

**Maximum Sustainable Withdrawal Rates With Varying Historical Success Rates
Using Large Cap Stocks, Corporate Bonds and US T-Bills
Ending Value Goal: Above Zero (Don't Go Broke)
Data from 1946 to 2000
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A rolling period analysis of historical investment performance is used to determine the maximum sustainable withdrawal rate and a portfolio capable of achieving that rate for various investment horizons and historical success rates. Every available time frame starting with 1946 ending 2000 is tested for each horizon (2, 3, ..., 40 years). Shorter horizons and higher success rates call for more conservative portfolios; longer horizons and lower success rates allow for more aggressive ones.

Methodology

To understand the rolling period analysis, consider the 20-year horizon which has 36 observations (1946-1965, 1947-1966, ..., 1981-2000). Each of these observations is tested for each portfolio to determine historical success rate, defined as the percentage of time the portfolio is able to achieve the ending value for the account (in this case, to stay above \$0), given the initial withdrawal amount and withdrawal schedule.

The portfolio is rebalanced at the start of each year. Withdrawals occur at the start of the year. The Maximum Sustainable Withdrawal Rate (MSR) is the percentage of total account value withdrawn the first year. Subsequent withdrawals are adjusted by prior year inflation rates, maintaining buying power at the risk of running out of money.

For an example, consider the 20-year horizon from Table 2 (100% historical success rate): There are 36 observations (that is, time periods) to consider: 1946-1965, 1947-1966, ..., 1981-2000. The value for MSR of 5.06% means that there are one or more portfolios that, with 100% historical success, were able to survive 20 years of withdrawals from the account, starting with 5.06% of the value of the account the first year and adjusting each subsequent year's withdrawal by the prior year's inflation rate. Starting with one million dollars and the right asset allocation, you would have been able to withdraw \$50,600 the first year, then maintain buying power for the next 19 years without running out of money.

Continuing the example, of the thousands of portfolios examined, the portfolio composed of 23.35% Large Cap Stocks and 76.65% US T-Bills is the best performer. This portfolio achieves the goal of not running out of money in all 36 of the 20-year periods.

The example given uses a historical success rate of 100%. As you lower your historical success rate (and presumably your probability for future success) you gain higher levels of sustainable spending. Tables 3 through 9 demonstrate successively lower and lower levels of historical success, with the resulting higher and higher levels of MSR.

Portfolio Optimizations

The WAT\$ Black Box program is used to find optimal portfolios. Black Box runs two processes, a systematic process and an optimization process. The systematic process creates portfolios by varying the percentage invested in each available asset by 5% at a time. So, for example, the following portfolios, as well as many others, are tested:

- 100% Large Cap Stocks
- 65% Large Cap Stocks, 35% US T-Bills
- 15% Large Cap Stocks, 45% Corporate Bonds, 40% US T-Bills

During the optimization process, the best portfolios from the systematic testing are kept and refined in an attempt to find better portfolios. This is done through a process known as simulated annealing, in which many more portfolios are tested to see if better portfolios exist. The idea of annealing comes from metallurgy: as molten metal cools the atoms gradually move less and less, eventually coming to a stable state. By repeatedly shrinking our test areas around known good portfolios we are able to gradually come to better and better portfolios.

The method of simulated annealing does not guarantee we will find the optimal portfolio, but it does find very good portfolios. If, for example, the WAT\$ Black Box program lists the optimal portfolio as being capable of a 5% withdrawal rate, it is very unlikely there exists a portfolio (using the same constraints and assets) that can achieve a 5.1% withdrawal rate.

Anomaly

There is an anomaly in the MSR in that longer horizons sometimes show higher withdrawal rates than shorter horizons. For example, in the 36-year horizon there is a portfolio that achieved 100% historical success with an initial withdrawal of 3.99%. In the 35-year horizon, however, the maximum sustainable withdrawal rate is 3.82%. This is counter-intuitive in that, if you cannot survive 35 years at a 3.9% withdrawal rate you should not be able to survive 36 years at that rate.

The anomaly is a result of the rolling period technique used. Each time a year is added to the horizon we lose one observation. In the example, the last 35-year time frame run is 1966-2000. When we increase the horizon by one year the last time frame becomes 1965-2000. It turns out that the 35-year time frame from 1966-2000 is the worst time frame in the cycle—the removal of 1966 as a starting year in the 36-year tests means that the initial withdrawal can increase slightly.

The correct interpretation is to extend the lowest withdrawal rate in each column through the end of the table, so that, in fact, the maximum sustainable withdrawal rate for the 36-year horizon is also 3.82%. We have highlighted the text in the tables to indicate these anomalies.

Conclusion

Table 1 summarizes the results of the study by showing the maximum sustainable withdrawal rates for all horizons (2 through 40 years) and all historical success rates (eight different ones from 50% to 100%). Tables 2 through 9 show portfolios capable of achieving the withdrawal rates shown in Table 1. Because of the mathematical complexity of the problem, and because of the algorithm

employed by Black Box, the portfolios shown in Tables 2 through 9 should not be considered as absolute optimal portfolios for their particular horizon and success rate, but rather they should be considered very near optimal.

The purpose of the study is to determine how much you can spend from a pool of money over some time horizon, yet still meet some future goal for the value of the portfolio. The two primary variables in the study are horizon and historical success rate. Horizon is simply the length of time to consider for withdrawals. Historical success rate is the frequency of time you would have been successful, had you lived through any particular period of time in the past.

Historical success rate works very well as a measure of risk. The more you are willing to lower historical success rate the greater the capacity to spend from the portfolio. Associated with this lower historical success rate, however, is most likely a lower probability for future success. Various success rates were run so that investors with different levels of risk acceptance can find portfolios and withdrawal rates that fit their personal needs.

As expected, as you consider shorter horizons and higher success rates, you are driven to more conservative portfolios. In the extreme case, for the 2-year horizon and 100% historical success, the portfolio consisting of 89% Corporate Bonds and 11% US T-Bills performs the best, allowing for a first year withdrawal equal to 46.23% of the value of the account.

As you extend the amount of time you withdraw from the account the withdrawal rate also drops and the portfolios become more aggressive. This pattern reaches a low withdrawal rate of 3.82% for the 35-year horizon, 100% success rate, with the associated portfolio consisting of 74% Large Cap Stocks and 26% US T-Bills.

Moving left to right through Table 1 we see that, as success rates are lowered, withdrawal rates increase. The move from 100% historical success to 95% historical success, for example, results in an initial withdrawal rate that is, on average, 3.5% higher. Moving to 75% historical success, the initial withdrawal rates are 20% higher on average than the withdrawal rates associated with 100% historical success. At the extreme, the withdrawal rates associated with 50% success rate are 55% higher than those associated with 100% historical success. As a planning tool, this data suggests that, with the right asset allocation, if you are willing to lower your probability for success you can increase your spending dramatically, perhaps by as much as 50%.

Finally, it is clear from this data how important it is to periodically review the financial plan. To choose a 30-year strategy and then blindly follow the strategy for 30 years, without regard to portfolio value or spending needs, would certainly be unwise.

In this study the assets available to the portfolio are restricted to Large Cap Stocks, Corporate Bonds and US T-Bills. Other studies include Small Cap Stocks and other asset classes.

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Study conducted by Zunna, Inc. using the WAT\$ Black Box Program.

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**Table 1 - Maximum Sustainable Withdrawal Rates
With Varying Historical Success Rates
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	# Obs	Historical Success Rate							
		100%	95%	90%	85%	80%	75%	66%	50%
2	54	46.23	48.96	49.55	49.67	49.90	50.12	50.70	52.80
3	53	28.95	32.21	32.80	33.16	33.57	33.94	34.73	36.11
4	52	21.09	23.96	24.45	25.20	25.87	26.21	26.86	28.18
5	51	16.82	19.11	19.83	19.98	20.96	21.34	22.06	22.96
6	50	14.19	15.85	16.48	16.76	17.86	17.92	18.94	20.02
7	49	12.30	13.51	13.92	14.34	14.58	15.90	16.89	17.90
8	48	10.86	11.78	12.21	12.43	12.91	14.35	15.32	16.44
9	47	9.72	10.47	10.87	11.13	11.48	12.25	13.45	14.94
10	46	8.83	9.40	9.75	9.91	10.62	10.96	12.58	13.98
11	45	8.14	8.53	8.80	8.98	9.68	10.48	11.91	13.03
12	44	7.57	7.86	8.08	8.20	8.75	9.80	10.48	12.36
13	43	7.08	7.32	7.50	7.69	8.07	8.93	9.98	11.80
14	42	6.69	6.87	7.03	7.14	7.46	8.30	9.60	11.21
15	41	6.34	6.47	6.61	6.69	6.99	7.69	9.12	10.40
16	40	6.00	6.11	6.24	6.40	6.54	7.15	8.50	9.99
17	39	5.71	5.78	5.88	6.03	6.16	6.62	7.99	9.57
18	38	5.46	5.51	5.60	5.78	5.92	6.36	7.48	9.26
19	37	5.25	5.27	5.40	5.57	5.67	6.01	7.12	8.73
20	36	5.06	5.07	5.22	5.41	5.49	5.74	6.75	8.39
21	35	4.88	4.90	5.06	5.27	5.33	5.48	6.03	8.04
22	34	4.74	4.74	4.91	5.16	5.17	5.34	5.92	7.76
23	33	4.60	4.61	4.78	4.80	5.06	5.19	5.84	7.28
24	32	4.48	4.48	4.65	4.70	4.97	5.07	5.19	7.18
25	31	4.38	4.38	4.54	4.62	4.88	4.90	5.11	6.25
26	30	4.28	4.28	4.46	4.55	4.81	4.82	5.05	6.08
27	29	4.19	4.20	4.24	4.50	4.74	4.77	4.86	5.86
28	28	4.12	4.13	4.16	4.46	4.68	4.72	4.81	5.80
29	27	4.05	4.07	4.11	4.62	4.65	4.68	4.93	5.71
30	26	3.99	4.03	4.06	4.18	4.60	4.63	4.91	6.08
31	25	3.94	3.99	4.02	4.13	4.55	4.58	5.25	5.98
32	24	3.90	3.96	3.99	4.08	4.50	4.53	5.21	5.97
33	23	3.87	3.97	4.05	4.46	4.49	4.50	5.16	5.89
34	22	3.84	4.02	4.43	4.44	4.48	5.08	5.35	7.08
35	21	3.82	4.00	4.41	4.41	5.03	5.08	5.30	7.01
36	20	3.99	4.38	4.39	4.99	5.06	5.26	5.27	6.95
37	19	4.36	4.36	4.38	4.95	5.04	5.22	5.60	6.90
38	18	4.35	4.35	4.93	5.02	5.18	5.21	5.64	7.05
39	17	4.33	4.33	4.91	5.16	5.19	5.52	5.59	6.99
40	16	4.89	4.89	5.14	5.18	5.48	5.56	6.74	8.54

**Table 2 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 100%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	46.23		88.80	11.20
3	53	28.95			100.00
4	52	21.09		73.40	26.60
5	51	16.82	35.24	64.76	
6	50	14.19	43.58	14.36	42.06
7	49	12.30	40.45	0.06	59.49
8	48	10.86	35.36	0.05	64.60
9	47	9.72	33.19	0.02	66.79
10	46	8.83	29.14	0.04	70.82
11	45	8.14	26.67		73.33
12	44	7.57	25.71		74.29
13	43	7.08	25.65	0.01	74.34
14	42	6.69	25.59		74.40
15	41	6.34	25.28	0.02	74.71
16	40	6.00	24.50		75.50
17	39	5.71	23.74	0.04	76.22
18	38	5.46	23.60	0.01	76.39
19	37	5.25	23.57		76.43
20	36	5.06	23.35		76.65
21	35	4.88	23.20	0.01	76.79
22	34	4.74	25.00		75.00
23	33	4.60	29.76		70.24
24	32	4.48	38.53		61.47
25	31	4.38	43.34		56.66
26	30	4.28	48.16		51.83
27	29	4.19	52.43		47.57
28	28	4.12	55.00		45.00
29	27	4.05	59.47		40.53
30	26	3.99	62.05		37.95
31	25	3.94	65.00		35.00
32	24	3.90	67.49		32.51
33	23	3.87	70.00		30.00
34	22	3.84	71.48		28.52
35	21	3.82	73.90		26.10
36	20	3.99	89.77		10.23
37	19	4.36	100.00		
38	18	4.35	100.00		
39	17	4.33	100.00		
40	16	4.89	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 3 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 95%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	48.96	1.09		98.91
3	53	32.21	3.82		96.18
4	52	23.96	2.92		97.08
5	51	19.11	14.37	3.69	81.94
6	50	15.85	12.76	6.39	80.84
7	49	13.51			100.00
8	48	11.78	18.31		81.69
9	47	10.47	12.88		87.12
10	46	9.40	6.48		93.51
11	45	8.53	5.69		94.31
12	44	7.86	7.52		92.48
13	43	7.32	15.00		85.00
14	42	6.87	11.42		88.58
15	41	6.47	4.37		95.63
16	40	6.11	7.26		92.73
17	39	5.78	7.04		92.96
18	38	5.51	8.93		91.07
19	37	5.27	15.00		85.00
20	36	5.07	24.17		75.82
21	35	4.90	28.72		71.28
22	34	4.74	34.35		65.65
23	33	4.61	35.31		64.69
24	32	4.48	35.00		65.00
25	31	4.38	39.10		60.90
26	30	4.28	43.94	0.23	55.84
27	29	4.20	46.95		53.05
28	28	4.13	51.38	0.18	48.44
29	27	4.07	55.05		44.95
30	26	4.03	57.88	0.24	41.87
31	25	3.99	60.77		39.23
32	24	3.96	63.14	0.04	36.82
33	23	3.97	74.00		26.00
34	22	4.02	86.51		13.49
35	21	4.00	88.25		11.75
36	20	4.38	100.00		
37	19	4.36	100.00		
38	18	4.35	100.00		
39	17	4.33	100.00		
40	16	4.89	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 4 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 90%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	49.55	11.77		88.23
3	53	32.80	21.24		78.75
4	52	24.45	8.28		91.72
5	51	19.83	34.25		65.75
6	50	16.48	26.52	12.24	61.23
7	49	13.92	18.51		81.49
8	48	12.21	17.56	0.10	82.34
9	47	10.87	14.72	9.41	75.87
10	46	9.75	13.35	28.07	58.58
11	45	8.80	35.61		64.38
12	44	8.08	40.00		60.00
13	43	7.50	36.57	3.34	60.08
14	42	7.03	38.27	8.76	52.97
15	41	6.61	31.21	4.20	64.60
16	40	6.24	29.69		70.31
17	39	5.88	27.23		72.77
18	38	5.60	26.41		73.58
19	37	5.40	26.56		73.44
20	36	5.22	26.80		73.20
21	35	5.06	36.75		63.25
22	34	4.91	49.09		50.91
23	33	4.78	56.02		43.98
24	32	4.65	60.00		40.00
25	31	4.54	62.84		37.16
26	30	4.46	66.39		33.61
27	29	4.24	56.33		43.67
28	28	4.16	60.00		40.00
29	27	4.11	63.32		36.68
30	26	4.06	65.85	0.01	34.14
31	25	4.02	70.00		30.00
32	24	3.99	71.42		28.58
33	23	4.05	84.74		15.26
34	22	4.43	100.00		
35	21	4.41	100.00		
36	20	4.39	100.00		
37	19	4.38	100.00		
38	18	4.93	100.00		
39	17	4.91	100.00		
40	16	5.14	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 5 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 85%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	49.67	18.53	0.02	81.45
3	53	33.16	14.42	0.01	85.57
4	52	25.20	71.52		28.48
5	51	19.98	19.45	13.20	67.35
6	50	16.76	34.12	7.57	58.31
7	49	14.34	33.42	13.67	52.91
8	48	12.43	21.64	1.38	76.99
9	47	11.13	90.08		9.92
10	46	9.91	14.42	6.27	79.31
11	45	8.98	12.25	9.42	78.33
12	44	8.20	41.25	13.22	45.53
13	43	7.69	40.62		59.37
14	42	7.14	35.88		64.12
15	41	6.69	50.00		50.00
16	40	6.40	55.06		44.94
17	39	6.03	44.73	8.15	47.12
18	38	5.78	49.34		50.66
19	37	5.57	50.00		50.00
20	36	5.41	55.00		45.00
21	35	5.27	58.79		41.21
22	34	5.16	65.00		35.00
23	33	4.80	40.25	0.01	59.74
24	32	4.70	45.00		55.00
25	31	4.62	49.57	0.06	50.38
26	30	4.55	52.71	0.01	47.28
27	29	4.50	55.86		44.14
28	28	4.46	59.67	0.01	40.32
29	27	4.62	98.67		1.33
30	26	4.18	78.26		21.74
31	25	4.13	80.00		20.00
32	24	4.08	81.82		18.18
33	23	4.46	100.00		
34	22	4.44	100.00		
35	21	4.41	100.00		
36	20	4.99	100.00		
37	19	4.95	100.00		
38	18	5.02	100.00		
39	17	5.16	100.00		
40	16	5.18	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 6 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 80%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon			Portfolio		
Years	#Obs	MSR	L	CB	T
2	54	49.90	3.49	0.13	96.38
3	53	33.57	52.37	6.04	41.59
4	52	25.87	100.00		
5	51	20.96	100.00		
6	50	17.86	100.00		
7	49	14.58	39.71		60.29
8	48	12.91	38.39		61.60
9	47	11.48	25.50		74.49
10	46	10.62	91.13		8.86
11	45	9.68	78.64		21.36
12	44	8.75	56.58	0.01	43.41
13	43	8.07	63.82		36.18
14	42	7.46	62.42		37.58
15	41	6.99	70.00		30.00
16	40	6.54	68.03		31.97
17	39	6.16	60.00		40.00
18	38	5.92	71.57		28.43
19	37	5.67	72.96		27.04
20	36	5.49	75.00		25.00
21	35	5.33	78.92		21.08
22	34	5.17	73.14	2.14	24.72
23	33	5.06	76.67	0.69	22.64
24	32	4.97	79.87	0.53	19.60
25	31	4.88	86.72		13.28
26	30	4.81	78.94	1.45	19.60
27	29	4.74	93.59		6.41
28	28	4.68	96.54		3.46
29	27	4.65	100.00		
30	26	4.60	100.00		
31	25	4.55	100.00		
32	24	4.50	100.00		
33	23	4.49	100.00		
34	22	4.48	100.00		
35	21	5.03	100.00		
36	20	5.06	100.00		
37	19	5.04	100.00		
38	18	5.18	100.00		
39	17	5.19	100.00		
40	16	5.48	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 7 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 75%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	50.12	24.43	0.88	74.69
3	53	33.94	41.38	2.48	56.14
4	52	26.21	88.49	11.51	
5	51	21.34	77.97	4.53	17.50
6	50	17.92	100.00		
7	49	15.90	100.00		
8	48	14.35	100.00		
9	47	12.25	100.00		
10	46	10.96	100.00		
11	45	10.48	100.00		
12	44	9.80	100.00		
13	43	8.93	100.00		
14	42	8.30	100.00		
15	41	7.69	95.00		5.00
16	40	7.15	90.00		10.00
17	39	6.62	72.89		27.11
18	38	6.36	88.35		11.65
19	37	6.01	85.00		15.00
20	36	5.74	85.00		15.00
21	35	5.48	77.47		22.53
22	34	5.34	86.89		13.11
23	33	5.19	88.65		11.35
24	32	5.07	91.21		8.79
25	31	4.90	82.16	4.08	13.76
26	30	4.82	85.35	3.08	11.57
27	29	4.77	82.17		17.83
28	28	4.72	87.63	3.31	9.07
29	27	4.68	94.44	2.07	3.49
30	26	4.63	100.00		
31	25	4.58	100.00		
32	24	4.53	100.00		
33	23	4.50	100.00		
34	22	5.08	100.00		
35	21	5.08	100.00		
36	20	5.26	100.00		
37	19	5.22	100.00		
38	18	5.21	100.00		
39	17	5.52	100.00		
40	16	5.56	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 8 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 66%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	50.70	81.77	0.03	18.20
3	53	34.73	100.00		
4	52	26.86	97.56	2.44	
5	51	22.06	100.00		
6	50	18.94	100.00		
7	49	16.89	94.51	5.48	
8	48	15.32	100.00		
9	47	13.45	100.00		
10	46	12.58	100.00		
11	45	11.91	100.00		
12	44	10.48	100.00		
13	43	9.98	100.00		
14	42	9.60	100.00		
15	41	9.12	100.00		
16	40	8.50	100.00		
17	39	7.99	100.00		
18	38	7.48	100.00		
19	37	7.12	100.00		
20	36	6.75	100.00		
21	35	6.03	89.60		10.40
22	34	5.92	92.56		7.44
23	33	5.84	95.47		4.53
24	32	5.19	85.95	0.02	14.03
25	31	5.11	90.00		10.00
26	30	5.05	91.31	0.03	8.66
27	29	4.86	68.78	31.21	
28	28	4.81	69.86	30.14	
29	27	4.93	97.62	0.03	2.35
30	26	4.91	98.97		1.03
31	25	5.25	100.00		
32	24	5.21	100.00		
33	23	5.16	100.00		
34	22	5.35	100.00		
35	21	5.30	100.00		
36	20	5.27	100.00		
37	19	5.60	100.00		
38	18	5.64	100.00		
39	17	5.59	100.00		
40	16	6.74	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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**Table 9 - Maximum Sustainable Withdrawal Rates
With Historical Success Rate of 50%
Ending Value Goal: Above Zero (Don't Go Broke)
1946-2000**

Horizon Years	#Obs	MSR	Portfolio		
			L	CB	T
2	54	52.80	100.00		
3	53	36.11	100.00		
4	52	28.18	100.00		
5	51	22.96	100.00		
6	50	20.02	100.00		
7	49	17.90	100.00		
8	48	16.44	100.00		
9	47	14.94	100.00		
10	46	13.98	100.00		
11	45	13.03	100.00		
12	44	12.36	100.00		
13	43	11.80	100.00		
14	42	11.21	100.00		
15	41	10.40	100.00		
16	40	9.99	100.00		
17	39	9.57	100.00		
18	38	9.26	100.00		
19	37	8.73	100.00		
20	36	8.39	100.00		
21	35	8.04	100.00		
22	34	7.76	100.00		
23	33	7.28	100.00		
24	32	7.18	100.00		
25	31	6.25	100.00		
26	30	6.08	100.00		
27	29	5.86	100.00		
28	28	5.80	100.00		
29	27	5.71	100.00		
30	26	6.08	100.00		
31	25	5.98	100.00		
32	24	5.97	100.00		
33	23	5.89	100.00		
34	22	7.08	100.00		
35	21	7.01	100.00		
36	20	6.95	100.00		
37	19	6.90	100.00		
38	18	7.05	100.00		
39	17	6.99	100.00		
40	16	8.54	100.00		

Assets Available to the Portfolio: Large Cap Stocks (L), Corporate Bonds (CB) and US T-Bills (T)
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