Earning our Keep – The Benefits of Active Management

Brian J. Janowski, CFA - Portfolio Manager & Senior Research Analyst

"Active management is dead." This has been the common refrain from so-called investment industry "experts" for the past decade. Their reasoning seemed sound as passive management consistently beat active management from 2006 – 2020 and passive indices experienced strong inflows over the past decade while actively managed domestic equity funds saw outflows.

However, this is only part of the story, as the true active vs. passive comparison is far more complicated. Factors such as the impact of macro changes, market direction, index concentration, active share, and fees make the decision between active and passive far more difficult.

Macro Changes

One of the main reasons investors favored passive management in recent years was their belief that passive management outperformed active management. Depending on the time period selected, this may be true. For example, for the 15-year period from January 1, 2006 – December 31, 2020, the Russell Midcap Growth Index return was 11.55% annualized while Nicholas II Class I was 10.06%, or about 150 bps of outperformance annually. However, fast forward 18 months, and the annualized returns for 15-year period ended 6/30/22 for Nicholas II Class I and Russell Midcap Growth Index were 8.45% and 8.21%, respectively, or 24 bps of outperformance annually for Nicholas II Class I. What happened?

For the 15-year period from 2006 – 2020, the world was primarily in a disinflationary mode. In the aftermath of the Global Financial Crisis, the US inflation rate struggled to get above the Fed's 2% target rate. Some contributing factors to this included technological progress driving improved productivity, globalization which included the outsourcing of labor to lower cost countries, companies and individuals repairing their balance sheets which negatively impacted demand, an aging population which caused savings rates to trend upward and demand to slow, among other things. Despite multiple rounds of fiscal and monetary stimulus, inflation, and consequently, interest rates, continued to trend lower. Falling interest rates led to declining discount rates, and this drove valuations of assets of all flavors, especially high-growth, long duration stocks, to record high levels. In this environment, active managers struggled to keep up with the passive indices as the market was being driven higher by a select few stocks ("FAANG" in large cap, software as a service stocks in mid cap). Any active manager using valuation as part of his investment process was penalized as valuation was one of the worst-performing factors during the deflationary regime.

Active management needed a positive catalyst, and it received one in the response to the COVID-19 pandemic. While the pandemic was destructive to demand and deflationary in isolation, the combination of monetary and fiscal stimulus from central banks and governments around the world was the spark that ignited inflation. This stimulus drove demand above long-term trends, and when combined with supply shortages driven by the kinks in global supply chains, caused inflation to move upward rapidly. The result was a regime change from over a decade of deflation to inflation, which drove interest rates and discount rates higher. This caused a massive rotation in stock markets away from those high-growth, long duration stocks and toward inflation beneficiaries like energy and materials stocks. This also caused valuation as a factor to rise in prominence and once again become a primary determinant in stock performance. For those active managers who incorporate valuation as part of their investment process, the period since the fiscal and monetary stimulus response to COVID-19 has been fruitful on a relative basis. As evidence, from the date (1/20/21) the White House proposed the American Rescue Plan, which was one of the largest fiscal stimulus packages in US history and helped kickstart inflation through June 30, 2022, the Nicholas II Class I's total return was -6.95% compared to the Russell Midcap Growth -24.61%, 1,766 basis points of outperformance. Looking over multiple market cycles, the Nicholas II Class I performance has exceeded its passive index over all periods.

Total Return

Fund	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs
Nicholas II I	15.32%	7.92%	6.23%	9.51%	8.46%	11.61%	8.45%
US Passive Fund Mid-Cap Growth	-29.20%	3.84%	4.72%	7.19%	6.75%	10.05%	6.96%
US Active Fund Mid-Cap Growth	-29.19%	2.20%	4.69%	8.35%	7.48%	10.33%	6.94%
Russell Midcap Growth TR USD	-29.57%	0.62%	4.25%	8.88%	8.35%	11.50%	8.21%

As of 6/30/2022. Periods longer than 1-year are annualized.

The expense ratio for Nicholas II Class I is 0.59%. Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the funds may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 1-800-544-6547.

Another way to assess performance is to examine risk-adjusted performance, which measures returns adjusted for their volatility. Once again, active management wins as the Nicholas II Class I Sharpe Ratio is superior across all long-term measurement periods ended 6/30/22.

Sharpe Ratio

Fund	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs
Nicholas II I	-0.93	0.53	0.38	0.54	0.53	0.79	0.55
US Passive Fund Mid-Cap Growth	-1.67	0.27	0.29	0.38	0.40	0.62	0.42
US Active Fund Mid-Cap Growth	-1.63	0.19	0.29	0.45	0.44	0.65	0.42
Russell Midcap Growth TR USD	-1.61	0.12	0.27	0.47	0.48	0.71	0.48

As of 6/30/2022. Periods longer than 1-year are annualized.

Market Direction

In our discussions with investors, the common refrain we hear is that they prefer downside protection when markets decline over keeping pace with bull markets. This sentiment squares with the "loss aversion" bias highlighted in research by Tverskey and Kanheman (1979) that shows investors feel the pain of a loss twice as much as the joy of an equivalent gain. This highlights another pitfall of passive indices. Passive indices historically behave in the exact opposite manner. They perform in line with market indices on the way up but underperform active management on the way down. The graphic below shows the performance of the Nicholas II Class I in every market pullback of 20% or more since 2000. We believe investors who value downside protection should consider active management based on this consistent historical outperformance.

***Total Return - Bear Markets**

Bear Market Period	Nicholas II I	Russell Mid-Cap Growth	Difference
3/10/00 - 10/9/02	-29.10%	-65.94%	36.84%
10/11/07 - 11/20/08	-46.09%	-58.49%	12.40%
7/8/11 - 10/3/11	-23.00%	-24.95%	1.95%
9/16/18 - 12/24/18	-19.32%	-22.46%	3.14%
2/20/20 - 3/23/20	-36.35%	-35.71%	-0.64%
11/17/21 - 6/16/22	-25.89%	-38.65%	12.76%

**Non-annualized Returns*

Index Concentration

The trillions of dollars invested in passive investments in recent years has caused massive buying of stocks irrespective of fundamentals and valuation. This is because passive investors must buy stocks in proportion to the index they track and ignore the quality and valuation of the companies they are buying. This has resulted in markets that are increasingly divorced from underlying fundamentals. Additionally, since indices are usually cap-weighted, if the market is going up and investors are allocating more to passive investments, the winning stocks are awarded disproportionately bigger weights than the losers.

The combination of the bull market over the past decade and massive inflows to passive investments helped drive technology stocks to unprecedented valuations and concentrations in various indices. The graphic below shows the historical sector weightings in the S&P 500. Note how the technology sector nearly doubled its weight in the index over this period despite the increased risk from these stocks appreciating to all-time high valuations.

Historical S&P Sector Weightings

Sector	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Communication Services	4%	4%	3%	3%	3%	3%	2%	2%	2%	3%	2%	10%	10%	11%	10%
Consumer Discretionary	8%	8%	10%	11%	11%	11%	13%	12%	13%	12%	12%	10%	10%	13%	13%
Consumer Staples	10%	13%	11%	11%	12%	11%	10%	10%	10%	9%	8%	7%	7%	7%	6%
Energy	13%	13%	11%	12%	12%	11%	10%	8%	6%	8%	6%	5%	4%	2%	3%
Financials	18%	13%	14%	16%	13%	16%	16%	17%	16%	15%	15%	13%	13%	10%	11%
Health Care	12%	15%	13%	11%	12%	12%	13%	14%	15%	14%	14%	16%	14%	13%	13%
Industrials	12%	11%	10%	11%	11%	10%	11%	10%	10%	10%	10%	9%	9%	8%	8%
Information Technology	17%	15%	20%	19%	19%	19%	19%	20%	21%	21%	24%	20%	23%	28%	29%
Materials	3%	3%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Real Estate	1%	1%	1%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	2%	3%
Utilities	4%	4%	4%	3%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%

Unfortunately for passive investors, when the market sells off, passively managed funds with over-concentrations in overvalued stocks historically fall the hardest. The pattern of the current stock market decline appears to rhyme with history as the S&P 500 followed the same path in the 1990s and 2000s. The technology weight in the S&P 500 was a meager 5% in 1992, peaked at 29% in 2000, and the subsequent "tech wreck" brought its weight all the way down to 14% in 2002. We believe active management offers a valid tool to minimize downside risk from stocks with irrationally exuberant valuations by avoiding or underweighting those stocks.

Active Share and Fees

Not all active management is created equal. This is important as studies have shown that different types of active management have vastly different performance compared to passive indices. Cremers (2017) documented that from 1990-2015, actively managed funds with high active share and low expense ratios tended to outperform passive indices. Throughout its history, Nicholas II Class I has maintained high active share (10-year average of 83%). Additionally, the Fund's Class I expense ratio of 59 bps is the 4th lowest out of 381 total actively managed funds in the Morningstar Midcap Growth universe. We believe the combination of high active share and a low expense ratio provides Nicholas II the pillars to outperform passive indices.

In summary, the evidence suggests actively managed funds like Nicholas II can outperform over long time periods and provide valuable diversification benefits to investment portfolios. As a result, we firmly believe active management remains a critical part of an investor's strategy to achieve their long-term financial goals. We believe Nicholas II Class I is an excellent option within the active management universe given its long-term focus, low relative expense ratio, and strong historical risk-adjusted performance.

Disclosure:

The Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectus contain this and other important information about the investment company, and it may be obtained by visiting www.nicholasfunds.com. Read it carefully before investing.

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Glossary of Terms:

Russell Midcap® Growth Index - Russell Midcap® Growth Index measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth index. One cannot invest directly in an index.

Russell Midcap® Index - Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. One cannot invest directly in an index.

Active Share - A measure of the percentage of stock holdings in a manager's portfolio that differs from the benchmark index.

Sharpe Ratio - A risk-adjusted measure developed by Professor William F. Sharpe, which measures reward per unit of risk. The higher the Sharpe Ratio, the better. The numerator is the difference between the portfolio's annualized return and the annualized return of the risk-free instrument (T-Bills). The denominator is the portfolio's annualized standard deviation.

Morningstar™ Category Averages - Each Morningstar™ Average represents a universe with similar investment objectives.

Works Cited

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