Asset Allocation Risk & Return Spectrum – January 2023

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25-Year Period from 1998-2022

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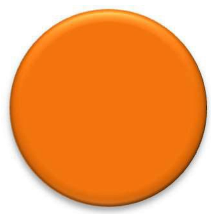
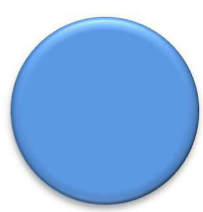
Risk Level	Various Asset Allocation Models with Annual Rebalancing (Using underlying indexes shown on page 3)		25-Year Annualized Return (%) of Lump Sum Investment	25-Year Growth of $10,000 Lump Sum Investment*	Retirement Account Ending Balance** (see next page)
Very Conservative	**100% Cash** 90-day T Bill		1.79%	$15,601	$0 Ran out in year 20
Conservative	**100% Bonds** Agg Bond Index		3.97%	$26,488	$59,497
Moderately Aggressive	**60% US Stock** **40% Bonds** 60% S&P 500 40% Agg Bond Index		6.62%	$49,638	$215,794
Moderately Aggressive	**Index-based** ***7Twelve*® Portfolio** 8.33% allocation to 12 asset classes		6.68%	$50,415	$337,642
Very Aggressive	**100% Large Cap US Stock** S&P 500		7.64%	$62,965	$197,546

* Ending account balance on December 31, 2022 assuming a lump sum investment of $10,000 on January 1, 1998 (25-year period)

** Ending account balance on 12/31/2022 in a retirement portfolio with a starting balance of $250,000 on January 1, 1998, 5% initial withdraw rate, 3% cost of living increase in the annual cash withdrawal. A total of 25 annual withdrawals totaling $455,741

25-Year Portfolio Survival Test: 1998-2022

$250,000 starting balance on January 1, 1998
5% initial withdrawal and 3% annual COLA (annual cost of living adjustment)
Total 25-year withdrawal of $455,741

Retirement Portfolio Asset Allocation Model (Using underlying indexes shown on next page)		**1-Asset Portfolio** Very Conservative	**2-Asset Portfolio*** Conservative	**2-Asset Portfolio*** Moderately Aggressive	**12-Asset Portfolio*** Moderately Aggressive	**1-Asset Portfolio** Very Aggressive
		100% Cash	**100% Bonds**	**60% US Stock 40% Bonds**	***7Twelve Portfolio*** (8.33% each index)	**100% Large US Stock**
Calendar Year	**Annual Cash Withdrawal** (3% annual increase)					
Year-End Account Balances Shaded area in yellow indicates portfolio value is "underwater" (less than starting balance of $250,000)						
1998	12,500	249,766	259,216	289,055	241,417	308,947
1999	12,875	248,823	244,212	311,723	269,228	361,079
2000	13,261	250,439	259,343	295,930	270,595	314,944
2001	13,659	245,149	267,581	271,161	251,271	263,851
2002	14,069	235,076	280,952	232,258	235,795	191,470
2003	14,491	223,012	277,993	261,554	285,202	231,901
2004	14,926	211,301	275,129	268,245	321,507	242,211
2005	15,373	202,794	266,437	263,383	346,304	238,735
2006	15,835	196,788	262,149	277,074	383,355	260,607
2007	16,310	189,223	264,102	277,619	414,300	258,615
2008	16,799	175,052	261,144	205,011	291,910	146,134
2009	17,303	158,026	259,328	225,125	349,466	167,505
2010	17,822	140,433	258,471	233,541	382,013	174,914
2011	18,357	122,159	260,384	225,469	360,721	160,251
2012	18,907	103,354	252,451	232,012	380,667	166,990
2013	19,475	83,940	227,868	255,746	401,022	201,600
2014	20,059	63,908	221,403	262,795	386,957	209,138
2015	20,661	43,281	201,960	244,894	342,855	191,371
2016	21,280	22,138	186,026	243,781	361,026	192,978
2017	21,919	425	170,696	257,249	382,401	213,190
2018	22,576	0	148,139	227,917	331,011	181,267
2019	23,254	0	137,798	255,668	362,617	215,087
2020	23,951	0	124,190	267,617	357,770	230,709
2021	24,670	0	97,605	287,389	393,374	272,266
2022	25,410	0	59,497	215,794	337,642	197,546
Account Value After 25 Years of Withdrawals		**$0**	**$59,497**	**$215,794**	**$337,642**	**$197,546**

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* The multi-asset portfolios were rebalanced at the start of each year
Raw data source: Steele Mutual Fund Software, calculations by author

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Indexes used in performance calculations on previous two pages

7Twelve Portfolio Asset Class	Indexes Used in the Index-based 7Twelve® Model
Large US Stock	S&P 500 Index TR
Mid Cap US Stock	S&P Midcap 400 Index TR
Small Cap US Stock	S&P SmallCap 600 Index TR
Non-US Developed Stock	MSCI EAFE Index NR
Non-US Emerging Stock	MSCI EM Index GR
Real Estate	S&P Global REIT Index TR
Natural Resources	S&P North American Natural Resources Index TR
Commodities	DBIQ Optimum Yield Diversified Commodity Index TR
US Bonds	Bloomberg US Aggregate Bond Index TR
Inflation Protected Bonds	Bloomberg US Treasury US TIPS Index TR
Non-US Bonds	Bloomberg Global Treasury Index TR
Cash	US Treasury Bill 90 Day TR

Raw data source: Steele Mutual Fund Software, calculations by author

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