## To Retire a Millionaire, Exercise Patience

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The Prudent Speculator, a value-oriented investment newsletter we've published continuously since March 1977, has been guided-through thick and thin-by three core tenets: patience, selection and diversification. We believe selection (improving the odds of success) and diversification (risk reduction) are useful, and we extoll their virtues frequently in our Newsletter and Insights, as well as in the weekly Market Commentary. However, we must admit it's possible, and likely probable, to retire a millionaire simply by observing the first tenet, patience.

The bad news first. The Fed's Survey of Consumer Finances shows the mean retirement account size in 2019 was $\$ 255,000$, having steadily grown from $\$ 76,000$ in 1989 . Figure 1 shows those in the 55-74 range have accumulated over $\$ 400,000$, and the $75+$ cohort reports a mean balance closer to $\$ 358$,ooo. While the drop in balances for the $75+$ crowd makes sense because people are expected to draw down their accounts in retirement, it is worrying that those under 35 years old have saved a paltry $\$ 30,170$. Even though the figure indicates the average American has built a sizeable nest egg for retirement, the figures are for the Census-reported $49.6 \%$ of American families with a retirement account at all. More than half do not have retirement savings!

## DISCONCERTING TRENDS

Financial outcomes for the $55^{+}$crowd are largely set at this point, even as perks like catch-up contributions and larger salaries remain useful tools to make a late effort to stockpile investable assets. Beginning as early as 62 years old, Social Security benefits kick in, providing $49 \%$ of total retirement income for eligible individuals according to the Social Security Administration. The Administration notes other significant sources of retirement-aged income include annuities/ pensions ( $16 \%$ ) and earnings ( $24 \%$ ), the latter reflecting continued participation in the workforce by Social Security recipients. Defined benefit pensions have become rarities-the count has dropped from 175,000 in 1986 to 47,000 in 2020-and there are perpetual worries Social Security may 'dry up', leaving U.S. workers evermore reliant on their own retirement preparations.


Figure 1: The Federal Reserve's Survey of Consumer Finances
From 1989 through 2019. Average retirement balances include individual retirement accounts and three types of pensions (current job, received and future). SOURCE: Kovitz using data from the Survey of Consumer Finances (SCF)

## START NOW

The good news is with patience and persistence, individuals can retire comfortably, even if the thought of accumulating a million dollars in addition to life obligations may seem like too much to ask at this point. With near-term spending needs rising rapidly, we can appreciate why folks would wonder why it's even worth saving for the future at all when those funds could be spent now. For illustrative purposes in Figure 2, we constructed a diversified portfolio comprised of a blend of $50 \%$ U.S. stocks, $20 \%$ non-U.S. stocks, $10 \%$ bonds and $10 \%$ commodities. Between December 1991 and August 2023, the average annualized return of the portfolio is $8.4 \%$. We believe this annualized return serves as a useful benchmark for planning purposes, though we note long-term average returns for portfolios built on specific factors including those for Value or Dividend-Payers (which we favor in our investment processes) have hovered around $13 \%$ and $11 \%$ per annum, respectively, since 1927 .

The results are compelling. Figure 2 shows massive differences between end values for several levels of monthly saving over the study's time frame and demonstrates that one doesn't need to put away thousands of dollars per month to end up retiring with a million dollars or more. In fact, squirreling away $\$ 250$ per month over 40 years is sufficient to accumulate $\$ 1$ million, while $\$ 100$ per month results in a final tally around $\$ 400,000$. Put another way, recurring contributions of $\$ 100$ per month for 40 years achieves roughly the same outcome as contributions of $\$ 250$ for 30 years. In fact, 40 years of $\$ 100$ contributions easily exceeds the final value of $\$ 500$ per month saved for 20 years. It is those extra early years that allow the $\$ 100$ to converge to similar ending values.

## A SHIFT FROM EMPLOYERS TO EMPLOYEES

Believe it or not, employers are a great source of 'free' money, and we do not mean taking a long lunch. Data from Willis Towers Watson (WTW) shows that $100 \%$ of Fortune 500 companies offer some type of retirement plan. Retirement plans have shifted in recent years, moving from plans in which the employer bears the retirement income risk to those in which the employee bears the risk. In 1998, WTW reported $49 \%$ of Fortune 500 employers offered a defined benefit (DB) plan, which specifies with a formula (usually based on salary and years of service) how much an employee is entitled to receive in retirement. In the event that investment returns are subpar, the employer would be on the hook to contribute additional money to fund the distributions. In 2019, the year of the latest WTW study, just $3 \%$ of Fortune 500 employers offered a DB plan, opting instead for hybrid or defined contribution (DC) plans. In a defined contribution plan, the company deposits a certain amount (often matched by the employee), and future investment returns become the responsibility of the employee. While DC plans come with plenty of support to guide self-management of retirement funds, subpar investment returns leading up to and after retirement become the problem of the employee. This can lead to lower-than-expected retirement distributions.

## Figure 2:

Small Contributions Add Up Over Time

Contributions take place on a monthly basis. The portfolio is comprised of $50 \%$ Russell 3000 TR index, 20\% MSCI AC World ex U.S. USD NR index, 10\% Bloomberg Global Aggregate TR index, 10\% Dow Jones U.S. Real Estate TR index, $10 \%$ S\&P GSCITR index. The annualized return of the portfolio was $8.4 \%$ between 12.31.1991 and 08.31.2023, which is used as the return for the retirement portfolio. One cannot invest directly in an index. SOURCE: Kovitz using data from Bloomberg


## YOUR EMPLOYER WANTS TO GIVE YOU FREE MONEY

Surprisingly, the employer matching can be significant. The \$100 per month that we charted in Figure 2 could easily turn out to be a low estimate of saving efforts. But first, a quick primer on the several types of retirement plans. Simple individual retirement accounts (IRA) and $401(\mathrm{k})$ plans are frequently available for employees of for-profit businesses, while 403 (b) and 457(b) plans are offered to tax-exempt entities and government workers, respectively. They all function in a similar manner, in that both an employer and employee can contribute earnings to the plan, provided certain (reasonable) qualifications are met. There are contribution maximums, which tend to rise year-to-year based on inflation.

Employers have leeway in terms of their employee retirement plan contributions. Some opt to deposit a flat $3 \%$ of an employee's salary irrespective of the employee's contributions. Indeed.com quotes the median salary for an early saver (20-24 years old) near $\$ 35,000$. Nota bene: a median is the middle value, meaning one employee makes above $\$ 35,000$ and another below. A $3 \%$ company match would translate to a contribution of $\$ 1,050$ per year or $\$ 88$ per month. Workers 35 years and older have median salaries above $\$ 50,000$, penciling out to monthly employer contributions of $\$ 125$ or more.

In some situations, employers will match employee contributions up to a certain portion of their salary. In a scenario where an employer matches up to $3 \%$, an early saver making $\$ 35,000$ would save $\$ 176$ per month if matched dollar-for-dollar ( $\$ 88$ employee contribution and $\$ 88$ employer contribution) or $\$ 132$ per month if matched fifty cents-per-dollar ( $\$ 88$ employee contribution and $\$ 44$ employer contribution). We must make another admission. In more than 45 years of stock investing, we've never come across an investment that was guaranteed to double its money. Of course, after the money hits your retirement account (instead of your brokerage or bank account), we do like the prospects for a broadly diversified portfolio of Value stocks!

Important to this discussion, too, is that contributions are not taxed until they are eventually withdrawn and employers in many situations opt to make additional contributions via profit sharing. In Figure 3, we chart varying contribution rates for a hypothetical 401k plan for a 25 -year-old until they are 65 . For matching and contribution purposes, the initial salary starts at $\$ 35,000$, grows at a rate of $3.0 \%$ (which is in line with average inflation rates since 1927) and we use $8.4 \%$ for investment returns.

In Figure 3, an employer contributed 3\% in each series and the employee's contribution varied between $0 \%$ and $5 \%$. Total employer contribution was $\$ 82,000$ in all cases, while the total employee contribution varied between $\$ 0$ and $\$ 136,000$. Even though the investment growth does the majority of the heavy lifting, an employee's contribution has meaningful impact on the account's value just before retirement at 65 years old, adding an extra $\$ 730,000$ for "just" $\$ 136,000$ of contributions.

Figure 3:
40 Years of Contributions, Mostly Investment Returns

40 years of investment growth assuming an $8.4 \%$ per annum return. Contribution values vary and are based on salary growth of $3 \%$. Source: Kovitz using data from Bloomberg Finance L.P.


## PARTICIPATION ENCOURAGED

Employee Retirement Income Security Act (ERISA) rules state that employees who work 1,000 hours or more in a rolling year are eligible to participate in a retirement plan. Unfortunately, retirement benefits are not applied uniformly, or even required. Consistent with the $49.6 \%$ participation rate from the U.S. Census, payroll services company ADP wrote in its Retirement Savings Trends report that $50.1 \%$ of employers offer retirement benefits. The report offered some interesting, if discouraging, details. Just one third of companies with 20 or fewer employees offer retirement benefits, compared with $98 \%$ of companies with more than 5,000 employees. For those that offered plans, the $41.1 \%$ of employees in the 20 -to- 24 age group contributed $4.6 \%$ of their income. Those in the $55^{+}$group saw $65.6 \%$ participation with $8.5 \%$ of income set aside in a retirement account.

Happily, the SECURE 2.0 Act of 2022 improves American retirement prospects. Included in the Act are requirements for automatic enrollment in retirement plans, automatic contribution escalators, increased catch-up contributions, expanded eligibility and provisions for emergency savings accounts. Although employees can opt out from many of the (what we think are) improvements, opt-out policies dramatically improve participation rates because people often make little effort to change the status quo. Fidelity, a brokerage firm and custodian, reported that $91 \%$ of employees with automatic retirement savings plan enrollments did not end up opting out, indicating that a status quo bias could be 'gamed' to help employees save more.

## FOR THE PRICE OF A GRANDE LATTE

How does a young worker making a modest salary start saving for retirement without their employer's help? Surely, it's a bridge too far to expect a young worker to suddenly start saving $\$ 1,000+$ per month. However, there are opportunities for small contributions to add up over time. For example, foregoing a $\$ 5$ beverage once per week and investing those dollars each month would add $\$ 72,210$ to one's retirement nest egg after 40 years. Simply recognizing that little changes over long periods of time may turn into meaningful results can be enough to turn the tide.

## THE EARLY BIRD GETS THE WORM AND THEN SOME

Even though retirement saving in an ideal world is a joint effort from the employee and employer, that's not always the case. In situations where the burden of retirement saving rests squarely on an employee's shoulders, Figure 4 shows early contributions have a giant impact when it comes to easing pressure on annual savings needs. Excluding tailwinds like wage growth, a 25 -year-old 'only' needs to contribute $\$ 3,467$ per year to reach the $\$ 1$ million mark by the time they are 65 , whereas someone starting at 55 years old would have to put away nearly $\$ 68$,ooo per year. Investment returns account for a whopping $\$ 861,000$ of $\$ 1,000,000$ for a 25 -year-old, compared with investment returns accounting for $\$ 323,000$ for a 55 year-old saver.

## Figure 4:

Delaying is Costly
When It Comes to Growth

Annual contributions required to reach $\$ 1$ million in savings by 65 years old, grouped by age. Assumed annual rate of return is 8.4\%. Source: Kovitz using data from Bloomberg Finance L.P.

'CASH'AND 'BOND'ARE FOUR-LETTER WORDS
We think it's worth noting that we added cash and bonds to our blended portfolio because we understand they can enhance an investor's overall allocation in ways a strictly-equity portfolio usually cannot. However, young investors should consider the negative impact of cash and bonds in portfolios relative to equity returns, specifically in situations where invested funds are not needed within a short period of time.

Figure 5:
Sticking with Stocks Has Been Rewarded

From 06.30.1927 through 06.30.2023. Index definitions can be found at the end of this Insight. SOURCE: Kovitz using data from Professors Eugene F. Fama and Kenneth R. French and Ibbotson Associates

| Long-Term Returns |  |  |
| :---: | :---: | :---: |
| Investment | Annualized <br> Return | Variability <br> (Standard <br> Deviation) |
| Value Stocks | $13.0 \%$ | $25.9 \%$ |
| Growth Stocks | $9.6 \%$ | $21.4 \%$ |
| Dividend-Paying Stocks | $10.6 \%$ | $18.0 \%$ |
| Non-Dividend-Paying Stocks | $9.0 \%$ | $29.3 \%$ |
| Large Company Stocks | $10.1 \%$ | $18.7 \%$ |
| Small Company Stocks | $11.7 \%$ | $28.2 \%$ |
| Long-Term Government Bonds | $5.1 \%$ | $8.7 \%$ |
| Intermediate Government Bonds | $4.9 \%$ | $4.4 \%$ |
| Treasury Bills | $3.2 \%$ | $0.9 \%$ |

In general, cash and bonds serve as stores of value. As part of an overall investment allocation, holding cash and bonds is intended to buffer the return of the overall portfolio from oscillations in stock prices, such that one can meet upcoming cash needs. However, young investors shouldn't have near-term cash needs for their retirement accounts and reductions in exposure to cash and bonds have historically improved returns. Figure 6 shows the odds of positive returns hit $100 \%$ around the 12 year mark, meaning that investing for 12 years at any point since 1926 would have earned a positive return, with Figure 5 showing Large- and Small-Company stocks return north of $10 \%$ on average. While the table below offers the Large/Small Company series, the story is similar if we substitute in the Value/Growth or Dividend/No-Dividend series.

Figure 6:
In for the Long Haul: Patience is Virtuous

From 01.31.1926 through
06.30.2023. A three-year rolling window is defined as one 36 -month period. For example, the first three-year rolling period began on 07.01.1927 and ended on 06.30.1930. Each month thereafter begins a new three-year window. The same logic is applied for other rolling windows listed in the table. SOURCE: Kovitz using data from Professors Eugene F. Fama and Kenneth R. French

| Investment Success by Rolling Windows |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rolling Window | Large <br> Stocks <br> Positive <br> Return <br> Count | Large <br> Stocks <br> Negative Return Count | Large <br> Stocks <br> Percent <br> Positive | Small <br> Stocks <br> Positive <br> Return <br> Count | Small <br> Stocks <br> Negative Return Count | Small <br> Stocks <br> Percent <br> Positive |
| 1 Month | 735 | 435 | 62.8\% | 713 | 457 | 60.9\% |
| 3 Months | 814 | 354 | 69.7\% | 754 | 414 | 64.6\% |
| 6 Months | 844 | 321 | 72.4\% | 806 | 359 | 69.2\% |
| 1 Year | 896 | 263 | 77.3\% | 867 | 292 | 74.8\% |
| 3 Years | 995 | 140 | 87.7\% | 991 | 144 | 87.3\% |
| 5 Years | 1,030 | 81 | 92.7\% | 1,042 | 69 | 93.8\% |
| 10 Years | 1,042 | 9 | 99.1\% | 1,051 | 0 | 100.0\% |
| 15 Years | 991 | 0 | 100.0\% | 991 | 0 | 100.0\% |
| 20 Years | 931 | 0 | 100.0\% | 931 | 0 | 100.0\% |

## DELAY NOT

In the 2003 book, Damn Right! Behind the Scenes with Berkshire Hathaway Billionaire Charlie Munger, author Janet Lowe wrote, "[Charlie] Munger has said that accumulating the first \$100,000 from a standing start, with no seed money, is the most difficult part of building wealth. Making the first million was the next big hurdle. To do that, a person must consistently underspend his income. Getting wealthy, he explains, is like rolling a snowball. It helps to start on the top of a long hill-start early and try to roll that snowball for a very long time." We think that message is correct and important, especially for young investors planning for the future.

Of course, there are many factors that determine systematic retirement contribution amounts, even as we always believe the right amount is "as much as possible." For some, that will be $\$ 1,000$ or more per month, and for others it might be $\$ 25$ or $\$ 50$. The key in the early years is not necessarily to contribute the right dollar amount or pick the right stock, it's to save and invest early, allowing the "miracle of compounding" to do its job. As a bonus, early savers will be familiar with the ebbs and flows of their investments, having accumulated years of experience by the time they hit their prime earning years.

Of course, it can be helpful to have professional guidance rather than going it alone. We offer our clients and their families a wide variety of investment options paired with an experienced team of Wealth Advisors, which allows allocation decisions to be tailored for individual situations, taking into account factors like time horizon, risk-taking ability and personal goals.

For more than four decades, we have collaborated with our clients in their investment decision-making process as they pursue their long-term financial goals. We are committed to keeping your goals, concerns and attitude about investing at the heart of your plan. If you're ready to experience our personalized investment approach and exceptional client service, contact Jason R. Clark, CFA at 949-424.1013 or jclark@kovitz.com.

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 may lose value.

All returns are geometric average unless otherwise stated. The geometric average is calculated using the mean of a set of products that takes into account the effects of compounding.
The federal funds rate is the rate banks charge on loans to each other.
The quoted forward yield for the S\&P 500 uses the iShares S\&P 500 ETF (ticker: SPY) as a proxy. The quoted forward yield for the S\&P Core Value uses iShares Core S\&P U.S. Value ETF (ticker: IUSV) as a proxy. The quoted forward yield for the S\&P Core Growth uses iShares Core S\&P U.S. Growth ETF (ticker: IUSG) as a proxy.

The factor-based (book value-to-price) portfolio data is from Eugene F. Fama and Kenneth R. French. The dataset is broken into four groups: large value, large growth, small value and small growth. The aggregate Value and Growth portfolios are monthly averages of the two returns.

The Standard \& Poors 500 index (S\&P 500) is a broad stock market index based on the market capitalizations of the largest 500 companies listed in the U.S. Small company stocks, via Ibbotson Associates, are the bottom twenty percent of the New York Stock Exchange. Large company stocks, via Ibbotson Associates, are represented by the S\&P 500 index. The S\&P 500 Growth Index is a market capitalization weighted index. All the stocks in the underlying parent index are allocated into value or growth. Stocks that do not have pure value or pure growth characteristics have their market caps distributed between the value \& growth indices. Prior to $12 / 19 / 2005$ this index represented the S\&P 500/Barra Growth Index. The S\&P 500 Value Index is a market capitalization weighted index. All the stocks in the underlying parent index are allocated into value or growth. Stocks that do not have pure value or pure growth characteristics have their market caps distributed between the value \& growth indices. Prior to 12/19/2005 this index represented the S\&P 500/Barra Value Index.

Growth stocks $=50 \%$ Fama-French small growth and $50 \%$ Fama-French large growth returns rebalanced monthly. Value stocks $=50 \%$ Fama-French small value and $50 \%$ Fama-French large value returns rebalanced monthly. The portfolios are formed on Book Equity/Market Equity at the end of each June using NYSE breakpoints via Eugene F. Fama and Kenneth R. French. Dividend payers = $30 \%$ top of Fama-French dividend payers, $40 \%$ of middle Fama French dividend payers, and $30 \%$ bottom of Fama-French dividend payers rebalanced monthly. Non-dividend payers = Fama-French stocks that do not pay a dividend. Long term corporate bonds represented by the Ibbotson Associates SBBI US LT Corp Total Return index. Long term government bonds represented by the Ibbotson Associates SBBI US LT Govt Total Return index. Intermediate term government bonds represented by the Ibbotson Associates SBBI US IT Govt Total Return index. Treasury bills represented by the Ibbotson Associates SBBI US 30 Day TBill Total Return index. Inflation represented by the Ibbotson Associates SBBI US Inflation index.

The Russell 3000 Index is composed of 3000 large U.S. companies, as determined by market capitalization. This portfolio of Securities represents approximately $98 \%$ of the investable U.S. equity market. The Russell 3000 Index is comprised of stocks within the Russell 1000 and the Russell 2000 Indices. Russell 3000 Growth Index measures the performance of those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth values. Russell 3000 Value Index measures the performance of those Russell 3000 Index companies with lower price-to-book ratios and lower forecasted growth values.

The MSCI ACWI Index is a free-float weighted equity index. It was developed with a base value of 100 as of December 31 1987. It includes both emerging and developed world markets. The Bloomberg Barclays Global Aggregate Index is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers. The DJ US Real Estate Index represents REITs \& other companies that invest directly or indirectly in real estate through development, management or ownership, including property agencies. The index is a subset of the Dow Jones U.S. Index, which covers $95 \%$ of U.S. securities based on float-adjusted market capitalization. The S\&P GSCI Total Return Index in USD is widely recognized as the leading measure of general commodity price movements and inflation in the world economy. Index is calculated primarily on a world production weighted basis, comprised of the principal physical commodities futures contracts.

From 1927 to present, we utilized the dividend-weighted portfolio data from Eugene F. Fama and Kenneth R. French. The dataset is broken into five groups: non-dividend paying, top 30\% ofdividend payers, middle $40 \%$ of dividend payers, bottom $30 \%$ of dividend payers and all dividend payers (weighted $30 \%$ of top dividend payers, $40 \%$ of middle dividend payers and $30 \%$ of low dividend payers).

Figure 1 and Figure 2 definitions are as follows: Commodities: S\&P GSCI TR Index. REIT: MSCIU.S. REIT NR Index. Long-Term Bonds: Bloomberg US Treasury: 20+ Year Index. Short-Term Bonds: Bloomberg Barclays U.S. Treasury: 1-3 Year TR Value Unhedged USD Index. Cash: Bloomberg Barclays U.S. Tr Bills: 1-3 Months TR Value Unhedged USD Index. High Yield Bonds: Barclays VLI High Yield TR Value Unhedged USD Index. Domestic Small Cap Equity: Russell 2000 TR Index. Domestic Large Cap Equity: S\&P 500 TR Index. Emerging Markets: MSCI Emerging Markets NR USD Index. Developed Markets: MSCI EAFE NR USD Index. Aggregate Bond: Barclays U.S. Agg TR Value Unhedged USD Index. Generic 70/30 blend: 70\% S\&P 500 Index, 30\% Barclays U.S. Aggregate Bond Index. Expanded Blend: 60\% S\&P 500 Index, $25 \%$ Bloomberg Barclays U.S. Aggregate Bond Index, 10\% HFRX Equity Hedge Index and 5\% Dow Jones U.S. Real Estate Capped Index (USD) TR.
Figure 3 definitions are as follows: Value Factor: MSCI USA Value Net Total Return USD Index. Growth Factor: MSCI USA Growth Net Total Return USD Index. Minimum Volatility: MSCI USA Minimum Volatility Net Total Return Index. High Dividend Yield: MSCI USA High Dividend Yield Net Total Return Risk Premia Index. Quality: MSCI USA Quality Net Total Return USD Index. Momentum: MSCI USA Momentum USD Net Total Return Total Return Index. Size: MSCI USA Size Tilt USD Net Total Return Index.

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