UW Health Investment Sub-Committee

May 19, 2021, 4:00 - 5:30 PM

WebEx: https://uwhealth.webex.com/uwhealth/onstage/g.php?MTID=eea39d44eb9b59bbca25a4bb10025b2ec

Meeting number: 120 401 9677 // Password: 051921


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## Agenda

**4:00 PM**

### I. Call to Order
Mr. John Litscher

**4:00 PM**

### II. Open Session Meeting Minutes
Mr. John Litscher

**4:02 PM**

### III. VanEck Securities Corporation
VanEck Representatives: Mr. David Semple, Ms. Patricia Gonzalez, Ms. Ola El-Shawarby, Mr. Angus Shillington, Mr. Sam Onan

- Presentation - VanEck Securities Corporation Update  
  Page 3

**4:30 PM**

### IV. Graystone Consulting Update
Mr. Tom Parks, Mr. Matt Conway, Ms. Kelli Schrade, Ms. Kristina Van Liew

- Presentation - Graystone Market Commentary and Future Meeting Topics  
  Page 53

**5:00 PM**

### V. Closed Session

Motion to enter into closed session pursuant to Wisconsin Statutes section 19.85(1)(e) for the discussion of the following investment matters which for competitive reasons require a closed session: review and approval of closed session minutes and review of UW Health's Capital Markets and Portfolio Review – First Quarter 2021.

**5:30 PM**

### VI. Adjourn
VanEck’s mission is to strengthen portfolios by offering forward looking, intelligent solutions

- **Transformative Investments**: Started offering active strategies in international equities (1955), gold shares (1968), emerging markets (1993); added passive strategies in 2006 and has emerged as top 10 ETF sponsor globally

- **Private Ownership**: As an independent, private firm we can focus on client interests with a long-term perspective

- **Accessible Management**: We pride ourselves on being available to clients and engaging directly with them

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1955
VanEck founded with the launch of international equity mutual fund

1968
Developed the U.S.'s first gold equity fund

1993
Began managing emerging markets assets

1994
Created first hard assets fund

2006
Launched ETF business

2007
Issued first fixed-income ETF

2011
Launched index subsidiary MV Index Solutions

2012
Partnersed with Morningstar to offer wide moat investment strategy

2017
Joined the Principles for Responsible Investment (PRI) as a signatory

Launched European and Australian businesses
Today, VanEck manages approximately $71.2 billion in assets

- Global headquarters in New York with robust lineups of local funds in Europe and Australia
- 311 full-time staff, including 49 investment professionals; portfolio managers average 24 years of experience
- Lead portfolio managers all have direct experience in the sectors and regions in which they invest
- Institutional and wealth management clients
- Active funds and smart beta ETFs have won numerous performance awards


Strategies offered in mutual, pooled and off-shore funds, separate accounts, variable insurance portfolios, sub-advisory, ETFs and limited partnerships.

### Strategies Available in Various Investment Vehicles Globally

<table>
<thead>
<tr>
<th>Emerging Markets Equity</th>
<th>Emerging Markets Fixed Income</th>
<th>Natural Resources</th>
<th>Gold / Precious Metals</th>
<th>Strategic Equity</th>
<th>Asset Allocation</th>
<th>U.S. High Yield</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. ETFs</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>U.S. Mutual Fund</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>U.S. Insurance Trust</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>UCITS Funds and ETFs</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Sub-Advisory Services</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Institutional Separate Account</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Institutional Commingled Fund</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
</tbody>
</table>

VanEck’s strategies include emerging markets equity and fixed income, natural resources and commodities, gold and precious metals, tactical allocation, and a global range of index strategies delivered through exchange-traded funds.

The table above describes products and services typically offered by VanEck. Not all strategies have live accounts.

VanEck manages $10.88 billion in emerging markets assets across a variety of active and passive investment solutions
- Dedicated team of 16 portfolio managers and analysts
- Two active and 21 passive strategies

### Assets Under Management
by Emerging Markets Strategies (in $B)

<table>
<thead>
<tr>
<th>Investment teams</th>
<th>Active Emerging Markets Capabilities</th>
<th>Passive Emerging Markets Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Markets Equity - Active</td>
<td>- Emerging Markets Equity</td>
<td>- Global Equity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of strategies managed</th>
<th>1 equity, 1 debt</th>
<th>14 equity, 8 debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average years of experience</td>
<td>23</td>
<td>17</td>
</tr>
<tr>
<td>Dedicated portfolio managers and analysts</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: VanEck. Data as of March 31, 2021.
Investment Team,
Philosophy and Process
Emerging Markets Equity Strategy

Investment Management Team

David Semple
Portfolio Manager
- 31 years of dedicated emerging markets experience; 23 years at VanEck
- Portfolio Manager of VanEck’s Emerging Markets Equity Strategies
- Served as Regional Strategist, Head of Emerging Markets and Portfolio Manager specializing in Asia ex-Japan; based in Europe, Asia and the U.S.

Angus Shillington
Deputy Portfolio Manager
- 28 years of EM experience; 12 years at VanEck
- Deputy Portfolio Manager of VanEck’s Emerging Markets Equity Strategies
- Served as Head of International Equity, responsible for Asian and European equities. Previously held senior roles in research, sales, trading and portfolio management

Patricia Gonzalez
Senior Analyst
- 13 years of industry experience; 7 years at VanEck
- Primary focus on LatAm
- Served as a Financial Analyst at Newgate Capital, specializing in LatAm and EMEA. Previous roles included corporate finance and financial analysis in the U.S. and Venezuela

Ola El-Shawarby, CFA
Senior Analyst
- 14 years of industry experience; 4 years at VanEck
- Primary focus on EMEA
- Served as Director and Investment Analyst at Caravel Management LLC., responsible for EMEA equities. Held several roles at EFG-Hermes Asset Management, including Analyst and Portfolio Manager

Dominic Jacobson
Analyst
- 6 years of industry experience; 3 years at VanEck
- Primary focus on Healthcare and Technology
- Served as both Healthcare and Technology Analyst at Gavekal Capital. Co-founded Crowd Power Plant Ltd, an electricity supplier start-up in London

Yi Rong
Analyst (Consultant)
- 14 years of industry experience;
  Joined in Q1 2021
- Primary focus on Chinese equity markets; based in China
- Served as Senior Analyst at Allard Partners, covering Internet, Education and Consumer. Previously held positions at McKinsey & Co., Bain Capital, Fidelity International and Turiya Capital

Source: VanEck. Years of experience as of March 31, 2021 (rounded to closest natural number). LatAm refers to Latin America. EMEA refers to Europe, Middle East and Africa.

Emerging Markets Equity Strategy

Strategy Resources

Investment Management Team Emerging Markets Equity

David Semple (23/31)
Portfolio Manager

Angus Shillington (12/28)
Deputy Portfolio Manager Asia

Patricia Gonzalez (7/13)
Senior Analyst LatAm

Ola El-Shawarby, CFA (4/14)
Senior Analyst EMEA

Dominic Jacobson (3/6)
Analyst Healthcare/Technology

Yi Rong (<1/14)
Analyst China

Emerging Markets Fixed Income

Eric Fine (12/32)
Portfolio Manager
Emerging Markets Credit & FX

David Austerweil (9/19)
Co-Deputy Portfolio Manager
Emerging Markets Credit & FX

Natalia Gurushina (8/26)
Economist
Emerging Markets Economist

Robert Schmieder (6/34)
Senior Corporate Analyst
Emerging Markets Credit

Francis Rodilosso, CFA (9/29)
Head of Fixed Income ETF Portfolio Management

Quantitative Investment Solutions (QIS)

David Schassler (9/18)
Portfolio Manager

John Lau (14/14)
Deputy Portfolio Manager

Barak Laks (4/23)
Deputy Portfolio Manager

Joseph Schafer (10/21)
Quantitative Analyst

Trading and Execution

Greg Krenzer, CFA (27/27)

Chris Mailloux, CFA (14/14)

Jon Rizzo (<1/9)

Source: VanEck. Years of experience as of March 31, 2021 (rounded to closest natural number). LatAm refers to Latin America, EMEA refers to Europe, Middle East and Africa.

Emerging Markets Equity Strategy

Investment Philosophy and Approach

INVESTMENT PHILOSOPHY
Structural Growth at a Reasonable Price ("S GARP")

We believe an experienced team actively investing in visible and persistent growth with a disciplined valuation approach will create attractive investment returns for our clients through business cycles.

INVESTMENT APPROACH

Driven by Stock Selection
- Rigorous due diligence by a deeply experienced team
- Focus on management quality, governance, and business models with visibility, innovation, and low disruption risk

All-Cap Exposure
- No market capitalization bias
- Allows access to entrepreneurial ownership in growing sectors representing the future of emerging markets

Flexible Approach
- High active share
- Good portfolio liquidity to manage stock specific risks and changing investment environments

Source: VanEck. Information regarding portfolio composition, portfolio composition methodology, investment process or limits, or valuation methods of evaluating companies and markets are intended as guidelines which may be modified or changed by VanEck at any time in its sole discretion without notice.

Emerging Markets Equity Strategy

Structural Growth vs. Cyclicality

What is Structural Growth?

- Structural growth represents trends in company and sector fundamentals resulting in visible, persistent and self-sustaining growth in operating profitability.

Source: VanEck, Bloomberg. Data from 12/31/2010 through 12/31/2020. *EBITDA refers to earnings before interest, taxes, depreciation, and amortization, is a measure of a company's overall financial performance.

For illustrative purposes only. The information above is intended to demonstrate VanEck’s investment process and strategies, and the types of investment opportunities VanEck may consider. Actual holdings will vary for each VanEck client. Not a recommendation to buy or sell a security. There is no assurance that industries will grow as projected.

Emerging Markets Equity Strategy

Investment Process

Source: VanEck. Information regarding portfolio composition, portfolio composition methodology, investment process or limits, or valuation methods of evaluating companies and markets are intended as guidelines which may be modified or changed by VanEck at any time in its sole discretion without notice.

Emerging Markets Equity Strategy

Portfolio Construction & Composition

- Product of rigorous initial due diligence and subject to constant, ongoing due diligence and analysis.
- Risk adjusted expected returns for each stock.

Portfolio Manager determines inclusion or removal from Portfolio. Transition is driven by relative valuation, stock specific risks and optimization enhanced portfolio level risk management, resulting in low turnover.

THE FOCUS LIST – ~150 stocks

THE PORTFOLIO

60-85 stock portfolio constructed from highest conviction structural growth ideas diversified by geography, sector and liquidity

Source: VanEck. Information regarding portfolio composition, portfolio composition methodology, investment process or limits, or valuation methods of evaluating companies and markets are intended as guidelines which may be modified or changed by VanEck at any time in its sole discretion without notice.

VanEck’s Approach to Sustainable and Responsible Investing

- **ESG is Fundamental to Our Process**
  - VanEck considers Environmental, Social and Governance (ESG) factors to be integral components of its investment philosophy and processes. As part of its continuing commitment to responsible investment, the firm incorporates these factors into not only its investment analysis but also its engagement policies.

- **ESG Impacts Risk and Return**
  - ESG analysis and the advocacy of good practices are woven into our investment process because we believe that it is part of our responsibility to clients to mitigate associated risks and encourage change that can enhance and protect long-term returns for shareholders.

- **ESG Requires Engagement and Advocacy**
  - VanEck’s Investment Teams have frequent and extensive engagement with company management that allows us to identify and address material ESG matters. The principles that are incorporated in codes such as the PRI are important, and our active portfolio management teams drive integration of ESG criteria into each investment process. We think that through their extensive knowledge of the asset classes that they invest in, they are in the best place to actively engage corporate leadership to achieve a better outcome for our clients and beneficiaries within investment mandates.

- **ESG Implementation Through Voting**
  - We have established and apply general proxy voting guidelines based on what we consider to be best practices. We will allow room for portfolio management teams to deviate from these general guidelines where we consider clients’ interests are best served. As part of our ESG effort, we engage third-party research and guidelines as necessary.

Source: VanEck. Please note the information in this presentation represents the investment team’s current implementation of its investment strategy and this implementation may change without notice. Past performance is not indicative of future performance. For Institutional Use Only. Not for Public Distribution.
ESG in Practice – VanEck Emerging Markets Equity Strategy

- **Sustainable Incorporation**
  - VanEck incorporates sustainability risks in investment decisions for the actively managed Emerging Markets Equity Strategy. As it pertains to this Strategy in particular, ESG has been front and center of what we do and how we do it from the sustainable incorporation, full integration and company/client engagement perspective.

- **ESG Integration**
  - Financially material ESG factors are integrated into the investment process. The Investment Team assesses sustainability risks, including ESG risks, by conducting fundamental and bottom-up research on the investee companies. ESG risks are assessed by looking for both negative proscription and positive progression. In cases where it seems warranted, the valuation model for a company may incorporate a higher discount rate or additional estimated future costs to account for certain ESG risk factors. In contrast, future growth estimates for a company may reflect higher growth opportunities opened up by ESG factors.
  
  - Additional restrictions apply to the Strategy with regards to tobacco companies, fossil fuel companies and companies involved in weapons manufacturing. As a result, under the SFDR regulation effective as of March 10th, 2021, the Strategy’s UCITS vehicle is categorized as “light green” or Article 8 due to the above additional restrictions and screening of the Norges Bank list.

- **Company Engagement**
  - Company engagement is integral to the Strategy. Prior to and during the investment period, the Investment Team will engage with company management and raise sustainability issues relevant to that company and industry. The Investment Team continues to engage with and monitor the company throughout the investment cycle.

- **Client Engagement**
  - With our clients in mind first – and always – the Investment Team is equipped to apply additional screens (positive and negative) to our clients’ portfolios.*

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*Source: VanEck. Please note the information in this presentation represents the investment team’s current implementation of its investment strategy and this implementation may change without notice. Past performance is not indicative of future performance. *Client portfolios are defined as separately managed accounts (SMAs) in this instance.

Performance, Characteristics and Positioning
### Composite Performance

<table>
<thead>
<tr>
<th>Calendar Periods</th>
<th>Gross of Fees Returns (%)</th>
<th>Net of Fees Returns (%)</th>
<th>Benchmark 1 Return (%)</th>
<th>Benchmark 2 Return (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month to Date</td>
<td>-4.43</td>
<td>-4.50</td>
<td>-1.19</td>
<td>-1.51</td>
</tr>
<tr>
<td>Last 3 Months</td>
<td>0.38</td>
<td>0.20</td>
<td>2.86</td>
<td>2.29</td>
</tr>
<tr>
<td>Year to Date</td>
<td>0.38</td>
<td>0.20</td>
<td>2.86</td>
<td>2.29</td>
</tr>
<tr>
<td>1 Year</td>
<td>59.04</td>
<td>57.90</td>
<td>61.09</td>
<td>58.39</td>
</tr>
<tr>
<td>3 Year</td>
<td>6.34</td>
<td>5.58</td>
<td>6.33</td>
<td>6.48</td>
</tr>
<tr>
<td>5 Year</td>
<td>13.69</td>
<td>12.88</td>
<td>11.75</td>
<td>12.07</td>
</tr>
<tr>
<td>7 Year</td>
<td>7.63</td>
<td>6.85</td>
<td>6.44</td>
<td>6.58</td>
</tr>
<tr>
<td>10 Year</td>
<td>6.76</td>
<td>5.92</td>
<td>3.61</td>
<td>3.65</td>
</tr>
<tr>
<td>Since Composite Inception</td>
<td>8.81</td>
<td>7.70</td>
<td>6.71</td>
<td>6.64</td>
</tr>
</tbody>
</table>

The performance quoted represents past performance. Past performance does not guarantee future results. Returns greater than 1 year are annualized. Composite inception is January 1, 2006.

Total Firm Assets for current period are preliminary and subject to change. Final AUM is available after the 20th calendar day of each month. Reporting currency is in USD.

Source: VanEck. Data as of March 31, 2021.

Current market conditions may not continue. Reporting currency is in U.S. dollar. Performance quoted represents past performance.


Van Eck Associates Corporation
VanEck Emerging Markets Equity Strategy (Composite)
MSCI EM IMI (Benchmark 1)
MSCI EM Index (Benchmark 2)
## Composite Performance

<table>
<thead>
<tr>
<th>Calendar Period</th>
<th>Total Return Gross of Fees (%)</th>
<th>Total Return Net of Fees (%)</th>
<th>Benchmark Return (%)</th>
<th># of Portfolios</th>
<th>Composite Internal Dispersion (Avg. Monthly)*</th>
<th>Standard Deviation Comp**</th>
<th>Standard Deviation BM**</th>
<th>Total Composite Assets End Of Period ($M)</th>
<th>Total Firm Assets End Of Period ($M)</th>
<th>% of Firm Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>29.18</td>
<td>27.26</td>
<td>19.90</td>
<td>&lt;5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>390</td>
<td>30,765</td>
<td>1.27</td>
</tr>
<tr>
<td>2011</td>
<td>-24.97</td>
<td>-25.65</td>
<td>-19.49</td>
<td>&lt;5</td>
<td>N/A</td>
<td>30.87</td>
<td>26.03</td>
<td>229</td>
<td>32,478</td>
<td>0.70</td>
</tr>
<tr>
<td>2012</td>
<td>31.48</td>
<td>30.31</td>
<td>18.68</td>
<td>&lt;5</td>
<td>N/A</td>
<td>22.73</td>
<td>21.47</td>
<td>309</td>
<td>36,555</td>
<td>0.84</td>
</tr>
<tr>
<td>2013</td>
<td>14.15</td>
<td>13.12</td>
<td>-2.20</td>
<td>&lt;5</td>
<td>N/A</td>
<td>20.93</td>
<td>19.01</td>
<td>373</td>
<td>31,010</td>
<td>1.20</td>
</tr>
<tr>
<td>2014</td>
<td>1.52</td>
<td>0.65</td>
<td>-1.79</td>
<td>&lt;5</td>
<td>N/A</td>
<td>15.19</td>
<td>14.77</td>
<td>472</td>
<td>28,270</td>
<td>1.67</td>
</tr>
<tr>
<td>2015</td>
<td>-11.80</td>
<td>-12.49</td>
<td>-13.86</td>
<td>5</td>
<td>N/A</td>
<td>14.23</td>
<td>13.83</td>
<td>993</td>
<td>25,137</td>
<td>3.95</td>
</tr>
<tr>
<td>2016</td>
<td>1.34</td>
<td>0.63</td>
<td>9.90</td>
<td>8</td>
<td>0.28%</td>
<td>15.33</td>
<td>15.72</td>
<td>1,698</td>
<td>38,234</td>
<td>4.44</td>
</tr>
<tr>
<td>2017</td>
<td>51.95</td>
<td>50.90</td>
<td>36.83</td>
<td>8</td>
<td>0.56%</td>
<td>15.88</td>
<td>15.11</td>
<td>2,852</td>
<td>44,563</td>
<td>6.40</td>
</tr>
<tr>
<td>2018</td>
<td>-22.24</td>
<td>-22.79</td>
<td>-15.04</td>
<td>8</td>
<td>0.39%</td>
<td>16.05</td>
<td>14.43</td>
<td>2,274</td>
<td>44,762</td>
<td>5.08</td>
</tr>
<tr>
<td>2019</td>
<td>31.44</td>
<td>30.52</td>
<td>17.65</td>
<td>8</td>
<td>0.27%</td>
<td>15.34</td>
<td>13.94</td>
<td>3,050</td>
<td>55,536</td>
<td>5.49</td>
</tr>
<tr>
<td>2020</td>
<td>18.42</td>
<td>17.55</td>
<td>18.39</td>
<td>7</td>
<td>0.21%</td>
<td>21.21</td>
<td>19.87</td>
<td>3,585</td>
<td>68,910</td>
<td>5.20</td>
</tr>
<tr>
<td>YTD 2021</td>
<td>0.38</td>
<td>0.20</td>
<td>2.86</td>
<td>5</td>
<td>N/A</td>
<td>21.03</td>
<td>19.19</td>
<td>3,546</td>
<td>71,027</td>
<td>4.99</td>
</tr>
</tbody>
</table>

Total Firm Assets for current period are preliminary and subject to change. Final AUM is available after the 20th calendar day of each month. Reporting currency is in USD. Performance quoted represents past performance. Past performance does not guarantee future results.

* Internal Dispersion N/A due to insignificant number of portfolios in the composite.

** Three year standard deviation is a required GIPS element starting in 2011. If "N/A" appears on or after that, it is because 36 monthly returns are not available in the composite.

Source: VanEck, Bloomberg, FactSet, Data as of March 31, 2021.

Current market conditions may not continue. Reporting currency is in U.S. dollars. Performance quoted represents past performance. Past performance does not guarantee future results.

## Portfolio Characteristics

<table>
<thead>
<tr>
<th></th>
<th>VanEck Emerging Markets Equity Strategy</th>
<th>MSCI EM IMI Index Primary Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Weighted Market Capitalization (USD Billions)$1$</td>
<td>$27.2$</td>
<td>$34.0$</td>
</tr>
<tr>
<td>Number of Securities</td>
<td>$89$</td>
<td>$3075$</td>
</tr>
<tr>
<td>P/E(LTM)$^{2}$</td>
<td>$24.4$</td>
<td>$18.8$</td>
</tr>
<tr>
<td>Forward P/E$^{3}$</td>
<td>$20.0$</td>
<td>$14.7$</td>
</tr>
<tr>
<td>P/B (LTM)$^{4}$</td>
<td>$3.9$</td>
<td>$2.13$</td>
</tr>
<tr>
<td>Return on Equity (ROE)$^{5}$</td>
<td>$13.9$</td>
<td>$13.7$</td>
</tr>
<tr>
<td>Active Share vs MSCI EM IMI$^{6}$</td>
<td>$77.1$</td>
<td>-</td>
</tr>
<tr>
<td>5-Year Sharpe Ratio$^{7}$</td>
<td>$0.27$</td>
<td>-</td>
</tr>
<tr>
<td>5-Year Alpha vs MSCI EM IMI$^{8}$</td>
<td>$0.27$</td>
<td>-</td>
</tr>
<tr>
<td>5-Year Beta vs MSCI EM IMI$^{9}$</td>
<td>$1.02$</td>
<td>-</td>
</tr>
<tr>
<td>5-Year R-squared vs MSCI EM IMI$^{10}$</td>
<td>$86.83$</td>
<td>-</td>
</tr>
</tbody>
</table>

$1$Market Capitalization (cap) is the value of a corporation as determined by the market price of its issued and outstanding common stock.

$2$Price/Earnings (P/E) is equivalent to current stock price divided by last twelve months (LTM) earnings per share (EPS).

$3$Forward Price/Earnings (P/E) is equivalent to current stock price divided by FY1 EPS estimate.

$4$Price-to-Book Value (P/B) ratio is the ratio of a stocks price to its LTM book value.

$5$Return on Equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders’ equity.

$6$Active Share is a measure of the percentage of stock holdings in a manager’s portfolio that differs from the benchmark index.

$7$Sharpe Ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk.

$8$Alpha is a measure of the difference between a portfolio’s actual and expected returns, given its level of risk as measured by beta.

$9$Beta is a measure of sensitivity to market movements.

$10$R-squared reflects the percentage of a fund’s movements that can be explained by movements in its benchmark index.

**Source:** VanEck, FactSet. Data as of March 31, 2021.

Data presented herein reflects that of a representative portfolio of the VanEck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

## Portfolio Holdings

<table>
<thead>
<tr>
<th>Top Twenty Holdings</th>
<th>Country</th>
<th>Sector</th>
<th>% of the Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tencent Holdings Ltd.</td>
<td>China</td>
<td>Communication Services</td>
<td>6.4</td>
</tr>
<tr>
<td>Alibaba Group Holding Ltd.</td>
<td>China</td>
<td>Consumer Discretionary</td>
<td>6.1</td>
</tr>
<tr>
<td>HDFC Bank Limited</td>
<td>India</td>
<td>Financials</td>
<td>4.8</td>
</tr>
<tr>
<td>Taiwan Semiconductor Manufacturing Co., Ltd.</td>
<td>Taiwan</td>
<td>Information Technology</td>
<td>3.7</td>
</tr>
<tr>
<td>Prosus N.V. Class N</td>
<td>China</td>
<td>Consumer Discretionary</td>
<td>3.0</td>
</tr>
<tr>
<td>Samsung Electronics Co Ltd Pfd Non-Voting</td>
<td>South Korea</td>
<td>Information Technology</td>
<td>2.9</td>
</tr>
<tr>
<td>Samsung SDI Co., Ltd</td>
<td>South Korea</td>
<td>Information Technology</td>
<td>2.5</td>
</tr>
<tr>
<td>Meituan Class B</td>
<td>China</td>
<td>Consumer Discretionary</td>
<td>2.0</td>
</tr>
<tr>
<td>Delivery Hero SE</td>
<td>Germany</td>
<td>Consumer Discretionary</td>
<td>1.9</td>
</tr>
<tr>
<td>Naspers Limited Class N</td>
<td>South Africa</td>
<td>Consumer Discretionary</td>
<td>1.9</td>
</tr>
<tr>
<td>China Education Group Holdings Limited</td>
<td>China</td>
<td>Consumer Discretionary</td>
<td>1.9</td>
</tr>
<tr>
<td>Reliance Industries Limited</td>
<td>India</td>
<td>Energy</td>
<td>1.9</td>
</tr>
<tr>
<td>A-Living Smart City Services Co., Ltd. Class H</td>
<td>China</td>
<td>Industrials</td>
<td>1.9</td>
</tr>
<tr>
<td>NAVER Corp.</td>
<td>South Korea</td>
<td>Communication Services</td>
<td>1.8</td>
</tr>
<tr>
<td>Cholamandalam Investment and Finance Co. Ltd.</td>
<td>India</td>
<td>Financials</td>
<td>1.7</td>
</tr>
<tr>
<td>Sberbank Russia PJSC</td>
<td>Russia</td>
<td>Financials</td>
<td>1.6</td>
</tr>
<tr>
<td>Ping An Insurance (Group) Company of China, Ltd. Class H</td>
<td>China</td>
<td>Financials</td>
<td>1.6</td>
</tr>
<tr>
<td>Transaction Capital Ltd.</td>
<td>South Africa</td>
<td>Financials</td>
<td>1.5</td>
</tr>
<tr>
<td>Sea Ltd. (Singapore) Sponsored ADR Class A</td>
<td>Taiwan</td>
<td>Communication Services</td>
<td>1.5</td>
</tr>
<tr>
<td>Wuxi Biologics (Cayman) Inc.</td>
<td>China</td>
<td>Health Care</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Top Twenty Holdings as % of Portfolio:** 52.1

Source: VanEck, FactSet. Data as of March 31, 2021.

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## Top and Bottom Five Performance Contributors (Q1 2021)

### Top 5 Performance Contributors

<table>
<thead>
<tr>
<th>Country</th>
<th>Sector</th>
<th>Ending Weight (%)</th>
<th>Contribution to Performance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholamandalam Investment and Finance Co. Ltd.</td>
<td>India</td>
<td>Financials</td>
<td>1.8</td>
</tr>
<tr>
<td>Tencent Holdings</td>
<td>China</td>
<td>Communication Services</td>
<td>6.4</td>
</tr>
<tr>
<td>Transaction Capital Ltd.</td>
<td>South Africa</td>
<td>Financials</td>
<td>1.5</td>
</tr>
<tr>
<td>Naspers Limited Class N</td>
<td>South Africa</td>
<td>Consumer Discretionary</td>
<td>1.9</td>
</tr>
<tr>
<td>Taiwan Semiconductor Manufacturing</td>
<td>Taiwan</td>
<td>Information Technology</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>15.3</td>
</tr>
</tbody>
</table>

### Top 5 Performance Detractors

<table>
<thead>
<tr>
<th>Country</th>
<th>Sector</th>
<th>Ending Weight (%)</th>
<th>Contribution to Performance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Oriental Education &amp; Technology Group, Inc.</td>
<td>China</td>
<td>Consumer Discretionary</td>
<td>1.0</td>
</tr>
<tr>
<td>Delivery Hero</td>
<td>Germany</td>
<td>Consumer Discretionary</td>
<td>2.0</td>
</tr>
<tr>
<td>Movida Participacoes SA</td>
<td>Brazil</td>
<td>Industrials</td>
<td>0.8</td>
</tr>
<tr>
<td>JSL S.A.</td>
<td>Brazil</td>
<td>Industrials</td>
<td>0.6</td>
</tr>
<tr>
<td>Alibaba Group Holding</td>
<td>China</td>
<td>Consumer Discretionary</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>10.5</td>
</tr>
</tbody>
</table>

Source: VanEck, FactSet. Data as of March 31, 2021.

Please note that the information contained on this slide is based on a representative account in the composite. Any portfolio characteristics shown herein are for illustrative purposes only and reflects the representative account of the composite. Information should not be construed as a recommendation or solicitation to buy or sell any securities within the sectors shown. Data is supplemental to the GIPS compliant presentation at the end of this material. Each portfolio may differ due to individual client restrictions and guidelines. Please note the information in this presentation represents the investment team’s current implementation of its investment strategy and this implementation may change without notice. Past performance is not indicative of future performance. The securities identified and described do not represent all of the securities purchased, sold or recommended for client accounts.

The reader should not assume that an investment in the securities identified was or will be profitable.

### Market Capitalization Positioning

<table>
<thead>
<tr>
<th>Category</th>
<th>VanEck Emerging Markets Equity (%)</th>
<th>MSCI Emerging Markets Investable Market Index (IMI) (%)</th>
<th>MSCI EM Index (%) Secondary Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-Cap (&gt; $10 Billion)</td>
<td>61.6</td>
<td>70.8</td>
<td>79.4</td>
</tr>
<tr>
<td>Mid-Cap (&lt; $10 Billion, &gt; $2 Billion)</td>
<td>23.8</td>
<td>21.6</td>
<td>20.4</td>
</tr>
<tr>
<td>Small-Cap (&lt; $2 Billion)</td>
<td>14.6</td>
<td>7.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Weighted Average Market Cap ($ Billions)</td>
<td>$27.2</td>
<td>$34.0</td>
<td>$50.1</td>
</tr>
</tbody>
</table>

Market capitalization definitions: small-cap is less than or equal to $2 billion; mid-cap is greater than $2 billion and less than or equal to $10 billion; and large-cap is greater than $10 billion.

Source: VanEck, FactSet, MSCI. Data as of March 31, 2021.

Historical information is not indicative of future results; current data may differ from data quoted. Market capitalization (Market Cap) is the value of a corporation as determined by the market price of its issued and outstanding common stock. Please note that the information contained on this slide is based on a representative account in the composite. Any portfolio characteristics shown herein, including the sector allocations are for illustrative purposes only and reflects the representative account of the composite. The index is unmanaged and includes the reinvestment of all dividends but does not reflect the payment of transaction costs, advisory fees or expenses that are associated with the investment in the composite. One cannot invest in an index. See index disclosures at the end of the presentation.

Emerging Markets Equity Strategy

Sector Positioning vs. MSCI EM IMI

Source: VanEck, FactSet. Data as of March 31, 2021.

Please note that the information contained on this slide is based on a representative account in the composite. Any portfolio characteristics shown herein, including the sector allocations, are for illustrative purposes only and reflect the representative account of the composite. Information should not be construed as a recommendation or solicitation to buy or sell any securities within the sectors shown. Data is supplemental to the GIPS compliant presentation at the end of this material. Each portfolio may differ due to individual client restrictions and guidelines. Please note the information in this presentation represents the investment team’s current implementation of its investment strategy and this implementation may change without notice. Past performance is not indicative of future performance. The securities identified and described do not represent all of the securities purchased, sold or recommended for client accounts. The reader should not assume that an investment in the securities identified was or will be profitable. The index is unmanaged and includes the reinvestment of all dividends but does not reflect the payment of transaction costs, advisory fees or expenses that are associated with the investment in the composite. One cannot invest in an index. See index disclosures at the end of the presentation.

Emerging Markets Equity Strategy

Country Positioning vs. MSCI EM IMI

Source: VanEck, FactSet. Data as of March 31, 2021.

Please note that the information contained on this slide is based on a representative account in the composite. Any portfolio characteristics shown herein, including the country allocations, are for illustrative purposes only and reflects the representative account of the composite. Information should not be construed as a recommendation or solicitation to buy or sell any securities within the sectors shown. Data is supplemental to the GIPS compliant presentation at the end of this material. Each portfolio may differ due to individual client restrictions and guidelines. Please note the information in this presentation represents the investment team’s current implementation of its investment strategy and this implementation may change without notice. Past performance is not indicative of future performance. The securities identified and described do not represent all of the securities purchased, sold or recommended for client accounts. The reader should not assume that an investment in the securities identified was or will be profitable. The index is unmanaged and includes the reinvestment of all dividends but does not reflect the payment of transaction costs, advisory fees or expenses that are associated with the investment in the composite. One cannot invest in an index. See index disclosures at the end of the presentation.

Emerging Markets Equity Strategy

Market Cap Performance Attribution: Q1 2021

For N/A, market cap classification data is not available on FactSet’s database.

Source: VanEck, FactSet. Data as of March 31, 2021. Data presented herein reflects that of a representative portfolio of the VanEck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

Please see important disclosures at the beginning, and at the end, of this presentation. Attribution is versus the MSCI EM IMI.

Figures are gross of fees, non-transaction based and therefore estimates only. Past performance is not indicative of future results.

Emerging Markets Equity Strategy

Sector Performance Attribution: Q1 2021

Communication Services, Financials and Consumer Staples contributed to relative performance.
Industrials, Consumer Discretionary and Information Technology detracted.

Source: VanEck, FactSet. Data as of March 31, 2021. Data presented herein reflects that of a representative portfolio of the VanEck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

Please see important disclosures at the beginning, and at the end, of this presentation. Attribution is versus the MSCI EM IMI.

Figures are gross of fees, non-transaction based and therefore estimates only. Past performance is not indicative of future results.

Emerging Markets Equity Strategy

Country Performance Attribution: Q1 2021

South Africa, Malaysia and Tanzania contributed to relative performance.
Taiwan, Germany (Delivery Hero) and Saudi Arabia detracted.

Source: Van Eck, FactSet. Data as of March 31, 2021. Data presented herein reflects that of a representative portfolio of the Van Eck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

Please see important disclosures at the beginning, and at the end, of this presentation. Attribution is versus the MSCI EM IMI.

Figures are gross of fees, non-transaction based and therefore estimates only. Past performance is not indicative of future results.

Stock Examples
Company Overview:
Alibaba is one of the largest digital platform enterprises in China.

Structural Growth Thesis:
- We believe the structural growth trend is driven by the growth of the Chinese consumer, as well as broadening offerings to its very sticky ~700m customers.
- The stock’s dual listing reduces the perceived geopolitical risk of a single listing.
- Its performance has historically resulted in persistent upgrades to forward-looking earnings forecasts.

Source: Macquarie Research, Bloomberg. Data as of April 9, 2021.
*PEG Ratio is equivalent to Forward P/E divided FY1 to FY2 growth estimate. Standard Deviation is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance.

Stock examples used were chosen based on clear representation of an equity style, such as Structural Growth at a Reasonable Price (S GARP), at time of inclusion in the Strategy. Individual stock examples are not representative of all securities in the Strategy or the Strategy’s performance as a whole. Past performance is not a guarantee of future results.
Vamos – creating opportunities for the development of the Brazilian fleet, naturally contributing to the reduction of polluting gases and to healthy, safe and efficient businesses.

Vamos is the leader in the truck, machinery and equipment rental in Brazil. The company offers customized solutions to clients with long-term contracts (five years).

**Structural Growth Thesis:**

- We believe this sector represents solid fundamentals that support sector growth and an extensive addressable market.
- Vamos is the largest player with 70% market share in the underpenetrated market.
- In Q1 2021, we initiated our position in the company because of its forward-looking, sustainable and structural growth business model, strong management team and very attractive valuation.

Source: Company Data. Data as of March 31, 2021.

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Delivery Hero – Mapping Food Delivery & Growth in EM

Delivery Hero doubled orders with a YoY growth of 100%, while decreasing delivery time (-12% YoY).

Delivery Hero is an ambitious and truly inspiring food delivery service listed in Germany. While the company remains headquartered in Germany, most of its actual operations are based in emerging markets – spanning across EMEA, LatAm and Asia – operating in close to 50 countries globally and leading online food delivery in 90% of them. We believe that Delivery Hero’s scale and platform offer a unique play for EM structural growth.


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Locaweb – Helping Small Businesses Go Digital

Locaweb's focus on small businesses adds to increased digitization in Brazil

<table>
<thead>
<tr>
<th>Product Line</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Software</td>
<td>17%</td>
<td>33%</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>17%</td>
<td>37%</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telecom (Mobile &amp; Bband)</td>
<td>21%</td>
<td>34%</td>
<td>37%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>14%</td>
<td>41%</td>
<td>38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity Software</td>
<td>19%</td>
<td>40%</td>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloud</td>
<td>25%</td>
<td>35%</td>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Intelligence</td>
<td>20%</td>
<td>42%</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-commerce</td>
<td>28%</td>
<td>37%</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote Working</td>
<td>34%</td>
<td>38%</td>
<td>23%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Locaweb (“LWSA”) is another leading digitization name out of Brazil that operates across three innovative lines of business and stands to benefit from the highest increase in tech spending in the post-COVID environment.

Structural Growth Thesis:

- **E-commerce (20% of earnings)** – utilizing its large base of web developers (~19K), LWSA helps SMEs create online presence in Brazil.
- **SaaS (20% of earnings)** – LWSA has developed standardized and affordable SaaS solutions for SMEs in Brazil. Products include email, marketing and customer service, among others.
- **BeOnline (60% of earnings)** – web hosting – this is LWSA’s legacy business. The company is the dominant player in Brazil with 21% market share.

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FAWRY – Digitizing Egypt’s Payments

Fawry's user base has been growing and continues to grow in a visible & persistent pattern

Source: Citi Research. Data as of July 21, 2020, Company data.

Company Overview:
Founded in 2008, Fawry is the first and largest e-payments company in Egypt, with annual revenues of over $50M (as of end of 2019) and a market cap of ~$1.3B.

Structural Growth Thesis:
- We saw a structural growth opportunity in the company’s positioning in the space and its advantageous scale compared to other players in digital payments.
- In Egypt, banking penetration remains low at only 32%, with consumers heavily cash reliant and digital payments penetration still nearly at half of the global average. A combination of recent regulatory incentives and widespread point of sale (“POS”) rollout could translate into a massive investment opportunity in Egypt’s economic digitization and we believe that Fawry is well positioned to capture it.

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Emerging Markets Equity Strategy

Helios Towers: Connecting Africa by Building the Telecom Infrastructure

Africa vs. global tower ownership – most African towers are still owned by telecom operators

Connectivity is key for socioeconomic development, and building out the telecom infrastructure is the foundation. Helios Towers ("HT"), an independent telecom tower infrastructure company with over 7,000 towers across Africa, is one of the leading players in Africa’s shifting telecom landscape. HT is operating in some of the less accessible, underpenetrated and demographically attractive sub-Saharan African countries, with its largest exposures in Tanzania, The Democratic Republic of Congo ("DRC") and Ghana.

Structural Growth Thesis:
We saw an attractive structural growth opportunity in this company, as it directly addresses the growing need for telecom infrastructure due to the rising penetration of mobile phones, increased mobile data usage and evolving technology.


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EM Economic Recovery: China Upside and Drivers

- Global active mandates have had the lightest allocation to China over the past two decades.
- Southbound activities are still low relative to the representation of Chinese in other key economic sectors in Hong Kong.

**Offshore China Mutual Fund Allocation Globally (OW/UW)*

<table>
<thead>
<tr>
<th>Year (Feb)</th>
<th>Avg.</th>
<th>In Basis Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>-230</td>
<td>-500</td>
</tr>
<tr>
<td>2006</td>
<td>-283</td>
<td>-450</td>
</tr>
<tr>
<td>2007</td>
<td>-300</td>
<td>-400</td>
</tr>
<tr>
<td>2008</td>
<td>-290</td>
<td>-350</td>
</tr>
<tr>
<td>2009</td>
<td>-250</td>
<td>-300</td>
</tr>
<tr>
<td>2010</td>
<td>-230</td>
<td>-250</td>
</tr>
<tr>
<td>2011</td>
<td>-210</td>
<td>-200</td>
</tr>
<tr>
<td>2012</td>
<td>-190</td>
<td>-150</td>
</tr>
<tr>
<td>2013</td>
<td>-170</td>
<td>-100</td>
</tr>
<tr>
<td>2014</td>
<td>-150</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>-130</td>
<td>50</td>
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<tr>
<td>2016</td>
<td>-110</td>
<td>100</td>
</tr>
<tr>
<td>2017</td>
<td>-90</td>
<td>150</td>
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<tr>
<td>2018</td>
<td>-70</td>
<td>200</td>
</tr>
<tr>
<td>2019</td>
<td>-50</td>
<td>250</td>
</tr>
<tr>
<td>2020</td>
<td>-30</td>
<td>300</td>
</tr>
<tr>
<td>2021</td>
<td>-10</td>
<td>350</td>
</tr>
</tbody>
</table>

**China as % of Hong Kong**

- Inbound tourists
- Total trade
- New insurance premiums
- Luxury property purchased
- Southbound turnover (as % of mkt cap)


Past performance does not guarantee future results. Please see Disclosures for additional, important information.

The impact of the pandemic on (largely) service and apparel prices, experiencing more than a 2 standard deviation shift downwards in price level (relative to the trend).

The impact of the pandemic on (largely) core goods (i.e., household furnishings) were positively affected by working from home during the pandemic and expenditure switching away from services. The share in the basket is almost just as large as the "depressed basket."

Source: UBS, Haver. Data as of January 7, 2021. *Standard Deviation is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance.

Note that the Eurozone data attempts to remove changes in the timing of sales (and the VAT holiday in Germany), which has created large temporary swings in some prices.

Past performance does not guarantee future results. Please see Disclosures for additional, important information.

Inflation and What to Expect as Demand Picks up

- Older countries have lower inflation and vice-versa.
- Higher debt leads to lower inflation and vice-versa.

**Ageing vs. Inflation**

**Debt vs. Inflation**

*Left Chart: Source: BofA Global Research, UN population database, Bloomberg, Refinitiv, Datastream. Data as of March 17, 2021.*


Past performance does not guarantee future results. Please see Disclosures for additional, important information.

We continue to be optimistic about the emerging markets outlook for 2021 and beyond. We see considerable potential for strong growth ahead, boosted by Covid-19 vaccine availability, catalyzing a return to "normal" in EM economies, albeit at a slower pace for some. Inflation will likely return to lower levels and rates will likely stay at relatively accommodative levels.

This is a conducive environment for investments in companies that represent structural growth at a reasonable price. In many respects, we occupy the middle ground between unjustifiable valuations for long duration, high growth stocks and the “moment in the sun” value trades that have become the new momentum. We spend our time interacting with and analyzing forward-looking, sustainable, structural growth companies that we believe have strong prospects and are led by capable and credible management teams. We do not frantically toggle between styles to try to capture market zeitgeist. We believe that staying true to our style, with persistence and discipline, will be rewarding over the medium and longer term. Investing in emerging markets is for the long haul.

Whilst we can’t say exactly how all businesses will recover, we can say, with conviction, that the Strategy is well positioned for the future of emerging markets.

Source: VanEck. Data as of March 31, 2021.
Past performance does not guarantee future results. Please see Disclosures for additional, important information.
Large, small and mid caps contributed to performance on a relative basis.

For N/A, market cap classification data is not available on FactSet’s database.

Source: VanEck, FactSet. Data as of March 31, 2021. Data presented herein reflects that of a representative portfolio of the VanEck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

Please see important disclosures at the beginning, and at the end, of this presentation. Attribution is versus the MSCI EM IMI.

Figures are gross of fees, non-transaction based and therefore estimates only. Past performance is not indicative of future results.

Emerging Markets Equity Strategy

Sector Performance Attribution: 10 Year

Source: VanEck, FactSet. Data as of March 31, 2021. Data presented herein reflects that of a representative portfolio of the VanEck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

Please see important disclosures at the beginning, and at the end, of this presentation. Attribution is versus the MSCI EM IMI.

Figures are gross of fees, non-transaction based and therefore estimates only. Past performance is not indicative of future results.

Country Performance Attribution: 10 Year

China, Indonesia and Thailand contributed to relative performance.
Taiwan, UK and Saudi Arabia detracted.

**Source:** VanEck, FactSet. Data as of March 31, 2021. Data presented herein reflects that of a representative portfolio of the VanEck Emerging Markets Long Equity Composite and is supplemental to the GIPS-compliant presentation included at the end of the material. This portfolio was selected because it is the largest portfolio in the composite.

Please see important disclosures at the beginning, and at the end, of this presentation. Attribution is versus the MSCI EM IMI.

Figures are gross of fees, non-transaction based and therefore estimates only. Past performance is not indicative of future results.

Important Disclosures
Emerging Markets Equity Strategy

Strategy History

Source: VanEck.

Please note the information in this presentation represents the investment team’s current implementation of its investment strategy and this implementation may change at any time and from time to time. Not intended to be a forecast of future events, a guarantee of future results or investment advice. Current market conditions may not continue.

Launched in 1996. This Fund has been managed by David Semple from 1999 to present.

Launched in 1998. This Fund was managed by David Semple (1998 to 2003).

The “Mutual Fund: Emerging Markets” was a global stock strategy until December 2002, at which time the mandate was converted to emerging markets stocks. The “Mutual Fund: Asian Equities” was merged into the “Mutual Fund: Emerging Markets” in October 2003. This Fund has been managed by David Semple from December 2002 to present.
Important Disclosures

VanEck is the marketing name for Van Eck Associates Corporation and its affiliated entities.

Any projections, market outlooks or estimates in this material are forward-looking statements and are based upon certain assumptions that are solely the opinion of VanEck. Any projections, outlooks or assumptions should not be construed to be indicative of the actual events which will occur. Further, any information regarding portfolio composition, portfolio composition methodology, investment process or limits, or valuation methods of evaluating companies and markets are intended as guidelines which may be modified or changed by VanEck at any time in its sole discretion without notice.

The performance shown is for the stated time period only; due to market volatility, each account's performance may be different. Returns are gross of management fees, net of transaction costs, and include the reinvestment of dividends. If the expenses were reflected, the performance shown would be lower. Returns greater than one year are annualized. Actual fees are described in Part 2A of Van Eck Associates Corporation's Form ADV and will vary depending on, among other things, the applicable fee schedule and account size. For example, if $100,000 were invested and experienced a 10% annual return compounded monthly for 10 years, its ending value, without giving effect to the deduction of advisory fees, would be $270,704 with annualized compounded return of 10.47%. If an advisory fee of 0.95% of the average market value of the account were deducted monthly for the 10-year period, the annualized compounded return would be 9.43% and the ending dollar value would be $246,355.

Broad-based securities indices are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Past performance is no guarantee of future results.

Forecasts, estimates, and certain information contained herein are based upon proprietary research and the information contained in this material is not intended to be, nor should it be construed or used as investment, tax or legal advice, any recommendation, or an offer to sell, or a solicitation of any offer to buy, an interest in any security.
Important Disclosures

Van Eck Associates Corporation ("VEAC") including wholly owned subsidiary Van Eck Absolute Return Advisers Corp. ("VEARA") collectively ("VanEck") comprise the definition of the Firm. Both VEAC and VEARA are independent investment advisers registered under the Investment Advisers Act of 1940. VEAC, which commenced operations 1985 (predecessor company in 1955), provides investment advisory services to registered investment companies, other pooled investment vehicles and separate institutional clients. VEARA, which commenced operations in 1996, provides investment advisory services to pooled investment vehicles and private investment accounts.

VanEck claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. VanEck has been independently verified for the periods January 1, 2006 through December 31, 2020. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm’s policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The Emerging Markets Long Only Equity composite has had a performance examination for the periods of January 1, 2006 through December 31, 2020. The verification and performance examination reports are available upon request. The composite’s inception date is January 1, 2006 and the creation date is September 1, 2009. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

The Emerging Markets Long Only Equity composite seeks long-term capital appreciation by investing primarily in equity securities in emerging markets around the world including Africa, Asia, Emerging Europe, Latin America and the Middle East. The Emerging Markets strategy looks to capitalize on opportunities derived both from strong long-term structural growth and from expanding domestic demand. The use of derivatives may be employed for purposes of currency hedging and/or to equalize the cash position of the portfolios. The derivative instruments such as structured notes, futures and swap agreements are used to gain or hedge exposure on emerging assets that do not exceed 5% of net asset value. The strategy may write covered call options on portfolio securities to the extent that the value of all securities with respect to which covered calls are written do not exceed 10% of net asset value. None of the portfolios use leverage. The composite’s benchmark is the MSCI Emerging Markets IMI Net TR ("M1EFIM"). M1EFIM (the "index") is a free float-adjusted market capitalization index that is designed to capture large-, mid- and small-cap representation across emerging markets countries. The index is unmanaged and includes the reinvestment of all dividends but does not reflect the payment of transaction costs, advisory fees or expenses that are associated with the investment in the composite. An index’s performance is not illustrative of the composite’s performance. The index is rebalanced on a quarterly basis. Index performance data is sourced from Bloomberg.

The composite returns represent the total returns of all fully discretionary, fee paying portfolios within the Emerging Markets Long Only Equity investment mandate that possesses a minimum of $5 million in assets under management ("AUM"). The composite returns are asset-weighted based upon beginning period market values. The returns of the individual portfolios within the composite are time-weighted, based on trade date accounting. VanEck’s policy is to use accrual based accounting in recognizing interest income and interest expense, dividend income and short dividend expense, and are reported on ex-dividend date. Interest, dividends, and capital gains accrued on foreign securities are reported net of non-reclaimable foreign withholding taxes. Portfolio valuations are based on market values and expressed in US Dollars. Composite returns are shown gross and net of management fees while including the reinvestment of all income. Brokerage and transaction expenses such as exchange, duty, and commission fees are deducted from trade amounts to determine net transaction costs/proceeds which are reflected in both gross and net returns. Net of fee performance is calculated by deducting actual management fees and in some instances, performance based fees charged to each account. The composite returns represent past performance and are not reliable indicators of future results which may vary. The composite and comparative index returns can be found on the following page. Additional information regarding policies for valuing investments, calculating performance and preparing GIPS reports are available upon request.

Commencing January 1, 2011, portfolios are valued daily and adjusted for all external cash flows on the day that they occur. Prior to January 1, 2011, VanEck’s separately managed accounts were valued on a monthly basis, which adjusted for cash flows on a day-weighted basis. If cash flows exceed 5% of the beginning market value, the portfolios are revalued on the date of the cash flow and the resulting sub-periods are geometrically linked (or compounded) to produce a return for the full month. All other VanEck accounts were valued on a daily basis. During periods in which the cash flow is significant enough to impact the implementation of the investment strategy, VanEck’s policy is to remove the impacted account from the composite for that period. VanEck has set the level of significance at 25% or more of the portfolio’s total assets. If a portfolio falls below the minimum account size at the beginning of a full month, the portfolio will be removed from the composite and not included again until it meets the minimum criteria. VanEck excludes terminated portfolios after the last full performance measurement period in which the portfolios are under management. VanEck will continue to include the terminated portfolios in its composite for all periods prior to termination.

VanEck’s Emerging Markets Long Only Equity portfolios are generally charged an asset-based fee (which may be on a sliding scale with breakpoints dependent upon AUM). The fees charged for an Emerging Markets portfolio generally range from 0.65% to 1.00% of AUM. Actual account fee, inclusive of performance-based fees (if applicable), are used in the construction of composite net of fee performance unless otherwise noted. Separately, the Emerging Markets Commingled Fund, included in the composite, charges an annual fee of 0.80% (0.60% management fee and 0.20% operating expenses). A complete list of composite and limited distribution pooled fund descriptions and list of broad distribution pooled funds are available upon request.

Total Firm AUM include all discretionary and non-discretionary assets under management of VanEck, including all fee-paying accounts and accounts managed outside the Firm (e.g. by sub-advisers) where VanEck has allocation and selection authority. Firm proprietary accounts are included in the definition of firm assets. Composite internal dispersion, gross of fees, is calculated as the asset-weighted standard deviation of portfolio results. The three-year annualized standard deviation, gross of fees, found on the following page, measures the variability of the composite and the benchmark returns over the preceding 36 month period.

The Emerging Markets Long Only Equity implemented the significant cash flow policy since composite inception.
Index Definitions

All indices listed are unmanaged indices and include the reinvestment of all dividends, but do not reflect the payment of transaction costs, advisory fees or expenses that are associated with an investment in the Fund. An index’s performance is not illustrative of the Fund’s performance. Indices are not securities in which investments can be made.

The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets countries. The MSCI Emerging Markets Investable Market Index (IMI) is a free float adjusted market capitalization index that is designed to capture large-, mid- and small-cap representation across emerging markets countries.

MSCI Emerging Markets Investable Market Index (IMI) captures large, mid and small cap representation across emerging markets (EM) countries. The index covers approximately 99% of the free float-adjusted market capitalization in each country.

Attribution Descriptions

Allocation Effect: Allocation effect is the portion of portfolio excess return attributed to taking different group bets from the benchmark. (If either the portfolio or the benchmark has no position in a given group, allocation effect is the lone effect.) A group’s allocation effect equals the weight of the portfolio’s group minus the weight of the benchmark’s group times the total return of the benchmark group minus the total return of the benchmark in aggregate.

Selection + Interaction Effect: Selection effect is the portion of portfolio excess return attributable to choosing different securities within groups from the benchmark. A group’s selection effect equals the weight of the benchmark’s group multiplied by the total return of the portfolio’s group minus the total return of the benchmark’s group.

Total Effect: The total effect is the sum of all three effects. The total effect represents the opportunity cost of your investment decisions in a group relative to the overall benchmark.

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**Investment Sub-Committee Meeting**

**Open Session**

Graystone Consulting | May 19, 2021

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Market Commentary
A New Dawn
Market Commentary April 2021
A Continued Rally

From the market low on March 23, 2020, the market has continued its upward trend into 2021.
The New Phase of the New Bull

While the overall market continued to rise, leadership shifted as we moved into 2021

Shifting Equity Leadership
Style Performance

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Blend</th>
<th>Growth</th>
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</thead>
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<tr>
<td>Large</td>
<td>9.9%</td>
<td>5.1%</td>
<td>0.6%</td>
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<tr>
<td>Mid</td>
<td>13.2%</td>
<td>7.7%</td>
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<tr>
<td>Small</td>
<td>17.2%</td>
<td>12.9%</td>
<td>8.5%</td>
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</table>

<table>
<thead>
<tr>
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<th>Blend</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>0.6%</td>
<td>21.4%</td>
<td>43.3%</td>
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<tr>
<td>Mid</td>
<td>1.0%</td>
<td>21.0%</td>
<td>42.0%</td>
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<tr>
<td>Small</td>
<td>3.8%</td>
<td>18.9%</td>
<td>33.9%</td>
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</tbody>
</table>

S&P 500 Forward P/E Ratio
Weekly Data as of March 26, 2021

Source: FactSet, Morgan Stanley Wealth Management
The V-Shaped Recovery & Reopening Trade

Risks remain around policy changes, fiscal stimulus and the COVID-19 vaccine, but we expect 2021 GDP growth of 7.3%, which should improve profits among cyclical and small-/mid-caps.

Outperformance of Small Caps and Cyclicals Continues
Cyclicals outperformed in the fourth quarter and small caps are trending toward outperformance as investors move to pro-recovery trades.

Policy Implications
A potentially quick recovery to normalization and an accommodating Fed look to expedite the onset of inflation

Outperformance of Small Caps and Cyclicals Continues
Cyclicals outperformed in the fourth quarter and small caps are trending toward outperformance as investors move to pro-recovery trades.

Economic vs. Earnings vs. Stock Market Cycle

Understanding each important component

Growth, inflation, and other economic factors have varying effects on asset classes and investments. Identifying the economic environment is crucial to selecting the asset class, region, and sector leaders poised to outperform.

US Equity vs. Earnings

S&P 500 Index Level Vs. S&P 500 Operating Earnings
As of February 26, 2021

Year Over Year Earnings Growth Over the Past 7 Years

S&P 500
As of February 26, 2021

What’s Ahead – Shorter but Hotter Cycles

We’re in a new US economic cycle that could be shorter in duration than the prior 3

We Could Experience the Quickest EPS Recovery Since 1970
Implies This Economic Cycle May Be Short vs. History

Next Seven-Year Outlook Calls for Muted Returns Across Most Asset Classes

A Look Back At History
Morgan Stanley US equity strategists see a number of economic and market-related parallels between the current environment and the early- to mid-1940s. If history is a guide, we could be headed for higher inflation, shorter cycles, shallower corrections and a higher equity risk premium.

Note: The date labels indicate the timing for earnings per share levels achieving the peak levels of the prior cycle.
Source: Bloomberg, FactSet, Morgan Stanley & Co., Morgan Stanley Wealth Management GIC as of March 25, 2021

Note: We represent stocks by the MSCI All Country World Index and bonds by the Bloomberg Barclays US Aggregate Index.
Source: FactSet, Morgan Stanley Wealth Management GIC as of Feb. 26, 2021
### Market Outlook – 2021 Capital Market Assumptions

Proprietary forecasting and continually refreshed assumptions across all horizons

#### 7 YEAR (STRATEGIC)

<table>
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<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>US Equities</td>
<td>4.7%</td>
<td>4.8%</td>
<td>4.0%</td>
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<tr>
<td>International Equities</td>
<td>6.1%</td>
<td>6.9%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Emerging Markets Equities</td>
<td>7.5%</td>
<td>7.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Core Fixed Income</td>
<td>1.5%</td>
<td>1.1%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Private Real Estate</td>
<td>7.4%</td>
<td>8.5%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>9.0%</td>
<td>9.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Private Credit</td>
<td>5.3%</td>
<td>7.2%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Equity Hedge Assets</td>
<td>4.2%</td>
<td>4.7%</td>
<td>4.6%</td>
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#### 20 YEAR (SECULAR)

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<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
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<td>8.8%</td>
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<td>6.8%</td>
</tr>
<tr>
<td>Equity Hedge Assets</td>
<td>5.5%</td>
<td>6.3%</td>
<td>6.2%</td>
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</tbody>
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Volatility

Note: See disclosures for additional information
Morgan Stanley Forecasts: April 1, 2021

S&P 500 Earnings Estimates

Morgan Stanley Consensus

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021E</th>
<th>2021E</th>
<th>2022E</th>
<th>2022E</th>
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<tr>
<td>$142</td>
<td></td>
<td>$175</td>
<td>$176</td>
<td>$193</td>
<td>$203</td>
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Note: 2021 consensus is as of April 1, 2021

MS & Co. S&P 500 Price Target: Year-End 2021

<table>
<thead>
<tr>
<th>LANDSCAPE</th>
<th>EARNINGS</th>
<th>PRICE/EARNINGS MULTIPLE</th>
<th>PRICE TARGET</th>
<th>UPSIDE/DOWNSIDE</th>
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<tbody>
<tr>
<td>Bull Case</td>
<td>$202</td>
<td>20.75</td>
<td>4,175</td>
<td>5.0%</td>
</tr>
<tr>
<td>Base Case</td>
<td>$193</td>
<td>20.25</td>
<td>3,900</td>
<td>-1.9%</td>
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<tr>
<td>Bear Case</td>
<td>$176</td>
<td>19.25</td>
<td>3,375</td>
<td>-15.1%</td>
</tr>
</tbody>
</table>

Current S&P 500 Price

4,020

Note: Price targets are based on estimated 2022 earnings.
Source: MS & Co. Research as of April 1, 2020

Morgan Stanley & Co. Forecasts (as of Feb 5, 2021)

<table>
<thead>
<tr>
<th>REAL GDP GROWTH (%)</th>
<th>10-YR GOVT. BOND YIELD (%)</th>
<th>HEADLINE INFLATION (%)</th>
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<tbody>
<tr>
<td>Global</td>
<td>-3.2</td>
<td>6.6</td>
</tr>
<tr>
<td>US</td>
<td>-3.5</td>
<td>7.3</td>
</tr>
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<td>Euro Zone</td>
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<td>4.0</td>
</tr>
<tr>
<td>UK</td>
<td>-9.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Japan</td>
<td>-4.8</td>
<td>2.7</td>
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<tr>
<td>Emerging Markets</td>
<td>-1.7</td>
<td>7.6</td>
</tr>
<tr>
<td>China</td>
<td>2.3</td>
<td>9.0</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley & Co. Research
Preview of Future Meeting Topics
Future Topics for Considerations

Planning Education and Strategic Topics for 2021

Manager Presentations on Strategies and Market Overview

Fee Analysis for Investment Strategies

Asset Allocation Study & Portfolio Assessment

Financial Education Topics
Important Disclosures
Disclosures

The performance data shown reflects past performance, which does not guarantee future results.

Investment return and principal will fluctuate so that an investor's shares when redeemed may be worth more or less than original cost. Please note, current performance may be higher or lower than the performance data shown. For up to date month-end performance information, please contact your Financial Advisor or visit the funds' company website.

Investors should carefully consider the fund's investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds' company website.

Past performance is no guarantee of future results.

Investing involves market risk, including possible loss of principal. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Small and mid-capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than those of larger, more established companies. Bond funds and bond holdings have the same interest rate, inflation and credit risks that are associated with the underlying bonds owned by the funds. The return of principal in bond funds, and in funds with significant bond holdings, is not guaranteed. International securities' prices may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets. Alternative investments, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor. Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk; and MLP interests in the real estate sector are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. Because of their narrow focus, MLPs maintain exposure to price volatility of commodities and/or underlying assets and tend to be more volatile than investments that diversify across many sectors and companies. MLPs are also subject to additional risks including: investors having limited control and rights to vote on matters affecting the MLP, limited access to capital, cash flow risk, lack of liquidity, dilution risk, conflict of interests, and limited call rights related to acquisitions.

Mortgage backed securities also involve prepayment risk, in that faster or slower prepayments than expected on underlying mortgage loans can dramatically alter the yield-to-maturity of a mortgage-backed security and prepayment risk includes the possibility that a fund may invest the proceeds at generally lower interest rates.

Tax managed funds may not meet their objective of being tax-efficient.

Real estate investments are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. High yield fixed income securities, also known as "junk bonds", are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Credit quality is a measure of a bond issuer's creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown are based on security rating as provided by Standard & Poor's, Moody's and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P and Fitch's classification (the equivalent of Aaa and C, respectively, by Moody(s)). Ratings of BBB or higher by S&P and Fitch (Baa or higher by
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Moody’s) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as “NR”.

“Alpha tilt strategies comprise a core holding of stocks that mimic a benchmark type index such as the S&P 500 to which additional securities are added to help tilt the fund toward potentially outperforming the market in an effort to enhance overall investment returns. Tilt strategies are subject to significant timing risk and could potentially expose investors to extended periods of underperformance.”

Custom Account Index: The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a clients investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups
https://www.invmetrics.com/style-peer-groups

Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Alternatives

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For most investment advisory clients, the program account will be charged an asset-based wrap fee every quarter ("the Fee"). In general, the Fee covers investment advisory services and reporting. In addition to the Fee, clients will pay the fees and expenses of any funds in which their account is invested. Fund fees and expenses are charged directly to the pool of assets the fund invests in and impact the valuations. Clients must understand that these fees and expenses are an additional cost and will not be included in the Fee amount in the account statements.

As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of $100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client’s portfolio at the end of the three year period would be approximately $115,762.50 without the fees and $107,372.63 with the fees.

Please see the applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at www.morganstanley.com/ADV or from your Financial Advisor/Private Wealth Advisor.

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The Global Investment Committee is a group of seasoned investment professionals who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend model portfolio weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

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Investing in the markets entails the risk of market volatility. The value of all types of investments, including stocks, mutual funds, exchange-traded funds (“ETFs”), closed-end funds, and unit investment trusts, may increase or decrease over varying time periods. To the extent the investments depicted herein represent international securities, you should be aware that there may be additional risks associated with international investing, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes, and differences in financial and accounting standards. These risks may be magnified in emerging markets and frontier markets. Small- and mid-capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. In addition, the securities of small- and mid-capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies. The value of fixed income securities will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Bonds are subject to interest rate risk, call risk, reinvestment risk, liquidity risk, and credit risk of the issuer. High yield bonds are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issuers. In the case of municipal bonds, income is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax. Treasury Inflation Protection Securities’ (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation. There is no guarantee that investors will receive par if TIPS are sold prior to maturity. The returns on a portfolio consisting primarily of environmental, social, and governance-aware investments (“ESG”) may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client’s account will be managed as described herein. Options and margin trading involve substantial risk and are not suitable for all investors. Besides the general investment risk of holding securities that may decline in value and the possible loss of principal invested, closed-end funds may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance and potential leverage. Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and once issued, shares of closed-end funds are sold in the open market through a stock exchange. NAV is total assets less...
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Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not suitable for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other
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It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper. Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, “blow ups,” or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial “lift” or upwards bias.

Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns. An investment in an exchange-traded fund involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a target date portfolio is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio is geared to investors who will retire and/or require income at an approximate year. The portfolio is managed to meet the investor’s goals by the pre-established year or “target date.” A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. Managed futures investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are suitable only for the risk capital portion of an investor’s portfolio. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversified portfolio. Managed Futures are complex and not appropriate for all investors. Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy.

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Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract. If you are investing in a variable annuity through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection. Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk. Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund’s value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV, and, as a result, the MLP fund’s after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of private real estate include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a mortgage-backed security. Principal materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley’s standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio’s annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients’ returns. The impact of fees and/or expenses can be material.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of private real estate include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a mortgage-backed security. Principal materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley’s standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio’s annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients’ returns. The impact of fees and/or expenses can be material.
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Prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Asset-backed securities generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision. Credit ratings are subject to change. Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. The majority of $25 and $1000 par preferred securities are “callable” meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per $25 or $1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price. The initial interest rate on a floating-rate security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk. The market value of convertible bonds and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield. Some $25 or $1000 par preferred securities are QDI (qualified Dividend Income) eligible.

Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional ‘dividend paying’ perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Companies paying dividends can reduce or cut payouts at any time.

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Glossary of Terms

**Active Contribution Return:** The gain or loss percentage of an investment relative to the performance of the investment benchmark.

**Active Exposure:** The percentage difference in weight of the portfolio compared to its policy benchmark.

**Active Return:** Arithmetic difference between the manager’s return and the benchmark’s return over a specified time period.

**Actual Correlation:** A measure of the correlation (linear dependence) between two variables X and Y, with a value between +1 and -1 inclusive. This is also referred to as coefficient of correlation.

**Alpha:** A measure of a portfolio's time weighted return in excess of the market's return, both adjusted for risk. A positive alpha indicates that the portfolio outperformed the market on a risk-adjusted basis, and a negative alpha indicates the portfolio did worse than the market.

**Best Quarter:** The highest quarterly return for a certain time period.

**Beta:** A measure of the sensitivity of a portfolio’s time weighted return (net of fees) against that of the market. A beta greater than 1.00 indicates volatility greater than the market.

**Consistency:** The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

**Core:** Refers to an investment strategy mandate that is blend of growth and value styles without a pronounced tilt toward either style.

**Cumulative Selection Return (Cumulative Return):** Cumulative investment performance over a specified period of time.

**Distribution Rate:** The most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and/or return of capital.

**Down Market Capture:** The ratio of average portfolio returns over the benchmark during periods of negative benchmark return. Lower values indicate better product performance.

**Downside Risk:** A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the value, the more risk the product has.

**Downside Semi Deviation:** A statistical calculation that measures the volatility of returns below a minimum acceptable return. This return measure isolates the negative portion of volatility: the larger the number, the greater the volatility.

**Drawdown:** A drawdown is the peak-to-trough decline during a specific period of an investment, fund or commodity.

**Excess over Benchmark:** The percentage gain or loss of an investment relative to the investment’s benchmark.

**Excess Return:** Arithmetic difference between the manager’s return and the risk-free return over a specified time period.

**Growth:** A diversified investment strategy which includes investment selections that have capital appreciation as the primary goal, with little or no dividend payouts. These strategies can include reinvestment in expansion, acquisitions, and/or research and development opportunities.

**Growth of Dollar:** The aggregate amount an investment has gained or lost over a certain time period, also referred to as Cumulative Return, stated in terms of the amount to which an initial dollar investment would have grown over the given time period.

**Investment Decision Process (IDP):** A model for structuring the investment process and implementing the correct attribution methodologies. The IDP includes every decision made concerning the division of the assets under management over the various asset categories. To analyze each decision's contribution to the total return, a modeling approach must measure the marginal value of every individual decision. In this respect, the hierarchy of the decisions becomes very important. We therefore use the IDP model, which serves as a proper foundation for registering the decisions and relating them to each other.

**Information Ratio:** Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.

**Jensen's Alpha:** The Jensen's alpha measure is a risk-adjusted performance measure that represents the average return on a portfolio or investment above or below that predicted by the capital asset pricing model (CAPM) given the portfolio's or investment's beta and the average market return. This metric is also commonly referred to as alpha.

**Kurtosis:** A statistical measure that is used to describe the distribution, or skewness, of observed data around the mean, sometimes referred to as the volatility of volatility.

**Maximum Drawdown:** The drawdown is defined as the percent retrenchment from a fund's peak to the fund's trough value. It is in effect from the time the fund's retrenchment begins until a new fund high is reached. The maximum drawdown encompasses both the period from the fund's peak to the fund's valley (length), and the time from the fund's valley to a new fund high (recovery). It measures the largest percentage drawdown that has occurred in any fund's data record.

**Modern Portfolio Theory (MPT):** An investment analysis theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward.

**Mutual Fund (MF):** An investment program funded by shareholders that trade in diversified holdings and is professionally managed.

**Peer Group:** A combination of funds that share the same investment style combined as a group for comparison purposes.

**Peer/ Plan Sponsor Universe:** A combination of asset pools of total plan investments by specific sponsor and plan types for comparison purposes.

**Performance Ineligible Assets:** Performance returns are not calculated for certain assets because accurate valuations and transaction data for these assets are not processed or maintained by us. Common examples of
these include life insurance, some annuities and some assets held externally.

**Performance Statistics:** A generic term for various measures of investment performance measurement terms.

**Portfolio Characteristics:** A generic term for various measures of investment portfolio characteristics.

**Preferred Return:** A term used in the private equity (PE) world, and also referred to as a “Hurdle Rate.” It refers to the threshold return that the limited partners of a private equity fund must receive, prior to the PE firm receiving its carried interest or “carry.”

**Ratio of Cumulative Wealth:** A defined ratio of the Cumulative Return of the portfolio divided by the Cumulative Return of the benchmark for a certain time period.

**Regression Based Analysis:** A statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables

**Residual Correlation:** Within returns-based style analysis, residual correlation refers to the portion of a strategy’s return pattern that cannot be explained by its correlation to the asset-class benchmarks to which it is being compared.

**Return:** A rate of investment performance for the specified period.

**Rolling Percentile Ranking:** A measure of an investment portfolio’s ranking versus a peer group for a specific rolling time period (i.e. Last 3 Years, Last 5 years, etc.).

**R-Squared:** The percentage of a portfolio’s performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio’s performance to the appropriate benchmark.

**SA/CF (Separate Account/Commingled Fund):** Represents an acronym for Separate Account and Commingled Fund investment vehicles.

**Sector Benchmark:** A market index that serves as a proxy for a sector within an asset class.

**Sharpe Ratio:** Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product’s historical risk-adjusted performance results in.

**Standard Deviation:** A statistical measure of the range of a portfolio’s performance; the variability of a return around its average return over a specified time period.

**Total Fund Benchmark:** The policy benchmark for a complete asset pool that could consist of multiple investment mandates.

**Total Fund Composite:** The aggregate of multiple portfolios within an asset pool or household.

**Tracking Error:** A measure of standard deviation for a portfolio’s investment performance, relative to the performance of an appropriate market benchmark.

**Treynor Ratio:** A ratio that divides the excess return (above the risk free rate) by the portfolio’s beta to arrive at a unified measure of risk adjusted return. It is generally used to rank portfolios, funds and benchmarks. A higher ratio is indicative of higher returns per unit of market risk. This measurement can help determine if the portfolio is reaching its goal of increasing returns while managing market risk.

**Up Market Capture:** The ratio of average portfolio returns over the benchmark during periods of positive benchmark return. Higher values indicate better product performance.

**Upside Semi Deviation:** A statistical calculation that measures the volatility of returns above an acceptable return. This return measure isolates the positive portion of volatility: the larger the number, the greater the volatility.

**Value:** A diversified investment strategy that includes investment selections which tend to trade at a lower price relative to its dividends, earnings, and sales. Common attributes are stocks that include high dividend, low price-to-book ratio, and/or low price-to-earnings ratio.

**Worst Quarter:** The lowest rolling quarterly return for a certain time period.

**Information Disclosures**

*The performance data shown reflects past performance, which does not guarantee future results.*

Investment return and principal will fluctuate so that an investor’s shares when redeemed may be worth more or less than original cost. Please note, current performance may be higher or lower than the performance data shown. For up to date month-end performance information, please contact your Financial Advisor or visit the funds’ company website.

Investors should carefully consider the fund’s investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds’ company website.

Past performance is no guarantee of future results.

Investing involves market risk, including possible loss of principal. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Small and mid-capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than those of larger, more established companies. Bond funds and bond holdings have the same interest rate, inflation and credit risks that are associated with the underlying bonds owned by the funds. The return of principal in bond funds, and in funds with significant bond holdings, is not guaranteed. International securities’ prices may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets. Alternative investments, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor. Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate

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Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Alternatives

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Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client’s investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups:

https://www.invmetrics.com/style-peer-groups
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Alternative Investments are illiquid and may not be valued daily. The estimated valuation provided will be as of the most recent date available and will be included in summaries of your assets. Such valuation may not be the most recent provided by the fund in which you are invested. No representation is made that the valuation is a market value or that the interest could be liquidated at this value. We are not required to take any action with respect to your investment unless valid instructions are received from you in a timely manner. Some positions reflected herein may not represent interests in the fund, but rather redemption proceeds withheld by the issuer pending final valuations which are not subject to the investment performance of the fund and may or may not accrue interest for the length of the withholding.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to:• Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices;• Lack of liquidity in that there may be no secondary market for a fund;• Volatility of returns;• Restrictions on transferring interests in a fund;• Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;• Absence of information regarding valuations and pricing;• Complex tax structures and delays in tax reporting;• Less regulation and higher fees than mutual funds; and• Risks associated with the operations, personnel, and processes of the manager. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management’s interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund.

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Past performance is no guarantee of future results. Actual results may vary. Diversification does not assure a profit or protect against loss in a declining market.

Any performance or related information presented has not been adjusted to reflect the impact of the additional fees paid to a placement agent by an investor (for Morgan Stanley placement clients, a one-time upfront Placement Fee of up to 3%, and for Morgan Stanley investment advisory clients, an annual advisory fee of up to 2.5%), which would result in a substantial reduction in the returns if such fees were incorporated.

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As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of $100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client’s portfolio at the end of the three year period would be approximately $115,762.50 without the fees and $107,372.63 with the fees.

Please see the applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at www.morganstanley.com/ADV <http://www.morganstanley.com/ADV> or from your Financial Advisor/Private Wealth Advisor.

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2021 Capital Market Assumptions

We represented ultrashort fixed income represented by 90-day T-bills, fixed income & preferreds by Bloomberg Barclays US Aggregate Index, short-term fixed income by Bloomberg Barclays Aggregate 1-3 Year Index, US taxable fixed income by Bloomberg Barclays US Aggregate Index, international fixed income by Barclays Global Aggregate Non-USD (Hedged) Index, inflation-linked securities by Bloomberg Barclays Global Inflation-Linked Index, high yield fixed income by Barclays Global High Yield Corporate Index and emerging market fixed income by JP Morgan EMBI Global Index. All other are based on proprietary models. Strategic annualized return and volatility estimates are based on a seven-year time horizon. Secular annualized return and volatility estimates are based on a 20-year time horizon. Annualized volatility estimates are based on data with longest available history through Feb. 26, 2021. Estimates are for illustrative purposes only, are based on proprietary models and are not indicative of the future performance of any specific investment, index or asset class. Actual performance may be more or less than the estimates shown in this table. Estimates of future performance are based on assumptions that may not be realized. Investor appropriateness: Morgan Stanley Wealth Management recommends that investors independently evaluate each asset class, investment style, issuer, security, instrument or strategy discussed. Legal, accounting and tax restrictions, transaction costs and changes to any assumptions may significantly affect the economics and results of any investment. Investors should consult their own tax, legal or other advisors to determine appropriateness for their specific circumstances. Investments in private funds (including hedge funds, managed futures funds and private equity funds) are speculative and include a high degree of risk.