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Topical Study #51

Age Wave Is Still Bullish For Stocks

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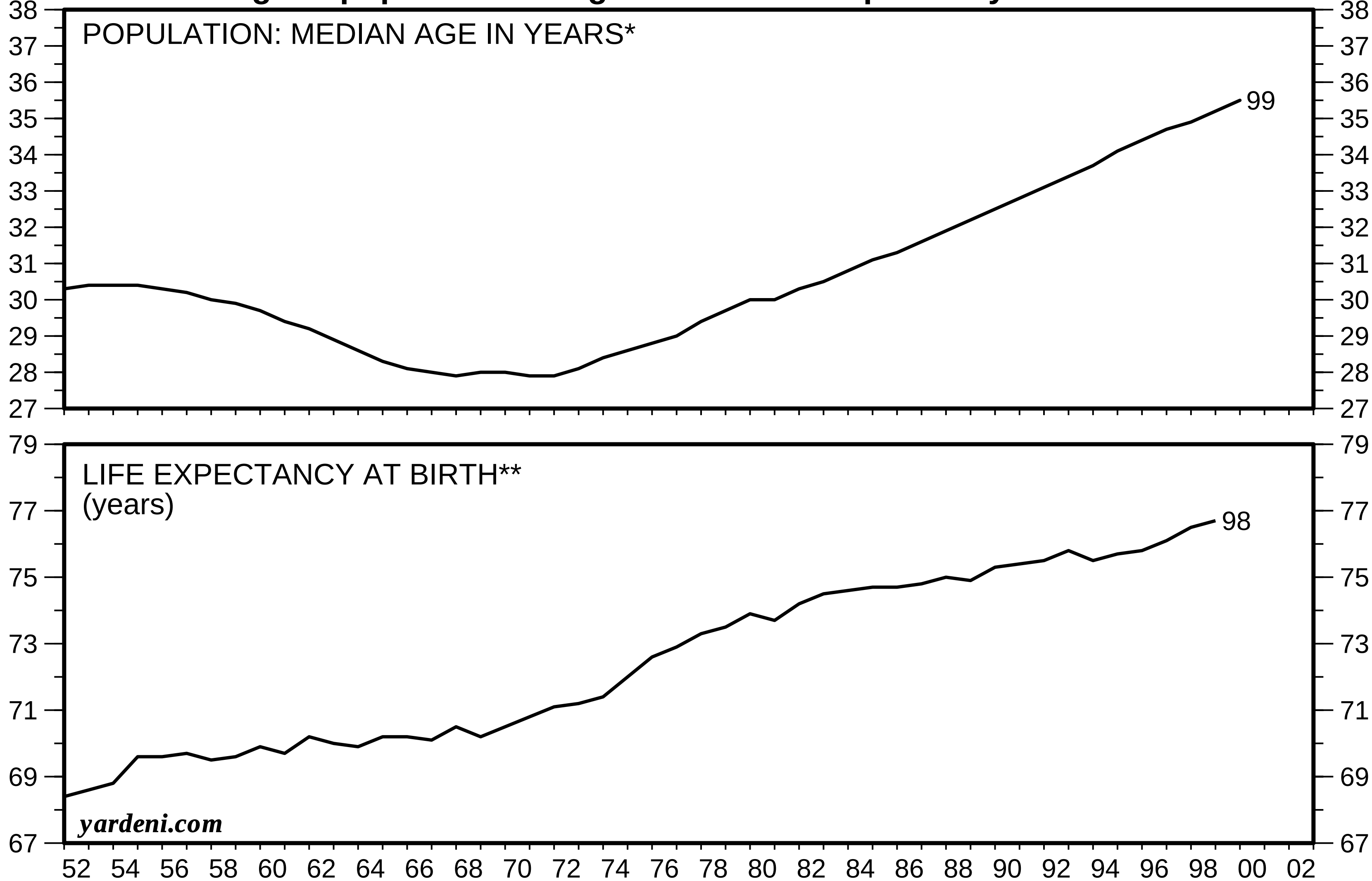
#1 Median age of population rising and so is life expectancy.



* Source: US Bureau of the Census.
** Source: US National Center for Health Statistics.

I. Peace, Stocks, and Viagra

During the 1970s, John Lennon's hit song, "Just Give Peace a Chance," was the anthem of many Baby Boomers. Now that most of us earthlings are enjoying peace, the Baby Boomers are more interested in making money in the stock market than joining peace movements. Their new mantra is, "All we are saying is give stocks a chance."

The Baby Boomers are a unique demographic phenomenon. They were born between 1946 and 1964 and number over 75 million people, or 36% of the total population today. They are currently 36 to 54 years old, which explains why the median age of the population rose to a record 36 last year (Exhibit 1 on page 2). They are the first generation in history to see their parents living into their 70s, 80s, and 90s. The Boomers can expect to live a long life too. In fact, the life expectancy at birth rose to a record high of 76.7 in 1998, up from 70 during 1970 (Exhibit 1).[1]

Living so long is a great gift, but it also poses some problems. Viagra has solved one of the problems. Another is money. Many years ago, most people retired at 65 and died a few years later. They were very considerate. Now many of us can expect to linger for 10, 20, even 30 years past retirement. How are we going to support our standard of living during those golden years?

Baby Boomers would like to retire comfortably when the time comes. Most of them recognize that there is no way they can save enough out of their incomes to meet their retirement needs for an unpredictable period of time that might stretch to 20 or even 30 years. The only way is to invest in the stock market and hope for the best. The Boomers conspired during the 1990s to buy lots of stocks to drive equity prices higher, boosting their net worth. It wasn't a premeditated conspiracy; it just happened.

II. The Greenspan Problem

Fed Chairman Alan Greenspan recently turned 74 years old. His term lasts until 2004. If he ever retires, he'll undoubtedly have enough in his retirement account to live very comfortably.

Apparently, Mr. Greenspan is unsympathetic to the retirement problem facing the Baby Boomers. He has recently suggested that household net worth shouldn't grow any faster than personal income. He first made this point in his January 13, 2000, speech before the Economic Club of New York:

> We cannot predict with any assurance how long a growing wealth effect—more formally, a rise in the ratio of household net worth to income—will persist, nor do

[1] For more information, see my *Topical Study #48*, "The Baby Boom Chart Book 2000," December 20, 1999, posted at www.yardeni.com/topical.asp.

> we suspect can anyone else. A diminution of the wealth effect, I should add, does not mean that prices of assets cannot keep rising, only that they rise no more than income.[2]

This ratio has been rising in recent years, thanks to the soaring stock market. The ratio of household net worth to personal income fluctuated around 4.25 from 1960 to 1996. Since then it jumped to nearly 5.5 in 1999 (Exhibit 2). If this "retirement-readiness" ratio stays at this level when the oldest Baby Boomers start to retire in 11 years—when they turn 65—then they'd better plan on dying by the time they are 70.5 years old, or else accept a lower standard of living during retirement.[3]

The Fed Chairman believes that the rising wealth-to-income ratio explains why the personal savings rate has fallen so sharply in recent years. This wealth effect has caused consumption growth to exceed income growth. This is an unsustainable situation, says the Fed's top man. He repeated his concern about the wealth effect, and more narrowly targeted the ratio of equity values to income, during his February 17, 2000, Humphrey-Hawkins Congressional testimony:

> Moreover, outsized increases in wealth cannot persist indefinitely either. For so long as the levels of consumption and investment are sensitive to asset values, equity values increasing at a pace faster than income, other things equal, will induce a rise in overall demand in excess of potential supply.[4]

III. Wealth and the Age Wave

I think the Fed Chairman may be fighting the forces of nature. It is only natural that older workers will more actively prepare for retirement than younger ones. They are bound to have a higher wealth-to-income ratio than younger folks. With so many Baby Boomers starting to focus on their retirement needs, it is only natural that the ratio of household net worth to personal income will rise. It must if the Baby Boomers are to maintain their standard of living during their retirement years.

Indeed, there is a good correlation of the Age Wave, i.e., the percentage of the population 45 years or older, and the ratio of household net worth to personal income (Exhibit 3). The Age Wave peaked during the early 1960s at 29%, fell to a trough of 23.5% during 1987, and rose back to 28% during 1999. It is projected to soar to 33% by the end of the decade.

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[2] You can find his testimony and much more at the Greenspan Center, www.yardeni.com/greenspan.asp. A more direct link is http://www.bog.frb.fed.us/boarddocs/speeches/2000/200001132.htm.

[3] Obviously, this is a very rough approximation to reality. A better "retirement-readiness" measure would compare net worth adjusted for tax consequences of selling assets during retirement with personal disposable income. Also many of the Baby Boomers closest to retiring are likely to have a higher wealth-to-income ratio than the national average.

[4] You can find his testimony and much more at the Greenspan Center, www.yardeni.com/greenspan.asp. A more direct link is http://www.bog.frb.fed.us/boarddocs/hh/2000/february/testimony.htm.

The Age Wave also correlates reasonably well with the ratios of the total market value of equities held by households to both personal income and to total net worth, which jumped to a record 32% last year (Exhibits 4, 5, 6, and 7). The ratio of equities to income is probably a better one for measuring retirement readiness, since other assets are less likely to be sold to fund consumption during retirement. You always need a house to live in, and credit market instruments are more likely to be held to generate additional income.

Currently, equities held by households amount to only 1.7 years of personal income (Exhibit 4). That is up from less than half a year during the 1980s, but it is still less than two years at this time. The household equities data include both directly and indirectly held corporate stocks at bank trusts, life insurance companies, private pension funds, and mutual funds (Table 1, lines 6-8). Directly held equities are currently only equivalent to one year of personal income (Exhibit 4).

My analysis strongly suggests that the wealth effect on personal consumption may be much less than Mr. Greenspan believes.[5] Baby Boomers need to have their wealth increase much faster relative to their incomes to retire well. Some may expect windfalls through inheritance from their parents. Others may be content to live on their social security benefits. But the Fed's own data on total household net worth show that, despite the bull market in stocks, the Baby Boomers will have to continue accumulating wealth at a faster pace than their income growth. I calculate that if income rises 6% per year and equity values increase 15% per year, the equity-to-income ratio will rise from 1.7 currently to 4.0 by 2010. Is such a high ratio plausible? I think it will more closely meet the retirement needs of the Baby Boomers than the current ratio of 1.7. But is it plausible? Yes, if productivity growth continues to rebound and continues to boost earnings growth in the decade ahead as I expect.

IV. Free Love and Compounded Returns

In the 1970s, many Baby Boomers were into free love. Now they are into tax-free compounding. Many of them have discovered that capital gains compound much faster when taxes are deferred. Since the early 1980s, many individual investors have contributed to their own self-directed retirement plans, including the 401(k) accounts. These defined-contribution plans now hold $1.6 trillion in equities (Table 1, line 11).

Most of this money is limited to a choice of several different kinds of mutual funds. Nevertheless, this is an enormous pool of money that can trade in and out of various kinds of funds with no immediate tax consequences. Recently, there has been a significant shift from income funds to aggressive growth, especially technology (Exhibit 10). This explains why the stock market is so clearly split between an old-economy bear market and a new-economy bull market. Tax-free compounding works best in new-economy investments, where the expected returns are highest.

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[5] For my explanation of why the personal savings rate is falling, please see my previous *Topical Study #50*, "Living *La Vida Loca*," March 6, 2000, available at www.yardeni.com/topical.asp.

Table 1: Balance Sheet of Households and Nonprofit Organizations with Equity Detail

Billions of dollars; amounts outstanding end of period, not seasonally adjusted

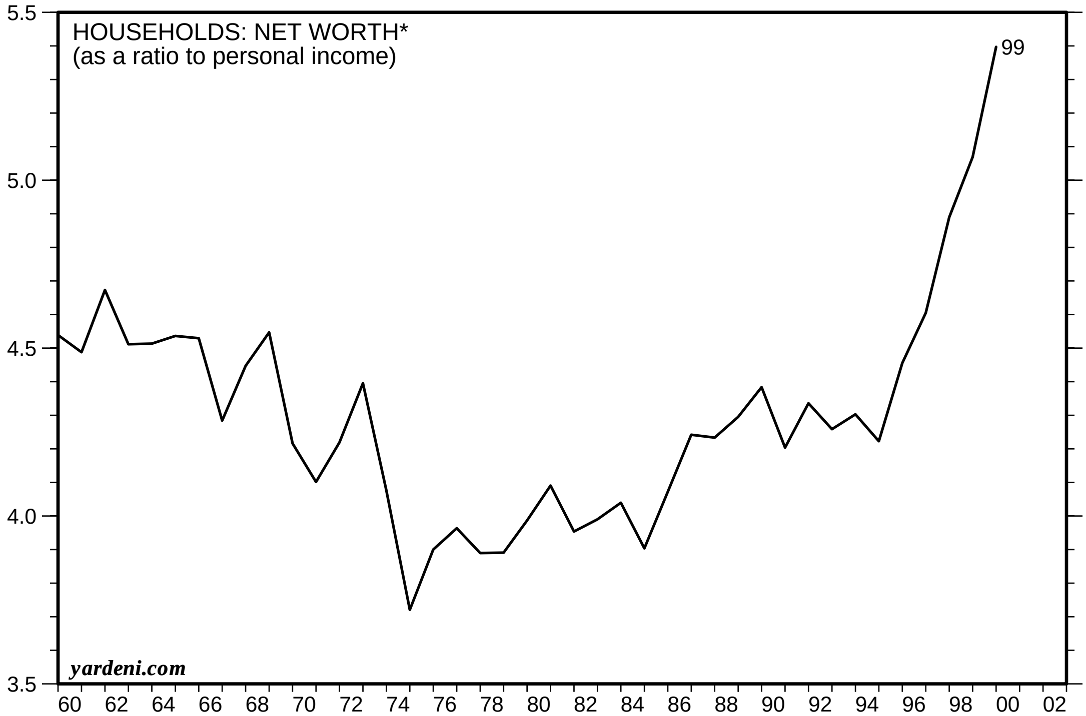
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
1	**Assets**	**24290.1**	**25920.3**	**27000.3**	**28428.9**	**29476.6**	**32610.4**	**35483.2**	**39697.0**	**43508.8**	**48889.1**
2	Tangible assets	9326.7	9469.9	9729.7	9975.0	10307.7	10776.7	11299.5	12068.6	12925.8	13940.9
3	Financial assets	14963.4	16450.5	17270.6	18453.9	19168.9	21833.7	24183.6	27628.3	30583.0	34948.3
4	Deposits	3264.5	3267.3	3249.6	3182.8	3157.3	3365.5	3539.6	3807.2	4165.1	4337.9
5	Credit market instruments	1502.8	1612.1	1655.8	1637.2	1930.0	1885.0	1993.7	1873.5	1781.1	1960.4
6	Equity shares at market value	2551.5	3557.6	3989.6	4629.1	4581.5	6148.7	7293.0	9207.6	10572.6	13331.5
7	Directly held	1806.5	2570.9	2873.2	3242.1	3070.9	4121.6	4642.1	5689.6	6338.7	8008.9
8	Indirectly held	745.0	986.7	1116.4	1387.0	1510.7	2027.1	2650.9	3518.0	4233.9	5322.7
9	Bank personal trusts and estates	214.1	271.7	268.7	262.0	263.6	365.2	433.2	536.7	583.6	699.2
10	Life insurance companies	66.8	99.1	116.6	156.7	185.2	246.5	325.2	433.8	542.4	717.3
11	Private pension funds	284.7	380.4	436.8	530.6	556.6	715.6	897.2	1158.2	1370.5	1596.9
12	Mutual funds	179.4	235.5	294.3	437.6	505.3	699.8	995.3	1389.3	1737.4	2309.2
13	Other	7644.5	8013.4	8375.5	9004.7	9500.1	10434.5	11357.4	12740.1	14064.1	15318.5
14	**Liabilities**	**3678.5**	**3871.5**	**4045.0**	**4290.2**	**4612.8**	**4982.2**	**5332.7**	**5707.8**	**6205.6**	**6840.9**
15	**Net worth**	**20611.6**	**22048.8**	**22955.3**	**24138.6**	**24863.8**	**27628.2**	**30150.5**	**33989.2**	**37303.2**	**42048.2**
	Memo: Equity shares (line 6) as a percent of										
16	Total assets (line 1)	10.5	13.7	14.8	16.3	15.5	18.9	20.6	23.2	24.3	27.3
17	Financial assets (line 3)	17.1	21.6	23.1	25.1	23.9	28.2	30.2	33.3	34.6	38.1

(1) Estimates of equity shares (lines 7 through 12) could differ from other sources owing to alternative definitions of ownership of equity by households.
In this table, line 11 includes equities in defined contribution plans only; assets in defined benefit plans are included in "other assets" (line 13).
Prior to 1985, all pension assets are assumed to have been in defined benefit plans.

Source: Federal Reserve Board, *Flow of Funds Accounts*

- Net Worth -

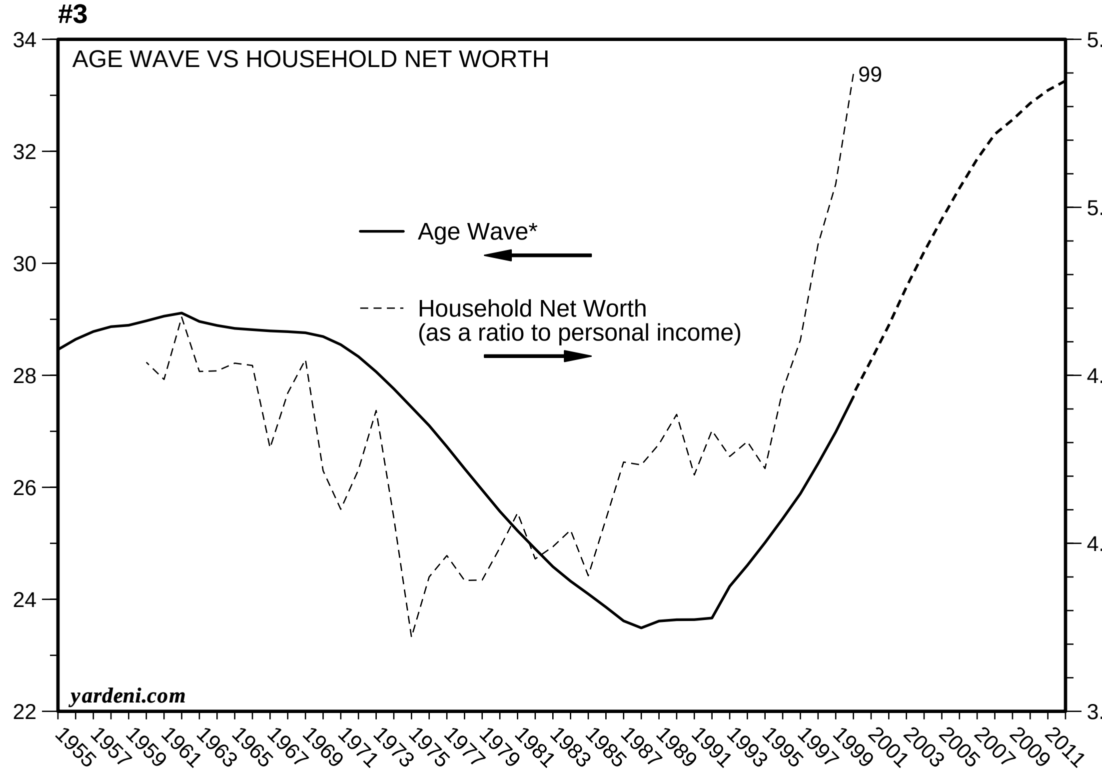
#2



* Source: Flow of Funds, Board of Governors of the Federal Reserve System.

As the Baby Boomers prepare for retirement, the ratio of household net worth to personal income is bound to rise as it is doing already.

#3

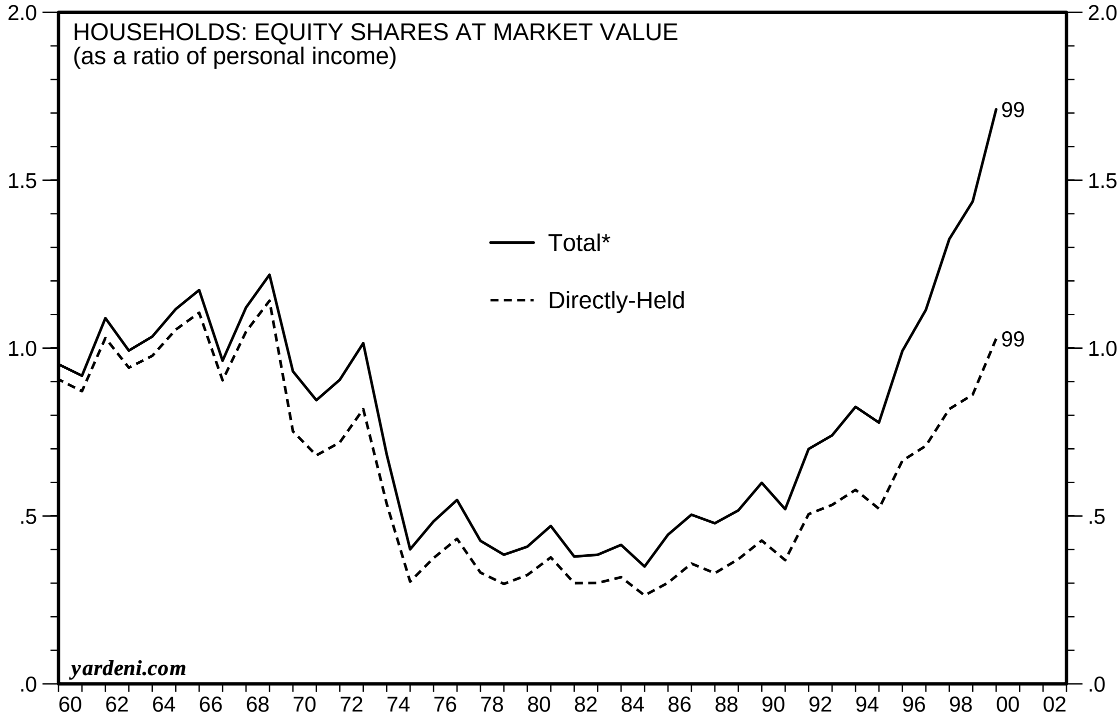


* Population 45 years and older as a percent of total population 15 years & older. Projected data start in 2000. Population from 15 years old includes armed forces overseas.

- Equity Shares -

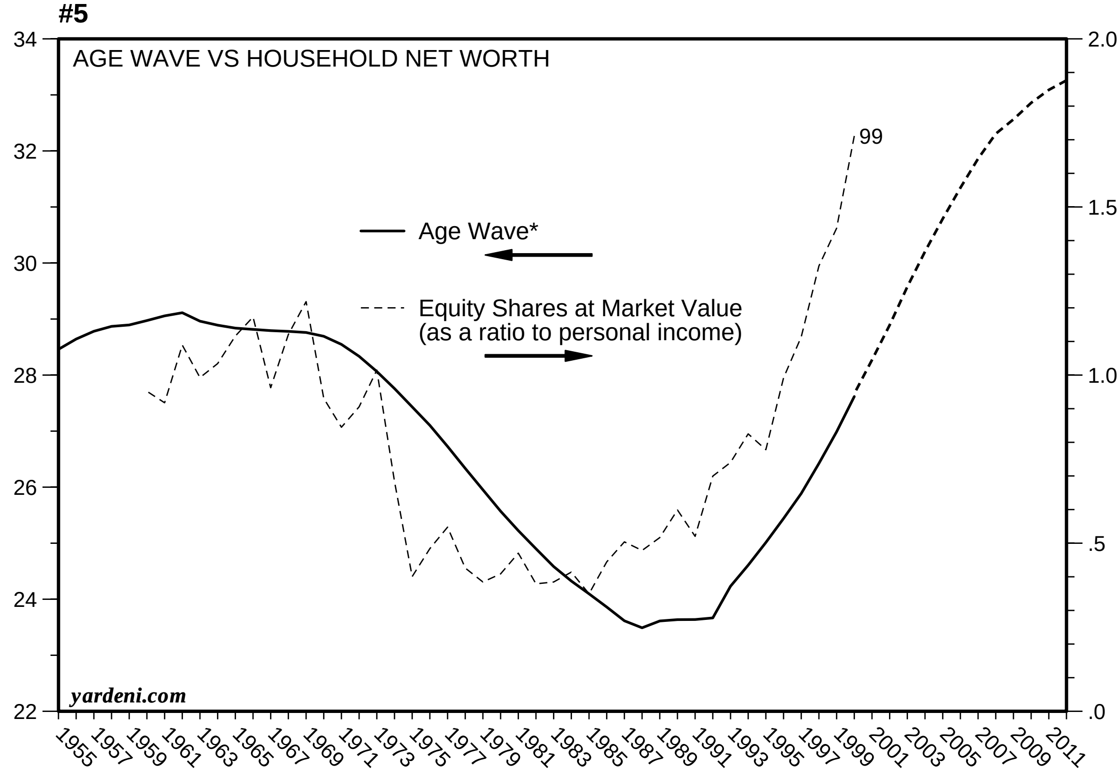
Equities held by households are currently 1.7 times personal income. This ratio will have to rise for the Baby Boomers to retire comfortably.

#4



* Includes directly held and indirectly held by bank trusts, life insurance companies, private pension funds, and mutual funds.
Source: Flow of Funds, Board of Governors of the Federal Reserve System.

#5



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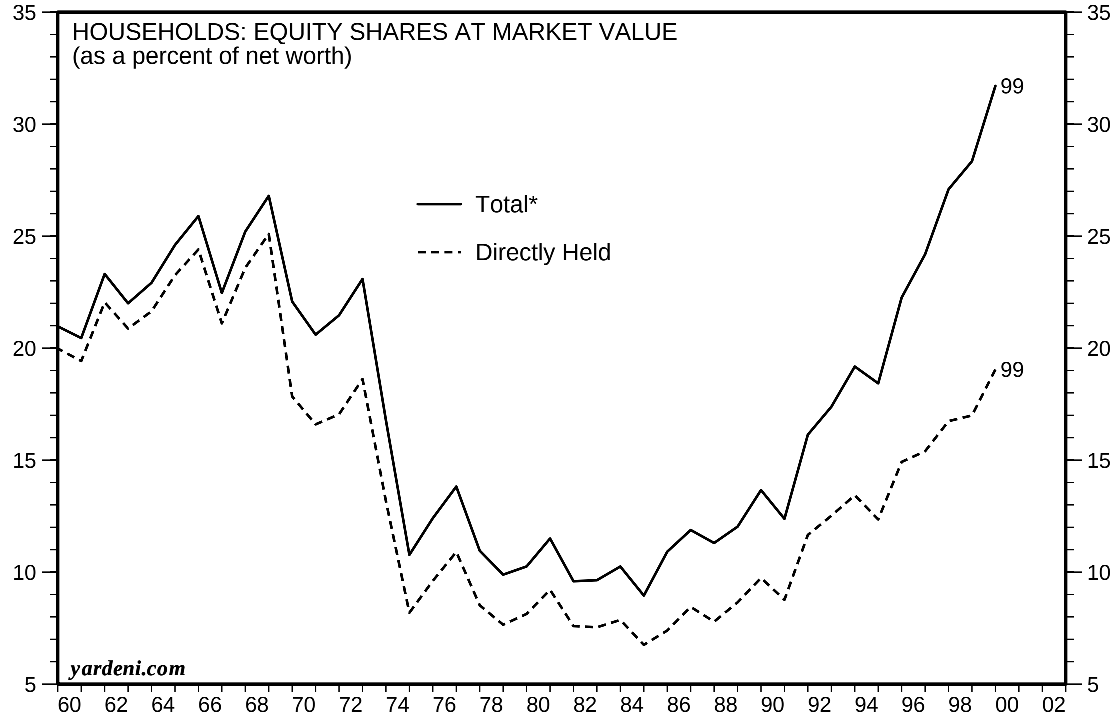
- Equity Shares -

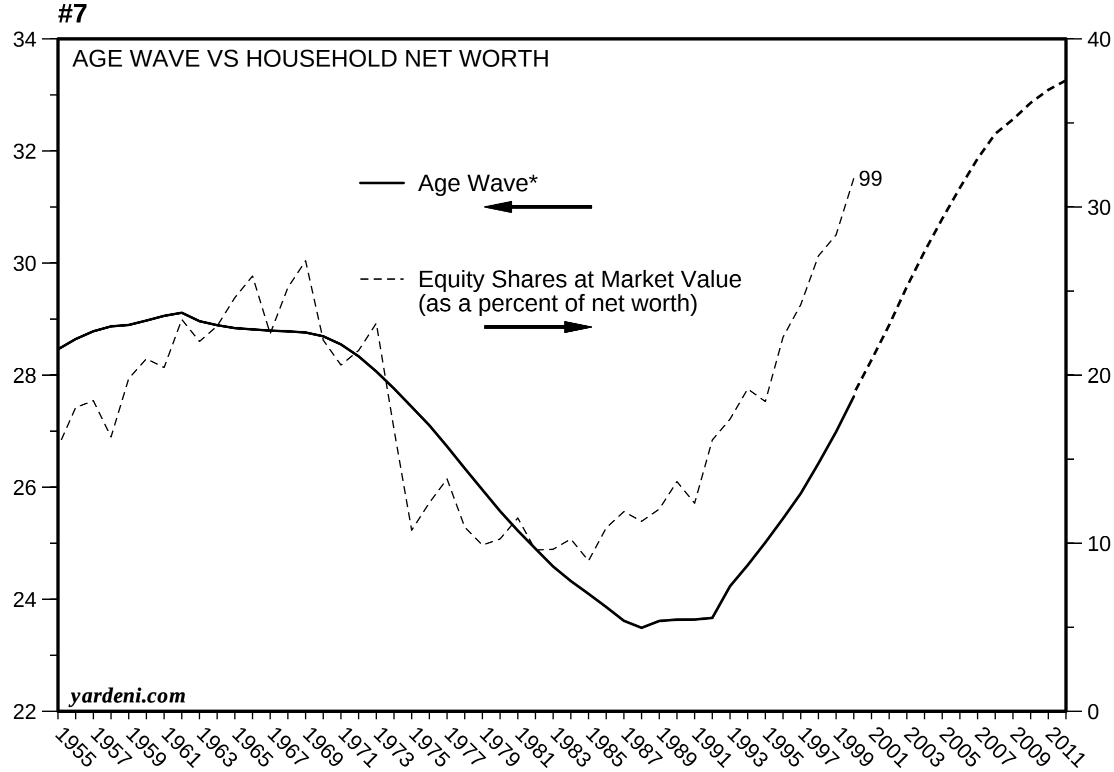
#6



* Includes directly held and indirectly held by bank trusts, life insurance companies, private pension funds, and mutual funds.
Source: Flow of Funds, Board of Governors of the Federal Reserve System.

Equities held by households currently account for nearly a third of their net worth.

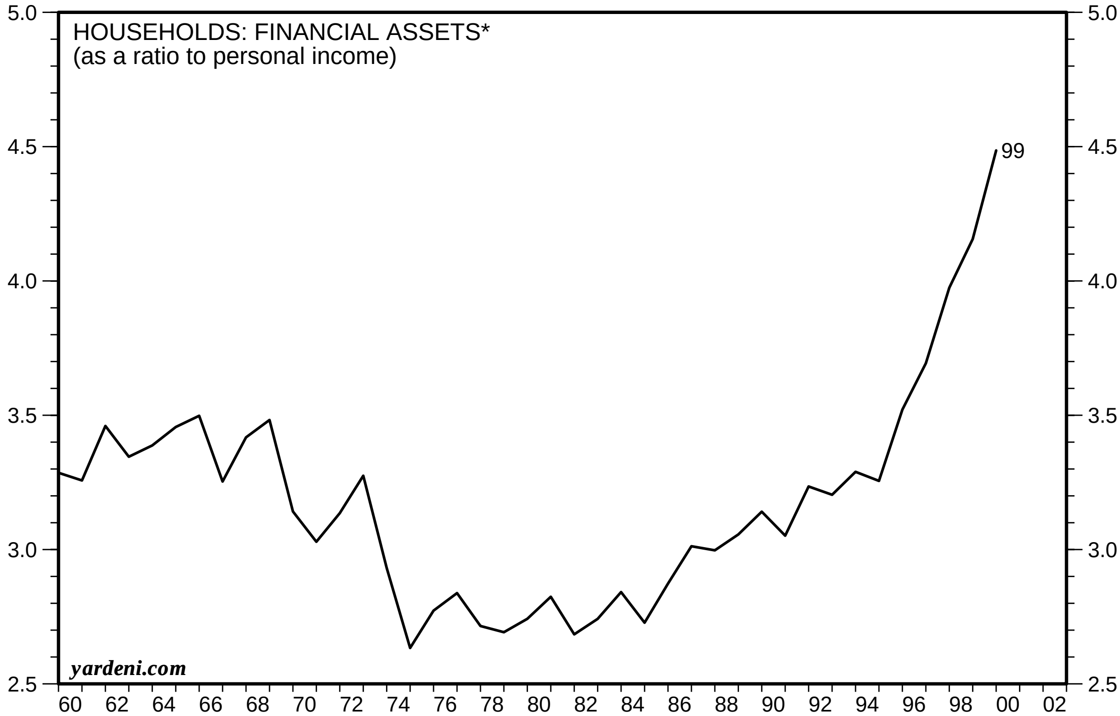
#7



* Population 45 years and older as a percent of total population 15 years & older. Projected data start in 2000. Population from 15 years old includes armed forces overseas.

- Financial Assets -

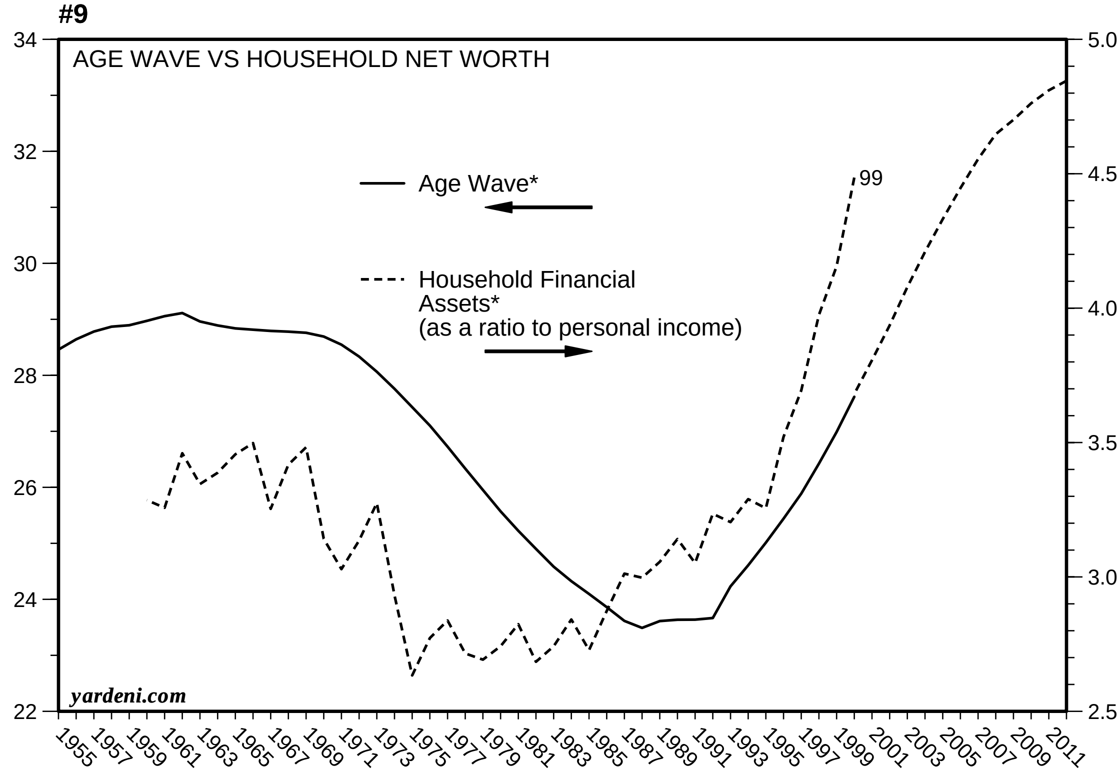
#8



Source: Federal Reserve Board, Flow of Funds Accounts.

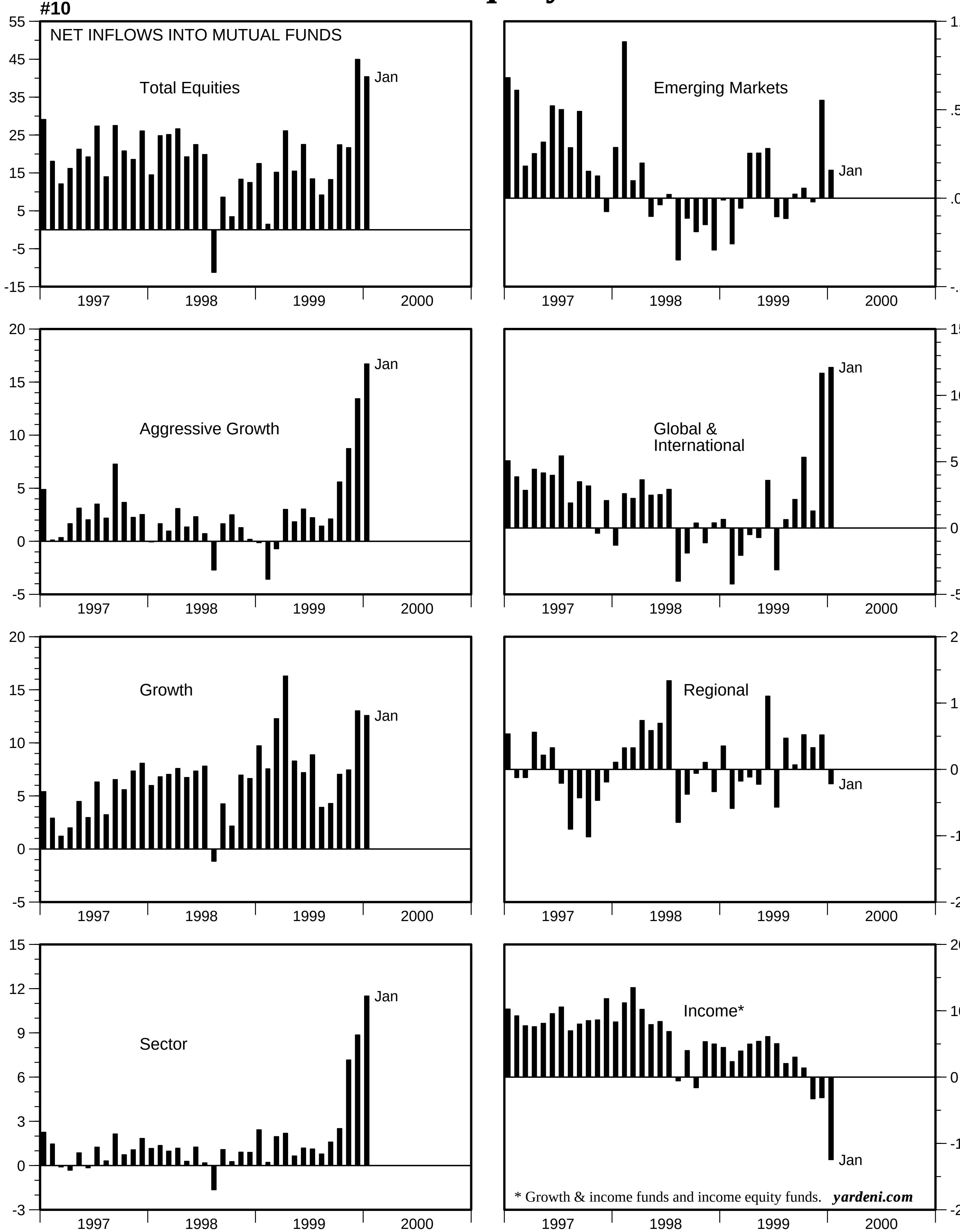
Household's financial assets at a record 4.5 times personal income.

#9



* Population 45 years and older as a percent of total population 15 years & older. Projected data start in 2000. Population from 15 years old includes armed forces overseas.

- Net Inflows Into Equity Mutual Funds -



* Source: Investment Company Institute. Total sales less redemptions plus the net result of fund switches in billions of dollars.

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