RETIREMENT MULTIPLIER EFFECT

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When analyzing the performance of money managers, the industry standard assumes a single investment is made at the start of period and that no additional deposits or withdrawals are made.

But how realistic is it to assume that the investor makes no contributions or withdrawals over a span of five, ten, or twenty years? In the real world, most investors are either in the accumulation or distribution stages, where contributions or withdrawals are indeed occurring.

When analyzing the suitability of an investment for an actual individual with long-term goals, the impacts of timing, withdrawals, and inflation need to be examined.

Impact of Timing

The timing of an initial investment can impact the success or failure of an investment plan and on the final wealth of a portfolio.

The combination of timing and the unpredictable nature of the markets results in outcome uncertainty. This makes it hard to plan for the future. This outcome uncertainty can cause more stress than is needed, especially for those who take a purely passive investing approach.

If you can’t predict it, it makes it very difficult to plan for it.

Impact of Withdrawals

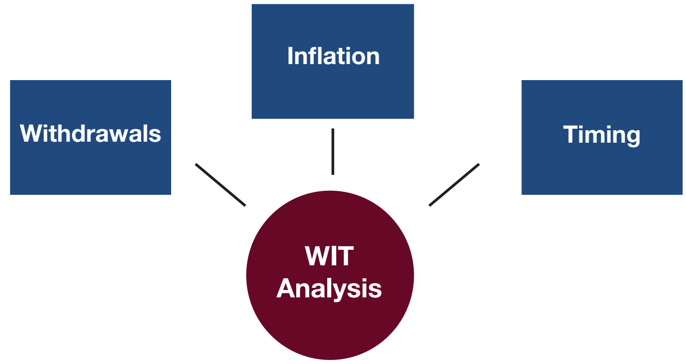
When an investor shifts from the accumulation to distribution stage of their life cycle, the negative consequences of large bear markets become much more pronounced. Market drawdowns are no longer opportunities to “buy on a low.” Instead, retirees are forced to liquidate their holdings during times of market weakness.

Withdrawing funds from a sinking market makes it all the more difficult to recover losses and get back on track.

Combined Impact of Timing, Withdrawals, and Inflation

Three important elements of to measure when considering an investment are withdrawals, inflation, and timing. So we combine these three analyses to create a WIT analysis.

The WIT analysis examines how an investment plan might look after a decade in the real world if a retiree is forced to take withdrawals and had the bad luck of investing at the wrong time.



The WIT Analysis and the Defined Risk Strategy

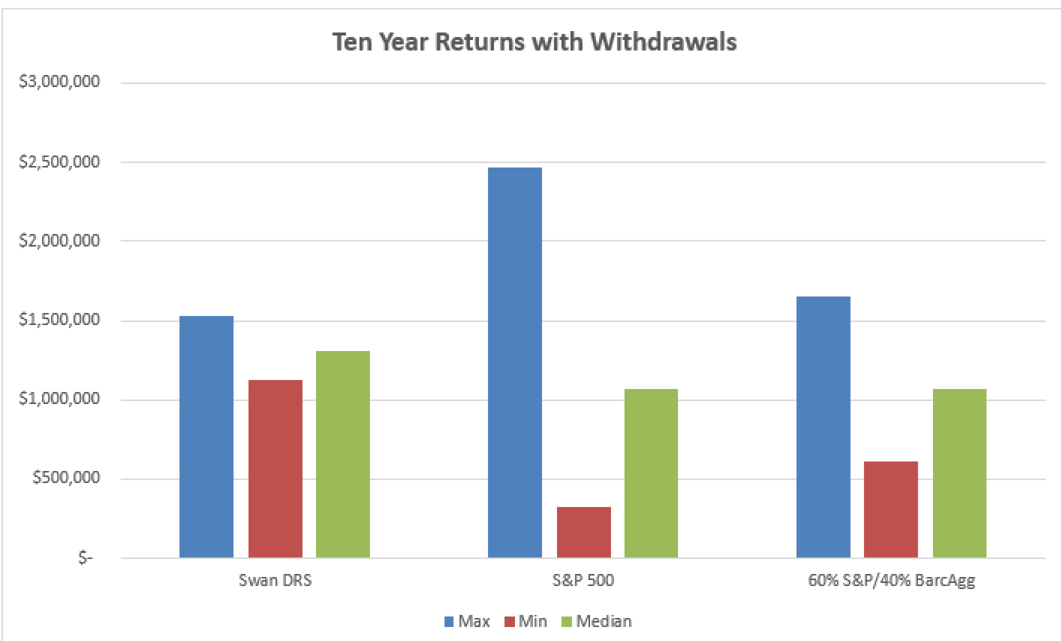
Let's assume an initial investment of $1,000,000 in one of three options:

- S&P 500
- Swan DRS Select Composite
- Traditional 60/40 Portfolio

Each investment is made for ten years, starting on January 1st. The results are "rolled forward" yearly, meaning the first investment period extended from 1/1/98 to 12/31/07, the second investment period was from 1/1/99 to 12/31/08, and so forth.

However, rather than assuming a simple buy-and-hold for each of those decades, we introduce the idea of taking out withdrawals, adjusted for inflation.

At the end of each year, we take out $50,000, adjusted for a 2% inflation rate.



Source: Zephyr StyleADVISOR. The Barclays U.S. Aggregate Bond Index and the S&P 500 Index are unmanaged indices and cannot be invested into directly. Past performance is no guarantee of future results. DRS results are from the Select Composite, net of fees, as of 12/31/2018.

Importance of Tackling Sequence Risk

After ten years and $547,486 of withdrawals, the median investment in the S&P 500 still had a remaining value of $1,073,501. However, that average masks a lot of variability:

- The "best case" scenario was an investment made on January 1st, 2009 with an ending value of $2,468,462.
- The "worst case" scenario was an investment made on January 1st, 2000 with an ending value of $324,201.

That unlucky investor was subject to not one but two major bear markets. Forced to take withdrawals in the down years of 2000, 2001, 2002, and 2008. The pool of capital remaining was only $324,201 at the end of 2009.

The traditional 60/40 portfolio had similar ending values as the S&P 500 but with less variability between best and worst.

The Swan DRS Select Composite posted the best results of the three. The median ending value after a decade, taking out the same $547,486 of withdrawals, was $1,311,296. There was little dispersion between the best decade and the worst decade with values of $1,531,771 and $1,130,967, respectively.

	Ending Values after 10 Years of Withdrawals		
Investment Period	**Swan DRS**	**S&P 500**	**60/40**
Jan-98 to Dec-07	$1,527,319	$1,037,175	$1,098,425
Jan-99 to Dec-08	$1,288,106	$416,610	$631,374
Jan-00 to Dec-09	$1,394,492	$324,201	$608,037
Jan-01 to Dec-10	$1,500,736	$476,519	$713,769
Jan-02 to Dec-11	$1,329,409	$663,175	$833,611
Jan-03 to Dec-12	$1,262,365	$1,249,573	$1,158,001
Jan-04 to Dec-13	$1,531,771	$1,136,545	$1,068,014
Jan-05 to Dec-14	$1,425,969	$1,131,099	$1,076,227
Jan-06 to Dec-15	$1,293,182	$1,109,827	$1,066,546
Jan-07 to Dec-16	$1,130,967	$993,503	$1,002,328
Jan-08 to Dec-17	$1,136,909	$1,154,842	$1,075,558
Jan-09 to Dec-18	$1,177,535	$2,468,462	$1,657,700
Median	$1,311,296	$1,073,501	$1,067,280

Assumptions	
Starting Value	$1,000,000
WD Rate	$50,000
Cuml WD	$547,486
Inflation	2%
Withdrawal Timing	Annual

Source: Zephyr StyleADVISOR. The Barclays U.S. Aggregate Bond Index and the S&P 500 Index are unmanaged indices and cannot be invested into directly. Past performance is no guarantee of future results. DRS results are from the Select Composite, net of fees, as of 12/31/2018.

Importance of Tackling Sequence Risk

These results illustrate the prime objective of the Defined Risk Strategy: to strike the right balance between upside participation during bull markets and downside protection during bear markets. In doing so, we have typically been able to mitigate the sequence risk that plagues many retiree investors as they are in the distribution phase.

Since its inception in July 1997, the DRS Select Composite has successfully navigated through three bull markets and two bear markets.

We are often asked, "What is the appropriate time horizon in which to measure the DRS's performance?" Our answer to that question is always a full market cycle—one that incorporates a bull and a bear. Except for one, each of the decades in this WIT analysis contain at least one bull and one bear market.

About the Author

Marc Odo, CFA®, CAIA®, CIPM®, CFP®, Client Portfolio Manager, is responsible for helping clients and prospects gain a detailed understanding of Swan's Defined Risk Strategy, including how it fits into an overall investment strategy. Formerly, Marc was the Director of Research for 11 years at Zephyr Associates.

About Swan Global Investments

Formed in 1997, Swan Global Investments is an asset manager that offers proven, goals-based investment solutions seeking to preserve irreplaceable capital and produce consistent returns over full market cycles.

The Defined Risk Strategy is a goals-based approach designed to directly address market risk. It seeks to help investors remain always invested for growth while remaining always hedged to mitigate losses, especially during bear markets.

If you want to preserve your irreplaceable wealth and secure a retirement that lasts, talk with your financial professional today about how our strategy may help you reach your financial goals.

For more information or more insights, visit swanglobalinvestments.com.

Important Notes and Disclosures

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All Swan products utilize the Defined Risk Strategy ("DRS"), but may vary by asset class, regulatory offering type, etc. Accordingly, all Swan DRS product offerings will have different performance results due to offering differences and comparing results among the Swan products and composites may be of limited use.

All data used herein, including the statistical information verification and performance, reports are available upon request. The S&P 500 Index is a market cap weighted index of 500 widely held stocks often used as a proxy for the overall U.S. equity market. Indexes are unmanaged and have no fees or expenses. An investment cannot be made directly in an index. Swan's investments may consist of securities which vary significantly from those in the benchmark indexes listed above and performance calculation methods may not be entirely comparable. Accordingly, comparing results shown to those of such indexes may be of limited use. The adviser's dependence on its DRS process and judgments about the attractiveness, value and potential appreciation of particular ETFs and options in which the adviser invests or writes may prove to be incorrect and may not produce the desired results. There is no guarantee any investment or the DRS will meet its objectives. All investments involve the risk of potential investment losses as well as the potential for investment gains. Prior performance is not a guarantee of future results and there can be no assurance, and investors should not assume, that future performance will be comparable to past performance. All investment strategies have the potential for profit or loss. Further information is available upon request by contacting the company directly at 970–382-8901 or www.www.swanglobalinvestments.com. 178-SGI-042319

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