Hazards to Your Retirement

Market Environment, Programs and Resources

CAA Workshop – March 13, 2012

Daniel E. Winslow, FSA, CPA – Winslow Financial LLC

Cheryl Krueger, CFP®, FSA – Growing Fortunes Financial Partners, LLC

Kirk A. Kreikemeier, CFP®, CFA, FSA - Pebble Valley Wealth Management

Contact Information

- Daniel E. Winslow, FSA, CPA – Winslow Financial LLC

  Registered Investment Adviser and Fee Based Planner

  Dan.Winslow@Winslow-Financial.com 222 E. Wisconsin Ave., Suite 214
  Winslow-Financial.com Lake Forest, IL 60045
  (847) 217-0366

- Cheryl Krueger, CFP®, FSA – Growing Fortunes Financial Partners, LLC

  Registered Investment Adviser and Fee-Only Planner

  Cheryl@GrowingFortunes.com 1821 Walden Office Square, Suite 400
  GrowingFortunes.com Schaumburg, IL 60173
  (847) 230-9636

- Kirk A. Kreikemeier, CFP®,CFA, FSA - Pebble Valley Wealth Management

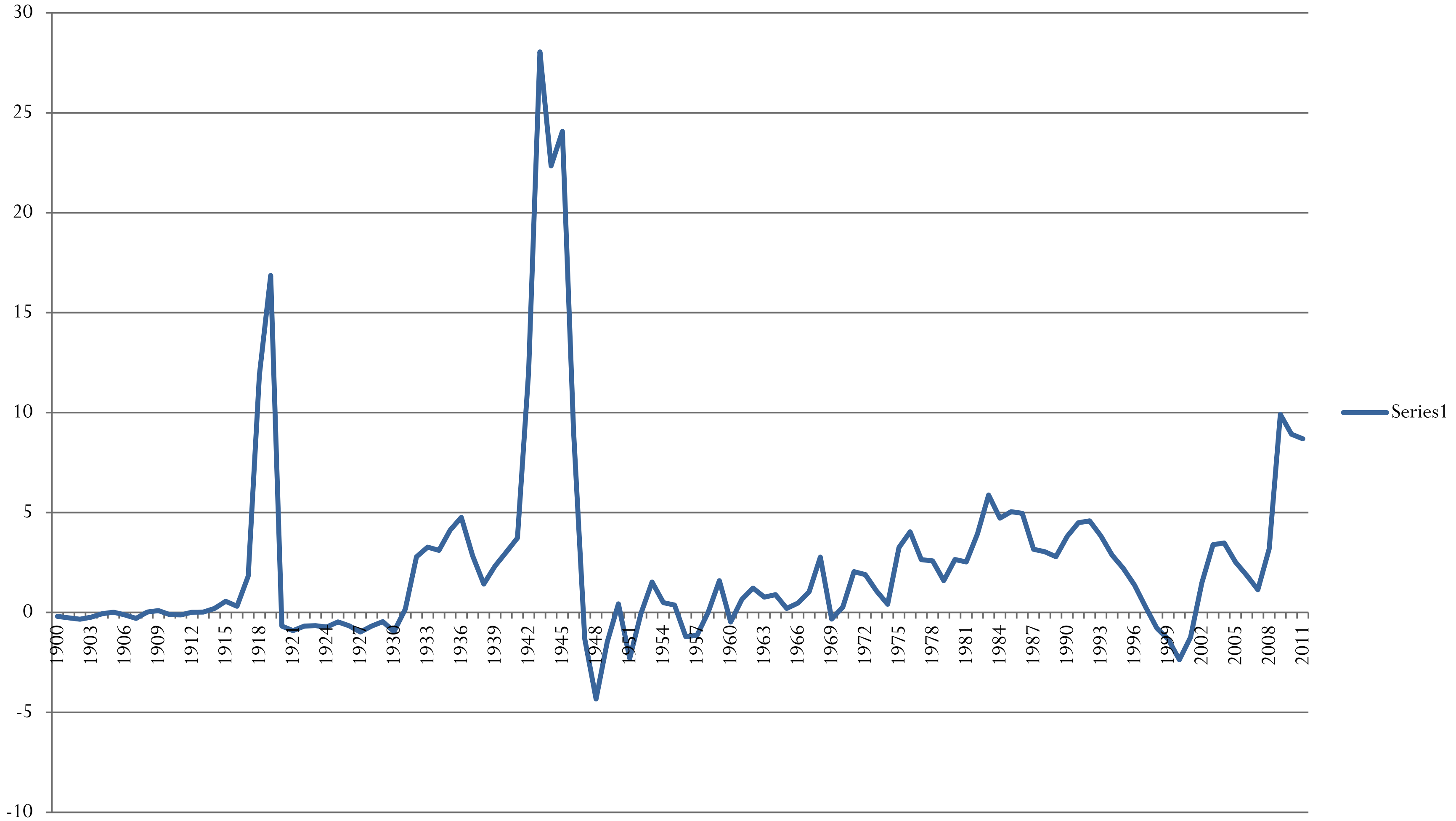
  Registered Investment Adviser and Fee-Only Planner

  kirk@pvwealthmgt.com 4365 Lawn Avenue, Suite 5
  pvwealthmgt.com Western Springs, IL 60558
  (708) 246-2366

Topics covered today

- Low return market environment
- Troubled government programs
- Longer lifespan requires additional resources
- Resources available from Society of Actuaries
- Withdrawal strategies during retirement
- Risks and considerations to withdrawal strategies

US Federal Deficit As Percent Of GDP



Winslow Financial LLC

Growing Fortunes Financial Partners, LLC

Pebble Valley Wealth Management

US Federal Deficit As Percent Of GDP

	US Billion $		
		Federal	
Year	US GDP	Deficit	pct GDP
2009	14,258	1,413	9.9
2010	14,508	1,294	8.9
2011	14,959	1,300	8.7

Winslow Financial LLC

Growing Fortunes Financial Partners, LLC

Pebble Valley Wealth Management

Federal Gross Public Debt As Percent of GDP

	US Billion $				
		Gross			
		Public			Average
Year	US GDP	Debt	Pct.	Int.	Int Rate
2008	14,441	9,986	69	253	2.5%
2009	14,258	11,876	83	187	1.6%
2010	14,508	13,529	93	196	1.4%
2011	14,959	14,764	99	230	1.6%

Federal Reserve Board Monetizing Federal Deficit

$877 billion in US Treasuries bought by FRB in past two years

about doubling their US Treasury holdings.

(Feb 29, 2012 balance less Mar 3, 2010 balance)

Temporary measure that cannot be sustained over multi-year period.

http://www.federalreserve.gov/releases/h41/hist/h41hist3.txt

Federal Reserve Board
Monetizing Federal Deficit

Percent change at seasonally adjusted annual rates	M1	M2
12 Months from Jan. 2011 to Jan. 2012	19.3%	10.2%

$9.8 Trillion M2 Money Supply, up 0.9 Trillion

In short run: creating money stimulates the economy

In long run: M2 growth rate » inflation plus real growth

Inflation concerns because of deficit spending and borrowing

US Treasury 5 Year = 0.83% annual yield (March 6, 2012)

assumes AAA credit and Zero inflation

List of Countries by Public Debt

Zimbabwe	231			
Japan	208			
Iceland	130			
Italy	120			
Greece	116	160 before cram down		
Portugal	110			
Ireland	105			
United States	102			

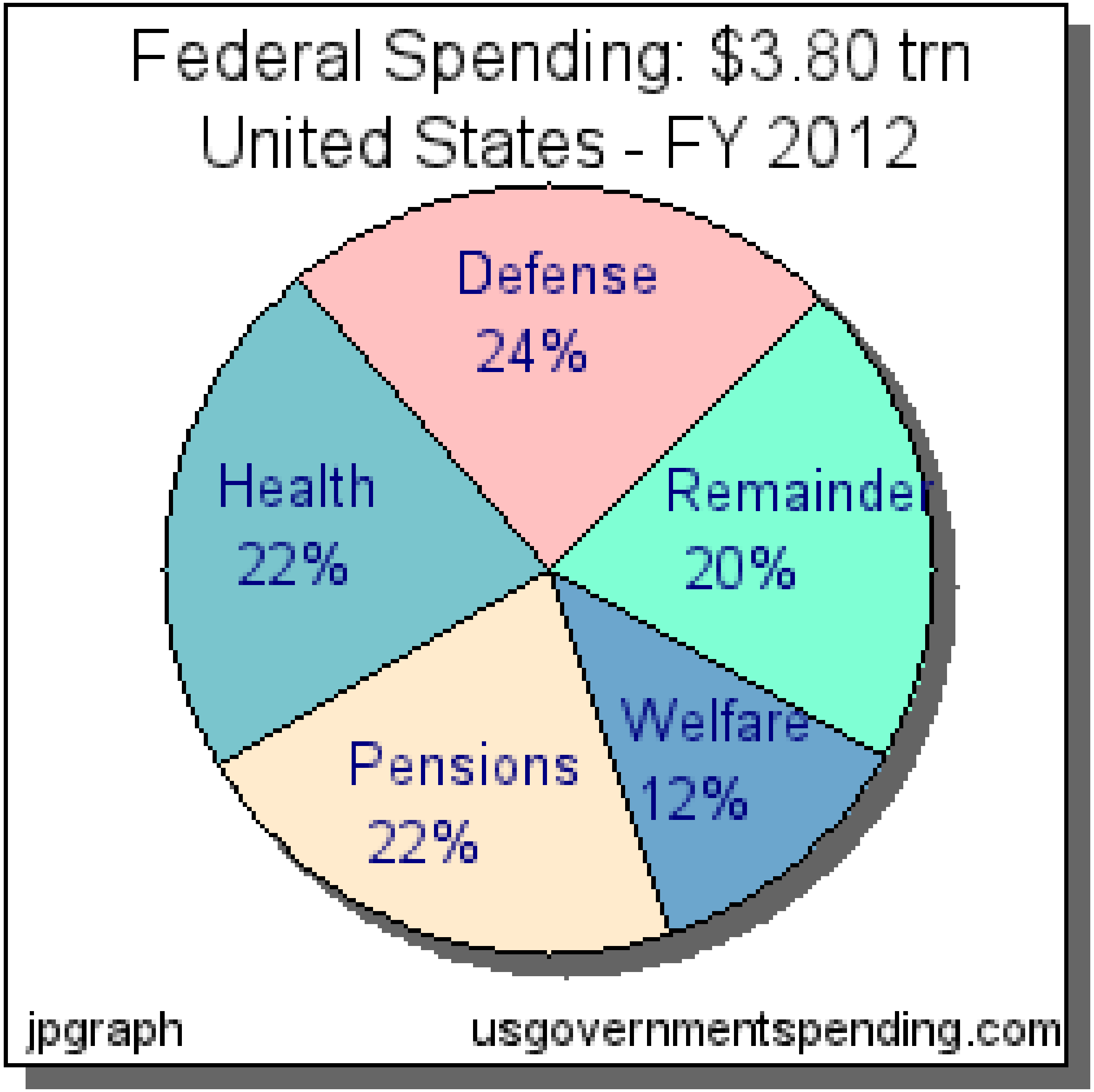
List of Countries by Public Debt

Method different than last year, includes Social Security Trust Fund and Federal Reserve Board US Treasury holdings.

Percent of Gross Domestic Product

2011 CIA and Eurostat estimates

http://en.wikipedia.org/wiki/List_of_sovereign_states_by_public_debt



Winslow Financial LLC

Growing Fortunes Financial Partners, LLC

Pebble Valley Wealth Management

Possible Medicare and Social Security Changes

- Doctor and Hospital payments cut
- Newly invented procedures/drugs not covered
- Increasing Medicare premiums
- Increasing deductibles and copayments
- Soc Sec annual inflation adjustments trimmed back

Lower Immigration to US

- Immigration emerges as a prominent component in the calculation: 60% of the population increase in the United States between 1994 and 2050 will be attributable to immigration and the descendants of immigrants.
- From 2005 to 2009, the number of people entering the U.S. illegally declined by nearly 67%, according to the Pew Hispanic Center, from 850,000 yearly average in the early 2000s to 300,000

Positive Emerging Market Economies

- Chinese economy grew at average rate of 10% for 30 years
- Emerging Markets 2012 forecast 5.4% growth (IMF), down from 6.2% in 2011
  - "The emerging markets are at the front of the train but it is a slower-moving train" El-Erian, CEO, PIMCO
  - Source Wall Street Journal, May 8, page A8

Challenges for Retirees

- 2000 to 2011 investment performance has been below most planning projections done at retiree retirement
- Some retirees are overspending their original retirement plan
- Some retirees resist reduced expectations and take higher investment risks (increased Beta).
- PT Barnum "A sucker is born every minute" applies also to retirees who want a home run with their investments

Successes for Retirees

- Some fiscally conservative retirees saved considerable money and spend at or below the “4%” suggested level and have the resources to live happily even in this “new normal” economy.

Are we planning for a long enough retirement?

- People are likely to live longer than they think
- Longevity is variable – averages can mislead
- Longevity is positively related to education and income
- Longevity is increasing
- Longevity is expensive
- Longevity is an insurable risk

We can’t plan for individual longevity

- If we plan for survival to 85, more than 50% of men and almost 60% of women will surprise us
- Even if we plan for survival to 95, we’ll underestimate lifespan for 13% of men and 20% of women
- On the other hand, 30% of men and 20% of women aged 65 won’t reach 80

Retirement planning requires…

- Contingency planning for shorter and longer lifespans
- Consider insurance solutions (annuitization)
- Ensuring that single surviving spouses have ample resources
  - E.g., maximum Social Security survivor benefits
  - Especially important for non-traditional couples

Improved Mortality

- There have been major unprecedented mortality improvements for humans in the 20th century
  - First at younger ages
  - More recently at older ages
- Patterns are common across many countries

US Life Expectancies

Age and Year	All	Male	Female
At Birth			
1900	47.3	46.3	48.3
2005	77.9	75.2	80.4
At 65 Years			
1950	13.9	12.8	15.0
2005	18.7	17.2	20.0
At 75 Years			
1980	10.4	8.8	11.5
2005	11.9	10.8	12.8

Why is longevity change important?

- Societal, employer, and employee choices about retirement and retirement age
- Helping individuals plan for themselves
- Understanding future of society – what public and private resources, goods and services will be needed and by whom
- Development of financial products and approaches

Thinking About Retirement?

- Considered as project for SOA Post-Retirement Needs and Risks Committee
- Addresses risk issues at or near time of retirement
- Committee found
  - Decisions complex and overlapping
  - Trade-offs involved
  - Some decisions are irrevocable, with high financial stakes
- Approach – "Decision Briefs" – short papers on each topic

Decision Briefs

- Topics:
  - Deciding when to retire
  - Dealing with unplanned early retirement
  - Special issues for women nearing retirement
  - Claiming Social Security
  - Methods of generating retirement income
  - Asset allocation
  - Decisions related to health insurance
  - Planning for long-term care financing
  - Housing considerations
  - Estate planning
  - How to find reliable financial advice

SOCIETY OF ACTUARIES

Big Question: When Should I Retire?

MANAGING RETIREMENT DECISIONS SERIES

Actuaries
Risk is Opportunity.®

Thinking about the decisions: Can they be changed?

Irrevocable

- Annuity purchase
- DB plan elections
- Rollover into IRA
- Retire from long-term employer
- Buy into Continuing Care Retirement Community

Can be changed

- Housing decisions (but can be costly)
- Investment/asset mix
- Change long term care insurance – can be costly or difficult
- Decision regarding working in retirement

Thinking about the decisions: Timing Considerations

Time constrained

- Benefit elections when leaving employment
- Sign up for Medicare
- Insurance purchase – buy before losing insurability

More flexible

- Housing choices
- When to retire (usually)
- Asset allocation

Withdrawal Strategies During Retirement

- Draw upon savings to augment income from other sources
  - Social Security, company pension, part-time income
- The questions are easy: how long and what will assets earn
  - We know the answers are not – longevity and market volatility
- Rules of thumb provide same inflation-adjusted amount yearly
- Additional nuances to consider
  - Taxes - care about what is left to spend, not withdrawn
  - Portfolio strategy – income, total return, bucket segmentation
  - Variable amount needs – when Social Security starts? lump expenses
  - Tax management – withdraw if not need? Capital gains on rebalance

Withdrawal Strategies – How Long?

- Longer than life expectancy; know the mortality table source

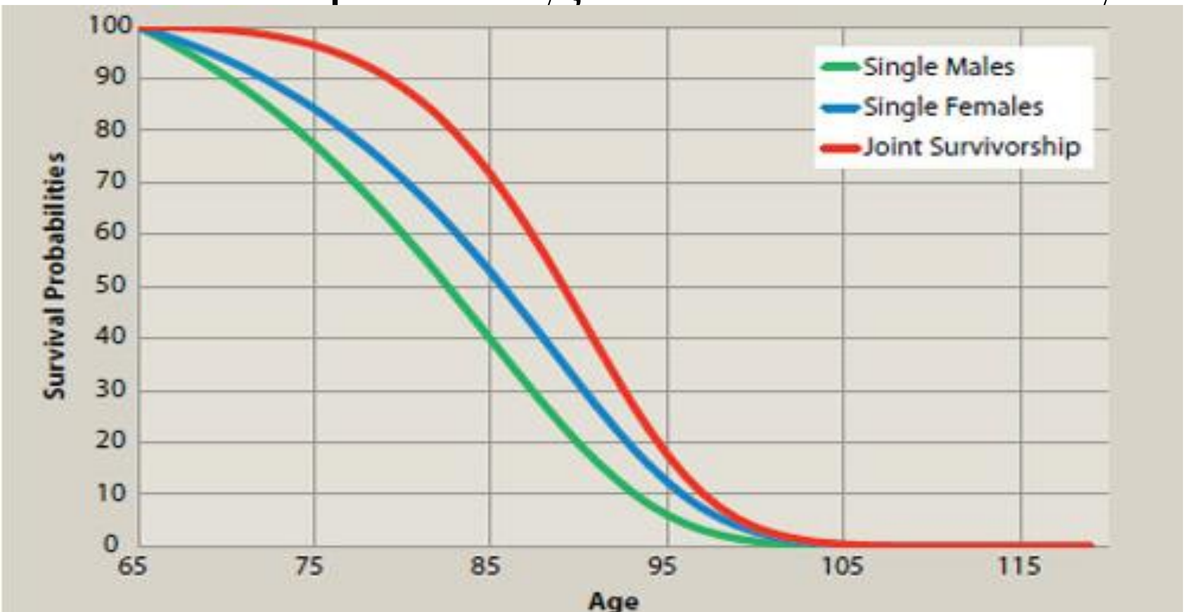


Table 1: Life Expectancy Ages

	Males		Females	
Current Age	Social Security	Annuity 2000	Social Security	Annuity 2000
60	80.3	84.6	83.2	87.4
65	81.5	85.4	84.2	88.0
70	83.1	86.6	85.4	88.8
75	85.1	88.2	87.0	89.9
80	87.4	90.2	88.9	91.3

- Source: "Spending Flexibility and Safe Withdrawal Rates"; SSA Table Finke, Pfau, Williams, *JFP*, Mar 2012
- Source: "Mortality Assumptions: Are Planners Getting It Right?"; Krueger, *JFP*, Dec 2011

Withdrawal Strategies – Original Research

- "Determining Withdrawal Rates Using Historical Data"
  - William P. Bengen, *Journal of Financial Planning*, Oct 1994: 171-180

- Source of "4% rule of thumb" plus additional insights
  - Sequence risk (3 periods); value of temporary reduced spending

- Used actual data with blends of US stocks and bonds over time
  - Base assumption of 50/50 allocation; up to 75% equities was attractive
  - Also consider inflation; '73-'74 hit plans harder than '29-'31

Withdrawal Strategies – Original Research

- What does 4% withdrawal rate mean?
  - 4% x Original Portfolio x (1+inflation) =Yr(1) $ Withdrawal
  - After withdraw end of year, rebalance to 50/50
  - Each year-end, grow last $ withdraw by inflation, withdraw, rebalance
- 3 Major Financial Events from study in grey
- Recent market updates in blue (note original study used calendar year data)

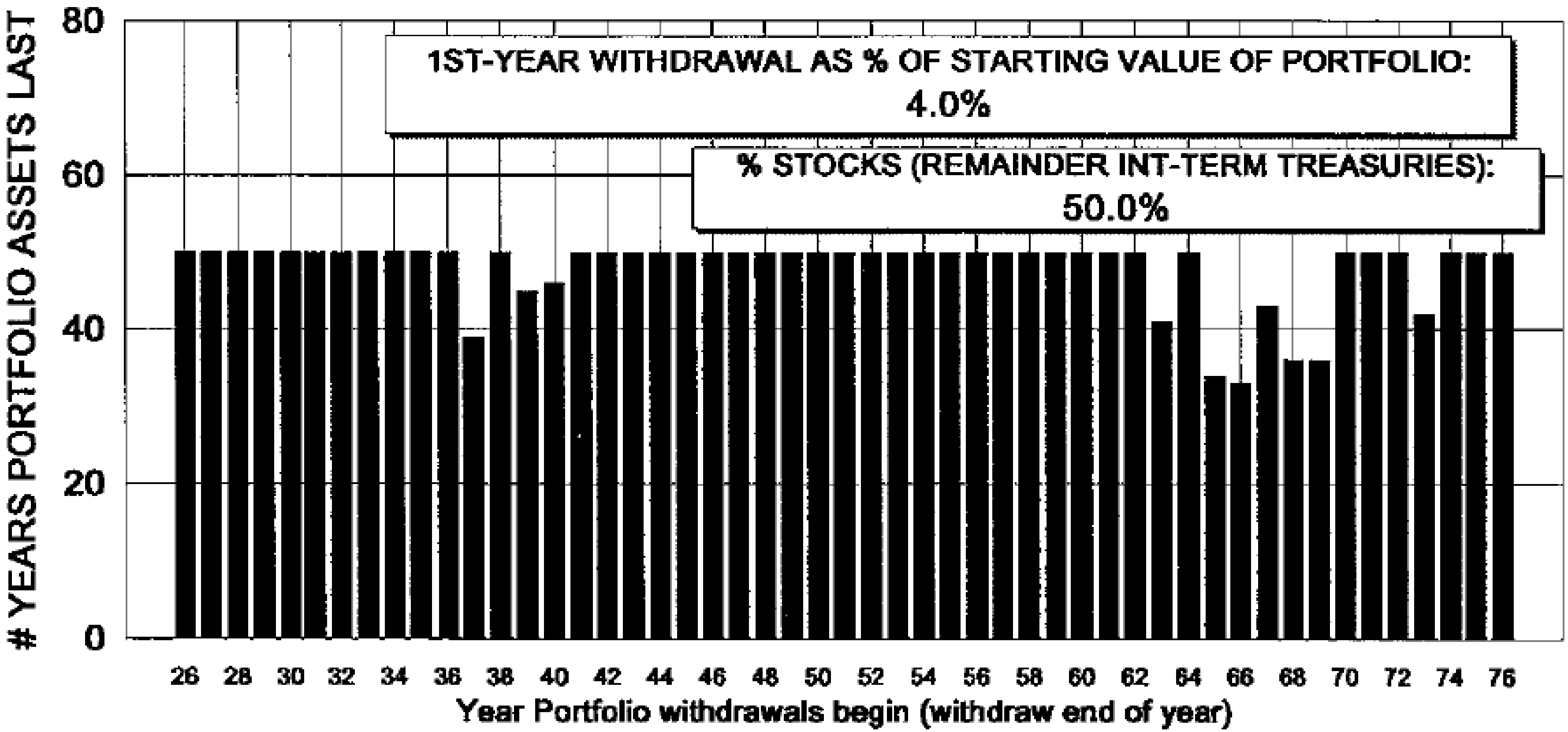
Period	Total return common stocks	Total return int-term bonds	Change in inflation
"Big Bang" (1973-1974)	-37.2%	10.6%	22.1%
"Big Dipper" (1937-1941)	-33.3%	16.7%	10.5%
"Little Dipper" (1929-1931)	-61.0%	10.5%	-15.8%
"Great Recession" (2008-2009)	-20.3%	11.5%	2.8%
"Extremes" (Oct '07 - Mar '09)	-55.0%	7.2%	2.0%
"Great Recovery" (Mar '09 - Mar '12)	115.8%	24.0%	6.9%

Source: Bengen; JFP Oct 1994

Source: PVWM Research; Morningstar Office; Barcap Agg for bonds

Withdrawal Strategies – Original Research

- 4% initial withdrawal assured 100% success of portfolio lasting for at least 33 years (many cases lasted 50 years or longer)



Source: "Determining Withdrawal Rates Using Historical Data" Bengen, *Journal of Financial Planning*, October 1994

Withdrawal Strategies– Updated Trinity Study

Table 2: **Retirement Portfolio Success Rates by Withdrawal Rate, Portfolio Composition, and Payout Period in Which Withdrawals Are Adjusted for Inflation**

	Annualized Withdrawal Rate as a Percentage of Initial Portfolio Value									
Payout Period	**3%**	**4%**	**5%**	**6%**	**7%**	**8%**	**9%**	**10%**	**11%**	**12%**
100% Stocks										
15 Years	100%	100%	100%	94%	86%	76%	71%	64%	51%	46%
20 Years	100%	100%	92%	80%	72%	65%	52%	45%	38%	25%
25 Years	100%	100%	88%	75%	63%	50%	42%	33%	27%	17%
30 Years	100%	98%	80%	62%	55%	44%	33%	27%	15%	5%
75% Stocks/25% Bonds										
15 Years	100%	100%	100%	97%	87%	77%	70%	56%	47%	30%
20 Years	100%	100%	95%	80%	72%	60%	49%	31%	25%	11%
25 Years	100%	100%	87%	70%	58%	42%	32%	20%	10%	3%
30 Years	100%	100%	82%	60%	45%	35%	13%	5%	0%	0%
50% Stocks/50% Bonds										
15 Years	100%	100%	100%	99%	84%	71%	61%	44%	34%	21%
20 Years	100%	100%	94%	80%	63%	43%	31%	23%	8%	6%
25 Years	100%	100%	83%	60%	42%	23%	13%	8%	7%	2%
30 Years	100%	96%	67%	51%	22%	9%	0%	0%	0%	0%
25% Stocks/75% Bonds										
15 Years	100%	100%	100%	99%	77%	59%	43%	34%	26%	13%
20 Years	100%	100%	82%	52%	26%	14%	9%	3%	0%	0%
25 Years	100%	95%	58%	32%	25%	15%	8%	7%	2%	2%
30 Years	100%	80%	31%	22%	7%	0%	0%	0%	0%	0%
100% Bonds										
15 Years	100%	100%	100%	81%	54%	37%	34%	27%	19%	10%
20 Years	100%	97%	65%	37%	29%	28%	17%	8%	2%	2%
25 Years	100%	62%	33%	23%	18%	8%	8%	2%	2%	0%
30 Years	84%	35%	22%	11%	2%	0%	0%	0%	0%	0%

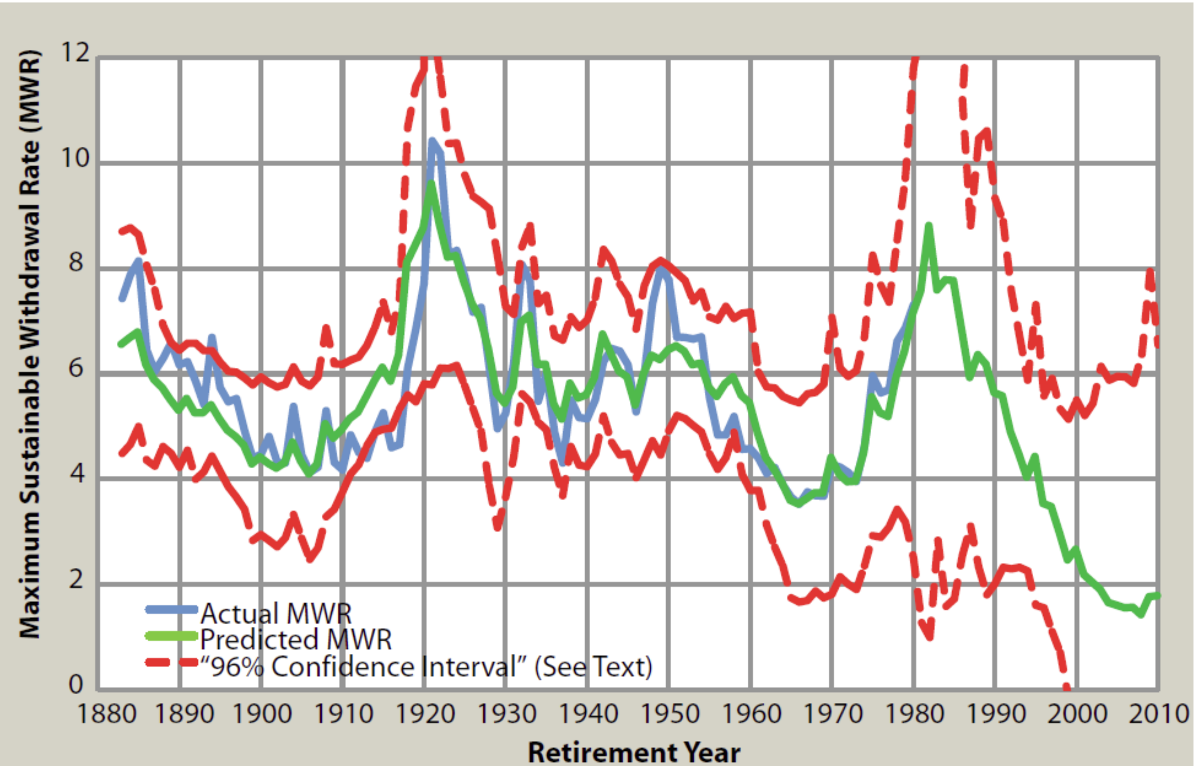
Note: Data for stock returns are monthly total returns to the Standard & Poor's 500 Index, and bond returns are total monthly returns to high-grade corporate bonds. Both sets of returns data are from January 1926 through December 2009 as published in the 2010 *Ibbotson SBBI Classic Yearbook* by Morningstar. Inflation adjustments were calculated using annual values of the CPI-U as published by the U.S. Bureau of Labor Statistics at www.bls.gov.

Source: "Portfolio Success Rates: Where to Draw the Line" Cooley, Hubbard, Walz, *Journal of Financial Planning*, April '11

Withdrawal Strategies–Predictive Rate Study

- ***Preliminary research*** but recent crisis shows 4% may not always work
- Don't spend excess after good years
- Be flexible on spending after severe crisis
- Low actual inflation may help sustainable rate

Figure 4: **Fitted and Predicted Maximum Sustainable Withdrawal Rates (MWR), for 60/40 Asset Allocation, 30-Year Retirement Period, Estimated for Years 1883–1980, Explanatory Variables: EY10, DY10, I**



Source: "Can We Predict the Sustainable Withdrawal Rate for New Retirees" Pfau, *Journal of Financial Planning*, Aug 2011

Withdrawal Strategies – Additional Research

- Advances in modeling capability
  - Studies referenced so far used historic data from US stocks and bonds
  - Expand using Monte Carlo analysis and additional asset class data
- Market environment during early years of withdrawal critical
  - Near retirement, still large % of equity; interest rates when annuitizing
- Look at blending annuities with a portfolio, not "either/or"
  - Different types for different needs - immediate, longevity and variable
- Reflect individual's risk tolerance and portfolio allocation
  - Different appetites for market volatility and "probability of success"

Withdrawal Strategies – Blend Annuities

- Annuitize a portion of portfolio to manage some risks
  - Rates currently low; balance waiting vs. current income need
- Portfolio + longevity annuity to manage mortality risk
  - Can answer "how long?" but left with market volatility
- Portfolio + immediate annuity for covering base expenses
  - Provide floor, absorb market risk through discretionary needs
- Variable annuity for managing mortality and investment risk
  - Understand features and costs
  - Lose liquidity and tax management flexibility

Withdrawal Strategies – Risk Tolerance

- Incorporate expected utility to capture trade-off of spending more early during retirement at risk of having to spend less later
  - Helps conceptual understanding but difficult to implement in practice

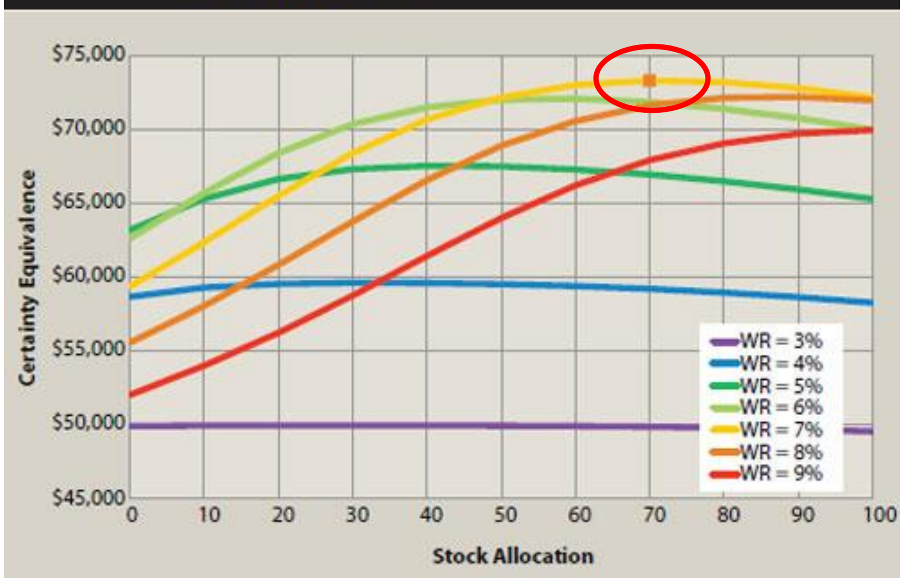


Figure 3: Inflation-Adjusted Withdrawal Strategy to Maximize Certainty Equivalence for Same-Age Couple, Retirement Age 65, Guaranteed Income $20,000, Risk Aversion 1, Nest Egg $1,000,000

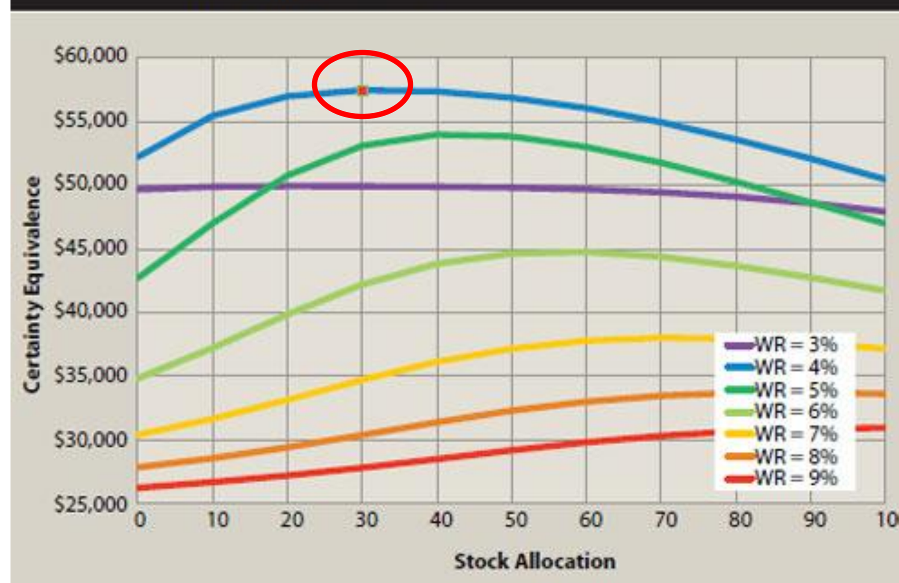


Figure 4: Inflation-Adjusted Withdrawal Strategy to Maximize Certainty Equivalence for Same-Age Couple, Retirement Age 65, Guaranteed Income $20,000, Risk Aversion 4, Nest Egg $1,000,000

- Source: "Spending Flexibility and Safe Withdrawal Rates"; SSA Table
  - Finke, Pfau, Williams, *Journal of Financial Planning*, Mar 2012: 44-51

Withdrawal Strategies – Portfolio Mgt

- After target initial withdrawal rate, still need to manage assets
  - Start with diversified portfolio in all cases
- Income focused portfolio
  - Focus on assets with high coupons and dividends, not growth
  - Watch tax treatment of investment income based on security
- Total return focus and sell assets as need
  - Focus on best total return and liquidate as need
  - Watch capital gain and whether short- or long-term
- Hybrid of setting aside 2+ years of living needs and replenish
  - If market drop, don't replenish until recover (Evensky approach)

Withdrawal Strategies - Show the Cash Flows

- Nuanced considerations – tax management and lump expenses
  - Withdraw "up to next tax bracket"; capital gains tax for lump expenses

			Total Income				Total Spending				Taxes
Year	Husband Age	Wife Age	Non-Asset Income	Retirement Account Withdrawal	Regular Asset Income	Total Income	Core Expenses	Additional Consume	Retirement Contribute	Total Spending	Total Taxes
2012	48	47	245,000	0	2,058	247,058	41,504	65,977	22,000	129,481	74,929
2013	49	48	245,000	0	4,184	264,184	41,328	65,977	22,000	129,305	77,974
…	…	…	…	…	…	…	…	…	…	…	…
2020	56	55	245,000	0	19,082	279,082	88,596	53,829	23,000	165,425	94,589
2021	57	56	245,000	0	19,785	264,785	38,018	53,829	17,000	108,847	88,112
2022	58	57	40,000	0	22,288	62,288	44,402	53,829	6,000	104,231	10,557
2023	59	58	40,000	0	20,351	60,351	44,609	53,829	6,000	104,438	9,778
2024	60	59	40,000	0	18,363	58,363	44,840	53,829	6,000	104,669	8,980
2025	61	60	40,000	3,077	16,324	59,401	95,095	53,829	6,000	154,924	8,184
2026	62	61	40,000	3,077	12,498	55,575	45,373	53,829	6,000	105,202	6,738
2027	63	62	40,000	3,077	10,418	53,495	45,676	53,829	6,000	105,505	5,958
2028	64	63	40,000	3,077	8,280	51,357	46,003	53,829	6,000	105,832	5,342
2029	65	64	40,000	3,077	6,073	49,150	35,870	53,829	6,000	95,699	5,319
2030	66	65	40,000	3,077	3,393	46,470	88,475	53,829	6,000	148,304	4,139
2031	67	66	14,513	70,603	203	85,319	29,721	53,829	0	83,550	8,531
2032	68	67	36,477	70,603	0	107,080	29,928	55,866	0	85,794	12,558
2033	69	68	43,733	70,603	263	114,599	30,155	55,866	0	86,021	14,714
2034	70	69	43,733	70,603	680	115,016	30,401	55,866	0	86,267	14,985

Conclusions

- Fiscal situation will impact government programs
- Recent market environment challenging retirement plans
- Living longer raises questions about retirement that advisors and Society of Actuaries can help answer
- Traditional rules of thumb on withdrawals need to be understood and monitored

Contact Information

- Daniel E. Winslow, FSA, CPA – Winslow Financial LLC

  Registered Investment Adviser and Fee Based Planner

  Dan.Winslow@Winslow-Financial.com
  Winslow-Financial.com
  222 E. Wisconsin Ave., Suite 214
  Lake Forest, IL 60045
  (847) 217-0366

- Cheryl Krueger, CFP®, FSA – Growing Fortunes Financial Partners, LLC

  Registered Investment Adviser and Fee-Only Planner

  Cheryl@GrowingFortunes.com
  GrowingFortunes.com
  1821 Walden Office Square, Suite 400
  Schaumburg, IL 60173
  (847) 230-9636

- Kirk A. Kreikemeier, CFP®,CFA, FSA - Pebble Valley Wealth Management

  Registered Investment Adviser and Fee-Only Planner

  kirk@pvwealthmgt.com
  pvwealthmgt.com
  4365 Lawn Avenue, Suite 5
  Western Springs, IL 60558
  (708) 246-2366