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FRBSF Weekly Letter

Educated Consumers

This is National Consumer Education Week. According to the U.S. Office of Consumer Affairs, the week's schedule will feature numerous media events designed "to stimulate support for consumer-education programs and to assist consumers in dealing with the problems of inflation." This might thus be a fitting time to summarize what consumers have learned in an inflationary environment about how to handle $2 trillion in annual income.

On the basis of their recent behavior, households seem to have learned the laws of economics reasonably well. They have responded to specific price shocks — especially the several OPEC oil-price shocks — by reducing their demand for higher-priced products. They have also responded to the upward surge in the general price level in an economically rational manner, by spending more and more of their funds on tangible goods rather than depreciating paper.

Higher living standards

Another important feature of consumer behavior during the past inflationary decade was an ability to maintain real living standards in the face of a serious weakening of productivity. Real disposable per capita income — probably the best measure of consumer well-being — rose at a 2.25-percent annual rate between 1949 and 1969, but at a 2.64-percent rate over the 1969-79 period. (Real spending showed the same trend as real income.) In contrast, the growth of real GNP per employee slackened considerably over time, with this productivity measure growing at a 2.42-percent rate in the 1949-69 period but at only a 0.82-percent rate in the 1969-79 period.

Herbert Stein, writing in *Contemporary Economic Problems — 1979*, notes that the ratio of workers to population remained steady in the first two postwar decades, but then jumped from 40 to 45 percent over the past decade. Thus we offset a good deal of the slowdown of output per employee by attracting more married women and teenagers into the paid workforce.

Stein attributes this maintenance of real living standards also to the electorate's decision to reduce spending on national defense. In the 1949-69 period, we increased the share of GNP devoted to defense, from 6.44 percent to 8.84 percent, but then reduced the defense share to 4.55 percent over the 1969-79 decade. Because of these two factors, then, the output available for private consumption rose less than GNP in the earlier period but faster than GNP in the most recent decade.

The 1980's may differ considerably from the 1970's in this regard. The Administration seems to have strong support for its plan to boost defense spending (in real terms) by 25 percent over the next half-decade, and consumers of course will have to bear the burden of that shift in resources. Moreover, demographic factors will work against the expansion of the workforce, because of the slower growth of the pool of potential workers represented by teenagers and middle-aged homemakers. But by the same token, demographic factors favor an improvement in productivity over the coming decade, because roughly half of the nation's population growth over the decade will be concentrated in mature adult (25-44) age brackets. If this mature workforce can obtain better tools to work with (e.g., through tax policies to encourage capital investment), then the nation's productivity performance should improve, and the economy could grow fast enough to meet all the demands placed upon it.

Response to price shocks

The OPEC oil exporters will continue to be among the most persistent claimants on U.S. resources. But American consumers, although perhaps unfamiliar with the eco-

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nomic concept of elasticity, have deftly illustrated that concept through their response to soaring oil prices during the past decade.

According to a Council of Economic Advisers' summary of recent elasticity studies, short-run (one-year) price elasticities of demand for gasoline range between minus 0.2 and 0.4, while longer-run (five-year) elasticities range between minus 0.6 and minus 0.8. In other words, a 10-percent rise in price will lead to a 2-to-4 percent reduction in consumption in the short run, and to a 6-to-8 percent reduction in the longer run. The data thus belie the common belief that demand for petroleum products is price inelastic.

Even before 1979's dramatic price increase, the rising price of energy had cut significantly into demand. After the 1973 oil embargo (1972-78), the growth in per capita gasoline consumption rose less than half as fast as in the preceding six-year period, even though real per capita income rose at roughly the same rate during the two periods. This finding can be partly explained by improvements in the fuel efficiency of automobiles, although auto usage also dropped in the post-embargo period. Average miles traveled per car dropped slightly between 1972 and 1978 — but would have been 10 percent higher if the 1966-72 trend had continued over the following period. And households showed an even better conservation record in terms of total per capita energy usage. If the earlier trend had continued, total energy use would have been 16 percent higher than the 1978 actual figure — which represents the saving of 6 million barrels of oil a day.

Households responded in the same fashion to the 1979 price hikes. Demand for all petroleum products declined more than 4 percent between the fourth quarter of 1978 and the fourth quarter of 1979, and gasoline demand fell more than 9 percent over that period. Also, drivers responded to higher prices by reducing their average mileage per car by 5 percent during the year. In 1979 as in earlier years, consumers thus showed a keen appreciation of the concept of price elasticity of demand.

Response to inflation

Even stronger evidence of consumer education in the economic facts of life can be gleaned from the shift of household assets in the inflationary environment of the past decade and a half. Over the 1952-65 period, as consumer prices increased about one-fifth, households concentrated much of their asset holdings in financial (paper) assets, such as deposits and securities; but over the 1965-78 period, as prices doubled, households shifted their attention to tangible (real) assets, such as housing and consumer durables. Consumers were encouraged in this direction by the legislative penalty imposed on saving in the form of deposits, since Congress not only kept bank deposit-rate ceilings intact, but even extended them to thrift institutions at the beginning of this inflationary period.

The overall wealth-income ratio of households increased about 9 percent between 1952 and 1965, but then declined about 13 percent over the inflationary 1965-78 period, with net financial wealth plus tangible wealth equalling 4.19 times disposable income in 1978. Between 1965 and 1978, the tangible wealth/income ratio actually increased slightly, but in contrast, the financial wealth/income ratio dropped sharply from 2.15 to 1.26 (see chart).

Financial and tangible assets

All types of financial assets were handicapped during the recent inflationary period. Household investment in corporate stock suffered because of the increasing uncertainty attached to stocks in an inflationary environment, according to William Fellner in *Contemporary Economic Problems — 1979*. Moreover, because of the absence of inflation adjustments in taxes on dividends and capital gains, the tax burden on securities owners rose in relation to real yields as the inflation rate increased. Other financial assets, such as

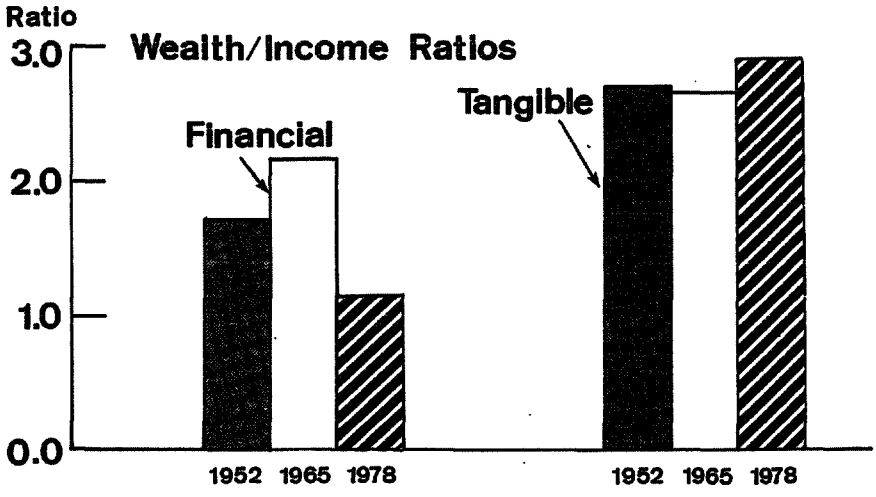
claims on money payments fixed in current dollars, involved substantial risk for pre-tax returns, and even greater risk for after-tax returns levied on current-dollar income.

Tangible assets, such as housing and consumer durables, were not handicapped in this fashion by the recent inflation. Instead, their prices rose in current-dollar terms, and the prices of some indeed increased in inflation-corrected dollars. And as Fellner notes, the expected real yield of these assets depended not on risky market prospects, but rather on the untaxed use value accruing to the households themselves. Moreover, such yields were not limited by price controls — by the statutory regulation of interest rates affecting certain financial assets.

To buy real property, the average saver assumed an unprecedented amount of additional debt in the recent inflationary period. Well-developed mortgage markets, combined with the favorable tax treatment of interest expense, encouraged individuals to leverage their savings sufficiently to purchase homes or investment real estate. Not surprisingly, then, home mortgages accounted for a growing share of total credit demands, rising from 19 percent of total net credit in the 1960's to 20½ percent in the 1970's.

Entering the 1980's, many consumers have shown considerable ingenuity in handling inflation. In fact, some have learned to cope too well, and may become somewhat reluctant allies in the fight against inflation. But the right policy mix — including the continued dismantling of deposit interest-rate ceilings and (above all) winning the fight against inflation — could persuade rational consumers to take a renewed interest in paper assets rather than continue their flight into real assets.

William Burke



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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 9/24/80	Change from 9/17/80	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	140,094	214	5,891	4.4
Loans (gross, adjusted) — total#	118,220	193	7,284	6.6
Commercial and industrial	34,346	47	2,563	8.1
Real estate	47,939	181	7,025	17.2
Loans to individuals	23,787	36	425	1.8
Securities loans	1,037	91	− 1,133	− 52.2
U.S. Treasury securities*	6,477	12	− 1,196	− 15.6
Other securities*	15,397	9	− 197	− 1.3
Demand deposits — total#	42,876	−3,561	− 58	− 0.1
Demand deposits — adjusted	32,277	−1,189	1,950	6.4
Savings deposits — total	29,353	− 247	− 835	− 2.8
Time deposits — total#	65,131	1,288	10,255	18.7
Individuals, part. & corp.	56,562	1,184	10,034	21.6
(Large negotiable CD's)	25,103	743	4,562	22.2

Weekly Averages of Daily Figures	Week ended 9/24/80	Week ended 9/17/80	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (−)	− 57	− 19	− 2
Borrowings	136	166	15
Net free reserves (+)/Net borrowed(−)	− 194	− 186	− 17

* Excludes trading account securities.

Includes items not shown separately.

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