Prudential-Bache
Securities

TOPICAL STUDY #12

HOW THE BABY BOOMERS ARE CHANGING THE ECONOMY

Economics

Dr. Edward Yardeni*

April 6, 1988

I. Conclusions

We expect that within the next five years, demographic forces related to the aging of the baby boom will push the personal savings rate up to 10% and the unemployment rate down to 4%. Consumer spending, which in real terms rose 4.6% per year on average from 1983 to 1986, should increase at half this pace over the next five years, as the baby boomers approach their forties. Home prices should rise at a much slower pace. Capital spending should be very strong because labor is scarce; new entrants into the labor force are now coming mostly from the baby bust generation which followed the baby boom generation. Productivity should grow rapidly. So the inflation rate is likely to stay low.

This optimistic forecast isn't intended to be a down-the-road scenario. We believe that most of the trends that we are projecting over the next five years are already underway. If so, then bond yields should continue to trend lower. Stock prices should reach new highs by year-end or early next year.

II. A Brief Introduction To The Baby Boom

The baby boomers have had a tremendous influence on our economy. Undoubtedly, they will continue to be extraordinarily influential. Yet, most models of the economy completely ignore demographic trends.

The baby boomers were born between 1946 and 1964. *During this 19 year interval, 76 million babies were born, almost one-third of our present population.* During 1946, 3.4 million babies were born in the United States, 20% more than in 1945 and an all-time high up to that time. At first demographers assumed that returning GIs were making up for lost time. But the tidal wave of births continued and didn't crest until 1957 when more than 4.3 million babies were born. At least 4 million babies were born in each of the bumper-crop years from 1954 through 1964, the last year of the baby binge.

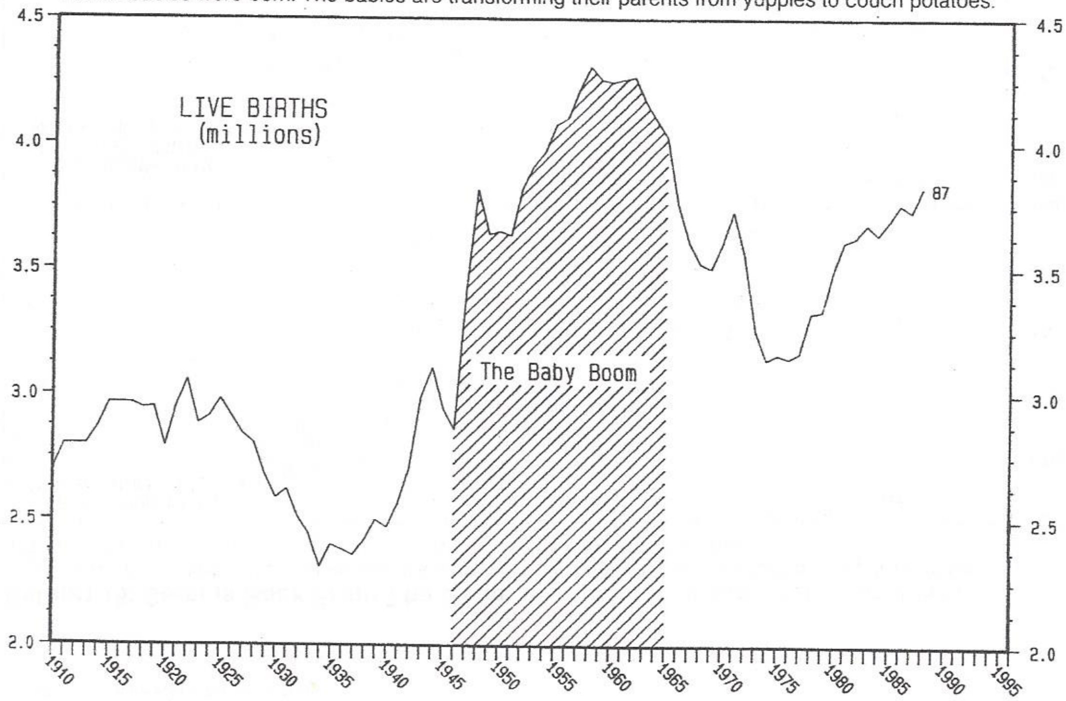
The oldest baby boomers, those born in 1946, are currently 42 years old and the youngest, born in 1964, are 24 years old. The median age is 32 years old—half of the crowd was born after 1955. So in eight years, i.e., in 1996, the "median" baby boomer will be 40 years old.

The postwar baby boom in America was quite unique. There was no comparable boom in Europe. Only Canada, Australia, and New Zealand experienced the same prolonged and broad-based baby boom as did the United States.

Several factors joined together after the second world war to boost the birth rate in the U.S. More Americans were marrying and they were marrying younger. The mothers of the baby boom were having an abnormally large number of children early in life. The postwar economy created a new wave of prosperity. So the parents of the baby boom felt secure about starting families.

*The author is 38 years old and a card-carrying member of the baby boom generation.

Exhibit 1: Between 1946 And 1964, Live Births Totalled 76 Million. Baby boomers account for roughly one-third of our present population. The oldest of the group are 42 years old today; the youngest are 24 years old. The median age is 32 years old. In eight years, the "median" boomer will be 40 years old. The "echo" baby boom started in 1977. During the past 11 years, 39.7 million babies were born. The babies are transforming their parents from yuppies to couch potatoes.



III. How The Boomers Overwhelmed The Economy

During the 1970s, unemployment remained high while inflation was accelerating. Economists were puzzled. During the 1960s, they had observed an inverse relationship between these two variables. The so-called Phillips Curve suggested that policymakers faced a tradeoff. Economists believed that fiscal and monetary policies could be used to "fine-tune" the economy, but if policymakers chose to lower the unemployment rate they had to accept a higher inflation rate.

*It is our view that the tremendous influx of baby boomers into the labor force during the 1970s and early 1980s largely explains why the unemployment rate **and** the inflation rate rose together.* The baby boomers overwhelmed the job market. They entered the labor force faster than the economy could create jobs. In the seventies, as millions of baby boomers left their schools and looked for jobs, the labor force grew by 24 million (or 30%)—compared to only 7 million during the fifties (an 11.3% increase) and 12.3 million during the sixties (an 18% increase).

So the unemployment rate shifted upwards during the 1970s. Policymakers responded by stimulating the economy in an effort to create more jobs for the boomers. The politicians recognized that this group was entering not only the labor market, but also the political marketplace. If the baby boomers were old enough to want a job, they were old enough to vote. So economic policy was biased towards inflation.

Inflation didn't bother the baby boomers. They could beat inflation by getting married and bringing home two paychecks. Those two paychecks, in turn, gave them the purchasing power to fuel even more inflation. Also, they leveraged their paychecks with large mortgages for houses and condominiums. Home prices rose faster than most other prices because of the enormous demand for housing by the baby boomers. So their need for shelter fueled the real estate inflation of the 1970s and 1980s which, in turn, made homes great inflation-hedge assets for these young households.

IV. The True Story Behind The Falling Savings Rate

The bulge of baby boom households during the first half of the 1980s helps to explain why the personal savings rate has been declining. The young couples needed lots of apartments and houses. Rents rose sharply, and faster than disposable incomes.

The consumption figures in the GNP accounts include tenant-occupied and owner-occupied rent. When a family buys a house, even if they pay all cash, the government's statisticians impute owner-occupied rent consumption. This procedure is slightly at odds with reality since most homeowners don't view their homes as consumption goods or even as depreciating assets.

The following table disaggregates the personal savings rate, i.e., personal savings divided by disposable income. The savings rate is just the flip side of the consumption rate: The two always sum to 100%, by definition. The savings rate fell from 7.1% during 1980 to 3.7% during 1987. The consumption rate rose 3.4 percentage points, from 92.9% to 96.3% over this period. The table shows that total rent relative to disposable income rose 1.4 percentage points from 1980 to 1987, thus explaining 41% of the rise (fall) in the consumption (savings) rate. Consumption items which we associate with the lifestyle of "yuppies" (i.e., young urban professional boomers) explain another 26% of the rise in the consumption rate from 1980 to 1987. The yuppie items are (1) clothing and shoes, (2) restaurant meals, (3) audio and video equipment, (4) foreign cars, (5) brokerage and investment fees, and (6) RVs, boats, and planes. *So the baby boomers as renters, homebuyers, and yuppies probably accounted for 68% of the drop in the savings rate from 1980 to 1987.*

Exhibit 2: Demographic Pressures Help To Explain The Drop In Personal Savings Rate.

	Personal Savings Rate	Personal Consumption Rate*	=	Rent Component	+	Yuppie Component	+	All Other Component
1987	3.7%	96.3%		13.9%		14.5%		67.9%
1986	4.3	95.7		13.6		14.4		67.7
1985	4.5	95.5		13.2		14.0		68.3
1984	6.2	93.8		12.9		13.7		67.2
1983	5.4	94.6		13.1		13.7		67.8
1982	6.8	93.2		13.1		13.2		66.9
1981	7.5	92.5		12.8		13.3		66.4
1980	7.1	92.9		12.5		13.6		66.8

*100% less personal savings rate.

V. The Birth Dearth Means Less Unemployment

As we approach the next decade, the demographic trends which pushed the unemployment rate up and the savings rate down are already reversing. During 1955, which was the median birth year for the baby boom generation, the percentage of 16-24 year olds in the labor force was only 15%. This ratio rose sharply over the next 23 years to a 1978 peak of 24.5%. This ratio fell to 19.2% during 1987. Currently, 25-34 year olds and 35-44 year olds constitute 29.4% and 23.7% of the labor force, respectively. So young, immature, and inexperienced workers have become a much less significant fraction of the labor force. Since such workers are the most likely to have trouble getting and keeping jobs they helped to push the unemployment rate up when they flooded the labor markets during the 1970s.

Now there are fewer youngsters entering the labor force. During the 1970s, the number of 16-24 year olds in the labor force increased 8.6 million. From 1980 through 1987, this cohort fell 2.4 million. The baby boom was followed by a baby bust. The annual live birth rate fell from 4.0 million babies during 1964 to 3.2 million babies during 1976. The "birth dearth"

Exhibit 3: The Labor Force Is Aging. Last year, 16-24 year olds contributed only 19% of the labor force, the lowest percentage since 1965 and well below the 1978 peak of 24.5%. Fewer young new entrants into the labor force suggest that the unemployment rate could fall to 4% within the next five years.

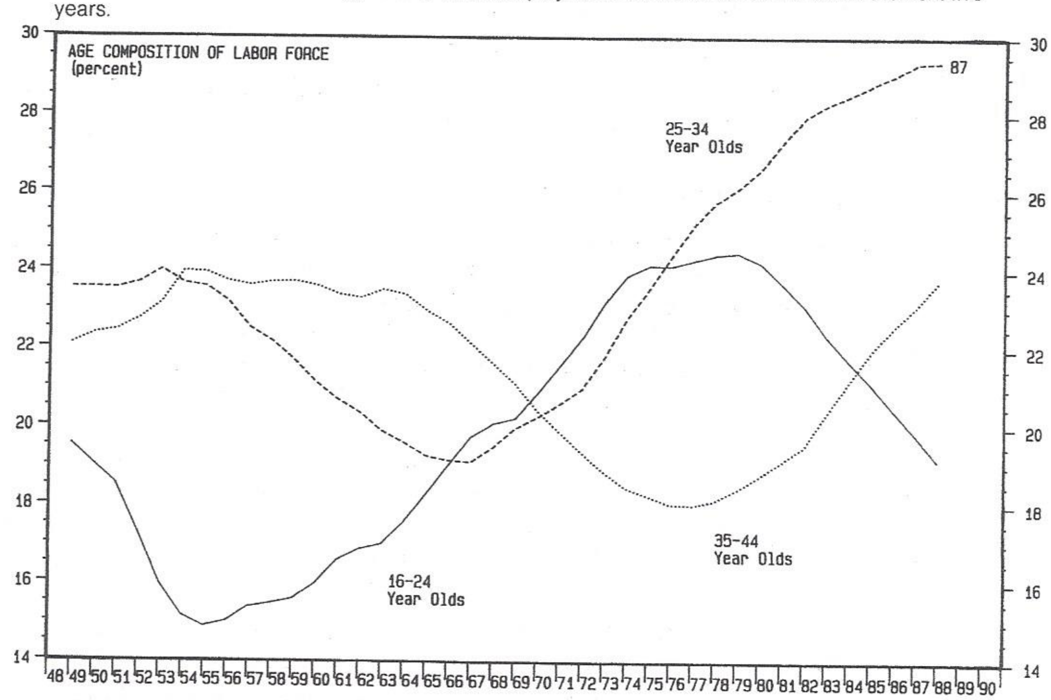
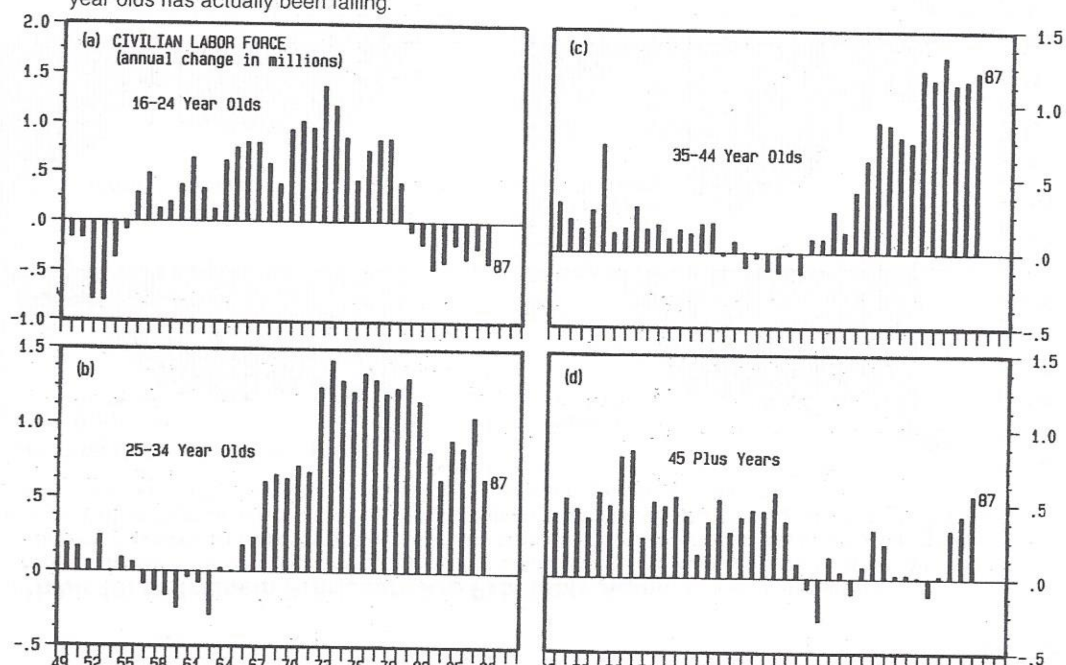


Exhibit 4: The "Median" Baby Boom Worker Will Be 40 Years Old In 1996. During the 1970s, the number of 16-34 year olds in the labor force increased by 20.2 million. The entire labor force increased by 24.3 million during that decade. So the baby boomers accounted for 83% of the surge in the labor force during the 1970s. Notice that since 1980, the number of 16-24 year olds has actually been falling.



which followed the baby boom is already helping to push the unemployment rate back down toward levels not seen since the mid-1970s. *We expect that by the end of the decade the unemployment rate will fall to 4%, the lowest rate since January 1970.*

The labor force grew 1.1%, 1.7%, and 2.7% per year, on average, during the 1950s, 1960s, and 1970s. During the 1980s, the growth rate will decline to 1.4% annually and then to 1.0% annually in the 1990s.

VI. Yuppies And Couch Potatoes

Annual births have been rising since 1976 as the baby boomers started to procreate. During 1987, 3.8 million babies were born, the largest number since 1964. From 1977 to 1987, 39.7 million babies were born. These "echo" babies are having an important effect on their baby boom parents. *The kids are transforming the yuppies into couch potatoes.* Yuppies go out to restaurants, discos, and movies whenever they get the urge. Couch potatoes stay home mostly, because they can get a baby sitter only on Saturday nights. They watch rented videotapes and bring home pizza or Chinese food. They don't buy VCRs because they already own VCRs. They don't need to buy lots of clothes because their nightlife doesn't extend much beyond a 50 foot radius from their couch. On the weekends, they don't go to their country house. Instead, they have a barbecue in the backyard. They do venture out into the malls but their purchases are practical, not frivolous. (We've heard that in California, "cocooners" prefer to stay indoors during the entire weekend.)

Professor Franco Modigliani of M.I.T. won the Nobel prize in economics in 1985. One of his contributions to economics was the Life Cycle Theory of consumer behavior. Like most great ideas, it is a simple and intuitively obvious concept. Young adults tend to have very low savings rates because they are in the process of household formation. As a group they are net borrowers because they consume more than they earn. As they get older, they become net savers. Savings are accumulated to fund college educations for the kids, retirement, and bequests.

In the context of our demographic lingo, the yuppies are borrowers and the couch potatoes are savers. Recently one male baby boomer confessed, "I used to be a stud, but now I'm a spud." The studs liked to party; the spuds like to save. That's our theory. If we're right then the savings rate should rise to 10% within the next five years. The 4% to 5% yuppie pace of real consumption should slow down to the couch potato pace of 2% to 3% per year. In fact, such spending rose only 1.9% last year after average annual gains of 4.6% from 1983 to 1986.

Note that consumption spending doesn't have to fall for the savings rate to rise. All that needs to happen is that disposable income grows faster than consumption.

VII. The Rush Home

Between 1970 and 1971, the baby boomers born in 1946 turned 25 and started to swell the traditionally house-hungry 25-34 year old group. The number of people in this group fluctuated between 22 million and 25 million from 1946 through 1969. Then, the 25-34 year cohort soared from 25 million in 1970 to 38 million in 1980, and should peak around 44 million by the end of the present decade.

As the baby boom poured into the 25-34 group, housing demand exploded. Not only were there lots of baby boomers, but also they left home earlier, married later, and lived alone more often. During the 1970s, the number of households increased 1.5 million per year versus 1 million per year during the 1960s. During the 1970s, single-person households accounted for 45% of the increase in the total. The average number of persons in a household dropped from 3.3 during 1960 to 3.1 during 1970 to 2.7 during 1980. The scramble for shelter caused home prices to skyrocket.

Exhibit 5: Households Need Housing. The country added a million new households every year in the sixties. Then the baby boom arrived and added 1.5 million new households every year during the 1970s and 1.6 million per year during the first 7 years of the 1980s. The average American household fell below three persons for the first time in 1974 and by 1986 was down to 2.65. Today roughly 55% of all households consist of only one or two people living together. Nonfamily households have increased dramatically and most of them consist of a single person living alone.

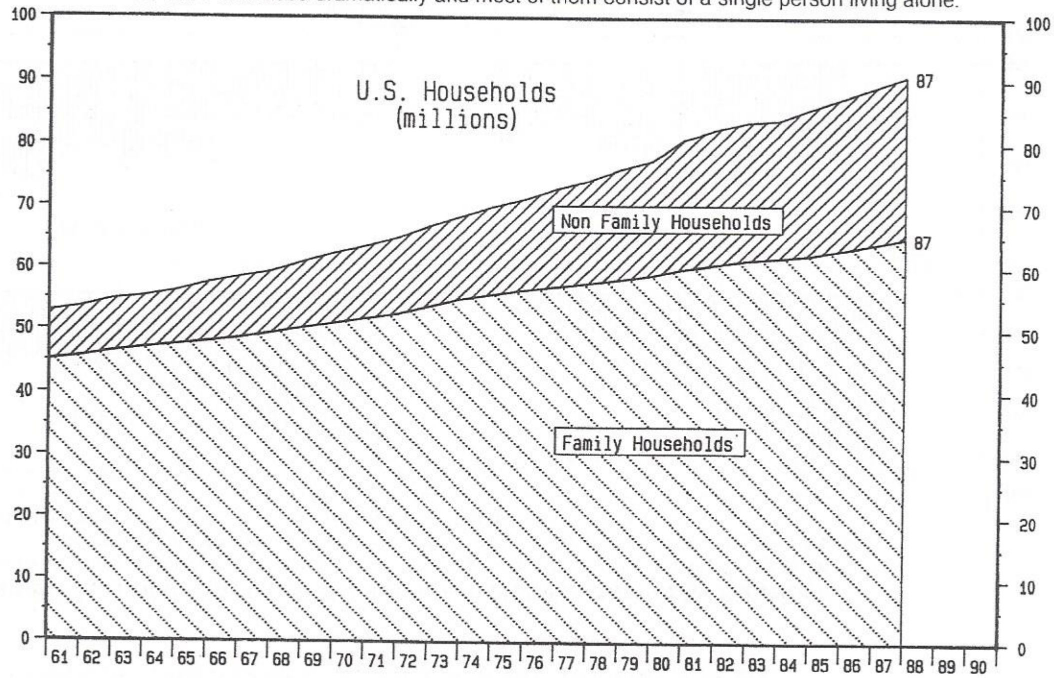
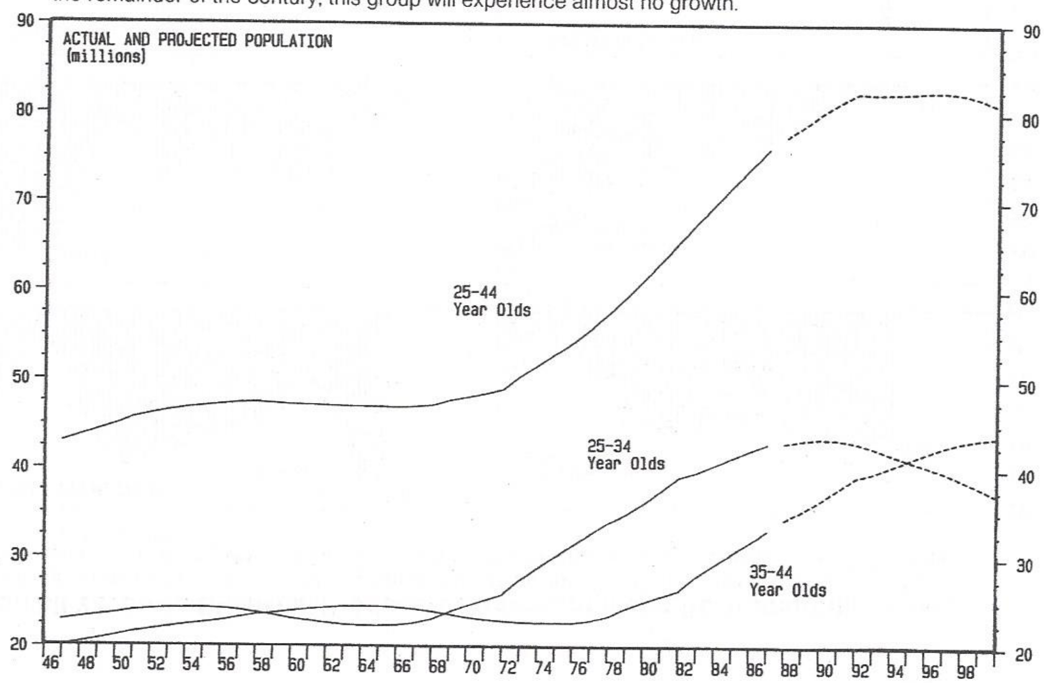


Exhibit 6: The Upward Pressure On Home Prices Should Subside Soon. The average existing single-family home price has increased roughly five fold from $23,000 during 1968 to $105,000 during 1987. Over this same period, the house-hungry 25-44 group rose sharply. Over the remainder of the century, this group will experience almost no growth.



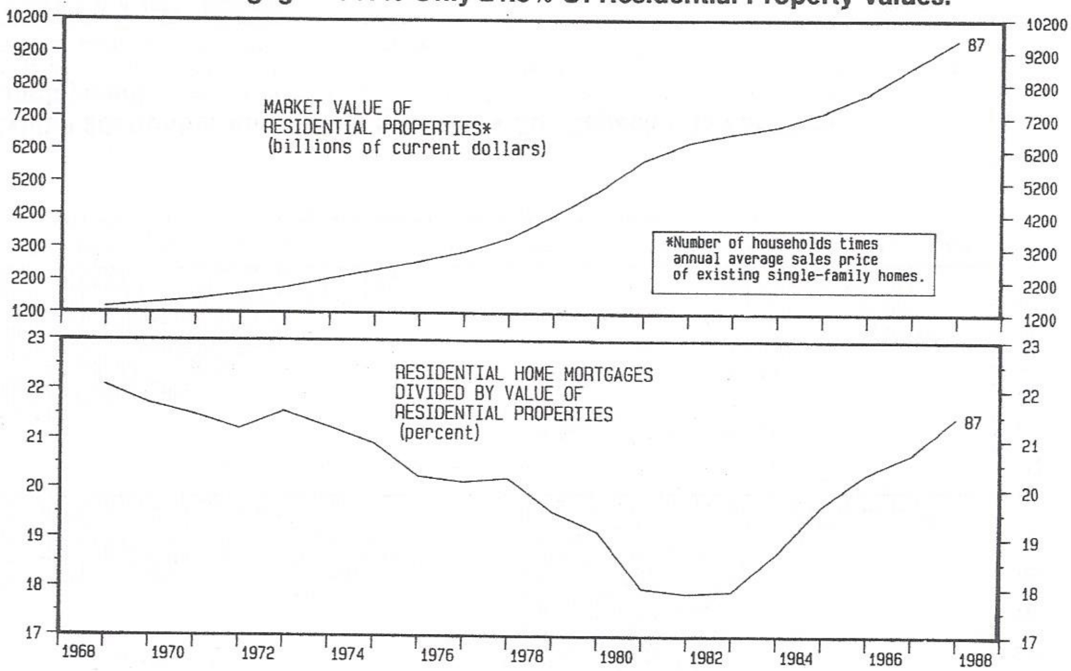
VIII. Are We Really Living Beyond Our Means?

The ratio of household debt to disposable income rose from 49.1% in 1960 to 54.1% in 1970 to 62.8% in 1980. During 1987, this ratio was at 74.3%, an all-time high. Many economists are convinced that consumers are tapped out; their debt loads are so excessive that they will be forced to retrench.

This perennial grim assessment of consumer finances ignores demographic developments. If one-third of the population is in the process of household formation the debt-to-income ratio is naturally likely to rise. As the population ages, along with the baby boom, this ratio should stop rising.

Moreover, comparing debt to income unfairly ignores the asset side of the consumers' balance sheet. A comparison of assets to liabilities suggests that consumers aren't living beyond their means. For example, at the end of 1987, homeowners owed the lenders only 21.5% of the market value of their homes. (To estimate the market value of residential properties we multiplied the number of American households by the average price of existing home sales.)

Exhibit 7: Mortgage Debt Is Only 21.5% Of Residential Property Values.



IX. Productivity Can Increase With Age

The entry of the baby boom into the labor force depressed productivity during the 1970s. The labor force was flooded with inexperienced young workers who were less productive than older workers already on the job. Since labor was readily available and relatively cheap, employers had little incentive to invest in labor-saving equipment.

In the 1980s and into the 1990s, labor shortages will stimulate investment in labor-saving equipment. The workforce will be more mature and experienced.

The shortage of skilled workers is already so acute that recently the Senate overwhelmingly passed a bill that would allow an extra 100,000 immigrants to enter the U.S. each year. That's a drop in the bucket. Labor-saving, productivity-enhancing capital spending is the only intelligent way that corporate America can respond to the labor shortage. Of course, there is another route. They could start a bidding war. That way they'll get costlier workers, not more workers. In our opinion, corporate managers are unlikely to suddenly offer big wage hikes after they spent five years cutting costs (a.k.a., restructuring).

The corporate culture of the 1980s (and 1990s) emphasizes cost cutting. Price increases were fashionable in the 1970s. Global and domestic pressures suggest that a return to the inflationary culture of the 1970s is unlikely.

We expect a capital spending boom over the remainder of the decade. In our forecast, real nonresidential fixed investment increases by 8% this year and 5% next year. Productivity should continue to grow at a fast clip, particularly in manufacturing. Factory productivity increased at an average annual rate of 4.8% from 1983 through 1987. That's twice the trend rate from 1960 to 1982. Corporate restructuring, with a heavy emphasis on cutting labor costs through layoffs, boosted productivity. Now we expect that capital expansion will be the source of rapid productivity gains. Rapid productivity growth should contribute to a low inflation rate. We forecast that the GNP implicit price deflator will rise between 3% and 4% annually over the next five years.

Topical Studies

#1 Dr. Edward Yardeni, *"Exports Should Weaken U.S. Recovery,"* March 22, 1983

#2 Dr. Edward Yardeni, *"The Ten Pillars of Faith,"* April 6, 1984

#3 Deborah Johnson, *"Behind the Corporate Borrowing Binge,"* June 13, 1984

#4 Dr. Edward Yardeni, *"Why Has the Leading Index of Inflation Failed So Badly?,"* October 24, 1984

#5 Dr. Edward Yardeni, *"The Case For Lower Oil Prices,"* December 12, 1984

#6 Dr. Edward Yardeni, *"The True Story Behind The Mighty Dollar,"* January 9, 1985

#7 Dr. Edward Yardeni, *"Plenty Of Cash Around To Fuel Additional Stock And Bond Gains,"* January 30, 1985

#8 Dr. Edward Yardeni, *"No Shortage Of Gluts,"* July 10, 1985

#9 Dr. Edward Yardeni, *"The Protectionist Road To Depression,"* September 9, 1985

#10 Dr. Edward Yardeni, *"The U.S. Becomes The World's Largest Debtor: So What?,"* July 14, 1987

#11 Dr. Edward Yardeni, *"The Restructuring of Corporate America Is Bullish,"* December 9, 1987