# Retirement resources for an uncertain future.

**By Henry (Bud) Hebeler**

www.anayzenow.com

American Association of Individual Investors

July 18, 2015

# Bleak Outlook Factors

- **Public & private debt spiraling out of control**
- **Fewer workers to support growing elderly**
- **Taxes have to increase to support growing welfare.**
- **Low savings**

## Disturbing EBRI Survey

- Just 48% of workers have calculated how much they need to save for retirement.
- Four in 10 workers and one-third of retirees say they spent eight or more hours planning for the holidays in the past year.
- Yet only 34% of workers and 21% of retirees report they spent that amount of time planning for retirement.

## Savings Suck

- According to a 2014 survey from the Employee Benefit Research Institute, only 64% of Americans have reported saving any money at all for retirement to supplement anticipated Social Security benefits.
- Those with some savings typically don't have much. The EBRI survey found that roughly six of every 10 Americans have less than $25,000 in total retirement savings.
- http://www.usatoday.com/story/money/personalfinance/2015/05/09/ebri-retirement-401k/26466299/

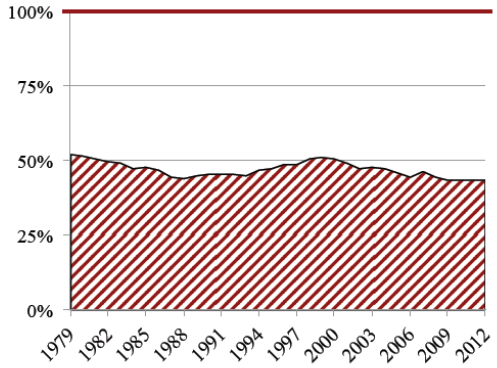
## Half of those close to retirement have NO savings per new report from the Government Accountability Office*

- **52% of those over 55 have no savings**.
  - But 44% of the 52% have a pension.
- **Of the remaining 42% who have savings**
  - **The median is only $109,000.**

* http://www.gao.gov/products/GAO-15-419

## Less than half of private sector workers use their employer's savings plans.

http://crr.bc.edu/wp-content/uploads/2015/04/IB_15-7_508.pdf



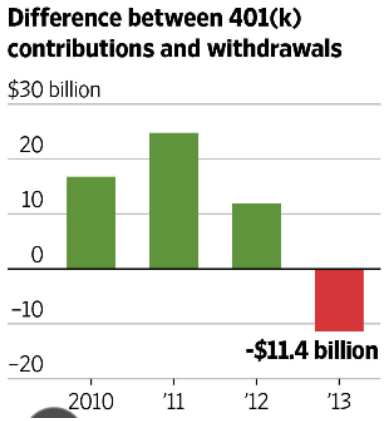

*Source:* U.S. Census Bureau, *Current Population Survey* (1979-2012).

## To make matters worse:

26% of 401(k)s have loans against them!

## 401(k) Draws now exceed deposits

https://us-mg5.mail.yahoo.com/neo/launch?.partner=sbc&.rand=1uhn319r3m81n#



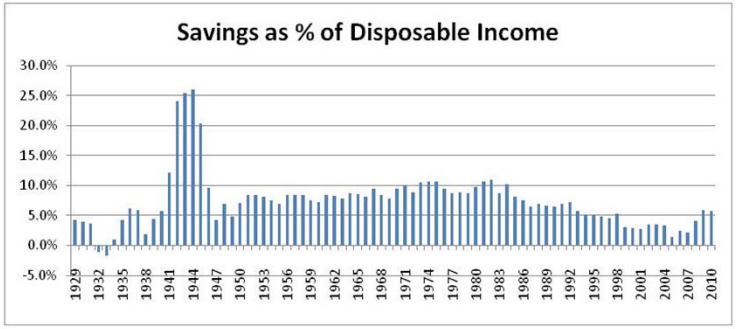
## Baby Boomers in Trouble

Transamerica Center for Retirement Studies Survey

- Average savings $111,000.
- 19% do not participate in their 401(k)
- 23% have 401(k) loans
- 21% say they will have to work after retiring
- 36% expect to live mostly on Social Security
- 43% recognize they are not saving enough

http://www.usatoday.com/story/money/personalfinance/2015/03/21/cheat-sheet-baby-boomers-retirement/24988969/

## We need more, not less savings!




## Median savings far different from average

- **Example for 2013 IRA balances:**
- **Average 2013 balance = $119,804**
- **Median 2013 balance = $32,179**

Source: Seattle Times from EPRI study

## Personal Debts

- US Households, as of March 2014 have an average credit card debt of $15,000 and a mortgage over $152,000
- Average college graduate has a student loan of almost $33,000.

Forbes, 1/4/15

## Student debt hurts future

http://www.wsj.com/articles/mitchell-e-daniels-how-student-debt-harms-the-economy-1422401693?mod=hp_opinion

- The average borrower in the class of 2014 left with $33,000 of college debt.
- 40 million people, roughly 70% of recent graduates, are now borrowers.
- Educational debt of $1.3 trillion this year has shot past every other category—credit cards, auto loans, refinancing—except home mortgages.
- And the feds will not forgive it!

## Debts of States & Local Governments

- State taxes fall short of outflows by $48 billion
- Wracked by pension obligations
- Most government pensions have COLAs– which exacerbate trust funding problems
- May be sovereign power, but some courts have ruled that it's illegal to abrogate public union contracts.

## Pension Funding Problems

- Public pensions: There are $3 trillion worth of unfunded pension liabilities at the state level, and $400 billion of unfunded liabilities at the large-city level
- Private pensions: Few still exist. Surviving ones are struggling and/or considering reductions. Only 83% funded. GE is 75%.
- The PBGC does not have enough money to support current obligations much less many more private trust failures.

## Underfunded & Risky

- Only 41% of state and local plans received their full contribution last, down from 65% in 2008.
- If U.S. public plans operated under the same accounting rules as corporate pensions, annual contributions would roughly double.
- New York state plans to defer $1 billion.
- PA's school-employees retirement plan got less than half its full contribution.
- Kansas is borrowing $1 billion which it will invest in hopes of generating a 7.75% annual return.
- State and local governments are required to contribute half as much as private
- 6-in-10 public plans fail to receive even that.
- http://www.wsj.com/articles/the-public-pension-funding-trap-1433109363?KEYWORDS=public+pension+trap

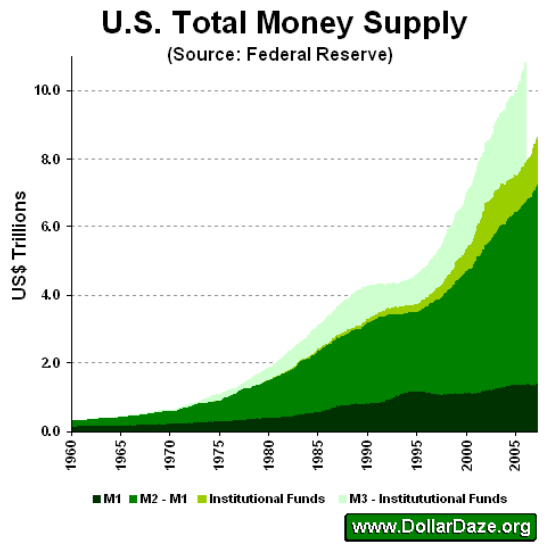
# It will get worse!

- Government accounting does not include unfunded future obligations.
- These are well over $200 trillion needed to cover Social Security, Medicare, welfare programs and growing government pensions.
- Government requires industry to account for their future obligations but not itself.
- We need politicians who will run and hope to win on long-term management.

**Is the interest on the national debt affordable? Not without cuts or inflation!**

http://www.politifact.com/wisconsin/statements/2013/sep/15/chris-kapanga/interest-payments-us-debt-exceeds-us-tax-revenue-w/

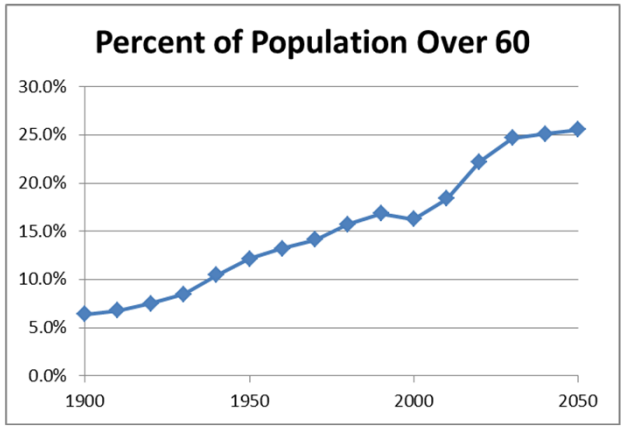
- Total interest payments = $220 B to outsiders + $140 B from SS trust, etc. = $360 B in 2012.
- CBO projects that the $220 will be $644 B by 2020. Also, the $140 B will grow appreciably.
- 1/7$^{th}$ of tax revenue goes to interest now.
- By 2020 it will be about 1/3 of tax revenue—or more with higher rates.
- Printing money appears to be the only solution that the majority would accept.



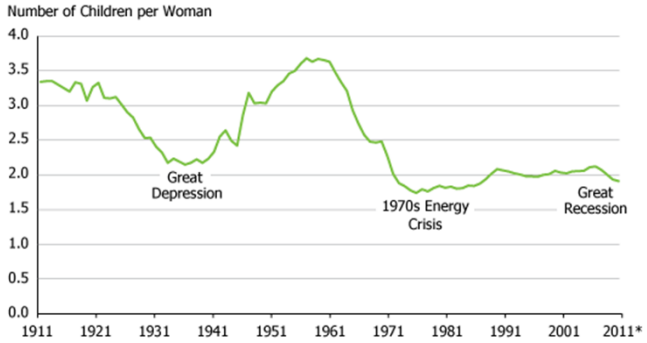

## When will reckoning come?

- Tax code driven by social engineering
- Taxes/household equal median household income
- Printing money to pay debts
- Stagflation grows to Depression-Hyperinflation
- Aging of population
- Youth oblivious of history, economics, need to save
- Barter, underground economy like USSR
- Growing numbers on welfare
- Patriotism & intentional financial sacrifice almost dead
- Change cataclysmic or like watching paint dry?

# Our aging population



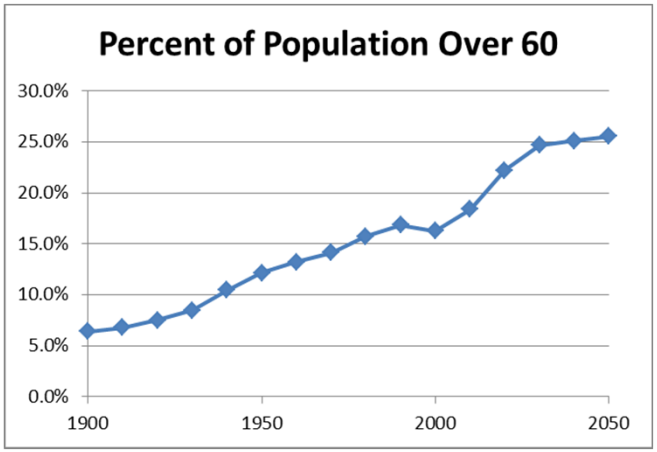

US Birthrate now below sustaining population




# Census Estimates

- In next 10 years:
  - Population over 65 will increase 38%.
  - Population of 18 - 64 will grow only 3%.
  - http://www.usatoday.com/story/opinion/2015/05/07/jobs-numbers-labor-shortage-baby-boomers-inflation-editorials-debates/70973518/
- For every 100 workers:
  - 27 people collected benefits in 2000
  - 37 people are collecting benefits today
  - 47 people will be collecting benefits in 15 years
  - http://www.usatoday.com/story/opinion/2015/05/07/jobs-labor-shortage-center-for-immigration-studies-editorials-debates/70974006/
- By 2050, 20% of total population will be over 65 vs 15% today.

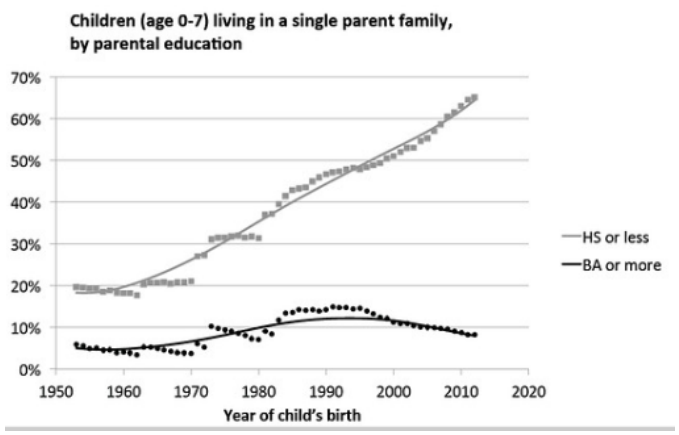
# Aged are important voters!



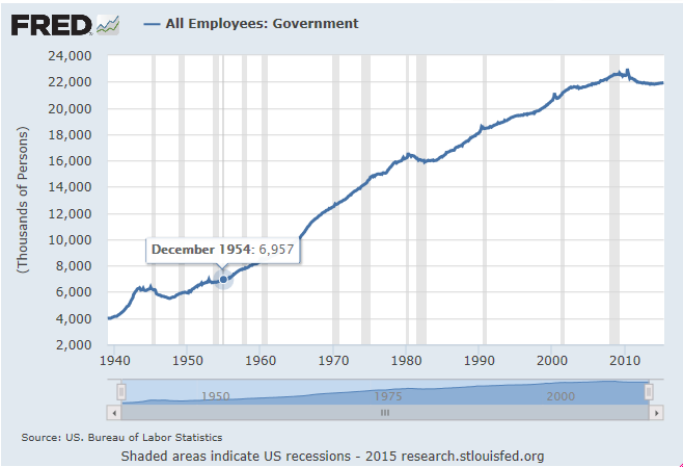
## Almost 50% of children raised by single parent.

Chart: http://www.marketwatch.com/story/why-the-american-dream-is-unraveling-in-4-charts-2015-03-18?link=MW_popular

Putnam/Our Kids/S&S

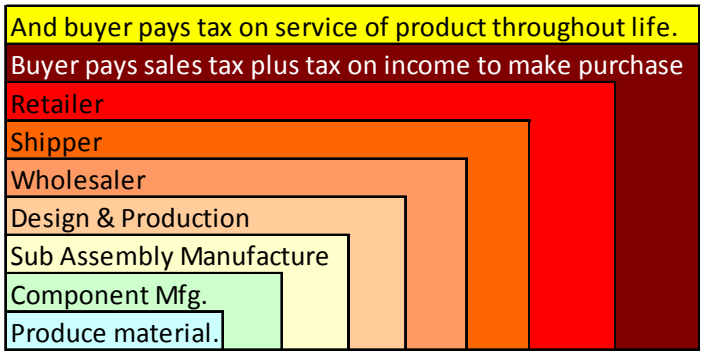



## Growth of government



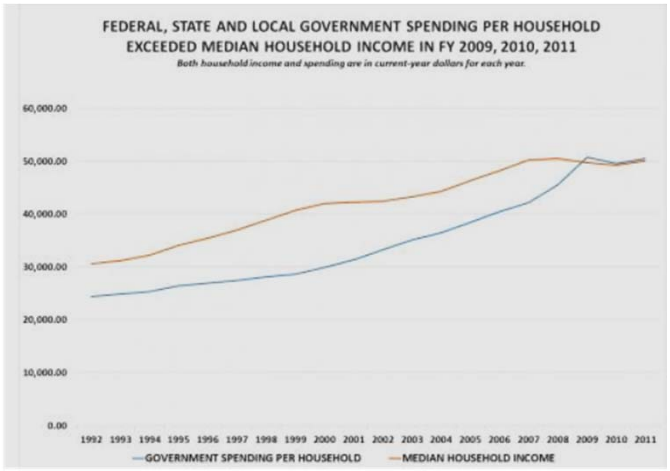

## Tax on tax on tax on tax on tax!

We pay it all when we buy and use a product.




## Tax at each levels compounds

- Suppose there 8 levels from material mining to retail store. (Some have more, some less.)
- 30% corporate tax on 10% profit = 3% at each level.
- 3% at each level cumulates to 6% corporate tax at retail store.
- Then we pay sales tax on the corporate tax.
- And we pay taxes to service the product.




http://www.cnsnews.com/news/article/terence-p-jeffrey/gov-t-spending-household-exceeded-median-household-income-3-straight

## Congressional Budget Office Projected PV (Outlays – Receipts)

- Extended Baseline Forecast (EBF) $47 trillion owed
- Alternative Baseline Forecast (ABF) $205 trillion owed
- Usually difficult to find, but since 2014, it's truly buried.

# Draconian Fixes Required

- Increase all federal taxes now and permanently by 57%.
- Or, reduce federal spending, except interest on debt, by 37%.
- Or severely devalue the dollar
- Or some combination of above
- Or declare bankruptcy and default.

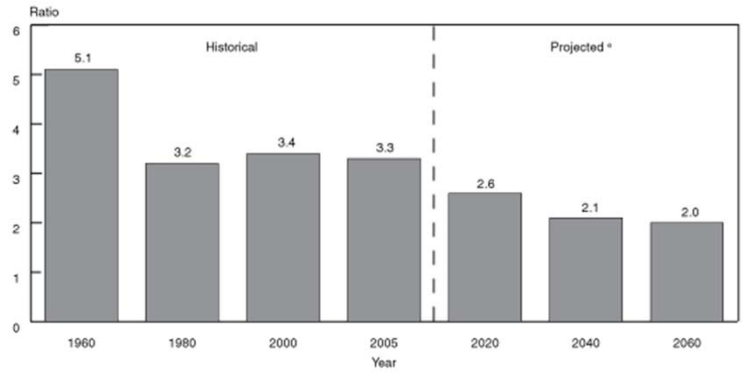
# Social Security Viable?

- Sometime between 2020 and 2025, there will be more people retired than working.
- Between now and 2030, 10,000 to 15,000 people will turn 65 EVERY DAY.
- One in four retirees have no income other than Social Security.
- One in three retirees in Maine have no income other than Social Security.

USA Today, 1-14-15: http://www.usatoday.com/story/money/columnist/brooks/2015/01/13/retirement-congress-pensions-social-security-medicare/21501407/

SSA projects fewer workers / beneficiaries

http://www.ssa.gov/policy/docs/ssb/v66n4/v66n4p37.html




# Is Social Security welfare?

- Lower income people get proportionately more
- Original intent was that average person would effectively pay for his/her benefits.
- Now current recipients are dependent on FICA taxes of younger people.
- Trust will run out in about 25 years and people will get about 75% of current stated amounts.
- Now only the rich can say they paid for their own.

## Social Security Replacement Rate

- Social Security was meant to replace about 40% of a worker's wage, not the entire wage.
- In recent years a number of changes have weakened this percentage
  - The increase in Full-Retirement-Age to 67.
  - Taxable portions were not indexed for inflation.
  - Medicare premiums are rising

## And look at Medicare costs!

- Part B premiums alone are estimated to increase from 5.4 percent of the average Social Security benefit for someone retiring in 1990 to 10.4 percent for someone retiring in 2030.

- http://crr.bc.edu/wp-content/uploads/2015/04/IB_15-7_508.pdf

## Drug costs are growing

- 139,000 used at least $100,000 worth of medication PER YEAR
- More than a half-million U.S. patients had medication costs in excess of $50,000 in 2014
- Technology finding more cures, but cost can be very high.
- The total cost to health plans for U.S. patients with prescription drug expenses in excess of $50,000 was $52 billion in 2014,
- http://www.reuters.com/article/2015/05/13/us-usa-pharmaceuticals-costs-idUSKBN0NY08H20150513?feedType=RSS&feedName=healthNews

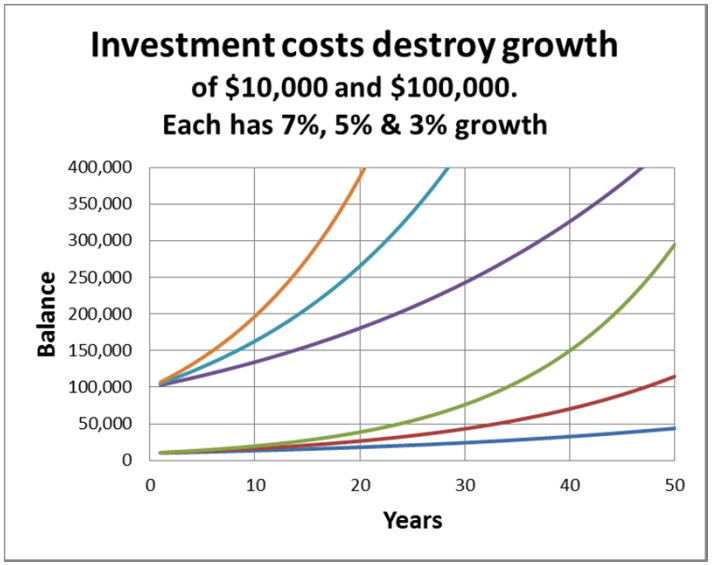
## 2015: Don't break a bone!

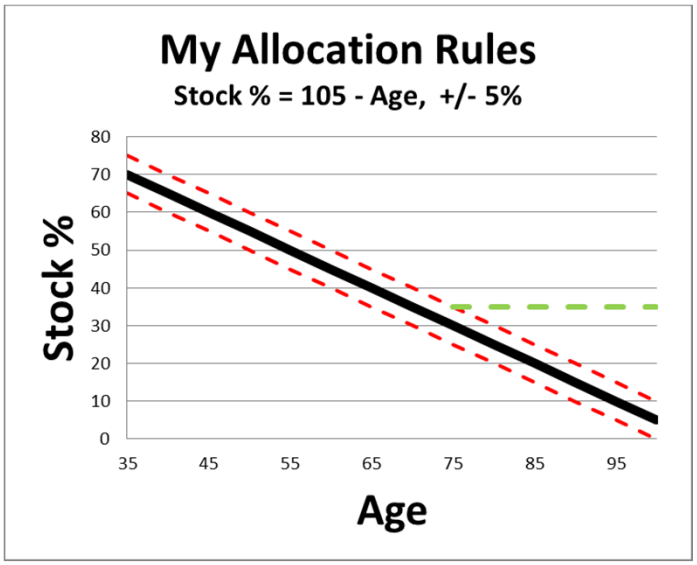
- **Friend broke collar bone**
- **Had out-patient surgery**
- **Hospital billed $68,166**
- **Negotiated outcome:**
  - **Insurance paid $7,037**
  - **Patient paid $1,804**
- **In addition, Doctor billed $2,955**

# Investments for difficult times

## Investment Return Leaks

- **Reduce Costs**
  - Advisors
  - 401(k), 403(b), etc.
  - Brokers
  - Fund costs + loads
  - Commissions
  - Fees
  - 12(b)-1 kickbacks
- **Reduce/Defer Taxes**
  - Investment vehicles
  - Strategic allocations
  - Strategic withdrawals
  - Individual securities or funds or ETFs
  - Trusts
  - Donor advised funds




# Allocation Control

**Analyze Now Program**

25% Estimate future ordinary income tax rate for after-tax allocations. I

| Investments (Delete examples when ready to use.) | Quick Q or N | Stock % | Def'd? Y or N | Current value | Values less ordinary income tax: After-tax value | Stocks | Fixed Income |
|---|---|---|---|---|---|---|---|
| Variable Annuity Stock Fund | N | 100% | Y | 20,000 | 15,000 | 15,000 | 0 |
| Variable Annuity Bond Fund | N | 0% | Y | 20,000 | 15,000 | 0 | 15,000 |
| Variable Annuity Balanced | N | 50% | Y | 20,000 | 15,000 | 7,500 | 7,500 |
| Variable Annuity Mny Mkt | N | 0% | Y | 20,000 | 15,000 | 0 | 15,000 |
| Taxable Money Market | Q | 0% | N | 10,000 | 10,000 | 0 | 10,000 |
| Taxable Bond Fund | N | 0% | N | 50,000 | 50,000 | 0 | 50,000 |
| Taxable Stock Fund | N | 100% | N | 100,000 | 100,000 | 100,000 | 0 |
| Savings I Bonds * | Q | 0% | N | 20,000 | 20,000 | 0 | 20,000 |
| 401(k) Target Fund | N | 70% | Y | 300,000 | 225,000 | 157,500 | 67,500 |
| Rental partnership equity | N | 100% | N | 50,000 | 50,000 | 50,000 | 0 |
| Checking account | Q | 0% | N | 2,000 | 2,000 | 0 | 2,000 |
| Roth IRA Bond Fund | N | 0% | N | 100,000 | 100,000 | 0 | 100,000 |
| | | | | | 0 | 0 | 0 |
| | | | | | 0 | 0 | 0 |
| | | | | | 0 | 0 | 0 |
| | | | Totals | 712,000 | 617,000 | 330,000 | 287,000 |
| | | | | | Mid target | 304,830.10 | 312,169.90 |
| | | | | | Difference | (25,169.90) | 25,169.90 |

32,000 Total of Q items below available for quick access.

# I tell my kids & grandkids:

- Always save 15% of your take-home pay if no pension
- When possible, save before you buy.
- Don't count your home as an investment
- Don't invest in time-shares or partnerships
- Keep emergency funds in liquid, taxable accounts.
- Allocation rules for buy/sell decisions

## Reverse Dollar Cost Averaging

- When workers make regular deposits, DCA takes advantage of buying more shares when security prices are low and fewer when prices are high.
- When retirees make regular withdrawals, the reverse happens, hence Reverse DCA
- That said, there are some exceptions.

## Returns affected by Reverse Dollar-Cost-Averaging

**Pre-Retirement Scenarios**

New yearly savings are adjusted upward each year with inflation.
Future savings are shown in today's dollar values to keep them in perspective.

| Years till retire | Current savings | New yearly savings | S & P Stocks | Investment Costs | Savings in 20 years | |
|---|---|---|---|---|---|---|
| | | | | | 1965 start | 1948 start |
| 20 | 100,000 | 10,000 | 60% | 1.0% | 351,470 | 792,844 |
| | | | | Inflation-adjusted returns> | 1.1% | 6.7% |

**Post-Retirement Scenarios**

Spending increases each year with inflation. Savings are in today's dollars.

| Years till death | Current Savings | Annual spending | S & P Stocks | Investment Costs | Savings left after 20 years | |
|---|---|---|---|---|---|---|
| | | | | | 1965 start | 1948 start |
| 20 | 200,000 | 10,000 | 60% | 1.0% | (4,238) | 396,981 |
| | | | | Inflation-Adjusted Returns> | -0.2% | 7.5% |

Source: Quick Retirement Analysis from www.analyzenow.com

## Squirrel Theory

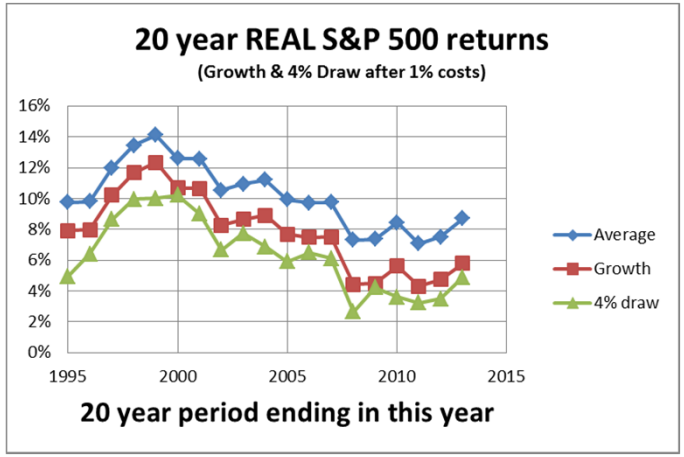
- If returns about equal to inflation, can use Squirrel theory.
- Pre-retirement savings = Current savings + Years till retire x Annual Savings (Today's $s)
- Post-retirement annual spending = Savings / Years till death.
- If returns continue about equal to inflation, your annual retirement budget will increase with inflation.

## Investment Risks
### A different view

## There are several kinds of risks.

- Risk as used by financial planners is a statistical measure of investment performance.
- The statistics most often truncate the tails. Nicholas Taleb calls these Black Swans and has based a great book on these.
- Another kind of risk comes from a surprise event like a stroke or divorce. These are often greater than investment risks.

## Future returns will not be the same!



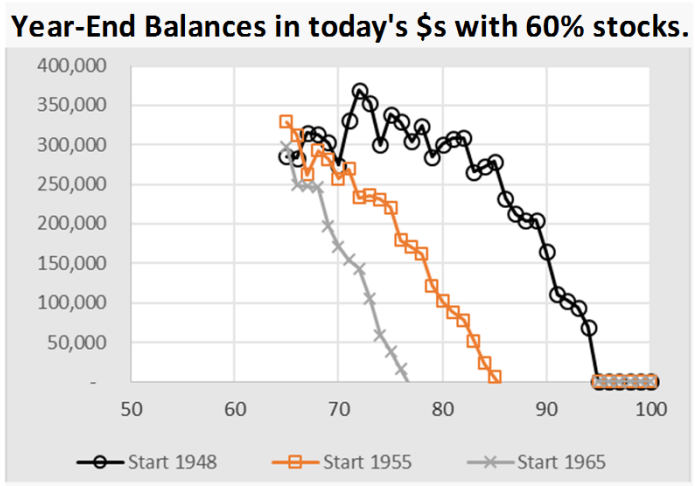

## Pain to Gain (PTG) risk measure

- PTG simpler than Sharpe Ratio
- PTG equals standard deviation of 10 year rolling average divided by return over that period. Lower the better.
- Craig L. Israelsen found 60% large stocks and 40% bonds was almost best for savers.*
- 7 asset portfolio slightly better.

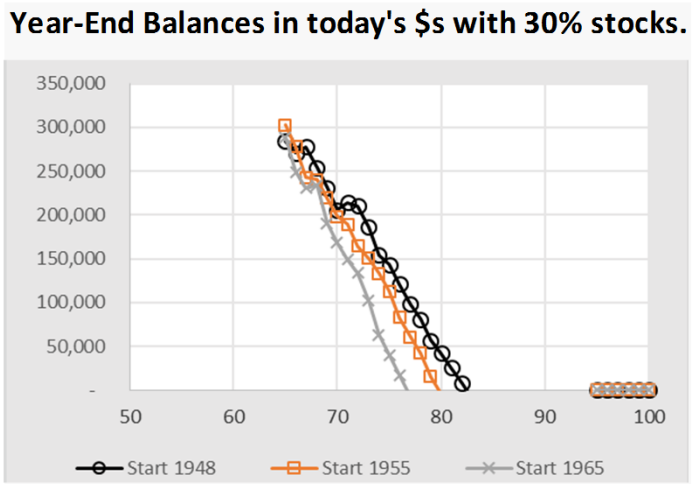
* May 2015 Financial Planning, p. 77 ff

## Example for 60% stock

- Start with $300,000 savings
- Couple would like to spend $2,000 a month from savings.
- Survivor could live on $1,500 a month.
- Consider 3 widely different scenarios:
  - 1948 and on: Post WWII boom years
  - 1955 and on: A fairly benign period
  - 1965 and on: Market plunges & high inflation




Source: AnalyzeNow.com's free Retirement Investment Optimizer




Source: AnalyzeNow.com's free Retirement Investment Optimizer

# Seek protection

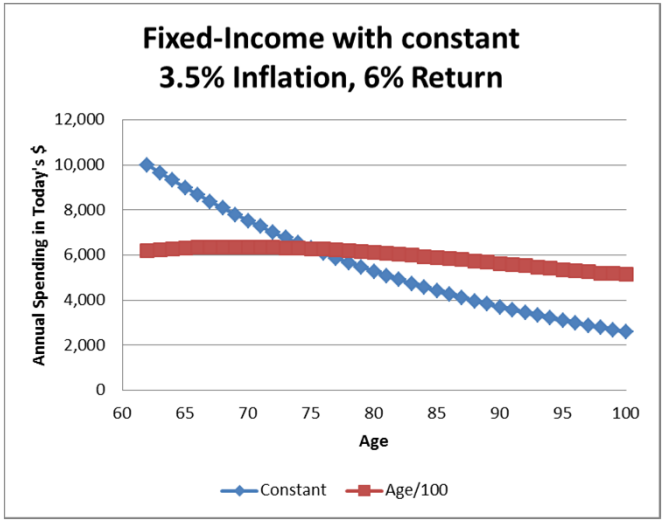
- From depression
- From hyper inflation
- From unscrupulous advice
- From charities, solicitors
- From trustees, relatives?
- From hackers/spammers

# Escape can be VERY difficult

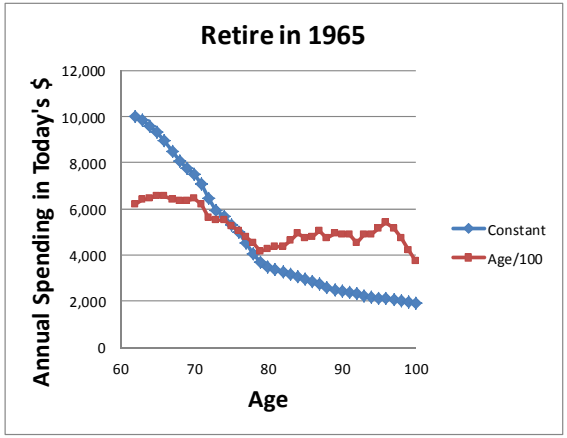
- **Time shares**
- **Partnerships**
- **Collectibles**
- **Your home**

## Fixed-Income is never fixed in terms of purchasing power.

- Inflation destroys its value
- You can do things to help reduce the effects of inflation, but it involves some pain.
- Only spend a fraction of the fixed payments and save the rest to be drawn down later.
- **Spend only Pension Payment x Age / 100.**
- Example for 70 year old with $1,000 pension payment: Spend only $700. Save $300.




## Fixed-Income in one of the worst scenarios

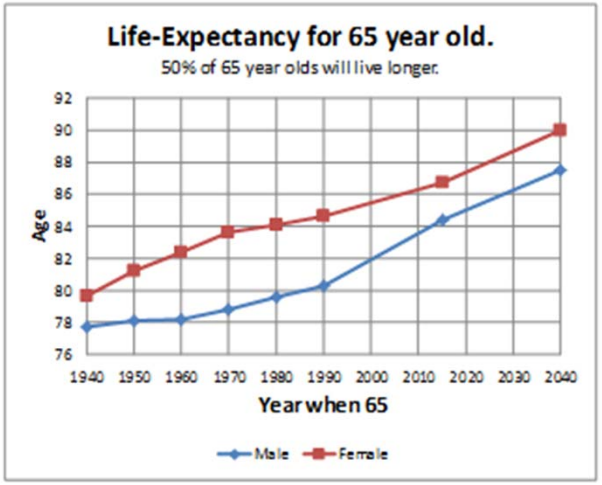



Source: Professional Assistant from www.analyzenow.com.

# Longevity Annuities

- How long do you think you will live?

## 50% of people will outlive life-expectancy.




Source: Data from www.ssa.gov. 2040 estimate by H. K. Hebeler

## Do-it-yourself longevity insurance with $100,000 to invest at 65 with payments beginning at 85.

- NY Life fixed annual payments of $59,000 for a man and $44,000 for a woman.
- About half of 85 years olds will then be dead.
- **The insurer pays nothing after death.**
- An 85 year old man has a life-expectancy of 6 years and a woman 7 years.
- If you can make 6% return on $100,000 at 65, would have $320k at 85. You **or your heirs** could draw $65,000 for 6 years or $44,000 for 10 years starting at 85.
- http://www.marketwatch.com/story/investments-that-help-retirees-maximize-income-2015-05-18

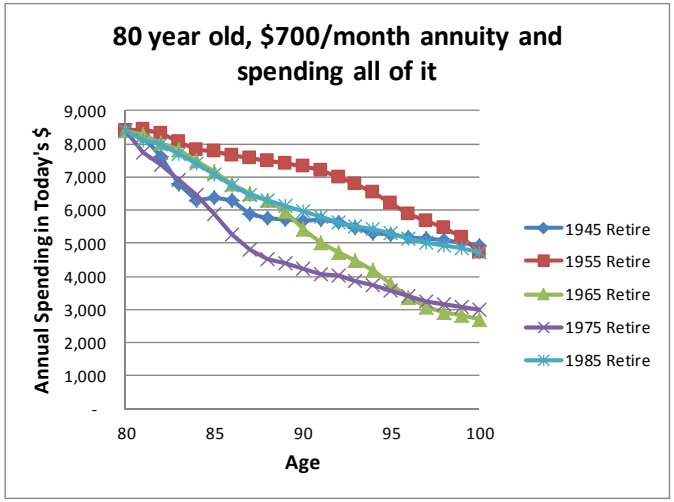
## Annuity Contracts

- Depend on sex, age, joint life, current interest rate, guaranteed period, possible inflation adjustment, and insurer.
- Joint life annuity payments are a fraction of single person annuities, e.g., 75% +/-.
- Quotes vary daily. Quotes are significantly different in different years.
- Must do a personalized analysis when ready.
- Read the small print!

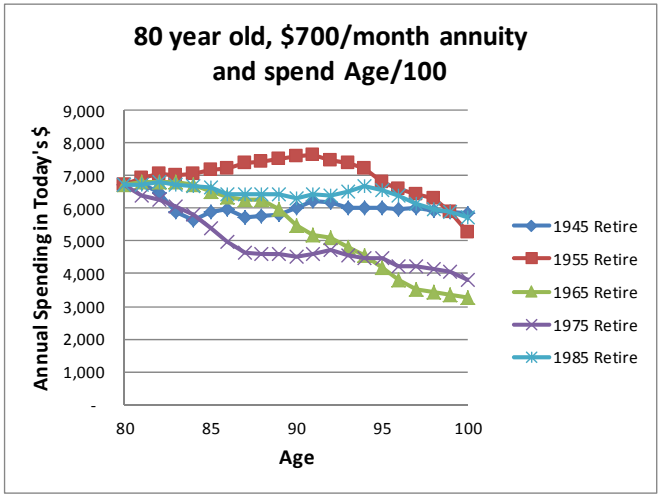
## Buy annuity to pay when 80?

# Warning!!!!

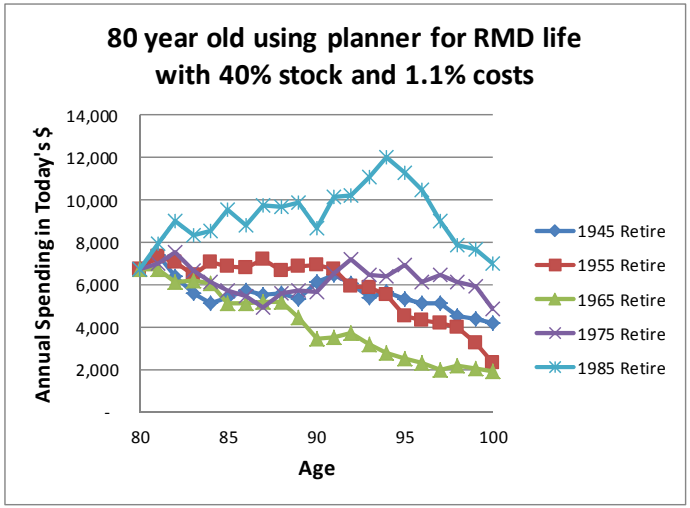
**Read the small print in any insurance product—especially a complex one.**




Source: Professional Assistant from www.analyzenow.com.




Source: Professional Assistant from www.analyzenow.com.




Source: Professional Assistant from www.analyzenow.com.

## Consider Alternatives

- Longevity (deferred) annuity with your choice of investments.
- Lump sum longevity annuity.
- Save separate funds to buy immediate annuity when elderly—may be the best.
- Count on using a professional
- or do-it-yourself managed portfolio with comprehensive planning analysis.

# Better yet!
# Delay Social Security

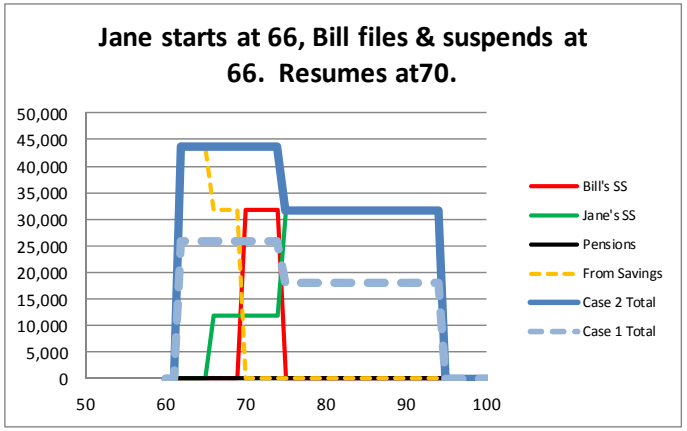
**It's the best longevity insurance you can buy!**

## Social Security Options

not always easy to select

- Start early
- Delay
- Suspend
- File and suspend
- File a restricted application
- Health & Medicare need consideration

## A better alternative



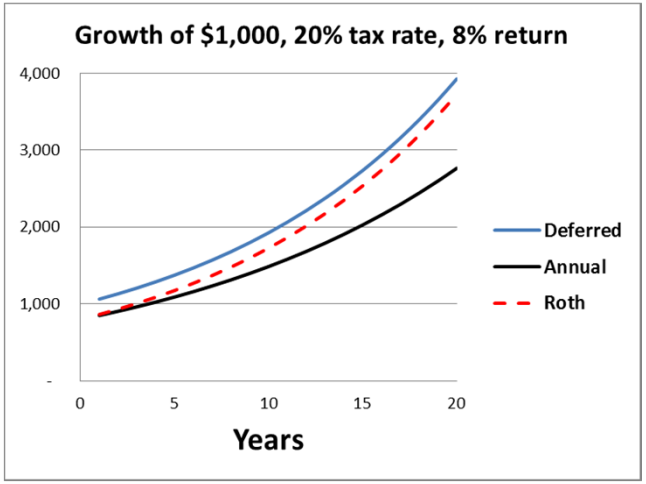

Source: www.analyzenow.com, Strategic Social Security Planner

## In higher tax brackets?

Take advantage of tax breaks:

- Strategic allocations
- Roths for TIPS, stocks, REITs
- Municipal bonds held to maturity
- I Bonds for deferral/inflation
- Tax-Managed Funds
- Mark-up on death for survivor/heirs
- 1031 and 1035 exchanges
- Insurance products, trusts
- Donor Advised Funds for charitable growth

## Pay taxes now or later?




## Often lower taxes if draw from

- Taxable investments first
- Deferred-tax investments next
- Tax-exempt investments last
- BUT, there are many exceptions:
  - Emergency fund liquidity
  - Highly appreciated securities for heirs
  - Irreplaceable investments
  - Convert to Roth

# Muni Bonds Vulnerable

http://www.marketwatch.com/story/these-lurking-debts-may-turn-us-cities-states-into-greece-2015-06-30?page=2

## Public Pension Supremacy Protected by State Constitution

| Past & Future | Past & Perhaps Future | Past only |
|---|---|---|
| AK, IL, NY, MN | AZ | HI, LA, MI |

## Wise portfolio

- Liquidity for emergencies and large purchases
- Significant tax-exempt or tax-deferred
- Some securities less vulnerable to inflation
- Some securities less vulnerable to depression
- Insurance products in highly rated companies
- Diversified and escape possible
- And, of course, allocate & low cost sources
- CFP for second opinion.

# Thoughtful Financial Planning!

## Compare, compare, compare!

| | | Things you can control: | | | |
|---|---|---|---|---|---|
| | | Spending or Saving | Investment Choices | Retire Age or Part-Time Work | Social Security Alternatives |
| No Control | Employee Benefits | | | | |
| | Economic Factors | | | | |
| | Death age(s) | | | | |
| | Financial Surprises | | | | |

Example: Compare spending amounts in different scenarios.

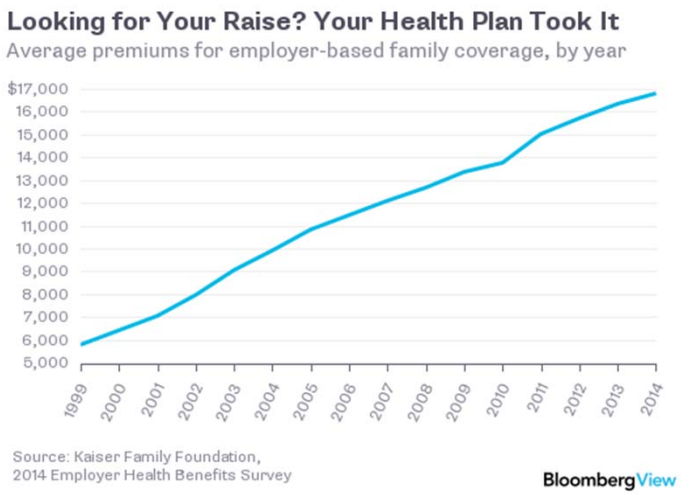
## Be wary of Monte Carlo

- We used Monte Carlo analysis in our weapons optimization when I worked.
- Uses data from the past—and can be misleading for retirement planning.
- Truncated distributions by clipping tails
- Using Monte Carlo, Moshe Milevsky of York University advocated all stock portfolios for retirees before 2008.
- Several years later he withdrew the paper from his website!

# Most important factor is how long you may live.

**Life-Expectancy**

| 70 | 80 | 90 | Your current age |
|---|---|---|---|
| 14.1 | 8.1 | 4.0 | SSA, Male |
| 16.3 | 9.6 | 4.8 | SSA, Female |
| 17.0 | 10.2 | 5.5 | RMD, Single if inherited |
| 27.4 | 18.7 | 11.4 | RMD, Orig. owner, spouse < 10 yrs |
| 21.8 | 13.8 | 7.8 | RMD, Inherited joint & last, same age |
| 27.4 | 18.7 | 11.4 | RMD, Inherited, spouse 10 years younger |
| Depends on smkg, wt, parents | | | www.LivingTo100.com and others |




http://www.bloombergview.com/articles/2015-05-13/obamacare-can-work-better-for-the-middle-class

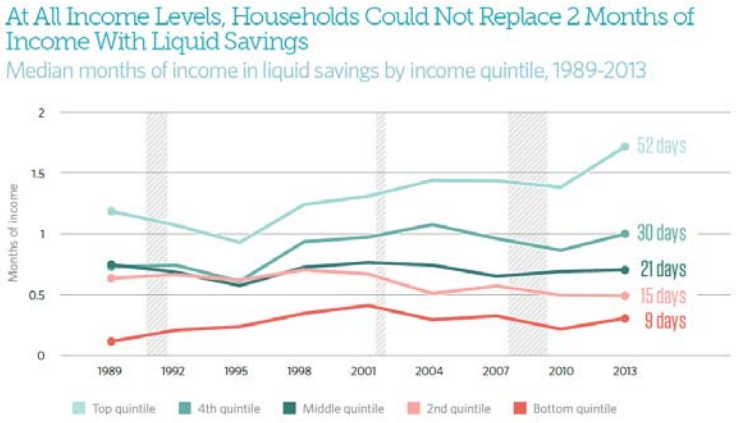
## Want savings to last a lifetime?

- Total savings
  - Less emergency reserves
  - Less large known future expenses
  - Less debts
- Net left for years of retirement withdrawals
- Divide by RMD factor to get this year's savings withdrawals for annual expenses and taxes. (Can also pay debts & large known future expenses because accounted for those.)
- If too different from last year's annual withdrawal, then add ¼ of last year's annual withdrawal increased by inflation to ¾ of the annual withdrawal calculated above.
- BUT using saving to delay Social Security may be better

## Not enough liquid savings

Liquid savings excludes retirement accounts

http://www.pewtrusts.org/~/media/Assets/2015/01/FSM_Balance_Sheet_Report.pdf



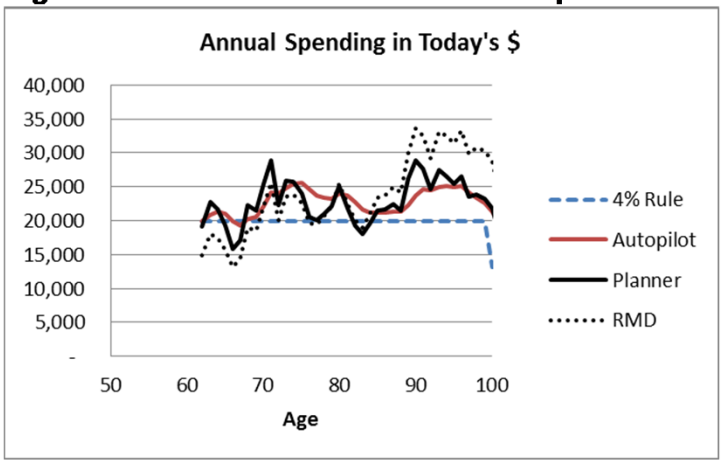
## There are better ways to plan:

- Limited applicability:
  - 4% rule (Open ended, only savings)
  - RMD (Conservative, only savings)
- Better: Planner (Requires CFP or computer. Account for real estate, Social Security, pension, special events, survivor benefits, LTC)
- Best: Autopilot (3/4 Planner + 1/4 Last year's plan adjusted for last year's inflation, LTC)

## Assumptions for examples

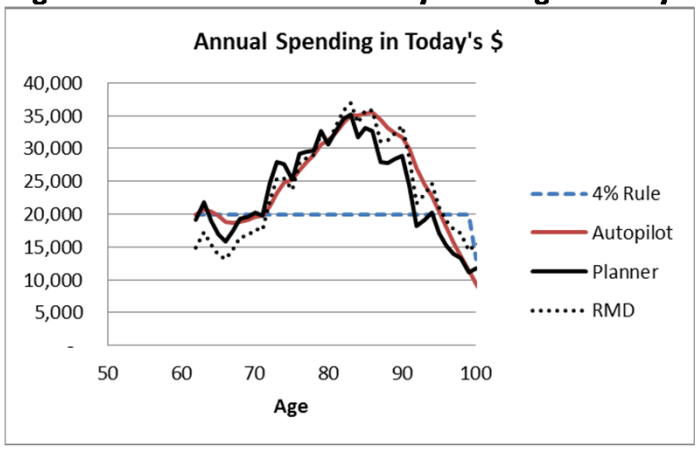
- 40% S&P 500 stock allocation
- 50% AAA Corporate bonds
- 10% Short-term treasuries
- 0.2% Costs
- $500,000 initial balance

**Fig. 1. Retire in 1928 before the Great Depression.**



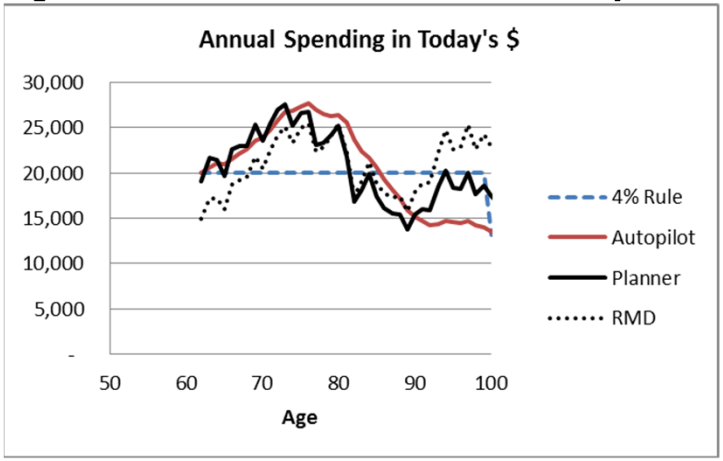

Source: Professional Assistant with Autopilot from AnalyzeNow.com.

**Fig. 2. Retire in 1945 followed by booming economy.**



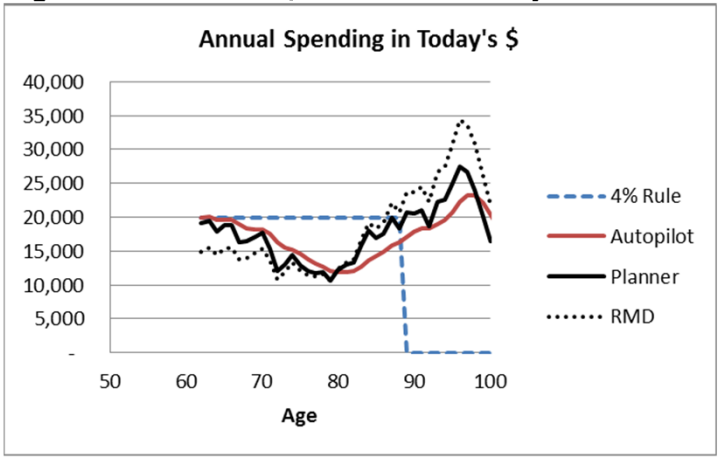

Source: Professional Assistant with Autopilot from AnalyzeNow.com.

**Fig. 3. Retire in 1955. Good times followed by bad.**




Source: Professional Assistant with Autopilot from AnalyzeNow.com.

**Fig. 4. Retire in 1965, one of the worst years to retire.**




Source: Professional Assistant with Autopilot from AnalyzeNow.com.

## What's in a good planning program?

- Reminder to subtract emergency fund
- Consider effects of allocations, costs
- Provide for real estate, annuity payments
- Unusual escalation of health-care costs
- Social Security growth less than inflation
- Income tax provisions
- Provide for future singular events & LTC
- Death ages and survivor's benefits
- Simultaneous comparisons

## Thoughtful planning includes:

- Comparisons of alternatives you can control
- Comparisons of alternatives you can't control
- Conservative life-expectancies, economic factors
- Considerations for health-care & LTC
- Known future events
- Comprehensive planning (Computer/CFP)
- Death book

Adults are never too young to think about their survivors.

- Will survivors need financial help?
- Will they inherit something that's manageable?
- Or will they need battery of lawyers, accountants, planners, courts, expert testimonies, shirttail relatives, etc.?
- Create a death book to help
- Review key elements with children, executor.

## Death Book Contents

- Legal documents (Will, living will, power of attorney, revocable or testamentary trusts, etc.)
- Financial condition and survivor benefits
- Time share rules & reservations
- Personal distributions
- Location, location, location
- Death instructions (funeral, burial, obituary)
- Home maintenance instructions
- Key helpers, addresses, phones, email addresses
- Passwords

## Planning Conclusions

- **Future returns will not be the same as the past!**
- **Do comprehensive planning and/or use CFP**
- **Plan annually setting aside emergency funds**
- **Compare alternatives, allocate & rebalance.**
- **Maximize social security**
- **Bias savings/spending considering future returns, inflation, taxes & events**
- **Bias investments considering risk & liquidity**
- **Seek low investment costs and tax drains**
- **A "Death Book" really helps heirs & executor**

**www.analyzenow.com**
**for Articles & Programs**

**Can use Google Alerts for Henry Hebeler to get latest WSJ articles.**