The Tactical Model Report

a Retirement Collaborative LLC Report

Dauphin County PA Deferred Compensation Plan
Quarterly Investment Report
2022 Q2

Asset Class	2022-1-25	2022 Q2	Action
Money Market / Short-Term Bond			Increase Exposure
Bonds			Decrease Exposure
U.S. Stocks			Increase Exposure
International Stocks			Decrease Exposure
Real Estate			Decrease Exposure
Materials & Natural Resources			Increase Exposure

This report contains the 2022 Q2 quarterly allocations for your retirement plan's tactical models. **As of this quarterly review, the U.S. equity trend indicator was negative, the international trend indicator was negative, and the Balance of Strength Signal recently turned positive. Also, our long-term U.S. and International stock indicators turned negative last quarter. This was the first time since 2016 that the U.S. long-term indicator was negative. The Bond Bull-Bear Indicator remains negative.**

In late January, the stock indicators we use in these models turned negative and the models move to more conservative allocations just above each model's minimum High Risk Category Exposure. Models will maintain their current High Risk Category Exposure and we will update the holdings in the High, Medium, and Low Risk categories. We will monitor the market action and will consider intra-quarter changes should the indicators change. Changes to the model allocations will be made in April.

Over the last quarter, there has been a lot of negative pressure on the financial markets. The Federal Reserve is in the process of raising short-term rates and reducing their balance sheet, which typically has a contractionary effect on financial markets and the economy. Inflation is at levels not seen for generations, and a war started between Russia and Ukraine. Russia is one of the largest commodity exporters in the world and they export many commodities vital to the global economy and food chain. The effects and side-effects of the war and the sanctions the West has imposed on Russia are unknown. I am concerned that they may lead to negative consequences for U.S. citizens due to even higher commodity and food prices as well as causing an international move away from foreign countries using the U.S. dollar to settle international trades. The dollar has long been the reserve currency. If the U.S. losses its reserve currency status, it could have negative repercussions for the U.S. financial system and economy. To summarize, we see several major macro trends that could put negative pressure on the stock and bond markets and few that could lead to near term positive outcomes.

If you are uncomfortable with your selected model maintaining its currently low High Risk Category exposure, we recommend that you look at other plan investment options or a more conservative tactical model. You can also contact your investment advisor representative, Stephen Hetrick at Hetrick@retirementc.com or 717-545-1447 to discuss your concerns and alternative options. Feel free to jump right to the model pages or first read our model and market commentary. As always, if you have questions regarding these models, your deferred compensation account, or retirement planning; do not hesitate to contact us.

Market Environment

Quarterly Summary: Major U.S. indexes were green across the board for the month. The Dow gained 2.3% and the NASDAQ rose 3.4%. Large caps led the way with a 3.6% increase. Midcaps finished up 1.2% and small caps added 1.1%. But for the first quarter as a whole, all of the major indexes finished to the downside. The Dow shed -4.6%, while the NASDAQ plunged -9.1%. Large caps ended down -4.9%, while midcaps gave up -5.2%. Small caps ended the quarter down -7.8%.

Among major international markets for the month of March, Canada led the way with a 3.6% rise and the UK added 0.8%. France was essentially unchanged while Germany ticked down -0.3%. China gained 0.9%, while Japan gave up 0.6%. By grouping, developed markets added 0.5%, but emerging markets ended the month down -3.6%. International markets finished the first quarter mixed. Canada rose 3.1%, along with the UK which added 1.8%. France and Germany ended the quarter down -6.9% and -9.3%, respectively. China managed a 0.9% rise, while Japan shed -0.6%. By grouping, developed markets ended down -6.5% and emerging markets declined -7.6%.

Major commodities rose in the month of March, Gold and Silver rose 2.8% and 3.1%, respectively. Oil added 4.8% and Copper gained 6.6%. Commodities had a great first quarter of 2022. Crude oil soared 33.3%, while Gold gained 6.9%, silver added 7.6%, and the industrial metal copper rose 6.5%.

U.S. Economic News: The Labor Department reported the number of Americans filing first-time unemployment benefits rose last week, retracing much of the previous week's sharp decline. Initial jobless claims rose by 14,000 to 202,000 in the week ended March 26. Claims had dropped by 27,000 the previous week to 188,000—its lowest level since 1969. Economists said then that the decline was too sharp to last. Economists had expected this week's reading to rise to 195,000. Meanwhile, the number of people already collecting jobless benefits fell by 35,000 to 1.31 million. Continuing claims are at their lowest level since December of 1969.

The U.S. economy added a robust 431,000 new jobs in March and the unemployment rate ticked down closer to a half-century low, as companies pushed to add staff and more people entered the labor force. As expected, the tight labor market pushed hourly pay up a sharp 5.6% over the past year—the highest rate since the early 1980's. For the second month in a row, a quarter of the job gains occurred in service-oriented companies such as hotels and restaurants. Employment rose by 112,000 in the hospitality business. Employment also rose by 102,000 at professional businesses, 49,000 in retail, 38,000 in manufacturing and 19,000 in construction. In addition, the percentage of people in the labor force edged up to a new pandemic high of 62.4%, just a percentage point below its pre-pandemic peak. Economists widely expect that while the labor market remains healthy, the economy should too. Robert Frick, corporate economist at Navy Federal Credit Union wrote in a note, "The March jobs report shows employment remains the best part of the economy, especially for lower-wage workers. These show an economy accelerating as the pandemic diminishes, and job levels probably reaching pre-pandemic levels this summer."

Over 4 million workers quit their jobs in February, evidence that the labor market remains the tightest it's been in decades. The number of people quitting topped 4 million last June for the first time ever, and it's now happened nine months in a row in an event that's become known as the "Great Resignation". Before the pandemic, the number of people quitting jobs averaged fewer than 3 million a month. The so-called "quits rate" component of the labor department's "JOLTS" report ticked up to 2.9% from 2.8%, just below an all-time high. Also in the report, the number of job openings fell slightly to 11.27 million in February, the Labor Department reported. But that number remains near a record high. Companies continue to complain of a shortage of qualified workers. Job openings rose in government, education, and services such as arts and entertainment as pandemic restrictions were eased. Openings fell in finance and manufacturing.

Home prices continued to soar in January at one of the fastest rates on record, but analysts expect higher mortgage rates to slow future growth. S&P CoreLogic reported its Case-Shiller 20-city home price index posted a 19.1% annual gain the first month of the year. On a monthly basis, the index increased 1.8% between December and January. Similarly, Case-Shiller's national home price index showed annual growth of 19.2% in January. Craig J. Lazzara, managing director at S&P DJI, said in the Case-Shiller report, "Last fall we observed that home prices, although continuing to rise quite sharply, had begun to decelerate. Even that modest deceleration was on pause in January." Phoenix, Ariz. recorded the highest rate of home-price growth in the country, according to the Case-Shiller report, with a 32.6% year-over-year increase. As with the month prior, two Florida cities closely followed: Tampa with a 30.8% gain and Miami with a 28.1% increase. All 20 cities that are tracked by the Case-Shiller index saw record price growth on an annual basis, and in 16 of the 20 cities the rate of home-price appreciation was higher in January than in December.

Confidence among the nation's consumers rose for the first time this year, but concerns remain over rising inflation and the war in Ukraine. The Conference Board reported its survey of consumer confidence rose 1.7 points to 107.2 in March. The reading was a slight miss of economists' expectations for a reading of 107.5. Overall, confidence remains well off its highs from last summer. The measure of how consumers feel about the economy right now rose by 10 points to 153.0, marking the highest point since last July. Yet a similar gauge that looks ahead six months dipped to 76.6 from 80.8, suggesting Americans are wary of the future path of the economy. Jim Baird, chief investment officer at Plante Moran Financial Advisors stated, "As the Fed embarks on what appears likely to be an extended rate hike cycle and financial conditions tighten, consumers are increasingly wary of the outlook for the economy in the latter half of the year and into 2023."

Factory activity slowed in March hitting its lowest level in a year-and-a-half, a recent survey showed. The Institute for Supply Management reported its Purchasing Managers' Index for manufacturing slipped 1.5 points to 57.1 in March. This is its lowest reading since September of 2020. Economists had expected a slight improvement to 59. Still, readings above 50 signify growth and this is the 22nd consecutive month the index has been above the breakeven level of 50. In the report, the new-orders index fell 7.9 points to 53.8, while the production index fell 4 points to 54.5. Despite supply-chain issues, manufacturing continues to be a solid source of strength in the economy.

International Economic News: The Canadian economy grew 0.2% in January, Statistics Canada reported. Goods-producing industries drove the gains in January, the agency said. The construction sector grew for the third time in four months—residential construction grew 4.3% in January StatCan said. The same couldn't be said for the services sector that as a whole registered zero growth in January. CIBC senior economist Andrew Grantham wrote in an analysis that the surprisingly resilient January figure and early estimate for growth in February puts economic growth for the first quarter ahead of the growth that was anticipated at the start of the year. Grantham now expects the economy to grow at an annualized rate of 4% in the first quarter—double the forecast of Canada's central bank.

Across the Atlantic, the United Kingdom's economy was only 0.1% below pre-pandemic levels after growing faster than originally thought at the end of last year, the UK's Office for National Statistics reported. UK economic output grew by 1.3% from October to December, compared with an initial estimate of 1.0%. Revisions to estimated growth in 2021 and 2020 mean the economy is now thought to have ended 2021 just 0.1% shy of its pre-Covid-19 level, compared with a previous estimate of 0.4%. However, some analysts noted increased government spending made up much of the shortfall and growth remained well off the trend that would have been expected before the pandemic began.

On Europe's mainland, inflation in France jumped more than expected with consumer prices rising 5.1% from the same time last year. Economists had expected inflation to come in at 4.9%. The ramp-up in euro-zone prices is heaping pressure on the European Central Bank to raise interest rates from record lows. But while some ECB officials are pushing for one or more hikes this year, President Christine Lagarde has stressed the need for a gradual approach amid "significant risks" to economic growth. France has tried to insulate its citizens from the increase in oil and gas prices by imposing caps on gas and electricity prices this year.

Germany's Economy Minister Robert Habeck stated Germany "will be poorer" because of Russia's assault on Ukraine, as soaring energy prices hit Europe's biggest economy particularly hard. "It is not possible that this ends without costs for German society, it is unthinkable," Robert Habeck said. Preliminary figures indicate that inflation hit 7.3% in March, according to the country's Federal Statistics Office. That's the highest level in more than 40 years. The German government indicated that its payments dispute with Russia--which has demanded that "unfriendly" nations pay in rubles for their natural gas rather than in euros or US dollars--could lead to shortages, and ultimately rationing.

In Asia, China renewed its criticism of Western sanctions against Russia as European Union officials sought assurances from Beijing that it would not help Russia circumvent the economic restrictions imposed in response to its invasion of Ukraine. The Chinese Foreign Ministry also laid blame for the war in Ukraine at least partially on the United States for pushing to expand the NATO military alliance closer to Russia's borders. China's Foreign Ministry spokesperson Zhao Lijian earlier warned that his country "disapproves of solving problems through sanctions, and we are even more opposed to unilateral sanctions and long-arm jurisdiction that have no basis in international law." China says it is not taking sides in the conflict, but it has declared a "no limits" partnership with Russia and refuses to condemn the invasion.

Japan "does not intend to withdraw" from oil and liquefied natural gas development projects in Russia, Trade Minister Koichi Hagiuda stated this week. Japanese companies have invested in the Sakhalin-1, Sakhalin-2 and Arctic LNG 2 (ARC 2) projects. Each has been deemed essential to Japan's energy security. "We have interest in them and have secured long-term claimants," said Hagiuda. "In the current situation of sudden energy price increases, we can procure energy at prices cheaper than the market price. This is extremely important for energy security."

(**Sources:** All index- and returns-data from Yahoo Finance; news from Reuters, Barron's, Wall St. Journal, Bloomberg.com, ft.com, guggenheimpartners.com, zerohedge.com, ritholtz.com, markit.com, financialpost.com, Eurostat, 0020Statistics Canada, Yahoo! Finance, stocksandnews.com, marketwatch.com, wantchinatimes.com, BBC, 361capital.com, pensionpartners.com, cnbc.com, FactSet.)

Equity and Bond Indicator Status

U.S. Equity Trend Indicator:	**Downtrend**
INTL Equity Trend Indicator:	**Downtrend**
Balance of Strength Signal	**Positive**
U.S. Bond Bull-Bear Indicator:	**Cyclical Bear Market**

U.S. Stocks

Long-Term Cycle:	**Secular Bull Market**
Intermediate Cycle:	**Cyclical Bear Market**
Market Trend:	**Downtrend**

International Stocks

Long-Term Cycle:	**Secular Bull Market**
Intermediate Cycle:	**Cyclical Bear Market**
Market Trend:	**Downtrend**

Bonds

Long-Term Cycle:	**Secular Bull Market**
Intermediate Cycle:	**Cyclical Bear Market**

Tactical Asset Allocation Overview

Below is a recap of the investment process that the models use.

Quarterly Review

High-Risk Category Investments

We utilize three indicators, our U.S. Equity Trend Indicator, our International Trend Indicator and our Balance of Strength Signal (BOSS).

To determine whether a model has its minimum or maximum exposure to high-risk category investments, at the beginning of each quarter, we review our indicators. When either or both of the equity trend indicators are in an uptrend during the quarterly review process, the models will target their maximum equity allocations for the quarter unless the BOSS is negative. When the BOSS is negative at the beginning of a quarter, we will normally delay making changes until either the BOSS turns positive or the trend indicators are both negative.

When both the U.S. and International Equity Trend Indicators are in downtrends, the models will target their minimum high-risk category allocations unless the BOSS is positive. When the BOSS is positive at the beginning of a quarter, we will usually delay making changes until the trend indicators turn positive or the BOSS turns negative.

Medium and Low Risk Category Investments

The amount not invested in high-risk category investments will be invested in the Plan's low risk or medium risk category investments. When our Bond Indicator is positive, the models can have exposure to bonds and the money market fund. When it is negative, this amount will be invested in the low-risk category investments, or when stock indicators are positive, it can include high yield bonds, which typically do well when stocks are doing well.

Intra-Quarter Review

When Models Have Maximum High-Risk Exposure

If the indicators turn negative during the quarter, the models can reduce their exposure to high-risk category investments down to the model's minimum exposure. All three indicators do not have to be negative for the models to start to reduce their high-risk category exposure. If this occurs towards the end of a quarter and there is no change to the indicators at the quarterly review, there will most likely be no changes to the model's allocations during that quarter's review.

When Models Have Minimum High-Risk Exposure

If the indicators turn positive during the quarter, the models can move to their maximum high-risk category exposure. All three indicators do not have to be positive for the models to start to increase their high-risk category exposure. If this occurs towards the end of a quarter and there is no change to the indicators at the quarterly review, there will most likely be no changes to the model's allocations during that quarter's review.

Model Constraints

Model	Minimum High Risk Category Allocation	Maximum High Risk Category Allocation
Tactical Conservative Model	0%	30%
Tactical Moderate Model	10%	60%
Tactical Growth Model	20%	90%

Listed above are the minimum and maximum exposures the models may have to the high-risk category investments. The models' allocations may fall anywhere in between these ranges but will usually have the maximum high-risk category exposure when indicators are positive, and when the indicators are negative, they will usually have the minimum high-risk category exposure or this exposure plus 10%.

There may be times in between model rebalancing that the actual holdings in high-risk category investments exceeds the minimum and maximum allocations. This would occur when either high-risk category investments are significantly underperforming the medium and/or low risk category investments, or when they are significantly outperforming the lower risk categories

Fund Selection

We feel that the primary driver for a model to potentially outperform its benchmark over a full market cycle (from one market peak to the next) is the tactical asset allocation process. We believe the secondary driver could be fund selection. This is defined as the selection of the funds within an asset class, such as stocks. If a higher percentage is invested in the funds/sectors that are outperforming the others, then the strategy should have a slightly higher return. Regarding fund selection, a portion of the High Risk Category Investments will be invested in a broad-based diversified U.S. equity fund. The remaining amount will be allocated to the highest ranked category options in your plan. The portion not invested in High Risk Category investments will be invested in bonds and/or stable value as long as bonds are in a Cyclical Bull Market. If bonds are in a Cyclical Bear Market, then this portion will be invested in the Low Risk Category Investments and possibly high yield bonds.

Investment Risk

Diversification is the first line of defense. Selecting the appropriate model to meet your investment goals and risk tolerance is of primary importance. **Retirement Collaborative LLC offers a Free Portfolio Risk Analysis that can be used to help you select an appropriate portfolio. We encourage you to take it by using the link on the Plan's Web Portal (www.dauphincountydcplan.com) or by requesting one via email – Hetrick@retirementc.com. It is also important to update this risk profile as your investment objectives change.** If you have questions regarding this process or if your financial situation has changed, please contact us. The tactical investment process is the second line of defense, but it is important to understand that no indicator is perfect. If it was, then everyone would want to use it and it would not work. We are looking for indicators that have worked well the majority of the time and have provided value in the past. There will be times when using a tactical approach will detract from returns and then there will be other times when it looks brilliant. The goal is to accumulate money over a long period of time so that you achieve your retirement objectives. This process attempts to do so by focusing on reducing downside risk while still seeking to achieve long-term returns in line with or better than the model's benchmark index. Lastly, there will be times when the sectors we overweight underperform a broad-based index's return. We feel that over time overweighting certain sectors will add value. If we find that the fund selection process is not adding value, we will examine using a constant sector holding.

Risk	Asset Class	Sub-Asset Class	Plan Investment Option
Low Risk	Fixed Income	Stable Value	Alerus Money Market
		Short-Term Bond	Vanguard Short-Term Bond Index Adm
Medium Risk	Fixed Income	Intermediate Bond	Fidelity U.S. Bond Index Fund
		Inflation Protected Securities	Fidelity Inflation Protected Bond Index Fund
		High Yield Bond	BrandywineGLOBAL High Yield I
		International Bond	Vanguard Total INTL Bond Index Fund Adm
		International Bond	PIMCO Foreign Bond (U.S. Dollar Hedged) R
High Risk	U.S. Equities	Large Cap Growth	T Rowe Price Blue Chip Growth Fund
		Large Cap Blend	Pear Tree Quality Ordinary Shares
		Large Cap Blend	Vanguard Total Stock Market Index Fund
		Large Cap Value	Neuberger Berman Large Cap Value R6
		Mid Cap Growth	BlackRock Mid-Cap Growth Equity Port Svc Shares
		Mid Cap Value	Vanguard Mid-Cap Value Index Fund
		Small Cap Growth	AB Small Cap Growth Portfolio Advisor Class
		Small Cap Growth	Morgan Stanley Inception Portfolio IS
		Small Cap Value	MFS New Discovery Value R4
	Moderate Allocation	Moderate Allocation	T. Rowe Price Capital Appreciation
	International Equities	Developed Markets	American Funds EuroPacific Growth R6
		Emerging Markets	Artisan Developing World Ins
	Real Estate	U.S. Real Estate	Fidelity Real Estate Income Fund
		Global Real Estate	Janus Henderson Global Real Estate
	Natural Resources	Diversified Natural Resources	Vanguard Materials Index Fund Adm

Tactical Conservative Model

Investment Objective:	1. Produce positive annualized returns 2. Produce returns 1% above the U.S. Consumer Price Index 3. Outperform the model's buy-and-hold benchmark over a full market cycle		
Model Benchmark:	100% iShares Barclays Short Treasury Bond Fund (SHV)		
Description:	The Tactical Conservative Model is designed for participants looking to preserve capital and make a slightly better long-term return than one could expect from investing in a bank savings account, short-term U.S. Treasuries, a money market account or a stable value account. It differs from a buy-and-hold model in that it can be as conservative as a 100% stable value investment or can be as aggressive as having 30% of the portfolio allocated to investments that Retirement Collaborative LLC has categorized as high-risk and 70% categorized as moderate-risk.		
Constraints:	Low Risk 0-100%	Medium Risk 0-100%	High Risk 0-30%

Holdings

Investment	Ticker	Risk Category	2022 Q2
Vanguard Short-Term Bond Index Admin	VBIRX	Low Risk	5.0%
BrandywineGLOBAL High Yield I	BGHIX	Medium Risk	5.0%
Alerus Money Market Fund		Low Risk	72.0%
Fidelity US Bond Index Fund	FXNAX	Medium Risk	5.0%
Fidelity Inflation Protected Bond Index Fund	FIPDX	Medium Risk	5.0%
Neuberger Berman Large Cap Value R6	NRLCX	High Risk	3.0%
Vanguard Mid-Cap Value Index Fund	VMVAX	High Risk	2.0%
MFS New Discovery Value R4	NDVUX	High Risk	2.0%
Vanguard Materials Index Fund Adm	VMIAX	High Risk	1.0%

Tactical Moderate Model

Investment Objective:	1. Produce positive annualized returns 2. Produce returns 2.5% above the U.S. Consumer Price Index 3. Outperform the model's buy-and-hold benchmark over a full market cycle		
Model Benchmark:	10% iShares Barclays Short Treasury Bond Fund (SHV)		
	40% iShares Barclays Aggregate Bond Fund (AGG)		
	30% iShares Barclays S&P 500 Index (IVV)		
	20% iShares Barclays EAFE Index Fund (EFA)		
Description:	The Tactical Moderate Model is designed for a moderate risk participant who is trying to reduce the volatility of a typical buy-and-hold balanced strategy while achieving long-term returns similar to or greater than the model's benchmark.		
Constraints:	Low Risk: 0-90%	Medium Risk: 0-90%	High Risk: 10-60%

Holdings

Investment	Ticker	Risk Category	2022 Q2
Vanguard Short-Term Bond Index Admin	VBIRX	Low Risk	4.0%
BrandywineGLOBAL High Yield I	BGHIX	Medium Risk	4.0%
Alerus Money Market Fund		Low Risk	64.0%
Fidelity US Bond Index Fund	FXNAX	Medium Risk	4.0%
Fidelity Inflation Protected Bond Index Fund	FIPDX	Medium Risk	4.0%
Neuberger Berman Large Cap Value R6	NRLCX	High Risk	8.0%
Vanguard Mid-Cap Value Index Fund	VMVAX	High Risk	5.0%
MFS New Discovery Value R4	NDVUX	High Risk	5.0%
Vanguard Materials Index Fund Adm	VMIAX	High Risk	2.0%

Tactical Growth Model

Investment Objective:	1. Produce positive annualized returns 2. Produce returns 5% above the U.S. Consumer Price Index 3. Outperform the model's buy-and-hold benchmark over a full market cycle		
Model Benchmark:	10% iShares Barclays Aggregate Bond Fund (AGG) 54% iShares S&P 500 Index (IVV) 36% iShares Barclays EAFE Index (EFA)		
Description:	The Tactical Growth Model is designed for a high-risk participant who would typically have all of their money invested in stocks, but who would also like to use a process designed to reduce potential losses that could occur in a sustained stock market decline.		
Constraints:	Low Risk: 0-80%	Medium Risk: 0-80%	High Risk: 20-90%

Holdings

Investment	Ticker	Risk Category	2022 Q2
Vanguard Short-Term Bond Index Admin	VBIRX	Low Risk	3.0%
BrandywineGLOBAL High Yield I	BGHIX	Medium Risk	3.0%
Alerus Money Market Fund		Low Risk	58.0%
Fidelity US Bond Index Fund	FXNAX	Medium Risk	3.0%
Fidelity Inflation Protected Bond Index Fund	FIPDX	Medium Risk	3.0%
Neuberger Berman Large Cap Value R6	NRLCX	High Risk	12.0%
Vanguard Mid-Cap Value Index Fund	VMVAX	High Risk	7.0%
MFS New Discovery Value R4	NDVUX	High Risk	7.0%
Vanguard Materials Index Fund Adm	VMIAX	High Risk	4.0%

Disclaimers

These pages are produced by Retirement Collaborative LLC (We, Us, Our) and are intended for the use of Dauphin County, PA Deferred Compensation Plan participants only.

Do not forward or re-transmit these pages in any form without written authorization. Do not allow an unauthorized person to view part or all of these pages.

The Tactical Forecast provides information on the Tactical Models found in the Dauphin County, PA Deferred Compensation Plan. It is not intended as investment advice, or as an offer or a solicitation of an offer to sell or buy, or as an endorsement, recommendation, or sponsorship of any company, security or fund. Although the goal of the investment strategy outlined herein is designed to minimize loss of capital, it does not guarantee that this will not happen. All investing entails risk. There are many different types of risks, such as risk to principal, purchasing power risk, and opportunity risk. Purchasing power risk is the risk of having inflation grow faster than your investments; thus, losing purchasing power of those investment dollars. This is a risk that should be considered, especially when investing in cash or stable value instruments. Opportunity risk is the risk of missing out on an investment opportunity. A tactical asset allocation strategy is susceptible to opportunity risk because there may be times when High Risk Category investments are rising while a tactical model is in its minimum exposure. Opportunity risk should be assessed when evaluating a tactical asset allocation strategy versus a buy-and-hold strategy. It is up to the participant to evaluate their risks, analyze what is discussed in our quarterly report, and if they deem that the strategy to be in keeping with their investment objective, they may choose to incorporate a Tactical Model into their retirement portfolio. It is incumbent upon the participant to make the election to invest in the models.

The investments used in the models are listed in the quarterly report. The contents of The Tactical Forecast are based on data sources believed to be reliable, but no representation or warranty, expressed or implied is made as to their accuracy, completeness or correctness. We assume no responsibility for typographical errors or other inaccuracies in the content, and occasional errors may occur. Therefore, The Tactical Forecast is provided "AS IS" without any warranty of any kind. Past results are not indicative of future results. Please read prospectuses for individual mutual funds before investing. They can be found on the participant website.

The Tactical Forecast is written and distributed quarterly by Retirement Collaborative LLC, 2000 Linglestown Road, Suite 101, Harrisburg, PA 17110. Retirement Collaborative LLC is an investment advisory firm that specializes in risk-managed investment management, retirement plan consulting, and wealth management. If you are interested in learning more about our firm or have questions, please contact us.

Contact Information:

Website for Retirement Collaborative LLC	www.retirementc.com
Email Address	hetrick@retirementc.com
Mailing Address	2040 Linglestown Road, Suite 107, Harrisburg, PA 17110