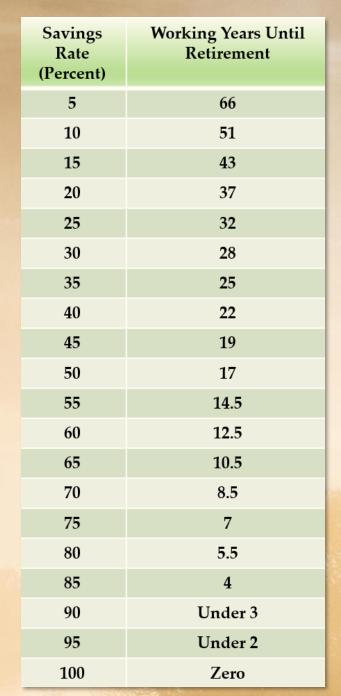


# KOLIK % PŘÍJMU UŠETŘÍŠ



# ZA KOLIK LET TI PF POKRYJE ŽIVOTNÍ NÁKLADY

MR. MONEY MUSTACHE BLOG, 13. 1. 2012



What's a reasonable withdrawal rate when living off savings? A look at how various withdrawal rates would have fared based on past market returns provides a useful guide.

# Retirement Savings: Choosing a Withdrawal Rate That Is Sustainable

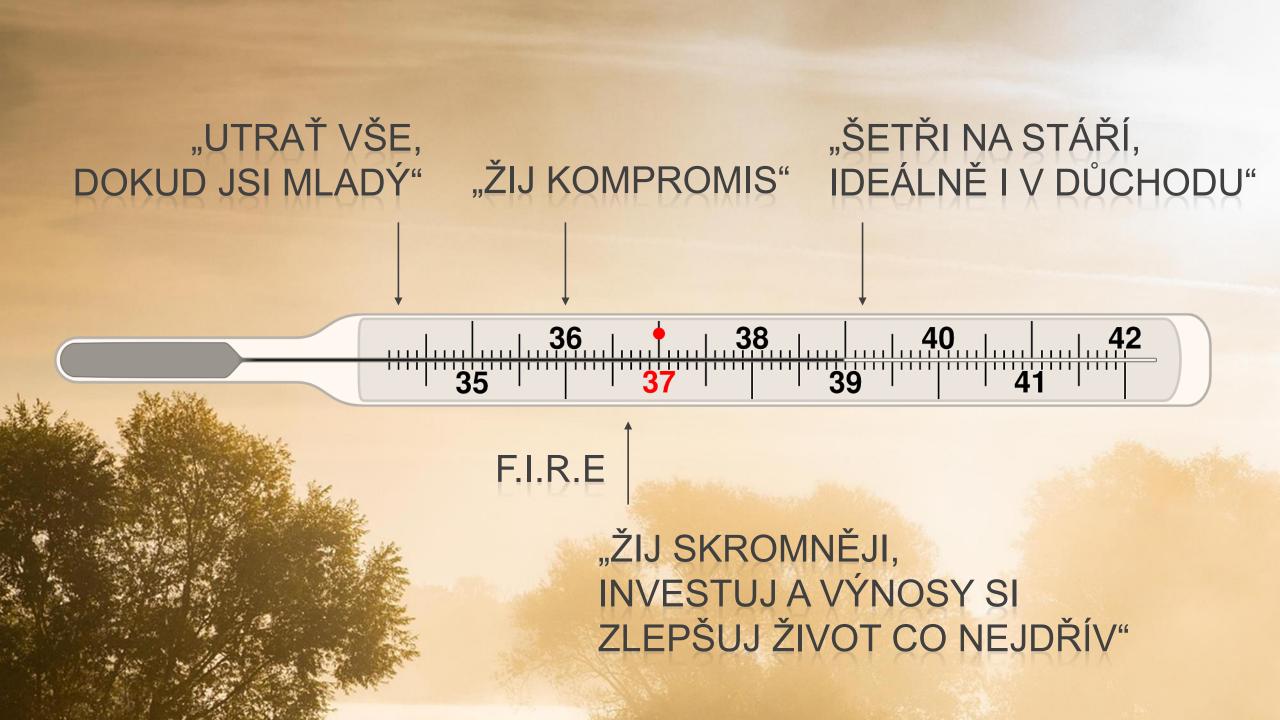
By Philip L. Cooley, Carl M. Hubbard and Daniel T. Walz

ost investors who plan for retirement eventually confront the question of how much money they should plan to withdraw annually from their investment portfolio. The dilemma is that if they withdraw too much, they prematurely exhaust the portfolio, but if they with-

To help in the selection of a withdrawal rate, the following sections provide information on the historical success of various withdrawal rates from portfolios of stocks and bonds. If a withdrawal rate proves too high based on historical year-to-year returns, then it seems likely that the rate will

Philip L. Cooley, Carl M. Hubbard and Daniel T. Walz are professors of finance in the Department of Business Administration, *Trinity University*, San Antonio, Texas.

The *portfolio success rate,* a useful concept for identifying sustainable withdrawal rates, is measured by the percentage of all past payout periods supported by the portfolio despite annual withdrawals. Presumably, a withdrawal rate



#### KROK 1

## DOSTATEČNÝ PŘEBYTEK PŘÍJMŮ

#### Savings Working Years Until Rate Retirement (Percent) 51 10 43 37 32 28 25 22 19 17 14.5 12.5 10.5 8.5 5.5 Under 3 Under 2 Zero

#### KROK 2

# PRAVIDELNĚ INVESTOVAT DO DYNAMICKÝCH AKTIV

#### KROK 3

# SPOŘÁDANĚ VYBÍRAT Z PORTFOLIA

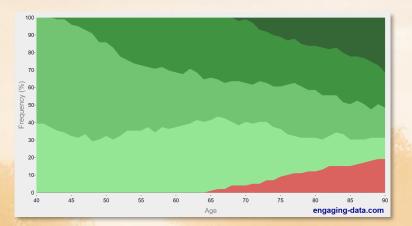


#### Case descriptions (all assume 50 years in retirement)

	;	Domestic		Domestic		
Domestic and international investments		and internation investmen		Domestic and international investments		
100 bps in fees		20 bps in fees		20 bps in fees		
Dollar plus inflation spending rule		Dollar plus inflation spending rule		Dynamic spending rule		
i	nvestme 100 bps n fees Dollar plu nflation spending	nvestments 100 bps n fees  Dollar plus nflation spending rule	nvestments investment  100 bps	nvestments investments  100 bps		

Note: The withdrawal rates are calculated using the industry benchmark of at least an 85% probability of success for the underlying portfolio.

Source: Vanguard, from VCMM forecasts.

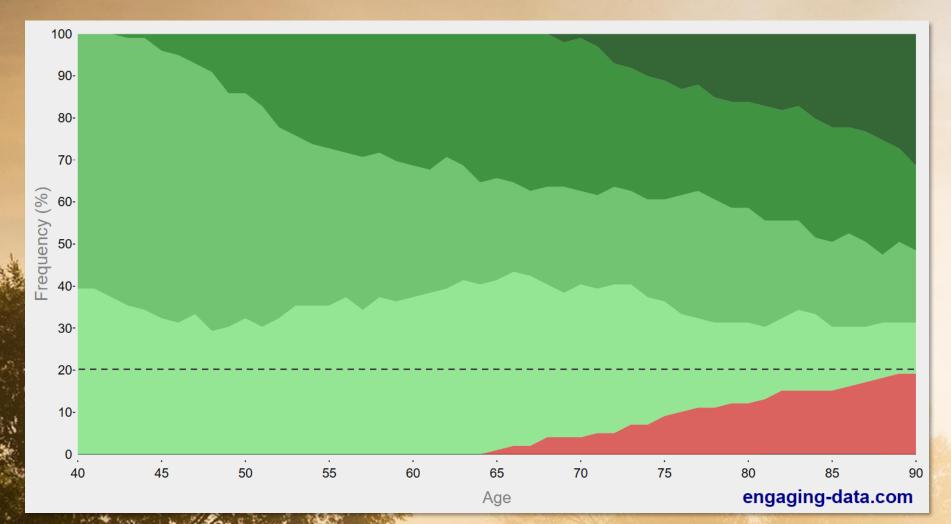


**ENGAGING-DATA.COM** 

VANGUARD RESEARCH, FUEL FOR THE FIRE (2021).

# VÝBĚR 4.0%, 75% V AKCIÍCH, POPLATKY 0.2% P.A.





> 5× POČ. PF

> 2× POČ. PF

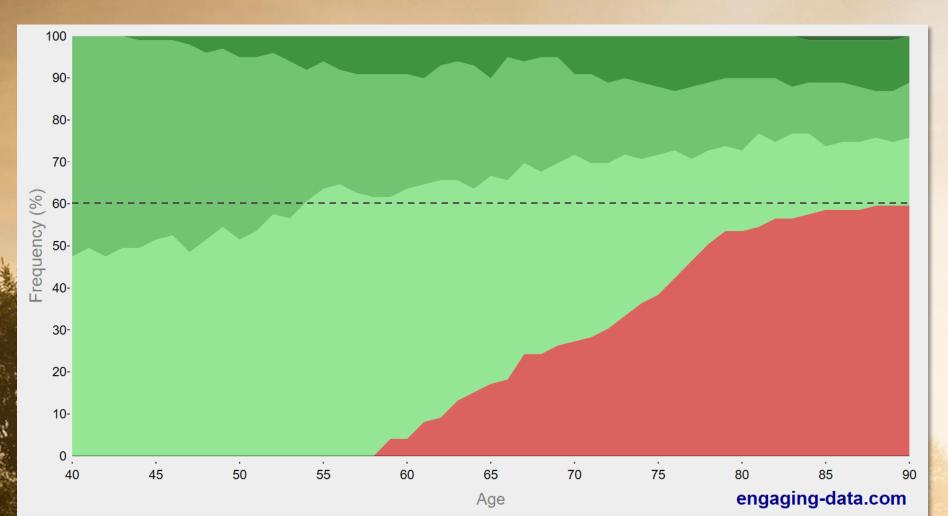
> POČ. PF

< POČ. PF

BANKROT

# VÝBĚR 4.0%, 75% V AKCIÍCH, POPLATKY 2.0% P.A.



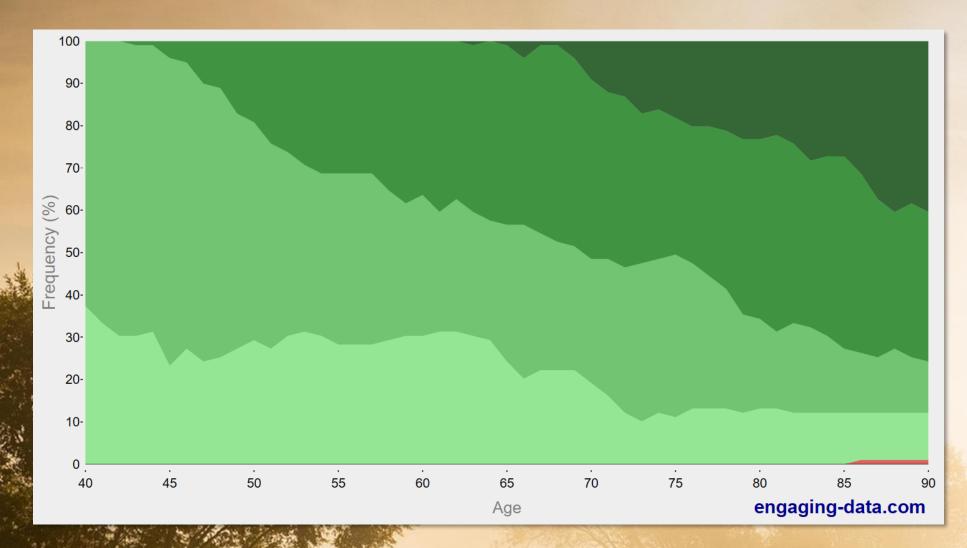


- > 2× POČ. PF
- > POČ. PF
- < POČ. PF

BANKROT

# VÝBĚR 3.3%, 75% V AKCIÍCH, POPLATKY 0.2% P.A.

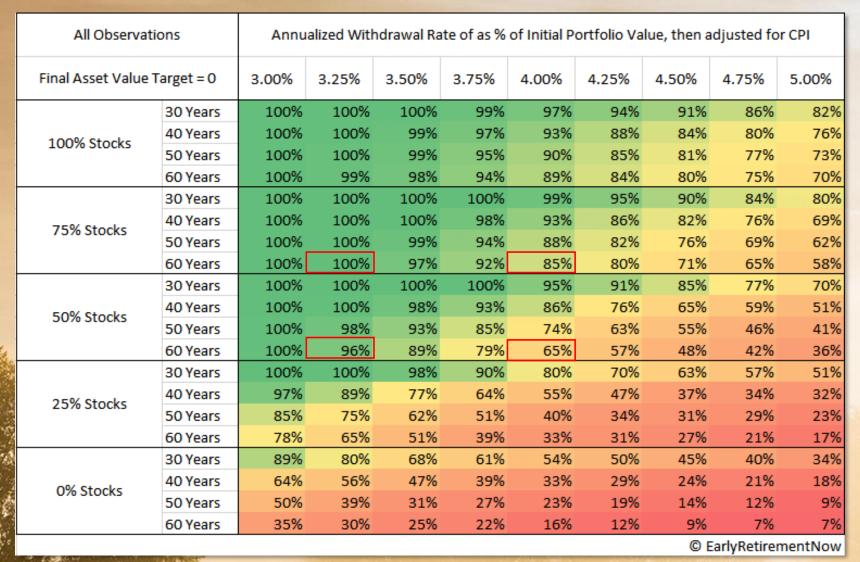




> 5× POČ. PF

> 2× POČ. PF

> POČ. PF < POČ. PF







Savings Rate (Percent)	Working Years Until Retirement
5	19
10	15
15	13
20	11
25	9
30	7.5
35	6
40	5
45	3.5
50	2
55	<1
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
100	0

#### + KAPITALIZOVATELNÝ MAJETEK: REZIDENČNÍ NEMOVITOST? (10× ROČNÍ PŘÍJEM)



### MR. MOUSTACHE BLOG

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COOLEY, P. L., HUBBARD, C. M. & WALZ, D. T.
RETIREMENT SAVINGS: CHOOSING A WITHDRAWAL RATE THAT IS SUSTAINABLE. AAII JOURNAL 16-21 (1998).

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### ANALYZA STABILITY F.I.R.E. PF

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# BONUS



Savings Rate (Percent)	Working Years Until Retirement
5	43
10	32
15	28
20	25
25	22
30	20
35	17
40	15
45	13
50	11
55	9
60	7.5
65	6
70	4.5
75	3
80	2
85	<1
90	0
95	0
100	0

#### + VSTUPNÍ KAPITÁL: 3× ROČNÍ PŘÍJEM

# BONUS

	All Observat	Annualized Withdrawal Rate of as % of Initial Portfolio Value, then adjusted for CPI									
	Final Asset Value Target = 1.00*Initial		3.00%	3.25%	3.50%	3.75%	4.00%	4.25%	4.50%	4.75%	5.00%
	100% Stocks	30 Years	96%	93%	88%	84%	80%	75%	71%	67%	62%
		60 Years	100%	99%	96%	92%	86%	82%	77%	72%	67%
	75% Stocks	30 Years	94%	90%	84%	78%	70%	64%	60%	56%	52%
		60 Years	100%	99%	93%	87%	81%	73%	65%	58%	52%
	50% Stocks	30 Years	80%	70%	62%	56%	50%	44%	39%	36%	32%
		60 Years	96%	88%	75%	62%	54%	46%	40%	34%	29%
	25% Stocks	30 Years	47%	38%	34%	33%	31%	29%	27%	22%	19%
		60 Years	52%	38%	31%	27%	24%	20%	16%	13%	11%
	0% Stocks	30 Years	26%	24%	22%	20%	18%	15%	12%	10%	9%
		60 Years	22%	17%	13%	10%	8%	7%	6%	5%	3%



