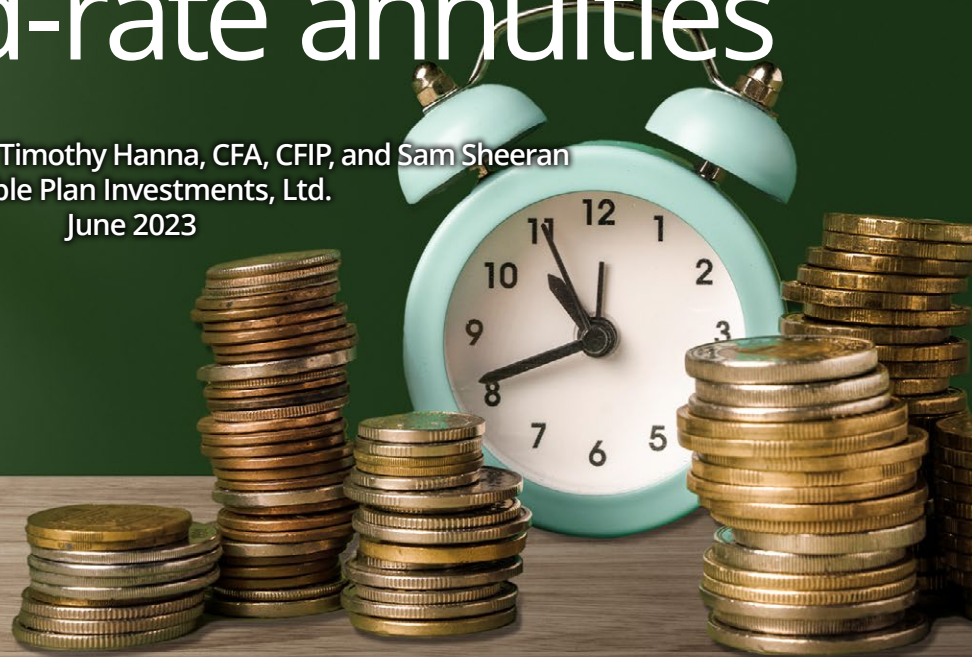




# The hidden cost of fleeing from equities to CDs and fixed-rate annuities

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## Summary

We examine the financial implications of shifting assets from equities to fixed-term investments, such as certificates of deposits (CDs) and fixed-rate annuities, particularly during periods of market downturns. Our study demonstrates that such a shift, often driven by fears of market volatility, can lead to substantial opportunity costs over an investor's lifetime, reaching into the millions of dollars. Through a detailed historical analysis dating back to 1987, the study establishes that remaining in the equity market, even during periods of significant declines, generally yields better financial outcomes in the long run. The study further suggests that working with a financial adviser who implements active strategies can help manage portfolio risk effectively, ultimately providing a more successful approach than resorting to fixed-duration investments.

## The allure of high short-term yields

Federal Reserve tightening has resulted in one of the fastest rises in yields in history. One-year Treasuries are near 5%. No wonder investors are paying attention.

**Figure 1** U.S. Treasury 1-Year Yield



Source: StockCharts.com, data as of 4/28/23

As Treasury yields have soared, so has the amount of assets deposited in money-market funds—now reaching an all-time high of nearly \$1.4 trillion.

**Figure 2** Assets Deposited in Money-Market Funds



Source: Board of Governors of the Federal Reserve System (U.S.), fred.stlouisfed.org

Sales of fixed-rate annuities have also soared as investors, frightened by stock market volatility, seek an asset class that offers more certainty of a positive return. The annuity trade association LIMRA reported that U.S. annuity sales hit record highs in 2022 and in the first quarter of 2023.

According to LIMRA, “Fixed-rate deferred (FRD) annuity sales were \$40.9 billion in the first quarter [of 2023], 157% higher than the first quarter of 2022. For the fourth consecutive quarter, FRD sales have marked record sales and now represent 44% of the total annuity market. To put this into perspective, FRD annuity sales represented just 18% of the total U.S. annuity market in the first quarter of 2020.”<sup>1</sup>

Given the losses many investors experienced in their stock and bond portfolios in 2022, it is understandable that they would find sales pitches and advertisements for high-interest CDs and fixed-rate annuities enticing.

But as with any investment, it’s important to consider potential risks and long-term consequences—the true cost of the investment. This is especially true when purchasing fixed-term investments, considering their restrictive maturity times, lack of liquidity, and penalties for early withdrawal. We aim to uncover the hidden opportunity costs of locking one’s assets in these investments, taking into account the last 36 years of financial market history.

## Evaluating the costs of shifting to fixed-term investments

Investors usually aren’t frightened out of their equity investments until the stock market has fallen substantially. It is the cost of the flight to quality that occurs at these moments that we want to study, as they are closely associated with the present market environment.

### *Methodology*

To determine the hidden opportunity costs of fleeing from equities to fixed-term investments, we examined the difference in their returns in the periods after the stock market, as represented by the S&P 500, fell by 20% from its latest high point. We chose this condition because declines of this magnitude may cause an investor to consider buying a fixed-rate annuity or investing in a CD.

In comparing returns, we used the Vanguard 500 Index Fund (VFINX) to represent the equity investment because it has a long history and is an investable asset. We compared the cost/benefit of staying in the market to earning the then available interest rate return of Treasury bonds of various terms (this is discussed in detail below). The rate of return that investors earned when they were out of the market was the daily yield that they would have received if they had bought Treasury bonds with the respective maturity duration.

### *Why we use Treasury data*

According to online annuity marketplace Blueprint Income, the highest rate for a two-year fixed annuity in Michigan (our home base) as of this writing was 4.60%, and the highest rate for a two-year CD was 4.80%.

The easiest option for investors considering a fixed-term investment for less than two years is CDs. FDIC insurance covers up to \$250,000. Once investors hit this insurance limit, they must choose other available options, which won’t return as much as the highest-rate CD available. According to financial-services company Bankrate, the highest one-year CD rates as of this writing were as follows: 5.20% Forbright (1 year) at 5.20%, and BMO (1 year) at 5.10%.

These rates compare well to those of one- and two-year Treasury bonds, which were yielding 5.02% for the one-year bill and 4.29% for the two-year bill as of this writing.

All fixed-rate investments have slightly different rates depending on investor location, total investment size, market conditions, and other factors. As a result, generic historical data for this long-term study is difficult to attain.

Given the similarity of their returns, we concluded that it is reasonable to use the more accessible Treasury rates to represent the return data for investments in CDs and fixed-rate annuities in our study. Therefore, we used one-, two-, three-, and five-year Treasury yields as stand-ins for the returns of equivalent-term fixed-rate annuities and CDs throughout this research.

*Time frame*

Our study covers the period from January 1, 1987, to May 17, 2023. We analyzed the results over the entire period, as well as on a rolling five-year and 10-year basis.

*Why start the study in 1987?*

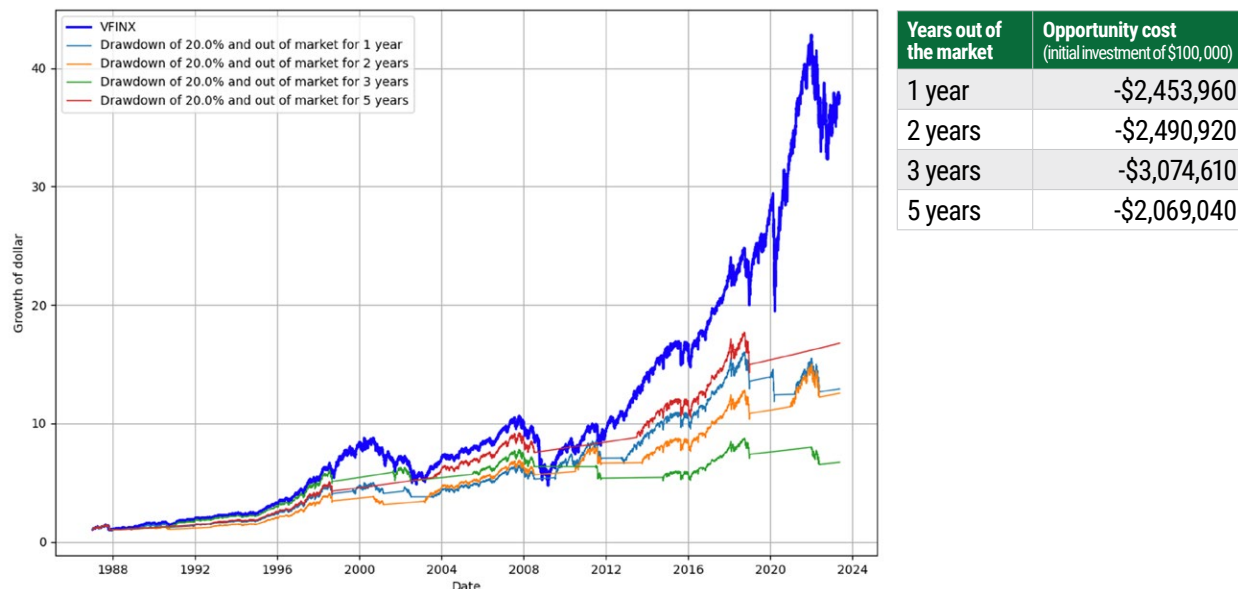
On March 31, 1980, President Jimmy Carter signed the Depository Institutions Deregulation and Monetary Control Act. According to Kenneth Robinson of the Federal Reserve Bank of Dallas, “Up until this time, the maximum interest rate that banks and other institutions could pay on deposits was regulated by the federal government under what was known as Regulation Q.” Eliminating these restrictions, Robinson adds, “improved the ability of banks to compete for funds.”<sup>2</sup>

From this date forward, yields of Treasuries and other fixed-income products started to align. This transition took place over six years, making 1987 the first full year when banks had no restrictions on the interest rates that they could pay on deposits.

*Results: Shifting from equities to fixed-term investments can come with steep opportunity costs*

Fleeing the market and moving to a fixed-term investment whenever there is a 20% drawdown in equities has high total opportunity costs, as the following chart and table illustrate. Investors with an initial investment of \$100,000 can experience total opportunity costs that range from \$2 million to \$3 million over the 36-year study, depending on when they leave the market, how long they are out, and when they get back into the market.

**Figure 3** Opportunity Cost of Leaving the Market After a 20% Drawdown

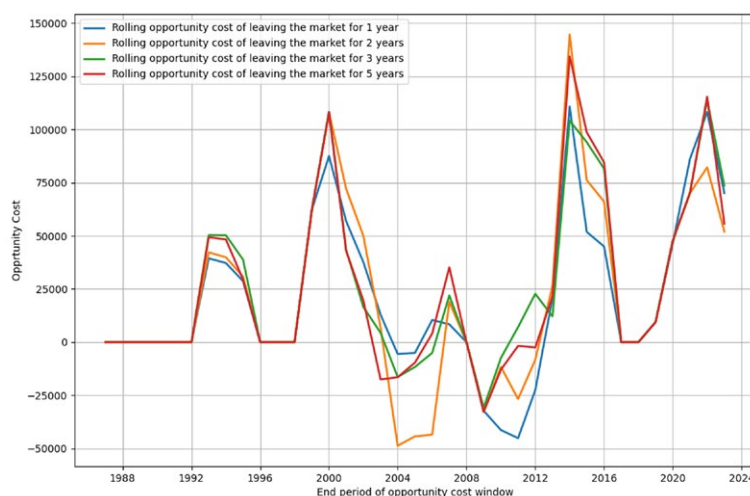


Source: Flexible Plan Investments Research



Adhering to this strategy over an even shorter investment cycle would have resulted in substantial opportunity costs. We did the same historical study but looked at the opportunity costs on a rolling five-year and 10-year basis. Both show significant opportunity costs on average.

**Figure 4** 5-Year Rolling Opportunity Cost of Leaving the Market After a 20% Drawdown



Years out of the market	Maximum	Average	Minimum
1 year	-\$117,796.98	-\$30,587.96	-\$45,127.03
2 years	-\$144,554.41	-\$30,706.65	-\$48,691.96
3 years	-\$113,778.78	-\$33,530.89	-\$30,800.33
5 years	-\$134,349.51	-\$33,804.12	-\$32,809.89

The number in the line charts at a given point is the opportunity cost in the preceding X window. For example, looking at the five-year rolling window chart in year 2000 would show the opportunity cost from January 1, 1995, to January 1, 2000.

Source: Flexible Plan Investments Research

**Figure 5** 10-Year Rolling Opportunity Cost of Leaving the Market After a 20% Drawdown



Years out of the market	Maximum	Average	Minimum
1 year	-\$212,785.18	-\$53,335.83	-\$45,621.64
2 years	-\$224,701.36	-\$58,424.58	-\$93,715.40
3 years	-\$244,915.80	-\$63,574.16	-\$47,303.24
5 years	-\$274,331.99	-\$56,401.58	-\$43,817.22

Source: Flexible Plan Investments Research

An investor frightened by stock market volatility placing a \$100,000 portfolio into fixed-rate investments would have missed out on a \$30,000–\$33,000 average gain on a five-year rolling period and a \$53,000–\$63,000 average gain on a 10-year rolling period. That’s missing out on average gains of 32% to 63%. And, as the tables show, the maximum loss could have been many times greater.

However, our analysis of the five- and 10-year rolling periods also demonstrated that there are times when fleeing to fixed-term investments can be successful. Using this approach during a decline of more than 20% (similar to what we experienced in 2008) or during multiple years of loss (such as 2000–2002) may yield successful results. But unless one can identify these deep and sustained down periods in advance, history shows following this approach repeatedly would have been unprofitable.

## Concluding thoughts on the evidence

In the current climate of historically high yields and extreme market volatility, it may seem sensible to leave equities for fixed-term investments. However, as the data suggests, there is a substantial hidden cost to this strategy. Assuming an initial investment of \$100,000, this approach can have an opportunity cost of millions of dollars over an investor’s lifetime.

A better solution for investors who feel the urge to abandon stocks for the safety of fixed-rate investments may be to work with a financial adviser who implements active strategies that can move in and out of different financial markets without the costly time limitations imposed by fixed-duration investments.

For example, in our white paper [“Bucket Investing with Dynamically Risk-Managed Portfolios”](#)<sup>3</sup> (for financial professionals only), we studied the benefits of using active management with the bucket investing method, which include the potential for higher returns and greater psychological appeal to investors when compared to more traditional systematic withdrawal methods.

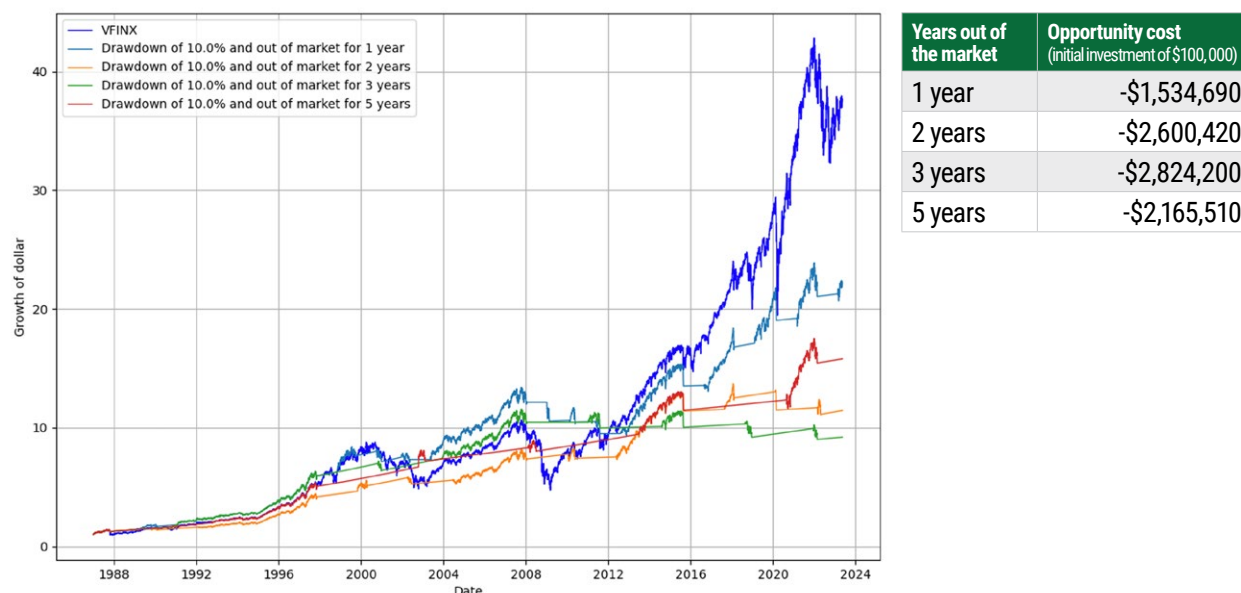
Fear of market volatility shouldn’t drive investors into a potentially unprofitable investment approach that doesn’t align with their long-term financial plan. An active manager can help investors and their financial advisers manage risk in a more dynamic, opportunistic, and systematic manner that helps keep investors on track toward their financial goals.

## Appendix: The costs of shifting from stocks to fixed-term investments in various market scenarios

Our study focuses on the hidden costs of leaving equities for the “certainty” of fixed-term investments after market drawdowns of 20%—a decline substantial enough for investors to consider getting out of the market. However, those are not the only periods in which investors in fixed-term investments could be leaving money on the table.

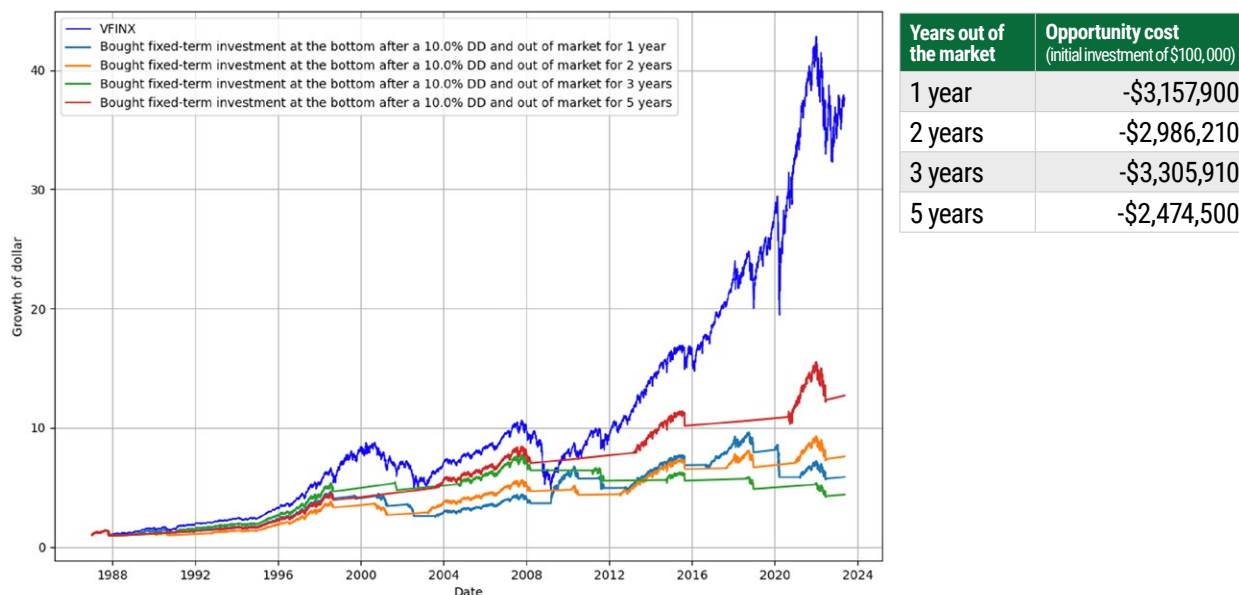
The following charts and tables show the opportunity costs these investors would have incurred during other market scenarios during our study period. Additional tables, including those showing the effect of inflation, can be found in our companion article [“The hidden cost of fleeing from equities to CDs and fixed-rate annuities.”](#)

**Figure A** Opportunity Cost of Exiting the Market After a 10% Drawdown



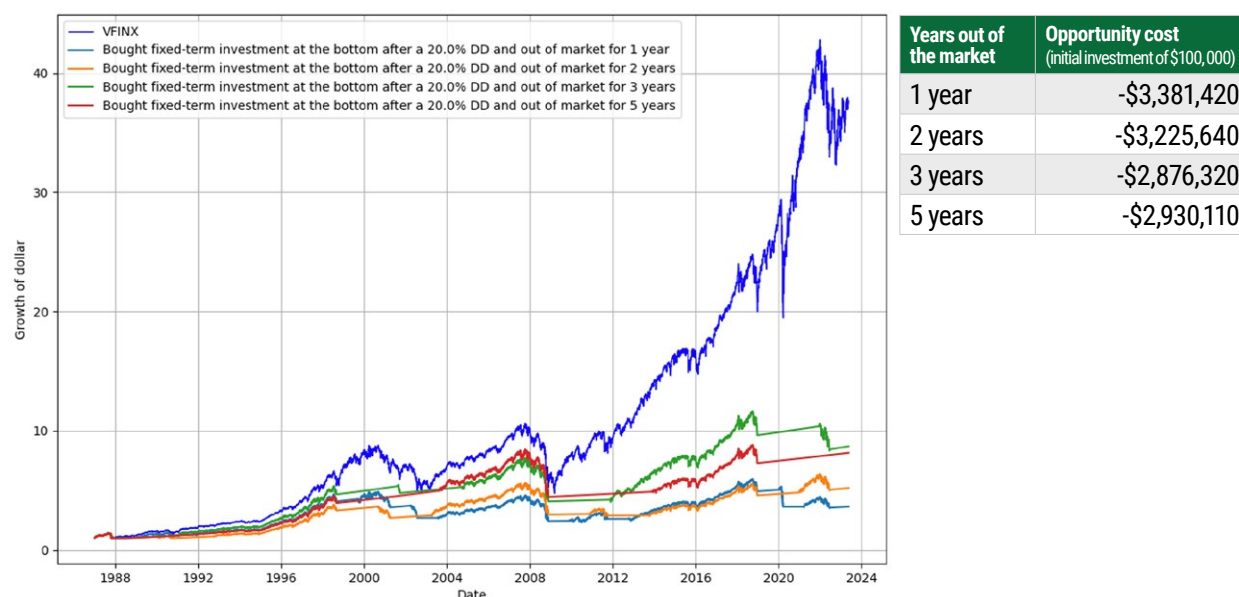
Source: Flexible Plan Investments Research

**Figure B Opportunity Cost of Buying a Fixed-Term Investment at the Bottom After a 10% Drawdown**



Source: Flexible Plan Investments Research

**Figure C Opportunity Cost of Buying a Fixed-Term Investment at the Bottom After a 20% Drawdown**



Source: Flexible Plan Investments Research

## References

1. LIMRA, "LIMRA: Another Record-Breaking Quarter for U.S. Annuity Sales," news release, May 2, 2023, <https://www.limra.com/en/newsroom/news-releases/2023/limra-another-record-breaking-quarter-for-u.s.-annuity-sales/>.
2. Kenneth J. Robinson, "Depository Institutions Deregulation and Monetary Control Act of 1980," Written as of November 22, 2013, <https://www.federalreservehistory.org/essays/monetary-control-act-of-1980>.
3. Tim Hanna, Ansh Chaudhary, and Jerry C. Wagner, "Bucket Investing with Dynamically Risk-Managed Portfolios," Flexible Plan Investments, Ltd., January 2021, <https://flexibleplan.actonservice.com/acton/form/34940/00a9:d-000e/0/-/-/-/index.htm>. For financial professionals only.

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