

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%

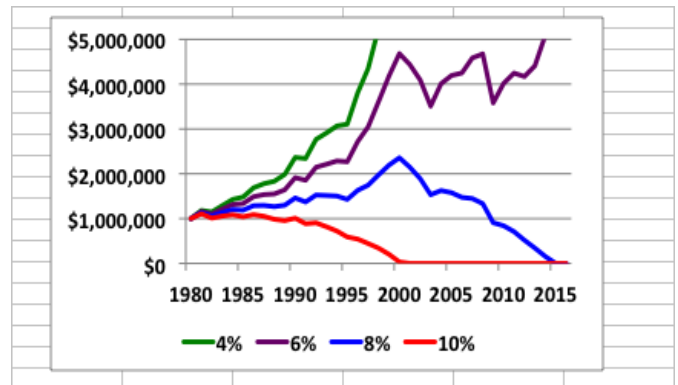
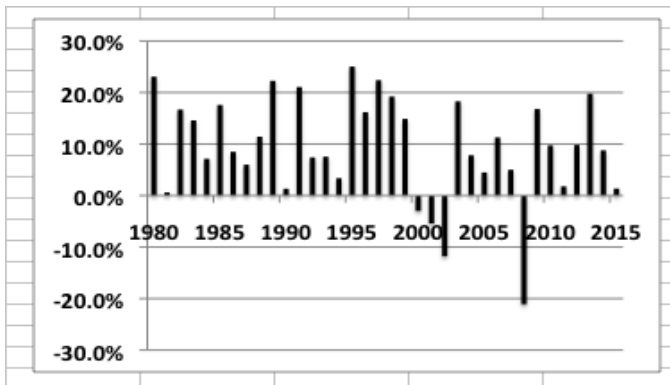
+ 40% bonds (5-year Treasuries); Cagr from 1980 – 2015 = 5.9%

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.

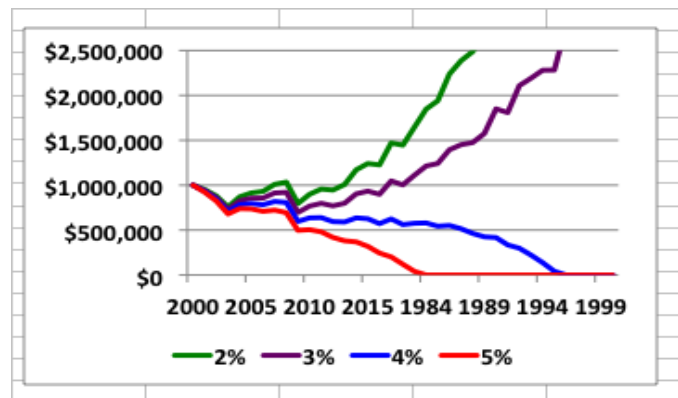
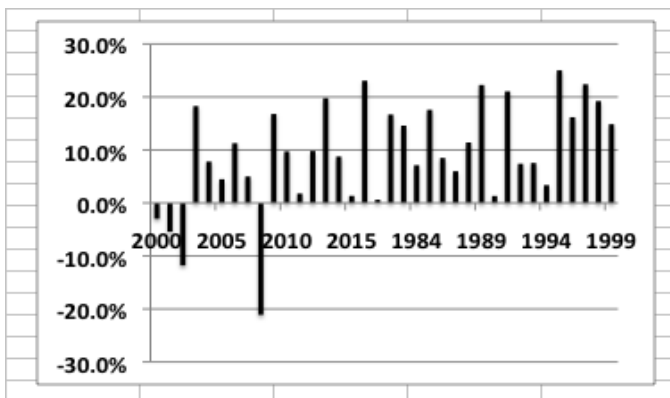


Results: Portfolio lasts 35 years even with an 8% pa initial withdrawal rate.

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 years around 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: Easy 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

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 13th, 2019: Taxes TRJA, Tax diversification, Asset location, QCDs

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11/20/18

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