The Great Retirement Experiment

What Happens When 50 Million Boomers Try to Cash Out \$44 Trillion In Paper Wealth?

E-Pamphlet Two:

Adding Up \$44 Trillion Of Boomer Wealth Expectations

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One Page Summary(*): Adding Up \$44 Trillion Of Boomer Wealth Expectations

This pamphlet is devoted to exploring an unusual but important question: how expensive will it be to cash out the Baby Booms' investments and meet their collective wealth expectations? Summary results of the 50 pages of schedules, discussion and footnotes are:

A little over <u>50 million</u> Boomers have retirement accounts and/or pensions. Total investments in accounts dedicated for Boomer retirements was <u>\$6.1 trillion</u>, including IRAs, Keoghs and pensions.

Those assets will not be cashed out today, but are invested for the long term with the expectations of substantial returns. Using the methodology described herein, total expectations for retirement investment wealth for all 50 million Boomer retirement investors were calculated to be **\$44 trillion**.

The present value cost of those wealth expectations (at 3% inflation) is over **\$22 trillion**, almost twice (180%) the size of the current annual national economy.

Even if those wealth expectations are met in full, the sum of all Boomer pension and retirement account income (in current dollars) will replace only <u>45%</u> of the total income for all 77 million Boomers, meaning a shortfall of <u>55%</u> for the entire generation, that will have to be made up from other sources.

The amount of paper wealth expected to be cashed out for real goods and services by Boomers will build year by year, as more Boomers retire each year, until it reaches a peak of **\$2.3 trillion per year** by 2027.

The inflation adjusted annual cost of cashing out those wealth expectations will peak at **\$1.3 trillion per year** in 2027 – about **2.5** times as large as the current annual cost of Social Security.

(*) The financial calculations to precisely model the retirement wealth expectations of more than 50 million individuals, each with their own individual ages, situations and goals, would be extraordinarily complex, and would require a database of individual-level information that does not exist. The numbers above are based upon a relatively simple two page model that is designed to be understandable by people who are not financial professionals. There were compromises in reaching that level of simplicity, and every number above is therefore limited by the methodology and assumptions whose documentation makes up the majority of this pamphlet. Since the actual outcome will be dependent on unknowable actual future investment returns and Boomer behavior, this model should be considered an <u>illustration</u> of the total retirement wealth <u>expectations</u> of the Baby Boom, rather than a precise forecast or comprehensive econometric model.

Introduction & Conceptual Overview

The-Great-Retirement-Experiment.com

There is an interesting question, with readily understandable implications, that has been traveling person to person for some years now around the country, as well as on Wall Street:

What happens to investment prices when the Boomers are all selling?

Finding out the answer will be guite the experiment, as it will play a crucial role in determining the standard of living for the 70% of the Baby Boom who have pensions and/or retirement accounts. However it will be only one of a number of major experiments that will be carried out as the Baby Boom steadily begins to retire. Each year, Social Security will consume more of the economy, as will Medicare, even as changes in income ripple through consumer spending, even as the Boomers begin cashing out their investments.

There is of course already an entire financial industry devoted to helping the Boomers invest for retirement. Normally, the process starts with working out the wants and needs for individual Boomers in retirement, finding out how much can realistically be saved, looking at historical investment returns, and then coming up with a long term investment strategy. Reasonable, logical, and of course – everything is from the perspective of the individual Boomer investors.

The-Great-Retirement-Experiment.com is an ongoing series of pamphlets, books, and videos that takes a holistic look at those and The-Great-Retirement-Experiment.com

other major Experiments from a uniquely people-based perspective – that is not the perspective of the Boomers. We look at the retirement of the Baby Boom not from the perspective of the wants and needs of the investment sellers, nor the investment returns of the past – but from the viewpoint of the buyers. The people who will be paying for the Boomers' retirements. The younger generations behind the Boomers, who in their own peak productive years will be providing the goods and services the retirees will need to live, as well as buying out the Boomers' investments.

We take the position that what will determine the real prices at which the Boomers will be able to sell will not be the wants and needs of the Boomers, their plans, or financial history. That instead, the highly intelligent and motivated wealth creators of the future will only cash out their elders' paper wealth at the prices that work in their own selfinterests.

If you have not already read the first free e-pamphlet in this series, "Thinking Like A Buyer When The Boomers Are Selling" (download here), it will provide an easy to follow, 57 page conceptual introduction to this perspective. This second e-Pamphlet got its start in the attempt to explore an intriguing retirement finance question, that is introduced in the first pamphlet, and explored in more detail in Book One.

We know that the Boomers are the largest generation of investors in history. We know that tens of millions of investors are currently investing trillions of dollars towards retirement. We know that the common and well-meaning advice to long term investors is to invest

early and consistently in assets that have historically earned good yields – because that allows our money to grow. So our money can work for us as the saying goes, instead of us working for our money. Tens of millions of Boomers have been pursuing investment strategies that they each expect will allow them to compound their personal wealth at rates well above the inflation rate and the rate of real per capita growth in the economy, so they can all individually achieve real wealth, using nothing more than the time tested investment principles of history.

The question is: can all of us really do that together?

Sure, there is no doubt that individuals, or even millions of people can all have their personal wealth increase at rates far in excess of the overall economy. But, can 50 million people pull that off?

Can we all be wealthier than average?

And then successfully cash that wealth out?

Now this may sound like an academic question that would of interest only to economists, however, it is more than academic. It may turn out to be the single most important question in determining what the real lifestyles in retirement will be for over 50 million people who are relying on investment income to help pay for those lifestyles, either directly or through their pensions.

A step towards answering that bigger question may be to ask another question:

Just how much are the Boomers expecting to get paid for their investments?

We quite literally have tens of millions of financial plans for individual Boomers, each of which is based on what are (hopefully) quite reasonable assumptions. When we add up all the plans, all the retirement planning models and all the expectations of future wealth just how much are the Boomers expecting to be paid? A most reasonable question, if we want to evaluate the chances of the Boomers being paid what they expect. It is also a guestion that just isn't being asked. Indeed, for people who are used to working with individual retirement investments, it might seem almost heretical to even say that such things could matter.

The pages that follow are devoted to exploring this unusual – but vitally important – question. Please note that this pamphlet has multiple levels of complexity, and you can pick whichever one fits your interests the best. The Quick Summary is the easiest to follow, then the two page model that begins on the next page, then the 8 page overview of the model, and finally the 23 pages of detailed notes and discussion of each line and column in the model.

Schedule 1

Adding Up The Boomers' Retirement Wealth Expectations

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<u>Line</u>		<u>Description</u>			
1	45,800,000	Boomer Households			
2	\$136,215	Average Retirement Account Value for Boomers Having Such Accounts			
3	58%	Percent of Boomers Who Own Retirement Accounts			
4	\$79,005	Average Retirement Account Value adjusted for ALL Boomer Households			
5	1.68	Adjustment for Boomer Pension Investments			
6	\$132,728	Average Value of Each Boomer Household's Total Retirement Assets			
7	\$6,078,937,636,800	Total Current Value of Boomer Retirement Assets			
8	7.20	Future Value Multiple With Standard Investment/Retirement Assumptions			
9	\$955,601	Cost to Cash Out Each Boomer Household			
10	\$43,766,510,292,789	Cost to Cash Out All Boomer Retirement Investments, Including Pensions			
11	\$11,700,000,000,000	United States Gross Domestic Product, 2004			
12	3%	Inflation Discount Rate			
13	\$22,409,368,132,218	Present Value Cost of Cashing All Boomers Out			
14	\$28,782	Present Value Per Boomer Household Per Year (Real Retirement Income)			
15	\$64,360	Average Income Per Boomer Household, 2003			
16	45%	Percent of Boomer Income Replaced by Retirement Accounts & Pensions			
17	55%	Percent Decline in Boomer Income After Retirement, Before Social			
		Security, Work Earnings & Proceeds From Other Assets			
18	\$135,500,031,866	Average Annual Cashing Out of Paper Wealth Per Boomer Class Year			
19	\$2,303,500,541,726	Peak Annual Cashing Out of Paper Wealth by Boomers (2027, 2028)			

Schedule 2

The-Great-Retirement-Experiment.com

Retirement Financial Plan For Barry The Unusually Average Boomer

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			(4)			(7)
	(2)	(3)	Retirement	(5)	(6)	3.00%
(1)	Boomer	Annual	Spending	8.00%	Ending	Present
Year	Age	Savings	Drawdowns	Earnings	Balance	Value
	3 -	3-		3-		
1992	35	4,526		362	4,888	0
1993	36	4,526		753	10,168	0
1994	37	4,526		1,176	15,869	0
1995	38	4,526		1,632	22,027	0
1996	39	4,526		2,124	28,678	0
1997	40	4,526		2,656	35,860	0
1998	41	4,526		3,231	43,617	0
1999	42	4,526		3,851	51,995	0
2000	43	4,526		4,522	61,043	0
2001	44	4,526		5,246	70,815	0
2002	45	4,526		6,027	81,368	0
2003	46	4,526		6,872	92,766	0
2004	47	4,526		7,783	105,076	0
2005	48	4,526		8,768	118,370	0
2006	49	4,526		9,832	132,728	0
2007	50	4,526		10,980	148,235	0
2008	51	4,526		12,221	164,982	0
2009	52	4,526		13,561	183,068	0
2010	53	4,526		15,008	202,602	0
2011	54	4,526		16,570	223,699	0
2012	55	4,526		18,258	246,483	0
2013	56	4,526		20,081	271,090	0
2014	57	4,526		22,049	297,665	0
2015	58	4,526		24,175	326,367	0
2016	59	4,526		26,471	357,365	0
2017	60	4,526		28,951	390,842	0
2018	61	4,526		31,629	426,998	0
2019	62	4,526		34,522	466,046	0
2020	63	4,526		37,646	508,218	0
2021	64	4,526		41,020	553,764	0
2022	65	0	56,212	39,804	537,356	36,080
2023	66	0	56,212	38,492	519,636	35,029
2024	67	0	56,212	37,074	500,498	34,009
2025	68	0	56,212	35,543	479,829	33,019
2026	69	0	56,212	33,889	457,506	32,057
2027	70	0	56,212	32,104	433,398	31,123
2028	71	0	56,212	30,175	407,361	30,217
2029	72	0	56,212	28,092	379,241	29,337
2030	73	0	56,212	25,842	348,872	28,482
2031	74	0	56,212	23,413	316,072	27,653
2032	75	0	56,212	20,789	280,649	26,847
2033	76	0	56,212	17,955	242,393	26,065
2034	77	0	56,212	14,894	201,075	25,306
2035	78	0	56,212	11,589	156,452	24,569
2036	79	0	56,212	8,019	108,260	23,853
2037	80	0	56,212	4,164	56,212	23,159
2038	81	0	56,212	0	0	22,484
		135,786	955,601	819,815		489,288

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General Discussion of Numbers & Model

The \$44 trillion price tag probably looks like a bit of a shocker, perhaps even a ridiculous exaggeration. After all for 50 million Baby Boomers with retirement assets - that would be almost \$900,000 each!

As explained below, to get to \$44 trillion we start with a Census Bureau number, add some Federal Reserve, Bureau of Labor Statistics, and Employee Benefit Research Institute numbers, plug them all into a basic financial planning model using an analytical approach that is simple, conservative, and easily verifiable on a line by line basis, and we end up with \$44 trillion in round (non inflation-adjusted) terms. What the \$44 trillion illustrates is not the wealth that will be there for the Boomers, but rather, the number we get when we add up all of the expectations of wealth, for what the Boomers are planning on receiving from their individual retirement investments and pensions. The actual number received will be one of the results of The Great Retirement Experiment. (much more detail can be found in the line and column notes for the two schedules, that follow this section.)

We start with the total number of Boomer households, which is 45,800,000, as reported by the Census Bureau. Note this is different than total individual Boomers (77 million), as well as Boomers with any retirement assets (71% of 77 million which is 54,670,000 individual Boomers, rounded down herein to 50 million). About 58% of Boomer households have self-directed retirement accounts (IRAs & Keoghs), about 40% have traditional (defined benefit) pensions, and around 27% have both self-directed accounts and traditional pensions.

We next take the average (mean) retirement account holding per household, as reported by the Federal Reserve, for all households having such assets, of \$121,300. Older households have more assets, Baby Boomers are older than average, so when we adjust the average to only include Boomer households, the average value of retirement account holding per Boomer household is calculated to be \$136,215. However, not all Boomer households have such accounts, and when we include the 42% who do not, that drops the average retirement account holdings to \$79,005 each for all Boomer households.

Next we take the key step of adding in pension fund assets. This is absolutely necessary as pensions are funded with investments, those investments will be used to pay retirement benefits, and the liquidations of those investments will therefore very much be part of paying for the Boomers retirement. Precise calculations of what those widely varying benefit payment obligations would be is a task that that is close to impossible for the nation as a whole however, so we take the simple "back door" approach for this illustration of adding pension assets to retirement account assets, to come up with total retirement investment assets. There are about two thirds as many assets held by public and private traditional pension plans as in IRAs and Keoghs for the nation as a whole, so when we include pensions, total retirement investment assets rise to \$132,728 per Boomer household.

Multiply 45,800,000 households by \$132,728, and we come up with \$6.1 trillion for current retirement investments assets for all the Boomers, including the investments that are funding their pensions. A fairly reasonable number for the largest and wealthiest generation in history as it begins to near retirement, it represents less than one

sixth of the approximately \$37 trillion current total household holdings of US stocks and bonds.

The whole idea with retirement investments is not their current value however, but the way they grow in value. To illustrate the cumulative future wealth expectations of the Boomers, we go to Schedule 2 and we visit a Boomer named Barry who is as average for a Boomer as he can be in all aspects. As shown in the detailed notes, Barry is 50 years old, has been investing and/or participating in a pension for 15 years, has a precisely average \$132,728 in his total current retirement accounts and pension, expects to live a quite average 17 years beyond retirement, and to earn the nice, round, relatively common assumption of an 8% return on his long term investments. Which means that his portfolio (as shown in the schedule) will have grown to \$553,764 by December 31, 2021, the day before he retires. So Barry does not own anything like a million dollar portfolio on the day of his retirement. However, he does plan on a retirement of normal duration, and to earn money on his assets until he spends them.

(If we discount for roughly 40% of the assets being in a pension (for all Boomers), Barry's directly owned retirement account assets drop to \$332,258 at retirement. If we then discount for inflation at 3% (as further discussed below), then the value of Barry the unusually average Boomer's self-directed portfolio at age 65 is \$213,264 in current dollars. For total retirement assets including adding back in pension assets invested on his behalf and discounting at a 3% inflation rate, the value at retirement for Barry would be \$355,440 in current dollars.)

Assuming he can continues to earn 8% over the 17 years of his retirement, Barry will be able to take out \$56,212 per year, which adds up to a total of \$955,601 before his quite average expiration on New Year's Eve in 2038. How \$377 in monthly employee and employer contributions compounds at 8% over a 47 year period (30 years investing and 17 years drawing down) to produce almost \$1 million in retirement cash flow for Barry is the exponential mathematics miracle that conventional financial planning and pensions are each based upon.

Barry's \$955,601 in total future cash is about 7.2 times as large as his current precisely average \$132,728 in retirement assets. Multiply the precise ratio times 45,800,000 Barry households, and we come up with \$43.8 trillion for all the Boomers, which rounds to \$44 trillion for summary purposes. A reasonable ballpark estimate, albeit a highly simplified one.

One important consideration to keep in mind about the \$44 trillion is that it does not explicitly take inflation into account. This corresponds to the norm for how gross returns are presented for investment analysis purposes. However the real economic value of that \$44 trillion in today's dollars depends on the rate of inflation between now and then. Assume a 3% rate of inflation, and the \$44 trillion in future dollars drops to a value of \$22 trillion in today's dollars.

When we look at this on a personal level, and an annual basis, in inflation adjusted terms, then the estimates become more reasonable still. Assuming 3% inflation, the nearly million dollars between 2022 and 2038 comes down to an annual value of \$28,782 in current

dollars, per year and per household, for all pension and retirement investment income. Another of way of presenting this would be to say no income for the 30% of Boomer households lacking pensions and retirement accounts, and an average of about \$41,118 per year in current dollars for the 70% of households having such assets.

When we look at all households, you could say that the estimates just became much too "reasonable", because they represent approximately a 55% reduction from the current average pre-tax income of about \$64,360 for all Boomer households (before adding Social Security, work earnings after retirement, and other assets back in). As explored in the books and free pamphlets of The Great Retirement Experiment, the real issue is that there are multiple fundamental economic experiments associated with the retirement of the Boomers, and they are cumulative – not independent. Yes, you can have a huge generation attempting to cash out investment market paper wealth for real resources on an unprecedented scale for decades – and yet still have a simultaneous substantial drop in cash available for the consumer spending growth that current market values are based upon. With the interaction between those two experiments being potentially quite... unpleasant... for the Boomers using some traditional investment strategies in trying to reach the wealth expectation levels illustrated here.

Finally, we take a look at the incremental nature of the Boomers' collective retirement. The Boomers' were born between January 1st, 1946, and December 31st, 1964, for a total of 19 years (inclusive). This means that if we use an average expected lifespan of 17 years beyond age 65, the earliest Boomers born in 1946 will have already

period of 37 years.

died (more than half of them anyway) before the last two years of Boomers born in 1964-1965 even reach retirement age in 2028 and 2029. In total, using the simplifying assumptions of retiring at 65 and living an average of 17 years beyond retirement, the first Boomers will retire in 2010, and half of the youngest year of Boomers will have expired (on average) by the year 2046, so the Boomers will be selling

the great majority of their \$44 trillion in retirement investments over a

In Line 18, we divide the \$44 trillion by 19 years of Boomer retirees, and then again by 17, for 17 years of retirement for each average Boomer, to come up with a total of about \$135 billion in wealth expectations per year for each "class year" of Boomers. So \$135 billion when the first year is fully retired, \$270 billion when the second year has retired, then \$405 billion the next year when the next wave retires, and so forth. As shown in Line 19, the attempted cashing out of paper wealth expectations for real goods and services peaks at a level of \$2.3 trillion annually during the years of 2027, 2028 and 2029 as the maximum of 17 class years of Boomers are retired at the same time, and then reduces year by year as dying Boomers are not replaced by newly retired Boomers. When we adjust for inflation, Line 20 shows the peak present value of that cashing out would be in 2027, for a total of \$1.28 trillion, or about 10% of the current size of the total US annual economy.

Now, it could be that your first reaction to the above would be to say that 10% sounds doable, maybe even not that bad, particularly when we include future economic growth. However, by way of comparison, Social Security benefit costs in 2004 were only \$493 billion, or about

4% of the GDP that year. To cash out the investment markets for real goods and services to the tune of close to 10% (or even 5% if the economy doubles with 3.5% annual real economic growth by 2027) of GDP, even while paying much higher payroll taxes as a percentage of the economy, while still keeping enough cash coming in to keep the paper wealth of the markets exponentially climbing each year, and do it year after year, would be... extraordinary and without precedent.

This is of course a highly simplified analysis, written with the objective of being presented in two easy to follow and short schedules, with each line on each schedule being quickly verifiable with a hand calculator. For the financial/economics professional, there are some major items that particularly call out for change. One would be to change the savings and drawdown columns from unchanging absolute dollars, to flat real dollars (or more accurately still, build an upward real dollar trend in the annuals savings column). Another highly desirable change would be to run 19 separate exponential series for each year of the Boom (inclusive), and calculate our total from the sum of those models – an approach that would lead to substantively different results than the single exponential series leading to the \$44 trillion presented.

Going to flat real dollars would increase the total above \$44 trillion, as the \$132,728 would remain fixed, and absolute dollars would necessarily fall before 2006, and rise afterwards, thereby pushing up total dollars (unless the prior number of years of savings were simultaneously increased). Going to a more accurate sum of multiple individual exponential series would substantively push up the \$44

trillion figure as the increased compounding for later retirees more than offsets the reduced compounding for earlier retirees (\$1,000 invested at 8% for 15 years has a future value of \$3,172, while \$500 invested for 5 years and \$500 invested for 25 years (for a 15 year average) have a future value of \$4,159 [\$735+\$3,424]). The purpose of the schedules is to serve as a simple but powerful illustration of what happens when we add up a compounded 8% return for a large generation. As complicating the matter just increases the amount well above \$44 trillion, sticking with an approach that was both more easily understandable and conservative was the route chosen.

As with any financial model that takes information from different databases and dates to paint a complex picture in broad but simple strokes, the assumptions can be quibbled with. However, it is much easier to increase the \$44 trillion than to decrease it. Yes, another analyst can change assumptions and equations to reasonable alternatives that can shave a trillion here or three trillion there, if that is their objective – but if you add in the Boomer investment assets held outside of retirement accounts, also add the investment assets held by Boomer parents that will become available for Boomers by retirement, modify for the two years of investment earnings between the 2004 Survey of Consumer Finance and the 1/1/07 start date of the model, and then modify that model to take the more accurate multiple exponential series approach mentioned above, the results are that the somewhat conservative future value total above can be fairly easily increased to the \$50-\$60+ trillion range.

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Line Item Notes

<u>Line 1: Boomer Households</u>

(The bookmarks on the left are provided for your convenience in going back and forth between schedules and line notes.)

The relevant Census Bureau and Federal Reserve statistics are presented per household, rather than per individual. There are about 77 million Boomers, 71% have some form of individual or employersponsored retirement account (albeit minimal in some cases). Multiplying 77 million times 71% means a little under 55 million Boomers have some sort of tax-deferred retirement account savings or pension vesting, which rounds down to a nice even 50 million summary figure (also some other sources use figures as low as 67%). There is in fact a double conservatism resulting from Boomer households having higher percentage ownership of retirement account assets than the overall population, but it doesn't matter for the rest of this analysis, as it is performed on a household basis.

The number used for the rest of this table is households, as that is how the relevant data is kept by the Census Bureau and Federal Reserve, and there are about 45,800,000 Boomer households.

Sources: U.S. Census Bureau for the original data, with analysis via MetLifes' Mature Market Institute Demographic Profiles (for Boomer individual and households numbers), and via the Investment Company Institute (The Role of IRAs in Americans' Retirement Preparedness, January 2006) for percentage ownership.

<u>Line 2: Average (mean) Value For Boomer Households</u> <u>Having Such Accounts</u>

Deciding what number to use here is where the plot starts to thicken. If you want to make the number look small, then you list median direct ownership retirement account (only) holdings for Boomers – IRAs, and 401(k)s and so forth – and come up with an amount in the mid 40s, or \$45,900 in a recent GAO report.

The problem is that there is more to the world than poor people and rich people – and retirement accounts aren't geared towards either group. The poor people don't have them, and the rich people only keep a little bit of their assets there, both because of legal restrictions on contributions, and for reasons of flexibility. (The billionaires of the world don't keep their billions in 401(k) accounts). The greatest dollars in the retirement accounts are held by the working people in the top half of the income scale, those people who make enough money to actually save, but aren't so wealthy that they are assured of a comfortable retirement without their accounts. People whose retirement assets somehow just... disappear... when choosing to use the median.

The existence of the upper middle class, and the disproportionate amount of retirement investments they own can be seen by going

straight to "horse's mouth" for retirement account statistics, Table 5 of the 2004 Survey of Consumer Finance (Federal Reserve Board). Here, we find that while the median for some retirement accounts may be in the mid \$40 thousands, the mean for all retirement accounts (for all ages) is \$121,300 per household! A little top end loaded to be sure, but the average for families in the 60th to 90th percentiles is about \$98,000 – including many younger workers who haven't had time to save much, which drags the averages down well below what they are for Boomer households.

(Note that the GAO study used total asset holdings – not retirement asset holdings – to make their argument that the wealth is concentrated in the top 3% of the population. True, for total wealth – but not nearly as true for investments securing pensions and selfdirected retirement accounts, the very assets in question when looking at Boomer Bust possibilities. So pick a measure that excludes pension assets, use a median that excludes the bulk of retirement related individual account assets, use a wealth distribution that isn't even about retirement assets - and four of the six trillion in current Boomer retirement investments disappear.)

When we look just at people in the Boomer's age range who have retirement accounts, then the average retirement accounts for households headed by 35 to 44 year olds is \$66,700, for 45 to 54 year olds it is \$141,100, and for 55 to 64 year olds it is \$210,900. Weight those numbers for the Boomers in each age category in 2004, and we find that average Boomer retirement account holdings in that year would have been about \$136,215, the figure used.

Source: 2004 Survey of Consumer Finance, Federal Reserve Board (Table 5, mean assets)

<u>Line 3: Percent of Boomer Households Who Own Retirement Accounts</u>

Retirement accounts in 2004 were owned by 55.9%, 57.7% and 62.9% of the households headed by 35-44, 45-54 and 55-64 year olds, respectively. Using those percentages multiplied by weights for each bracket based upon the percentage of the bracket age range that corresponded to Boomer ages in 2004, led to a weighted average of 58.3% of all Boomer households owning retirement accounts, rounded down to an even 58%.

Source: 2004 Survey of Consumer Finance, Federal Reserve Board (Table 5, percentage of family holding asset.)

<u>Line 4: Average Retirement Account Value Adjusted for ALL Boomer Households</u>

The direct route is to simply multiply \$136,215 times 58% to come up with \$79,005. The indirect route is to take the mean holdings of \$136,215 per household, multiply by the 26,564,000 households holding such assets (45,800,000 X 0.58), and come up with \$3.6 trillion in total Boomer retirement account assets. Then divide by 45,800,000 total Boomer households to find the average value for all Boomer households of \$79,005.

<u>Line 5: Adjustment for Boomer Pension Investments</u>

A problem with our approach so far is that it leaves out the pension assets. While there are a number of differences, the principle behind pensions is pretty much the same as that with individual accounts, which is you buy investments, reinvest all the earnings, have the whole portfolio compound for years using the magic of exponential equations, and then draw it down to pay expenses. So all the Boomers getting rights to pensions have investment portfolios held on their behalf right now, and the intention is to pay for every penny of their pensions with the earnings on those portfolios. Investments that need to be sold right alongside with the IRA and 401(k) accounts, and that must be accounted for if we are to understand the pressure on the investment markets resulting from the retirement of the Boomers.

As of 2004, total retirement account and pension assets were as follows:

IRAs: \$3.5 trillion

Defined Contribution Pension Plans (Keoghs): \$2.5 trillion

Total Retirement Account Assets: \$6.0 trillion

\$1.9 trillion Private Defined Benefit (traditional) Pensions:

Public Defined Benefit Pensions (2003)(1): \$2.2 trillion

Total Traditional Pension Assets: \$4.1 trillion

Total Retirement Account & Pensions Assets: \$10.1 trillion

(1) State & Local Government Pension Plans only

Total pension assets that are not captured with the retirement accounts numbers amount to another \$4.1 trillion, or about 68.3% of the retirement accounts. For calculation purposes, we round that down to an even 68%.

When we convert that 68% to a ratio format, total retirement account and pension assets are equal to 1.68 times retirement account assets. (As can be confirmed by multiplying the 6.0 trillion by 1.68 to get 10.1 trillion.)

There are multiple levels of simplification involved here, but the sum of the analytical consequences of those simplifications is unclear. Pensions are invested somewhat differently on average than retirement accounts. Employer pension contribution rates typically rise faster as an employee nears retirement than normal financial planning models, which would increase future cash investments relative to our Barry example. Yet such contributions won't necessarily be occurring at all for the many plans already frozen. Older households are much more likely to have defined benefit plans than younger households, which should pull our Boomer ratio up, but the percentage of pension assets dedicated to older than Boomer households would pull the ratio the opposite direction. (Though a sale is a sale when looking for the impact of overall pension investment liquidations.) All in all, taking the simple approach shown above just might be best for illustrating the approximate amount of future paper wealth that the Boomers are planning on converting to real goods and services.

Sources: The Employee Benefit Research Institute, 2004 numbers from Fast Facts from EBRI #16, February 3, 2006; and 2003 numbers from Chapter 19 of the EBRI Databook on Employee Benefits, updated in April 2005.

Line 6: Average Value of Each Boomer Household's Total **Retirement Assets**

When we take our average retirement account value from Line 4, and multiply it by the ratio calculated in Line 5 to include pension assets, we come up with the total shown of \$132,728 for the average value of each Boomer household's total retirement investment assets. It is important to remember that this is a household number, not a per Boomer number. Seventy seven million boomers with only 45,800,000 boomer households means that there are an average of 1.68 Boomers per Boomer household (not counting Boomers who are within households not headed by Boomers). That means the assets would be \$79,005 in total retirement assets per Boomer, for all IRAs, Keoghs and pensions. (That a ratio of 1.68 applies to the separate pension and household calculations is pure coincidence.)

Line 7: Total Current Value of Boomer Retirement Assets

Take the number of Boomer Households from Line 1, multiply by Boomer household total retirement account holdings from Line 6, and we come up with about \$6.1 trillion for the total current value of all Boomer retirement assets. Seems fairly reasonable: a lot of money, but only about a sixth of the \$37 trillion paper value of total domestic stocks and bonds held by all households.

Line 8: Future Value Multiple With Standard Investment/Retirement Assumptions

Going from about \$133,000 per Boomer household to \$6 trillion for all the Boomers combined is guite a jump, and if you tried to take that \$6 trillion in paper wealth out in a single year, then there wouldn't be anything remotely close to \$32 trillion left, and perhaps not even \$15 trillion left, not with the way that markets work. But cashing that out over several decades is a different matter and sounds feasible -though it would be painful, and it would likely pull down market yields and prices for the entire duration, compared to what they could have otherwise been.

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The problem is that taking \$6 trillion out is not at all what the Boomers have in mind. No, the Boomers are investing for a reason – to earn a return. The exponentially compounded returns that have been promised to them – "guaranteed" by long term historical average rates of return. Whether in an IRA, 401(k), pensions or other type of retirement account, everyone invests to make money. Which takes us to Barry the Boomer of Schedule 2, who happens to be an unusually average Boomer.

As an illustration of the return expectations built into financial planning and pensions, Barry happens to have just turned 50 years old, quite close to average for a Boomer (there were more babies towards the end of the Boom than the beginning). Barry has been investing for 15 years of work, plans to invest for another 15 years (making a total of 30 years), plans to retire on his 65th birthday, and then live a quite average 17 years past retirement. Barry has been investing \$4,526 per year, which means on his 50th birthday (as shown on the schedule

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for the end of his 49th year), he has a total of \$132,728 in his account - precisely equal to the mean for Boomer households from Line 6 above. The \$4,526 per year in contributions works out to an average of \$377 per month, or \$189 per month if he is saving in an account where his employer is matching his contributions. Or even saving nothing per month if he is fortunate enough to have an old style defined benefit pension that hasn't been frozen yet, with the employer making the full investment purchase on Barry's behalf. All of those still work out to \$132,728 in total retirement account and pension investments on his 50th birthday – assuming a very reasonable and common investment return of 8% per year.

If we make the standard further assumption that Barry earns that 8% return until the day he retires, his portfolio will increase in value until it is \$553,764 on his 65th birthday. Then assuming he can continue to earn his 8% return, he will be able to draw down \$56,212 per year for the next 17 years, meaning he will have \$955,601 to enjoy, over and above his Social Security benefits. An almost million dollar retirement on \$377 a month in savings – such are the miracles of financial planning and pension fund investment assumptions and models!

Could those numbers be right? As we can see in column (3), Barry has saved \$4,526 a year for 30 years, a total of \$135,786. Yet, looking at column (4), using guite reasonable and average assumptions he is planning on spending \$56,212 a year over 17 years of retirement – spending 12 times as much per year as he saved annually, even though he will be retired for more than half as long as the years he saved. The column does add up to \$955,601. Is there some mistake here? The explanation is of course column (5), the

\$819,815 in assumed investment earnings. If you take a substantive earnings rate such as 8%, and let it run wild and exponentially compound away for a total of 30 years, unconstrained by any outside

factors, then the compounding comes to dominate everything else. This long term exponential compounding of an assumed 100% reinvestment of earnings is the magic money machine that is at the heart of long term retirement finance planning models, whether for individual accounts or pensions. That is why the Boomers are saving not for the much smaller value of their portfolios today.

When we take the future value of Barry's investments, \$955,601, and divide by the present value of his investments, \$132,728, we find that for every \$1.00 of retirement account assets he has today, Barry is expecting to be paid \$7.20 over the course of his retirement.

(This model is intentionally quite simple, and could be complicated in 101 fun ways that would be of primary interest to economists and financial analysts. The big picture is however that retirement accounts and pensions exist precisely because of the expectation of substantively positive real rates of return. Take an average-aged boomer, average investment expectations, average savings plan, average lifetime, average current retirement portfolio, and the big picture is something around roughly a ratio of about 7 to 1, in future values expected per dollar invested today. An analyst with a desire to bring the ratio down, could certainly make some reasonable sounding assumption or equation changes that bring that down to 6 to 1 or lower – but there is a lot of money being saved and invested with higher hopes than 8 to 1 as well.)

Line 9: Cost To Cash Out Each Boomer Household

As shown on the accompanying Schedule 2, and discussed in the notes for Line 8, when we start with average assets per Boomer of \$132,728 from Line 6, and plug that number into a fairly basic and average financial model that builds assets at 8% compounded returns until retirement, and then earns 8% as the assets are drawn down over an average lifetime, there is a total of \$955,601 available for retirement spending, which is 7.2 times the current assets.

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Line 10: Cost to Cash Out All Boomer Retirement <u>Investments, Including Pensions</u>

Time for a simple multiplication: take average expectations for cash from Boomer households from Line 9, and multiply times the number of Boomer households from Line 1. The product of those two numbers is the total of how much the Boomers are planning on taking out of the economy through their retirement plans – and that total is \$44 trillion

A remarkable number that is about 3.5 times the size of the total economy, in terms of real goods and services. (As discussed in the notes for Line 13 below, when we discount for inflation, the number drops – but remains quite remarkable.)

Can we do that?

One issue is that we have a fundamental problem with a disconnect between exponential series. On the one hand, we have a fast growing expected investment wealth series, whose fulfillment is necessary not only to meet investor expectations – but the financial viability of many major corporations and state and local government pension sponsors are staked upon. On the other hand we have a far slower exponential growth rate for the real economy of goods and services, particularly when considered on a per capita basis. As discussed in more detail in the "Pie Slicing & Missing Trillionaires" chapter of Book One of The Great Retirement Experiment, the difference between these series will be growing at its own exponential rate, as paper wealth diverges from the real wealth of the economy at an ever increasing rate, which will likely lead to some quite unpleasant... adjustments... as too many people start trying to simultaneously convert their paper wealth expectations into real resources.

Placing the economic growth issue in context, as discussed in the main body of the first pamphlet, this Experiment between the investment markets and the real economy will not be happening in isolation. It will be happening even as increasing Social Security and Medicare demands are straining the economy to an unprecedented degree, as they simultaneously reduce cash available to buy investments, even while they drag down the growth rates in consumer spending that many securities valuations are dependent upon. To return to an earlier phrasing, the Boomers are attempting the largest intergenerational grab in history – and reaching for the same future dollars from several places simultaneously.

Important as they are, those holistic economic capacity issues merely set some outside boundaries for what <u>can</u> happen, as what <u>will</u> happen will be dependent on something else altogether. The younger generations from whom the Boomers are attempting to grab the wealth of the future. The workers who are creating this wealth, and

the investors who are deploying it. These are the people the \$44 trillion will be coming from. Which is where the real trouble will start, because paying that money – or more fundamentally, creating and delivering \$44 trillion in real goods and services to meet the paper wealth expectations of the Boomers —would run contrary to two of the basic principles of capitalism.

The first principle is that people act in their own self-interests – which won't involve handing over \$44 trillion to retirees in exchange for legacy investments, so that the hypothetical laws of mathematical compounding of average historical investment returns can be fulfilled. The second principal is that of efficiency. It will be more efficient for the generations behind the Boomers to create the wealth of the future in such a way that more of the benefits go to themselves, such efficiencies will necessarily come to dominate the economy and markets – and that means that two basic principles underlying capitalism (people acting in their own self-interest and the customers going to the most efficient providers) will be working together to deny access to much of that wealth for the Boomers. With the intertwined combination between those motivational factors and the economic capacity issues guiding the process of getting rid of much of the \$44 trillion before it ever really happens. (Except in the inflationary sense as discussed in more detail in the books, where the problem is not so much whether the Boomers will get \$44 trillion for their retirements but the danger they may get \$100 trillion or \$300 trillion instead.)

Line 11: Total United States Gross Domestic Product (GDP), 2004

As of 2004 the total gross domestic product of the United States was approximately \$11.7 trillion. 2004 was chosen for consistency with the 2004 numbers from the triannual Survey of Consumer Finance, currently GDP is approximately \$13 trillion in 2006 dollars.

Source: Federal Reserve Board

Line 12: Inflation Discount Rate

A nice round inflation rate of 3% was chosen for this illustration, fairly comparable with historical norms.

Line 13: Present Value Cost of Cashing All Boomers Out

In Column (7) of Schedule 2, the retirement spending dollars from Column (5) are present valued at the 3% discount rate from Line 12, for each Boomer household. The total present value is \$489,288, meaning the \$955,601 in retirement spending from 2022 to 2038 has an average value of about 51 cents on the dollar, when converted to real current dollar terms. When we multiply that figure by the 45,800,000 households from Line 1, we come up with a total of about \$22.4 trillion in current dollars, for the aggregate cost of meeting Boomer wealth expectations from retirement accounts and pension funds.

Note that as discussed in the column notes for Schedule 2, all cash savings and disbursements occur on January 1st of each year, with a begin date for present value purposes of January 1, 2007 (the day of Barry's the unusually average Boomer's 50th birthday, and the day after his unusually average portfolio reached the \$132,728 from Line 6 above). The discount period for the first nonzero period in Column (7)

is therefore 1/1/07 to 1/1/22, for 15 years, which leads to the standard present value equation of $56,212/((1+.08)^{15}) = 36,080$.

If the retirement spending drawdown was flat in real (current) dollars instead of the simplified example of level absolute dollar drawdowns shown in Schedule 2, that would increase this number as well as the number for Real Retirement Income below. Leveling the drawdown in real terms would increase the average life of the investments, which would increase the present value, as the future value rate is higher than the discount rate.

Line 14: Present Value Per Boomer Household Per Year (Real Retirement Income)

This takes the total cost of \$22.4 trillion calculated in Line 13, divides by 45,800,000 households to come down to the cost per household (back to the \$489,288 sum of Column (7) in schedule 2), and then divides by the average expected term of retirement of 17 years, to come up with expected annual income of \$28,782 per Boomer household in real dollar terms from all retirement account and pensions sources, per year of retirement.

Line 15: Average Income Per Boomer Household, 2003

Average pre-tax household income in 2003 was \$61,091, \$68,028, and \$58,672 for households headed by 35-44, 45-54 and 55-64 year olds. Using those incomes multiplied by weights for each bracket based upon the percentage of the bracket age range that corresponded to Boomer ages in 2003, led to a weighted average pretax Boomer household income of \$64,360.

Source: US Department of Labor, Bureau of Labor Statistics, Consumer Expenditures 2003, with analysis via MetLifes' Mature Market Institute Demographic Profiles. This is somewhat more conservative than results from the Fed's 2004 Survey of Consumer Finance.

Line 16: Percent of Boomer Income Replaced by Retirement Accounts & Pensions

Dividing Line 14, annual real household income from retirement accounts and pension funds, into Line 15, current average household income, demonstrates that even if all the Boomers are able to realize their wealth expectations, and achieve an 8% compounded return on all of their retirement savings, that investment based retirement income of \$28,782 by itself will only be sufficient to replace 45% of their current average annual household income of \$64,360.

Line 17: Percent Decline in Boomer Income After Retirement, Before Social Security, Work Earnings & **Proceeds From Other Assets**

If retirement investments and pensions can only replace 45% of the average Boomer household's current income, that means there is a 55% income shortfall, prior to considering Social Security, part or full time work, and proceeds from other assets such as commercial real estate, first and second homes, and investments owned outside of retirement accounts.

<u>Line 18: Average Annual Cashing Out of Paper Wealth Per</u> Boomer Class Year

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The Baby Boom was born over a period of 19 years, from January 1, 1946 through December 31, 1964. To get to the paper wealth expectations for each "class year" Boomers (born in 1946, 1947, 1948, etc.), we divide the \$44 trillion total wealth expectations by 19 class years. This gives us about \$2.3 trillion per class year in expectations. Assuming each class year has an average 17 year retirement, that works out to about \$135 billion in paper wealth that will need to be cashed out by each year of Boomers, in order to meet wealth expectations.

To get to the total wealth being cashed out in every year, we need to multiply the \$135 billion by the number of years of Boomers who have retired. At the end of 2010 that would be one year for \$135 billion, and at the end of 2011 that would be two years for \$270 billion. By the end of 2015, the total will be five class years of Boomers for about \$675 billion in wealth expectations per year, and by the end of 2020 ten years of Boomer retirees will have pushed wealth expectations up to over \$1.3 trillion per year.

There are of course multiple simplifications involved with this approach, such as the real Boomers not being evenly distributed across the 19 years, but rather somewhat back-end loaded. Lines 18 through 20 are also a place where keeping non-inflation adjusted dollars flat for simplicity rather than the more desirable approach using flat real dollars has particularly strong implications.

Line 19: Peak Annual Cashing Out of Paper Wealth by Boomers (2027-2029)

With an expected lifespan of 17 years after retirement (on average), no more than 17 of the 19 class years of Boomers should be alive and retired in any one year. This limits the peak to about \$2.3 trillion per year, representing 17 class years of Boomers simultaneously trying to cash paper wealth into real resources. This annual peak should be reached at the beginning of 2027, and continue through the end of 2029, for three years of peak wealth drawdowns. After that time, with the simple assumptions used here for illustration purposes, Boomers stop retiring but continue dying, and the amount of paper wealth drawdowns declines \$135 billion each year with the declining number of retirees, before ending in the year 2046.

Line 20: Present Value of Peak Year of Cashing Out Paper Wealth (2027)

Using a 3% inflation rate (with the present value methodology described in the Column (7) notes for Schedule 2), for the 20 years from 1/1/07 through 1/1/2027, the present value of \$2.3 trillion is \$1.28 trillion. This is equal to roughly 10% of current GDP, and is about 2.5 times as large as the \$493 billion paid in Social Security benefits in 2004.

Source: Social Security Administration for Social Security Numbers.

Schedule 2: Retirement Financial Plans For Barry The Unusually Average Boomer

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Column (1): Year

Calendar year, self-explanatory

Column (2): Boomer Age

Barry the unusually average Boomer was born at 12:01 am on January 1st, 1957, and he turns 50 on January 1st, 2007. His retirement will begin on January 1st, 2022, the same day he turns 65 years old. Barry will leave this world at midnight on December 31st, 2038, after enjoying the precisely average 17 years of retirement expected for someone who reaches 65 years old.

Column (3): Annual Savings

Barry is assumed to buy \$4,526 in retirement investments per year, which is the equivalent of \$377 per month. However, because Barry represents all Boomers, he does not save all of this money himself. As shown in the notes to Line 5 of Schedule 1, about 40% of all retirement assets are in pensions, so \$151 of the investment purchases are made by Barry's employer to fund his pension. About 25% of Barry's retirement savings are in Keogh accounts, and if we assume that Barry's employer matches his savings, then his employer (who is really all employers together) would be contributing another \$47 a month there. So Barry's direct contribution is \$132 for the IRA that makes up 35% of his completely average retirement assets, and the \$47 for the other half of his Keogh. That makes a total of \$179 a

month in direct retirement savings for Barry, with his employer contributing the other \$198, for a total of \$377 per month.

The annual amount of \$4,526.21 was chosen because when it is invested for 15 years at 8% with the assumptions herein, it compounds to exactly the \$132,728 in assets that is currently average for a Boomer household, per the calculations in Lines 1-6 of Schedule 1, helping to keep our Barry his unusually average self.

The \$4,526 in annual savings may look a little high for all Boomers together, particularly when we look at the national savings rate as a whole, which seems to go negative with some regularity. Four things to keep in mind here: 1) As mentioned in the notes to Line 6, "Barry" is a household, and there are 1.68 Boomers for every Boomer household, so dividing by 1.68 means average monthly contribution of only about \$106 per Boomer per month; 2) going back up to a household basis, the \$179 per month, or \$2,148 that Barry is directly contributing is only about 3.3% of his household income, when compared to the \$64,360 in mean Boomer household income from Line (15) of Schedule 1; 3) the Boomers are collectively in their peak years for savings, at their peak incomes as their kids start to move away and as retirement nears – they do save more than the national average, and we would expect a small positive savings rate for people in their 40s and 50s even when the overall national rate is zero; 4) the 3.3% is gross retirement savings, and does not include the debts Barry may be running up elsewhere in his life, and it particularly does not include the debts being run up by the less affluent 30% of Boomers who have neither pensions nor retirement accounts of any kind. Taking those four factors into consideration, the 3.3% personally funded annual savings figure for Barry the unusually average Boomer becomes quite reasonable.

There are two major simplifying assumptions, that are used to meet the goals of keeping this schedule basic, readily understandable by a non-financial professional, and easily verifiable with a calculator. The first is that there is only one investment purchase per year, and that purchase occurs on January 1st, which allows a simple 8% interest to be seen right on the schedule. Note that this means if you are using a financial calculator or spreadsheet function to run your own numbers, you will need to set the formula to "begin" ("1" in Excel), rather than the default period end formula which would have Barry not investing until December 31st of his first year of investing.

Columns (4), (5), (6) and (7) may therefore appear slightly off to an analyst who is used to working with standard securities models, where interest and present value are each handled on a period ending basis. Period end (where Barry saves and withdraws only on December 31st each year) would certainly have been easier for modeling purposes, but going there on an annual basis would have meant that Barry earned nothing on each year's savings the year he made them, and would have been taking cash out retroactively in retirement each year, after he had already spent the 12 months. On an overall basis, going to "period begin" increases earnings before retirement, decreases earnings after retirement, and decreases present value (yes, each payment moves forward one year for discounting purposes, but since the future value rate is higher than the present value rate, reducing the compounding periods reduces present value).

The second simplifying assumption is that level absolute dollars are used, rather than level real (inflation-adjusted) dollars, as discussed in the summary overview.

Column (4): Retirement Spending Drawdowns

This is the amount of money that is drawn down on January 1st of each year, to fund the retiree's financial needs for the rest of the year, commencing with Barry's 65th birthday in 2022. The \$56,212 was chosen as it fully funds 17 years, and then leaves a zero remaining balance.

Column (5): 8.00% Earnings

If we take the ending balance from the previous year in Column (6), add the annual savings invested on the first of the year in Column (3), subtract the spending for the entire year on the first of the year in Column (4), and multiply that new total investment balance by the earnings rate of 8%, we come up with assumed earnings for that year.

Column (6) Ending Balance

Take the previous year ending balance in Column (6), add savings and investment earnings from Columns (3) and (5), subtract retirement spending drawdowns from Column (4), and we have the ending investment balance on December 31st.

As of December 31st, 2006, this balance equals the average for all Boomer households calculated in Line (6) of Column (2). The balance peaks on December 31st, 2021 at \$553,764, the day before Barry retires.

Column (7): 3.0% Present Value

Note that as discussed in the Column (3), all cash savings and disbursements occur on January 1st of each year, with a begin date for present value purposes of January 1, 2007 (the day of Barry's the unusually average Boomer's 50th birthday, and the day after his unusually average portfolio reached the \$132,728 from Line 6 above). The discount period for the first nonzero period in Column (7) is therefore 1/1/07 to 1/1/22, for 15 years, which leads to the standard present value equation of $56,212/((1+.08)^{15}) = 36,080$.

Free Pamphlets – Pass Them Along!

What you have read in this E-Pamphlet is an out-of-the-box approach to basic retirement finance questions. And that is too bad – because it shouldn't be. Because what passes for the conventional wisdom about financially preparing for retirement rests on some foundations that are much shakier than most people realize. As an example, let's take the information and perspectives presented on the previous 45 pages and sum them up a different way:

Asking tens of millions of people to prepare for one of the biggest demographic changes in US history by using a financial approach that ignores demographic changes - should be vigorously questioned.

Does the statement above make sense to you? Do the implications worry you? Have you read anything else that was new to you in the pages up to here? Did you find yourself considering any other perspectives that were new to you? Perspectives that sound like common sense to you? Considerations that maybe all of us should be thinking about?

If the "heretical" notions contained herein sound like common sense to you, then please pass on this free and educational E-Pamphlet – full of fresh perspectives – to people you know who might be able to benefit. You can attach a copy of this file to an e-mail, send a link to the website, The-Great-Retirement-Experiment.com, send a link directly to the e-pamphlet download page, write about it and post a link on your website, or print out as many paper copies as you would like.

There will be lot more information and out-of-the-box perspectives to come, for this is only the first in a series of free E-pamphlets that are designed to challenge the status quo, change perceptions – and help get a dialogue going. A dialogue about the best ways we can find for an unprecedented number of retirees to live in financial peace with the generations behind them, instead of engaging in "Generational Warfare". About what each of us can do as individuals to build real wealth for ourselves and others, by making our savings work to help the wealth creators coming behind us.

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The Books of The Great Retirement Experiment

One way of briefly summing up what we've talked about so far is to break it into three parts that build on each other: (1) there will be multiple major market and economic Experiments occurring in the future, that when taken together mean the Boomers are planning on the largest intergenerational resource grab ever attempted; (2) the intelligent and talented generations behind the Boomers – the wealth creators of the future – are going to vigorously resist having unprecedented amounts of the wealth they create being grabbed by retirees, with that resistance taking many different forms, from elections, to how they invest, to how they work; and (3) the most profitable long term investment strategies will involve finding ways of aligning our interests with the wealth creators – not fighting them or investing our life savings today in futile attempts at controlling them.

That three part split of (1), (2) and (3) above, is the principle behind the organization of the topics covered in Book One ("Contracts With Our Children"), Book Two ("The Pushback"), and Book Three ("Dancing With Our Children"). These books build upon each other in exploring The Great Retirement Experiment, a holistic and people-based look ahead to the future where we will all be living.

"Contracts With Our Children" is the title of Book One of The Great Retirement Experiment. The book begins by discussing the underlying people-based nature of retirement, and the move from the traditional

plan of relying on our individual children, to the modern plan of relying upon our collective children. Investments and pensions are placed in context as two of the Five Contracts that we have collectively set up to obligate our collective children to pay for our retirements. Starting from that perspective, we move into an exploration of many aspects of the Experiments, with a few of highlights listed below:

We take a look at the extraordinary convergence of factors that has been pouring Boomer cash into the markets for decades. With the tax rules, accounting rules and prevailing theory combining to keep the cash coming in but not going out. We next look at each of these factors one by one, and ask the question – what happens when they reverse as the Boomers steadily retire?

We look at two growing pies, one being the real economic wealth of the nation on a per capita basis, and the other being investor wealth expectations. We find that many investors are expecting their own wealth to grow at higher rates than per capita real wealth, and that when exponentially compounded in the traditional financial planning manner, the expected wealth pie grows much larger than the real wealth pie. Which is fine for real resources for a few million people, or for paper wealth for everyone – but what happens when fifty million people are trying to systematically convert all of their exponentially compounded paper wealth into the real resources that haven't kept up?

We offer to make the reader a billionaire and instantly succeed – by using the same accounting logic the federal government uses with the Social Security trust fund. From there we go on to cut

through the convoluted mess of politically motivated and deceptive government descriptions and down to the underlying economic realities of Social Security – and how those burdens will be bearing down on future taxpayers.

We look at three Boomer siblings: Wendy, Cheryl and Bill. While each might appear to have separate sources for retirement security, we examine how the investment markets are particularly exposed to pension and Social Security problems, rather than being an isolated refuge from them. We drill down into the numbers to find out how much of Wendy's retirement investment plan is based upon what is solidly real today versus how much is based upon growth assumptions about that future – and then what happens to those assumptions (and Wendy's retirement) when the Social Security beneficiaries and pensioners of the world retire and reduce their consuming.

We develop one of the most important themes in the series. From an impersonal economic equations perspective, when you attempt the impossible, you may appear to collapse the system. When you and many others all attempt the impossible in a way that is directly against the interests of a large group of highly intelligent and motivated people, however, all you do is increase their incentives to invalidate your attempt, as they change the system to avoid a collapse. Which can be a problem when these other people are collectively running the world at the time, and your "attempt" consists of your life savings and social safety net.

"The Pushback" is the title of <u>Book Two</u> of The Great Retirement Experiment. (Available winter of 2006/2007.) In this book we take the Experiments from the previous book, wrap them around each other, and try to see what the future will look like from the perspective of the younger generations as they pay for Boomers' retirement. When we assume that these highly intelligent wealth creators are acting in their own self-interests, then everything changes. They may not obediently line up for the privilege of buying investments from their elders at high prices, so that the laws of mathematical compounding will be fulfilled. Instead, our collective children may have a distinctly... predatory... gleam in their eyes as they explore with their elders just how that whole retirement investment pricing thing is actually going to work.

This book is a look at what happens when a self-centered generation pushes hard against a Future that is Intelligent – and that Future pushes right back. A Pushback that will change the way many people work – as well as how investments are perceived and judged. A Pushback that will devastate the pension system as its transformation continues, from a former sleepy financial backwater providing security to retirees, to a tightly interlinked network of explosive risks that can bring down governments, corporations and individual investors alike (whether new benefits have already been frozen or not). A Pushback in the face of extraordinary challenges that will create extraordinary new investment opportunities – for those who are prepared.

(More detailed descriptions of these and many other of the most interesting concepts within this book will be found in future E-Pamphlets, which will be circulated at the time "The Pushback" becomes available for purchase.)

"Dancing With Our Children" is the title of Book Three of The Great Retirement Experiment. (Available spring/summer of 2007.) This book suggests that if we want to personally have access to as much of the wealth of the future as possible – then we need to change our approach. To shift from a strategy of using history-based mathematical equations to extract cash from an unthinking ATM through generational warfare - to an approach of dancing well with a talented partner through anticipating his or her ever changing movements. To understand that if a convergence of multiple factors means that expectations can't be met, we can bend and flex with markets in turmoil instead of building glass towers that soar high – but shatter when stressed. To understand how we can be there as investors for the best and brightest of our children when they will need us the most. Dance well, and we will find that while there will be interim periods of turmoil ahead that may be catastrophic for many investors at the time – the retirement of the Boom may also end up ushering in a new golden age of long term investing, based on more solid foundations, with high real returns that will last through the long years ahead.

We can respect our collective children's intelligence, understand their motivations, be there for them when they need us – and dance in harmony with our talented and creative children. Or we can bash the deadbeats over the head with our walkers in an attempt to shake them down for what we have promised to ourselves, but what they don't have. Which one sounds better for your golden years?

(Somewhat more practical descriptions of the particulars involved with our dancing metaphor, as well as lots of other interesting explorations, will be found in future E-Pamphlets, which will be circulated at the time "Dancing With Our Children" becomes available for purchase.)

There will be other books following these first three, please check the website for details as they become available.

About The Author

Daniel R. Amerman is a financial futurist, author, speaker, and consultant with over 20 years of financial industry experience. He is a Chartered Financial Analyst (CFA), and holds MBA and BSBA degrees in Finance from the University of Missouri. He has spent seven years developing a large, unique and intertwined body of work, that is devoted to using the foundation principles of economics and finance to try to understand the retirement of the Baby Boom from the perspective of the people who will be paying for it. Several key aspects of that work of futurism are introduced in this e-pamphlet, and much more will be presented through a series of books and epamphlets becoming available at The-Great-Retirement-Experiment.com over the next several years.

Since 1990, Mr. Amerman has provided specialized quantitative consulting services to financial institutions, with a particular emphasis on structured finance. Previously, Mr. Amerman was vice president of an institutional investment bank, with responsibilities including research, synthetic securities, and capital market originations.

Two of Mr. Amerman's previous books on finance were published by major business publishers. "COLLATERALIZED MORTGAGE OBLIGATIONS, Unlock The Secrets Of Mortgage Derivatives", was published by McGraw-Hill in 1995. Mr. Amerman is also the author of "MORTGAGE SECURITIES: The High-Yield Alternative To CDs, The Low-Risk Alternative To Stocks", which was published by Probus Publishing (now a McGraw-Hill subsidiary) in 1993. Advertised by the publisher as a professional "bestseller" for four quarters, an Asian edition was sold as well.

Mr. Amerman has previously spoken at numerous professional seminars and conferences nationwide, for a variety of sponsors including New York University, the Institute for International Research, and many others. After the publication of his prior books, he acted as keynote speaker at a number of banking related conferences over the next several years.

For more information, including the origins of the body of work that is The Great Retirement Experiment, click here.

One Page Summary: Thinking Like A Buyer When The Boomers Are Selling

The-Great-Retirement-Experiment.com

Every seller needs a buyer, and 50 million Boomers cashing out a planned \$44 trillion in paper wealth will need a lot of very motivated buyers. In the pages that follow we will seek to understand the perspectives of those buyers – the generations following the Boomers – during the decades when more Boomers are selling more investments than any generation before them. Even as the Boomers reduce consumer spending, and make staggering financial demands for the payment of Social Security and Medicare benefits. Could it be that what matters is not so much these individual experiments (for all are unprecedented), but how they will all combine and interact?

This **holistic perspective** is not the usual way that we look at long-term investments. Indeed, we invest so that we won't have to personally reduce our spending when Social Security and Medicare experience their widely expected problems in the decades to come. However, when we take the **people-based perspective** of evaluating investments based not upon mathematical equations from history, but upon the situation and motivations of the buyers when they are buying, then everything changes.

For these future buyers will be living in a single world, where they will be simultaneously paying for all of the promises that Baby Boom generation has made to itself. Or so the Boomers plan.

Did you ever stop to wonder just how tens of millions of bright, creative individuals at the peaks of their careers will react to these unprecedented demands? What their self-interests will be? What actions the younger generations will take to keep more of the real goods and services they are creating, instead of obediently and passively passing them over to retirees? How smart investors will price markets dominated by many millions of retirees trying to cash out tens of trillions of dollars of investments, with no end to the selling in sight for decades?

The over 50 pages that follow will present a fresh and out-ofthe-box exploration of the investment implications of the retirement of the Baby Boom, using the people-based fundamentals of finance and economics. We are going to take a walk in the shoes of the buyers, when they are buying – and maybe along the way, start to change the way you think about long term investing.

Your guide for this walk into the future is a Chartered Financial Analyst, MBA and former investment banker, with over 20 years of financial experience. He is a futurist, consultant, speaker, and author, with previous investment book publications by major publishers.