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

| Inputs | Scenario 1 | Scenario 3 |
| :---: | :---: | :---: |
| Accumulation Phase Average Return Distribution Phase Average Return | $\begin{aligned} & \hline 8.00 \% \\ & 6.00 \% \end{aligned}$ | $\begin{aligned} & \hline 9.00 \% \\ & 7.00 \% \end{aligned}$ |
| Starting Contribution Amount Annual Contribution Increase Start Investing Age Accumulation Phase Duration Start Retirement Age Retirement Duration End Retitrement Age Retirement Phase Withdrawal Rate |  |  |


| Results | Scenario 1 | Scenario 3 |
| ---: | ---: | ---: |
| 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) | $\$ 2,623,973$ | $\$ 4,019,535$ |
| Total Lifetime Benefit (Withdrawals + Ending Bal) | $\$ 5,457,207$ | $\$ 8,962,570$ |

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

Table 3
Impact of increasing contributions 3\% per year

| Inputs | Scenario 3 | Scenario 4 |
| ---: | :---: | :---: |
| Accumulation Phase Average Return | $9.00 \%$ |  |
| Distribution Phase Average Return | $7.00 \%$ |  |
| Starting Contribution Amount | $\$ 6,000$ |  |
| Annual Contribution Increase | $\mathbf{0 . 0 0 \%}$ | $\mathbf{3 . 0 0 \%}$ |
| Start Investing Age | 25 |  |
| Accumulation Phase Duration | 40 |  |
| Start Retirement Age | 65 |  |
| Retirement Duration | 30 |  |
| End Retitrement Age | 95 |  |
| Retirement Phase Withdrawal Rate | $4.00 \%$ |  |


| Results | 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) | $\$ 4,019,535$ | $\$ 5,580,807$ |
| Total Lifetime Benefit (Withdrawals + Ending Bal) | $\$ 8,962,570$ | $\$ 12,443,820$ |

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)

|  | $\begin{gathered} \text { US LCB } \\ \text { (S\&P 500) } \end{gathered}$ | US LCV | US SCB | US SCV | US 4-Fund (SCV, LCV, SCB, LCB) | $\begin{gathered} \text { US All } \\ \text { Value } \\ (\mathrm{SCV}, \mathrm{LCV}) \end{gathered}$ | $\begin{aligned} & \text { US 2-Fund } \\ & \text { (S\&P 500, } \\ & \text { SCV) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In 94 yrs $\$ 100$ grows to: CRR over 94 years | $\begin{gathered} \hline \$ 917,379 \\ 10.2 \% \end{gathered}$ | $\begin{gathered} \$ 2,185,429 \\ 11.2 \% \end{gathered}$ | $\begin{gathered} \$ 4,565,555 \\ 12.1 \% \end{gathered}$ | $\begin{gathered} \$ 13,233,052 \\ 13.4 \% \end{gathered}$ | $\begin{gathered} \$ 4,024,753 \\ 11.9 \% \end{gathered}$ | $\begin{gathered} \$ 6,208,587 \\ 12.5 \% \end{gathered}$ | $\begin{gathered} \$ 4,467,538 \\ 12.1 \% \end{gathered}$ |
| Best 1 year return Worst 1 year return | $\begin{gathered} 54.0 \% \\ -43.3 \% \end{gathered}$ | $\begin{gathered} 92.5 \% \\ -61.1 \% \end{gathered}$ | $\begin{gathered} \hline 110.8 \% \\ -48.3 \% \end{gathered}$ | $\begin{aligned} & 124.7 \% \\ & -55.4 \% \end{aligned}$ | $\begin{gathered} \hline 96.0 \% \\ -51.8 \% \end{gathered}$ | $\begin{gathered} \hline 110.3 \% \\ -58.2 \% \end{gathered}$ | $\begin{gathered} \hline 89.9 \% \\ -49.5 \% \end{gathered}$ |
| 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)

|  | $\begin{gathered} \text { US LCB } \\ (S \& P 500) \end{gathered}$ | US LCV | US SCB | US SCV | US 4-Fund (SCV, LCV, SCB, LCB) | $\begin{gathered} \text { US All } \\ \text { Value } \\ \text { (SCV, LCV) } \end{gathered}$ | $\begin{aligned} & \text { US 2-Fund } \\ & \text { (S\&P 500, } \\ & \text { SCV) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Avg 40 yr growth of $\$ 100$ Average 40 year CRR | $\begin{aligned} & \$ 6,499 \\ & 11.0 \% \end{aligned}$ | $\begin{gathered} \hline \$ 15,596 \\ 13.5 \% \end{gathered}$ | $\begin{gathered} \hline \$ 16,875 \\ 13.7 \% \end{gathered}$ | $\begin{gathered} \hline \$ 39,930 \\ 16.2 \% \end{gathered}$ | $\begin{gathered} \hline \$ 17,300 \\ 13.7 \% \end{gathered}$ | $\begin{gathered} \hline \$ 26,258 \\ 14.9 \% \end{gathered}$ | $\begin{gathered} \hline \$ 17,441 \\ 13.8 \% \end{gathered}$ |
| Best 40 year CRR Worst 40 year CRR | $\begin{gathered} 12.5 \% \\ 8.9 \% \end{gathered}$ | $\begin{aligned} & 15.6 \% \\ & 8.8 \% \end{aligned}$ | $\begin{aligned} & 16.6 \% \\ & 10.5 \% \end{aligned}$ | $\begin{aligned} & 19.0 \% \\ & 11.6 \% \end{aligned}$ | $\begin{aligned} & 15.9 \% \\ & 10.8 \% \end{aligned}$ | $\begin{aligned} & 17.2 \% \\ & 10.7 \% \end{aligned}$ | $\begin{aligned} & 15.8 \% \\ & 10.8 \% \end{aligned}$ |
| Average 40 year SD <br> Lowest 40 year SD <br> Highest 40 year SD | $\begin{aligned} & 17.7 \% \\ & 15.6 \% \\ & 23.2 \% \end{aligned}$ | $\begin{aligned} & 19.3 \% \\ & 16.3 \% \\ & 28.3 \% \end{aligned}$ | $\begin{aligned} & 26.0 \% \\ & 19.6 \% \\ & 34.8 \% \end{aligned}$ | $\begin{aligned} & 27.9 \% \\ & 21.5 \% \\ & 39.4 \% \end{aligned}$ | $\begin{aligned} & 21.5 \% \\ & 17.4 \% \\ & 30.4 \% \end{aligned}$ | $\begin{aligned} & 22.9 \% \\ & 18.7 \% \\ & 33.3 \% \end{aligned}$ | $\begin{aligned} & 21.3 \% \\ & 17.0 \% \\ & 30.3 \% \end{aligned}$ |

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 | $\begin{gathered} 100 \% \\ \text { S\&P 500 } \end{gathered}$ | 10/90 | 20/80 | 30/70 | 40/60 | 50/50 | 60/40 | 70/30 | 80/20 | 90/10 | $\begin{gathered} \hline 100 \% \\ \text { US SCV } \end{gathered}$ | $\begin{array}{c\|} \hline \text { S\&P } \\ \text { Out-Perf } \end{array}$ | $\begin{array}{c\|} \hline \text { SCV } \\ \text { Out-Perf } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 SCVSummary |  |
| 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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