

**Table 2**  
**Impact of an additional 1% in annual return**

<u>Inputs</u>	<b>Scenario 1</b>	<b>Scenario 3</b>
<i>Accumulation Phase Average Return</i>	<b>8.00%</b>	<b>9.00%</b>
<i>Distribution Phase Average Return</i>	<b>6.00%</b>	<b>7.00%</b>
Starting Contribution Amount	\$6,000	
Annual Contribution Increase	0.00%	
Start Investing Age	25	
Accumulation Phase Duration	40	
Start Retirement Age	65	
Retirement Duration	30	
End Retirement Age	95	
Retirement Phase Withdrawal Rate	4.00%	

<u>Results</u>	<b>Scenario 1</b>	<b>Scenario 3</b>
Total Contributions (age to 64, years)	\$240,000	\$240,000
Portfolio Value @ Age 65 (Start Retirement)	\$1,678,686	\$2,209,751
Portfolio Value @ Age 95 (End Retirement)	\$2,833,234	\$4,943,035
Total Withdrawals (Age 65 to 95)	\$2,623,973	\$4,019,535
<b>Total Lifetime Benefit (Withdrawals + Ending Bal)</b>	<b>\$5,457,207</b>	<b>\$8,962,570</b>

**Increased Total Benefit of increasing returns 1%/year is: \$3,505,363**

**Table 3**  
**Impact of increasing contributions 3% per year**

<u>Inputs</u>	Scenario 3	Scenario 4
Accumulation Phase Average Return	9.00%	
Distribution Phase Average Return	7.00%	
Starting Contribution Amount	\$6,000	
<b><i>Annual Contribution Increase</i></b>	<b><i>0.00%</i></b>	<b><i>3.00%</i></b>
Start Investing Age	25	
Accumulation Phase Duration	40	
Start Retirement Age	65	
Retirement Duration	30	
End Retirement Age	95	
Retirement Phase Withdrawal Rate	4.00%	

<u>Results</u>	Scenario 3	Scenario 4
Total Contributions (age to 64, years)	\$240,000	\$452,408
Portfolio Value @ Age 65 (Start Retirement)	\$2,209,751	\$3,068,065
Portfolio Value @ Age 95 (End Retirement)	\$4,943,035	\$6,863,013
Total Withdrawals (Age 65 to 95)	\$4,019,535	\$5,580,807
<b>Total Lifetime Benefit (Withdrawals + Ending Bal)</b>	<b>\$8,962,570</b>	<b>\$12,443,820</b>

**Increased Total Benefit of increasing contributions 3%/year is: \$3,481,249**

## Fixed Income Returns (1928 - 2021)

### Summary Results for 94 1-year Periods (1928-2021)

	STGB	ITGB	LTGB
In 94 years \$100 grows to:	\$2,040	\$10,228	\$16,549
CRR over 94 years	3.3%	5.0%	5.6%
Best 1 year return	14.7%	29.1%	40.4%
Worst 1 year return	-0.02%	-5.1%	-14.9%
SD over 94 years	3.1%	5.8%	10.1%

## Equity Returns (1928-2021)

### Summary Results for 94 1-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)
In 94 yrs \$100 grows to:	\$917,379	\$2,185,429	\$4,565,555	\$13,233,052	\$4,024,753	\$6,208,587	\$4,467,538
CRR over 94 years	10.2%	11.2%	12.1%	13.4%	11.9%	12.5%	12.1%
Best 1 year return	54.0%	92.5%	110.8%	124.7%	96.0%	110.3%	89.9%
Worst 1 year return	-43.3%	-61.1%	-48.3%	-55.4%	-51.8%	-58.2%	-49.5%
SD over 94 years	19.7%	22.8%	28.2%	31.3%	24.5%	26.5%	24.2%

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 Returns (1928-2021)

### 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	\$15,596	\$16,875	\$39,930	\$17,300	\$26,258	\$17,441
Average 40 year CRR	11.0%	13.5%	13.7%	16.2%	13.7%	14.9%	13.8%
Best 40 year CRR	12.5%	15.6%	16.6%	19.0%	15.9%	17.2%	15.8%
Worst 40 year CRR	8.9%	8.8%	10.5%	11.6%	10.8%	10.7%	10.8%
Average 40 year SD	17.7%	19.3%	26.0%	27.9%	21.5%	22.9%	21.3%
Lowest 40 year SD	15.6%	16.3%	19.6%	21.5%	17.4%	18.7%	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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Year	100%	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100%	S&P Out-Perf	SCV Out-Perf
	S&P 500										US SCV		
Annulized Return	11.0%	11.4%	11.8%	12.1%	12.4%	12.7%	13.0%	13.3%	13.5%	13.8%	14.0%	S&P vs US SCV Summary	
Standad Dev	16.9%	16.8%	17.0%	17.2%	17.6%	18.2%	18.9%	19.7%	20.6%	21.6%	22.7%		
Worst 3 Months	-29.7%	-30.4%	-31.1%	-31.9%	-32.6%	-33.3%	-34.0%	-34.8%	-35.5%	-37.2%	-39.0%	Years Out-Perform	
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	28
Worst 36 Mos (Ann)	-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 (Ann)	-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%	16.6%

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