 22500 | 18248 |
| liquid assets | 9598 | 7817 | 17.4 | 15.2 | 2250 | 1058 |
| bonds | 843 | 1630 | 1.5 | 3.2 | 0 | 0 |
| stocks | 4672 | 4660 | 8.5 | 9.1 | 0 | 0 |
| other property | 12050 | 11031 | 21.9 | 21.4 | 0 | 0 |
| TOTAL ASSETS | 55026 | 51442 | 100.0 | 100.0 | 32975 | 24331 |
| | 1977 Dollars | | Percent of Total Debts | | 1977 Dollars | |
| DEBTS | | | | | | |
| REAL ESTATE | | | | | | |
| home mortgage | 6875 | 6219 | 59.3 | 59.8 | 0 | 0 |
| other real estate | 2917 | 2311 | 25.2 | 22.2 | 0 | 0 |
| CONSUMER | | | | | | |
| instalment | 1257 | 1201 | 10.8 | 11.5 | 0 | 0 |
| noninstalment | 402 | 332 | 3.5 | 3.2 | 0 | 0 |
| revolving charge | 146 | 336 | 1.3 | 3.2 | 0 | 0 |
| TOTAL DEBT | 11598 | 10399 | 100.0 | 100.0 | 2207 | 1521 |
| NET WORTH | 43428 | 41042 | | | 21232 | 14155 |
| INCOME | 17360 | 16975 | | | 14111 | 12171 |

The statistical significance of 1977–83 changes in mean portfolio items is discussed in footnote 3 of the text.

*Source:* Tabulations by author from 1977 Consumer Credit Survey and 1983 Survey of Consumer Finances.

"permanent income" view, in bad economic times low temporary income would lead to greater borrowing to maintain living standards. Pearce [7] argues that the procyclical patterns of both mortgage and consumer debt since 1960 support the first view that poorer economic times leads on balance to less borrowing, overriding the permanent income effect. This position is supported by our findings that total real debt and each category of household debt except revolving charge debt decreased between 1977 and 1983 (table 1). Also, surveyed consumer attitudes showed that while 85 percent of households thought borrowing on credit was a good idea in 1977, only 76 percent thought so in 1983, further supporting the procyclical position on credit demand.

Increased costs of credit between 1977 and 1983 very likely reduced credit demand over this period. Real after-tax rates for mortgage loans were negative in 1977 (at −4 to −5.5 percent) and increased to 4.4 percent at the end of 1982 and to 6.0 by mid-1983. While house prices increased rapidly from 1974 to 1980, providing an incentive to borrow to buy homes to obtain future capital gains, the steep rise in mortgage credit cost apparently offset this investment effect and resulted in a net decline in home mortgage debt over the 1977-83 period. The real after-tax cost of consumer credit rose from 3 percent in 1977 to 6.8 percent by mid-1983, which likely affected consumer debt's lack of substantial growth between 1977 and 1983. In addition, growth in consumer credit was likely retarded because auto loan rate usury ceilings were hit from 1980-1982, causing some rationing of consumer credit during this period [7].

Life cycle factors may also have affected the holdings of consumer debt over the 1977-83 period. The percentage of household heads between the ages of 25 and 44 increased from 38.8 percent in 1977 to 42.3 percent in 1983, which should have stimulated total credit demand since these younger households tend to be relatively high credit users. Since the percentage over 65 (who tend to borrow less) was stable at approximately 19 percent over the period, the change toward a younger age distribution may well have dampened the fall in total household credit usage.

A shift from liquid assets to financial assets is the major change on the asset side of mean consumer portfolios over the 1977 to 1983 period. A fall in the share of liquid assets to total

**TABLE 2**

Selected Frequency and Income Distributions of Household Debt and Assets, 1977–1983

| Distribution and Variable | Percentile | Share of Variable Held by Percentile 1977 | 1983 |
|---|---|---|---|
| | | Percent | |
| Frequency dist. of total debt | Bottom 50% | 1.3 | 1.0 |
| | Top 50% | 98.7 | 99.0 |
| | Bottom 20% | 0.0 | 0.0 |
| | Second 20% | 0.2 | 0.2 |
| | Third 20% | 4.0 | 3.6 |
| | Fourth 20% | 20.1 | 19.0 |
| | Fifth 20% | 75.7 | 77.2 |
| Income dist. of total debt | Bottom 20% | 3.9 | 2.8 |
| | Second 20% | 7.3 | 6.2 |
| | Third 20% | 14.0 | 11.6 |
| | Fourth 20% | 23.2 | 21.8 |
| | Fifth 20% | 51.7 | 57.6 |
| Income dist. of mortgage debt | Bottom 20% | 3.4 | 3.0 |
| | Second 20% | 8.6 | 6.3 |
| | Third 20% | 16.8 | 12.3 |
| | Fourth 20% | 27.9 | 24.9 |
| | Fifth 20% | 43.3 | 53.5 |
| Income dist. of instalment debt | Bottom 20% | 4.7 | 3.2 |
| | Second 20% | 10.4 | 9.2 |
| | Third 20% | 19.5 | 17.2 |
| | Fourth 20% | 27.1 | 22.3 |
| | Fifth 20% | 38.4 | 48.2 |
| Income dist. of total assets | Bottom 20% | 7.5 | 4.1 |
| | Second 20% | 12.1 | 8.8 |
| | Third 20% | 16.1 | 12.3 |
| | Fourth 20% | 20.7 | 18.5 |
| | Fifth 20% | 43.7 | 56.2 |

*Source:* Tabulations by author from 1977 Consumer Credit Survey and 1983 Survey of Consumer Finances.



assets of 2.2 percentage points was offset by a 2.3 percentage point increase in the share of stocks and bonds. House value and other property assets also declined in dollar terms but were virtually unchanged as a proportion of total assets. Higher real interest rates in 1983 than in 1977 are likely factors behind the shift from liquid to financial assets, since higher rates signal both higher costs of holding idle liquid assets and higher returns on financial assets.[3]

The median portfolio holdings of U.S. households tell us that the majority of households owe much less, own less, and have lower net worth than the mean U.S. household (table 1, columns 5 and 6). In fact, for each individual component of total debt presented in table 1, more than half of U.S. households hold no debt, and most hold no bonds, stocks, or other real estate. (The positive median values for total debt and total assets tell us that most U.S. households hold *some* form of debt or asset.) Of the portfolio totals, median total debt forms an especially low percentage of mean total debt (less than 20 percent in both years). This suggests that a minority, perhaps a small minority, of U.S. households holds most household debt. In the next two sections, we examine directly the distribution of household debt and then focus attention upon large holders of debt in both survey years.

## III. DISTRIBUTION OF HOUSEHOLD DEBT, 1977–1983

Household debt was highly concentrated into the hands of a minority of the U.S. population in both 1977 and 1983. While over two-thirds of households held some form of household debt in both survey years,[4] virtually all of this debt was held by the upper half of debt holders (see frequency distribution of total debt in table 2). In fact, the top 20 percent of households ranked by total debt held over three-fourths of total household debt in both survey years.

Of equal interest to the highly skewed distribution of household debt is whether debt is becoming more or less concentrated over time. The evidence suggests that the 1983 frequency distribution of debt is slightly more concentrated than that of 1977, as indicated by a 1.5 percent increase in the share of debt held by the top quintile of debt holders from 1977 to 1983 (table 2) and also a slight increase in the Gini coefficient of inequality of total household debt from .753 in 1977 to .764 in 1983 (table 3). By contrast, relatively large increases in inequality occurred for total assets, net worth, and income over the period (table 3).

How are debt holders distributed by household income? From table 2, we learn that debtors are highly concentrated in the upper income groups, with over half of total household

**TABLE 3**

Gini Coefficients of Household Portfolio Items

| Portfolio Item | Gini Coefficients[a] 1977 | 1983 |
|---|---|---|
| Total debt | 0.753 | 0.764 |
| Total assets | 0.605 | 0.673 |
| Net worth | 0.682 | 0.741 |
| Income | 0.410 | 0.458 |

[a]Ginis closer to 1 indicate greater inequality of item.

*Source:* Computations by author from 1977 Consumer Credit Survey and 1983 Survey of Consumer Finances.

debt held by the top 20 percent of households ranked by income in both survey years. Also, debt was much more highly concentrated in the upper income groups in 1983 than in 1977. The increase in income inequality from 1977 to 1983 (noted earlier) would tend to produce this shift in debt holding toward upper income groups even with the overall distribution of debt held constant. It is also possible that the economic slowdown of the early 1980s may have tended to reduce eligibility for credit by lower income groups more so than for upper income groups. The general shift toward upper income groups also occurred for the distributions of mortgage debt, instalment debt, and total assets (table 2).

It is difficult to assess whether the overall and distributional changes in household debt and other variables discussed above results in an overall increase or reduction in household debt holding levels relative to debt holding capacity. In the next section, we use both the ratio of debt to income and net worth to determine whether the proportion of highly indebted and financially vulnerable households increased significantly between 1977 and 1983.

## IV. PORTFOLIOS OF HOUSEHOLDS BY DEBT/INCOME CLASS, 1977–1983

The 1977 and 1983 consumer surveys reveal dramatic differences among households in debt-holding levels relative to income. Over 9 percent of households carried nonhousing debt of

**TABLE 4**

Portfolios of Households by Debt/Income Class, 1977

| | Debt/Income Class[a] | | | Debt/Income Class[a] | | |
|---|---|---|---|---|---|---|
| | Zero | Some | High | Zero | Some | High |
| | Mean Value in 1977 Dollars | | | Percent of Total Assets | | |
| ASSETS | | | | | | |
| home | 25312 | 28376 | 35483 | 49.4 | 57.6 | 30.4 |
| liquid assets | 13467 | 7246 | 10204 | 26.3 | 14.7 | 8.8 |
| bonds | 784 | 759 | 1753 | 1.5 | 1.5 | 1.5 |
| stocks | 4511 | 4086 | 9925 | 8.8 | 8.3 | 8.5 |
| other property | 7190 | 8814 | 59169 | 14.0 | 17.9 | 50.8 |
| TOTAL ASSETS | 51264 | 49281 | 116534 | 100.0 | 100.0 | 100.0 |
| | Mean Value in 1977 Dollars | | | Percent of Total Debt | | |
| DEBT | | | | | | |
| REAL ESTATE | | | | | | |
| home mortgage | 2687 | 8652 | 12160 | 100.0 | 77.4 | 22.0 |
| other real estate | 0 | 359 | 35962 | 0.0 | 3.2 | 65.0 |
| CONSUMER | | | | | | |
| instalment | 0 | 1570 | 4549 | 0.0 | 14.0 | 8.2 |
| noninstalment | 0 | 382 | 2385 | 0.0 | 3.3 | 4.5 |
| revolving charge | 0 | 221 | 230 | 0.0 | 2.0 | 0.4 |
| TOTAL DEBT | 2687 | 11184 | 55286 | 100.0 | 100.0 | 100.0 |
| NET WORTH | 48577 | 38097 | 61248 | | | |
| INCOME | 12873 | 19570 | 20648 | | | |
| Households | 877 | 1493 | 193 | | | |
| Percent of sample | 34.2 | 58.3 | 7.5 | | | |

[a]Debt/income classes: Zero: 0 nonhousing debt. Some: nonhousing debt/income between 0 and 50%. High: nonhousing debt/income greater than 50%.

*Source:* Tabulations by author from 1977 Consumer Credit Survey.



greater than 50 percent of their income in 1983, while over 36 percent of all households had zero debt (exclusive of home mortgage debt).[5] One expects far different pictures of financial health to emerge for the high versus low debt groups. This section first analyzes household balance sheets for three debt/income classes in 1977 and 1983, and next investigates whether or not the proportion of financially vulnerable households increased from 1977 to 1983.

"High debt" households are defined as those having nonhousing debt to income ratios of greater than 50 percent, "some debt" have positive but less than or equal to 50 percent nonhousing debt/income, and "zero debt" have no nonhousing debt. We confine our analysis to nonhousing debt (total debt less home mortgage debt) because home mortgage debt has much longer maturity than other forms of debt and wide variation in mortgage maturities would severely complicate interpretation of debt totals across households.[6]

Mean debt for high debt households was approximately $55,000 in 1977 and $41,000 in 1983, far exceeding the mean debt totals of $11,000 in 1977 and $10,000 in 1983 of households with some debt (tables 4 and 5). However, with approximately double the assets of all other households, the average high debt household was far wealthier than the average household in the zero and some debt categories in 1977 and 1983. Mean net worth for high debt households (approximately equal in both years to $60,000) was over 20 percent higher than net worth for

**TABLE 5**

Portfolios of Households by Debt/Income Class, 1983

| | Debt/Income Class[a] | | | Debt/Income Class[a] | | |
|---|---|---|---|---|---|---|
| | Zero | Some | High | Zero | Some | High |
| | Mean Value in 1977 Dollars | | | Percent of Total Assets | | |
| ASSETS | | | | | | |
| home | 22382 | 27031 | 36855 | 43.0 | 64.8 | 36.5 |
| liquid assets | 11211 | 5426 | 6910 | 21.5 | 13.0 | 6.9 |
| bonds | 2921 | 713 | 1080 | 5.6 | 1.7 | 1.1 |
| stocks | 8357 | 2755 | 1264 | 16.0 | 6.6 | 1.3 |
| other property | 7240 | 5812 | 54733 | 13.9 | 13.9 | 54.3 |
| TOTAL ASSETS | 52111 | 41737 | 100842 | 100.0 | 100.0 | 100.0 |
| | Mean Value in 1977 Dollars | | | Percent of Total Debt | | |
| DEBT | | | | | | |
| REAL ESTATE | | | | | | |
| home mortgage | 2434 | 7804 | 11624 | 100.0 | 75.5 | 28.5 |
| other real estate | 0 | 452 | 21493 | 0.0 | 4.4 | 52.6 |
| CONSUMER | | | | | | |
| instalment | 0 | 1370 | 4794 | 0.0 | 13.2 | 11.7 |
| noninstalment | 0 | 236 | 2129 | 0.0 | 2.3 | 5.2 |
| revolving charge | 0 | 478 | 801 | 0.0 | 4.6 | 2.0 |
| TOTAL DEBT | 2434 | 10340 | 40841 | 100.0 | 100.0 | 100.0 |
| NET WORTH | 49677 | 31397 | 60001 | | | |
| INCOME | 12589 | 19037 | 19974 | | | |
| Households | 1325 | 1990 | 349 | | | |
| Percent of sample | 36.2 | 54.3 | 9.5 | | | |

[a]Debt/income classes: Zero: 0 nonhousing debt. Some: nonhousing debt/income between 0 and 50%. High: nonhousing debt/income greater than 50%.

*Source:* Tabulations by author from 1983 Survey of Consumer Finances.

zero debt households and from 60 to 90 percent higher than some debt households. Interestingly, mean income of high debt households was nearly the same as for households with some debt.

The breakdown of total assets and total debt into components is quite different for high debt households than for the average household in the zero debt and some debt classes. In both years, high debt households held most of their debt in other real estate, while home mortgage debt comprises over three-quarters of total debt of other households. High debt households held a higher proportion of noninstalment debt to total debt than did other households, but a lower proportion of instalment and revolving charge debt than other households in both survey years.

On the asset side, high debt households held far larger shares of their assets in other property and smaller shares in home value and liquid assets than did households in the lower debt categories in both years. Over the 1977-83 period, all three debt/income groups reduced their share of liquid assets, which one might expect since the cost of credit (the opportunity cost of holding liquid assets) increased over the 1977-83 period. One might also have expected investment in stocks and bonds to rise over the period because of increases in real interest rates. This occurred for zero debt households but not for high debt households. The real dollar value of homes actually fell for zero debt and some debt households and rose only slightly for high debt households despite the rapid housing price inflation that occurred in the late 1970s.

The proportion of high debt households rose from 7.5 percent in 1977 to 9.5 percent in 1983 (see bottom lines, tables 4 and 5). Does this indicate an increase in those who are financially vulnerable? Not necessarily, since we have seen that on average high debt households have high assets. We thus divide the high debt households into those capable of paying off debts with current assets (to be called "solvent" households[7]) and those not so capable ("insolvent" households) and examine mean debt, assets, and net worth of these groups. This is also done for households with some debt. The findings allow us to not only focus concern upon the insolvent among the high debt (and some debt) households but to examine the average magnitude of negative net worth of the insolvent groups in 1977 and 1983.

The results indicate that most of the growth in high debt households of from 7.5 percent in 1977 to 9.5 percent in 1983 was due to increased numbers of solvent high debt households, a group whose mean net worth exceeded $84,000 in both years (table 6). The proportion of insolvent high debt households rose by 0.8 percent, less than half of the 2 percent increase in high debt households.[8] Further, the net financial position of the insolvent high debt group improved, with the margin of mean debt over assets falling from approximately $14,000 in 1977 to just $5,000 in 1983. The shares of insolvent households with some debt increased from 10.4 percent in 1977 to 12.9 percent in 1983, but as with high debt households the net financial position of this group improved. Of the groups analyzed, only solvent households with some debt sustained a significant decline in net worth over the 1977-83 period, and the share of this group fell from 47.9 to 41.5 percent.

## V. CHARACTERISTICS OF HIGH DEBT HOUSEHOLDS, 1977–1983

Most high debt households have real income under $20,000, are young (household head under 45), male, white, married, not self-employed, are located in an urban area, and are homeowners (table 7, columns 1 and 2). The North Central region in 1977 and the South region in 1983 contained the highest percentage of high debt households of the four census regions. In addition, the distribution of high debt households shifted between 1977 and 1983 toward higher percentages of young, female, black, nonowner, unmarried, and self-employed households. In each of these cases, an increase in the percentage of these groups in the underlying distribution of all households partially explains the increased makeup of high debt households among these groups (table 7, columns 3 and 4).



**TABLE 6**

Mean Asset and Debt Holdings for Selected Debt and Solvency Categories, 1977–1983

| Sample Year | Financial Category[a] | Debt[b] | Assets[c] | Net Worth | Sample Size | Proportion of Sample |
|---|---|---|---|---|---|---|
| | | Mean Value in 1977 Dollars | | | Number | Percent |
| 1977 | Zero debt | 0 | 48635 | 48635 | 877 | 34.2 |
| | Some debt | | | | | |
| | solvent | 2607 | 49465 | 46858 | 1227 | 47.9 |
| | insolvent | 2186 | −119 | −2305 | 266 | 10.4 |
| | High debt | | | | | |
| | solvent | 45444 | 130313 | 84869 | 147 | 5.7 |
| | insolvent | 35716 | 21486 | −14230 | 46 | 1.8 |
| 1983 | Zero debt | 0 | 49713 | 49713 | 1325 | 36.2 |
| | Some debt | | | | | |
| | solvent | 2715 | 43922 | 41207 | 1519 | 41.5 |
| | insolvent | 1937 | 589 | −1348 | 471 | 12.9 |
| | High debt | | | | | |
| | solvent | 36731 | 120983 | 84252 | 252 | 6.9 |
| | insolvent | 9057 | 3977 | −5080 | 97 | 2.6 |

[a]Financial categories: Zero debt: 0 nonhousing debt. Some debt: nonhousing debt/income between 0 and 50%. High debt: nonhousing debt/income greater than 50%. Solvent: assets equal or exceed debt. Insolvent: debt exceeds assets.

[b]Debt refers to total debt less home mortgage debt (or nonhousing debt).

[c]Assets refers to total assets less home mortgage debt (or gross nonhousing assets plus net home equity).

*Source:* Tabulations by author from 1977 Consumer Credit Survey and 1983 Survey of Consumer Finances.

To examine the presence of high debt households in each demographic group without considering the relative size of the group in the overall population, we calculated the proportion of high debt households within the given demographic groups (columns 5 and 6 of table 7). It is not surprising that the proportion of high debt households within demographic categories would rise for many categories since the overall percentage of high debt households in the U.S. increased from 7.5 percent to 9.5 percent, a change found to be statistically significant at the .01 level. Table 7 indicates that 15 of the 26 demographic groups analyzed registered statistically significant increases in the percentage of high debt households over the 1977-83 period. Also of interest is whether there are significant differences between demographic categories at a point in time. Significance tests conducted at the .01 level for the 1983 sample (not shown in table 7) revealed that the concentration of high debt households was significantly greater for higher income (over $20,000) than for lower income households, for younger (under 45) than for older households, for male-headed than for female-headed households, for residents of the West census region than for all other regions, and for the self-employed than for those not self-employed.

## VI. SUMMARY

Total debt, total assets, and net worth all declined in real terms for the mean household over the 1977 to 1983 period, as might be expected in comparing a boom to a recession period.

**TABLE 7**
Characteristics of High Debt Households, 1977–1983

| Variable | Distribution of High Debt | | Distribution of All Households | | Concentration of High Debt Within Each Demographic Category | |
|---|---|---|---|---|---|---|
| | 1977 | 1983 | 1977 | 1983 | 1977 | 1983 |
| | | | Percent | | | |
| INCOME | | | | | | |
| <10000 | 30 | 37 | 33 | 40 | 7 | 9* |
| 10000–20000 | 32 | 29 | 39 | 33 | 6 | 9* |
| 20000–35000 | 22 | 19 | 22 | 19 | 8 | 10 |
| 35000–50000 | 9 | 7 | 4 | 4 | 18 | 16 |
| 50000+ | 7 | 8 | 3 | 4 | 16 | 21 |
| AGE | | | | | | |
| <35 | 37 | 39 | 32 | 31 | 9 | 12* |
| 35–44 | 25 | 27 | 16 | 20 | 12 | 13 |
| 45–54 | 18 | 13 | 17 | 16 | 8 | 8 |
| 55–64 | 15 | 16 | 17 | 15 | 7 | 10* |
| 65+ | 6 | 5 | 19 | 19 | 2 | 2 |
| SEX | | | | | | |
| Male | 85 | 79 | 78 | 74 | 8 | 10* |
| Female | 15 | 21 | 22 | 26 | 5 | 8* |
| RACE | | | | | | |
| White | 90 | 84 | 87 | 81 | 8 | 10* |
| Black | 6 | 9 | 9 | 13 | 5 | 7 |
| TENURE | | | | | | |
| Owner | 72 | 67 | 69 | 63 | 8 | 10* |
| Nonowner | 28 | 33 | 31 | 37 | 7 | 9 |
| REGION | | | | | | |
| Northeast | 14 | 17 | 21 | 21 | 5 | 8* |
| North Central | 33 | 22 | 29 | 25 | 9 | 9 |
| South | 29 | 33 | 31 | 34 | 7 | 9* |
| West | 24 | 28 | 19 | 20 | 10 | 14* |
| URBAN/RURAL | | | | | | |
| Urban | 82 | 83 | 87 | 85 | 7 | 9* |
| Rural | 18 | 17 | 13 | 15 | 10 | 11 |
| MARITAL STATUS | | | | | | |
| Married | 72 | 64 | 66 | 61 | 8 | 10* |
| Unmarried | 28 | 36 | 34 | 39 | 6 | 9* |
| SELF-EMPLOYMENT | | | | | | |
| Self-employed | 14 | 21 | 5 | 11 | 20 | 19 |
| Not self-employed | 86 | 79 | 95 | 89 | 7 | 9* |
| U.S. | | | | | 7.5 | 9.5* |

* = difference between 1977 and 1983 value was statistically significant at the .05 level; significance tests between categories at a point in time are discussed in the text.

*Source:* Tabulations by author from 1977 Consumer Credit Survey and 1983 Survey of Consumer Finances.

Upon closer inspection, we found that a high and rising concentration of household debt was held by the highest debt holders and the highest income households. While the proportion of households with high debt relative to income rose over this period, most of this increase was in relatively wealthy households. While the distribution of high debt households among demographic groups tended to reflect the distribution of these groups in the overall population, relatively high concentrations of high debt households were found among high income, young, male, white, owner, West region, rural, married, and self-employed households.



Recent analysis using macroeconomic data documents large increases in household and other forms of debt relative to personal income and total assets since 1983 [5]. Research is needed to determine whether this trend has produced large increases in financially vulnerable households and if so, which groups of households have primarily been affected. The new 1986 Federal Reserve Board Survey of Consumer Finances provides a promising source of household-level data to pursue analysis of post-1983 developments in household balance sheets.

## REFERENCES


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## FOOTNOTES

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1. This microeconomic approach has been taken by Luckett and August [6] and Pozdena [8], who examined household assets and liabilities using the same survey data as used in this paper.
2. Other real estate is any real estate or properties the household owned excluding their principal residence or properties owned by a business. Examples are second homes, land, apartment buildings, or trailers used as seasonal dwellings. In this paper, liabilities on other real estate are referred to as "other real estate debt" and assets are listed as "other property assets."
3. Because most of the portfolio items discussed above had relatively high variances, the 1977-83 changes in mean values do not necessarily represent statistically significant changes. We thus ran significance tests and found that only liquid assets and revolving charge debt were significantly different in their means in 1983 than in 1977 at the .01 significance level, with home mortgage debt registering a significant mean change at the .10 level.
4. The proportion of all households holding any debt was 72 percent in 1977 and 70 percent in 1983.
5. In addition, 5 percent of households had nonhousing debt to income ratios of greater than 100 percent, and 3 percent had nonhousing debt/income exceeding 150 percent. While this paper focuses on the group with over 50 percent of nonhousing debt to income, much of the analysis was repeated for the over 100 percent group with similar major findings.
6. Wider geographic variation in housing costs than in incomes and nonhousing goods (see the 1980 Bureau of Labor Statistics [9] for evidence of this) was another reason for confining our analysis to nonhousing debt. A disadvantage of this approach is that those with only mortgage debt are not

considered here but may face similar monthly obligations to other debtors. Thus we also conducted all of our analysis using total debt and defining high debt households as those with total debt to income ratios of greater than 100 percent. Major findings under this "total debt" approach were similar to those reported in this paper using the "nonhousing debt" approach.

7. Thus "solvent" households are defined as those whose assets are greater than or equal to debts and "insolvent" households have debts greater than their assets. Since only nonhousing debt is considered in defining the three debt/income classes, assets are here defined to exclude home mortgage debt (which is part of gross home value) from total gross assets. Thus assets are defined as total gross assets minus home mortgage debt or, equivalently, gross nonhousing assets plus net home equity.
8. According to statistical tests of 1977-83 changes at the .01 level, this increase in the proportion of insolvent high debt households of from 1.8 percent to 2.6 percent was not significant while the increase in the share of high debt households of from 7.5 percent to 9.5 percent was statistically significant.