Retirement "Planning" ... II

Distribution phase

Income from 3-legged stool: Pension, Social Security {more in April}, Retirement portfolio

Before Bengen: Ibbotson data from 1926 to 1992

Common stocks cagr = 10.3% Intermediate Treasuries cagr = 5.1% Inflation = 3% pa

Average return for 60% stocks / 40% bonds portfolio = 8.2% pa

Real return after inflation = 5.2% pa

Withdrawing 5% pa and adjusting for inflation should be OK, right ? Wrong !!!

Let's try an experiment

Assume \$1M retirement portfolio on 1/1/1980

60% stock: S&P 500 Index (VFINX); Cagr from 1980 – 2015 = 10.4%

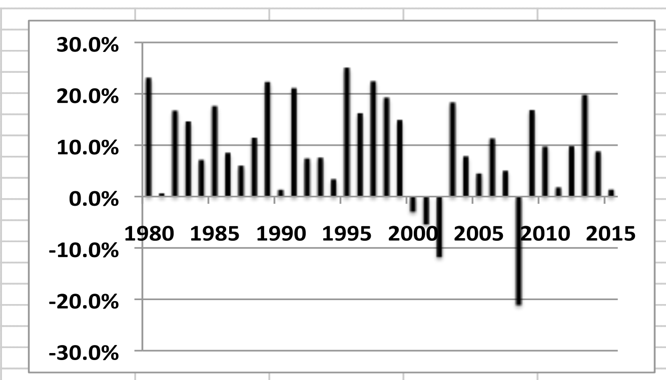
\+ 40% bonds (5-year Treasuries); Cagr form 1980 – 2015 = 5.9%

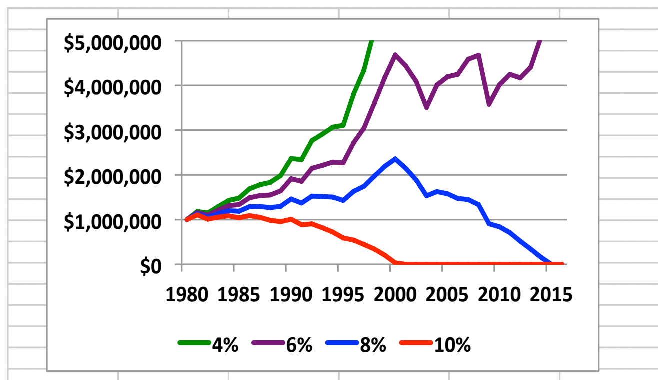
Average return = 9.0%, Real return after inflation = 6.0%

Withdraw 4% (\$40,000) to fund expenses in 1980; Increase by 3% pa for subsequent years

How long does the portfolio last?

Repeat experiment with other withdrawal rates.



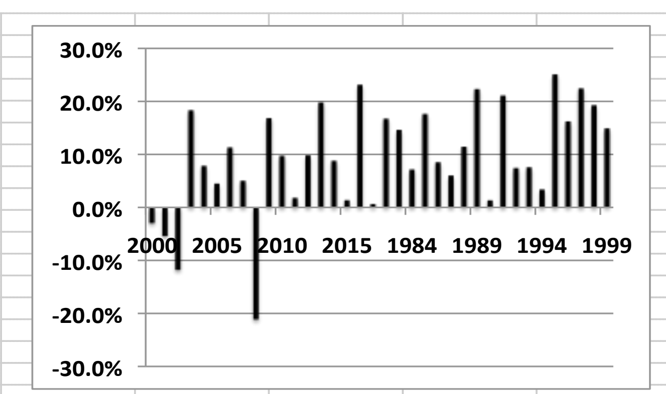


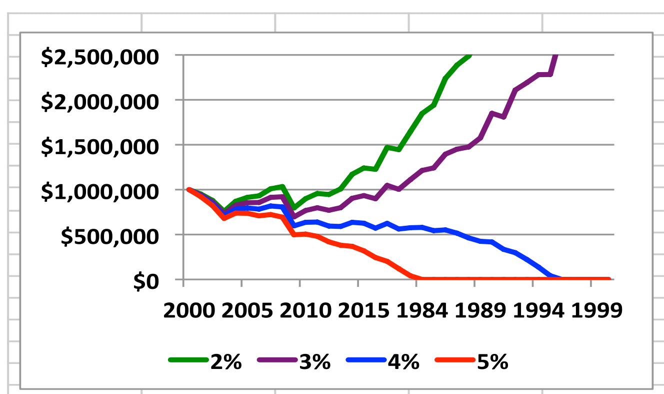
Results: Portfolio lasts 35 years even with an 8% pa initial withdrawal rate.

How about less favorable timing?

Suppose we start the withdrawals in 2000, i.e. use returns from 2000–2015, followed by 1980-1999

Same 9.0% pa average return and 6.0% real return as before





Results: Portfolio barely lasts 31 years with a 4% initial withdrawal rate.

Conclusion: Performance during the early years is critically important, i.e. "sequence of returns" risk.

In fact performance in period 5 - 10 years before or after retirement date is critical.

Bengen's 4% Rule, published in October 1994

Used Ibbotson data from 1926 thru 1992

50% common stocks + 50% intermediate treasuries, rebalanced annually

Increase initial withdrawal each year to adjust for inflation

Results:	Initial withdrawal rate	3%	4%	5%	6%
	Portfolio longevity	>50 years	35 years	20 years	17 years

Worst starting years: 1966, 1965, 1968, 1969, 1937, 1962, 1973, 1939, 1940

Summary: Set up 50% - 75% of portfolio in equities, balance in intermediate Treasuries
Withdraw 4% of assets in first year, increasing by inflation in subsequent years
Most portfolios should last over 50 years, worst case timing lasts 35 years.

Variations on Bengen's 4% Rule

Trinity Study (1998): used 75% stocks + 25% long-term corporate bonds, 35 year retirement

Withdrawal rate:	3%	4%	5%	6%	7%
Success rate:	100%	98%	83%	68%	49%

Bengen (2004): Portfolio mix = 35% large cap stock + 18% small cap stocks + 47% Treasuries

Safe withdrawal rate can be increased to 4.5% for first year.

Guyton and Klinger (2006): 5.2% - 6.2% rate may be OK if certain rules/ guardrails are used
Kitces (2015): Start with a conservative rate, say 4%, for early years, then ratchet up later if OK
Pfau and Dokken (2015): 4% rule may be optimistic in today's environment; Suggest 2% to 3%
Israelsen (2016): Gives data for conservative and moderate portfolios, and a range of inflation data

Limitation of all Bengen-like Rules

Cash flow is determined only by the initial portfolio value; no dependence on current market value
Constant fixed real cash flow; may not fit retirement needs
Unravels in periods of high inflation
Assumes historical worst case sequence of returns risk
In most cases considerable $$$ from favorable returns left on the table for heirs

Required Minimum Distribution (RMD) Method

Sun and Webb (2012): Use IRS RMD tables to determine withdrawal rate by age

Advantages: East to follow, conservative withdrawal rate, responds to current market value
Disadvantages: Variable withdrawals, may not be tailored to retirement needs.

Equity glide paths

Kitces, Pfau, Blanchett suggest minimum stock allocation at retirement date, then ramp up later

Bucket Strategies { Harold Evensky, Christine Benz, etc.}

Bucket 1, Short-term (1-2 years): Cash, checking/savings accts, money markets, T-bills, CDs, etc.
Bucket 2, Intermediate term (2-10 years): CD ladder, short/intermediate bonds, dividend stocks
Bucket 3, Long term (>10 years): Diversified long-term portfolio, domestic and international stocks

****************** Transfer say 3-5% annually from Bucket 3 to Bucket 2 ******************
************ Transfer say 20% from Bucket 2 to Bucket 1 ************
*** Withdraw monthly living expenses from Bucket 1 ***

May require selling from long term bucket in a bear market; Consider using a standby reverse mortgage.

Next month, February 12th, 2020: Taxes ….. TRJA, Tax diversification, Asset location, QCDs

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