

Buyer Beware: This Fund Isn't What It Seems

Check out this week's <u>Danger Zone interview</u> with Chuck Jaffe of <u>Money Life</u>.

Through our <u>rigorous analysis</u> of fund holdings¹, we've identified a mutual fund that is Mid Cap in name only. Review of its holdings reveals more downside risk than traditional research shows. Voya Mid Cap Opportunities Fund (NMCAX) is in the <u>Danger Zone</u>.

Learn more about the best fundamental research

Backwards Looking Research Overrates This Fund

Investors that rely solely on past performance may miss the biggest risk of investing in this fund: its poor holdings. Per Figure 1, all of the share classes of Voya Mid Cap Opportunities Fund earn the 3-Star rating from Morningstar while garnering our Very Unattractive rating, the worst of our <u>Predictive Risk/Reward Fund</u> ratings.

Figure 1: Voya Mid Cap Opportunities Fund Ratings

Ticker	Morningstar Rating	New Constructs Rating
NMCAX	3-Star	Very Unattractive
NMCCX	3-Star	Very Unattractive
IMORX	3-Star	Very Unattractive
IMOWX	3-Star	Very Unattractive
NMCIX	3-Star	Very Unattractive
IMOZX	3-Star	Very Unattractive

Sources: New Constructs, LLC, company, ETF and mutual fund filings, and Morningstar

NMCAX allocates significantly more capital to companies with low profitability and expensive valuations, which makes its portfolio riskier than its benchmark, iShares Core S&P U.S. Growth ETF (IUSG).

Holdings Research Reveals a Low-Quality Portfolio

Per Figure 2, Voya Mid Cap Opportunities Fund's asset allocation poses greater downside risk and holds less upside potential than IUSG.

NMCAX allocates 50% of its portfolio to Unattractive-or-worse rated stocks compared to just 16% for IUSG. On the flip side, NMCAX's exposure to Attractive-or-better rated stocks is much lower, at 10%, versus IUSG at 31%.

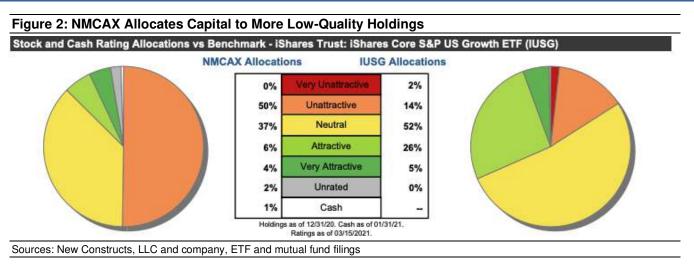
Additionally, nine of NMCAX's top 10 holdings (25% of assets invested) earn a Neutral-or-worse rating.

Important Disclosure Information is contained on the last page of this report. The recipient of this report is directed to read these disclosures.

¹ Three independent studies prove the superiority of our data, models, and ratings. Learn more here.



DILIGENCE PAYS 3/22/21



Given the unfavorable allocation of Attractive-or-better rated stocks vs. Unattractive-or-worse rated stocks relative to the benchmark, NMCAX appears poorly positioned to generate the outperformance required to justify its fees.

Easily Make Any Fund Better

As we showed in <u>The Paradigm Shift to Self-Directed Portfolio Construction</u>, new technologies enable investors to create their own fund without any fees while also enabling better, more sophisticated weighting methodologies. If instead of weighting by NMCAX's method, we weight the fund's holdings by return on invested capital (<u>ROIC</u>), our <u>customized fund</u> allocates:

- 14% of assets to Attractive-or-better rated stocks (compared to 10% for NMCAX)
- 19% of assets to Unattractive-or-worse rated stocks (compared to 50% for NMCAX).

Compare the quality of stock allocation in our customized fund vs. NMCAX here.

Unclear Active Management Strategy

In its prospectus, Voya Mid Cap Opportunities Fund outlines its strategy for choosing investments as follows:

- "normally invests in companies that the sub-adviser believes have above average prospects for growth"
- uses "...a stock selection process that combines quantitative screens with rigorous fundamental analysis"
- and seeks to identify companies' stocks with:
 - o strong business momentum
 - o relative price strength
 - o a perceived value by the Sub-Adviser that is not reflected in the current price.

The use of vague statements like "the sub-adviser believes" and "above average prospects" should be a red flag to investors because we have no idea what they actually mean. Managers that tend to be less transparent in their language and methodology are usually less rigorous about how they pick stocks. After all, why wouldn't managers want everyone to know how much work goes into building a quality portfolio?

Regardless of the level of transparency, without the use of <u>reliable fundamental data</u> and metrics that accurately reflect profitability and valuation (e.g. <u>Core Earnings²</u>, ROIC, and price-to-economic book value [<u>PEBV</u>]) NMCAX routinely invests in stocks with low-quality earnings, negative cash flows, and expensive valuations.

² Core Earnings are a superior measure of profits, as demonstrated in <u>Core Earnings: New Data & Evidence</u>, a paper by professors at Harvard Business School (HBS) & MIT Sloan. Recently accepted by the Journal of Financial Economics, the paper proves that our data is superior to all the metrics offered elsewhere.



Strategy Selects Too Many Bad Stocks

Figure 3 contains our detailed rating for NMCAX, which includes each of the criteria we use to rate all funds under coverage.

These criteria are the same for our <u>Stock Rating Methodology</u> because the performance of a fund's holdings equals the performance of a fund after fees.

Figure 3: Voya Mid Cap	Opportunities Fund	Rating Breakdown
------------------------	--------------------	------------------

	Portfolio Management 😧						
Risk/Reward	Quality of Earnings		Valuation		Asset Allocation		
	Economic vs Reported EPS	ROIC 😧	FCF Yield 😡	Price to EBV 😧	Market-Implied GAP	Cash % 😧	Total Annual Costs 😧
Very Unattractive	Misleading Trend	Bottom Quintile	<-5%	>3.5 or -1<0	>50	>20%	>4%
Unattractive	False Positive	4th Quintile	-5%<-1%	2.4<3.5 or <-1	20<50	8%<20%	2%<4%
Neutral	Neutral EE	3rd Quintile	-1%<3%	1.6<2,4	10<20	2.5%<8%	1%<2%
Attractive	Positive EE	2nd Quintile	3%<10%	1.1<1.6	3<10	1%<2.5%	0.5%<1%
Very Attractive	Rising EE	Top Quintile	>10%	0<1.1	0<3	<1%	<0.5%
Actual Values				uti Va			
NMCAX	Positive EE	4%	0%	4.5	59 yrs	<1%	3.8%
Benchmarks Ø							
Style ETF (IUSG)	Positive EE	36%	1%	2.9	27 yrs	(A)	0.0%
S&P 500 ETF (SPY)	Positive EE	25%	2%	2.9	24 yrs	(A)	0.1%
Small Cap ETF (IWM)	Positive EE	4%	0%	3.7	42 yrs	(A)	0.2%

Sources: New Constructs, LLC and company, ETF and mutual fund filings

As Figure 3 shows, NMCAX's holdings are inferior to its benchmark, IUSG, and the S&P 500 (SPY). Specifically:

- NMCAX's ROIC is 4% and below the 36% earned by IUSG and 25% earned by SPY
- NMCAX's free cash flow yield of 0% is worse than the 1% of IUSG and the 2% of SPY
- the PEBV ratio for NMCAX is 4.5, which is greater than the 2.9 for IUSG and SPY
- our <u>discounted cash flow analysis</u> reveals an average market implied growth appreciation period (<u>GAP</u>) of 59 years for NMCAX's holdings compared to 27 years for IUSG and 24 years for SPY

In other words, the stocks held by NMCAX generate inferior cash flows and have higher valuations compared to both IUSG and SPY. The market expectations for stocks held by NMCAX imply profit growth (measured by PEBV ratio) that is well above the profit growth expectations embedded in IUSG's and SPY's holdings.

Lower historical profits and higher expectations for future profits are a bad combination. Furthermore, in the current market, there is no reason to allocate to overvalued stocks when there are <u>industry leading</u> firms trading at discounted prices.

Strategy Selects Many of the Most Dangerous Stocks

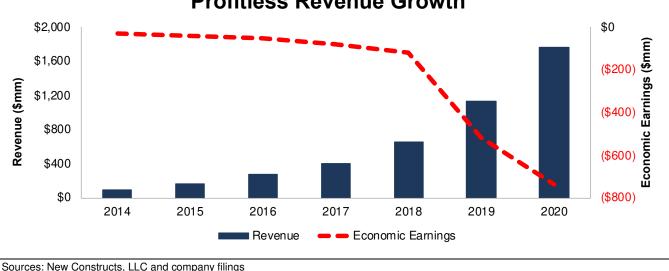
We have featured several of the highly overvalued stocks to which NMCAX allocates as <u>Danger Zone</u> picks: <u>Entegris Inc.</u> (ENTG), <u>Peloton Interactive Inc.</u> (PTON), <u>Spotify</u> (SPOT), and <u>Snap Inc.</u> (SNAP). These companies have poor profitability and competitive disadvantages matched with valuations that imply they will significantly improve profitability and achieve huge market share gains.

NMCAX's largest holding, Twilio Inc. (TWLO: \$352/share) poses particularly large risk for fiduciaries. Twilio has grown revenue from \$89 million in 2014 to \$1.8 billion in 2020. Economic earnings, which not only account for unusual items on the income statement and balance sheet, declined from -\$29 million to -\$739 million over the same time, per Figure 4.

Twilio's ROIC, which remains negative, has improved from -64% in 2014 to -7% in 2020, but the firm has burned through a cumulative \$10 billion (17% of market cap) in free cash flow (FCF) since 2015.



Figure 4: Twilio's Revenue & Economic Earnings Since 2014



Profitless Revenue Growth

TWLO Is Priced to Take ~43% of Its TAM

Despite the deterioration in Twilio's fundamentals, shares are up 327% over the past year (vs. S&P +63%) and are significantly overvalued. We use our <u>reverse discounted cash flow (DCF) model</u> to quantify the growth in cash flows, and implied market share, Twilio must achieve to justify its valuation.

To justify its current price of ~\$350/share, Twilio must:

- immediately achieve a 14% NOPAT margin (which equals the average NOPAT margin of the 69 profitable Software firms under coverage, compared to Twilio's -22% NOPAT margin in 2020)
- grow revenue by 34% compounded annually (above consensus estimates of 31% compounded annually over the next five years) for the next decade

<u>See the math behind this reverse DCF scenario.</u> In this scenario, Twilio's NOPAT would reach \$4.6 billion in 2030, which based on 2020 figures, would be higher than the 128 Software firms under coverage except only Microsoft (MSFT), Oracle (ORCL), and SAP (SAP).

In this scenario, Twilio's revenue would reach nearly \$34 billion in 2030, or 43% of its total addressable market (TAM), which is up from 2% of its TAM based on 2020 revenue. See Figure 6.

Figure 5 compares the firm's implied future NOPAT in this scenario to its historical NOPAT. For context, we include the NOPAT of Adobe (ADBE) and Intuit (INTU), the firms with the fourth and fifth highest NOPAT in the Software industry in 2020. As show in Figure 5, Twilio's valuation implies its profits will nearly triple that of Intuit, despite Twilio's NOPAT currently ranking seventh worst in the industry.



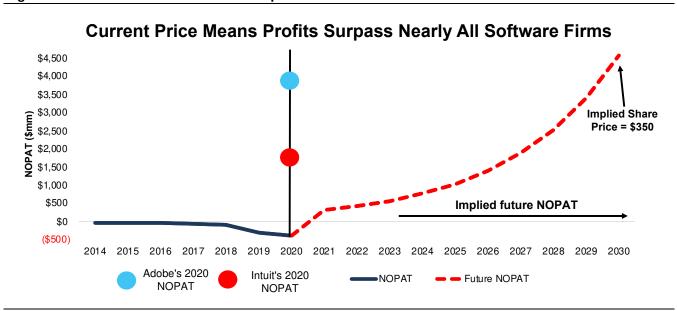
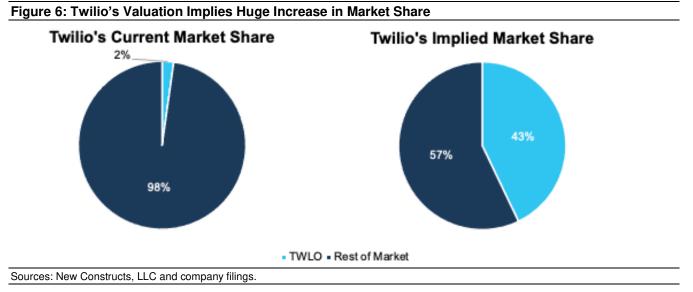


Figure 5: Twilio's Historical NOPAT vs. Implied NOPAT

Sources: New Constructs, LLC and company filings.

Twilio's current valuation implies unrealistic market share gains.



61% Downside Risk Even if Twilio Becomes Profitable

Twilio's <u>economic book value</u>, or no growth value, is -\$50/share, which further illustrates the overly optimistic expectations implied by its stock price.

Even if we assume Twilio can achieve a 7% NOPAT margin (half the average of profitable Software firms under coverage) and grow revenue by 31% compounded annually for the next decade (which assumes revenue grows at consensus estimates from 2021-2025 and 28% each year thereafter), the stock is worth only \$138/share today – a 61% downside to the current stock price. See the math behind this reverse DCF scenario.

In this scenario, Twilio's NOPAT grows from -\$393 million in 2020 to \$1.7 billion in 2030. For reference, the firm's NOPAT fell from -\$27 million in 2014 to -\$393 million in 2020.



Each of these scenarios also assumes Twilio is able to grow revenue, NOPAT, and FCF without increasing working capital or fixed assets. This assumption is unlikely but allows us to create best-case scenarios that demonstrate how high expectations embedded in the current valuation are.

Style Drift Is an Another Red Flag

Investors that blindly trust fund managers without doing diligence on the fund's holdings can unknowingly allocate to a different investment style than the fund's name suggests. Prior <u>research shows</u> that managers drift into other styles to improve their relative ranking from Morningstar and look more attractive to investors.

Morningstar classifies NMCAX (and other share classes) as a Mid Cap Growth fund. Mid Cap is commonly defined as companies with market capitalizations between \$2 billion and \$10 billion. However, the weightedaverage market cap of NMCAX's holdings is \$29 billion and its top 10 holdings have market capitalizations ranging from \$11.2 billion to \$65.9 billion. Its smallest holding has a market cap of just \$4.2 billion. Accordingly, NMCAX should be classified as an All Cap Growth fund.

Without holdings analysis, investors in NMCAX think they're getting exposure to Mid Cap stocks, when in reality the size of firms skews much larger.

Excessive Fees Make Outperformance Even More Difficult

At 3.85%, NMCAX's total annual costs (TAC) are higher than 97% of the 476 All Cap Growth mutual funds under coverage. For comparison, the average TAC of all All-Cap Growth mutual funds under coverage is 1.68%, the weighted-average is 1.45%, and the benchmark ETF (IUSG) has total annual costs of 0.04%.

Our TAC metric accounts for more than just the expense ratio. We consider the impact of front-end loads, backend loads, redemption fees, and transaction costs. For example, NMCAX's front-end load adds 2.19% to its total annual costs, and its annual turnover ratio of 92% adds 0.2% to its total annual costs – neither of which are captured by the expense ratio. Figure 7 shows our breakdown of NMCAX's total annual costs, which we <u>provide</u> for all of the ~7,000 mutual funds under coverage.

Figure 7: Voya Mid Cap Opportunities Fund Total Annual Costs Breakdown

All Cost Types	NMCAX	IUSG
Front-End Load	2.19%	
Expense Ratio	1.45%	0.04%
Back-End Load	0.00%	-
Redemption Fee	0.00%	
Transaction Costs	0.20%	-
Total Annual Costs	3.85%	0.04%

Sources: New Constructs, LLC and company, ETF and mutual fund filings

To justify its higher fees, each class of the fund must outperform its benchmark by the following amounts over three years:

- 1. NMCAX must outperform by an average of 3.8% annually.
- 2. NMCCX must outperform by an average of 2.4% annually.
- 3. IMORX must outperform by an average of 1.9% annually.
- 4. IMOWX must outperform by an average of 1.3% annually.
- 5. NMCIX must outperform by an average of 1.2% annually.
- 6. IMOZX must outperform by an average of 1.1% annually.



Get a copy of our standard mutual fund report on NMCAX.

Free copy of our NMCAX report

The Importance of Holdings-Based Fund Analysis

Smart fund (or ETF) investing means analyzing the holdings of each mutual fund. Failure to do so is a failure to perform proper due diligence. Simply buying a mutual fund or ETF based on past performance <u>does not</u> <u>necessarily lead</u> to outperformance. Similarly, blindly diversifying through index funds is no substitute for diligence. Only through holdings-based analysis can one determine if a fund's methodology leads managers to pick high-quality or low-quality stocks.

However, most investors don't realize they can access sophisticated fundamental research³ using data that enables investors to <u>overcome</u> inaccuracies, omissions, and biases in legacy fundamental datasets. Our <u>Robo-Analyst technology</u> analyzes the holdings of all 506 ETFs and mutual funds in the All Cap Growth and ~7,600 ETFs and mutual funds under coverage to avoid "<u>the danger within</u>." This diligence allows us to <u>cut through the noise</u> and identify potentially dangerous funds that traditional, backward-looking fund research may overlook, such as NMCAX.

Our clients can directly leverage holdings-based analysis and <u>create their own All Cap fund</u> while avoiding the management fees that NMCAX and other mutual funds charge.

Better-Rated All Cap Growth Funds

The following are two All Cap Growth mutual funds that earn an Attractive-or-better rating, have more than \$100 million in assets under management, and have below average TAC.

- 1. Evercore Equity Fund (EWMCX) 1.15% TAC
- 2. Nicholas Fund, Inc. (NICSX) 0.83% TAC

This article originally published on March 22, 2021.

Disclosure: David Trainer, Kyle Guske II, Alex Sword, and Matt Shuler receive no compensation to write about any specific stock, sector, style, or theme.

Follow us on <u>Twitter</u>, <u>Facebook</u>, <u>LinkedIn</u>, and <u>StockTwits</u> for real-time alerts on all our research.

³ See how our models overcome flaws in Bloomberg and Capital IQ's (SPGI) analytics in the detailed appendix of this paper.



It's Official: We Offer the Best Fundamental Data in the World

Many firms claim their research is superior, but none of them can prove it with independent studies from highlyrespected institutions as we can. Three different papers from both the public and private sectors show:

- 1. Legacy fundamental datasets suffer from significant inaccuracies, omissions and biases.
- 2. Only our "novel database" enables investors to overcome these flaws and apply <u>reliable</u> fundamental data in their research.
- 3. Our proprietary measures of <u>Core Earnings</u> and <u>Earnings Distortion</u> materially improve stock picking and forecasting of profits.

Best Fundamental Data in the World

Forthcoming in <u>The Journal of Financial Economics</u>, a top peer-reviewed journal, <u>Core Earnings: New Data &</u> <u>Evidence</u> proves our Robo-Analyst technology overcomes material shortcomings in legacy firms' data collection processes to provide superior <u>fundamental data</u>, <u>earnings</u> models, and <u>research</u>. More <u>details</u>.

Key quotes from the paper:

- "[New Constructs'] Total Adjustments differs significantly from the items identified and excluded from Compustat's adjusted earnings measures. For example... 50% to 70% of the variation in Total Adjustments is not explained by S&P Global's (SPGI) Adjustments individually." – pp. 14, 1st para.
- "A final source of differences [between New Constructs' and S&P Global's data] is due to data collection oversights...we identified cases where Compustat did not collect information relating to firms' income that is useful in assessing core earnings." – pp. 16, 2nd para.

Superior Models

A top accounting firm features the superiority of our ROIC, NOPAT and Invested Capital research to Capital IQ & Bloomberg's in <u>Getting ROIC Right</u>. See the <u>Appendix</u> for direct comparison details.

Key quotes from the paper:

- "...an accurate calculation of ROIC requires more diligence than often occurs in some of the common, off-the-shelf ROIC calculations. Only by scouring the footnotes and the MD&A [as New Constructs does] can investors get an accurate calculation of ROIC." – pp. 8, 5th para.
- "The majority of the difference...comes from New Constructs' machine learning approach, which leverages technology to calculate ROIC by applying accounting adjustments that may be buried deeply in the footnotes across thousands of companies." – pp. 4, 2nd para.

Superior Stock Ratings

Robo-Analysts' stock ratings outperform those from human analysts as shown in this <u>paper</u> from Indiana's Kelley School of Business. Bloomberg features the paper <u>here</u>.

Key quotes from the paper:

- "the portfolios formed following the buy recommendations of Robo-Analysts earn abnormal returns that are statistically and economically significant." pp. 6, 3rd para.
- "Our results ultimately suggest that Robo-Analysts are a valuable, alternative information intermediary to traditional sell-side analysts." pp. 20, 3rd para.

Our mission is to provide the best fundamental analysis of public and private businesses in the world and make it affordable for all investors, not just Wall Street insiders.

We believe every investor deserves to know the whole truth about the profitability and valuation of any company they consider for investment. More details on our cutting-edge technology and how we use it are <u>here</u>.



DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, "New Constructs") is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first two days after New Constructs issues a report on that security.

DISCLAIMERS

The information and opinions presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or solicitation of an offer to buy or sell securities or other financial instruments. New Constructs has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor and nothing in this report constitutes investment, legal, accounting or tax advice. This report includes general information that does not take into account your individual circumstance, financial situation or needs, nor does it represent a personal recommendation to you. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about any such investments or investment services.

Information and opinions presented in this report have been obtained or derived from sources believed by New Constructs to be reliable, but New Constructs makes no representation as to their accuracy, authority, usefulness, reliability, timeliness or completeness. New Constructs accepts no liability for loss arising from the use of the information presented in this report, and New Constructs makes no warranty as to results that may be obtained from the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information and opinions contained in this report reflect a judgment at its original date of publication by New Constructs and are subject to change without notice. New Constructs may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and New Constructs is under no obligation to insure that such other reports are brought to the attention of any recipient of this report.

New Constructs' reports are intended for distribution to its professional and institutional investor customers. Recipients who are not professionals or institutional investor customers of New Constructs should seek the advice of their independent financial advisor prior to making any investment decision or for any necessary explanation of its contents.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would be subject New Constructs to any registration or licensing requirement within such jurisdiction.

This report may provide the addresses of websites. Except to the extent to which the report refers to New Constructs own website material, New Constructs has not reviewed the linked site and takes no responsibility for the content therein. Such address or hyperlink (including addresses or hyperlinks to New Constructs own website material) is provided solely for your convenience and the information and content of the linked site do not in any way form part of this report. Accessing such websites or following such hyperlink through this report shall be at your own risk.

All material in this report is the property of, and under copyright, of New Constructs. None of the contents, nor any copy of it, may be altered in any way, copied, or distributed or transmitted to any other party without the prior express written consent of New Constructs. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of New Constructs. Copyright New Constructs, LLC 2003 through the present date. All rights reserved.