

# The Case for Small Cap Value: The Good, the Bad and the Ugly

# Mission Statement

The Merriman Financial Education Foundation believes “knowledge is power” and is dedicated to providing comprehensive financial education to investors at all stages of life, with information and tools to make informed decisions in their own best interest and successfully implement their retirement savings program.

# How We Help Do It Yourself Investors

- Identify best equity asset classes
- Compare impact of combining equity asset classes
- Add fixed income to manage volatility
- Create accumulation glide path
- Create distribution glide path
- Select the best performing ETFs or mutual funds

## Equity Index Returns (1928-2022)

### Summary Results for 95 1-year Periods (1928-2022)

	US LCB (S&P 500)	US LCV	US SCB	US SCV	US 4-Fund (SCV, LCV, SCB, LCB)	US All Value (SCV, LCV)	US 2-Fund (S&P 500, SCV)
In 95 yrs \$100 grows to:	\$751,234	\$1,996,611	\$4,111,737	\$12,764,806	\$3,617,830	\$5,831,807	\$3,976,839
CRR over 95 years	9.8%	11.0%	11.8%	13.2%	11.7%	12.2%	11.8%
Best 1 year return	54.0%	92.5%	111.2%	124.7%	96.1%	110.4%	89.9%
Worst 1 year return	-43.3%	-61.1%	-48.3%	-55.4%	-51.8%	-58.1%	-49.4%
SD over 95 years	19.8%	22.8%	28.3%	31.2%	24.5%	26.5%	24.3%

Notes: 1) Source data from Dimensional Fund Advisors, 2) Results *exclude* advisor fees and fund expenses.

Abbreviations: LCB - US Large Cap Blend, LCV - US Large Cap Value, SCB - US Small Cap Blend, SCV - US Small Cap Value, CRR - Compound Rate of Return, SD - Standard Deviation.

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## Equity Index Returns (1928-2022)

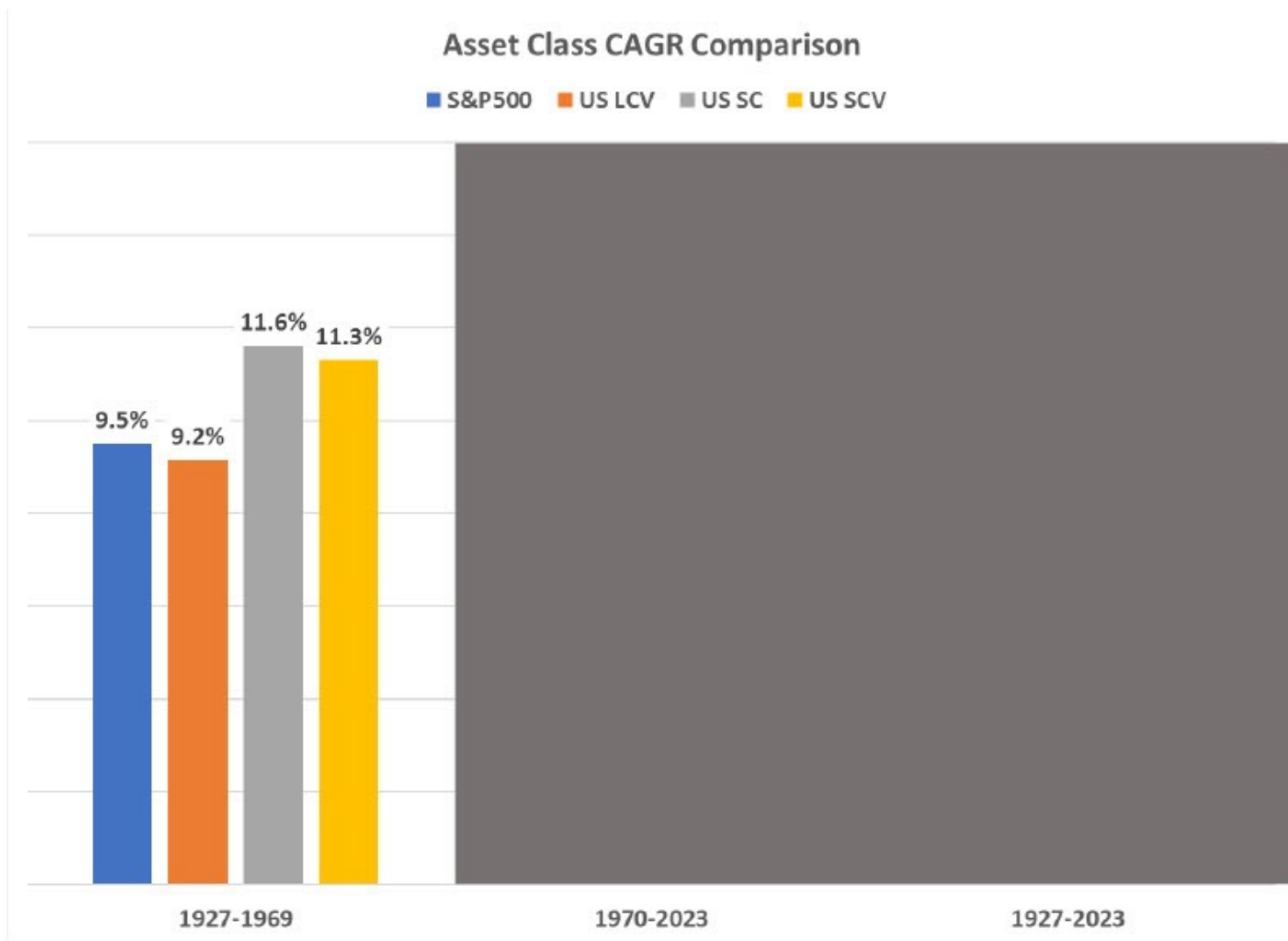
### Summary Results for 55 40-year Periods (1928-2021)

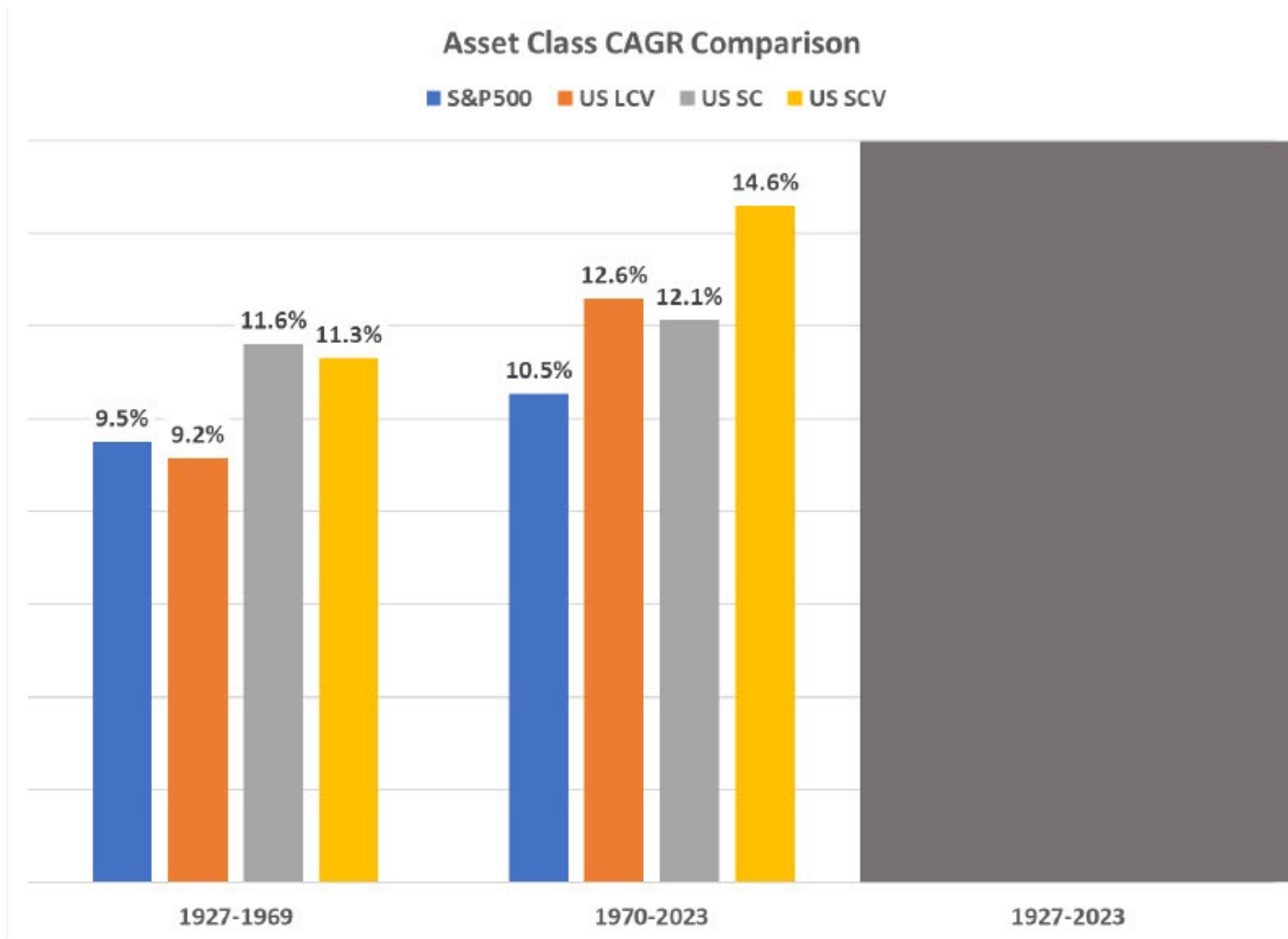
	US LCB (S&P 500)	US LCV	US SCB	US SCV	US 4-Fund (SCV, LCV, SCB, LCB)	US All Value (SCV, LCV)	US 2-Fund (S&P 500, SCV)
Avg 40 yr growth of \$100	\$6,499	\$15,481	\$17,142	\$40,059	\$17,348	\$26,204	\$17,469
Average 40 year CRR	11.0%	13.4%	13.7%	16.2%	13.8%	14.9%	13.8%
Best 40 year CRR	12.5%	15.6%	16.7%	19.0%	15.9%	17.2%	15.8%
Worst 40 year CRR	8.9%	8.8%	10.6%	11.6%	10.8%	10.7%	10.8%
Average 40 year SD	17.7%	19.3%	26.0%	27.9%	21.6%	23.0%	21.3%
Lowest 40 year SD	15.6%	16.3%	19.6%	21.6%	17.4%	18.8%	17.0%
Highest 40 year SD	23.2%	28.3%	34.8%	39.4%	30.4%	33.3%	30.3%

Notes: 1) Source data from Dimensional Fund Advisors, 2) Results exclude advisor fees and fund expenses.

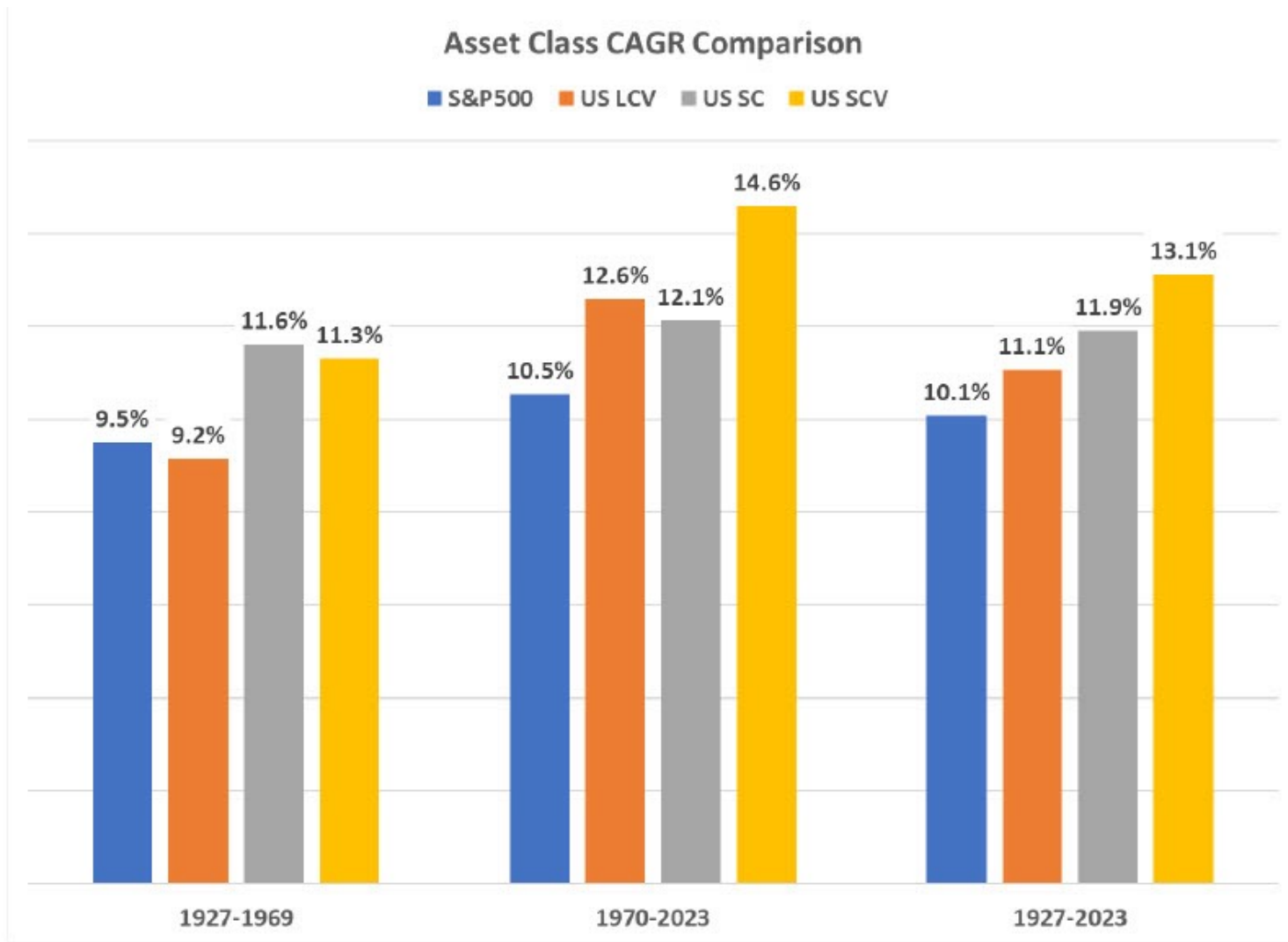
Abbreviations: LCB - US Large Cap Blend, LCV - US Large Cap Value, SCB - US Small Cap Blend, SCV - US Small Cap Value, CRR - Compound Rate of Return, SD - Standard Deviation.

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## US 4 Asset Classes and 4-Fund Combo Relative Performance Rankings (1928-2019)

1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
S&P 500 43.6%	US LCV 2.8%	S&P 500 -24.9%	S&P 500 -43.3%	S&P 500 -8.2%	US SCV 125.3%	US SCB 15.7%	US SCB 56.1%	US SCV 66.5%	S&P 500 -35.0%	US SCB 39.8%	S&P 500 -0.4%	US SCB -3.6%	US LCV 1.0%	US SCV 34.1%	US SCV 78.5%	US SCV 52.6%	US SCV 65.4%	US LCV -6.3%	US SCV 8.8%	S&P 500 5.5%	US SCB 20.9%	US SCV 63.4%
US SCB 42.9%	S&P 500 -8.4%	US LCV -34.1%	US SCB -46.2%	4-Fund -10.3%	US SCB 111.0%	4-Fund -0.2%	4-Fund 48.5%	US SCB 52.5%	US LCV -36.6%	US SCV 32.6%	US SCB -0.8%	US LCV -5.4%	US SCV -0.2%	4-Fund 25.4%	US SCB 56.9%	US SCB 42.1%	US SCB 64.2%	S&P 500 -8.1%	US LCV 7.2%	US LCV 1.5%	US SCV 19.7%	US LCV 47.2%
4-Fund 35.9%	4-Fund -19.2%	4-Fund -34.8%	4-Fund -51.5%	US SCV -10.5%	4-Fund 95.7%	S&P 500 -1.4%	US SCV 47.7%	4-Fund 50.5%	4-Fund -42.6%	S&P 500 31.1%	4-Fund -2.5%	4-Fund -6.7%	4-Fund -5.5%	US SCB 25.4%	4-Fund 48.1%	4-Fund 36.0%	4-Fund 52.0%	4-Fund -8.7%	S&P 500 5.7%	4-Fund -0.8%	S&P 500 18.8%	4-Fund 45.4%
US SCV 32.4%	US SCB -34.1%	US SCB -36.5%	US SCV -55.5%	US LCV -10.7%	US LCV 92.5%	US SCV -6.3%	S&P 500 47.7%	US LCV 49.1%	US SCB -48.3%	4-Fund 30.4%	US SCV -3.9%	US SCV -8.1%	US SCV -11.1%	US SCB 22.0%	US LCV 31.0%	US LCV 29.7%	US LCV 41.9%	US SCB -9.9%	4-Fund 5.2%	US SCV -4.9%	4-Fund 18.7%	US SCB 39.1%
US LCV 24.6%	US SCV -37.1%	US SCV -43.6%	US LCV -61.1%	US SCB -11.6%	S&P 500 54.0%	US LCV -8.7%	US LCV 42.4%	S&P 500 33.9%	US SCV -50.6%	US LCV 18.1%	US LCV -4.9%	S&P 500 -9.8%	S&P 500 -11.6%	S&P 500 20.3%	S&P 500 25.9%	S&P 500 19.7%	S&P 500 36.4%	US SCV -10.4%	US SCB -0.8%	US SCB -5.4%	US LCV 15.5%	S&P 500 31.7%

1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
S&P 500 24.0%	S&P 500 18.4%	S&P 500 -1.0%	US SCV 64.4%	S&P 500 31.5%	US SCB 8.2%	S&P 500 -10.8%	US SCV 77.0%	US SCB 19.3%	S&P 500 0.5%	US SCB 29.9%	US LCV -4.4%	US SCV 29.6%	US SCV 25.5%	US SCV 40.1%	US LCV -5.7%	US SCB 79.1%	US SCV 49.0%	S&P 500 -8.5%	US LCV 10.8%	US SCB 20.4%	S&P 500 19.0%	US LCV -8.7%
US LCV 19.2%	US LCV 15.1%	US SCB -2.9%	US LCV 63.5%	4-Fund 25.0%	US LCV 7.2%	US LCV -14.4%	US SCB 61.2%	US SCV 15.0%	US LCV -0.2%	US SCV 29.2%	S&P 500 -8.7%	US LCV 24.8%	4-Fund 19.7%	US SCB 37.1%	US SCB -7.2%	US SCV 69.3%	US SCB 40.1%	US LCV -18.0%	S&P 500 4.0%	US SCV 15.1%	US LCV 17.4%	S&P 500 -14.7%
4-Fund 16.8%	4-Fund 13.0%	4-Fund -5.0%	4-Fund 59.8%	US SCV 23.8%	S&P 500 6.6%	4-Fund -14.6%	4-Fund 57.5%	4-Fund 14.1%	US SCB -2.6%	4-Fund 27.9%	4-Fund -9.8%	4-Fund 23.5%	US LCV 19.1%	4-Fund 26.8%	4-Fund -8.2%	4-Fund 49.3%	4-Fund 30.7%	4-Fund -20.7%	4-Fund 0.0%	4-Fund 14.8%	4-Fund 12.2%	4-Fund -22.6%
US SCB 13.9%	US SCB 9.7%	US LCV -5.5%	US SCB 58.8%	US LCV 23.5%	4-Fund 5.9%	US SCB -14.7%	US LCV 48.2%	S&P 500 12.0%	4-Fund -3.3%	S&P 500 26.9%	US SCV -10.3%	S&P 500 22.8%	US SCB 17.5%	US LCV 17.5%	US SCV -9.6%	US LCV 24.7%	US LCV 22.5%	US SCB -27.2%	US SCV -1.3%	S&P 500 14.3%	US SCV 7.8%	US SCV -30.2%
US SCV 9.9%	US SCV 8.9%	US SCV -10.6%	S&P 500 52.6%	US SCB 21.2%	US SCV 1.7%	US SCV -18.6%	S&P 500 43.4%	US LCV 10.2%	US SCV -10.7%	US LCV 25.6%	US SCB -15.7%	US SCB 17.0%	S&P 500 16.5%	S&P 500 12.5%	S&P 500 -10.0%	S&P 500 24.0%	S&P 500 11.1%	US SCV -28.9%	US SCB -13.7%	US LCV 9.4%	US SCB 4.5%	US SCB -36.6%

1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US LCV -17.6%	US SCV 65.6%	US SCV 58.5%	US SCB 23.0%	US SCV 23.1%	US SCB 39.6%	US SCB 37.5%	US SCV 20.4%	US SCV 37.1%	US SCV 49.4%	US LCV 13.2%	US SCB 32.6%	US LCV 19.2%	S&P 500 5.2%	US SCV 34.0%	S&P 500 31.5%	S&P 500 -3.1%	US SCV 47.0%	US SCV 34.8%	US SCV 26.0%	US SCV 2.7%	US LCV 41.1%	US LCV 27.1%
US SCV -17.8%	US SCB 54.3%	US SCB 48.0%	US SCV 22.4%	US SCB 22.1%	US SCV 35.3%	S&P 500 32.4%	US LCV 9.0%	US SCB 30.7%	US SCB 39.1%	S&P 500 6.3%	S&P 500 32.2%	S&P 500 18.5%	US LCV 5.0%	US LCV 28.7%	US LCV 30.8%	4-Fund -15.7%	US SCB 46.5%	US SCB 23.9%	US LCV 22.0%	US LCV 2.5%	S&P 500 37.6%	US SCV 25.9%
4-Fund -22.2%	4-Fund 51.6%	US LCV 44.4%	4-Fund 9.7%	4-Fund 14.9%	4-Fund 29.7%	4-Fund 28.6%	4-Fund 7.5%	4-Fund 27.3%	4-Fund 35.8%	4-Fund 4.4%	4-Fund 31.3%	4-Fund 13.7%	4-Fund -1.2%	4-Fund 26.4%	4-Fund 22.6%	4-Fund -15.7%	4-Fund 39.1%	4-Fund 20.9%	4-Fund 20.6%	4-Fund 1.5%	4-Fund 35.3%	4-Fund 24.5%
S&P 500 -26.5%	US LCV 49.2%	4-Fund 43.7%	US LCV 0.5%	US LCV 7.8%	US LCV 25.5%	US SCV 24.2%	US SCB 5.4%	S&P 500 21.4%	US LCV 32.4%	US SCV 2.1%	US LCV 30.9%	US SCV 8.6%	US SCV -5.8%	US SCB 25.9%	US SCB 14.5%	US SCB -20.1%	US LCV 32.3%	US LCV 17.2%	4-Fund 19.7%	S&P 500 1.3%	US SCB 31.3%	S&P 500 23.0%
US SCB -27.1%	S&P 500 37.2%	S&P 500 23.8%	S&P 500 -7.2%	S&P 500 6.6%	S&P 500 18.4%	S&P 500 20.2%	S&P 500 -4.9%	S&P 500 19.9%	S&P 500 22.5%	US SCB -4.0%	US SCV 29.4%	US SCB 8.4%	US SCB -9.1%	S&P 500 16.8%	US SCV 13.5%	S&P 500 -23.9%	US SCV 30.5%	S&P 500 7.6%	S&P 500 10.1%	US SCB -0.3%	US SCV 31.2%	US SCB 22.1%

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
US SCV 39.2%	S&P 500 28.6%	US SCB 22.8%	US SCV 20.5%	US SCV 28.3%	US SCV -7.0%	US SCV 66.3%	US SCV 23.9%	US LCV 9.7%	US LCV 22.2%	S&P 500 5.5%	US SCB -36.0%	US SCV 50.1%	US SCV 31.1%	S&P 500 2.1%	US LCV 20.2%	US SCB 44.4%	S&P 500 13.7%	S&P 500 1.4%	US SCV 37.2%	S&P 500 21.8%	S&P 500 -4.4%	S&P 500 31.5%
US LCV 38.4%	US LCV 8.4%	S&P 500 21.0%	US LCV 12.8%	US SCB 14.5%	US LCV -12.5%	US SCB 55.3%	US SCB 22.0%	US SCV 7.5%	US SCV 21.8%	US SCB -4.5%	US SCV -36.8%	US SCB 38.9%	US SCB 29.5%	4-Fund -2.8%	US SCB 18.2%	US SCV 42.8%	US LCV 8.5%	4-Fund -4.2%	US SCB 26.4%	US LCV 16.0%	4-Fund -11.1%	US LCV 24.3%
4-Fund 35.0%	4-Fund 7.3%	4-Fund 15.1%	4-Fund 7.3%	4-Fund 8.4%	US SCB -13.1%	4-Fund 47.0%	US LCV 19.5%	4-Fund 7.3%	4-Fund 19.8%	4-Fund -4.8%	S&P 500 -37.0%	4-Fund 36.1%	4-Fund 24.0%	US LCV -2.9%	4-Fund 17.8%	4-Fund 39.7%	4-Fund 7.5%	4-Fund -4.9%	4-Fund 25.0%	4-Fund 14.5%	4-Fund -12.8%	4-Fund 22.2%
S&P 500 33.4%	US SCB -2.5%	US LCV 8.4%	US SCB 4.8%	US LCV 2.7%	4-Fund -13.7%	US LCV 37.6%	4-Fund 19.1%	US SCB 7.3%	US SCB 19.4%	US LCV -8.4%	4-Fund -38.2%	US LCV 28.9%	US LCV 20.5%	US SCB -4.2%	US SCV 16.7%	US LCV 39.3%	US SCB 4.3%	US SCB -5.4%	US LCV 24.3%	US SCB 13.1%	US SCV -13.2%	US SCB 19.2%
US SCB 29.1%	US SCV -5.2%	US SCV 8.3%	S&P 500 -9.1%	S&P 500 -11.9%	S&P 500 -22.1%	S&P 500 28.7%	S&P 500 10.9%	S&P 500 4.9%	S&P 500 15.8%	S&P 500 -11.6%	US SCV -43.2%	US LCV 26.5%	S&P 500 15.1%	US SCV -6.2%	S&P 500 16.0%	S&P 500 32.4%	US SCV 3.6%	US SCV -8.1%	S&P 500 12.0%	US SCV 7.1%	US LCV -14.1%	US SCV 13.8%



Sound Investing US Equity Portfolios (1928-2021) - Quilt Chart

Ordinal Ranking	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
	S&P 43.6%	S&P -8.4%	S&P -24.9%	S&P -43.3%	S&P -8.2%	USSV 124.7%	US4F -0.2%	US4F 48.4%	USSV 66.6%	S&P -35.0%	USSV 32.6%	S&P -0.4%	US4F -6.7%	USAV 0.4%	USSV 34.1%	USSV 78.6%	USSV 52.5%	USSV 65.4%	S&P -8.1%	USSV 8.8%
	US2F 37.8%	USAV -17.1%	US2F -34.2%	US2F -49.4%	US2F -9.4%	USAV 108.6%	S&P -1.4%	USSV 47.7%	USAV 57.8%	US4F -42.6%	US2F 31.9%	US2F -2.1%	USAV -6.7%	USSV -0.2%	USAV 28.0%	USAV 54.8%	USAV 41.1%	USAV 53.6%	USAV -8.4%	USAV 8.0%
	US4F 35.8%	US4F -19.2%	US4F -34.7%	US4F -51.5%	US4F -10.3%	US4F 95.6%	US2F -3.8%	US2F 47.7%	US4F 50.5%	US2F -42.8%	S&P 31.1%	US4F -2.5%	USSV -8.1%	US4F -5.5%	US2F 27.2%	US2F 52.3%	US2F 36.1%	US4F 51.9%	US4F -8.7%	US2F 7.3%
	USSV 32.0%	US2F -22.7%	USAV -38.8%	USSV -55.4%	USSV -10.5%	US2F 89.4%	USSV -6.2%	S&P 47.7%	US2F 50.3%	USAV -43.6%	US4F 30.4%	USSV -3.7%	US2F -8.9%	US2F -5.9%	US4F 25.4%	US4F 48.1%	US4F 36.0%	US2F 50.9%	US2F -9.3%	S&P 5.7%
	USAV 28.3%	USSV -37.0%	USSV -43.5%	USAV -58.2%	USAV -10.6%	S&P 54.0%	USAV -7.4%	USAV 45.0%	S&P 33.9%	USSV -50.5%	USAV 25.3%	USAV -4.3%	S&P -9.8%	S&P -11.6%	S&P 20.3%	S&P 25.9%	S&P 19.7%	S&P 36.4%	USSV -10.5%	US4F 5.3%
Ordinal Ranking	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
	S&P 5.5%	USSV 19.7%	USSV 63.4%	S&P 24.0%	S&P 18.4%	S&P -1.0%	USSV 64.3%	S&P 31.5%	S&P 6.6%	S&P -10.8%	USSV 76.9%	USSV 15.1%	S&P 0.5%	USSV 29.3%	USAV -7.4%	USSV 29.5%	USSV 25.4%	USSV 40.0%	USAV -7.7%	USSV 69.3%
	US2F 0.3%	US2F 19.2%	USAV 55.3%	US2F 17.0%	US2F 13.7%	US4F -5.0%	USAV 63.9%	US2F 27.5%	US4F 5.9%	US4F -14.6%	USAV 62.5%	US4F 14.2%	US4F -3.3%	US2F 28.1%	S&P -8.7%	USAV 27.1%	USAV 22.2%	USAV 28.7%	US4F -8.2%	US4F 49.3%
	US4F -0.8%	S&P 18.8%	US2F 47.6%	US4F 16.7%	US4F 13.0%	US2F -5.8%	US4F 59.8%	US4F 25.0%	USAV 4.5%	US2F -14.7%	US2F 60.1%	US2F 13.6%	US2F -5.2%	US4F 27.9%	US2F -9.5%	US2F 26.1%	US2F 20.9%	US4F 26.8%	USSV -9.7%	USAV 47.1%
	USAV -1.7%	US4F 18.7%	US4F 45.4%	USAV 14.6%	USAV 12.0%	USAV -8.0%	US2F 58.5%	USSV 23.5%	US2F 4.2%	USAV -16.5%	US4F 57.4%	USAV 12.7%	USAV -5.5%	USAV 27.4%	US4F -9.8%	US4F 23.5%	US4F 19.6%	US2F 26.2%	US2F -9.9%	US2F 46.6%
	USSV -4.9%	USAV 17.6%	S&P 31.7%	USSV 9.9%	USSV 9.0%	USSV -10.6%	S&P 52.6%	USAV 23.5%	USSV 1.7%	USSV -18.6%	S&P 43.4%	S&P 12.0%	USSV -10.8%	S&P 26.9%	USSV -10.3%	S&P 22.8%	S&P 16.5%	S&P 12.5%	S&P -10.0%	S&P 24.0%
Ordinal Ranking	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	USSV 49.0%	S&P -8.5%	USAV 5.2%	USSV 15.1%	S&P 19.0%	S&P -14.7%	USAV -17.8%	USSV 65.8%	USSV 58.6%	USSV 22.1%	USSV 23.4%	USSV 35.2%	S&P 32.4%	USSV 20.4%	USSV 37.0%	USSV 49.4%	USAV 7.7%	S&P 32.2%	S&P 18.5%	S&P 5.2%
	USAV 35.8%	US2F -18.6%	S&P 4.0%	US4F 14.8%	US2F 13.3%	USAV -19.6%	USSV -17.9%	USAV 57.4%	USAV 51.5%	USAV 11.3%	USAV 15.6%	USAV 30.3%	US4F 28.7%	USAV 14.7%	US2F 29.2%	USAV 40.9%	S&P 6.3%	US4F 31.5%	USAV 13.8%	US2F -0.2%
	US4F 30.6%	US4F -20.6%	US2F 1.8%	US2F 14.7%	USAV 12.4%	US2F -22.6%	US2F -22.2%	US4F 51.6%	US4F 43.7%	US4F 9.5%	US4F 15.0%	US4F 29.5%	US2F 28.5%	US2F 7.8%	USAV 28.5%	US2F 35.9%	US4F 4.5%	US2F 31.0%	US4F 13.6%	USAV -0.3%
	US2F 30.0%	USAV -23.4%	US4F 0.2%	S&P 14.3%	US4F 12.0%	US4F -22.6%	US4F -22.3%	US2F 51.5%	US2F 41.2%	US2F 7.4%	US2F 15.0%	US2F 26.8%	USSV 24.6%	US4F 7.5%	US4F 27.3%	US4F 35.8%	US4F 4.3%	USAV 30.4%	US2F 13.4%	US4F -1.0%
	S&P 11.1%	USSV -28.8%	USSV -0.5%	USAV 12.2%	USSV 7.6%	USSV -30.5%	S&P -26.5%	S&P 37.2%	S&P 23.8%	S&P -7.2%	S&P 6.6%	S&P 18.4%	USAV 22.5%	S&P -4.9%	S&P 21.4%	S&P 22.5%	2.4%	USSV 29.8%	USSV 8.4%	USSV -5.6%
Ordinal Ranking	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	USSV 34.0%	S&P 31.5%	S&P -3.1%	USSV 46.9%	USSV 34.9%	USSV 25.8%	USAV 2.5%	S&P 37.6%	USAV 26.1%	USSV 39.2%	S&P 28.6%	S&P 21.0%	USSV 19.6%	USSV 28.2%	USSV -6.9%	USSV 67.1%	USSV 23.4%	USAV 9.1%	USSV 21.2%	S&P 5.5%
	USAV 31.2%	US4F 22.4%	US2F -13.4%	USAV 39.8%	USAV 26.2%	USAV 23.6%	USSV 2.5%	USAV 36.7%	USSV 25.3%	USAV 38.1%	US2F 11.8%	US4F 15.2%	USAV 16.5%	USAV 15.5%	USAV -10.2%	USAV 53.2%	USAV 21.5%	US4F 7.6%	USAV 21.1%	US2F -3.5%
	US4F 26.3%	US2F 22.4%	US4F -15.7%	US4F 39.1%	US2F 21.3%	US4F 19.5%	US2F 1.9%	US4F 35.6%	US4F 24.4%	US2F 36.3%	US4F 7.6%	US2F 14.6%	US4F 7.2%	US4F 8.4%	US4F -13.9%	US2F 47.9%	US4F 19.0%	USSV 7.6%	US4F 19.3%	US4F -5.7%
	US2F 25.4%	USAV 22.0%	USAV -19.7%	USAV 38.7%	US4F 21.0%	US2F 17.9%	US4F 1.5%	US2F 34.4%	US2F 24.1%	US4F 34.7%	USAV 2.0%	USAV 8.5%	US2F 5.2%	US2F 8.2%	US2F -14.5%	US4F 47.7%	US2F 17.1%	US2F 6.2%	US2F 18.5%	USAV -11.7%
	S&P 16.8%	USSV 13.2%	USSV -23.7%	S&P 30.5%	S&P 7.6%	S&P 10.1%	S&P 1.3%	USSV 31.3%	S&P 23.0%	S&P 33.4%	USSV -5.0%	USSV 8.1%	S&P -9.1%	S&P -11.9%	S&P -22.1%	S&P 28.7%	S&P 10.9%	S&P 4.9%	S&P 15.8%	USSV -12.6%
Ordinal Ranking	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Portfolio CAGR Rank #1 Rank #3 Rank #5					
	USSV -36.6%	USSV 49.3%	USSV 31.4%	S&P 2.1%	USAV 19.0%	USSV 42.6%	S&P 13.7%	S&P 1.4%	USSV 37.3%	S&P 21.8%	S&P -4.4%	S&P 31.5%	S&P 18.4%	USSV 42.8%	US SCV	13.4%	45	4	31	
	US2F -36.8%	USAV 39.4%	USAV 25.6%	US2F -1.8%	US4F 18.2%	USAV 40.8%	US2F 8.7%	US2F -3.3%	USAV 30.7%	US4F 14.7%	US2F -8.6%	US4F 25.6%	US2F 11.1%	US2F 35.8%	US All Val	12.5%	10	6	14	
	S&P -37.0%	US2F 37.9%	US4F 24.0%	US4F -2.7%	USSV 17.4%	US4F 39.7%	US4F 7.7%	US4F -4.0%	US4F 25.1%	US2F 14.7%	US4F -11.0%	US2F 25.2%	US4F 8.8%	USAV 35.6%	US 2-Fund	12.2%	0	33	0	
	US4F -38.2%	US4F 36.0%	US2F 23.2%	USAV -4.3%	US2F 16.7%	US2F 37.5%	USAV 6.4%	USAV -6.1%	US2F 24.6%	USAV 11.8%	USSV -12.9%	USAV 23.7%	USSV 3.8%	US4F 31.5%	US 4-Fund	12.0%	3	48	1	
	USAV -39.7%	S&P 26.5%	S&P 15.1%	USSV -5.7%	S&P 16.0%	S&P 32.4%	S&P 3.6%	USSV -7.9%	S&P 12.0%	USSV 7.5%	USAV -13.4%	USSV 18.9%	USAV 0.8%	S&P 28.7%	S&P 500	10.2%	36	3	48	

## Sound Investing US Equity Port. (1928-2021) - Ordinal Rank Summary

		Ordinal Rank Frequency					'Average' Rank
Portfolio	CAGR	1	2	3	4	5	
US SCV	13.4%	45	5	4	9	31	2.7
		48%	5%	4%	10%	33%	
		<----- 19% ----->					
US All Value	12.5%	10	42	6	22	14	2.9
		11%	45%	6%	23%	15%	
		<----- 74% ----->					
US 2-Fund	12.2%	0	26	33	35	0	3.1
		0%	28%	35%	37%	0%	
		<----- 100% ----->					
US 4-Fund	12.0%	3	17	48	25	1	3.0
		3%	18%	51%	27%	1%	
		<----- 96% ----->					
S&P 500	10.2%	36	4	3	3	48	3.2
		38%	4%	3%	3%	51%	
		<----- 11% ----->					

# The Lost Decades

- 2000-2009 S&P  $-.9\%$  CAGR
- Ben Felix: Rational Reminder Podcast
- Lost decades last 120 months
- Period 6/1/1927 to 6/30/2023

# The Lost Decades

- 145 lost decades for S&P 500
- Ave. loss for S&P -2.33%
- 108 (74%) profitable for SCV
- Ave. SCV return in lost decades +6.45%

# Japan LCB vs. SCV (1987–2022)

- Japan LCB vs. SCV
- Japan LCB 2.81%
- U.S. T-Bills 2.87%
- Japan SCV 8.71%

**Table B14B - Fine Tuning Table - S&P 500 vs US SCV Equity Portfolio**  
Index returns reduced by a representative fund's expense ratio, except S&P 500 Index shown below.

Year	100% S&P	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100% SCV	Out Performance	
												S&P	US SCV
1970	4.0%	3.5%	3.0%	2.5%	2.0%	1.5%	0.9%	0.3%	-0.2%	-0.8%	-1.5%	5.4%	0.6%
1971	14.3%	14.4%	14.6%	14.7%	14.8%	14.8%	14.9%	14.9%	14.9%	14.9%	14.9%	11.4%	
1972	18.9%	17.8%	16.7%	15.6%	14.5%	13.4%	12.2%	11.1%	9.9%	8.7%	7.6%	15.7%	
1973	-14.7%	-16.3%	-17.9%	-19.5%	-21.1%	-22.7%	-24.3%	-25.8%	-27.4%	-28.9%	-30.4%		
1974	-26.5%	-25.5%	-24.6%	-23.6%	-22.8%	-21.9%	-21.1%	-20.3%	-19.5%	-18.7%	-18.0%		
1975	37.2%	40.0%	42.8%	45.7%	48.5%	51.3%	54.1%	56.9%	59.7%	62.5%	65.2%		
1976	23.8%	27.0%	30.3%	33.6%	37.0%	40.4%	43.9%	47.4%	51.0%	54.6%	58.2%		
1977	-7.2%	-4.6%	-1.9%	0.9%	3.7%	6.6%	9.6%	12.6%	15.8%	18.9%	22.2%		
1978	6.5%	8.2%	9.8%	11.5%	13.1%	14.8%	16.4%	18.0%	19.6%	21.2%	22.8%		
1979	18.4%	20.0%	21.6%	23.3%	24.9%	26.6%	28.2%	29.9%	31.6%	33.3%	35.0%		
1980	32.4%	31.6%	30.8%	30.0%	29.2%	28.3%	27.5%	26.6%	25.7%	24.9%	24.0%	8.4%	25.1%
1981	-4.9%	-2.6%	-0.3%	2.1%	4.6%	7.1%	9.6%	12.2%	14.8%	17.5%	20.2%		
1982	21.4%	22.9%	24.4%	25.9%	27.5%	29.0%	30.6%	32.1%	33.7%	35.3%	36.8%		
1983	22.5%	25.0%	27.5%	30.1%	32.7%	35.4%	38.0%	40.8%	43.5%	46.3%	49.1%		
1984	6.2%	5.8%	5.4%	4.9%	4.5%	4.1%	3.7%	3.2%	2.8%	2.4%	1.9%	4.3%	
1985	32.1%	31.9%	31.6%	31.3%	31.0%	30.7%	30.4%	30.1%	29.8%	29.5%	29.2%	3.0%	
1986	18.4%	17.4%	16.4%	15.4%	14.4%	13.4%	12.4%	11.4%	10.4%	9.4%	8.4%	10.0%	
1987	5.2%	4.1%	3.0%	1.9%	0.8%	-0.4%	-1.5%	-2.6%	-3.7%	-4.8%	-6.0%	11.2%	
1988	16.8%	18.4%	20.1%	21.8%	23.5%	25.2%	26.9%	28.6%	30.3%	32.0%	33.8%		
1989	31.5%	29.6%	27.7%	25.8%	24.0%	22.2%	20.3%	18.5%	16.8%	15.0%	13.2%	18.2%	
1990	-3.1%	-5.4%	-7.6%	-9.8%	-12.0%	-14.1%	-16.1%	-18.2%	-20.2%	-22.1%	-24.0%	20.9%	16.3%
1991	30.4%	32.0%	33.6%	35.3%	36.9%	38.5%	40.1%	41.8%	43.4%	45.1%	46.7%		
1992	7.6%	10.1%	12.7%	15.3%	17.9%	20.6%	23.3%	26.1%	28.9%	31.7%	34.5%		
1993	10.0%	11.6%	13.3%	14.9%	16.5%	18.2%	19.9%	21.6%	23.3%	25.0%	26.8%		
1994	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.2%	0.1%	
1995	37.5%	36.7%	35.9%	35.1%	34.3%	33.4%	32.6%	31.8%	30.9%	30.1%	29.3%	8.3%	
1996	22.9%	22.9%	22.9%	22.8%	22.8%	22.7%	22.7%	22.6%	22.5%	22.4%	22.3%	0.6%	
1997	33.3%	33.2%	33.0%	32.8%	32.6%	32.3%	32.1%	31.8%	31.5%	31.1%	30.7%	2.6%	
1998	28.5%	24.5%	20.5%	16.7%	13.0%	9.4%	5.8%	2.4%	-0.9%	-4.2%	-7.3%	35.8%	
1999	21.0%	20.3%	19.6%	18.9%	18.1%	17.4%	16.5%	15.7%	14.8%	14.0%	13.0%	8.0%	
2000	-9.1%	-7.3%	-5.5%	-3.7%	-1.9%	-0.1%	1.7%	3.6%	5.4%	7.2%	9.0%		18.1%
2001	-11.9%	-8.8%	-5.7%	-2.4%	0.9%	4.3%	7.8%	11.4%	15.1%	18.8%	22.7%		34.6%
2002	-22.1%	-20.8%	-19.5%	-18.2%	-16.9%	-15.6%	-14.3%	-13.0%	-11.8%	-10.5%	-9.3%		12.9%
2003	28.7%	31.5%	34.4%	37.4%	40.4%	43.4%	46.5%	49.7%	52.9%	56.1%	59.4%		30.8%
2004	10.8%	12.3%	13.7%	15.1%	16.6%	18.0%	19.5%	21.0%	22.4%	23.9%	25.4%		14.5%
2005	4.9%	5.2%	5.5%	5.8%	6.1%	6.4%	6.7%	7.0%	7.3%	7.5%	7.8%		2.9%
2006	15.8%	16.4%	17.0%	17.6%	18.2%	18.7%	19.3%	19.9%	20.5%	21.0%	21.5%		5.8%
2007	5.5%	3.8%	2.1%	0.4%	-1.3%	-2.9%	-4.5%	-6.1%	-7.7%	-9.2%	-10.7%		
2008	-37.0%	-37.0%	-36.9%	-36.8%	-36.8%	-36.8%	-36.8%	-36.8%	-36.8%	-36.8%	-36.8%		0.2%
2009	26.4%	27.3%	28.1%	28.9%	29.6%	30.4%	31.1%	31.8%	32.4%	33.0%	33.6%		7.2%
2010	15.0%	16.6%	18.2%	19.8%	21.3%	22.9%	24.5%	26.1%	27.7%	29.3%	30.9%	9.6%	15.9%
2011	2.1%	1.1%	0.2%	-0.8%	-1.8%	-2.7%	-3.7%	-4.6%	-5.6%	-6.6%	-7.5%		5.8%
2012	16.0%	16.5%	17.1%	17.7%	18.3%	18.9%	19.4%	20.0%	20.6%	21.2%	21.7%		
2013	32.3%	33.3%	34.3%	35.3%	36.3%	37.3%	38.3%	39.3%	40.4%	41.4%	42.4%		
2014	13.7%	12.6%	11.6%	10.6%	9.6%	8.6%	7.6%	6.5%	5.5%	4.5%	3.5%		
2015	1.4%	0.4%	-0.5%	-1.4%	-2.3%	-3.2%	-4.1%	-5.0%	-6.0%	-6.9%	-7.8%		
2016	11.9%	13.5%	15.1%	16.8%	18.4%	20.0%	21.6%	23.3%	24.9%	26.6%	28.3%		
2017	21.8%	20.3%	18.8%	17.3%	15.9%	14.4%	13.0%	11.5%	10.1%	8.6%	7.2%		
2018	-4.4%	-5.5%	-6.6%	-7.7%	-8.8%	-9.8%	-10.9%	-12.0%	-13.0%	-14.1%	-15.1%		
2019	31.4%	30.1%	28.8%	27.5%	26.2%	24.8%	23.5%	22.2%	20.8%	19.5%	18.1%		
2020	18.4%	16.9%	15.4%	13.9%	12.3%	10.7%	9.1%	7.4%	5.7%	4.0%	2.2%		
2021	28.7%	29.9%	31.1%	32.3%	33.4%	34.5%	35.6%	36.7%	37.8%	38.8%	39.8%		11.1%
2022	-18.1%	-16.7%	-15.3%	-13.9%	-12.4%	-11.0%	-9.5%	-8.0%	-6.5%	-5.0%	-3.5%		14.6%
Annualized Return	10.4%	10.8%	11.2%	11.5%	11.9%	12.2%	12.5%	12.8%	13.1%	13.4%	13.6%	S&P vs US SCV Summary	
Standard Deviation	17.1%	17.1%	17.2%	17.4%	17.8%	18.3%	18.9%	19.7%	20.5%	21.5%	22.5%		
Worst 6 Months	-41.8%	-42.7%	-43.6%	-44.4%	-45.3%	-46.1%	-47.0%	-47.8%	-48.7%	-49.5%	-50.3%	S&P	US SCV
Worst 12 Months	-43.3%	-43.9%	-44.5%	-45.1%	-45.7%	-46.3%	-46.9%	-47.5%	-48.1%	-48.7%	-49.3%	24	29
Worst 36 Mo (An'lzd)	-16.1%	-15.8%	-16.5%	-17.2%	-17.9%	-18.6%	-19.3%	-20.0%	-20.7%	-21.4%	-22.1%	Avg. Out-Perf Rtn.	
Worst 60 Mos Annualized	-6.7%	-6.8%	-6.9%	-7.0%	-7.2%	-7.3%	-7.5%	-7.6%	-7.8%	-8.0%	-8.2%	S&P	US SCV
Worst Drawdown	-51.0%	-51.6%	-52.4%	-53.5%	-54.7%	-55.8%	-56.9%	-58.0%	-59.1%	-60.1%	-61.2%	11.0%	16.5%



**Table B14B - Fine Tuning Table - S&P 500 vs US SCV Equity Portfolio**

Index returns reduced by a representative fund's expense ratio, except S&P 500 Index shown below.

Year	100%										100%	Out Performance	
	S&P	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	SCV	S&P	US SCV
Annualized Return	10.4%	10.8%	11.2%	11.5%	11.9%	12.2%	12.5%	12.8%	13.1%	13.4%	13.6%	<b>S&amp;P vs US SCV Summary</b>	
Standard Deviation	17.1%	17.1%	17.2%	17.4%	17.8%	18.3%	18.9%	19.7%	20.5%	21.5%	22.5%		
Worst 6 Months	-41.8%	-42.7%	-43.6%	-44.4%	-45.3%	-46.1%	-47.0%	-47.8%	-48.7%	-49.5%	-50.3%	S&P	US SCV
Worst 12 Months	-43.3%	-43.9%	-44.5%	-45.1%	-45.7%	-46.3%	-46.9%	-47.5%	-48.1%	-48.7%	-49.3%	<b>24</b>	<b>29</b>
Worst 36 Mo (An'lzd)	-16.1%	-15.8%	-16.5%	-17.2%	-17.9%	-18.6%	-19.3%	-20.0%	-20.7%	-21.4%	-22.1%	Avg. Out-Perf Rtn.	
Worst 60 Mos Annualized	-6.7%	-6.8%	-6.9%	-7.0%	-7.2%	-7.3%	-7.5%	-7.6%	-7.8%	-8.0%	-8.2%	S&P	US SCV
Worst Drawdown	-51.0%	-51.6%	-52.4%	-53.5%	-54.7%	-55.8%	-56.9%	-58.0%	-59.1%	-60.1%	-61.2%	<b>11.0%</b>	<b>16.5%</b>

Table C14A - Fixed Contributions: S&amp;P 500 vs US SCV Equity Portfolio

Annual contribution grows at 3%/yr. Contributions at BEGINNING OF MONTH. Results reflect Fine Tuning Table returns.

Year	100% S&P	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100% SCV	S&P 500 Idx	Distribution
1970	\$1,022	\$1,019	\$1,016	\$1,014	\$1,011	\$1,008	\$1,005	\$1,002	\$999	\$995	\$992	\$1,022	\$1,000
1971	\$2,275	\$2,275	\$2,274	\$2,273	\$2,271	\$2,269	\$2,266	\$2,263	\$2,259	\$2,256	\$2,251	\$2,276	\$1,030
1972	\$3,873	\$3,842	\$3,809	\$3,776	\$3,742	\$3,708	\$3,673	\$3,637	\$3,600	\$3,563	\$3,525	\$3,875	\$1,061
1973	\$4,308	\$4,208	\$4,109	\$4,011	\$3,914	\$3,818	\$3,724	\$3,630	\$3,538	\$3,447	\$3,357	\$4,311	\$1,093
1974	\$4,124	\$4,098	\$4,069	\$4,038	\$4,005	\$3,969	\$3,932	\$3,893	\$3,852	\$3,809	\$3,765	\$4,127	\$1,126
1975	\$7,038	\$7,134	\$7,226	\$7,311	\$7,392	\$7,466	\$7,536	\$7,599	\$7,658	\$7,711	\$7,759	\$7,044	\$1,159
1976	\$10,057	\$10,426	\$10,798	\$11,172	\$11,548	\$11,926	\$12,304	\$12,683	\$13,062	\$13,441	\$13,819	\$10,067	\$1,194
1977	\$10,513	\$11,149	\$11,814	\$12,510	\$13,235	\$13,992	\$14,780	\$15,600	\$16,453	\$17,339	\$18,259	\$10,526	\$1,230
1978	\$12,512	\$13,385	\$14,310	\$15,290	\$16,327	\$17,423	\$18,580	\$19,798	\$21,082	\$22,431	\$23,847	\$12,529	\$1,267
1979	\$16,245	\$17,504	\$18,858	\$20,312	\$21,870	\$23,539	\$25,324	\$27,232	\$29,267	\$31,437	\$33,747	\$16,270	\$1,305
1980	\$23,072	\$24,597	\$26,223	\$27,954	\$29,794	\$31,747	\$33,818	\$36,010	\$38,327	\$40,772	\$43,349	\$23,112	\$1,344
1981	\$23,280	\$25,317	\$27,537	\$29,953	\$32,579	\$35,430	\$38,521	\$41,870	\$45,491	\$49,403	\$53,623	\$23,324	\$1,384
1982	\$29,842	\$32,708	\$35,866	\$39,340	\$43,158	\$47,350	\$51,947	\$56,981	\$62,487	\$68,503	\$75,067	\$29,904	\$1,426
1983	\$38,191	\$42,542	\$47,419	\$52,883	\$58,997	\$65,833	\$73,467	\$81,983	\$91,472	\$102,033	\$113,772	\$38,279	\$1,469
1984	\$42,136	\$46,571	\$51,525	\$57,051	\$63,210	\$70,067	\$77,693	\$86,163	\$95,560	\$105,972	\$117,492	\$42,241	\$1,513
1985	\$57,492	\$63,220	\$69,603	\$76,708	\$84,607	\$93,381	\$103,113	\$113,896	\$125,827	\$139,011	\$153,560	\$57,648	\$1,558
1986	\$69,852	\$75,994	\$82,783	\$90,277	\$98,539	\$107,635	\$117,633	\$128,607	\$140,635	\$153,796	\$168,176	\$70,057	\$1,605
1987	\$75,183	\$80,795	\$86,934	\$93,640	\$100,949	\$108,902	\$117,539	\$126,900	\$137,026	\$147,957	\$159,736	\$75,421	\$1,653
1988	\$89,648	\$97,557	\$106,294	\$115,934	\$126,553	\$138,234	\$151,063	\$165,127	\$180,521	\$197,339	\$215,681	\$89,953	\$1,702
1989	\$119,884	\$128,419	\$137,729	\$147,865	\$158,876	\$170,814	\$183,729	\$197,671	\$212,687	\$228,824	\$246,126	\$120,320	\$1,754
1990	\$117,903	\$123,232	\$128,945	\$135,049	\$141,544	\$148,431	\$155,706	\$163,363	\$171,393	\$179,786	\$188,525	\$118,361	\$1,806
1991	\$155,932	\$164,871	\$174,504	\$184,858	\$195,955	\$207,813	\$220,451	\$233,878	\$248,103	\$263,127	\$278,949	\$156,575	\$1,860
1992	\$169,766	\$183,592	\$198,714	\$215,226	\$233,222	\$252,795	\$274,038	\$297,044	\$321,901	\$348,693	\$377,501	\$170,508	\$1,916
1993	\$188,888	\$207,057	\$227,167	\$249,398	\$273,934	\$300,970	\$330,705	\$363,347	\$399,105	\$438,194	\$480,828	\$189,761	\$1,974
1994	\$193,372	\$211,794	\$232,180	\$254,708	\$279,564	\$306,941	\$337,040	\$370,065	\$406,227	\$445,736	\$488,803	\$194,314	\$2,033
1995	\$268,457	\$292,057	\$318,020	\$346,536	\$377,802	\$412,017	\$449,383	\$490,101	\$534,371	\$582,388	\$634,340	\$269,831	\$2,094
1996	\$332,414	\$361,380	\$393,211	\$428,132	\$466,371	\$508,162	\$553,735	\$603,322	\$657,146	\$715,426	\$778,367	\$334,201	\$2,157
1997	\$445,793	\$483,886	\$525,605	\$571,211	\$620,963	\$675,118	\$733,927	\$797,631	\$866,453	\$940,602	\$1,020,259	\$448,307	\$2,221
1998	\$575,654	\$604,972	\$636,151	\$669,190	\$704,067	\$740,743	\$779,150	\$819,203	\$860,788	\$903,769	\$947,983	\$579,056	\$2,288
1999	\$699,192	\$730,576	\$763,612	\$798,237	\$834,361	\$871,867	\$910,613	\$950,427	\$991,112	\$1,032,447	\$1,074,182	\$703,515	\$2,357
2000	\$637,648	\$679,341	\$723,767	\$770,952	\$820,891	\$873,548	\$928,846	\$986,671	\$1,046,865	\$1,109,226	\$1,173,509	\$641,770	\$2,427
2001	\$564,023	\$621,783	\$685,267	\$754,875	\$830,992	\$913,983	\$1,004,183	\$1,101,886	\$1,207,336	\$1,320,715	\$1,442,135	\$567,827	\$2,500
2002	\$441,485	\$494,718	\$554,049	\$620,012	\$693,145	\$773,986	\$863,056	\$960,853	\$1,067,836	\$1,184,412	\$1,310,921	\$444,583	\$2,575
2003	\$571,027	\$653,683	\$747,836	\$854,838	\$976,130	\$1,113,237	\$1,267,752	\$1,441,318	\$1,635,612	\$1,852,319	\$2,093,098	\$575,181	\$2,652
2004	\$635,849	\$736,788	\$853,205	\$987,168	\$1,140,937	\$1,316,953	\$1,517,836	\$1,746,368	\$2,005,474	\$2,298,191	\$2,627,639	\$640,644	\$2,732
2005	\$669,775	\$778,016	\$903,182	\$1,047,584	\$1,213,755	\$1,404,439	\$1,622,591	\$1,871,359	\$2,154,063	\$2,474,163	\$2,835,224	\$675,006	\$2,814
2006	\$778,486	\$908,555	\$1,059,685	\$1,234,872	\$1,437,419	\$1,670,937	\$1,939,335	\$2,246,811	\$2,597,828	\$2,997,078	\$3,449,438	\$784,773	\$2,898
2007	\$824,082	\$945,699	\$1,084,571	\$1,242,732	\$1,422,339	\$1,625,663	\$1,855,057	\$2,112,933	\$2,401,722	\$2,723,829	\$3,081,583	\$830,960	\$2,985
2008	\$521,448	\$598,665	\$686,831	\$787,220	\$901,178	\$1,030,113	\$1,175,476	\$1,338,739	\$1,521,373	\$1,724,813	\$1,950,427	\$525,945	\$3,075
2009	\$662,853	\$765,537	\$883,370	\$1,018,187	\$1,171,939	\$1,346,674	\$1,544,512	\$1,767,615	\$2,018,149	\$2,298,237	\$2,609,910	\$668,733	\$3,167
2010	\$765,997	\$896,180	\$1,047,532	\$1,222,979	\$1,425,706	\$1,659,140	\$1,926,932	\$2,232,921	\$2,581,088	\$2,975,498	\$3,420,227	\$772,991	\$3,262
2011	\$785,339	\$909,646	\$1,052,649	\$1,216,636	\$1,404,033	\$1,617,383	\$1,859,309	\$2,132,469	\$2,439,511	\$2,783,004	\$3,165,373	\$792,715	\$3,360
2012	\$914,504	\$1,063,934	\$1,236,692	\$1,435,794	\$1,664,470	\$1,926,143	\$2,224,387	\$2,562,882	\$2,945,352	\$3,375,484	\$3,856,848	\$923,331	\$3,461
2013	\$1,214,502	\$1,422,851	\$1,665,537	\$1,947,347	\$2,273,491	\$2,649,570	\$3,081,540	\$3,575,650	\$4,138,364	\$4,776,252	\$5,495,867	\$1,226,544	\$3,565
2014	\$1,384,277	\$1,606,644	\$1,863,096	\$2,157,879	\$2,495,500	\$2,880,683	\$3,318,303	\$3,813,306	\$4,370,606	\$4,994,969	\$5,690,875	\$1,398,378	\$3,671
2015	\$1,406,821	\$1,617,590	\$1,858,204	\$2,131,906	\$2,442,035	\$2,791,973	\$3,185,071	\$3,624,563	\$4,113,473	\$4,654,502	\$5,249,911	\$1,421,539	\$3,782
2016	\$1,578,750	\$1,840,620	\$2,143,740	\$2,493,385	\$2,895,169	\$3,354,986	\$3,878,927	\$4,473,178	\$5,143,887	\$5,897,013	\$6,738,147	\$1,595,697	\$3,895
2017	\$1,927,320	\$2,218,760	\$2,551,546	\$2,930,098	\$3,358,940	\$3,842,613	\$4,385,561	\$4,992,014	\$5,665,840	\$6,410,383	\$7,228,301	\$1,948,534	\$4,012
2018	\$1,846,296	\$2,100,637	\$2,387,339	\$2,709,179	\$3,068,852	\$3,468,883	\$3,911,536	\$4,398,713	\$4,931,839	\$5,511,751	\$6,138,582	\$1,867,137	\$4,132
2019	\$2,431,868	\$2,738,522	\$3,080,064	\$3,458,722	\$3,876,468	\$4,334,914	\$4,835,212	\$5,377,945	\$5,963,017	\$6,589,550	\$7,255,788	\$2,459,983	\$4,256
2020	\$2,884,111	\$3,206,765	\$3,559,614	\$3,943,299	\$4,357,977	\$4,803,221	\$5,277,940	\$5,780,297	\$6,307,642	\$6,856,466	\$7,422,375	\$2,918,264	\$4,384
2021	\$3,717,198	\$4,171,085	\$4,671,660	\$5,220,626	\$5,819,027	\$6,467,088	\$7,164,068	\$7,908,110	\$8,696,120	\$9,523,650	\$10,384,837	\$3,762,260	\$4,515
2022	\$3,048,162	\$3,478,100	\$3,960,906	\$4,500,236	\$5,099,305	\$5,760,699	\$6,486,185	\$7,276,505	\$8,131,168	\$9,048,257	\$10,024,247	\$3,086,005	\$4,651

Table C14A - Fixed Contributions: S&P 500 vs US SCV Equity Portfolio

Annual contribution grows at 3%/yr. Contributions at BEGINNING OF MONTH. Results reflect Fine Tuning Table returns.

Year	100% S&P	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100% SCV	S&P 500 Idx	Distribution
2000	\$637,648	\$679,341	\$723,767	\$770,952	\$820,891	\$873,548	\$928,846	\$986,671	\$1,046,865	\$1,109,226	\$1,173,509	\$641,770	\$2,427
2001	\$564,023	\$621,783	\$685,267	\$754,875	\$830,992	\$913,983	\$1,004,183	\$1,101,886	\$1,207,336	\$1,320,715	\$1,442,135	\$567,827	\$2,500
2002	\$441,485	\$494,718	\$554,049	\$620,012	\$693,145	\$773,986	\$863,056	\$960,853	\$1,067,836	\$1,184,412	\$1,310,921	\$444,583	\$2,575
2003	\$571,027	\$653,683	\$747,836	\$854,838	\$976,130	\$1,113,237	\$1,267,752	\$1,441,318	\$1,635,612	\$1,852,319	\$2,093,098	\$575,181	\$2,652
2004	\$635,849	\$736,788	\$853,205	\$987,168	\$1,140,937	\$1,316,953	\$1,517,836	\$1,746,368	\$2,005,474	\$2,298,191	\$2,627,639	\$640,644	\$2,732
2005	\$669,775	\$778,016	\$903,182	\$1,047,584	\$1,213,755	\$1,404,439	\$1,622,591	\$1,871,359	\$2,154,063	\$2,474,163	\$2,835,224	\$675,006	\$2,814
2006	\$778,486	\$908,555	\$1,059,685	\$1,234,872	\$1,437,419	\$1,670,937	\$1,939,335	\$2,246,811	\$2,597,828	\$2,997,078	\$3,449,438	\$784,773	\$2,898
2007	\$824,082	\$945,699	\$1,084,571	\$1,242,732	\$1,422,339	\$1,625,663	\$1,855,057	\$2,112,933	\$2,401,722	\$2,723,829	\$3,081,583	\$830,960	\$2,985
2008	\$521,448	\$598,665	\$686,831	\$787,220	\$901,178	\$1,030,113	\$1,175,476	\$1,338,739	\$1,521,373	\$1,724,813	\$1,950,427	\$525,945	\$3,075
2009	\$662,853	\$765,537	\$883,370	\$1,018,187	\$1,171,939	\$1,346,674	\$1,544,512	\$1,767,615	\$2,018,149	\$2,298,237	\$2,609,910	\$668,733	\$3,167



Table D14.4A - Fixed Distributions: S&amp;P 500 vs US SCV Equity Portfolio - Conservative (\$40,000/yr)

Initial investment \$1,000,000. Fixed initial distribution grows with inflation. Distribution at BEGINNING OF YEAR. Results reflect Fine Tuning Table returns.

Year	100% S&P	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100% SCV	S&P 500 Idx	Distribution	CPI (%)
1970	\$998,351	\$993,833	\$989,148	\$984,300	\$979,292	\$974,127	\$968,809	\$963,339	\$957,722	\$951,962	\$946,060	\$998,650	\$40,000	5.57%
1971	\$1,092,695	\$1,088,981	\$1,084,871	\$1,080,370	\$1,075,486	\$1,070,226	\$1,064,597	\$1,058,607	\$1,052,264	\$1,045,577	\$1,038,552	\$1,093,361	\$42,228	3.27%
1972	\$1,247,793	\$1,231,919	\$1,215,547	\$1,198,705	\$1,181,425	\$1,163,734	\$1,145,663	\$1,127,239	\$1,108,494	\$1,089,454	\$1,070,148	\$1,248,954	\$43,607	3.41%
1973	\$1,026,000	\$993,094	\$960,447	\$928,104	\$896,108	\$864,501	\$833,320	\$802,600	\$772,373	\$742,670	\$713,517	\$1,027,304	\$45,093	8.71%
1974	\$718,268	\$703,231	\$687,515	\$671,182	\$654,295	\$636,919	\$619,115	\$600,945	\$582,470	\$563,749	\$544,838	\$719,448	\$49,019	12.34%
1975	\$909,725	\$907,456	\$903,345	\$897,423	\$889,727	\$880,302	\$869,202	\$856,484	\$842,213	\$826,460	\$809,299	\$911,611	\$55,066	6.94%
1976	\$1,053,445	\$1,078,011	\$1,100,432	\$1,120,561	\$1,138,262	\$1,153,409	\$1,165,887	\$1,175,592	\$1,182,434	\$1,186,336	\$1,187,233	\$1,056,091	\$58,886	4.86%
1977	\$920,219	\$969,863	\$1,019,354	\$1,068,424	\$1,116,794	\$1,164,172	\$1,210,255	\$1,254,728	\$1,297,270	\$1,337,552	\$1,375,238	\$922,953	\$61,751	6.70%
1978	\$910,222	\$978,023	\$1,047,277	\$1,117,668	\$1,188,843	\$1,260,417	\$1,331,969	\$1,403,043	\$1,473,154	\$1,541,784	\$1,608,387	\$913,408	\$65,889	9.02%
1979	\$992,563	\$1,087,452	\$1,186,412	\$1,289,147	\$1,395,299	\$1,504,441	\$1,616,077	\$1,729,640	\$1,844,488	\$1,959,906	\$2,075,100	\$996,630	\$71,830	13.29%
1980	\$1,206,123	\$1,323,825	\$1,445,224	\$1,569,802	\$1,696,968	\$1,826,054	\$1,956,314	\$2,086,929	\$2,217,005	\$2,345,575	\$2,471,606	\$1,211,862	\$81,379	12.52%
1981	\$1,059,527	\$1,199,987	\$1,350,150	\$1,509,910	\$1,679,039	\$1,857,184	\$2,043,845	\$2,238,372	\$2,439,947	\$2,647,578	\$2,860,086	\$1,065,303	\$91,565	8.92%
1982	\$1,164,934	\$1,352,062	\$1,555,607	\$1,775,908	\$2,013,151	\$2,267,341	\$2,538,281	\$2,825,541	\$3,128,431	\$3,445,974	\$3,776,879	\$1,172,291	\$99,735	3.83%
1983	\$1,299,953	\$1,560,471	\$1,851,805	\$2,175,858	\$2,534,401	\$2,929,017	\$3,361,043	\$3,831,505	\$4,341,044	\$4,889,841	\$5,477,530	\$1,309,350	\$103,554	3.79%
1984	\$1,266,819	\$1,537,341	\$1,838,093	\$2,170,672	\$2,536,501	\$2,936,782	\$3,372,430	\$3,844,017	\$4,351,702	\$4,895,160	\$5,473,505	\$1,277,183	\$107,480	3.95%
1985	\$1,526,249	\$1,879,700	\$2,271,346	\$2,702,995	\$3,176,202	\$3,692,208	\$4,251,862	\$4,855,546	\$5,503,094	\$6,193,705	\$6,925,849	\$1,540,395	\$111,724	3.80%
1986	\$1,670,272	\$2,071,196	\$2,509,503	\$2,986,133	\$3,501,671	\$4,056,283	\$4,649,650	\$5,280,905	\$5,948,562	\$6,650,452	\$7,383,658	\$1,687,526	\$115,968	1.10%
1987	\$1,633,776	\$2,033,955	\$2,463,699	\$2,922,689	\$3,410,199	\$3,925,060	\$4,465,614	\$5,029,681	\$5,614,526	\$6,216,829	\$6,832,665	\$1,652,422	\$117,241	4.43%
1988	\$1,764,857	\$2,263,897	\$2,811,943	\$3,410,202	\$4,059,373	\$4,759,558	\$5,510,177	\$6,309,874	\$7,156,428	\$8,046,666	\$8,976,381	\$1,787,161	\$122,440	4.42%
1989	\$2,151,881	\$2,767,486	\$3,427,199	\$4,130,039	\$4,874,351	\$5,657,750	\$6,477,069	\$7,328,314	\$8,206,628	\$9,106,260	\$10,020,558	\$2,181,840	\$127,851	4.65%
1990	\$1,954,862	\$2,491,360	\$3,041,986	\$3,603,707	\$4,173,074	\$4,746,244	\$5,318,995	\$5,886,763	\$6,444,677	\$6,987,610	\$7,510,230	\$1,984,481	\$133,793	6.11%
1991	\$2,364,512	\$3,101,886	\$3,875,532	\$4,682,139	\$5,517,635	\$6,377,171	\$7,255,122	\$8,145,096	\$9,039,957	\$9,931,866	\$10,812,338	\$2,403,848	\$141,963	3.06%
1992	\$2,386,620	\$3,254,968	\$4,202,881	\$5,230,140	\$6,335,357	\$7,515,845	\$8,767,492	\$10,084,656	\$11,460,063	\$12,884,742	\$14,347,968	\$2,429,667	\$146,313	2.90%
1993	\$2,460,552	\$3,465,745	\$4,589,477	\$5,835,817	\$7,207,538	\$8,705,867	\$10,330,225	\$12,077,969	\$13,944,136	\$15,921,204	\$17,998,867	\$2,508,668	\$150,557	2.75%
1994	\$2,335,597	\$3,354,073	\$4,492,683	\$5,755,457	\$7,145,088	\$8,662,676	\$10,307,466	\$12,076,587	\$13,964,793	\$15,964,225	\$18,064,189	\$2,385,048	\$154,695	2.67%
1995	\$2,993,866	\$4,368,560	\$5,889,790	\$7,559,978	\$9,379,607	\$11,346,932	\$13,457,701	\$15,704,889	\$18,078,448	\$20,565,097	\$23,148,141	\$3,062,775	\$158,833	2.54%
1996	\$3,479,977	\$5,169,177	\$7,037,477	\$9,087,284	\$11,318,534	\$13,728,339	\$16,310,653	\$19,055,955	\$21,950,961	\$24,978,388	\$28,116,762	\$3,565,734	\$162,865	3.32%
1997	\$4,415,297	\$6,660,161	\$9,136,625	\$11,845,549	\$14,784,237	\$17,946,006	\$21,319,781	\$24,889,738	\$28,635,008	\$32,529,448	\$36,541,511	\$4,530,960	\$168,276	1.70%
1998	\$5,455,477	\$8,078,190	\$10,807,859	\$13,626,004	\$16,511,241	\$19,439,411	\$22,383,777	\$25,315,298	\$28,202,977	\$31,014,264	\$33,715,543	\$5,605,801	\$171,141	1.61%
1999	\$6,391,015	\$9,511,291	\$12,721,156	\$15,994,143	\$19,300,787	\$22,608,942	\$25,884,189	\$29,090,327	\$32,189,939	\$35,145,023	\$37,917,678	\$6,574,857	\$173,899	2.68%
2000	\$5,645,132	\$8,648,465	\$11,849,447	\$15,227,842	\$18,758,662	\$22,411,199	\$26,151,178	\$29,939,049	\$33,731,417	\$37,481,413	\$41,139,391	\$5,813,946	\$178,568	3.39%
2001	\$4,810,030	\$7,717,099	\$11,005,295	\$14,681,389	\$18,745,540	\$23,190,319	\$27,999,827	\$33,148,917	\$38,602,581	\$44,315,534	\$50,232,033	\$4,960,240	\$184,615	1.55%
2002	\$3,599,789	\$5,963,360	\$8,710,153	\$11,860,052	\$15,427,505	\$19,420,237	\$23,837,966	\$28,671,154	\$33,899,869	\$39,492,783	\$45,406,387	\$3,717,905	\$187,480	2.38%
2003	\$4,384,264	\$7,589,912	\$11,449,546	\$16,027,816	\$21,385,281	\$27,575,856	\$34,643,968	\$42,621,495	\$51,524,556	\$61,350,240	\$72,073,386	\$4,537,555	\$191,936	1.88%
2004	\$4,643,021	\$8,301,522	\$12,795,567	\$18,228,483	\$24,702,836	\$32,317,152	\$41,162,073	\$51,315,995	\$62,840,223	\$75,773,772	\$90,127,916	\$4,814,370	\$195,544	3.26%
2005	\$4,657,901	\$8,521,038	\$13,288,574	\$19,076,836	\$26,002,237	\$34,177,699	\$43,708,413	\$54,686,982	\$67,187,989	\$81,262,110	\$96,929,902	\$4,839,060	\$201,910	3.42%
2006	\$5,150,364	\$9,673,252	\$15,300,484	\$22,184,209	\$30,479,016	\$40,337,596	\$51,905,491	\$65,314,952	\$80,677,963	\$98,078,527	\$117,564,398	\$5,361,667	\$208,806	2.54%
2007	\$5,205,884	\$9,814,138	\$15,397,704	\$22,056,718	\$29,884,970	\$38,965,775	\$49,367,400	\$61,138,141	\$74,301,178	\$88,849,385	\$104,740,274	\$5,430,351	\$214,111	4.08%
2008	\$3,138,478	\$6,047,161	\$9,576,018	\$13,788,375	\$18,743,141	\$24,962,086	\$31,076,847	\$38,525,721	\$46,850,338	\$56,042,338	\$66,070,181	\$3,280,879	\$222,850	0.09%
2009	\$3,685,865	\$7,412,330	\$11,979,910	\$17,482,559	\$24,009,372	\$31,640,680	\$40,443,680	\$50,467,691	\$61,739,176	\$74,256,691	\$87,985,974	\$3,867,038	\$223,054	2.72%
2010	\$3,976,270	\$8,375,767	\$13,886,954	\$20,662,659	\$28,855,891	\$38,614,654	\$50,075,797	\$63,357,962	\$78,553,772	\$95,721,439	\$114,876,049	\$4,185,915	\$229,124	1.50%
2011	\$3,821,642	\$8,234,859	\$13,677,268	\$20,268,252	\$28,121,419	\$37,339,546	\$48,008,894	\$60,193,030	\$73,926,346	\$89,207,492	\$105,993,009	\$4,036,860	\$232,551	2.96%
2012	\$4,154,248	\$9,318,460	\$15,739,092	\$23,574,398	\$32,978,514	\$44,095,264	\$57,051,051	\$71,946,964	\$88,850,292	\$107,785,732	\$128,726,607	\$4,405,140	\$239,440	1.74%
2013	\$5,175,704	\$12,100,595	\$20,816,216	\$31,574,731	\$44,629,184	\$60,224,832	\$78,588,810	\$99,918,286	\$124,367,289	\$152,032,581	\$182,938,999	\$5,509,373	\$243,608	1.50%
2014	\$5,601,405	\$13,351,805	\$22,960,607	\$34,651,924	\$48,640,507	\$65,122,279	\$84,263,630	\$106,189,727	\$130,972,174	\$158,616,466	\$189,049,793	\$5,982,411	\$247,267	0.76%
2015	\$5,424,707	\$13,161,021	\$22,605,854	\$33,928,865	\$47,282,195	\$62,791,720	\$80,547,652	\$100,594,797	\$122,922,872	\$147,457,317	\$174,051,131	\$5,812,613	\$249,137	0.73%
2016	\$5,790,806	\$14,656,764	\$25,739,391	\$39,321,252	\$55,675,876	\$75,055,922	\$97,679,689	\$123,716,240	\$153,269,594	\$186,362,545	\$222,920,817	\$6,226,828	\$250,955	2.07%
2017	\$6,740,955	\$17,324,344	\$30,278,506	\$45,838,671	\$64,214,040	\$85,575,168	\$110,040,494	\$137,662,487	\$168,414,009	\$202,175,578	\$238,724,286	\$7,274,156	\$256,161	2.11%
2018	\$6,193,444	\$16,123,563	\$28,038,313	\$42,079,189	\$58,354,452	\$76,929,281	\$97,815,965	\$120,964,592	\$146,254,771	\$173,488,945	\$202,387,856	\$6,705,135	\$261,564	1.91%
2019	\$7,790,761	\$20,635,020	\$35,773,237	\$53,305,735	\$73,283,043	\$95,695,820	\$120,465,636	\$147,437,182	\$176,372,496	\$206,947,782	\$238,753,331	\$8,465,851	\$266,560	2.29%
2020	\$8,901,350	\$23,808,490	\$40,973,182	\$60,391,001	\$81,991,285	\$105,629,875	\$131,084,011	\$158,049,958	\$186,143,867	\$214,906,234	\$243,810,175	\$9,703,526	\$272,651	1.36%
2021	\$11,100,823	\$30,570,285	\$53,350,807	\$79,506,820	\$109,011,251	\$141,731,922	\$177,420,620	\$215,705,810	\$256,089,911	\$297,951,920	\$340,555,936	\$12,136,833	\$276,365	7.04%
2022	\$8,848,131	\$25,214,046	\$44,934,792	\$68,215,609	\$95,188,131	\$125,891,724	\$160,255,838	\$198,084,522	\$239,044,296	\$282,656,598	\$328,295,896	\$9,699,475	\$295,811	6.45%

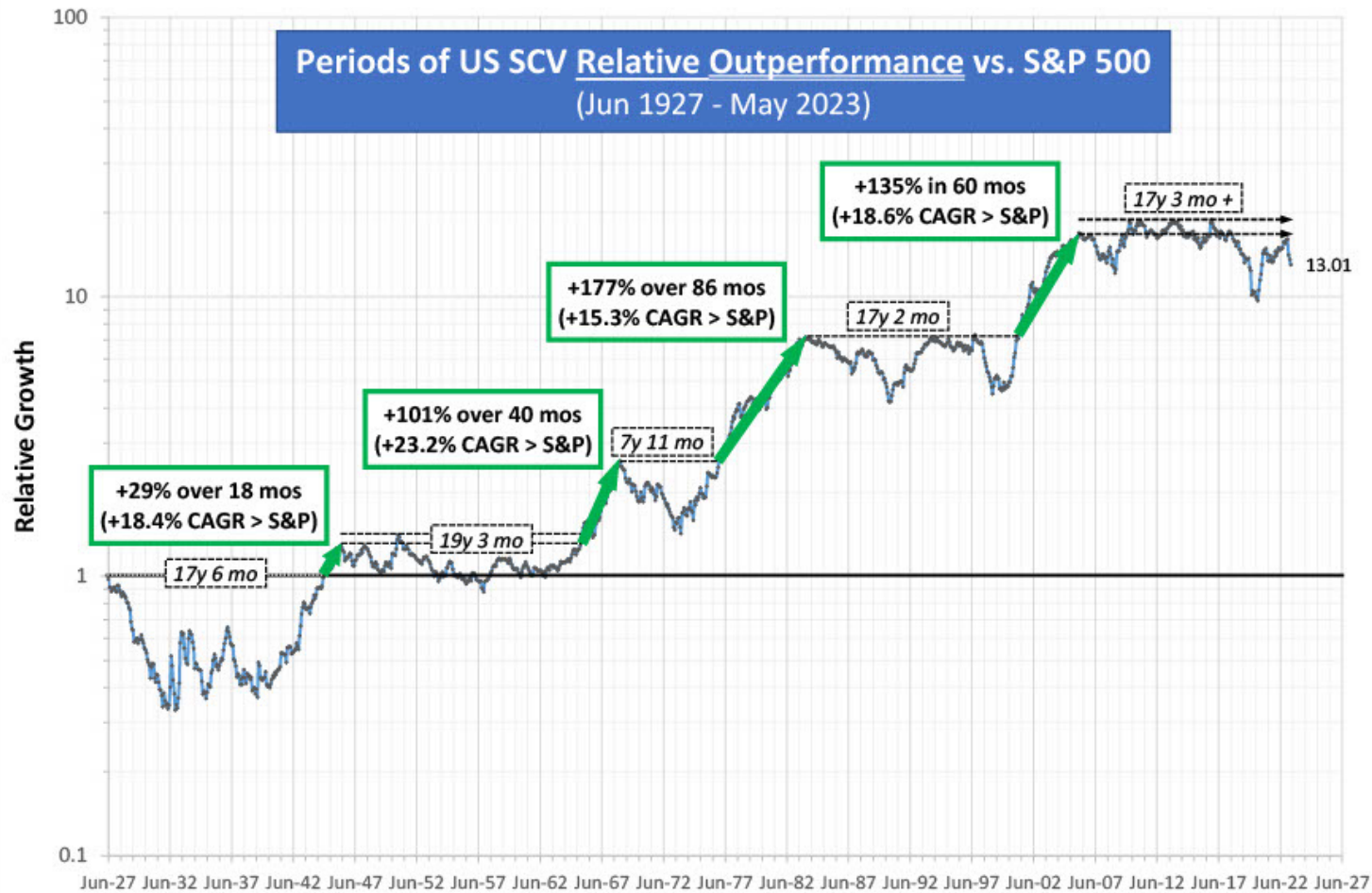
Table D14.4A - Fixed Distributions: S&P 500 vs US SCV Equity Portfolio - Conservative (\$40,000/yr)

Initial investment \$1,000,000. Fixed initial distribution grows with inflation. Distribution at BEGINNING OF YEAR. Results reflect Fine Tuning Table returns.

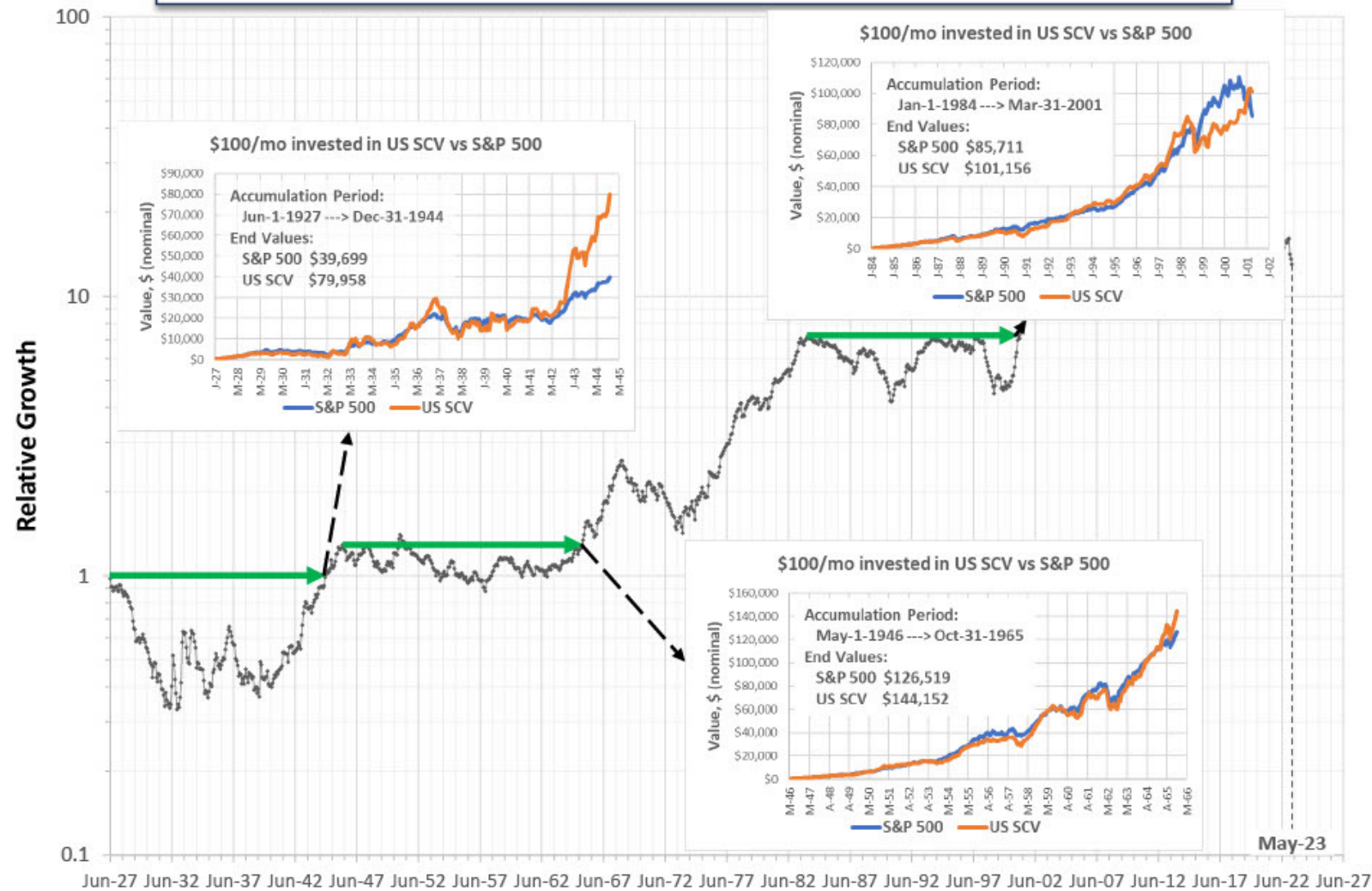
Year	100% S&P	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100% SCV	S&P 500 Idx	Distribution	CPI (%)
2000	\$5,645,132	\$8,648,465	\$11,849,447	\$15,227,842	\$18,758,462	\$22,411,199	\$26,151,178	\$29,939,049	\$33,731,417	\$37,481,413	\$41,139,391	\$5,813,946	\$178,568	3.39%
2001	\$4,810,030	\$7,717,099	\$11,005,295	\$14,681,389	\$18,745,540	\$23,190,319	\$27,999,827	\$33,148,917	\$38,602,581	\$44,315,534	\$50,232,033	\$4,960,240	\$184,615	1.55%
2002	\$3,599,789	\$5,963,360	\$8,710,153	\$11,860,052	\$15,427,505	\$19,420,237	\$23,837,966	\$28,671,154	\$33,899,869	\$39,492,783	\$45,406,387	\$3,717,905	\$187,480	2.38%
2003	\$4,384,264	\$7,589,912	\$11,449,546	\$16,027,816	\$21,385,281	\$27,575,856	\$34,643,968	\$42,621,495	\$51,524,556	\$61,350,240	\$72,073,386	\$4,537,555	\$191,936	1.88%
2004	\$4,643,021	\$8,301,522	\$12,795,567	\$18,228,483	\$24,702,836	\$32,317,152	\$41,162,073	\$51,315,995	\$62,840,223	\$75,773,772	\$90,127,916	\$4,814,370	\$195,544	3.26%
2005	\$4,657,901	\$8,521,038	\$13,288,574	\$19,076,836	\$26,002,237	\$34,177,699	\$43,708,413	\$54,686,982	\$67,187,989	\$81,262,110	\$96,929,902	\$4,839,060	\$201,910	3.42%
2006	\$5,150,364	\$9,673,252	\$15,300,484	\$22,184,209	\$30,479,016	\$40,337,596	\$51,905,491	\$65,314,952	\$80,677,963	\$98,078,527	\$117,564,398	\$5,361,667	\$208,806	2.54%
2007	\$5,205,884	\$9,814,138	\$15,397,704	\$22,056,718	\$29,884,970	\$38,965,775	\$49,367,400	\$61,138,141	\$74,301,178	\$88,849,385	\$104,740,274	\$5,430,351	\$214,111	4.08%
2008	\$3,138,478	\$6,047,161	\$9,576,018	\$13,788,375	\$18,743,141	\$24,492,086	\$31,076,847	\$38,525,721	\$46,850,338	\$56,042,338	\$66,070,181	\$3,280,879	\$222,850	0.09%
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## Tell-Tale (Relative Growth) Chart - US Small Cap Value Index vs. S&P 500 Index

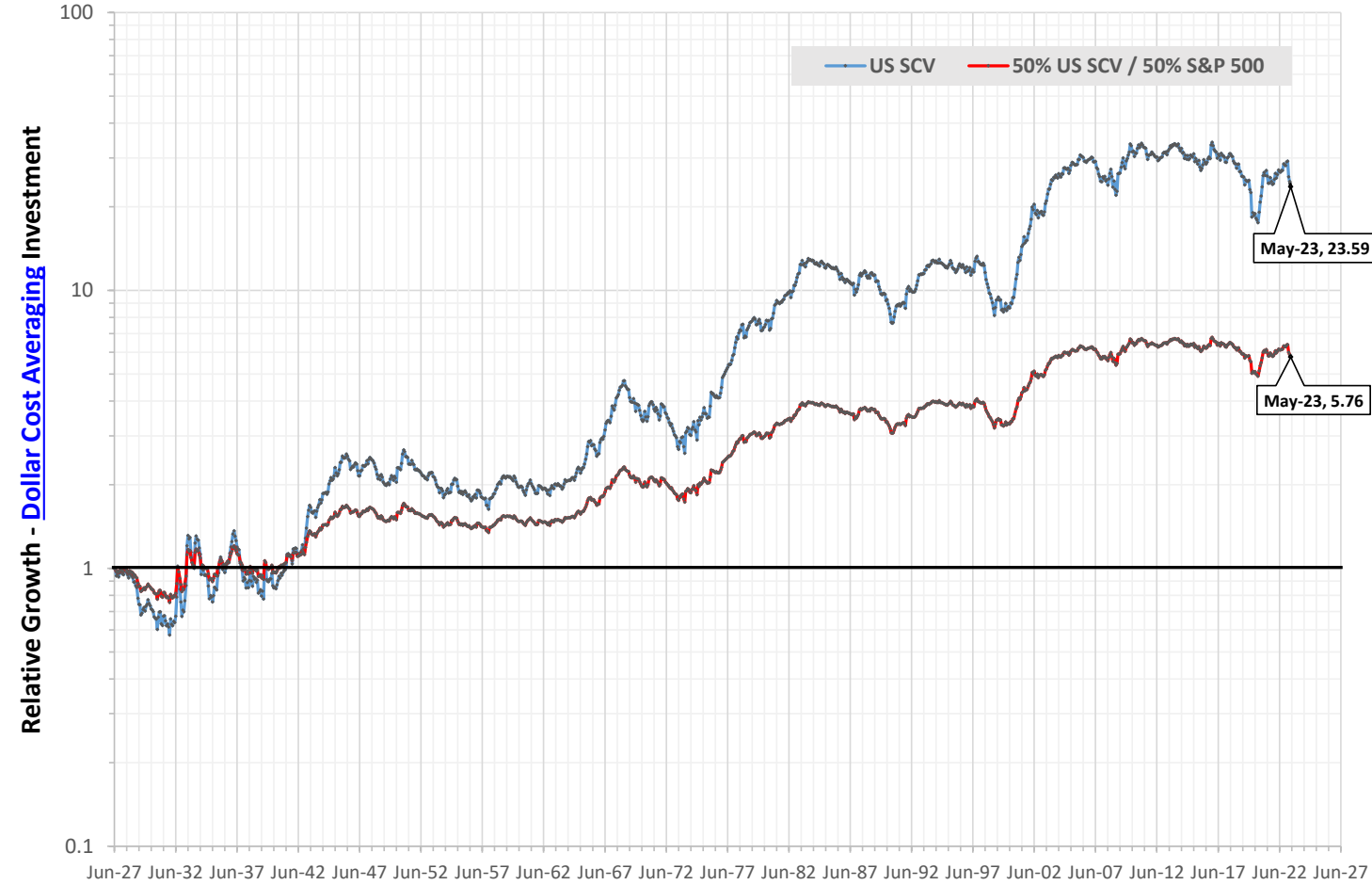


## US SCV Accumulation during Relative Underperformance Breakeven Periods





Tell-Tale (Relative Growth) Chart - US Small Cap Value Index vs. S&P 500 Index



# Reports

## Report 1a: Percentage of U.S. Equity Funds Underperforming Their Benchmarks (Based on Absolute Return)

SPIVA Category	Comparison Index	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)	15-Year (%)	20-Year (%)
All Domestic Funds	S&P Composite 1500	50.29	78.69	88.01	93.14	93.95	92.14
All Large-Cap Funds	S&P 500	51.08	74.27	86.51	91.41	93.40	94.79
All Mid-Cap Funds	S&P MidCap 400	62.60	77.97	64.78	81.51	93.22	94.04
All Small-Cap Funds	S&P SmallCap 600	56.91	66.92	70.54	89.11	94.35	93.67
All Multi-Cap Funds	S&P Composite 1500	50.75	81.02	87.55	93.20	94.58	93.54
Large-Cap Growth Funds	S&P 500 Growth	73.85	88.94	86.09	95.89	98.15	97.65
Large-Cap Core Funds	S&P 500	54.30	68.27	84.01	95.91	95.69	96.38
Large-Cap Value Funds	S&P 500 Value	58.70	39.46	69.02	84.90	79.13	86.51
Mid-Cap Growth Funds	S&P MidCap 400 Growth	91.23	78.36	38.89	65.87	91.00	91.58
Mid-Cap Core Funds	S&P MidCap 400	53.66	70.75	78.15	88.43	96.49	97.03
Mid-Cap Value Funds	S&P MidCap 400 Value	72.73	81.82	83.93	95.65	93.00	92.16
Small-Cap Growth Funds	S&P SmallCap 600 Growth	79.60	75.76	58.60	84.50	95.43	96.67
Small-Cap Core Funds	S&P SmallCap 600	39.83	65.48	76.33	95.26	94.81	95.12
Small-Cap Value Funds	S&P SmallCap 600 Value	40.63	43.84	80.65	90.99	91.43	92.16
Multi-Cap Growth Funds	S&P Composite 1500 Growth	56.21	85.00	84.36	89.55	96.05	91.36
Multi-Cap Core Funds	S&P Composite 1500	58.38	79.43	90.20	96.69	93.48	95.36
Multi-Cap Value Funds	S&P Composite 1500 Value	58.16	58.04	86.84	91.23	90.60	88.89
Real Estate Funds	S&P United States REIT	87.67	58.44	61.90	74.03	87.25	87.10

Sources: S&P Dow Jones Indices LLC, CRSP. Data as of Dec. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Report 3: Average U.S. Equity Fund Performance (Equal-Weighted) (cont.)**

Category	1-Year (%)	3-Year (Annualized, %)	5-Year (Annualized, %)	10-Year (Annualized, %)	20-Year (Annualized, %)
<b>Small-Cap</b>					
S&P SmallCap 600 Growth	-21.08	4.99	6.11	11.13	10.97
Small-Cap Growth Funds	-28.04	3.74	6.54	9.82	8.92
S&P SmallCap 600	-16.10	5.80	5.88	10.82	10.64
Small-Cap Core Funds	-15.24	4.87	4.29	8.28	8.79
S&P SmallCap 600 Value	-11.04	6.10	5.38	10.33	10.19
Small-Cap Value Funds	-8.65	6.73	4.17	8.18	8.75

### Sound Investing Portfolios - Asset Allocations (Worldwide (WW) portfolios: 50% US / 50% Int'l)

Portfolio	S&P 500	US LCV	US SCB	US SCV	REIT	Intl LCB	Intl LCV	Intl SCB	Intl SCV	Em Mrkt
S&P 500	100%									
WW UBH	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
WW 4-Fund	25%			25%			25%	25%		
US 4-Fund	25%	25%	25%	25%						
WW All Value		25%		25%			20%		20%	10%
US All Value		50%		50%						
WW All SCV				50%					50%	
US All SCV				100%						
US 2-Fund	50%			50%						

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Table H2 - Sound Investing Portfolios: Comparison Data

(Worldwide (WW) portfolios are 50% US / 50% Int'l)

1970-2022		S&P 500	WW UBH	WW 4-Fund	US 4-Fund	WW All Value	US All Value	WW All SCV	US All SCV	US 2-Fund
53 yr Growth of \$10K*		\$1,890,696	\$3,739,092	\$3,923,052	\$4,094,415	\$5,342,367	\$6,430,549	\$9,138,074	\$8,652,097	\$4,482,114
(*-Monthly rebalancing)										
Returns	CAGR (70-22)	10.4%	11.8%	11.9%	12.0%	12.6%	13.0%	13.7%	13.6%	12.2%
	(70-79)	5.8%	13.3%	13.4%	10.4%	14.4%	13.0%	17.2%	13.9%	10.1%
	(80-89)	17.5%	22.0%	22.9%	18.8%	23.5%	20.2%	26.7%	20.0%	18.9%
	(90-99)	18.2%	10.1%	10.4%	15.4%	10.6%	14.6%	8.4%	15.3%	16.9%
	(00-09)	-1.0%	7.3%	6.1%	4.8%	8.5%	6.9%	10.5%	9.1%	4.2%
	(10-22)	12.1%	8.2%	8.6%	11.5%	8.0%	11.1%	8.5%	10.8%	11.7%
The "Ups & Downs" Ride	Number of Up Yrs	42	42	42	40	44	41	41	40	41
	Average Up Yr Gain	18.7%	20.6%	20.8%	21.8%	20.6%	22.6%	24.3%	25.5%	21.3%
	Sum of Up Yr Gains	787.0%	863.2%	875.5%	871.7%	904.4%	926.4%	997.3%	1020.9%	872.0%
	Best Year	37.5%	48.9%	48.9%	51.4%	53.5%	57.0%	69.7%	65.2%	51.3%
		1995	2003	2003	1975	2003	1975	1975	1975	1975
	Number of Down Yrs	11	11	11	13	9	12	12	13	12
	Average Down Yr Loss	-14.5%	-13.6%	-14.0%	-11.4%	-16.1%	-12.2%	-13.0%	-13.7%	-11.8%
	Sum of Down Yr Losses	-159.2%	-149.4%	-153.5%	-148.2%	-144.8%	-146.5%	-156.5%	-178.0%	-141.1%
	Worst Year	-37.0%	-41.2%	-40.9%	-37.6%	-42.2%	-38.8%	-39.1%	-36.8%	-36.8%
		2008	2008	2008	2008	2008	2008	2008	2008	2008
Risk Measures	Standard Dev (70-22)	17.2%	18.4%	18.8%	18.6%	19.1%	19.4%	21.7%	22.6%	18.4%
	(70-79)	19.2%	22.7%	23.9%	24.5%	22.9%	25.3%	29.9%	30.4%	23.7%
	(80-89)	12.7%	12.5%	13.6%	12.7%	12.6%	12.3%	12.9%	17.0%	12.5%
	(90-99)	14.2%	13.5%	12.4%	16.5%	14.3%	18.4%	14.8%	21.6%	15.9%
	(00-09)	21.1%	26.1%	25.7%	23.1%	27.0%	24.1%	27.6%	26.8%	22.9%
	(10-22)	14.7%	14.5%	15.2%	16.1%	15.6%	17.2%	17.3%	19.1%	15.8%
	Sharpe Ratio (70-22)	0.75	0.79	0.78	0.79	0.80	0.81	0.78	0.75	0.81
	(70-79)	0.44	0.73	0.71	0.57	0.77	0.66	0.73	0.61	0.57
	(80-89)	1.51	1.89	1.81	1.61	2.00	1.77	2.18	1.30	1.64
	(90-99)	1.41	0.88	0.97	1.06	0.88	0.93	0.71	0.85	1.19
	(00-09)	0.10	0.44	0.40	0.36	0.48	0.44	0.54	0.50	0.33
	(10-22)	0.96	0.70	0.70	0.84	0.65	0.78	0.63	0.70	0.87
	Sortino Ratio (70-22)	1.21	1.18	1.22	1.31	1.21	1.47	1.31	1.57	1.37
	(70-79)	0.87	1.37	1.61	18.65	1.13	9.25	1.97	1.28	23.22
	(80-89)	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
	(90-99)	NMF	NMF	NMF	NMF	NMF	1.31	NMF	1.55	NMF
	(00-09)	0.17	0.61	0.56	0.47	0.52	0.62	0.71	0.86	0.45
	(10-22)	1.46	2.01	2.02	3.08	1.92	3.27	1.45	2.76	3.18

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NMF - No meaningful figure (not enough losing years to calculate the downside standard deviation for the period.)

# What You Might Not Know About Asset Class Returns

2008-2022


CRSP US Small Cap Value
9.33
S&P SmallCap 600 Value
8.43
Morningstar US Small Value
8.28
Wilshire US Small Value
8.13
MSCI US Small Cap Value
6.94
Russell 2000 Value
6.81
2.52


S&P SmallCap 600
8.89
CRSP US Small Cap
8.64
MSCI USA Small Cap
8.35
Wilshire US Small
8.24
Morningstar US Small
7.69
Russell 2000
7.16
1.73

S&P SmallCap 600 Growth
9.23
MSCI US Small Cap Growth
8.43
Wilshire US Small Growth
8.28
CRSP US Small Cap Growth
7.63
Russell 2000 Growth
7.26
Morningstar US Small Growth
6.76
2.47





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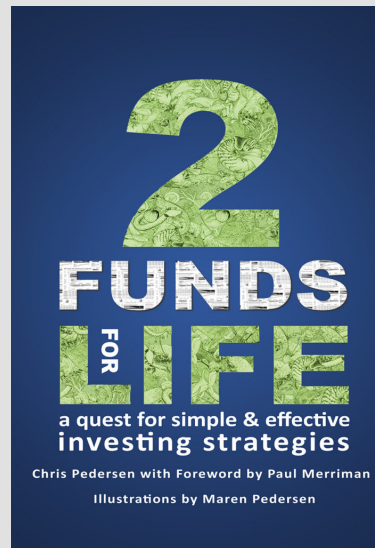
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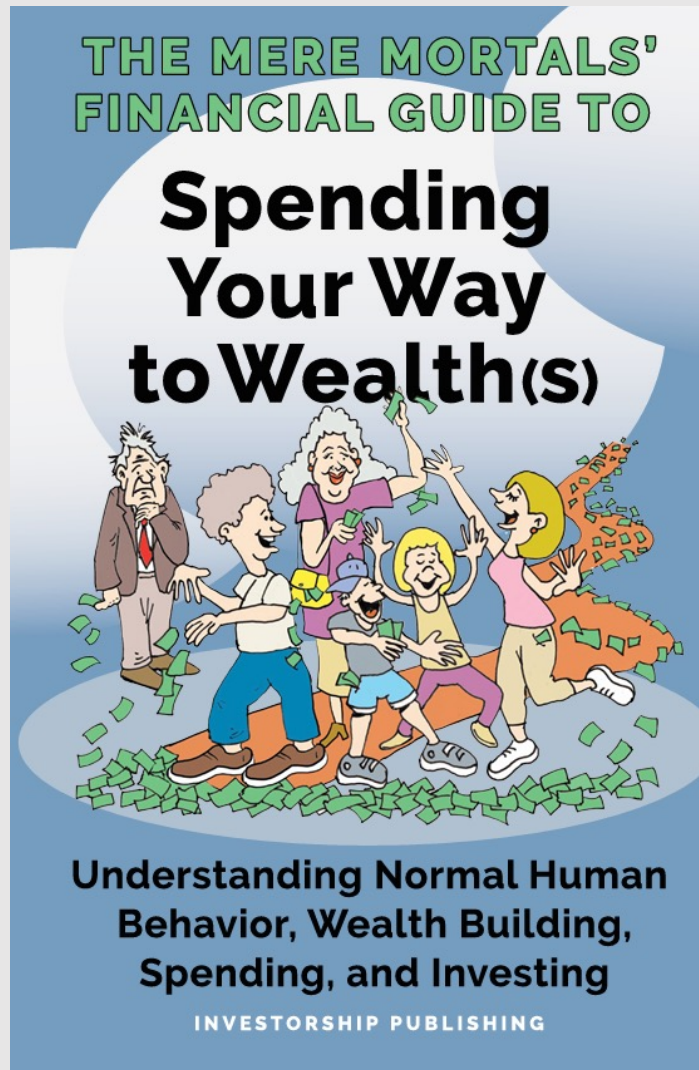


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Paul Merriman

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If you have any questions,  
please email [Paul@paulmerriman.com](mailto:Paul@paulmerriman.com)

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