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ECONOMIC COMMENTARY

Is the Consumer Overextended?

by K.J. Kowalewski

In November, the current economic expansion attained the ripe old age of 48 months. It has lasted longer than six of the other eight post-World War II expansions. Given its relatively advanced age, analysts have wondered how much longer it can last before it ends in recession.

Consumer spending plays an important role in any expansion simply because it accounts for two-thirds of gross national product (GNP). It is especially important now because it has been the strongest source of spending this year. In the first half of 1986, real personal consumption expenditures averaged an annual growth rate of 4.9 percent, while GNP only grew 2.2 percent. Should consumer spending weaken this year, it is reasonable to ask whether there will be sufficient spending strength in other sectors to prevent the economy from falling into recession.

Doubts about the strength and durability of consumer spending have centered on the amount of debt held by consumers. There is concern that their budgets have little room left for higher rates of spending growth and debt accumulation. However, to get a complete picture of their financial health, the asset side of consumer balance sheets should also be examined.

This *Economic Commentary* examines the consumer balance sheet for sources of weakness that might lead to a slowing in spending next year. Although debt growth has been strong in this expansion, a shift in the composition of consumer assets toward liquid financial assets suggests that consumers are in better financial shape today than during similar periods of expansion in the past.

Debt as a Constraint on Spending

The amount of debt held by a household is a very important constraint on its subsequent spending and saving decisions. Debt represents an obligation to repay in the future, and leaves less income available for other spending, for saving, or for servicing additional debt.[1]

This is one reason why some analysts have worried about recent consumer debt statistics. From the trough of the recession in November 1982, through December 1985, real per capita consumer installment debt has grown a total of 64.2 percent, more than during any other postwar expansion. Moreover, a commonly used measure of consumer indebtedness, the ratio of consumer installment debt to disposable personal income, reached a new high in August 1986 (figure 1).

Although it is true that consumer installment debt growth since 1982 fourth quarter has been the most rapid of any postwar recovery, there are good reasons to downplay the importance both of this growth and of the new high of the installment-debt-to-income ratio as far as the outlook for consumer spending is concerned.[2]

One reason is that installment debt is not a complete measure of consumer indebtedness. Real per capita mortgage debt held by households has grown a total of 18.5 percent between the fourth quarters of 1982 and 1985, which is slower than its average growth during the first three years of any other postwar expansion. Total real per capita household indebtness has grown a total of 24.3 percent over the same period, slower than its growth during all expansions since the one beginning in 1954 second quarter (table 1). Moreover, the ratio of total household debts to total household assets in 1985 fourth quarter stood only slightly above its previous peak in 1980 first quarter; in the first half of 1986, the ratio fell below the 1980 peak (figure 2).

Another reason to downplay the importance of the growth of installment debt is that credit cards have been used increasingly as a transactions medium rather than as a debt medium. Many people find using credit cards more convenient for making transactions because they are safer than carrying cash, require fewer trips to the bank, and provide a record of purchases. When a person makes a purchase with a credit card, it is counted in the debt statistics. If this debt simply substitutes for cash, however, it is not "debt" in the usual sense because it will be repaid in full next month when the balance is due. In the meantime, this convenience debt inflates the debt statistics and distorts the relationship of debt and the debt-to-income ratio.

The exact amount of convenience credit is unknown, so the amount of distortion in the credit statistics is also unknown. However, revolving credit, the bulk of which represents credit card transactions, has been rising as a proportion of total installment credit. This suggests that the convenience credit fraction of total installment credit has also been rising. A convenience-adjusted

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1. This is not to say that debt necessarily constrains all spending plans. The convenience of debt undoubtedly shifts the time pattern of spending from the future to the present and promotes more spending throughout the economy than would be true in a world without available debt.

2. See Charles A. Luckett and James D. August, "The Growth of Consumer Debt," *Federal Reserve Bulletin*, vol. 71, number 6, June, 1985, for an excellent discussion of these and other reasons.

Table 1 Growth of Selected Consumer Net Worth Components in Expansions
Per Capita, 1982 dollars
Total Percentage Growth From Trough

	54:IIQ-57:IIQ	61:IQ-64:IQ	70:IVQ-73:IVQ	75:IQ-78:IQ	82:IVQ-85:IVQ
NET WORTH	16.1	5.7	2.4	10.3	16.2
ASSETS	17.8	7.7	4.3	11.1	17.6
TANGIBLE ASSETS	13.5	2.2	14.0	16.4	6.8
FINANCIAL ASSETS	20.9	10.9	-1.6	6.7	25.9
Deposit & Credit Mkt Inst.	7.1	11.3	10.2	10.0	22.4
Deposits & Currency	9.1	19.4	19.4	12.9	16.6
Check dep. & currency	-4.7	-3.9	8.7	5.8	15.7
Small time & svg.	18.3	28.5	18.3	18.8	20.6
Money mkt. funds	NA	NA	NA	25.5	-12.4
Large time deposits	-23.7	195.7	115.3	-32.2	23.6
Credit Mkt. Insts.	4.3	-1.8	-9.6	2.0	38.6
U.S. government	-5.8	-4.7	-17.4	11.9	44.0
Savings bonds	-11.0	-4.1	-4.2	-2.1	1.8
All other	7.8	-5.7	-30.1	28.5	53.8
Other	20.5	1.0	-4.0	-4.0	33.1
Corporate Equities	44.3	10.1	-19.5	-7.1	34.4
Pension Fund Reserves	35.6	22.1	14.0	22.6	31.5
Financial Minus Corporate Equities	9.0	11.6	9.3	11.4	23.3
LIABILITIES	30.6	19.8	13.8	14.8	24.3
MORTGAGE LIABILITIES	35.2	19.7	12.2	16.7	18.5
CONSUMER CREDIT LIABILITIES	24.4	19.5	17.5	10.6	39.1
Installment	27.6	20.9	21.5	14.1	41.5
Other	18.2	16.3	6.3	-1.0	29.4

SOURCE: Household Balance Sheet, Flow of Funds Section, Board of Governors, Federal Reserve System, and U.S. Department of Commerce, Bureau of Economic Analysis, and Bureau of the Census.

Table 2 Composition of Selected Consumer Financial Assets after 12 Quarters of Expansion
Fraction of Total Financial Assets

	1957:IIQ	1964:IQ	1973:IVQ	1978:IQ	1985:IVQ
DEPOSITS & CREDIT MKT. INSTS.	0.407	0.380	0.463	0.521	0.482
DEPOSITS & CURRENCY	0.240	0.251	0.343	0.392	0.338
Checkable & Currency	0.083	0.060	0.068	0.066	0.054
Small Time & Saving	0.157	0.189	0.255	0.308	0.232
Money Market Funds	0.000	0.000	0.000	0.002	0.026
Large Time Deposits	0.000	0.002	0.020	0.017	0.025
CREDIT MARKET INSTS.	0.166	0.129	0.120	0.129	0.144
U.S. government	0.092	0.061	0.046	0.053	0.076
Savings Bonds	0.063	0.038	0.026	0.025	0.010
All Other	0.029	0.022	0.020	0.028	0.065
Other	0.074	0.069	0.074	0.076	0.068
CORPORATE EQUITIES	0.403	0.428	0.310	0.219	0.248
PENSION FUND RESERVES	0.078	0.101	0.144	0.180	0.221

SOURCE: Household Balance Sheet, Flow of Funds Section, Board of Governors, Federal Reserve System.

installment debt ratio therefore would lie between the usual installment debt ratio (top line in figure 1) and one with revolving credit removed (lower line in figure 1), and would look less worrisome than the usual ratio.

A third important reason why the consumer installment debt-to-income ratio provides a misleading picture of household indebtedness is that loan maturities have lengthened over time. For example, five-year auto loans are no longer unusual. Longer maturities for a given loan size mean smaller monthly payments. This is important because it is not the amount of debt relative to income, but rather the amount of debt payments relative to income, that best indicates the financial strength of households. For example, for many homeowners, the ratio of their mortgage debt to their income is much larger than the ratio of their monthly mortgage payment to their monthly income. To get an idea about how well the homeowner could weather an unexpected income decline, it is better to know what is currently obligated to be paid rather than what is ultimately obligated to be paid.[3]

Unfortunately there are no debt repayment statistics after 1982. Luckett and August (see footnote 2) estimated what the statistics might be and found that if the historical relationship of repayments to the stock of debt has not changed since 1982, then the ratio of repayments to income was most likely approaching its historical peak at the end of 1984. Nevertheless, the repayment data are distorted by repayments of convenience credit, meaning that this ratio most likely is overly pessimistic. Futhermore, as noted earlier, longer maturities have reduced the current level of repayments in relation to overall outstanding debt, thus further distorting the data.

Another reason why outstanding debt is a constraint on future spending is because it affects the supply and cost of debt. Creditors are concerned about the riskiness of their loans and attempt to minimize this risk for a given return on their assets. Thus, they may be unwilling to lend additional amounts to households that owe many debts relative to their assets, or who are making large debt repayments relative to their incomes. Thus, there is the possibility in the current outlook that even if households wish to borrow more, they may be unable to do so, again leading to slower spending growth. However, there is no evidence to suggest that creditors are reducing their consumer lending at this time.

3. Lower interest rates this year also have lowered monthly payments for new borrowers as well as for borrowers who have refinanced mortgage and other loans.

4. The value of an asset at a point in time is the maximum amount of cash that would be realized by selling the asset under the most favorable conditions. This definition and the three asset characteristics are discussed in an unpublished manuscript by Professor James Tobin of Yale University.

Assets as Constraints on Spending

The asset side of the balance sheet can constrain spending simply because the fewer assets a household has, the less the household can spend by selling some of its assets. Recent growth in total household assets suggests that a sudden decline in consumer spending is not likely. As shown in table 1, real per capita assets have grown 17.6 percent between the trough of the recession in 1982 fourth quarter and 1985 fourth quarter. Even though real per capita liabilities grew 24.3 percent over the same period, real per capita net worth grew 16.2 percent, the strongest growth of all the expansions. A net worth increase this strong seems likely to have bolstered consumer spending in the current expansion.

Moreover, because consumer assets differ according to their liquidity, divisibility, and reversibility, the types of assets owned by a household can affect the timing and amount of its spending.

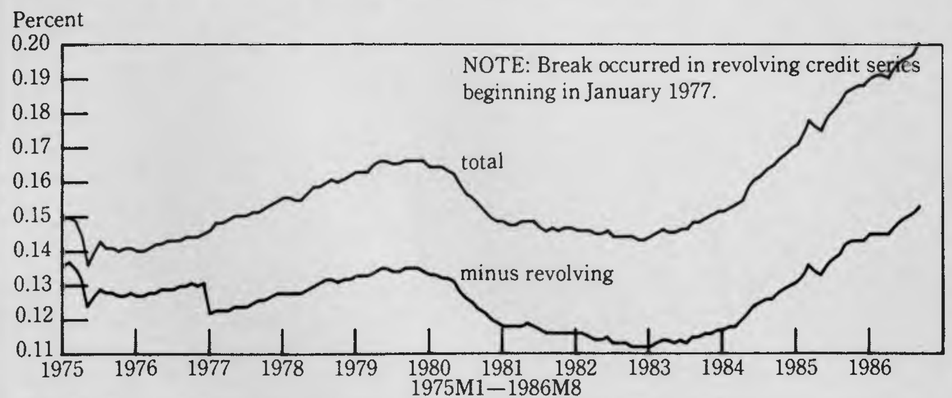
The *liquidity* of an asset is the ease and speed with which its value can be realized.[4] Currency has the greatest liquidity because it is a medium of exchange, while tangible assets such as consumer durable goods, housing, land, and pension assets are relatively illiquid. It usually is difficult to sell illiquid assets quickly without lowering their asking prices substantially.

The *reversibility* of an asset refers to the discrepancy between its net selling price and the contemporaneous cost of buying the same asset. Perfect reversibility is impossible because every asset exchange involves transactions costs, such as brokerage fees, the time and trouble of going to the bank, or of advertising in the classified ads. Some assets such as nonmarketable U.S. government savings bonds, and retirement and death benefits, are irreversible; once they are acquired, they cannot be sold to anyone else.

The *divisibility* of an asset is the size of the smallest unit that can be bought or sold. Currency, for example, is highly divisible because any denomination of a Federal Reserve note can be exchanged for an equivalent amount of pennies. On the other hand, an automobile is indivisible; a whole car must be owned to obtain its transportation services.

Consequently, households whose assets are primarily illiquid, irreversible, and indivisible may find their spending plans limited at certain times by their inability to sell part of their assets at a favorable price. This is especially true because the values of many assets vary over time. In particular, asset prices generally fall during recessions. Thus, there is a chance that a household's assets may be worth less just when they need to be sold. Moreover, the collateral value of assets also will fall with market value. For example, the drop in farm land prices has put additional strain on the financial positions of farmers because their creditors have asked for additional collateral for their loans.

Figure 1 Installment Debt-to-Income Ratio



SOURCE: Board of Governors of the Federal Reserve System; and U.S. Department of Commerce, Bureau of Economic Analysis.

Thus, when a household's wealth is concentrated in tangible or risky financial assets, it may be particularly difficult to weather income declines. Instead of selling assets, or acquiring additional debt, the household may be forced to reduce current spending. In addition, if assets are sold, any capital losses from the sale will act to reduce future spending.

Accordingly, the recent shift in the mix of assets is also an encouraging sign. Real per capita tangible assets have grown only 6.8 percent, which is the slowest pace since the early 1960s. Real per capita financial assets, on the other hand, have grown 25.9 percent during this expansion, the fastest of all postwar expansions that have lasted at least 12 quarters. Consequently, the ratio of financial assets to total assets has increased during this expansion, after falling during the decade of the 1970s (figure 2). This shift gives households better ability to weather unexpected income declines than in the 1970s and early 1980s when household portfolios were more heavily weighted toward tangible assets.

The value of corporate equity held by consumers has grown 34.4 percent in this expansion, the fastest since the mid-1950s expansion. However, the strong equity performance accounted for only a fraction of the increase in consumers' financial assets. Excluding corporate equities, real per capita financial assets have grown 23.3 percent, showing by far the fastest growth of all these expansions. Deposits and currency holdings have grown 16.6 percent, faster than in two of the four other expansions, while credit market instrument holdings have grown 38.6 percent, by far the fastest growth of all expansions.

As a result, deposits and credit market instruments accounted for 48.2 percent of financial assets in 1985 fourth quarter, more than after all other expansions, except during 1978 first quarter (table 2). Money market fund shares, checkable deposits, and currency, the most liquid, reversible and divisible of all assets, together accounted for 8.0 percent, a close second to the 1957 second quarter standing. Corporate equities, whose values are less predictable, accounted for 24.0 percent, the second lowest of all expansions.

Caveats

An examination of the household balance sheet tells an encouraging story about the financial strength of the consumer sector. Although debt growth has been strong, asset growth, especially liquid financial asset growth, also has been strong. The consumer sector as a whole appears to be in much better financial shape now than in recent years. Moreover, installment debt growth has slowed to an average annual rate of 12.0 percent in the first eight months of 1986, after rising to 17.7 percent in the second half of 1985. According to preliminary estimates, household financial asset growth remained high in the first half of 1986, partly due to the strong stock market performance. Nevertheless, a few caveats are in order.

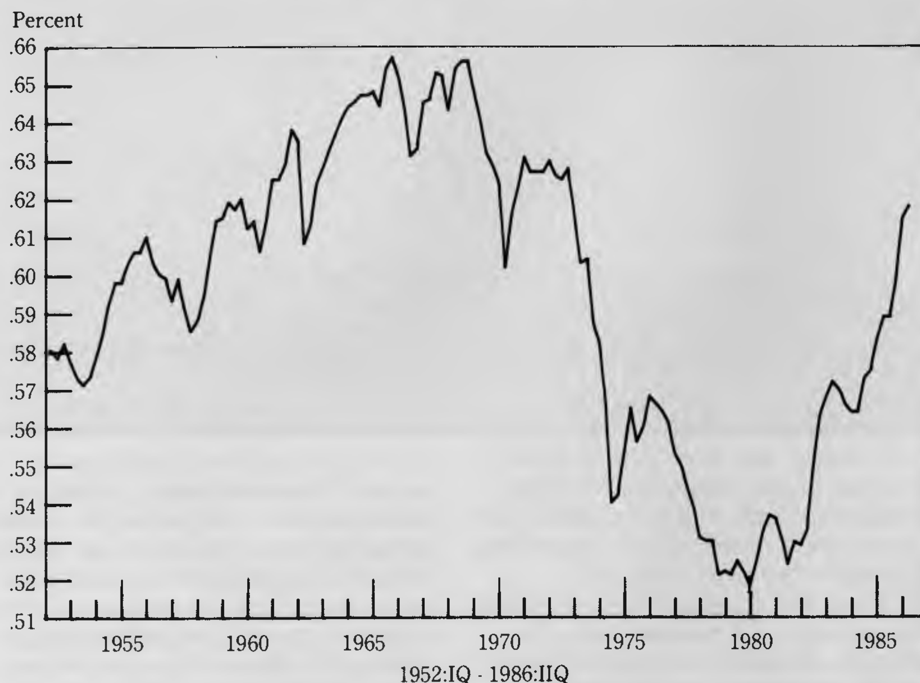


Figure 2 Financial Assets as a Percentage of Total Assets

SOURCE: Household Balance Sheet, Flow of Funds Section, Board of Governors, Federal Reserve System.

First, most of the asset figures are not market values. The nonland tangible asset figures are measured at replacement cost, and the credit market instrument figures are par values. Unfortunately, it is not clear what the actual market values would amount to for these assets. In many areas of the country, the housing market is depressed, while in other areas, most notably the East Coast, the housing market is booming. Since the drop in interest rates, the market values of outstanding bonds have risen, but it is not clear how many of those bonds were redeemed with call provisions.

Second, pension assets, which are illiquid and irreversible, have accounted for an increasing share of financial assets over time. For example, in the first quarter of 1952, pension assets accounted for about 6 percent of total financial assets, but by 1985 fourth quarter, they accounted for over 22 percent. Moreover, on a share-weighted basis, the growth in pension fund reserves accounted for about 30 percent of the percentage point increase in total financial assets. On the other hand, a smaller share of consumer assets is held in U.S. savings bonds, which are also illiquid and irreversible. Because the amount of pension assets is greater than that of savings bonds in the household balance sheet, the recent shift in the balance sheet towards financial assets does not convey the same degree of financial strength as in the past.

Third, personal bankruptcy filings were up 31.2 percent (annual rate) in 1986 first quarter over 1985 fourth quarter, and another 52.2 percent in 1986 second quarter, continuing a rise that began in 1985 first quarter. The rise is not centered in areas of particular distress, such as the farm belt and the oil-producing states, but is spread out across the country. Although changes in the bankruptcy laws have altered the behavior of personal bankruptcy filings, the sudden rise in bankruptcy filings over the last six quarters, after they fell steadily since 1981 second quarter, bears watching.

Finally, the percent of installment loans delinquent 30 days or more has increased to 2.50 percent in 1986 second quarter from a recent low of 1.99 percent in 1984 first quarter. However, this is still below previous peaks, and delinquencies have not increased as much as might be expected given the sharp increase in personal bankruptcy filings. Like the bankruptcy filings, this statistic also bears watching.

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