

# **DILIGENCE PAYS 12/16/19**

# Don't Pay Fund Managers to Buy Overvalued Stocks

Check out this week's **Danger Zone** interview with Chuck Jaffe of Money Life.

Despite its 3 Star Morningstar rating, Virtus Zevenbergen Innovative Growth Stock Fund (SAGAX) is one of the worst rated funds in our 8,000+ ETF and mutual fund coverage universe. SAGAX is in the <u>Danger Zone</u>.

Virtus Zevenbergen Innovative Growth Stock Fund (SAGAX) is in the All Cap Growth style, which ranks seventh per our <u>4Q19 Style Ratings for ETFs and Mutual Funds</u> report and earns our Neutral rating. There are 79 Attractive-or-better rated funds in the style, but there are also over 100 Unattractive-or-worse funds. As such, investors need to be careful to avoid the risky funds in this sector.

SAGAX gets our Very Unattractive Rating, the worst of <u>Predictive Risk/Reward Fund</u> ratings, which are based on analysis of fund holdings and leverage the <u>Earnings Distortion</u> research featured in this <u>Harvard Business School and MIT Sloan paper</u>.

Get the best fundamental research

### **Backwards Looking Research Overrates this Fund**

Per Figure 1, SAGAX and SCATX earn the 3-Star rating from Morningstar. However, our <u>Predictive Risk/Reward Fund Rating</u> methodology shows them as Very Unattractive.

Figure 1: Virtus Zevenbergen Innovative Growth Stock Fund Ratings

Ticker	Morningstar Rating	New Constructs Rating
SAGAX	3 Star	Very Unattractive
SCATX	3 Star	Very Unattractive

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

SAGAX allocates significant capital to companies with low profitability and high profit growth expectations baked into their stock prices, which makes its portfolio unusually risky. Investors that rely solely on past performance may not see the true risk of investing in this fund.

# Holdings Research Reveals a Low-Quality Portfolio Versus the Benchmark

The only justification for a mutual fund to charge higher fees than its ETF benchmark is "active" management that leads to out-performance. A fund is most likely to outperform if it has higher quality holdings than its benchmark. To assess holdings quality, we leverage our Robo-Analyst technology to drill down and analyze the individual stocks in every fund we cover.

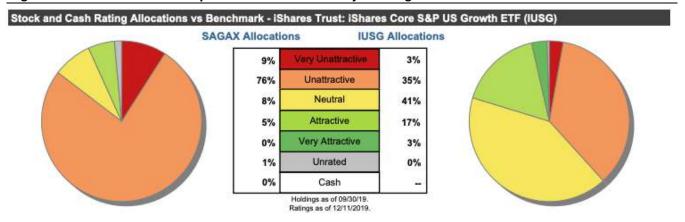
Per Figure 2, Virtus Zevenbergen Innovative Growth Stock Fund's asset allocation poses greater downside risk and holds less upside potential than its benchmark, the iShares Core S&P U.S. Growth ETF (IUSG).

SAGAX allocates just 5% of its portfolio to Attractive-or-better rated stocks compared to 20% for IUSG. On the flip side, SAGAX's exposure to Unattractive-or-worse rated stocks is much higher, at 85% versus IUSG at 38%.

<sup>&</sup>lt;sup>1</sup> Harvard Business School features the powerful impact of our research automation technology in the case study New Constructs: Disrupting Fundamental Analysis with Robo-Analysts.



Figure 2: SAGAX Allocates Capital to More Low-Quality Holdings



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

Given the unfavorable allocation of Very Attractive vs. Very Unattractive stocks relative to the benchmark, SAGAX appears poorly positioned to generate the outperformance required to justify its fees.

### **Stock Selection Methodology Picks Bad Stocks**

Virtus Zevenbergen Innovative Growth Stock Fund claims its investment process includes three key items:

- High growth focus
- Rigorous fundamental research
- High-Conviction portfolio

SAGAX's portfolio certainly finds stocks with high-growth expectations, as we'll show below. "Rigorous fundamental research," as SAGAX defines it, aims to identify stocks with "price catalysts from positive revenue, cash flow, and earnings growth." That statement looks good on its face, but the fund provides no details on exactly how it measures "cash flow" and "earnings growth", two metrics that are prone to manipulation by corporate managers.

As we show in "Consensus Earnings Are Wrong & How Much Is It Costing You", earnings are misunderstood by the market. Core earnings, when adjusted for unusual gains/losses, are falling much faster than reported earnings. Further, reported earnings are easily manipulated through the use of numerous accounting loopholes; so, not surprisingly, earnings growth has very little correlation with shareholder value creation.

As empirically shown in "Core Earnings: New Data & Evidence", our models remove these distortions to calculate a better measure of earnings and, subsequently, valuation of SAGAX's holdings. Our research finds that it allocates to stocks with significantly lower profitability but higher expectations for future profit growth than its benchmark and the market as a whole.

Figure 3 contains our detailed rating for SAGAX, 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: Virtus Zevenbergen Innovative Growth Stock Fund Rating Breakdown

	Portfolio Management ②						
Risk/Reward Rating ⑦	Quality of Earnings		Valuation			Asset Allocation	
	Economic vs Reported EPS ②	ROIC ®	FCF Yield ②	Price to EBV ②	Market-Implied GAP	Cash % ⑦	Total Annual Costs ①
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							
SAGAX	Neutral EE	0%	-2%	9.3	91 yrs	<1%	3.8%
Benchmarks ③							
Style ETF (IUSG)	Positive EE	18%	0%	3.9	46 yrs	(*)	0.0%
S&P 500 ETF (SPY)	Positive EE	18%	1%	2.9	33 yrs	(*)	0.1%
mall Cap ETF (IWM)	Positive EE	5%	-1%	3.6	38 yrs		0.2%

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

As Figure 3 shows, SAGAX's holdings are inferior to its benchmark, IUSG, in all five of criteria that make up our holdings analysis. Specifically:

- SAGAX's return on invested capital (ROIC) is 0% and well below the 18% earned by IUSG and the S&P 500 (SPY).
- SAGAX's free cash flow yield of -2% is worse than the 0% of IUSG and 1% of SPY.
- The price to economic book value (PEBV) ratio for SAGAX is 9.3, which is significantly greater than the 3.9 for IUSG holdings and the 2.9 of SPY holdings.
- Our <u>discounted cash flow analysis</u> reveals an average market implied growth appreciation period (<u>GAP</u>) of 91 years for SAGAX's holdings compared to 46 years for IUSG and 33 years for SPY.

The stocks held by SAGAX generate inferior cash flows and have higher valuations compared to IUSG. The market expectations for stocks held by SAGAX imply cash flow growth that is more than double the cash flow expectations embedded in IUSG's holdings. Lower historical profits and higher expectations for future profits are a bad combination.

### Overweighting Technology Adds Earnings Distortion Risk

45% of the fund is in the Technology sector.

As we show in, "Big Tech Leads Decline in Core Earnings," the Technology sector's earnings distortion worsened more than any other sector over the trailing twelve months. Reported earnings have not been this overstated, relative to core earnings, for the Tech sector since the Tech bubble.

In other words, by investing heavily in the Technology sector, SAGAX is allocating to stocks with some of the most overstated earnings in the market. These stocks are more likely to miss earnings expectations, which could lead to significant underperformance moving forward.

# Deep Dive on SAGAX's Bad Stock Holdings

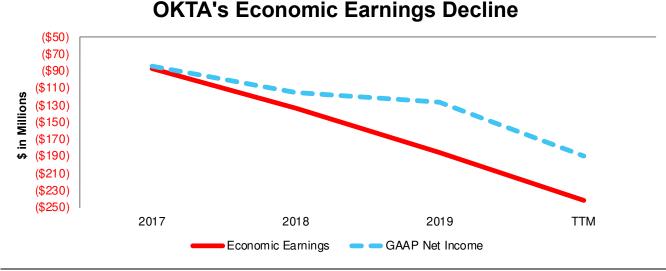
SAGAX's holdings include many previous Danger Zone picks including Netflix (NFLX), Tesla (TSLA), Shake Shack (SHAK), Uber (UBER), Zillow (ZG), CoStar Group (CSGP), and ServiceNow (NOW).

Okta Inc. (OKTA: \$118/share) is one of SAGAX's worst holdings, due to its rising earnings distortion, worsening cash flows, and overvalued stock price. OKTA's GAAP net income has fallen 127%, from -\$83 million in 2017 to -\$189 million TTM. Core earnings, which account for non-operating items buried in the footnotes, have fallen 139%, from -\$83 million to -\$198 million over the same time.



Economic earnings, which not only account for non-operating items on the income statement, but also changes to the balance sheet, look even worse. Economic earnings have declined 179%, from -\$87 million in 2017 to -\$241 million TTM. See Figure 4.

Figure 4: OKTA's Economic Earnings vs. GAAP Earnings Since 2017



Sources: New Constructs, LLC and company filings

OKTA's positive earnings distortion (i.e. overstated earnings) is due to non-recurring gains that artificially prop up reported earnings. For example, the company reported over \$11 million in other income through the nine months ended October 31, 2019. This other income is attributable to interest earnings on short-term investment balances and not the core operations of the business.

#### **OKTA** is Significantly Overvalued

Despite the deterioration in the core earnings of the company, shares have increased ~69% over the past year and are quite overvalued. We use our <u>reverse DCF model</u> to quantify the growth in cash flows OKTA must achieve to justify its valuation.

To justify its current price of \$118/share, OKTA must immediately achieve 13% NOPAT margins (average of 61 Software firms under coverage with positive NOPAT margin – compared to -30% TTM) and also grow revenue by 34% compounded annually for the next 14 years. See the math behind this reverse DCF scenario. In this scenario, OKTA would be generating \$24 billion in revenue 14 years from now, which today would rank behind only Microsoft and Oracle in terms of annual revenue, out of the 117 Software firms under coverage.

Even if we assume OKTA can achieve 15% NOPAT margins, and grow revenue by 30% compounded annually for the next decade, the stock is worth only \$26/share today – a 78% downside. See the math behind this reverse DCF scenario.

# **Excessive Fees Make Outperformance Even More Difficult**

At 3.85%, SAGAX's total annual costs (TAC) are higher than 97% of the 560 All Cap Growth mutual funds under coverage. For comparison, the average TAC of all All Cap Growth mutual funds under coverage is 1.75%, the weighted average is 1.56%, and the benchmark ETF (IUSG) has total annual costs of 0.04%.

Our TAC metric accounts for more than just expense ratios. We consider the impact of front-end loads, back-end loads, redemption fees, and transaction costs. For example, SAGAX's front-end load adds 2.19% to its total annual costs and its annual turnover ratio of 103% adds 0.22% to its total annual costs – neither of which are captured by the expense ratio. Figure 5 shows our breakdown of SAGAX's total annual costs, which is available for all of the 8,000+ mutual funds under coverage.



Figure 5: Virtus Zevenbergen Innovative Growth Stocks Fund Total Annual Costs Breakdown

All Cost Types	SAGAX	IUSG	
Front-End Load	2.19%	***	
Expense Ratio	1.43%	0.04%	
Back-End Load	0.00%	***	
Redemption Fee	0.00%	775	
Transaction Costs	0.22%	***	
Total Annual Costs	3.85%	0.04%	

\*All values represented are Annualized Values.

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 over three years:

- 1. SAGAX must outperform by an average of 3.80% annually.
- 2. SCATX must outperform by an average of 1.30% annually.

An in-depth analysis of SAGAX and its TAC is available in our standard mutual fund report.

Free copy of our SAGAX report

### SAGAX's Performance Can't Justify Its Fees

When we take into account its load, which adds 2.19% to its total annual costs, we see that SAGAX has underperformed in recent years and failed to justify its fees.

SAGAX's 1-year quarter-end average annual total return underperformed IUSG by over 16 percentage points. Its 3-year quarter-end average annual total return bested IUSG by 152 basis points, which is nowhere near enough to justify its fees, as noted above. Its 5 and 10-year quarter-end average annual total return each underperformed by 167 and 85 basis points respectively

Given that 85% of assets are allocated to stocks with Unattractive-or-worse ratings, SAGAX looks likely to underperform moving forward.

### 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 does not necessarily lead to outperformance. 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 research using data that corrects market inefficiencies and generates alpha. Our Robo-Analyst technology analyzes the holdings of all 586 ETFs and mutual funds in the All Cap Growth style and 8,000+ ETFs and mutual funds under coverage to avoid "the danger within.2" This diligence allows us to cut through the noise and identify potentially dangerous funds that traditional backward-looking fund research may overlook, such as SAGAX.

<sup>2</sup> This paper compares our analytics on a mega cap company to other major providers.



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## **Better Rated All Cap Growth Funds**

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

- 1. RiverPark Funds: RiverPark/Wedgewood Fund (RWGIX) Very Attractive 1.08% TAC
- 2. YCG Enhanced Fund (YCGEX) Attractive 1.37% TAC
- 3. Hennessy Focus Fund (HFCSX) Attractive 1.68% TAC

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Disclosure: David Trainer, Kyle Guske II, and Sam McBride receive no compensation to write about any specific stock, sector, style, or theme.

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



# Footnotes adjustments matter. We are the ONLY source.

We provide ratings, models, reports & screeners on U.S. 3,000 stocks, 700 ETFs and 7,000 mutual funds.

### **HBS & MIT Sloan research** reveals that:

- Markets are inefficiently assessing earnings because no one reads the footnotes.
- Corporate managers hide gains/losses in footnotes to manage earnings.
- Our technology brings the material footnotes data to market for the first time ever.

Combining human expertise with NLP/ML/AI technologies (<u>featured by Harvard Business School</u>), we shine a light in the dark corners (e.g. footnotes) of hundreds of thousands of financial filings to unearth critical details.

The HBS & MIT Sloan paper, Core Earnings: New Data and Evidence, shows how our superior data drives uniquely comprehensive and independent debt and equity research.

This paper compares our analytics on a mega cap company to other major providers. The Appendix details exactly how we stack up.

### Learn more.

Quotes from HBS & MIT Sloan professors on our research:

#### Get better research:

"...the NC dataset provides a novel opportunity to study the properties of non-operating items disclosed in 10-Ks, and to examine the extent to which the market impounds their implications." – page 20

### Pick better stocks:

"Trading strategies that exploit cross-sectional differences in firms' transitory earnings produce abnormal returns of 7-to-10% per year." – Abstract

### Avoid losses from using other firms' data:

"...many of the income-statement-relevant quantitative disclosures collected by NC do not appear to be easily identifiable in Compustat..." – page 14

### Build better models:

"Core Earnings [calculated using New Constructs' novel dataset] provides predictive power for various measures of one-year-ahead performance...that is incremental to their current-period counterparts." – page 4

## Exploit market inefficiencies:

"These results ... suggest that the adjustments made by analysts and Compustat to better capture core earnings are incomplete. Moreover, the non-core items identified by NC produce a measure of core earnings that is incremental to alternative measures of operating performance in predicting an array of future income measures." – page 26

## Fulfill fiduciary duties:

"An appropriate measure of accounting performance for purposes of forecasting future performance requires detailed analysis of all quantitative performance disclosures detailed in the annual report, including those reported only in the footnotes and in the MD&A." – page 33-34



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