Model Portfolio Updates

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An investor should consider a portfolio's investment objectives, risks, charges and expenses carefully before investing. The underlying funds' prospectus contain this and other important information. Please read any applicable prospectus carefully before investing.

Model Portfolios

Kick Start
Tracker
CORE
CORE with DFA
All DFA
Cause

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.	
Date:	April 15, 2022
Type of Change:	Fund Change
Description and Rationale: Certain T. Rowe Price mutual funds, including those in our Kick Start model, have transaction costs at Charles Schwab. As a result of the pending merger of Charles Schwab and TD Ameritrade—and with the assumption that TD will assume the same cost structure—we are switching to the following Schwab Index Products, which trade with no transaction fees and provide very similar exposure: SWTSX – Schwab Total Stock Market Index Fund SWISX – Schwab International Index Fund	

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 **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

Date:	April 1, 2022
Type of Change:	Fund Change

Description and Rationale:

We had previously been using the **Vanguard FTSE All-World ex-US Small Cap ETF (VSS).** Our preference is to have an international small cap *value* strategy in this part of the portfolio, which we express using transaction-fee mutual funds in other models. Over the past few years, we have monitored the **Avantis International Small Cap Value ETF (AVDV)**, as well as its manager, Avantis Investors, and have determined this ETF to be more aligned with our desired exposures.

Also in the Core model, we had previously been using the **Vanguard FTSE Emerging Markets ETF (VWO)**. Our preference is to have a tilt toward value and small-cap in this part of the portfolio, which we express using transaction-fee mutual funds in other models. We have determined that the **Avantis Emerging Markets Equity ETF (AVEM)** is more aligned with our desired exposures.

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 replacing **VEU (Vanguard FTSE All-World ETF)** 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 replacing DTMIX (DFA Tax-Managed International Value Portfolio) in the Tax-Sensitive version with **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.

Date:	April 1, 2022
Type of Change:	Fund Change
Description and Rationale: Replacing **Vanguard Short-Term Inflation-Protected Securities Index Fund Admiral Shares (VTAPX)** with its ETF share class (**VTIP**). Vanguard's unique share class structure means that there will be no tax-consequences for the conversion, and since it is not a transaction, there will be no transaction fee. The switch will result in a slight reduction in expense ratio (from 6 to 5 basis points), but most importantly will trade with no transaction fees going forward, whereas the mutual fund carried a $25 trade cost at TD Ameritrade.	
Date:	December 1, 2022
Type of Change:	Fund Change
Description and Rationale: We have recently approved DFA Dimensional US Small Cap Value ETF (Ticker: DFSV) for the small value asset class and will be using it to replace DFA U.S. Small Cap Value Portfolio (Ticker: DFSVX) in the All DFA and Core with DFA models. Though the underlying small and value exposure is similar between the two funds, we intend to gradually replace mutual funds with ETFs as the opportunities arise due to trading costs associated with the mutual funds and the expected enhanced tax-efficiency of the ETF structure. In addition, DFSVX is slated for a distribution in December that is greater than 5% of NAV (record date of 12/13/2022).	

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	

Date:	October 1, 2022
Type of Change:	Fund Change

Description and Rationale:

Replacing **DFA Intermediate-Term Extended Quality (DFTEX)** with **DFA Investment Grade (DFAPX)**. The latter is more in keeping with our preferred duration exposure (short-to-intermediate), and is more diversified among corporate and government securities than the current holding.

Replacing **DFA Five-Year Global (DFGBX)** with **DFA Global Core Plus (DGCFX)**. DFGBX has proven to be more conservative at times. We believe that Global Core Plus will give us more of the broad-based intermediate-term exposure we seek, whereas DFGBX can be skewed toward shorter maturities and focused on government-related holdings.

Date:	December 1, 2022
Type of Change:	Fund Change

Description and Rationale:

We have recently approved DFA Dimensional US Small Cap Value ETF (Ticker: DFSV) for the small value asset class and will be using it to replace DFA U.S. Small Cap Value Portfolio (Ticker: DFSVX) in the All DFA and Core with DFA models.

Though the underlying small and value exposure is similar between the two funds, we intend to gradually replace mutual funds with ETFs as the opportunities arise due to trading costs associated with the mutual funds and the expected enhanced tax-efficiency of the ETF structure. In addition, DFSVX is slated for a distribution in December that is greater than 5% of NAV (record date of 12/13/2022).

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

Date:	May 27, 2021
Type of Change:	Fund Change

Description and Rationale:

With an expanded pool of products to choose from, especially since TD Ameritrade (and, importantly given the impending merger, Schwab) now allow all ETFs to trade commission-free, we had an opportunity to move away from some of the more expensive holdings in the model. In particular, the iShares lineup of ESG ETFs afforded us the opportunity to apply consistent ESG screening mechanisms across multiple categories, as well as allow further diversification into areas like Emerging Markets stocks and global bonds.

When combined with the opportunity to reduce the internal expense ratios of the model portfolios, we felt like this was the time to make the changes. Rest assured that the underlying characteristics and ESG credentials of the models will not change much, despite what looks like a lot of substitutions. In fact, the new portfolios will be in even closer alignment with the investment characteristics we prefer than before.

Equity Model (this was for the Tax-Sensitive version as well):

- **Removed** – PAX MSCI EAFE ESG Leaders Index (74 basis points)
  - **Added** – iShares ESG Aware MSCI EAFE ETF (20 bps)
- **Removed** – Calvert International Opportunities (132 bps)
  - **Added** – iShares ESG Aware MSCI Emerging Markets ETF (25 bps)
- **Removed** – TIAA-CREF Social Choice Equity (45 bps)
  - This position will be distributed equally to two positions already in the portfolio, Nuveen ESG (US) Large Cap Growth and Value (35 bps each)

Fixed Income Model (this did not impact the Tax Sensitive version):

- **Removed**:
  - Parnassus Fixed Income (68 bps)
  - Praxis Impact Bond Fund (92 bps)

- Calvert Short Duration Income (76 bps)
- **Added**:
  - iShares ESG 1-5 Year USD Corporate Bond ETF (12bps)
  - iShares ESG USD Corporate Bond ETF (18 bps)
  - iShares Global Green Bond ETF (20 bps)

Date:	August 1, 2022
Type of Change:	Fund Change

Description and Rationale:

We have decided to begin using the **iShares ESG Advanced MSCI EAFE ETF (DMXF)** instead of **iShares ESG Aware MSCI EAFE ETF (ESGD)**. DMXF has a more stringent implementation of ESG screens more in line with the Nuveen ETFs we use on the domestic equity side. When we originally constructed the Cause models, the iShares Advanced series were small products with a short track record, but we are now comfortable with their size and liquidity.

We also decided to begin using the **Vanguard ESG US Corporate Bond ETF (VCEB)** instead of the **iShares ESG Aware USD Corporate Bond ETF (SUSC)**. Both products track the same index, but the Vanguard ETF's expense ratio is 6 basis cheaper, at 12 bps.

Model Name: Cost NTF (formerly Core NTF)	
Date:	March 20, 2019
Type of Change:	Miscellaneous
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.	
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:	Discontinue Model
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.	