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Special Report

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Demographics and Investing

Introduction

As investors and market analysts try to explain the great bull market of the 1990s, attention has been focused on the demographic make-up of the United States. Many investing books and Wall Street economists have argued that the "great baby boom" from 1946 to 1964 is one of the "reasons" for the above average performance of the stock market in the last two decades. As this cohort aged, so did their preferences and desires to own stocks in the 1990s, pushing prices higher than most thought possible 10 years ago.

We agree with the assessment that demographics have played an important role in the performance of the U.S. equity markets. **Furthermore, as we will show, the positive demographics could now be ending for the U.S. equity markets.**

What Demographics Matter The Most?

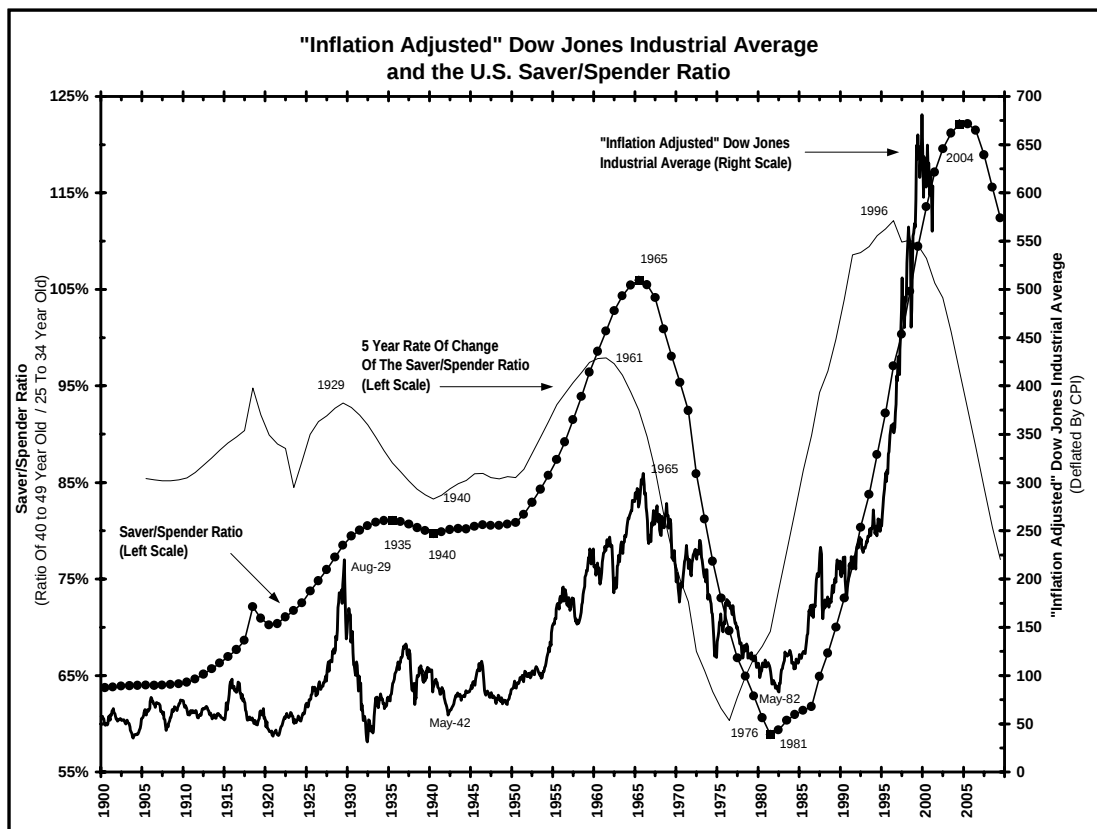
One popular argument for the positive demographics that the stock market has enjoyed came from the idea of shifting births forward (popularized by Harry Dent in two books about demographics and investing). Take the birthrate in 1956 and shift it forward 45 years. It should provide a good "roadmap" for the stock market in 2001. It is this idea that argues that the Dow Jones Industrial Average could reach 40,000 or higher by 2009 (45 years after the "baby boom" ended in 1964).

Another demographic theory comes from the so-called "dependency ratio": (population less than 18

years old) + (those greater than 65 years old) divided by the total of 18 to 64 year olds. This ratio peaks in the year 2011. Many in the investment community argue that the U.S. has another 8 to 10 years of positive investing demographics ahead, based on the combination of the "birth shifting" (peaks in 2009) and "dependency ratio" (peaks in 2011).

The problem with both of these arguments is that they do not have a good fit in explaining past movements of the stock market. While many different demographic ratios fit since the mid-1960s, as the "bulge" of baby boomers make all demographics ratios look the same, neither of the ratios noted above worked well before 1960.

There is, however, one demographic ratio that has worked well in explaining the stock market both prior to and after 1960 - the "Saver (40 to 49 years old) / Spender (25 to 34 years old)" ratio. We developed this ratio based on the work of John Carder of Topline Investment Graphics (www.topline-charts.com) and commentaries by the late Stan Salvigsen of Comstock Partners about the "yuppie/nerd" ratio. The chart on the next page shows this ratio (dotted line) along with the Dow Jones Industrial Average adjusted for inflation (thick line) and the 5-year rate of change in the "saver/spender ratio" (thin line).



How does this work? This demographic ratio (dotted line) measures the important 25 to 49 year cohort. It shows the number of savers (40 to 49 years old) **relative to** the number of spenders (25 to 34 years old). As far as the **stock market** is concerned (as opposed to the economy, inflation or interest rates), **we believe this is the most important demographic ratio influencing prices.**

The stock market outpaces inflation when the "saver/spender ratio" is rising, and underperforms inflation when the "saver/spender ratio" is falling. Furthermore, inflation-adjusted stock prices typically "turn" between the "peak" in the saver/spender momentum (the 5-year rate of change shown as the

thin line) and the actual "peak" in the "saver/spender ratio".

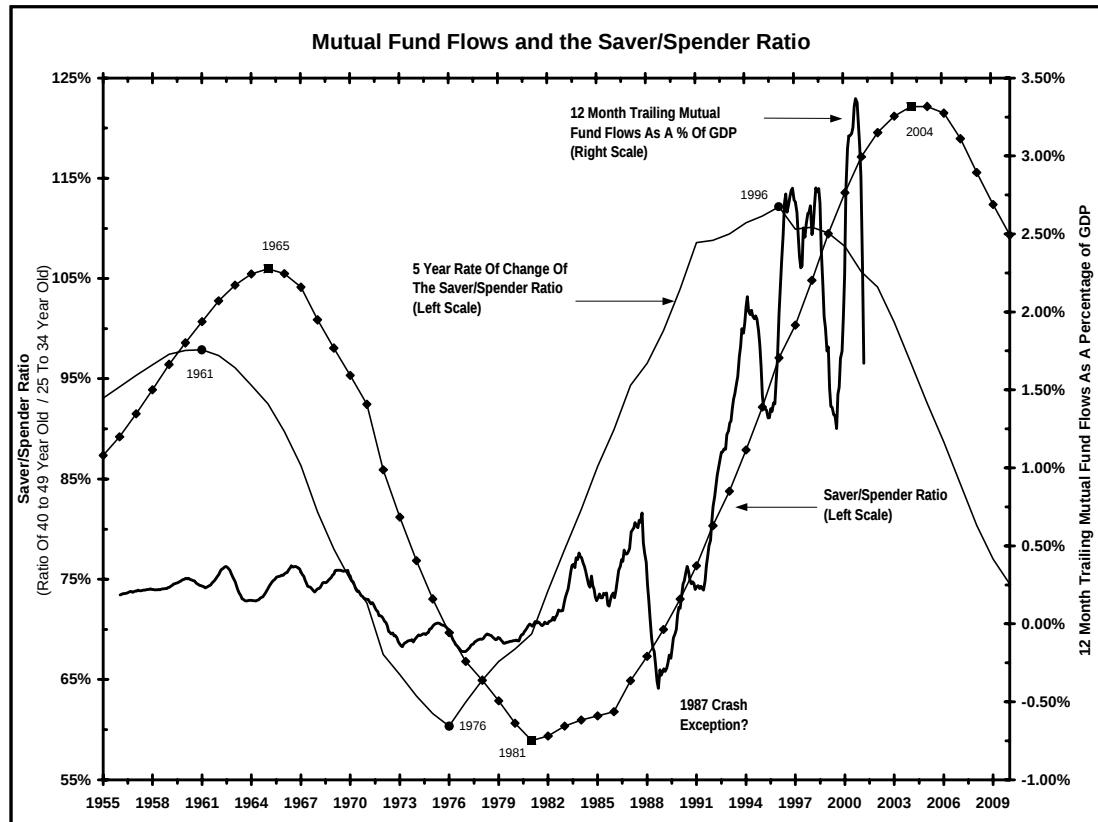
Demographics can be projected with a high degree of accuracy (unless the assumption behind these projections is radically altered by events like war or disease). Thus it is possible to see where the next demographic turn is coming. As the chart above shows, the next turn is projected between 1996 (the peak in the momentum) and 2004 (the peak in the ratio).

Fund Flows and Demographics

So, how does demographic interact with the stock market? See the next chart.

This chart shows the same “saver/spender” ratio as before, except now it is overlaid with equity mutual

fund flows (as a percent of nominal GDP). This ratio also fits well with the ups and downs of mutual fund flows. The lone exception is the after-math of the stock market crash of 1987.



Taken together, these charts show how stock prices are affected by demographics. When the number of savers (40 to 49 years old) swells in relation to spenders (25 to 34 years old), equity mutual fund flows rise faster than nominal GDP. In this environment, the stock market outperforms inflation. Conversely, when the number of savers falls in relation to spenders, equity mutual fund flows decline relative to nominal GDP. In this environment, the stock market underperforms inflation.

Currently, the stock market is in a period of “demographic transition.” The “saver/spender” ratio momentum peaked in 1996, which also marked

a plateau in equity mutual fund inflows. The actual “saver/spender” peak is in 2004. This suggests the “tailwind” that many believed accounted for the superior performance of the stock market in the 1990s might be ending.

If so, we could be entering a demographic period similar to 1965 to 1981, when stocks underperformed inflation. **This means the best way to make money in the stock market is not from a general bull market of rising prices, but stock and group selection.**

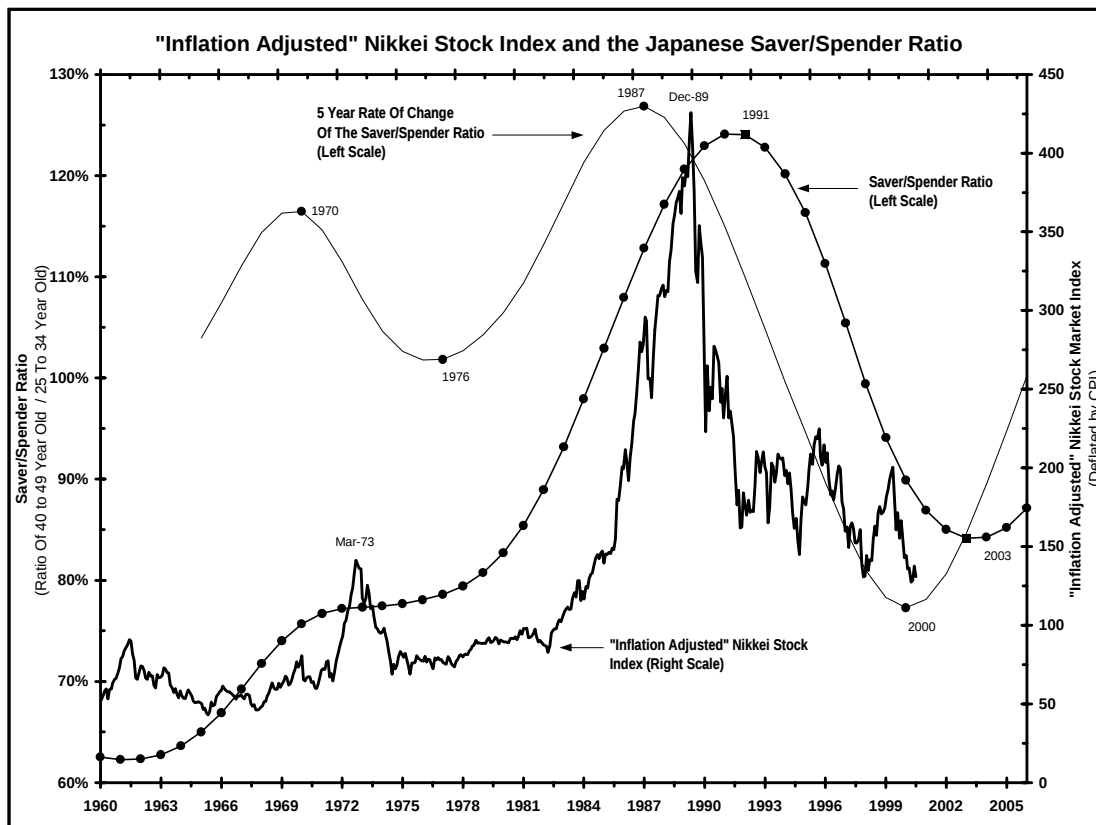
Other Countries As A Test

The “saver/spender” ratio appears to have done an impressive job of explaining the larger trends in the stock market and equity mutual fund flows. But how do we know this ratio really works? Could it be a case of data mining? To further test this “saver/spender ratio”, we applied the same

methodology to the next two largest economies – Japan and the UK. (This type of analysis on the German markets cannot be done as the unification of 1989 created a “series break” in their population data.)

This ratio seems to do a good job in explaining the movements of their stocks markets as well.

Japan – Bottom?



The chart above shows the same “saver/spender ratio” applied to Japan. This ratio did a good job explaining the 1970s and 1980s.

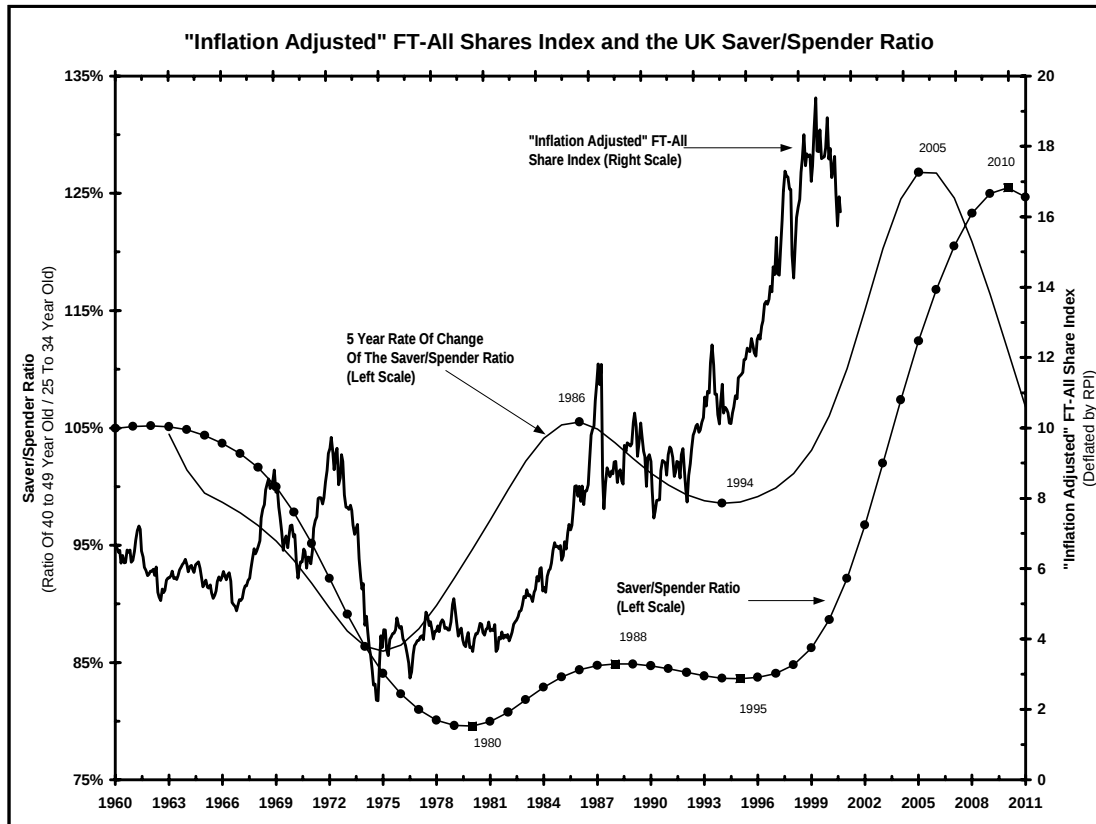
The momentum of the 5-year rate of change peaked in 1987 and the ratio itself peaked in 1991. The inflation-adjusted Nikkei topped right between these “peaks”.

What is of most interest is that the momentum bottomed in 2000 and the actual ratio bottoms in 2003. Therefore, the “saver/spender ratio” in Japan is almost completely opposite of the U.S. While the “saver/spender ratio” in the U.S. is peaking (suggesting trouble ahead), this same ratio is bottoming in Japan, suggesting their decade long bear market could be near an end.

The United Kingdom – Positive For Several More Years

This chart shows the “saver/spender ratio” for the U.K. This ratio has only recently turned higher and its momentum peak is still 4 years away. The actual

peak is nine years away. This suggests that the demographics for the UK stock market are strong and will remain that way for several years.



Why Does This Work?

Demographic analysis does a reasonable job of explaining the long-term trend in stock prices. Why does it work? Why does it work in many different countries, that have different cultures, and over many decades when the life expectancy has dramatically increased?

We believe it only works in “established economies” of the developed countries. Undeveloped countries have too many variables (including reasonable predictions about their population) to make such an analysis accurate. When an economy is “stable”, the population make-up matters a great deal. Therefore, the number of savers *relative to* spenders affects the performance of the financial markets. Notice we highlighted the words “relative to” because it is not just the gross number in a particular cohort that matters (which is what “birth-shifting” looks at);

rather it is their numbers relative to each other that matters most.

Should this ratio change as life expectancy increases? We do not believe so. People are still spenders from 25 to 34, regardless if life expectancy is in the mid 50s (like it was in the U.S. in 1900) or in the low 80s (like it is in Japan now). People become savers from 40 to 49 no matter how many years they perceive they have left to live. So, a change in life expectancy, unless it is unexpected due to war or disease, should not greatly impact the effectiveness of this ratio.

The sharp-eyed reader will notice that 35 to 39 is not part of this ratio. Presumably, this is when one changes from a spender to a saver. In addition, it appears to be the case whether one lives in the U.S., Japan, or the United Kingdom.