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# Safe Withdrawal Rates: How to Retire (Almost) Broke

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## Overview of SWR

- What it is
- What affects it
- Risks
- Different approaches to calculating SWRs
- Available resources
- Summary



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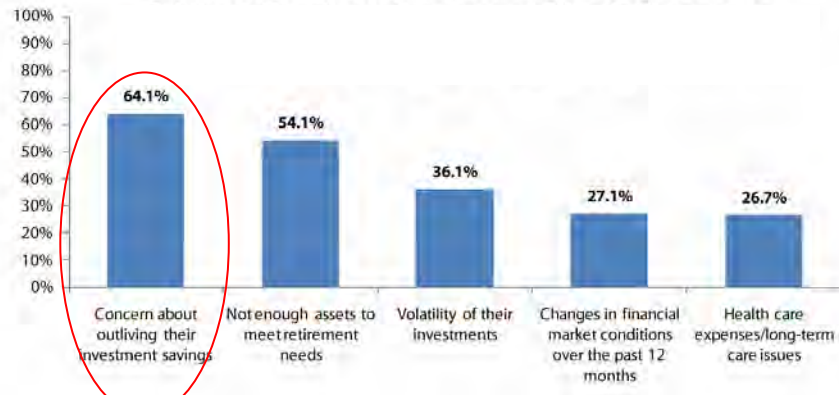
## Income Sources in Retirement

- Social Security (own, spousal, survivors)
- Pension(s)
- Medicare
- Your lifetime savings



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## Top Reasons for Changing Retirement Plans



Source: FPA Research Center



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## What is an SWR?

- “Safe Withdrawal Rate”:

*The rate at which one’s retirement savings can be drawn down each year with a low risk of running out of funds.*



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## Factors Affecting SWRs

- Age at retirement:
  - Life expectancy → # of years savings must last
- Portfolio mix (% stocks/bonds/other)
- Market conditions near time of retirement
- Acceptable probability of failure ( $P[f]$ ):
  - Backup plans (e.g., reverse mortgage, relatives)
  - Risk tolerance
  - Willingness to change lifestyle during retirement



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## SWR vs. Risk Tolerance

*The ability to withstand possible early failure  
(= $P[f]$ ) permits higher SWRs.*



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## Risks Inherent in Choosing an SWR

- Excessive longevity
- Inflation
- Tax rates
- Excessive early withdrawals
  - Emergencies
- Sequence of market returns
  - Particularly near time of retirement
- *Underspending*
  - *Shortchanging your retirement → more \$\$ to heirs*



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## Risks: Longevity

- It isn't what it used to be... it's longer (and getting longer still)



58% age 90 and above

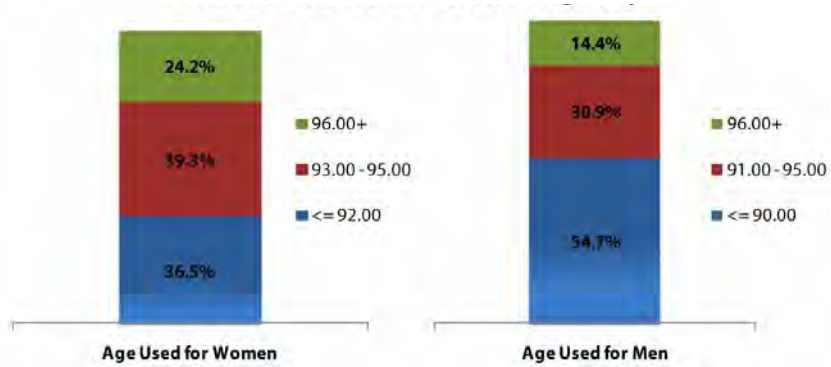
**Table 1: Life Expectancy Ages**

Current Age	Males		Females	
	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



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## Risks: Longevity (#s Used by Planners)



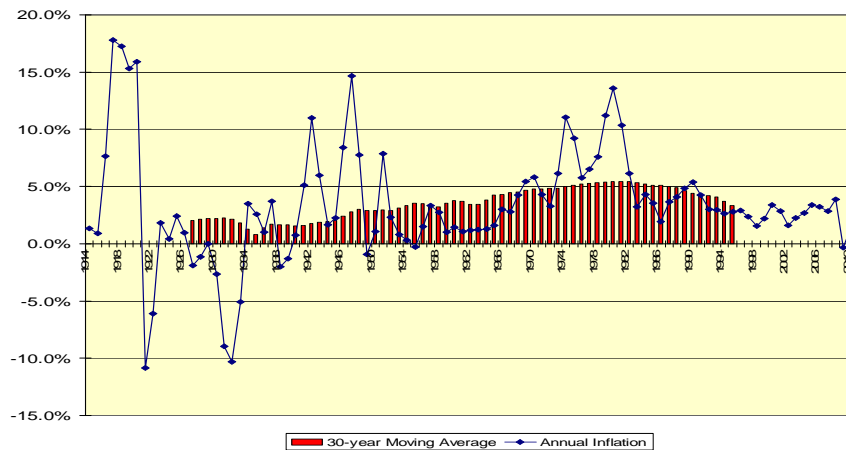
Source: FPA Research Center



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## Risks: Inflation

Rolling 30-year Average Inflation Rate



Source: InflationData.com



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## Risks: Tax Rates

- For IRAs, 401(k)'s: \$1 ≠ \$1 to spend
  - Must consider income taxes owed (Federal, state)
- For non-qualified assets: Capital gains and tax on income (dividends, interest)
- The tax rates will change!
  - Most likely ↑

*Therefore, you need to factor after-tax returns into your income calculations.*



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## Risks: Tax Rates + Management Fees

### EXPENSE & TAX DRAG

	CURRENT RETURN*	FUTURE RETURN
GROSS	11.5%	7.8%
Less Expenses (1%)	1.0	1.0
Less Taxes (20%)	2.3	1.4
NET GROSS RETURN	8.2	5.4

Optimistic estimate for next 5 years

### After Inflation - What Investors Have to Spend

Past	Future
5.1%	2.4%

\* 40% Fixed / 60% Equity – 25 Years

Source: Harold Evensky, "The New Wealth Management"



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## Risks: “Sequence of Market Returns”

- Example: Same annual returns, but in reverse order
  - More losing years early on
  - Identical \$ withdrawals each year
- Yr 25 Residual Value: \$19K vs. \$2.5 million!

Strategy #1 – Systematic Withdrawal Hypothetical Example

Year	PORTFOLIO 1			PORTFOLIO 2		
	Investment Return	Withdrawal	Account Balance	Investment Return	Withdrawal	Account Balance
1	-8.4%	30,000	\$427,900	1.3%	30,000	\$476,600
2	4.0%	30,900	\$414,030	10.1%	30,900	\$493,646
3	14.3%	31,827	\$441,410	7.6%	31,827	\$499,385
4	19.0%	32,782	\$492,275	30.4%	32,782	\$618,417
5	-14.8%	33,765	\$385,752	-3.1%	33,765	\$565,419
6	-26.5%	34,778	\$248,942	31.5%	34,778	\$708,917
7	37.3%	35,822	\$305,376	16.8%	35,822	\$792,335
8	23.7%	36,896	\$341,596	5.2%	36,896	\$796,799
9	-7.3%	38,003	\$278,793	18.6%	38,003	\$906,602
10	6.6%	39,143	\$257,366	32.0%	39,143	\$1,157,644
11	18.6%	40,317	\$265,631	6.1%	40,317	\$1,188,270
12	32.1%	41,527	\$309,451	22.4%	41,527	\$1,412,559
13	-4.9%	42,773	\$251,484	21.1%	42,773	\$1,667,578
14	21.1%	44,056	\$260,516	-4.9%	44,056	\$1,542,024
15	22.4%	45,378	\$273,416	32.1%	45,378	\$1,992,099
16	6.1%	46,739	\$243,383	18.6%	46,739	\$2,315,890
17	32.0%	48,141	\$273,197	6.6%	48,141	\$2,419,903
18	18.6%	49,585	\$274,290	-7.3%	49,585	\$2,194,633
19	5.2%	51,073	\$237,535	23.7%	51,073	\$2,663,688
20	16.8%	52,605	\$224,883	37.3%	52,605	\$3,604,638
21	31.5%	54,183	\$241,605	-26.5%	54,183	\$2,597,028
22	-3.1%	55,809	\$178,282	-14.8%	55,809	\$2,157,378
23	30.4%	57,483	\$174,997	19.0%	57,483	\$2,508,718
24	7.6%	59,208	\$129,107	14.3%	59,208	\$2,808,257
25	10.1%	60,984	\$81,111	4.0%	60,984	\$2,859,042
26	1.3%	62,813	\$19,369	-8.4%	62,813	\$2,555,498

Source: Securities America Financial Corp.



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## Risks: “Sequence of Market Returns”

- The “Birthday Problem”
  - Often highest balance in early years of retirement
  - Year of retirement has a major impact on SWR

Figure 1: Maximum Sustainable Withdrawal Rates (MWR) for 60/40 Asset Allocation, 30-Year Retirement Period



Source: Journal of Financial Planning (Pfau, May 2011)



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## SWR Methodology: “4% Rule”

1. Year 1 withdrawals at 4 - 4.5% of total savings
2. Maintain 50% stock/50% bond mix
  - Rebalance annually
  - Can go up to 75% equity if desired
3. Annually increase withdrawal by current inflation rate (CPI-U)
4. Plan to withdraw for 30 years

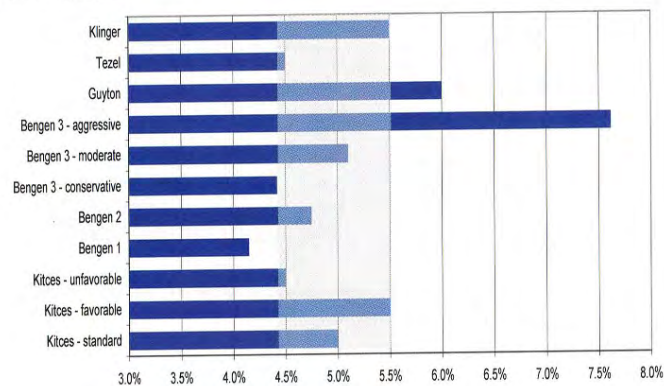


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## “4% Rule”: Results of Various Studies

### ■ Results cluster in 4.4 - 5.5% range

Depending on the assumptions and methodology used, these studies suggest safe initial withdrawal rates ranging from 4.2% to 7.6%, but the results tend to cluster between 4.4% and 5.5%.



Source: *WJM Financial*



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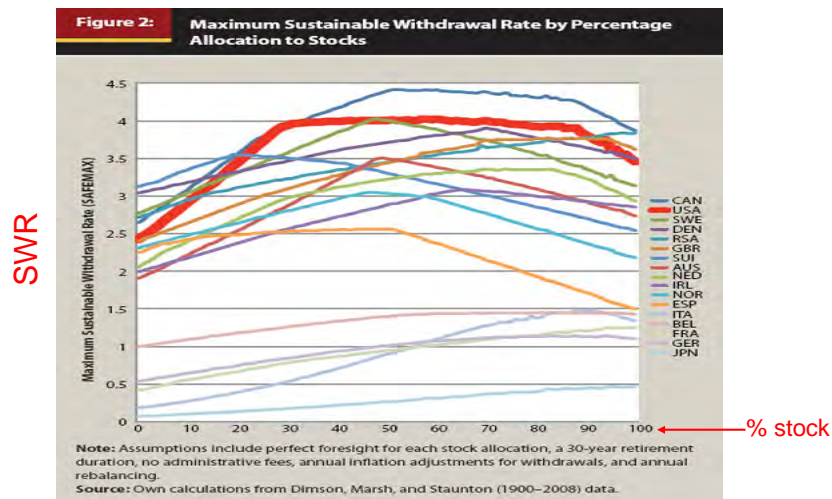
## “4% Rule”: Problems and Issues

- Living longer than 30 years
- Example of 17 Developed Countries
  - Much lower SWRs in their respective markets
- End up with large surpluses in most cases
  - Significant underspending of retirement funds
  - Shortchanging your early years of retirement



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## “4% Rule”: 17 Developed Countries



Source: Wade Pfau (*Journal of Financial Planning*, December 2010)



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## “4% Rule”: 17 Developed Countries

**Table 3: Sustainable Withdrawal Rates with Perfect Foresight Assumption for Retirees, 1900–1979**

	SAFEMAX	SAFEMAX Year	10th Percentile	Withdrawal Rate = 4%		Withdrawal Rate = 5%	
				# Years in Worst Case	% Failures Within 30 Years	# Years in Worst Case	% Failures Within 30 Years
Canada	4.42	1969	5.04	30	0.0%	23	8.8%
Sweden	4.23	1914	4.92	30	0.0%	20	11.3%
Denmark	4.08	1937	4.6	30	0.0%	20	28.8%
United States	4.02	1969	4.7	30	0.0%	20	22.5%
South Africa	3.84	1937	4.88	27	1.3%	17	11.3%
United Kingdom	3.77	1900	4.17	26	3.8%	17	27.5%
Australia	3.68	1970	4.91	25	2.5%	18	10.0%
Switzerland	3.59	1962	4.08	26	5.0%	18	40.0%
The Netherlands	3.36	1941	4.14	22	2.5%	17	37.5%
Ireland	3.28	1911	3.41	21	25.0%	15	45.0%
Norway	3.13	1915	3.46	20	32.5%	13	61.2%
Spain	2.56	1957	3.07	19	36.3%	15	68.8%
Italy	1.56	1944	2.61	6	62.5%	5	76.3%
Belgium	1.46	1911	1.78	11	40.0%	9	68.8%
France	1.25	1943	2.62	7	42.5%	7	71.3%
Germany	1.14	1914	1.52	9	25.0%	8	41.3%
Japan	0.47	1940	0.54	3	37.5%	3	40.0%

Note: Assumptions include perfect foresight, a 30-year retirement duration, no administrative fees, annual inflation adjustments for withdrawals, and annual rebalancing.  
Source: Own calculations from Dimson, Marsh, and Staunton (1900–2008) data.

Source: Wade Pfau (*Journal of Financial Planning*, December 2010)



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## “4% Rule”: 17 Developed Countries

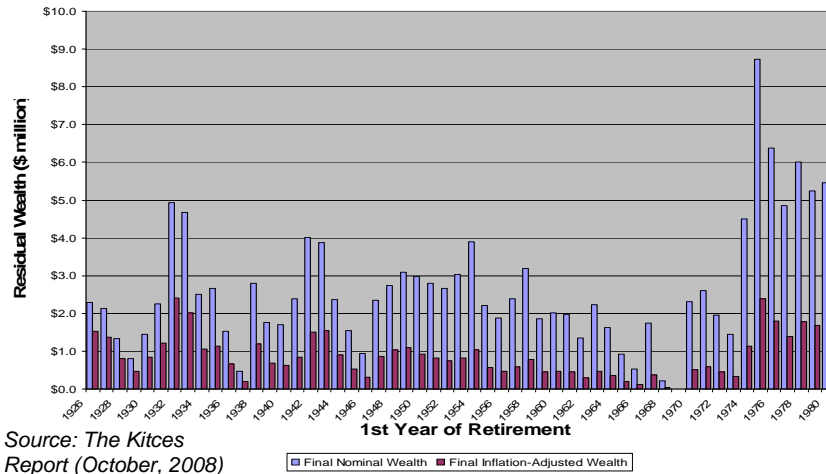
- Several observations:
  - Maximum SWR ranges from 4.4% to 0.5% **A**
  - 5 countries w/ Max. SWR < 1.6%
    - @4%, 8 of 17 would have failed > 25% of the time **B**
    - @5%, 5 countries fail > 60% of the time **C**
- Maximum SWR ≠ 100% stock allocation
  - Typically between 30% and 70% stocks (see earlier graph)



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## Surpluses at End Using “4% Rule”

Residual Wealth After 30 Years Using "4% Rule"  
(starting with \$500,000)



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## Other Approaches to SWR

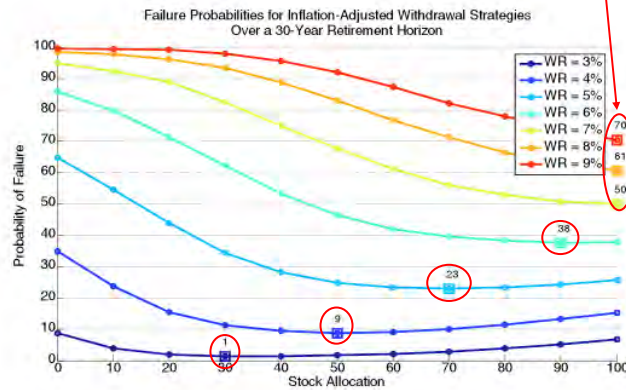
1. Using different SWR rates,  $P[f]$
2. Adjusting SWR based on initial market valuation
3. Varying the stock/bond/other asset mix
4. Dynamic readjustments



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## Using Different SWR Rates, P[f]

- Increasing risk of failure ( $P[f]$ ) with increasing SWR
  - Q: What is an acceptable  $P[f]$  for you?
- Note the optimal stock/bond mixes for minimizing failure risk (circled)



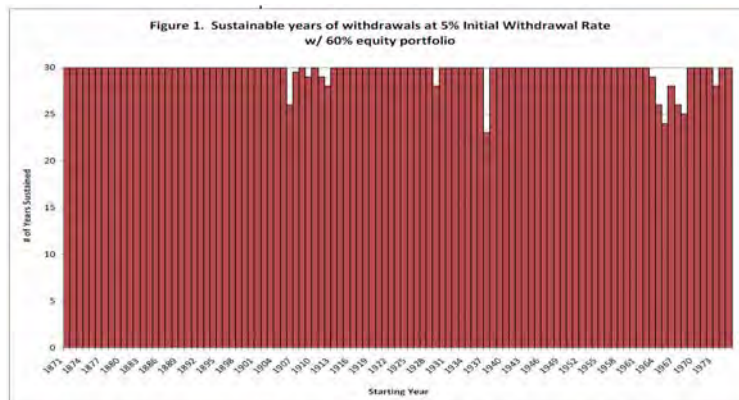
Source: Financial Advisor Magazine (Pfau, October, 2011)



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## Using 5% SWR

- 5% SWR resulted in success 87% of time (1871-1974)
- Funds lasted >25 years more than 97% of the time



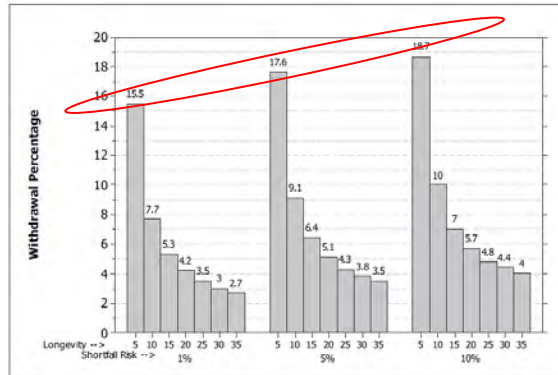
Source: The Kitces Report (May, 2008)



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## Using Different Time Periods, P[f]s

- 50/50 stock/bond mix
- 1%, 5%, or 10% failure likelihood; what can you tolerate?
- Fewer years = higher SWRs



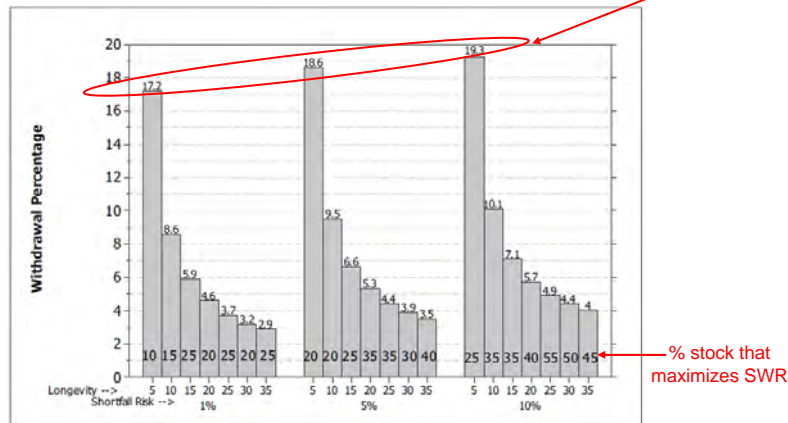
Source: Financial Services Review (Sptizer, No. 17, 2008)



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## ... and different % Stocks/Bonds

- %s shown optimize SWRs

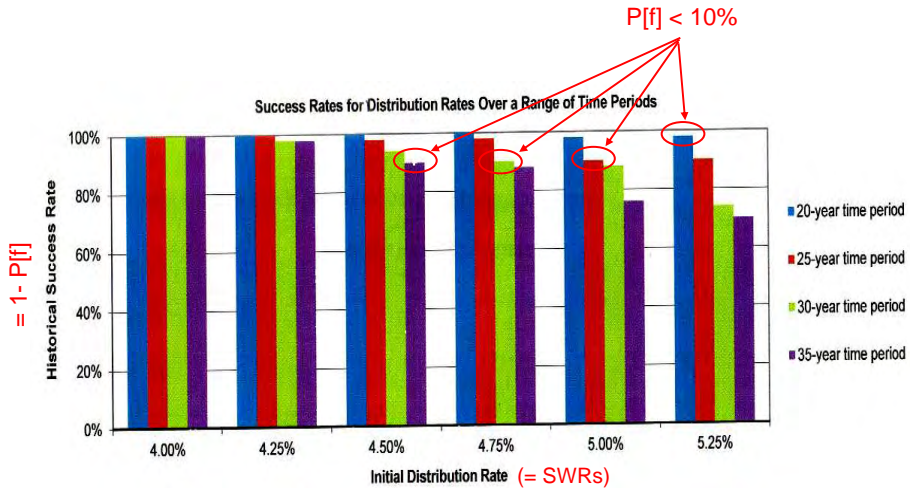


Source: Financial Services Review (Sptizer, No. 17, 2008)



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## Another View of Diff. Durations, P[f]

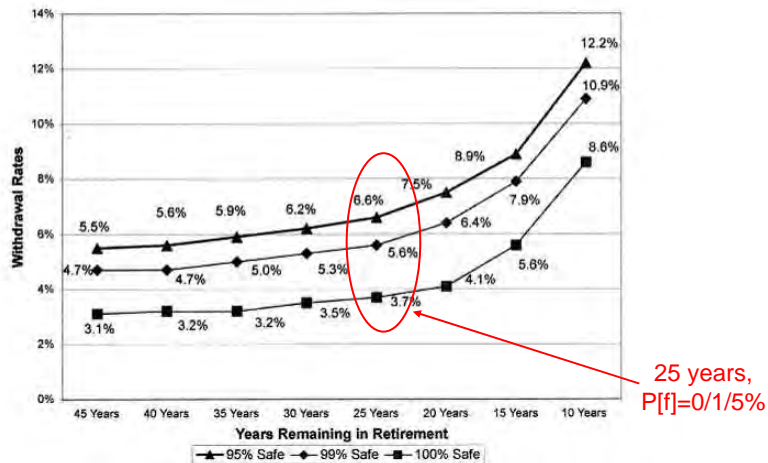


Source: WJM Financial



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## One More View of Durations, P[f], SWRs



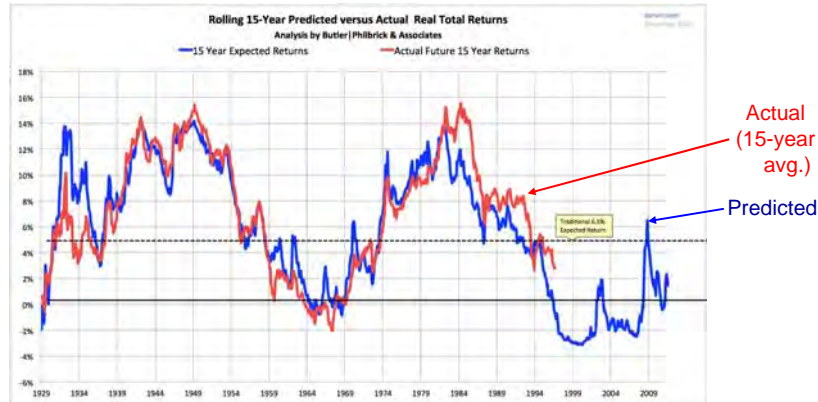
Source: "Yes, You Can Still Retire Comfortably!" (Stein, De Muth, 2008)



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## SWR Based on Market Valuation Measures

- Averaged market performance and P/E ratios can be highly predictive of long-term (> 10 year) returns



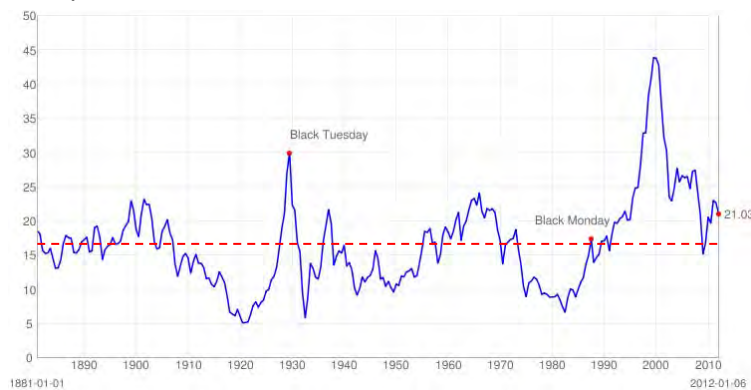
Source: Butler/Philbrick Assoc. (dshort.com)



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## Valuation Measure: Shiller PE10

- 10-year P/E moving average, normalized for inflation
- Current Value of 21.03 (vs. long-term mean of 16.43)
- Implies current market overvaluation of 28%



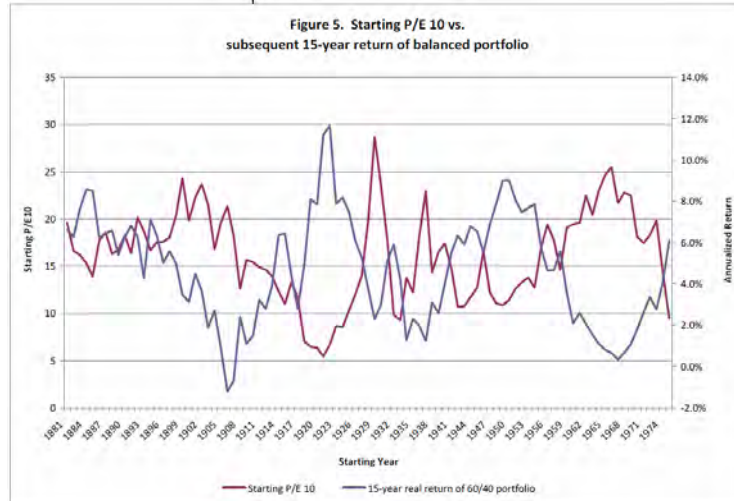
Source: multpl.com



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## Inverse Correlation: SWR and PE10

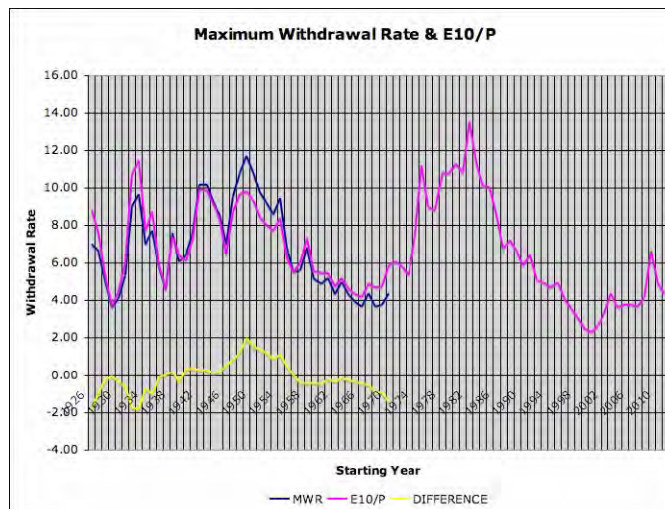


Source: *The Kitces Report* (May, 2008)



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## Correlation of “Inverse of PE10” to SWR



Source: [bogleheads.com](http://bogleheads.com)



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## Comparing PE10 to Historical SWR

- Initial PE10 quintiles versus historical SWR ranges

Quintile	Lower P/E	Upper P/E	Lowest SWR	Highest SWR	Average SWR
1	5.4	12.0	5.7%	10.6%	8.1%
2	12.0	14.7	4.8%	8.3%	6.7%
3	14.7	17.6	4.9%	8.1%	6.3%
4	17.6	19.9	4.9%	7.2%	5.8%
5	19.9	28.7	4.4%	6.1%	5.1%

Low  
↓  
Hi

Current range

Source: The Kitces Report (May, 2008)



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## Starting P/E vs. 4% SWRs

STARTING P/E QUINTILES	STARTING P/E RANGE	SUCCESS RATE	AVERAGE ENDING \$\$	AVG YRS IF OUT OF \$\$
Top 20%	18.7 +	76%	\$ 2,555,842	27.3
Second 20%	15.1 to 18.6	100%	\$ 5,517,179	n/a
Third 20%	12.2 to 14.9	100%	\$ 7,009,735	n/a
Fourth 20%	10.4 to 12.0	100%	\$ 10,779,456	n/a
Bottom 20%	below 10.4	100%	\$ 9,317,929	n/a
ALL PERIODS	14.4 avg	95%	\$ 6,980,717	27.3

Current P/E=14.7

Crestmont Research (www.CrestmontResearch.com)



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## Starting P/E vs. 5% SWRs

**Safe Withdrawal Rate From Stock Market Portfolio**  
5% Withdrawal Plus Inflation: 30-Year Periods Since 1900

STARTING P/E QUINTILES	STARTING P/E RANGE	SUCCESS RATE	AVERAGE ENDING \$\$	AVG YRS IF OUT OF \$\$
Top 20%	18.7 +	41%	\$ (1,141,148)	21.8
Second 20%	15.1 to 18.6	75%	\$ 1,624,058	22.0
Third 20%	12.2 to 14.9	69%	\$ 4,421,662	24.0
Fourth 20%	10.4 to 12.0	94%	\$ 8,175,391	26.0
Bottom 20%	below 10.4	100%	\$ 6,889,885	n/a
ALL PERIODS	14.4 avg	75%	\$ 3,930,573	22.6

*Crestmont Research (www.CrestmontResearch.com)*

Current  
P/E=14.7



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## Kitces Adjustment to “4% Rule”

Rules for adjusting Safe Withdrawal Rates	
P/E10	Safe withdrawal rate impact
Above 20.0 “overvalued”	Utilize base safe withdrawal rate of 4.5%
Between 12.0 and 20.0 “fairly valued”	Increase safe withdrawal rate by 0.5% to 5.0%
Below 12.0 “undervalued”	Increase safe withdrawal rate by 1.0% to 5.5%

Source: *The Kitces Report (May, 2008)*



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## Can Also Vary Asset Mix

- Between 50/50 and 75/25 stk/bnd gives best result

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

Normalized Withdrawal Rate as a Percentage of Initial Portfolio Value

Payout Period	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
<b>100% Stocks</b>										
15 Years	100%	100%	100%	94%	86%	76%	71%	64%	51%	46%
20 Years	100%	100%	92%	80%	72%	63%	52%	45%	28%	25%
25 Years	100%	100%	80%	75%	63%	50%	42%	33%	27%	17%
30 Years	100%	98%	80%	62%	55%	44%	33%	27%	15%	5%
<b>75% Stocks/25% Bonds</b>										
15 Years	100%	100%	100%	97%	87%	77%	70%	59%	47%	39%
20 Years	100%	100%	95%	80%	72%	60%	49%	41%	24%	11%
25 Years	100%	100%	87%	70%	58%	42%	32%	20%	10%	3%
30 Years	100%	100%	82%	60%	48%	35%	17%	5%	0%	0%
<b>50% Stocks/50% Bonds</b>										
15 Years	100%	100%	100%	96%	84%	71%	61%	44%	24%	21%
20 Years	100%	100%	94%	78%	63%	43%	31%	23%	8%	6%
25 Years	100%	100%	83%	66%	42%	23%	13%	8%	7%	2%
30 Years	100%	96%	69%	51%	22%	9%	0%	0%	0%	0%
<b>25% Stocks/75% Bonds</b>										
15 Years	100%	100%	100%	99%	77%	59%	40%	24%	26%	12%
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%
<b>100% Bonds</b>										
15 Years	100%	100%	100%	81%	54%	37%	24%	27%	19%	10%
20 Years	100%	97%	69%	37%	29%	28%	17%	8%	2%	2%
25 Years	100%	82%	33%	23%	18%	8%	8%	2%	2%	0%
30 Years	84%	15%	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 S&P Capital Markets 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: Journal of Financial Planning (Cooley, Hubbard, Walz, April 2011)



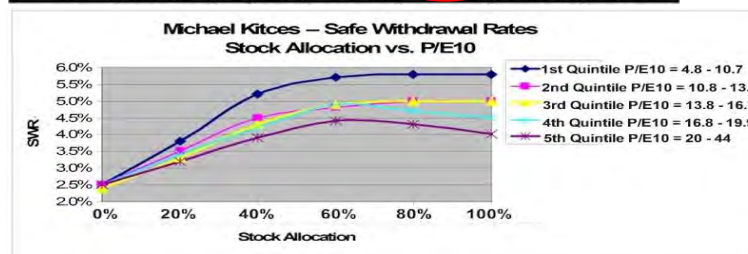
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## Asset Mix vs. SWR: Another View

**Figure 8. Safe withdrawal rate ranked by P/E10 with varying equity exposure**

P/E Quintile	0%	20%	40%	60%	80%	100%
1	2.5%	3.8%	5.2%	5.7%	5.8%	5.8%
2	2.5%	3.5%	4.5%	4.8%	5.0%	5.0%
3	2.4%	3.3%	4.3%	4.9%	5.0%	5.0%
4	2.5%	3.4%	4.2%	4.9%	4.7%	4.5%
5	2.5%	3.2%	3.9%	4.4%	4.3%	4.0%

Lower stock Valuation = higher %



Source: The Kitces Report (May 2008)



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## SWR Dynamic Readjustment Method

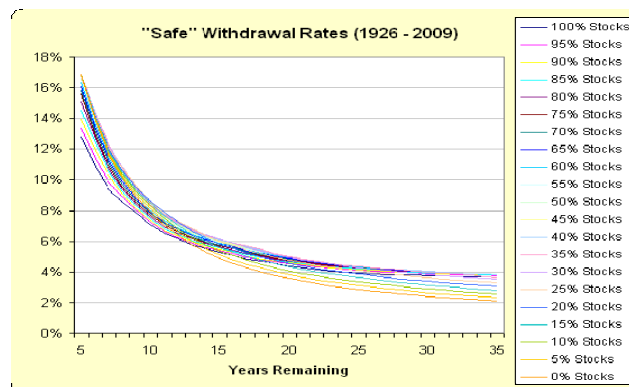
- Proposed by Stein and De Muth in “*Yes, You Can Still Retire Comfortably!*” (2006)
- Procedure:
  1. Estimate duration of retirement
  2. Calculate SWR (=f[duration, P[f], PE10, etc.) and move 1 year’s worth of funds to cash equivalent
  3. Annually adjust SWR for inflation, withdraw to cash
  4. Every 5 years, recalculate SWR as if it were your 1<sup>st</sup> day of retirement
    - Reduce duration by 5 years
    - SWR based on current variables, \$ remaining



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## “Annual Dynamic Readjustment”

- Reset SWR annually:
  - Minimizes amount left over at the end
  - SWR applied to amount remaining (= f[Years remaining, stock/bond mix])
  - Disadvantages: More effort, more variability



Source: [bobsfinancialwebsite.com](http://bobsfinancialwebsite.com)



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## SWR Adjustment Methods for Dynamic Withdrawals

Adjustments Typically Made by Advisers who Use Dynamic Withdrawal	
OPTIONS	PERCENT
Adjust the recommended withdrawal amount so that it <b>keeps pace with inflation.</b>	35.6%
Adjust the recommended withdrawal amount if the current withdrawal rate <b>percentage varies too much from the initial</b> withdrawal rate percentage. = "smoothing"	34.5%
Adjust the recommended withdrawal amount <b>based on the current results of a Monte Carlo or other simulation analysis.</b>	34.5%
Adjust the recommended withdrawal amount <b>based on current and expected stock market valuation levels.</b> = PE10, etc.	33.2%
Adjust the recommended withdrawal amount so that it <b>maintains the initial withdrawal rate percentage.</b>	18.4%
Other*	12.3%
*Other responses most commonly include adjusting based on client need/goals, changes in client situation, and various market shifts.	

Source: Financial Planning Association (FPA Research Center Whitepaper: Financial Adviser Retirement Income Planning Experiences, Strategies, and Recommendations (Dec., 2011))



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## Other Approaches for Retirement Income

- Immediate annuities:
  - Can do partial (e.g., needed cash flow)
  - Is the most "vanilla" annuity (easy to compare)
  - Advantage: Is predictable
  - Disadvantage: Doesn't account for inflation, not very good returns at present (low interest rates)
- Fixed deferred annuities:
  - "Longevity insurance" (e.g., start at Year 31)
  - Less expensive than immediate



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## Other Approaches to SWRs

### All-TIPS strategy (Huebscher): ➔

- Has funds to support 4% SWR
- 100% 30-year TIPS
- Lower P[f], but also lower residual at end
- Works better in low volatility interest rate environments

Lower interest rate volatility

Std dev=2.59%

Withdrawal rate	Median present value of terminal principal	Success rate before year			
		30	25	20	15
3.5%	\$252,971.18	100.0%	100.0%	100.0%	100.0%
4.0%	\$60,253.82	97.1%	100.0%	100.0%	100.0%
4.5%	\$0.00	0.0%	100.0%	100.0%	100.0%
5.0%	\$0.00	0.0%	40.1%	100.0%	100.0%
5.5%	\$0.00	0.0%	0.1%	100.0%	100.0%
6.0%	\$0.00	0.0%	0.1%	61.7%	100.0%
6.5%	\$0.00	0.0%	0.1%	0.4%	100.0%

Std dev=14%

Withdrawal rate	Median present value of terminal principal	Success rate before year			
		30	25	20	15
3.5%	\$254,370.69	94.7%	99.7%	100.0%	100.0%
4.0%	\$52,994.13	62.2%	95.3%	99.8%	100.0%
4.5%	\$0.00	22.7%	76.8%	98.2%	100.0%
5.0%	\$0.00	4.7%	46.2%	90.6%	99.9%
5.5%	\$0.00	0.7%	22.3%	73.3%	99.4%
6.0%	\$0.00	0.0%	8.0%	50.8%	96.9%
6.5%	\$0.00	0.0%	2.7%	30.5%	90.0%

Source: *Advisor Perspectives* (Huebscher, August 2011)



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## Withdrawal Strategies Used by Advisors

Advisor Use of Various Strategies/Approaches in Providing Retirement Income to Clients

	Do Not Use	Occasionally Use	Frequently Use	Always Use	Fr./Al.
<b>Systematic withdrawal approach</b> - Diversify investments based on client's risk profile and manage the total return of the client's entire portfolio. To provide income, withdraw either a pre-determined or policy-based amount funded by a combination of interest, dividends, and/or portfolio holdings based on the client's income needs and economic conditions.	5.4%	19.8%	53.9%	20.8%	75%
<b>Time-based segmentation approach</b> - Set up separate pools of investments with lowest risk investments in the near-term time horizon "segment," somewhat higher risk investments in the next segment, and riskiest portfolio in the longest-term segment. Income is drawn from one segment at a time. Once the first segment is depleted, assets from the second segment are used for income.	28.6%	33.8%	29.4%	8.2%	38%
<b>Essential-versus-discretionary income approach</b> - Classify client's retirement expenses as essential or discretionary. Low-risk investments or annuity guarantees are selected to fund the essential expenses. A mix of medium- and higher-risk investments is selected to fund the discretionary expenses. Income is drawn from the respective pools to cover essential and discretionary expenses.	35.0%	32.3%	26.2%	6.6%	33%
<b>Less formal strategies</b> - Clients mainly live on their pension and/or Social Security, which may be supplemented periodically.	21.5%	56.0%	20.5%	2.0%	
<b>Other</b>	69.4%	22.7%	5.2%	2.7%	

Handwritten notes: "Buckets" (between Time-based and Essential-versus-discretionary), "Need vs. Want" pools (under Essential-versus-discretionary).

Source: *Financial Planning Association (FPA Research Center Whitepaper: Financial Adviser Retirement Income Planning Experiences, Strategies, and Recommendations (Dec., 2011))*



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## Income Generation Products Used by Advisors

Please select any of the following **financial products** you use/recommend with your clients for retirement income generation.

OPTIONS	PERCENT
Bond funds	78.8%
Equity mutual funds	75.5%
Bonds	69.4%
Dividend-paying stocks	66.2%
Exchange-traded funds (ETFs)	54.6%
Real estate investment trusts (REITs)	49.7%
Treasuries/TIPs	47.9%
Variable annuities with guaranteed living benefits (GMIBs, GMABs, GMWBs)	46.2%
CDs	44.2%
Immediate annuities	39.5%
Combination products (e.g., life insurance and long-term care)	28.1%
Separately managed accounts (SMAs)	26.2%
Fixed deferred annuities	26.2%
Reverse mortgages	16.8%
Limited partnerships	12.6%
Target maturity funds	11.6%
Long-term care annuities	10.4%

Source: Financial Planning Association (FPA Research Center Whitepaper: Financial Adviser Retirement Income Planning Experiences, Strategies, and Recommendations (Dec., 2011))



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## Internet Resources Available

- Economic Security Planner (ESPlanner.com)
  - Focuses on “Consumption Smoothing”
- Wealth2k – “Income for Life”
  - Uses “bucket” methodology
  - [www.incomeforlife.com](http://www.incomeforlife.com)
- Financial Engines: Income+
  - Available only through employer 401(k) plans
  - Fee ~ 0.4% on top of other fees



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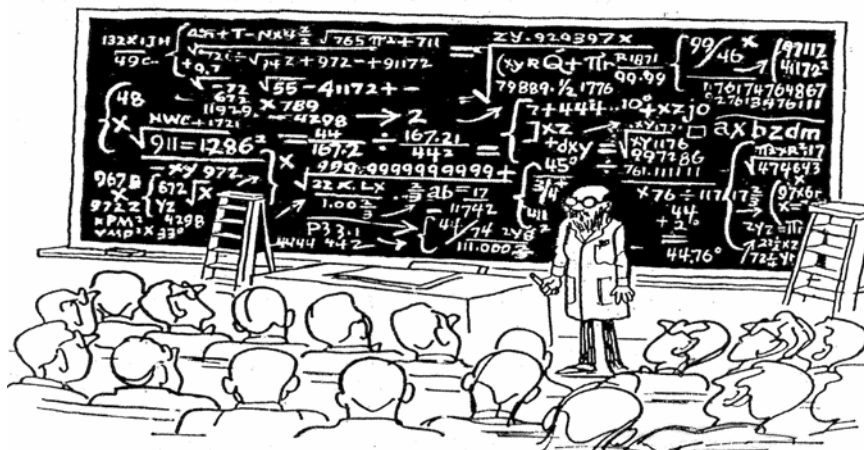
## Summary

- Many ways to approach SWR calculation
  - 4-5.5% seems to be “consensus range” for 30 years
  - Dynamic approaches entail more work, but provide the most flexibility
- The early years are the most important ones
  - Most time left in retirement
  - Most assets, so greatest effect on assets by market
- Assumptions are a critical part of the process
  - Inflation, life expectancy, expenses
- Take a holistic approach, and look at all income sources
- Don't ignore Social Security
  - Use best ages and ways to take it



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## Questions?



Source: Sid Harris



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