Prudential-Bache Securities

TOPICAL STUDY #16
THE BABY BOOM CHART BOOK

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Economics

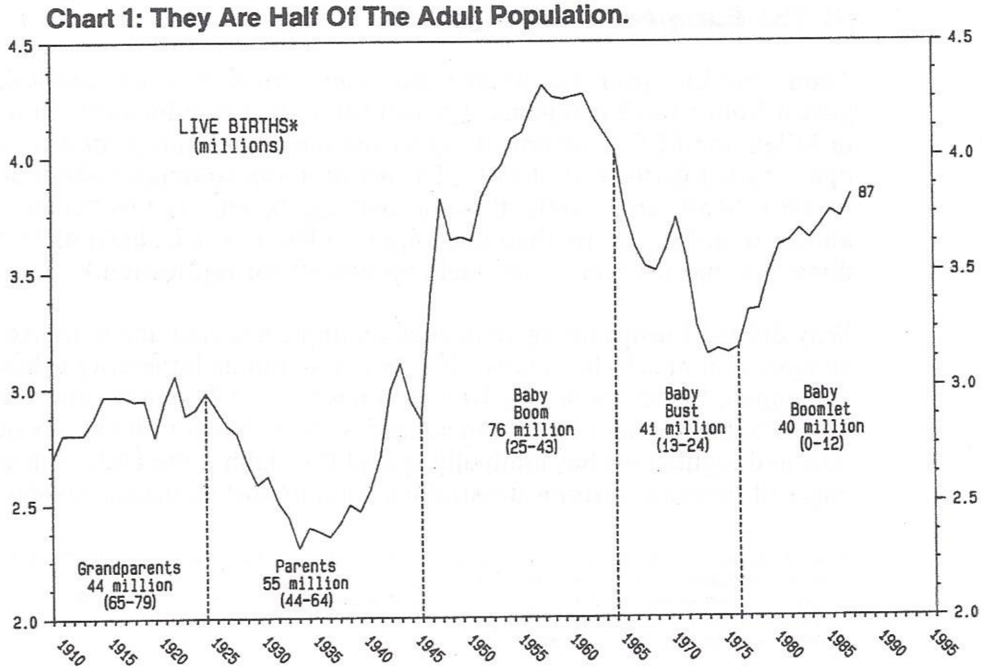
I. Conclusions

In *The New Wave Manifesto,* we wrote that one of the most important trends influencing the economy in the years ahead will be the aging of the baby boom generation. In this chart book, we present evidence to support the following demographically based forecasts for the next five years:

• The unemployment rate should fall to 4%. • Yet wage inflation should remain moderate. • Productivity should increase between 2% and 3% annually, well above the sluggish pace of the past two decades. • Capital spending continues to boom. • The standard of living, as measured by the real median income of families, should rise along with productivity. • The distribution of income should become more equitable. • Housing demand should weaken as household formation slows. • Home prices should increase between 2% and 4% per year. • Office construction will continue to decline. • Age and children are transforming the yuppies into couch potatoes, who are likely to save more. • The national personal savings rate should rise from 4% to 10%. • Robust economic growth based on solid productivity gains and mounting Social Security surpluses should balance the federal budget.

Our New Wave scenario is clearly very bullish for stocks and bonds. We've said it before and we'll say it again: Within five years, the Dow should be at 5000 and government bond yields should fall to 5%. Hopefully, the following charts along with our analytical comments will convince you that our extraordinarily bullish outlook is not far-fetched; rather, it is very realistic.

Chart 1: They Are Half Of The Adult Population.



*Figures in parentheses are the youngest and oldest ages of group members during 1989.

II. Boom, Bust, & Boomlet

During the baby boom, which spanned the 19 years from 1946-1964, live births totalled 76 million. *In 1987, the baby boomers represented 48% of the adult population (over 24 years old), and 53% of the labor force.* Half of the baby boomers were born during 1946-1955; the other half were born from 1956-1964.

So the "median" baby boomers were born during 1955-1956 and are 33-34 years old this year. The youngest are 25 years old and the oldest are 43 years old. In five years, the group will be 29-47 years old and the median baby boomer will be 37-38 years old during 1993: *Many of them are moving into their late thirties and early forties.*

The large baby boom generation was preceded and followed by smaller generations. From 1925 to 1945, live births totalled 55 million. Most of these people, who are currently 44-64 years old, are the parents of the baby boomers. From 1965 to 1976, the birth rate fell sharply and only 41 million people were born during this baby bust period.

Then a baby boomlet started during 1977, when the oldest baby boomers turned 31. By 1987, 40 million "echo boom babies" were born. Most of these children belong to the baby boomers. *The baby boomers and their kids account for 48% of the total U.S. population.*

In *The Baby Boom Generation And The Economy* (1982), Louise B. Russell observes that the post-war baby boom was caused by a sharp increase in the fertility rate attributable to four demographic factors: 1) More women married than ever before—a record 96% of all women born during the 1930s. 2) More women who married had children—only 7% of these women remained childless. 3) They had children earlier—the fertility rate of 20-24 year old women jumped 74% from 1945 to 1955. 4) And some had more children—over one-third of women born during the early 1930s had four or more children by the time they were 35.

In contrast to their mothers, the women of the baby boom are marrying later, and a larger proportion will probably never marry. They are having children later because they are marrying later and delaying childbearing after marriage.

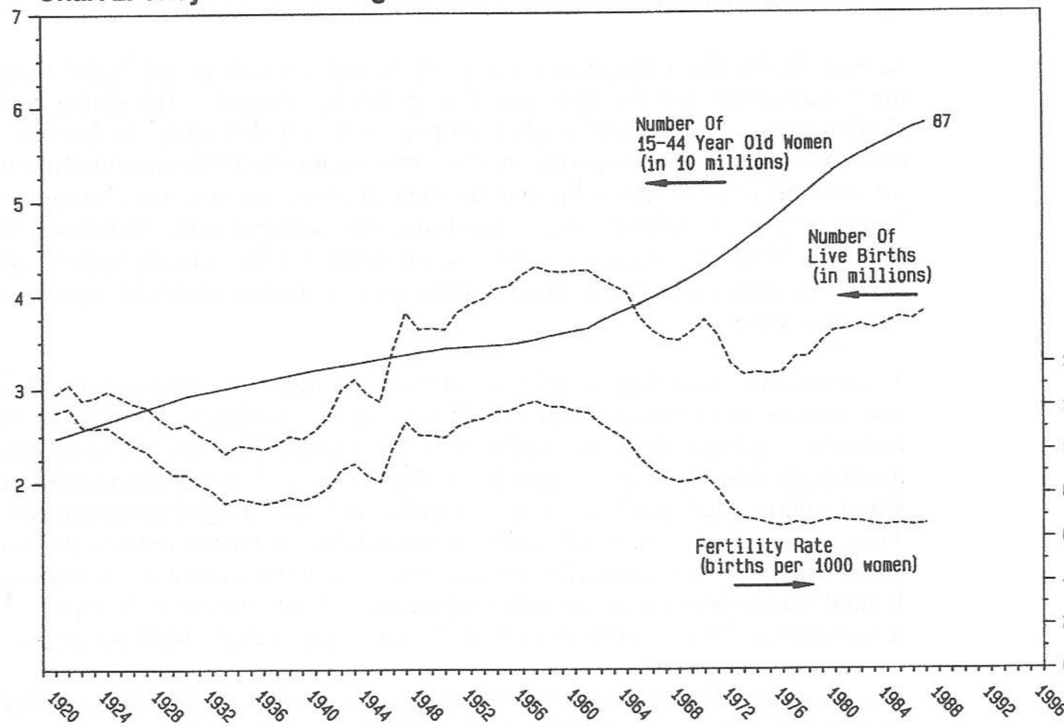
The following table shows that the percent of females aged 20-24 who never married rose from 35.8% during 1970 to 61.1% during 1988. The median age of first marriage for females rose from 20.8 in 1970 to 23.6 in 1988. During 1986, 40.7% of women aged 25-29 were childless, up from 30.8% during 1976.

	Percent Of Females Never Married By Age Group					
	15-19	20-24	25-29	30-34	35-39	40-44
1988	94.2	61.1	29.5	16.1	9.0	6.2
1980	91.2	50.2	20.9	9.5	6.2	4.8
1970	90.3	35.8	10.5	6.2	5.4	4.9

Source: U.S. Bureau of the Census.

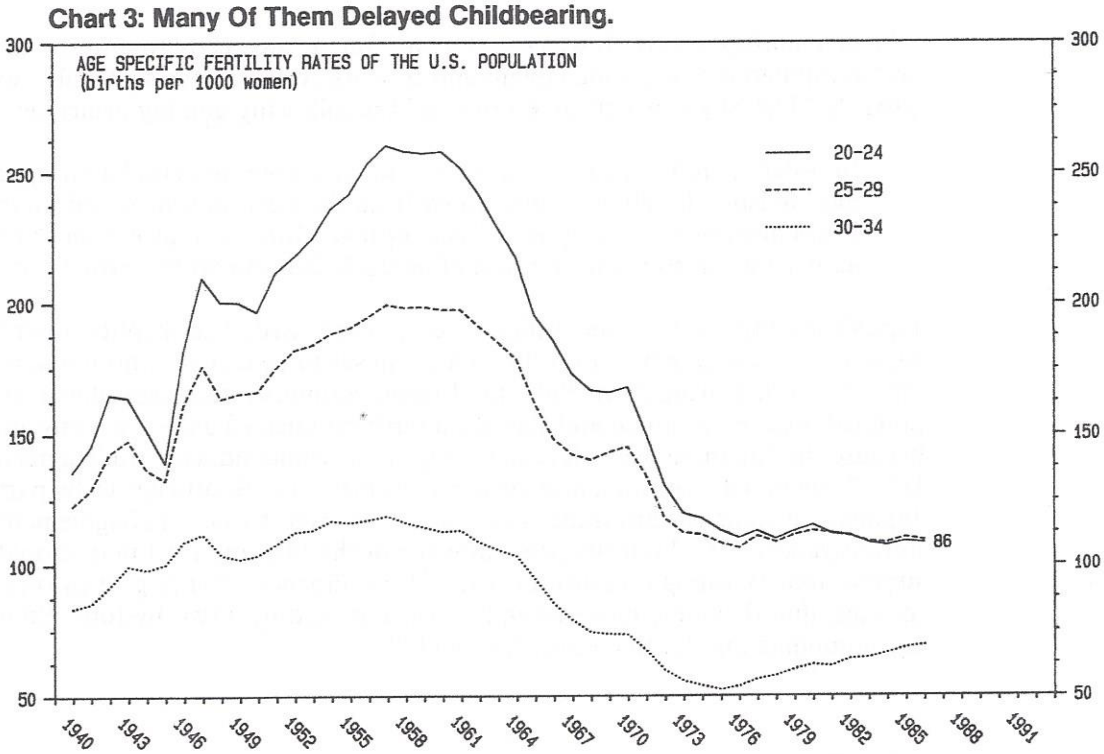
As a result of these trends, the fertility rate has hovered at record lows since the early 1970s. The only group showing a rising fertility rate in recent years is women aged 30-34 who postponed earlier childbearing. The baby boomlet is attributable solely to the big jump in the number of women of childbearing age.

Chart 2: They Are Producing An "Echo Boom."



Source: National Center for Health Statistics, Vital Statistics of the United States.

Chart 3: Many Of Them Delayed Childbearing.



Source: National Center for Health Statistics, Vital Statistics of the United States.

III. Population Dynamics

The baby boomers will continue to have a tremendous impact on the growth rates of the overall U.S. population, the working-age population, and the labor force. Of course, they will also continue to dominate the age composition of both the population and the labor force.

The following table shows the inexorable progression of the baby boom bulge through the population age structure. In the 1960s, the highest rates of population growth were in the 18-24 age group. As the baby boomers matured, the 25-34 age group had the highest rate of growth in the 1970s. Population growth in each of these age groups first accelerated, then continued at much slower rates, or even declined, as the postwar children became teenagers, and then young adults.

In the early 1980s, the 18-24 year old population group declined, and the Census Bureau projects further decline until 1995. The growth rate of the 25-34 year olds fell below 1.0% during the second half of the 1980s and is projected to turn negative during the coming decade. Population in the two youngest age groups is projected to decline by 6.3 million from 1985 to 1995. The number of 25-34 year olds peaks this year at 44 million, after increasing by roughly 20 million since the early 1970s, and will decline by 516,000 per year on average through 1995.

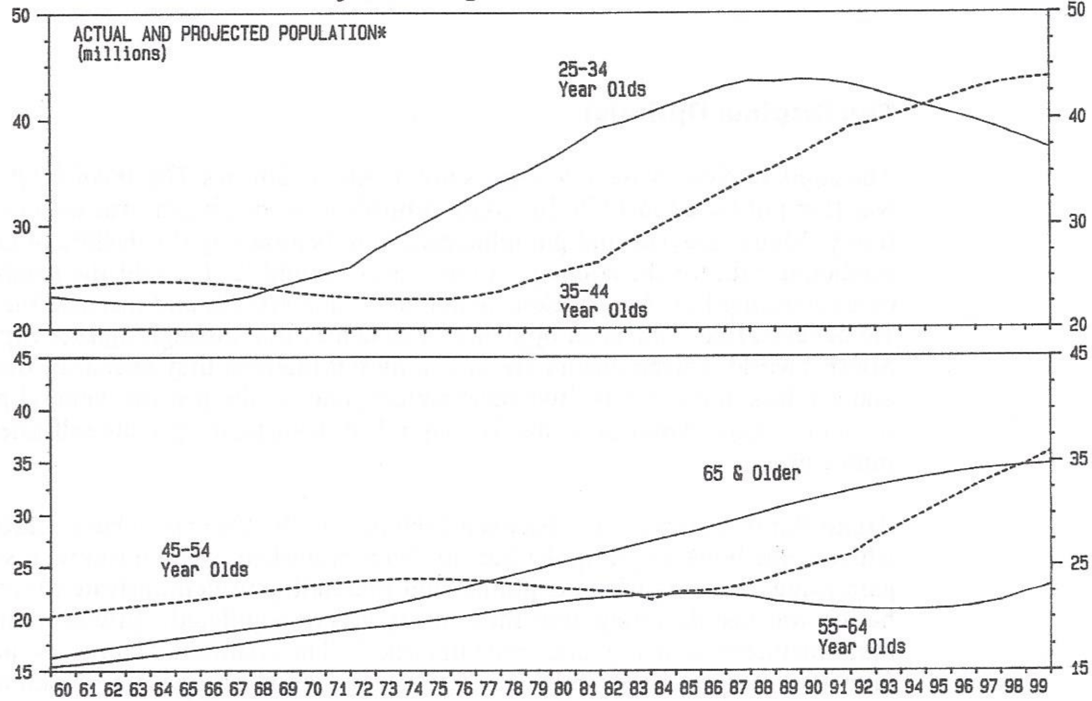
The oldest baby boomers turned 35 during 1981. *This year, 44% of the baby boomers are 35 or older. In five years, 67% will be more than 34 years old.* From 1989 to 1995, the number of 35-44 year olds will increase by 900,000 per year, on average. During 1994, the number of 35-44 year olds will exceed the number in the 25-34 group for the first time since 1968.

During the first half of the coming decade, the fastest growing age group will be the 45-54 year olds (up 4.7%) followed by the 35-44 year olds (up 2.2%). Still, by 1995, the younger group will total 42 million and outnumber the older group by 11 million. From the 1950s to the 1980s, the number of people aged 65 and over rose very rapidly as the death rate fell and average life expectancy rose from 68.2 years to over 75 years. The Census Bureau projects a significantly slower rate of growth for this group in the 1990s.

	Average Annual Percent Change In Population By Age						
	18-24	**25-34**	**35-44**	**45-54**	**55-64**	**65 And Over**	**Total**
Actual							
1950-55	-1.4	0.2	1.2	1.6	1.8	3.4	1.8
1955-60	1.6	-1.1	1.1	1.8	1.4	3.0	1.8
1960-65	5.2	-0.4	0.2	1.2	1.9	2.1	1.5
1965-70	4.4	2.5	-1.1	1.4	1.9	1.8	1.1
1970-75	2.7	4.9	-0.3	0.4	1.5	2.6	1.1
1975-80	1.7	3.9	2.7	-0.8	1.7	2.7	1.1
1980-85	-1.1	2.5	4.6	-0.1	0.5	2.2	1.0
Projected							
1985-90	-2.1	0.8	3.7	2.6	-1.0	2.2	0.9
1990-95	-1.6	-1.4	2.2	4.7	-0.1	1.4	0.8
1995-2000	0.8	-2.0	0.8	3.6	2.7	0.6	0.6

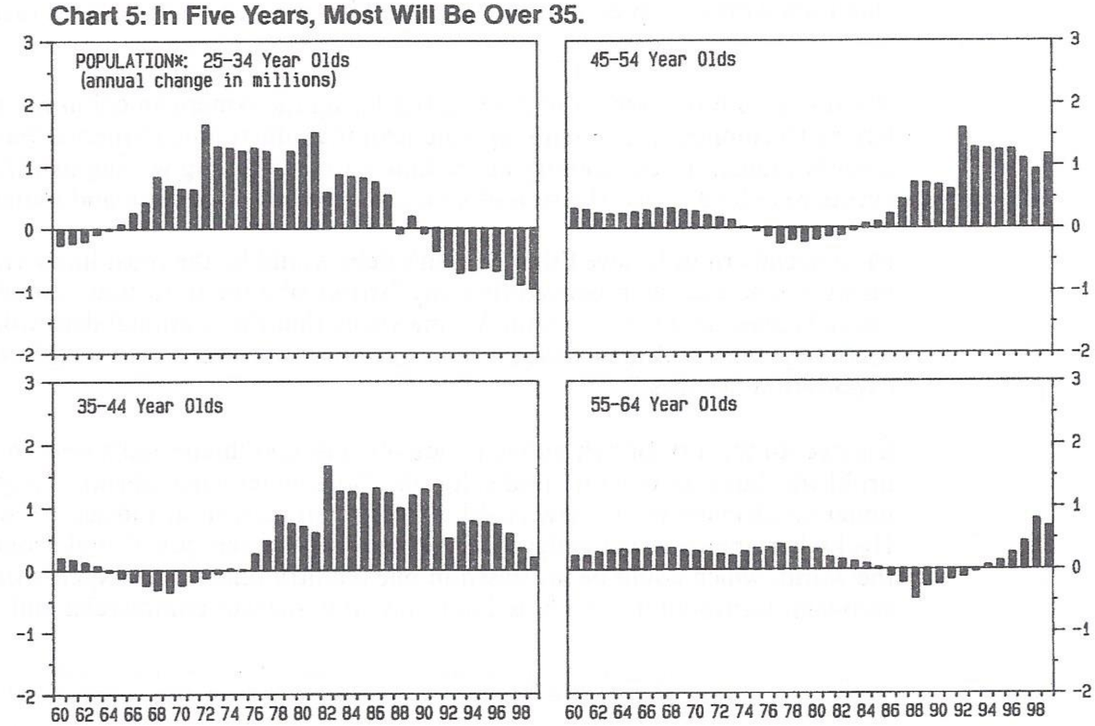
Source: U.S. Bureau of the Census.

Chart 4: Most Are "Thirtysomething."



*Projected data start in 1988.

Chart 5: In Five Years, Most Will Be Over 35.



*Projected data start in 1988.

IV. Labor Force

In the late 1960s and particularly during the 1970s, the baby boomers poured into the labor markets. The working-age population increased 2.3% per year, on average, from 1970 to 1980, following annual increases of 1.7% during the sixties and 1.1% during the fifties.

The labor force increased at an even faster pace because the labor force participation rate started to rise after 1965. In the seventies, as millions of baby boomers left their schools and looked for jobs, the labor force increased 3.0% per year, on average, following annual increases of 1.8% during the sixties and 1.1% during the fifties.

The oldest baby boomers started to enter the labor markets during 1962 when they turned 16 and thus became a part of the working-age population. By 1980, all of the baby boomers were old enough to work. The number of new workers aged 16-24 rose 700,000 per year, on average, from 1965 to 1980. From 1980 to 1988, this group declined 300,000 per year, on average, because the baby boomers aged and were replaced by fewer new entrants from the baby bust generation.

According to the Census Bureau, the total U.S. population's growth rate is likely to fall below 1.0% through the remainder of the century. Last year, the working-age population rose only 1.0%, the lowest reading since the early fifties. Yet the labor force increased 1.5% because the labor force participation rate edged up 0.5% during the year.

The labor force should continue to expand by 1½% per year over the next five years if the labor force participation rate continues to move higher. On an annual basis, the participation rate hovered around 59% from 1948 through the mid-sixties. By the end of last year it was up to 66%.

All of this uptrend is attributable to a huge influx of female baby boomers and older women into the labor force. In fact, the labor force participation rate of men has declined from 86.6% in 1948 to 76.2% in 1988 because the percentage of retired men has risen as older men are retiring at earlier ages and living longer. (In 1948, 46.8% of men aged 65 and over were in the labor force. Today only 16.5% are working.)

Of course, women are living longer too, yet, in 1988, 56.6% of all women were in the labor force, up from 32.7% during 1948. *Baby boom females helped to raise the participation rate of 25-34 year old women from 33.2% in 1948 to 72.7% in 1988!*

In the late 1940s, only one wife in five worked. Today over half of all wives work: 56.8% of all wives with children under 6 years old are in the labor force and 70.6% of all wives with children 6 to 17 years of age are workers.

Labor force participation rates for women 18-to-44 years old with newborn children, i.e., born in the past 12 months, reached the 50% level in 1986, up from 38% in 1980 and 31% in 1976, the first date the Census Bureau recorded these statistics. New first-time mothers aged 30-44 apparently jumped right back to work: 65.2% of them were in the labor force during 1986.

Older women are more likely to enter the labor force as their children get older. And older women who have babies are more likely to return quickly to their jobs, than in the past. As the baby boom females age, the national labor force participation rate should continue to rise.

Chart 6: By 1980, All Of Them Were Old Enough To Work.

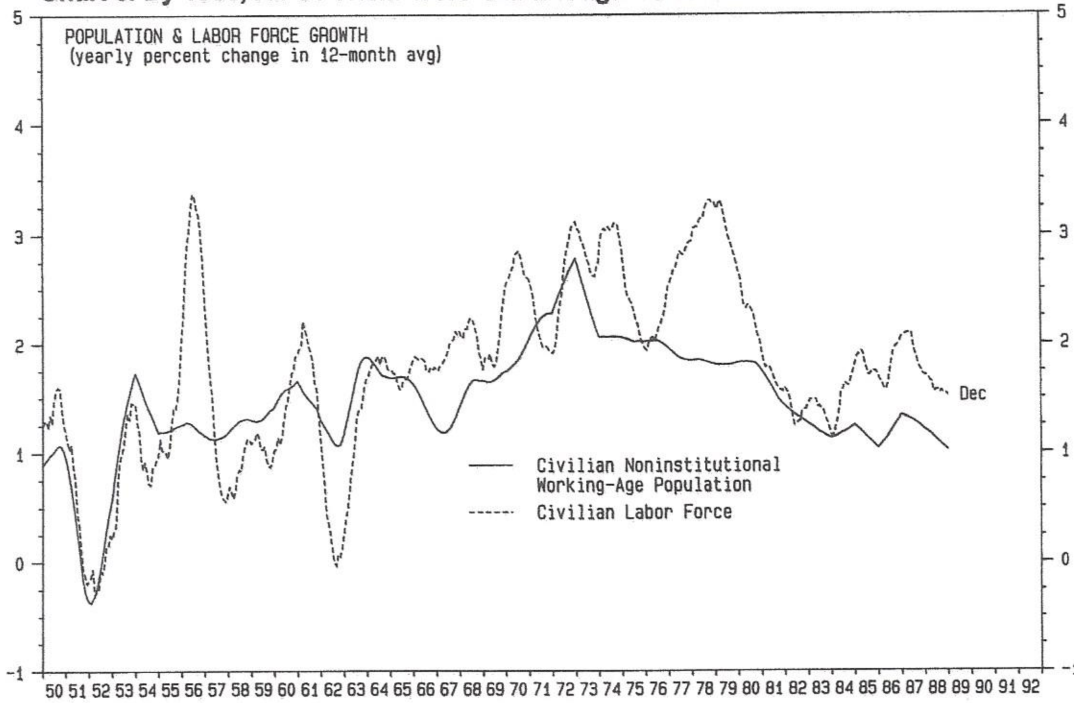
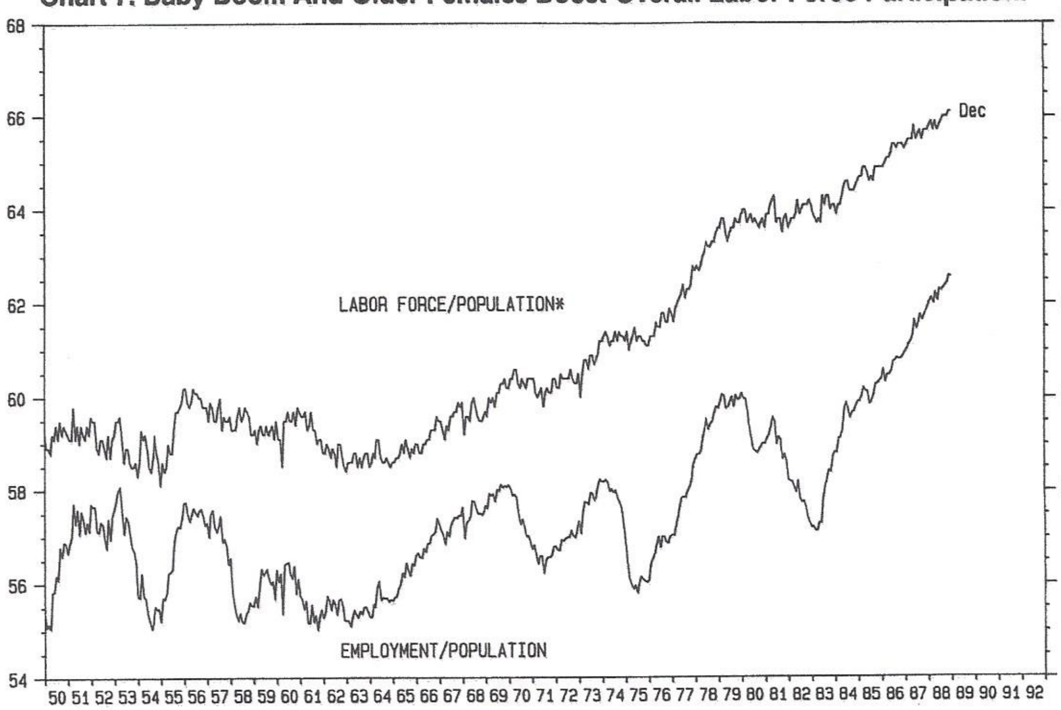


Chart 7: Baby Boom And Older Females Boost Overall Labor Force Participation.



*Noninstitutional working-age population.

V. Unemployment

Demographic forces related to the aging of the baby boomers should push the unemployment rate down to 4% within the next three years, yet inflation should remain low.

The tremendous influx of baby boomers into the labor force during the 1970s largely explains why the unemployment rate and inflation rate rose together. They entered the labor force faster than the economy could create jobs. So the unemployment rate shifted upwards during the seventies. Policymakers responded by stimulating the economy in an effort to create more jobs for the baby boomers. Policy was biased towards inflation.

Younger workers typically have higher unemployment rates than older workers. Younger workers have relatively little or firm specific training or experience. They change jobs often as they search among potential careers. They spend more time looking for jobs. They are more likely to be working part of the time, particularly if they go to school or are raising a family (more true of female labor participants). As a consequence, these individuals tend to have relatively low wages, and high voluntary and involuntary employment turnover rates.

During the 1960s and 1970s, the unemployment rates of young workers soared as the baby boomers overwhelmed the job market. From 1950 to 1959, the unemployment rate of 16-34 year olds averaged 6.0%, which exceeded the rate for 35-64 year old workers by 2.5 percentage points. The jobless rate for younger workers averaged 8.1% during the following two decades and exceeded the older group's jobless rate by 4.7 percentage points. During the recession of 1982, the unemployment rate of 16-19 year olds jumped to 23.2%, while the rate for older workers rose to 8.6%.

During the sixties and seventies, the national unemployment rate was on an uptrend because young workers aged 16-34, whose relatively high unemployment rates were driven still higher by the baby boom invasion, increased significantly from a low of 36.7% of the labor force during 1962 to a high of 51.1% during 1981. Interestingly, during the postwar period, there were more older workers than younger ones until 1975. Then younger workers were slightly more numerous until 1988. Is it economic nostalgia to believe that the earlier period was "the good old days" and the later period was more troubled? Perhaps better times are ahead as the nation matures: Older workers started to outnumber younger ones again during 1987.

During 1958, unemployed 16-34 year olds accounted for 50% of the total unemployment rate. This ratio rose to a peak of 72.8% during the second quarter of 1981. Recently, it fell to 65% and it should fall back toward 50% in the next few years. The contribution of 34-64 year olds to the current unemployment rate of 5½% is roughly 2 percentage points, with 3½ percentage points attributable to younger unemployed workers. Within three years, each group should contribute 2 percentage points to a 4% unemployment rate.

Doesn't such a low rate suggest much higher wage inflation? Not necessarily. Many employers are facing labor shortages. And they probably recognize that offering big wage hikes will only drive up their labor costs rather than attract workers that don't exist demographically. Odds are that business managers will opt to spend more on labor-saving, productivity-enhancing capital to substitute for scarce and expensive workers.

Noninflationary unemployment rates for younger workers are higher than for older workers. Writing in 1970, George Perry of the Brookings Institution was among the first to observe that significant changes in the composition of the labor force can have significant effects on the total noninflationary unemployment rate, which he estimated had shifted upward by roughly 1½ percentage points since the mid-1950s largely as a result of the baby boom crowd. Over the next three years, the unemployment rate should fall to 4% which should be consistent with a low and stable rate of inflation.

Chart 8: They Are Becoming Older Workers, With Lower Jobless Rates.

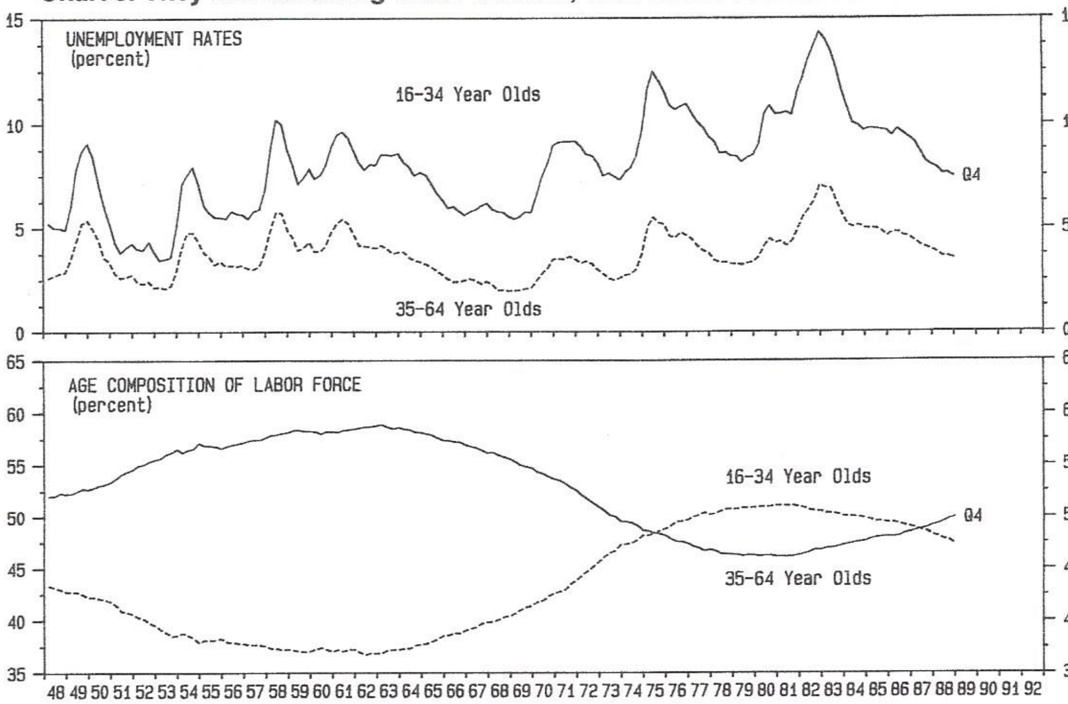
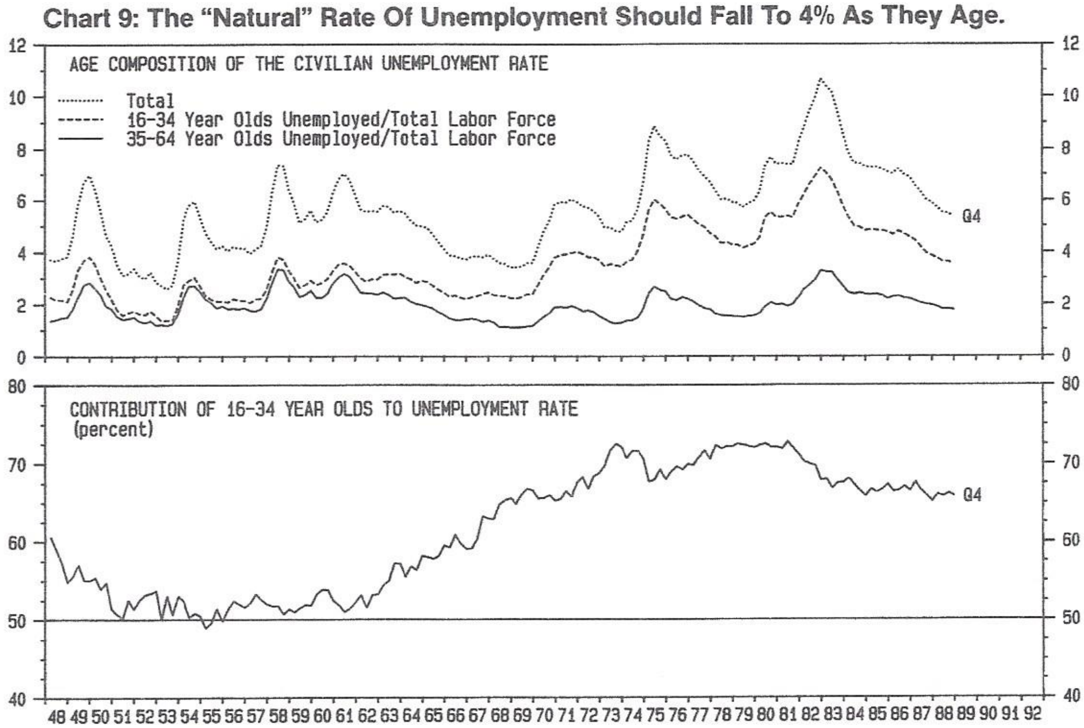


Chart 9: The "Natural" Rate Of Unemployment Should Fall To 4% As They Age.



VI. Productivity & Income

Productivity suffered and real incomes stagnated as the baby boom generation entered the workforce. Now that most of them have been employed for several years, odds are that the standard of living for most families will improve along with productivity. From 1947 to 1973, nonfarm productivity and the median income of families (in 1987 dollars) rose at an average annual rate of 3.2% and 3.7%, respectively; after 1973, these rates fell to 1.1% and 0.3%, respectively.

Of course, there is a direct link between productivity and family real incomes. Job seekers find employment as long as their extra output exceeds their real wage. In economic equilibrium, the marginal productivity of newly hired employees should equal their real earnings. If productivity expands rapidly so will incomes. Since 1973, the standard of living hasn't improved for most Americans because productivity growth faltered.

Many factors are behind the productivity stagnation. Demographic factors were particularly influential. In *Dollars And Dreams* (1987), Frank Levy observed, "When baby boomers and older women entered the labor force in great numbers, they lowered average labor force experience. They also caused the labor force to grow rapidly enough to further dilute capital equipment per worker." Many of these new workers found jobs in service-producing industries.

The 1989 *Economic Report of the President* observes that since the 1970s there has been a dramatic slowing of the rate of capital formation, particularly in nonmanufacturing. "Partly as a result of the continued growth in capital formation, manufacturing productivity growth did not suffer as much of a slowdown as did productivity in other sectors."

In fact, the decline in the growth of total nonfarm productivity can be blamed entirely on the collapse in the efficiency of the service-producing sector of the economy. From 1947 to 1987, manufacturing productivity increased 4.9% per year, on average. Productivity in the nonfarm, nonmanufacturing sector rose 3.0% per year until 1969, and only 0.5% per year thereafter.

The good news, though, is that the services economy did create the jobs for the huge number of baby boomers and older women who wanted to work. From 1968 to 1988, payroll employment rose 38 million, with service-producing jobs accounting for 95% of this total gain! The number of people working part-time rose 9 million over this period and now represent 17% of those employed. Most of the part-time jobs are in services which also explains why productivity has been so depressed in this sector.

Over the next five years, nonfarm productivity should grow by 2% to 3% per year as factory productivity continues to rise at a fast clip and productivity growth in service-producing industries rebounds. Since the early 1970s, service businesses expanded by hiring the abundant supply of baby boomers. Now there are labor shortages, particularly of young workers, because a baby bust followed the baby boom. Service-producing industries, which are particularly hard-hit by the labor shortages, will be forced to increase productivity.

If so, then real family incomes should start to grow again. The median income of families (in 1987 dollars) during 1987 was $30,853, virtually unchanged from the real income earned during 1973! Families with a householder aged 25-34, actually experienced a 9% decline in real incomes over this period. Interestingly, older families, with a householder aged 45-54, enjoyed a record median income of $41,241 during 1987; and that was 34% more than the median income for all families! *This suggests that as the baby boomers move into their late thirties and early forties, more families will have more income.*

Chart 10: Productivity Should Rebound As They Mature.

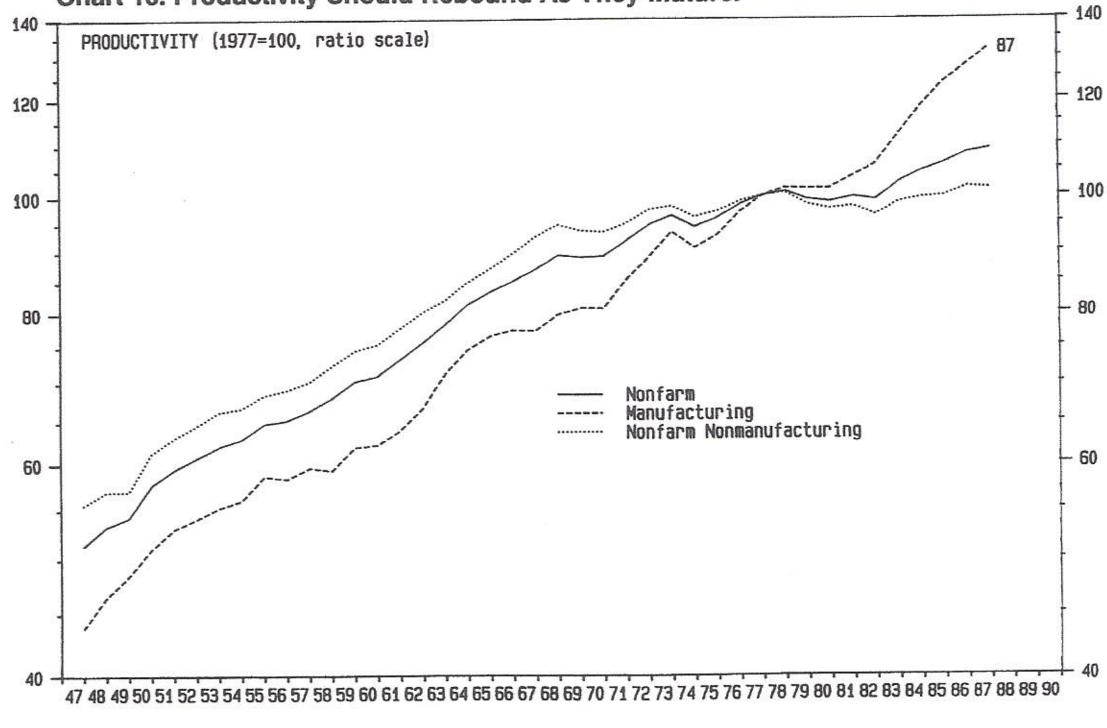
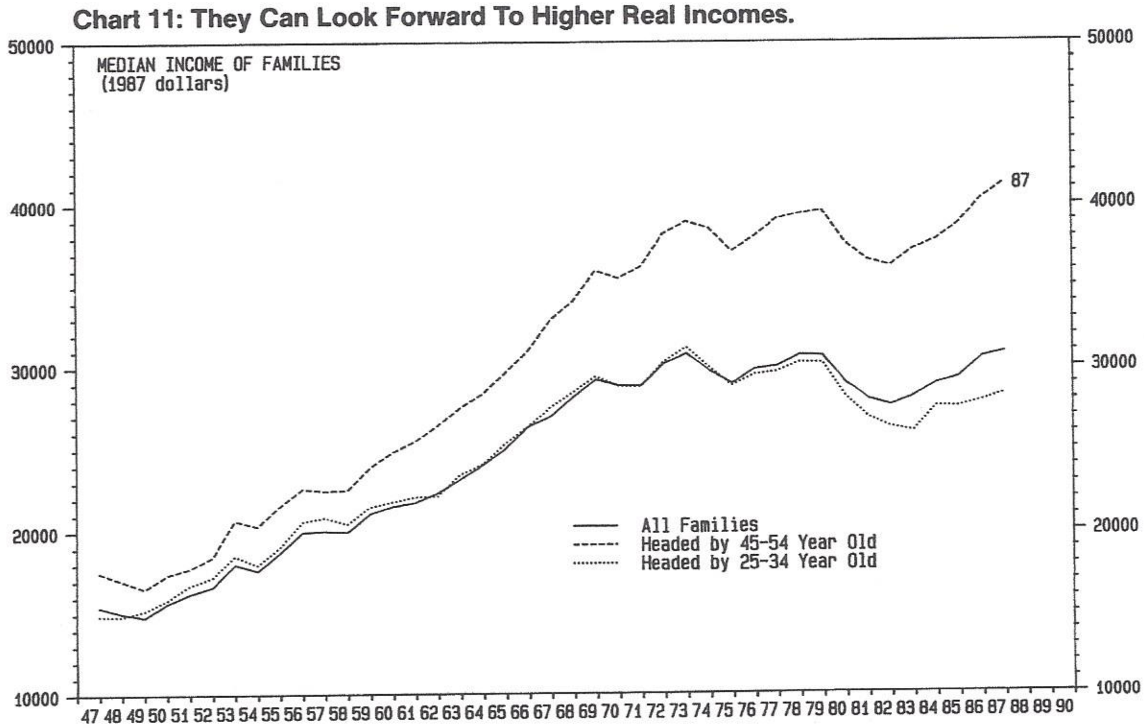


Chart 11: They Can Look Forward To Higher Real Incomes.



Source: Bureau of the Census, Income Statistics Branch, unpublished data.

VII. Income Distribution

The onslaught of baby boomers not only depressed aggregate productivity and real incomes, but also they significantly affected the distribution of income. *The income distribution became less equitable, particularly for age groups within the male population.* That's because baby boom men boosted the supply of young, inexperienced workers relative to older, experienced males. On the other hand, the flood of baby boom women was matched by a comparable wave of older and *inexperienced* women so the change in the relative supply of younger workers was more pronounced for males than females.

The median income of men aged 20-24 dropped from roughly 60% of income earned by men aged 45-54 during 1947 to barely 35% during 1987. The ratio of incomes earned by men aged 25-34 to men aged 45-54 hovered in a flat trend between 90% and parity during the 1950s and until 1967. It has been on a downtrend since then, and fell to 70% during 1987.

Unlike relative unemployment rates, the relative income of employed young workers worsened throughout the 1970s and into the early 1980s as the large number of young workers continued to depress wage rates for this group. A study of the economic implications of changing population trends in the December 1986 *Federal Reserve Bulletin* observes that "the deterioration in the relative income position of young workers in the 1970s suggests that labor market conditions were worse for individuals born later in the baby boom than for those born earlier. Many of the latter probably were able to take advantage of the shortage of workers in the preceding generation and become middle- and upper-level managers. Those who came later faced fewer and less favorable opportunities."

The middle class, defined as the sum of the shares of aggregate household income earned by the third and fourth quintiles, fell to 40.5% of national income during 1987, down from 42.2% twenty years ago. The upper fifth of all households received a whopping 46.1% of all income, up significantly from 42.7% twenty years ago, while the poor did get poorer as the share of the first plus second quintiles fell from 15.1% during 1967 to 13.4% during 1987.

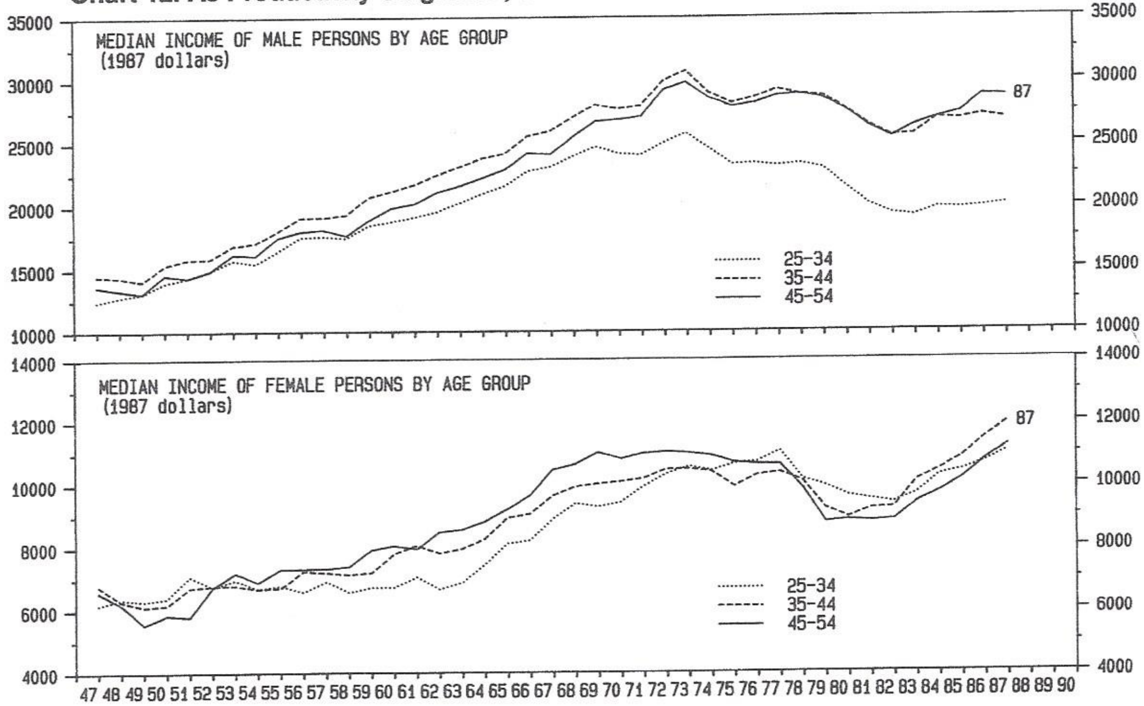
Undoubtedly, these changes in the nation's income distribution were greatly influenced by the baby boomers. The real income of households headed by a 15-24 year old dropped from 62% of that for the 45-54 group in 1967 to 44% in 1987. The reason lies partly in the lower relative earnings of baby-boom workers and in the sharp increase in the number of single-person households and families headed by young single parents, both of whom tend to be at the low end of the income distribution.

The relative income position of households headed by a 25-34 year old also slipped but this group counteracted their lower relative wage rates by sending additional earners into the labor market: Recall that the labor force participation rate of 25-34 year old women rose to a record 73% in 1988. Two-income households tend to be in the upper half of the income distribution. *As the baby boomers mature their relative wages should rise along with their productivity and experience. Also there should be fewer single person households and more baby boom households with two earners.*

	Percentage Share Of Aggregate Household Income					
	Lowest Fifth	Second Fifth	Third Fifth	Fourth Fifth	Highest Fifth	Top 5%
1987	3.8	9.6	16.1	24.4	46.1	18.0
1985	3.9	9.8	16.2	24.4	45.7	17.6
1980	4.1	10.2	16.8	24.8	44.2	16.5
1975	4.3	10.4	17.1	24.7	43.4	16.3
1970	4.1	10.8	17.4	24.5	43.3	16.8
1967	4.0	11.1	17.6	24.6	42.7	16.3

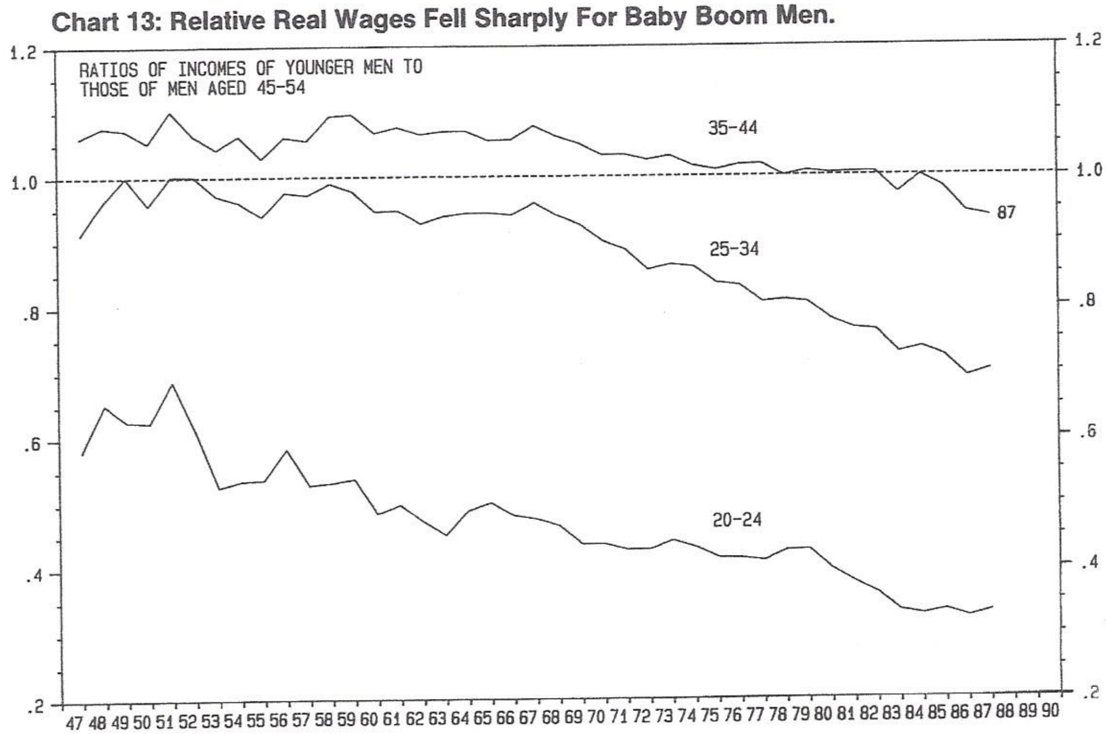
Source: U.S. Bureau of the Census.

Chart 12: As Productivity Stagnated, So Did Real Incomes.



Source: Bureau of the Census, Income Statistics Branch, unpublished data.

Chart 13: Relative Real Wages Fell Sharply For Baby Boom Men.



Source: Bureau of the Census, Income Statistics Branch, unpublished data.

VIII. Households & Real Estate

The Census Bureau projects that of all households, the number of those headed by 45-54 year olds will increase the fastest, by 21.7%, over the next five years through 1993. The next fastest growing group will be households headed by 35-44 year olds with a projected rate of 16.0%.

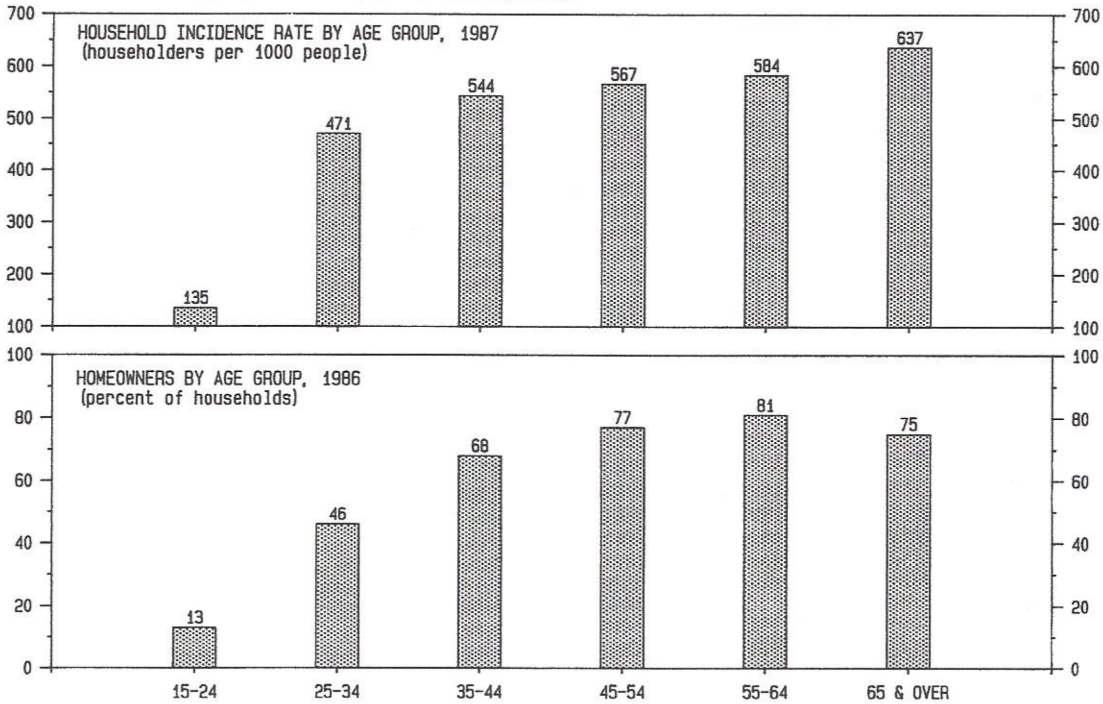
These two age groups have household incidence rates exceeding 500 households for every 1000 people in the group. (If all people in a group were paired together then the incidence rate would be exactly .500. It can exceed this rate to the extent that single people form their own households.) The *Consumer Expenditure Survey* shows that the proportion of households headed by 35-44 year olds and 45-54 year olds who owned their homes in 1986 was 68% and 77%, respectively.

The baby boomers are now 25-43 and will be 29-47 by 1993. The older ones have formed their households and most have bought a house. The younger ones, aged 25-34, still need houses: Only 46% owned their home in 1986. But this group's size is expected to fall 2.5% by 1993.

The biggest jump in household incidence, and therefore housing demand, occurs as people mature from the 15-24 to the 25-34 age group. But over the next five years, this passage will be made by members of the baby bust generation. *So the frenzied demand for homes caused by the baby boomers over the past 20 years should continue to subside and home prices should rise modestly, between 2% and 4% per year over the next five years.*

School construction peaked during 1968, when the oldest baby boomers were 22 and the youngest were 4. When they graduated, they moved into apartments and found jobs, often in office buildings. Apartment construction peaked during 1973, about the same time that the baby boomers started to crowd into the single-family home market. Over the next five years, demographic forces are favorable for school construction, unfavorable for apartment and office construction, and neutral for single-family starts.

Chart 14: Most Of Them Own Their Homes.



Sources: U.S. Bureau of the Census and Consumer Expenditure Survey, 1986.

Chart 15: The Crowd Moved Out of Schools And Into Offices.

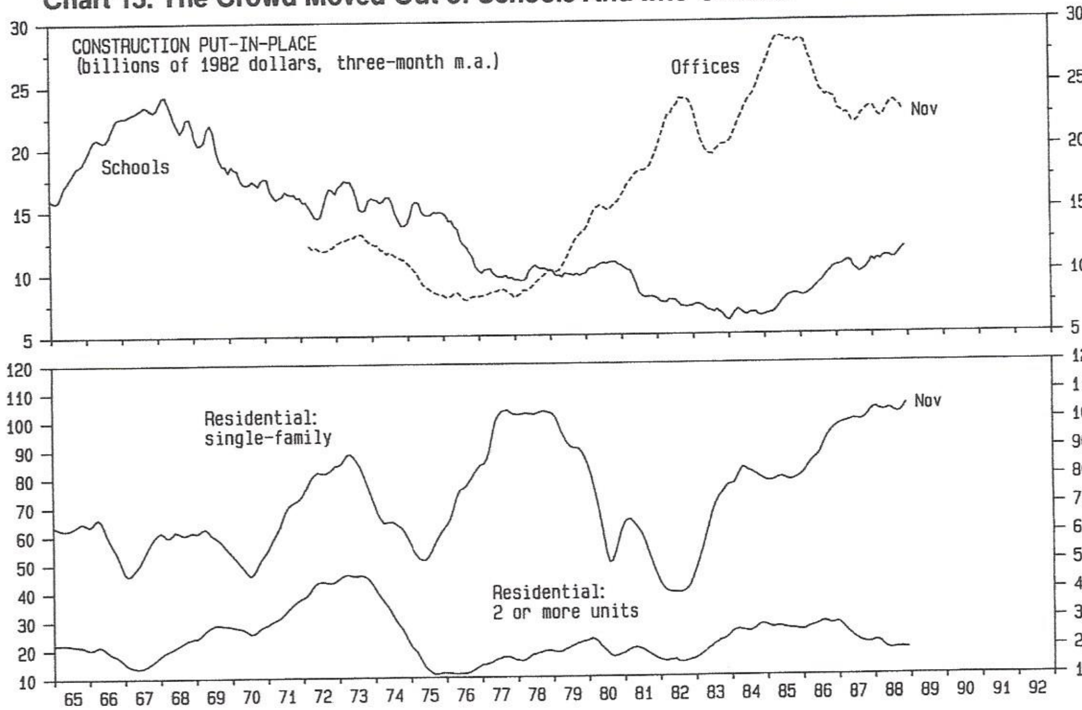
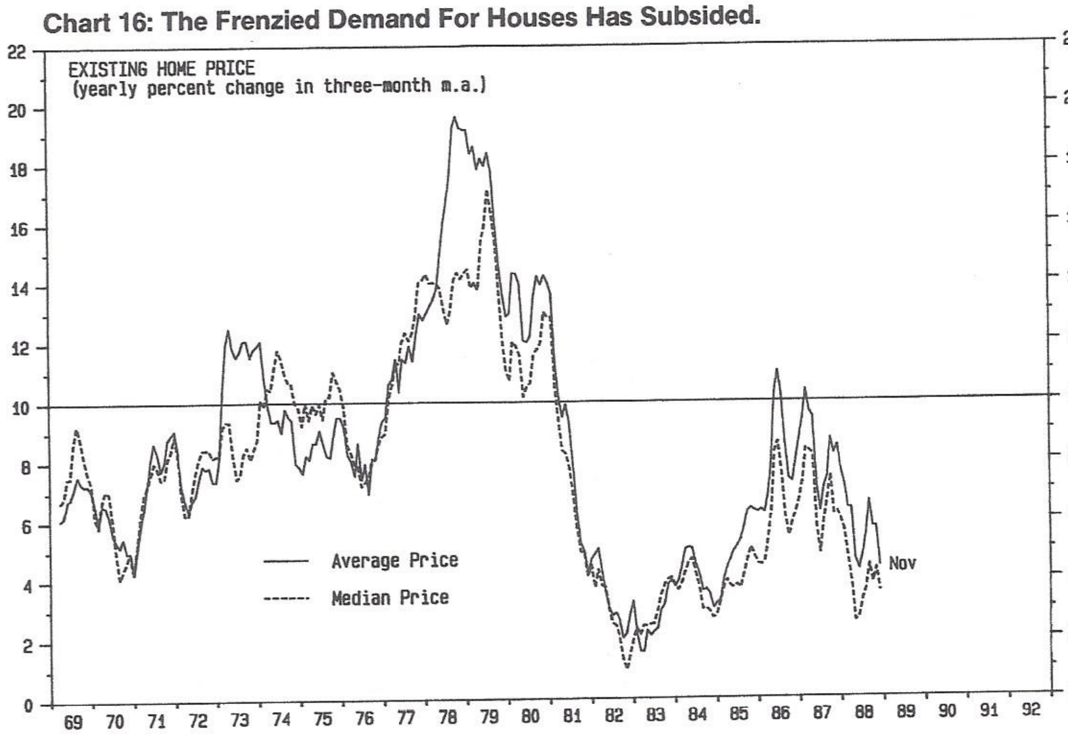


Chart 16: The Frenzied Demand For Houses Has Subsided.



Source: National Association of Realtors.

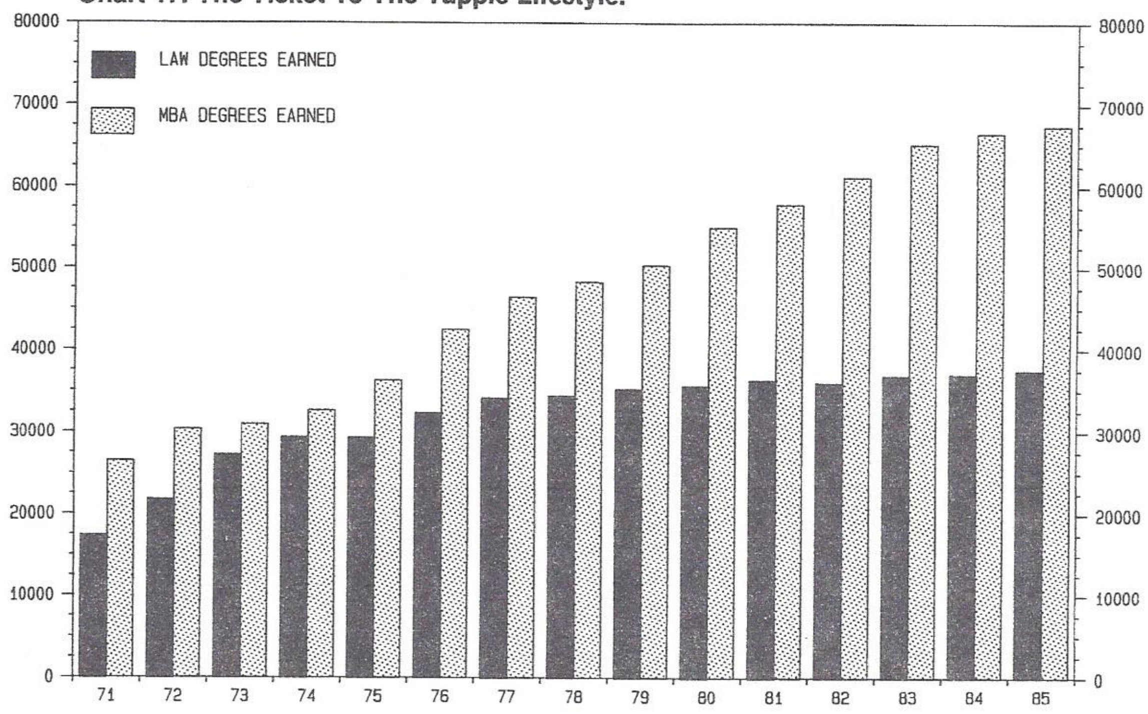
IX. Yuppies

The Yuppie Handbook was published January 1984. *Newsweek's* cover story at the end of that year was titled "The Year Of The Yuppie." The January 1988 issue of *American Demographics* observes, "In fact, a statistical search for yuppies shows that they are a rare breed, hardly numerous enough to do the kind of environmental damage for which they are blamed. Only 0.3% of Americans, for example, are both younger than age 40 and earn more than $75,000 per year." Still the materialistic values of the yuppies have broadly influenced the behavior of many baby boomers.

Because young workers are an imperfect substitute for older workers, the increased supply of young baby boomers drove down the relative wage and income of this group. As more of them recognized that an undergraduate college degree no longer guaranteed a middle-class standard of living, they swarmed into law and business schools. For some, the masters degrees paid off in six figure salaries. But most of the baby boomers were less fortunate.

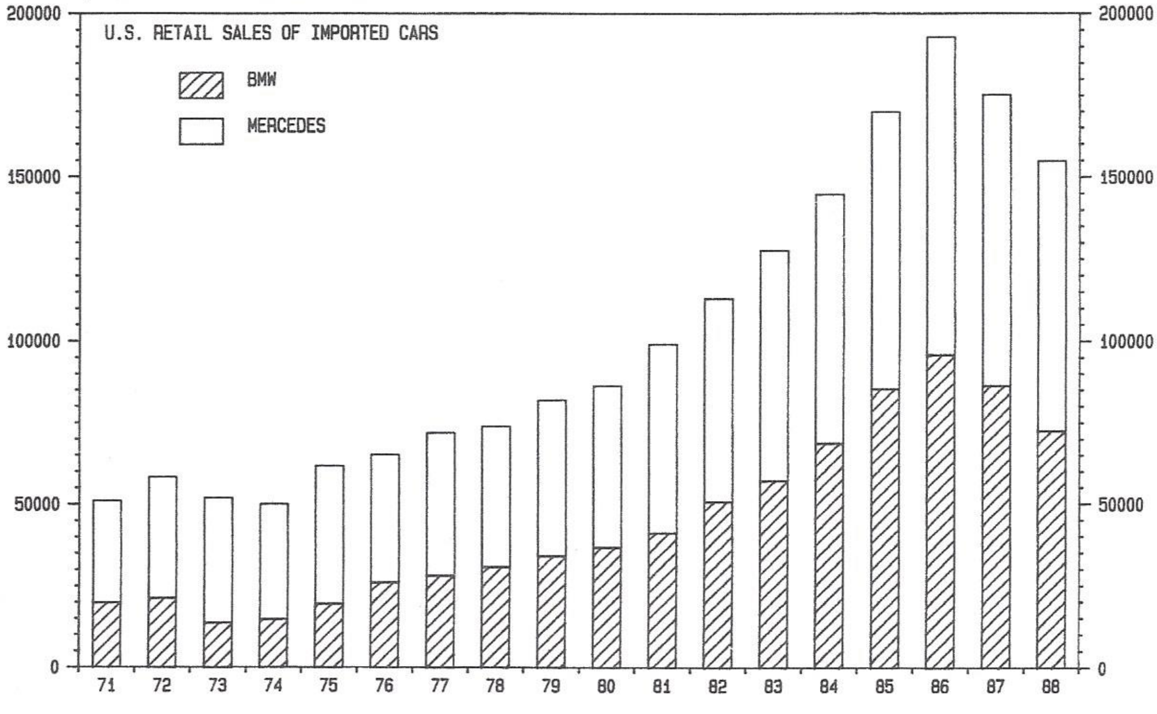
The fortunate few boosted the demand for imported European luxury cars. The prices of cooperative apartments in New York City soared from $11,050 during 1975 to $133,730 during 1987. *That's per room!* Restaurants and health clubs flourished. Consumer electronic sales boomed. Vacation homes near the beach or the ski slope were hot. And so were divorces: The divorce rate jumped from 278 per 1000 marriages during 1968 to roughly 500 divorces per 1000 marriages since 1976.

Chart 17: The Ticket To The Yuppie Lifestyle.



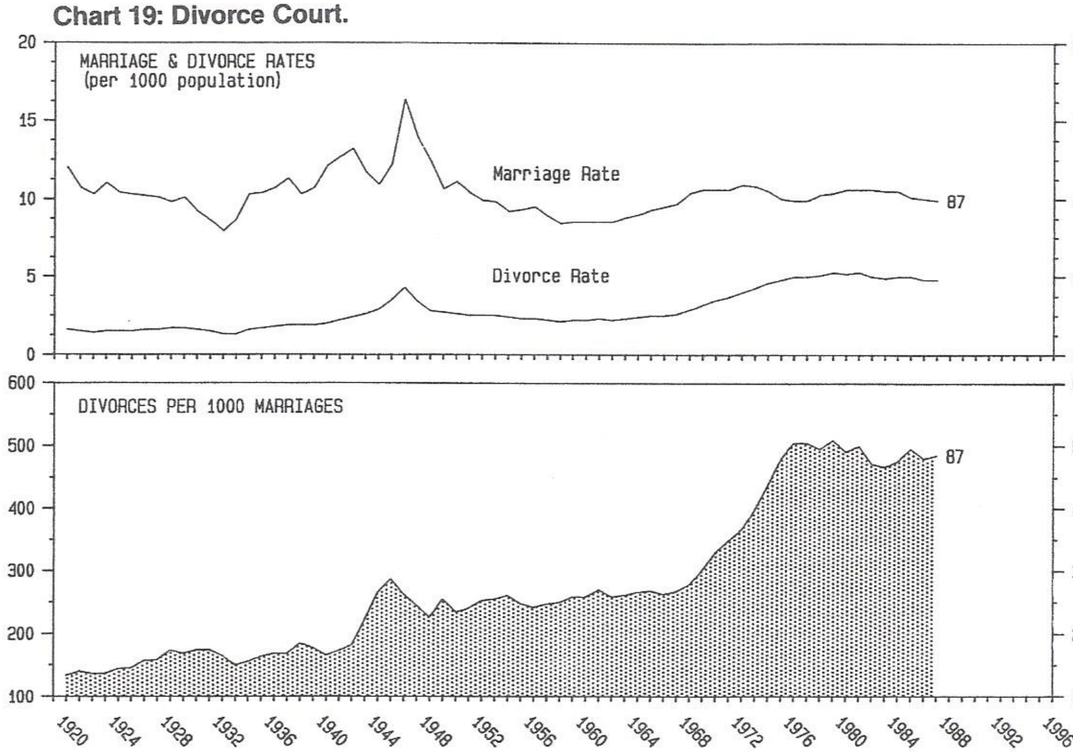
Source: U.S. Department of Education, Center for Education Statistics, Digest of Education Statistics, 1987.

Chart 18: The Fast Lane.



Source: Ward's Automotive Yearbook.

Chart 19: Divorce Court.



Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1988.

X. Couch Potatoes

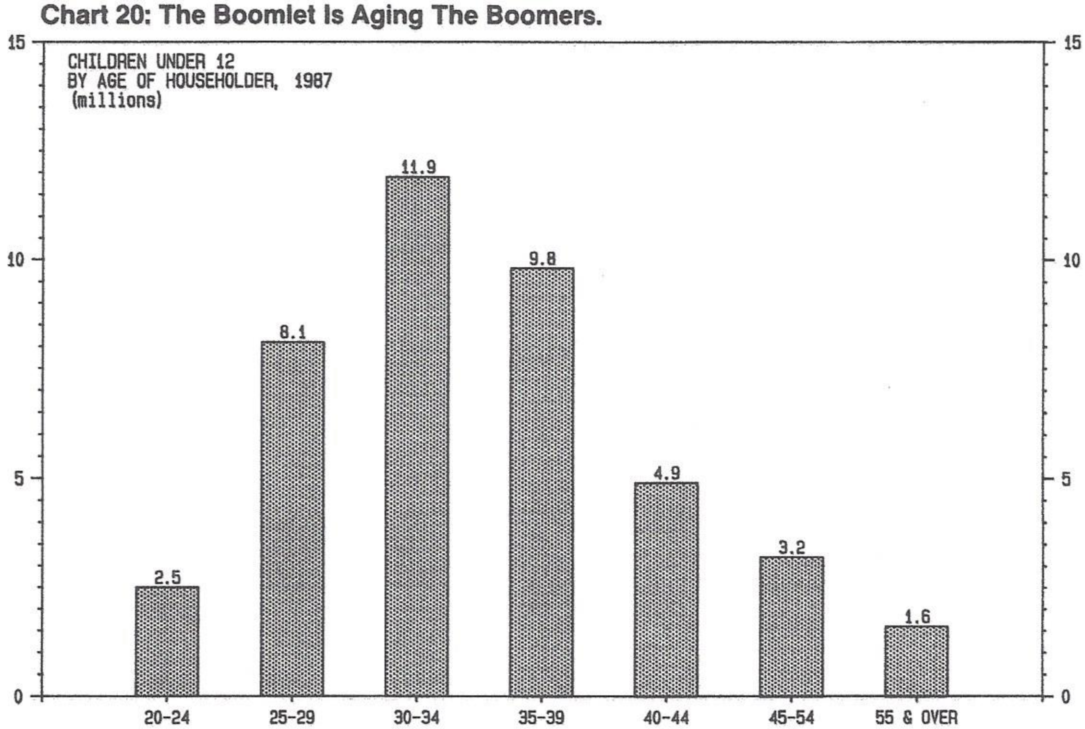
The yuppie crowd is slowing down because they are aging and having children. On July 10, 1988, Maxwell's Plum, the flamboyant restaurant and singles bar in New York that, more than any place of its kind, symbolized two social revolutions of the 1960s—sex and food—closed abruptly. Warner LeRoy, the owner, said, "You can't keep something going forever." The December 9, 1987 issue of *The Wall Street Journal* reported that Madison Avenue's advertisers and marketers were dumping the yuppies. Couch potatoes were in fashion.

Since 1977, 40 million babies have been born. Babies require 6,000 to 10,000 diaper changes over a three-year period. The disposable diaper took hold in the early 1970s and today it is a $3.3 billion-a-year business.

Those 40 million children are under 12 years old, and almost 90% of them belong to baby boom parents. Most of these families already own their own homes. When the baby boomers were younger, they were more mobile. But now they are settling down. Between 1985 and 1986, more than 30% of all Americans who were in their twenties moved. Only 16% of those in their late thirties and early forties moved over that one year interval.

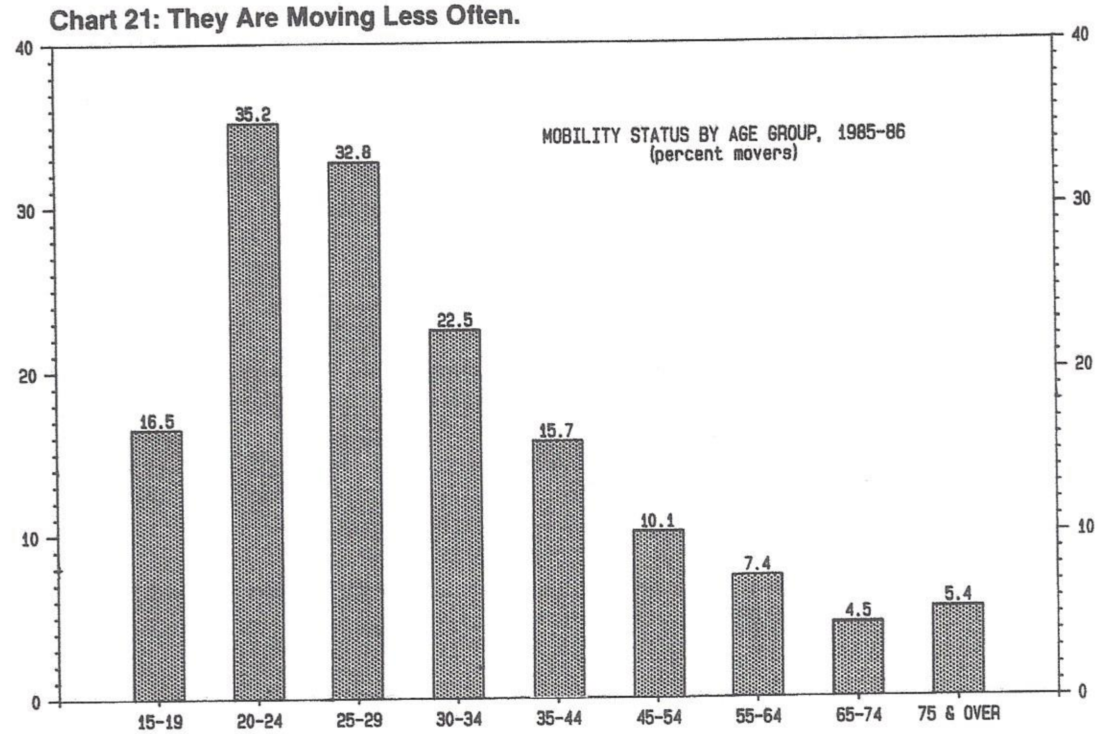
As they stay put, the couch potatoes will continue to make their mortgage payments, and each year a larger fraction of those payments will reduce their mortgage principal. Owing less is one way to save more. *As the money pours in from the baby boomers, mortgage lenders will be hard pressed to find as many new borrowers in the baby bust group. Clearly, in this scenario interest rates continue to trend lower over the next several years.*

Chart 20: The Boomlet Is Aging The Boomers.



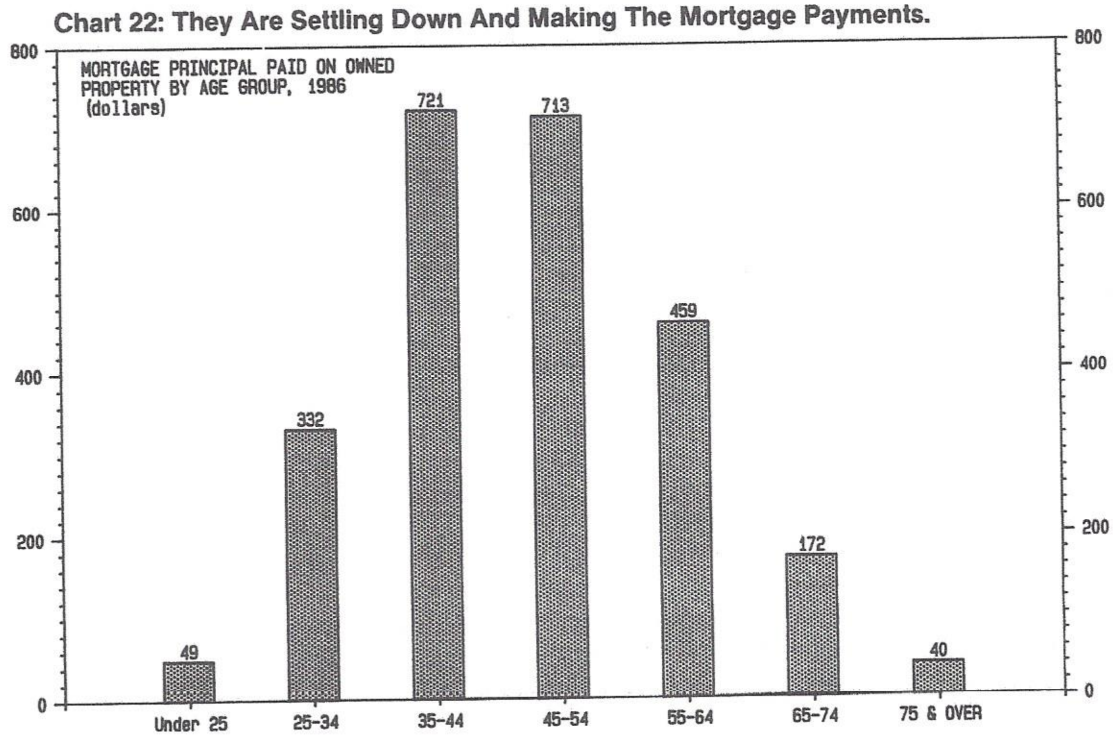
Source: Bureau of the Census, Household and Family Characteristics: March 1987, Current Population Report, Series P-20, No. 424.

Chart 21: They Are Moving Less Often.



Source: Bureau of the Census, Geographical Mobility: March 1985 to March 1986, Current Population Reports, Series P-20, No. 425.

Chart 22: They Are Settling Down And Making The Mortgage Payments.



Source: Bureau of Labor Statistics, Consumer Expenditure Survey.

XI. The Savings Rate

The national personal savings rate rose from 5.8% during 1960 to 9.3% during 1973. Since then, it has dropped sharply down to 3.2% during 1987. The Bureau of Economic Analysis provides separate data on annual employer contributions to private pension funds, which are included in the "other labor income" component of personal income. Since employees can't consume this income, pension fund contributions automatically boost personal savings and the personal savings rate. (Retirement benefits aren't counted as income, but rather as an asset transfer from the pension fund to the beneficiary.) Excluding pension fund contributions, the personal savings rate has plummeted from 7.2% during 1973 to a meager 1.6% during 1987.

Economists have been just as puzzled by the collapse in the savings rate as by the stagnation in productivity. Some have suggested that the anemic growth in productivity can be attributed to the decline in the savings rate; Americans consume too much and don't invest enough in the plant and equipment that are necessary to keep productivity growing.

As demonstrated in Section VI, demographic factors probably played a big role in the sub-par performance of productivity since 1973. Given that 1973 was also the year which marked the beginning of the downtrend in the personal savings rate, it is possible that the same demographic forces which depressed productivity also depressed the savings rate. Moreover, causality might run from anemic productivity to anemic savings, rather than the other way around.

Perhaps, the problem isn't that savings are too low, but rather that there hasn't been enough income to save because the baby boomers depressed both productivity and real incomes. And the influx of young baby boom families changed the income distribution by creating more households with relatively less income to save.

This line of reasoning differs slightly from the popular version of the Life Cycle Model of Savings which posits that as people get older they save more for their childrens' college educations and for their own retirement. As people get older, they *earn* more. And if they earn more, they'll probably save more. So age and savings are positively correlated because age and income are directly related. Again, older workers have more money and are probably more inclined to save.

This hypothesis is supported by the latest *Consumer Expenditure Survey* conducted by the Bureau of Labor Statistics during 1986. The average after-tax income for all "consumer units," was $23,191 and average annual expenditures were $22,710 so the average savings rate was 2.1%.

The survey data are not strictly comparable to the corresponding national income statistics. For example, survey income does not include pension fund contributions, but it does include retirement benefits. Also survey expenditures include Social Security taxes, which are not included in personal consumption expenditures.

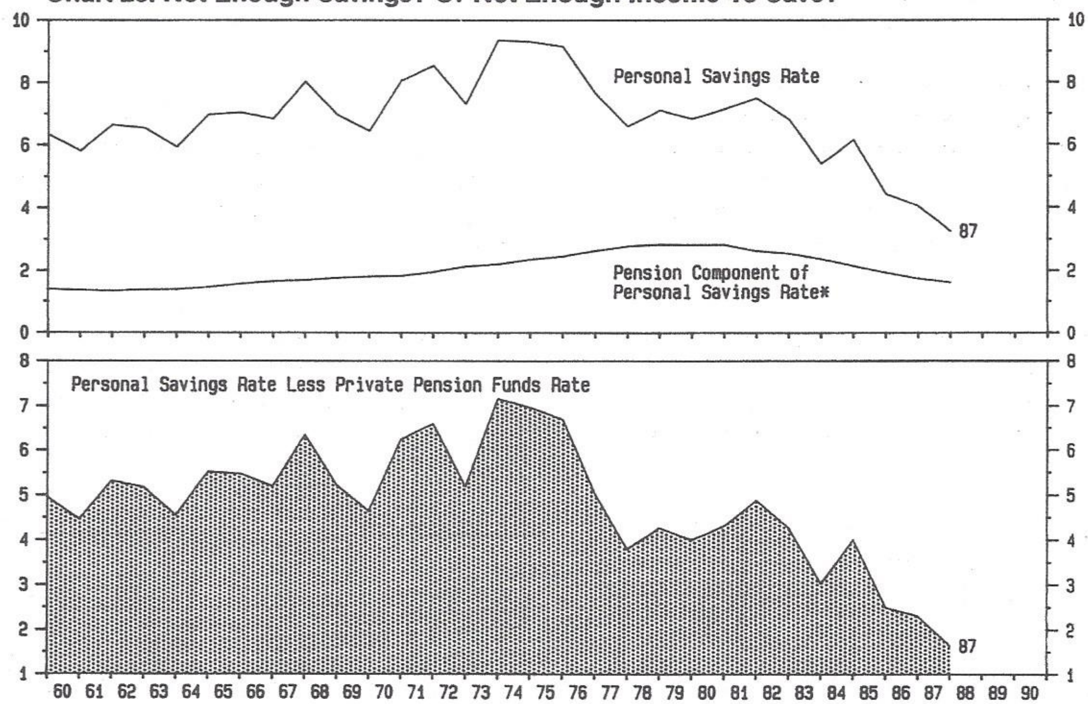
Consumer units with incomes below $30,000 all have negative savings rates, i.e., on average they spend more than they earn. Households earning $30,000 to $39,999 had a savings rate of 10.9% and those earning $40,000 or more saved a whopping 25.1% of their income!

Not surprisingly, the survey also shows that higher income households have more earners. During 1986, the average household with income over $40,000 had 2.1 earners versus 1.0 earner per household in the $10,000 to $14,999 bracket. By age group, units headed by 35-44 and 45-54 year old householders have the highest average number of earners, i.e., 1.8

and 2.0, respectively. Older households have more earners, in part, because the wives are more likely to be working. In Section IV, we observed that the 1987 labor force participation rate of wives jumped from 57% to 71% as their kids turned older than six.

As the baby boomers age over the next five years from 25-43 to 29-47, they'll earn more and they'll have more earners. They should also be inclined to save more. The personal savings rate could rise to 10%.

Chart 23: Not Enough Savings? Or Not Enough Income To Save?



*Employer contributions to private pension funds as a percent of disposable personal income.

XII. Social Security

In 1983, Congress amended the Social Security system so that income will exceed outgo for the next 30 years. As a result, the actuaries project that the trust fund, excluding accumulated interest, will grow to $3.0 trillion by 2018. Including interest, the fund should grow to a staggering $12 trillion by 2030.

These projections suggest that there will be no federal deficit by the middle of the next decade and no publicly held federal debt at all within the first few years of the next century. This happens because the retirement fund's trustees can invest only in nonmarketable Treasury securities. The Treasury gets automatic and immediate access to the Social Security surpluses to finance the expenditures of the government. As the surplus swells so will the nonmarketable holdings of the trust fund. This, in turn, reduces the Treasury's need to issue marketable securities.

The interest earned by the Social Security fund is paid by the Treasury not in cash, but in more nonmarketables. This procedure reduces the Treasury's cash interest outlays to the public. So the Social Security trust fund's effect on federal finances should be calculated including interest received on trust fund assets and not just on the basis of the direct sources of revenue.

The 1983 legislative changes were intended to save the system from imminent bankruptcy. There was no intention to build enormous surpluses over the next several decades in order to create a till from which to draw when the baby boomers retire, as is widely believed. Robert J. Myers, the former Chief Actuary of the Social Security Administration, claims that the huge surplus projections did not become available until three months after Congress enacted the changes. Once these projections were released, however, those responsible for the legislation justified the results by insisting that they were creating a till for the baby boomers.

The sponsors of the Gramm-Rudman deficit reduction law saw these surpluses as a tremendous opportunity. They recognized that if the non-Social Security deficits could be modestly reduced between 1986 and 1993, the Social Security surpluses would offset the remaining deficits and—presto—the budget would soon be balanced. Without a doubt, the Social Security surpluses are what made Gramm-Rudman possible.

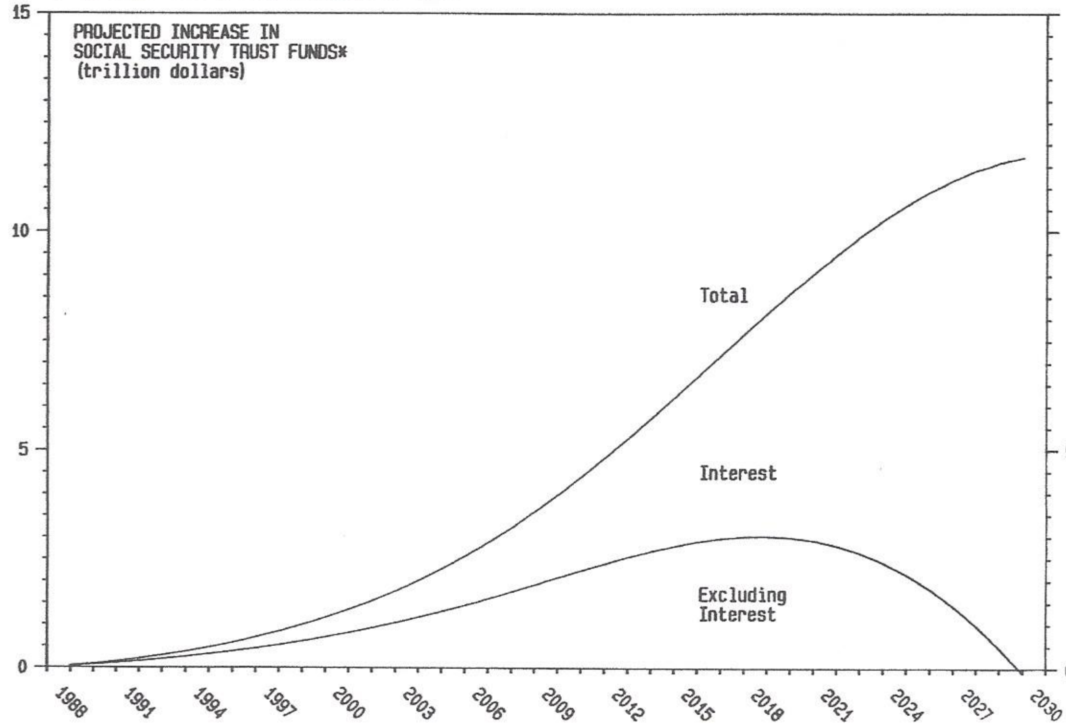
From a fiscal standpoint, the budget balancing magic act is real. By 1993, if all goes according to plan, total revenues will equal total expenditures, and the Treasury won't have to issue any new marketable securities to finance current expenditures.

After 1993, the gross debt of the government will continue to grow as the Social Security system accumulates the nonmarketable debt of the rest of the government which will continue to be in deficit. But, the government's net debt will start to decline after 1993, because the Treasury will be paying down marketable debt held by the public with the surplus funds generated by the Social Security system.

The bottom line is that—because of Gramm-Rudman fiscal discipline and the Social Security surpluses—the deficit will go to zero by 1993 and the supply of marketable debt will be much smaller than it would otherwise have been.

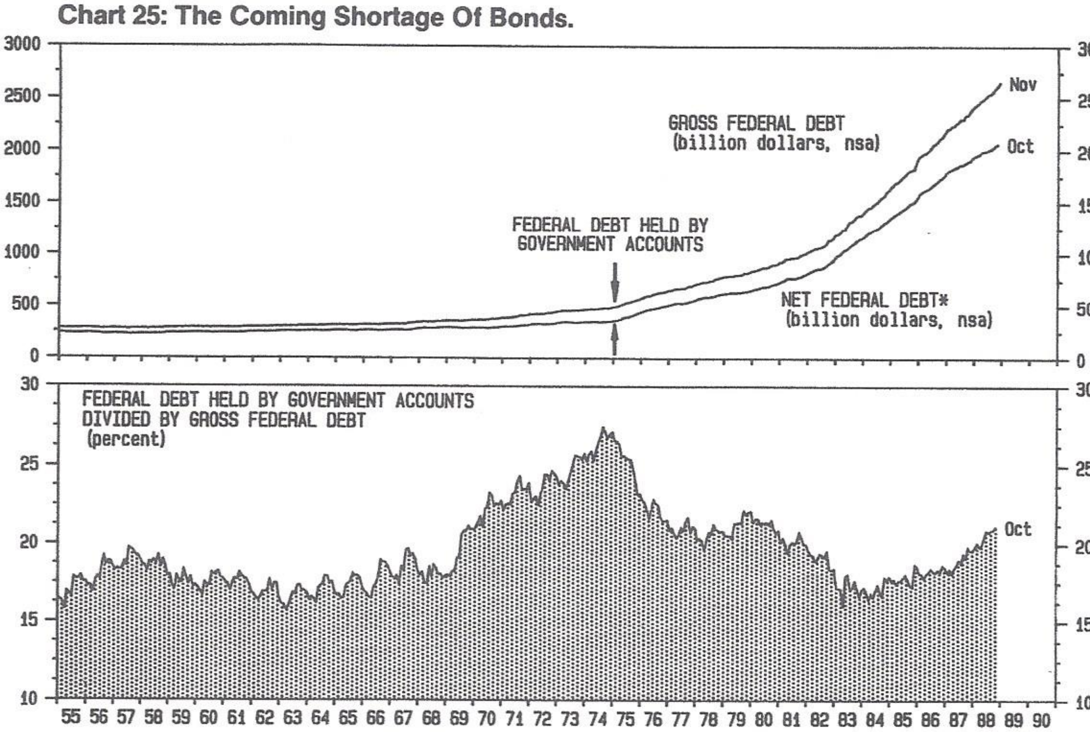
If the Treasury continues to spend the system's surpluses on current expenditures, there will be no till when the baby boomers start to retire. Ultimately, the ability of our society to pay retirement benefits depends first and foremost on the size of the economy, i.e., the gross national product. If the Social Security surpluses significantly reduce the outstanding amount of publicly held government debt, then the Treasury will have plenty of room to borrow again to meet the retirement needs of the baby boomers, particularly if the economy continues to prosper over the next 30 years.

Chart 24: The Baby Boomers' Till.



*OASI and DI Trust Funds.
Source: Office of the Actuary, Social Security Administration.

Chart 25: The Coming Shortage Of Bonds.



*Held by the public, including the Federal Reserve.

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