# Q&A: Recent Rebalancing of New Frontier Portfolios and Investing in Extreme Volatility

March 23, 2020

*On March 23, 2020, New Frontier hosted a live webinar in which Dr. Richard Michaud, President and Chief Executive Officer, and Robert Michaud, Chief Investment Officer, discussed investing in historic market volatility, as well as the recent trades of New Frontier's Standard and Tax-Sensitive Global Multi-Asset ETF investment strategies, which occurred on March 17 and March 20, respectively.[1] This interview has been excerpted from the call. Responses have been edited for length and clarity.*

**Were any new ETFs introduced into the portfolios as part of the rebalance?**

*Robert Michaud (RM):*

New Frontier did not introduce any new ETFs into the portfolios as part of the rebalance. New Frontier implements the portfolios with highly liquid ETFs, and we continue to invest in the ETFs we have been using. We have performed extensive due diligence on these ETFs, and are comfortable with their liquidity even during this period. We do have a watchlist of interesting new ETFs that we consider substituting or adding to the portfolios on a periodic basis, and there may have been one of those in the queue. But during a time like this you want to be prudent and conservative, so we did not want to introduce any new ETFs into the portfolios.

**Do you change targets for rebalancing or are they kept similar?**

*Richard Michaud (DM):*

We optimize directly to the stock/bond ratios that we maintain and always rebalance back to the target risk as defined by the stock/bond ratio of the portfolio- be that 20/80, 40/60, 60/40, and so on. Our goal is to build optimal portfolios relative to long-term risk objectives. The one thing I find that's pretty reliable, and there's not much evidence in finance that really is very reliable, has to do with the stock/bond ratio as a good measure of long-term systematic risk. Investors can use the stock/bond ratio to slide up a curve for time periods when they would like to take more risk. On the other hand, in time periods where there's an awful lot of uncertainty,

[1] The New Frontier Multi-Asset Income Portfolios were also rebalanced on March 26, 2020.

including unforecastable risk, investors may slide down the efficient frontier and invest in a less risky portfolio. Investing in a lower risk optimized portfolio on an efficient frontier provides a way for people to reduce risk without sacrificing the optimality of the portfolios that they are investing in.

*RM:*

Keep in mind, when we rebalance the portfolio back to the risk targets, the allocations within those equity and fixed income buckets across all asset classes have been updated and are different than they were before. It's not just price movements, it's also new information resulting in new models that we anticipate to be more efficient going forward in this market environment.

**Did the asset allocation change in conjunction with the most recent rebalance?**

*RM:*

There are two components of any rebalance- the first is driven by price changes of the individual ETFs, and the second comes from new structural information about the updated risk and return relationships of all of the asset classes. This rebalance certainly had a lot of both of those things going on. If one is accustomed to strategic managers who have had the same model for the last decade, this is not that situation. This rebalance was not merely rebalancing back to last year's model. If it had been just rebalancing back to last year's model, then we might not have done the trade. What really made the rebalance important was that the risk and return characteristics of all of the asset classes globally have changed dramatically in the last month, and consequently we needed to change the model as well. The model needed to be adjusted for different correlation relationships, different risks of individual asset classes that we now understand to be riskier, and expect to be riskier going forward. Also, China is an example of a market that had a lot more volatility than any other equity market but now maybe doesn't, because they're affected by this risk in a different way than we are in the U.S.

**Can you share more details of the rebalance and what the changes to the portfolios looked like? Were there changes in credit and duration? What other shifts were implemented?**

*RM:*

I'd like to be able to give a really simple answer but unfortunately, it's a bit complex because the answer is different for a conservative portfolio versus an aggressive portfolio. As you know, we optimize the portfolio as a whole, and there are additional considerations within the stock and the bond components individually.

The 20/80 stock/bond portfolio is designed to have not just more bonds, but be a more conservative portfolio in total, so there you may see a shift towards domestic away from international. The one surprising exception there is China- for the first time there's a small allocation to China in a conservative portfolio. It's a very small allocation, but this is actually helping diversify the portfolio during a time like this. The most obvious changes are on the fixed income side, because of the decline of yields and the increase in credit spreads. And so you see, since credit spreads are so high, is that the optimization process wants to take a bit more credit risk which is offset by a bit less risk in equities which are highly correlated to it.

**How do you consider tax impacts in rebalancing and trading decisions?**

*RM:*

Taxes are obviously a big consideration in the Tax-Sensitive portfolios. Normally, we would be very careful about making a rebalance to our Tax-Sensitive portfolios only a month and a half after the previous rebalance, because of the risk of short-term gains. In this case, we were able to make sure that our trades did not incur any meaningful short-term gains, and that any short-term gains incurred would be more than offset by the short-term losses in the portfolio. From the perspective of taxable investors, you never like it when the portfolio goes down, but there will at least be some likely tax losses that would be part of this trade as well. That made it much more palatable to rebalance so shortly after the previous rebalance. In hindsight, the previous rebalance had very good timing, because it was pretty close to the market high before the crisis started.

**Were there any major differences in rebalancing between the Tax-Sensitive and the Standard (Tax-Exempt) portfolios?**

*RM:*

We did have to be more careful about the individual ETFs and what their prices were at the time they traded for the Tax-Sensitive portfolios. We considered the range of points at which investors would have bought into those models, and we tried to make sure that any gains would either be long-term gains, or short-term losses. There’s no way we can control the timing of every individual investor’s cash flows, but we did look across a wide range of entry points to the portfolios to make sure that virtually all investors in the portfolio would have a good tax experience. Partially as a result of this, the turnover might be a bit lower for the Tax-Sensitive portfolios.

**How do you determine rebalancing to optimality in a time of unforecastable risk?**

*DM:*

Frank Knight used to talk about three levels of uncertainty. The first- uncertainty associated with a roulette wheel- you don't know what's going to happen but you know what the probability is. The second- uncertainty associated with statistical estimation- like trying to estimate fire insurance policies or car insurance policies for an insurance company. But a third level of uncertainty has to do with essentially unknowable risk- what we call and really care a lot about is unforecastable risk. There's no formula here. There's no equation here. There's no model here. Who had a model of a global Coronavirus pandemic? Nobody did.

And so when you think in terms of unforecastable risk, it's really outside of any quantitative model, any Pareto model; it is outside of all the different things that the finance professors love to talk about. But real investing has to think in terms of unforecastable risk. The way we optimize our portfolio is to compute thousands of scenarios, then average them. The new optimized portfolio, while not perfect, is better than just relying on a single very imperfect scenario.

I don't know if I have any great wisdom to say about unforecastable risk beyond the fact that we do everything we can with our optimization process that has been patented, and tested by many people. It's the only one with a simulation test with out-of-sample performance that is better than the Markowitz solution. I don't think Harry Markowitz has ever said anything better about anybody besides us that way. We do what we can with the information that we have, and we try to be very, very conservative about not misusing information. But there is new information. There is a lot of new information, and the portfolios are designed to reflect that.

*RM:*

As far as unforecastable risks go, by their nature there's not too much you can do about it other than be well diversified. Diversified in every sense - so don't have concentrations in individual stocks, don't have concentration to individual geographic regions. This is an example of a time where there might be a risk in one geographical region that we cannot possibly forecast given the way the world evolves. But as long as the global economy eventually recovers, a globally effectively diversified portfolio will ultimately benefit investors. The single most important and most effective risk management strategy is effective diversification. It is essentially the only risk management strategy that is useful for unforecastable risk. That is what our goal is- truly effective diversification for all different levels of systematic risk.

**What are you currently doing about the massive discrepancies between market price and NAVs?**

*RM:*

One of the things that 2008 helped us understand is that a discrepancy between market price and NAV is often not a problem with the ETF, but rather a problem with the underlying bond market, and that the ETF is giving us insight into what's going on with these often illiquid bonds. If there's an active market of buyers and sellers, I'd argue as a financial economist that the ETF likely reflects the correct market price. That said, ETFs are not perfect. In cases where the underlying bonds are not liquid and the market makers are not able to sufficiently hedge the ETFs, you can't create liquidity and accuracy from nothing. And so I think there have been some cases of dislocation where bond ETFs may have a price issue.

To mitigate this, we're often trading like for like, so if we're trading one municipal bond ETF for another municipal bond ETF of a slightly different duration at the same time, then we can be more confident that the trade is likely to be a net even for the investor. Whether NAVs are higher, NAVs are low, or NAVs are very low, as they have been some of these times, we pay careful attention that the investor will be getting a similar experience on both sides of the trade, so that they won't be adversely impacted.

*This note was posted as an entry on New Frontier's investment blog on March 23, 2020. Read this entry and other posts at newfrontieradvisors.com/blog.*