# The Michael Price Student Investment Fund



# NYU STERN'S MICHAEL PRICE STUDENT INVESTMENT FUND A FAMILY OF FUNDS MANAGED BY NYU STERN SCHOOL OF BUSINESS MBA STUDENTS

#### WHAT IS THE MICHAEL PRICE STUDENT INVESTMENT FUND?

With \$2.0 million currently under management, the Michael Price Student Investment Fund ("MPSIF" or "the Funds") is a family of funds managed directly by NYU Stern MBA students. The Funds, part of the overall NYU endowment, were established in 1999 through a generous gift from Michael Price, Managing Partner, MFP Investors, LLC and former Chairman of Franklin Mutual Series Funds.

## WHAT IS UNIQUE ABOUT MPSIF?

The Michael Price Student Investment Fund provides Stern MBA students with hands on experience managing real Funds with significant assets. In addition, the Funds are required to pay an annual 5% dividend to the University Of Oklahoma Price School Of Business, Mr. Price's undergraduate alma mater. This dividend assists students with their tuition and living expenses so they can attend summer classes at Stern. Additionally, MPSIF maintains a transparent record of our performance and classroom activities.

#### WHAT IS THE PORTFOLIO COMPOSITION?

For diversification purposes, MPSIF is divided into three equity Funds – Growth, Value, and ESG - and one Fixed Income Fund. While each sub-Fund has its own performance benchmark (Russell 1000 Growth Index, Russell 1000 Value Index, S&P 500, and the Vanguard Total Bond Index, respectively), MPSIF's primary goal is to deliver overall positive returns. Prior to March 2018, MPSIF also operated a Small Cap Fund, which was dissolved, and the proceeds disbursed pro rata across the other sub-funds.

#### WHAT ROLE DO STERN MBA STUDENTS PLAY IN MANAGING THE FUNDS?

Students must go through a competitive process to become a portfolio manager or analyst with the Funds, which is the basis of Stern's "Managing Investment Funds" course. Stern MBAs must apply to this course, and demand has always exceeded available spots. About 40 students enroll each year and are then responsible for all Fund activities—screening and evaluating stocks, preparing and presenting pitches for buy and sell recommendations and strategizing on broader portfolio issues as they relate to sectors allocation. For the Fixed Income Fund the primary role of analysts is to make tactical allocation recommendations and decisions based on market outlook and economic analyses among various product sectors.

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Portfolio Manager, Fixed Income Fund Parth Shah

Co-Portfolio Managers, Growth Fund
Co-Portfolio Managers, Value Fund
Joseph Diaz, Ce Wang
Faculty Advisor
Professor Anthony Marciano

#### Executive Committee - Spring 2018

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Edward Kerschner, Adjunct Professor of Finance, Stern School of Business

Fred Renwick, Professor (Emeritus) of Finance, Stern School of Business

Matthew Richardson, Professor of Finance, Stern School of Business

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# Letter from the Faculty Advisor

I am pleased to introduce the Annual Report for the Michael Price Student Investment Fund (MPSIF) for the fiscal year ending February 28, 2019. It continues to be a period of transition for the Fund where we are attempting to respond to difficult changes in the marketplace. The major change for the Fund, as noted in the previous Annual Report, was the creation of the new ESG-based subfund.

The ESG subfund has been created and is now being managed by a small group of just six people. The smaller size is due to it being a new fund with no previous positions and that was only started once classes resumed in February. Since the first trades had not being executed in time to make this Annual Report, the full presentation of the ESG portfolio is omitted from this Report and instead will be a focus of the next Report for August in the The Portfolio Managers discuss in their section the decisions that were made in bringing this fund up to speed. First, the benchmark used will be the Standard and Poor's 500. Second, the approach used for the pitches of stocks follows a multi-phase perspective. Stocks whose ESG scores from readily available public databases (MSCI and Sustainalytics) fall below a sufficiently low threshold (bottom quarter) are precluded from being pitched to the analysts. The stocks chosen to be held by the ESG fund must additionally meet two tests: first, they must be demonstrated to be valued via the analyst pitch at a number greater than the prevailing market price; but second, its ESG characteristics must be deemed to be of high quality in the areas that are considered to be Material (as demonstrated by SASB). It was after much deliberation and incredibly insightful discussions with our visitors that the students ultimately arrived at this investment approach. These discussions began with NYU faculty members such as Richard Levich, Tensie Whelan, and Steven Godeke. Thanks to them, from these discussions we were able to reach out and seek the invaluable advice of a range of ESG investment professionals that included Steve Falci of Impax Investment Management, Brace

Arabesque, and Kevin Parker of Sustainable Investment Management. Kevin was kind enough to visit the entire Fund to offer his insights on the ESG landscape. This term, we continued these discussions with Lee Ballin of Bloomberg and Rob Brown, who was also able to visit the ESG fund directly and provided the students with his great advice from his years of experience in the area.

We have also considered a range of administrative changes but have been unable to arrive at ones that we believe will make a significant difference. Nonetheless, the current modernized website nyumpsif.com is complete and we continue efforts to streamline the Annual Report to a smaller size.

As always, we are infinitely grateful to have invaluable guidance from our Management Advisory Council (MAC) given the state of flux for the fund. I know the students see this as a most useful characteristic of the class: to observe the speakers and take in their insights. In addition to the speakers mentioned above, this term we were joined by the MAC members Mitch Williams, Randy Haase, Michael Weinberg, and Richard Saperstein. The discussions were incredibly useful as they shed light on many facets of the investment world – from the macroeconomic landscape to the concerns with the employment environment including the role of technology in the investment field.

As usual, let's examine the figures for MPSIF. The fund earned -4.66% the last six months in total return compared to a weighted benchmark return of -1.14% -- for a total underperformance relative to the benchmark of 353bps. The significant underperformance is partly due to the current asset allocation of the benchmark with one third in Fixed Income (which generated positive returns unlike the negative returns in the equity portfolios). Nonetheless, each individual fund underperformed with Value leading the pack; this is discussed further in this Report. Overall, returns

since inception continue to closely track the S&P 500 but to a slightly lesser extent our benchmarks. We again paid, on May 1<sup>st</sup>, our nineteenth annual 5% dividend to support the students of the University of Oklahoma to allow them to take classes at Stern for the amount of \$103,200 based on assets under management of \$2.064 million on March 31, 2019.

Overall, while it was indeed exciting to initiate the new ESG fund – an area that I personally am excited about as I know the students are – there are some concerns in the more traditional areas. While ESG investing clearly attracts evermore attention and is growing dramatically in popularity, traditional fundamental active investing continues to underperform on average and provides a more anxious employment arena for students overall. This is a challenge for the fund in that MPSIF needs to adapt to this new environment going forward.

Anthony Marciano Faculty Advisor, MPSIF



# Letter from the President

Spring 2019 has been an exciting time for the markets, with equities bouncing back following the 2018 drop, and the Fed weighing up decisions in the wake of lower-than-expected inflation. Nevertheless, we entered the period with a historically high cash position at 23% of AUM, perhaps indicative of some caution as we enter the eleventh year of this bull market. In this period of cautious optimism, it has been a privilege to serve as the President of the fund, and I am excited to share our performance with you.

MPSIF returned -4.66% over the past six months and 0.44% over the past year, trailing the benchmarks across all sub funds. It has become increasingly challenging to find compelling value investments as multiples pick up and the market cycle draws on, possibly towards a correction. The same has been true for growth stocks, as traditionally strong investments – such as the FAANGs of this world – have shown they are not unshakeable, with household names dragging down our relative performance.

Despite this, students have shown dedication to the class by developing thoughtful investment theses and backing up their views with in-depth, much-deliberated valuations. We are grateful too for the time and insight from the guest speakers, who provided insightful perspectives that often became the cornerstones for our investment theses.

Beyond investment performance, MPSIF has seen significant growth over the past 6 months. This semester saw the realization of many semesters of work in developing the ESG sub fund. Following Ray Dalio's LinkedIn piece, Larry Fink's CEO circular and Sen. Warren's Accountable Capitalism Act, the introduction of the sub fund feels particularly timely; we look

forward to seeing it grow over the course of the next few semesters.

On behalf of the students in the fund, I would like to thank the MAC for their continued dedication to MPSIF. Your time and guidance are invaluable as we strive to become the next generation of top investors. I would also like to thank our faculty advisor, Professor Anthony Marciano, for his commitment to our learning experience, and Michael Price, for making this experience possible for nearly two decades of Stern MBAs.

I am proud to have served MPSIF as President. I believe the class offers a uniquely practical and rigorous investing experience at business school; one that sets up graduates to achieve success in their future careers. I look forward to watching the fund develop as the next class of students takes on this exciting challenge.

William Pitt MPSIF President May 8, 2019



# **Review of Operations**

As of 28 February 2019, the Michael Price Student Investment Fund is divided into four autonomous sub-funds, having dissolved the Small Cap Fund in March 2018: the Fixed Income Fund, the Growth Fund, the Value Fund, and the ESG Fund. The Fund managers employ a well-defined, disciplined investment and diversification strategy.

We continued to work towards achieving the goals set by preceding Executive Committees while continuously striving to set new and better goals for the current year. Our progress and strategic objectives for the fiscal year were as follows:

- Improve the analytics and reporting process to drive greater insight and to focus energy on finding value across the Funds
- Establish and setup the ESG Fund
- Provide focused sector and economic analysis to help make timely actionable investment recommendations
- Continue to invite successful investors as guest speakers to stimulate the learning process
- Hold Exchange Traded Funds (ETFs) over cash, whilst seeking attractive stocks to put money to work
- Improve the risk management process and employ quality screens and discussion of risks during each pitch

We started the semester with a "Pitching 101" session in which experienced second semester analysts presented best-in-class examples of stock pitches to the full class. Parth Shah and Charles Swartz volunteered to present past stock selections that had been approved in the previous semester.

In addition to the practical rigor of stock selection, it was deemed important for the class to understand the

procedural elements required to run a successful fund. Early in the semester, each analyst selected an administrative role, such as fund analytics or trade execution, to further the objectives of a holistic education.

Throughout the semester, the regular routine of stock pitches was interspersed with economic sector updates and guest speakers. Detailed economic analysis was presented by Daniel Jaw, Lei Gong, Manojna Pinnamaneni, and Peng Ser guiding many of the decisions made in the sub-funds.

We were delighted to welcome a number of notable speakers, including Randy Haase, Kevin Parker, Richard Saperstein, Michael Weinberg, and Mitch Williams. We are grateful to all these distinguished practitioners for giving up their time to provide deep and candid insight into the asset management industry.

#### **AUM & Cumulative Distributions**

The Funds began operating on March 1, 2000 with an endowment of \$1.8 million. As of February 28, 2019, our assets under management stand at \$2.01 million, which represents a cumulative return of 167.23% (net). On an annualized basis since inception, MPSIF has earned 5.41% net of brokerage commissions and fees, just above our required annual 5% distribution.

Raymon Halim Annual Report Lead



# Michael Price Student Investment Fund Performance

# Summary

#### Performance of the Michael Price Student Investment Fund

For the period ending February 28, 2019

	6 Month	1 Year	3 Ye	3 Year		5 Year		Inception*	
			Cum.	Cum. Annualized		Annualized	Cum.	Annualized	
The Price Fund	-4.66%	0.44%	33.18%	10.02%	24.18%	4.43%	167.23%	5.41%	
Blended Benchmark	-1.14%	5.53%	42.52%	12.54%	46.03%	7.87%	185.83%	5.66%	
Relative - Net of Fees	-3.53%	-5.09%	-9.34%	-2.51%	-21.85%	-3.44%	-18.60%	-0.25%	

\* Inception from March 1, 2000

	6 Month	1 Year	3 Ye	3 Year		5 Year		ion*
			Cum.	Cum. Annualized		Annualized	Cum.	Annualized
Value Fund	-6.55%	-4.49%	25.11%	8%	21.62%	4%	239.75%	7%
Russell 1000 Value Index	-1.61%	3.17%	43.50%	12.79%	47.52%	8.09%	281.98%	7.28%
Relative - Net of Fees	-4.94%	-7.66%	-18.40%	-5.04%	-25.90%	-4.09%	-42.23%	-0.53%

\* Inception from March 1, 2000

	6 Month	1 Year	3 Year		5 Year		Inception*	
			Cum.	Annualized	Cum.	Annualized	Cum.	Annualized
Growth Fund	-6.09%	0.65%	49.79%	14%	23.69%	4%	44.79%	2%
Russell 1000 Growth Index	-4.52%	6.62%	64.27%	17.99%	81.33%	12.64%	127.49%	4.40%
Relative - Net of Fees	-1.57%	-5.98%	-14.47%	-3.57%	-57.64%	-8.30%	-82.70%	-2.41%

\* Inception from March 1, 2000

	6 Month	1 Year	3 Ye	3 Year		5 Year		tion*
			Cum.	Annualized	Cum.	Annualized	Cum.	Annualized
Fixed Income Fund	1.50%	2.29%	6.10%	2%	10.54%	2%	80.79%	4%
Vanguard Total Bond Fund	1.99%	2.99%	4.71%	1.55%	11.15%	2.14%	93.36%	3.97%
Relative - Net of Fees	-0.49%	-0.70%	1.38%	0.45%	-0.61%	-0.11%	-12.57%	-0.32%

\*Inception from May 20, 2002

<sup>\*</sup> The blended benchmark is a simple average of each sub-fund's respective benchmark during the time that the sub-fund was active. To this end, the fixed income benchmark is included from May 2002, whilst the small-cap benchmark is included up until March 2018.

<sup>\*\*</sup> Inception for all equity funds was March 1, 2000. The fixed income fund began operations on May 20, 2002.

#### Benchmark Index Description

The purpose of benchmarking is to track the Funds' performance relative to the index that most closely resembles the investment mandate of each portfolio. It is important to note that while the Funds are measured against the market, our more critical and overarching goal is to provide an absolute rate of return that exceeds our annual distribution mandate to the University of Oklahoma plus the rate of inflation in a given year. Therefore, although we consider the aforementioned indices our benchmark, we are keenly focused on risk management in the construction of each sub-Fund.

Each of the four sub-Funds, Fixed Income, Growth, Small Cap, and Value, are benchmarked to a leading index in order to measure relative performance. The benchmarks are as follows:

- Fixed Income: Vanguard Total Bond Index Fund
- Growth: Russell 1000 Growth Index
- Value: Russell 1000 Value Index

Vanguard Total Bond Index Fund measures the performance of fixed income securities. The benchmark has the following characteristics:

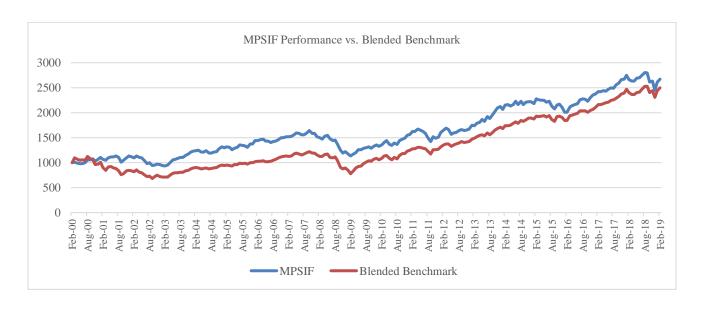
 Invests in U.S. Treasury, Investment-grade corporate, mortgage-backed, asset-backed securities

- Seeks to track the performance of the Barclays Capital Aggregate Bond Index
- Broadly diversifies exposure to investmentgrade U.S. bond market
- Passively manages using index sampling
- Intermediate-duration portfolio and
- Provides moderate current income with high credit quality

The Russell 1000® Growth Index measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 2000® Index measures the performance of the 2,000 smallest companies in the Russell 3000 Index, representing approximately 10% of the total market capitalization of the Russell 3000 Index.

The Russell 1000® Value Index measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

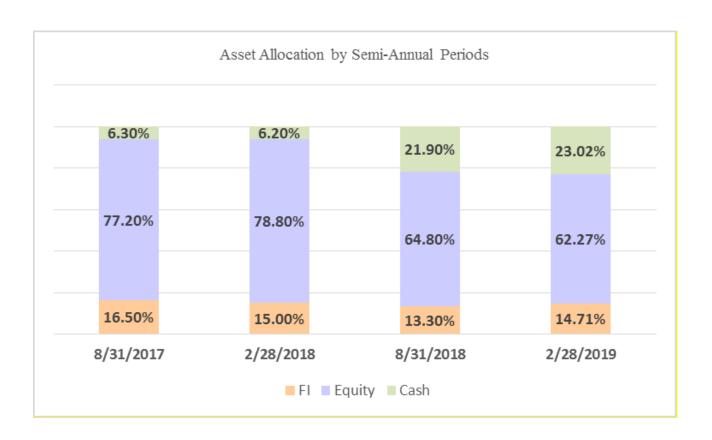


## Asset Allocation

The following chart shows our total asset allocation by asset class and our composite equity sector allocation. The Executive Committee does not utilize any top-down approach to set a target allocation.

During the last 6 months, overall the fund decreased equity holdings slightly and increased Fixed Income and Cash holdings.

Fixed Income increased from 13.30% in the prior reporting period to 14.71%. Equities decreased from 64.8% to 62.27% while cash increased drastically from 21.90% to 23.02%. These developments were largely attributable to the reallocation of funds across Growth, Value, and Fixed income for the inception of the ESG Fund.



# The Growth Fund

# Message from the Portfolio Managers

#### **General Fund Discussion**

For the six (6) month period from August 31, 2018 to February 28, 2019, the Growth Fund returned -6.09% versus the Russell 1000 Growth's -4.52% - the fund's relative performance was -1570bps. We maintained our strategic focus on shifting our capital from speculative growth stocks towards high quality growth names with solid business models for the long-term. We maintain our exposure to sector ETFs in sectors we had limited expertise to analyze individual companies such as Healthcare and Real Estate. However, despite our commitment to sector allocation, we differ from the benchmark by continuing to be overweight on the Information Technology and Healthcare sectors. This exposure was a major factor behind our relative performance as US stock markets saw negative returns during this period, technology stocks underperformed the general market with NASDAQ being down -6.34%. Our exposure to core FAANG names: Facebook, Apple, Netflix and Google, pulled back our performance during this period. All four stocks had negative returns during this time. Our sector analysis last semester resulted in us increasing our exposure to aerospace. This resulted in the addition of Transdigm in November 2018 and it has continued being one of our top performers. Transdigm designs, produces, and supplies aircraft components for use in commercial and military aircraft in service and was chosen based on its position in the industry, large addressable market and strong pricing power.

We shifted our strategy last semester to add more defensive growth stocks to our portfolio and added ALGN and CHGG as a result. This strategy yielded mixed returns during this period, with CHGG being one of our top performers but ALGN was our third worst performer during this time. That said,

we continue to look for high growth defensive stocks in order to limit our downside especially given our exposure to technology

We continued to implement new pitching process we constructed in the last semester - incorporate a list of requirements that need to be included in every pitch. By doing this, we have been much more strategic in our stock selection. We also continue to refine the pitch process on an ongoing basis based on our observations and analyses of the semester's pitches. Lastly, we maintain our focus on defining responsibilities and roles for each fund member and require members to give updates of their assigned stocks on a more frequent basis if material stock volatility is noted.

#### Sector Allocation

While the Growth Fund is a bottom-up, long-term approach stock selection fund, we believe that sector selection is also essential. However, we do not assign analysts to cover any specific sector but allow them to specialize in sectors identified with their expertise. Students come from diverse backgrounds and may have insight into specific industries. Although we closely monitor and try to maintain our benchmark across the board, we still prefer not to invest in particular sectors due to our lack of expertise in the sector. We instead chose to hold sector ETFs in such sectors.

We reaffirmed our favorable position in Industrials and Information Technology as we believe in our ability to pick growth companies at reasonable valuations. Our team devotes one full class session on sector discussions.

#### **Improving Stock Selection**

We continued to focus on digging out undervalued growth stocks. Although, the market adjustment in Q4 of FYE18 had a serious negative effect on our performance, we still maintain our investment processes and philosophy. This coverage includes

Micron, Baxter, and Nvidia, which we believe are all better positioned for the long-run.

Additionally, we closed positions such as NetEase to reduce our exposure to communication service sector, which we have overweighted and underperformed for a while.

As part of an effort to make more informed stock picking decisions, we have leveraged many of the ideas that MAC members. Since our meeting, the Growth fund has been consistently implementing new pitch requirements that force us all to be more diligent in our research.

As part of an effort to make more informed stock picking decisions, we have leveraged many of the ideas that MAC members provided us last Spring. Since our meeting, the Growth fund has been consistently implementing new pitch requirements that force us all to be more diligent in our equity research.

This semester we have revamped our fund's group workflow, improving tools around voting, attendance, real time portfolio tracking, sector weight and pitch scheduling. We have updated our online voting process by using Google Forms. We required our student members to provide rationales along with their votes to buy, sell or no action, both on updates and full pitches. This encouraged students to listen closely to the pitches and think hard about the validity of the investment case. The approach both improved the quality of our voting and provided valuable feedback to members. We feel this spurs excellent dialogue and yields better stock selection. More importantly this way we ensure each member enhances his/her skills analyzing equity opportunities in a comprehensive way which goes a long way in overall performance improvement for the fund.

Austin Ma and Tapan Sabnis Co-Portfolio Managers, MPSIF Growth Fund

# Discussion of Performance

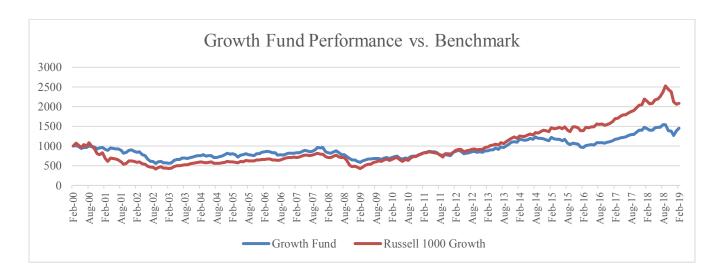
For the period ending February 28, 2019:

	6 Month	6 Month 1 Year 3 Year		5 Yea	r	Inception		
			Cum.	Annulized	Cum.	Annulized	Cum.	Annulized
Growth Fund	-6.09%	0.65%	14.42%	4%	31.48%	5%	44.79%	2%
Russell 1000 Growth Index	-4.52%	6.62%	64.26%	17.46%	81.33%	12.42%	127.48%	4.44%
Relative - Net of Fees	-1.57%	-5.97%	-49.84%	-13.12%	-49.84%	-7.07%	-82.70%	-2.51%

<sup>\*</sup> Inception from March 1, 2000

#### **Performance Overview**

The Growth Fund ("the Fund") underperformed on a relative basis from August 31, 2018 through February 28, 2019. During that time period, the Fund's six-month return was -6.09%, while the Russell 2000 Growth Index's return was -4.52%. This represents a -1.57% relative return for the Fund.



#### **Stock Picking**

Top Performers	Return
Chipotle	86.09%
Broadcom	25.72%
Transdigm	24.57%
Bottom Performers	Return
<b>Bottom Performers</b> Flex	<b>Return</b> -43.37%
2000000 2 00000000	110001111
Flex	-43.37%

**Return:** measures the stock's return (excluding dividends) since the later of August 31, 2018 or the date of acquisition to the earlier of February 28, 2019 or the date of disposition.

**Note:** in addition, this report uses prices as of the market close and not intraday numbers.

The Growth Fund's six month return (from August 31, 2018 to February 28, 2019) of -6.09% underperformed the Russell 1000 Growth benchmark's return of -4.52% over the same period. The Growth Fund currently holds 23 individual stocks. During the six-month period ending February 28, 2019, 9 of those stocks generated positive returns.

#### **Top Performers**

Chipotle: Chipotle was bought in October 2017 and has been a top performer since its addition to the fund. The stock price increase during the reported period was mainly driven by growth of digital sales and investors' positive respond to management changes.

However, digital sales only represent less than 13% of total sales and the growth in digital sales is

mainly from existing customers, while same store transactions only increased by 2% during Q4 2018. Besides, complete overhaul of management may lead to higher growth but also leads to uncertainty in operations. Given such circumstance, this stock was sold during the most recent period.

**Broadcam:** Broadcom was purchased in April 2017 and has provided solid performance during the reported period. The stock was purchased with the view that Broadcam's custom ASIC chipset business is expected to maintain high growth over the next few years and the company's acquisition of Brocade will strengthen Broadcam's position in enterprise data centers.

**Transdigm:** Transdigm was purchased in November 2018 and has been a great stock since its addition. TransDigm designs, produces, and supplies aircraft components for use in commercial and military aircraft in service. The investment thesis was that TDG has best position in the industry because of its huge TAM and strong pricing power. Also, the acquisition of Esterline is expected to be significantly accretive.

Other strong performers during the period include Chegg (22.39%), American Tower (10.41%) and Salesforce (7.19%).

#### **Bottom Performers**

Flex: Flex was bought in November 2017 as an electronics manufacturer with full service capabilities and impressive scale. However, the stock has struggled and missed earnings expectations for a variety of reasons. The company faces stiff competition in the electronics manufacturing segment both domestically and abroad and has needed to increase R&D spending to remain competitive. Further, Flex is highly levered adding to the riskiness of the stock. Flex was recently sold from the fund.

**Activision Blizzard:** Activision Blizzard was purchased in April 2018 with the belief that its

strong legacy franchises and the growing video and game industry will give the company ample opportunity to grow. However, the stock has struggled over the past few months because of its disappointed sales on Call of Duty: WWII and also the decline of monthly active users.

**Align:** Align was bought in April 2018. However the stock price of Align has fallen considerably over

the last few months. Despite fast revenue and margin growth, Align's 2018 Q4 guidance shook investor confidence after the company forecasted a much lower revenue and EPS compared with consensus views. This is mainly due to the rising costs for training new doctors and promotional programs, lower ASPs, and unfavorable foreign exchange. These headwinds could continue and would explain why management is cautious.

#### Asset Allocation

At its core, the Growth Fund focuses on bottom-up stock-picking and fundamental analysis. The continued commitment to bottom-up stock selection is derived from the overall purpose of the course. The Fund is a seminar-style course in which students deploy skills learned in other classes in a hands-on and dynamic environment. We believe there are enormous benefits that come from the design of this course.

With that said, asset allocation is a significant focus and the Fund carefully considers appropriate allocation strategies. The Fund continues to utilize ETFs to increase its exposure to sectors with fewer individual security holdings, and we closely examine all of our holdings from a sector-specific context. This is done to ensure that the portfolio does not become drastically overweight in a particular sector for too long of a time period.

Despite our commitment to appropriate sector allocation, the Fund did differ from its benchmark at the end of the fiscal year.

As of February 28, 2019, the sectors with the most significant weight in the Growth Fund are:

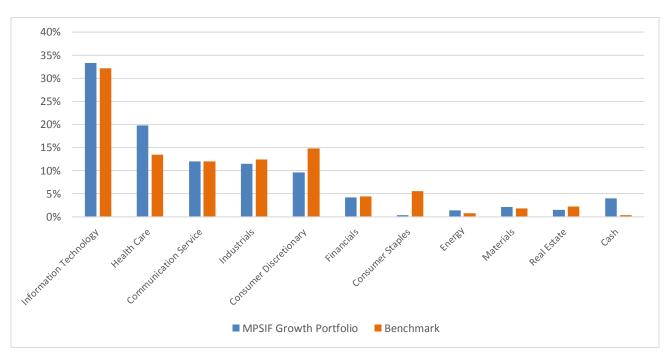
 Information Technology, which represents 33.35% of the Fund's portfolio, is overweight relative to the benchmark (32.14%). Apple Inc. (AAPL) and Paypal (PYPL) are our largest technology holdings.

- Health Care, which represents 19.79% of the Fund's portfolio, is overweight relative to the benchmark (13.47%). Select Spector SPDR Healthcare (XLV) and Baxter International (BAX) are our two major holdings in the health care sector.
- Communications, which represents 12.01% of the Fund's portfolio, is overweight relative to the benchmark (11.98%). Netflix (NFLX), Facebook (FB), and Alphabet (GOOG) represent our three largest holdings in the sector.

To keep our sector exposure roughly in-line with the Russell 1000 Growth Index, the Fund holds positions in iShares S&P Global Energy (IXC), iShares S&P Global Materials (MXI), IShares US Real Estate (IYR), Select Sector SPDR – Industrials (XLI), Vanguard Consumer Staples (VDC), and Vanguard Telecommunication Services (VOX).

Our blended approach of identifying promising sectors with favorable macroeconomic tailwinds while employing a bottom-up process, enables us to select best of breed stocks in these areas.

# Sector Allocation – Growth



# Holdings Profile

# Growth Portfolio Holdings February 28, 2019:

ctive Position								
Ticker	Description	Current Market Price	Cost Basis	Fot shares owned	Total Cost Busis	Current Position	Return's	% of Portfolio
MPL	APPLE	173.15	123.44	341	42,093.04	59,044.15	40.27%	8.77%
ALGN	ALIGN TECHNOLOGY	258.97	271.80	60	16,308.00	15,638.20	-4.72%	2.31%
ATM	ACTIVISION BLIZZARO	42.14	66.09	242	15,993.78	10.197.88	-36.24%	1.51%
AVGO	BROADCOM	275.36	218.52	37	8.085.24	10.188.32	26.01%	1.51%
BAX	BAXTER INTERNATIONAL	74.73	70.36	583	39,612.68	42.072.99	6.21%	6.25%
CAE	CAEINC	21.11	18.99	842	15,989.58	17,774.62	11.16%	2.64%
CHGG.	CHEGG INC	39.63	21.77	450	9.796.60	17,833.50	82.04%	2.65%
CRM	SALESFORCE COM	163.65	77.83	126	9,806.58	20,619.90	110.27%	3.06%
DFS-	DISCOVER FINANCIAL BERVICES	71.61	51.63	400	20,652.00	28.644.00	38.70%	4.25%
FB	FACEBOOK	161.45	58.00	177	10,266.00	28,576.65	178.36%	4.24%
GOOG	ALPHABET	1,119.92	756.38	12	9.076.56	13,439.04	48.06%	2.00%
HD	HOME DEPOT	185.14	133.60	66	8.817.60	12,219,24	38.58%	1.81%
MSFT	MICROSOFT	112.03	55.21	161	8.888.81	18,036.83	102.92%	2.68%
MU	MICRON TECHNOLOGY	40.88	36.93	416	15,362.88	17,006.08	10.70%	2.53%
NFLX	NETFLIX	358.10	311.32	80	24,905.60	28,648.00	15.03%	4.25%
NVDA	NVIDIA	154.26	203.31	228	46,354.68	35,171.28	-24.13%	5.22%
PYPL	PAYPAL.	98.07	42.20	572	24,138.40	56,096.04	132.39%	8.33%
TDG	TRANSDIGM GROUP	434.09	345.26	67	23,132.42	29.084.03	25.73%	4.32%
TJX.	TJMAXX	51.29	78.32	228	17,856.96	11,694,12	-34.51%	1.74%
TSEM	TOWER SEMICONDUCTOR	17.93	22.23	470	10,448.10	8.427.10	-19.34%	1.25%
UNH	UNITEDHEALTH GROUP	242.22	127.36	112	14,264,32	27,128.64	90.19%	4.03%
VRSK	VERISK ANALYTICS INC	126.43	72.43	150	10,864.50	18,964.60	74.55%	2.82%

ETFs							
Ticker	Description	<b>Current Market Price</b>	Cost Basis # of shares owned	Total Cost Basis	Current Position	Returns	% of Portfolio
DIC	ISHARES TRIGLOBAL ENERGY ETF	33.35	280		9,338		1.39%
IYR.	ISHARES TR US REAL ESTATE ETF	84 15	125		10.519		1.56%
MOG	ISHARES TRIGLOBAL MATLS ETF	63.32	225		14,247		2.12%
RXI	ISHARES GLOBAL CONSUMER DISCRETIONARY ETF	111.30	208		23,150		3.44%
VDC	VANGUARD WORD FDS VANGUARD CONSUMER STAPLES ETF	141.11	18		2,540		0.38%
70.1	SELECT SECTOR SPDR TR INDL	76.34	160		11,451		1.70%
XLV	SELECT SECTOR SPDR TR HEALTH CARE	91.65	530		48,574		7.21%

# Investment Style and Strategy

Our goals: The goal of the Growth Fund is to identify and capitalize on investments that have significant growth potential. The companies we invest in may derive their growth from a unique business model or a strong, competitive position in a rapidly growing industry. We require that forecasted earnings growth for companies be at least 10% over the next five years. These growth opportunities can be uncovered by identifying companies that are pioneering a new product or service that will see significant future demand. Other growth companies may be disrupting preestablished norms in a mature industry and subsequently gaining significant market share. Additionally, these companies may be applying their business models to new regions or simply be an incumbent in an industry that is experiencing high levels of growth. Our analysts utilize intrinsic and comparable valuation techniques to determine if these growth companies are available at attractive prices.

**Our objective:** The core objective of the Fund is to outperform the benchmark on a total return basis by investing in securities that provide superior returns on a risk/return basis through capital appreciation and dividends.

Investment process: Our analysts look at a firm and ask, "What is the catalyst for growth?" The analyst will then consider whether the company's business model will succeed in a competitive environment. A valuation analysis follows, which includes an extensive examination of the company's financials and overarching industry trends and assumptions. In addition, the analyst will conduct relative valuations by comparing the company to its peers. The analyst then writes a research report

and pitches the stock to the class, who then engages in a discussion to challenge the investment theses presented. After this rigorous process, the class votes on whether or not to add the security to the portfolio.

Sell Discipline: In 2006, the Fund added stoploss orders to provide more sell discipline. The stop-loss price is determined by the analyst and is related to the stock's volatility and downside risk. The Fund's consensus model also helps determine stop-loss orders. Additionally, the stop-loss policy is regularly evaluated to ensure that these risk controls stay relevant. This includes actively reducing our exposure to a specific stock when our investment thesis no longer sees room for upside. Some of the factors that would change our investment thesis are:

- The company growth rate deteriorates or its performance otherwise disappoints
- The price of the security reaches or exceeds our price target, or otherwise appears relatively high to the analyst
- The company publishes negative earnings announcements that could affect the long-term outlook and overall industry attractiveness
- The company experiences unfavorable changes in management

Why Growth Stocks? Growth companies have above average earnings growth, which we believe will translate into above average price appreciation. Thus, we believe investing in growth companies that are not currently overpriced should lead to realization of potentially superior investment returns over the long term.

# The Value Fund

# Message from the Portfolio Managers

#### **General Fund Discussion**

For the six (6) month period from September 2018 to February 28th, 2019 the Value Fund returned -6.5% versus the Russell 1000 Value Index return of -1.6%, underperforming on a relative basis by 4.9%. While the performance for the reported period was below benchmark, we believe the structural changes we have implemented will lead to strong performance in the future. During this term, we have tightened our standard for stock selection, which helped us liquidate some of the positions with unfavorable outlooks, such as Wells Fargo and Nelnet. A focus of the fund this semester was streamlining our portfolio and focusing new investment ideas on clearly-defined thesis that are easily testable and will allow for a smoother knowledge transfer as new analysts come into the fund. With well-defined catalysts in place for our positions, we believe we are in a strong position to take advantage of new, exciting companies that we were able to purchase at attractive valuations.

The past 6 months saw significant volatility as trade tensions and quantitative tightening helped to cause a significant market sell-off at the end of Q4 2018, followed by a strong rally through the end of our term. Our fund felt the effects of this sell-off through certain positions that had international exposure, specifically to China. While we feel the long-term prospects of these positions is favorable, they have lagged the broader Russell index during the subsequent market appreciation through Feb. 2019. Our near-term view for the economy is that the US consumer is in increasingly great shape, and the fears of a significant recession are slightly overblown. During this term we purchased companies who should do well alongside a US consumer with more discretionary income and alongside a US economy that continues to grow economic and political instability internationally. With this semester goes on, we saw more price appreciation in some of our portfolio

stocks such as Constellation Brands, TJX Companies, and Darden Restaurants, so we expect the overall performance by the end of May to surpass the performance at the end of February.

#### **Sector Allocation**

The Value Fund's sector allocation is a function of its benchmark as well as the fund's stock selection, which is based on a bottom-up analysis of intrinsic value and downside risk mitigation. While not beholden to benchmark sector weightings, the fund realizes the risks and rewards to sector imbalance and have implanted a new strategy moving forward that we believe provides the fund with a better chance of outperformance into the future. In reviewing our health care holdings, it was determined that a sector filled with complex companies which require detailed understanding of information such as medical product pipelines, is difficult to invest in with strong conviction given the bi-annual analyst turnover in the fund. A decision was made to replace individual stock holdings in health care with a healthcare ETF. This will lower idiosyncratic risk and mitigate the shortage of knowledge in the sector, allowing the fund to maintain exposure to the sector without taking on unforeseen risk. Outside of health care, the fund has increased its weights on consumer discretionary, consumer staples, financials, industrials, IT and materials. We underweighted communication services, energy, real estate and utilities. We managed to liquidate the Russell 1000 Value ETF position to ensure sufficient cash for setting up the new ESG fund. Our core strategy remains to manage downside risk while purchasing the best companies possible, regardless of sector. We are aware of the fund's imbalances and mitigate risk where possible, but have strong conviction in our positions and in the broad sectors we are overweight. Generally, we consider the broad economic condition and its impact to specific industry sectors in our stock pitches.

#### **Stock Selection**

As value investors, we continue to search for names that trade at a significant discount to intrinsic value. In particular, we seek companies with highquality businesses and assets with sustainable competitive advantages and management teams with successful track records of capital allocation & aligned interests. Overall, we remain conservatively optimistic about the market. We believe that value stocks were overshadowed by the high-flying growth stocks in the past years, and a reversal to value is likely in 2019 and 2020 if economic conditions deteriorate.

Going forward, we will remain focused on the value segment and continue to follow a disciplined approach to fundamental, bottom up value investing. We remain focused on our objective of finding good businesses trading significantly below our estimates of intrinsic business value.

Ce Wang and Joseph Diaz Co-Portfolio Managers, MPSIF Value Fund

# Discussion of Performance

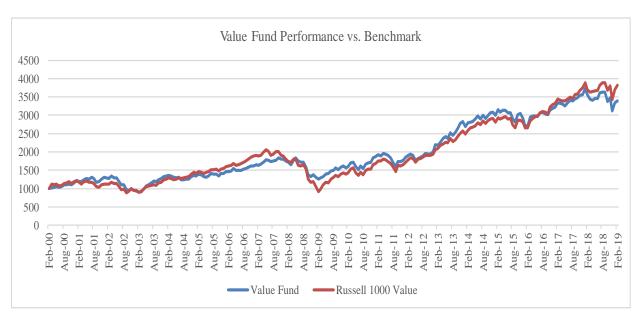
For the period ending February 28th, 2019:

#### Performance of the Michael Price Student Investment Fund (Value)

For the period ending February 28th, 2019

	6 Month	1 Year	3 Year		5 Year		Inception	
			Cum.	Annualized	Cum.	Annualized	Cum.	Annualized
Value Fund	-6.55%	-4.49%	25.11%	8%	21.62%	4%	239.75%	7%
Russell 1000 Value Index	-1.61%	3.17%	43.50%	12.79%	47.52%	8.09%	281.98%	7.28%
Net of Fees	-4.94%	-7.66%	-18.40%	-5.04%	-25.90%	-4.09%	-42.23%	-0.53%

The Value Fund declined by -6.55% for the 6 months ending February 28, 2019 while its benchmark, The Russell 1000 Value Index, declined by -1.61% over the same period.



#### **Stock Picking**

Top Performers	Return
Honeywell International	+15.27%
Philip Morris International	+15.00%
Darden Restaurants Inc	+14.18%
Bottom Performers	Return
Bottom Performers U.S. Silica Holdings Inc	<b>Return</b> -30.61%
*	
U.S. Silica Holdings Inc	-30.61%

**Return:** measures the stock's return (excluding dividends) since the later of August 31, 2018 or the date of acquisition to the earlier of February 28, 2019 or the date of disposition.

**Note:** in addition, this report uses prices as of the market close and not intraday numbers.

#### Honeywell International

The best performing stock for the period from September 01 2018 to February 28, 2019 was Honeywell International., which was up +15.27%. Honeywell was interesting in December 2018 due to two main factors. First, the company was in the middle of a major transition, spinning off low-growth units and executing tuck-in acquisitions to enhance their high growth segments. We were excited about this transition due to a bullish view on their Aerospace and Safety and Productivity Solutions segments. Specifically, the high growth

potential associated with building and warehouse automation moving forward. The second factor that led to pitching the stock was their recent poor performance, mainly due to the US-China trade war exposure, which we felt was unwarranted given management's preemptive actions for a potential trade war and our thoughts on how the trade war would actually unfold.

Outperformance YTD took off after Honeywell reported earnings on February 1st. The company matched or beat analyst estimates, and their strong results combined with solid guidance into 2019 led to strong outperformance.

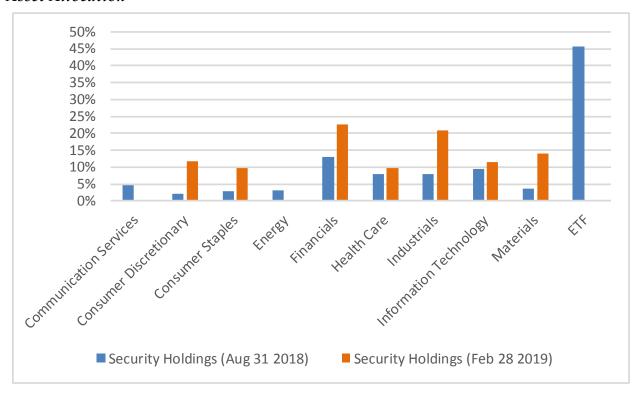
#### Philip Morris International

Philip Morris International was an oversold story and was captured in last year's pitch. Investors had negative views on the stock at the end of last year in light of the rise of e-cigarettes. The company was trading below industry average multiples. During the first two months of this year, the company beat earnings estimate and receive upgrades from sell side analysts. Market responded positively as a result, and our position gained 15% as of Feb. 2019.

#### Darden Restaurant

The stock was purchased ahead of its earnings release in December as our analyst had strong conviction in its performance. The company's earnings topped consensus estimates, which started the gradual increase in stock price. In January, a couple of sell side analysts raised the rating on the stock, which drove the stock price higher. The stock is still in our portfolio, and it's gained another 4% since the end of February.

## **Asset Allocation**



# Holdings Profile

Value Portfolio Holdings February 28, 2019:

	T. 1		Shares	Closing	Position
Company Name	Ticker	Sector	Held	Price	Value
DARDEN RESTAURANTS		Consumer	348.00	112.11	39,014
INC	DRI	Discretionary			
TJX COMPANIES INC		Consumer	640.00	51.29	32,826
	TJX	Discretionary			
CONSTELLATION BRANDS			194.00	169.16	32,817
INC-A	STZ	Consumer Staples			
PHILIP MORRIS			295.00	86.94	25,647
INTERNATIONAL	PM	Consumer Staples			
BERKSHIRE HATHAWAY			242.00	201.30	48,715
INC-CL B	BRK-B	Financials			
NELNET INC-CL A	NNI	Financials	521.00	54.82	28,561
WELLS FARGO & CO	WFC	Financials	1,218.00	49.89	60,766
AMGEN INC	AMGN	Health Care	174.00	190.08	33,074
GILEAD SCIENCES INC	GILD	Health Care	390.00	65.02	25,358
HONEYWELL			257.00	154.07	39,596
INTERNATIONAL INC	HON	Industrials			
HUNTINGTON INGALLS			121.00	209.41	25,339
INDUSTRIE	HII	Industrials			
INGERSOLL RAND PLC	IR	Industrials	342.00	105.56	36,101
SNAP-ON INC	SNA	Industrials	165.00	160.00	26,400
MANHATTAN ASSOCIATES		Information	700.00	54.75	38,325
INC	MANH	Technology			
		Information	414.00	77.02	31,886
PAYCHEX INC	PAYX	Technology			
DOWDUPONT INC	DWDP	Materials	431.00	53.23	22,942
VALVOLINE INC	VVV	Materials	1,701.00	18.79	31,962
WESTROCK CO	WRK	Materials	843.00	37.38	31,511

#### Investment Style and Strategy

**Fund Objective:** Outperform the benchmark on a total return basis. Achieve superior returns by investing in securities which provide the best risk adjusted returns through capital appreciation and dividends.

Benchmark: Russell 1000 Value Index

Fund Strategy: The Value Fund utilizes a bottom-up approach to stock selection. Our analysts go through a rigorous screening process to select deep value positions. The team pursues this strategy by investing primarily in large capitalization companies with consistent year-over-year earnings that are trading at a discount relative to their peer group. We estimate the value of our securities primarily through an intrinsic value methodology. Additionally, we examine each security's valuation relative to its peer group. For the purposes of this analysis, we utilize many of the following metrics: price-to-earnings, price-to-book, dividend yield, and various free-cashflow ratios. There is, however, no specific country or region quota. Analysts discuss the Fund's overall sector allocation compared to our benchmark to

monitor our exposure, though we do not intentionally make sector bets. The Fund seeks absolute returns in order to fulfill our distribution requirements and monitors our performance against the Russell 1000 Value index.

Why Value Stocks? A value stock is one that is underpriced by the market for a wide variety of reasons. They are undervalued relative to their comparables on various metrics used to value comparable companies. Stocks that are undervalued on metrics compared to the index may not be Value stocks because sectors trade differently. Historical trading multiples are often a good indicator of whether a sector has a favorable perception.

Cash: The goal of the Fund is to be invested in the best value opportunities in the marketplace. Over the past few semesters, to the extent we have non-invested cash, we have invested in our benchmark ETF in an effort to minimize any cash drag. Our view remains conservatively positive in the next few months of this year. Therefore, we're going to invest excess cash into benchmark ETF to ensure a balance sector allocation.

# The Fixed Income Fund

# Message from the Portfolio Managers

#### **Economic Overview**

- 10-year U.S. Treasury yield is around 2.6%
- Bond total returns gained on tighter spreads after December and lower rates, especially HY
- The U.S. economy continued its expansion with solid activity data and inflation & unemployment at multi-year lows; however, 2018Q4 GDP growth was revised downward and several other indicators showed slowing growth

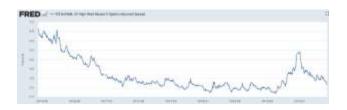
#### 10-Year U.S. Treasury Yield

The 10-year U.S. Treasury yield retreated to 2.55% in April 2019, a drop from the 7-year high of 3.232% achieved in November 2019. We expect 10-year Treasury yields to remain below 3.0% in 2019, as the Fed is likely to be cautious about hiking rates any further given March's commentary and fears of slowing growth. Uncertainty still remains with respect to trade talks between the U.S. and China. Year-to-date, both high-yield and investment grade bond total returns gained on tighter spreads and lower rates.

Exhibit 1. 10-year U.S. Treasury yield fell to 2.6% range in 2019



Exhibit 2. HY spreads tightened from 2+ year highs in 2019



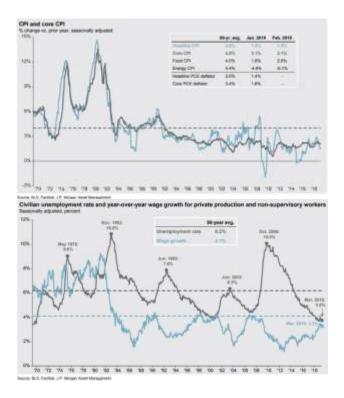
#### Continued U.S. Economic Expansion

Q4 GDP increased 2.2%, a downward revision from the initial estimate of 2.6%. The weaker-thanexpected growth was mainly driven by the biggest retail sales drop month-over-month since 2009 in December. Uncertainty regarding the performance of the equity market along with the government shutdown were likely contributors to the underperformance. Corporate profits decreased 0.4% quarter-over-quarter in Q4. Annual GDP growth fell just shy of 3.0% at 2.9% from solid activity data, historically low unemployment, and continued personal consumption, private inventory, and federal government spending.

US inflation data has held steady with year-over-year core CPI at 2.1%. Inflation has not advanced significantly in light of economic expansion, which contributed to the Fed's decision to hold off on rate hikes for the near future. Higher inflation would increase bond risk premia, but this story has yet to manifest in the data.

The unemployment rate remains below 4% since June, but wage growth remains muted and is much lower than previous expansions. Whether this is reflective of a new normal in the labor market remains to be seen.

Exhibit 3 & 4. U.S. inflation & unemployment at multi-year lows



#### The Fed Moves to "Wait and See" Mode

At the March 2019 FOMC meeting, the Fed elected to hold their policy rate constant in a range between 2.25-2.50% given risks from a slowdown in global growth and because of low inflation. We believe that the Fed has clearly signaled an end to rate hikes for 2019, barring major surprises in the economic data. To quote Fed Chairman Powell, "It may be some time before the outlook for jobs and inflation calls clearly for a change in [interest rate] policy". We remain optimistic about healthy unemployment data, but will continue to monitor inflation and consumer & industrial spending for any signs of weakness heading into 2020.

# ECB – Expects Rates to remain at present levels through 2019

The Governing Council's monetary policy meeting in March confirmed slower growth momentum extending into the current year. While there are signs that some of the idiosyncratic domestic factors dampening growth are fading, global headwinds continue to weigh on euro area growth developments. The risks surrounding the euro area

growth outlook remain tilted to the downside, on account of the persistence of uncertainties related to geopolitical factors, the threat of protectionism and vulnerabilities in emerging markets. ECB announced a program (TLTRO-III) to stimulate bank lending in the Eurozone, starting in September 2019. It now expects interest rates to remain at present levels through the end of 2019.

#### **Increasing Duration**

The duration of our portfolio excluding cash was 4.63 years. Our benchmark's duration is 6.00. To create value and preserve our principal in an increasing rate environment, we believe that increasing exposure to the short-end of the yield curve is most prudent and minimizes price risk.

We believe that a 5-6-year duration is a more appropriate target for the current environment, and we plan on continuing to lower our duration with our investments in the coming months. Given the stable rate environment, we believe that as long as we have a slightly longer duration than our benchmark with a similar risk profile, we will outperform our benchmark.

#### Floating Rate

Another way to lower the interest rate risk is the floating rate products. We would like to add products with underlying high credit quality bonds with floating rates.

#### **Reducing Management Fees**

Currently, we hold one mutual funds, PIMCO Inflation Response Multi- Asset Fund Class P. We would like to replace those two funds with alternative products at lower management fees.

#### **Concentrated Portfolio**

Our current portfolio contains 7 products and 5 of them are below 10%. We would like to rebalance by increasing the size of the funds we like, such as long duration and emerging market, and reducing the weight of some funds. Eventually the size of each products should be above 10%.

Parth Shah

#### Portfolio Manager, Fixed Income

# Discussion of Performance

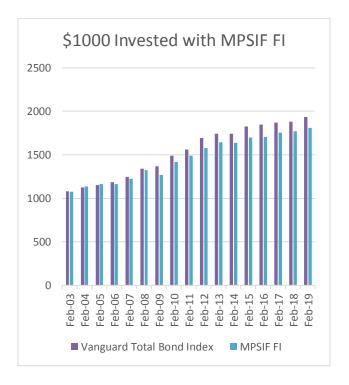
For period ending February 28, 2019

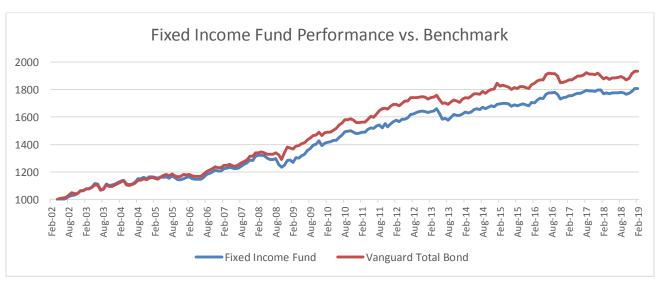
	6 Month	1 Year	3 Year		5 Year		Inception*	
			Cum.	Annualized	Cum.	Annualized	Cum.	Annualized
Fixed Income Fund	1.50%	2.29%	6.10%	1.99%	10.54%	2.02%	80.79%	3.65%
Vanguard Total Bond Fund	1.99%	2.99%	4.71%	1.55%	11.15%	2.14%	93.36%	3.97%
Relative - Net of Fees	-0.49%	-0.70%	1.38%	0.45%	-0.61%	-0.11%	-12.57%	-0.32%

<sup>\*</sup> Inception from May 20, 2002

## Performance Review

Over the past 6 and 12 months, the Benchmark has earned 2.0% and 3.03% respectively. During the most recent 6-month, net of fees, the Fund underperformed the benchmark by 52 basis points.





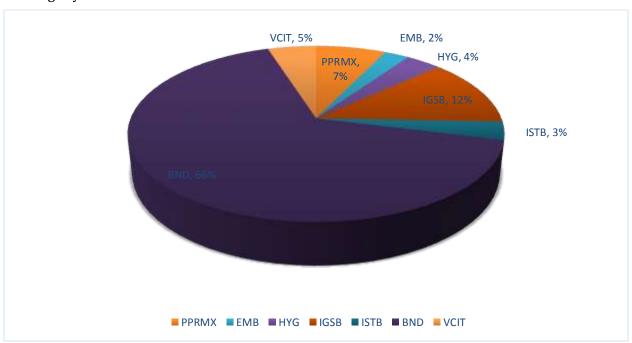
# Asset Allocation and Holdings Profile

Each of the bond funds meets our goals as an investment vehicle for exposure to a particular sector. As of Feb 2019, the largest positions were in the Vanguard Total Bond Market ETF (BND), iShares Treasury Short-term Corporate Bond Fund (IGSB) and PIMCO Inflation Response Multiasset.

As we go forward, we intend to continue to monitor these high-yielding instruments by looking for any updates on the underlying holdings. Our objective is to make investment decisions consistent with our view. In that regard, although majority of our fund will be invested in quality high-grade treasuries and corporate bonds, as interest rates and yields rise – we would like to slightly increase our exposure to high-yield assets and slightly lower our inflation-hedged assets. Throughout this process, we will also ensure that we maintain the average duration of our portfolio so that it is better suited as the Fed is holding its rate hike process. Since the underlying assets and durations of our bond funds are subject to change, we will be closely monitoring and actively managing our investments.

Description	Ticker	Asset Classification	Quantity	Price	Market Value	Holding by %
VANGUARD BD INDEX FDS VANGUARD TOTAL BD MARKET ETF	BND	EQUITY	2,459	79.82	\$196,277.38	55.47%
ISHARES TR SHORT-TERM CORP BD ETF	IGSB	EQUITY	700	52.37	\$ 36,659.00	10.36%
PIMCO INFLATION RESPONSE MULTI- ASSET FUND CLASS I-2	PPRMX	MUTUAL FUND	2,689	7.92	\$ 21,297.40	6.02%
VANGUARD SCOTTSDALE FDS VANGUARD INTERMEDIATE-TERM CORPORATE BOND INDI	E)VCIT	EQUITY	172	85.04	\$ 14,626.88	4.13%
ISHARES TR IBOXX \$ HIGH YIELD CORP BD ETF	HYG	EQUITY	125	85.75	\$ 10,718.75	3.03%
ISHARES TR CORE 1-5 YR USD BD ETF	ISTB	EQUITY	200	49.49	\$ 9,898.00	2.80%
ISHARES TR JPMORGAN USD EMERGING MKTS BD ETF	EMB	EQUITY	68	108.87	\$ 7,403.16	2.09%
Total Positions					\$296,880.57	83.91%
U.S.DOLLARS CURRENCY	CASH	CASH			\$ 56,940.10	16.09%
Total Assets					\$353 820 67	

#### Holdings by % (Excl. Cash)



Descriptions				
EMB	The iShares J.P. Morgan USD Emerging Markets Bond ETF seeks to track the investment results of an index composed of U.S. dollar-denominated, emerging market bonds.			
HYG	The iShares iBoxx \$ High Yield Corporate Bond ETF seeks to track the investment results of an index composed of U.S. dollar-denominated, high yield corporate bonds.			
IGSB	The iShares Short-Term Corporate Bond ETF seeks to track the investment results of an index composed of U.S. dollar-denominated investment-grade corporate bonds with remaining maturities between one and five years.			
ISTB	The iShares Core 1-5 Year USD Bond ETF seeks to track the investment results of an index composed of U.S. dollar-denominated bonds that are rated either investment grade or high yield with remaining maturities between one and five years.			
PPRMX	The fund invests in a combination of Fixed Income Instruments of varying maturities, equity securities and seeks to mitigate negative effects of inflation			
BND	Vanguard Total Bond Market ETF is an exchange-traded fund incorporated in the USA. The Fund seeks to track the performance of the Barclays Capital Aggregate Bond Index, which measures a wide spectrum of public, investment-grade, taxable, fixed income securities in the U.S.			
VCIT	Vanguard Intermediate-Term Corporate Bond ETF is an exchange-traded fund incorporated in the USA. The Fund seeks to track the performance of the Barclays Capital US 5-10 Year Corporate Bond Index.			

### Investment Style & Strategy

The Fund seeks to outperform its benchmark, the Vanguard Total Bond Fund (VBMFX). The Fund implements its views through a top-down sector of the U.S. Fixed Income investment grade market, namely U.S. Treasuries, Corporate Bonds and Foreign Investment Grade Bonds (Emerging Markets and Developed Markets). Due to its taxexempt status, the Fund does not invest in Municipal bonds. Also, the Fund does not engage in shorting, derivatives trading, or other non-linear investment strategies. Currently, the Fund does not buy individual securities due to the limited size of our trades and market spreads associated with buying individual securities. Instead the Fund invests in ETFs, mutual funds and other publicly traded funds to implement its sector allocation.

Due to the Fund's inability to take positions in specific bond issues (limited dollar resources, the need to maintain a diversified fixed income portfolio and the limitations of our trading account), we use the Vanguard Total Bond Fund as our benchmark, as opposed to the more widely used Barclays Capital Aggregate Bond Index. Instead, we make sector allocation decisions and invest through ETFs and established mutual funds. We incur management fees, and thus benchmark to an index whose performance is also adversely impacted by mutual fund management fees. We felt it most appropriate to benchmark to the bond mutual fund index with the least tracking error to the Barclays Capital Aggregate Bond Index, and thus chose the Vanguard Fund.

# The ESG Fund

# Message from the Portfolio Managers

#### **General Fund Discussion**

2019 saw the launch February the Environmental, Social and Governance (ESG) fund at NYU Stern as part of the Michael Price Student Investment Fund with a starting position of \$350,000. As ESG investing gains widespread traction and attention in the investment management space, adopting this focus has allowed students to select stocks through the lens of both ESG factors and traditional valuation. Currently, ESG investing is somewhat undefined and has presented the fund with key decisions early on in its life regarding how to approach the fund. Some of the issues discussed include: 1) How to determine authentic ESG companies due to limited information and no universally accepted ranking system? 2) The current rankings that can be found are inconsistent and often in direct conflict with one another. 3) How to deal with investment concentration across large and mega companies which have ESG ratings, limiting opportunities for diversification?

Throughout the semester, the ESG fund team had the opportunity to hear from a number of speakers with experience investing across the ESG space. Students benefited by discussing ESG factors, hearing about career experiences investing across the ESG space, in addition to learning about stock selection and going about the research process. There were two fundamental takeaways the fund assumed from these discussions. The first is that as there is limited empirical evidence which illustrates pure-play ESG investing generates alpha, we should use ESG ratings as a factor in the overall analysis, not the sole factor – leading us to

incorporate ESG into a stock selection framework instead of solely focusing on ESG. This will allow us to determine value and growth opportunities which will have the requisite catalysts to generate solid returns. Second, while it is difficult to determine which ESG rated companies will generate upside, it is easier to determine which companies are exposed to downside risk due to low ESG ratings. Therefore, by using ESG factors as a screening mechanism, students can improve their stock selection by avoiding the worst performing ESG rated companies, protecting against downside risk

While many ESG rated companies promote many ESG factors in corporate sustainability reports, we focused on the top ESG issues which were deemed to be "material" to a given company. Every pitch contained information of what ESG factors were "material" to that company and how the company fared with regard to those issues. We leveraged resources such as MSCI rankings, Sustainalytics and SASB to determine which ESG factors were material to a given company and how the company performed on those specific material ESG factors. We then used that as a component in the overall evaluation of the stock, including ESG factors alongside traditional valuation.

We are grateful to the MAC members whose ideas were instrumental to ideal stock selection as well as Robert Brown and Kevin Parker who generously shared with us their experiences in the ESG investment industry.

Robert Herzka and Janet Hong Co-Portfolio Managers, MPSIF ESG Fund

# The Executive Committee

#### Professor Anthony Marciano - Faculty Advisor

Anthony Marciano is Clinical Professor of Finance at New York University Stern School of Business, where he teaches courses in Corporate and Behavioral Finance. Previously, he was on the faculty at the University of Chicago Booth School of Business where he won multiple teaching awards and was listed on the Business Week list of outstanding faculty. Tony also visited at the MIT Sloan School of Management and Northwestern's Kellogg School of Management, where he similarly was one of the highest rated instructors. Tony has also worked for Goldman Sachs in the financial institutions area after receiving his MBA from Sloan, which followed employment at Morgan Stanley and Drexel Burnham Lambert. He has a B.A. from Dartmouth College.

#### William Pitt- President

William Pitt has a B.A. in History from the University of Warwick in the UK. Prior to Stern, William worked as a consultant at Deloitte and as the head of an impact investing charity. He spent the past summer as an Investment Banking Associate in the Global Industrials Group at Credit Suisse, where he will return full time.

#### Austin (Renzhong) Ma - Co-Portfolio Manager, Growth Fund

Austin (Renzhong) Ma has a B.S in Finance and Accountancy (double major) from Miami University. Prior to Stern, he has worked as a market consultant in Wolfe Research. He also spent 5 years working China in Morgan Stanley Huaxin, CITIC Securities previously.

#### Tapan Sabnis - Co-Portfolio Manager, Growth Fund

Tapan Sabnis has a B.S. in Computer Science from Georgia Tech. Prior to Stern, he worked in Product Management for the Private Wealth group within Fidelity Investments. He spent the last summer working as a Technology Solutions Consultant at Google.

#### Ce Wang, CFA – Co-Portfolio Manager, Value Fund

Ce Wang, CFA has a B.S. from Rutgers University where he majored in Finance and minored in Economics. While attending Stern, Ce also works in Morgan Stanley, where he manages technology solutions for the credit risk department. Prior to Morgan Stanley, he worked in Citigroup as a business analyst with responsibilities in data analysis and integration. Ce is a CFA Charterholder and passionate about equity research and investment.

#### Joseph Diaz - Co-Portfolio Manager, Value Fund

Joseph Diaz earned a B.S in Accounting with a minor in Business Information Systems from Lehigh University. Currently completing his MBA part-time, Joe works at a \$22 billion equity-focused asset management firm as a Trade Support analyst where he works alongside the investment, trading and middle office teams: providing trade execution support, building trading programs and developing portfolio analytics for the firm.

#### Parth Shah - Co-Portfolio Manager, Fixed Income Fund

Parth Shah is a second year MBA student at NYU Stern specializing in Quantitative Finance and Law and Business. Prior to Stern, he worked as a Senior Analyst in the Product Control division at Deutsche Bank, focusing on interest rate derivatives. He holds a B.Com. from Mumbai University and has cleared all three levels of the CFA exams.

#### The Growth Fund



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**Parth Shah** is a second year MBA student at NYU Stern specializing in Quantitative Finance and Law and Business. Prior to Stern, he worked as a Senior Analyst in the Product Control division at Deutsche Bank, focusing on interest rate derivatives. He holds a B.Com. from Mumbai University and has cleared all three levels of the CFA exams.



**Neil Karandikar** has a B.A. in Economics from the University of Chicago. Prior to Stern, he worked as a financial consultant devising trading strategies for investment management clients. He spent the past summer at American Century Investments as an Investment Analyst Summer Associate.



**Raymon Halim** is a first year MBA student at NYU Stern. Prior to business school, Raymon spent time at the Capital Group as well as Ernst & Young. Originally from California, Raymon graduated from the University of Southern California with a B.S. in Business Administration.



**Michael Lee** is an MBA student in the Langone Program at NYU Stern, specializing in finance and strategy. He has as B.S. and M.S. in Electrical and Computer Engineering from Rutgers University. Prior to Stern, he worked for five years at AT&T as an engineer for various technologies including the wireless and international undersea network.



**Guanyi Wang** has a B.S. in Economics from Tsinghua University in Beijing and MSc in Economics from Hong Kong University of Science and Technology. Prior to Stern, he worked five years in investment banks focusing on fixed income and debt capital market.



Manojna Pinnamaneni is originally from India and grew up in India and Singapore. She did her Bachelor's in Economics and Finance from Singapore Management University. Prior to Stern, she worked at BNP Paribas in Singapore for three years in the Business Development/Business Management function. She has also completed all three levels of the CFA examinations. She is currently a first-year MBA student specializing in Finance.



**Ayush Khanna** earned his Bachelor of Engineering in Computer Engineering from Thapar University, India, and is specializing in Corporate Finance and Strategy during his MBA. Prior to attending Stern, Ayush was a management consultant at ZS and Deloitte where he used digital transformation to solve Healthcare clients' Marketing and Sales challenges. An aspiring guitar player, Ayush unwinds by traveling or listening to 70's Rock.

#### The Value Fund



**Ce Wang**, CFA has a B.S. from Rutgers University where he majored in Finance and minored in Economics. While attending Stern, Ce also works in Morgan Stanley, where he manages technology solutions for the credit risk department. Prior to Morgan Stanley, he worked in Citigroup as a business analyst with responsibilities in data analysis and integration. Ce is a CFA Charterholder and passionate about equity research and investment.



**Joseph Diaz** earned a B.S in Accounting with a minor in Business Information Systems from Lehigh University. Currently completing his MBA part-time, Joe works at a \$22 billion equity-focused asset management firm as a Trade Support analyst where he works alongside the investment, trading and middle office teams: providing trade execution support, building trading programs and developing portfolio analytics for the firm.



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**Chuck Swartz** earned a Bachelor of Science in Management from Tulane University. Prior to attending Stern, Chuck was a management consultant with experience in a variety of different industries, including: Financial Services, Oil & Gas (Midstream), Pharmaceuticals, Flexible Packaging, Chemicals, Freight Shipping, and Private Equity.



**Peng Ser** is a first year MBA candidate at NYU Stern School of Business. Prior to Stern, Peng worked as a Finance lawyer in London at Norton Rose Fulbright LLP advising both bank and borrowers on loan and security documents. Peng has a BA in Law and Business from the University of Warwick.



**Lei Gong** was born and raised in Hangzhou, China. He graduated from the University of Indianapolis with a major in English Literature and later completed his master degree in accounting at Indiana University Kelley School of Business. Prior to coming to Stern, he worked at Cummins, a Fortune 500 company, and rotated through four corporate finance roles.

#### The Fixed Income Fund



**Parth Shah** is a second year MBA student at NYU Stern specializing in Quantitative Finance and Law and Business. Prior to Stern, he worked as a Senior Analyst in the Product Control division at Deutsche Bank, focusing on interest rate derivatives. He holds a B.Com. from Mumbai University and has cleared all three levels of the CFA exams.



**Lance He** received his B.A. in Finance from Suzhou University, China. Prior to Stern, Lance worked at Private Equity firm and hedge fund as analyst and investment manager primarily focused on growth companies. At Stern he specializing in Quantitative Finance and Fin-tech. He is CFA level 2 candidate.

#### The ESG Fund



**Janet Hong** has a B.S. in Finance and Economics from University of Pittsburgh. Prior to Stern, she worked in finance for four years, with roles including credit risk reporting, sales and trading interest rate strategy, and macroeconomic research, in addition to earning her CFA. She spent the past summer at Principal Global Investors in their equity investments group, where she conducted fundamental research on a variety of sectors and markets, including International Large Cap, Emerging Markets, and Small Cap.



**Robert Herzka** has a B.A. in Business Management from Fairleigh Dickinson University. He spent two years in healthcare administration at a rehabilitation center overseeing client relations and operational efficiencies. He previously interned at Shavit Capital, a boutique Private Equity fund based in Israel which invests and advises healthcare startups through the IPO process.



**Zhipeng (Leo) Liu** joined China Everbright Assets Management, a leading asset management company in Hong Kong in Nov 2014. He covered Hong Kong and China listed equities and was a key member of the award-winning Everbright China Focus Fund. Before that, Leo worked at Group Investment department of AIA and performed due diligence on equity funds and structured credit products (CLOs). He graduated from The Chinese University of Hong Kong with a Bachelor of Science degree in Risk Management. Leo is a CFA Charterholder.



**Benjamin Gottesdiener, CFA**, is a first year MBA student at NYU Stern, specializing in Corporate Finance, Global Sourcing and Supply Chain Management, and Sustainable Business. He has a B.A. in Political Science from Washington University in St. Louis. Prior to Stern, Ben spent 4 years at Bank of America Merrill Lynch as an equity research associate covering the energy infrastructure, chemical and agriculture sectors. He is a CFA Charterholder.



**Jamison Friedland** is a first-year MBA student specializing in Sustainable Business and Corporate Finance. Prior to NYU, Jamison graduated from Northwestern University as an economics major. He began his career trading, first in equity options before transitioning into fixed income, primarily interest rates. Before starting at Stern, Jamison interned with various social impact roles at organizations including Rainforest Alliance and NYU Stern Center for Sustainable Business.



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