Model Portfolio Updates

Last Updated: 1/12/2021

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Model Portfolios

Model Name: Kick Start	
Date:	March 20, 2019
Type of Change:	New Model Introduction
Description and Rationale: We have added a new model designed specifically for smaller accounts. The Kick Start model consists of two diversified ETFs which trade with no transaction fees (NTF) at TD Ameritrade. This streamlined approach will allow more of your clients' accounts to be invested, reducing cash drag, and is ideally suited for accounts under $5,000, especially if receiving regular contributions. Note that the equity portion of the portfolio is globally diversified and uses value-, quality-, and momentum factors and is not market-cap weighted. This may result in country- and regional allocations which deviate from global market cap weights.	

Model Name: Tracker	
Date:	July 31, 2020
Type of Change:	New Model Introduction
Description and Rationale: We introduced this model portfolio because we recognize that an investment strategy is only as good as an investor's ability to stick with it. Our goal in managing our menu of model portfolios is to provide a variety of strategies to fit the unique business models of XYPN members while helping you determine which models match your clients' objectives and behaviors. Compared to the CORE model portfolio, this model will have less non-US equity, no value tilt, and only a slight small company overweight versus the overall US market (no small cap overweight in non-US stocks). It will still provide non-US diversification and a meaningful allocation to global REITs. We utilize best-in-breed ETFs to execute this strategy and the bond portfolio will be identical to the CORE portfolio's fixed income approach.	
Date:	January 19, 2021
Type of Change:	Fund Change
Description and Rationale: Allocate 10% of fixed income portfolios to iShares 0-5 YR TIPS (Ticker: STIP) from iShares ST Corporate (Ticker: IGSB) While there is much debate whether inflation is on our horizon, we believe that the possibility of a return of inflation due in part to stimulative policy, the possibility of a global economic rebound, and the Fed's removal of its previous 2% inflation target give us reason to add protection to our portfolios, even if the probability is low. As such, we are shifting 10% of the fixed income models into Short Term TIPS, which we believe provide the desired inflation hedge with less interest rate risk (and volatility) than Intermediate-Term TIPS. We are making room for this allocation with a commensurate reduction in Short-Term Investment-Grade bond exposure (in primary models) and Short-Term Tax-Exempt Bond exposure (in tax-sensitive models). Please note that TIPS exposure in model allocations with 70% and 80% in fixed income will have an allocation to TIPS of 15% and 25% respectively	

Model Names: CORE	
Date:	March 20, 2019
Type of Change:	Fund Change

Description and Rationale:

XYIS investment committee continuously evaluates all model portfolios and their underlying components to ensure they are achieving their objectives. During a recent review of our bond managers we concluded that a change was appropriate. ***Specifically, we are replacing the Dreyfus/Standish Global Fixed Income Fund (DHGAX) with the PIMCO International Bond - US hedged (PFOAX) in both the Cost and Core models.*** The driver of this decision was finding the best fit within the fixed income asset class, rather than a critique of the Dreyfus fund, which has performed well during the holding period. Here are some additional details regarding this change:

1. Our preference is for purely non-US exposure rather than a fund which can, at times, heavily invest in US bonds, which are already represented in the portfolio.
2. PFOAX has slightly tighter risk controls, such as limits to emerging market and below-investment-grade debt.
3. PIMCO has a strong reputation and track record as a bond manager.

Date:	December 12, 2019
Type of Change:	Fund Change

Description and Rationale:

Changes to the Core model were proposed in response to the elimination of transaction fees on the TD platform.

1. Replace IWN with SLYV due to lower all-in cost (expense ratio plus spread) of 20 bps to 28 bps and our preference for S&P's construction methodology. Specifically on that note, we think S&P's use of a profitability overlay improves the investment merits over the portfolio; Russell's index methodology does not contain such a screen.
2. Replace RWO with REET due to all-in cost reduction (20 bps vs 66 bps) with very similar exposure.
3. Replace VWIUX and VMLUX (Vanguard's actively-managed muni funds) with MUB and SUB (iShares with similar exposure), respectively. Vanguard funds have $25 trade costs versus iShares' $0 and very similar exposure.
4. Switch from HLMOX (Harding Loevner Frontier Markets mutual fund) to FM (iShares Frontier Markets 100 ETF). With a nudge from the change to having no transaction fees, as well as the poor track record of Harding Loevner and active managers in general, the significant reduction in expense ratio (from 200 bps to 81 bps), we believe moving to the ETF is appropriate.

Date:	January 19, 2021

Type of Change:	Fund Change

Description and Rationale:

Removal of Removal of iShares MSCI Frontier 100 (Ticker: FM) and shifting allocation to Vanguard FTSE Emerging Markets (Ticker: VWO).

This decision was made in light of increasing challenges accessing the frontier markets category with low-cost and efficiently-trading vehicles. Any previous allocation to frontier markets was or will be added to the emerging markets allocation in the respective models. This brings our emerging markets exposure to 15% in this model.

Allocate 10% of fixed income portfolios to iShares 0-5 YR TIPS (Ticker: STIP) from iShares ST Corporate (Ticker: IGSB)

While there is much debate whether inflation is on our horizon, we believe that the possibility of a return of inflation due in part to stimulative policy, the possibility of a global economic rebound, and the Fed's removal of its previous 2% inflation target give us reason to add protection to our portfolios, even if the probability is low. As such, we are shifting 10% of the fixed income models into Short Term TIPS, which we believe provide the desired inflation hedge with less interest rate risk (and volatility) than Intermediate-Term TIPS. We are making room for this allocation with a commensurate reduction in Short-Term Investment-Grade bond exposure (in primary models) and Short-Term Tax-Exempt Bond exposure (in tax-sensitive models). Please note that TIPS exposure in model allocations with 70% and 80% in fixed income will have an allocation to TIPS of 15% and 25% respectively

Model Name: CORE with DFA	
Date:	August 12, 2019
Type of Change:	Fund Changes

Description and Rationale:

During a recent review of our Core Non-US positions, we determined the following two changes were warranted:

1. We will be removing VEU (Vanguard FTSE All-World ETF) from the Core with DFA model, replacing it with VEA (Vanguard FTSE Developed Markets ETF). The rationale here is two-fold. It will bring emerging markets exposure in the model in line with our other models, and will lower the overall cost of the portfolio, as VEA's expense ratio is a little lower than VEU, at 5 bps versus 9 bps.
2. Similarly, we will be removing DTMIX (DFA Tax-Managed International Value Portfolio) from the Tax-Sensitive version of the Core with DFA model, and replacing it with VEA (Vanguard FTSE Developed Markets ETF). We determined that DTMIX was much more value-tilted than originally anticipated, as our preference is for a core developed markets holding in this position, and the cost advantage of switching is significant. DTMIX expense ratio is 53 bps versus VEA's 5 bps. VEA has historically been as tax-efficient as DTMIX and we have no reason to expect it will not be going forward.

Date:	December 12, 2019
Type of Change:	Fund Changes

Description and Rationale:

Changes to the Core with DFA model were proposed in response to the elimination of transaction fees on the TD platform.

1. Switch from HLMOX (Harding Loevner Frontier Markets mutual fund) to FM (iShares Frontier Markets 100 ETF). With a nudge from the change to having no transaction fees, as well as the poor track record of Harding Loevner and active managers in general, the significant reduction in expense ratio (from 200 bps to 81 bps), we believe moving to the ETF is appropriate.
2. Switch from DFEMX (DFA Emerging Markets Large Cap) to DFCEX (DFA Emerging Markets Core) due to the latter's added emphasis on small caps and the value tilt consistent with our overall philosophy and our approach in US and Developed ex-US categories. This recommendation is made based on the analysis provided by Dimensional during a due diligence call on 10/30/2019.

Date:	July 22, 2020
Type of Change:	Fund Changes

Description and Rationale: The following changes are made to the fixed income portion of the model: 1. Replace DFIHX with VCSH. The new holding better reflects a short-term bond allocation, which we define as having maturities between 1-5 years. DFIHX is more accurately described as an ultra-short term fund. This change also provides some cost savings with a lower expense ratio of 0.05% vs. 0.17% with DFIHX. 2. Replace DFGBX with PFORX. DFA Global 5-Year (DFGBX) is too short-term focused, so we are replacing it with PIMCO International Bond (PFORX) in the Core with DFA model. While the expense ratio of PFORX is higher at 0.55% vs. 0.26% for DFGBX, we feel the strategy benefits outweigh the cost. DFGBX will remain in the All-DFA model, as options are limited among DFA funds and we still believe this fund is the best available choice.	
Date:	January 19, 2021
Type of Change:	Fund Change
Description and Rationale: Removal of iShares MSCI Frontier 100 (Ticker: FM) and shifting allocation to DFA Emerging Markets Core (Ticker: DFCEX). This decision was made in light of increasing challenges accessing the frontier markets category with low-cost and efficiently-trading vehicles. Any previous allocation to frontier markets was or will be added to the emerging markets allocation in the respective models. This brings our emerging markets exposure to 15% in this model. Allocate 10% of fixed income portfolios to Vanguard ST Inflation Protection Index (Ticker: VTAPX) from Vanguard ST Corporate Bond (Ticker: VCSH) While there is much debate whether inflation is on our horizon, we believe that the possibility of a return of inflation due in part to stimulative policy, the possibility of a global economic rebound, and the Fed's removal of its previous 2% inflation target give us reason to add protection to our portfolios, even if the probability is low. As such, we are shifting 10% of the fixed income models into Short Term TIPS, which we believe provide the desired inflation hedge with less interest rate risk (and volatility) than Intermediate-Term TIPS. We are making room for this allocation with a commensurate reduction in Short-Term Investment-Grade bond exposure (in primary models) and Short-Term Tax-Exempt Bond exposure (in tax-sensitive models). Please note that TIPS exposure in model allocations with 70% and 80% in fixed income will have an allocation to TIPS of 15% and 25% respectively	

Model Name: All DFA	
Date:	December 12, 2019
Type of Change:	Fund Changes
Description and Rationale: Switch from DFEMX (DFA Emerging Markets Large Cap) to DFCEX (DFA Emerging Markets Core) due to the latter's added emphasis on small caps and the value tilt consistent with our overall philosophy and our approach in US and Developed ex-US categories. This recommendation is made based on the analysis provided by Dimensional during a due diligence call on 10/30/2019.	
Date:	July 22, 2020
Type of Change:	Fund Changes
Description and Rationale: Replace DFIHX with DFEQX. Similar to the change to VCSH, this new holding better reflects a short-term bond allocation with maturities between 1-5 years within the DFA family of funds. This does however come with a slight expense increase from 0.17% to 0.22%.	
Date:	January 19, 2021
Type of Change:	Fund Change
Description and Rationale: Allocate 10% of fixed income portfolios to DFA Short Duration Real Return (Ticker: DFAIX) from DFA ST Extended Quality (Ticker: DFEQX) While there is much debate whether inflation is on our horizon, we believe that the possibility of a return of inflation due in part to stimulative policy, the possibility of a global economic rebound, and the Fed's removal of its previous 2% inflation target give us reason to add protection to our portfolios, even if the probability is low. As such, we are shifting 10% of the fixed income models into Short Term TIPS, which we believe provide the desired inflation hedge with less interest rate risk (and volatility) than Intermediate-Term TIPS. We are making room for this allocation with a commensurate reduction in Short-Term Investment-Grade bond exposure (in primary models) and Short-Term Tax-Exempt Bond exposure (in tax-sensitive models). Please note that TIPS exposure in model allocations with 70% and 80% in fixed income will have an allocation to TIPS of 15% and 25% respectively	

Model Name: Cause	
Date:	August 5, 2019
Type of Change:	Fund Change and Asset Allocation

Description and Rationale:

The recent expansion of TD Ameritrade's No Transaction Fee ETF list offered an opportunity to review the Cause NTF model portfolio. Previously, only a handful of higher-cost, actively-managed mutual funds were available for us to build a prudent portfolio representative of our investment philosophy. While the current Cause NTF portfolio exhibits attractive ESG attributes, evidenced by the MSCI ESG Quality score, it does so at a significant cost; namely about a 55 bps higher annual expense ratio versus the XYIS Core model (as a baseline).

Among the ETFs added to the TD NTF list in June were a number of iShares and Nuveen ESG ETFs. Upon comparing their methodology, we are comfortable with both, but generally favor Nuveen's approach.

There are four pillars of Nuveen's optimization process: ESG Quality Score (mentioned above) in addition to Controversy Score, Controversial Business Involvement, and a Low Carbon criteria. iShares does not utilize a low carbon criteria in their optimization process. As a result, they have a fairly high carbon intensity compared to Nuveen's ETFs, holding names like Exxon Mobil, Chevron and Conoco Phillips, which are screened out of Nuveen. iShares does not sector-neutralize – where Nuveen includes companies that are in the top 50% of ESG scores for their given sector, iShares optimizes on ESG score.

After multiple rounds of analysis and discussion, we decided on the following changes to the Equity portion of this model, which will reduce its expense ratio from 84 bps to 66 bps.

1. Reduce the equity allocation in the TIAA-CREF Social Choice Fund (TICRX) from 30% to 10%. Replace it with 10% Nuveen ESG Large Cap Growth (NULG) and 10% Nuveen Large Cap Value (NULV). This move will raise the ESG score of the US Core category from 7.2 to 7.5 and lower the expense ratio from 45 bps to 38 bps.
2. Eliminate the Calvert Small Cap fund (CCVAX). Replace it with Nuveen ESG Small Cap (NUSC). ESG score for US Small Cap segment will improve from 3.9 to 6.0 and expenses will drop from 121 bps to 40 bps.
3. We also evaluated new ETFs on the list in the Developed Non-US and Emerging Market equity space, and on the fixed income side, but the tradability of these ETFs are not conducive to incorporating them at this time. We will look at these again in the next 12 months.

Date:	January 19, 2021
Type of Change:	Fund Change

Description and Rationale:

Allocate 10% of fixed income portfolios to iShares 0-5 YR TIPS (Ticker: STIP) from Calvert Short

Duration Income (Ticker: CSDAX)

While there is much debate whether inflation is on our horizon, we believe that the possibility of a return of inflation due in part to stimulative policy, the possibility of a global economic rebound, and the Fed's removal of its previous 2% inflation target give us reason to add protection to our portfolios, even if the probability is low. As such, we are shifting 10% of the fixed income models into Short Term TIPS, which we believe provide the desired inflation hedge with less interest rate risk (and volatility) than Intermediate-Term TIPS. We are making room for this allocation with a commensurate reduction in Short-Term Investment-Grade bond exposure (in primary models) and Short-Term Tax-Exempt Bond exposure (in tax-sensitive models). Please note that TIPS exposure in model allocations with 70% and 80% in fixed income will have an allocation to TIPS of 15% and 25% respectively

<table>
<tr><th colspan="2">Model Name: Cost NTF (formerly Core NTF)</th></tr>
<tr><td>Date:</td><td>March 20, 2019</td></tr>
<tr><td>Type of Change:</td><td>Miscellaneous</td></tr>
<tr><td colspan="2">Description and Rationale:

Core NTF is renamed to Cost NTF.

While this is not a material change to the portfolio, we believe this name change better reflects the purpose and reason behind this portfolio. It still retains “core” objectives - focus on reducing cost and making it as accessible as possible to investors. All funds are NTF (or no transaction fees) and there is a conscious effort to limit the expense ratios in the investments utilized.</td></tr>
<tr><td>Date:</td><td>March 20, 2019</td></tr>
<tr><td>Type of Change:</td><td>Fund Change</td></tr>
<tr><td colspan="2">Description and Rationale:

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3. PIMCO has a strong reputation and track record as a bond manager.</td></tr>
<tr><td>Date:</td><td>December 12, 2019</td></tr>
<tr><td>Type of Change:</td><td>Discontinue Model</td></tr>
<tr><td colspan="2">Description and Rationale:

Due to the elimination of commissions on TD’s platform, the Cost NTF model is no longer needed for accounts with lower balances where trading costs were a barrier to full investment in the model. Current accounts invested in this model will be merged into the Core model. This will result in FM being added to most accounts.</td></tr>
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